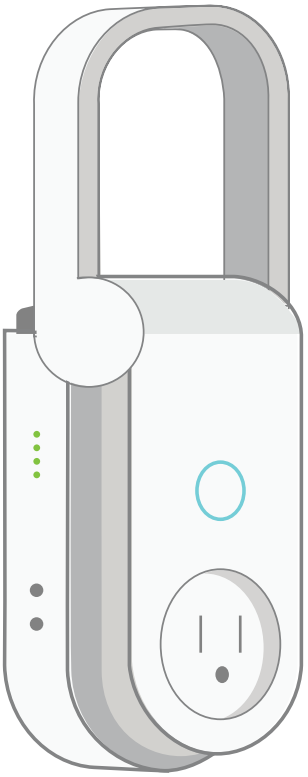
User's Manual

RE270K / RE370K



AC750 / AC1200
Wi-Fi Range Extender with Smart Plug

1910011951 REV 1.0.0

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Introduction

Product Overview

TP-Link **AC750/AC1200 Wi-Fi Range Extender with Smart Plug**, also called "*Wi-Fi Extender+*" is a compact home device that expands and boots the Wi-Fi signal of your existing router to those hard-to-reach areas throughout your home or office up to 10,000 square feet.

Powered by the latest wireless AC technology, the Wi-Fi Extender+ delivers ultra-fast Wi-Fi speed up to 1750Mbps, providing reliable connections for bandwidth-intensive needs such as HD/4K video streaming and online gaming.

The Wi-Fi Extender+ is also integrated with an intelligent Wi-Fi socket, also known as a "*Smart Plug*", that gives you the ability to customize, automate, and remotely control the plugged-in devices, such as lights and other household electronics, via TP-Link's Kasa mobile app on your iOS or Android devices, no matter where you find yourself.

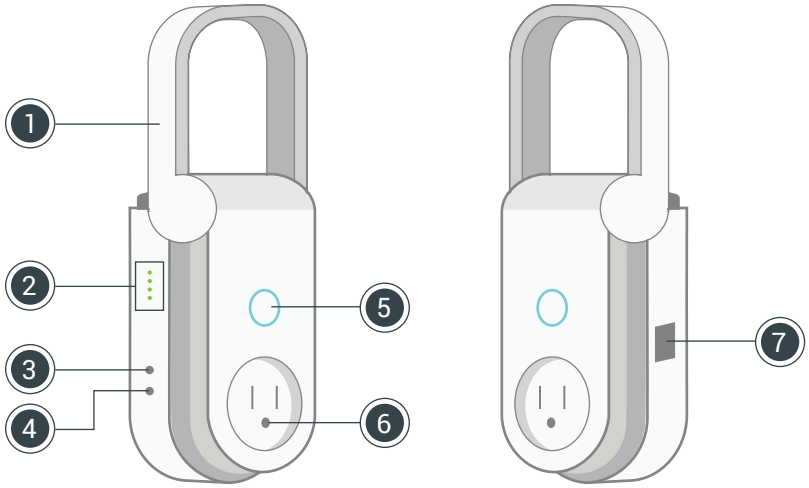
Features

- Complies with IEEE 802.11ac
- Provide multiple encryption security types, including 64-bit, 128-bit, 152-bit WEP, and WPA-PSK/WPA2-PSK
- Support built-in DHCP server
- Support app-based and web-based managements.
- Control the Smart Plug whenever you are connected to the Internet using the Kasa app on your smartphones and tablets.
- Automate your lights and small household appliances with Schedule and Timer.
- Provide historical power consumption report of the plugged-in devices in real-time.
- Discourage potential intruders with Away Mode that automatically turns the plugged-in devices on and off at different times.
- Compatible with Amazon Echo (sold separately) that lets you interact with the devices plugged into the Smart Plug using your voice.

Product Requirements

- A smartphone or tablet running iOS 8 or higher; Android 4.1x or higher.
- A Wi-Fi connection (supports 802.11n standard).

Wi-Fi Extender+



Note: Image may differ from actual product due to different regional power specifications. We use the U.S. version as an example

1 **Antenna**

Position the antenna vertically for optimal performance.

2 **LED Indicators**

2.4G	**Green:** The 2.4GHz network is extended. **Flashing green:** The extender is in SoftAP mode. **OFF:** No 2.4GHz connection.
5G	**Green:** The 5GHz network is extended. **Flashing green:** The extender is in SoftAP mode. **OFF:** No 5GHz connection.
Status	**Green:** The extender is connected and in a good signal location. **Red:** The extender is connected, but in a poor signal location. **Flashing green rapidly:** SoftAP connection is in progress. **Flashing amber and green:** When pressing the Reset button for 5~10 seconds to trigger a Soft Reset. **Flashing amber rapidly:** When pressing the Reset button for 10 seconds to factory reset the device. **OFF:** No active connection.

Power	**Green:** The extender is plugged into an active power outlet. **Flashing green:** Initializing. **Flashing green rapidly:** Upgrading firmware.

3 LED ON/OFF Button

Press to turn the LED Indicators ON or OFF.

4 Reset Button

Press and hold for about 5 seconds or until the Status LED starts to flash amber and green alternately to only reset the network settings without losing the current settings and initiate the SoftAP mode.

Press and hold for about 10 seconds or until the Status LED starts to flash amber rapidly to reset the extender to factory defaults.

5 Socket ON/OFF Button

Press to turn the Smart Plug and its LED indicator ON or OFF.

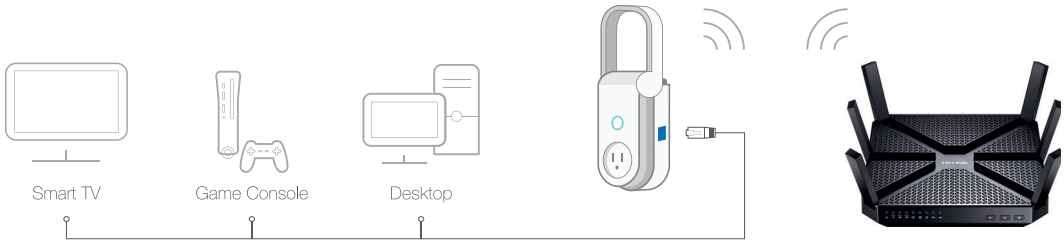
6 Smart Plug

Plug in your electronic devices and small appliances with the input range from 100V to 240V, and control them from the Kasa app

Note: The input voltage should be consistent with the output voltage of the power outlet.

7 Gigabit Ethernet Port

Connect Ethernet-only (wired) devices such as Smart TVs, game consoles, and Blu-ray players to your wireless network with Ethernet cables.



Important Safety Information

Before installing and using the Wi-Fi Range Extender with Smart Plug, read and follow all safety precautions including the following:

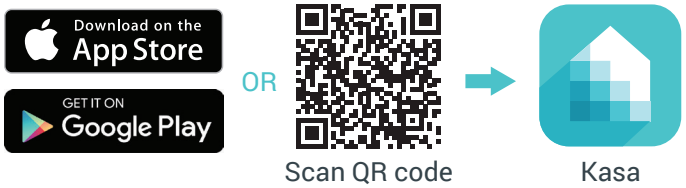
- **WARNING: RISK OF ELECTRIC SHOCK OR FIRE.** Do NOT exceed the recommended electrical ratings (100V–240V~15A, 50/60Hz) of the pass-through power outlet.
- For indoor use only.
- The Wi-Fi Extender+ must only be installed and operated in an upright vertical position with the antenna pointing upwards.
- Do NOT leave the Wi-Fi Extender+ in an excessive hot or humid environment.
- The Wi-Fi Extender+ is not intended for use in locations where the temperature may be less than actual room conditions, such as unheated basements or garages.
- Do NOT touch the integrated pass-through power outlet with wet hands or when standing on wet or damp surfaces.

Connect Wi-Fi Extender+ to the Internet

There are two easy-to-setup methods to extend your Wi-Fi network.

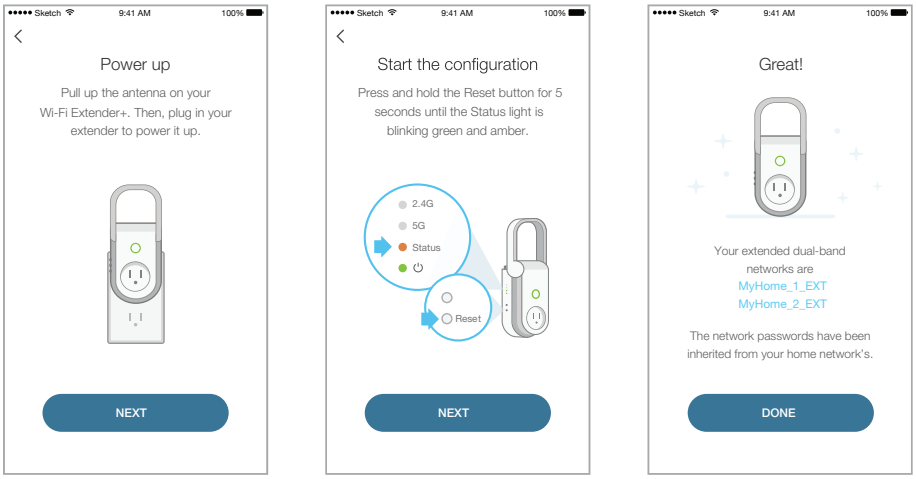
Setting Up Wi-Fi Extender+ via Kasa

1. Download TP-Link Kasa from the App Store or Google Play.



2. Connect your mobile device to your Wi-Fi network.

3. Launch Kasa and follow the in-app instructions to expand your Wi-Fi network.



4. Connect your Wi-Fi devices to the new extended network using the same password as the main network.

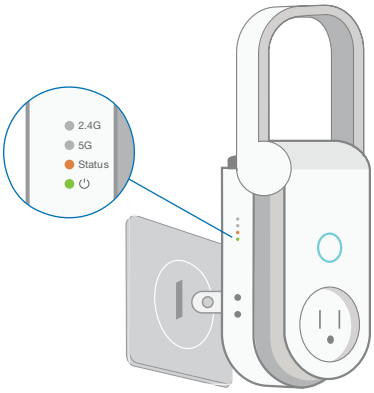
   The extended network names are your main network names (SSIDs) with *_EXT* or *_2GEXT* or *_5GEXT* as a suffix, depending on whether the extender is connecting to the single-band or dual-band router. For example:

Main Router	Main Router's SSIDs	Extended SSIDs
2.4GHz Single-Band	***MyHome***	2.4GHz: ***MyHome_EXT*** 5GHz: ***MyHome_5GEXT***

5GHz Single-Band	***MyHome***	2.4GHz: ***MyHome_2GEXT*** 5GHz: ***MyHome_EXT***
Dual-Band	***MyHome_1*** ***MyHome_2***	2.4GHz: ***MyHome_1_EXT*** 5GHz: ***MyHome_2_EXT***

Setting Up Wi-Fi Extender+ via Computer

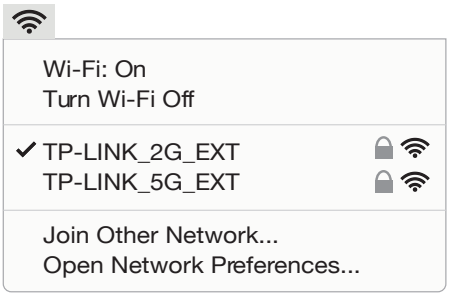
1. Position antenna vertically and plug in the extender near your router. Then, wait until the Power LED is lit solid green.



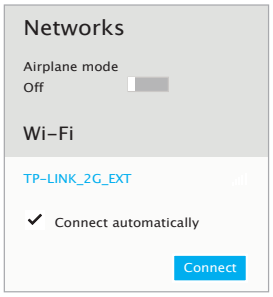
The Wi-Fi Extender+ must only be installed and operated in an upright vertical position with the antenna pointing upwards.

2. Disconnect the Ethernet connection from your computer (if any). Click the Wi-Fi icon on the taskbar and select the extender's default network name (SSID): TP-LINK_2G_EXT or TP-LINK_5G_EXT. No password is needed to connect.

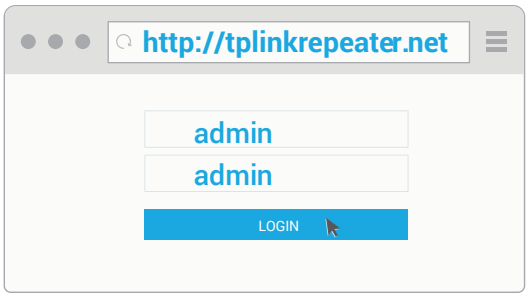
Mac OS X



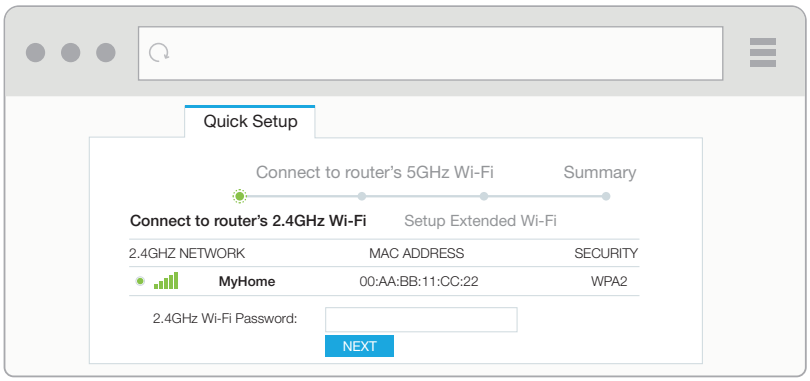
Windows



3. Launch a web browser and enter **http://tplinkrepeater.net** into the address field. Then, enter *admin* (all lowercase) for both username and password to log in.



4 Follow the Quick Setup wizard to extend your 2.4GHz and 5GHz Wi-Fi networks.



5 Relocate your Wi-Fi Extender+ to an outlet around the midpoint between your Wi-Fi router and the Wi-Fi "*dead*" zone. Alternatively, use the *Status LED* on the extender or the *Location Assistant* feature on the Kasa app to find the optimal placement for your Wi-Fi Extender+.

> (!) It is important that you wait until the Wi-Fi Extender+ is fully powered up, and all LED Indicators stop blinking.
>
> Keep in mind that other types of radio frequencies can interfere with the Wi-Fi signal between your router and Wi-Fi Extender+. Avoid placing the extender near Bluetooth® devices, cordless phones, microwave ovens, baby monitors, and motor-driven appliances.

6 Connect your Wi-Fi devices to the new extended network using the same password as the main network.

Unless you customized the extended network names during the configuration, the extended network names are your main network names (SSIDs) with *_EXT* or *_2GEXT* or *_5GEXT* as a suffix, depending on whether the extender is connecting to the single-band or dual-band router. For example:

Main Router	Main Router's SSIDs	Extended SSIDs
2.4GHz Single-Band	***MyHome***	2.4GHz: ***MyHome_EXT*** 5GHz: ***MyHome_5GEXT***

5GHz Single-Band	***MyHome***	2.4GHz: ***MyHome_2GEXT*** 5GHz: ***MyHome_EXT***
Dual-Band	***MyHome_1*** ***MyHome_2***	2.4GHz: ***MyHome_1_EXT*** 5GHz: ***MyHome_2_EXT***

Using Kasa with Wi-Fi Extender+

Once the Wi-Fi Extender+ is conneted to your Wi-Fi network, you can use the Kasa app on your mobile devices or tablets to control, automate the Smart Plug and manage the extended network easily and seemlessly. Please make sure that your mobile device or tablet is connected to the extended network before any configuration.

If you want to control and manage the Wi-Fi Extender+ from outside of your home or office via an Internet connection, please enable the *Remote Control* within the Kasa app settings.

Kasa Account

While you don't have to have a Kasa account to use your devices, signing up for an account provides added functionality such as:

- Synchronization of settings and configurations to all your mobile devices.
- Ability to control and configure the devices from outside your home.
- Ability to customize your TP-Link Smart Home devices with "Scenes" for a truly automated experience.
- Use of third-party services and products such as Amazon Echo.

Devices can only be associated with one Kasa account. To remove the association, turn off *Remote Control* in the Kasa's settings, or factory reset the device.

After creating your Kasa account, you will need to verify the email associated with your account by clicking a link in an email that Kasa sends you. Until you verify the email, much of the above functionality will not work.

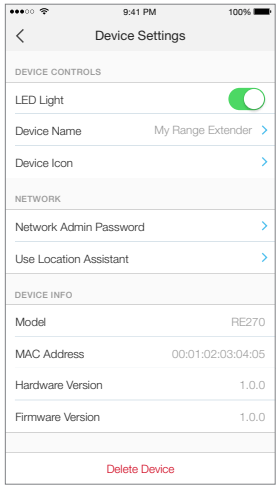
Kasa Settings

Kasa's Settings allows you to set your global preferences such as:

- **Location and Time** to set the location and time of where the Smart Home devices are located so that the Away Mode and Schedules can run on time. You can set your device's location using your smartphone's GPS function, or manually enter the latitude and longitude coordinates.
- **Firmware Update** to update your Smart Home devices when there is an update available. Refer to *Firmware Update* for instructions.

Customizing Wi-Fi Extender+

You can personalize your Wi-Fi Extender+ with a descriptive name and a custom icon that represents the connected device or household appliance from the extender's details screen.



1. On the *Devices* screen, tap on the row of the Wi-Fi Extender+ to go to its controls.

2. Tap the (Settings) icon at the top-right corner.

3. On the *Device Settings* screen, you can personalize the following settings:

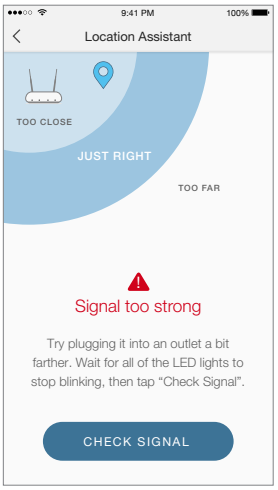
   - **Remote Control –** Tap the toggle to turn ON the Remote Control feature that allows you to control the Wi-Fi Extender+ outside of your home. You will be prompted to sign in to your Kasa account first. This feature is set to OFF by default.
   - **LED Light –** Tap the toggle to turn ON or OFF all LED Indicators.
   - **Device Name –** Enter a unique name for your Wi-Fi Extender+.
   - **Device Icon –** Choose one of the available icons or from your device's albums or camera.
   - **Network Admin Password –** Set a unique password (up to 15 characters) to protect your Wi-Fi Extender+ and its settings from unauthorized access. The default Admin Password is "*admin*".
   - **Use Location Assistant –** Use this feature to find a location within your home or office that maximizes the performance of the Wi-Fi Extender+. It is important to make sure that you wait until the Wi-Fi Extender+ is fully powered up (for instance, by waiting for the Power and Status LEDs to stop blinking) before tapping *Check Again*.

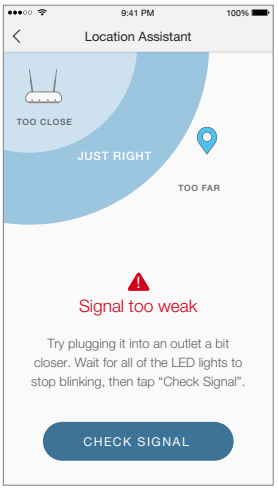
Location Assistant

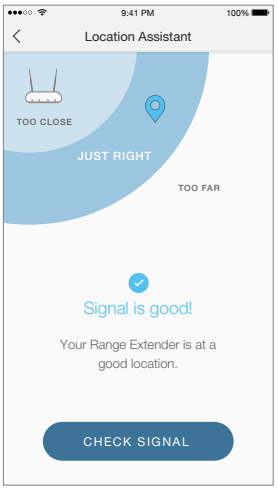
After setup, the Status LED on the left side of the Wi-Fi Extender+ and the Kasa app will detect whether the device's signal strength is too strong or too weak. You can use either the Status LED or Location Assistant to help you reposition the extender to an optimal location (if needed).

Please note that any time you relocate the Wi-Fi Extender+, make sure that you wait until the device is fully powered up and all LED Indicators stop blinking after plugging the extender into a wall outlet. If the Status LED is green, your Wi-Fi Extender+ is placed in an optimal location.

The Location Assistant can also be accessed anytime from the *Device Settings* page.

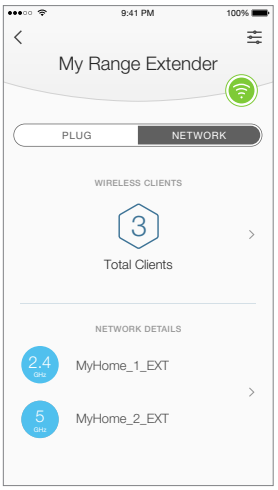


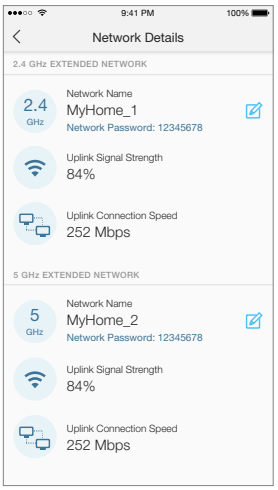


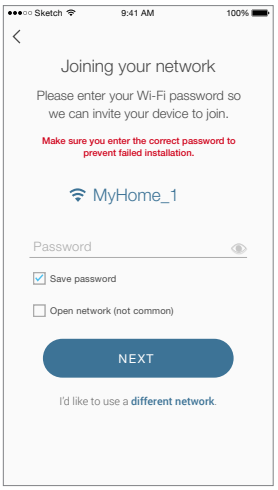


Extending Another Wi-Fi Network

If you want to reconfigure an extender's Wi-Fi connection to another network, perform the following steps. Note that you will need to reconnect the Wi-Fi devices in your home or office to the newly configured network.





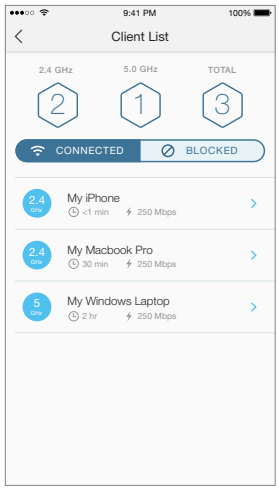


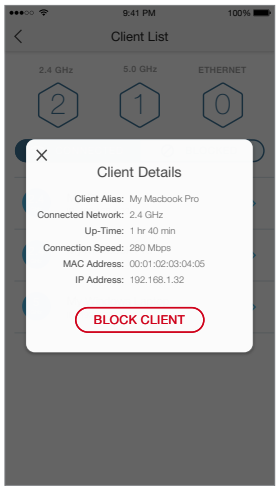
1. On the *Devices* screen, tap on the row of the Wi-Fi Extender+ to go to its controls.
2. Tap NETWORK to switch to the Extended Network view.
3. Tap anywhere in the *Network Details* section.
4. Within the *Network Details* screen, tap on the (Edit) icon of the Wi-Fi connection you want to reconfigure and confirm when prompted.
5. On the *Joining your network* screen, tap the current Wi-Fi network name (SSID) or "*I'd like to use a different network*", and then choose another network to connect the extender to.
6. Enter the Wi-Fi password of the selected network. Please make sure that you enter the correct password to prevent failed connection.
7. Tap NEXT.

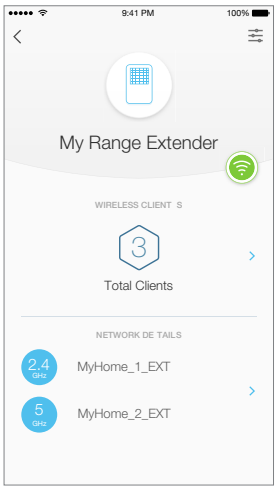
Note that if you change the Wi-Fi network name (SSID) and Wi-Fi password of your main (host) network, the Wi-Fi Extender+ will need to be reconfigured to connect to the network with the changes. You can simply re-add the extender using the Add Device process and follow the app's instructions. Be careful not to reset the Wi-Fi Extender+ when prompted.

Managing Network Access

You also have the ability to view and manage wireless clients (users) connecting to your extended network(s). You can get the details of the clients, block or unlock them.







1. On the *Devices* screen, tap on the row of the Wi-Fi Extender+ to go to its controls.
2. Tap NETWORK to switch to the Extended Network view.
3. Tap on the 1 (hexagon client count) in the *Wireless Clients* section.

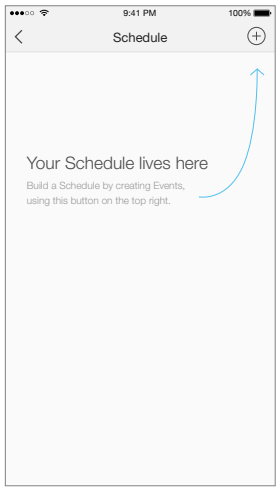
4. On the *Client List* screen, you can block the current wireless clients listed under the CONNECTED tab by tapping on the row of the client. To unblock a client, tap on the BLOCKED tab to view the blocked clients list, then tap on the row of the blocked client and confirm when prompted.

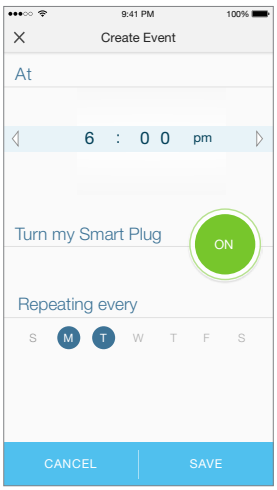
Home Automation with Integrated Smart Plug

The Wi-Fi Extender+ is equipped with a Smart Plug that lets you to control and automate your connected lights and other household electronic devices via the Kasa app.

Scheduling

You can set up the Smart Plug's schedule, which is made up of Events, to automate your connected devices to work around your home and work schedules, such as setting the lights to come on at dusk and turn off at sunrise.

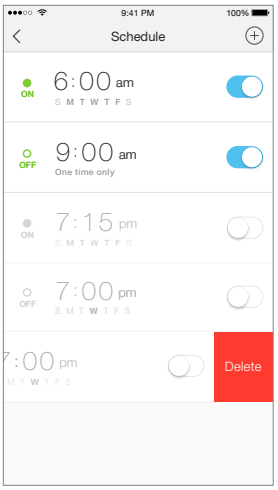




1. On the *Devices* screen, tap on the row of the Wi-Fi Extender+ that you want to create a schedule for.
2. Tap (Schedule) to open the *Schedule* screen.
3. Tap ⊕ to create an event.
4. Within the *Create Event* screen, set the time, your preferred state (ON or OFF) for the connected device, and repeating frequency.

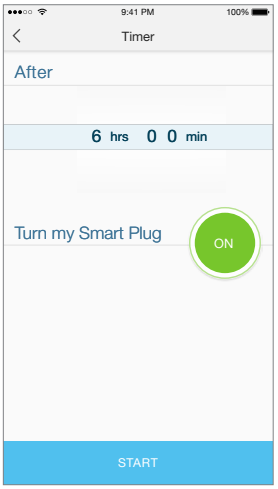
   You can set the Event's time for sunrise or sunset by tapping the arrows next to the time. The time of the Event will synchronize with your local sunrise and sunset times for each day.
5. Tap **Save**.

You can create as many events as you like and edit them at anytime from the *Schedule* screen. To edit a scheduled Event, simply tap the row for it. To delete it, you can swipe left on the row on an iOS device, or long-press the row on an Android device. If you want to temporarily disable an Event, just turn off its toggle from the *Schedule* screen. Please note that up to 32 events can be set on a Wi-Fi Extender+.



Timer

Timer can be set to automatically turn the lights or household appliances plugged into the Wi-Fi Extender+ ON or OFF after the countdown time has elapsed.



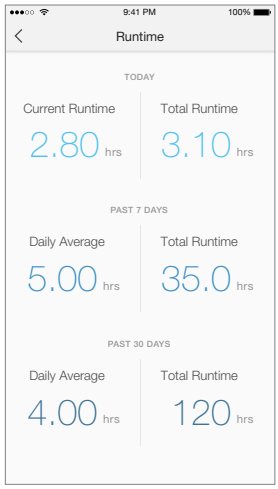
1. On the *Devices* screen, tap on the row of the Wi-Fi Extender+ to go to its controls.
2. Tap (Timer) to open the *Timer* screen.
3. Set the timer duration in Hours and Minutes.
4. Set your preferred state (ON or OFF) to be triggered once the countdown timer is complete.
5. Tap **Start**.

Note that if a timer overlaps an existing scheduled Event, that schedule will not run. If it overlaps Away Mode, the device will resume away behavior after the timer expires. However, timer will be canceled

when power is lost or interrupted, or at any time you turn ON/OFF the device manually using Kasa or the physical ON/OFF switch. You may need to set a new timer if desired.

Runtime Report

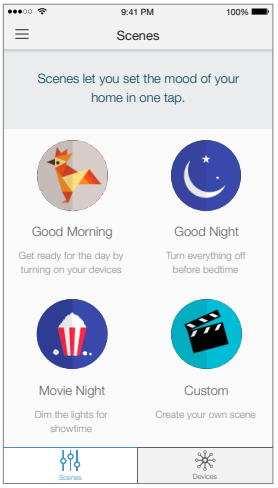
The Runtime report provides a statistical information about how long the Wi-Fi Extender+ has been running. To view the Runtime report, tap anywhere in the Usage section of the Wi-Fi Extender+'s details screen.



Creating Scenes

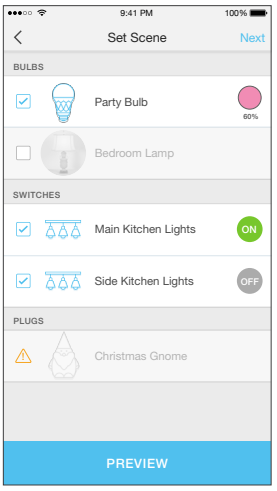
Take full advantage of your TP-Link Smart Home devices in your home with "*Scenes*". A scene is a preset group of Smart Devices (such as Wi-Fi Extender+, Smart Wi-Fi Plugs Mini and Smart Wi-Fi Switches) that can be customized and controlled simultaneously at the touch of a button from your smartphone or tablet to easily set your mood or fit any special occasion. For example, set a customized "*Movie Time*" to turn on the home theater system plugged into a Wi-Fi Extender+ and dim down the lights controlled by the Smart Wi-Fi Switches in your Entertainment Room to 10% at the same time.

Please keep in mind that SCENES can only be set and controlled once you're signed in to your Kasa account.



1. On the main *Home* screen, tap on the (Scenes) tab to switch to the Scenes view.

2. Choose one of the preset scenes to start, or choose **Custom** to set up your own scene that is personalized to suit individual preferences and needs. To set a scene, you will need to select one or more devices to be controlled, and then define their actions and/or states.



Note that you must have at least one Smart Device in order to create a scene.

Configuring Wi-Fi Extender+ via a Web Browser

The Wi-Fi Extender+'s web-based interface lets you configure your extended network via a web browser on your computer, mobile device, or tablet. Please make sure that you connect the smart device to the extended network before any configuration.

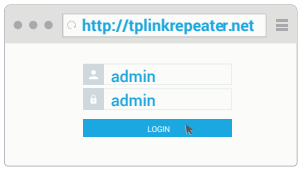
Changing Admin Account

The default admin account credentials to log into the extender's web interface are *admin* (all lowercase) for both username and password. It is strongly recommended that you change the default to something unique to protect your Wi-Fi Extender+ and its settings from unauthorized access.

Note that you will be prompted to change the default admin account at the first time you access the web-based interface. If you wish change the admin account at a later time, follow the following steps.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field.

2. Log in using the admin credentials. If you have not changed the default admin account, enter **admin** (all lowercase) for both username and password.



3. Go to **Settings > System Tools > Admin Account**.

4. Enter your current username and password into the *Old Username* and *Old Password* fields respectively.

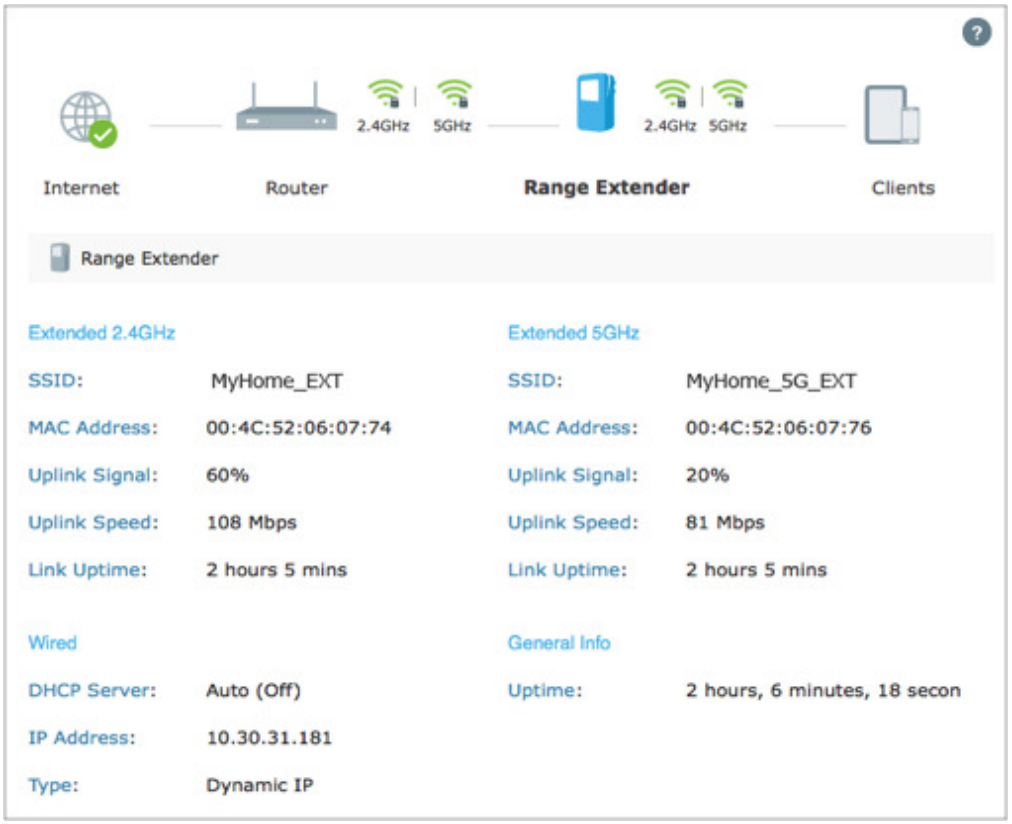
5. Enter your new username and password into the *New Username* and *New Password* fields, then enter the password again to confirm. Be sure to choose a strong, but memorable password.

6. Click SAVE to confirm the changes.

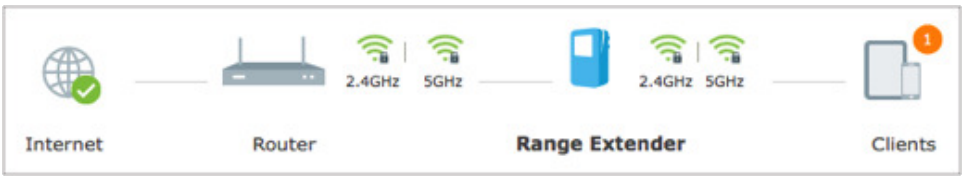
ⓘ You will be prompted to log back in using the new admin account.

Dashboard

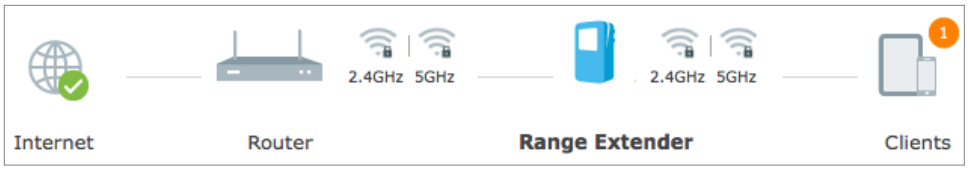
Every time you log into the web-based interface, you will be taken to the visual dashboard (or control panel) of your Wi-Fi Extender+. The dashboard provides an overview of your extended networks and allows you to view the current status of the Wi-Fi Extender+, detailed information about the uplink connection (the Router), and see who's currently connected to your extended networks.



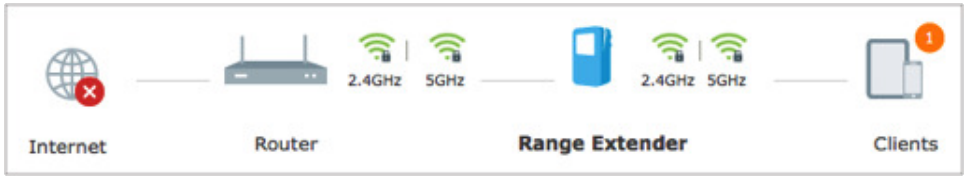
- Normal network connection status.



- The Wi-Fi Extender+ is not connected to the router.



- The Wi-Fi Extender+ is connected to the router, but Internet is not available.



- The Wi-Fi Extender+ is partially connected to the router. Make sure the extender is set to obtain an IP address automatically under **Network > Network Settings**.

Wi-Fi icon indicator for 2.4GHz and 5GHz networks:

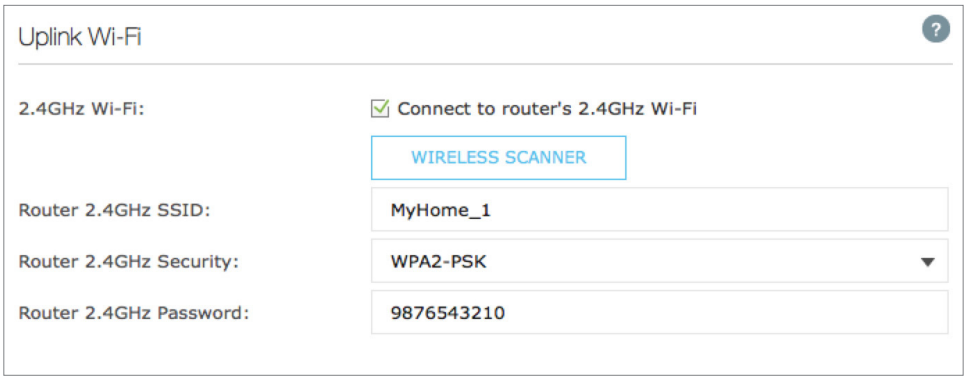
Wi-Fi Icon	Indication
	A secure Wi-Fi connection.
	A non-secure Wi-Fi connection.
2.4GHz 5GHz	No Wi-Fi connection.

Extending Another Wi-Fi Network

If you want to change the extender's connection to a different Wi-Fi network, you can repeat the Quick Setup or follow the steps below without using the Quick Setup.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

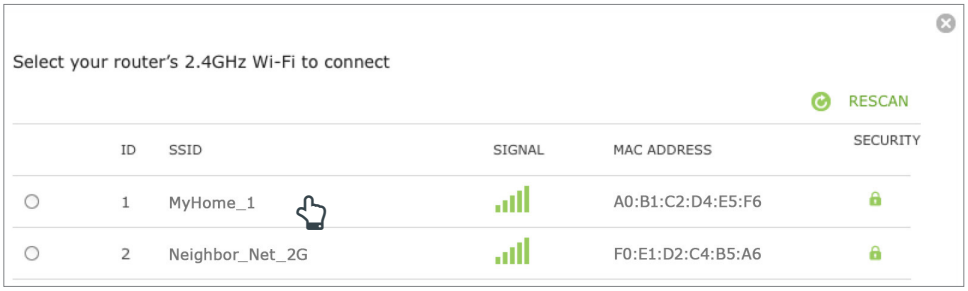
2. Under the *Settings* tab, go to **Wireless > Uplink Wi-Fi**.



3. Enable the "*Connect to router's 2.4GHz Network*" checkbox to extend the 2.4GHz band of the main (host) network.

4. Click WIRELESS SCANNER to scan for available 2.4GHz networks near you.

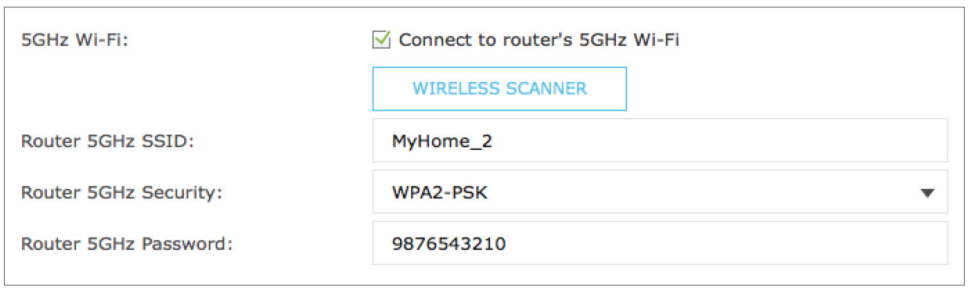
5. Select the Wi-Fi network that you wish to extend from the list.



If your Wi-Fi network doesn't appear in the list, its SSID may be hidden, click the ⊗ to close the list and enter the SSID, Security, and Password of the main (host) network. These fields are case-sensitive.

6. If the selected network is protected, enter the Wi-Fi password. Note that the *Security* of the selected network will automatically populate.

7. If your router supports the 5GHz band, and you wish to extend the 5GHz network, repeat step **3** to **6**.



8. Click SAVE to apply your settings.

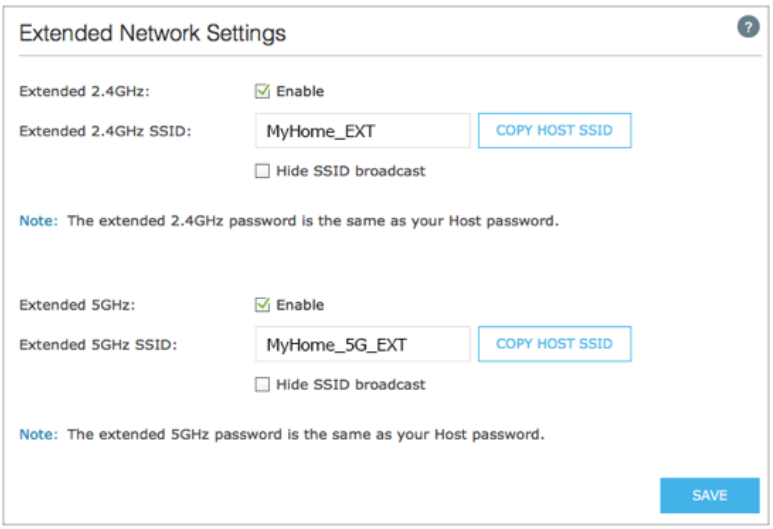
Extended Network Settings

You can customize and/or hide the wireless network name (SSID) to add extra security for your extended networks. However, you cannot change the extender's Wi-Fi security and password. You must use the same Wi-Fi password of the main (host) network to connect your wireless devices to the extended network. The steps to change the extended network's SSID are as follows.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **Wireless > Extended Wi-Fi**.

3. You can change the following Wi-Fi settings to secure your extended networks.



   a. **Extended 2.4GHz** and **Extended 5GHz:** The extended network (2.4GHz) is enabled by default. Deselect *Enable* if you do not want to use that extended network.

   b. **Extended 2.4GHz SSID** and **Extended 5GHz SSID:** You can enter a new SSID or click COPY HOST SSID to use the same SSID as the main (host) network.

   c. **Hide SSID broadcast:** Select this checkbox to hide the extender's SSID from the Wi-Fi network list.

4. Click SAVE to save the extended network settings.

Wi-Fi Access Control

By default, the Access Control function is disabled, and any wireless devices can connect to the extended networks through the SSID and Wi-Fi password. However, you can restrict Wi-Fi access to specific devices on your extended networks using the Access Control function.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **Wireless > Access Control**.

3. Toggle **On** to enable the Access Control function.

4. Under *Access Mode*, select **Blacklist** or **Whitelist**.

   - **Blacklist:** The devices in this list are not allowed to connect to the extended network.
   - **Whitelist:** Only the devices in this list are allowed to connect to the extended network.

5. Click SAVE.

To add one or more wireless devices (clients) to the Blacklist:

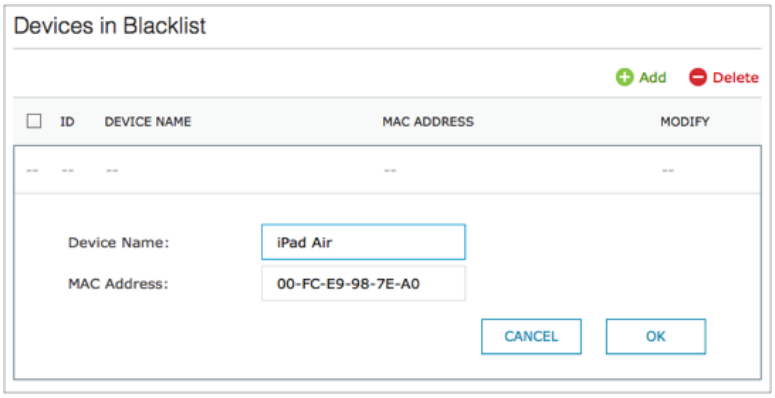
1. In the *Online Devices* list, displaying all wireless devices that are currently connected to the extended network.

   - To block a device, click the (Block) icon on the row of the device. It will be added to the *Device in Blacklist*.

   - To block multiple devices, select the checkboxes of the devices and click BLOCK at the top-right of the listing. Those devices will be added to the *Devices in Blacklist*.

To add a device to the Blacklist or Whitelist using its MAC address:

1. Under the *Devices in Blacklist* or *Devices in Whitelist*, click Add.



2. Enter the **Device Name**.

3. Enter the device's **MAC Address** in hexadecimal format (0-9, a-f, A-F) separated by a dash (for example, 00-FC-E9-98-7E-A0).

4. Click OK.

To modify the device's name or its MAC address, or remove the device from the Blacklist or Whitelist, click the (Edit) icon or the (Trash) icon on the row of the device.

To remove multiple devices, select the checkboxes of the devices and click Delete at the top-right of the listing.

Changing the IP address

By default, the Wi-Fi Extender+ is configured to obtain its IP address automatically from your wireless router or Access Point (AP) that it connects to. If the wireless router does not have a DHCP server or its DHCP server is disabled, you can assign a static IP address to the extender.

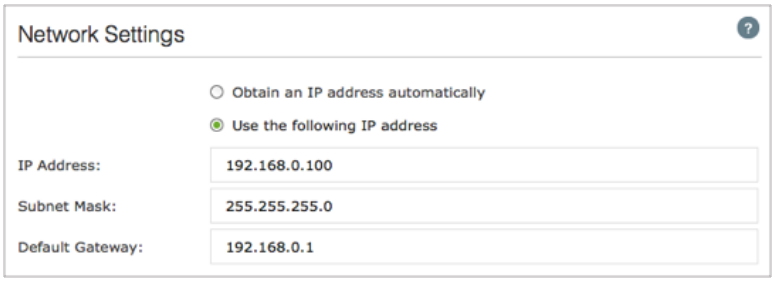
We do NOT recommend that you change the extender's IP address unless you are an experienced network administrator with strong knowledge of IP addressing, subnetting, and DHCP. Incorrect configuration can cause performance and network connection issues.

To assign a static IP address:

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **Network**.

3. Under the *Network Settings* section, select **Use the Following IP Address** and enter the static IP addresses in dotted-decimal notation into the following fields.



   a. **IP Address:** The IP address to be assigned to the extender.

   b. **Subnet Mask:** The subnet mask associated with the static IP address.

   c. **Default Gateway:** The gateway address of your wireless router or Access Point.

4. Click SAVE to apply your configuration.

You will be disconnected from the extended network upon changing the IP address. To access the extender's web-based interface, enter *http://tpinkrepeater.net* or the new assigned IP address, and log in.

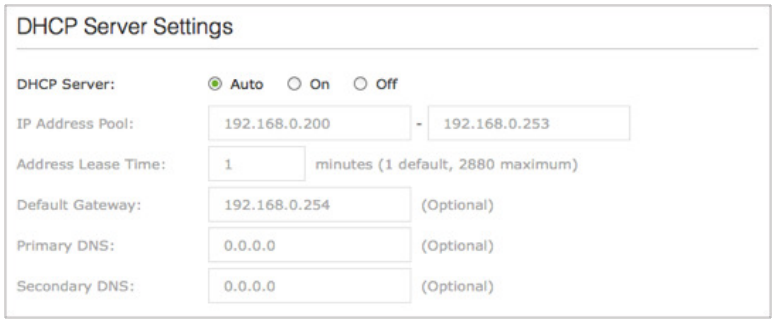
DHCP Server

By default, the Wi-Fi Extender+ is configured as a DHCP (Dynamic Host Configuration Protocol) server to automatically allocates dynamic IP addresses to DHCP clients connected to your extended networks.

To change the DHCP Server settings:

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **Network**.



3. Scroll down to the *DHCP Server Settings* section, select one of the following options:
   - **Auto:** This option is selected by default to automatically allocate IP addresses to devices.
   - **On:** If you want the extender to allocate IP addresses from a IP address pool, select this option and enter the following:

     a. **IP Address Pool:** Enter the starting and ending IP addresses in dotted-decimal notation. These addresses must be in the same subnet as the main (host) network.

     b. **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.

     c. **Default Gateway:** Enter the LAN IP address of your main (host) network. This field is optional.

     d. **Primary DNS:** Enter the primary DNS address of your main (host) network. This field is optional.

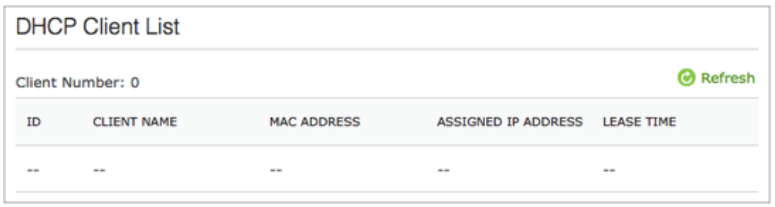
     e. **Secondary DNS:** Enter the secondary DNS address of your main (host) network. This field is optional.

f. **Off:** If selected, you must have another DHCP server within your LAN; otherwise, you have to assign an IP address for each client manually.

7. Click SAVE to save your DHCP Server configuration.

DHCP Client List

The DHCP Client List displays the following information of each DHCP client that is currently connected to the extended networks. Use the **Refresh** button to update the client list.



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

Wireless Adapter

The Range Extender can also be used as a wireless adapter to connect any Ethernet-only device, such as a Blu-ray® player, game console, DVR, or Smart TV, to your Wi-Fi network.

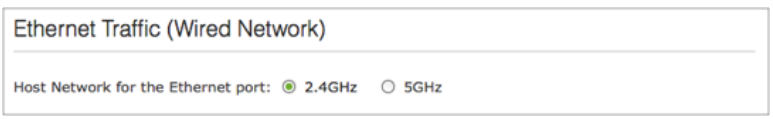
Once the Wi-Fi Extender+ is successfully connected to your Wi-Fi networks, simply connect the Ethernet-only device and the extender using an Ethernet cable.

By default, the wired device connecting to the extender's LAN port automatically connects to the 5GHz extended network. If you want the Ethernet-only device to connect to the 2.4GHz extended network, follow the steps below.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **Network**.

3. Scroll down to the *Ethernet Traffic (Wired Network)* section, and select the **2.4GHz** option.



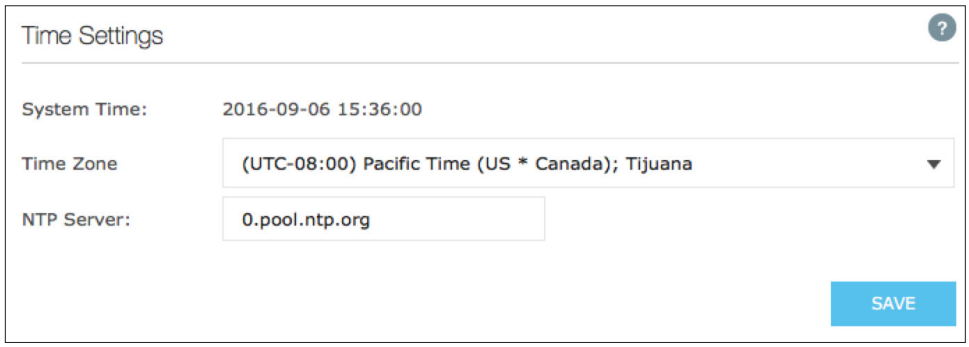
4. Click SAVE to apply your changes.

Other Administrative Tools

The System Tools allow you to perform other administrative tasks, such as time settings, firmware upgrade, backup and restore the Wi-Fi Extender+.

Time Settings

The Time Settings are very important for the time-based features, such as LED Control, System Log, and Access Control, to work properly.



1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **System Tools > Time Settings**.

3. Make sure the the current *System Time* is displayed correctly. If it is not, select the *Time Zone* of where the Wi-Fi Extender+ is located. Then, enter the IP address or domain name of the NTP (Network Time Protocol) Server to automatically synchronize the time with the timeservers that are available on the Internet.

4. Click SAVE to apply your changes.

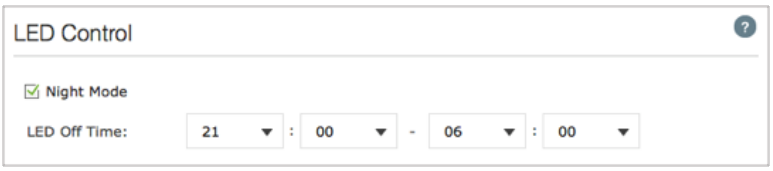
LED Control

The LED Indicator lights (2.4G, 5G, Status, Power, as well as the Smart Plug's LED) can be turned ON or OFF by pressing the physical LED button on the Wi-Fi Extender+, or you can set a specific schedule for the LED Indicator lights to turn OFF at night and turn ON at dawn with *Night Mode*.

Before enabling the *Night Mode* feature, make sure the extender's time zone is set to your proper time zone under ***Settings > System Tools > Time Settings***.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **System Tools > LED Control**.



3. Select **Night Mode** to enable the Night Mode feature.

4. Under *LED Off Time*, select the time range (from and to) during which the LEDs will be off in 24-hour time format.

5. Click SAVE to activate the Night Mode feature.

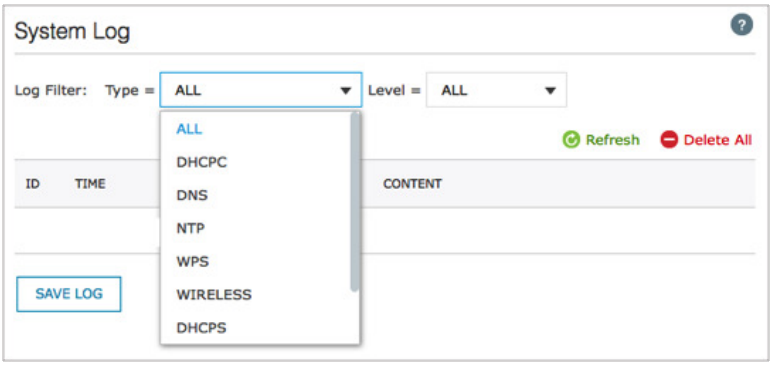
System Log

The System Log displays a list of the most recent activities (events) of the Wi-Fi Extender+. You can define which type of logs and/or the level of logs you want to view. You also have the ability to export the system log as a text file to your computer.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **System Tools > System Log**.

3. Under *Log Filter*, select the type of logs and/or the log level you want to view. "*All*" is the default selection for displaying all log types and log levels.



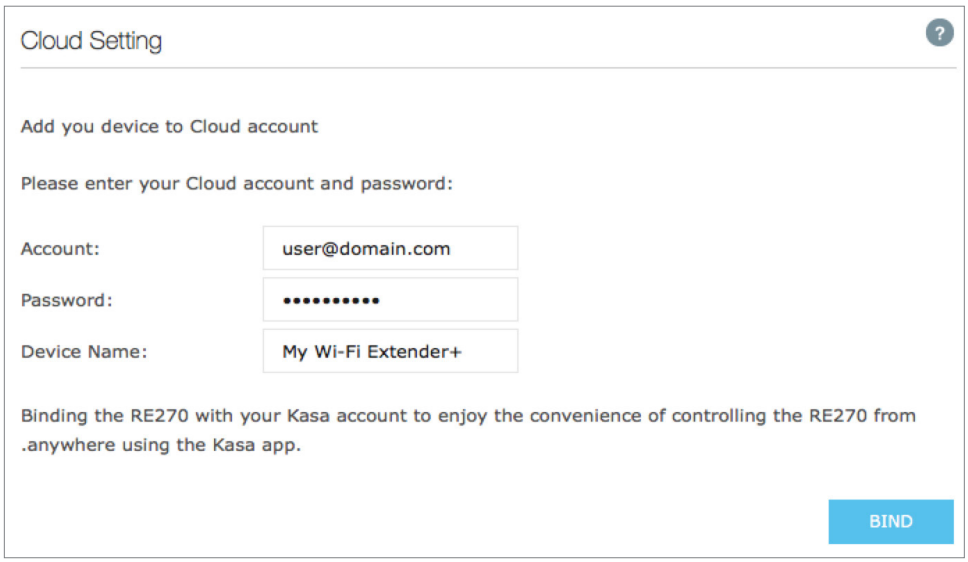
- Click Refresh to update the system log.
- Click Delete All to permanently remove all system logs.
- Click SAVE LOG (located at the end of the list) to export the system log as a text (*.txt) file to your computer.

Cloud Setting

Binding the Wi-Fi Extender+ to your Kasa account to enjoy the convenience of controlling the devices plugged into the Smart Plug and managing your extended networks from anywhere and at any time using the Kasa app.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **System Tools > Cloud Setting**.



3. Enter your Kasa account email address and password.

4. Enter a descriptive name (an alias) for your Wi-Fi Extender+.

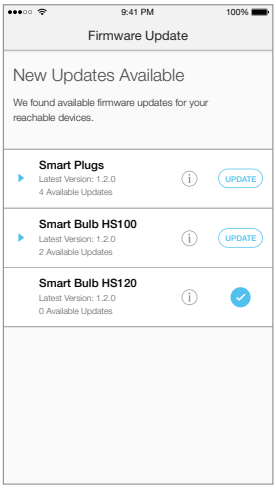
5. Click BIND.

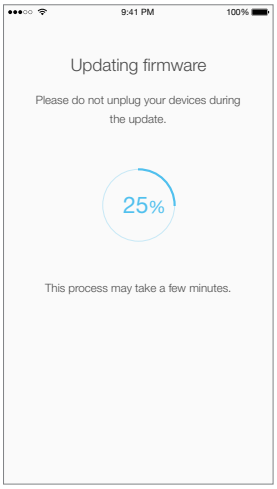
Maintaining the Wi-Fi Extender+

Firmware Upgrade

To keep your Wi-Fi Extender+ or other Smart Home devices working at peak performance and up-to-date with all the latest improvement or important fixes, we recommend that you update the firmware when updates are available. You can perform firmware upgrade on a computer or directly via the Kasa app.

To update firmware via Kasa:





1. Tap the ☰ (navigation drawer) and then **Settings**.
2. Tap **Firmware Update**.
3. Within the *Firmware Update* screen, devices that have available update are shown by device type group. Tap **Update** and confirm at the prompt.

   Remember: *Only the Wi-Fi Extender+ that are currently reachable and have an available update will be shown in the Firmware Update screen.*

It is important to leave the Kasa app running while it finishes updating the Wi-Fi Extender+. Try not to minimize the app, close the app, or interrupt the update to prevent problems.

To upgrade firmware via a computer:

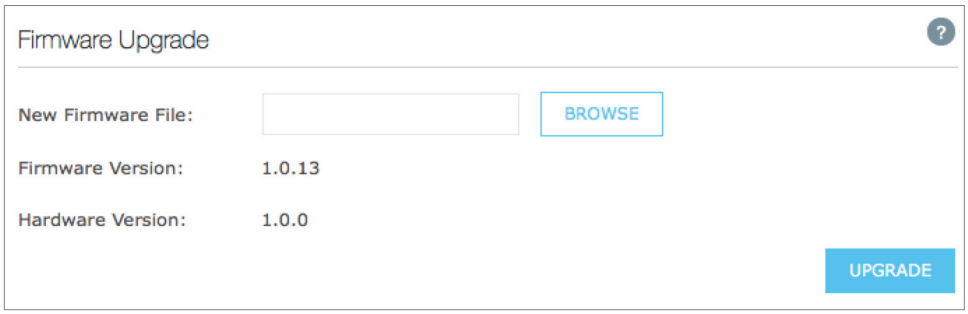
Before upgrading the firmware of the Wi-Fi Extender+, visit ***www.tp-link.com/support*** to search for and download the latest firmware to your computer.

IMPORTANT: To prevent upgrade failure, please note the following:

- Make sure that the latest firmware file you downloaded matches the *Hardware Version* as displayed under the ***Settings > System Tools > Firmware Upgrade*** page.
- Make sure you have a stable connection (wired or wireless) between the Wi-Fi Extender+ and the computer performing the firmware upgrade.
- Backup your current configuration from the ***Settings > System Tools > Backup & Restore*** page.
- Do **NOT** unplug the Wi-Fi Extender+ during the firmware upgrade.

1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.

2. Under the *Settings* tab, go to **System Tools > Firmware Upgrade**.



3. Click BROWSE to locate and select the downloaded firmware file.

4. Click UPGRADE to start upgrading the firmware.

The firmware upgrade takes a few minutes to complete, and the Wi-Fi Extender+ will automatically reboot. Please DO NOT unplug the Wi-Fi Extender+ or interrupt the firmware upgrade or reboot processes.

Backup and Restore

It is highly recommended to backup your current configurations on a regular basis, before factory resetting, or firmware upgrading. In the case of network failure or poor Wi-Fi performance, you will be able to restore the Wi-Fi Extender+ to its previous state.

Please DO NOT unplug the Wi-Fi Extender+ or interrupt the backup or restore process.

1. Connect your computer to the Wi-Fi Extender+ via a wired or wireless connection.

2. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the

admin credentials.

3. Under the *Settings* tab, go to **System Tools > Backup & Restore**.

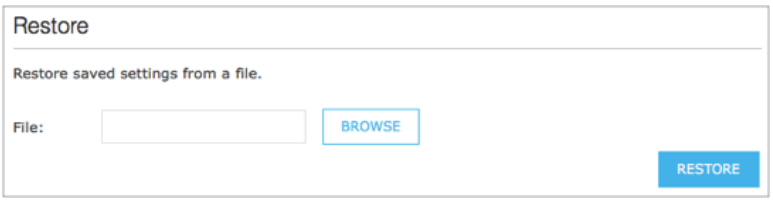
4. Under the *Backup* section, click BACKUP to save a copy of your current configuration as a binary (*.bin) file to your computer.

Make sure you save the backup file in a safe location where you can retrieve it when needed.

To restore the Wi-Fi Extender+ to its previous state:

1. Under the *Settings* tab, go to **System Tools > Backup & Restore**.

2. Under the *Restore* section, click BROWSE to locate and select the saved binary (*.bin) file.

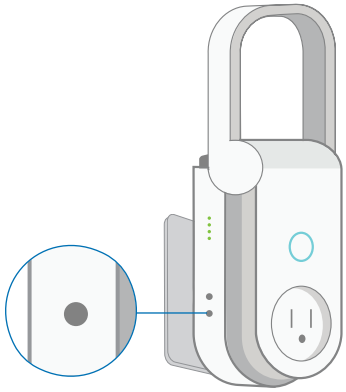


3. Click RESTORE to start the restore process.

The restore process takes a few minutes to complete. DO NOT unplug the Wi-Fi Extender+ or interrupt the restore process. After reverting back to a previous state is finished, the Wi-Fi Extender+ will automatically reboot.

Resetting

Resetting the Wi-Fi Exender+ can help you troubleshoot any issues that you may have. There are two types of reset you can perform on your Wi-Fi Extender+, Soft Reset and Hard Reset.



The Reset button is located on the left side of the Wi-Fi Extender+.

- **Soft Reset**

  Press and hold the **Reset** button for about 5 seconds, or until the *Status LED* starts to flash amber and green alternately to only reset the network settings without losing your current configuration and initiate the app onboarding (SoftAP) process.

- **Hard Reset** *(Also known as Factory Reset)*

  Press and hold the **Reset** button for about 10 seconds, or until the *Status LED* starts to flash amber rapidly to reset the Wi-Fi Extender+ to its factory defaults. Note that factory resetting the Wi-Fi Extender+ will erase all of your custom settings (such as network settings, schedules, and admin account credentials) and return them to an out-of-box configuration.

  Factory reset can also be done through the Wi-Fi Extender+'s web interface.

  1. Launch a web browser and enter **http://tplinkrepeater.net** into the URL field, then log in using the admin credentials.
  2. Under the *Settings* tab, go to **System Tools > Backup & Restore**.
  3. Under the *Factory Default Restore* section, click FACTORY RESTORE and confirm at the prompt.

The factory reset takes a few minutes to complete. DO NOT unplug the Wi-Fi Extender+ or interrupt the factory reset process. The Wi-Fi Extender+ will automatically reboot when the factory reset is finished.

To log back into the Wi-Fi Extender+, enter the default credentials "*admin*" for both username and password.

Troubleshooting

Frequently Asked Questions

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

   There are two methods to factory reset the Wi-Fi Extender+. Keep in mind that factory resetting the Wi-Fi Extender+ will erase all of your custom settings (such as network settings, schedules, and admin account credentials) and return them to an out-of-box configuration.

   - **Via the Reset button**

     With the Wi-Fi Extender+ powered on, press and hold the Reset button for about 10 seconds, or until all the Status LED starts to flash amber rapidly, then release the button.

   - **Via the extender's web interface**

     Launch a browser and log in at *http://www.tplinkrepeater.net*. Under the *Settings* tab, go to *System Tools > Backup & Restore*. Then, click the FACTORY RESTORE button under *Factory Default Restore*.

2. **I forgot my password, what should I do?**

   There are two types of passwords: Wi-Fi password and admin password that is used to access the extender's web interface.

   - **Wi-Fi password**

     The Wi-Fi password to connect to your extended network is the same as your main (host) network.

   - **Admin account password**

     The default Admin account's username and password are "*admin*" (all lowercase). If you have changed and forgotten the Admin account, you will have to reset the Wi-Fi Extender+ to its factory defaults. Refer to the ***Resetting*** section for instructions.

3. **What should I do when the Status LED is OFF?**

   - Check your network connectivity.
   - Avoid placing the Wi-Fi Extender+ near potential sources of radio signal interference such as microwave ovens, cordless phones, baby monitors, and motor-driven appliances.
   - Soft reset the Wi-Fi Extender+ and repeat the app onboarding process.
   - Factory reset the Wi-Fi Extender+ and try to add it to your network again.

4. **What should I do if the 2.4G and 5G LEDs keep flashing green or are OFF?**

   - When the 2.4G and 5G LEDs are flashing green, the Wi-Fi Extender+ is in the SoftAP mode, you need to set up the extender using Kasa or its web-based user interface.
   - If both of the LEDs are not illuminated, which means the Wi-Fi Extender+ is not connected to your router, press and hold the Reset button for 5 seconds until the Status, 2.4G, and 5G LEDs

start to flash to initiate the SoftAP mode. Then, launch the Kasa app and add the extender again.

5. **How to troubleshoot when the SoftAP process fails?**

   - Press and hold the Reset button for about 5 seconds or until the Status, 2.4G and 5G LEDs start to flash, then release the button. When the Status, 2.4G and 5G LEDs are flashing green, follow the Kasa app's prompts to set up your Wi-Fi Extender+ again. Alternatively, you can set up the Wi-Fi Extender+ using a web browser on your computer.

6. **What should I do when I cannot access the extender's web interface using a computer?**

   - Make sure that your mobile device or computer is connected to the extended network. If you have not configured the Wi-Fi Extender+, connect to the default network name (SSID): *TP-LINK_2G_EXT* or *TP-LINK_5G_EXT*.
   - Make sure that your computer is set to obtain an IP address automatically (DHCP).

7. **Which devices can I plug into the Smart Plug?**

   - You can plug in your electronic devices and small appliances, such as lamps, humidifiers, portable heaters, and fans. The Smart Plug is rated to handle loads of up to 15 amps. Please do not exceed the recommended electrical ratings.

8. **What should I do when the plugged-in device won't respond to Kasa's commands?**

   - Make sure the device plugged into the Smart Plug is switched to ON.
   - Check your network connectivity.
   - Check the extender's connection.
   - Check if the 2.4G and 5G LEDs are lit green. If they are flashing green or off, reconnect the Wi-Fi Extender+ to your Wi-Fi network.
   - Power cycle your router and/or reboot the Wi-Fi Extender+ by unplugging it and plugging it back in.
   - Factory reset the Wi-Fi Extender+. Refer to the FAQ #1.

9. **How do I pair the Wi-Fi Extender+ with Amazon Echo?**

   Visit *www.tp-link.com/en/faq-944.html* or within the Kasa Help section for pairing instructions, then you can interact with your plugged-in devices using voice recognition. For example, to command Alexa to turn on the Wi-Fi Extender+ named "*Bedroom Lights*", simply say, "*Alexa, turn on Bedroom Lights.*"

Usage Tips

- Place your Wi-Fi Extender+ midway between your wireless router and the Wi-Fi "dead" zone.
- Avoid physical obstructions and radio interference in the surrounding area.

Support

If you encounter any issues with the Wi-Fi Extender+ or configuration, please visit **www.tp-link.com/support** for web support and troubleshooting information.

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 10/100/1000M Auto-Negotiation LAN RJ45 port
System Requirements:	Android 4.1 or higher, iOS 8 or higher
Wireless	
Frequency Band:	*2.4GHz:* 2.4~2.4835GHz *5GHz:* 5.15~5.25GHz
Radio Data Rate:	*2.4GHz:* 11n: Up to 450Mbps 11g: 54/48/36/24/18/12/9/6Mbps 11b: 11/5.5/2/1Mbps *5GHz:* 5.15~5.25GHz 11ac: Up to 1300Mbps 11n: Up to 450Mbps 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

Environment:	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -20°C~70°C (-4°F ~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing

Limited Warranty

To learn more about the Limited Warranty for TP-Link products, please visit www.tp-link.us/support/rma.

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."

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 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.

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.

DFS (Dynamic Frequency Selection) products that operate in the bands 5250- 5350 MHz, 5470-5600MHz, and 5650-5725MHz.

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.

Les produits utilisant la technique d'atténuation DFS (sélection dynamique des fréquences) sur les bandes 5250- 5350 MHz, 5470-5600MHz et 5650-5725MHz.

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 and 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)

NCC 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。

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。

Safety Information

- When product has a power button, the power button is one of the ways to shut off the product; when there is no power button, the only way to completely shut off the 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.

~	AC voltage
	Indoor use only
VI	Energy efficiency Marking
	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.