



User Guide

AV600 Powerline Wi-Fi Extender
TL-WPA4220

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About This Guide

This guide is a complement to Quick Installation Guide. The Quick Installation Guide provides instructions for quick Internet setup, while this guide contains details of each function and demonstrates how to configure them in typical scenarios.

When using this guide, please notice that features of the powerline extender may vary slightly depending on the model and software version you have, and on your location and language. All images, parameters and descriptions documented in this guide are used for demonstration only.

Conventions

In this guide the following conventions are used:

Convention	Description
Powerline extender	Stands for AV600 Powerline Wi-Fi Extender without any explanation.
<u>Teal Underlined</u>	Hyperlinks are in teal and underlined. You can click to redirect to a website or a specific section.
Teal	Key information appears in teal, including management page text such as menus, items, buttons and so on.
>	The menu structures to show the path to load the corresponding page. For example, Wireless > MAC Filter means the MAC Filter function page is under the Wireless menu.
 Note:	Ignoring this type of note might result in a malfunction or damage to the device.
 Tips:	Indicates important information that helps you make better use of your device.
Symbols on the web page	 click to edit the corresponding entry.  click to delete the corresponding entry.  click to enable or disable the corresponding entry.

More Info

- The latest software, management app and utility are available from the [Download Center](#) at <http://www.tp-link.com/support>.
- The Quick Installation Guide (QIG) can be found where you find this guide or inside the product packaging.
- Specifications can be found on the product page at <http://www.tp-link.com>.
- A Technical Support Forum is provided for you to discuss our products at <http://forum.tp-link.com>.
- Our Technical Support contact information can be found at the [Contact Technical Support](#) page at <http://www.tp-link.com/support>.

Chapter 1

Get to Know Your Powerline Extender

This chapter introduces the powerline extender by detailing its main features and appearance.

It contains the following sections:

- [Product Overview](#)
- [Main Features](#)
- [Product Appearance](#)

1.1. Product Overview

TP-Link's Powerline Wi-Fi Extender is a combined wired/wireless network expansion device. With the help of your home's existing electrical circuitry, it can extend your Wi-Fi to wherever you want in your house.

Ethernet ports and built-in antennas enable the powerline Wi-Fi extender to provide wired and wireless access for multiple computers and mobile devices.

With an array of additional features, the powerline Wi-Fi extender is the perfect choice for your home or business network.

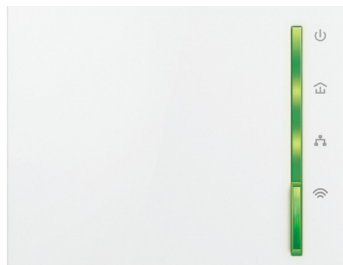
1.2. Main Features

- tpPLC Utility to manage the whole powerline network easily and conveniently.
- Wi-Fi Move to synchronize any changes of Wi-Fi Settings and LED schedules across a secured powerline network.
- Wi-Fi Clone to copy wireless network name (SSID) and password of your router to the extender at the press of a button.
- Guest Network to set a new wireless network for guests without disclosing your own wireless network.
- Wi-Fi Schedules to set when your Wi-Fi will be on.
- Multiple Ethernet ports to connect the TVs, game consoles, or PCs to the internet at the same time.

1.3. Product Appearance

Your powerline extender may differ in appearance slightly from that depicted because of the region and product version.

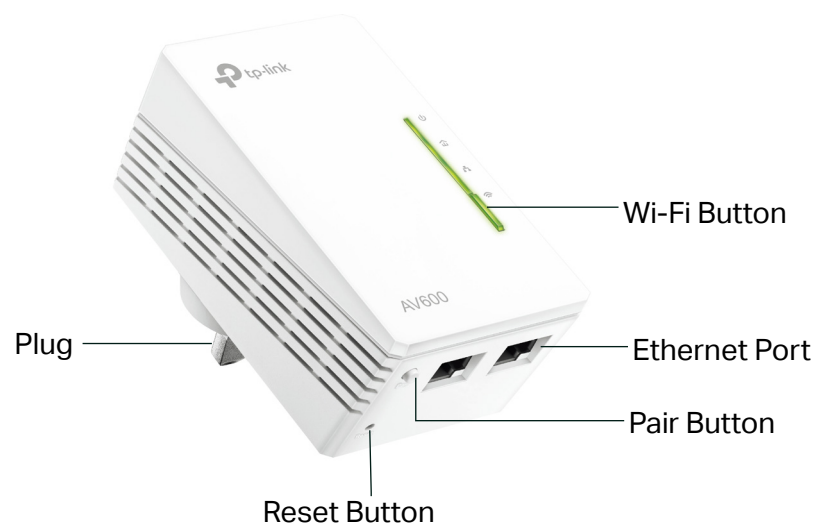
1.3.1. LED Legend



LEDs indicate the powerline extender's working status. For more details, please refer to the following table.

Name	Status	Indication
 Power	On/Off	The powerline extender is on or off.
	Blinking	Pairing is in progress.
 Powerline	On	The powerline extender is connected to the powerline network and is in a suitable location.
	Blinking	The powerline extender is experiencing poor signal strength. Try plugging it into another wall socket.
	Off	The powerline extender is not connected to any powerline network.
 Ethernet	On	At least one Ethernet port is connected to a powered-on device.
	Off	No Ethernet port is connected to a powered-on device.
 Wireless	On	The wireless function is enabled.
	Off	The wireless function is disabled.
	Blinking	Slowly: The powerline extender is cloning 2.4GHz wireless network settings from the main router. Quickly: The powerline extender is syncing 2.4GHz wireless network settings.

1.3.2. Physical Interface



Wi-Fi Button

Press and hold the button for 1 second to copy wireless settings from the main router to the extender. Go to [Wi-Fi Clone](#) for more information.

Press and hold the button for about 5 seconds to turn the wireless function on or off. The wireless function is on by default.

Ethernet Port

Connect the Ethernet ports to your wired devices, such as a computer, a router or a game console, via Ethernet cables.

Pair Button

Press and hold the button for 1 second to join a powerline network. Go to [To Set Up a New Secure Wireless Network](#) for more information.

Reset

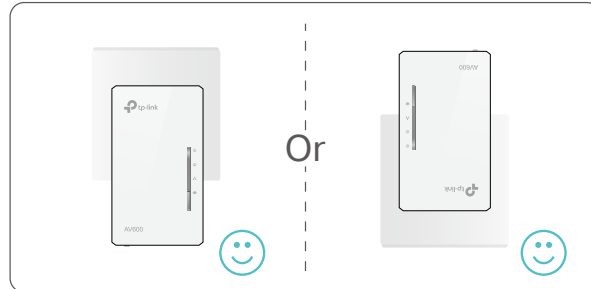
Press and hold the Reset button for at least 2 seconds to reset the powerline extender to factory default settings. When Reset is triggered properly, all LEDs will turn off and start on again.

Plug

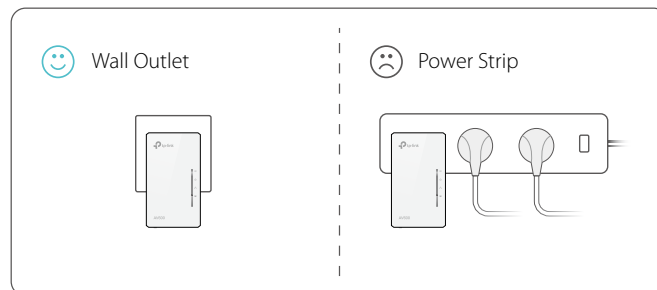
The powerline adapter has a Plug that can be connected to any standard power socket.

Note:

1. The provided plug may differ from the picture due to different regional power specifications.
2. Use the product in below directions.



3. Plug the product directly into a wall socket instead of a power strip.



Chapter 2

Initial Use

This chapter guides you on how to use the powerline extender when you first open the package.

It contains the following sections:

- [To Set Up a New Secure Wireless Network](#)
- [To Extend the Existing Wireless Network](#)

2.1. To Set Up a New Secure Wireless Network

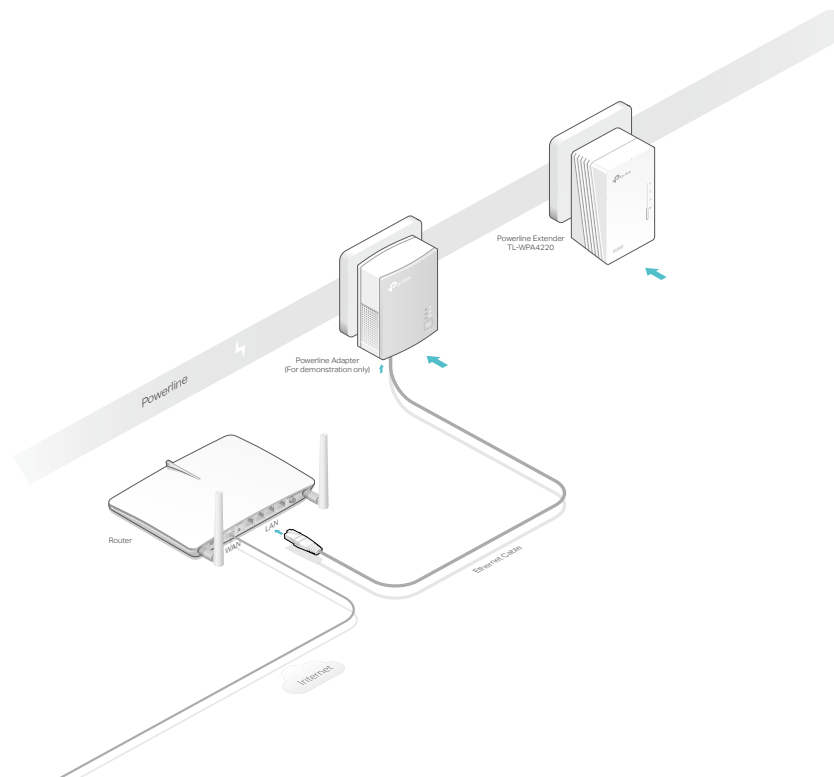
I want to:

Use the Powerline Wi-Fi Kit to set up a new secure wireless network in my house.

For example, I have a wireless router in my house, but the wireless signal cannot reach every corner. So I bought a Powerline Wi-Fi Kit to extend the wireless network. The Powerline Wi-Fi Kit includes a powerline adapter and a powerline extender.

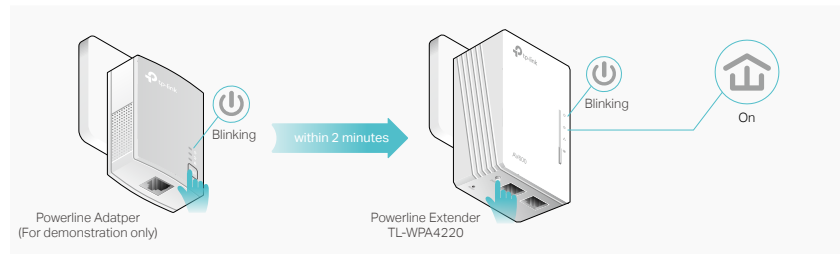
How can I do that?

1. Connect the powerline adapter to an available LAN port of the router.
2. Plug the powerline adapter into a wall socket.
3. Plug the powerline extender into a wall socket near the adapter.



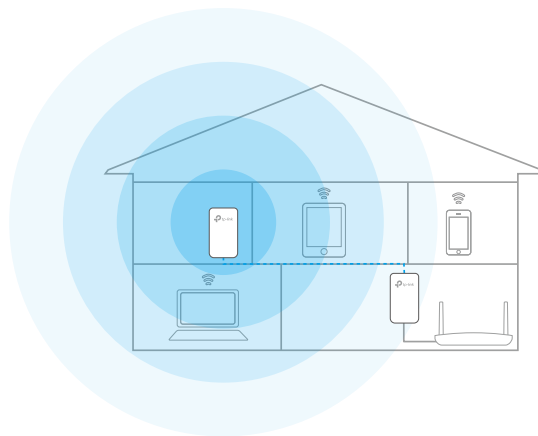
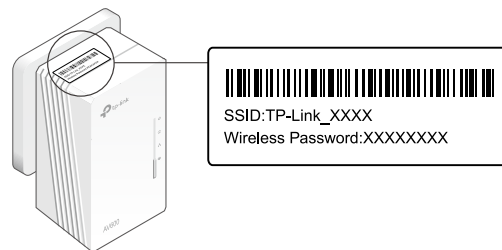
4. Pair the powerline devices.
 - a. Press the Pair button on the powerline adapter for 1 second. The Power LED starts blinking.
Note: If the Power LED does not blink, press the Pair button again.
 - b. Within two minutes, press the Pair button on the powerline extender for 1 second. The Power LED starts

blinking. When the Powerline LED turns solid on, the pairing process is complete.



- Relocate the extender to the Wi-Fi “dead” zone. Use the SSID (network name) and password on the label at the top of the extender.

Note: A blinking Powerline LED indicates poor signal strength. Move the extender to another location.



Done!

Now enjoy the internet!

2.2. To Extend the Existing Wireless Network

I want to:

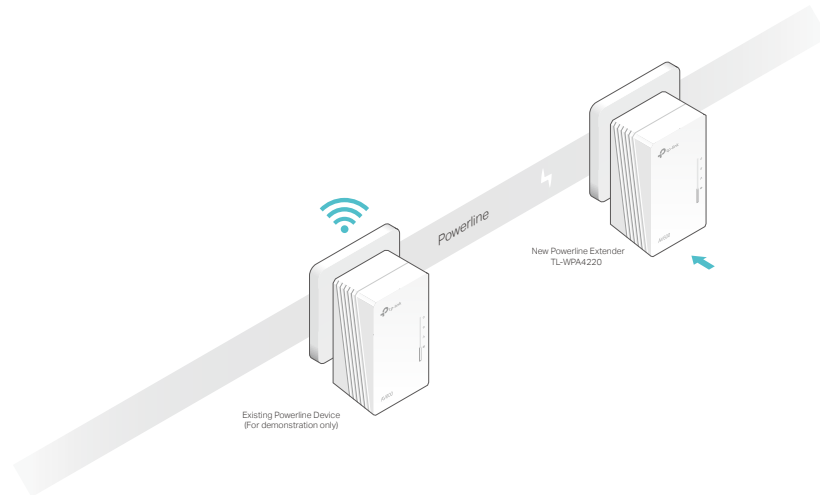
Extend the existing wireless network by adding a new powerline extender to the existing powerline network.

For example, I already set up a wireless network using powerline

devices, but the wireless network is still not big enough to reach the top floor. So I bought a new powerline extender to extend the wireless network.

How can I do that?

1. Plug the new powerline extender into a wall socket near one of the existing powerline extender.



2. Check the new extender's Powerline LED . Is it on?
 - If it is on, follow Step 4 > A.
 - If it is off, follow Step 3 and Step 4 > B.
3. Add the new powerline extender to the existing powerline network by pairing two powerline devices.
 - a. Press the Pair button on the existing powerline device for 1 second. The Power LED starts blinking.

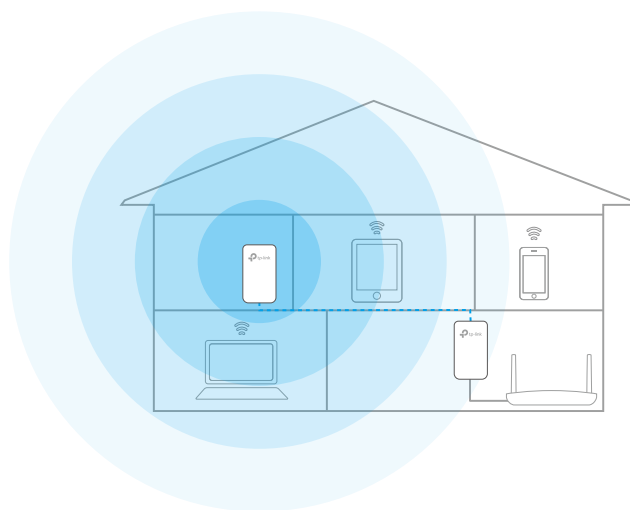
 Note: If the Power LED does not blink, press the button again.
 - b. Within two minutes, press the Pair button on the new powerline extender for 1 second. The Power LED starts blinking. When the Powerline LED turns solid on, the pairing process is complete.



4. Relocate the new extender to the Wi-Fi "dead" zone.

 Note: A blinking Powerline LED indicates poor signal strength. Move the extender to another location.

- A . Use the SSID (network name) and password on the on the label at the top of the extender to connect to the internet.
- B . If you cannot find the default SSID in your Wi-Fi network list, this may mean the Wi-Fi Move feature has automatically copied over the existing wireless settings. In this case, use the SSID and password of your existing powerline network to connect.



Done!

Enjoy the internet through your extended network!

Chapter 3

Configuring via Web Management Interface

The powerline extender has a management interface to configure all settings. The management interface can be opened on any device that has a web browser, such as Internet Explorer, Chrome or Firefox. This chapter is going to give detailed information on what functions the powerline extender has and how to configure them.

It contains the following sections:

- [Management Interface](#)
- [Manage Powerline Network](#)
- [Wi-Fi Move](#)
- [Wi-Fi Clone](#)
- [Wireless Network](#)
- [LED Schedules](#)
- [Schedule Your Wireless Function](#)
- [Parental Controls](#)
- [Guest Network](#)
- [MAC Filter](#)
- [Administration](#)

3. 1. Management Interface

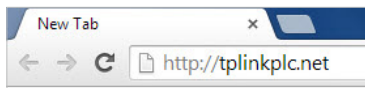
3. 1. 1. Log In

There are two methods to log in to the management interface.

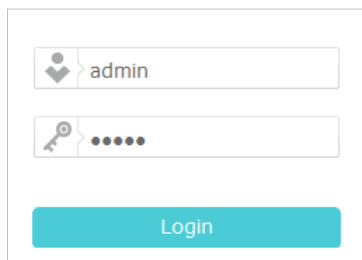
Method 1: Via web browser

Follow the steps below:

1. Connect your device to the powerline extender wirelessly.
2. Launch a web browser and type in <http://tplinkplc.net> to open the management interface.



3. Enter **admin** (the default username and password) for both username and password. We recommend you change them immediately after your first login.

A login form with two input fields. The first field has a user icon and the text 'admin'. The second field has a key icon and a series of dots representing a password. Below the fields is a blue button labeled 'Login'.

4. Click **Login**.

Method 2: Via tpPLC utility

Follow the steps below:

1. Connect your computer to the powerline extender via an Ethernet cable or wirelessly.
2. Obtain and install the tpPLC Utility from the product's Support page at <http://www.tp-link.com>.
3. Open the utility, move your mouse over your powerline extender, and click the  icon that appears beside it.
4. Enter **admin** for both username and password.
5. Click **Login**.

3. 1. 2. Change the Login Account

We strongly recommend you change the login account immediately after the first login.

Follow the steps below to change the account.

1. Go to **System Tools > Administration**.

Account Management

Old Username:

Old Password:

New Username:

New Password:

Low

Middle

High

Confirm New Password:

Save

2. Follow instructions on the page to set a new username and password. A strong password should be at least 8 characters in length, combining uppercase and lowercase letters, numbers and punctuations.
3. Click [Save](#) to make the settings effective.

3. 2. Manage Powerline Network

A powerline network is formed of powerline devices, including adapters and extenders. Powerline devices in the same powerline network share the same powerline network name.

3. 2. 1. Add a New Device to the Powerline Network

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to the [Status](#) page. Click the [Powerline Network](#) icon to see the Powerline Device List.

Powerline Device List

List of all Powerline devices in the current powerline network.

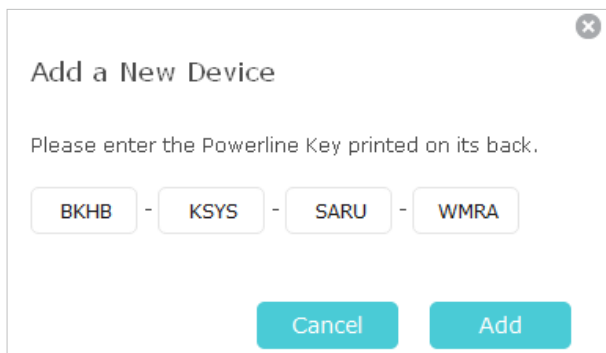

Local Device

	12-54-25-42-54-52	RX:467Mbps	TX:465Mbps	
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Back Refresh

3. Click the **add** icon  and enter the **Powerline Key** of the device you want to add. The Powerline Key contains 16 capital letters, formed like XXXX-XXXX-XXXX-XXXX. It is printed on the back of the powerline device.



A dialog box titled "Add a New Device" with a close button (X) in the top right corner. Below the title, it says "Please enter the Powerline Key printed on its back." There are four input fields, each containing a four-letter code: "BKHB", "KSYS", "SARU", and "WMRA", separated by hyphens. At the bottom, there are two buttons: "Cancel" and "Add".

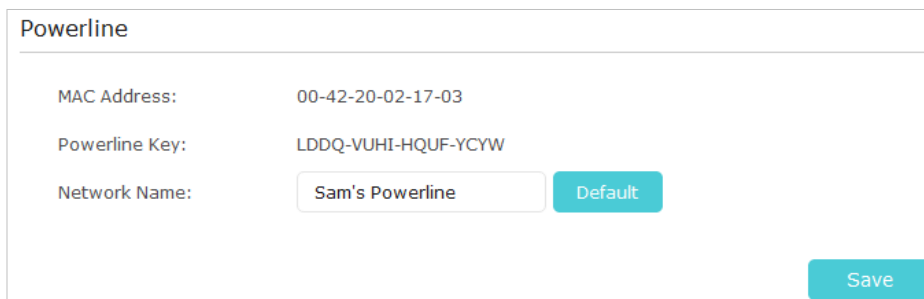
4. Click **Add** to add the device.

3. 2. 2. Change Powerline Network Name

You can change the extender's powerline network name to add it to or remove it from a powerline network.

Follow the steps below to change the name.

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **Device Settings > Powerline**.



A screenshot of the "Powerline" settings page. It shows three fields: "MAC Address:" with value "00-42-20-02-17-03", "Powerline Key:" with value "LDDQ-VUHI-HQUF-YCYW", and "Network Name:" with a text input field containing "Sam's Powerline" and a "Default" button next to it. A "Save" button is located at the bottom right.

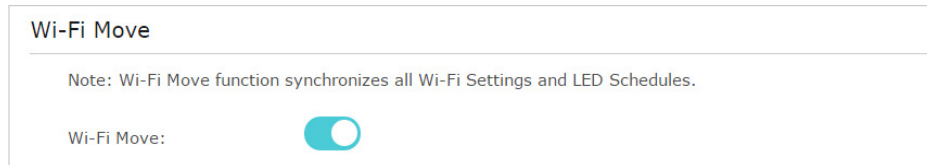
3. Change the **Network Name**. You can also click **Default** to use the default network name, e.g. HomePlugAV. However, if the default name is used, the Wi-Fi Move function will be automatically disabled.
4. Click **Save** to make the settings effective.

3. 3. Wi-Fi Move

Wi-Fi Move is enabled by default. With the feature enabled, any changes made to the Wi-Fi settings and LED schedules of one powerline extender will be automatically synchronized to other powerline extenders whose Wi-Fi Move feature is also enabled on the same powerline network .

Follow the steps below to enable the Wi-Fi Move feature:

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **Wireless > Wi-Fi Move**.
3. Toggle **On** to enable the feature.



Note:

When Wi-Fi Move is enabled, the following features will be synced: Wireless SSID & Password, Wireless Security, Wireless Mode, Wireless Radio Status, Wi-Fi Schedules, LED Schedules, Wi-Fi Clone Settings, MAC Filter Settings, Parental Controls, and Guest Network.

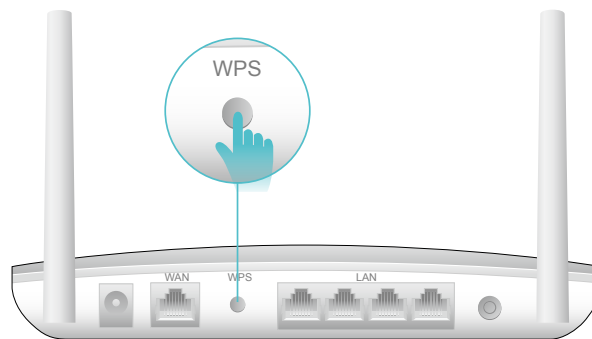
3.4. Wi-Fi Clone

I want to:

Copy wireless settings from my router to my extender, so I can use the same SSID and password to access the internet in my house.

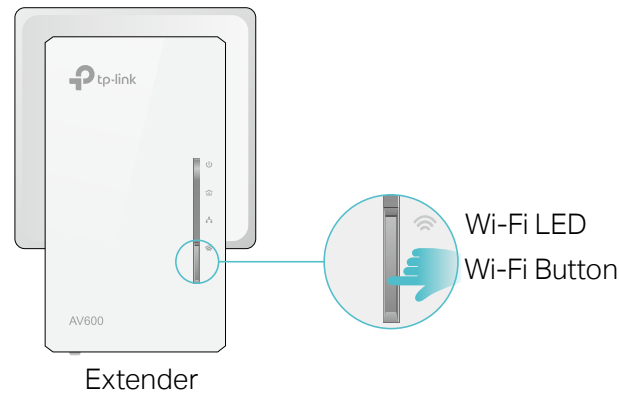
How can I do that?

1. Before cloning, make sure your router supports the same band as your extender. If you do not know how to check this, go to your router's User Guide for more information.
2. Plug your extender near your router.
3. Press the WPS button on your router.



Wireless Router

4. Within two minutes, press the Wi-Fi button on the front panel of the extender for 1 second. The Wi-Fi LED starts blinking.



Done!

When the Wi-Fi LED blinks quickly for 3 seconds and then stays on, the Wi-Fi Clone process is complete.

3.5. Wireless Network

3.5.1. Customize Wireless Settings

The powerline extender's wireless network name (SSID), password, and security option are preset in the factory. The preset SSID and password can be found on the product label. You can customize the wireless settings according to your needs.

Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.

Go to [Wireless](#) > [Settings](#) page.

To enable or disable the wireless function:

Select the box to enable the wireless function. Deselect the box to disable wireless function. If disabled, all wireless settings will be ineffective.

Wireless	
2.4GHz:	☒ Enable Wireless Radio

To change the wireless network name (SSID) and password:

The default SSID is TP-Link_XXXX, and the default password is printed on the product label. You can change the default ones by directly entering new ones in the field. SSID is up to 32 characters, and the value in both SSID and password is case-sensitive.

Note:

Remember to write down the new SSID and password, for you will be disconnected when new settings are effective.

Network Name (SSID):	TP-Link_1DA1	☐ Hide SSID
Password:	12345670	

To hide SSID:

Select Hide SSID, and your SSID will not be broadcasted. It won't display when you scan for local wireless network list on your wireless device and you need to manually join the network.

Network Name (SSID):	TP-Link_1DA1	☒ Hide SSID
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To have more advanced settings

Click [Advanced](#) below [Password](#) to have more advanced settings.

 [Advanced](#)

Security:	WPA/WPA2-Personal (Recommended)
Version:	☒ Auto ☐ WPA-PSK ☐ WPA2-PSK
Encryption:	☐ Auto ☐ TKIP ☒ AES
Mode:	802.11b/g/n mixed
Channel Width:	☒ Auto ☐ 20MHz ☐ 40MHz
Channel:	Auto
Transmit Power:	☐ Low ☐ Middle ☒ High

Security: Select an option from the Security drop-down list. The extender provides three options, No Security, WPA/WPA2 Personal (Recommended), and WEP. WPA2 uses the newest standard and the security level is the highest. Don't change the default settings unless necessary.

Mode: Select the desired mode.

- 802.11n only: Select only if all of your wireless clients are 802.11n devices.
- 802.11g/n mixed: Select if you are using both 802.11g and 802.11n wireless clients.
- 802.11b/g/n mixed: Select if you are using a mix of 802.11b, 11g, and 11n wireless clients.

Note: When 802.11n only mode is selected, only 802.11n wireless clients can connect to the extender. It is strongly recommended that you select 802.11b/g/n mixed, so that all of 802.11b, 802.11g, and 802.11n wireless clients can connect to the extender.

Channel Width: Select the channel width. The default setting is Auto, which can adjust the channel width for your clients automatically.

Channel: Select the channel you want to use from the drop-down list. This field determines which operating frequency will be used. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.

Transmit Power: Select the level of transmit power. We recommend you choose **High** to have the best signal strength.

3.5.2. Wireless Clients

Follow the steps below to view detailed information of all wireless clients connected to the extender.

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **Wireless > Clients** page.

Online Wireless Clients					
Total Clients: 1				 Refresh	
ID	Device Name	IP Address	MAC Address	Wireless Band	Security
1	android-61a2dbec646dc5d0	192.168.0.100	58-1F-28-DA-E6-40	2.4GHz	WPA2-PSK

3. Now you can view the detailed information, including MAC address, connected wireless band, security option as well as the packets transmitted.

 **Tips:** You can also see the wireless details by clicking the wireless clients icon on the **Status > Wireless Clients** page.

3.6. LED Schedules

I want to:

Automatically turn off LEDs at times when I do not want light in my room.

For example, I want to turn LEDs off everyday from 00:00am to 7:00am.

How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net> and log in with the username and password you set for the extender.
2. Go to **Device Settings > LED Schedules**.
3. Enable the LED Scheduler. If you are prompted of changes synchronization, click **Continue**.

LED Schedules

Note: Please make sure the time settings are correct before using this function.

LED Scheduler: ☒

LED Off Schedules

Note: Any changes made to LED Schedules will be synchronized across powerline extenders whose Wi-Fi Move function is enabled. Be careful to make changes.

+ Add - Delete

☐	ID	From	To	Day(s)	Status	Modify
☐	--	--	--	--	--	--

4. Click [Add](#) to add an entry.
5. Choose [LED Off Time](#) from 00:00 to 7:00, and then check all boxes from Sunday to Saturday.

Note: Please make sure that the system time is correct before using this function.
6. Select [Enable this entry](#) to make it effective.

LED Off Schedules

Note: Any changes made to LED Schedules will be synchronized across powerline extenders whose Wi-Fi Move function is enabled. Be careful to make changes.

+ Add - Delete

☐	ID	From	To	Day(s)	Status	Modify
☐	--	--	--	--	--	--

LED Off Time:

0:00 - 7:00

Repeat Every: ☒ Sun. ☒ Mon. ☒ Tue. ☒ Wed. ☒ Thu. ☒ Fri. ☒ Sat.

☒ [Enable this entry](#)

Cancel

OK

7. Click [OK](#) to save the settings.

Done!

Now your LEDs will be turned off automatically at 00:00 and turned on at 7:00am the next morning.

3. 7. Schedule Your Wireless Function

I want to:

Automatically turn off my wireless network at times when I do not need the wireless connection.

For example, I want to turn them off from 00:00am to 7:00am. Yet if I have my wireless devices connected to the extender at that

time, I want the wireless on till all devices are disconnected from the internet.

How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net> and log in with the username and password you set for the extender.
2. Go to **Wireless > Wi-Fi Schedules**.

Wi-Fi Schedules

Note: Please make sure the time settings are correct before using this function.

Wi-Fi Scheduler: ☐

☐ Do not turn off Wi-Fi while clients are connected to it.

Save

Wi-Fi Off Schedules

Note: Any changes made to Wi-Fi Schedules will be synchronized across powerline extenders whose Wi-Fi Move function is enabled. Be careful to make changes.

[+ Add](#) [- Delete](#)

☐	ID	From	To	Day(s)	Status	Modify
☐	--	--	--	--	--	--

3. Enable the Wi-Fi Scheduler. If you are prompted of changes synchronization, click [Continue](#).
4. Check the box of [Do not turn off Wi-Fi while clients are connected to it](#) and click [Save](#).
5. Click [Add](#) to add an entry.
6. Choose 00:00 and 7:00 from the drop-down list. Check all boxes from Sunday to Saturday.

Note: Please make sure that the system time is correct before using this function.
7. Select [Enable this entry](#) to make it effective.

Wi-Fi Off Schedules

Note: Any changes made to Wi-Fi Schedules will be synchronized across powerline extenders whose Wi-Fi Move function is enabled. Be careful to make changes.

+

Add

-

Delete

☐	ID	From	To	Day(s)	Status	Modify
☐	--	--	--	--	--	--

Wi-Fi Off Time:

0:00

-

7:00

Repeat Every: ☒ Sun. ☒ Mon. ☒ Tue. ☒ Wed. ☒ Thu. ☒ Fri. ☒ Sat.

☒ Enable this entry

Cancel

OK

8. Click **OK** to save the settings.

Done!

Now your Wi-Fi will be automatically turned off at 00:00 and turned on at 7:00am the next morning.

Note:
The Wi-Fi LED will turn off if the wireless network is disabled.

3. 8. Parental Controls

I want to:

Control when my children’s wireless devices can access the internet.

For example, I want to allow my children’s wireless devices to access only from 18:00 (6PM) to 22:00 (10PM) on weekdays and not other times.

How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **Parental Controls**.

Parental Controls

Note: Please make sure the time settings are correct before using this function.

Parental Controls: ☐

Devices Under Parental Controls

+ Add
- Delete

☐	ID	MAC Address	Internet Access Time	Description	Status	Modify
☐	--	--	--	--	--	--

3. Enable Parental Controls. If you are prompted of changes synchronization, click [Continue](#).
4. Click [Add](#).
5. Click [View Existing Devices](#), and select the device to be controlled. Or, enter the [MAC Address](#) manually.
6. Click the  icon to set the Internet Access Time. Drag the cursor over the appropriate cell(s) and click [Save](#).

Note: Please make sure that the system time is correct before using this function.

Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

00:00						
01:00						
02:00						
03:00						
04:00						
05:00						
06:00						
07:00						
08:00						
09:00						
10:00						
11:00						
12:00						
13:00						
14:00						
15:00						
16:00						
17:00						
18:00						
19:00						
20:00						
21:00						
22:00						
23:00						
24:00						

Internet Access Time

Cancel
Reset
Save

7. Enter a [Description](#) for the entry.
8. Select [Enable this entry](#) to make it effective.

Devices Under Parental Controls

+ Add - Delete

☐	ID	MAC Address	Internet Access Time	Description	Status	Modify
☐						

MAC Address: View Existing Devices

Internet Access Time: 🕒

Description: (Optional)

☒ Enable this Entry

Cancel
OK

9. Click **OK** to save the settings.

Done!

Now the controlled device can access only from 18:00 (6PM) to 22:00 (10PM) on weekdays and not other times.

3.9. Guest Network

I want to:

Create a network for my guests, providing internet access for them while at the same time limit the network authorities for guests to ensure network security and privacy.

How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the password you set for the extender.
2. Go to **Guest Network**.
3. Check the box of relative entry to limit network authorities. If you have problems understanding these items, click the question mark on the upper right corner to have more information.
4. Click **Save** to make the settings effective. If you are prompted of changes synchronization, click **Continue**.

Guest Network

☒ Allow guests to see each other
☒ Do not allow guests to manage my network
☒ Automatic disable after 2 hours

Save

5. Configure the following settings.

Guest Network Settings

2.4GHz:

☐ Enable Guest Network

Network Name (SSID):

TP-Link_Guest_1DA1

Security:

☐ No Security
☒ WPA/WPA2-Personal

Password:

12345670

Save

To enable or disable the guest network function:

Select the box to enable the guest network function. Deselect the box to disable guest network function. If disabled, all guest network settings of the corresponding band will be ineffective.

To change the guest network name (SSID) and password:

The default SSID is TP-Link_Guest_XXXX, and the default password is printed on the product label. You can change the default ones by directly entering new ones in the field. SSID is up to 32 characters, and the value in both SSID and password is case-sensitive.

Done!

Now you can tell your guests to connect to the guest network you created.

3. 10. MAC Filter

This function exploits the uniqueness of the MAC (Medium Access Control) address, a unique 12-digit hexadecimal address (for example, D8-5D-4C-B4-46-EA) of every network device, to determine if the device can or cannot access your wireless network.

I want to:

Prevent unauthorized users from accessing my wireless network by utilizing the network device's MAC address.

For example, I have a computer that is connected to my wireless

network. Now, an unknown device (an intruder) is also using my wireless network, which affects my internet speed. I would like to control my wireless network with the following capabilities:

- My computer is always allowed to access the wireless network.
- The unknown device is not allowed to access the wireless network.
- I don't have to keep changing my wireless password as often.

How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **Wireless > MAC Filter**.
3. Enable MAC Filter. If you are prompted of changes synchronization, click **Continue**.
4. Select either of the filtering rules (here we select **Block wireless access from the devices listed below**), and then click **Save**.

MAC Filter Settings

MAC Filter: ☒

MAC Filter

Select the filtering rule: ☒ Block wireless access from the devices in the list below.
☐ Allow wireless access only from the devices in the list below.

Save

5. Click **Add** under **Device List** to add devices to the list.

Device List

+ Add - Delete

☐	ID	MAC Address	Description	Status	Modify
☐	--	--	--	--	--

MAC Address: View Devices

Description: (Optional)

☐ Enable this entry

Cancel OK

6. Click [View Devices](#) to see how many devices are now connected to the network. Click [Choose](#) to choose a device. You can also enter the [MAC Address](#) manually.
7. Give a description of the entry in the [Description](#) field. (Optional)
8. Select [Enable this entry](#) to make this entry effective.
9. Click [OK](#) to save the settings.

Done!

Now MAC Filter is implemented to protect your wireless network.

3. 11. Administration

3. 11. 1. LAN IP Address

Follow the steps below to configure LAN settings of the extender.

Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.

Go to [Device Settings](#) > [LAN Settings](#).

LAN Settings

LAN Type: ☒ Dynamic IP ☐ Static IP

IP Address:

Subnet Mask: ▼

Default Gateway:

[Save](#)

LAN Type: Select [Dynamic IP](#) to have your extender automatically obtain IP Address from the main router. Select [Static IP](#) to manually configure the LAN parameters.

IP Address: The IP address of the powerline extender.

Subnet Mask: The subnet mask associated with IP address.

Default Gateway: The IP address of the gateway device.

3. 11. 2. Set Up System Time

System time is the time displayed while the extender is running. The system time you configure here will be used for other time-based functions like Parental Controls and Wi-Fi Schedules. You can manually set how to get the system time.

Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.

Go to [System Tools > Time Settings](#) page.

The screenshot shows the 'Time Settings' page. It includes a 'Time Zone' dropdown menu set to '(GMT) Greenwich Mean Time, Dublin, London'. The 'Date' field is set to '01/06/2017' with a 'DD/MM/YY' label. The 'Time' field is set to '20 : 38 : 24' with a '(HH/MM/SS)' label. There are two 'NTP Server' fields, both set to '0.0.0.0' and labeled '(Optional)'. A 'Get GMT' button is located below the NTP Server fields. A 'Save' button is located at the bottom right of the form.

To automatically synchronize the time:

1. Select your local [Time Zone](#) from the drop-down menu.
2. In the [NTP Server I](#) field, enter the IP address or domain name of your desired NTP Server. (Optional)
3. In the [NTP Server II](#) field, enter the IP address or domain name of the second NTP Server. (Optional)
4. Click [Get GMT](#) and click [Save](#).

To manually set the date and time:

1. In the [Time Settings](#) field, select your local [Time Zone](#).
2. Enter the current [Date](#).
3. Set the current [Time](#) (In 24-hour clock format, e.g. 16:00:00 is 04:00PM).
4. Click [Save](#).

To set up Daylight Saving time:

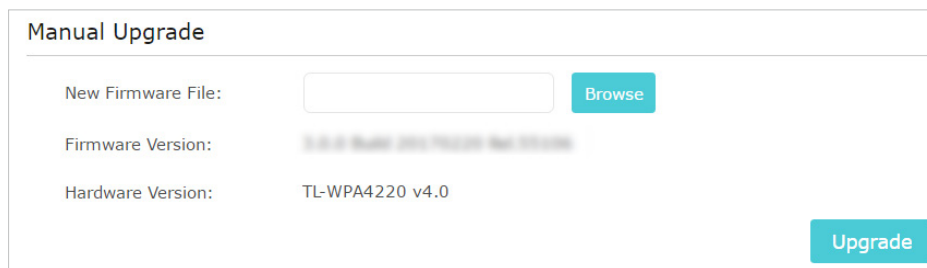
The screenshot shows the 'Daylight-Saving Time' page. It includes a checkbox labeled 'Enable Daylight Saving'. The 'Start' field is set to '2017 Mar. M Last W Sun. D 1a.m. H'. The 'End' field is set to '2017 Oct. M Last W Sun. D 2a.m. H'. Below the fields, it says 'Daylight saving is down'. A 'Save' button is located at the bottom right of the form.

1. Select [Enable Daylight Saving](#).
2. Select the correct [Start](#) date and time when daylight saving time starts at your local time zone.
3. Select the correct [End](#) date and time when daylight saving time ends at your local time zone.
4. Click [Save](#).

3. 11. 3. Upgrade the Firmware

TP-Link is dedicated to improving and enriching the product features, giving you a better network experience. We will release the latest firmware at our official website, you can download the latest firmware file from our website: www.tp-link.com and upgrade the firmware to the latest version.

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to [System Tools](#) > [Firmware Upgrade](#) page and confirm the [Hardware Version](#).



Manual Upgrade	
New Firmware File:	Browse
Firmware Version:	3.0.0 Build 201611030000000000
Hardware Version:	TL-WPA4220 v4.0
Upgrade	

3. Go to www.tp-link.com. Download the latest firmware file for the extender.

■ **Note:** The upgraded firmware version must correspond to the hardware.

4. Click [Browse](#) to locate the downloaded new firmware file, and click [Upgrade](#).

5. Wait a few minutes for the upgrading and rebooting.

■ **Note:**

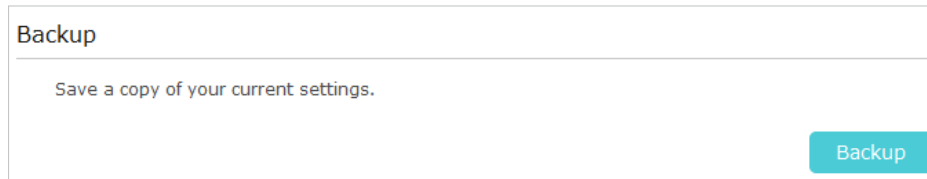
1. Before upgrading the firmware, it's better to back up your current settings.
2. During the upgrading process, do not turn off or reset the extender.
3. If the upgrade is interrupted, it's possible your extender may stop working and its LEDs blink once a second. In this case, please connect your computer to the extender via an Ethernet cable, and set your computer to static IP 192.168.0.X and subnet mask 255.255.255.0. Then visit <http://192.168.0.254> to complete the upgrade.

3. 11. 4. Back Up and Restore Configuration Settings

The configuration settings are stored as a configuration file in the extender. You can back up the configuration file to your computer for future use and restore the extender to a previous settings from the backup file when needed. Moreover, if needed, you can erase the current settings and reset the extender to the default factory settings.

To backup configuration settings:

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to [System Tools](#) > [Backup & Restore](#) page.

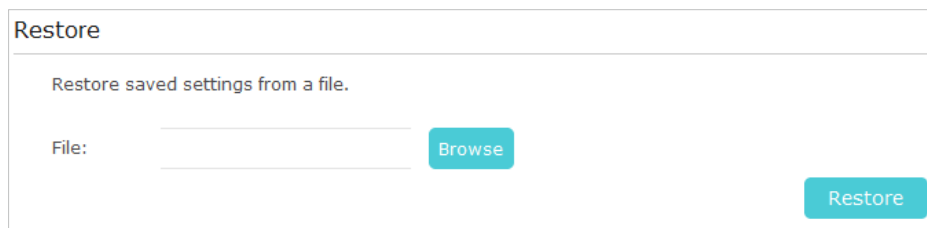


The screenshot shows a web interface titled "Backup". Below the title is a horizontal line, and then the text "Save a copy of your current settings." is displayed. In the bottom right corner, there is a teal button labeled "Backup".

3. Click [Backup](#) to save a copy of the current settings to your local computer. A [config.bin](#) file will be stored to your computer.

To restore configuration settings:

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to [System Tools](#) > [Backup & Restore](#) page.

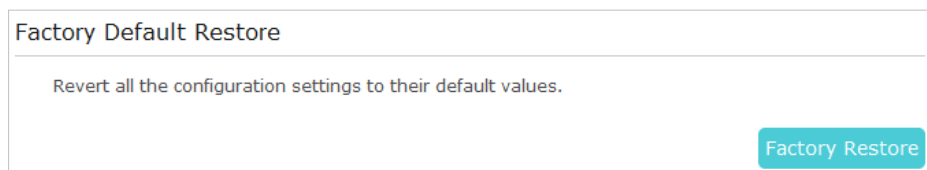


The screenshot shows a web interface titled "Restore". Below the title is a horizontal line, and then the text "Restore saved settings from a file." is displayed. Below this text, there is a label "File:" followed by a text input field. To the right of the input field is a teal button labeled "Browse". In the bottom right corner, there is a teal button labeled "Restore".

3. Click [Browse](#) to locate the backup configuration file stored on your computer, and click [Restore](#). The configuration file is config.bin.
 4. Wait a few minutes for the restoring and rebooting.
- **Note:** During the restoring process, do not turn off or reset the extender.

To reset the extender to factory default settings:

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to [System Tools](#) > [Backup & Restore](#) page.



The screenshot shows a web interface titled "Factory Default Restore". Below the title is a horizontal line, and then the text "Revert all the configuration settings to their default values." is displayed. In the bottom right corner, there is a teal button labeled "Factory Restore".

3. Click [Factory Restore](#) to reset the extender.
 4. Wait a few minutes for the resetting and rebooting.
- **Note:**
1. During the resetting process, do not turn off the extender.

2. We strongly recommend you back up the current configuration settings before resetting the extender.

3.11.5. System Log

When the extender does not work properly, you can save the system log and send it to the technical support for troubleshooting.

Follow the steps below to save the system log:

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
2. Go to **System Tools > System Log**.

System Log

Log Filter: Type= ALL and Level = ALL

Refresh Delete All

ID	Time	Type	Level	Log Content
1	0 days 00:41:09	OTHERS	INFO	User cleared up all the logs.

Save Log

3. Choose the type and level of the system log according to your need.
4. Click **Save Log** to save the system log to local.

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FCC STATEMENT



Product Name: AV600 Powerline Wi-Fi Extender

Model Number: TL-WPA4220

Responsible party:

TP-Link USA Corporation, d/b/a TP-Link North America, Inc.

Address: 145 South State College Blvd. Suite 400, Brea, CA 92821

Website: <http://www.tp-link.com/us/>

Tel: +1 626 333 0234

Fax: +1 909 527 6803

E-mail: sales.usa@tp-link.com

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."

We, **TP-Link USA Corporation**, has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2018.3.9

CE Mark Warning



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.

OPERATING FREQUENCY(the maximum transmitted power)

2400 MHz -2483.5 MHz(20dBm)

EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2009/125/EC and 2011/65/EU.

The original EU declaration of conformity may be found at <http://www.tp-link.com/en/ce>

RF Exposure Information

This device meets the EU requirements (2014/53/EU 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.

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, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement:

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

Déclaration d'exposition aux radiations:

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

Industry Canada Statement

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

CAN ICES-6/NMB-6

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

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。

BSMI Notice

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。

限用物質含有情況標示聲明書

產品元件名稱	限用物質及其化學符號					
	鉛 Pb	鎘 Cd	汞 Hg	六價鉻 CrVI	多溴聯苯 PBB	多溴二苯醚 PBDE
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應板	-	○	○	○	○	○
備考1. "超出0.1 wt %" 及 "超出0.01 wt %" 系指限用物質之百分比含量超出百分比含量基準值。						
備考2. "○"系指該項限用物質之百分比含量未超出百分比含量基準值。						
備考3. " - " 系指該項限用物質為排除項目。						



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Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device.
- Do not use the device where wireless devices are not allowed.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- Plug the powerline devices directly into the wall outlets but not the power strips.

Please read and follow the above safety information when operating the device. We cannot guarantee that no accidents or damage will occur due to improper use of the device. Please use this product with care and operate at your own risk.

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.
	Indoor use only
	Protection earth