User Guide

Kasa Smart Wi-Fi Outdoor Plug-in Dimmer

KP405

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About This Guide

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

Features available of this product and in Kasa Smart may vary by model and software version. Smart Outdoor Plug-in Dimmer and Kasa Smart availability may also vary by region. 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.
Underline	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.

Introduction

Extend your smart home to the outdoors with the weather-resistant smart outdoor plug-in dimmer. Work with dimmabled bulbs to dim brightness from 100% to 1%. Control your plug-in dimmer from anywhere, set schedules, even use simple voice commands with Alexa or Google Assistant to control the bulbs connected to the plug-in dimmer.

- Weather-resistant - IP64 rating and weather-resistant cover ensure your outdoor plug-in dimmer is protected against entry of dust and splashes of water from any direction.*

  *To prevent water from entering, always keep the socket of the plug-in dimmer faced down and cover the socket with the weatherproof cover when not in use.

- Control from Anywhere - Turn your connected light on and off from anywhere using your Kasa Smart app.
- Brightness adjustment - Dim your light brightness from 100% to 1%.
- Voice Control - Use simple voice commands with Alexa or Google Assistant to control your connected devices.
- No Hub Required - This plug-in dimmer works with a secured 2.4 GHz wireless network without the need for a separate hub.
- Set Schedules - Switch your connected device on and off automatically, or use a preset brightness.

Appearance

This Smart Outdoor Plug-in Dimmer has one control button to turn on or off the connected light and an LED to show you the current status. The LED changes color according to different status. See the explanation below:

Smart Outlet
Plug in your device and control it from your smartphone.

Control Button
Press to turn on or off the plug.
Press for **5s** to reset Wi-Fi connection while keeping previous settings.
Press for **10s** to factory reset your plug-in dimmer.
Press twice quickly to cycle through the four preset levels of brightness.
You can change presets in the Kasa Smart app.

System LED

Orange
Rebooting.

Blinking Orange and Green
Setup mode initiated.

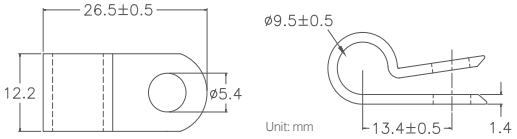
Blinking Green
Searching for Wi-Fi.

Green
Connected to Wi-Fi network successfully.

Blinking Orange
Resetting.

Red
No Wi-Fi connection.

Provided clamp:



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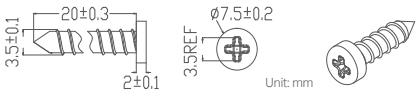

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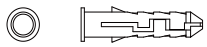


Set Up Your Outdoor Plug-in Dimmer

Follow the steps below to set up your plug-in dimmer via Kasa Smart app.

1. Download and install Kasa app

Get the Kasa Smart app from the App Store or Google Play, or by scanning the QR code below.

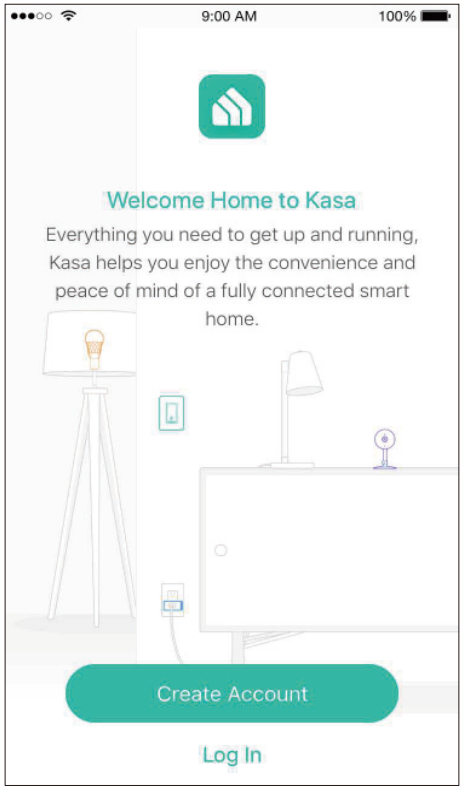
Download on the App Store

GET IT ON Google Play

OR

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

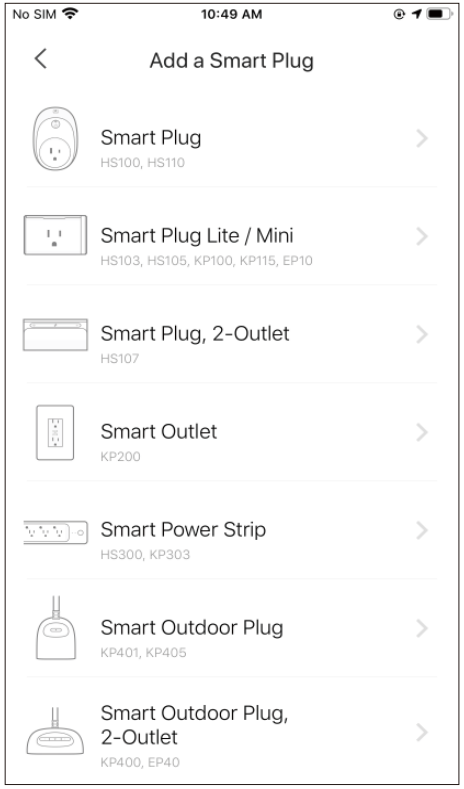
Open the app, and log in with your TP-Link ID. If you don't have an account, create one first.



3. Add Device

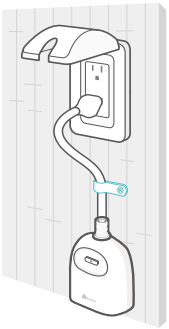
Tap the + button in the Kasa app, go to Smart Plug > Smart Outdoor Plug and then follow app instructions to complete the setup.

Note: When not in use, the sockets should be firmly capped with the weather-resistant cover.

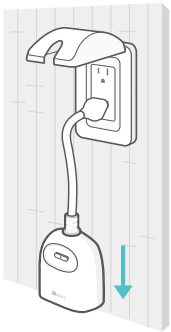


Install Following Waterproof Tips

Following are some tips to waterproof you Smart Outdoor Plug-in Dimmer when used in outdoor.

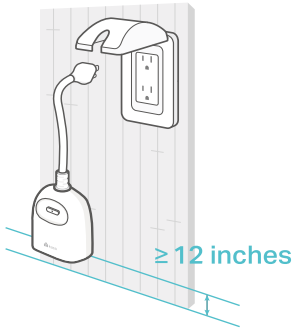


Secure the plug with provided clamp and screw.

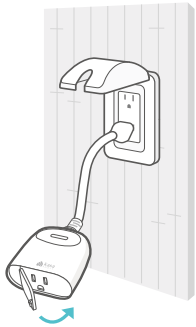


Keep the socket face down.

Tips



Keep the plug at least 12 inches (1 ft) from the ground.



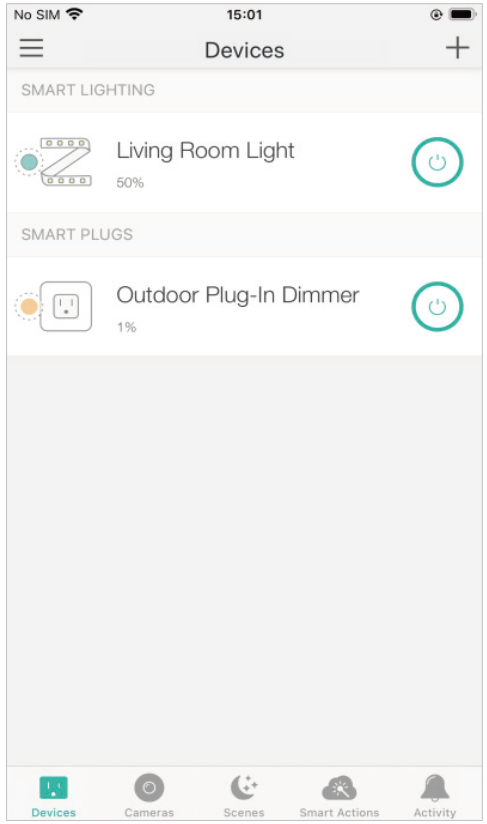
Keep the socket covered with the weatherproof cover when not in use.

Main Device Controls

After you successfully set up your Smart Outdoor Plug-in 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 plug-in dimmer to control and manage it.

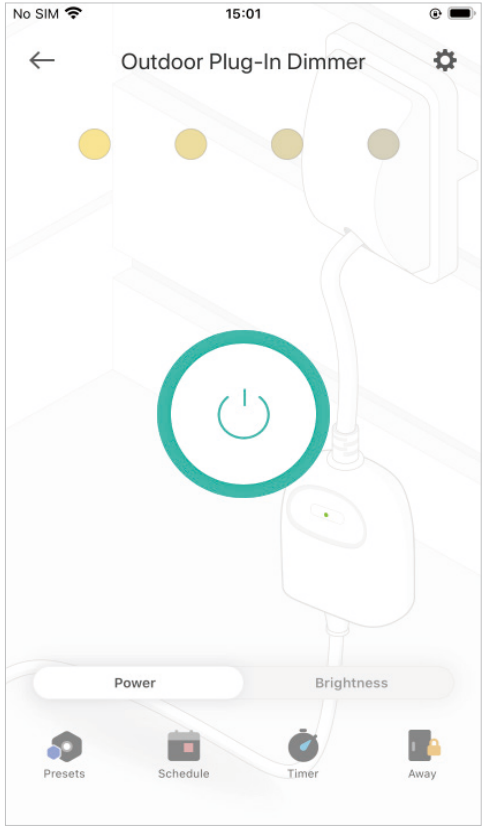
Home Page

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



Turn on/off the plug-in dimmer

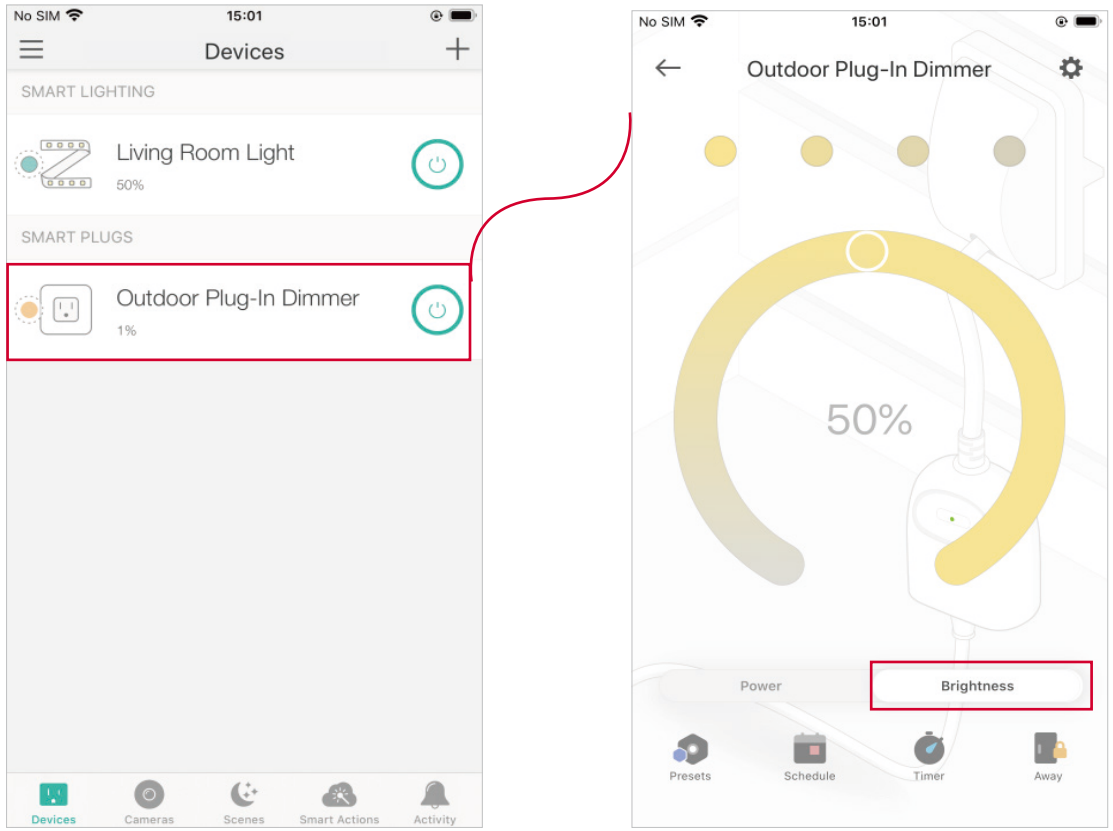
Tap your plug-in dimmer, then you can check or change its status.



Adjust Brightness

Adjust the brightness of your light from 1% to 100% to have the perfect atmosphere for any activities.

Go to the status page and tap the Brightness tab. Your light will change brightness to the value you set.

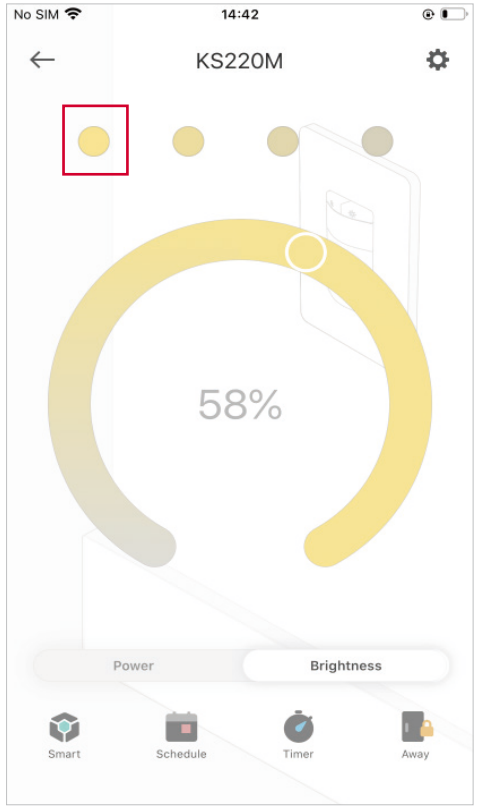


Set Preset Brightness

Set preset brightness levels so you can switch to the desired brightness with just one tap. You can set up to 4 preset brightness levels.

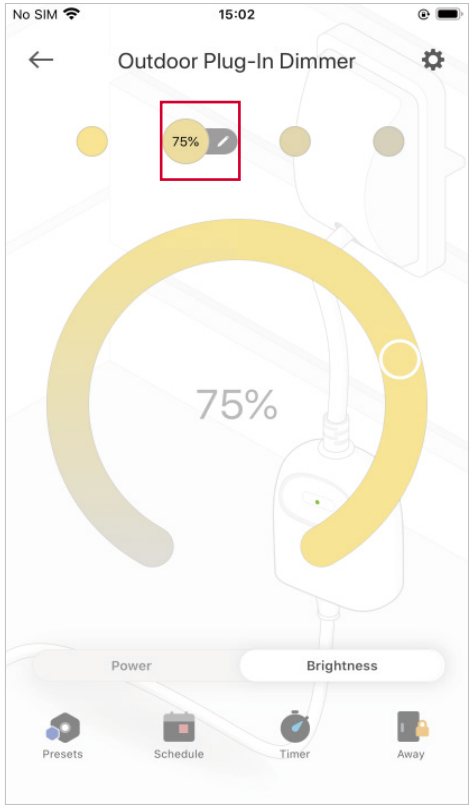
Method 1- In the Status Page

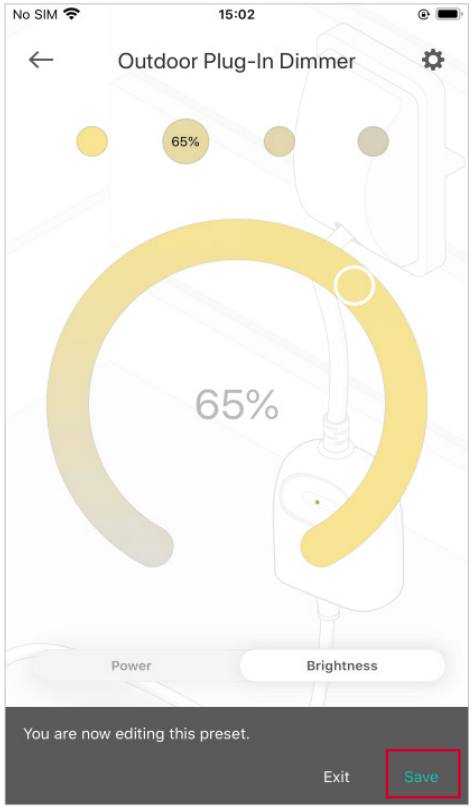
1. Go to the status page and tap the Brightness tab. Tap the circle on the top and choose a brightness. A preset brightness is set successfully.



2. Change the preset brightness.

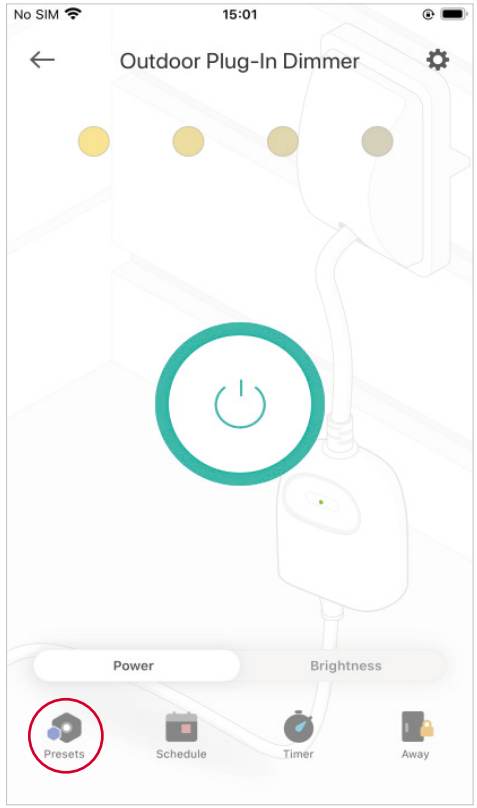
Tap a preset, then tap beside it. A pop up message will appear in the bottom. Choose another brightness level and tap Save.





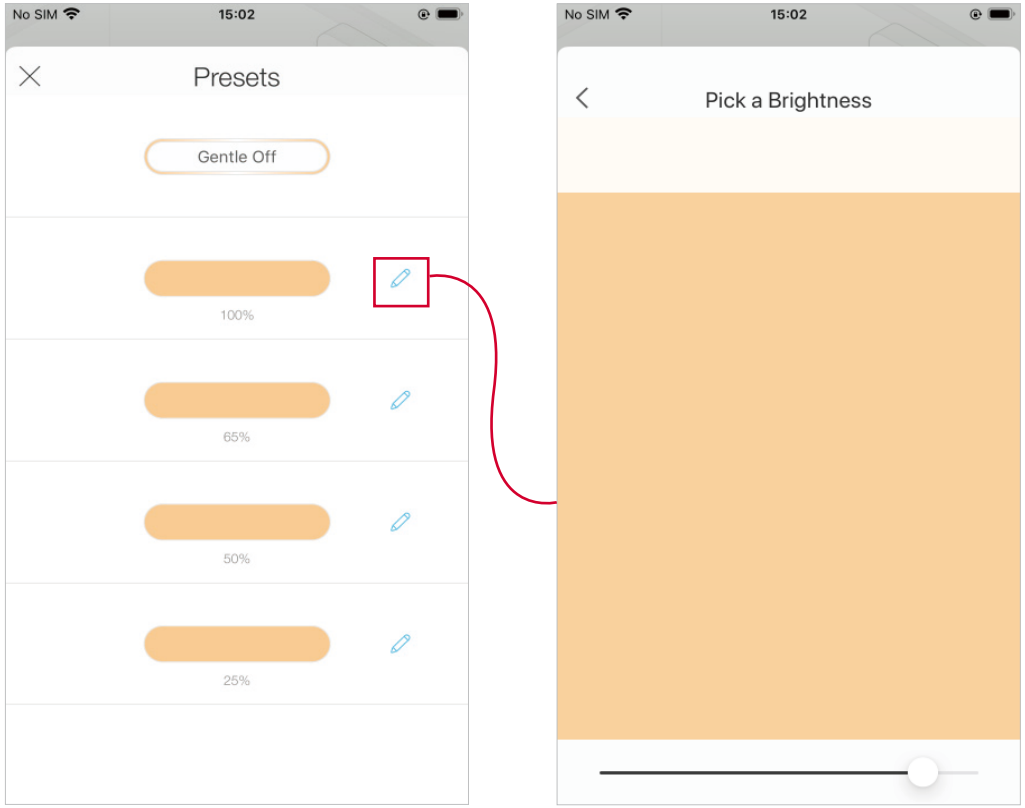
Method 2- Through the Presets Tab

1. Go to the status page and tap the Presets tab.



2. Change the preset brightness.

Tap beside a Preset to customize its brightness. Or tap Gentle Off to fade your light off slowly when you turn off light..



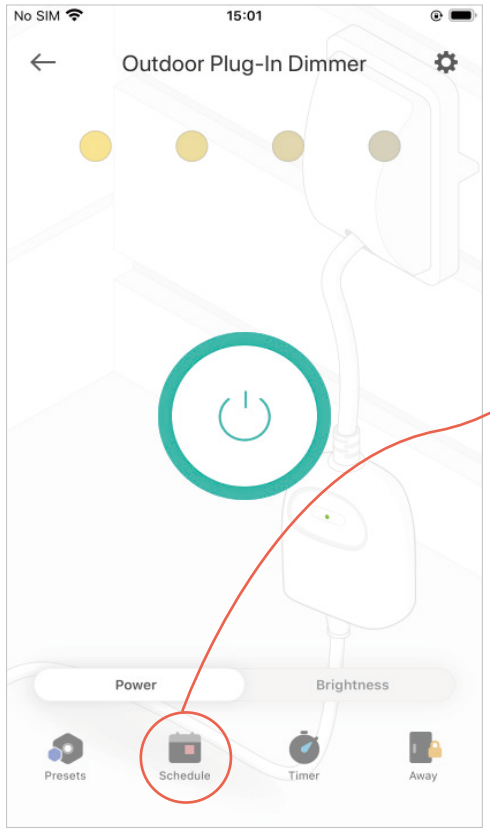
Set Schedules

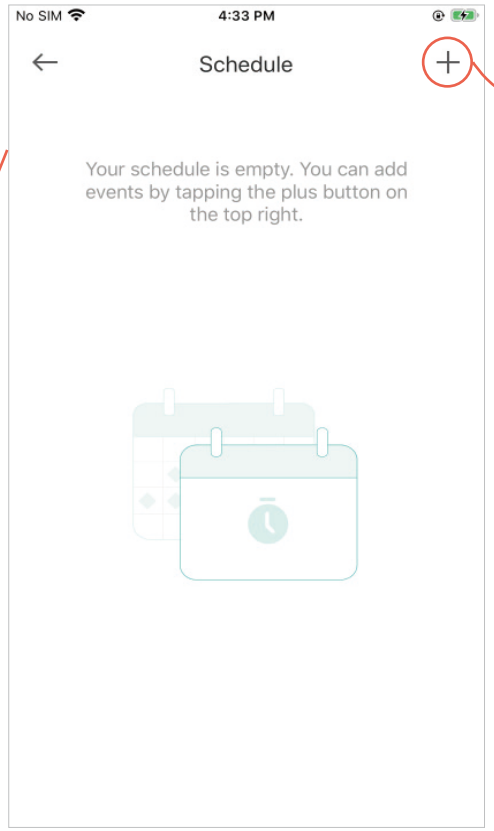
Schedule: Set schedules to automatically turn on/off the light connected to your plug-in dimmer according to your daily routine.

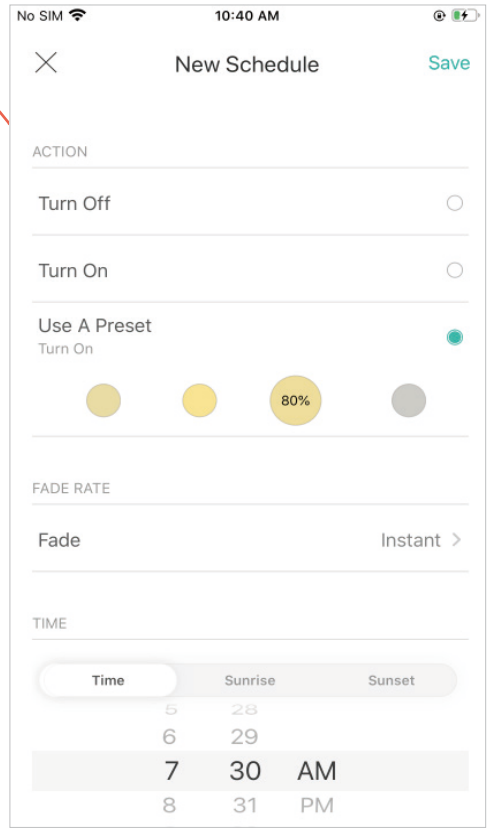
1. Tap your Smart Outdoor Plug-in Dimmer in the Home page, and then tap .
Schedule

2. Tap + on the top right corner.

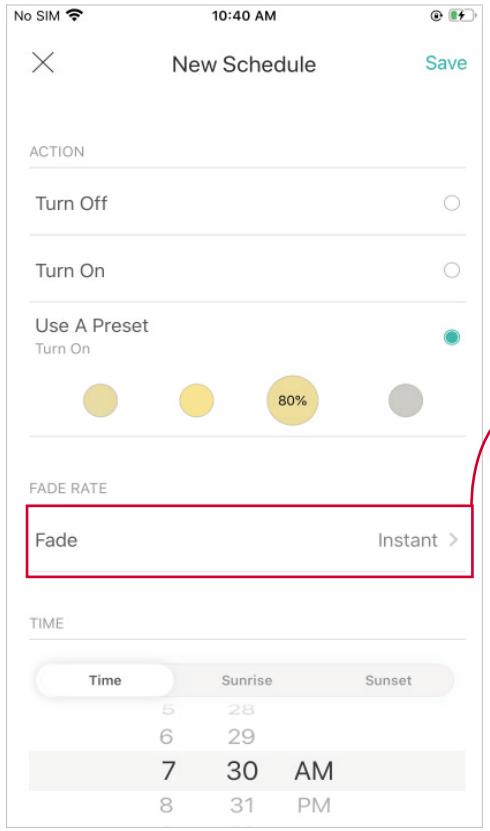
3. Choose an action that you want your light to do, for example, simply turn on/off at certain time, or turn on at a preset brightness.

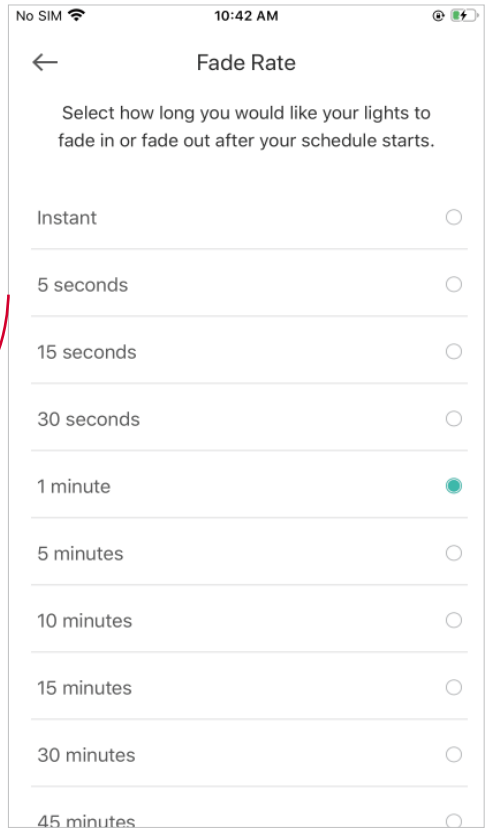




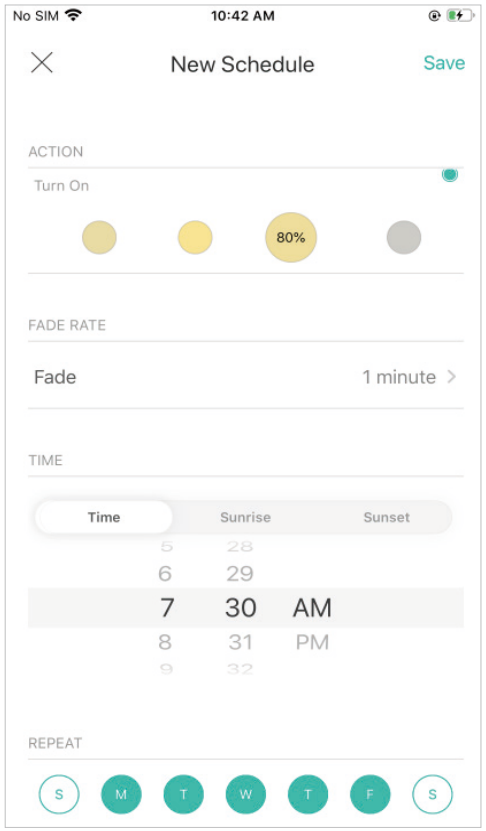


4. Set fade rate, i.e., how long you would like your light to fade in after your schedule starts.





5. Select the time and repeating frequency at which you want your schedule to run.



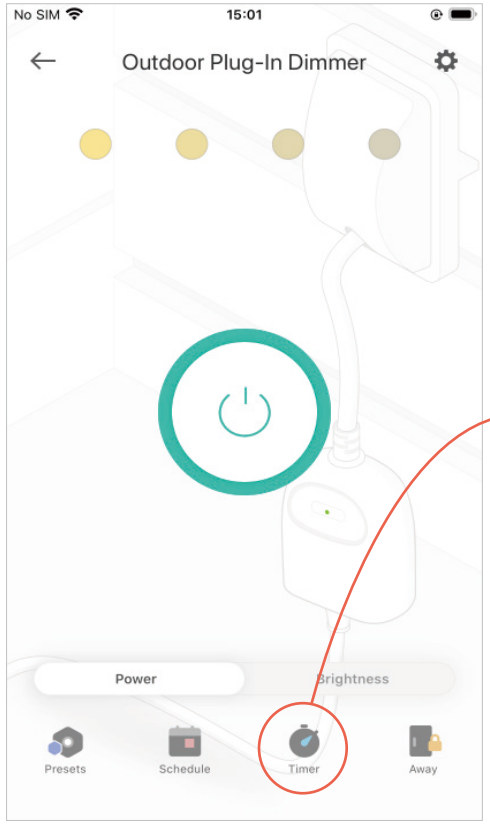
5. Tap Save and you'll see your schedule listed in the Schedule Page. Now your light will be turned on to 80% brightness at 7:30 AM every weekday.

You can add more schedules following the same steps.

Set Timer

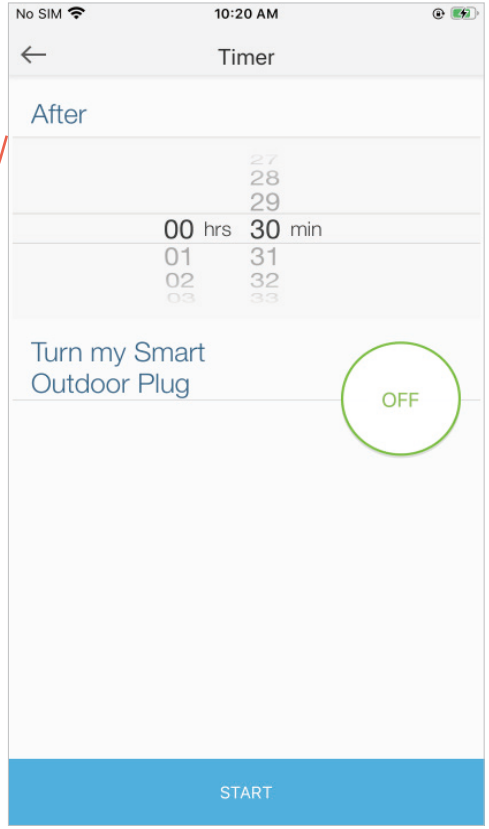
Timer: Set the timer for your plug-in dimmer to automatically turn on/off after the specified time ends.

1. Tap your Smart Outdoor Plug-in Dimmer in the Home page, and then tap Timer.

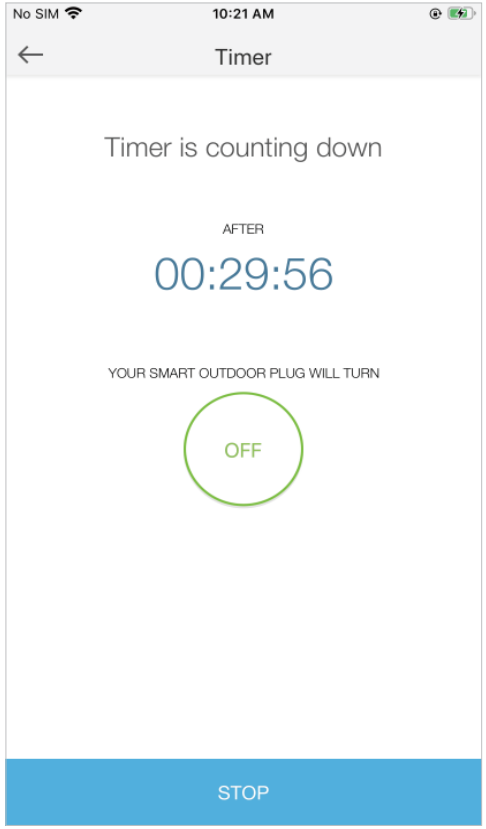


2. Set the time after which the plug-in dimmer will be automatically turned on/off.

e.g. when I turn on the outdoor light, I want it to turn off automatically after 30 minutes.



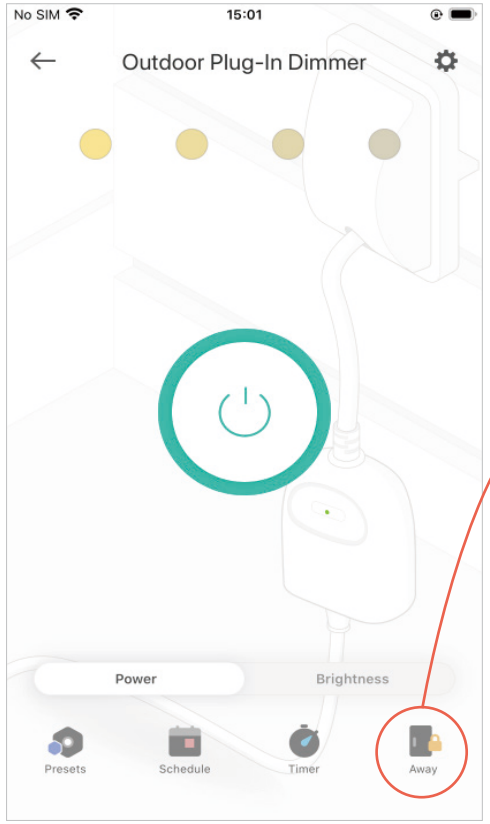
2. Tap START and you'll see the timer is counting down. Tap STOP to stop the Timer at any time.



Set Away Mode

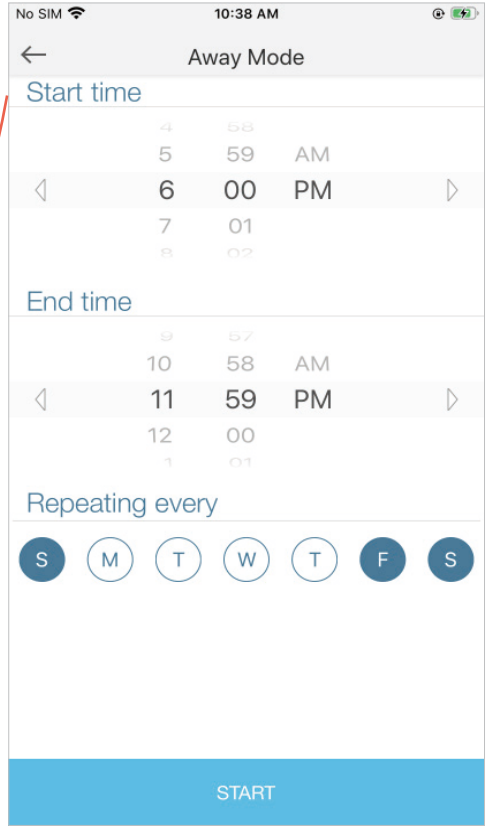
Away Mode: Set Away Mode for your plug-in dimmer to turn on/off automatically at random intervals while you are away to make the appearance that someone is at home.

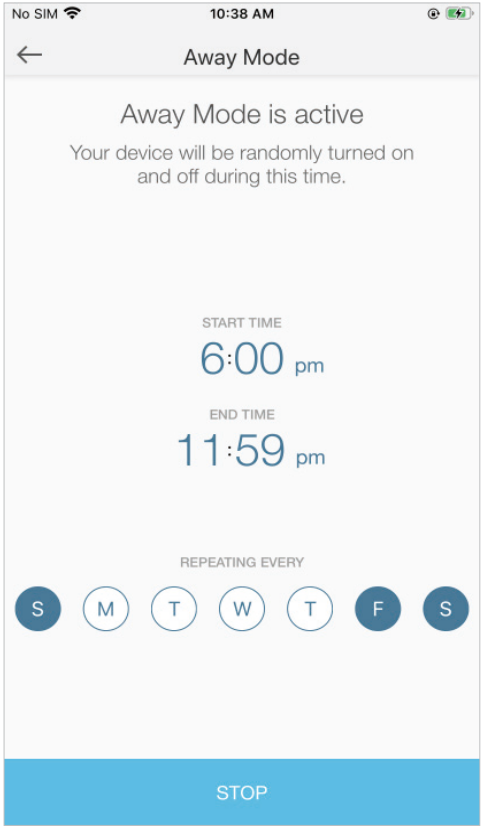
1. Tap your Smart Outdoor Plug-in Dimmer in the Home page, and then tap .



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

e.g. I want my outdoor light to turn on/off from 6:00 PM to 11:59 PM every Friday, Saturday and Sunday.

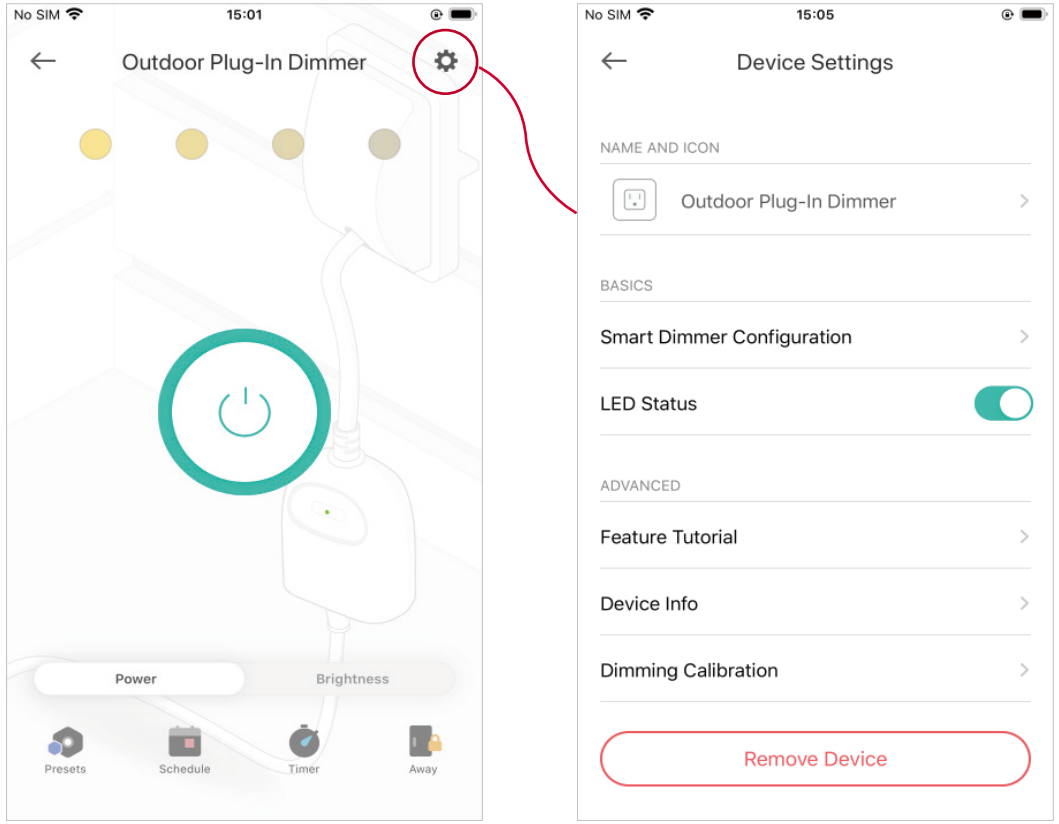




Manage Device Settings

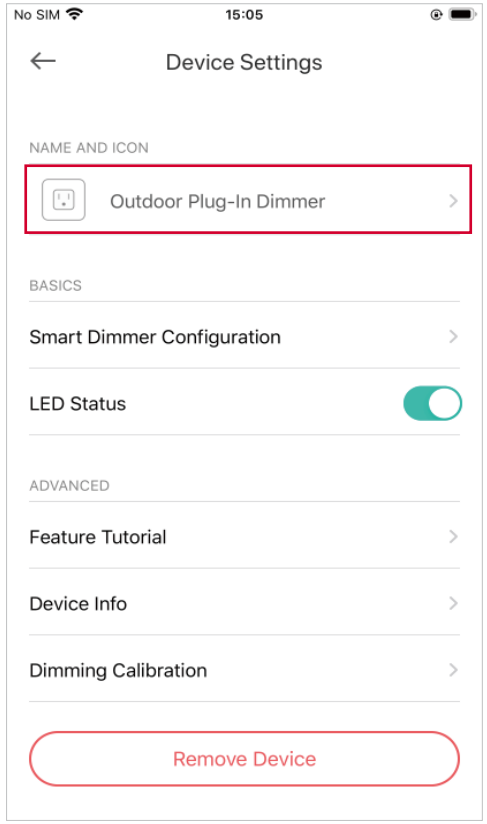
You can change the settings in the Device Settings page.

Tap your Smart Outdoor Plug-in Dimmer in the Home page and then tap ⚙ to enter the Device Settings page.



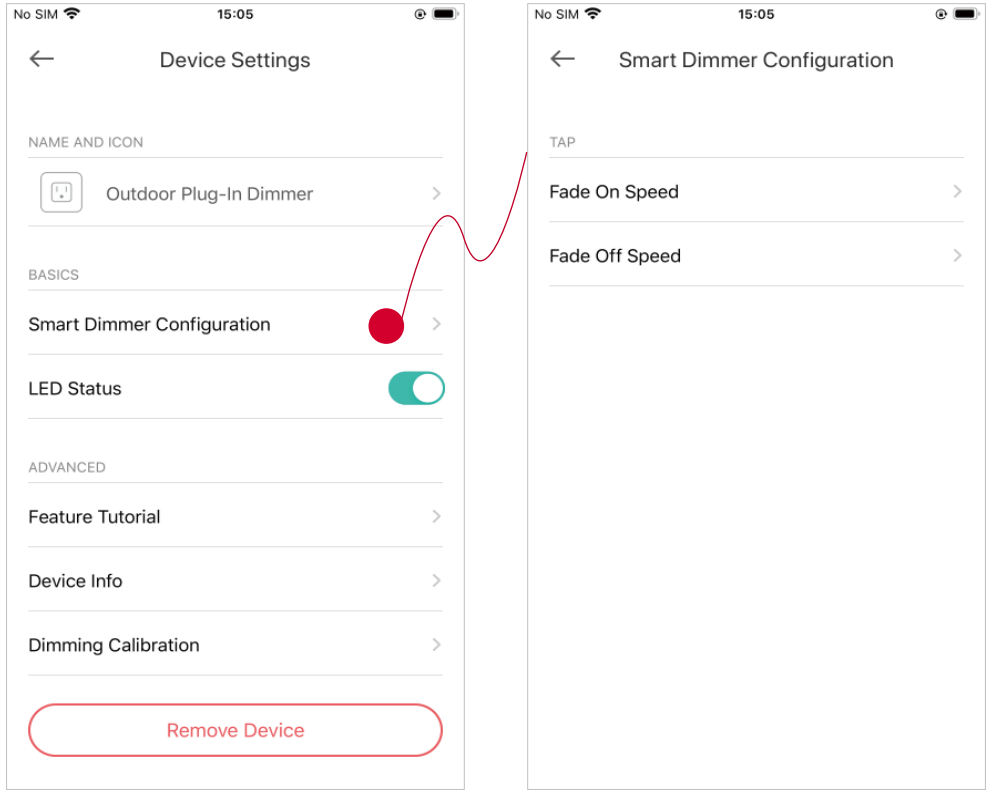
Change Device Name & Icon

Change the name and icon of the Smart Outdoor Plug-in Dimmer.



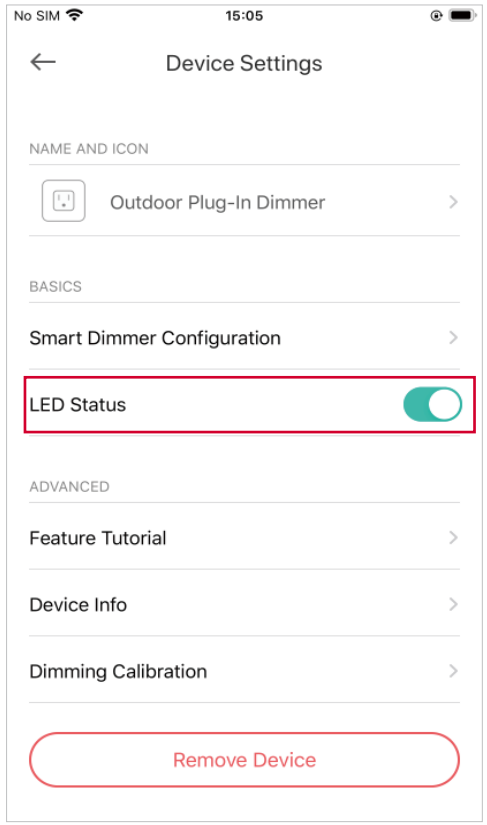
Customize Smart Dimmer Configuration Settings

Set Fade On Speed / Fade Off Speed to slowly turn the light on or off so as to ease the strain on your eyes.



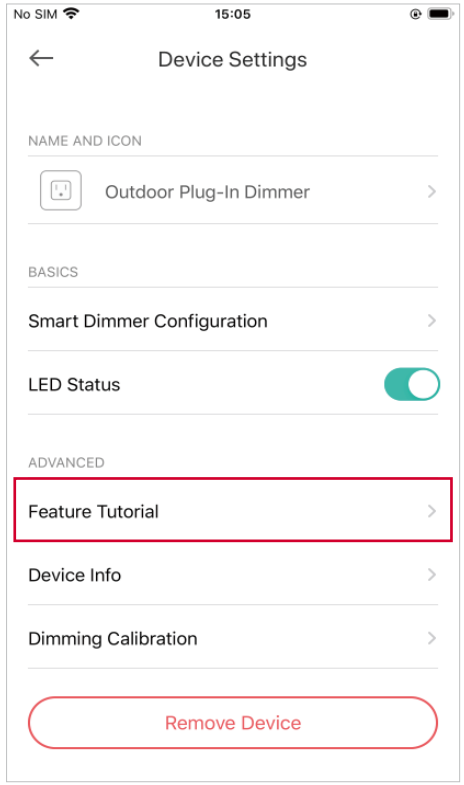
Turn On/Off LED

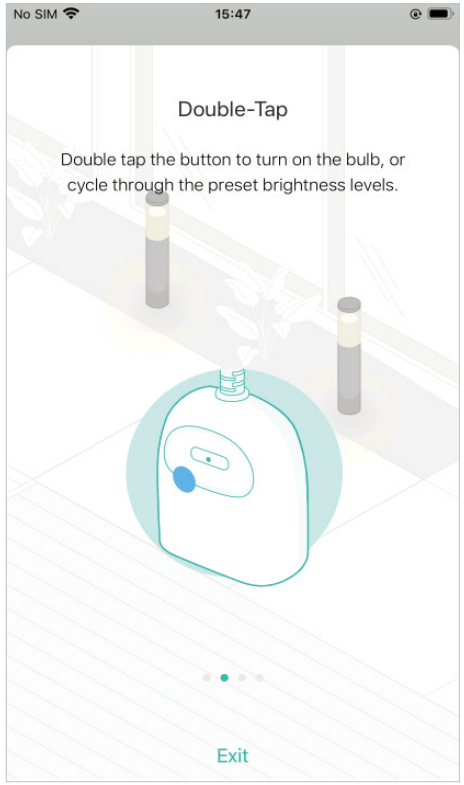
Turn on / off LED on the plug-in dimmer.



Feature Tutorial

Take a look at the main features of the Smart Outdoor Plug-in Dimmer.

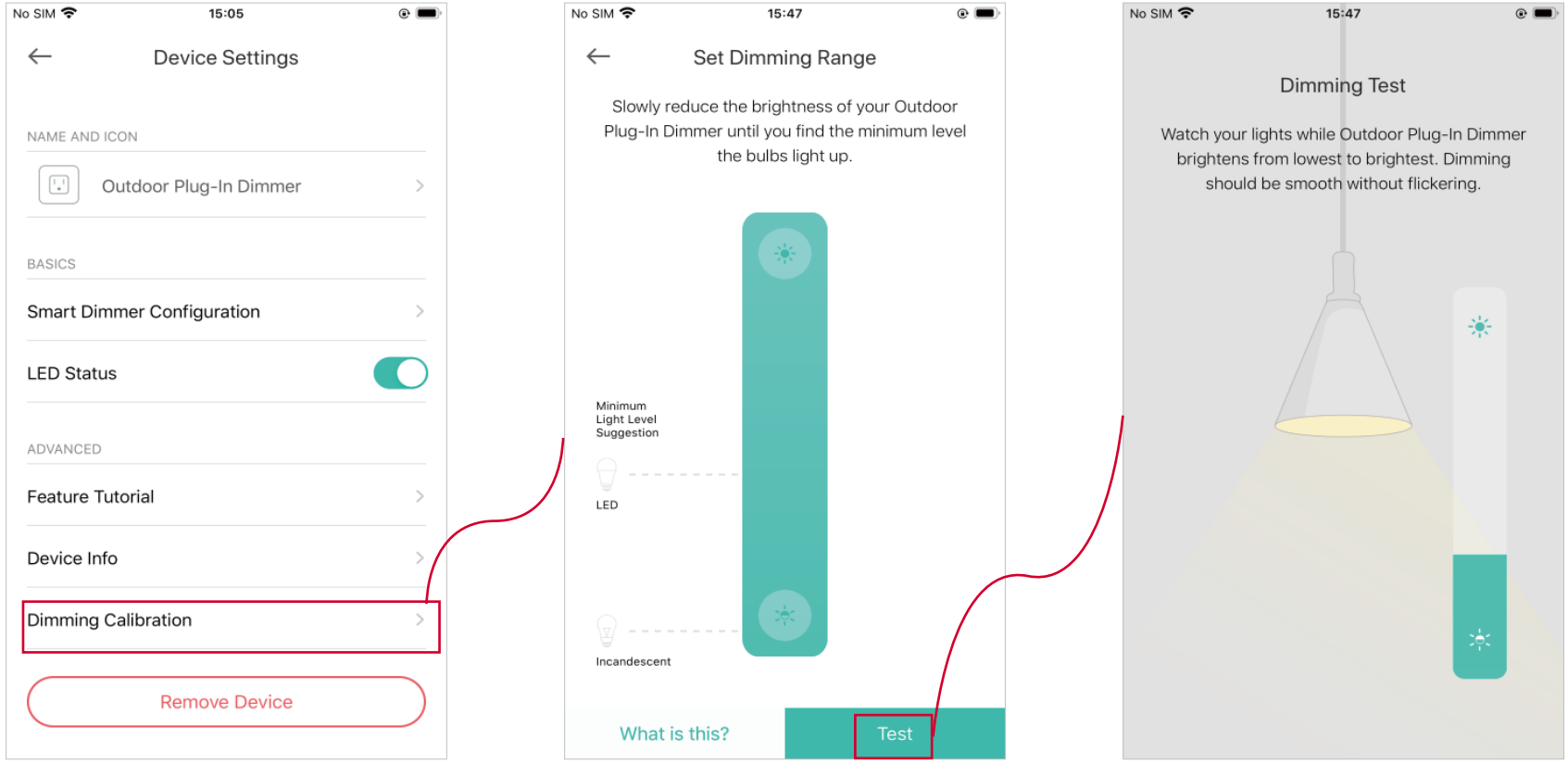




Dimming Calibration

Calibrate your light to avoid flickering.

Test the dimming range of your plug-in dimmer by slowly reducing the brightness of your light until you find the minimum level of brightness.

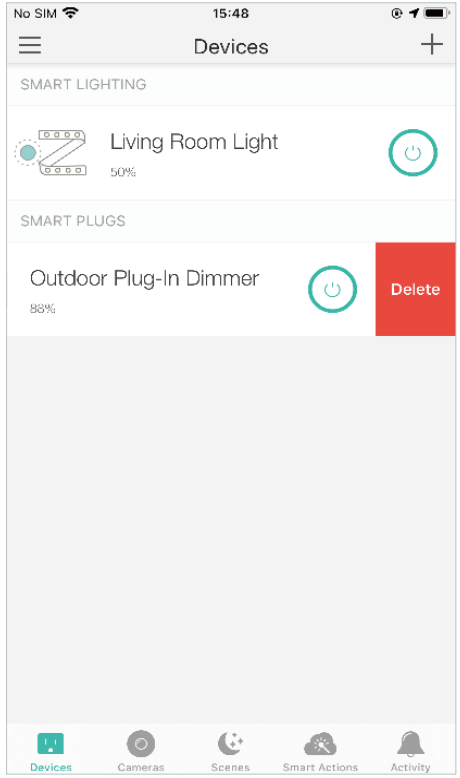


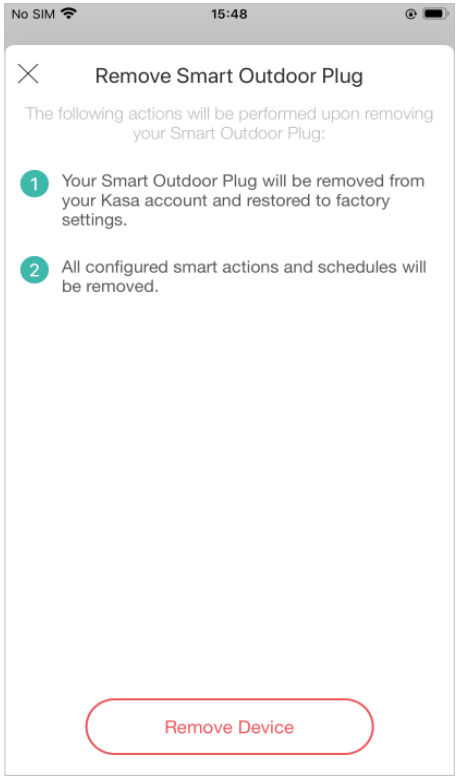
Reset Your Outdoor Plug-in Dimmer

There are three methods to reset your Smart Outdoor Plug-in Dimmer.

Method 1

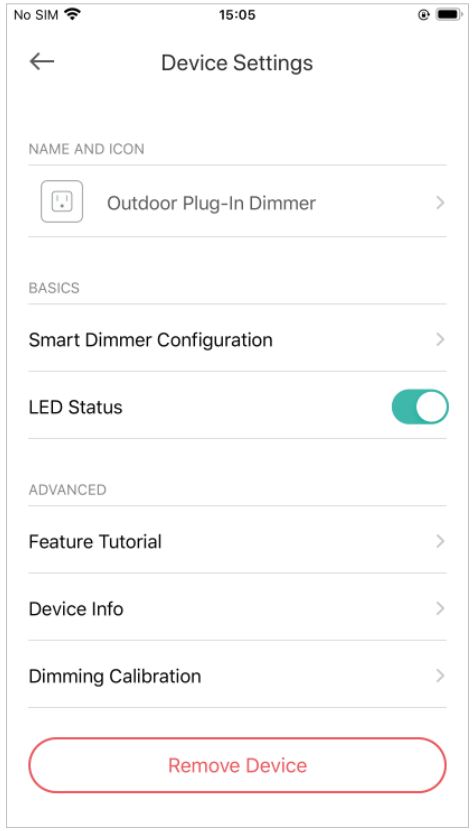
Swipe left your Smart Outdoor Plug-in Dimmer and tap Delete. Then tap Remove Device. Your device will be removed from your Kasa account and restored to factory settings.

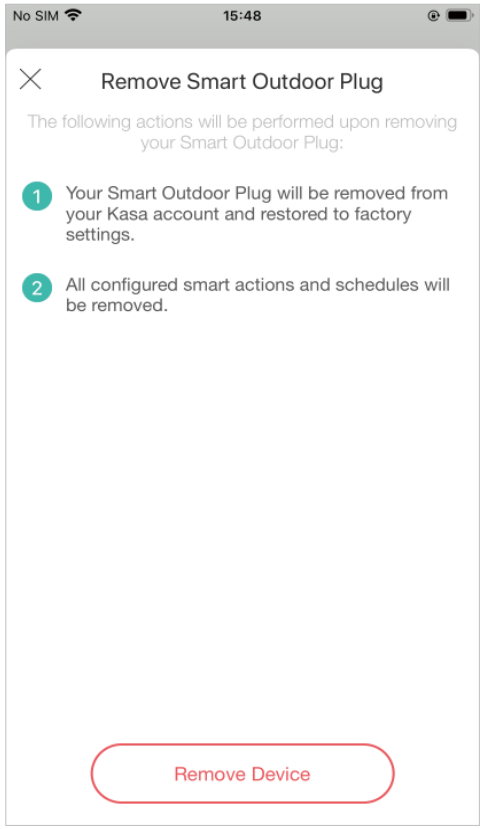




Method 2

Tap your Smart Outdoor Plug-in Dimmer and go to the Devices Settings page. Then tap Remove Device in the bottom. Your Smart Dimmer Switch will be removed from your Kasa account and restored to factory settings.

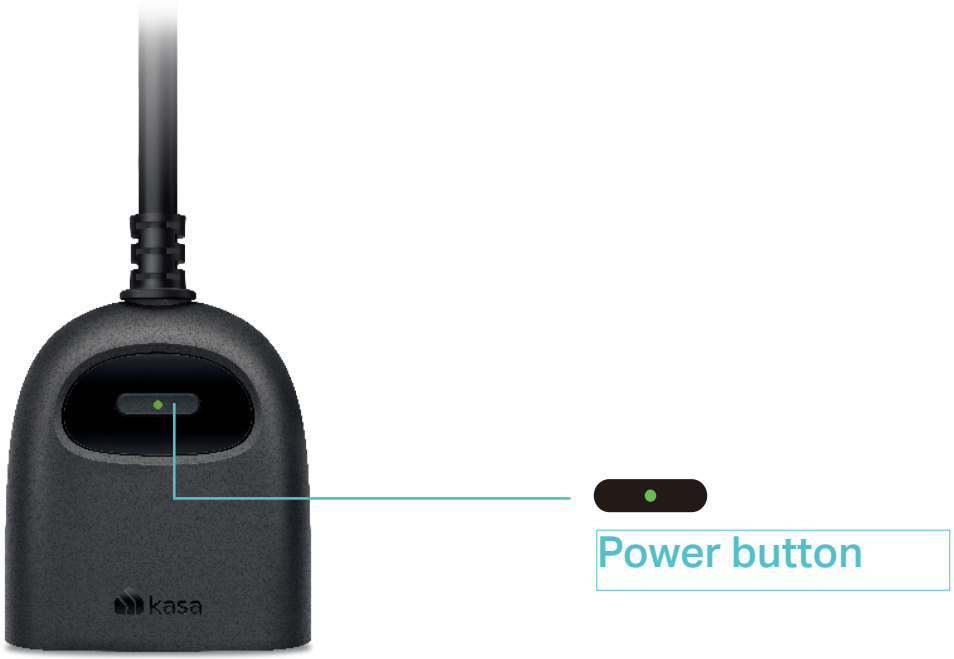




Method 3

Press and hold the power button on the panel for **10s** to restore your plug-in dimmer to factory default settings.

Press and hold the power button on the panel for **5s** to reset Wi-Fi connection while keeping previous settings.

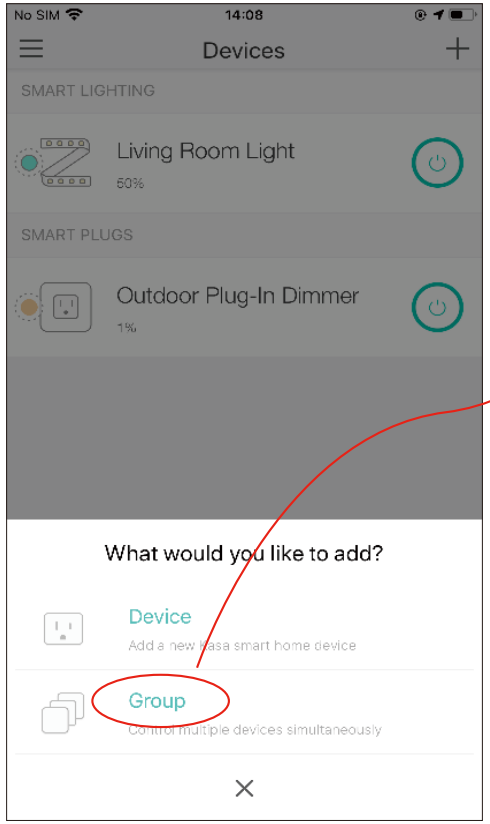


Create Groups

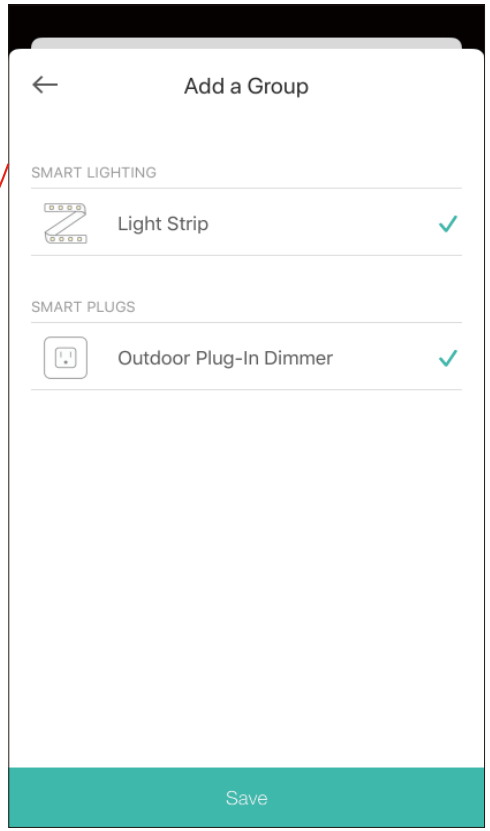
With groups, you can control multiple devices simultaneously. This page allows you to add your Smart Outdoor Plug-in Dimmer and your other Kasa smart devices to a group for unified management.

1. Create groups for your Smart Outdoor Plug-in Dimmer

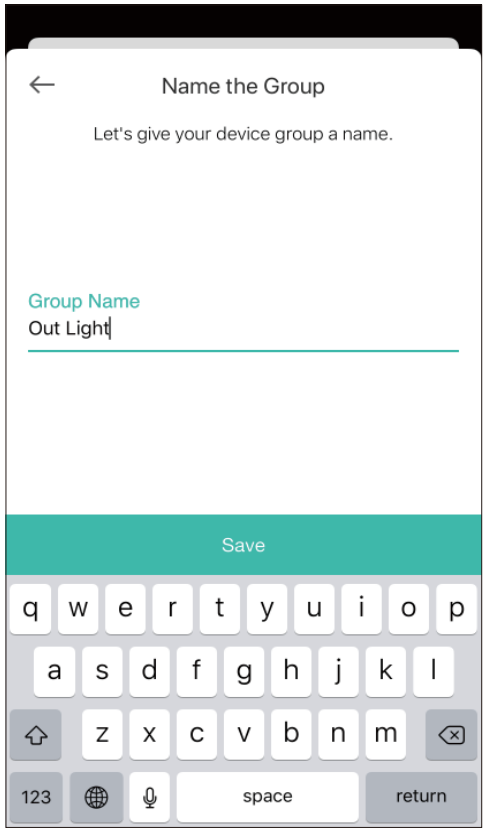
1. Tap the ⊕ button in the Home page of the Kasa Smart app, and select Group.



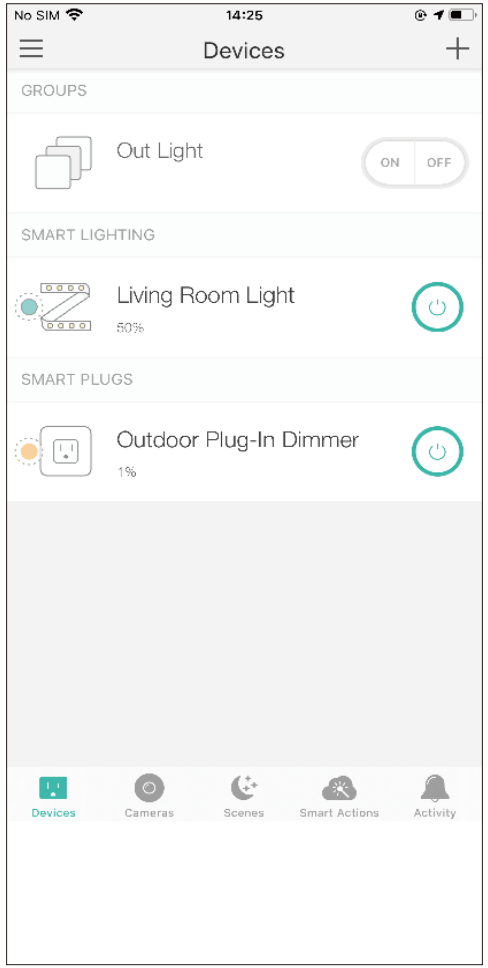
2. Select your Smart Outdoor Plug-in Dimmer and other Kasa smart devices and tap Save.



3. Name the group.

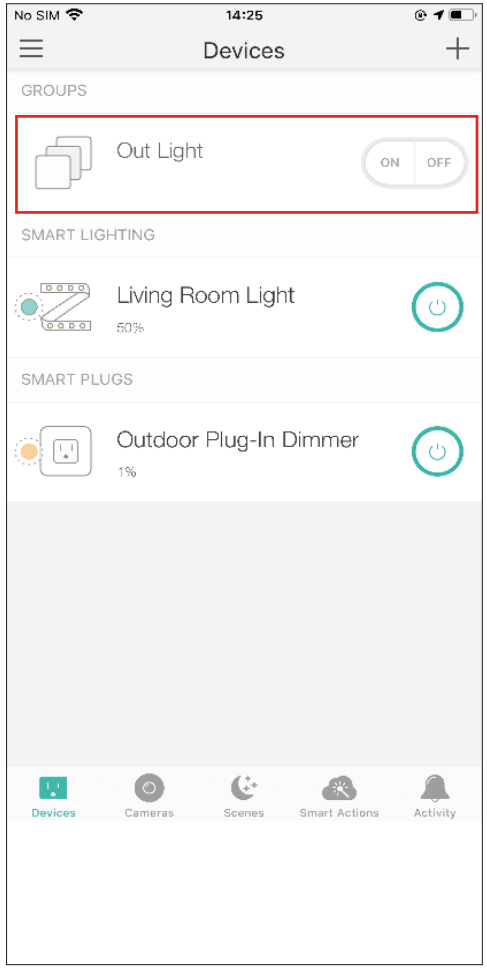


4. The created group is listed in the Home page. You can tap ON or OFF to turn on or off the devices together in the group.

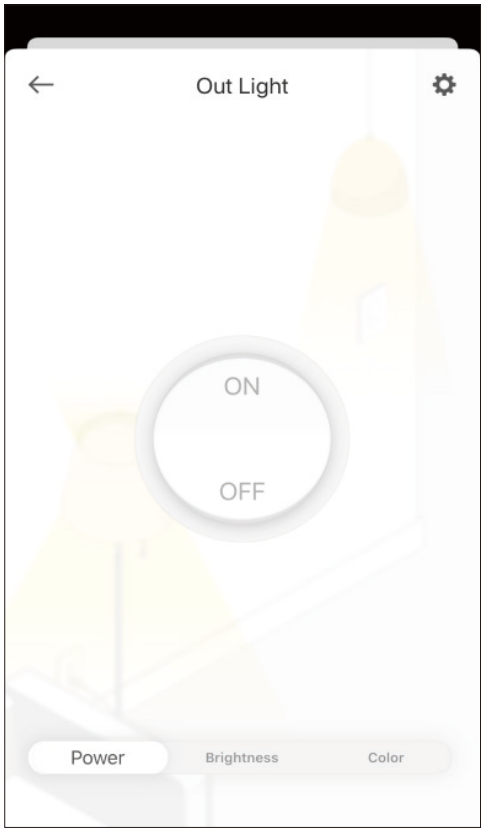


2. Manage the group

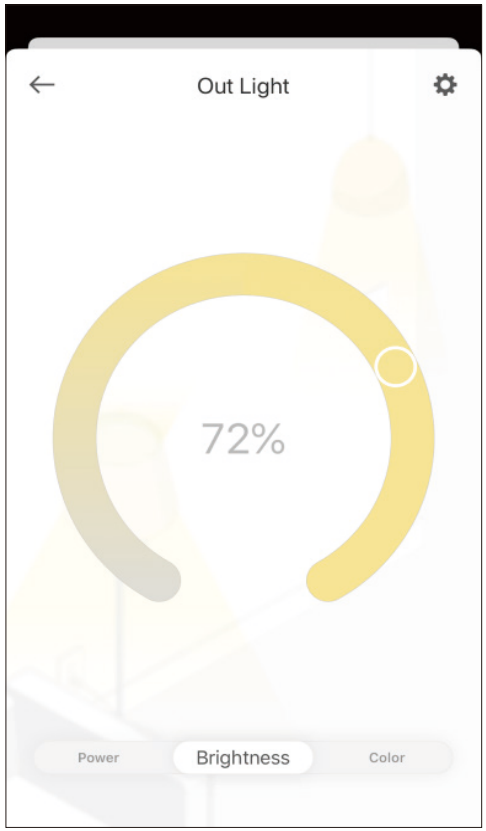
1. Tap the group you want to manage.



2. Turn on or off the devices in the Group in the status page.



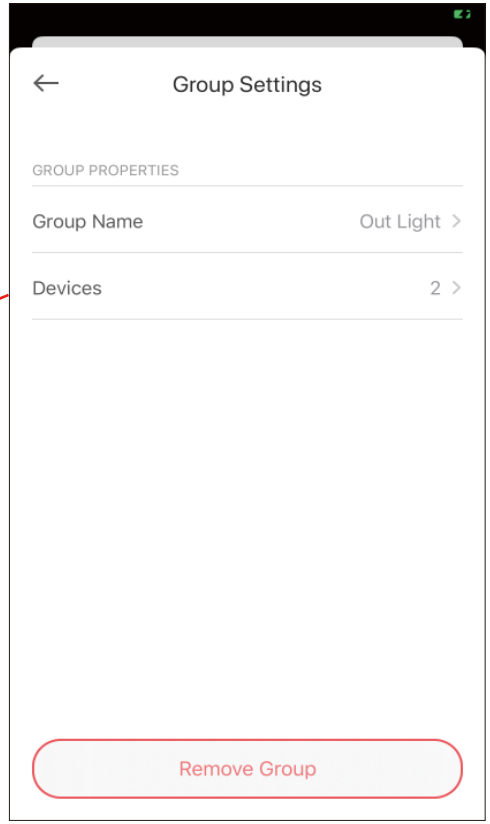
3. Tap Brightness to adjust the brightness of your plug-in dimmer and light strip.



4. Tap Color to adjust the color of your light strip.

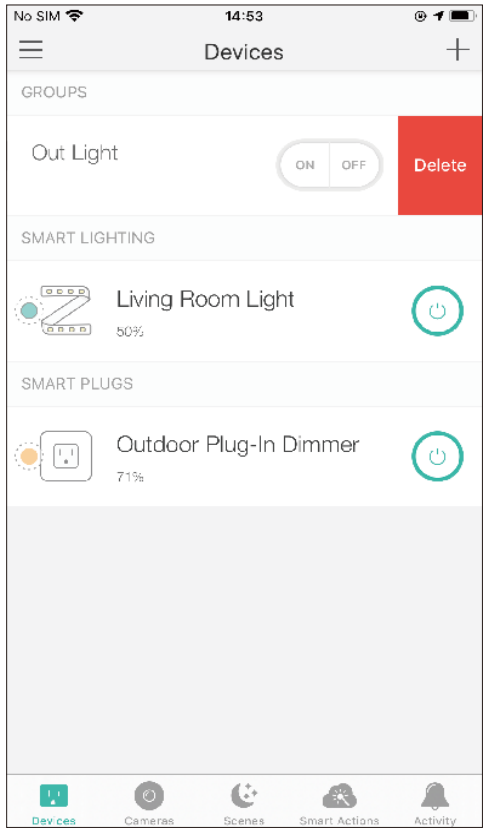
Note: This is avaliable only when the other device in the group supports this feature.

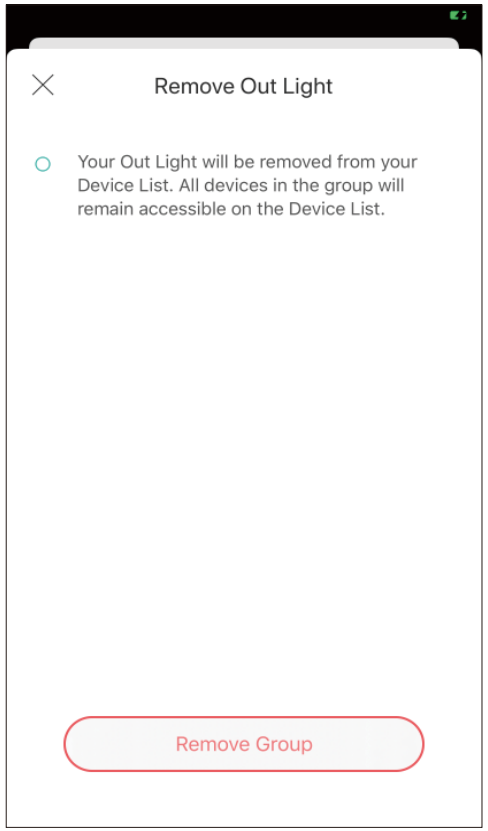
5. Tap ⚙ in the top right corner to enter the settings page. You can change the group name or devices in the group as you like.



3. Remove the group-Method 1

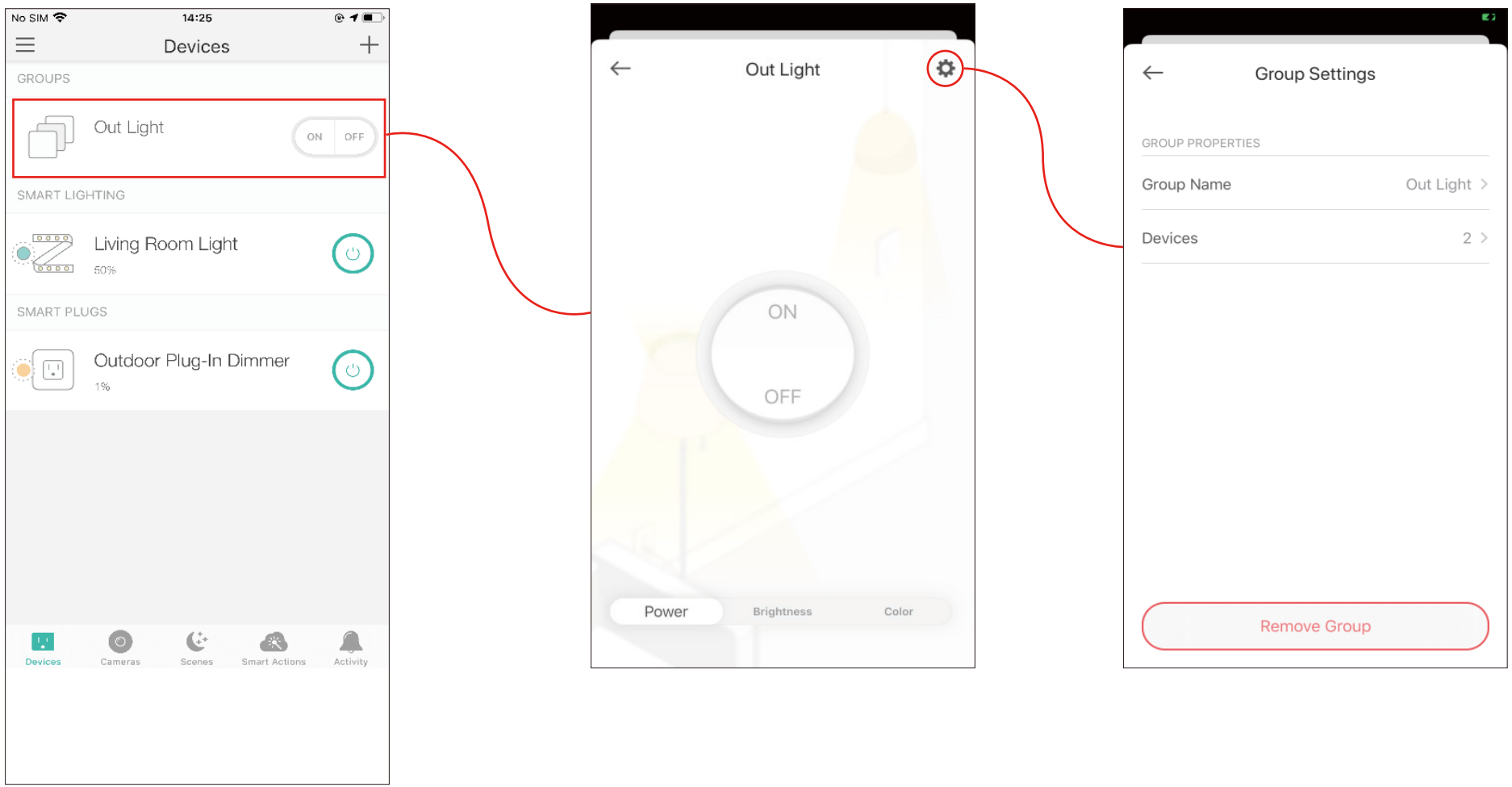
In the Devices page, swipe your group left, then tap Delete.



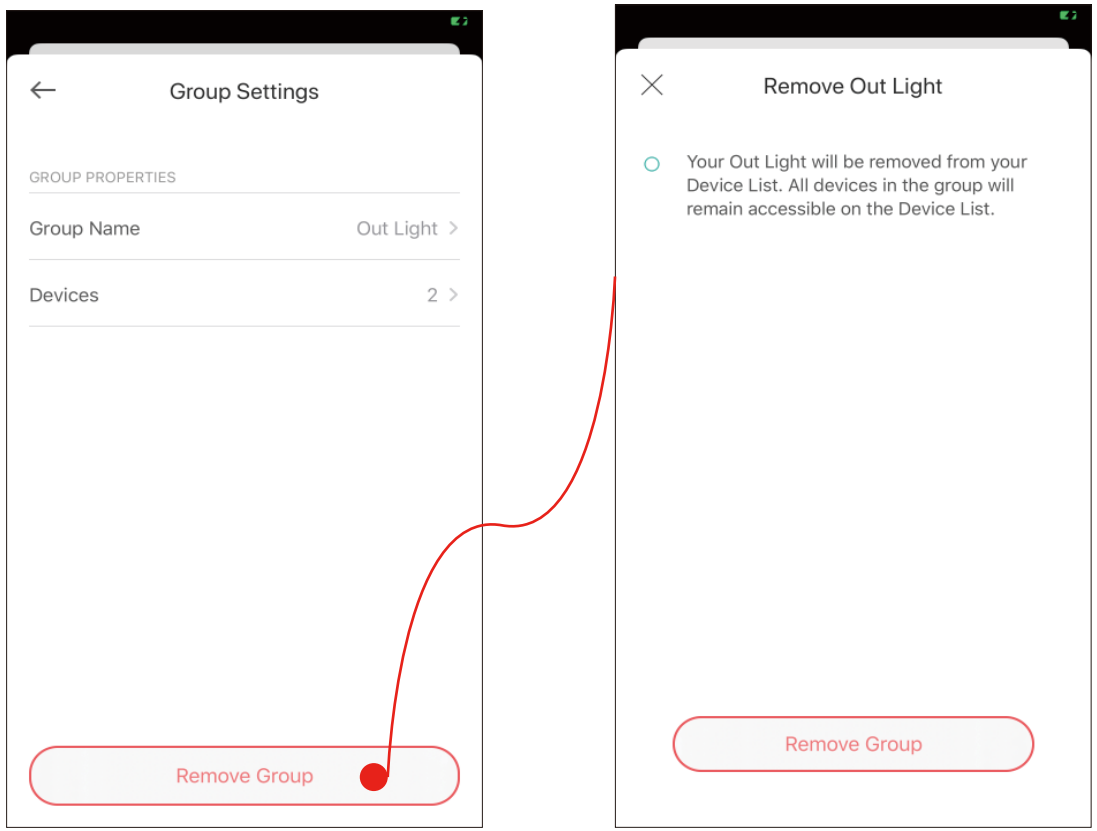


3. Remove the group-Method 2

1. Go to the settings page of your group.



2. Tap Remove Group if you want to remove the group from your device list. Then double confirm it. All devices in the group will remain accessible on the device list.

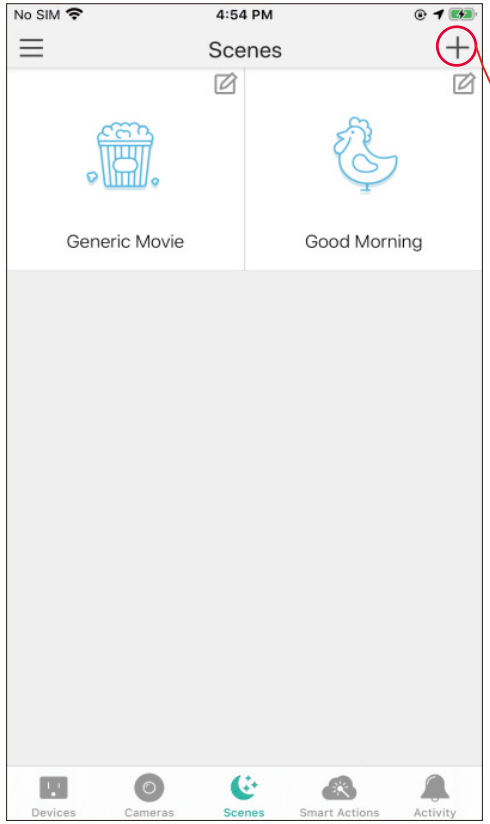


Create Scenes

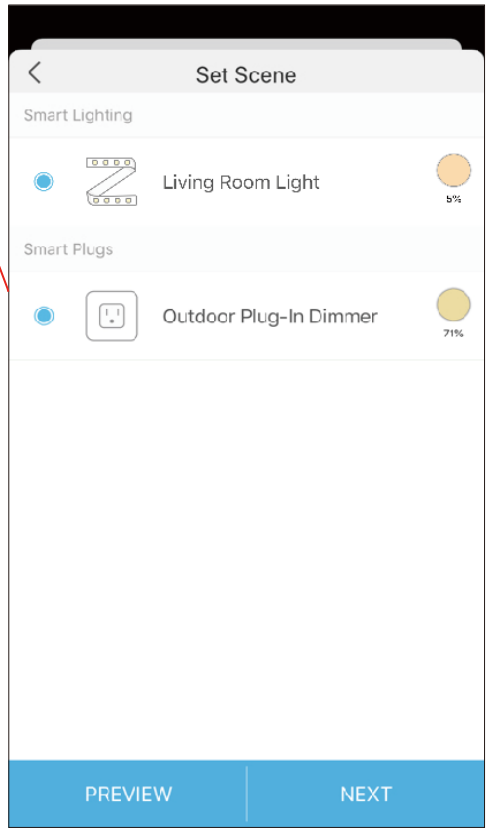
A scene is a preset group of smart devices that can be programmed, customized and activated simultaneously at the touch of a button from your smartphone or tablet, allowing you to easily set your mood, activity or fit any special occasion. This page allows you to preset how your smart home devices should act automatically at special occasions.

1. Tap Scenes at the bottom, then select a scene or create your own scene.

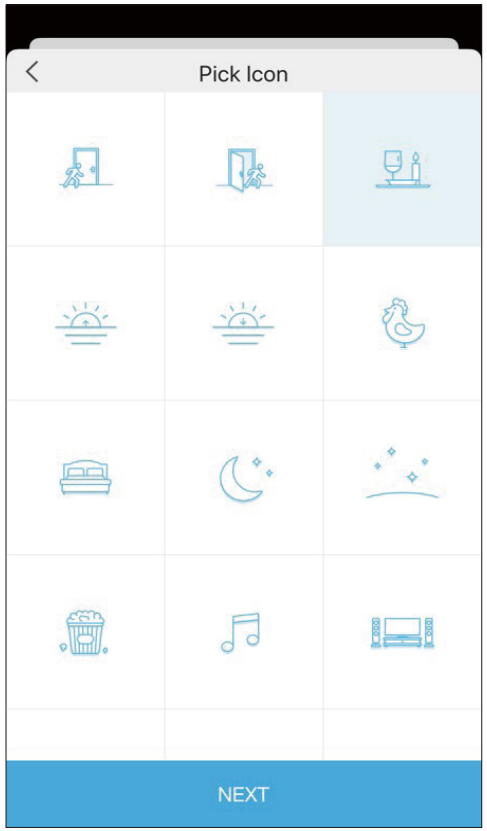
e.g. I want to turn on outdoor light and turn off air conditioner simultaneously.



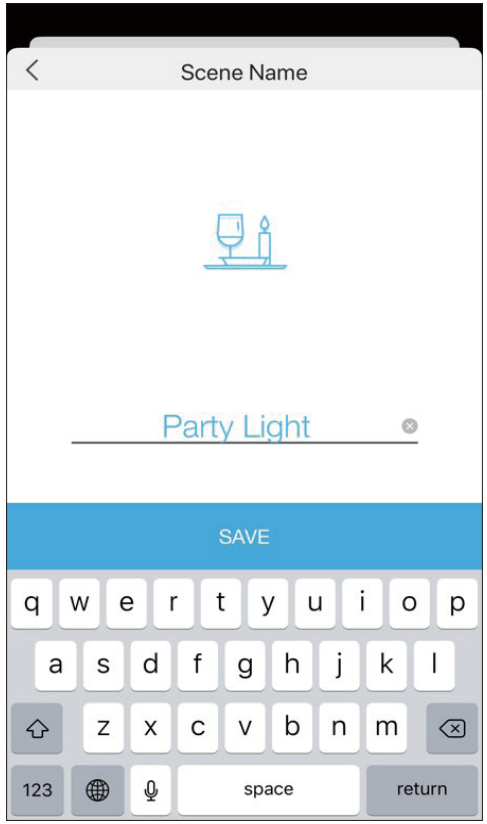
2. Select devices for the scene to work on and set their status respectively.



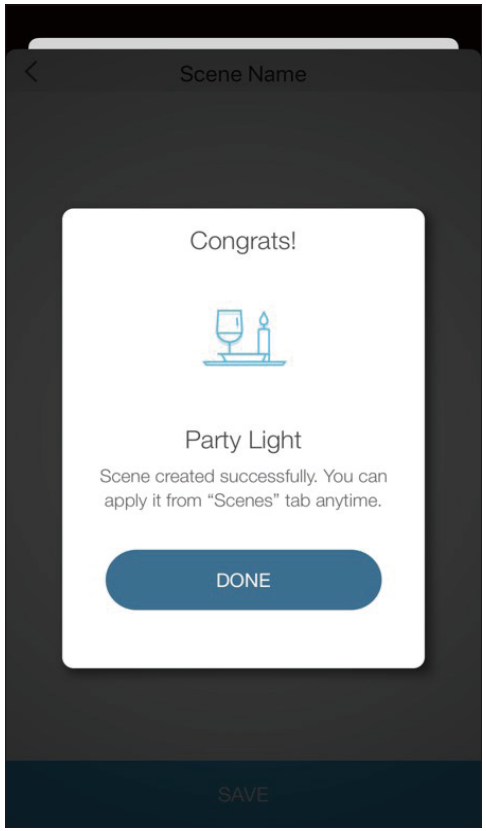
3. Pick an icon for your scene.



4. Name your scene.



5. Tap Save. Then your scene is created successfully.



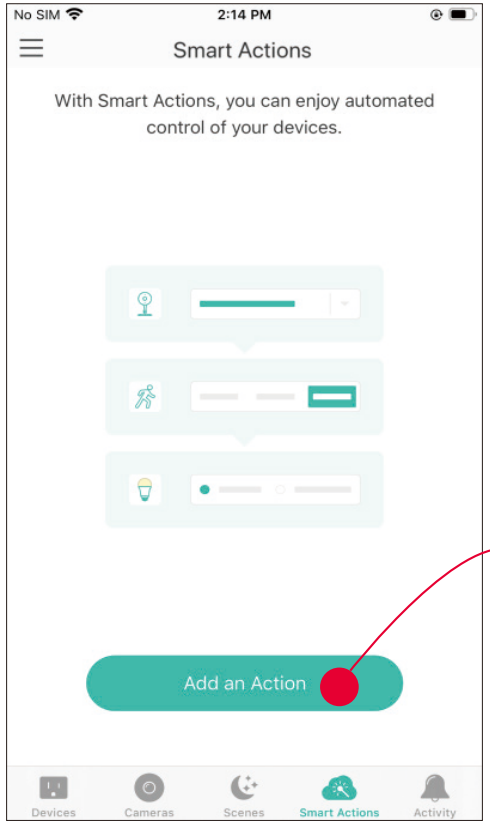
Smart Actions

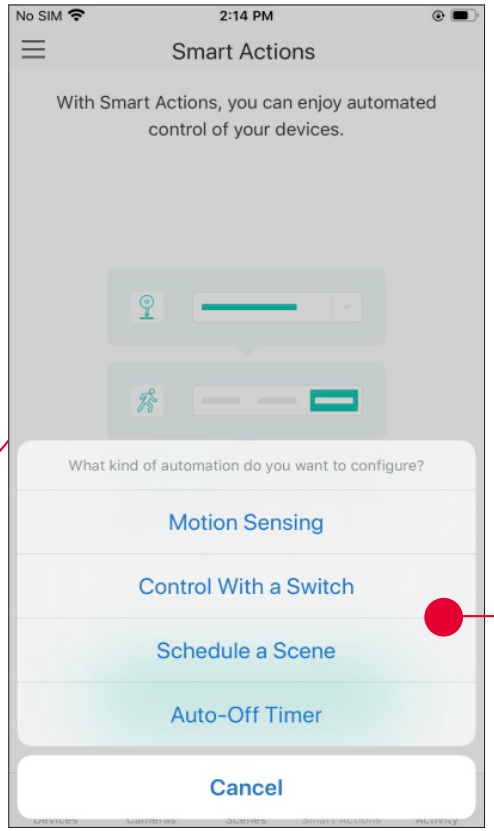
Smart Actions is a function provided that enables device interconnections and home automations. With Smart Actions, your Kasa devices can work together to create a smarter smart home. From the moment you wake up to the moment you drift asleep, Smart Actions make your home safer and more comfortable.

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.

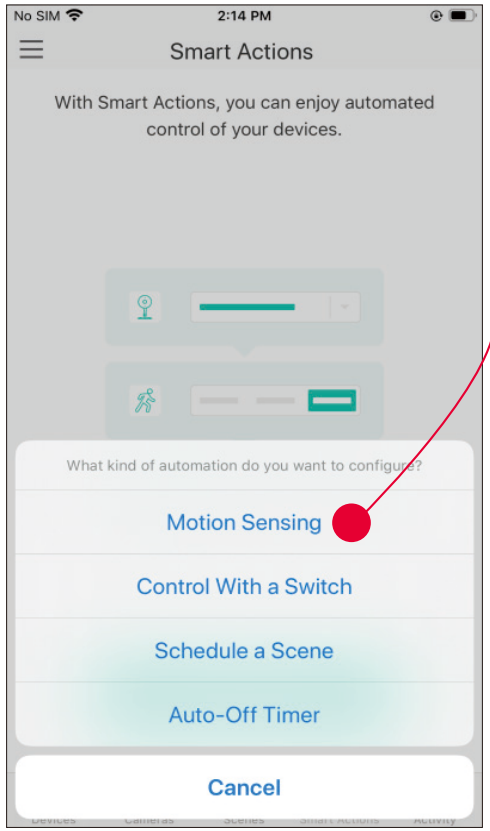
Auto-off Timer: Whenever a Smart device is turned on, turn it off after the designated amount of time.

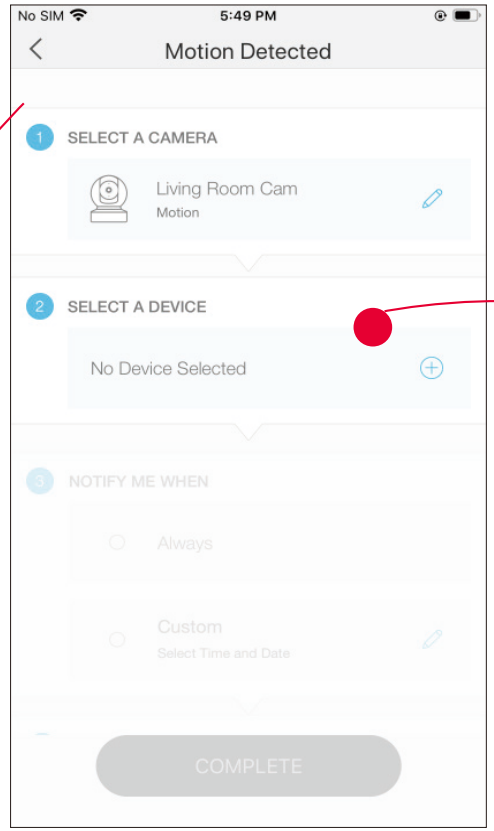
1. Configure Motion Sensing If you already have a Kasa Smart Camera

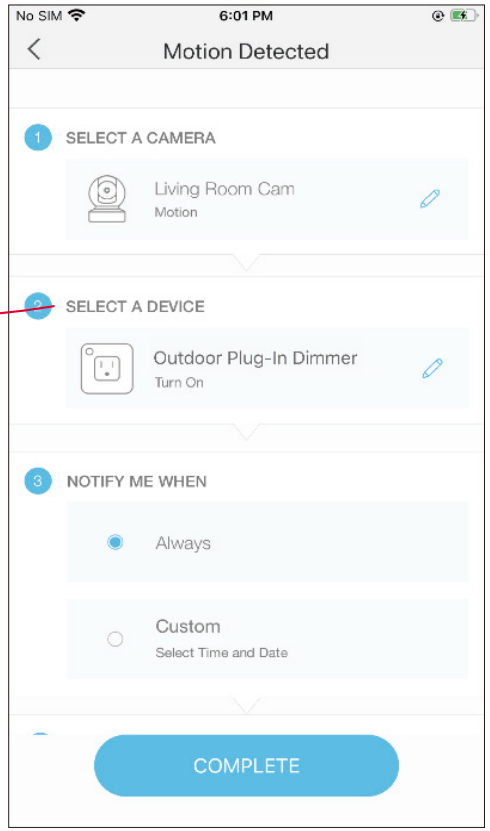
e.g.: I want to turn the outdoor light on when my Kasa camera senses a motion.

1. Tap Motion Sensing then select a camera.

2. Select your plug-in dimmer.

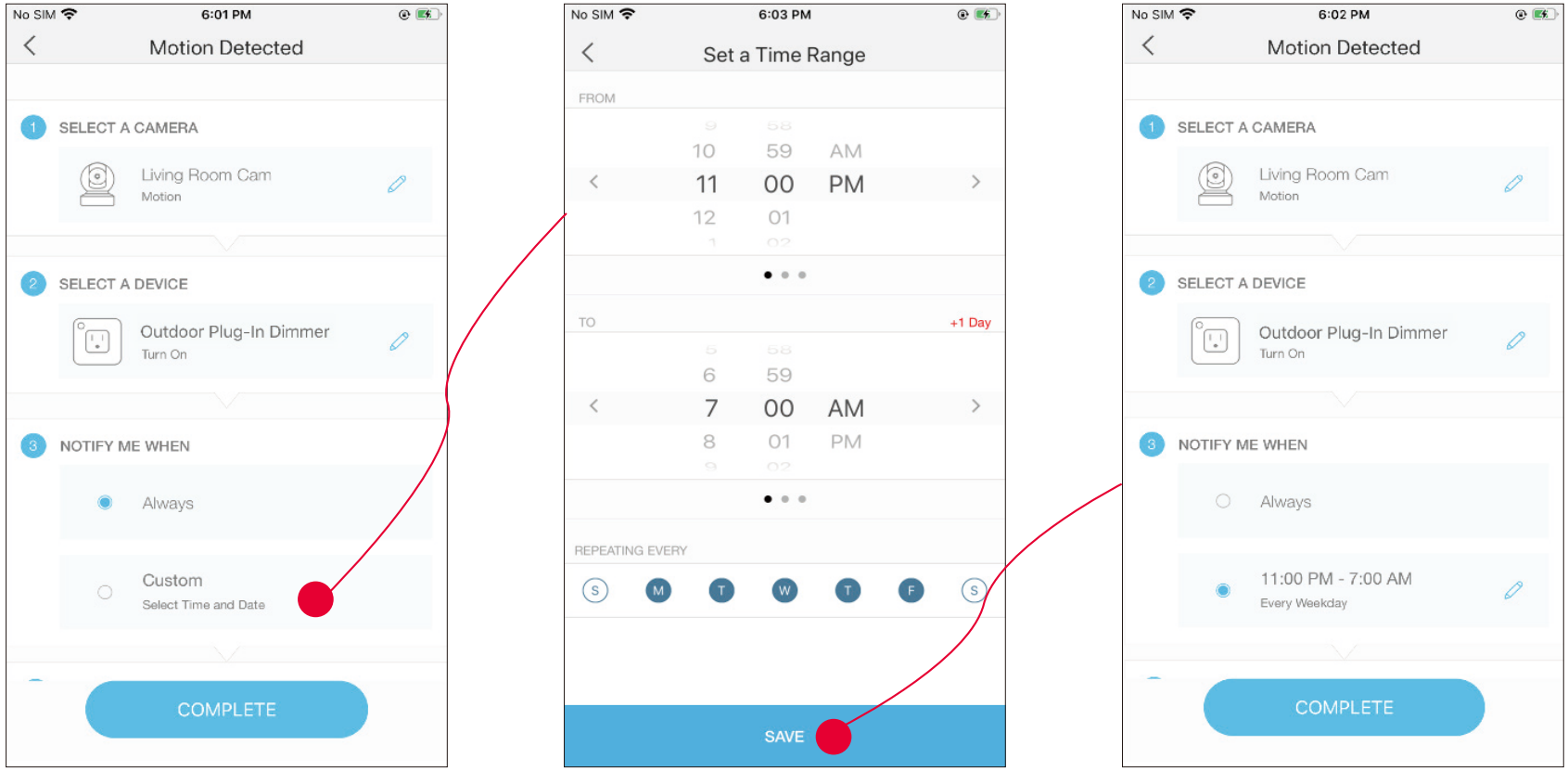




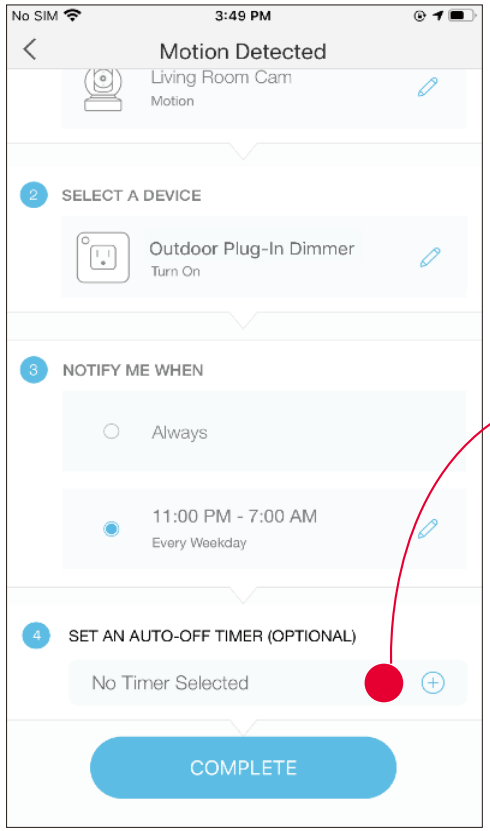


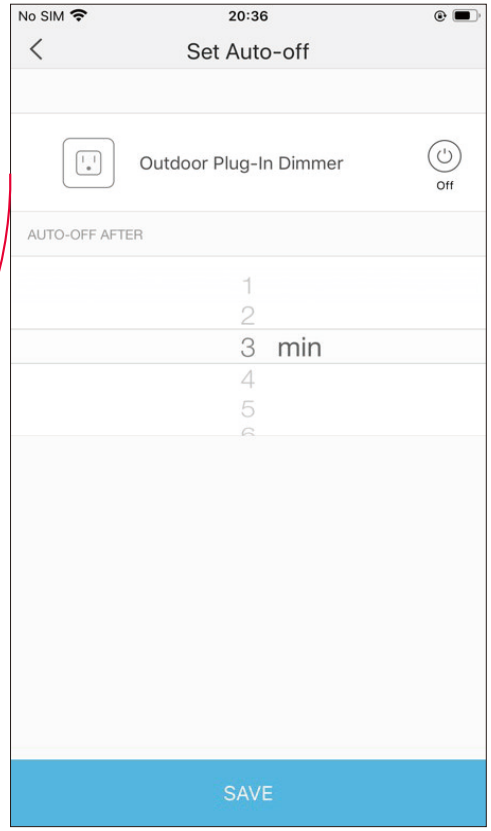
3. Set the time when you want to be notified. You can choose Always or tap Custom to choose time according to your needs.

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

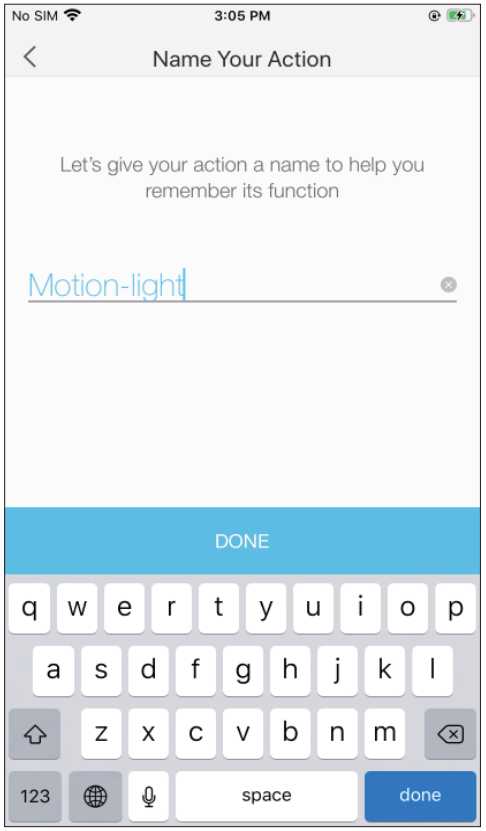


4. (Optional) Set an auto-off timer then tap Complete. Then your outdoor light will be turned off after the time you set if no motion is detected.





5. Name your action for easy identification. Then the Smart Action is created successfully.

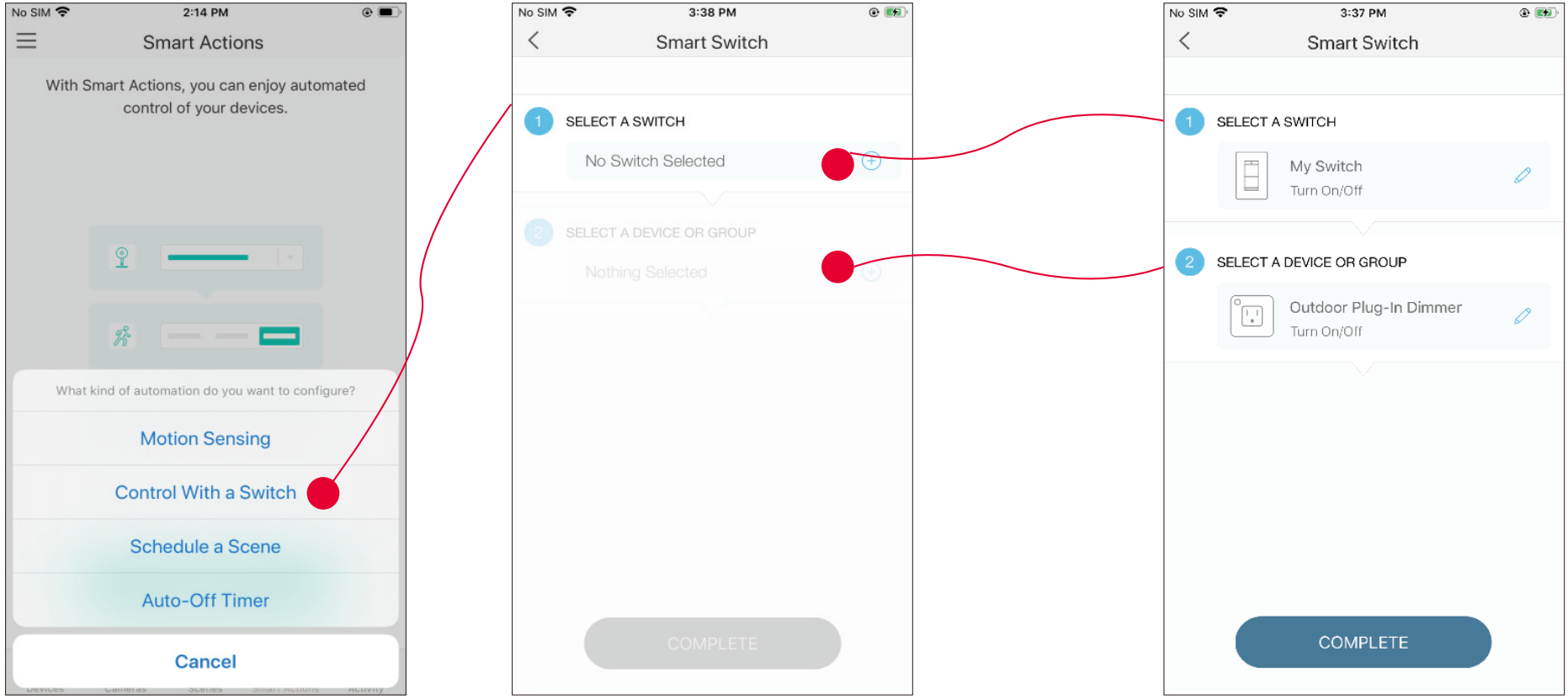


2. Configure Control With a Switch If you already have a Kasa Smart Switch

e.g.: I want to turn the outdoor light on when I turn on my switch, and turn the light off when I turn off the switch.

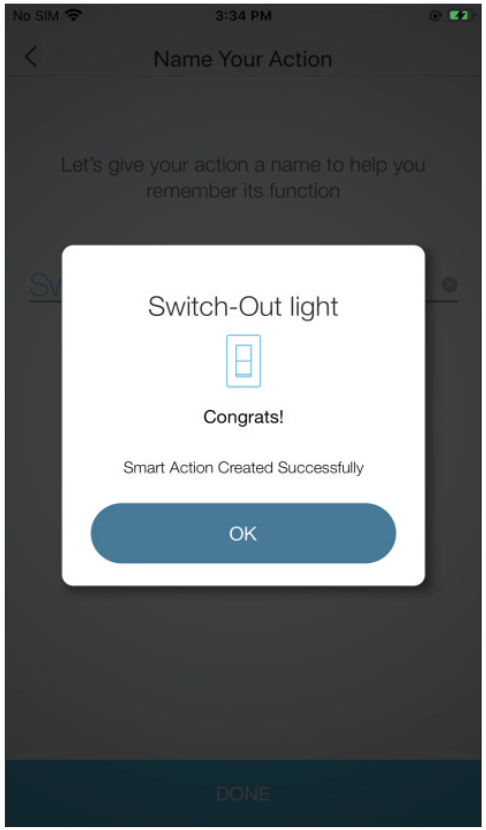
1. Tap Control With a Switch.

2. Add a Kasa smart switch. Then select your plug-in dimmer.



3. Name your action for easy identification.

4. Now Your Smart Action is created successfully.



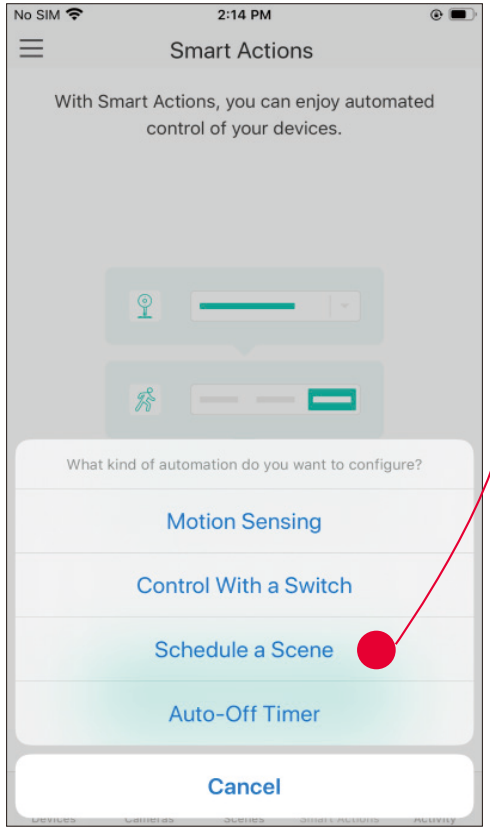
3. Configure Schedule a Scene

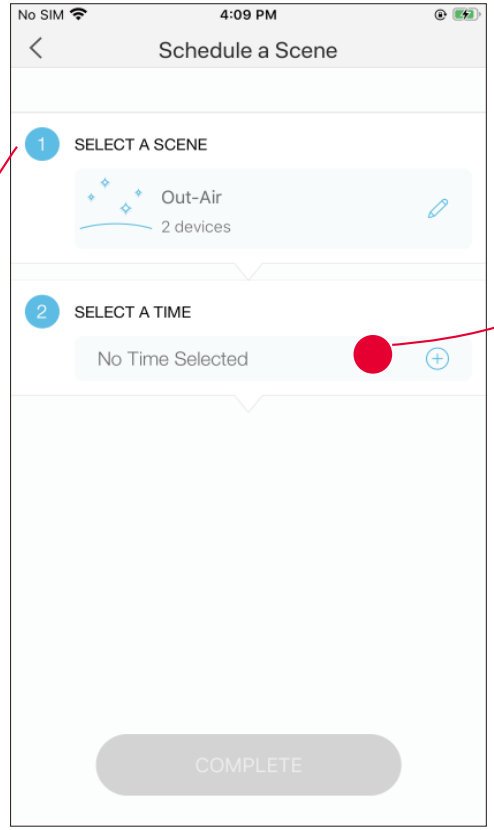
e.g.: I want to turn on the scene I have created automatically at scheduled time.

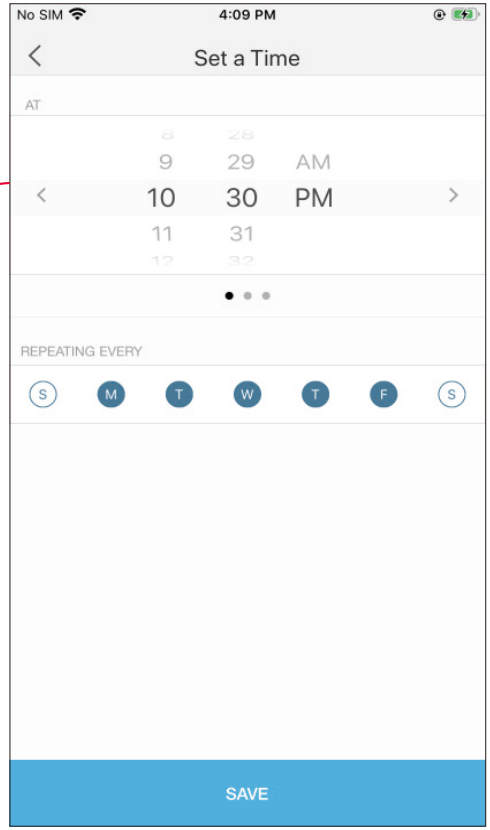
1. Tap Schedule a Scene then select a scene you have created.

For example: I want to turn on my Out-Air scene, which turns on my outdoor light and turns off the air conditioner with just a tap, at 10: 30 PM every weekday.

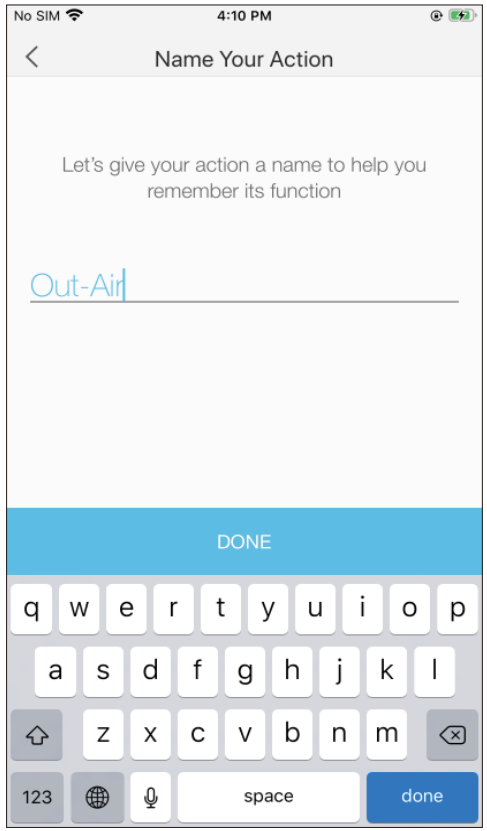
2. Set the time and frequency at which you want your scene to be turned on .



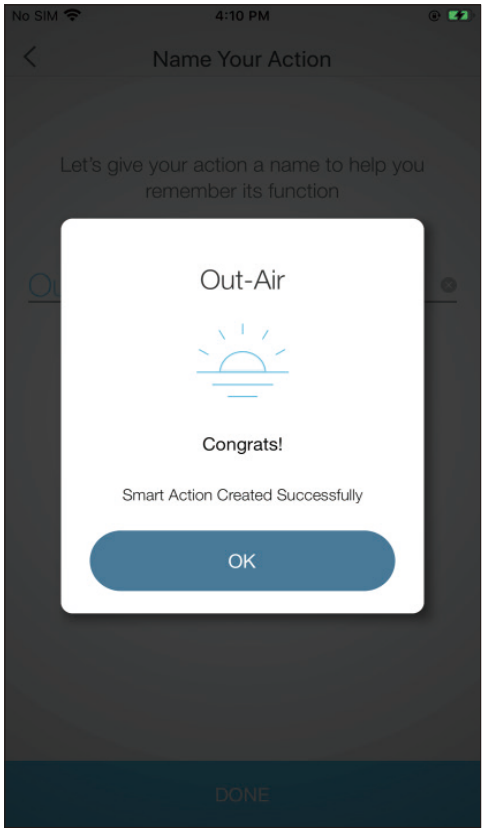




3. Name your action for easy identification.



4. The Smart Action is created successfully.

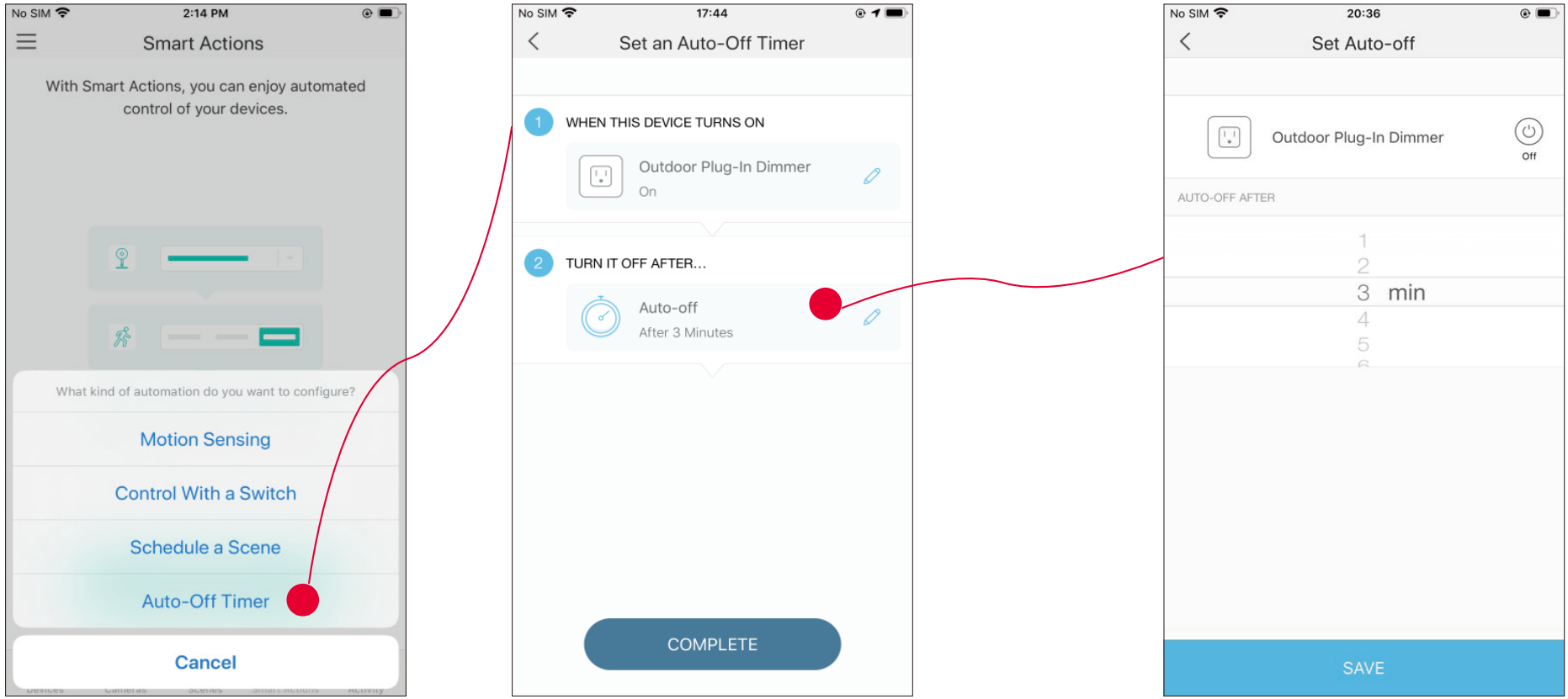


4. Configure Auto-Off Timer

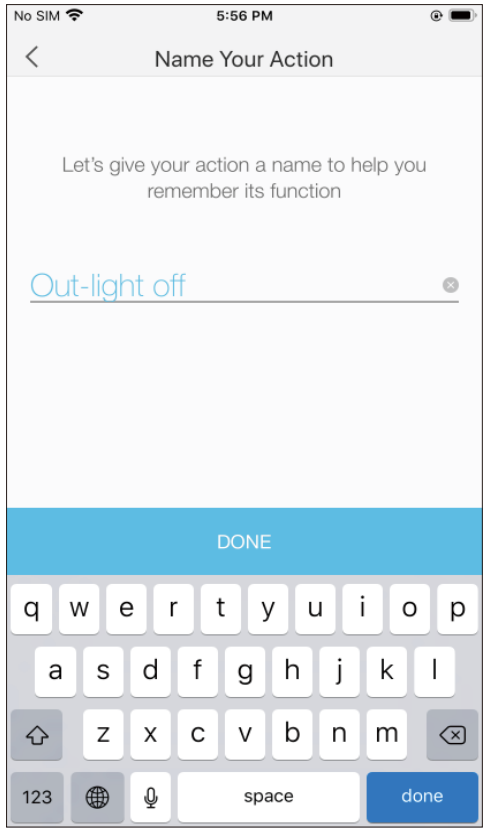
e.g.: I want to turn off my outdoor light after 3 minutes when it is turned on.

1. Tap Auto-Off Timer then select your plug-in dimmer.

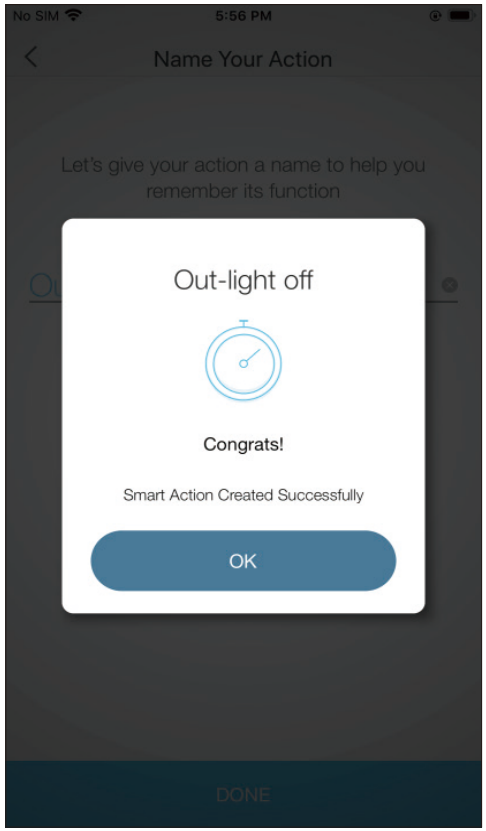
2. Set the time.



3. Name your action for easy identification.



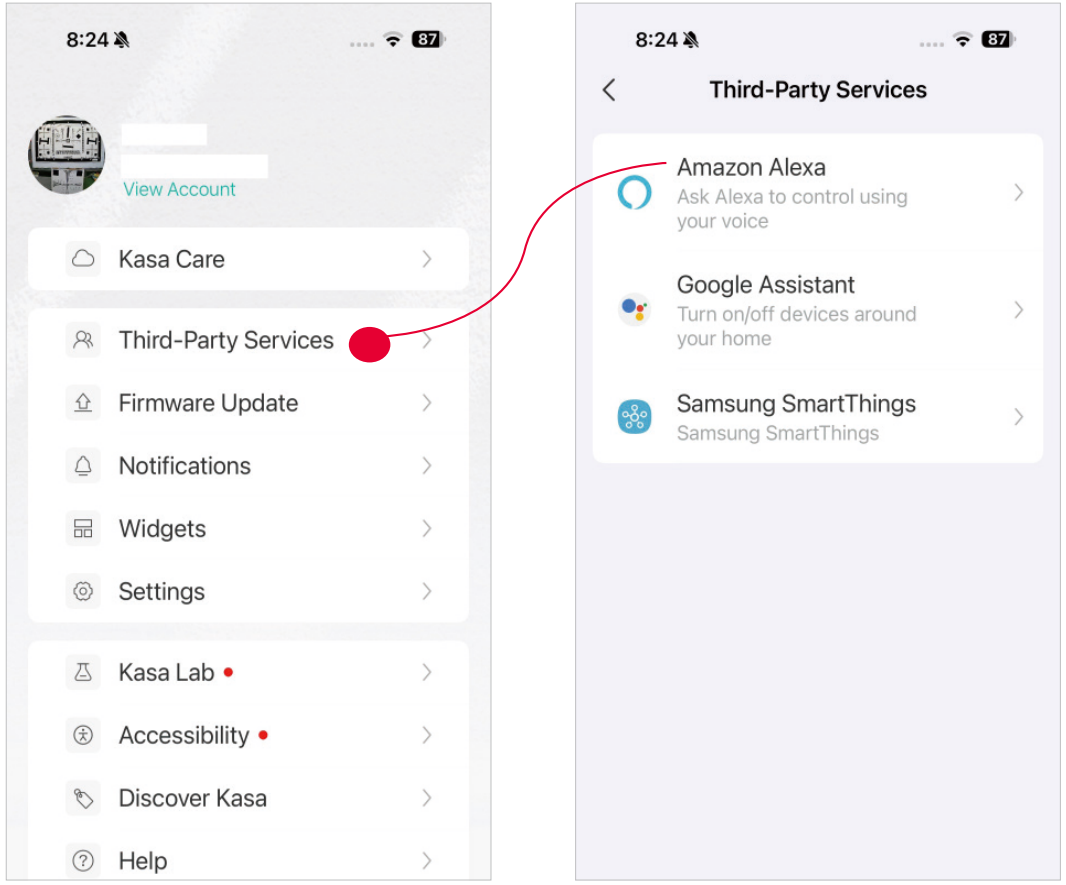
4. The Smart Action is created successfully.



Set Up Voice Assistants

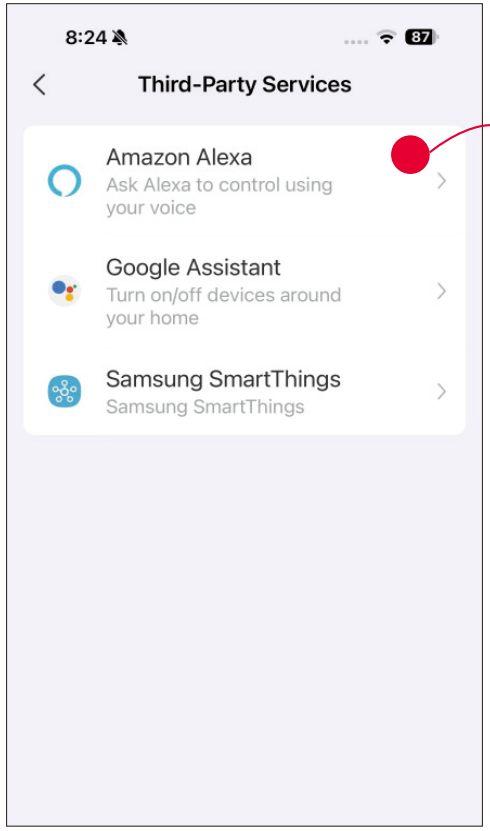
Use the Kasa Smart app to pair your Smart 3-Way Dimmer Kit with Amazon Alexa or Google Home Assistant, and enjoy a full hands-free experience. Kasa helps manage the rest of your smart home too, working with Samsung SmartThings to trigger changes when you arrive home or leave for the day.

Launch the **Kasa Smart** app. Go to the **Me** page and tap **Third-Party Services**. You can choose **Amazon Alexa / Google Assistant / Samsung SmartThings** for detailed instructions.

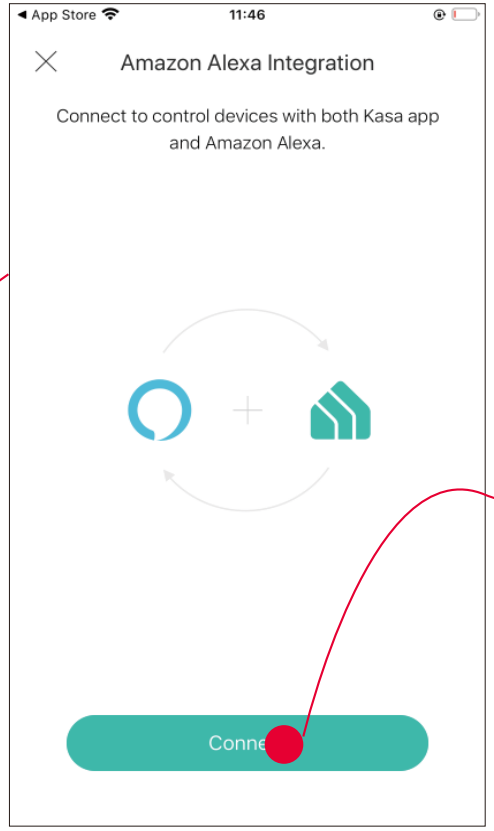


1. Set up Amazon Alexa

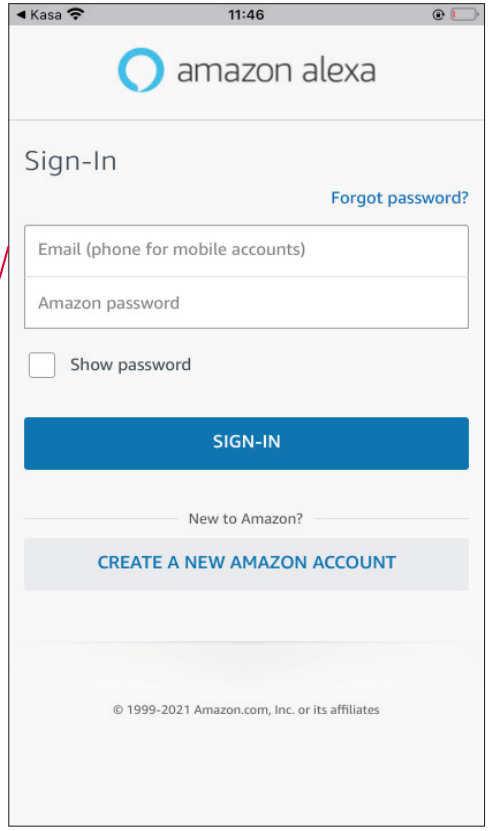
1. Tap Amazon Alexa.



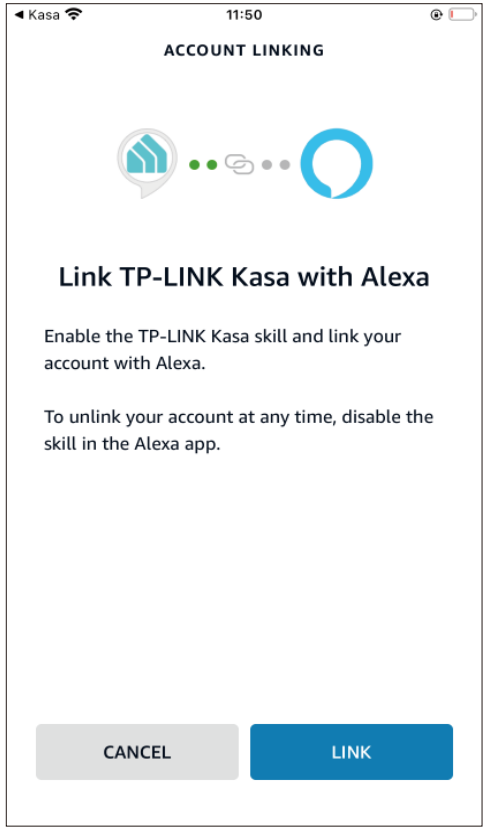
2. Tap Connect.



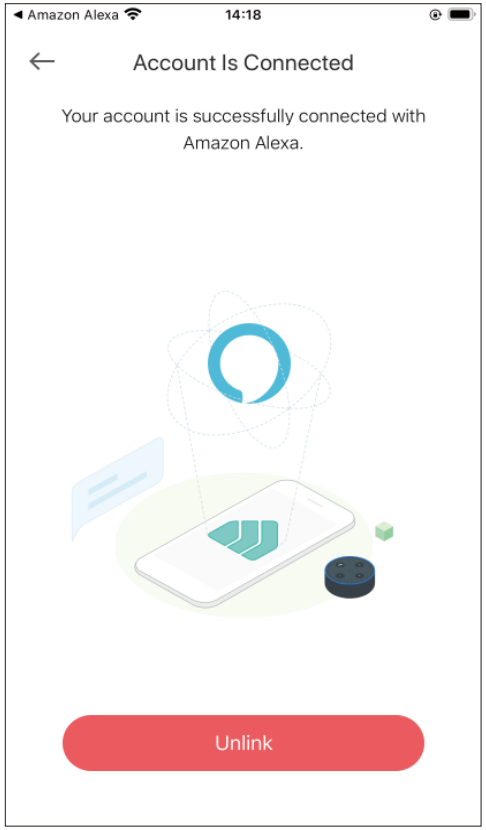
3. Sign in with your amazon account.



3. After sign-in, tap LINK.



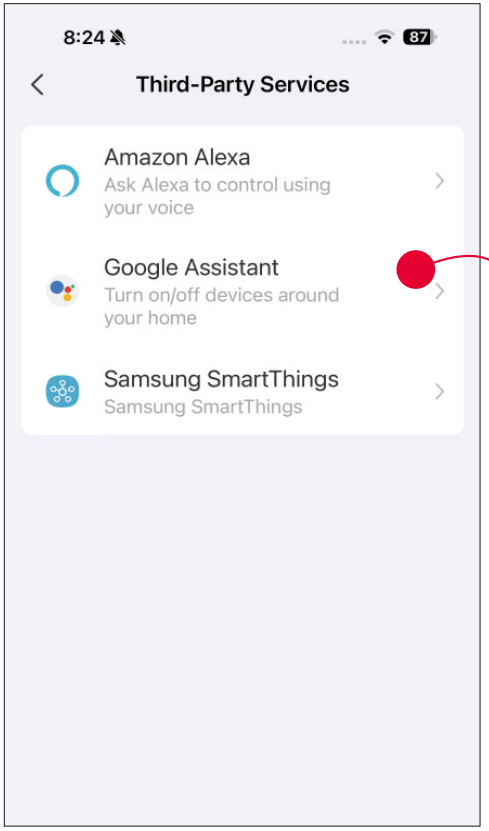
4. Your TP-Link ID has been successfully linked with your amazon account. You can use Alexa voice commands to control your 3-way dimmer switch.

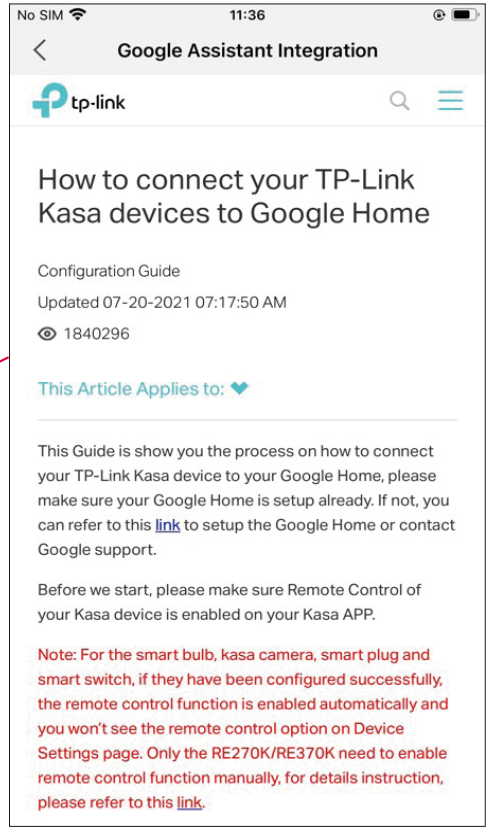


2. Set up Google Assistant

1. Tap Google Assistant.

2. Follow instructions to conenct your device to your Google Home.
Or find the FAQ at https://www.tp-link.com/en/support/faq/1534/.





Authentication

FCC Compliance Information Statement

Product Name: Kasa Smart Wi-Fi Outdoor Plug-in Dimmer

Model Number: KP405

Responsible party:

TP-Link USA Corporation

Address: 10 Mauchly, Irvine, CA 92618

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

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:

- 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: 2026-07-30

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)

NCC Notice

注意！

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 Kasa Smart Wi-Fi Outdoor Plug-in Dimmer				型號（型式）： Type designation (Type) KP405		
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.〝〇〞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：“〇” 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

- Do not attempt to disassemble, repair, or modify the device.
- Do not use the device where wireless devices are not allowed.
- Operating Temperature: -20℃~50℃ (-4°F~122°F)
- Operating Humidity: 10%~90%RH, Non-condensing
- For outdoor usage, use this product with ground fault circuit interrupter (GFCI) outlet.
- Risk of electric shock. Do not open. No user serviceable parts inside.
- Refer servicing to qualified service personnel.
- Keep the device away from fire or hot environments. DO NOT immerse in water or any other liquid.
- For passthrough devices, plug the power strips into the integrated electrical sockets of the devices, but devices of the same or another type not be stacked in normal use.

CAUTION
Electronic switch integrated in this product is only intended for functional purposes.
Unplug the appliance before servicing.

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.

WARNING

- Timer could turn-on unexpectedly without the user being present. To Reduce the Hazardous Condition – Unplug the appliance that is plugged into the receptacle(s) controlled by the timer before servicing.
- Risk of Electric Shock. Do not plug into another relocatable power tap or an extension cord.
- When plugged into grounded 3-prong outlet , always ensure that the housing is facing downward and is at least 2 feet off the ground . Use the plug's mounting tag to hang from a screw to ensure correct orientation.
- DO NOT expose to heavy rain or immerse in water or any other liquid.
- DO NOT remove ground pin (middle pin) or use with 3-to 2-prong adapter.
- DO NOT use with devices that should not be operated unattended , such as power tools.
- DO NOT use in precision timing applications where inaccurate timing could be dangerous(sunlamps , Saunas , etc).
- Keep children away from smart plug and outlet.
- No Serviceable parts inside. DO NOT open or tamper with unit.
- Do not discard the stopper, the plug should be covered when the socket is not in use.
- Remove smart plug from outlet before cleaning.
- DO NOT clean with liquid.
- DO NOT exceed the recommended electrical ratings.
- Refer servicing to qualified service personnel.

Explanation of the symbols on the product label

Symbol	Explanation
~	AC voltage
	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.