Xiaolei

Bluetooth 5.2 SIG Mesh

RELAY-BLE

Smart Controller

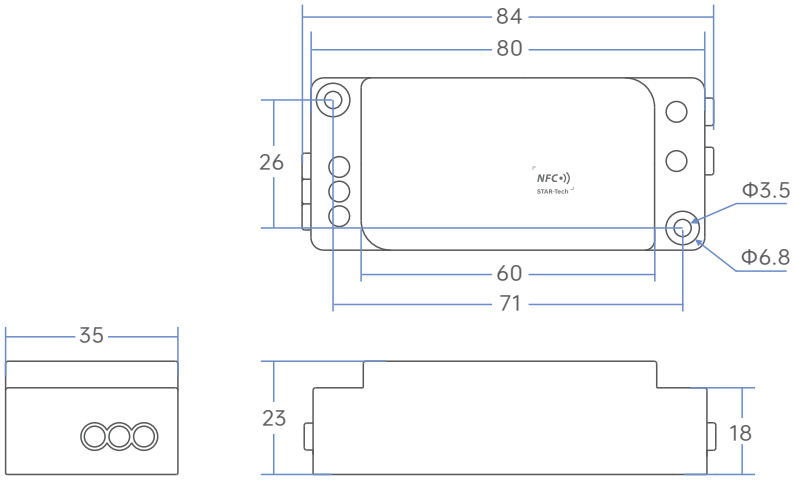
- Compact and lightweight for easy installation.
- Adopts Bluetooth 5.2 SIG Mesh communication protocol with strong networking capability, reliable and stable.
- Zero-cross detection function extends relay service life.
- Supports relay ON/OFF control via reset switch / mechanical switch, with synchronous Bluetooth control.
- Supports direct Bluetooth control from iOS and Android smart devices.
- When used with a smart gateway, it enables rich cloud scenes, cloud automation and local automation.
- Supports local scenes, gateway-free and offline control, providing faster and more stable performance.
- Supports online OTA update.

Technical Specs

Model	RELAY-BLE
Wireless Type	Bluetooth 5.2 SIG Mesh
Operating Voltage	100-240V~，50/60Hz，μ
Maximum Relay Load Parameters	Resistive load：1800W@230V~，900W@110V~ Capacitive load：900W@230V~，450W@110V~
Inrush Current in Loads	70A@10ms
Working Temperature	-25°C~50°C
Switch channel	Single channel
Protection	Overload Protection, Zero-Cross Detection
Product Dimensions	84×35×23mm(L×W×H)
Package Dimensions	100×70×42mm(L×W×H)
Net Weight	30g

Product Dimensions

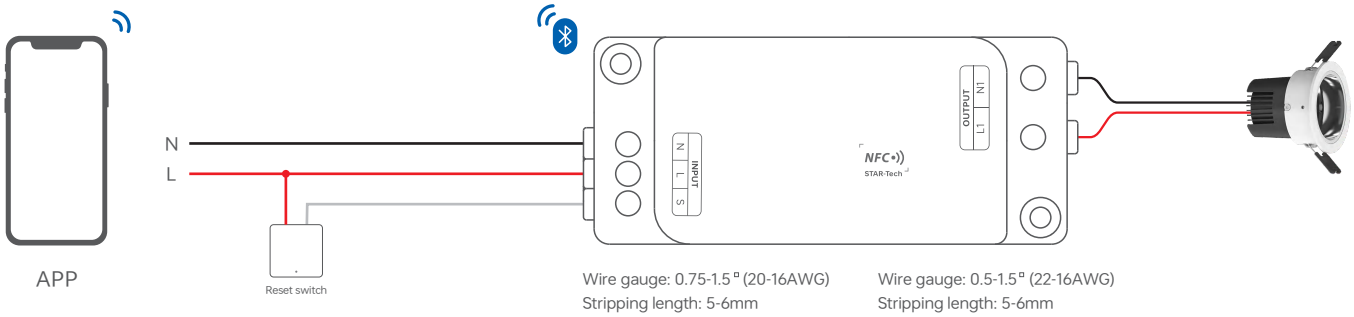
Unit: mm



Wiring method

1. Reset Switch (Default)

Suitable for momentary switches; the relay status toggles each time the switch is triggered.



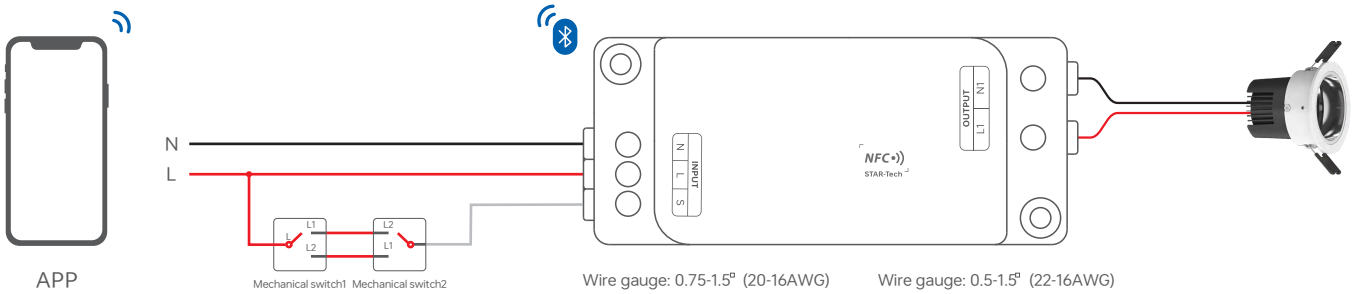
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

Wire gauge: 0.5-1.5㎡ (22-16AWG)
Stripping length: 5-6mm

*Access the network and control via the APP

2. Two-Way Switch (Configurable via APP)

Suitable for controlling the same light from two switches. When enabled, the two switches can alternately control the light, and the relay status toggles each time a switch is triggered.



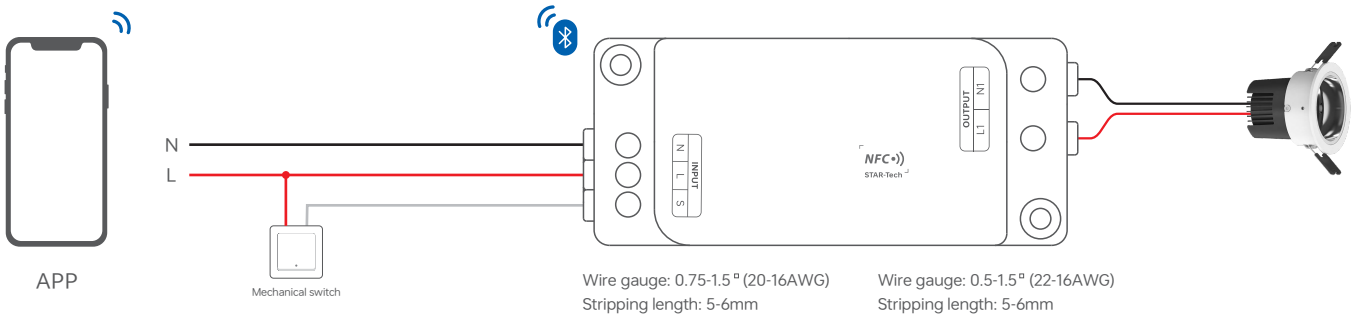
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

Wire gauge: 0.5-1.5㎡ (22-16AWG)
Stripping length: 5-6mm

*Access the network and control via the APP

3. Synchronous Switch (Configurable via APP)

Suitable for a single mechanical switch. When enabled, the relay synchronously follows the status of the connected external switch.



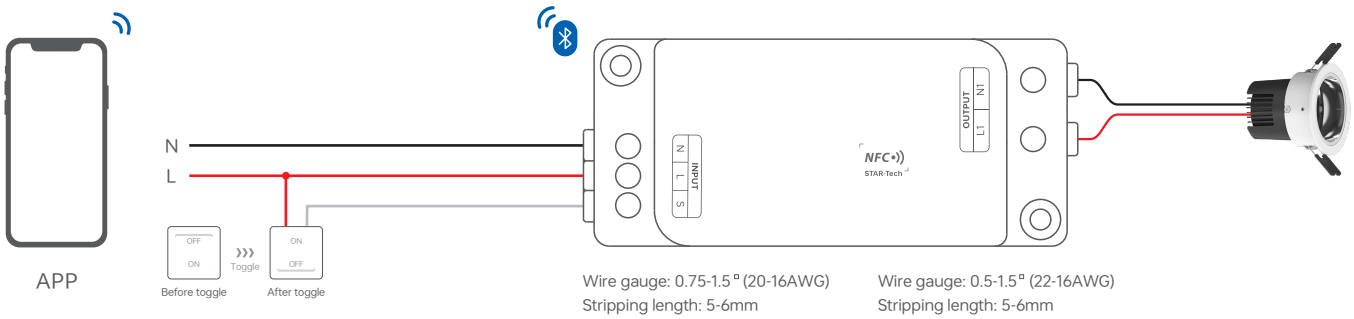
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

Wire gauge: 0.5-1.5㎡ (22-16AWG)
Stripping length: 5-6mm

*Access the network and control via the APP

4. Toggle Switch (Configurable via APP)

Suitable for use with a single mechanical switch when the button direction does not match usage habits; it reverses the logic function of the mechanical switch.

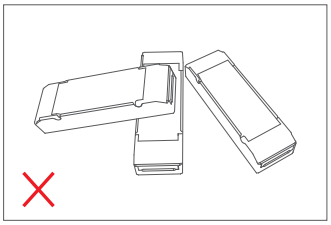


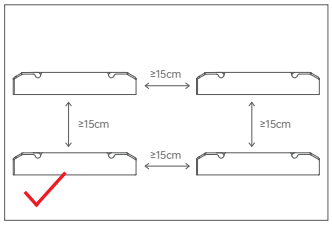
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

Wire gauge: 0.5-1.5㎡ (22-16AWG)
Stripping length: 5-6mm

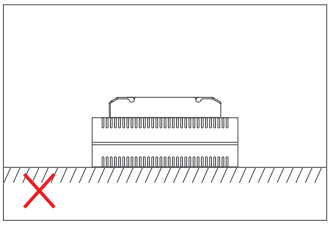
*Access the network and control via the APP

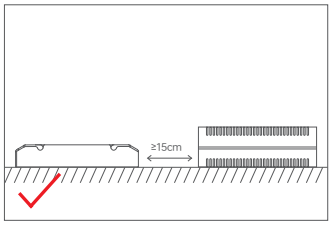
Installation Precautions



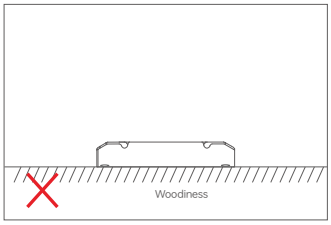


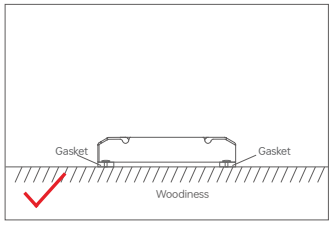
Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.



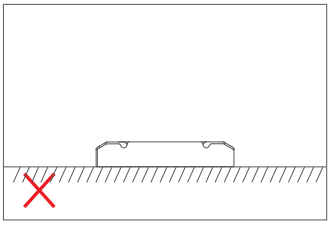


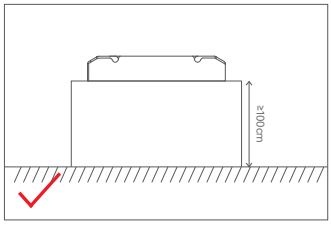
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.



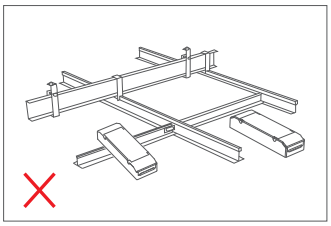


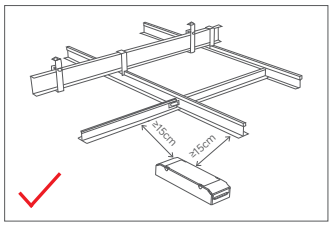
Do not fix the product tightly against the wooden board with screws. Please add a washer ≥7 mm thick under the mounting screws to leave a gap for effective heat dissipation, so as to avoid affecting the heat dissipation and service life of the product.



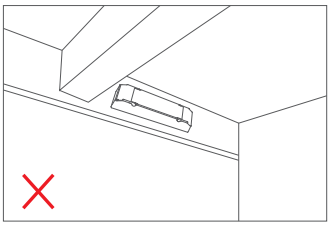


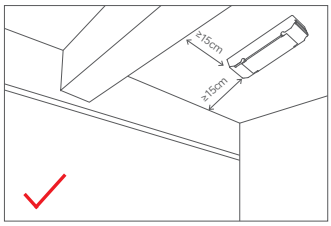
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.





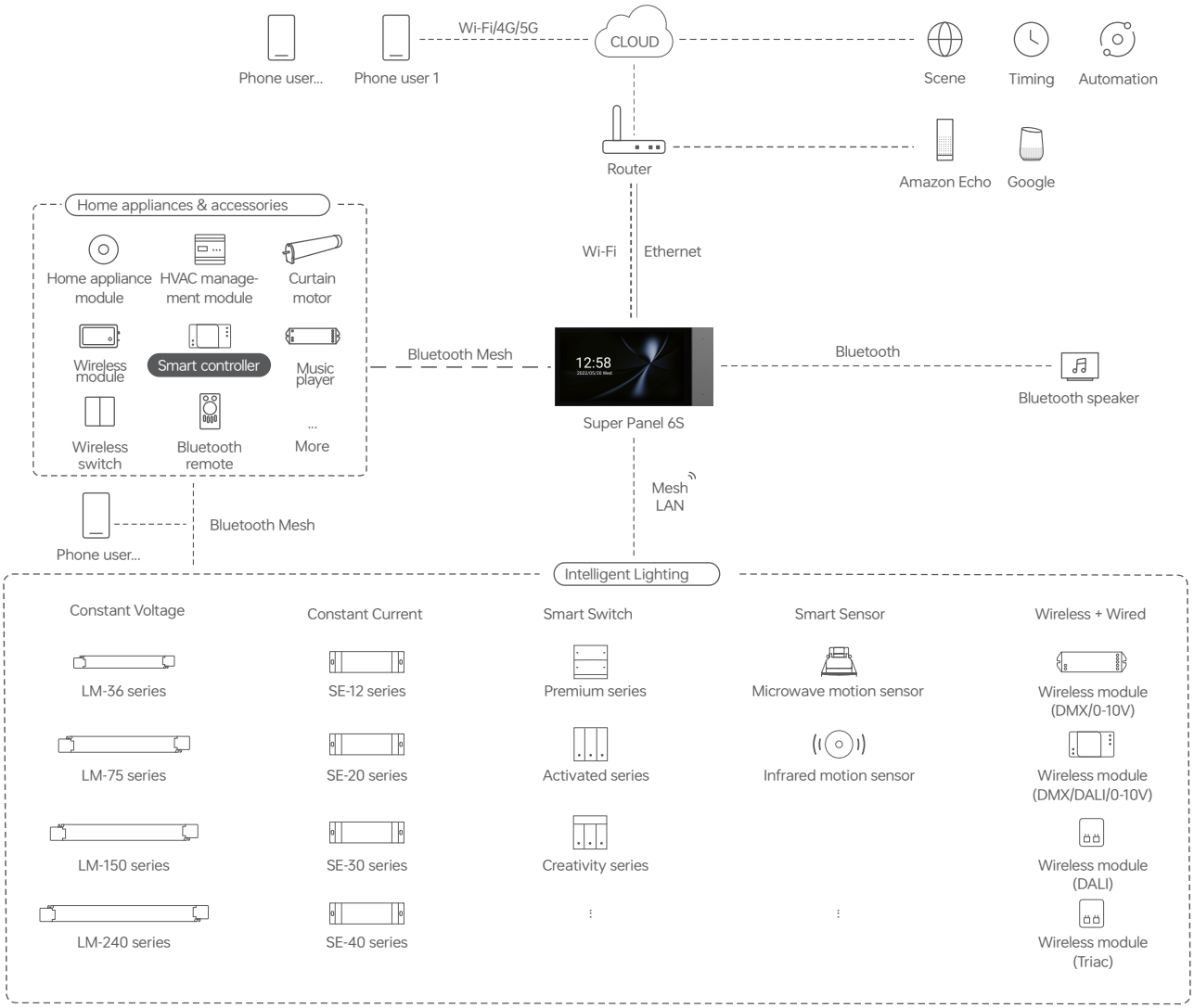
Do not allow the product to come into large-area contact with metal objects (e.g. keel frames). The separation distance shall be ≥15 cm to avoid signal interference affecting operation.





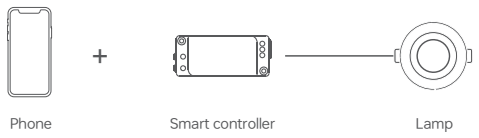
Please do not install the products on beams or near the corners. The distance between the product and the beam or the corner should be ≥15cm so as to avoid signal interference.

Recommend Applications

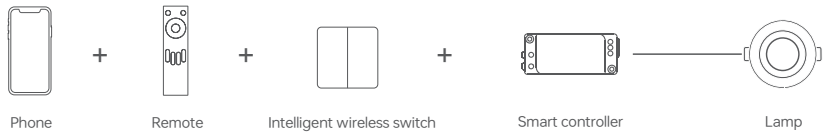


Recommend Applications

1. Achieve fast dimming control.



2. Both App and remote can control the smart controller after connecting the remote to the driver with App.



3. Both App and Super Panel 6S can control the smart controller simultaneously after connecting the Super Panel 6S to the driver with App. By connecting the Super Panel to network, you are allowed to control the driver, cloud scenes and automation remotely with App.

4. More applications of intelligent control are waiting for you to set up.

List of Compatible Devices

Smart Gateway: Serves as the control center of a smart home, enabling interconnection between Bluetooth devices and the cloud, as well as managing and controlling scenes and automation. It realizes remote control of smart devices such as Bluetooth drivers and Bluetooth switch panels.

SP-GW-12S

SP-GW-6S

SP-GW-BLE

SP-GW-4S

G4 MAX

CG-KIT: Enables the access of Bluetooth drivers to Apple Home via HomeKit, and also to all IoT platforms supporting the standard Matter protocol through Matter Bridge, including Apple Home, Google Home, Amazon Alexa, Samsung SmartThings, etc.

CG-KIT

Smart Switch: Can control the on/off, dimming and color temperature of Bluetooth drivers. Supports functions such as local scenes.

S1

S2

S3

S4

S6

S6-B

SQ

SQ-B

S1 PRO

S2 PRO

S3 PRO

S6 PRO

SQ PRO

G4

G4 PRO

S4M

S8M

EB1

EB2

EB5

EB6

EB8

UB1

UB2

UB4

UB5

UB8

Remote Control: Can control the on/off, dimming and color temperature of Bluetooth drivers. Supports functions such as local scenes

GQ PRO

GQ MAX

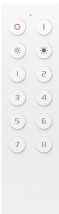
GQ

GQX

B1

B2

B5



B8

R8

RC4-BLE

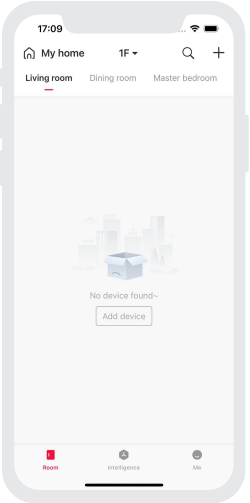
Use with Bluetooth L-Home APP

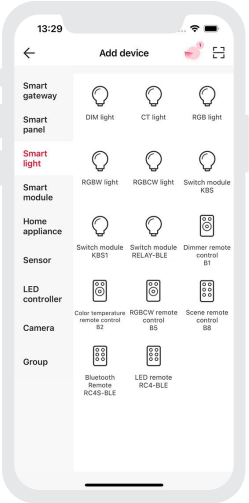
1. Register an account

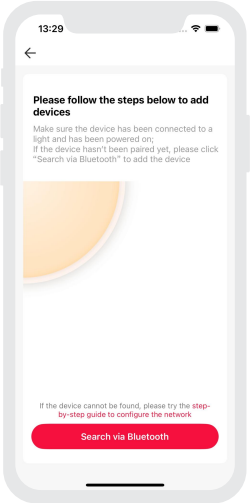
The App is available on iOS or Android devices. Scan the QR code below with you mobile phone and follow the prompts to complete the App installation. Open the App to log in or register an account.

2. Paring instructions

Open the APP and create a home if you are a new user. Click “+” icon in the upper right corner and access the “Add Device” list, then follow the prompts to add the device. Pick “Smart lighting-Switch module RELAY-BLE” from the list and follow the prompts to power on the device firstly. Make sure the device is not connected to the network. Then click “Bluetooth Search” and follow the prompts to add the device.

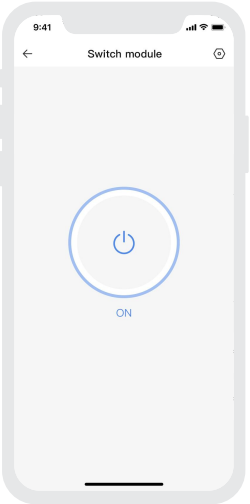


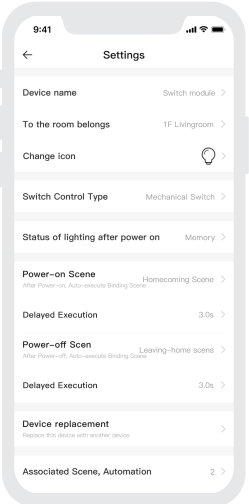


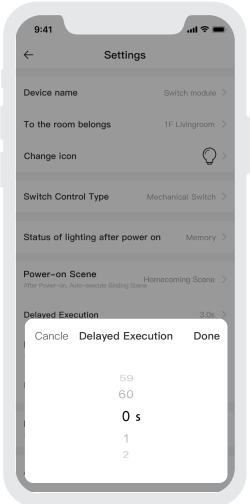


3. Power On/Off Scene Settings

On the settings page, you can configure the scenes to be executed and the scene execution duration when the device is powered on or off.

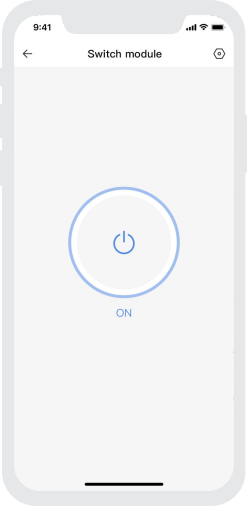


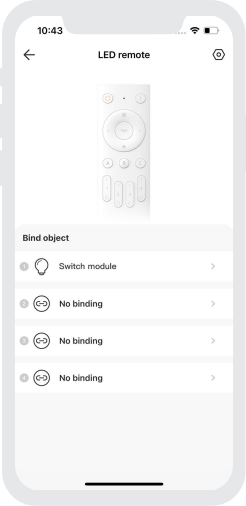


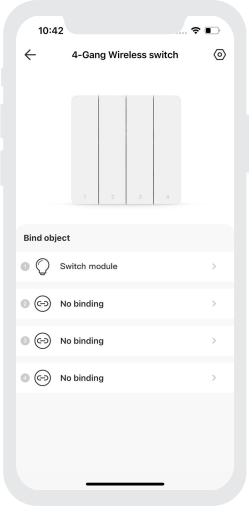


4. Binding Interface Settings

After pairing is complete, enter the binding target interface of the smart remote control / smart wireless switch, select the switch module device to associate it. You can then control the device on/off via the smart remote control / smart wireless switch. You can also unbind the device on this interface.

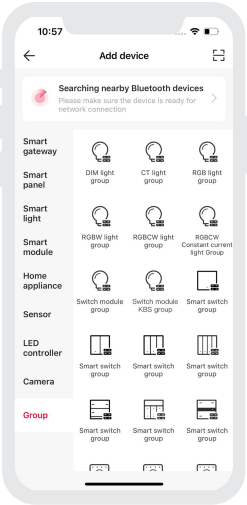


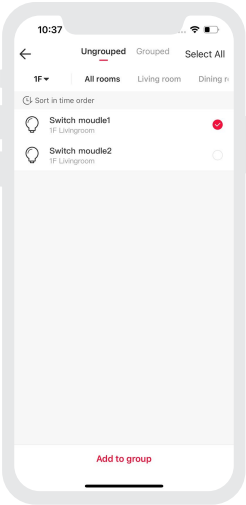


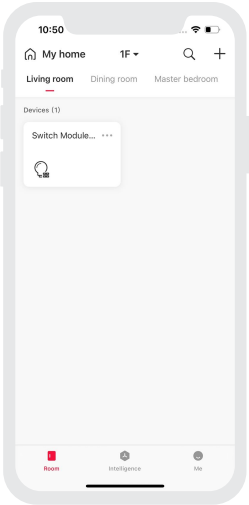


5. Group Control

Supports grouping of the same type of switch modules. Users can perform operations such as power on/off control for the group, making operation more convenient. Enter the add device list, select "Group - Switch Module Group", modify the group name as prompted, click "Next", check the devices you want to group, then save.

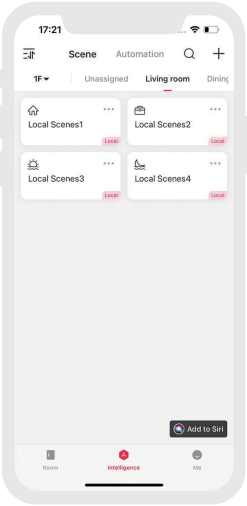


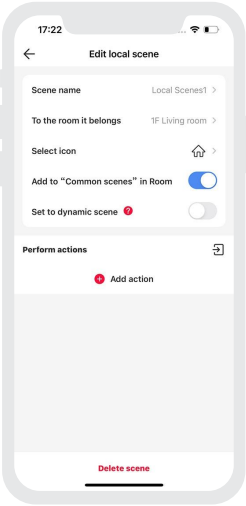


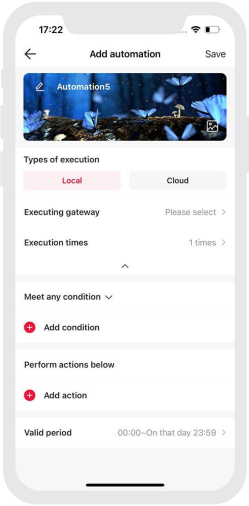


6. Advanced Functions

This product can achieve advanced functions such as local scenes, cloud scenes, and automation by linking with devices equipped with gateway capabilities, such as the Super Panel 12S.

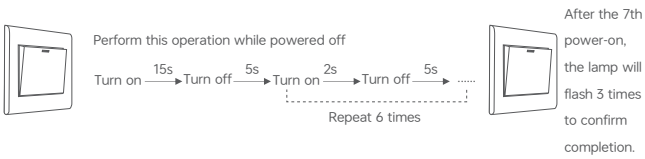




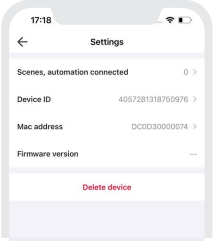


Reset the Device (Reset to Factory defaults)

Method 1: With the power off, turn on the device and keep it powered on for 15 seconds, then turn it off. Repeat the power on/off cycle 6 consecutive times (2 seconds on, 5 seconds off each time). After the 7th power-on, if the load light flashes 3 times, the device has been restored to factory default settings.



Method 2: Ensure the device is powered on and online, open the L-Home APP, locate the device and access its settings interface, then tap the Delete Device button. When the interface prompts "Deletion Successful", it indicates the device has been restored to factory settings.



More Features

STAR-Tech

- It has achieved an innovative breakthrough of no power-on required and no on-site debugging required. Staff can deploy smart home solutions in advance, preconfigure network access, grouping, scenarios, and other settings in the early stage, which greatly shortens the project cycle and reduces project costs.(Set via NFC sensing using the L-Home APP)

Device Replacement

- When a device is damaged, lost, or offline, you can select a device of the same model to replace it. The new device will synchronize the configuration of the old one, including name, group, scene, automation, and more.

Power-On State

- The state maintained by the device (full brightness / off / memory / custom) when the device is powered on.

Fade Time

- Two-Way Switch: Suitable for controlling the same light with two switches. When enabled, the two switches can alternately control the light, and the relay status toggles each time a switch is triggered.
- Synchronous Switch: Suitable for a single mechanical switch. When enabled, the relay synchronously follows the status of the connected external switch.
- Inverted Switch: Suitable for a single mechanical switch when the button direction does not match usage habits; it reverses the logic function of the mechanical switch button.
- Momentary Switch: Suitable for self-resetting switches. The relay status toggles each time the switch is triggered.

Device Log

- Record the operation logs of the device.

FAQs

1. What should I do if device addition fails?
1.1 Ensure the device is powered on normally and in an activated state;
1.2 Ensure the device to be added has not been added to any other account. If it has, manually restore it to factory settings;
1.3 Ensure the mobile phone and the device are as close as possible, with a recommended distance of no more than 20 meters;
1.4 If the device has been forcibly deleted, manually restore it to factory settings first, then add the device again.

2. What should I do if the device goes offline?
2.1 Please check if the device is powered on normally;
2.2 Please check if the router is working properly and the network is smooth;
2.3 If using remote control, please check if the mobile phone network is working properly and the network is smooth.

3. How to perform remote control / set up cloud scenes?
To use remote control / add and set up cloud scenes, it is necessary to use the company's super panel together.

4. How to Share a Device?
Please go to "My" -> "Family Management", select the family for which you want to share devices, then click "Add Member". Follow the prompts to add the family member or friend with whom you want to share the device to this family, and the sharing process will be completed.

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

- Product installation and commissioning should be done by a qualified professional.
- LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
- Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

✻ This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

ZHUHAI LTECH TECHNOLOGY CO., LTD.

Address: No. 183, Shui'an 1st Road, Xiangzhou District, 519060 Zhuhai City, PEOPLE'S REPUBLIC OF CHINA

Website: www.xiaolei.com.cn

Update Log

Version	Updated Time	Update Content	Updated by
A0	20260120	Original version	Shaoyun He