Xiaolei

Bluetooth 5.2 SIG Mesh

RELAY-BLE

Smart Controller

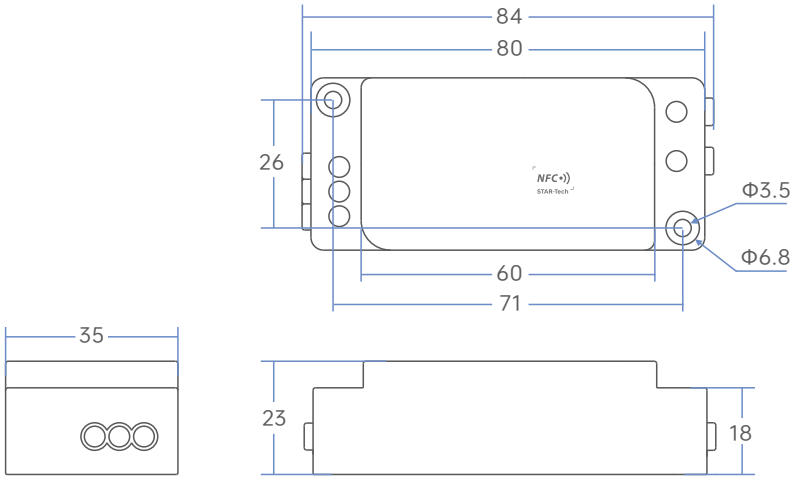
- Compact and lightweight for easy installation.
- Adopts Bluetooth 5.2 SIG Mesh communication protocol with strong networking capability, reliable and stable.
- Zero-cross detection function extends relay service life.
- Supports relay ON/OFF control via reset switch / mechanical switch, with synchronous 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

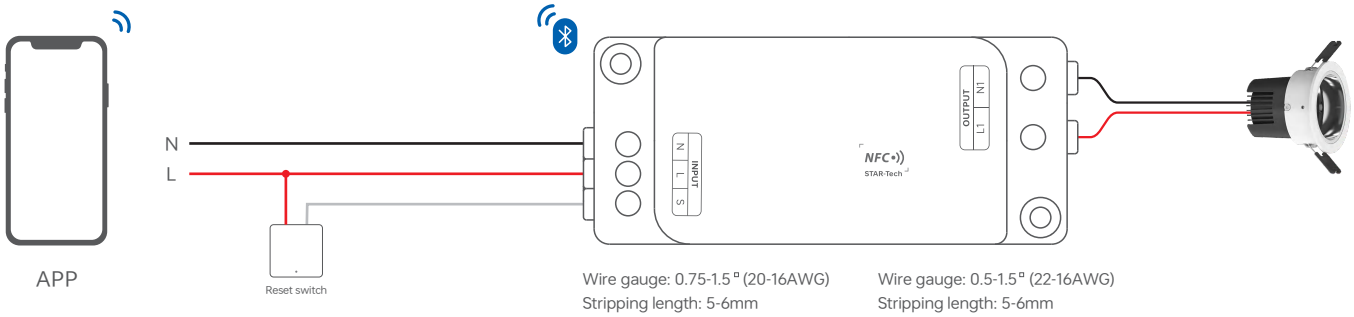
Unit: mm



Wiring method

1. Reset Switch (Default)

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



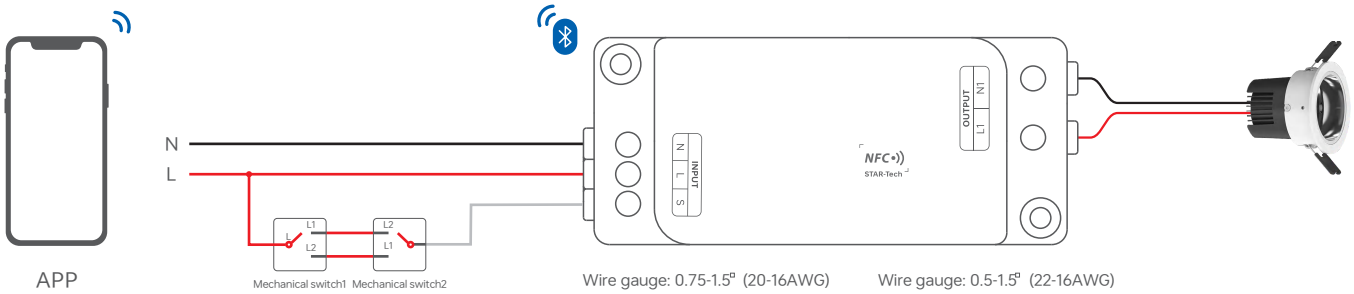
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

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.



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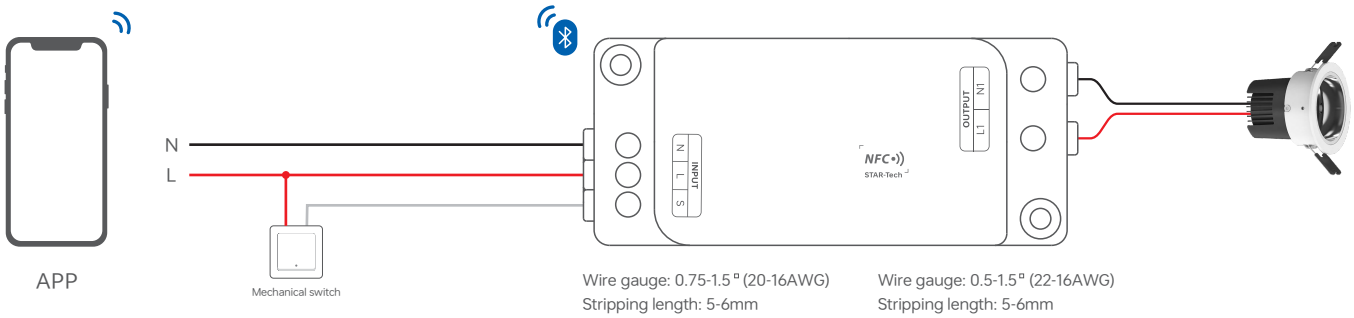
Stripping length: 5-6mm

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.



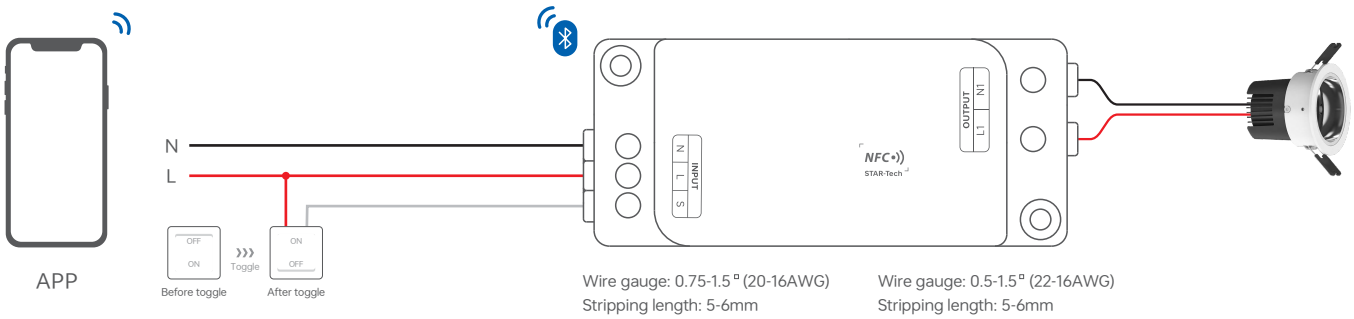
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

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.

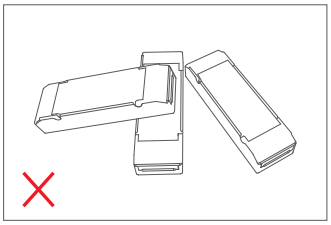


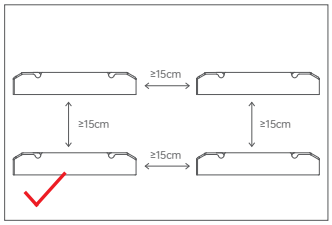
Wire gauge: 0.75-1.5㎡ (20-16AWG)
Stripping length: 5-6mm

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

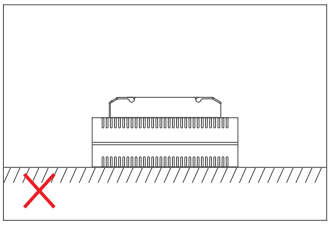
*Access the network and control via the APP

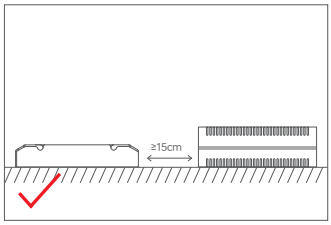
Installation Precautions



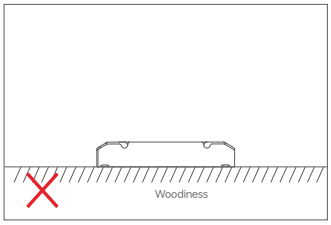


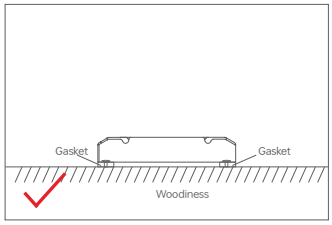
Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.



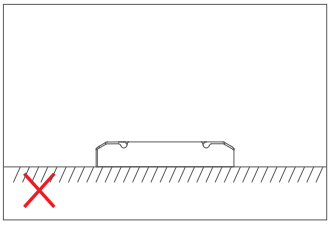


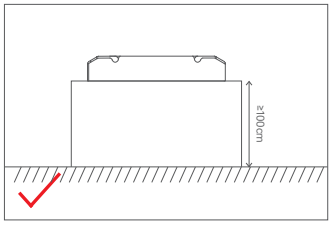
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.



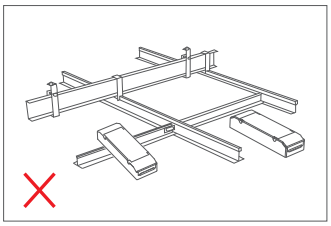


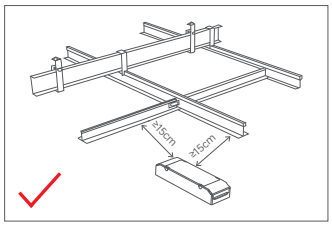
Do not fix the product tightly against the wooden board with screws. Please add a washer ≥7 mm thick under the mounting screws to leave a gap for effective heat dissipation, so as to avoid affecting the heat dissipation and service life of the product.



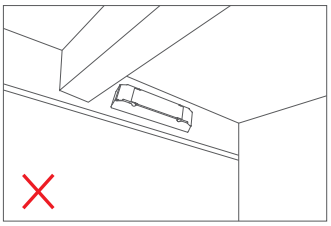


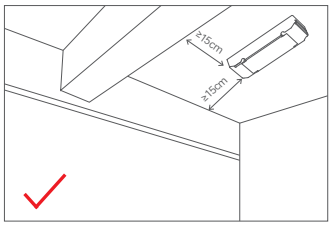
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.





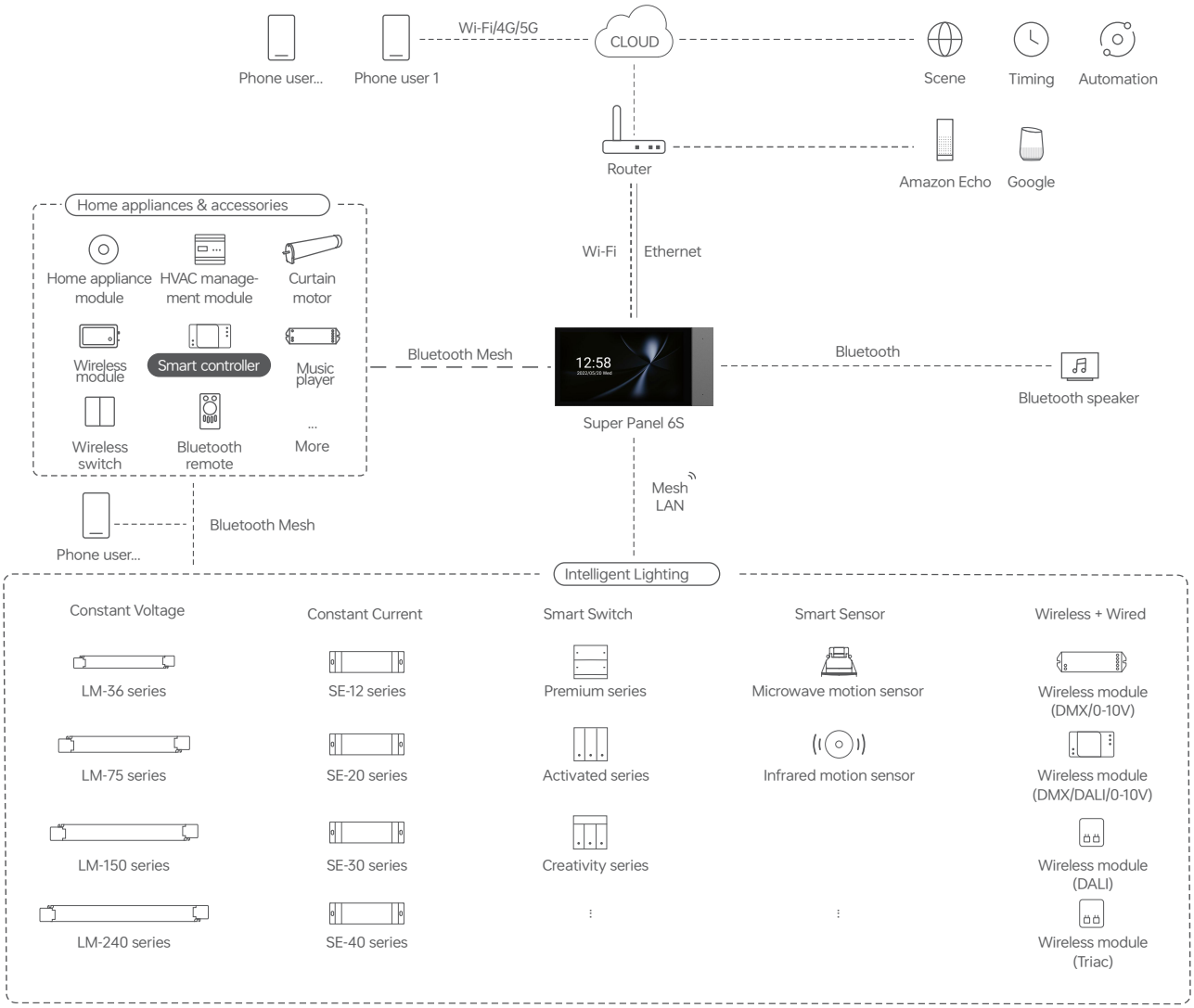
Do not allow the product to come into large-area contact with metal objects (e.g. keel frames). The separation distance shall be ≥15 cm to avoid signal interference affecting operation.





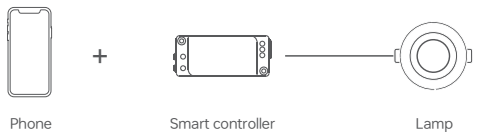
Please do not install the products on beams or near the corners. The distance between the product and the beam or the corner should be ≥15cm so as to avoid signal interference.

Recommend Applications

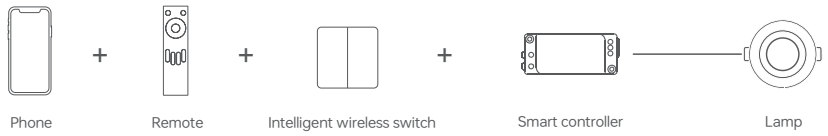


Recommend Applications

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

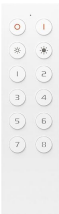
GQ

GQX

B1

B2

B5



B8

R8

RC4-BLE

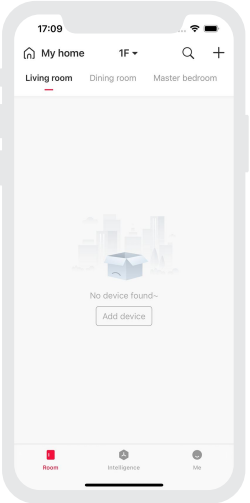
Use with Bluetooth L-Home APP

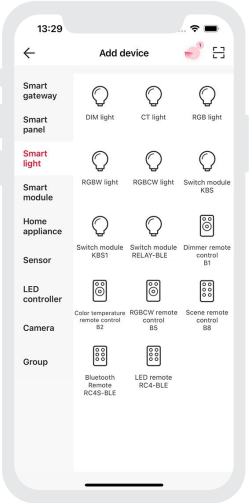
1. Register an account

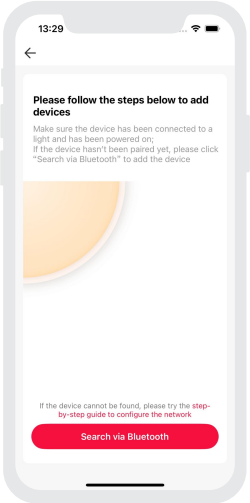
The App is available on iOS or Android devices. Scan the QR code below with you mobile phone and follow the prompts to complete the App installation. Open the App to log in or register an account.

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.

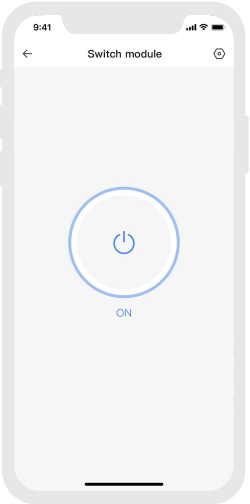


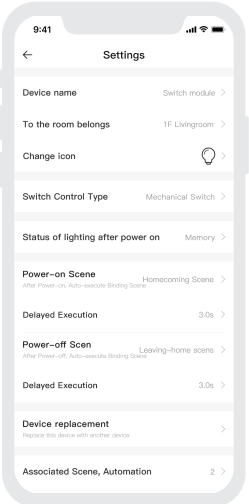


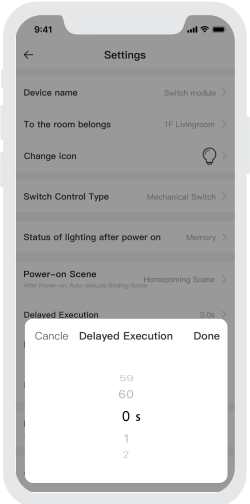


3. Power On/Off Scene Settings

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.

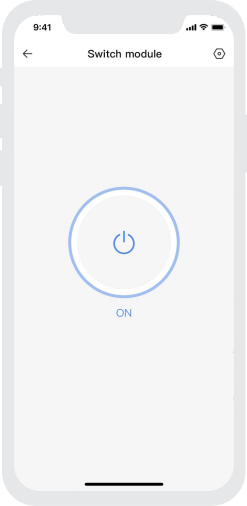


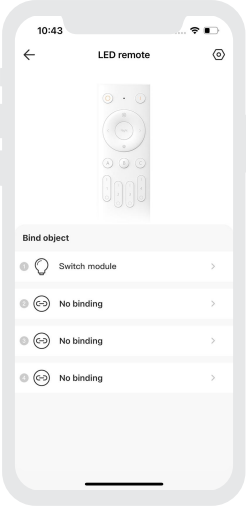


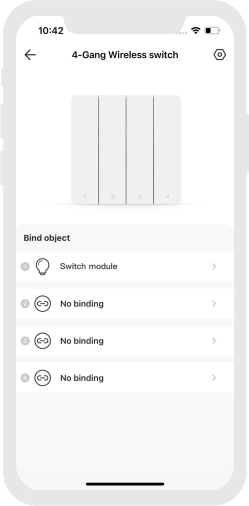


4. Binding Interface Settings

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.

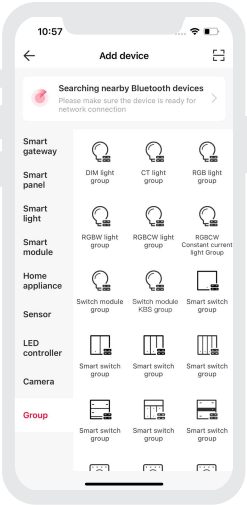


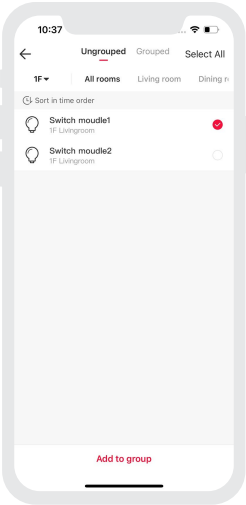


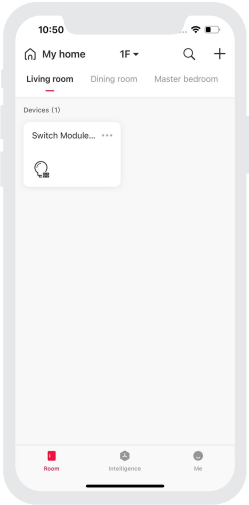


5. Group Control

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.

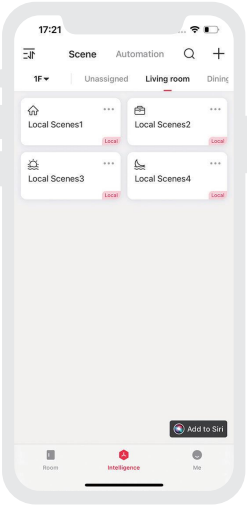


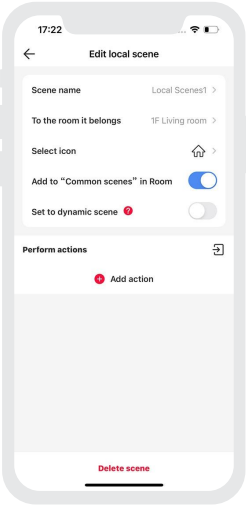


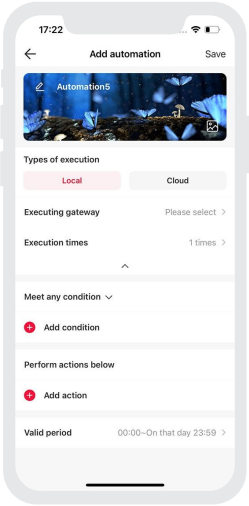


6. Advanced Functions

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.

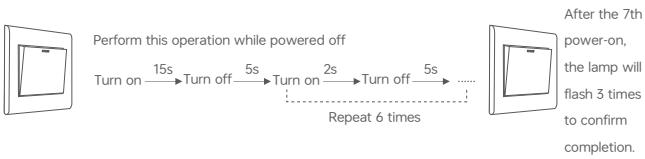




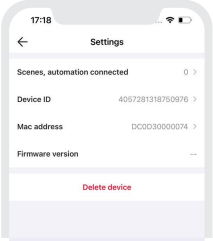


Reset the Device (Reset to Factory defaults)

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

RELAY-BLE

智能控制器

- 体积小、重量轻，便于安装；
- 采用 Bluetooth 5.2 SIG Mesh 通信协议，组网能力强，可靠稳定；
- 过零检测功能提高继电器寿命；
- 支持使用复位开关/机械开关通过信号控制继电器的通断，可与蓝牙同步控制；
- 支持 iOS 和安卓智能设备通过蓝牙直连控制；
- 搭配智能网关可实现丰富的云场景、云自动化、本地自动化控制方式；
- 支持本地场景，去网关，断网可控，更快更稳定；
- 支持在线升级功能；

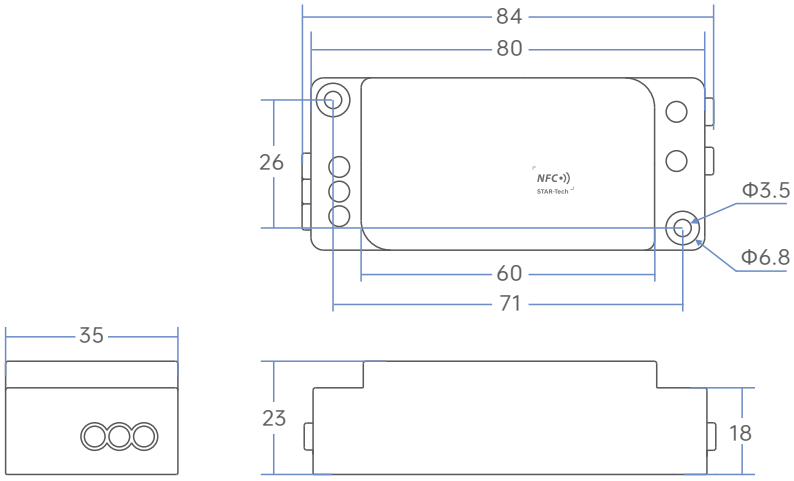
NFC STAR-Tech Bluetooth FC CE RoHS

技术参数

产品型号	RELAY-BLE
无线类型	Bluetooth 5.2 SIG Mesh
工作电压	100-240V~，50/60Hz，μ
继电器最大负载参数	阻性负载：1800W@230V~，900W@110V~ 容性负载：900W@230V~，450W@110V~
继电器抗浪涌电流	70A@10ms
工作温度	-25°C~50°C
开关通道	单通道
保护	过载保护、过零检测
产品尺寸	84×35×23mm(L×W×H)
包装尺寸	100×70×42mm(L×W×H)
产品重量	30g

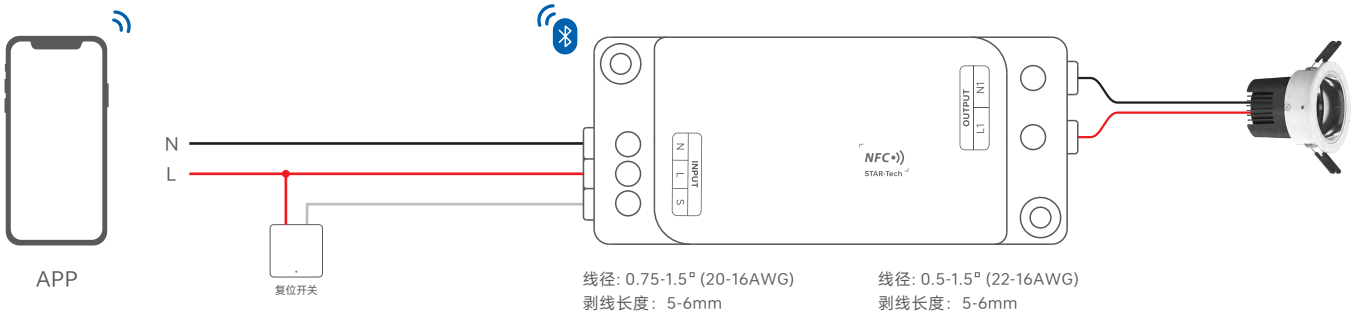
产品尺寸

单位：mm



接线方式

1.复位开关（默认）
适用于自回弹开关，每次触发开关时翻转继电器状态。

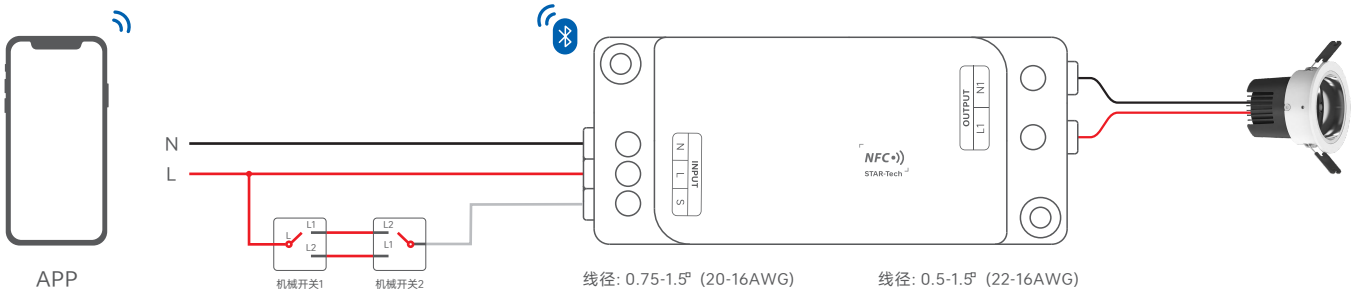


线径: 0.75-1.5㎡ (20-16AWG)
剥线长度：5-6mm

线径: 0.5-1.5㎡ (22-16AWG)
剥线长度：5-6mm

*通过APP入网控制

2.双控开关（通过APP设置）
适用于两处开关控同一盏灯。选中后，两个开关可交替控制灯具开关，每次触发开关时翻转继电器状态。

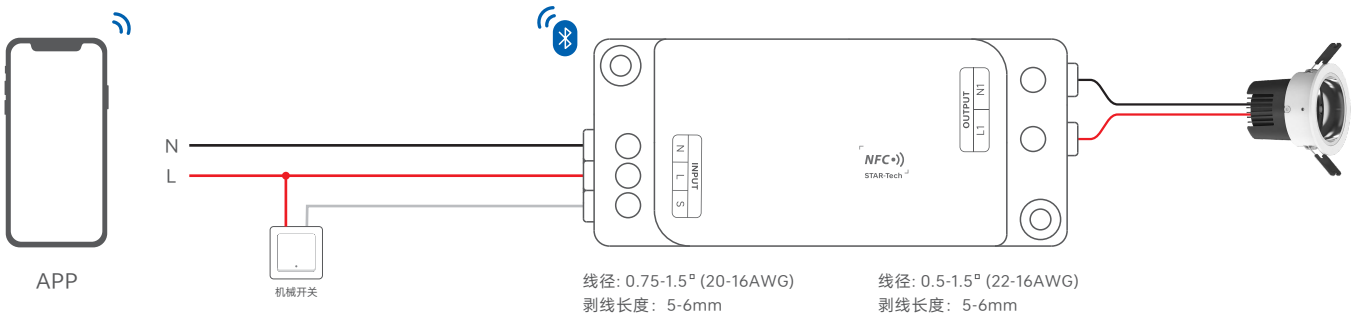


线径: 0.75-1.5㎡ (20-16AWG)
剥线长度：5-6mm

线径: 0.5-1.5㎡ (22-16AWG)
剥线长度：5-6mm

*通过APP入网控制

3.同步开关（通过APP设置）
适用于单个机械开关。选中后，继电器同步跟随所接外部开关状态。

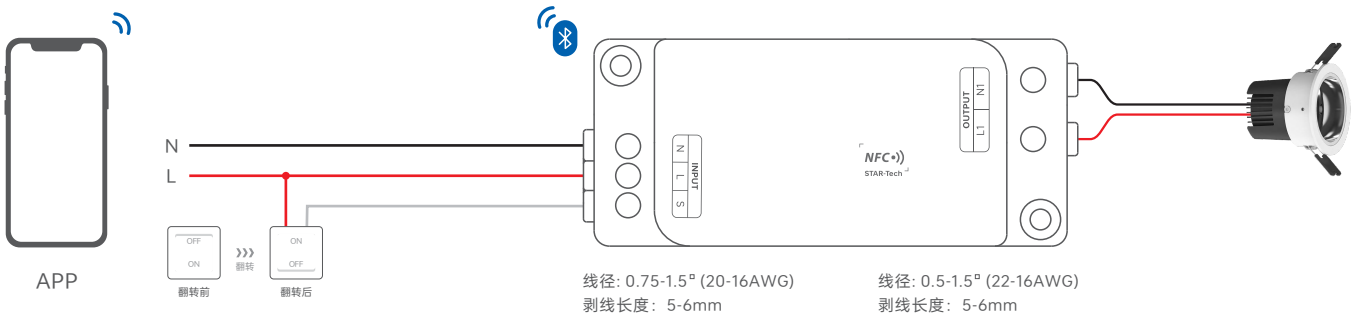


线径: 0.75-1.5㎡ (20-16AWG)
剥线长度：5-6mm

线径: 0.5-1.5㎡ (22-16AWG)
剥线长度：5-6mm

*通过APP入网控制

4.翻转开关（通过APP设置）
适用于单个机械开关且开关按键方向与使用习惯不一致时，反转机械开关按键的逻辑功能。

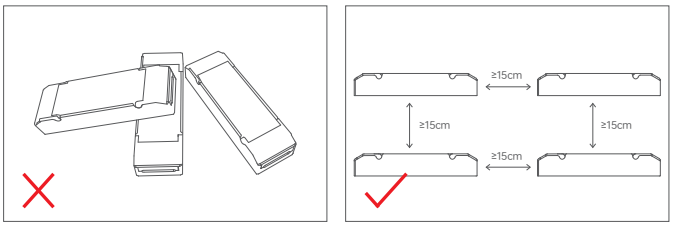


线径: 0.75-1.5㎡ (20-16AWG)
剥线长度：5-6mm

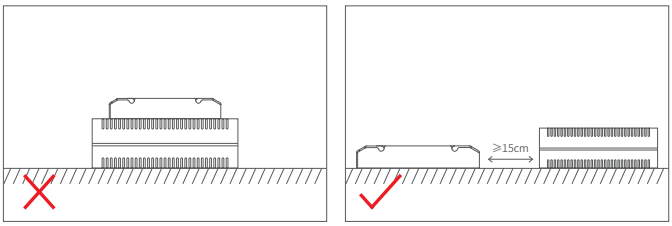
线径: 0.5-1.5㎡ (22-16AWG)
剥线长度：5-6mm

*通过APP入网控制

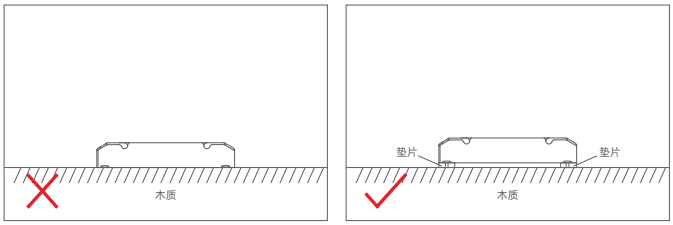
安装注意事项



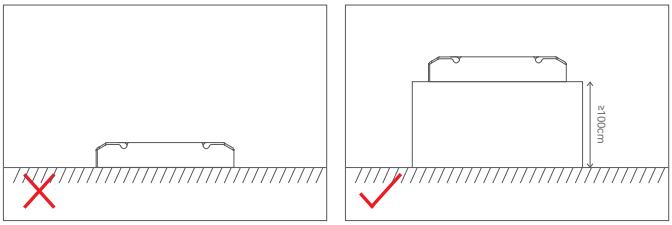
请勿将产品堆叠摆放，产品与产品间隔距离应≥15cm，避免影响产品散热和使用寿命。



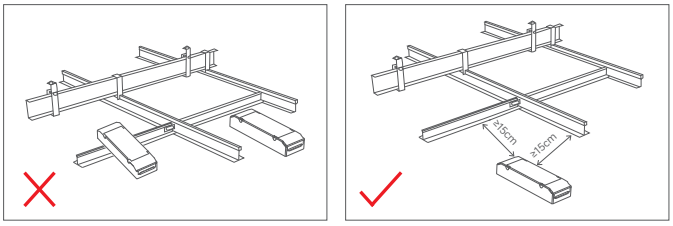
请勿将产品置于电源上方，产品与电源间隔距离应≥15cm，避免影响产品散热而减少使用寿命。



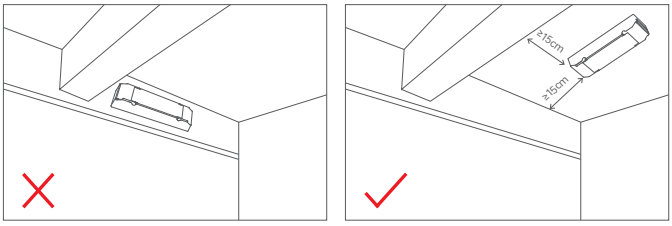
请勿将产品螺丝固定紧贴于木板，应在固定螺丝下增加≥7mm的垫片，留点空隙可以有效散热，避免影响产品散热和使用寿命。



请勿将产品放置在地面上。产品与地面之间的距离应≥100cm， 以免信号干扰影响使用。

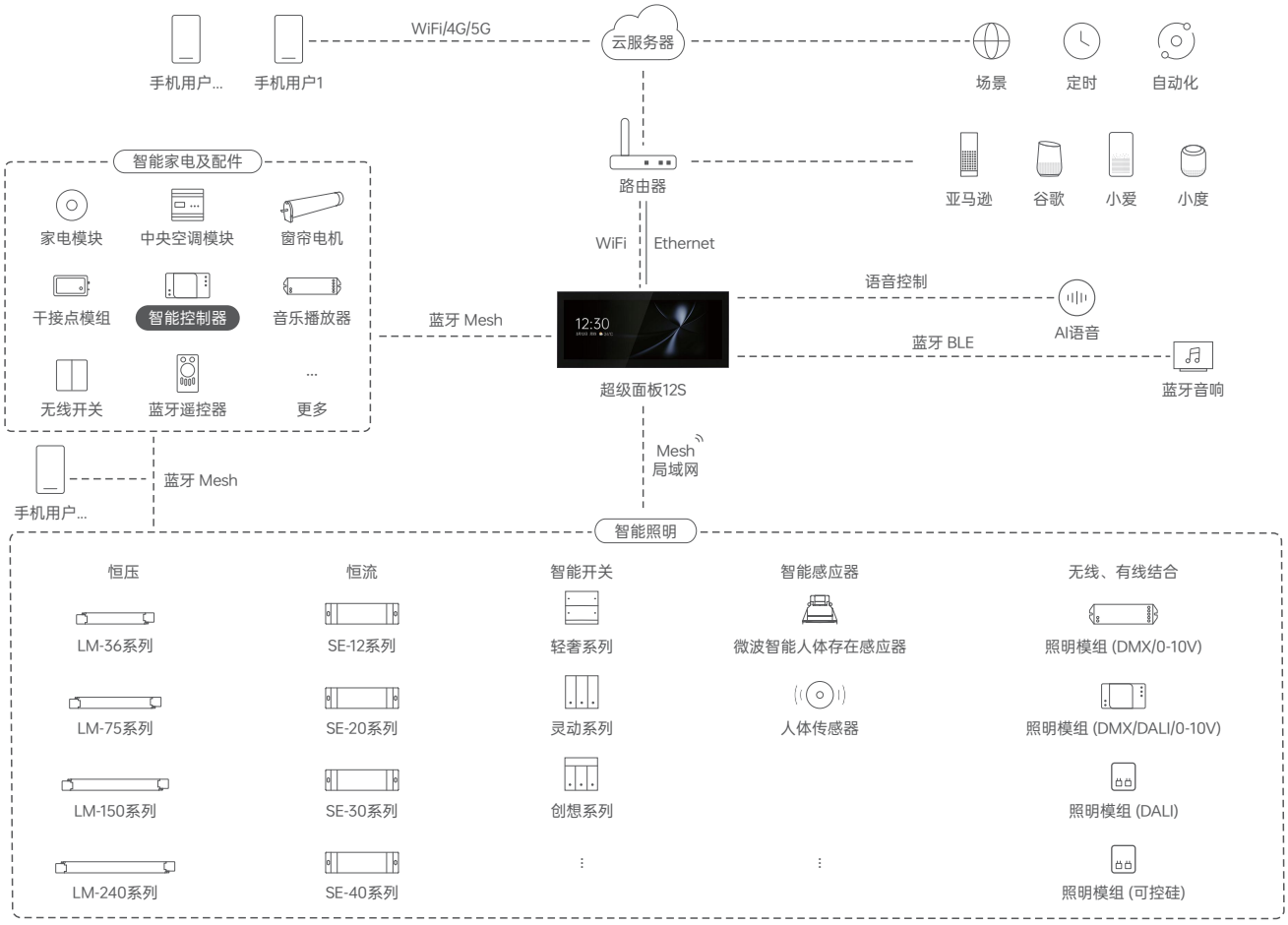


请勿将产品大面积接触金属物体(如：龙骨架)， 间隔距离应≥15cm， 以免信号干扰影响使用。



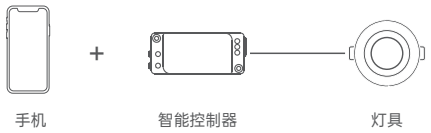
请勿将产品安装在横梁、墙角等位置， 间隔距离应≥15cm， 以免信号干扰影响使用。

系统图



推荐应用控制方式

1、快速实现本地调光。



2、通过APP设置遥控关联智能控制器后，可实现APP与遥控两种控制方式控制模块。

3、通过APP设置面板关联开关模块，可实现APP与面板同时控制。并能够通过面板联网，可实现APP远程控制模块，云场景，自动化联动功能。

4、.....智能控制，更多应用搭配等您来设置。

可搭配的设备清单

智能网关：是智能家庭控制中心，用于蓝牙设备和云端之间的互联互通，以及管理和控制场景和自动化，实现远程控制蓝牙驱动电源，开关面板等智能设备。

SP-GW-12S

SP-GW-6S

SP-GW-BLE

SP-GW-4S

G4 MAX

CG-KIT：可以把蓝牙驱动电源通过HomeKit接入 Apple Home，也可以通过Matter Bridge的方式接入所有支持标准Matter协议的IOT平台，包括Apple Home，Google Home， Amazon Alexa，Samsung Smart Things等。

CG-KIT

智能面板：可控制蓝牙驱动电源开/关，调光调色；支持本地场景等功能。

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

遥控器：可控制蓝牙驱动电源开/关，调光调色；支持本地场景等功能。

GQ PRO

GQ MAX

GQ

GQX

B1

B2

B5

B8

R8

RC4-BLE

APP操作说明

1. 账号注册

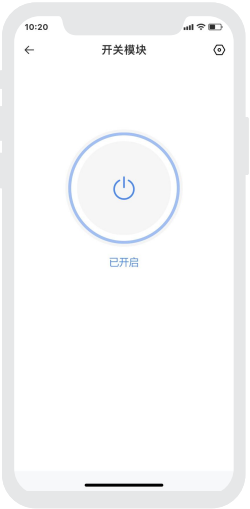
APP兼容iOS和Android系统，通过手机扫描下方二维码，按提示完成APP安装,安装后即可进行登录/注册操作。

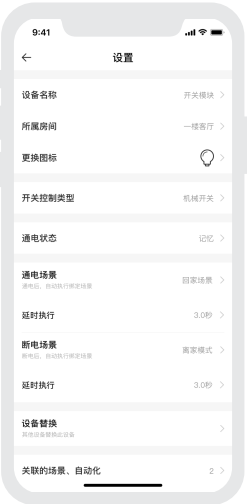
2. 配对操作

新用户创建家庭后，点击右上角“+”进入添加设备列表，选择“智能照明-开关模块 RELAY-BLE”后，按照界面提示，先将设备接通电源，确保设备处于未入网状态。点击“蓝牙搜索”后，按照提示完成添加设备。

3. 通断电场景设置

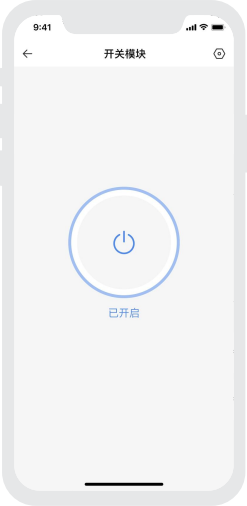
在设置页面可以设置设备通电或断电时所执行的场景与场景执行时间；





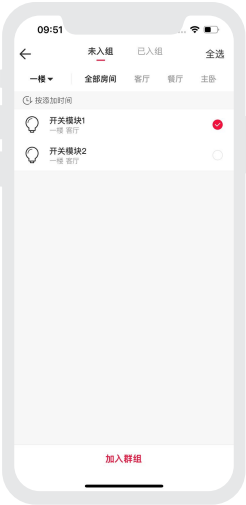
4. 绑定界面设置

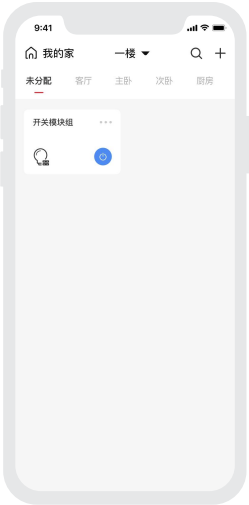
配对完成后，进入智能遥控器/智能无线开关绑定对象界面，选择开关模块设备进行关联后，可通过智能遥控器/智能无线开关控制设备开关，同时也可以在该界面解除绑定设备。



5. 群组控制

支持同类型的开关模块组成群组，用户可以对群组进行控制通断电等操作，操作更加便利。进入添加设备列表，选择“群组-开关模块组”，按照提示修改群组名称后，点击“下一步”勾选您要组成群组的设备，保存即可。



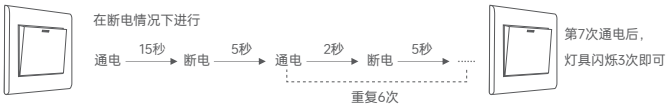


6. 高级功能

本产品可以通过与具有网关功能的设备联动，如超级面板12S。可实现本地场景、云场景、自动化等高级功能。

重置设备 (恢复出厂设置)

方法一：在断电的情况下，使用开关让设备通电15秒后断电，再连续通断电6次（每次通电2秒，断电5秒），第7次通电后，负载灯具闪烁3次，即表示已恢复到出厂设置状态。



方法二：确保设备已接通电源且处于在线状态，打开L-Home APP，找到该设备并进入其设置界面，点击“删除设备”按钮。当界面提示“删除成功”时，即表示已恢复到出厂设置。

更多功能

星际技术

- 实现了免通电、免现场调试的创新突破。工作人员可以在前期提前部署智能家居方案，预设入网、分组、场景等，极大地缩短了工程周期，降低了工程成本。（使用L-Home APP通过NFC感应设置）

设备替换

- 当设备损坏、丢失或离线时，可以选择同型号设备进行替换。新设备将同步旧设备的配置，包括名称、群组、场景、自动化等。

通电状态

- 当设备通电时，设备保持的状态（开启/关闭/记忆）。

开关控制类型

- 双控开关：适用于两处开关控同一盖灯。选中后，两个开关可交替控制灯具开关，每次触发开关时翻转继电器状态。
- 同步开关：适用于单个机械开关。选中后，继电器同步跟随所接外部开关状态。
- 翻转开关：适用于单个机械开关且开关按键方向与使用习惯不一致时，反转机械开关按键的逻辑功能。
- 复位开关：适用于自回弹开关，每次触发开关时翻转继电器状态。

设备日志

- 记录设备的操作日志。

常见问题

1. 设备添加失败怎么办？
1.1 确保设备正常通电，并且处于激活状态；
1.2 需要添加的设备未被其他账号添加过，如被添加过，请手动恢复出厂；
1.3 确保手机与设备两者尽量靠近，建议不超过20米；
1.4 如设备已被强制删除，请手动恢复出厂，然后重新添加设备。

2. 设备离线怎么办？
2.1 请检查设备是否正常通电；
2.2 请检查路由器是否工作正常，网络畅通；
2.3 如使用远程控制，请检查手机网络是否工作正常，网络畅通。

3. 如何远程控制/云场景设置？
如需远程控制/添加云场景设置，需搭配本司超级面板方可使用。

4. 如何共享设备？
请在“我的”—“家庭管理”，进入需要共享的家庭，点击“添加成员”，请按提示将需要设备共享的家人/朋友加入该家庭即完成共享。

运输和贮存

1.运输

产品适用车、船、飞机交通运输工具运输。

在运输中，应使用遮蓬进行防雨和防晒，并保持文明装卸，不应有剧烈振动、撞击等。

2.贮存

贮存符合 I 类环境的规定。贮存期限超过6个月的产品建议重新检验，合格后方可使用。

注意事项

- 请由具有专业资格的人员进行调试安装。
- 雷特产品（专有型号除外）不能防水，需避免日晒雨淋，如安装在户外，请用防水箱。
- 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境。
- 请检查使用的工作电压是否符合产品的参数要求。
- 使用的电线直径大小必须能足够负载连接的LED灯具，并确保接线牢固。
- 通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏。
- 如果发生故障，请勿私自维修；如果有疑问，请联系供应商。

✻ 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，请与供应商联系。

保修条例

- 自出厂之日起保修服务期为2年。
- 在保修服务期内出现产品质量问题雷特科技将给予免费修理或更换服务。

非保修条例：

属下列情况不在免费保修或更换服务范围之内：

- 已经超出保修服务期；
- 过高电压、超负载、操作不当等人为造成的损坏；
- 产品外形严重损坏或变形；
- 自然灾害以及人力不可抗拒原因造成的损坏；
- 产品保修标签和产品唯一条形码损坏；
- 无雷特科技签订的合同或发票凭证。

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更新日志

版本	更改日期	更改内容	更改人
A0	20260120	正稿	何少云