

TP-LINK®

TL-WPA4530

User Guide

AV500 Powerline Wi-Fi Kit

Contents

About This Guide	1
-------------------------------	----------

Chapter 1. Get to Know About Your Powerline Extender.....	2
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1. 1. Product Overview	3
1. 2. Main Features	3
1. 3. Product Appearance	4
1. 3. 1.LED Legend.....	4
1. 3. 2.Physical Interface	5

Chapter 2. Initial Use.....	7
------------------------------------	----------

2. 1. To Set Up a New Secure Wireless Network.....	8
2. 2. To Extend the Existing Wireless Network	9

Chapter 3. Configuring via Web Management Interface	12
--	-----------

3. 1. Management Interface	13
3. 1. 1.Login	13
3. 1. 2.Change the Login Account	13
3. 2. Manage Powerline Network	14
3. 2. 1.Add a New Device to the Powerline Network.....	14
3. 2. 2.Change Powerline Network Name	15
3. 3. Wi-Fi Move.....	15
3. 4. Wi-Fi Clone.....	16
3. 5. Wireless Network.....	17
3. 5. 1.Customize Wireless Settings	17
3. 5. 2.Wireless Clients	20
3. 6. LED Schedules	20
3. 7. Schedule Your Wireless Function.....	21
3. 8. Parental Controls	23
3. 9. Guest Network	25
3. 10. MAC Filter.....	26
3. 11. Administration	28
3. 11. 1.LAN IP Address	28
3. 11. 2.Set Up System Time.....	28
3. 11. 3.Upgrade the Firmware	30

3.11.4. Backup and Restore Configuration Settings	30
3.11.5. System Log	32
Appendix A: Specifications	33

About This Guide

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

Conventions

In this guide the following conventions are used:

Convention	Description
Powerline extender	Stands for AV500 Powerline Wi-Fi Extender without any explanation.
parameters	Parameters provided in the screenshots are just references for setting up the device, which may differ from the actual situation. You can set the parameters according to your demand.
screenshots	The demonstrated screenshots may look a little different from the actual page of your device due to the various firmware versions. Please just configure your product based on the actual web page.
<i>Blue Italic</i>	Hyperlinks are in blue italic. You can click to redirect to a website or a specific section.
Blue	Contents to be emphasized and texts on screen or on the web page are in blue, including the menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example, 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	<ul style="list-style-type: none">✍ click to edit the corresponding entry.刪 click to delete the corresponding entry.💡 click to enable or disable the corresponding entry.

Chapter 1

Get to Know About Your Powerline Extender

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

This chapter contains the following sections:

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

1.1. Product Overview

What This Product Does

TP-LINK's TL-WPA4530 AV500 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.

802.11ac - The Next Generation of Wi-Fi

TP-LINK's TL-WPA4530 comes with the next generation Wi-Fi standard – 802.11ac, backward compatible with 802.11n and 3 times faster than wireless N speeds. With higher power efficiency and robust security, 802.11ac is the perfect way to accelerate a home multimedia network and solve congestion that multiple devices may cause.

750Mbps Concurrent Dual Band - More Bandwidth, Less Interference

With 433Mbps wireless speeds over the crystal clear 5GHz band and 300Mbps over the 2.4GHz band, TL-WPA4530 offers you the flexibility of two dedicated networks and ensures amazing wireless performance. Simple tasks such as sending e-mails or web browsing can be handled by the 2.4GHz band while bandwidth intensive tasks like online gaming or HD video streaming can be processed by the 5GHz band – all at the same time.

1.2. Main Features

- New Generation of Utility to manage the whole powerline network easily and conveniently.
- Wi-Fi Move to synchronize any changes to Wi-Fi Settings 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 separate new wireless network for guests without disclosing your own wireless network.
- Button control to turn LEDs or Wi-Fi on or off with the press of a button.
- Wi-Fi Schedules to set when your Wi-Fi be on.
- Multiple Ethernet ports to connect the TVs, game consoles, or PCs to the Internet at the same time.

1.3. Product Appearance

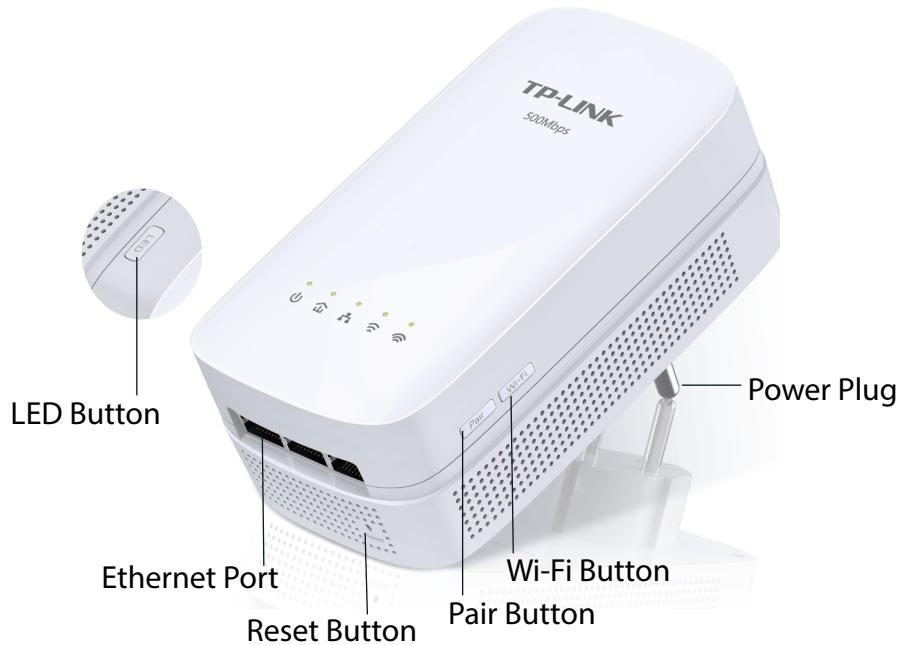
1.3.1. LED Legend



LEDs of the extender are located on the front side. They indicate the working status. For more details, please refer to the following table.

Name	Status	Indication
Power	On/Off	The powerline adapter is on or off.
	Blinking	Pairing is in process.
Powerline	Yellow-green	The powerline extender is in a location with a good signal strength.
	Red	The powerline extender is in a location with a poor signal strength. We recommend trying another wall socket.
	Off	The powerline extender is not connected to any powerline network.
Ethernet	On	At least one Ethernet port is connected.
	Off	No Ethernet port is connected.
2.4GHz Wireless	On	2.4GHz wireless network is enabled.
	Off	2.4GHz wireless network 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.
5GHz Wireless	On	5GHz wireless network is enabled.
	Off	5GHz wireless network is disabled.
	Blinking	Slowly: The powerline extender is cloning 5GHz wireless network settings from the main router. Quickly: The powerline extender is syncing 5GHz wireless network settings.

1.3.2. Physical Interface



LED Button

Press and hold the LED button for 1 second to turn all LEDs on or off. All LEDs are on by default. If you don't feel like being bothered by the LED light at night, press and hold the button for 1 second to turn all LEDs off. The next morning, just press and hold the button again to turn them on.

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 at least 5 seconds to turn the wireless function on or off. The wireless function is on by default. You can turn them off at night and then on in the morning by pressing the Wi-Fi button.

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.

Press and hold the button for about 8 seconds to leave the existing powerline network.

Reset

Use a pin to press and hold the Reset button for at least 5 seconds to reset the powerline extender to factory default settings. When Reset is triggered properly, all LEDs will turn off and start on again.

Ethernet Port

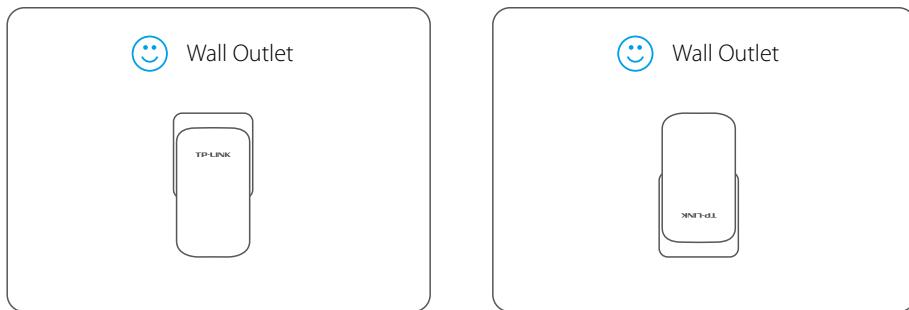
TL-WPA4530 has three 10/100Mbps Ethernet ports. You can use them to connect the extender to computers or broadband devices.

Power Plug

TL-WPA4530 has a Power Plug which can connect to any (100V-240V~, 50/60Hz) power socket.

Note:

1. The provided power plug may differ from the picture due to different regional power specifications. Here we take the EU version as an example.
2. The powerline extender can only be used in below directions.



Chapter 2

Initial Use

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

This chapter 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 TL-PA4020P powerline adapter and a TL-WPA4530 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.

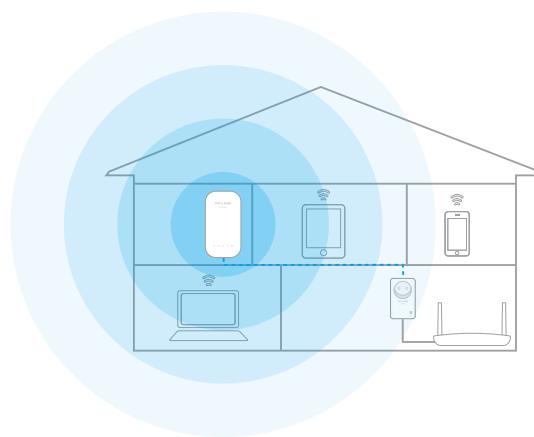


4. Pair the powerline devices.
 - a. Press the Pair button of the powerline adapter for 1 second. The Power LED starts blinking.
Note: If the Power LED does not blink, press it again.
 - b. Within two minutes, press the Pair button of the powerline extender for 1 second. The Power LED starts blinking.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



5. Find the Wi-Fi Info Card in the package, and then relocate the powerline extender to a new location. Connect to the Wi-Fi using the SSID and password on the card.

Note: A red Powerline LED indicates poor signal strength, we recommend another location.



Done!

Now enjoy the Internet with the SSID and password printed on the Wi-Fi Info Card!

2. 2. To Extend the Existing Wireless Network

I want to:

Extend the existing wireless network by adding another powerline extender into the existing powerline network.

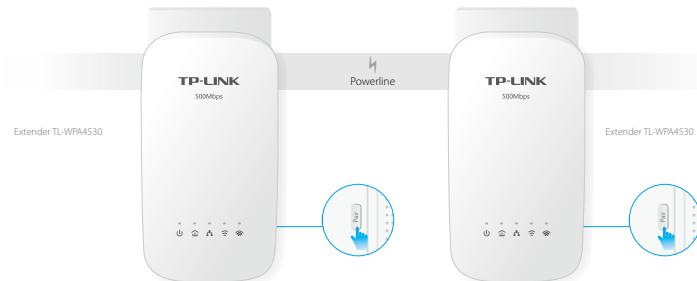
For example, I already set up a wireless network using powerline devices, but the wireless network is still not big enough to reach the top floor. So I bought another TL-WPA4530 to extend the wireless network.

How can I do that?

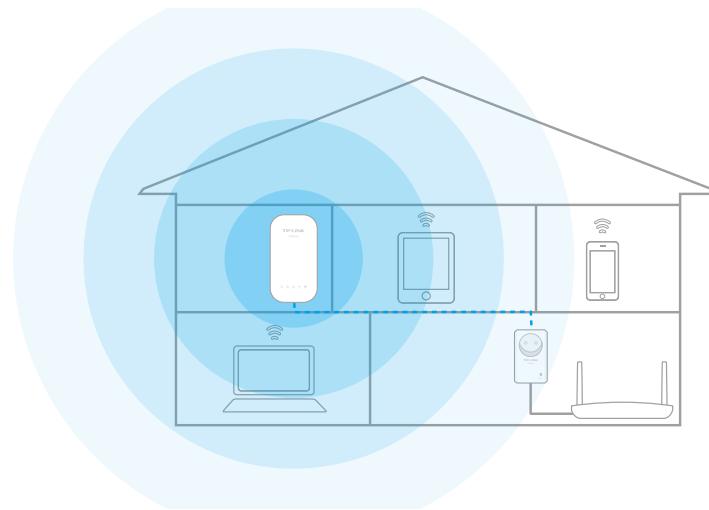
1. Plug the powerline extender into a wall socket near one of the existing powerline extender.



2. Join the new powerline extender into the existing powerline network by Pairing two powerline devices.
 - a . Press the Pair button on the old powerline extender for 1 second. The Power LED starts blinking.
■ Note: If the Power LED does not blink, press 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 stays on, the pairing process is done!



3. Relocate the extender to where Wi-Fi is preferred.
■ Note: A red Powerline LED indicates poor signal strength, we recommend another location.



Done!

Now Enjoy the Internet! The SSID and password are the same as that of your old wireless network!

Q & A:

If you still don't have wireless signals near the new extender, it is possibly you haven't paired your old powerline devices. We recommend you follow the steps below to pair them. Please note that Pair can only be used on two devices at a time.

1. Press the Pair button on the old powerline extender for 1 second. Then its Power LED starts blinking.
Note: If the Power LED does not blink, press again.
2. Press the Pair button on the old powerline adapter for 1 second. Then its Power LED starts blinking. When the Powerline LED stays on, it's done!
3. The SSID and password used for Internet connection are the ones printed on the back of your old powerline extender.

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 TL-WPA4530 has and how to configure them.

This chapter 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. Login

There are two methods to log into the management interface, each with a different hardware connection type.

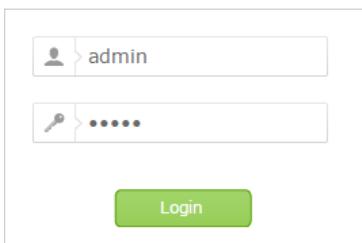
Method 1: Wireless Login

Follow the steps below to log into the management interface wirelessly.

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.



4. Click **Login**.

Method 2: Wired Login

Follow the steps below to log into the management interface wired.

1. Connect your computer to the powerline extender with the provided Ethernet cable.
2. Obtain and install the PLC utility from the resource CD (for Windows) or from the product support page at <http://www.tp-link.com> (for Windows and Mac).
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:

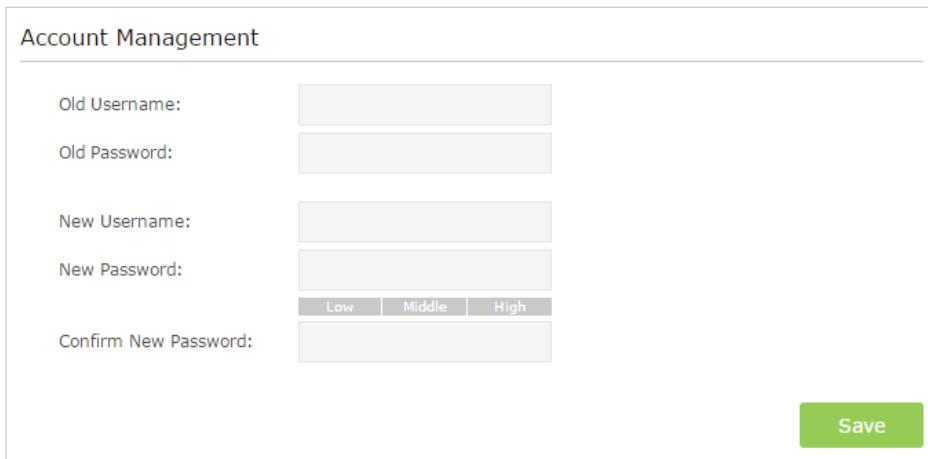
New Username:

New Password:

Confirm New Password:

Strength: Low Middle High

Save



- Follow instructions on the page to set a new username and password. A strong password should be at least 8 or more characters in length, combining uppercase and lowercase letters, numbers and punctuations.
- 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

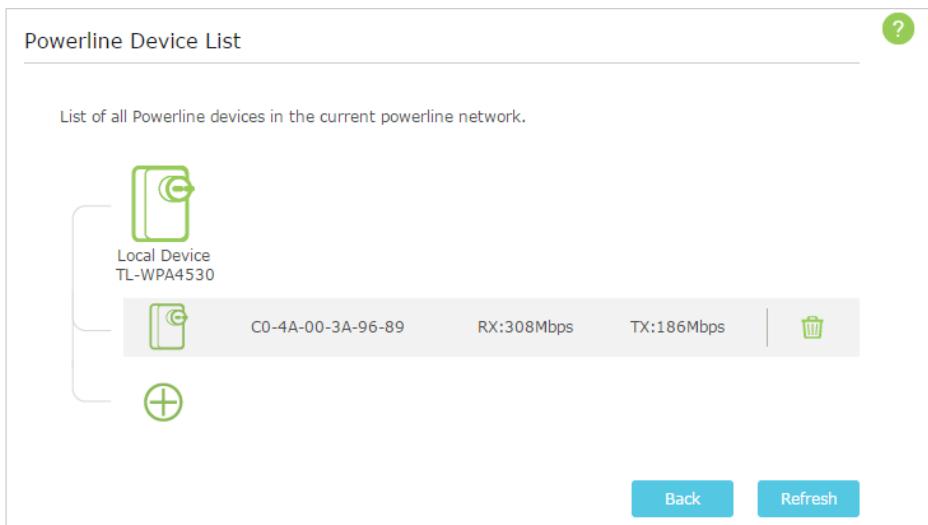
- Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the password you set for the extender.
- Go to the **Status** page. Click the **Powerline Network** icon to see the Powerline Device List.

Powerline Device List

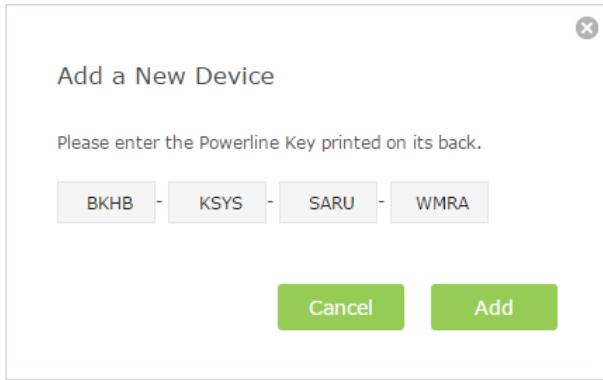
List of all Powerline devices in the current powerline network.

 Local Device TL-WPA4530	 C0-4A-00-3A-96-89	RX:308Mbps	TX:186Mbps	
				

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.



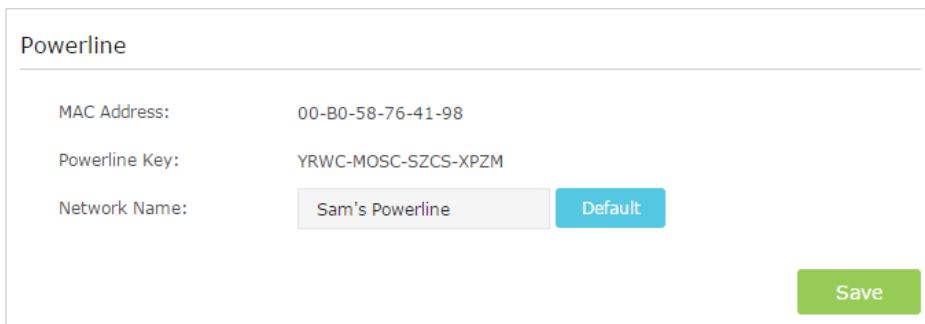
4. Click **Add** to add the device.

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 password you set for the extender.
2. Go to **Device Settings > 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.

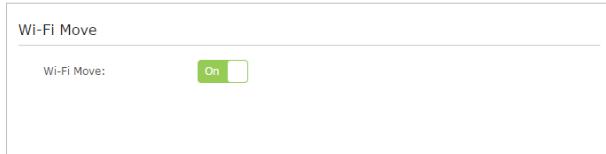
3.3. Wi-Fi Move

Wi-Fi Move feature is enabled by default. With the feature enabled, any changes made to the Wi-Fi settings of one powerline extender will automatically synchronize to other

powerline extenders on the same powerline network whose Wi-Fi Move feature is also enabled.

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

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 **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; Region; Wi-Fi Schedules; LED Schedules; Wi-Fi Clone Settings; MAC Filter Settings; Parental Controls, Guest Network.

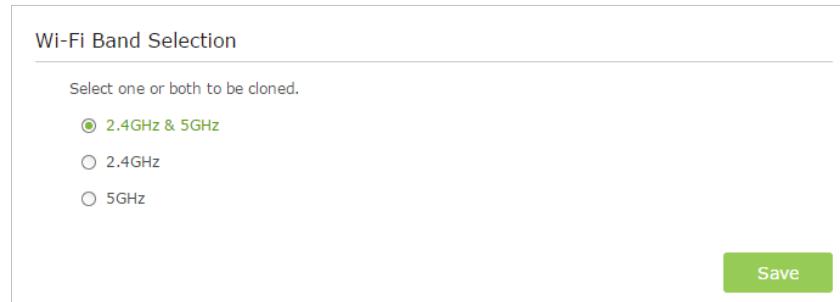
3.4. Wi-Fi Clone

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.

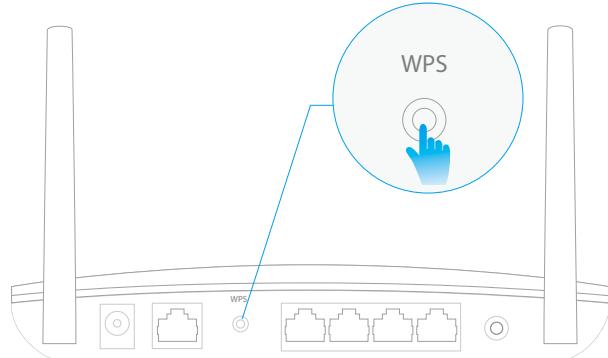
How can I do that?

1. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the password you set for the extender.
2. Go to **Wireless > Wi-Fi Clone**.
3. Select a Wi-Fi band or both to be cloned. **2.4GHz & 5GHz** is selected by default.

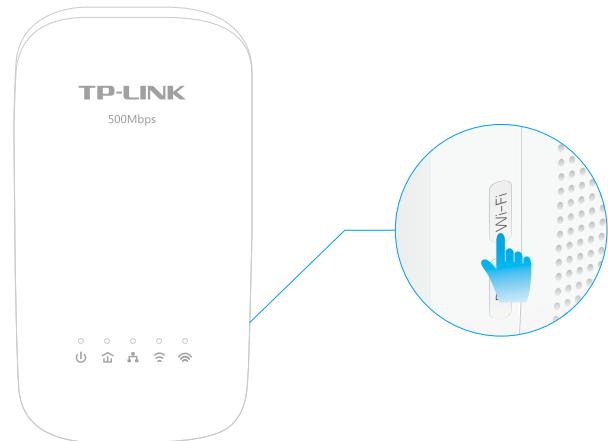


4. Before cloning, make sure your router supports the same band as your extender. If you do not know how to check this, go to your router's User Guide for more information.
5. Plug your extender near your router.

6. Press the **WPS** button on your router.



7. Within two minutes, press the **Wi-Fi** button on the side panel of the extender.



Done!

When the corresponding Wi-Fi LED blinks quickly for 3 seconds and then stays on. It's done!

3.5. Wireless Network

3.5.1. Customize Wireless Settings

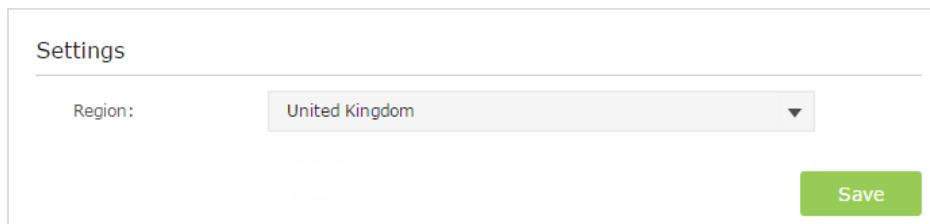
The powerline extender's wireless network name (SSID) and password, and security option are preset in the factory. The preset SSID and password can be found on the product label and Info Card. You can customize the wireless settings according to your needs.

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

Go to **Wireless > Settings** page.

To select your region:

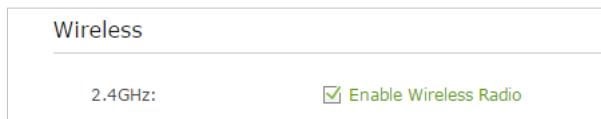
Select your [Region](#) from the drop-down list. If your country or region is not specified here, you may be banned from using wireless devices here in this country or region. In this case, contact your local government agency for more information.



The screenshot shows a 'Settings' page with a 'Region' dropdown menu. The dropdown is currently set to 'United Kingdom'. A green 'Save' button is located at the bottom right of the form.

To enable or disable the wireless function:

Enable the [Wireless Radio](#) of 2.4GHz or 5GHz. Uncheck the box to disable wireless function. If disabled, all wireless settings of the corresponding band will be ineffective.



The screenshot shows a 'Wireless' page for the 2.4GHz band. A green checkbox labeled 'Enable Wireless Radio' is checked.

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

The default SSID is TP-LINK_XXXX, and the default password is 12345670. 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 may be disconnected when new settings are effective.



The screenshot shows the 'Network Name (SSID)' field containing 'TP-LINK_7946' and the 'Password' field containing '12345670'.

To hide SSID:

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



The screenshot shows the 'Network Name (SSID)' field containing 'TP-LINK_7946' and a green checkbox labeled 'Hide SSID' which is checked.

To have more advanced settings

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

Security: WPA/WPA2-Personal (Recommended)

Version: Auto

Encryption: AES

Mode: 802.11b/g/n mixed

Channel Width: Auto

Channel: Auto

Transmit Power: High

Security: Select an option from the Security drop-down list. The extender provides four options, None, WPA/WPA2 Personal (Recommended), WPA/WPA2 Enterprise, WEP. WPA2 uses the newest standard and the security level is the highest. We recommend you 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, and all of 802.11b, 802.11g, and 802.11n wireless clients can connect to the extender.

- 802.11ac only (5GHz): Select only if all of your wireless clients are 802.11ac devices.
- 802.11ac/n mixed (5Ghz): Select if you are using both 802.11ac and 802.11n wireless clients.
- 802.11a/n/ac mixed (5Ghz): Select if you are using a mix of 802.11ac, 802.11n and 802.11ac wireless clients. It is strongly recommended that you select 11a/n/ac mixed.

Channel Width: Select the channel width from the drop-down list. The default setting is automatic, 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.

RADIUS Server IP: Enter the IP address of the RADIUS Server.

RADIUS Port: Enter the port used by RADIUS service.

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 password you set for the extender.
2. Go to [Wireless > Clients](#) page.

Online Wireless Clients					
Total Clients: 1					
ID	MAC Address	Wireless Band	Security	Received Packets	Sent Packets
1	D8-5D-4C-B4-46-EA	2.4GHz	WPA2-PSK	3044	3240

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 [Status > Wireless Clients](#).

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.
2. Go to [Device Settings > LED Schedules](#).
3. Toggle **On** to enable the LED Scheduler.

LED Schedules

LED Scheduler: On

LED Off Schedules

+ Add - Delete

<input type="checkbox"/>	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 Time Settings are correct before using this function.

6. Click **Enable this entry** to make it effective.

LED Off Schedules

+ Add - Delete

<input type="checkbox"/>	ID	From	To	Day(s)	Status	Modify
--	--	--	--	--	--	--

LED Off Time: 0:00 - 7:00

Select Day(s): Sun. Mon. Tue. Wed. Thur. 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

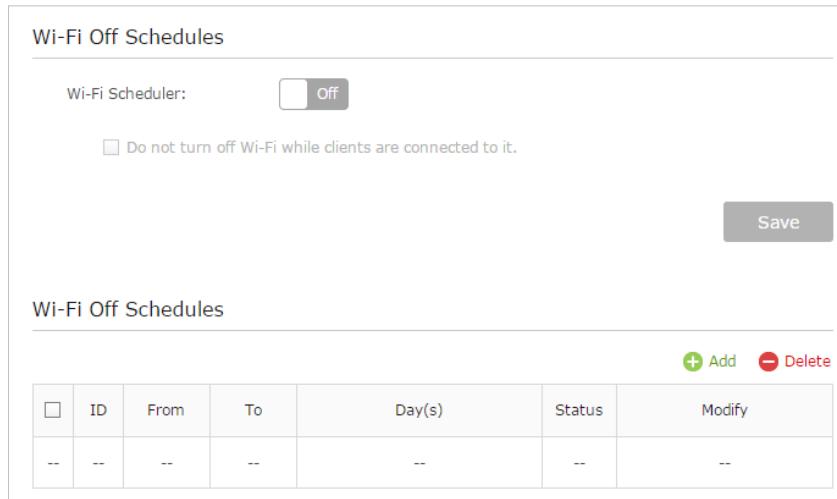
I want to:

Automatically turn off my wireless network (both 2.4GHz and 5GHz) 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.
2. Go to [Wireless > Wi-Fi Schedules](#).



Wi-Fi Off Schedules

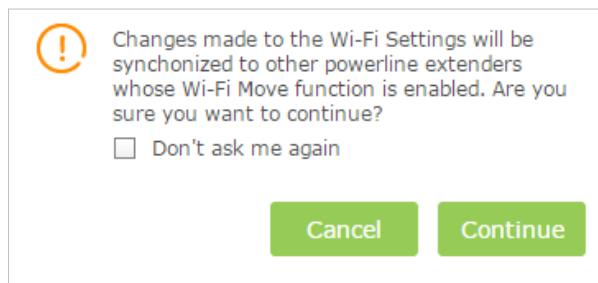
Wi-Fi Scheduler: Off

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

Save

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

3. Toggle **On** to enable the Wi-Fi Scheduler. If you are prompted like the following picture, click [Continue](#).



4. Check the box of [Do not turn off Wi-Fi while clients are connected to it](#).
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 Time Settings are correct before using this function.
7. Click [Enable this entry](#) to make it effective.

Wi-Fi Off Schedules

Add **Delete**

<input type="checkbox"/>	ID	From	To	Day(s)	Status	Modify
--	--	--	--	--	--	--

Wi-Fi Off Time: 0:00 - 7:00

Select Day(s): Sun. Mon. Tue. Wed. Thur. Fri. Sat.

Enable this entry

Cancel **OK**

- 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 wireless LED (2.4GHz, 5GHz) will turn off if the corresponding 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?

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

- Go to **Parental Controls**.

Parental Controls

Parental Controls: Off

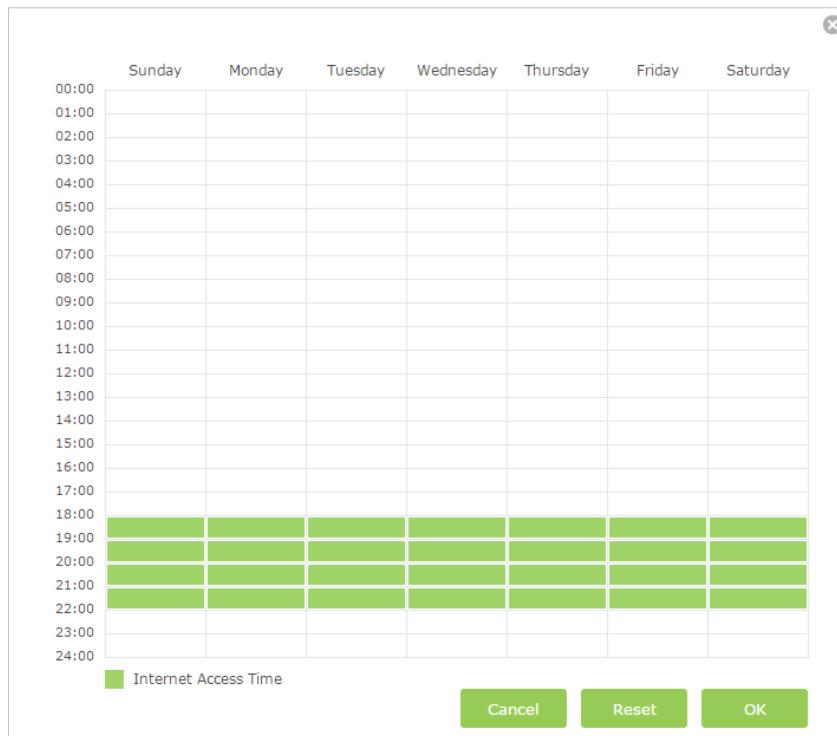
Devices Under Parental Controls

Add **Delete**

<input type="checkbox"/>	ID	MAC Address	Internet Access Time	Description	Status	Modify
--	--	--	--	--	--	--

- Toggle **On** to enable Parental Controls.

4. Click **Add**.
5. Click **View Existing Devices**, and select the device to be controlled. Or, enter the **Device Name** and **MAC Address** manually.
6. Click the  icon to set the Internet Access Time. Drag the cursor over the appropriate cell(s) and click **OK**.
Note: Please make sure that the Time is correct before using this function.



7. Enter a **Description** for the entry.
8. Click **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

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

Done! Now you can control when your children can access the Internet according to your needs.

3. 9. Guest Network

I want to:

Create a separate 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.

Guest Network

Allow guests to see each other

Do not allow guests to manage my network.

Automatic disable after 2 hours

Save

5. Click [2.4GHz](#) or [5GHz](#) to choose a wireless band, and configure the following settings.

Guest Network Settings

2.4GHz | 5GHz

2.4GHz: Enable Guest Network

Network Name (SSID): For Guest_2.4GHz

Security: No Security WPA/WPA2-Personal

Password: 12345678

Save

To enable or disable the wireless function:

Enable the [Wireless Radio](#) of 2.4GHz or 5GHz. Uncheck the box to disable wireless function. If disabled, all wireless settings of the corresponding band will be ineffective.

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

The default SSID is TP-LINK_GUEST_XXXX, and the default password is 12345670. 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.

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 and IP 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 password you set for the extender.
2. Go to [Wireless](#)> [MAC Filter](#).
3. Toggle [On](#) to enable MAC Filter.
4. Select either of the filtering rules and click [Save](#). Here we select [Block wireless access from the devices listed below](#) and then click [Save](#).

MAC Filter Settings

MAC Filtering: **On**

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**

<input type="checkbox"/>	ID	MAC Address	Description	Status	Modify
--	--	--	--	--	--

MAC Address: **View Devices**

Description: 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 in the MAC address manually.

Access Devices List

ID	MAC Address	Connection Type	Operation
1	D8-5D-4C-B4-46-EA	2.4GHz	Choose
2	D4-97-0B-B2-41-68	2.4GHz	Choose

7. Give a description of the entry here. (Optional)

8. Click **Enable this entry** to make this entry effective.

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

Done!

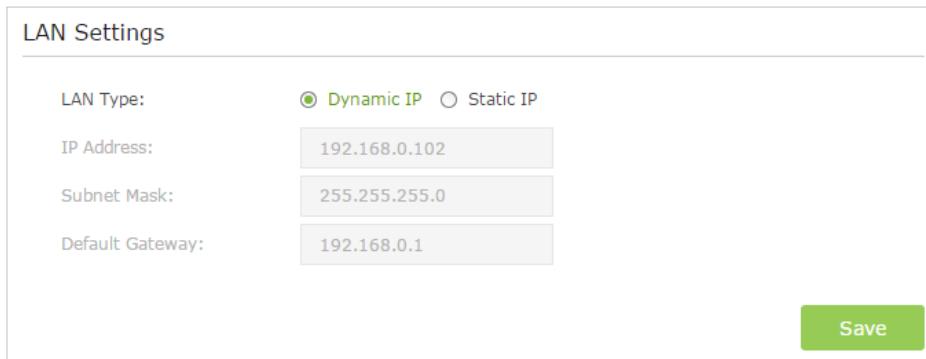
Now MAC Filtering is implemented to protect your wireless network.

3.11. Administration

3.11.1. LAN IP Address

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

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



LAN Settings

LAN Type: Dynamic IP Static IP

IP Address: 192.168.0.102

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

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, 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.

Time Settings

Time Zone:	(GMT) Greenwich Mean Time, Dublin, London		
Date:	06/05/2015 MM/DD/YY		
Time:	06	:	19
NTP Server I:	0.0.0.0 (Optional)		
NTP Server II:	0.0.0.0 (Optional)		
<input type="button" value="Get GMT"/>			
<input type="button" value="Save"/>			

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**.

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:

Daylight-Saving Time

Daylight-Saving Time:	<input checked="" type="checkbox"/> Enable Daylight Saving
Start:	2015 Mar. Last Sun. 1a.m. H
End:	2015 Oct. Last Sun. 1a.m. H
Daylight saving is up.	
<input type="button" value="Save"/>	

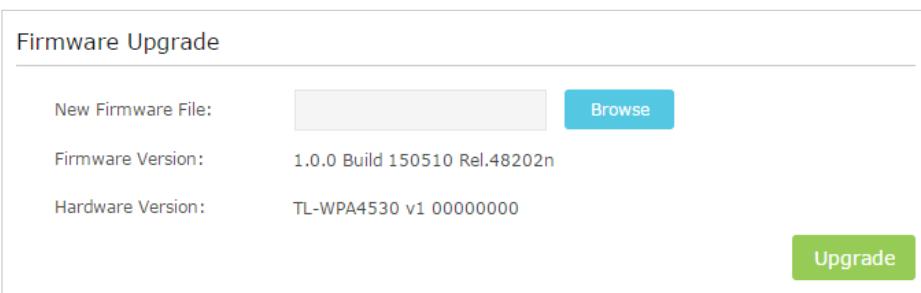
1. Select **Enable Daylight Saving**.
2. Select the correct **Start** date and time when daylight saving time starts at your local time zone.

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 TP-LINK 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. Download the latest firmware file for the extender from our website: www.tp-link.com.
2. Connect to the powerline extender wirelessly. Visit <http://tplinkplc.net>, and log in with the username and password you set for the extender.
3. Go to **System Tools > Firmware Upgrade** page.



Firmware Upgrade

New Firmware File: **Browse**

Firmware Version: 1.0.0 Build 150510 Rel.48202n

Hardware Version: TL-WPA4530 v1 00000000

Upgrade

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.

3.11.4. Backup 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.

Backup

Save a copy of your current settings.

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.

Restore

Restore saved settings from a file.

File: Browse

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.

Factory Default Restore

Revert all the configuration settings to their default values.

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**.

ID	Time	Type	Level	Log Content
1	1st day 00:13:26	LED Schedules	INFO	turn off led.
2	1st day 00:13:24	LED Schedules	INFO	turn off led.
3	1st day 00:13:18	LED Schedules	INFO	turn on led.
4	1st day 00:13:12	Other	INFO	User clear 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.

Appendix A: Specifications

Hardware	
Transmission Speeds	Powerline: up to 500 Mbps Ethernet: 10/100 Mbps
Standards and Protocols	HomePlug AV, IEEE 1901, IEEE 802.3, IEEE 802.3u, IEEE 802.11b/g/n 2.4GHz, IEEE 802.11a/ac 5GHz
Interface	3 * Built-in Ethernet Port
Plug Type	EU, UK, US
Item Dimensions (W x D x H)	TL-WPA4530: 5.2 x 2.8 x 1.9 in. (131 x 72 x 47 mm) TL-PA4020P: 3.7 x 2.3 x 1.7 in. (95 x 58 x 42 mm)
Access Methods	CSMA/CA channel-access schemes
IGMP	IGMP v1/v2/v3
Power Consumption	Maximum: 8 W (230V/50Hz) Standby: 4.5 W (230V/50Hz)
Range	300 meters in house
Compatibility	Compatible with all HomePlug AV & HomePlug AV2 standard Powerline adapters
Software	
Modulation Technology	OFDM
Security	128-bit AES Encryption
Quality of Service (QoS)	ToS Supports up to 4-level type QoS Supports up to 8-level VLAN priority field
Other	
Certification	CE, RoHS
System Requirements	Windows 8.1/8/7/Vista/XP, Mac OS, Linux2
Environment	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing

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FCC STATEMENT



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

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

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

FCC RF Radiation Exposure Statement

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

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

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

CE Mark Warning



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

RF Exposure Information

This device meets the EU requirements (1999/519/EC) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

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

National Restrictions

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

Country	Restriction	Reason/remark
Belarus	Not implemented	
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund on Svalbard.
Italy	Implemented	The public use is subject to general authorisation by the respective service provider.
Russian Federation	Limited implementation	<ol style="list-style-type: none">1. SRD with FHSS modulation1.1. Maximum 2.5 mW e.i.r.p.1.2. Maximum 100 mW e.i.r.p. Permitted for use SRD for outdoor applications without restriction on installation height only for purposes of gathering telemetry information for automated monitoring and resources accounting systems. Permitted to use SRD for other purposes for outdoor applications only when the installation height is not exceeding 10 m above the ground surface.1.3. Maximum 100 mW e.i.r.p. Indoor applications.2. SRD with DSSS and other than FHSS wideband modulation2.1. Maximum mean e.i.r.p. density is 2 mW/MHz. Maximum 100 mW e.i.r.p.2.2. Maximum mean e.i.r.p. density is 20 mW/MHz. Maximum 100 mW e.i.r.p.It is permitted to use SRD for outdoor applications only for purposes of gathering telemetry information for automated monitoring and resources accounting systems or security systems.2.3. Maximum mean e.i.r.p. density is 10 mW/MHz. Maximum 100 mW e.i.r.p. Indoor applications.
Ukraine	Limited implementation	e.i.r.p. \leq 100 mW with built-in antenna with amplification factor up to 6 dBi.

ATTENTION: Due to EU law, the country settings must be identical to the country where the device is operating (important due to non-harmonised frequencies in the EU).

Restricted to indoor use.

Canadian Compliance Statement

This device complies with Industry Canada license-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil 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.

Caution:

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

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

Avertissement:

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

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

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

Déclaration d'exposition aux radiations:

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

Industry Canada Statement

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

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

NCC Notice & BSMI Notice:

注意！

依據 低功率電波輻射性電機管理辦法

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

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

減少電磁波影響，請妥適使用。

安全諮詢及注意事項

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



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



Safety Information

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

CAUTION

DOUBLE POLE / NEUTRAL FUSING

This product can be used in the following countries:

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

DECLARATION OF CONFORMITY

For the following equipment:

Product Description: **AV500 Powerline WiFi Extender**

Model No.: **TL-WPA4530**

Trademark: **TP-LINK**

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

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

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

EN 55022: 2010 + AC: 2011

EN 55024: 2010

EN 301 893 V1.8.1

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

EN 50412-2-1: 2005/AC:2009

EN 62311: 2008

EN 300 328 V1.9.1

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

The product carries the CE Mark:



Person responsible for making this declaration:

A handwritten signature in black ink, appearing to read 'Yang Hongliang'.

Yang Hongliang
Product Manager of International Business

Date of issue: 2015-10-27

TP-LINK TECHNOLOGIES CO., LTD

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