

# **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 adapter and 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.
Teal_Underlined	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.
Ø Tips:	Indicates important information that helps you make better use of your device.
Symbols on the web page	<ul> <li>☑ click to edit the corresponding entry.</li> <li>☑ click to delete the corresponding entry.</li> <li>☑ click to enable or disable the corresponding entry.</li> </ul>

#### More Info

- The latest software, management app and utility are available from the Download Center at <a href="https://www.tp-link.com/support/download/">https://www.tp-link.com/support/download/</a>.
- 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 <a href="https://www.tp-link.com">https://www.tp-link.com</a>.
- Our Technical Support contact information can be found at the Contact Technical Support page at <a href="https://www.tp-link.com/support">https://www.tp-link.com/support</a>.
- TP-Link Community is provided for you to discuss our products and share knowledge at https://community.tp-link.com/.

# **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. European version is used for demonstration in this guide.

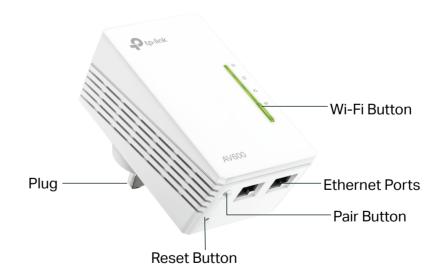
#### 1. 3. 1. **LED Legend**



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

Name	Status	Indication		
	On/Off	The powerline extender is on or off.		
U Power	Blinking	Quickly: Pairing is in progress. Slowly: Power-saving Mode is on.*(TL-PA4010 Only)		
<b>^</b> - "	On	The powerline extender is connected to the powerline network and is in a suitable location.		
	Off	The powerline extender is not connected to any powerline network.		
<b>.</b> 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.		
	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 <u>To Set Up a</u> New Secure Wireless Network for more information.

#### Reset

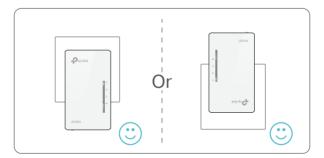
Press and hold the Reset button for at least 2 seconds to reset the powerline extender to factory default settings. When Reset is triggered properly, all LEDs will turn off and start on again.

#### Plug

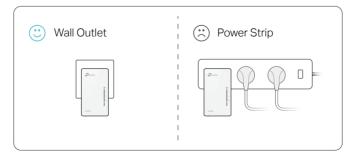
The powerline adapter has a Plug that can be connected to any standard power socket.

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

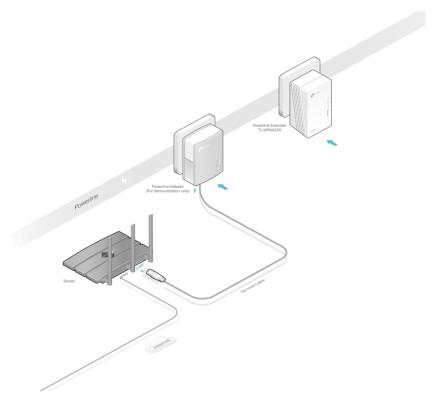
#### I want to:

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.

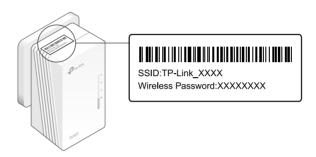


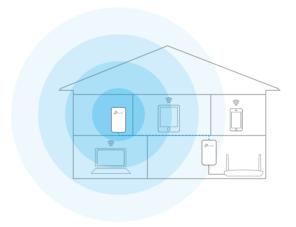
- 4. Pair the powerline devices.
- a . Press the Pair button on the powerline adapter for 1 second. The Power LED starts blinking.
  - Note: If the Power LED does not blink, press the Pair button again.
- b. Within two minutes, press the Pair button on the powerline extender for 1 second. The Power LED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



**5.** 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

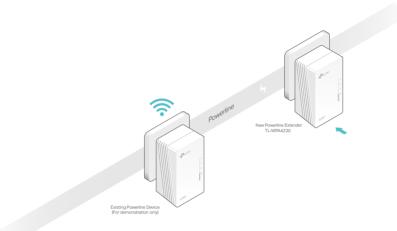
#### I want to:

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 **a**. 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.

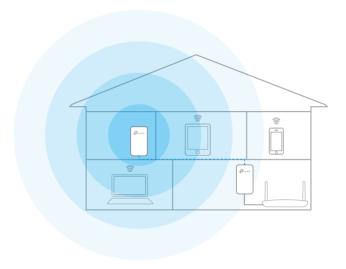


4. Relocate the new extender to the Wi-Fi "dead" zone.

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.

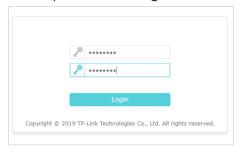
#### Method 1: Via web browser

Follow the steps below:

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



3. Create a password to log in.



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 <a href="https://www.tp-link.com">https://www.tp-link.com</a>.
- 3. Open the utility, move your mouse over your powerline extender, and click the icon that appears beside it.
- 4. Create a password to log in.

#### Method 3: Via tpPLC app

- 1. Connect your computer to the powerline extender wirelessly.
- 2. Obtain and install the tpPLC app from App Store or Google Play, or simply scan the QR code.





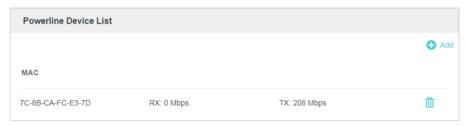
- 3. Connect your phone to the wireless network of the extender. Then launch the app and you can see the extender you added on Device list.
- 4. Create a password to log in.

### 3. 2. Manage Powerline Network

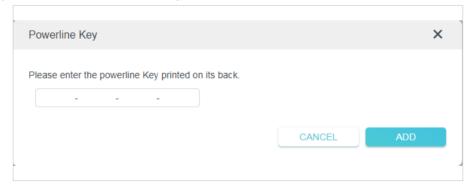
A powerline network is formed of powerline devices, including adapters and extenders. Powerline devices in the same powerline network share the same powerline network name.

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

- 1. Connect to the powerline extender wirelessly. Visit <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the password you set for the extender.
- 2. Go to the Status page and click the Powerline Network icon to open the Powerline Device List.



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. It is printed on the back of the powerline device.



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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Basic > Powerline.



- 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Advanced > Wireless > Wi-Fi Move.
- 3. Toggle on WiFi Move 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.

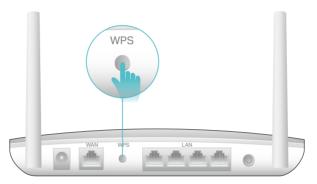
### 3. 4. Wi-Fi Clone

#### 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.

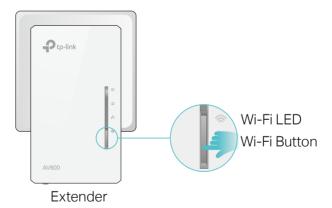
#### How can I do that?

- 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.

Go to Basic > 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.



#### To change the wireless network name (SSID) or hide SSID:

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.

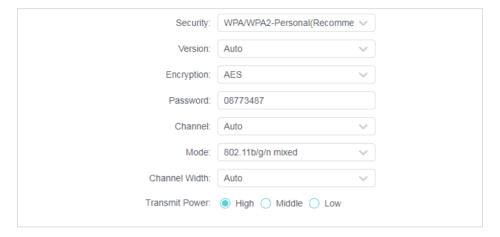
Select Hide SSID, and your SSID will not be broadcasted. It won't display when you scan for local wireless network list on your wireless device and you need to manually join the network.

#### Note:

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



#### To customize more advanced settings



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.

Version: You can select one of following versions.

- Auto (Recommended) Select WPA-Personal or WPA2-Personal automatically based on the wireless station's capability and request.
- WPA-PSK Pre-shared key of WPA.

Ecryption: You can select either Automatic(Recommended), TKIP or AES

Password: Set the password of the Wi-Fi network.

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.

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.

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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Wireless > Clients page.



3. Now you can view the detailed information, including device name, MAC address, connected wireless band, and IP address.

#### 3. 6. LED Schedules

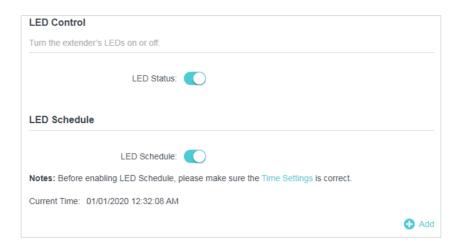
#### I want to:

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 18:00 to 22:00.

#### How can I do that?

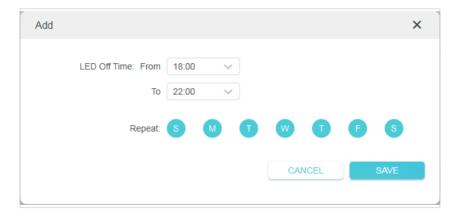
- 1. Connect to the powerline extender wirelessly. Visit <a href="http://tplinkplc.net">http://tplinkplc.net</a> and log in with the username and password you set for the extender.
- 2. Go to Wireless > Device Settings > LED Control.
- 3. Enable LED Status to turn on the extender's LEDs.



- 4. Enable LED Schedule.
- 5. Click Add to add an entry.
- 6. Choose LED Off Time from 18:00 to 22:00, and then check all boxes from Sunday to Saturday.

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

7. Click SAVE.



#### 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

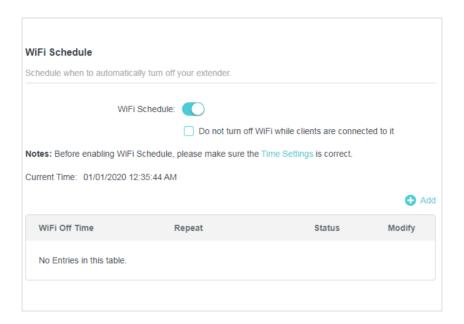
#### I want to:

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 18:00 to 22:00. 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?

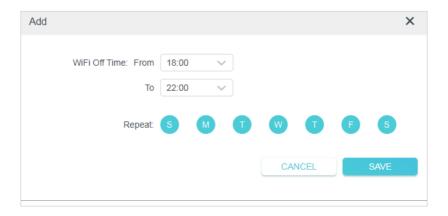
- 1. Connect to the powerline extender wirelessly. Visit <a href="http://tplinkplc.net">http://tplinkplc.net</a> and log in with the username and password you set for the extender.
- 2. Go to Advanced > Wireless > Wi-Fi Schedule.



3. Toggle on the Wi-Fi Schedule.

Note: If you check the box of Do not turn off Wi-Fi while clients are connected to it, the Wi-FI schedule are not enabled when any clients are connected to your extender.

- 4. Click Add to add an entry.
- 5. Choose WiFI Off Time from 18:00 to 22:00, and then check all boxes from Sunday to Saturday.
- **6.** Note: Please make sure that the system time is correct before using this function.
- 7. Select Enable this entry to make it effective.



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

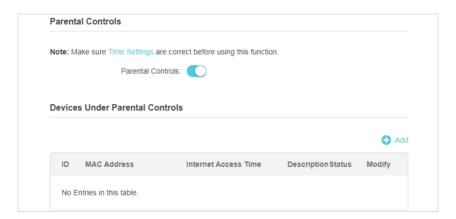
#### I want to:

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

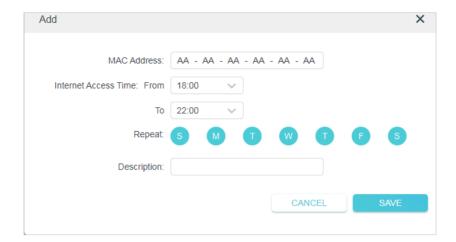
For example, I want to allow my children's wireless devices to access only from 18:00 (6PM) to 22:00 (10PM) on weekdays and not other times.

#### How can I do that?

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



- 3. Toggle on Parental Controls.
- 4. Click Add.
- 5. Click View Existing Devices, and select the device to be controlled. Or enter the MAC Address manually.
- 6. Choose Internet Access Time from 18:00 to 22:00, and then check all boxes from Sunday to Saturday.
- 7. Give a description to the device to be controlled.
- 8. Click SAVE to save the settings.
- 9. Note: Please make sure that the system time is correct before using this function.



#### Done!

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

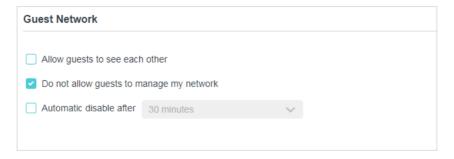
#### 3. 9. Guest Network

#### 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the password you set for the extender.
- 2. Go to Advanced > Guest Network.



- 3. Check the box of relative entry to limit network authorities.
- 4. Configure the following settings.



#### To enable or disable the guest network function:

Select the box 2.4GHZ 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:

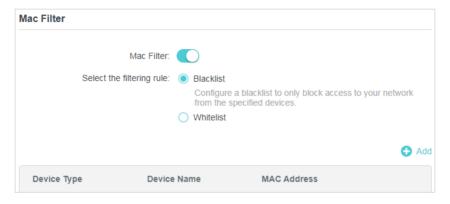
Prevent unauthorized users from accessing my wireless network by utilizing the network device's MAC address.

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:

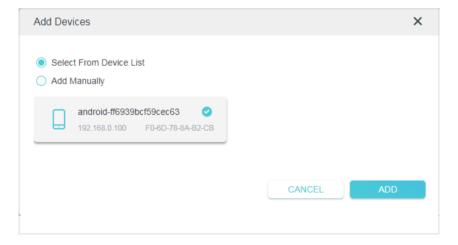
- My computer is always allowed to access the wireless network.
- The unknown device is not allowed to access the wireless network.
- I don't have to keep changing my wireless password as often.

#### How can I do that?

- 1. Connect to the powerline extender wirelessly. Visit <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Advanced > Wireless > MAC Filter.
- 3. Toggle on MAC Filter.
- 4. Select either of the filtering rules (here we select Black List).



5. Click Add to add devices to the list.



- **6.** Select Select From Device List to see how many devices are now connected to the network. Select a device and click ADD to finish the settings.
- 7. You can also add devices manually. Select Add Manually, enter device name and the MAC address and click ADD to finish the settings.

#### Done!

Now MAC Filter is implemented to protect your wireless network.

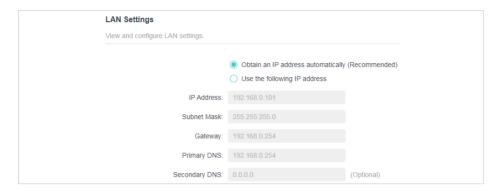
#### 3. 11. Administration

#### 3. 11. 1. LAN IP Address

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

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

Go to Device Settings > LAN Settings.



LAN Type: Select Obtain an IP address automatically to have your extender automatically obtain IP Address from the main router. Select Use the following IP address to manually configure the LAN parameters.

IP Address: The IP address of the powerline extender.

Subnet Mask: The subnet mask associated with IP address.

Gateway: The IP address of the gateway device.

Primary DNS: Input the DNS IP address provided by your ISP.

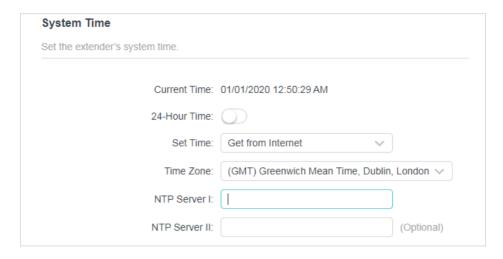
Secondary DNS: Input the IP address of another DNS server if your ISP provides two DNS servers.

#### 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.

Go to Settings > Time Settings page.



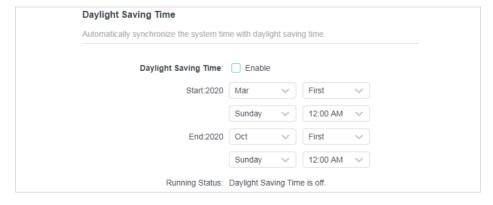
#### To automatically synchronize the time:

- 1. Select Get from the Internet.
- 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 SAVE.

#### To manually set the date and time:

- 1. Select Manually.
- 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:



1. Check the box of Daylight Saving Time.

- 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 richening 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: <a href="www.tp-link.com">www.tp-link.com</a> and upgrade the firmware to the latest version.

- 1. Connect to the powerline extender wirelessly. Visit <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Settings > Firmware Upgrade page and confirm the Hardware Version.



- 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 UPGRAGE.
- 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 <a href="https://192.168.0.254">https://192.168.0.254</a> 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Settings > Backup & Restore page.



3. Click BACK UP 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Settings > Backup & Restore page.



- 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the username and password you set for the extender.
- 2. Go to Settings > Factory Default Restore page.



- 3. Click FACTORY RESTORE to reset the extender.
- 4. Wait a few minutes for the resetting and rebooting.

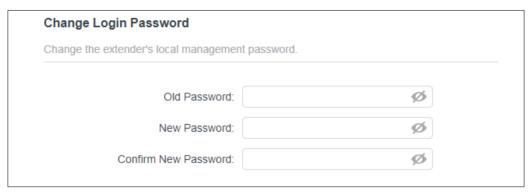
#### Note:

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. Change Login Password

Go to Settings > Change Login Password, and you can change the login password of the extender.



#### Note:

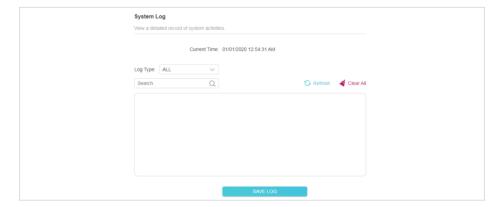
1. The new password must be 6-32 characters long and not include any spacing.

#### 3. 11. 6. 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 <a href="http://tplinkplc.net">http://tplinkplc.net</a>, and log in with the password you set for the extender.
- 2. Go to Settings > System 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 colocated 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: 2020.5.27

#### **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, 2011/65/EU and (EU)2015/863.

The original EU declaration of conformity may be found at https://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, meme 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切斷電源。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。
- 不要私自拆開機殼或自行維修,如產品有故障請與原廠或代理商聯繫。

設備名稱:AV600 Powerline Wi-Fi Extender 型號(型式):TL-WPA4220 Equipment name Type designation (Type)

	限用物質及其化學符號 Restricted substances and its chemical symbols					
單元 Unit	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr+6)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
PCB	0	0	0	0	0	0
外殼	0	0	0	0	0	0
電源供應板	_	0	0	0	0	0
其他及其 配件	_	0	0	0	0	0

備考1. <sup>\*</sup>超出0.1 wt % <sup>\*</sup> 及 <sup>\*</sup>超出0.01 wt % <sup>\*</sup> 係指限用物質之百分比含量超出百分比含量基準值

Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2. ℃ 係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 2: "O" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3. \*- \* 係指該項限用物質為排除項目。

Note 3: The "-" indicates that the restricted substance corresponds to the exemption.



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

# EHC

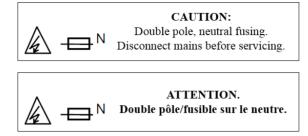
#### **Safety Information**

- 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.
- Plug the powerline devices into the wall outlets with earthing connection.

#### **Environment:**

- Operating Temperature: 0°C ~ 40°C (32°F ~104°F)
- Alert to service person

CAUTION NEUTRAL FUSING



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
$\sim$	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
	Warning electric shock
→ N	Fuse is used in neutral N