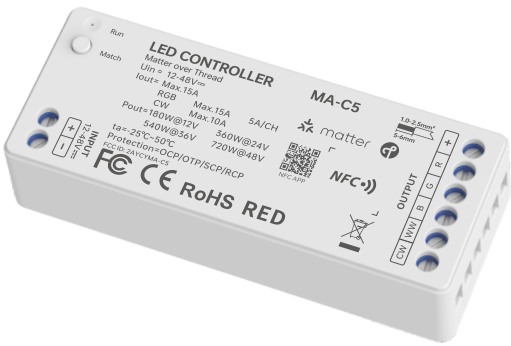


DIM/CCT/RGB+CCT Matter LED Controller

MA-C1,MA-C2,MA-C5



- Matter over Thread certified devices require pairing with a Matter hub featuring Thread border router functionality;
- Supports control via major smart home platforms including Apple Home, Google Home, Amazon Alexa, SmartThings, etc.;
- Supports voice control via Apple Siri, Google Assistant, Amazon Alexa, Samsung Bixby, etc.;
- Can be networked by scanning a QR code or via NFC one-touch pairing without scanning;
- Supports Matter standard OTA updates;
- Features NFC quick programming, allowing adjustment of on/off fade times, brightness ranges, and other parameters via smartphone app using NFC;
- Compact and lightweight design with housing made from Covestro/ Samsung V0-rated flame-retardant PC material;
- Includes soft-start gradual brightening for enhanced visual comfort;
- IP20 protection rating.

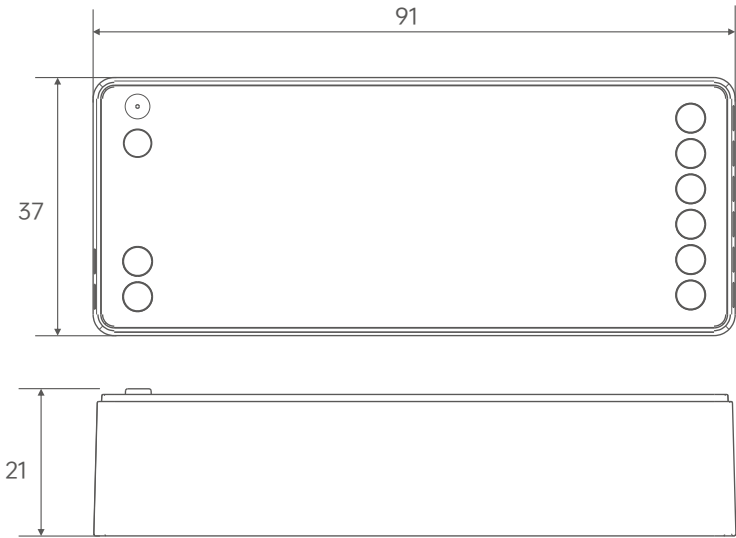


Technical Specifications

Model	MA-C1	MA-C2	MA-C5
Dimming Type	DIM	CCT	RGB+CCT
Input Signal	Matter over Thread		
Input Voltage	12-48V ~		
Output Voltage	12-48V ~		
Channels	1CH	2CH	5CH
Push Dim	Yes	Yes	No
Load Current	10A@12V 10A@24V 10A@36V 10A@48V	10A/CH@12V 10A/CH@24V 9A/CH@36V 9A/CH@48V	RGB Max.15A 5A/CH CW Max.10A
Load Power	120W@12V 240W@24V 360W@36V 480W@48V	120W@12V 240W@24V 324W@36V 432W@48V	180W@12V 360W@24V 540W@36V 720W@48V
Service Life	100000 Hours		
Protection Type	Short-circuit, over-temperature, over-current protection, reverse polarity protection		
Supported Platform	Apple Home, Google Home, Amazon Alexa, Amazon Alexa, SmartThings All smart home platforms supporting the standard Matter protocol.		
Working Temperature	-25°C ~ 50°C		
Product Dimensions	L91×W37×H21(mm)		
Package Dimensions	L94×W39×H22(mm)		
Weight (Gross Weight)	46g		

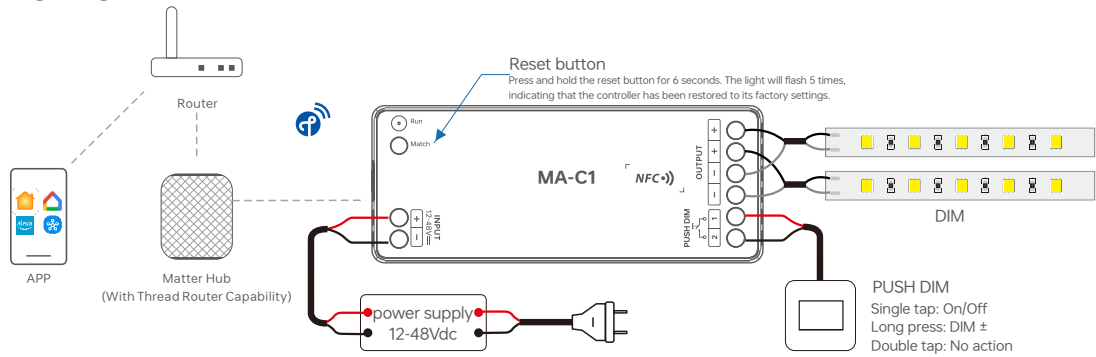
Dimension Drawing

Unit: mm



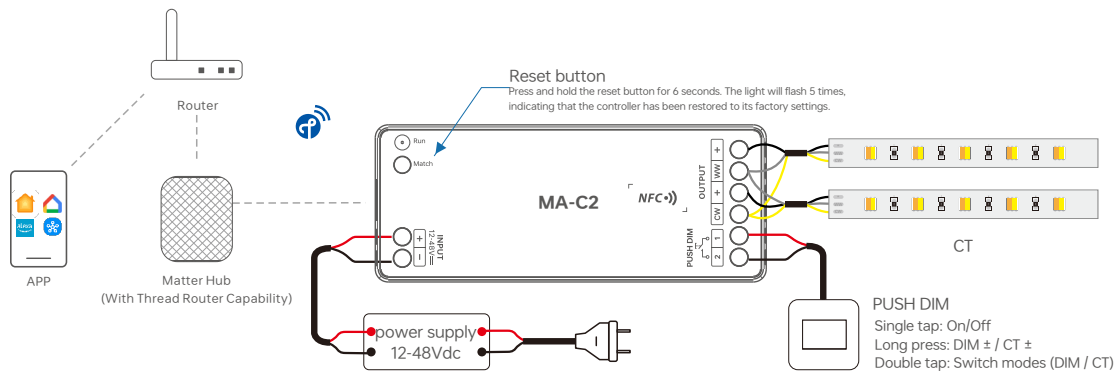
Connection Diagram

1. MA-C1 Wiring Diagram



2. MA-C2 Wiring Diagram (Three-Wire Color-Temperature LED Strip)

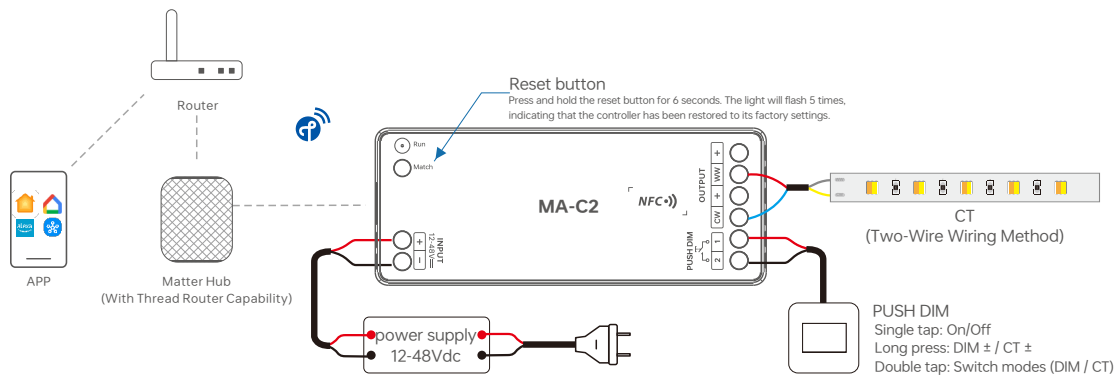
Note: If you need to connect a 2-wire color temperature light strip, you must switch it via the NFC Lighting app.



Note: Each unit must be connected to its own power supply and must not be powered alongside other units. Otherwise, the load indicator light will flash.

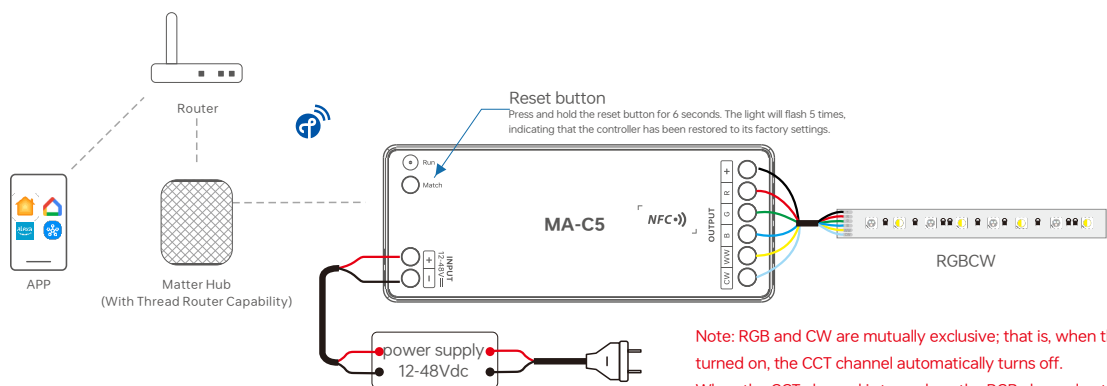
3. MA-C2 Wiring Diagram (Two-Wire Color Temperature Light Strip)

Note: If you need to connect a 3-wire color temperature light strip, you must switch it via the NFC Lighting app.



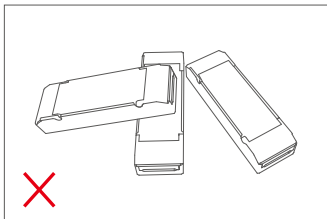
Note: Each unit must be connected to its own power supply and must not be powered alongside other units. Otherwise, the load indicator light will flash.

4. MA-C5 Wiring Diagram

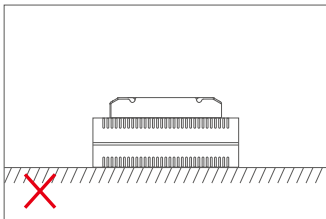
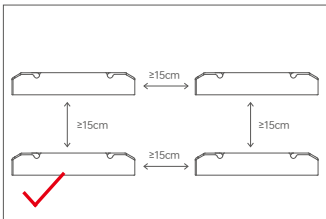


Note: RGB and CW are mutually exclusive; that is, when the RGB channel is turned on, the CCT channel automatically turns off. When the CCT channel is turned on, the RGB channel automatically turns off.

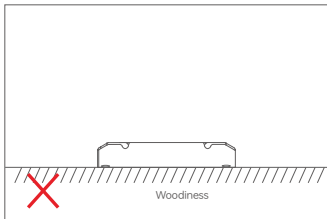
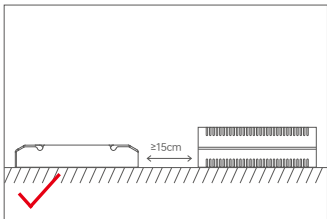
Installation Precautions



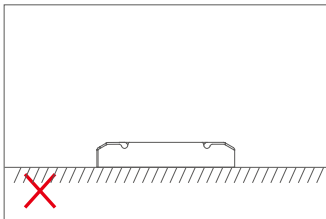
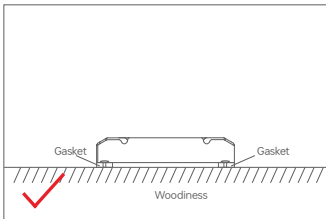
Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.



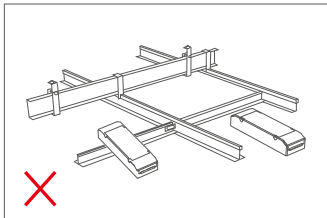
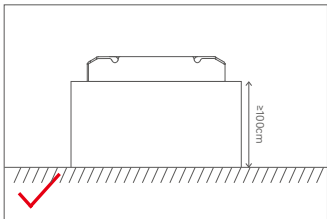
Do not place the product on top of a power supply. The distance between the product and the power supply should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the product.



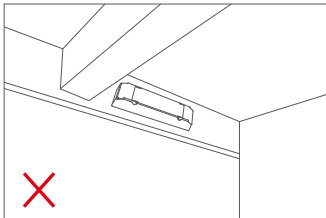
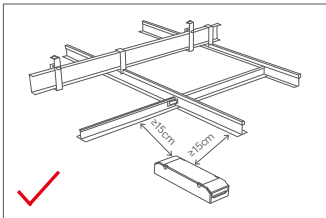
Do not fix the product tightly against the wooden board with screws. Please add a washer $\geq 7\text{mm}$ thick under the mounting screws to leave a gap for effective heat dissipation, so as to avoid affecting the heat dissipation and service life of the product.



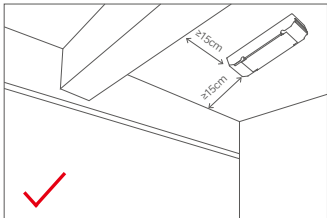
Please do not place the products on the floor. The distance between the product and the floor should be $\geq 100\text{cm}$ so as to avoid signal interference.



Do not allow the product to come into large-area contact with metal objects (e.g. keel frames). The separation distance shall be $\geq 15\text{cm}$ 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 $\geq 15\text{cm}$ so as to avoid signal interference.



Add to Matter Platform Instructions

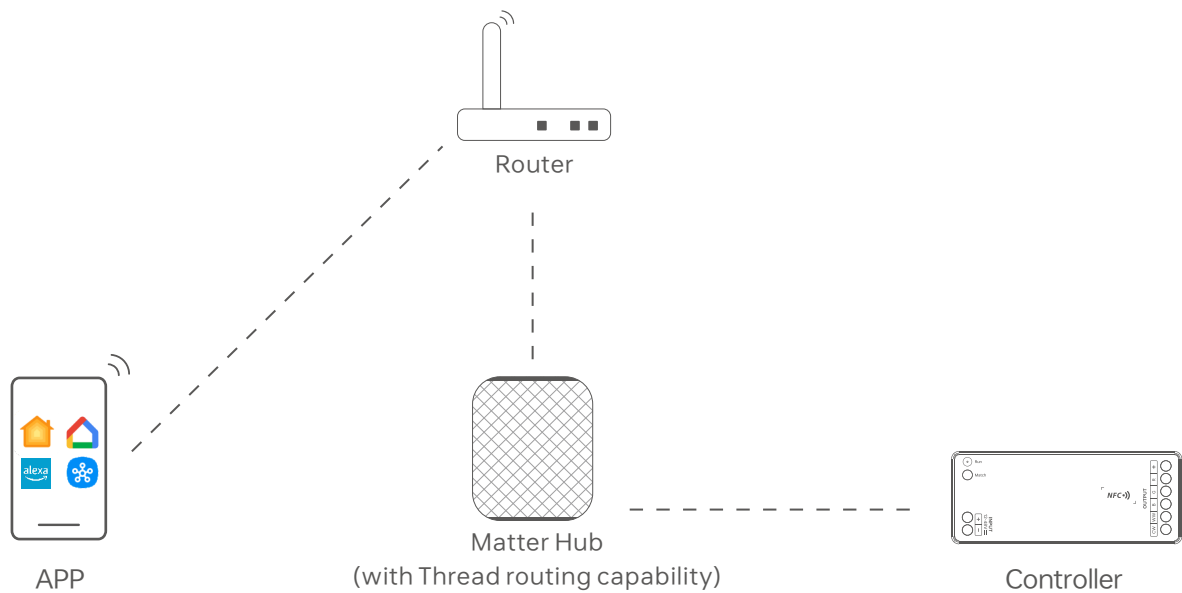
1. This device supports control via major smart home platforms, including Apple Home, Amazon Alexa, Google Home, SmartThings, and others.
2. To connect Matter over Thread devices, you need a Matter hub supporting Thread border router functionality from major platforms. Refer to the image below for compatible models.

 Apple Home	 Google Home	 Amazon Alexa	 SmartThings
Apple HomePod (second-gen)	Google Nest Hub (2nd Gen)	Amazon Echo (4th-gen)	Aeotec SmartThings Smart Home Hub
Apple HomePod Mini	Google Nest Hub Max	Amazon Echo Hub	Samsung SmartThings Station
Apple TV 4K (2nd gen)	Google Nest Wifi Pro	Amazon Echo Show 8 (3rd-gen)	Samsung SmartThings Hub Dongle
Apple TV 4K (3rd gen,128 GB)	Google TV Streamer (4K)	Amazon Eero 6, Pro 6, 6 Plus, Max 7 etc.	Samsung SmartThings Hub v3

3. This guide uses Apple Home as an example. First, prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest firmware, along with an Apple HomePod mini also running the latest firmware. Then connect your iPhone or iPad to your home Wi-Fi network, launch the Apple Home app, and follow Apple's instructions to set up the HomePod mini.

*For iPhone models 16 and above, no Matter hub is required; devices can be added directly.

Matter System Diagram

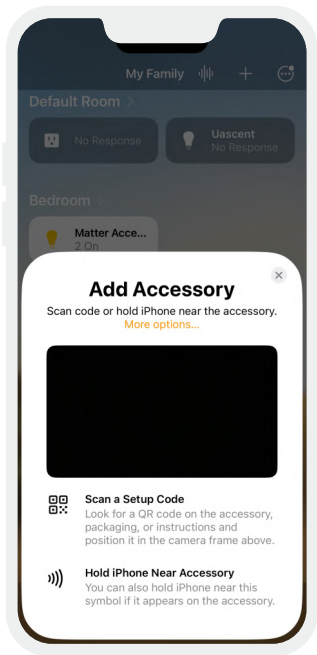
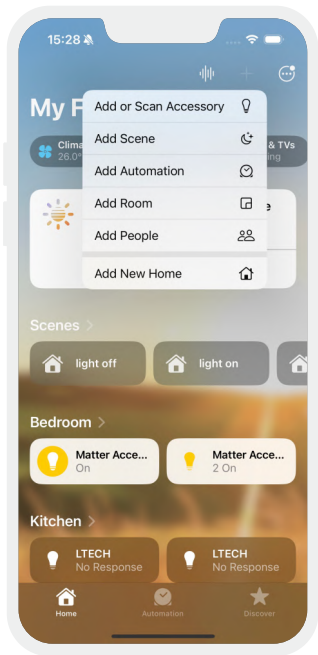


Add Steps

1. Add accessories

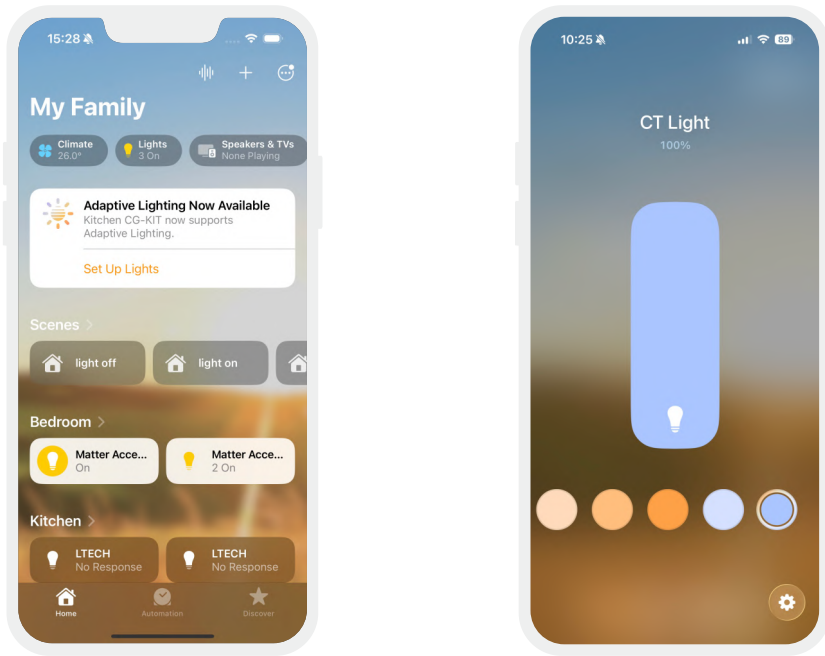
Open the Apple Home app and tap “Add or Scan Accessories.” Add the device to the Home app by scanning the QR code sticker on the device, as shown below.

*Alternatively, you can add it via NFC: Open the Home app and hold it near the device's NFC sensor area to add it.



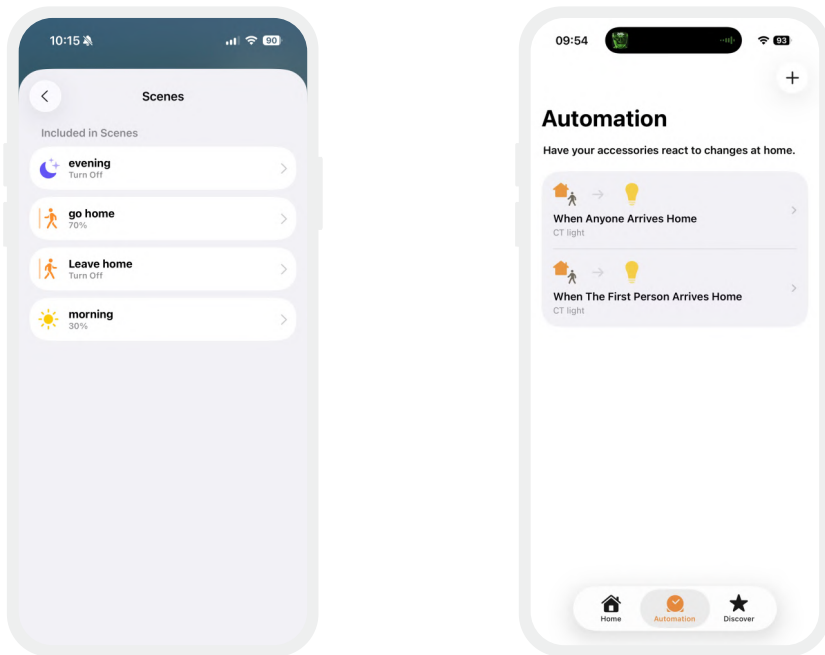
2.Control device

After successfully adding a device, tap the device icon to turn it on or off. Tap the device card to access the brightness and color temperature control interface.



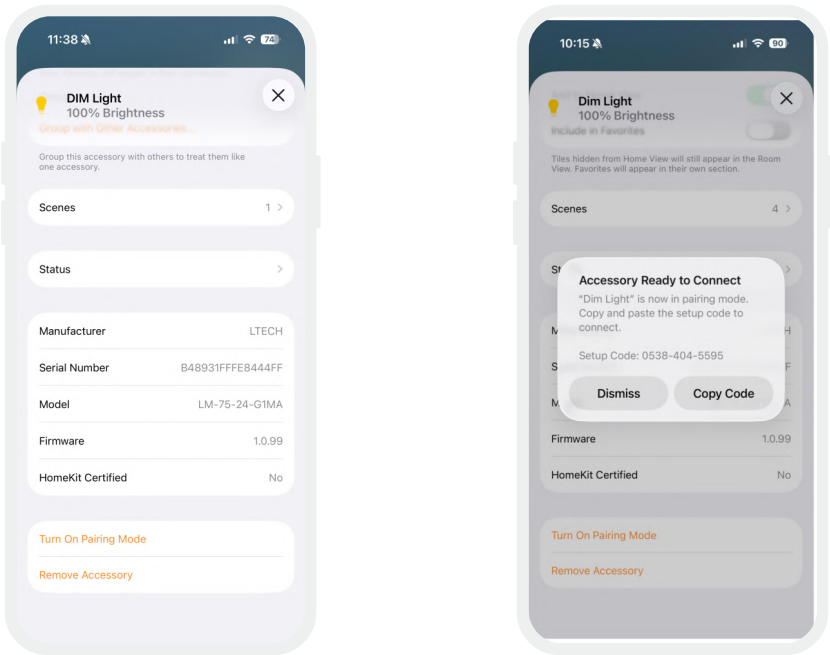
3. Advanced Features

Supports creating groups, scenes, and automations, enabling remote control and scheduled control. Devices can also be controlled via Siri voice commands.



4.Multi-Ecological Distribution Network

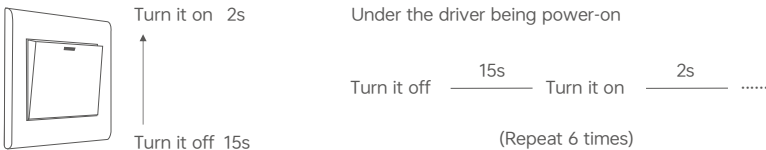
If the product needs to be added to two or more ecosystems, go to the device settings page, tap “Enable Pairing Mode,” obtain the pairing code, and add it to the third-party platform.



Restore factory settings

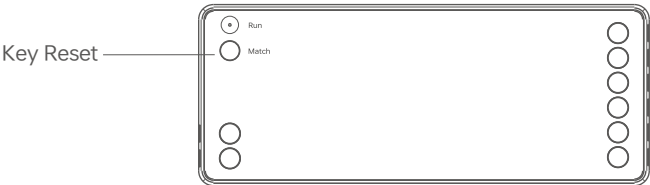
Method 1: Power-cycle reset

Make sure the driver is well-connected to a lamp and the lamp is on, turn it off with the switch and after 15s turn it on. After 2s, turn it off again. Repeat the same operation 6 times. When the lamp flashes 5 times , reset the device to factory defaults successfully.



Method Two: Key Reset

Press and hold the reset button for 6 seconds. When the light flashes 5 times, the device has been restored to factory settings.



Use the NFC Lighting APP

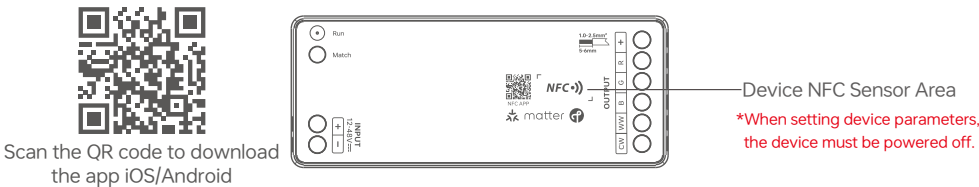
Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).

Read/Write the LED driver

Use your NFC-capable phone to read LED driver data, then edit the parameters and they can be directly written to the driver

1.Read the LED driver

On the APP home page, click [Read/Write LED driver] , then keep the programmer's sensing area close to the NFC sensing area of the driver to read the driver parameters.

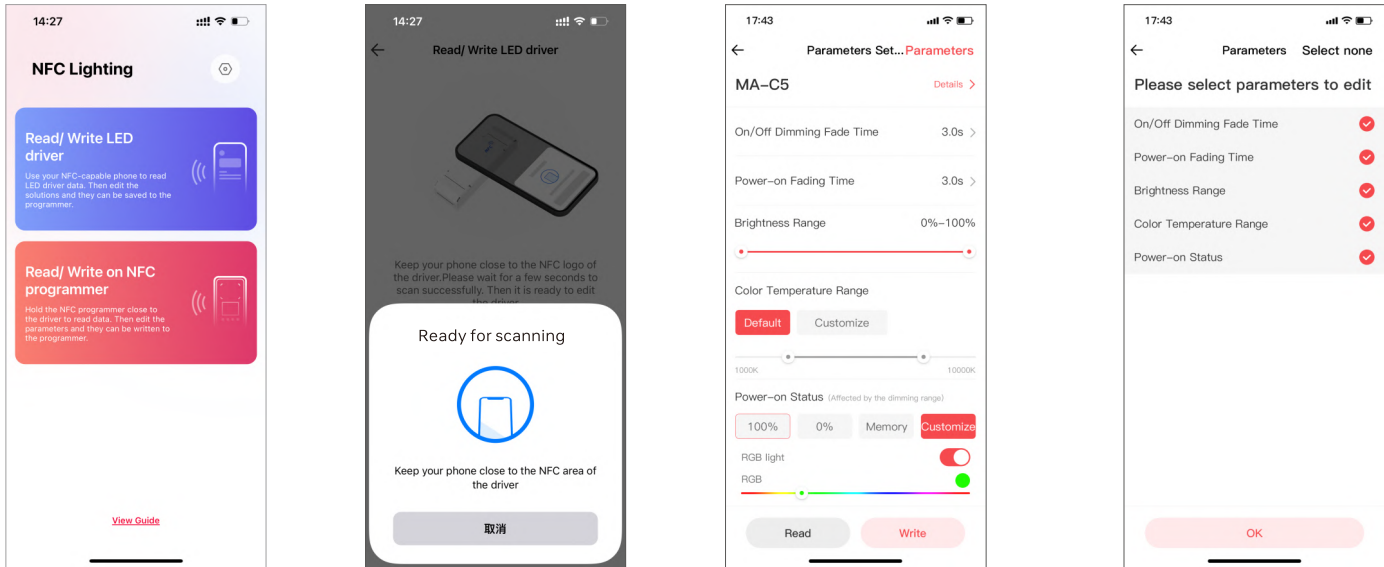


2. Edit Parameters

Click [Parameter Management] to edit parameters such as On/Off Dimming Fade Time, Power-on Fading Time, Brightness Range, Color Temperature Range, and Power-on Status.

3. Write to Drive

After completing parameter settings, click the [Write] button in the upper-right corner. Bring the phone's sensor area close to the drive's NFC sensor zone to successfully write parameters to the drive.



FAQs

This product is designed in compliance with the Matter protocol standard. As the protocol is still in the early stage of industry development and limited by the current version, some functions, performance and network connection stability may be subject to further optimization. Product performance is subject to the current version of the Matter protocol. Our company will continuously upgrade and optimize product functions and performance in line with official updates. Please kindly note.

1. What should I do if the large number of Matter devices managed by the Matter hub gateway causes unstable connections and control?

1.1 It is recommended that each hub gateway add no more than 40 Matter devices.

1.2 It is recommended that the hub gateway remain powered on at all times; otherwise, the device reconnection time will be long.

1.3 Routers of different brands and performances have a certain impact on the number of devices managed by the Matter hub. It is recommended to choose a high-performance router.

2. What should I do if packet loss occurs during group control switching or dimming, and the app status flips back and forth?

It is recommended to keep the number of devices in a group within 10 units.

3. What should I do if the device goes offline and cannot recover after a long period of inactivity?

It is recommended to power the device off and on again to reconnect.

4. What should I do if adding the device still fails after restoring it to factory settings?

Please try powering the device off and on again before adding it.

5. Common reasons for failed device addition caused by router issues.

5.1 The router must have the IPv6 option enabled.

5.2 The router must have the "Brute-force network attack prevention" option disabled.

5.3 Do not connect to the guest Wi-Fi; connect to the main Wi-Fi network instead.

6. What should I do if I see the message "The limit on the number of platforms a device can be added to has been exceeded" when adding a device?

Solution: A device can be added to a maximum of 5 platforms (Apple Home counts as 2). If you exceed this limit, locate any Matter platforms you rarely use or no longer need and delete them, then try adding the new platform again.

Attention

- Product installation and commissioning should be done by a qualified professional.
- Our company 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.
- Avoid installation near large metal surfaces, in thunder-prone areas, strong magnetic fields, or high-voltage zones.
- 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:

Following conditions are not within the guarantee range of free repairing or replacement services:

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

Update Log

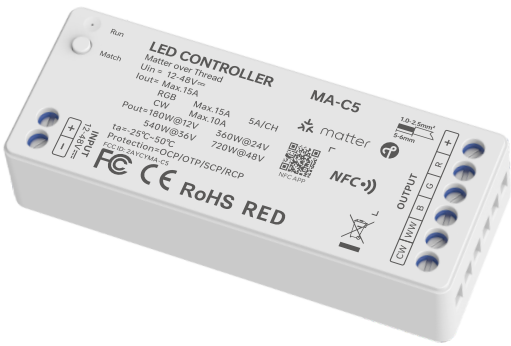
Version	Updated Time	Update Conten	Updated by
A0	20260129	Original version	Haipeng Li

DIM/CCT/RGB+CCT Matter LED控制器

MA-C1,MA-C2,MA-C5



- Matter over Thread 认证设备，需要搭配具备Thread 边界路由功能的Matter中枢使用；
- 支持主流智能家居平台控制，包括Apple Home、Google Home、Amazon Alexa、SmartThings等；
- 支持语音控制，包括Apple Siri、Google Assistant、Amazon Alexa、Samsung Bixby等；
- 可通过扫描二维码配网，也可无需扫码，通过NFC一碰配网；
- 支持Matter标准OTA升级；
- 支持NFC极速编程，可使用手机APP通过NFC更改开/关灯渐变时间、亮度范围等参数；
- 体积小、重量轻，外壳采用科思创/三星PC阻燃V0级原料；
- 带软启动渐亮功能，让人眼视觉更舒适；
- IP20 防护等级。

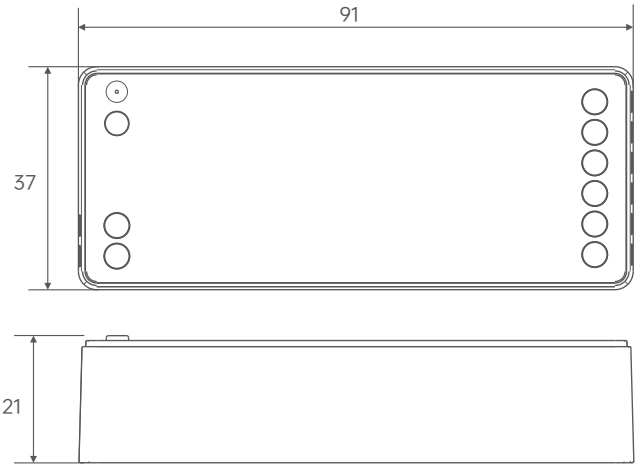


技术参数

型号	MA-C1	MA-C2	MA-C5
调光类型	DIM	CCT	RGB+CCT
输入信号	Matter over Thread		
输入电压	12-48V ---		
输出电压	12-48V ---		
通道数量	1通道	2通道	5通道
复位开关	有	有	无
负载电流	10A@12V 10A@24V 10A@36V 10A@48V	10A/CH@12V 10A/CH@24V 9A/CH@36V 9A/CH@48V	RGB Max.15A 5A/CH CW Max.10A
负载功率	120W@12V 240W@24V 360W@36V 480W@48V	120W@12V 240W@24V 324W@36V 432W@48V	180W@12V 360W@24V 540W@36V 720W@48V
使用寿命	100000小时		
保护类型	短路、过温、 过流保护、防反接保护	短路、过温、 过流保护、防反接保护	短路、过温、 过流保护、防反接保护
支持平台	Apple Home, Google Home, Amazon Alexa, Amazon Alexa, SmartThings 等所有支持标准Matter协议的智能家居平台		
工作温度	-25°C ~ 50°C		
产品尺寸	L91×W37×H21(mm)		
包装尺寸	L94×W39×H22(mm)		
重量(毛重)	46克		

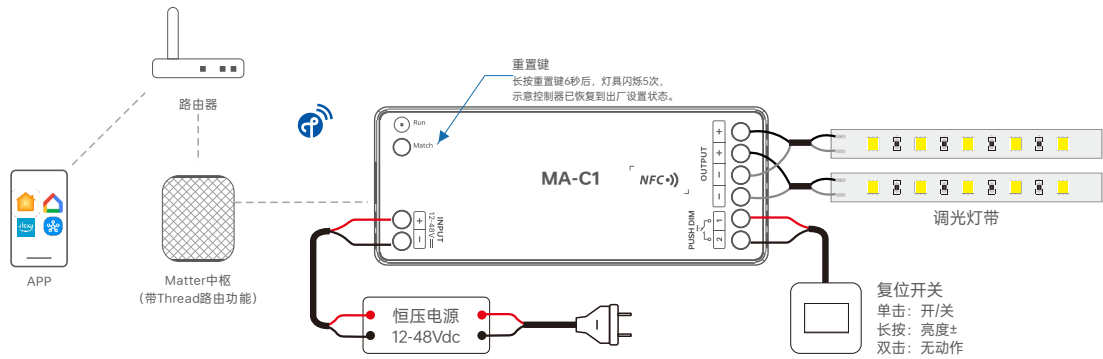
尺寸图

单位：mm



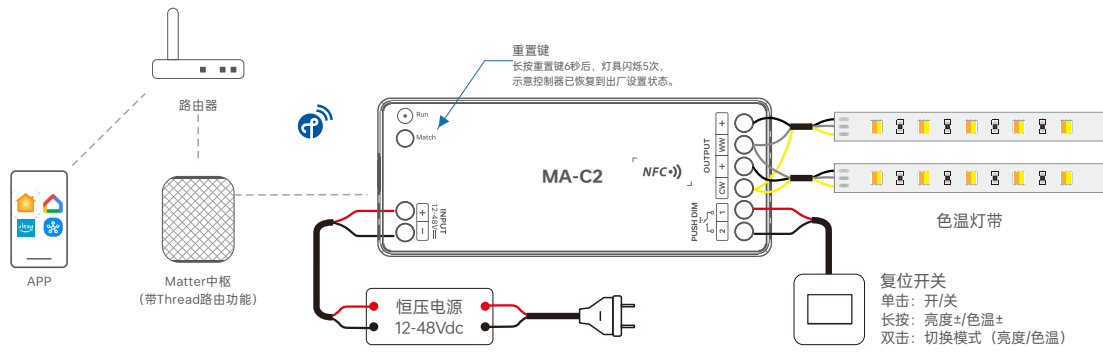
连接示意图

1、MA-C1接线示意图



2、MA-C2接线示意图（三线色温灯带）

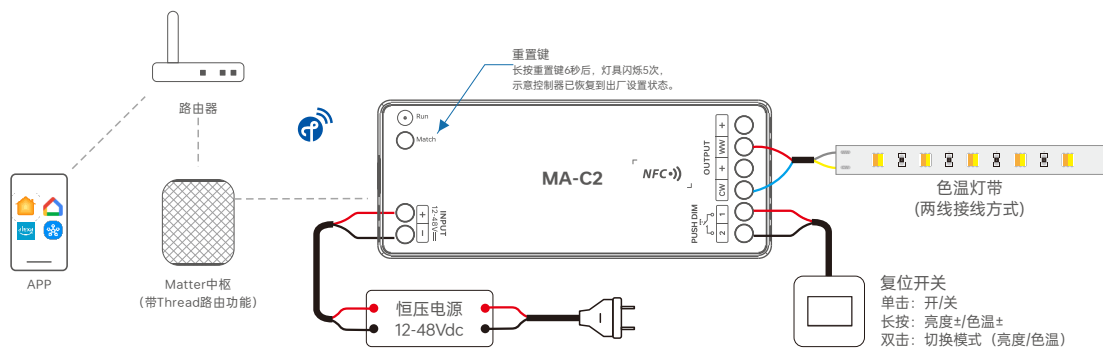
注：若需要接2线色温灯带，需要通过NFC Lighting APP 切换



注：一台产品单独搭配一台电源，并且不能与其它产品一起供电。
否则会出现负载灯闪烁的问题。

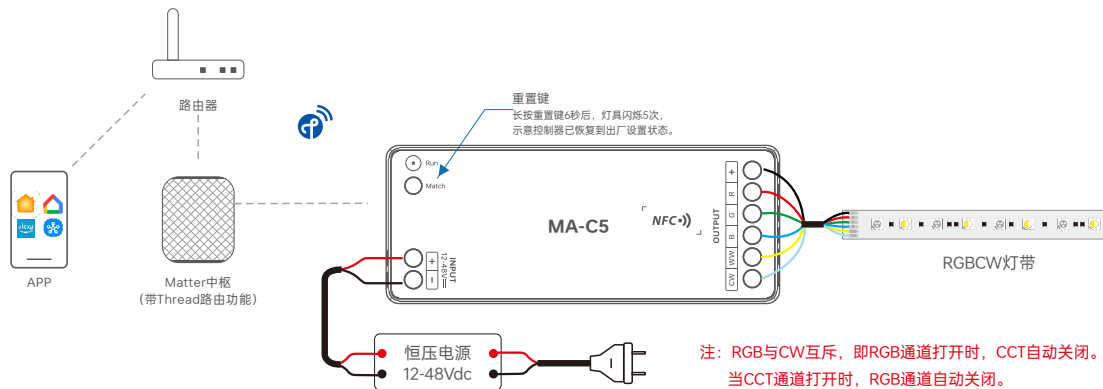
3、MA-C2接线示意图（两线色温灯带）

注：若需要接3线色温灯带，需要通过NFC Lighting APP 切换



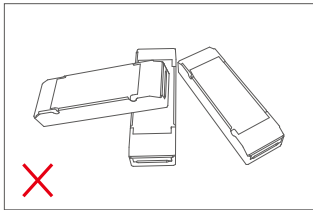
注：一台产品单独搭配一台电源，并且不能与其它产品一起供电。
否则会出现负载灯闪烁的问题。

4、MA-C5接线示意图

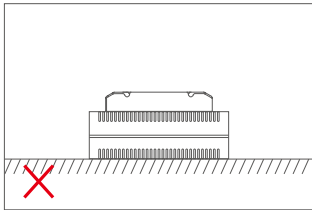
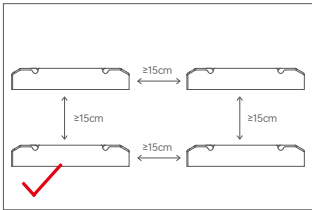


注：RGB与CW互斥，即RGB通道打开时，CCT自动关闭。
当CCT通道打开时，RGB通道自动关闭。

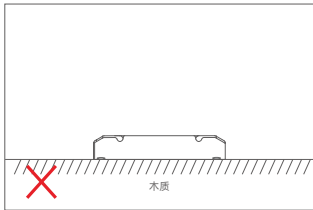
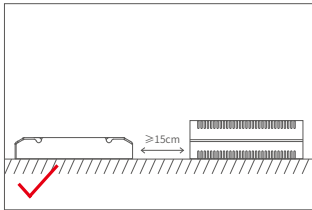
安装注意事项



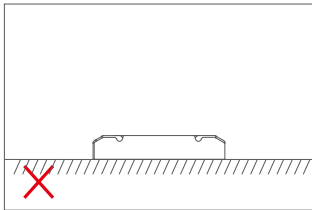
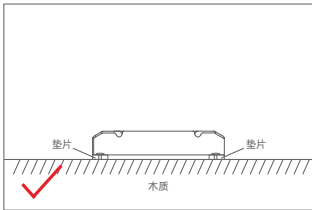
请勿将产品堆叠摆放，产品与产品间隔距离应≥15cm，避免影响产品散热和使用寿命。



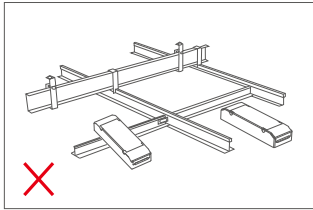
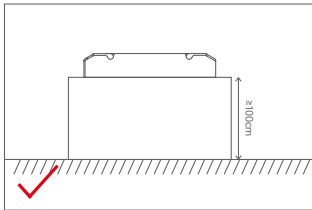
请勿将产品置于电源上方，产品与电源间隔距离应≥15cm，避免影响产品散热而减少使用寿命。



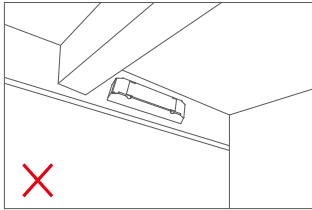
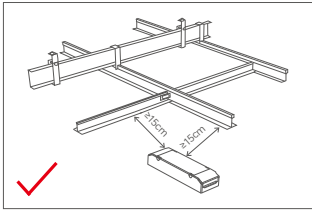
请勿将产品螺丝固定紧贴于木板，应在固定螺丝下增加≥7mm的垫片，留点空隙可以有效散热，避免影响产品散热和使用寿命。



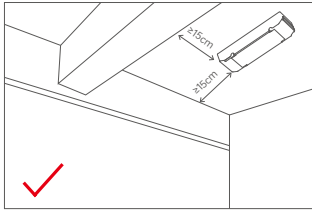
请勿将产品放置在地面上。产品与地面之间的距离应≥100cm，以免信号干扰影响使用。



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。



添加到Matter平台说明

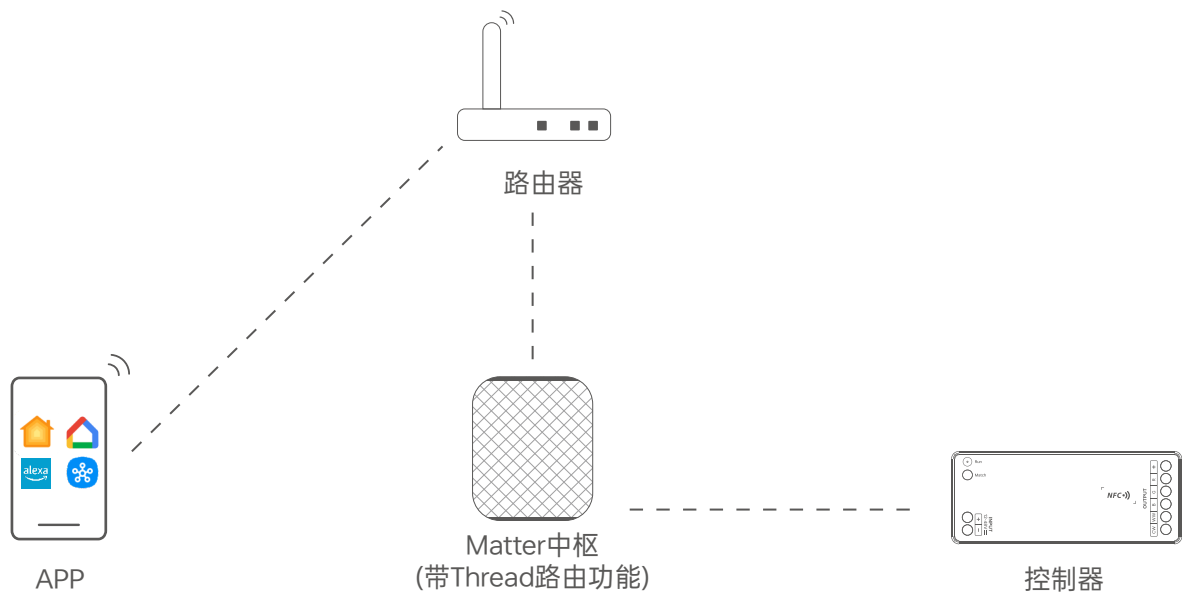
- 1.本设备支持各大主流智能家居平台控制，包括Apple Home、Amazon Alexa、Google Home、SmartThings等。
- 2.要连接Matter over Thread设备，需要准备各大平台支持Thread边界路由功能的Matter中枢，型号可以查看下图。

 Apple Home	 Google Home	 Amazon Alexa	 SmartThings
Apple HomePod (second-gen)	Google Nest Hub (2nd Gen)	Amazon Echo (4th-gen)	Aeotec SmartThings Smart Home Hub
Apple HomePod Mini	Google Nest Hub Max	Amazon Echo Hub	Samsung SmartThings Station
Apple TV 4K (2nd gen)	Google Nest Wifi Pro	Amazon Echo Show 8 (3rd-gen)	Samsung SmartThings Hub Dongle
Apple TV 4K (3rd gen,128 GB)	Google TV Streamer (4K)	Amazon Eero 6, Pro 6, 6 Plus, Max 7 etc.	Samsung SmartThings Hub v3

3.本说明书以Apple Home为例，请先准备一台装有最新版本固件的 iPhone（iOS 16.2 或更高版本）或 iPad（iPadOS 16.2 或更高版本），以及一台装有最新版本固件的 Apple HomePod mini。然后将 iPhone 或 iPad 连接到您的家庭 WLAN 网络，运行 Apple Home 应用程序并按照 Apple 的指示设置 HomePod mini。

*如苹果手机型号是iphone 16及以上，则无需Matter中枢，可直接添加。

Matter系统图



添加步骤

1.添加配件

打开苹果“家庭” app，并点击“添加或扫描配件”，通过扫描设备上的二维码贴纸，将设备添加到“家庭”APP，如下图所示。
*也可以通过NFC入网：打开“家庭”APP靠近设备的NFC感应区域，识别入网。



2.控制设备

成功添加设备后，点击设备图标进行开/关；点击设备卡片进入亮度、色温控制界面。



3. 高级功能

支持创建组、场景、自动化、进行远程控制 and 定时控制，也可以通过Siri语音指令控制设备。



4.多生态配网

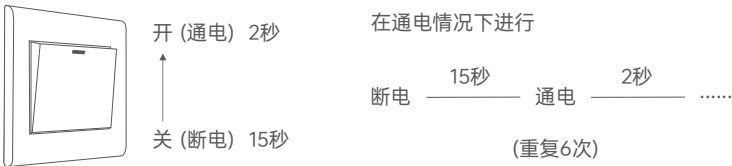
如果产品需要加入到两个或者多个生态，可以进入设备设置页，点击“打开配对模式”，获取配对码并添加到第三方平台。



恢复出厂设置

方式一：断上电复位

确保设备已接灯且处于常亮状态下，使用开关让设备连续通断电6次(每次断电时间5秒，通电2秒)，第6次通电2秒后，灯具闪烁5次，即表示设备已恢复出厂设置状态。



方式二：按键复位

长按重置键6秒后，灯具闪烁5次，即表示设备已恢复出厂设置状态。



搭配NFC Setup APP使用

通过手机扫描下方二维码，按提示完成APP安装。（因性能需求，要求手机型号苹果：iPhone8及以上、且操作系统iOS13及以上；安卓：具备NFC功能机型）



扫码下载APP
IOS/Android

读/写智能电源

使用手机，通过NFC读取驱动器信息，根据需求设置参数后，可直接写入驱动器。

1. 读取设备

在APP【首页】点击“开始扫描”将手机感应区域靠近驱动器NFC感应区，读取设备参数。



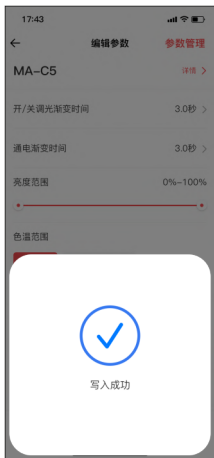
2. 编辑参数

点击【参数管理】可编辑开/关灯渐变时间、调光渐变时间、亮度范围、通电状态、PWM频率等参数。



3. 写入驱动器

参数设置完成后，点击右上角【写入】，将手机感应区域靠近驱动器NFC感应区，即可写入驱动器成功修改参数。



常见问题

本产品遵循Matter协议标准设计，因该协议尚处行业发展初期，受当前版本限制，部分功能、性能及网络连接稳定性存在优化空间。产品表现以当前Matter协议版本为准，我司将随官方版本持续升级并优化产品功能与性能，敬请知悉。

1.Matter中枢网关管理的Matter数量多，导致连接不稳定，控制不稳定怎么办？

1.1 建议每台中枢网关添加matter设备不要超过40台；

1.2 建议中枢网关保持常通电，否则设备重连时间较长；

1.3 不同品牌，不同性能的路由器对matter中枢管理的设备数量有一定的影响，建议选择性能强大的路由器。

2.群组控制开关，调光出现丢包，app出现状态来回跳动清空怎么办？

建议群组数量控制在10台以内。

3.长时间不控制设备，设备掉线，无法恢复怎么办？

建议设备断上电重新连接。

4.设备恢复出厂设置后，依旧添加设备失败怎么办？

建议断上电后再添加设备。

5.常见的路由器原因导致添加设备失败的原因。

5.1 路由器需要开启IPV6选项；

5.2 路由器需要关闭“防暴力破解网络”选项；

5.3 不要连接“访客模式”下的WiFi，需要连接主WiFi。

6.添加设备时提示“设备加入平台数量超限”怎么办？

解决方案：设备最多可被5个平台添加（Apple Home占2个）。若超过了数量限制，可找到设备不常用或已闲置的 Matter 平台并删除后，再重新尝试添加新平台。

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，欢迎向我司授权的经销商咨询。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题我司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；
- 无我司签订的合同或发票凭证。

1. 修理或更换是我司对客户唯一补救措施。我司不承担任何附带引起的损害赔偿，除非在适用法律范围之内。
2. 我司享有修正或调整本保修条款的权利，并以书面形式发布为准。

更新日志

版本	更改日期	更改内容	更改人
A0	20250730	正稿	黎海鹏