





# **User Guide**

**Smart Ceiling Fan Control and Dimmer Switch** 

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# **About This Guide**

This guide provides a brief introduction to Smart Ceiling Fan Control and Dimmer Switch and the Kasa Smart app, as well as regulatory information.

Please note that features of Smart Ceiling Fan Control and Dimmer Switch may vary slightly depending on the model and software version you have, and on your location and language. All images, steps, and descriptions in this guide are only examples and may not reflect your actual experience.

## Conventions

In this guide, the following convention is used:

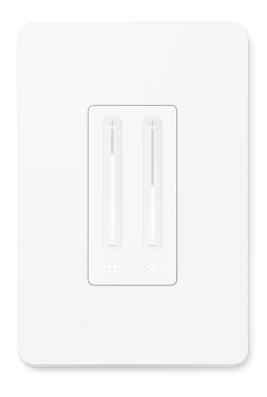
Convention	Description
Teal	Key information appears in teal, including management page text such as menus, items, buttons and so on.
<u>Underline</u>	Hyperlinks are in teal and underlined. You can click to redirect to a website.

## More Info

- Operating temperature, storage temperature, and other 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 and troubleshooting information can be found at <a href="https://www.tp-link.com/support/">https://www.tp-link.com/support/</a>.
- A TP-Link Community is provided for you to discuss our products at <a href="https://community.tp-link.com">https://community.tp-link.com</a>.
- Install & setup video can be found at <a href="https://www.tp-link.com/support/setup-video/#home-smart-switches">https://www.tp-link.com/support/setup-video/#home-smart-switches</a>.
- FAQs on wiring and compatibility can be found at https://www.tp-link.com/support/faq/3682/.

# Introduction

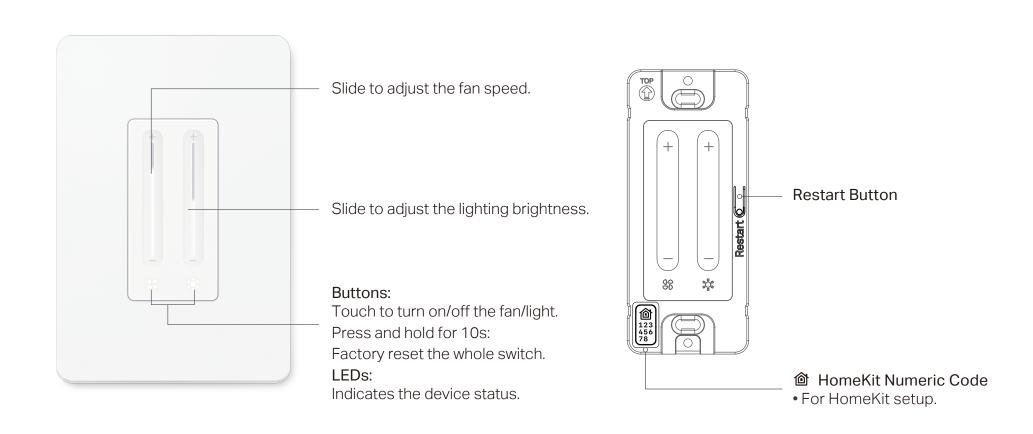
KS240 is a 2-in-1 Smart Ceiling Fan Control and Dimmer Light Switch. Adjust fan speed and dim your lights from anywhere with smart-phone using the Kasa Smart app.



- **Smooth Dimming** Set the optimal brightness of your lights for the perfect ambiance. Smoothly illuminate or dim your lights with the Fade On/Off feature.
- 4-Speed Fan Control Choose from four fan speeds to find the ideal airflow that suits your comfort.
- **Voice Control** Use simple voice commands with Alexa, Siri®, or Google Assistant to conveniently control the fan and light without leaving your spot.
- **Set Schedule** Schedule your lights and fans to turn on at your preferred brightness and speed so you always walk into a well-lit, suitably cooled home.
- **HomeKit Supported** Control your plugged-in appliances using the Apple Home app and Siri on your iPhone, iPad, Apple Watch, HomePod, or Mac.
- Remote Control Adjust fan speeds and set lighting levels separately from anywhere with the Kasa Smart app.
- Sleep Mode Automatically switches to a gentle fan speed after a set time, guiding you to restful sleep.

# Appearance

The Smart Ceiling Fan Control and Dimmer Switch includes a fan speed bar, a fan LED/button, brightness bar, a light LED/button, and a Restart button. See the explanation below:



# **LED Status**

Solid red	Starting up; Disconnected from Cloud.
Blinking red & white slowly	Ready for setup.
Blinking white quickly	Connecting to Wi-Fi.
Solid white	Connected to Cloud.
Blinking red slowly	Disconnected from Wi-Fi.
Blinking red quickly	Restoring to factory default settings.
Blinking red & white quickly	Resetting Wi-Fi.
Blinking white slowly	Firmware updating.

# Wire Your Switch

Follow the steps below to wire your Smart Ceiling Fan Control and Dimmer Switch. If you are not familiar with basic electronical wiring, please consult an electrician.

## Before You Start

#### 1. Prepare Baisc Knowledge of Wiring

- Neutral: Usually a bundle of white wires, not connected to the old switch. They may be folded up in the very back of your wallbox. If the old switch is smart, then the neutral wire may be connected to the switch.
- Ground: Usually a green or bare copper wire.
- Line (Live/Hot): Usually black. One end is connected to the circuit breaker, the other to your old switch.
- Load: Usually black or red. One end is connected to the switch, the other to your electrical device.

Note: If you are unsure, consult a qualified electrician.

#### 2. Requirements

- Separate load wires for fan and light are required.
- A neutral wire is required to install the smart switch.
- The smart switch is designed for single-pole (one location) wiring (not compatible with 3-way/multi-way switch wiring).
- Supported fan type: AC motor speed control (most pullchain ceiling fans) with a recommended rating of less than 60W.

- For optimal fan performance, please manually adjust the fan speed to the highest settings with the independent speed control (e.g., pull chain) of your fan.
- If you have an additional controller connected to your fan, remove it first.
- DO NOT use to control exhaust fans, DC motor fans, and fans with integrated fan speed controls (i.e., fans with remote control or Bluetooth/Wi-Fi enabled).

#### 3. Prepare Your Tools

Prepare a philips and slotted screwdriver, pliers, wire strippers, a voltage detector, and a pair of insulated gloves.

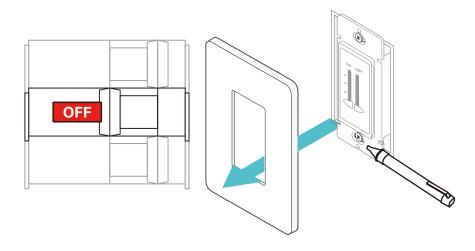
#### 4. Check Wi-Fi Strength

Make sure your switch is in an area with strong Wi-Fi signal.

# Wire Your Switch

#### Step 1. Turn Off Power and Remove the Wallplate

Turn off the light and fan of the old switch and turn off the circuit breaker. Remove the wallplate of your old switch and use a voltage detector to confirm that all power is off.





#### CAUTION

Risk of Electric Shocks - High Voltage - Disconnect power supply at the circuit breaker before servicing.

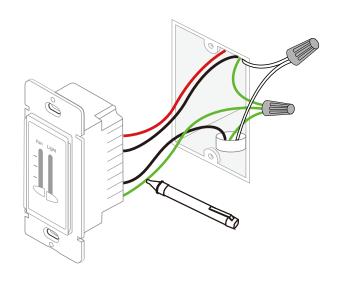


#### MISE EN GARDE

Risque d'électrocution - Haute tension: débranchez l'alimentation électrique au niveau du disjoncteur avant l'utiliser.

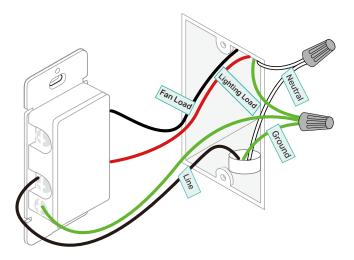
#### Step 2. Pull out the Old Switch

Unscrew the old switch and pull it out. Use a voltage detector to test all the wires to confirm that all power is off.



## Step 3. Identify the Wires

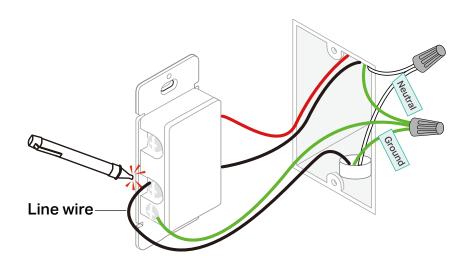
- 1) Identify and label the **Ground** and **Neutral** wires in the wall box.
- 2) Identify the Line, Fan Load, and Lighting Load wires of the old switch according to their wire colors and the existing marks, if any, and label them with the provided wire labels.
- 3) Take a photo of the old switch wiring conditions for later reference.



If you cannot identify and label the Line, Fan Load, and Lighting Load wires, you can follow Steps 4 and 5 to make it. Otherwise, you can skip Steps 4 and 5.

## Step 4. Identify the Line Wire

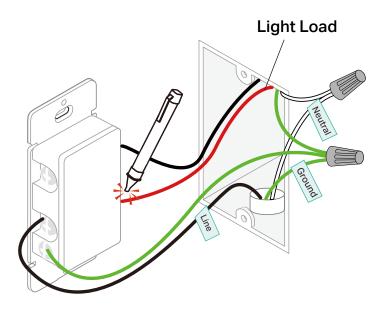
- 1) Turn on the circuit breaker. Make sure your old light and fan switch is turned off.
- 2) Use a voltage detector to identify the energized wire (Line wire). Note: If you find more than one wire is energized, please refer to: https://www.tp-link.com/support/faq/3682/



3) Turn off the circuit breaker. Label the energized wire as the **Line** wire.

#### Step 5. Identify the Load Wires

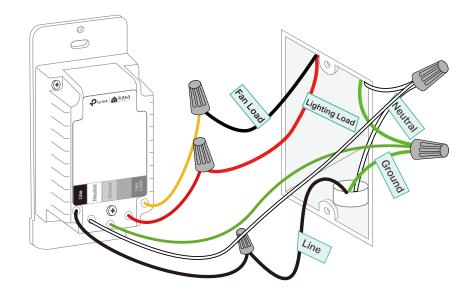
- 1) Turn on your light switch, turn off your fan switch, and turn on the circuit breaker to see that your light is working.
- 2) Use a voltage detector to identify the energized wire among the two load wires. This should be the load wire of your light switch.



3) Turn off the circuit breaker and the light switch. Label the energized wire as **Lighting Load**. Then label the other one as **Fan Load**.

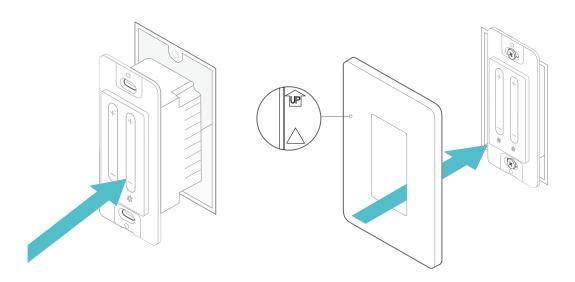
#### Step 6. Remove Old Switch

Disconnect all wires from the old switch, and connect them to the smart switch as below. Check that all the wires are correct. Pull gently to make sure each wire is secure.



# Step 7. Install Smart Switch

Line up the smart switch with the mounting holes. Secure it with screws. Ensure the UP arrow on the back of the wallplate points up and attach the wallplate. Then turn on the circuit breaker.



# Set Up Your Switch via Kasa

Follow the steps below to set up your smart dimmer switch via Kasa Smart app.

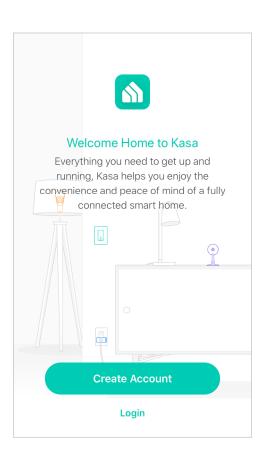
# 1. Install Kasa Smart app

Get the Kasa Smart app from Google Play or the App Store, or scan the QR code below to download it.

## 2. Log in or sign up with TP-Link ID

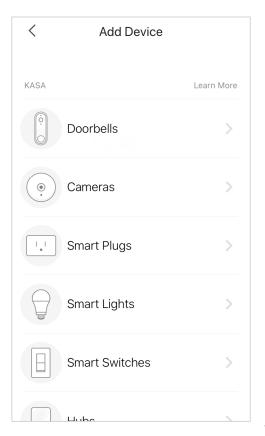
Open the Kasa Smart app and log in with your TP-Link ID. If you don't have an account, create one first.





## 3. Add Device

Tap the button in the Kasa Smart app, select Add a Device > Smart Switches > Fan Control & Dimmer Switch. Follow the app instructions to complete the setup.



# Set Up Your Switch via HomeKit

#### **Before You Start**

- Your iPhone/iPad should be connected to a stable 2.4 GHz Wi-Fi network with internet access.
- Ensure your iPhone/iPad, HomeKit device, and Apple home hub\* (if any) are connected to the same Wi-Fi network.
- \*The hub like HomePod, HomePod mini, and Apple TV helps control your HomeKit devices remotely, share the devices with others, and automate your devices to do tasks for you.
- To control the HomeKit-enabled device in the Apple Home app, the latest iOS or iPadOS version is highly recommended.
- Find the HomeKit QR code or numeric code on your device or in its packaging. After setup, you can save the code in Device Settings in the Kasa Smart app.

## How to Set Up?

- 1. Factory reset your Smart Switch.
- 2. Open the Apple Home app.
  - If you have added your smart device to the Kasa Smart app, you can go to **Device Settings > Device Info** in the app to find the HomeKit setup code and add the device to the Home app.
- 3. Scan the HomeKit QR code or enter the provided numeric setup code.
- 4. Follow the instructions in the app to complete setup.

## Failed to Set Up?

- Factory reset the Smart Switch and restart your phone. Then try again.
- Move your iPhone/iPad and the smart device closer to the router to get a stronger Wi-Fi signal.
- HomeKit setup will be disabled in 10 minutes since the smart device is powered on. You can power off your Smart Switch, then power it on and try again.
- Creating a new home in the Home app can greatly help set up your smart device.
- You can visit https://www.tp-link.com/support/fag/3390/ or scan the QR code below for more troubleshooting instructions.



Scan QR Code



Contact us at https://www.tp-link.com/support

for Technical Support, FAQs & more

# **Use Your Smart Switch**

After setup, your Smart Switch will be listed on the Home page. You can tap your device to manage it.

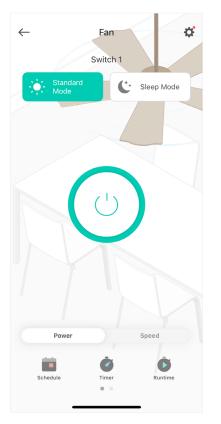
# 1. Home Page

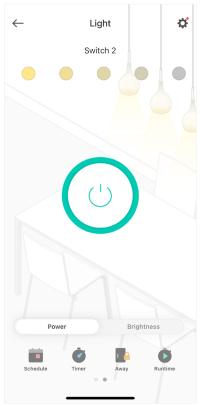
Your can turn on or off your device on the Home page.

# My home v All Devices Favorites 3.3.500 Hallwa = **SWITCHES** PLUGS Plug 1 Home Plug 2 Home GROUPS

# 2. Status Page

Tap your fan control or light switch to enter its Status page.

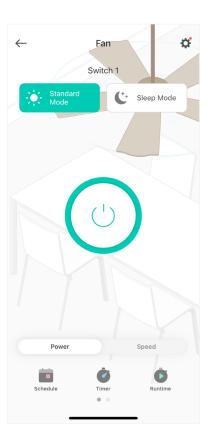




# 3. Standard Mode VS Sleep Mode

Standard Mode: Normal working status for the fan.

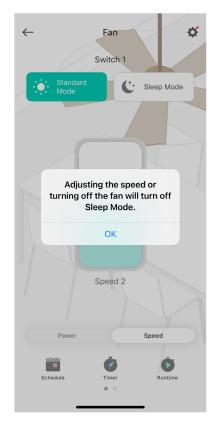
**Sleep Mode:** Automatically switches to a gentle fan speed after a set time. In Sleep Mode, the fan will gradually lower its speed by 1 increment every interval you set, stopping at Speed 1.



# 4. Adjust fan speed.

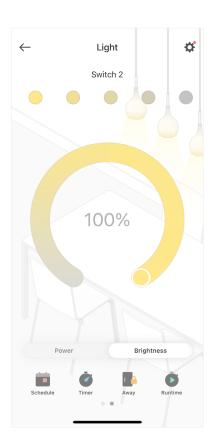
Go to the Status page. You can change fan speed when working on Standard Mode. In Sleep Mode, adjusting the speed or turning off the fan will disable Sleep Mode.





# 5. Adjust lighting brightness.

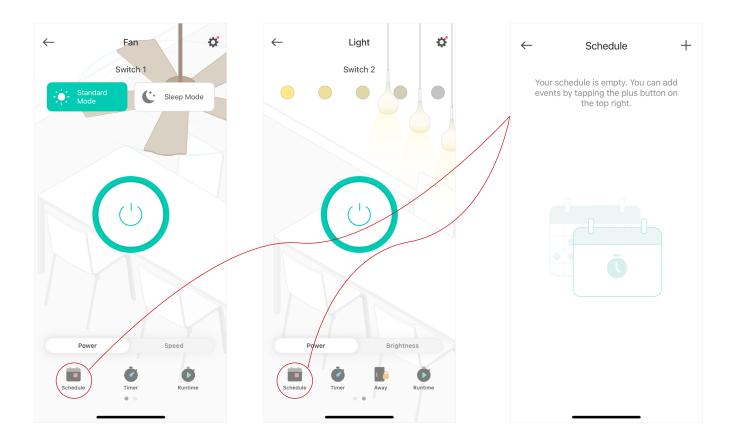
Change light brightness from 1% to 100%. You can also set brightness presets here.



# 6. Set schedules for the fan/light.

Fan schedule: Adjust speed or turn on/off the fan at set times.

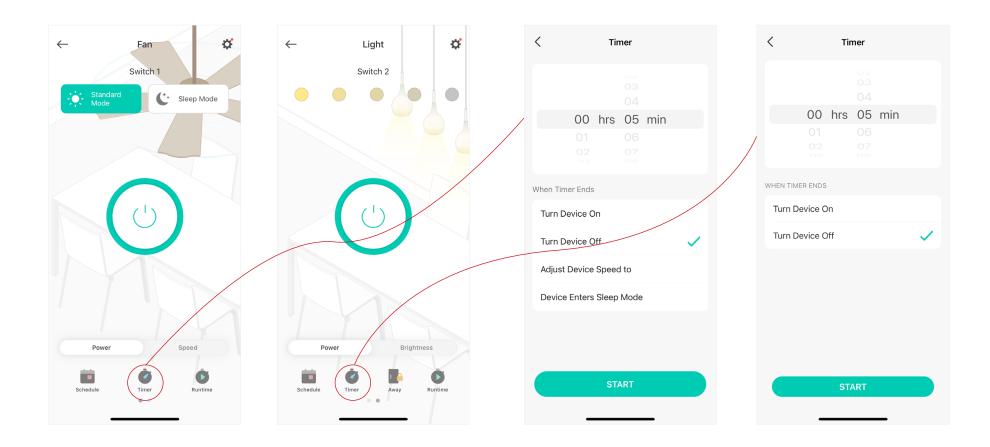
**Light schedule:** Adjust brightness or turn on/off the light at set times.



# 7. Set Timer for the fan/light.

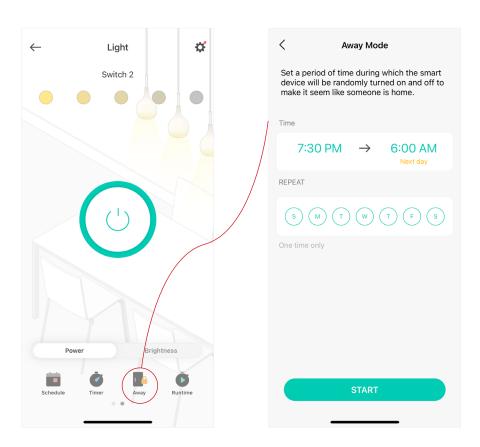
Fan Timer: Turn on/off the fan, adjust fan speed, or enter Sleep Mode, after a set time.

Light Timer: Turn on/off the light after a set time.



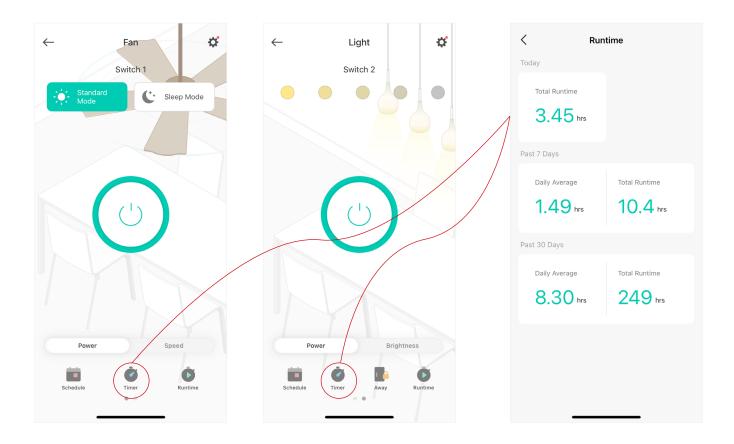
# 8. Set Away Mode for the light.

With Away Mode, the light will turn on/off automatically at random intervals while you are away to make the appearance that someone is at home.



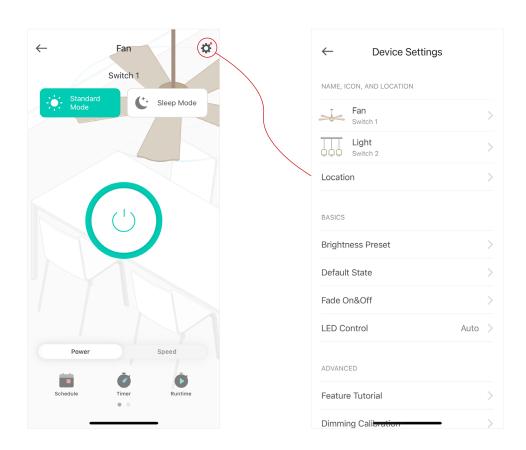
# 9. Check Runtime of the fan/light.

Fan Runtime: Check runtime of the fan.
Light Runtime: Check runtime of the light.



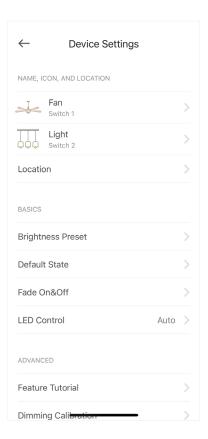
# Manage Device Settings

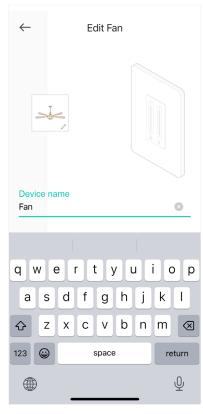
Tap the gear icon on the Status page of the fan or the light to enter the Device Settings page.



#### 1. Edit device name and icon.

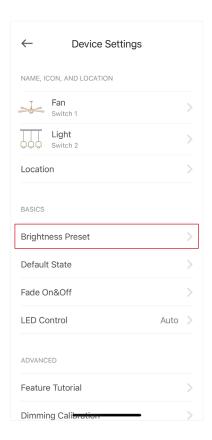
You can edit the device name and icon for the fan/light.

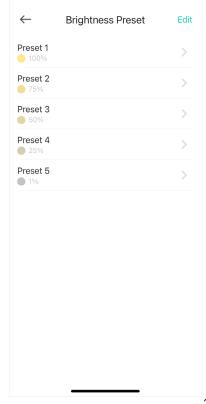




# 2. Set light brightness presets.

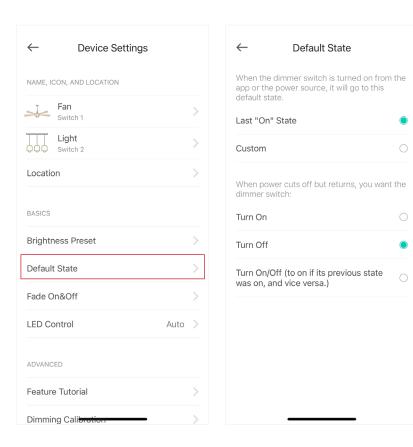
Set preset brightness levels so you can switch to the desired brightness with just one tap. The presets will appear on the Status page of the light.





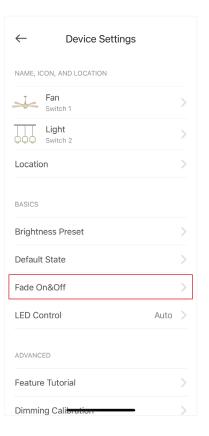
# 3. Set default state for your Smart Switch.

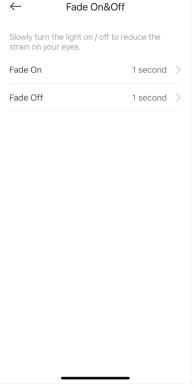
Set the default state your Smart Switch will turn to when it is turned on from the app or the power source.



# 4. Set fade on/off for the light.

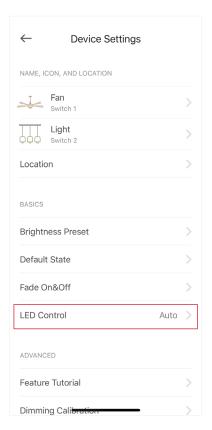
Set the fade on/off time for the light to reduce the strain on your eyes.

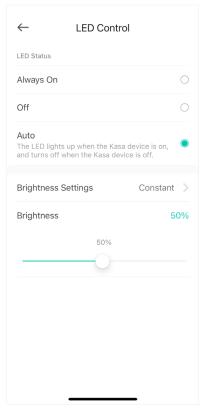




# 5. Control your device LEDs.

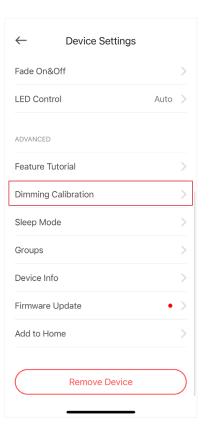
Set when to turn on your device LEDs and the brightness.





# 6. Calibrate your Smart Switch.

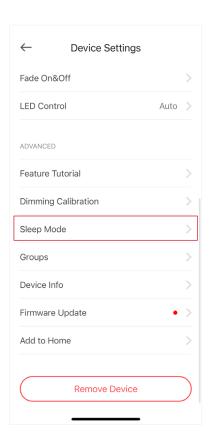
Calibrate your device to better dim your light.

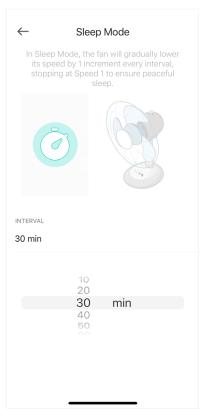




# 7. Set Sleep Mode for the fan.

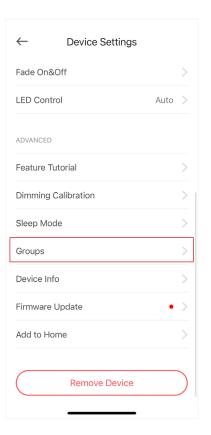
Set the interval for your fan to gradually lower its speed on Sleep Mode.

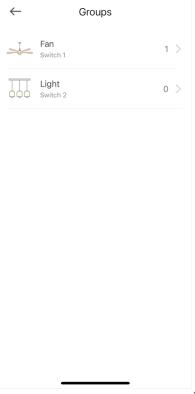




# 8. Check Groups that your Smart Switch is in.

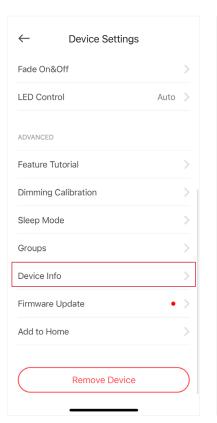
Check whether your device is added to a group with other devices for simultaneous control.

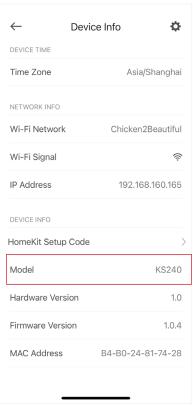




# 9. Check Homekit setup code.

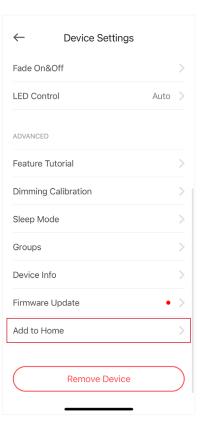
You can check the HomrKit setup code and save the code to add your device to your Apple Home app anytime.

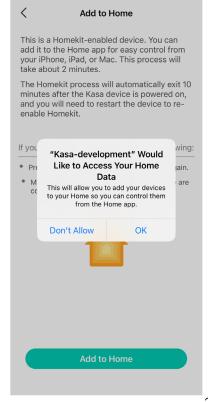




## 10. Add to Home

Add your device to your Apple Home app.





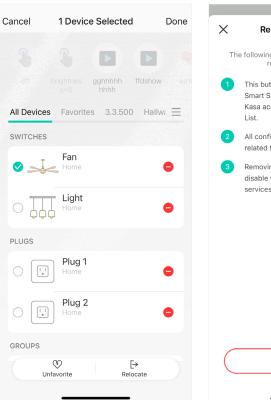
# Remove Your Device

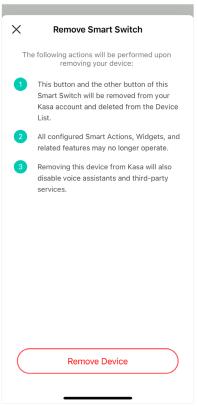
You can remove your device from the Kasa Smart app on the Home page or on the Device Settings page, or by pressing the fan/light button of your device.

# Home Page

Long press the fan or the light and then tap 

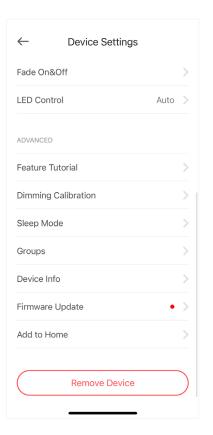
. The whole device will be removed.

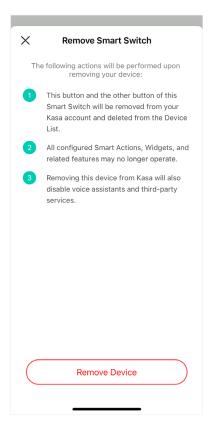




## **Device Settings Page**

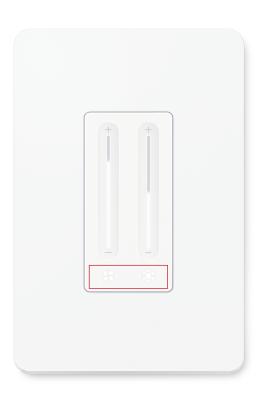
Tap Remove Device. The whole device will be removed.





# Press the fan/light button

Press and hold the fan or light button for at least 10 seconds to restore factory default settings.



# **Authtication**

## FCC compliance information statement

FC.

Product Name: Smart Ceiling Fan Control and Dimmer Switch

Model Number: KS240 Responsible party:

**TP-Link USA Corporation** 

Address: 10 Mauchly, Irvine, CA 92618

Website: <a href="http://www.tp-link.com/us/">http://www.tp-link.com/us/</a>

Tel: +1 626 333 0234 Fax: +1 909 527 6804

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

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

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

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

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

## **FCC RF Radiation Exposure Statement**

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

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

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

Issue Date: 2024-01-18

## **Canadian Compliance Statement**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **Radiation Exposure Statement:**

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

### Déclaration d'exposition aux radiations:

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

### **Industry Canada Statement**

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

### **Safety Information**

Before installing, servicing or removing the switch, read and follow all safety precautions including the following:

- Follow all national and local safety regulations and practices. If you are uncertain or uncomfortable when performing the installation, consult a qualified electrician.
- CAUTION Risk of Electric Shock More than one disconnect switch may be required to de-energize the equipment and luminaire before servicing. A circuit breaker which disconnects the Line and Neutral conductor simultaneously is suitable.
- CAUTION High Voltage Disconnect power supply before servicing. Ensure power is off at the circuit breaker before removing or installing any switch. Use a non-contact voltage tester to ensure the power is off.
- Do not install the Smart Dimmer Switch with wet hands or when standing on wet or damp surfaces.

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- Do not use the device where wireless devices are not allowed.
- Rating: 120V~ 60Hz
- Lighting Load: 300W INC/HAL, 150W LED
- Dimming Type: Leading Edge Dimming / TRIAC Phase Cut
- Ceiling Fan Load: 1.5A Max Load, 4-Speed
- Supported Fan Type: AC Motor Speed Control
- Operation temperature: 32°F~104°F (0~40°C)
- Install only in a suitable UL Listed outlet box (suitable dimensions: H > 2.95 in. / 75 mm, W > 1.81 in. / 46 mm, D > 2 in. / 51 mm).
- Tighten terminal screws to 13 lbf-in.



#### CAUTION

Electrical switch integrated in this product is only intended for functional purposes. De-energized the product at the circuit breaker before servicing.

## Explanation of the symbols on the product label

Symbols may vary from products

Symbol	Explanation	
	Class II equipment	
	Class II equipment with functional earthing	
$\sim$	Alternating current	
===	DC voltage	

Symbol	Explanation
<b>♦-@-</b> ♦	Polarity of output terminals
	Indoor use only
4	Dangerous voltage
	Caution, risk of electric shock
VI	Energy efficiency Marking
	Protective earth
	Earth
	Frame or chassis
	Functional earthing
<u></u>	Caution, hot surface
$\triangle$	Caution
Ĩ	Operator's manual

Symbol	Explanation
	Stand-by
	"ON"/"OFF" (push-push)
$\Rightarrow$	Fuse
N	Fuse is used in neutral N
	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.
11)	Caution, avoid listening at high volume levels for long periods
	Disconnection, all power plugs
m	Switch of mini-gap construction
μ	Switch of micro-gap construction (for US version) Switch of micro-gap / micro-disconnection construction (for other versions except US)
ε	Switch without contact gap (Semiconductor switching device)