



# User Guide

## Smart Wi-Fi Dimmer Switch HS220

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# About This Guide

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

Features available in Kasa Smart may vary by model and software version. Kasa Smart availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual Kasa Smart 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

- Specifications can be found on the product page at <https://www.tp-link.com>.
- Our Technical Support and troubleshooting information can be found at <https://www.tp-link.com/support>.
- A TP-Link Community is provided for you to discuss our products at <https://community.tp-link.com>.
- Frequently Asked Questions (FAQs) can be found at <https://www.tp-link.com/support/faq/>.

# Introduction

With the Smart Dimmer, you can control the ambiance of any space with the push of a button. Download the Kasa Smart app and control your dimmer remotely. The Kasa Smart app provides easy step-by-step installation instructions and convenient remote control from anywhere.

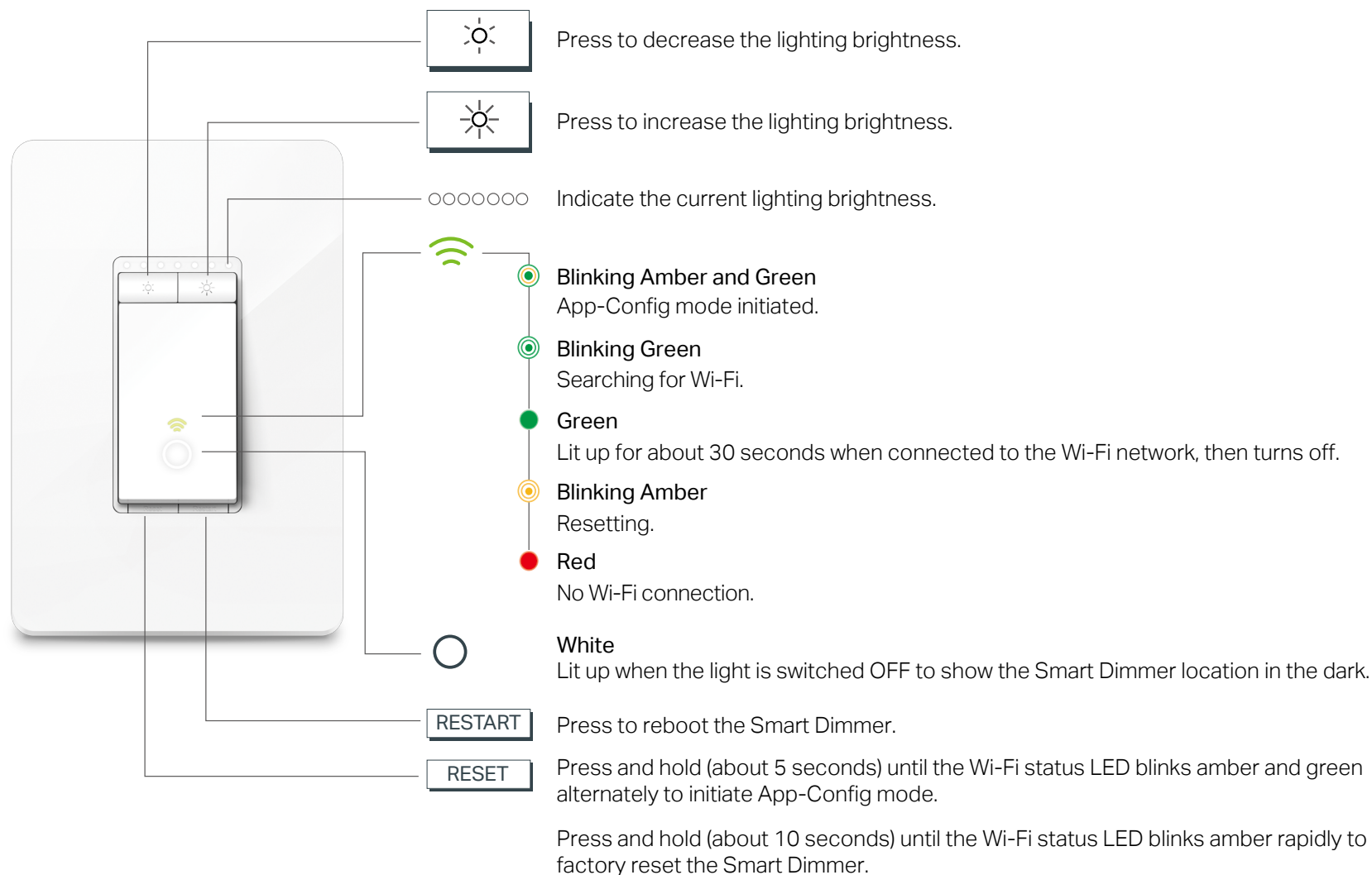
- **Brightness Control** - Control the brightness of your lights to set the perfect ambiance for any activity
- **Control Your Lights From Anywhere** - Control your dimmer from wherever you are with the free Kasa app
- **Hands-free Experience** - Control your lights by voice commands through support from Amazon Alexa and Google Assistant
- **No Hub Required** - Work with a 2.4GHz Wi-Fi network, no need for a hub or extra equipment.
- **Scheduling** - Program lights to turn off and on at set times throughout the day or night



Phone not included;  
Works with iOS and Android

# Appearance

The Smart Dimmer has Up/Down buttons to adjust the brightness of your lights, an indicator that tell you the current brightness of your lights, two LEDs that changes color according to its status, a RESTART button and a RESET button. See the explanation below:



# Set Up Your Smart Dimmer

Follow the steps below to set up your Smart Dimmer via [Kasa Smart](#) app.

## 1. Download and install Kasa app

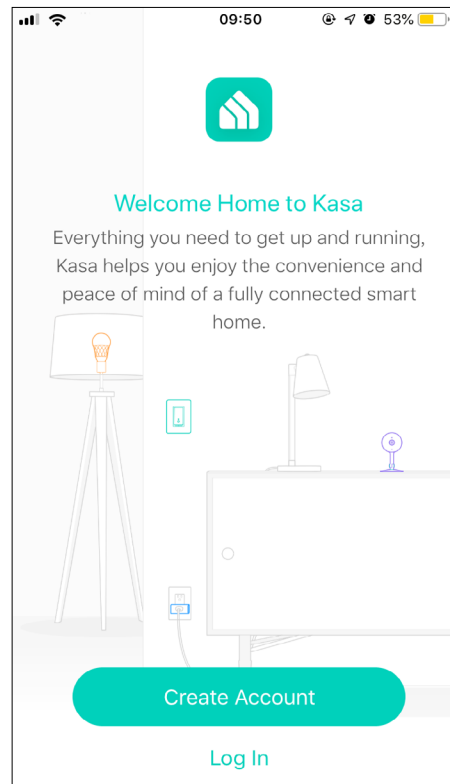
Go to Google Play or the App Store or scan the QR code below to download the Kasa Smart app on your Android or iOS smartphone or tablet.



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

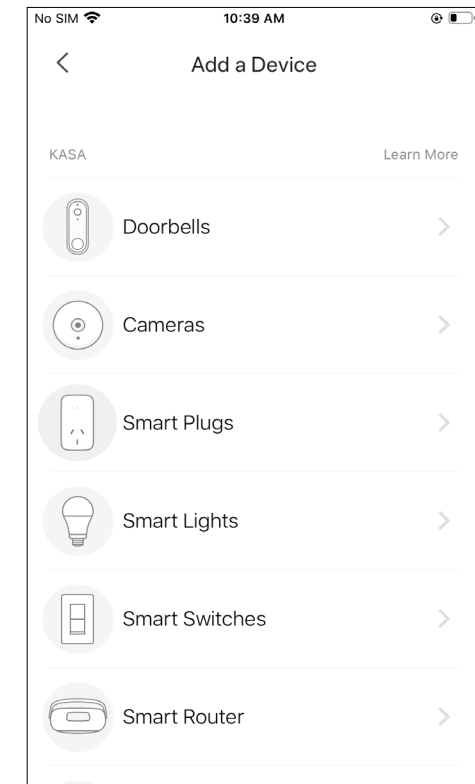
Open the app. Use your TP-Link ID to log in.

If you don't have a TP-Link ID, tap [Create Account](#) and the Kasa app will guide you through the rest.



## 3. Install and set up

Tap the ⊕ button in the app and select Doorbells. Follow the app instructions to wire your Smart Dimmer and then set up your Smart Dimmer.

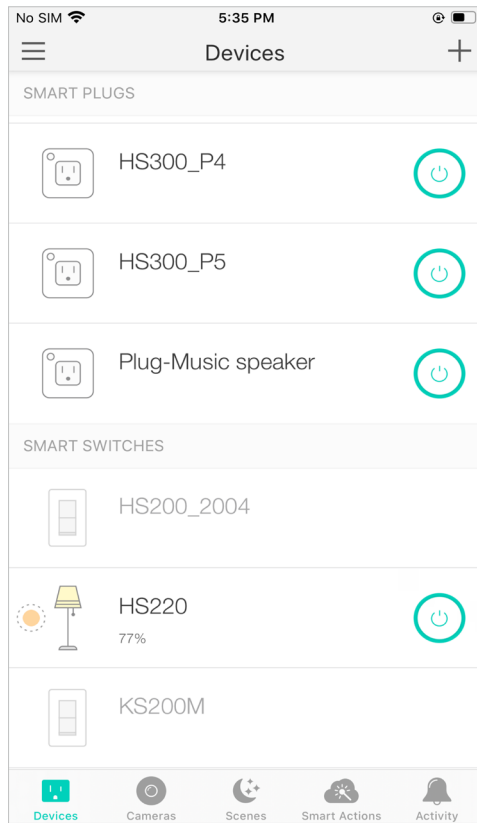


# Main Device Controls

After you successfully set up your Smart Dimmer, you will see the home page of the Kasa Smart app. Here you can view and manage all devices that you've added to Kasa. Tap your smart switch to control and manage it.

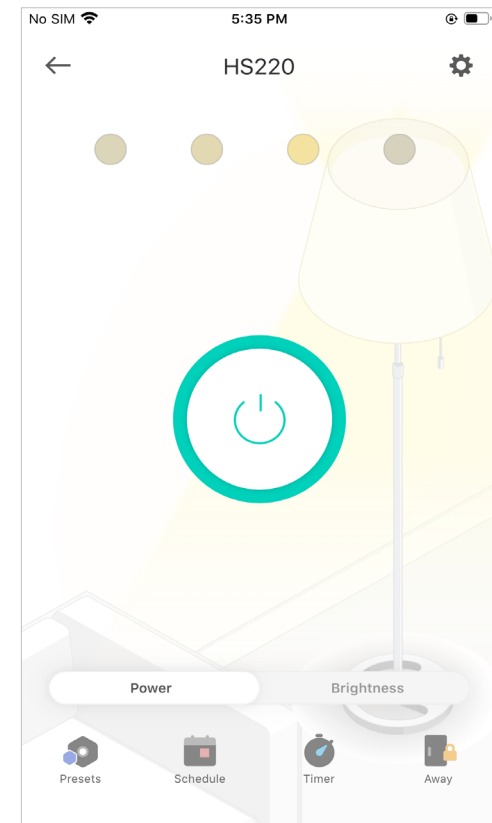
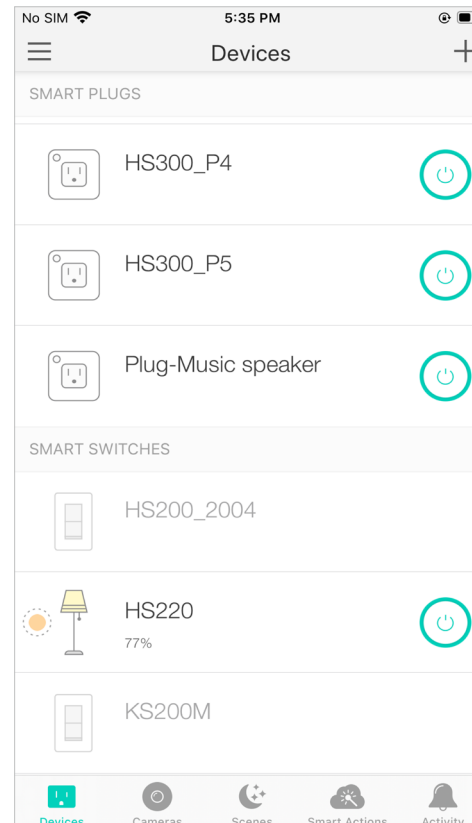
## Home Page

You can see all your Kasa devices listed in the Home page.



## Turn on/off the smart outlet

Turn on/off your Smart Dimmer quickly by tapping the switch on the home page. Tapping the device to enter its Status page, you can also check or change its status.

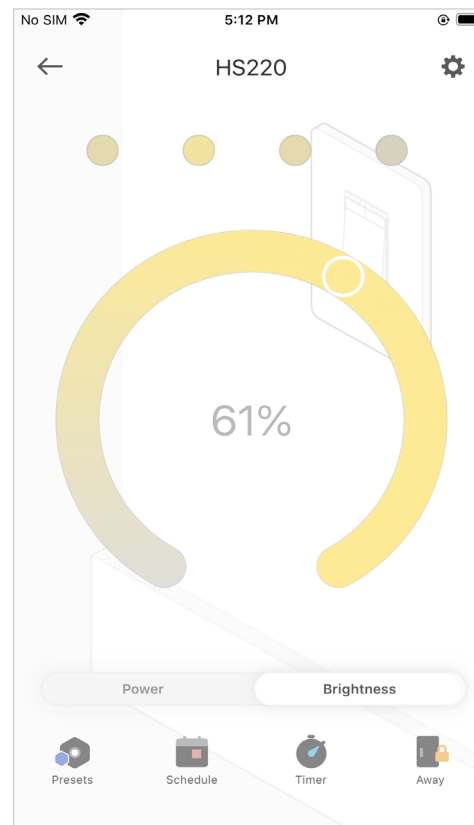
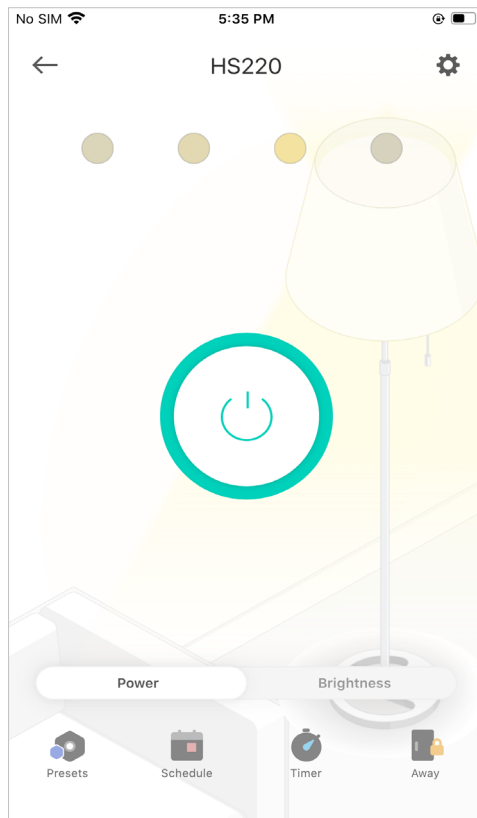


# Adjust Brightness

**Brightness:** It allows you to adjust the brightness of your light from 1% to 100%.

1. Tap your Smart Dimmer in Home page to enter the Status page, and then tap the **Brightness** bar.

2. Tap on the arc to set the desired brightness.





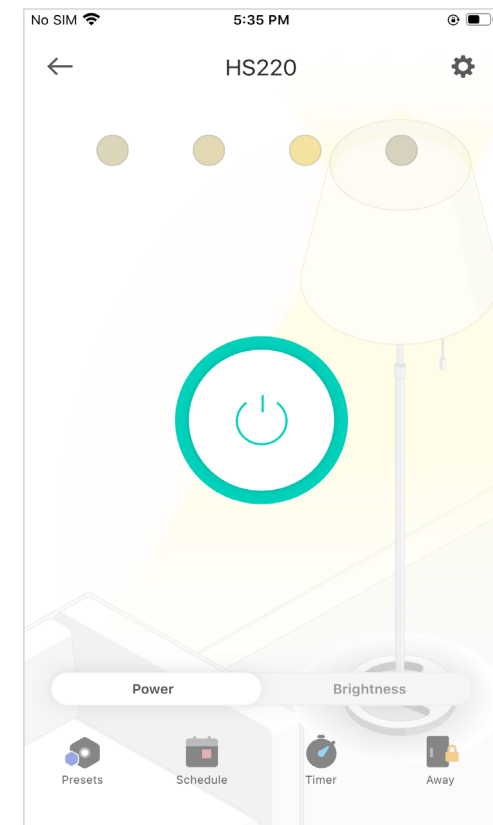
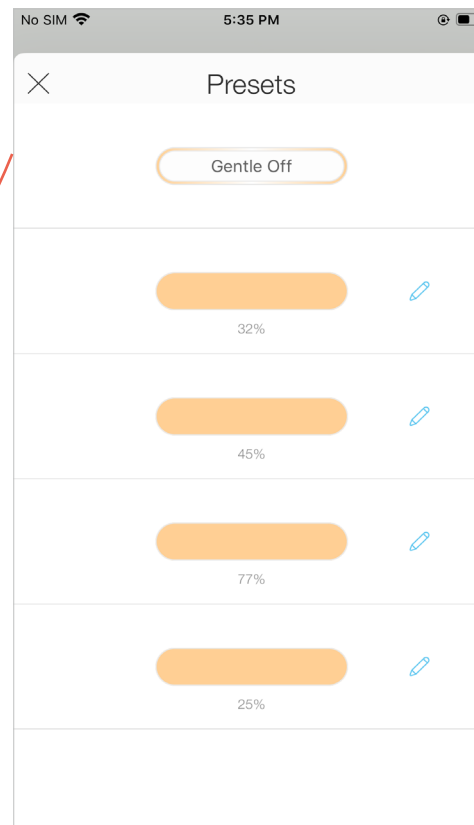
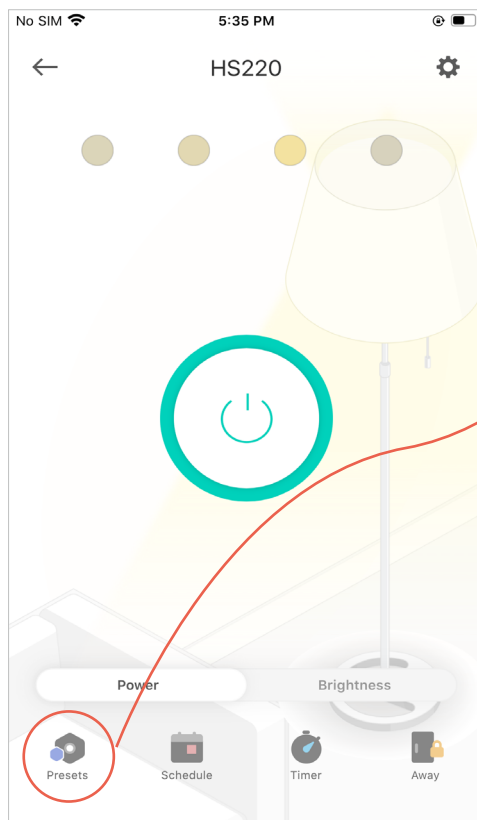
# Set Presets

**Presets:** Set desired light effects in advance as presets so you can quickly change to the corresponding effect.


1. Tap your Smart Light Switch in the Home page, and then tap .

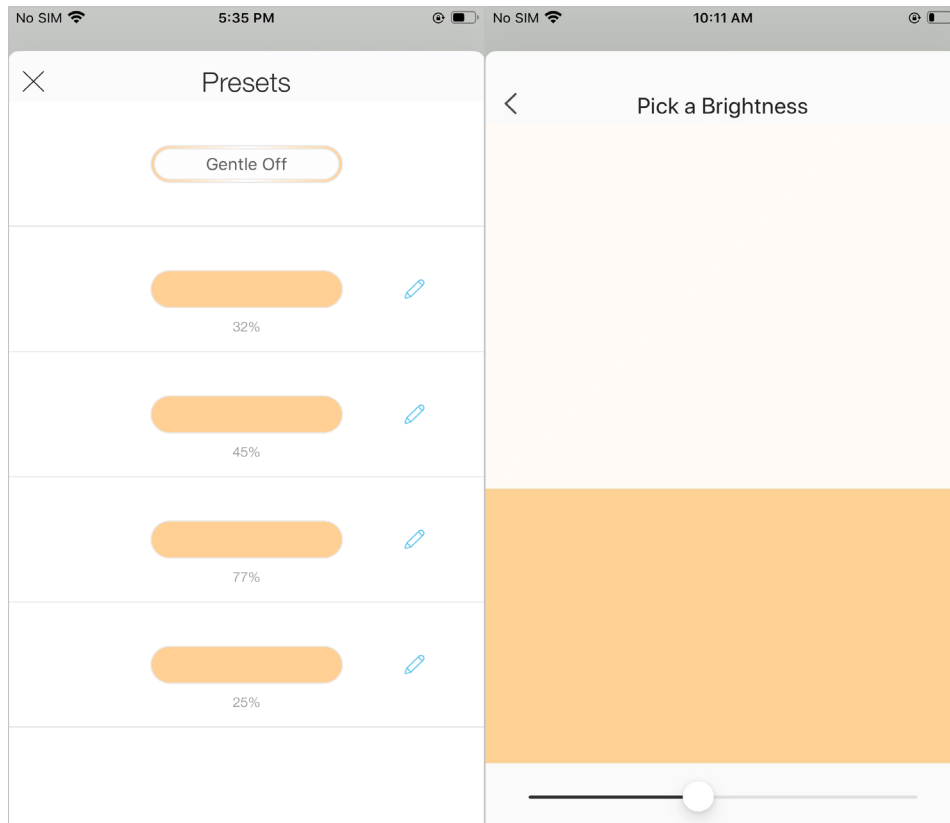
2. Set different brightness and gentle off (which means turning the light off slowly).


3. The presets you set will be displayed on the top in the [Status](#) page.

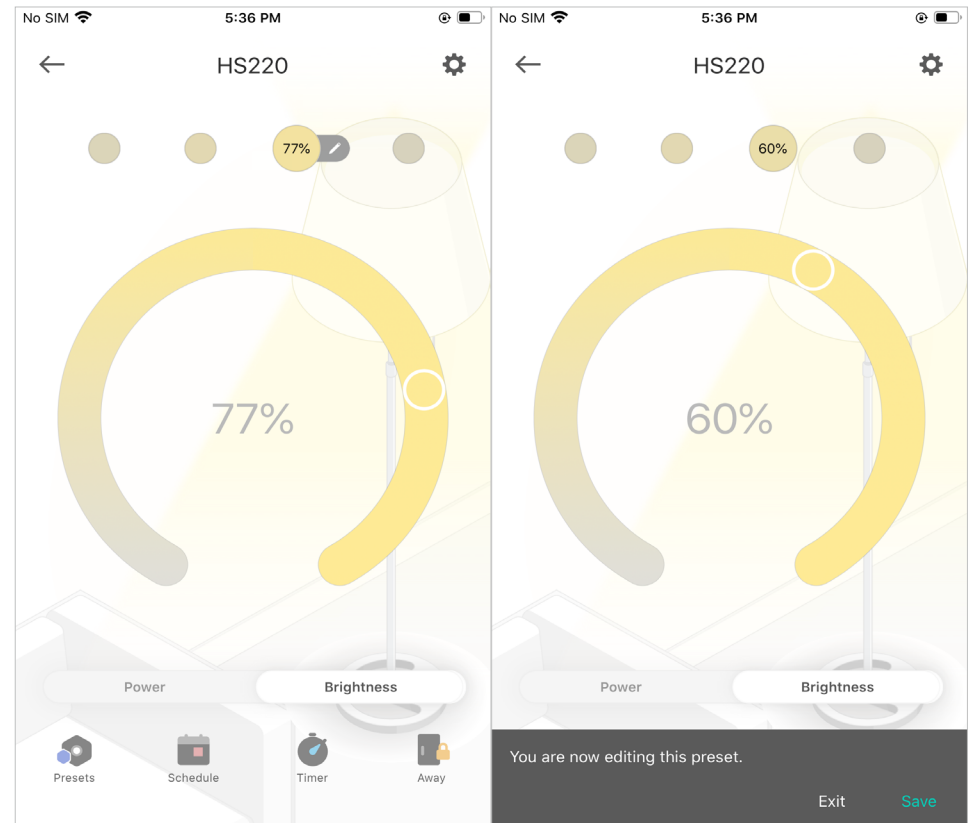


4. Change the brightness of presets by:

1) Tap  in the [Presets](#) page to change the brightness.



2) Tap a preset in the [Status](#) page, then tap  beside. A pop up message will appear in the bottom. Choose another brightness and tap [Save](#).



# Set Schedules

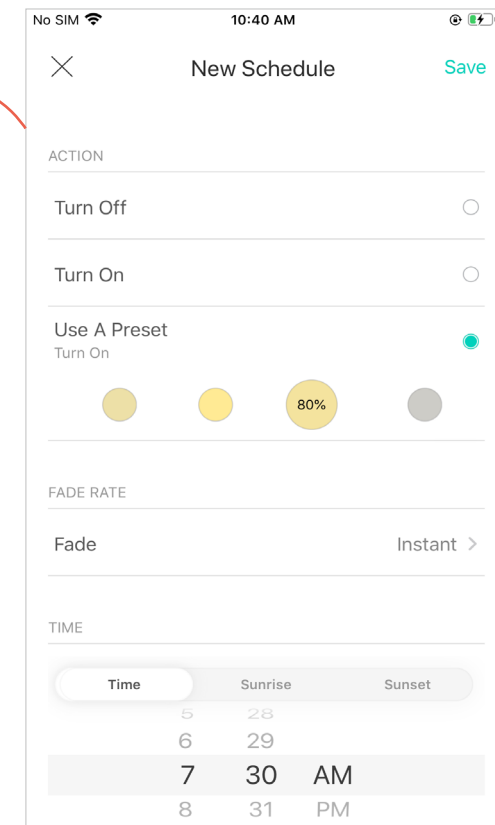
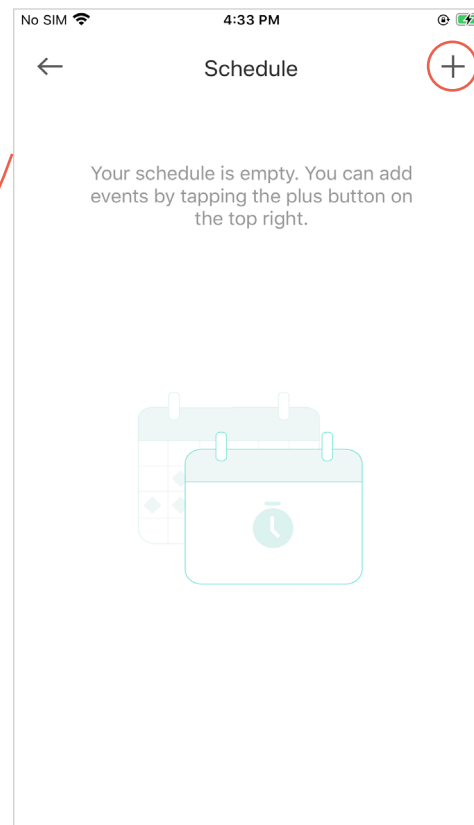
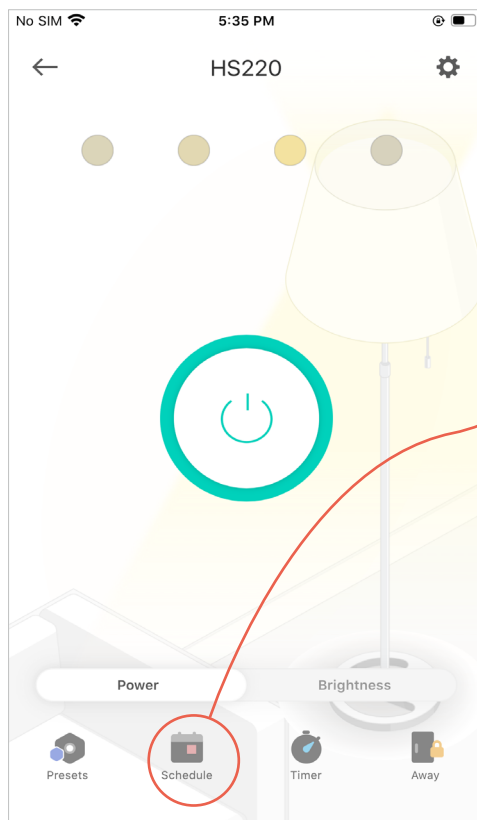
**Schedule:** Set schedules to automatically turn on/off the light or apply a preset at set times according to your daily routine.

1. Tap your Smart Dimmer in the Home page, and then tap .

2. Tap + on the top right corner.

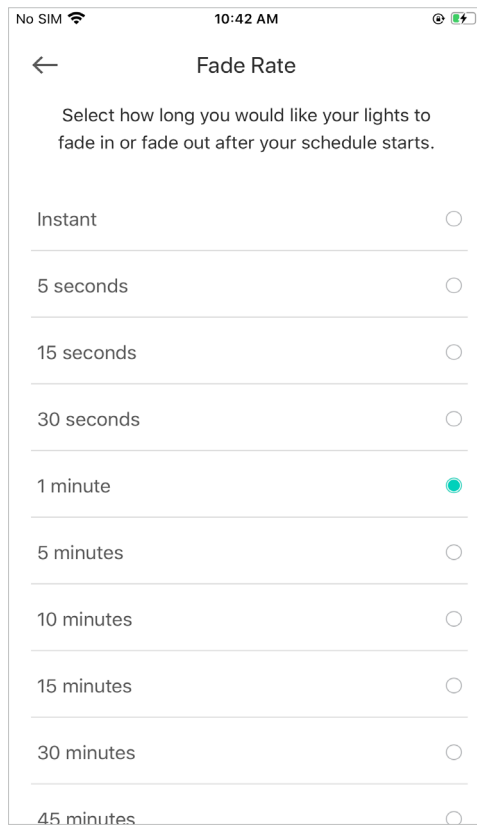
3. Set a schedule to turn the light on or off, or apply a specific preset effect.

e.g. I want to turn on the light using the preset of 80% brightness.



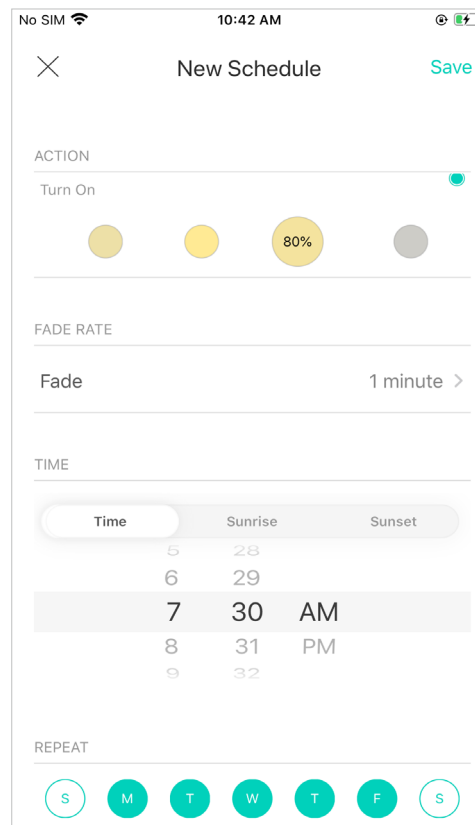
4. Set the fade rate, i.e. how long you want your light to fade in or fade out after your schedule starts.

e.g. I want the light to slowly turn on in 1 minute.

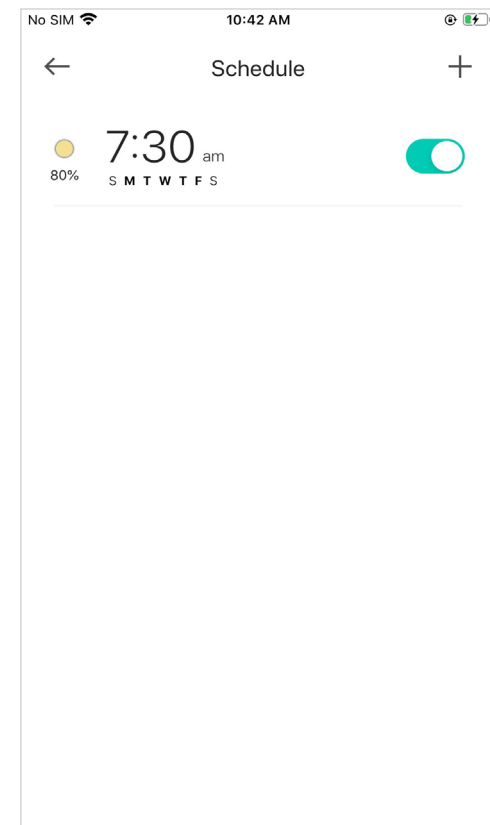


5. Set the time and frequency for your schedule.

e.g. I want to use the preset at 7:30 AM every weekday.




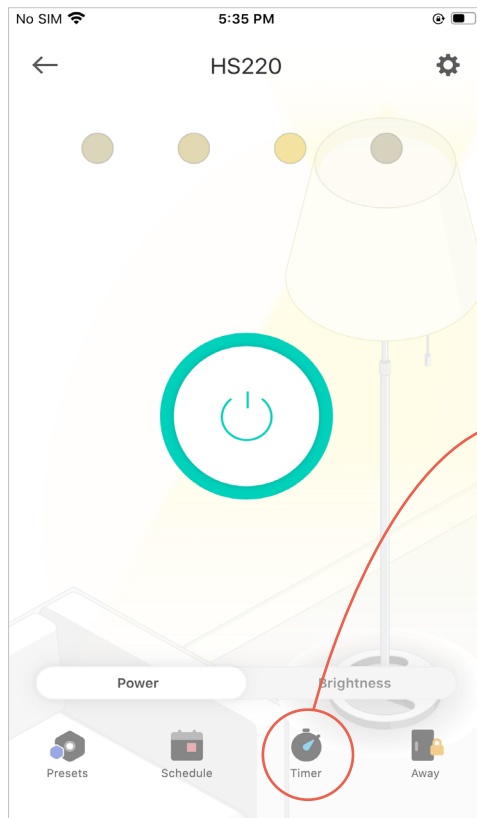
6. You can see the schedule you set at the [Schedule](#) page. You can also turn it off any time.



# Set Timer

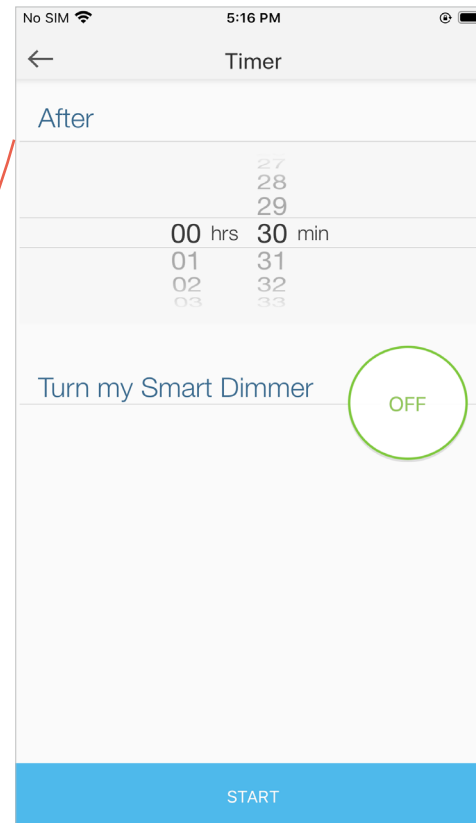
**Timer:** Set the timer for your Smart Dimmer to automatically turn on/off after the time ends.

1. Tap your Smart Dimmer in the Home page, and then tap .

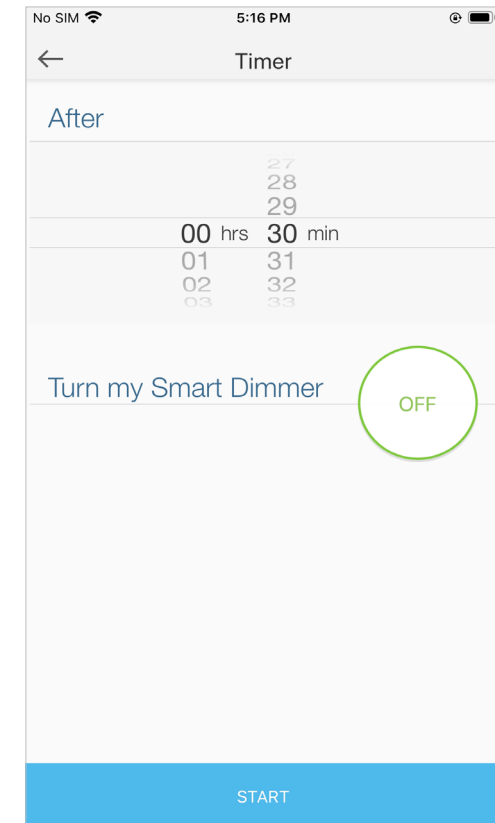


2. Set the time after which the dimmer will be automatically turned on/off.

For example, when I turn on the light, I want it to be off after 30 minutes.




2. Tap **START** and you'll see the timer is counting down. Tap **STOP** to stop the Timer at any time.



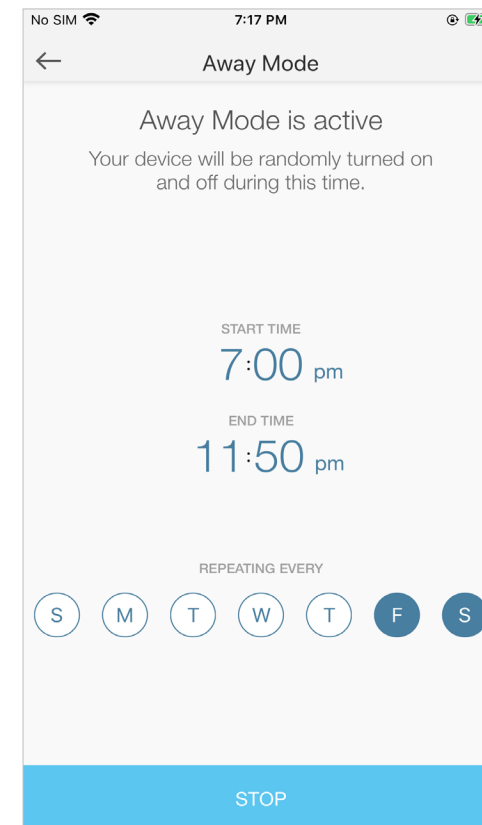
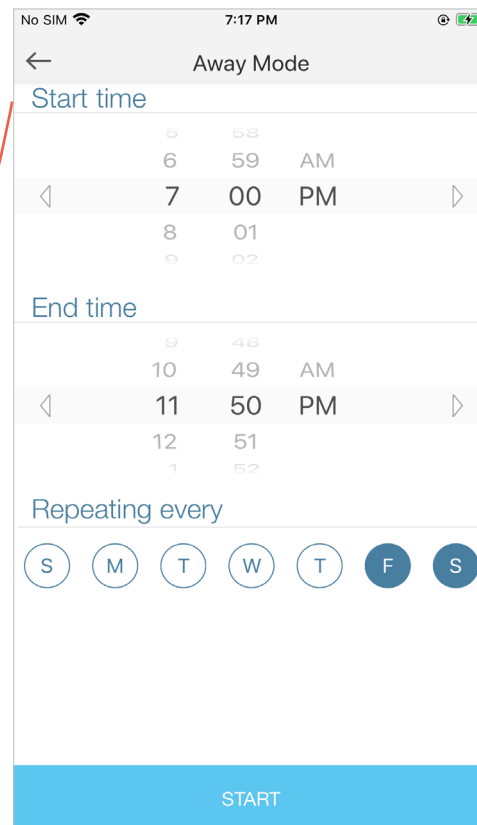
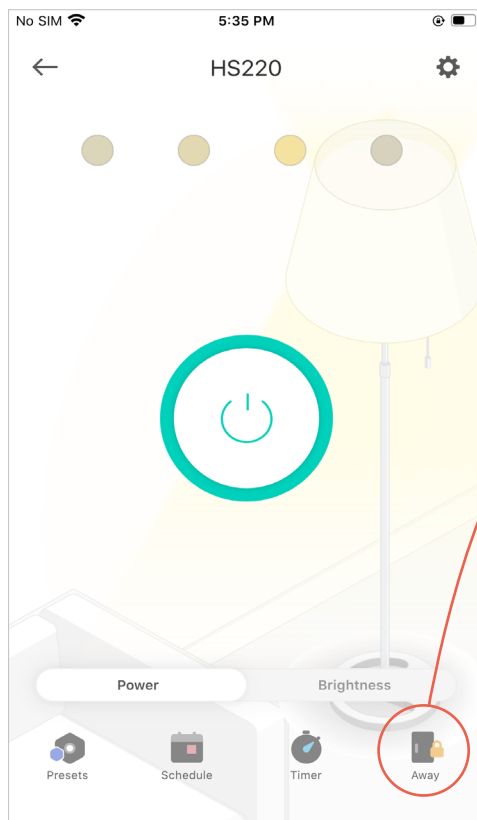
# Set Away Mode

**Away Mode:** Set Away Mode for your Smart Dimmer to turn on/off the light automatically at random intervals while you are away to make the appearance that someone is at home.

1. Tap your Smart Dimmer in the Home page, and then tap .

2. Set the start and end time during which the dimmer will be automatically turned on and off at random intervals, and the repeating frequency.

e.g. I want the light to turn on and off between 7:00 PM to 11:50 PM every Friday and Saturday.



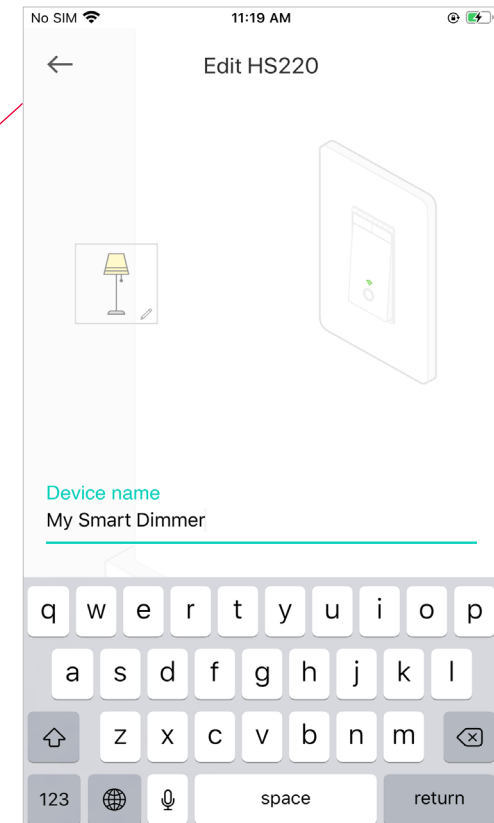
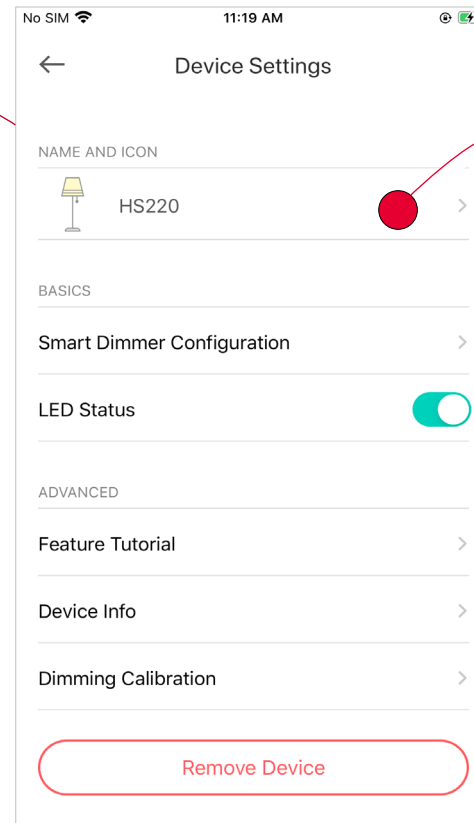
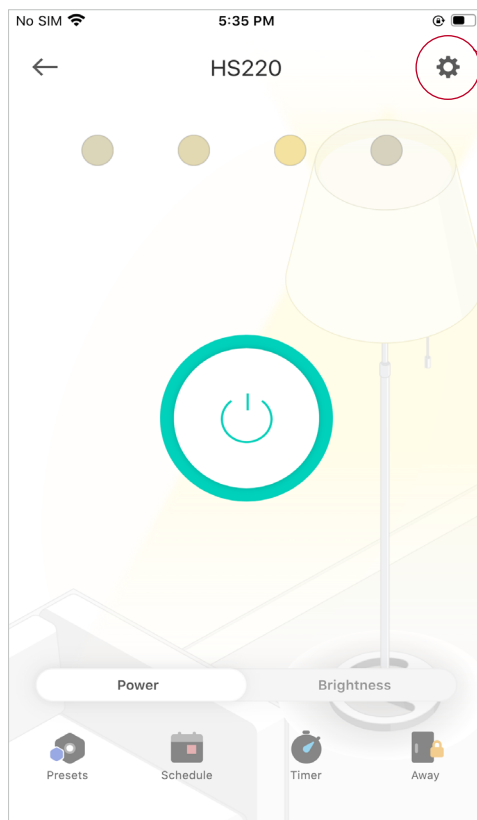
# Manage Device Settings

You can edit the device settings here.

## Edit Name & Icon

1. Tap your Smart Dimmer in the Home page and then tap .

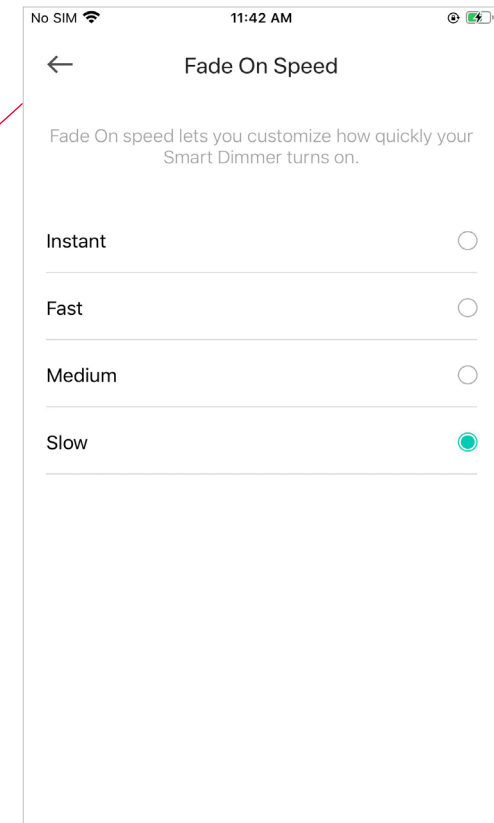
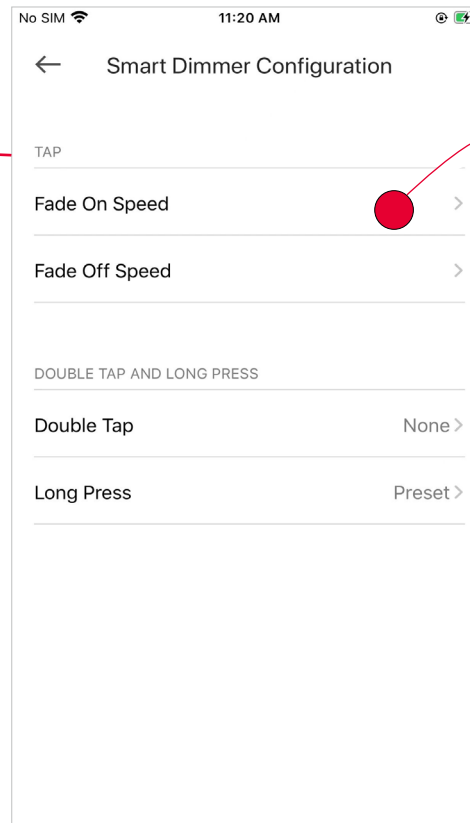
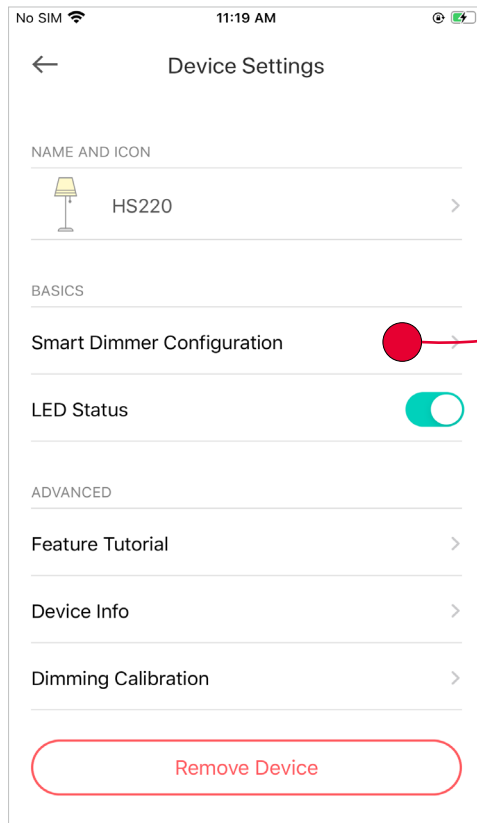
2. Change the name and icon of your switch.



## Smart Dimmer Configuration

1. Tap **Smart Dimmer Configuration** in the Device Settings page.

2. Set the **Fade On Speed / Fade Off Speed** which decides how quickly your Smart Dimmer turns on.

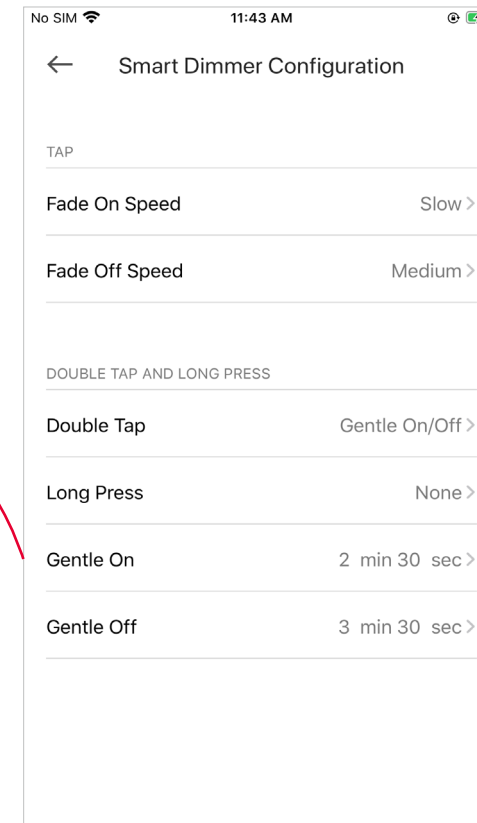
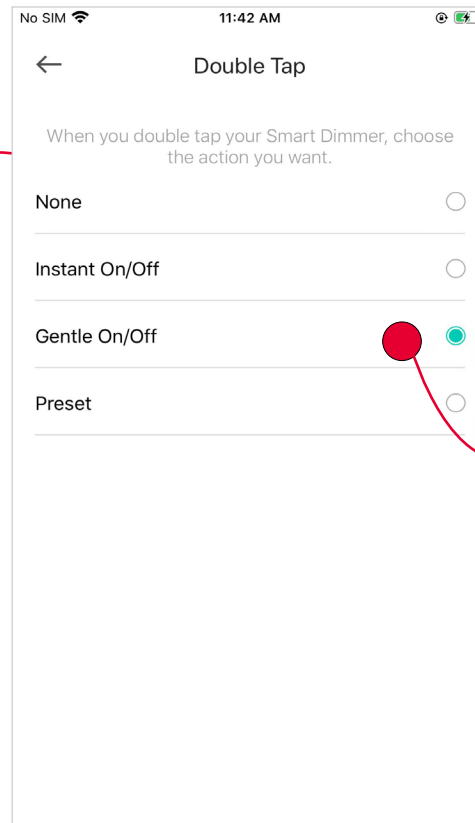
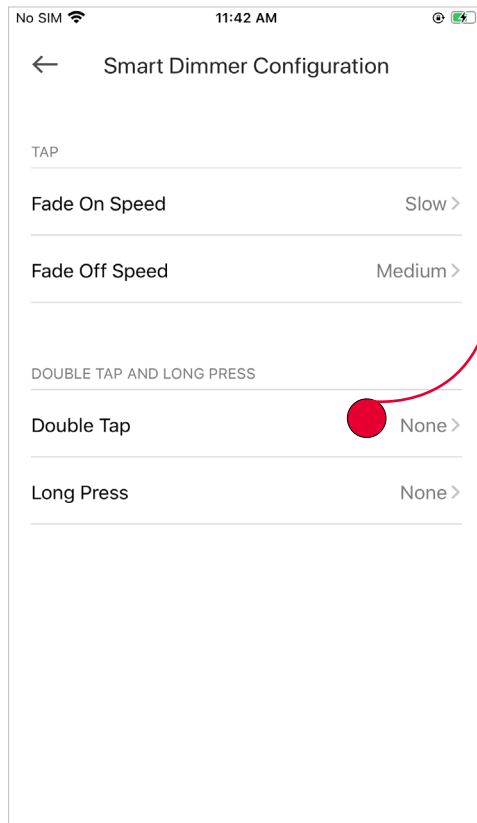




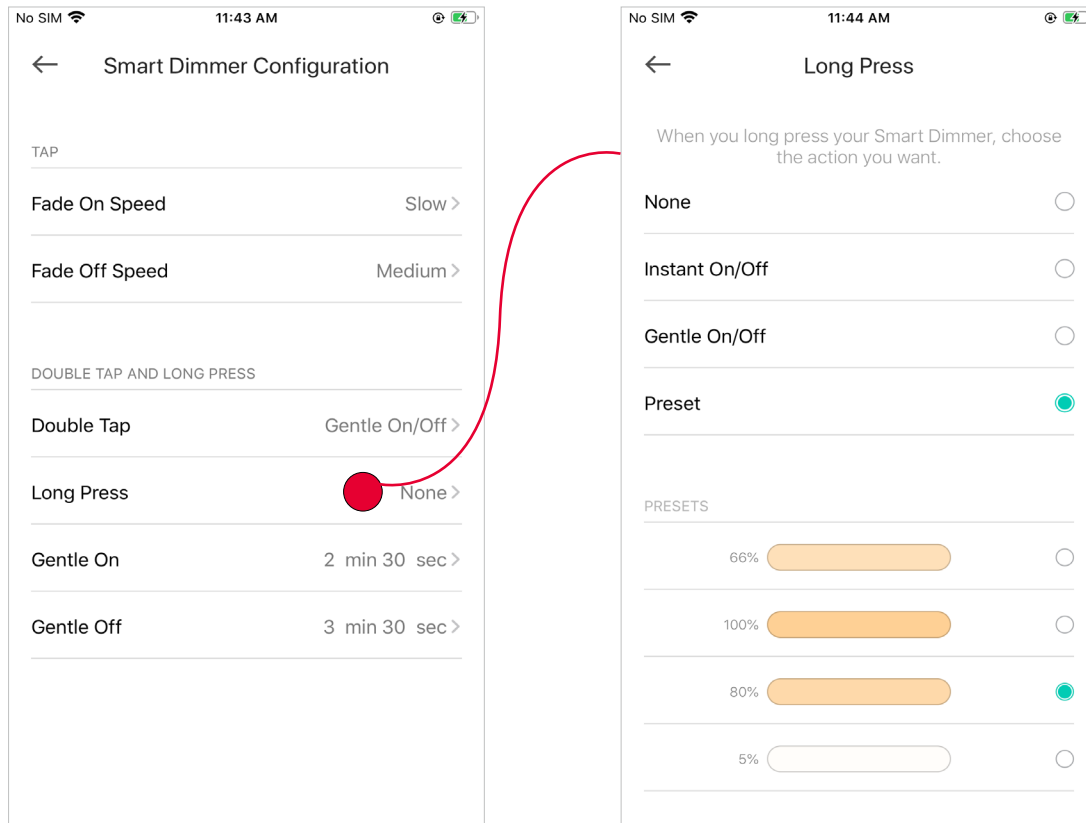
3. Set the effects for **Double Tap**, i.e., what effect you want when you double tap your Smart Dimmer.

e.g. I want my light to turn on/off slowly when I double tap my Smart Dimmer.

Then you can set the time for gentle on and gentle off.



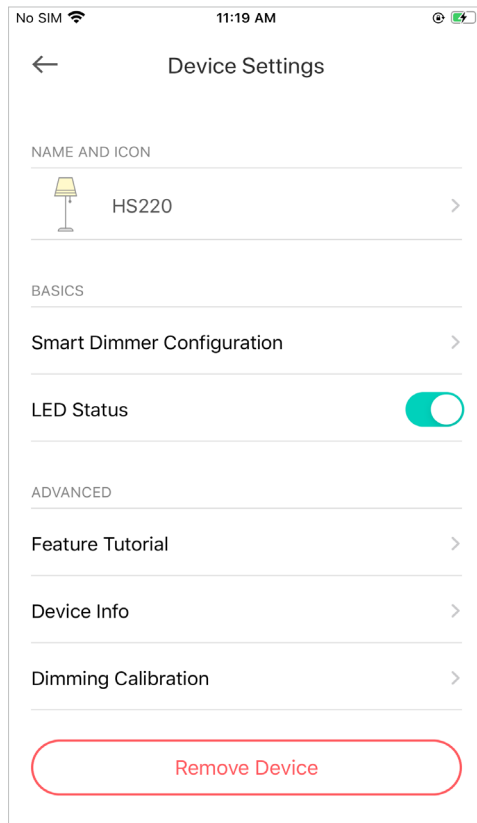
3. Set the effects for **Long Press**, i.e., what effect you want when you long press your Smart Dimmer.  
e.g. I want my light to apply the preset of 80% brightness when I long press my Smart Dimmer.



## Turn On/Off LED

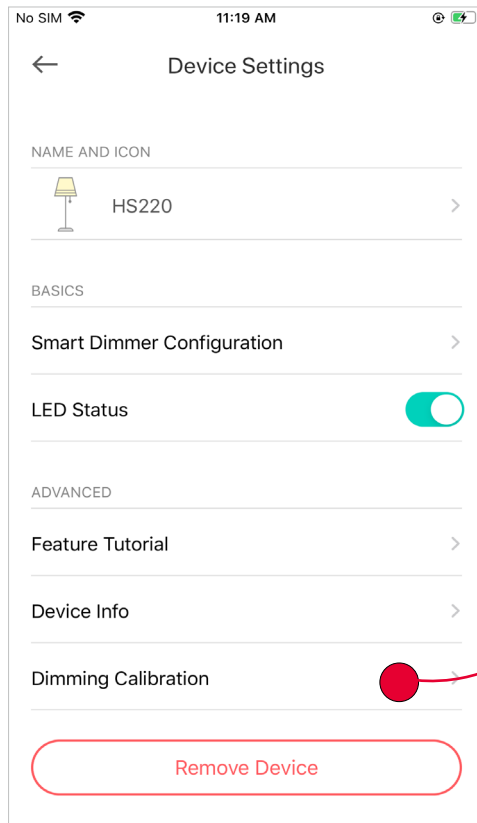
1. Turn on or off [LED Status](#) in the Device Settings page.

Note: Usually the LED turns white when light is off to show the location of your Smart Dimmer. Turning off LED will disable that change.

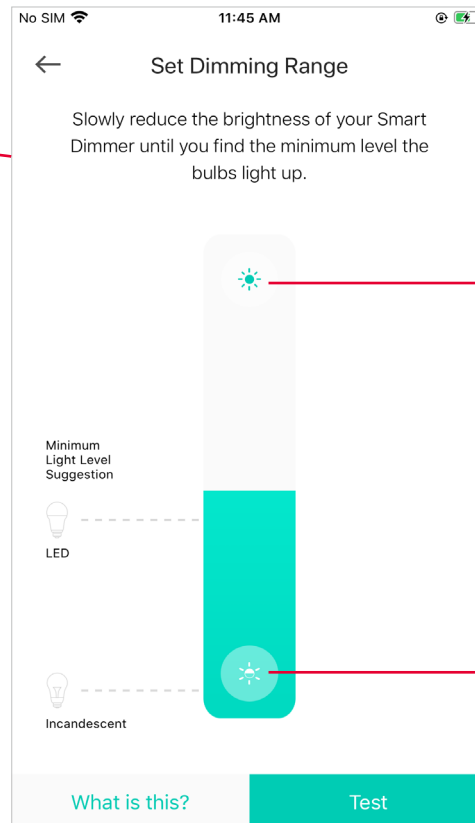


## Dimming Calibration

1. Tap [Dimming Calibration](#) in the Device Settings page.



2. Set the dimming range for your Smart Dimmer. You can tap [Test](#) to help you find the proper minimum level of brightness by dimming up / down the brightness and checking if the light flickers.



Tap to increase the brightness.

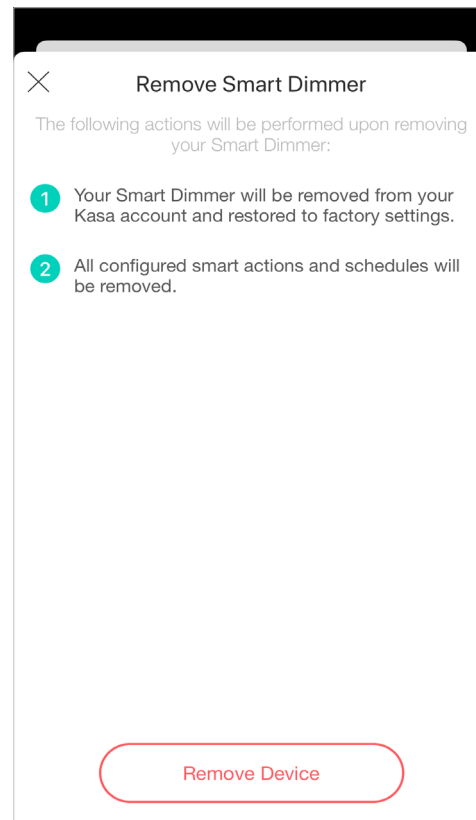
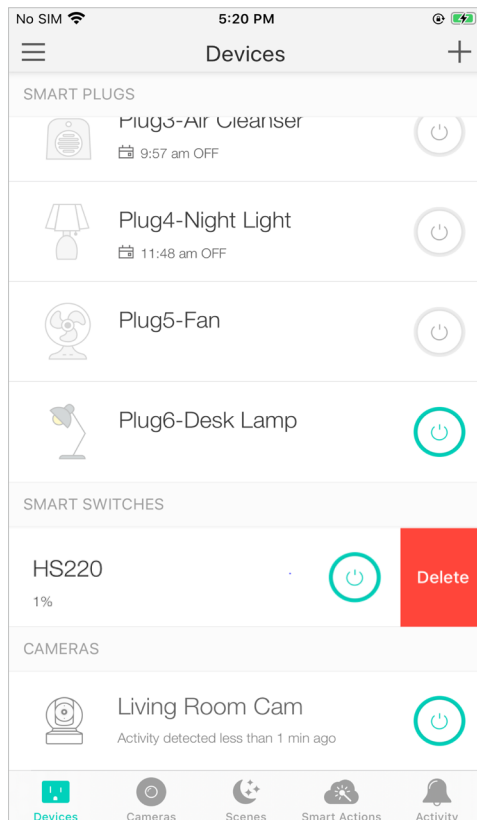
Tap to decrease the brightness.

# Reset Your Smart Dimmer

TP-Link provides three methods to reset your Smart Dimmer.

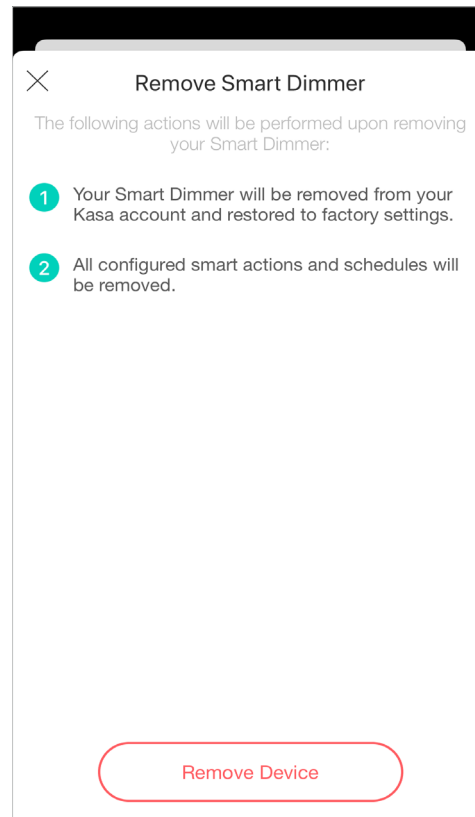
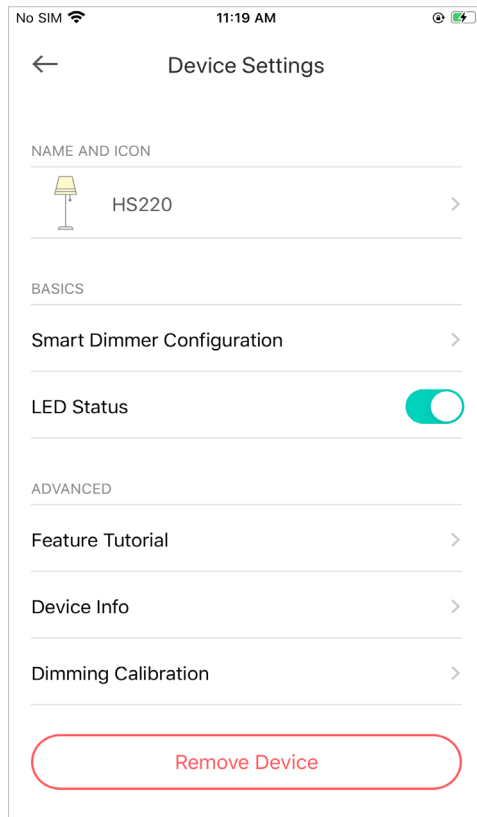
## Method 1

Swipe left your Smart Dimmer on the Home page and tap [Delete](#). Then tap [Remove Device](#). Your Smart Dimmer will be removed from your Kasa account and restored to factory settings.



## Method 2

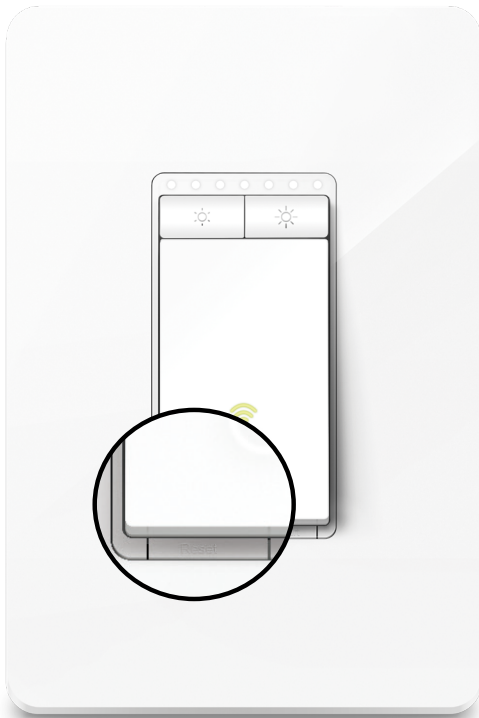
Tap your Smart Dimmer and go to the [Devices Settings](#) page. Then tap [Remove Device](#) in the bottom. Your Smart Dimmer will be removed from your Kasa account and restored to factory settings.



## Method 3

Press and hold the **Reset** button on the panel of the dimmer for **5s** to enable setup mode while keeping previous settings.

Press and hold the **Reset** button on the panel of the dimmer for **10s** to restore your switch to factory default settings.

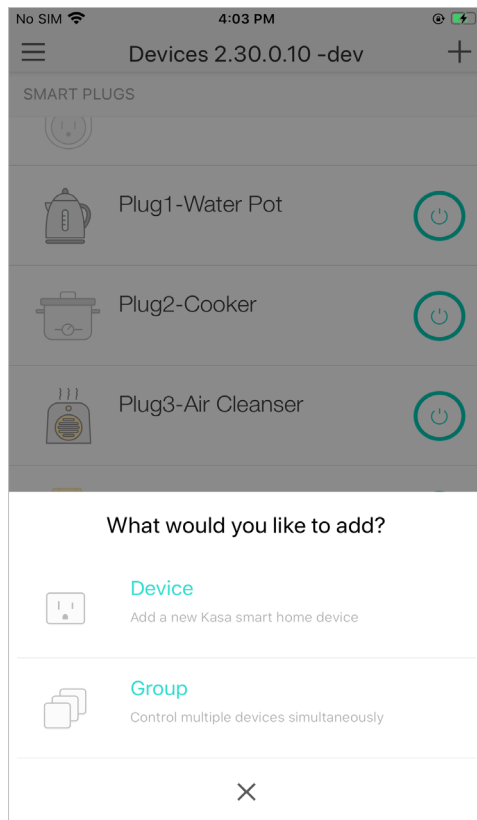


# Create Groups

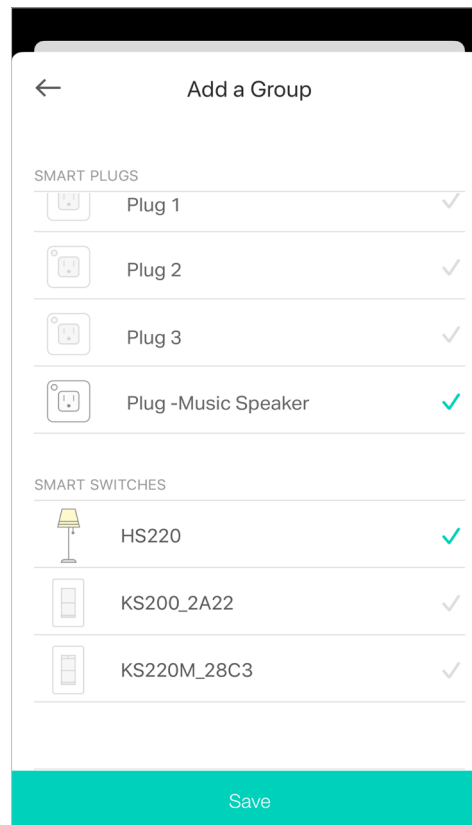
You can add your Smart Dimmer and your other Kasa devices in a group so you can turn them on or off all together.

## Create Group

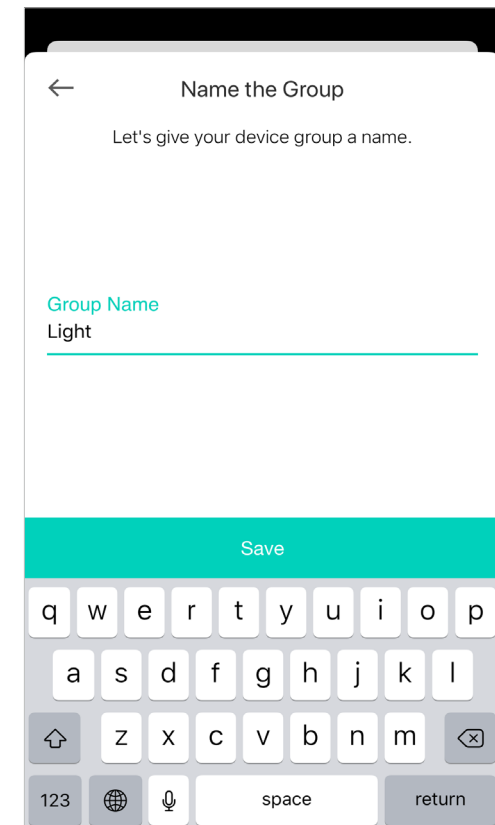
1. Tap the ⊕ button in the app and select **Group**.



2. Select devices to be added in a group.



3. Name the group and tap **Save**. The Group is added successfully.



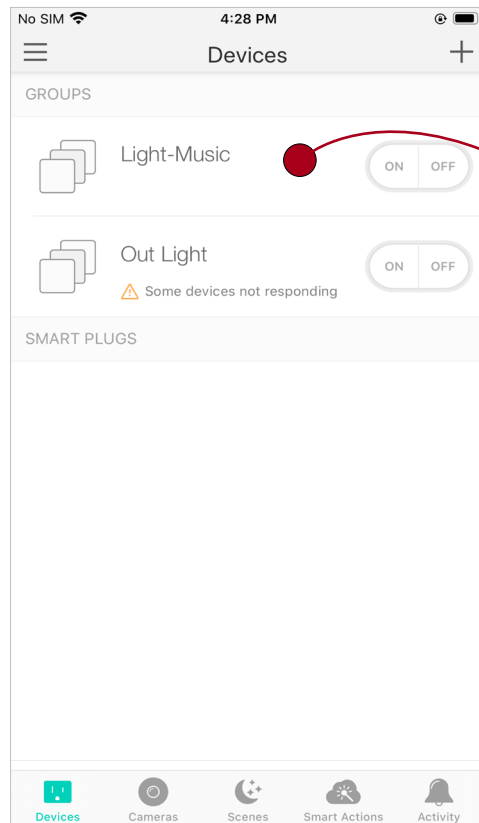


# Edit Groups

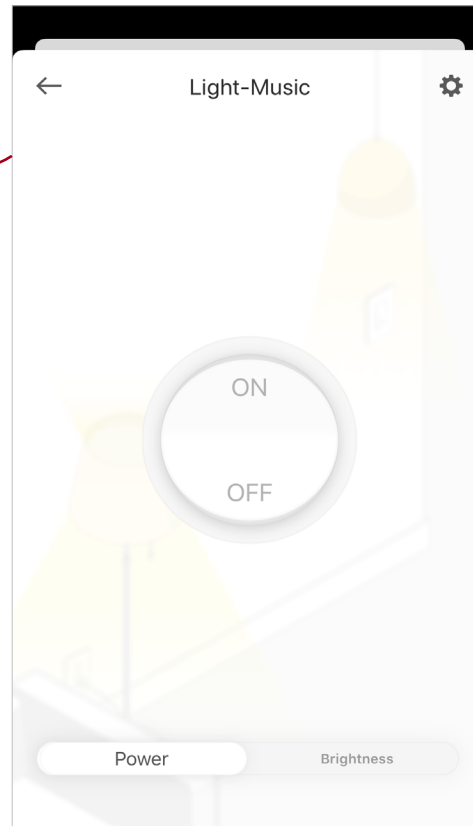
You can change the name of the group or change the devices in the group.

## Edit Group

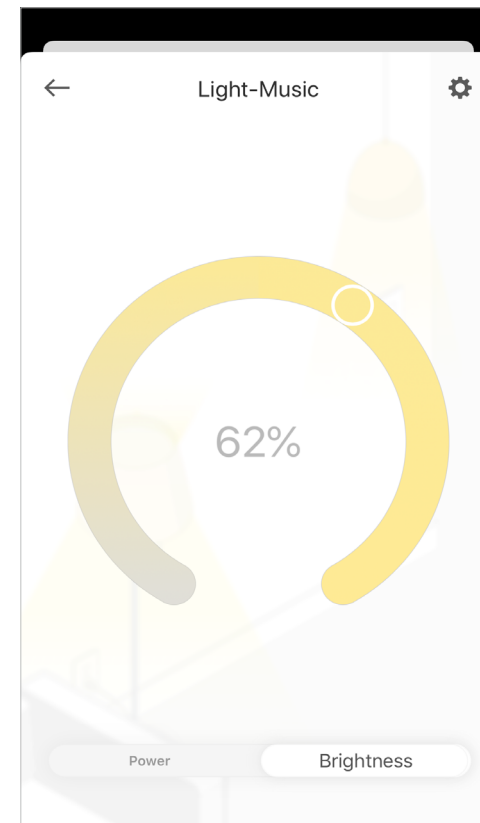
1. Tap your group in the Home page.



2. Turn on or off your group.

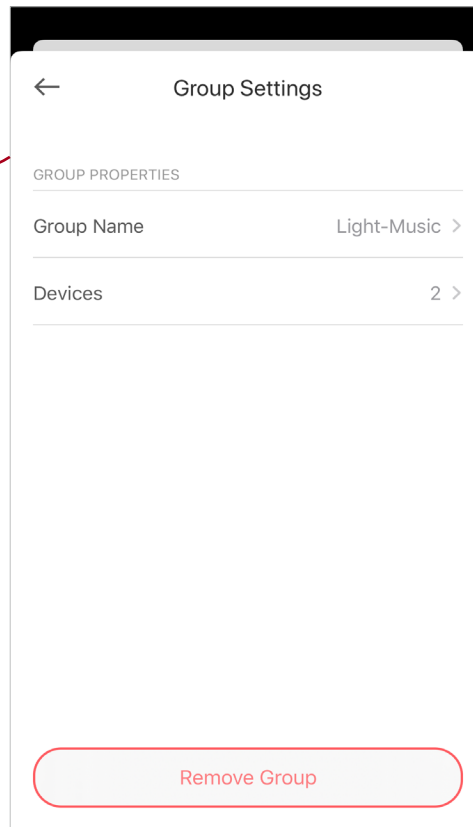
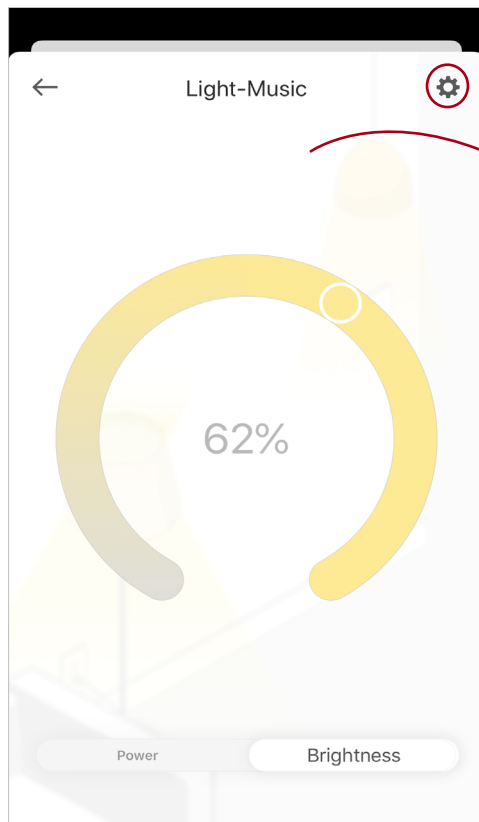


3. Set the brightness for your dimmer in the group.



4. Tap  to enter the [Group Settings](#) page.

5. Change the name of the group or change the devices in the group.



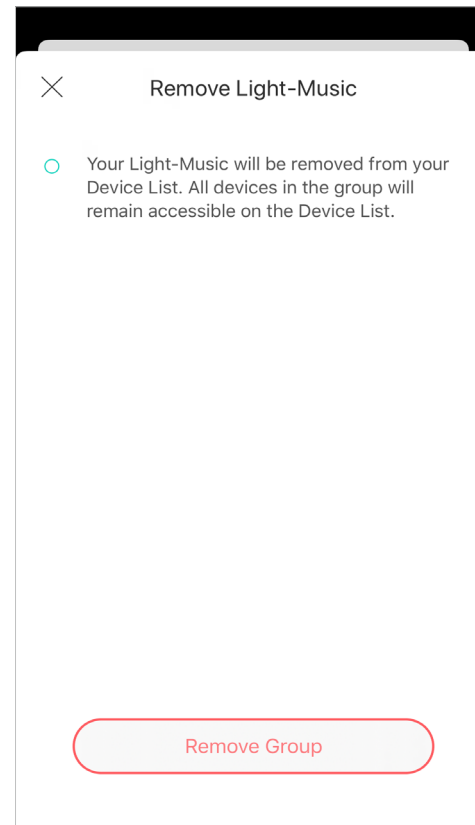
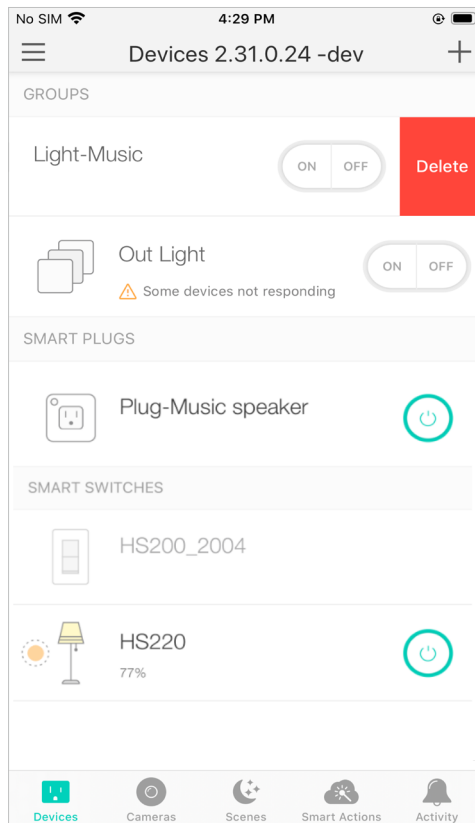
# Remove Groups

You can change the name of the group or change the devices in the group.

## Method 1

1. Swipe left your group in the Home page, then tap [Delete](#).


2. Tap [Remove Group](#).

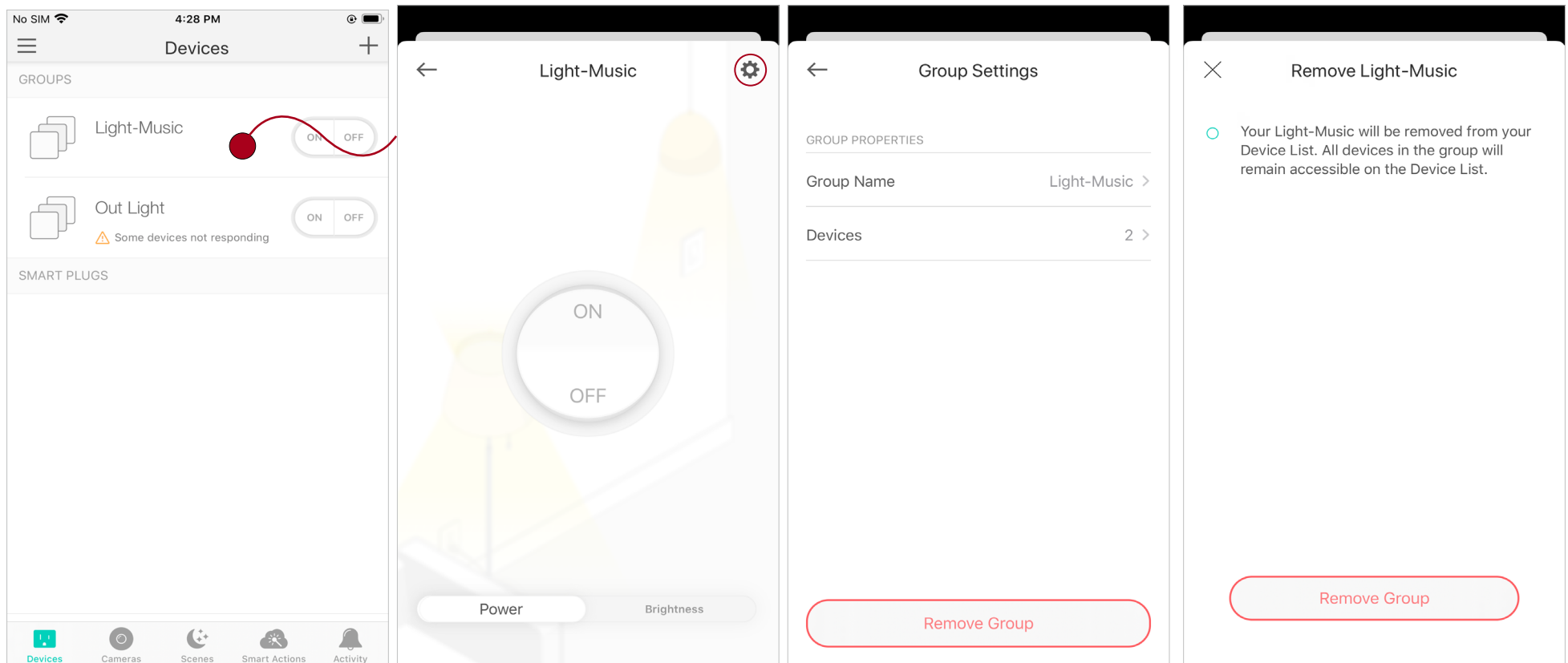


# Remove Groups

You can change the name of the group or change the devices in the group.

## Method 2

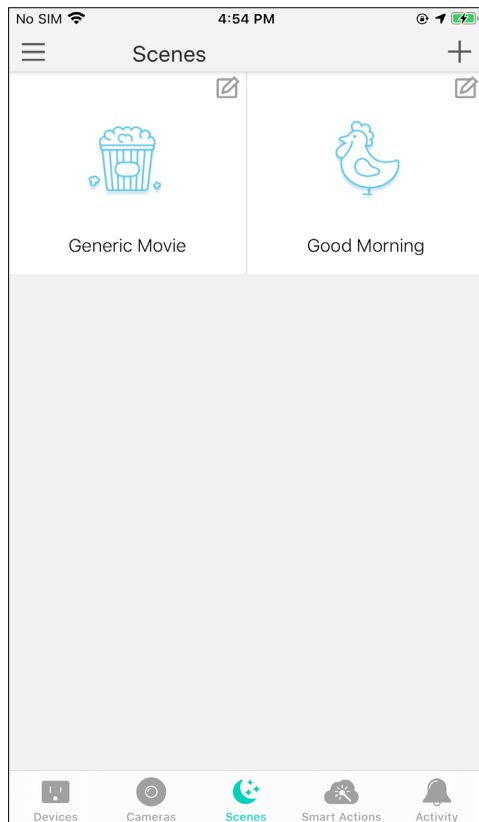
1. Tap your group in the Home page to enter the Status page. 2. Tap  to enter the [Group Settings](#) page. 3. Tap [Remove Group](#) and double confirm.



# Create Scenes

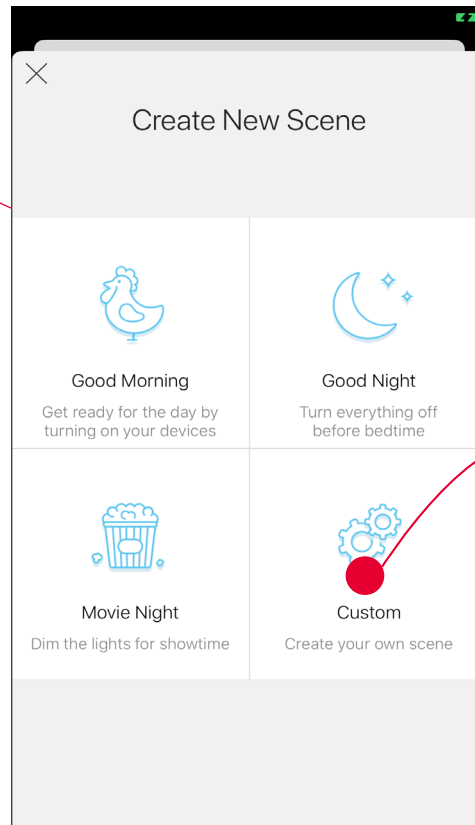
A scene is a preset group of smart devices that can be programmed, customized and activated simultaneously at the touch of a button from your smartphone or tablet, allowing you to easily set your mood, activity or fit any special occasion. To create a scene with your Smart Light Switch, you need other Kasa smart devices, a smart plug for example.

1. Tap  at the bottom, then tap + at the top right corner.

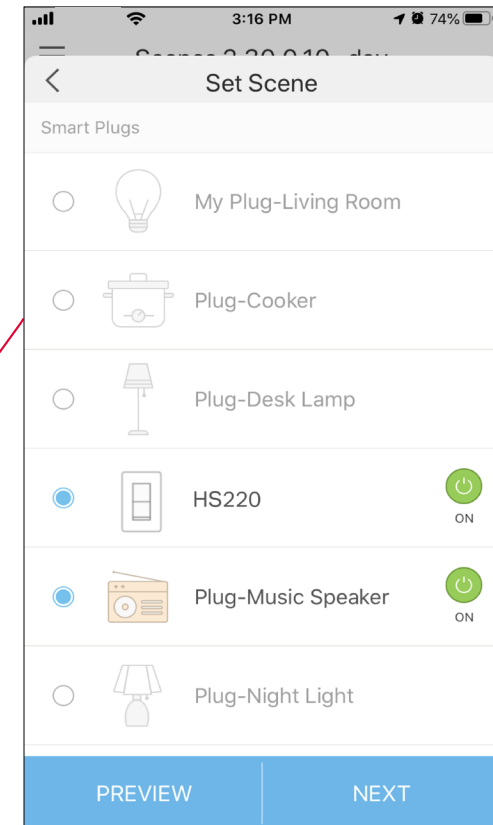


2. Select a scene or create your own scene.

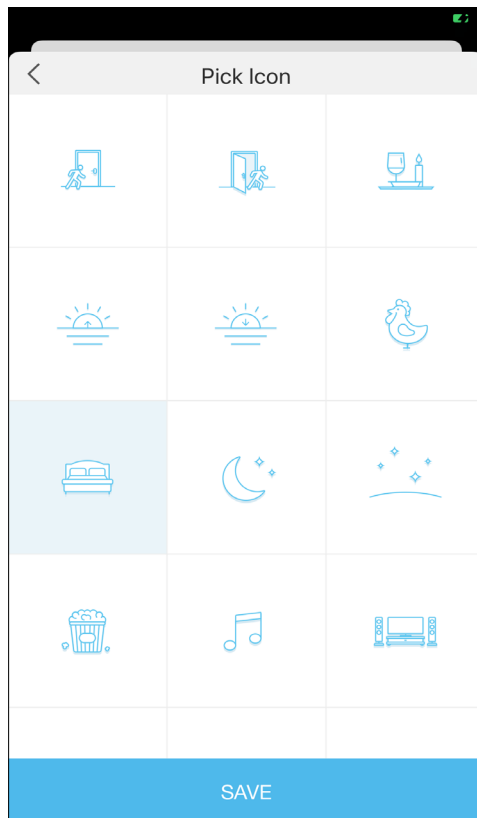
For example: I want to turn on the light and the the speaker simultaneously in the morning with just a tap in the Kasa Smart app .



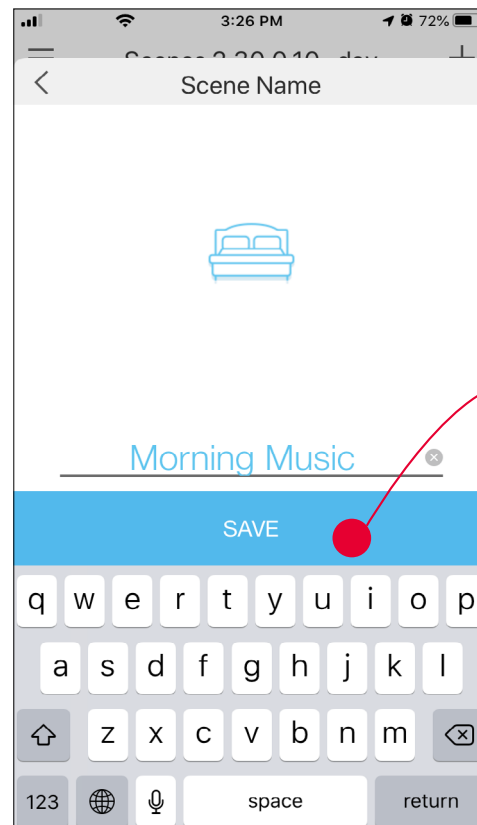
3. Select devices for the scene to work on and set their status respectively.



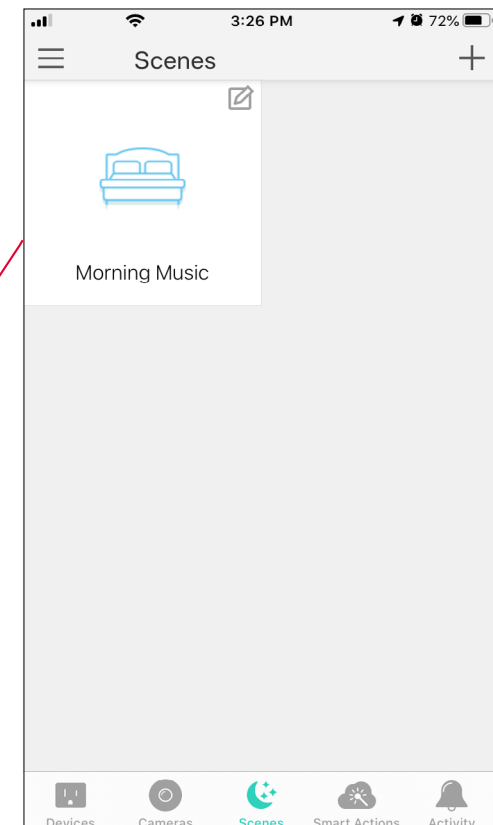
4. Pick an icon for your scene.



5. Name your scene.




6. Your scene is created and is displayed in the scene list. Just tap the scene to activate it.

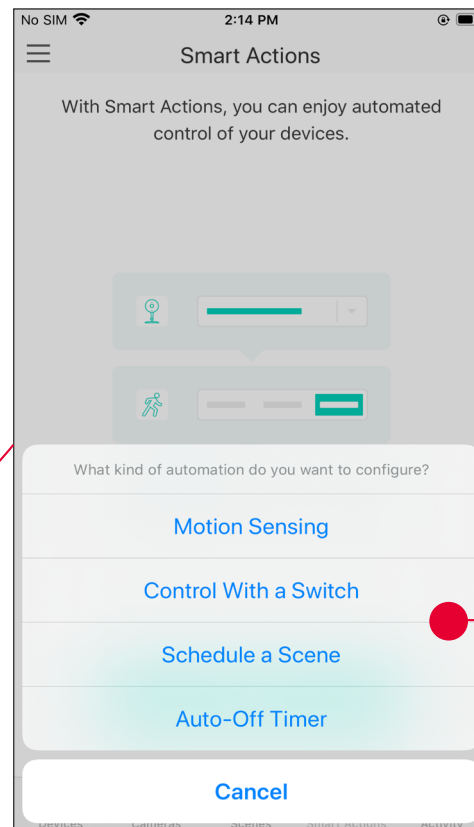
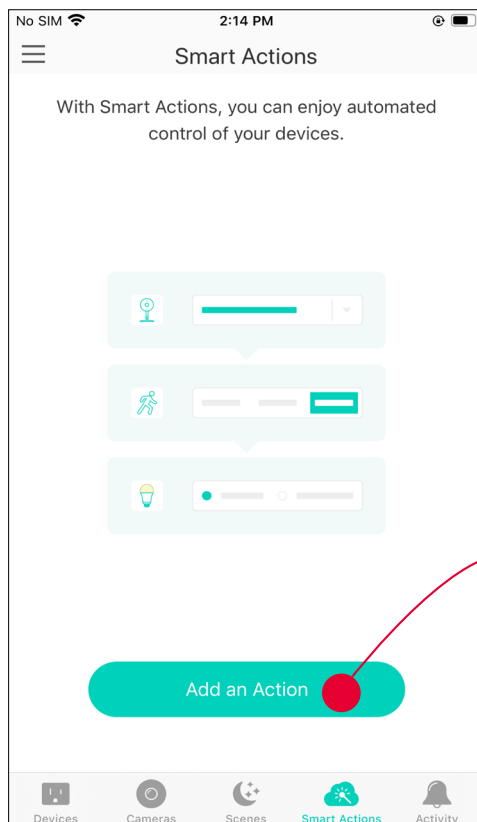


# Smart Actions

Smart Actions is a function provided that enables device interconnections and home automations. With Smart Actions, your Kasa devices can work together to create a smarter smart home. From the moment you wake up to the moment you drift asleep, Smart Actions make your home safer and more comfortable.

1. Tap  at the bottom, then tap **Add an Action**.

2. Select an automation type for your Smart Actions.



**Motion Sensing:** Take actions when a Kasa camera senses a motion.

**Control With a Switch:** Extending the Smart Switch control to other Kasa Smart devices. Turn on/off a group of devices with the Smart Switch all together.

**Schedule a Scene:** Schedule a "Scene" to be turned on automatically at the time specified.

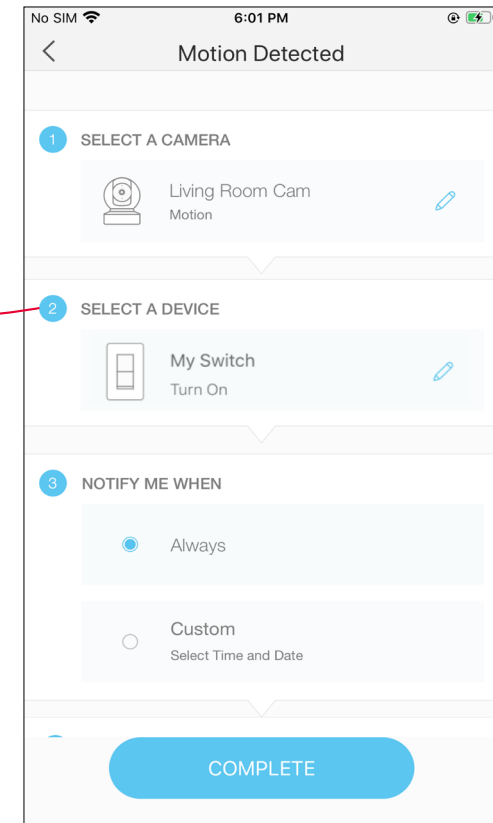
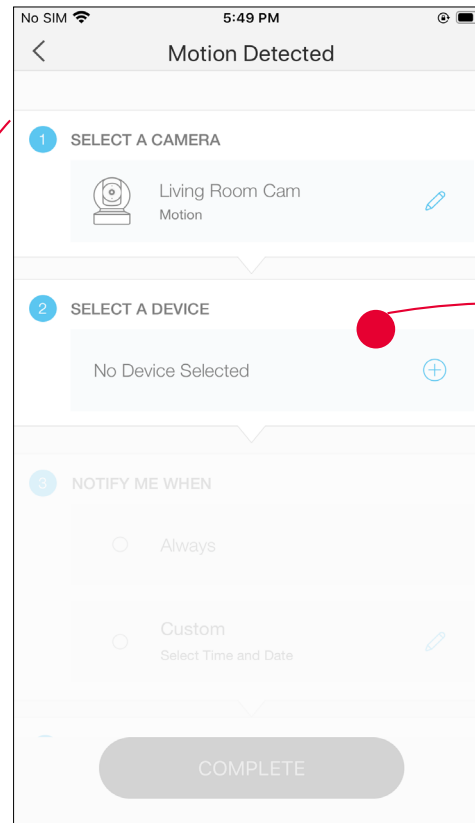
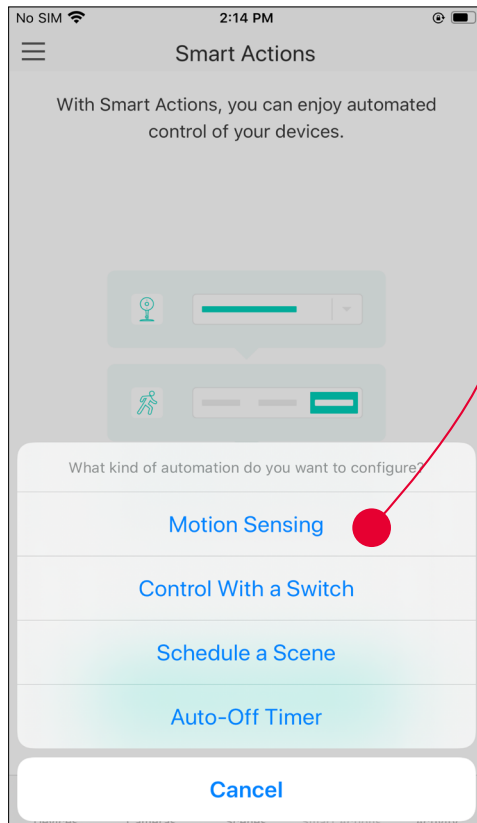
**Auto-off Timer:** Whenever a Smart device is turned on, turn it off after the designated amount of time.

## 1. Configure Motion Sensing if you already have a Kasa Smart Camera

e.g.: I want to turn the light on when my Kasa camera senses a motion.

1. Tap **Motion Sensing** then select a camera.

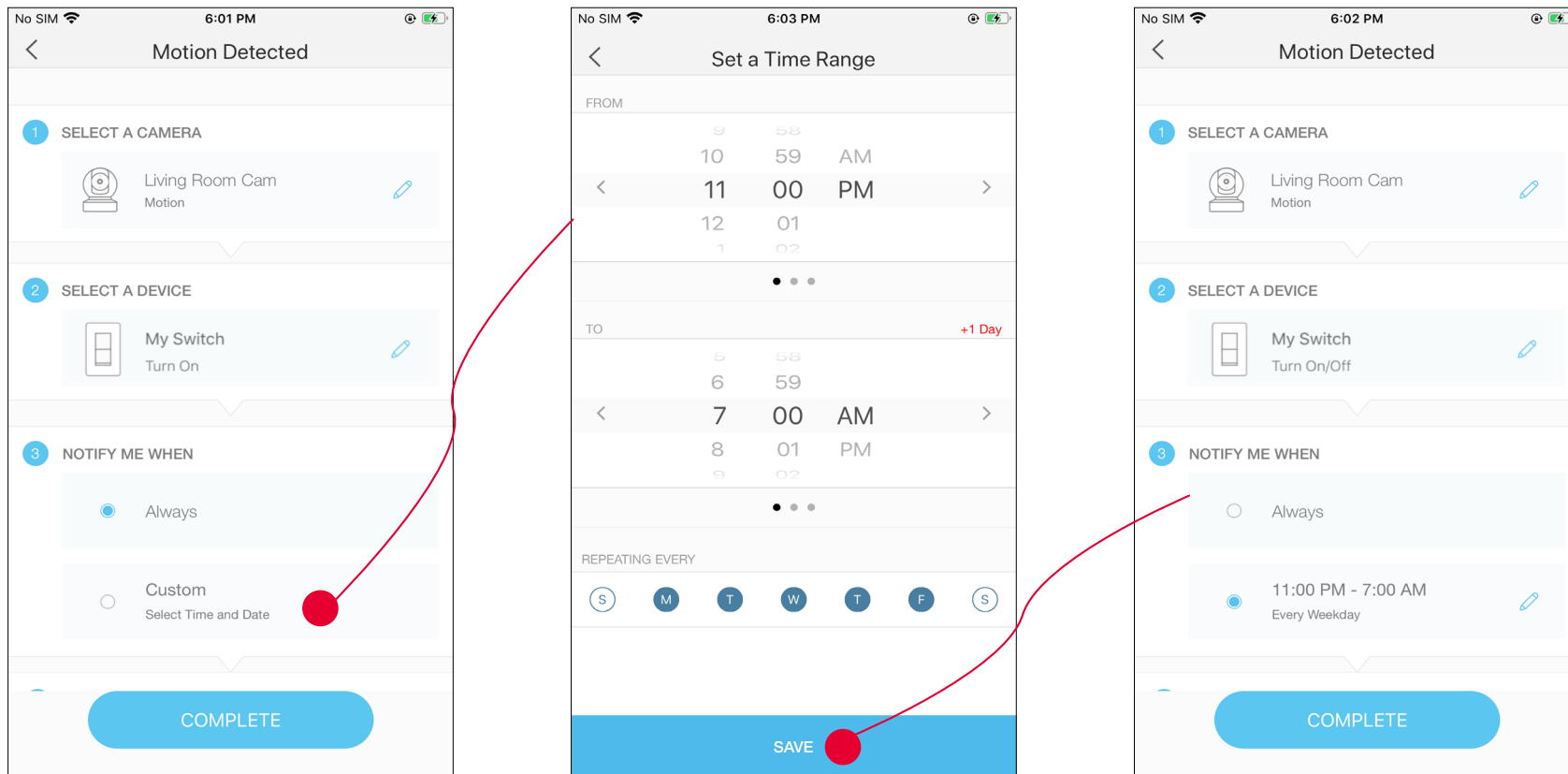
2. Select your Smart Light Switch.





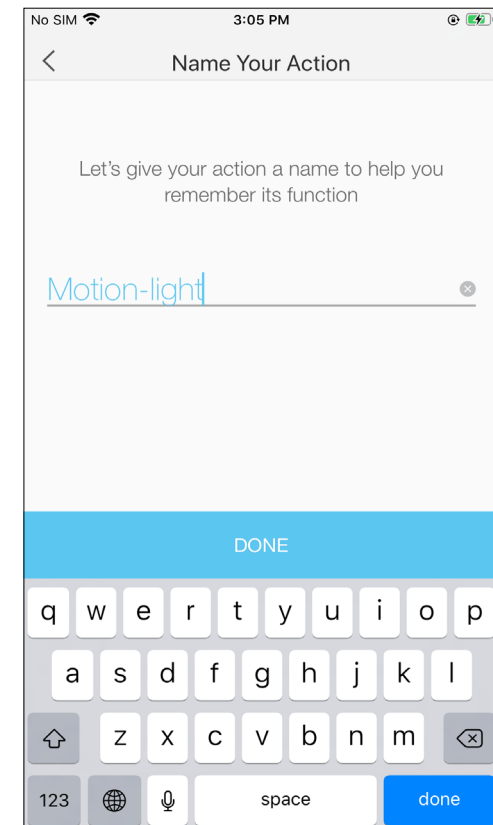
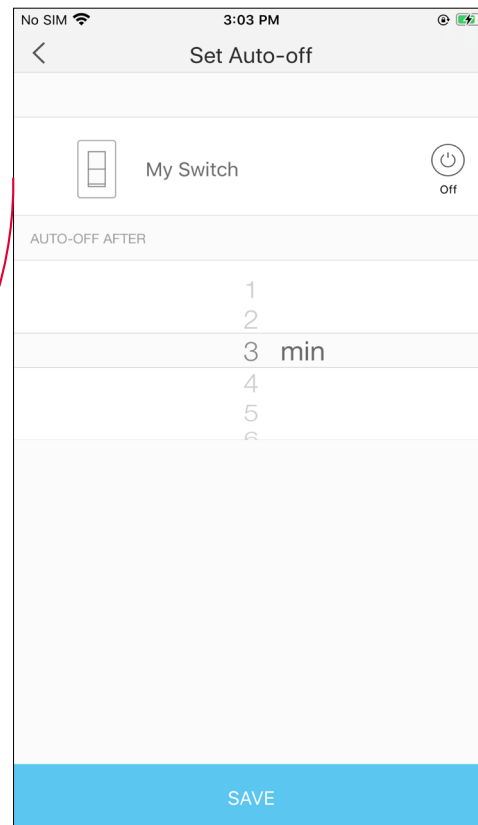
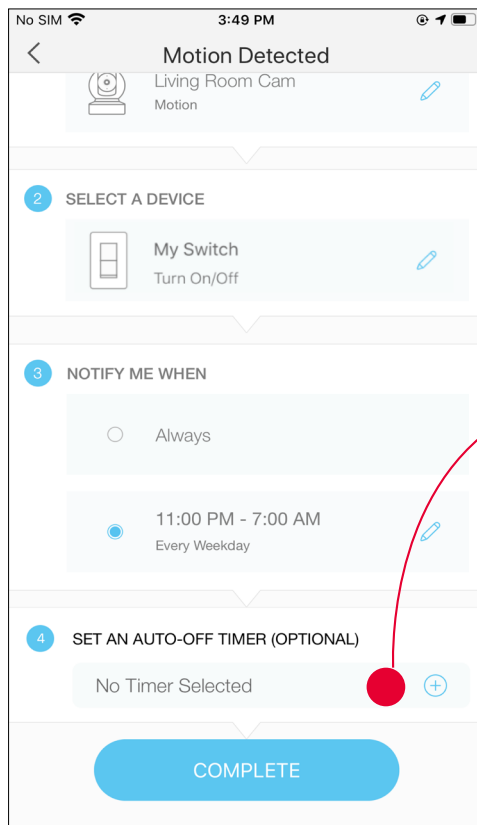
3. Set the time when you want the action to run. You can choose [Always](#) or tap [Custom](#) to choose time according to your needs.

For example: I want the motion to trigger the light on from 11:00 PM to 7:00 AM every day.

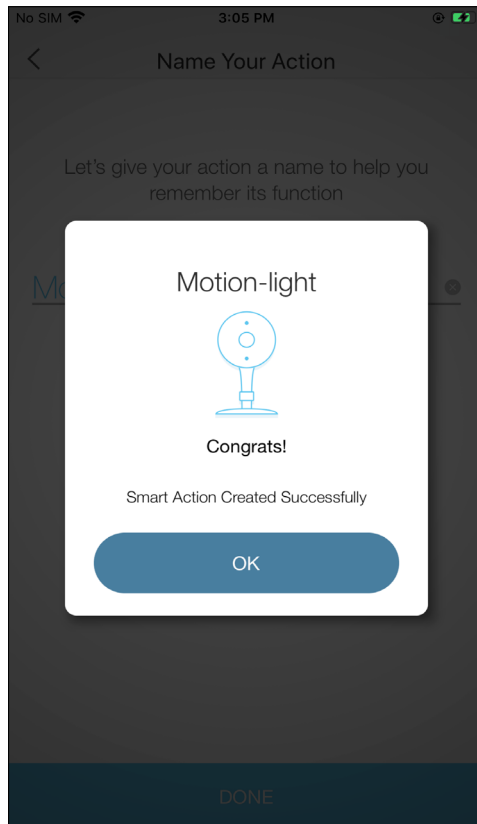


4. (Optional) Set an auto-off timer then tap **COMPLETE**. Then your living room light will be turned off after the time you set.

5. Name your action for easy identification.



6. The Smart Action is created successfully and displayed in the Smart Actions list.

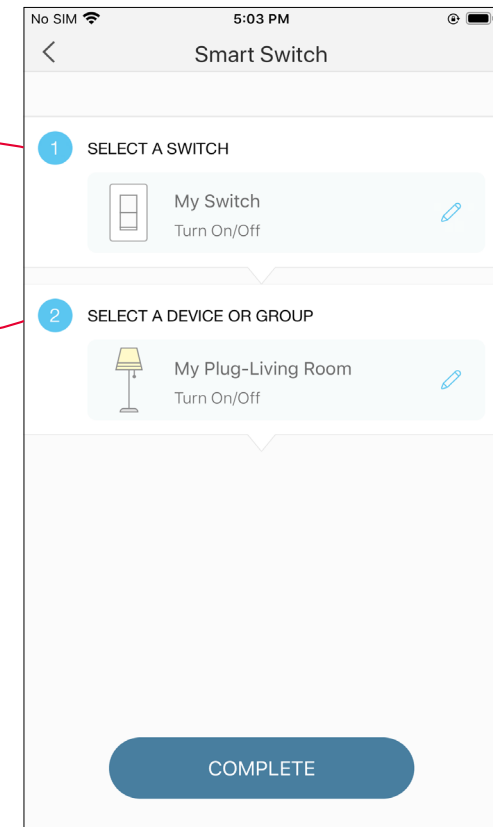
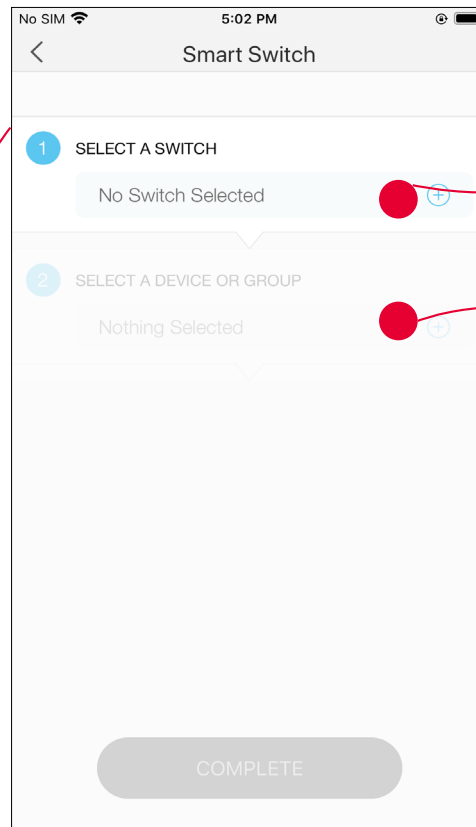
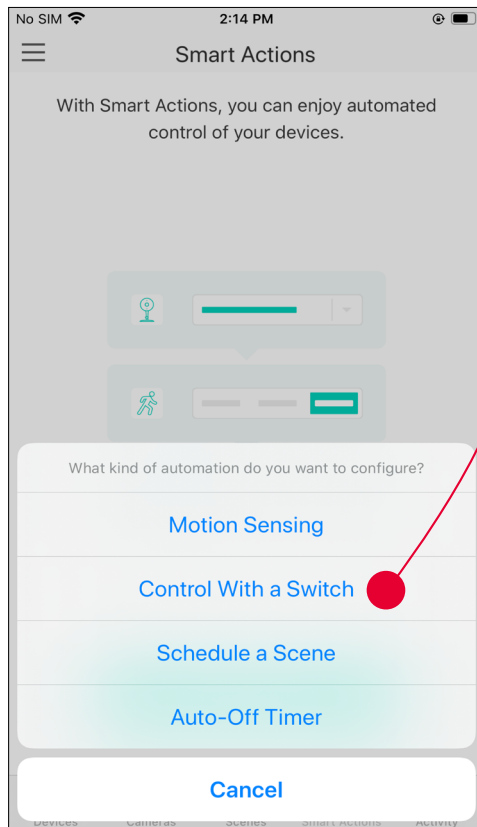


## 2. Configure Control With a Switch if you have other Kasa smart dveices

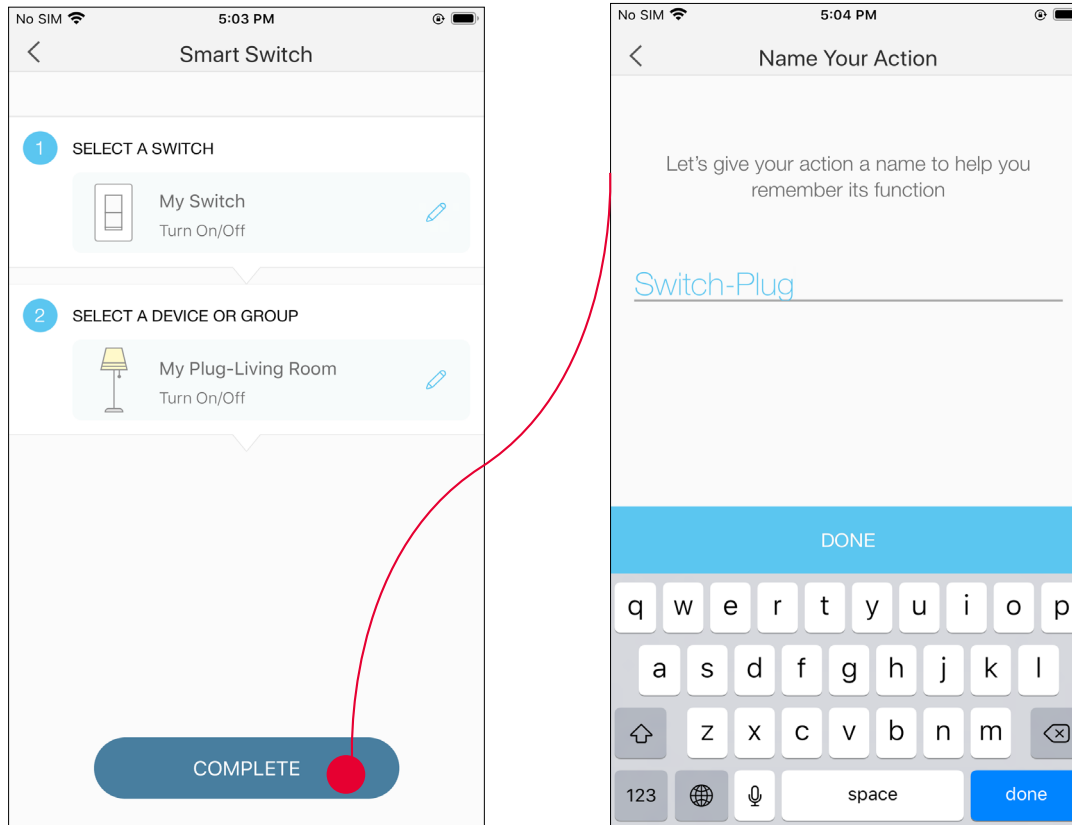
e.g.: I want to turn on the living room light, which is plugged in my Kasa smart plug, when I turn on my switch, and turn the light off when I turn off the switch.

1. Tap [Control With a Switch](#).

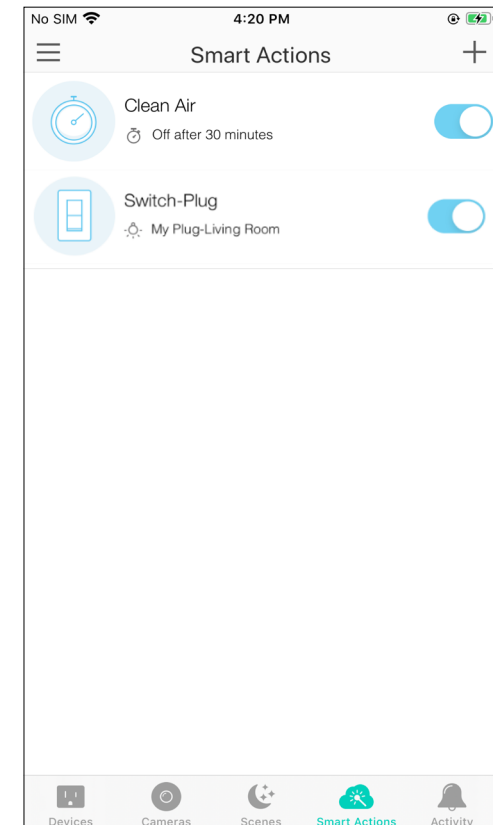
2. Add a Kasa smart switch. Then select your Kasa smart plug which your living room light is plugged in.



4. Name your action for easy identification.



5. Now Your Smart Action is created successfully and is displayed in the smart actions list.



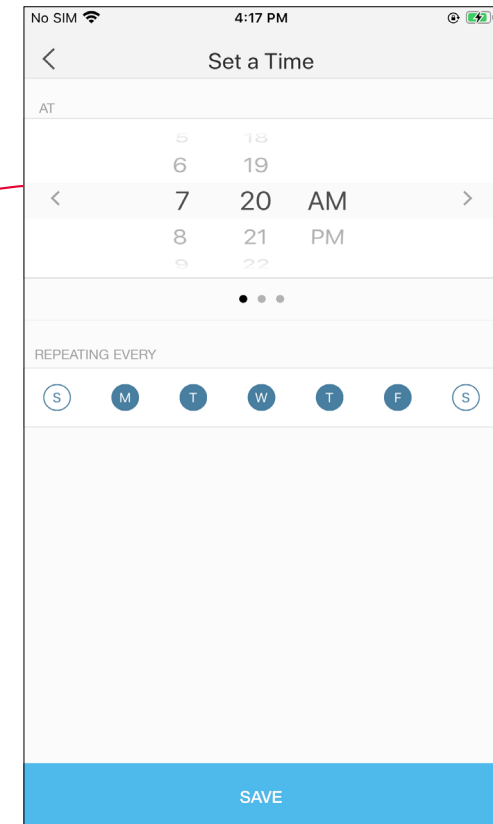
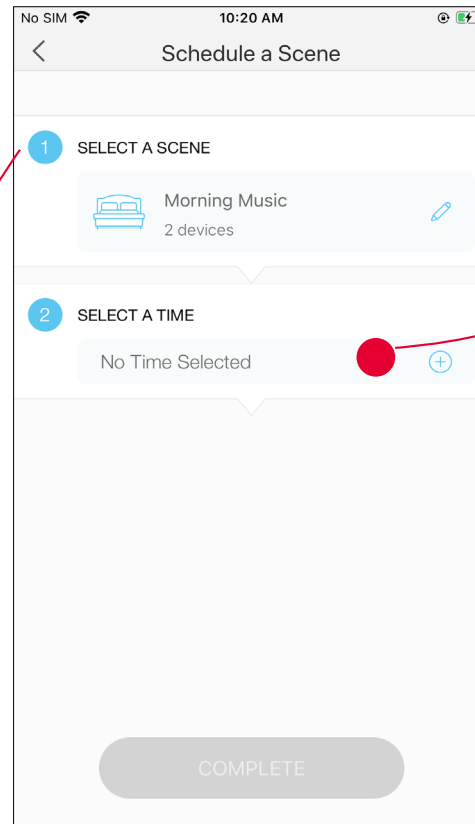
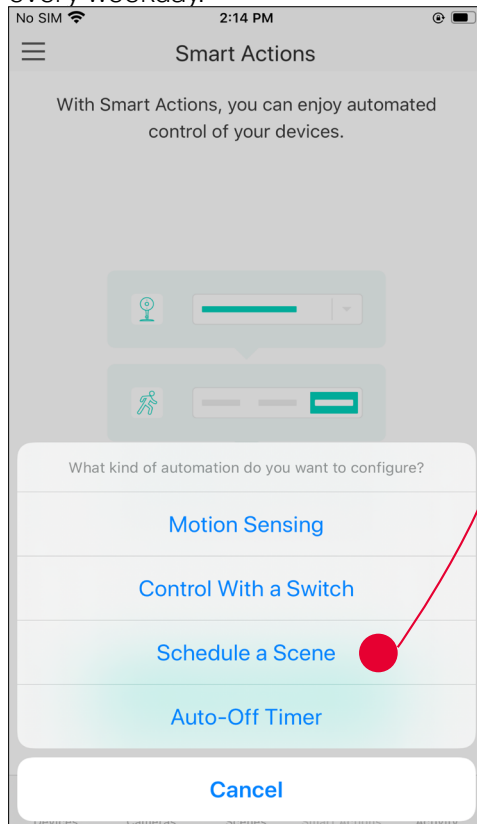
### 3. Configure Schedule a Scene

e.g.: I want to turn on the scene I have created automatically at scheduled time.

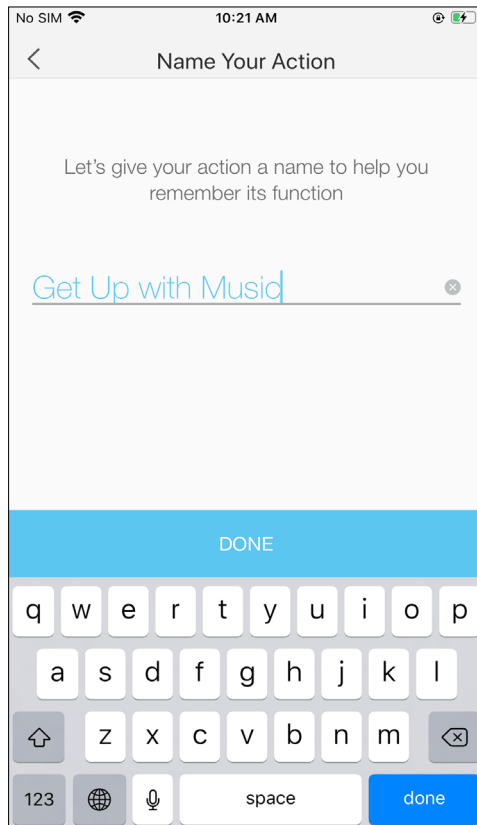
1. Tap [Schedule a Scene](#) then select a scene you have created.

For example: I want to turn on my [Morning Music](#) scene, which turns on my light switch and my music speaker (plugged in to a Kasa smart plug) with just a tap, at 7: 20 AM every weekday.

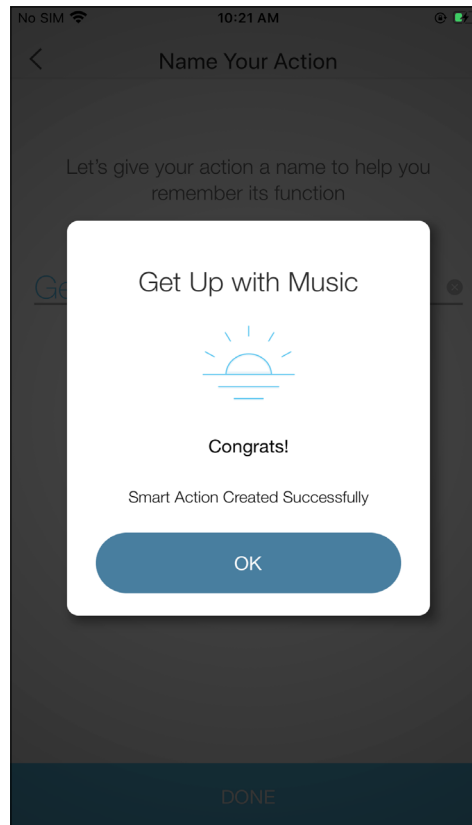
2. Set the time and frequency at which you want your scene to be turned on .



3. Name your action for easy identification.



4. The Smart Action is created successfully and displayed in the Smart Actions list.

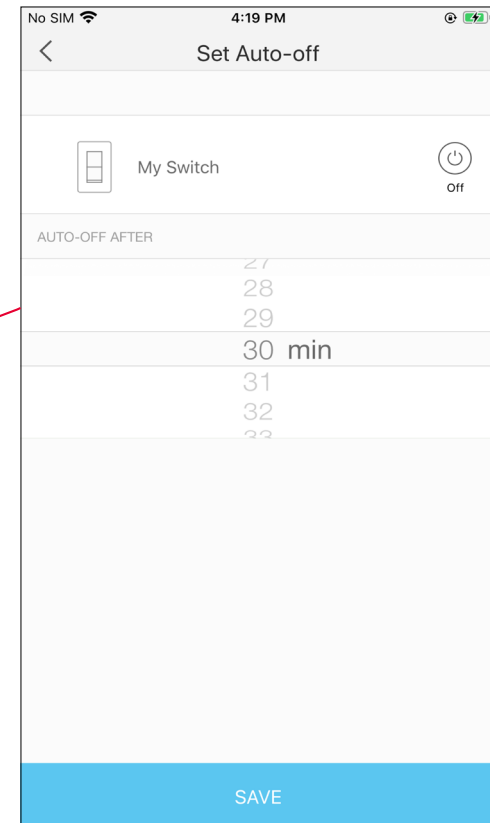
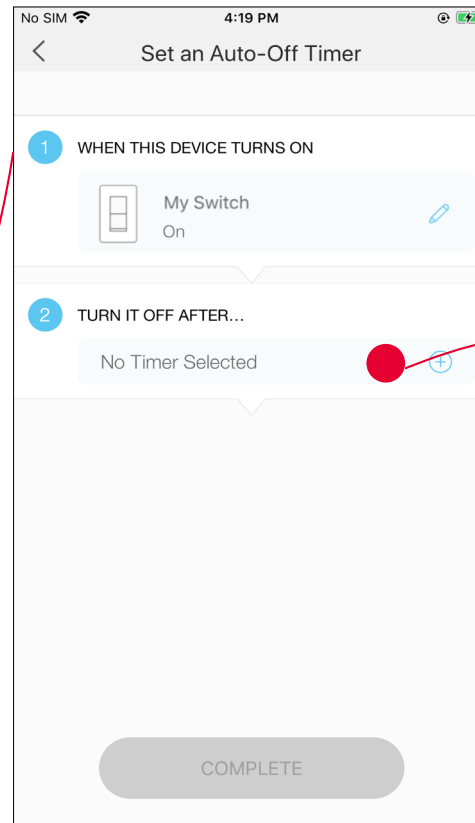
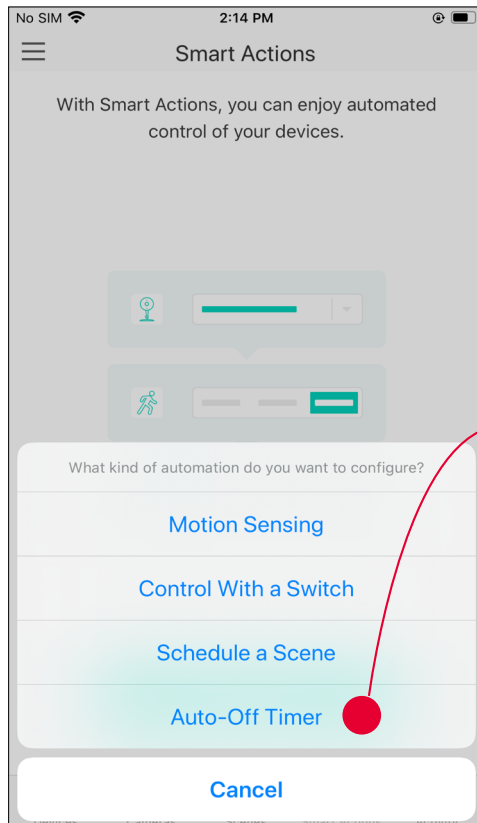


## 4. Configure Auto-Off Timer

e.g.: I want to turn off my Kasa Smart Light Switch after 30 minutes whenever it turns on.

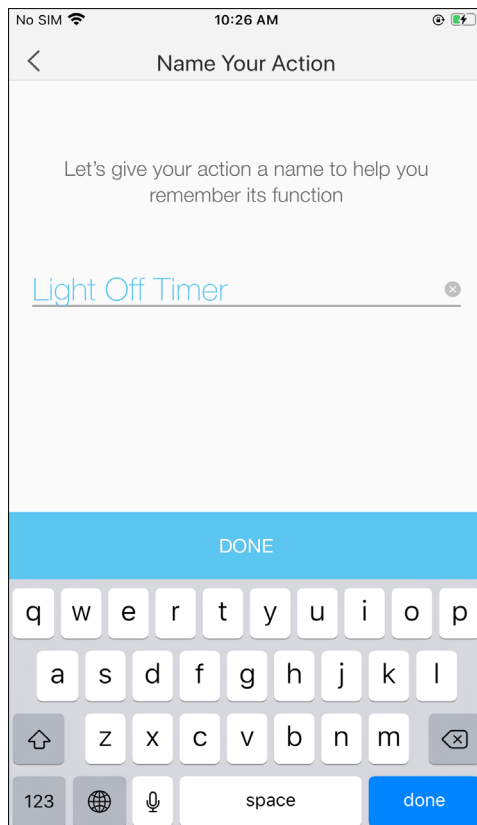
1. Tap [Auto-Off Timer](#) then select a device.

2. Set the time.

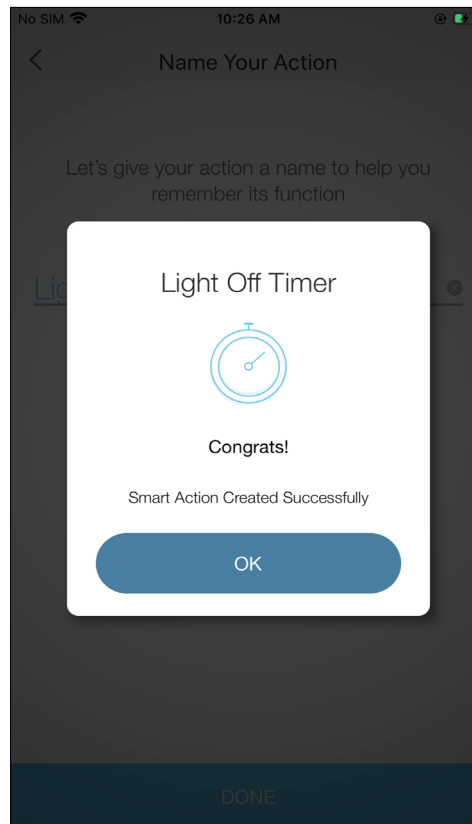




3. Name your action for easy identification.



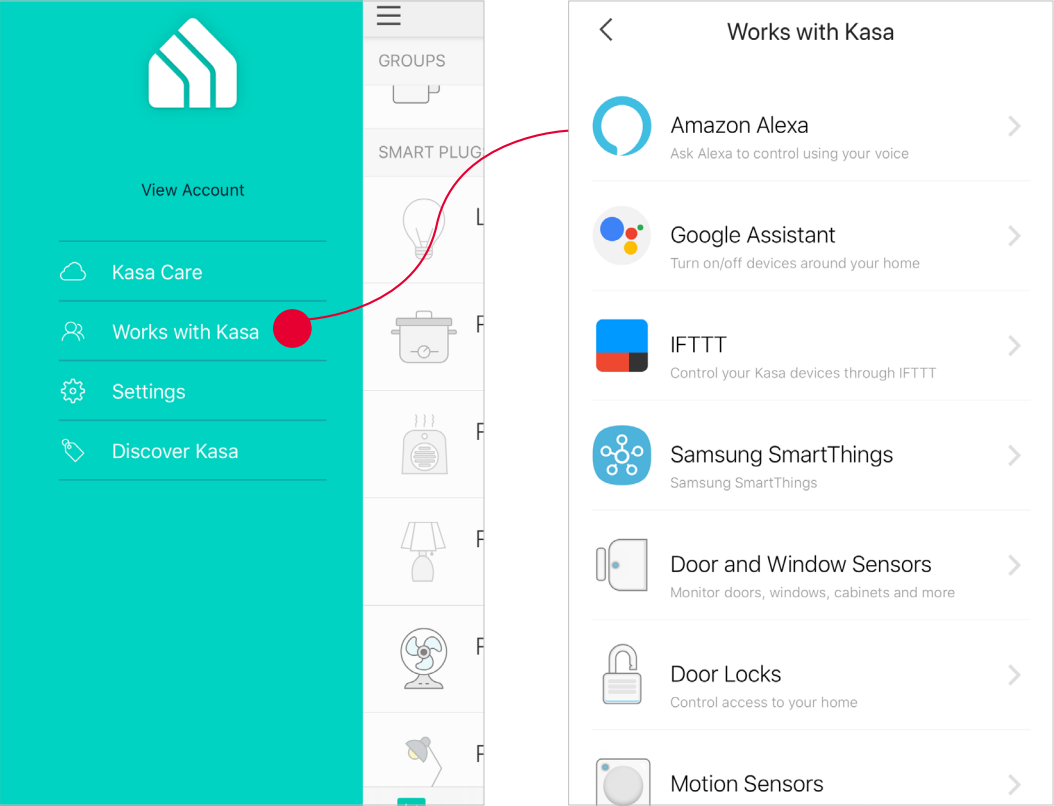
4. The Smart Action is created successfully and displayed in the Smart Actions list.



# Discover Kasa

Use the Kasa Smart app to pair your Smart Light Switch with Amazon Alexa or Google Home Assistant, and enjoy a full hands-free experience. Kasa helps manage the rest of your smart home too, working with Samsung SmartThings to trigger changes when you arrive home or leave for the day.

Launch the **Kasa Smart** app. Go to the sidebar and tap **Work with Kasa**. You can choose **Amazon Alexa / Google Assistant/ IFTTT / Samsung SmartThings** for detailed instructions.



## FCC compliance information statement



**Product Name:** Smart Wi-Fi Dimmer Switch

**Model Number:** HS220

**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:** <https://www.tp-link.com/us/>

**Tel:** +1 626 333 0234

**Fax:** +1 909 527 6803

**E-mail:** [sales.usa@tp-link.com](mailto: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:

- 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: 2021.04.25

## Canadian Compliance Statement

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

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

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

1. l'appareil ne doit pas produire de brouillage;
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Radiation Exposure Statement:

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

## Déclaration d'exposition aux radiations:

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

## Industry Canada Statement

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

## NCC Notice

注意!

依據 低功率電波輻射性電機管理辦法

LP0002低功率射頻器材技術規範\_章節3.8.2

取得審驗證明之低功率射頻器材，非經核准，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及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信；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。

前述合法通信，指依電信管理法規定作業之無線電通信。

低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

## BSMI Notice

### 安全諮詢及注意事項

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

### 限用物質含有情況標示聲明書

設備名稱： Equipment name Smart Wi-Fi Dimmer Switch		型號（型式）： Type designation (Type) HS220				
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	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	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應板	—	○	○	○	○	○
其他及其配件	—	○	○	○	○	○

備考 1. “超出 0.1 wt %” 及 “超出 0.01 wt %” 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: “○” 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.

## 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.
- Alert to service person

### CAUTION

#### DOUBLE POLE / 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.

## Warnings



- Install only in a suitable UL Listed outlet box (suitable dimensions: W > 2.83in./72mm, H > 1.81in./46mm, D > 3.15in./80mm).
- CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing.
- The manufacturer’s assigned screw torque.
- Tighten terminal screws to 13 lbf-in
- Supported specified line number for the thread terminal copper wire: 12AWG 14AWG and 16AWG.
- Supported Load Types:
  - 120VAC 60Hz
  - 300W Incandescent

150W LED

- Operating Temperature: 0 °C-40 °C (32°F-104°F)

	<b>CAUTION</b> <b>Electronic switch integrated in this product is only intended for functional purposes. De-energized the product at the circuit breaker before servicing.</b>
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### Explanation of the symbols on the product label

Symbol	Explanation
	Indoor use only
	<b>RECYCLING</b> 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.