LEDVANCE LINK

COMMISSIONING GUIDE

DESIGN SCRIPT

Please prepare a smart lighting design script for each lighting project which should include:

- Floor plan and the functions of each zone;

- Zones, it is suggested to divide site into zones according to their lighting functions, and to make sure each zone contain no more than 100 lights and with no objects that may block the wireless signal transmission, such as concrete walls or large metal objects, and the size does not outreach the limit of wireless coverage (better with radius less than 100 Ft and zone less than 10,000 Sq. Ft)

PARAMETER FOR LUMINAIRE WITH SENSOR

LEDVANCE

The lights with embedded sensors can detect human movements and ambient light level and automatically turn on, turn off and dim the lights to provide comfortable, healthy and energy saving lights.

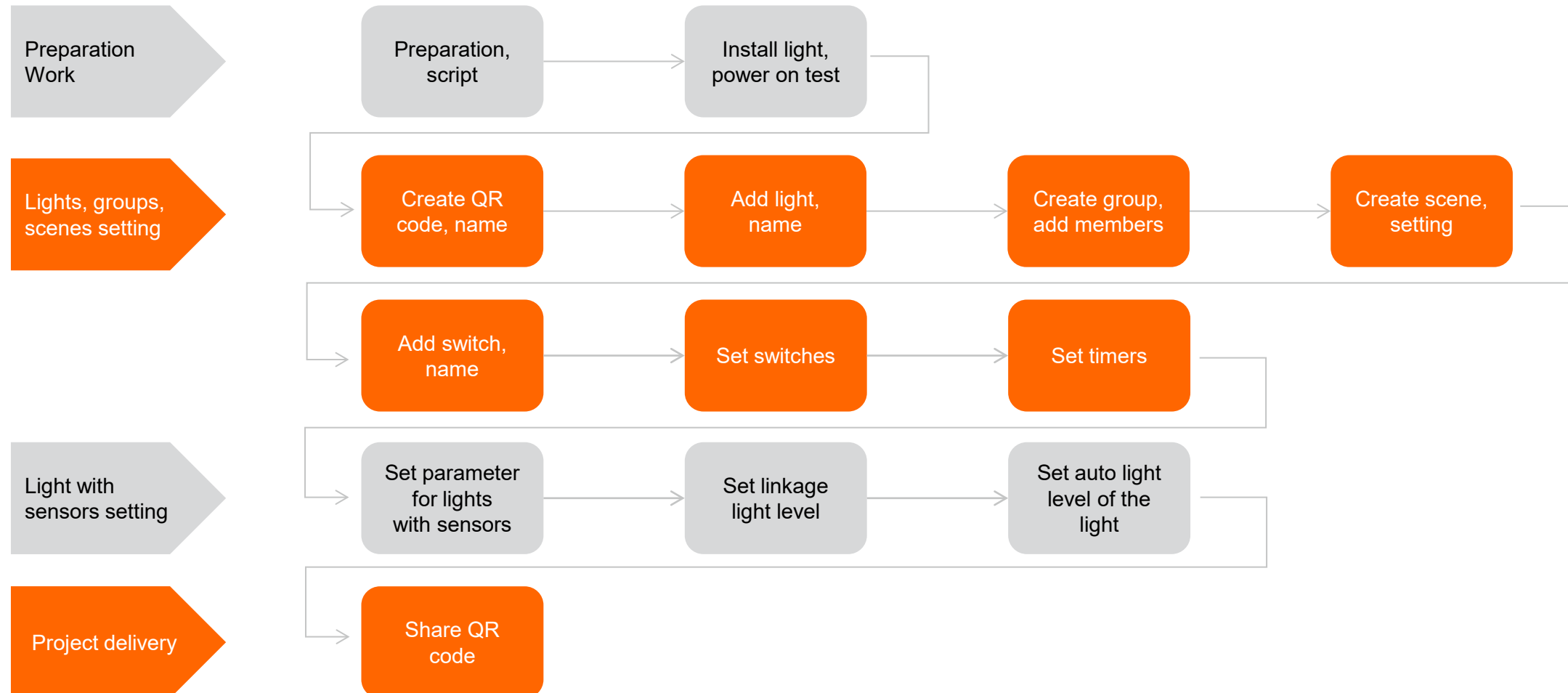**There are some parameters for lights with embedded sensors, including:**

- Timer 1: Lights will maintain working level lighting during the "Timer 1" period each time they detect a human movement;

- Timer 2: Lights will go to Timer 2 setting when they do not detect any movement during the Timer 1 period;

- Linkage light level: if a light does not detect movement (both timer 1 and timer 2 timed out) but other lights in the same group detects movement, and the linkage is turned on in this group, then this light will dim to linkage light level; Linkage light level is calculated as percentage of the working light level;

- It is suggested to use "Auto calibrate" to set the working light level which has a self-learning process to get rid of the ambient light interference to get the accurate result.

PARAMETER FOR LUMINAIRE WITH SENSOR

LEDVANCE

Suggested parameters settings for different zones						
Zone	Timer 1	Timer 2	Min Level	Linkage	Scenes	Switches
Open office area	25	1	50	50%	No scene	You may associate the "ALL OFF" scene to the button on the switch so to quickly turn off all lights when leaving office.
Meeting room	25	1	80	80%	Configure PPT/Lecture scenes.	Associate PPT/Lecture scenes to SCENE button on the panel.
Classroom	30-40	5	80	80%	Configure PPT/Lecture scenes.	Associate PPT/Lecture scenes to SCENE button on the switch.
Storage room	10	1	80	80%	No scene	No switch
Corridor	10	1	50	50%	No scene	No switch

RECOMMEND COMMISSION PROCEDURE

LEDVANCE

Preparation Work	

Preparation, script	→	Install light, power on test

Lights, groups, scenes setting	Create QR code, name	→	Add light, name	→	Create group, add members	→	Create scene, setting

Add switch, name	→	Set switches	→	Set timers

Light with sensors setting	Set parameter for lights with sensors	→	Set linkage light level	→	Set auto light level of the light

Project delivery	Share QR code

DOWNLOAD THE APP

Please scan the QR code according to your phone type to download APP.

* Support most Android smart phones. Some Android phone models may not support due to the phone's hardware or firmware issues.

* APP will not collect user's private data.

CREATE AND MANAGE ZONES, GROUPS AND SCENES
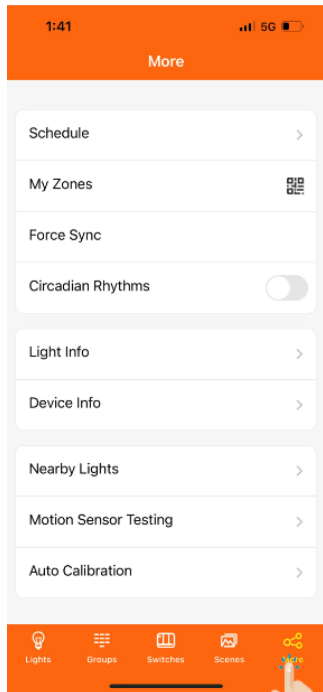
Start LEDVANCE Link APP and click **"More"**.
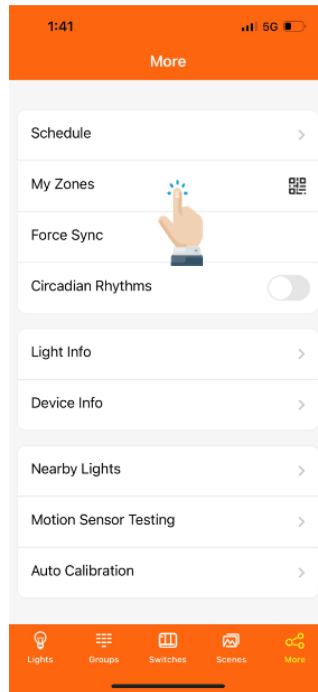
Click **"My zones"**.
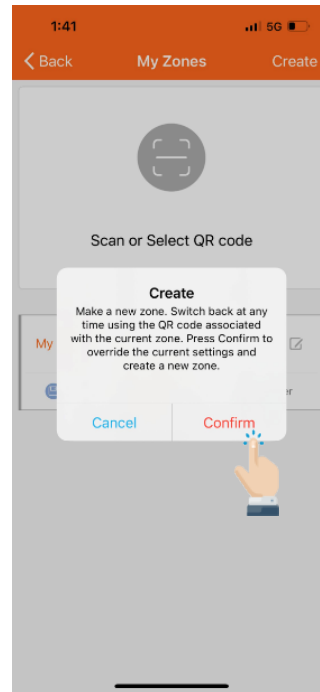
Click **"Create"** on top-right and then click **"Confirm"**.
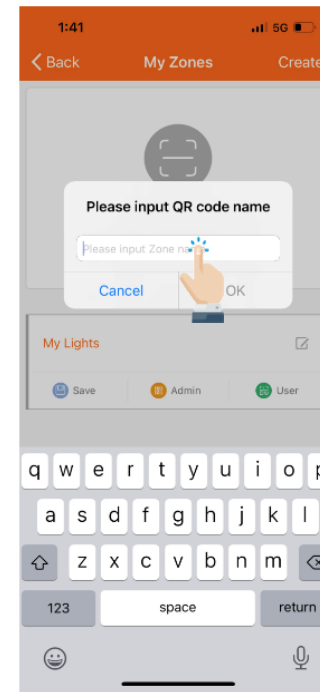
Input the name of the QR code then click **"OK"**.
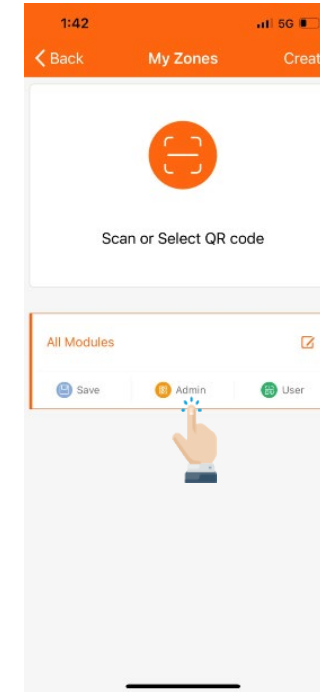
Find all zones in the list and click to switch between them and also change the name by clicking the button.

A QR code represents a zone and the lights, switches and other devices in this zone.

It is suggested to create QR codes for all zones, all groups, and all scenes and their names to reduce work on site.

ADD LIGHTS
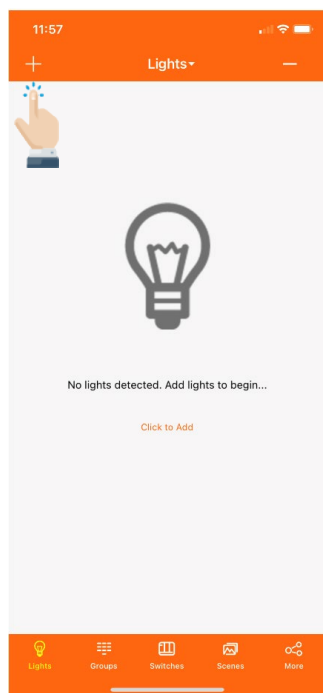
Press the **"+"** on the top left corner in "Lights" page of the APP.
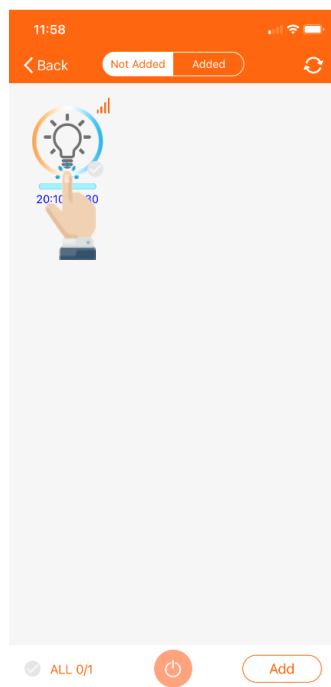
APP will scan and list all the nearby lights that can be added to the zone. To locate any **light** you can turn on/off by pressing the icon as above.
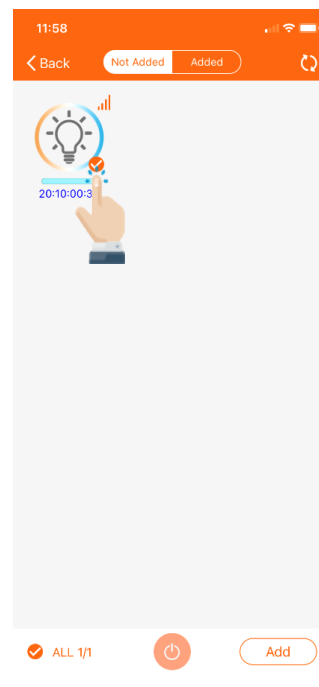
Click the **checkbox** on the bottom right corner of the light to add/remove this light.
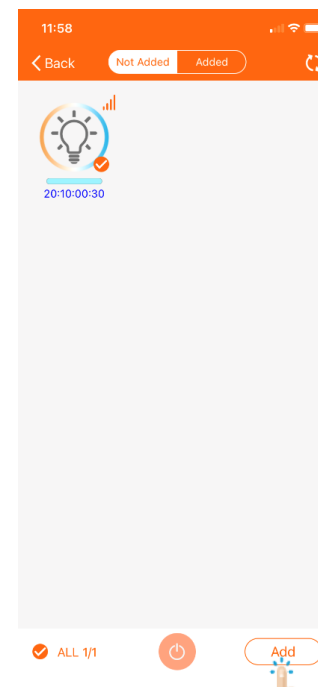
Click the **"Add"** button to add all selected lights to the zone.

Click the **"Add"** button to add lights. Light will blink to indicate a successful add operation.

ADD LIGHTS
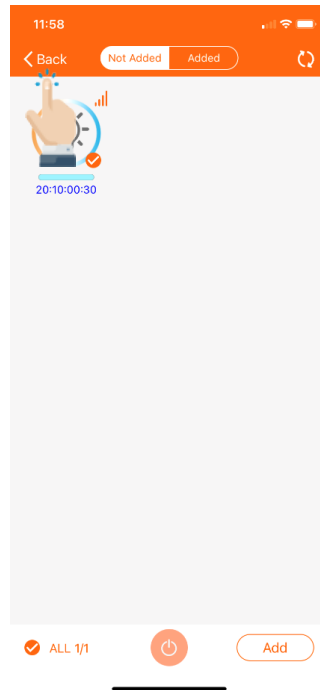
Please click **"Back"** button to return to "Lights" page when done.
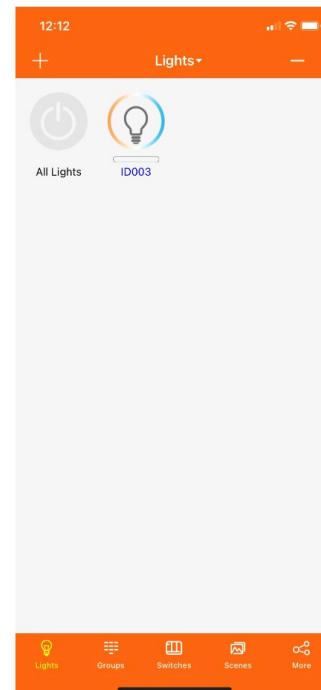
You may see the newly added lights in "Lights" page.

It's suggested to add lights zone by zone if there are many lights to be added.

Do not power on more than 100 lights at a time.

And shut off the power of the lights that are not in the current zone.

This will help prevent wireless communication jam due to too many lights sending signals.

SET NAMES
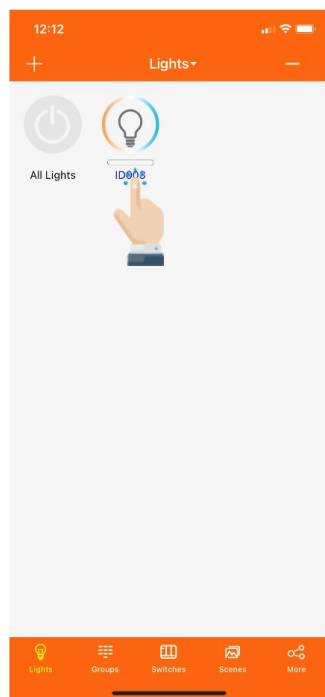
Click a light's **icon** on "Lights" page to quickly turn on/off.
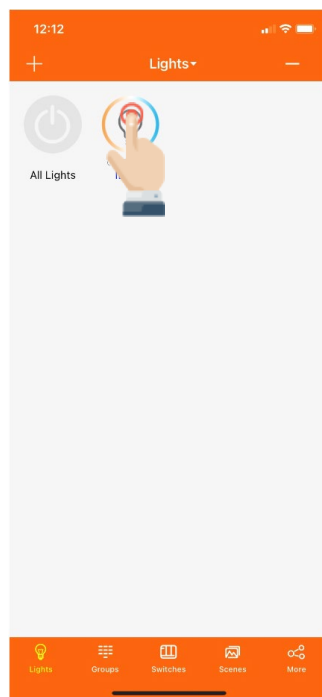
Long press a light will bring out the dimming and managing page of this light.
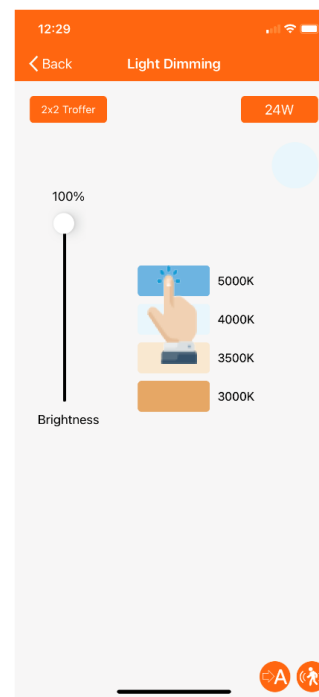
Click the **light's name** in the blue box.
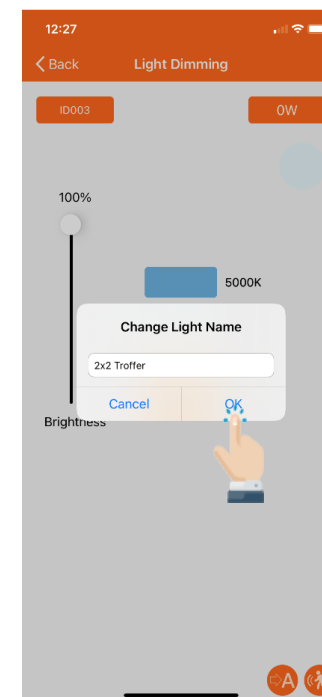
Input the light's name in the box and click **"OK"** to save it.

The light's name has been changed successfully.

QUICK DIMMING
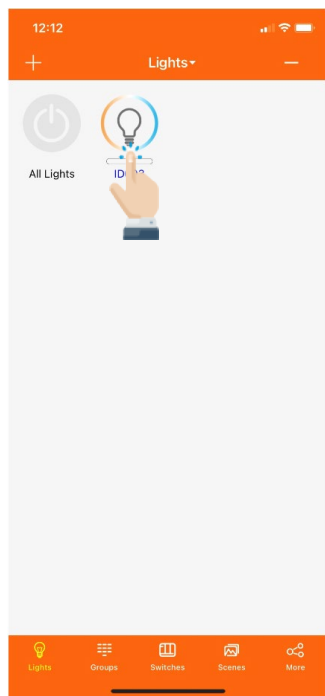
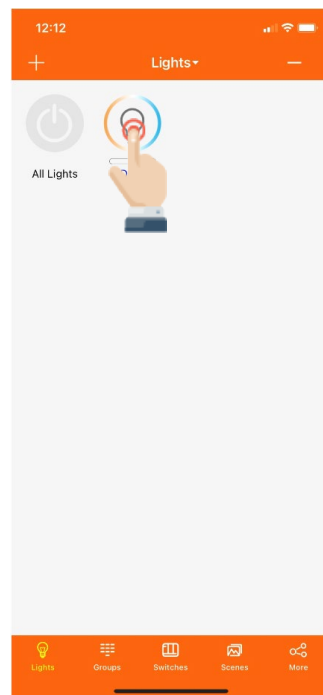

Click a **light's icon** on "Lights" page to turn on/off .
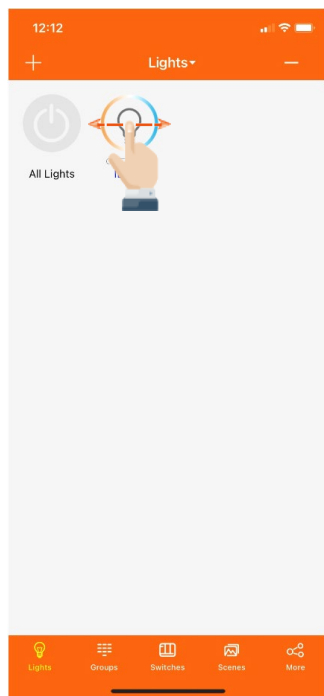
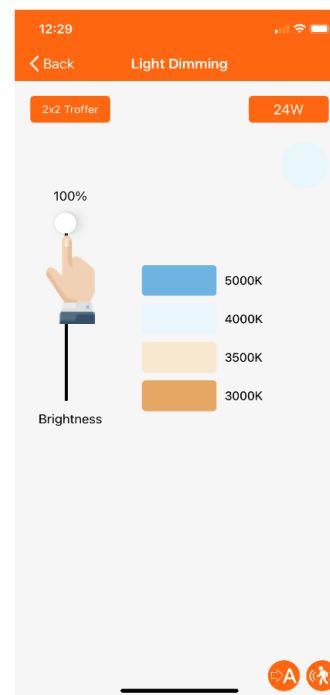**Left right slide** on a light's icon to quickly dim up and down.
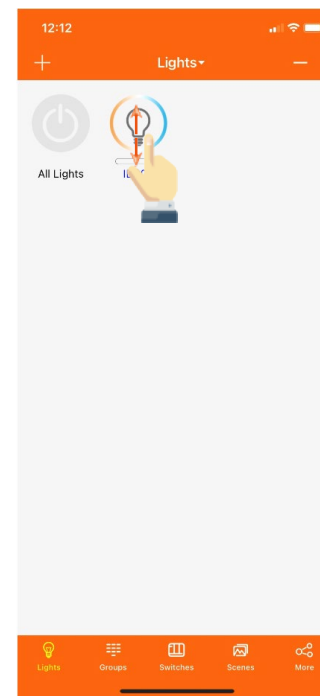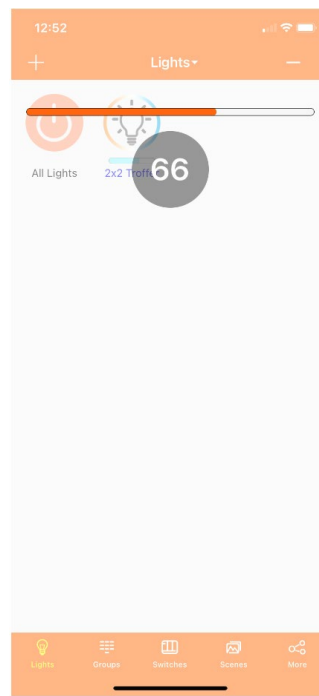
Slide up and down on a tunable white light's icon to quickly change its color temperature.
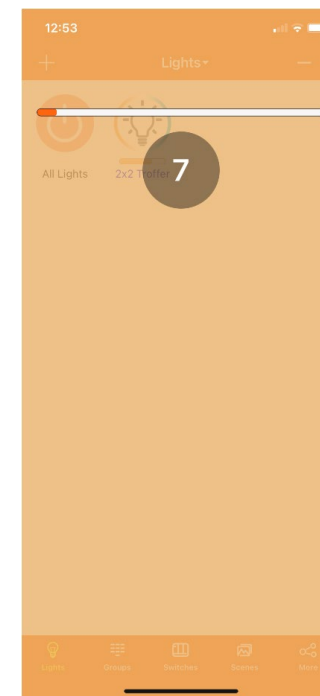
DIMMING AND TUNING

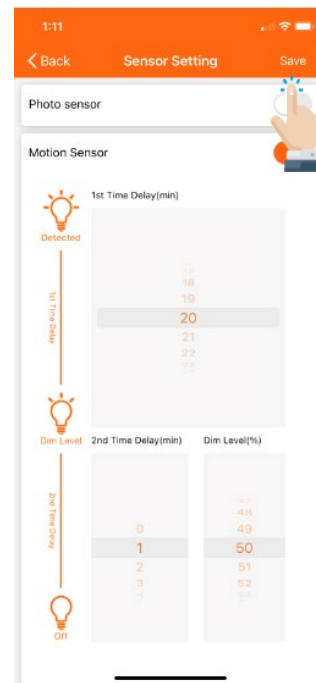**Long press** a light will bring out the dimming and managing page of this light.

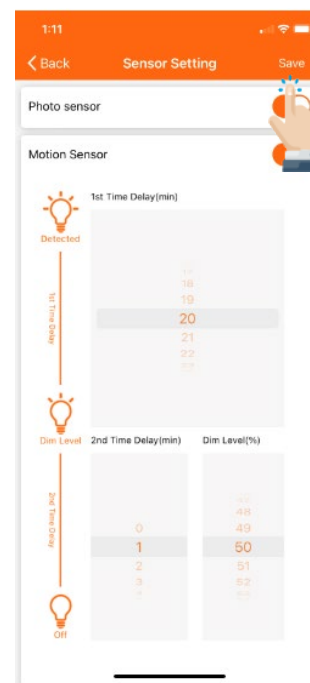Please **click and slide the controls** to dim the lights.

SENSOR SETTING
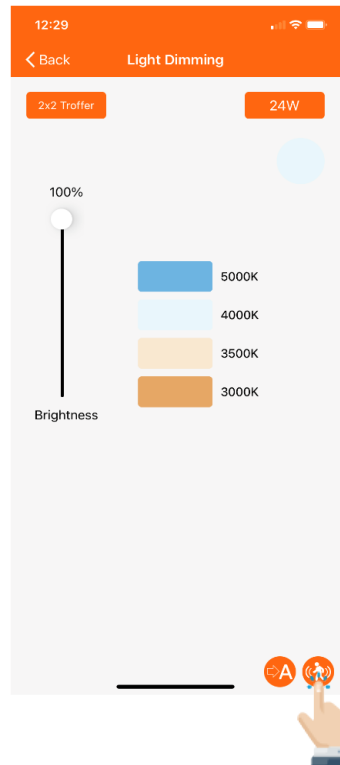
There is a **sensor setting icon** on the bottom right corner of the dimming page, click this icon to set the sensor's parameters.

In this page you can enable/disable sensors and also change the parameters of the sensors. Please click the **"Save"** button on the top right corner to save the settings.

There are two working modes of motion sensors, their behaviors in auto mode are defined as follows;

- Occupancy sensor, auto turns on when motion detected, and auto turns off when $1^{st}/2^{nd}$ timer is timed out.

- Vacancy sensor, manually turns on when people enter the area and auto turns off when $1^{st}/2^{nd}$ timer is timed out.

1st and 2nd time delay may set to "infinite" to prevent lights from turning off to meet special requirement for certain applications.
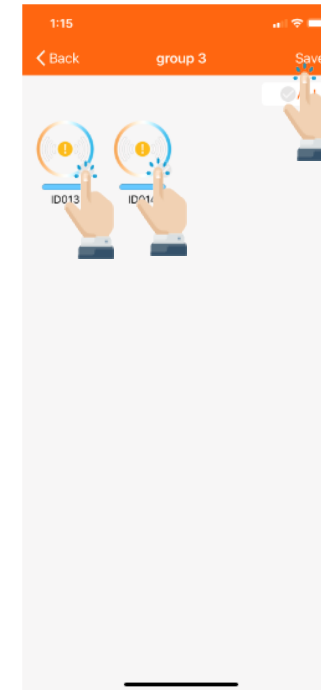
Please refer to the product spec for more details.

CREATE GROUPS
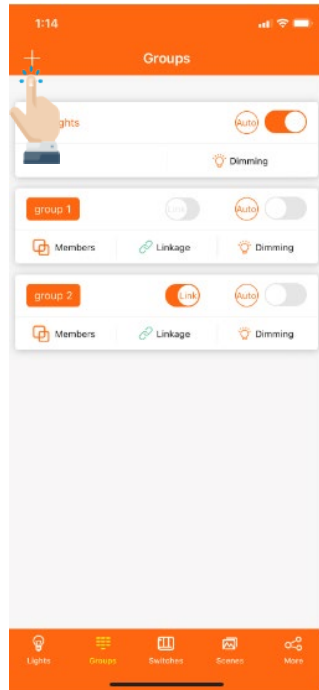
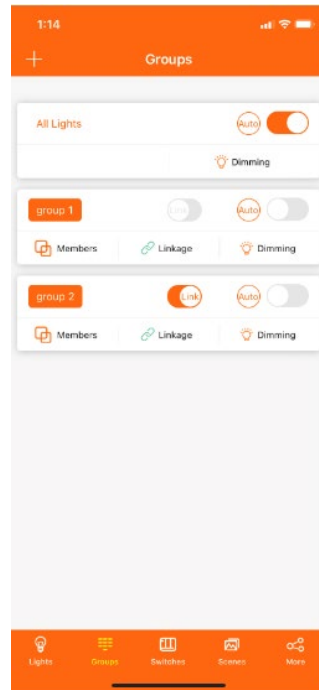Click the **"+"** on the upper left corner of the "Groups" page to create a new group.
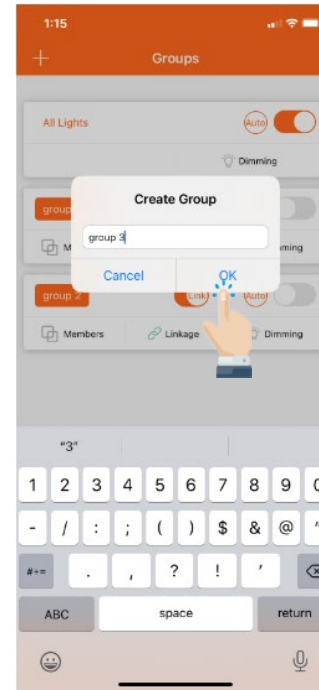
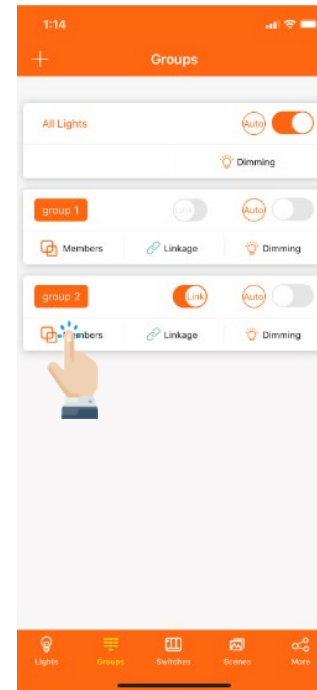Input the group name in the dialog and click **"OK".**

Click the **checkbox** on the bottom right corner of a light's icon to select/de-select the light. Click the **"Save"** button on the top right corner after selecting all appropriate members to save the group.
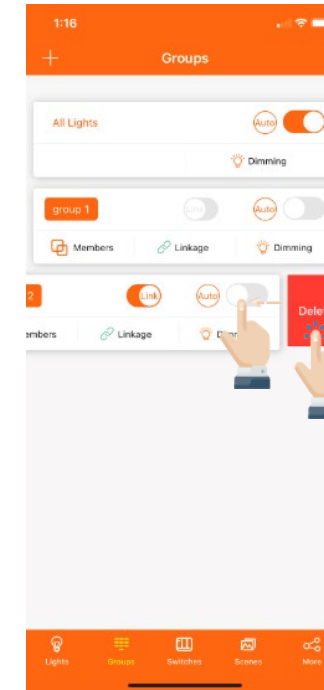
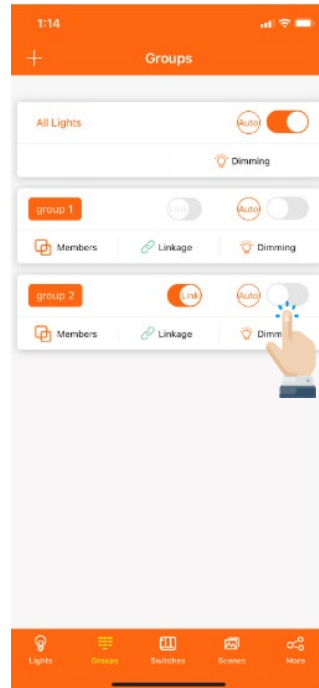# MANAGING A GROUP

You may see all the groups in the "Groups" page.

Click the **"Member"** button of a group to manage the member lights of this group.
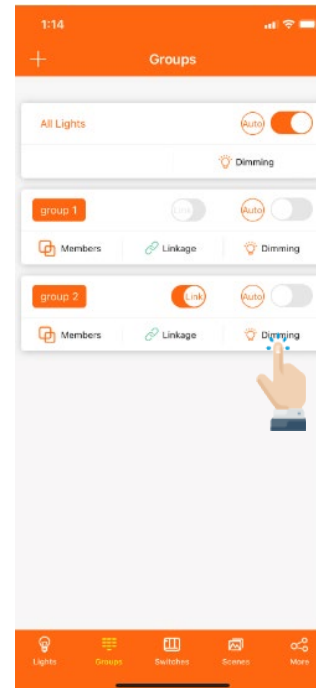
Sliding left on a group will bring out a **"Delete"** button on the right, clicking this button will delete the group.

GROUP CONTROL

Click the **"Toggle"** button on the upper right corner of a group to quick turn on/off the lights in this group on the "Groups" page.
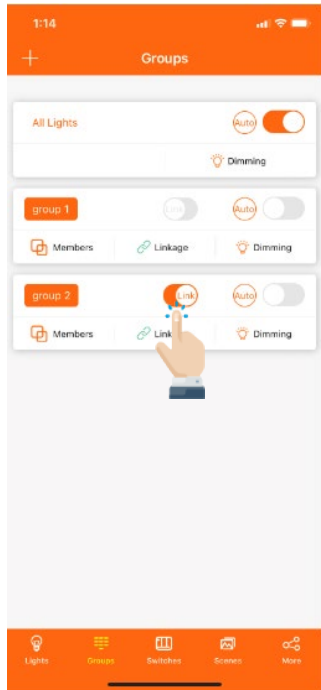
Click the **"Dimming"** button on the bottom right corner of a group to dimming the lights in this group.
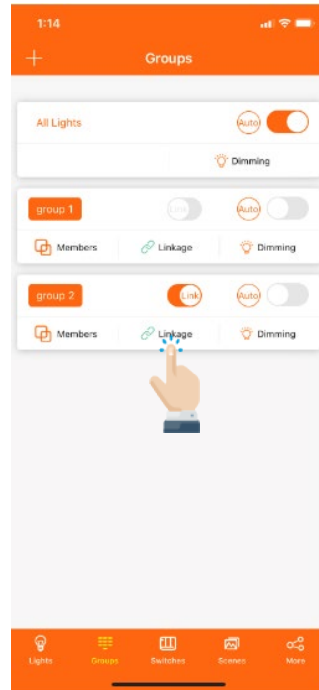
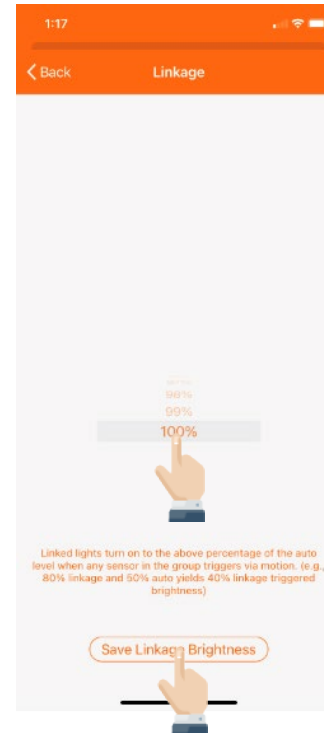Use the wheel to control the CCT and slider to control brightness.

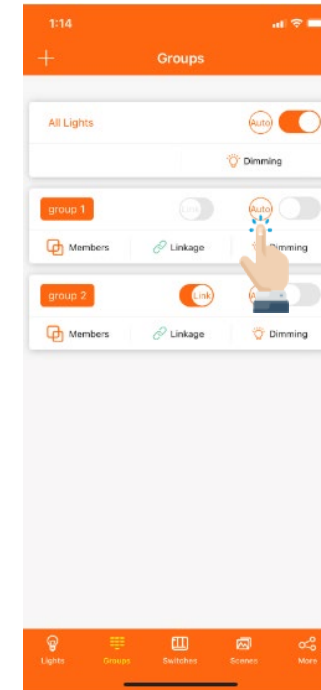# GROUP MEMBER LINKAGE SETTING, SETTING AND AUTO POINT

Click the **"Link"** toggle button for a group to turn on/off linkage function for this group.
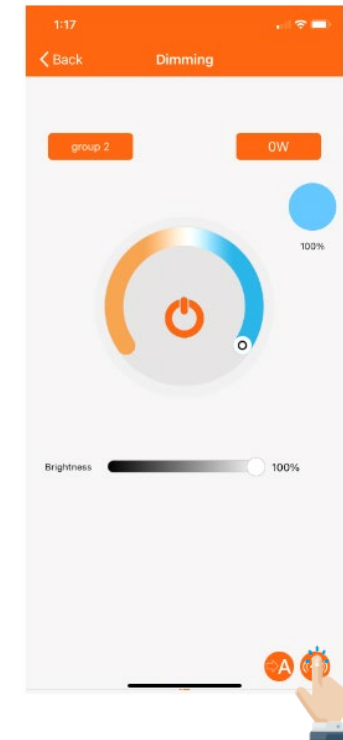

Click the **"Linkage"** button of a group to set the linkage brightness level of this group.

Set the linkage brightness level on the dimming control. Click **"Save Linkage Brightness"** button to save the setting.
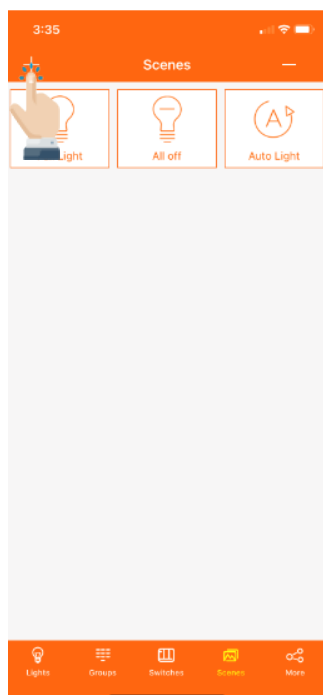

Click the **"Auto"** button in the middle of the group to set all the lights in this group to Auto mode.
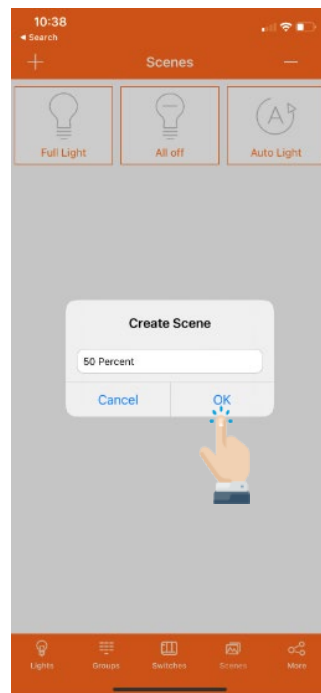

If there are lights with sensors in this group, then you may set the sensors parameter by clicking the **sensor icon** on the bottom right corner.
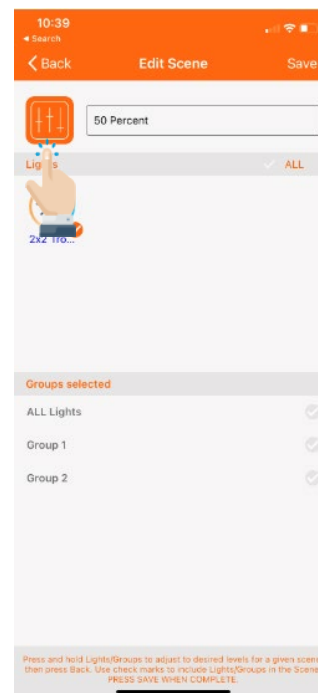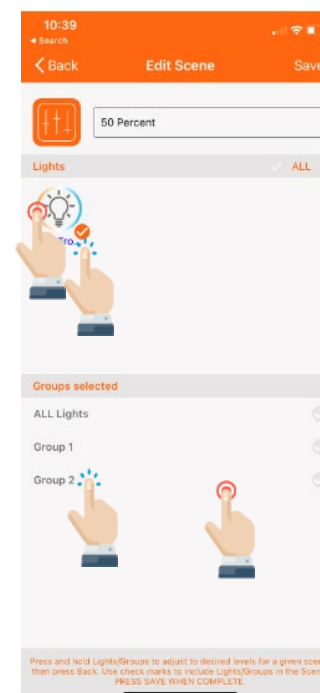
CREATE A SCENE

Click the **"+"** button on the upper left corner of the "Scenes" page to create a new scene.
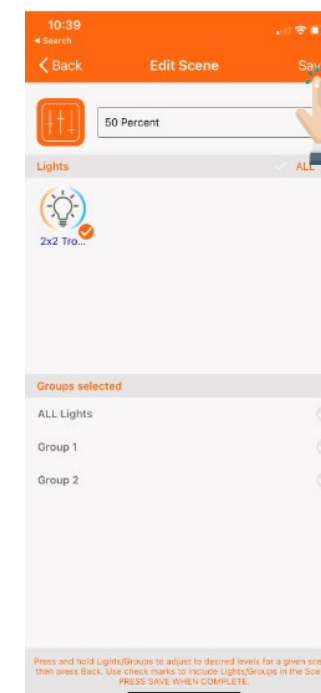

Input the scene's name in the dialog and click **"OK".**

Click the icon on the **upper left corner** to select an appropriate icon for this scene in the popup icon selection dialog.
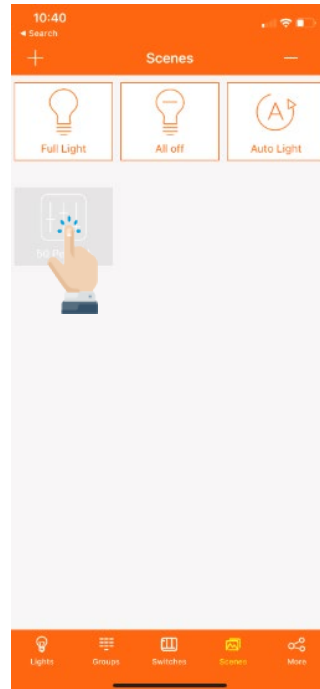

You may select the **lights or group** for this scene in the lights/group's selection area on the bottom. Long press a light or a group may dim this light or group.
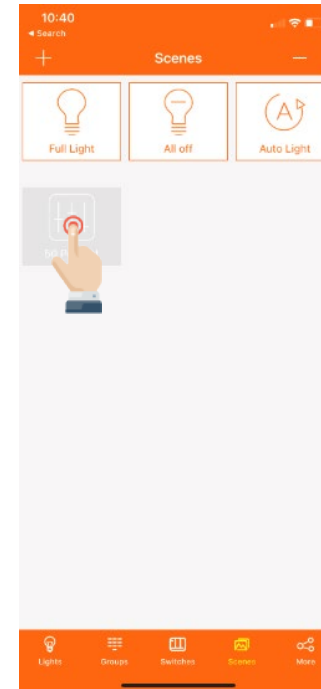

Click the **"Save"** button on the top right corner after all settings are done to save the scene.

EDIT A SCENE

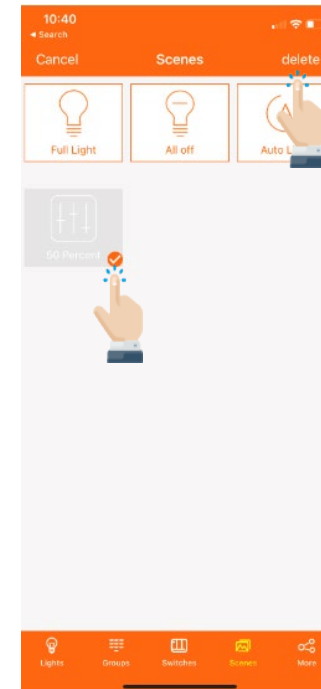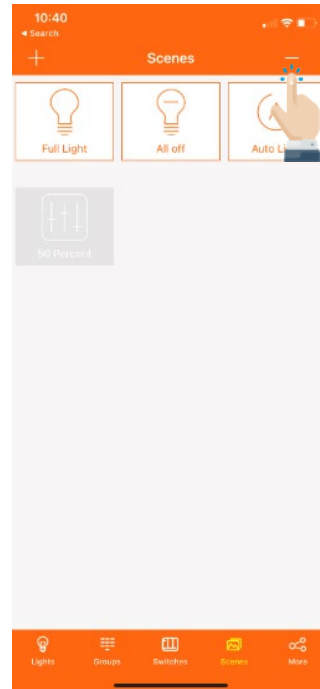You can recall any scene just by clicking the icon.

Long press a scene in the **"Scenes"** page may edit this scene.

DELETE A SCENE

Click the **"-"** button on the upper right corner of the "Scenes" page to select and **delete scenes.**

Click the **checkbox** on the bottom right corner of a scene's icon to select/de-select this scene, then click the **"Delete"** button on the upper right corner to delete all selected scenes.

HOLD TIME FOR A SCENE

A scene will be hold for a certain time according to whether motion sensors are enabled and T1/T2 settings:

- No motion sensors, or motion sensors are disabled, then the scene will be held until the next operation, either manually or by schedules.
- Motion sensors and linkage are enabled, then the scene will be held for T1+T2 period, and the timer will be restarted if motion is detected.
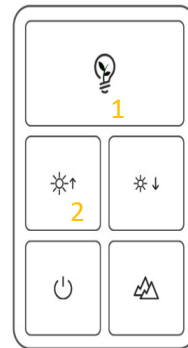
ADD A SWITCH

Click the **"+"** on the upper left corner of the "Switches" page to search and add switches.
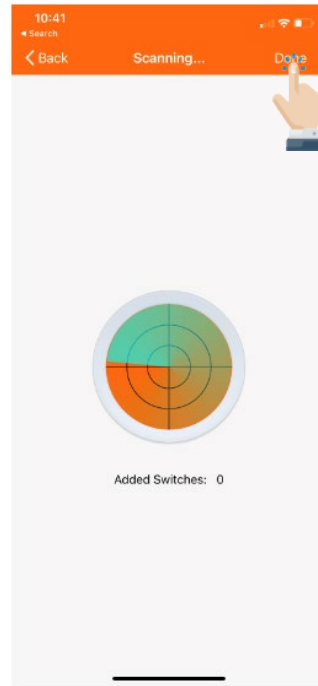

It shows the newly added switches number in the searching page. Click **"Done"** button to return to "Switches" page after successfully adding the switches.

How to enter the pairing mode: Please follow the instructions to set the switches to "Commissioning" mode after the APP is starting to search and add switches so that you can add them into the zone. The switches will automatically exit the "commissioning" mode after 30 seconds or pressing a button.

Add a switch:
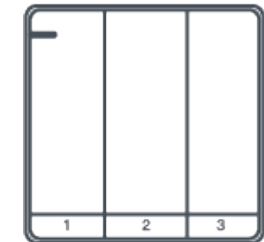Press buttons 1 and 2 together and hold for 2 seconds and then release.

Remove a paired switch: Press buttons 1 and 2 together and hold for 10 seconds and then release.
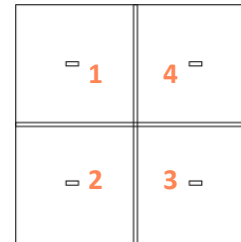

Press the buttons in sequence of 123124

Press the button 1 and 3 together and hold for 2 seconds and then release.


Press button 3 on a sequence of "3-short and 2-long press", short press means press the button and release immediately while long press means press and hold the button for 2 seconds then release.

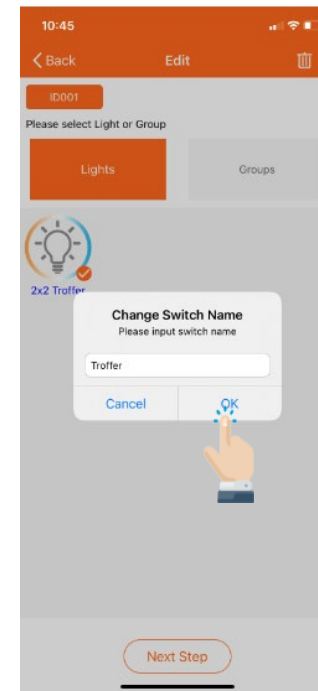*for some early models the sequence is "133231" short press.

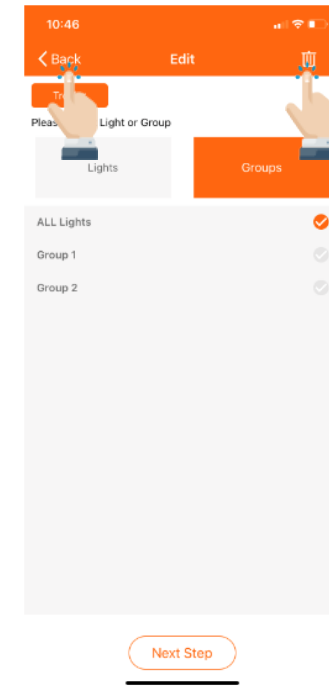# CHANGE THE SWITCH'S NAME, DELETE SWITCH
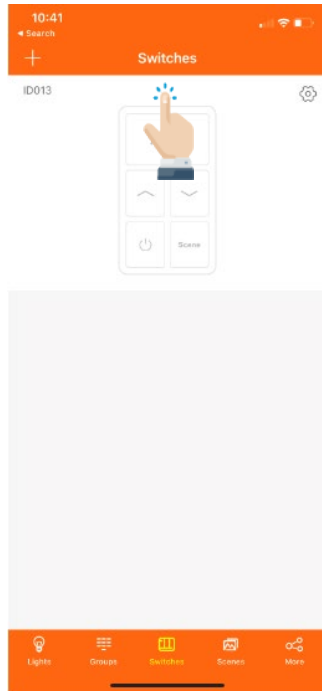
You can see all switches in the "Switches" page. Click the **setting button** on the upper right corner of a switch to set it.
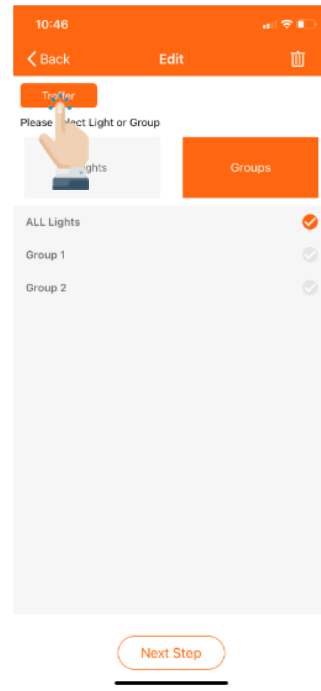
Click the **switch's name** on the upper left corner in the setting page to change the switch's name.
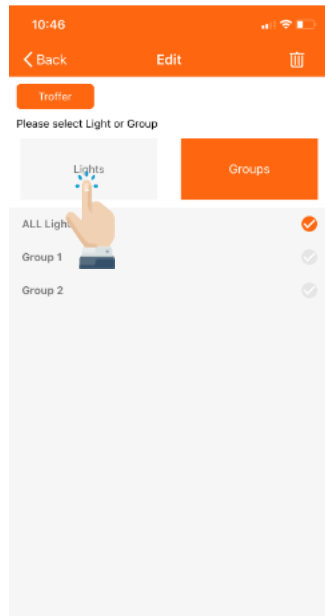

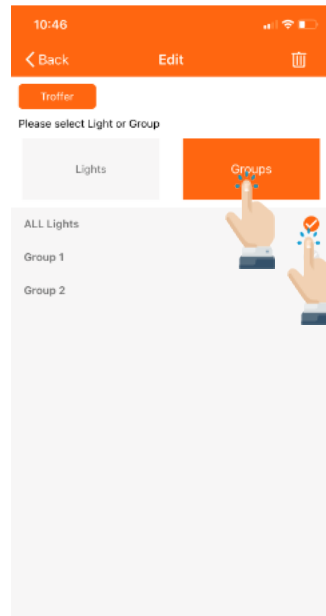Input the new name of the switch then click **"OK"** to save.

Click the **"Delete"** button on the upper left corner of the setting page to delete this switch from the group. Click the **"Back"** button on the upper left corner to return to "Switches" page.
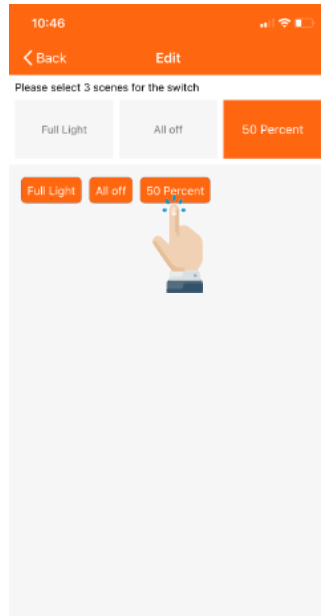
SET A SWITCH

Click **"Lights"** to select a light to be associated to the switch.

Click **"Groups"** to select a group to be associated to the switch.

Click the **scenes** to select/de-select scenes to be associated to the switch.

Button functions vary for different types of switches. Some buttons have pre-defined functions and can not be associated to scenes. Please set the functions of the switches according to their types.

- **Associate scenes:** You can program up to 3 scenes on the switch.

- **Associate light:** associate a button to a light then you may turn on/off the light by pressing this button.

- **Associate group:** associate a button to a group then you may turn on/off the group by pressing this button.
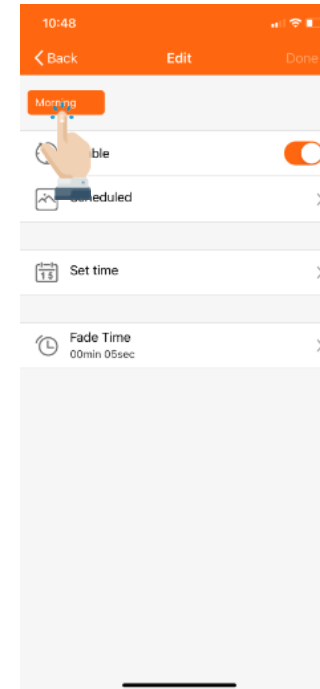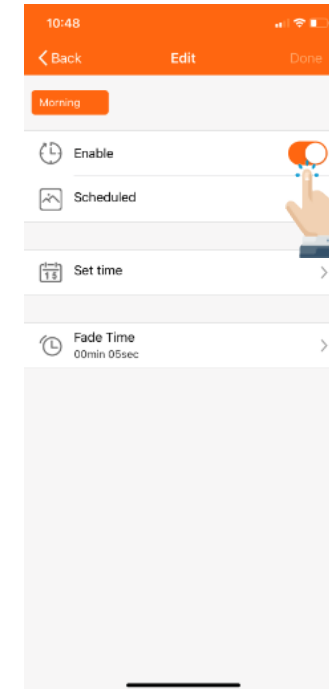
CREATE A SCHEDULE
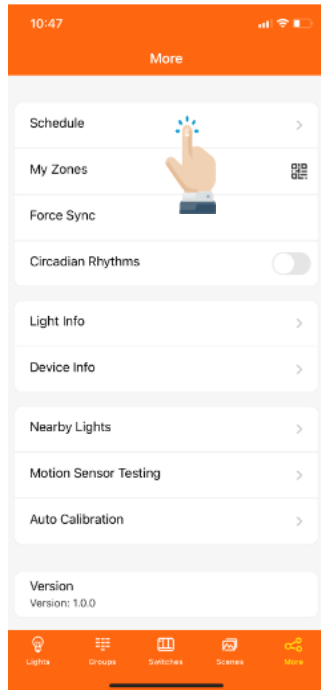
Click **"Schedule"** on the "More" page.
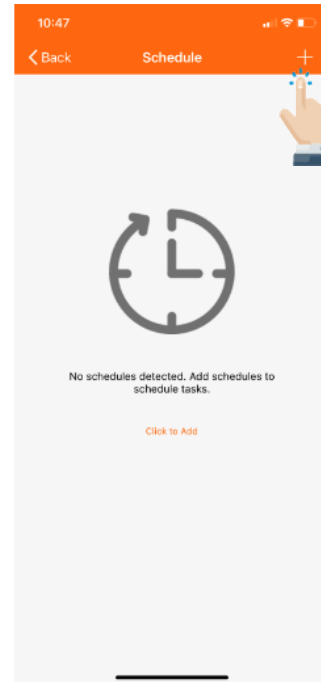
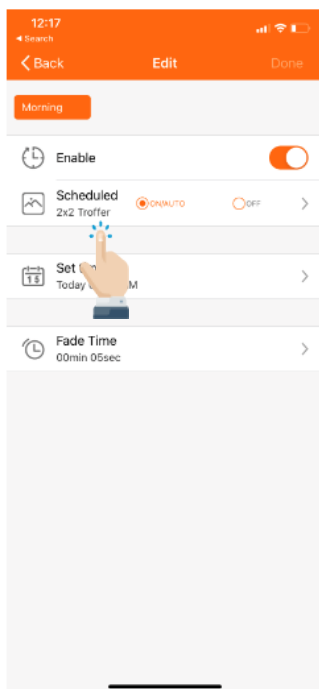Click the **"+"** on the upper right corner of the schedule list page to add a new schedule.

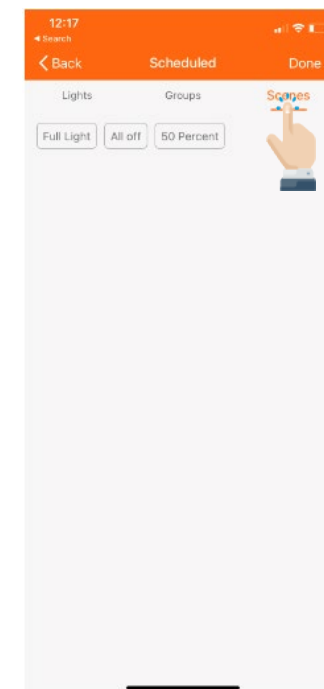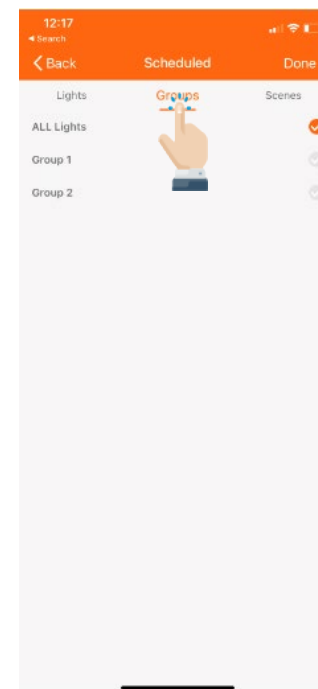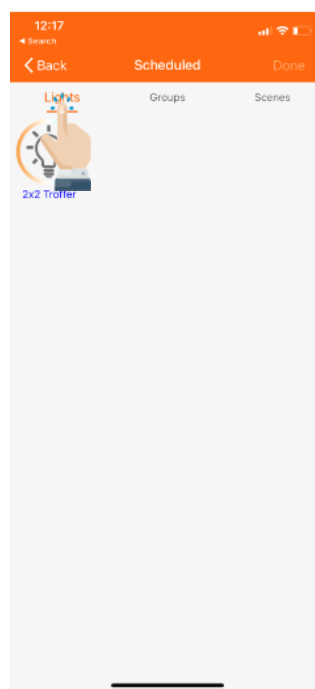Click **the name** on the upper left corner to change the schedule name.

Click the **toggle** button to enable/disable the schedule.
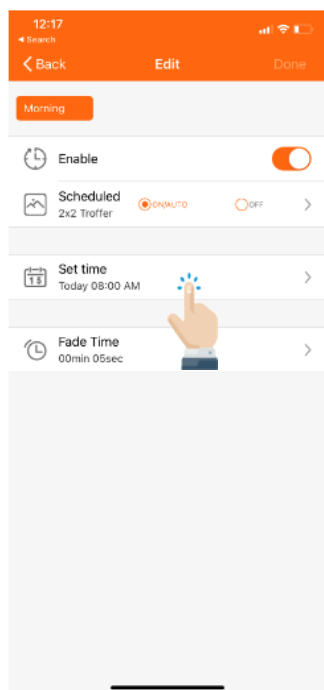
SET A SCHEDULE

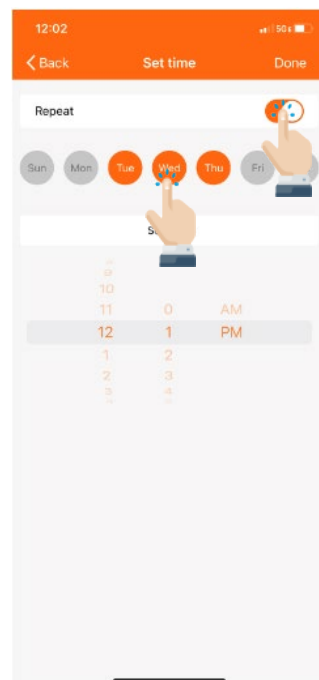Click **"Scheduled"** to set the schedule action.

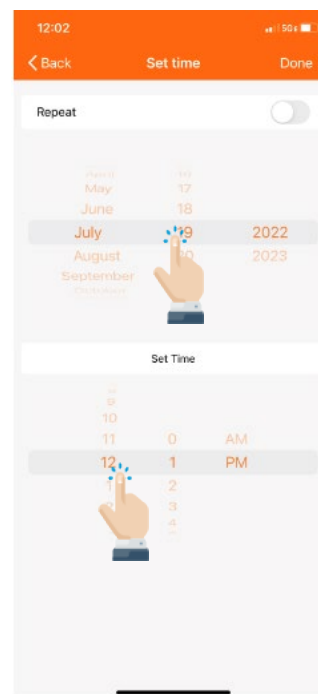You may choose to associate to a light, group or a scene.

SET A SCHEDULE

Click **"Set time"** to set the time of the schedule.

You may choose to **repeat** the schedule and the date and time.

You may choose to **run schedule** just once at a specified time and date.
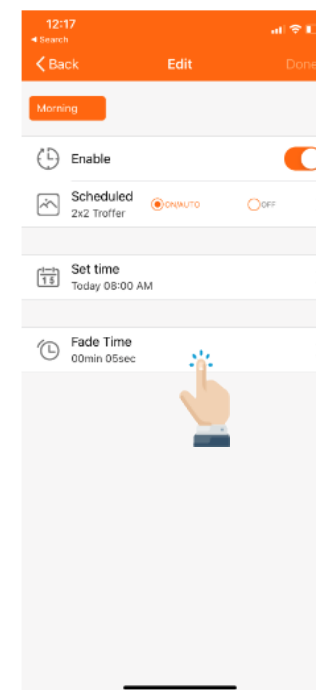
Click **"Fade Time"** to set the action fading time for the schedule action.

DELETE, ENABLE, DISABLE SCHEDULE

Swipe left on a schedule on the schedule list page and then click "delete" to delete this schedule.

You may click the **enable/ disable** button on the right of the schedule to "enable" or "disable" the schedule on schedule list page.

AUTO POINT OF THE LUMINAIRE
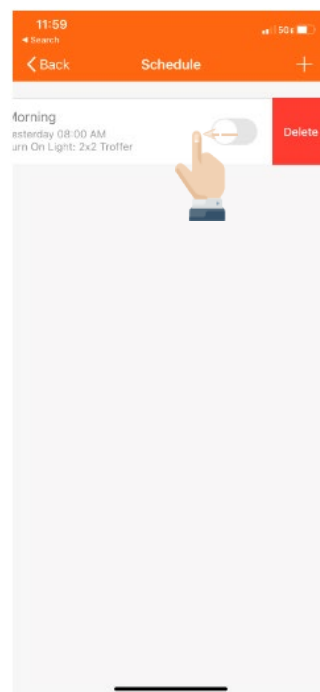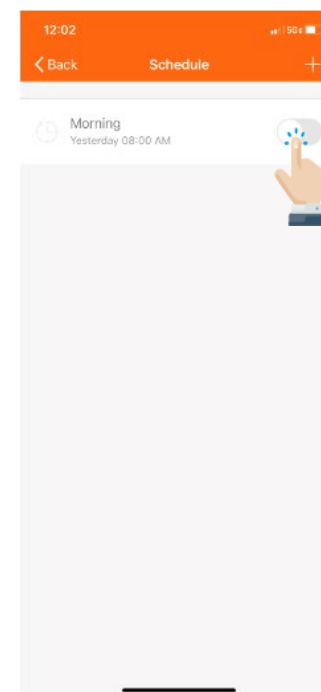
- Motion Sensor detects human movements and turns on/off the lights, whereas Daylight Harvesting Sensor is used to Dim up/down depending on the natural light, keeping sufficient and comfortable lighting to provide healthy, comfortable and energy saving lighting.

- There will be an "A" in the center of the light's icon if the light is in auto control mode and the on/off, light level are automatically controlled by sensors.

- The light with light sensor will remember the data recorded by the sensor, not the light level of this light. So, the light can fully harvest natural light to dim itself while keeping a comfortable and healthy lighting and save energy at the same time.

- To maximize the energy savings, it is essential to get rid of the ambient light interference when setting the auto light level, otherwise the light may not save much energy as expected.

- There are two ways to quickly, conveniently set the auto light level.

  - By "Auto calibrate", user specify parameters and the lights will automatically remove the ambient light interference by the self-learning process to determine the appropriate auto light level. It is suggested to test with one light in real or simulated environment to find the appropriate parameters and then quickly batch set the lights by "Auto calibrate".

  - By "Manually setting", to customize the auto light level. In this way the light will remember the light reading from the sensor directly without deduct the ambient light.
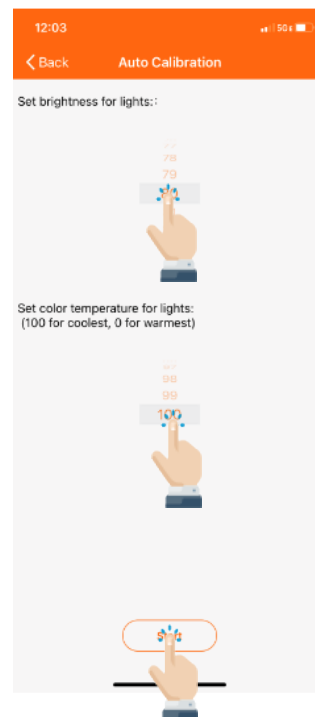
AUTO CALIBRATE AND AUTO POINT
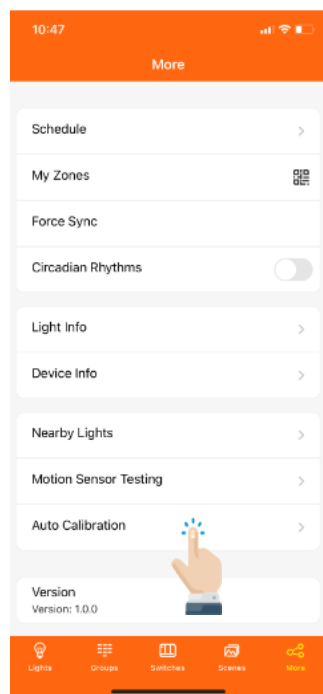
Click **"Auto Calibration"** in "More" page.
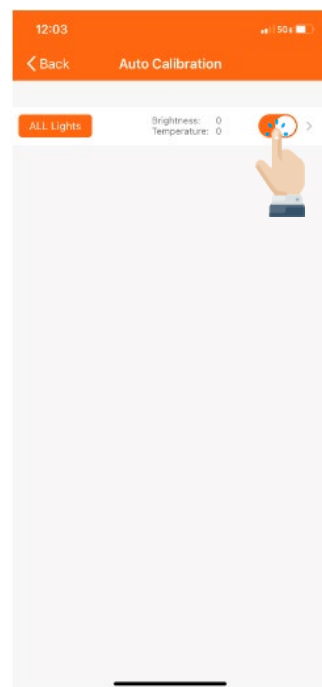
Select the group in the pop up page. Click the **toggle** button to the right of the group to turn on/off this group.

Choose the appropriate target light level and color temperature (if the lights are tunable white) and then click the **"Start"** button.

You will see a prompt that lights will automatically turn on/off for several times to do the self-learning process.

A prompt message will appear after the auto calibration. Lights will change to auto mode. Please manually turn on/off the lights to confirm it.

MANUAL SET AUTO POINT

Please make sure the lights are in auto mode before you set it manually. The light is in auto mode when there is an "A" in the icon of the light. You may set the light to auto mode by turning on the light or clicking the **"Auto"** button on a group.
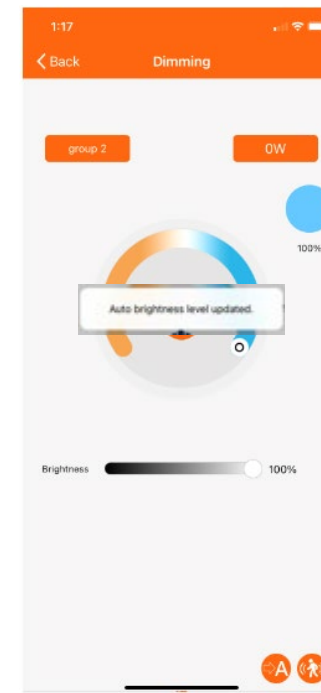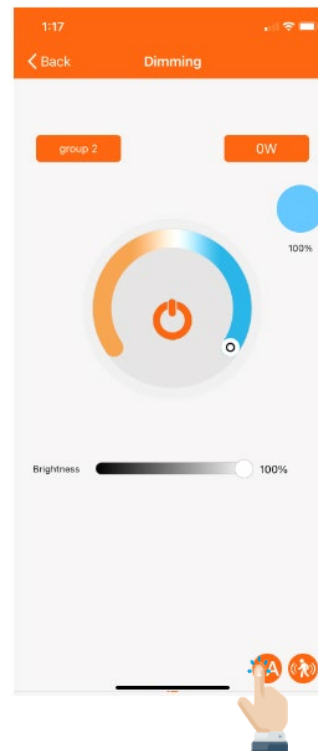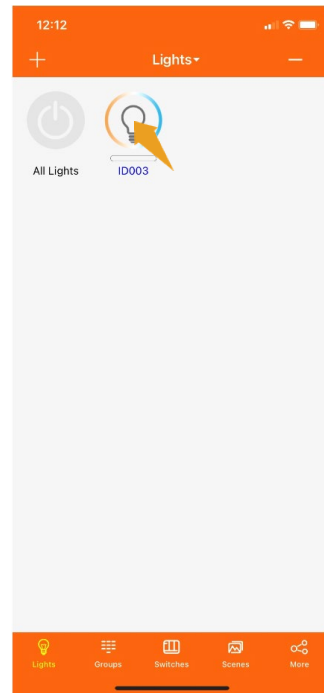
The lights will read the current light level from sensors and also record the current color temperature and save them as the auto light level.

Use the APP to dim the light or group when it is in auto mode and confirm the light level and color temperature are appropriate for auto lighting and then click the **"Set auto light level"** button on the bottom.

PLUG LOAD CONTROLLER
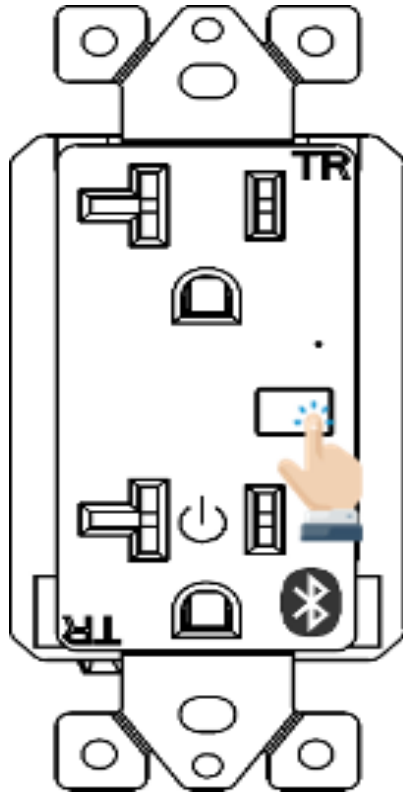
Plug load controllers appear on the **"Lights"** page. They can be automatically turned on or off when grouped with other lights and then linked.

To turn the plug load controller on or off, press the button on the face of the receptacle.
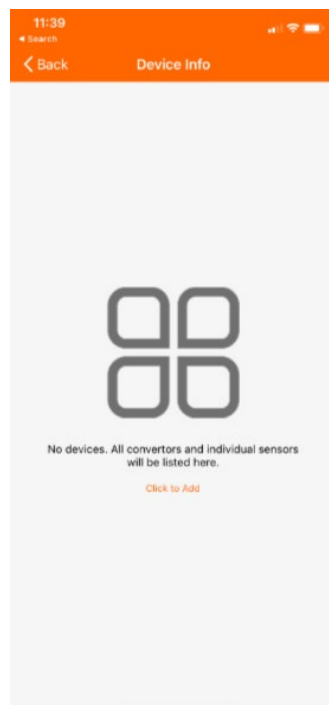
To reset the plug load controller to factory settings, press and hold the button on the receptacle for 6 seconds.

To add the plug load controller to a zone, press and hold the button on the receptacle for 6 seconds

TIME CLOCK MODULE
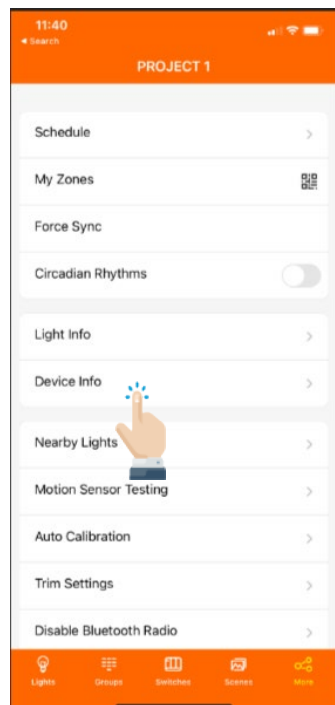
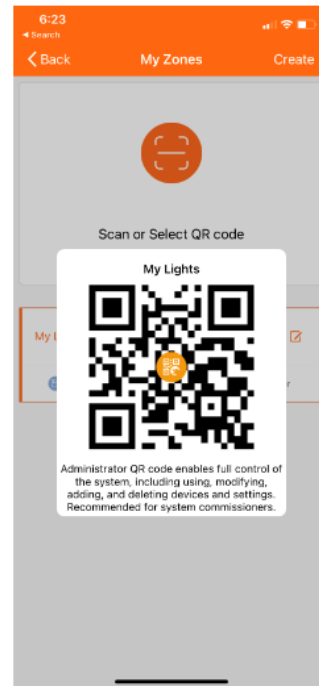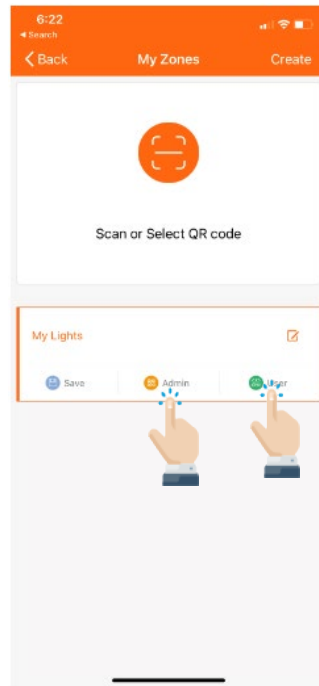To add a Time Clock Module:
Click **"Device Info"** in "More" page.

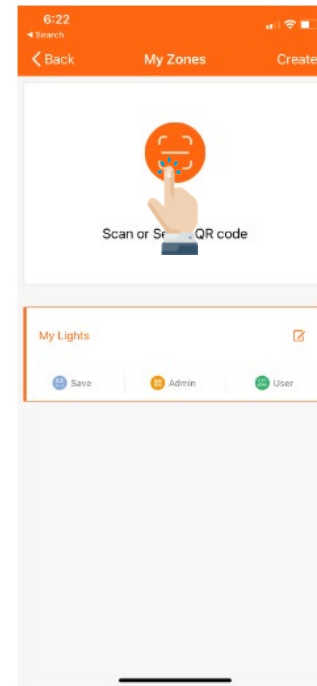Click **"Click to Add"** to have the app search for the new device.

CONTROL SOLE SHARE VIA QR CODE

Admin privilege: With privilege for all operations, only the users with high privilege can share high privilege QR code.
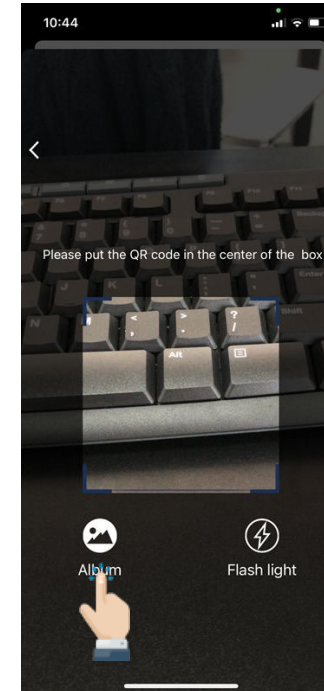
User privilege: user can dim and call scene, but can not add, delete, change lights, group or scene.
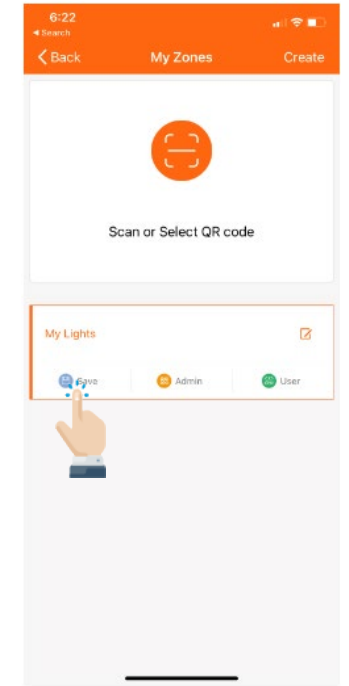

Share zone to others.

Click the **"Scan"** button in "My Zones" page to scan The QR code and receive control of the zone.
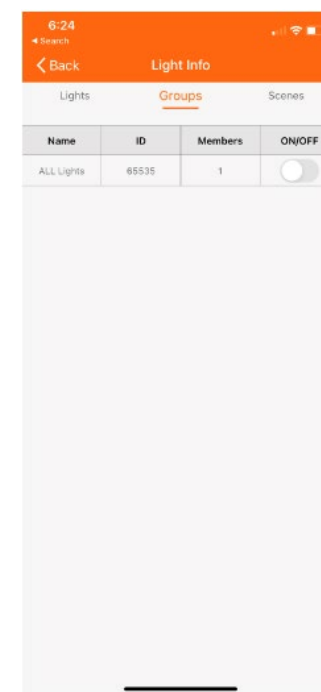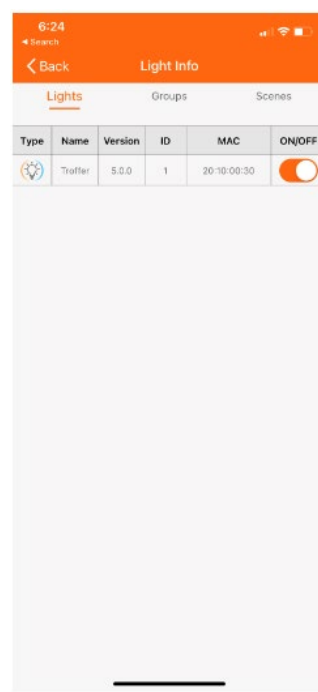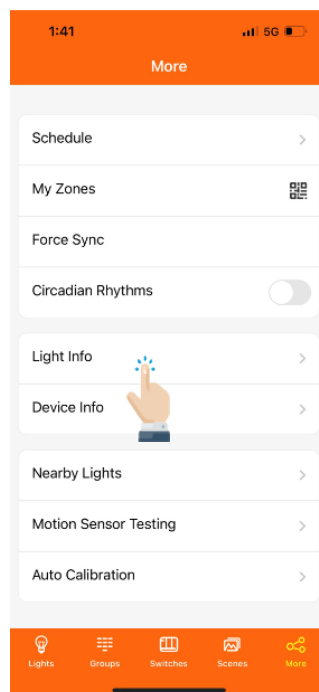

Point the camera of the phone to the QR code to scan. Click the **"Album"** on the bottom to scan the QR code picture in the phone's album.

Click **"Save"** in "My Zones" page to save the QR code as a picture to your album so that you may send to others.
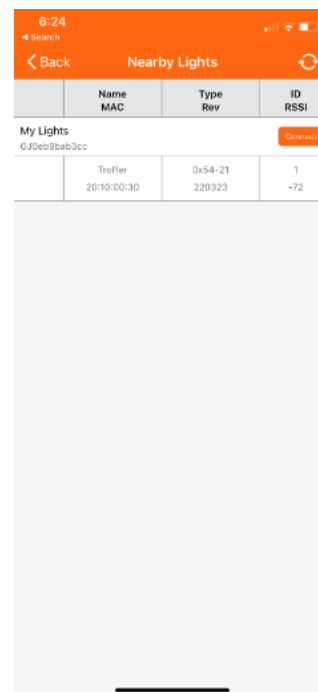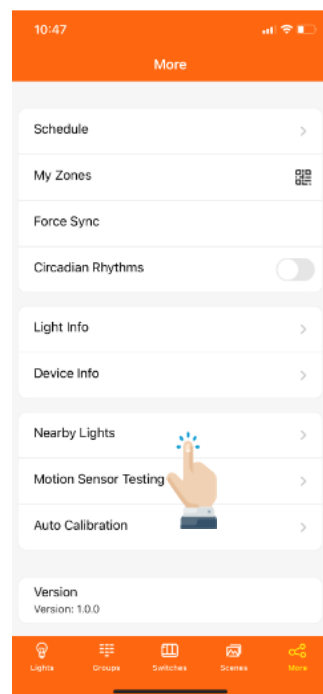
CHECK LIGHT, GROUP, SCENE AND DEVICE INFORMATION

Click **"Light info"** in the More page to check all lights, groups, and scenes information in the project.
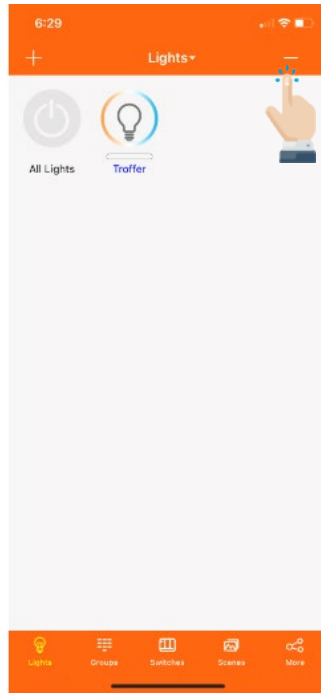
CHECK NEARBY LIGHTS

Click **"Nearby Lights"**
In the "More" page.

Lights and devices nearby will be shown here. Including the zone name which the lights belong to, the name of the lights, MAC address, type, ID and RSSI.

You may check the powered-on lights and devices nearby. It may help to solve problems during commission process.
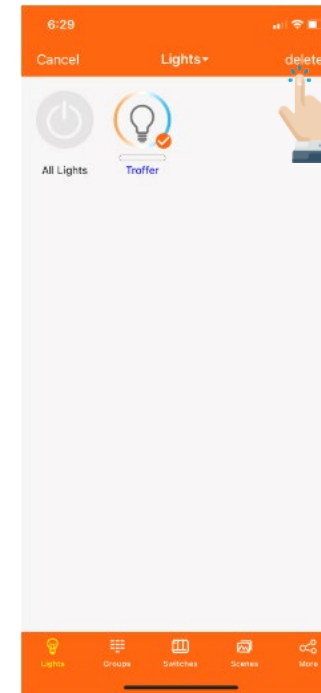
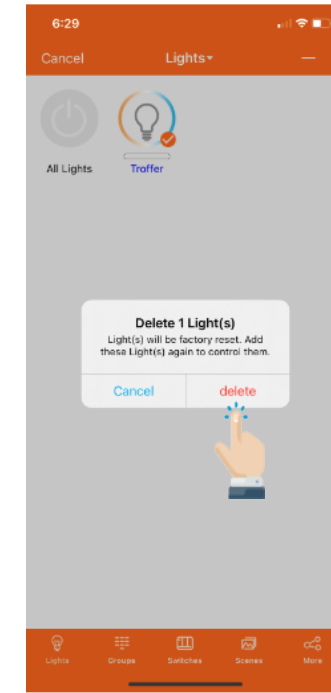# RESTORE FACTORY SETTING BY LEDVANCE LINK APP

Click the **"-"** button on the upper right corner in "Lights" page.
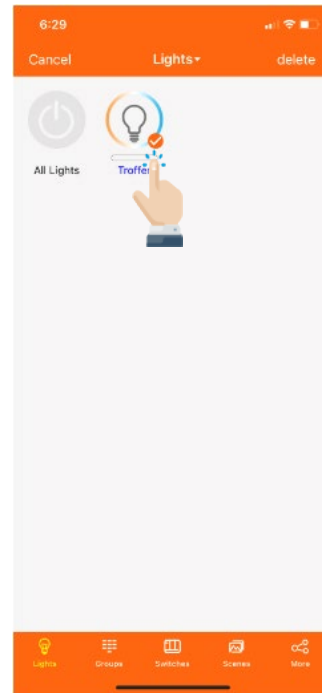
Select all lights you want to delete and reset.

Click the **"Delete"** button on the upper right corner to delete and reset all selected lights.

You may only delete Light(s) in this project.

RESTORE FACTORY SETTING BY POWER SEQUENCE

Follow the steps:

1. Power ON and wait for 1 second, then power OFF and wait for 10 seconds.

2. Power ON and wait for 1 second, then power OFF and wait for 10 seconds.

3. Power ON and wait for 1 second, then power OFF and wait for 10 seconds.

4. Power ON and wait for 10 seconds, then power OFF and wait for 10 seconds.

5. Power ON and wait for 10 seconds, then power OFF and wait for 10 seconds.

6. Turn on the light, the device will be restored to factory Settings and displayed on searching page.

After following the above steps, the luminaire will blink 3 times to indicate that the device has been successfully reset and factory settings have been restored.

SYSTEM CAPACITY

Nodes	Up to 100 nodes in a zone. Please divide to different zones if you have more than 100 nodes.
Node/Group	A node can be a member of up to 32 groups. It will exit from the first group if you add it to 33rd group.
Scene	Up to 32 scenes can be set to a node (first scene of the node will be deleted when you add the 33rd scene) and up to 127 scenes can be set to a zone.
Schedule	Up to 32 schedules can be set to a zone.

THANK YOU!

LEDVANCE