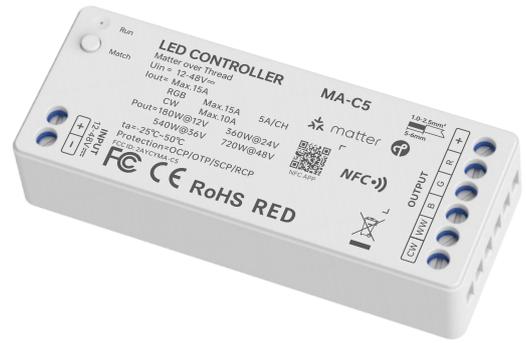


DIM/CT/RGBCW Matter LED Controller

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.

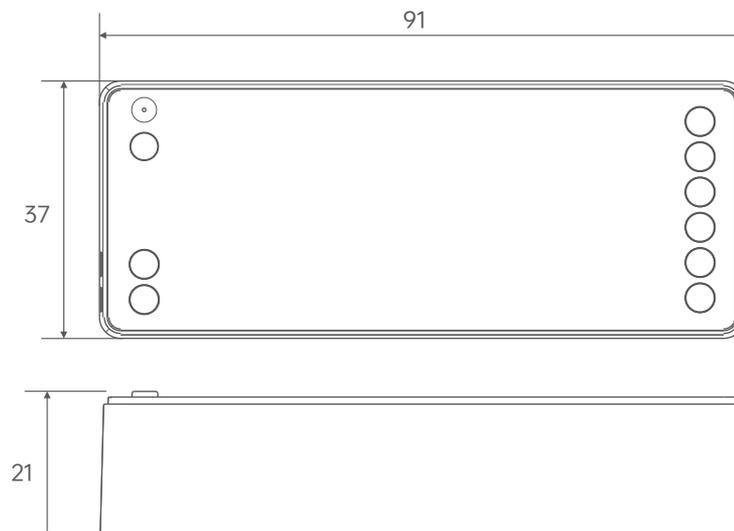


Technical Specifications

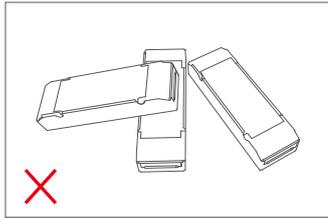
Model	MA-C1	MA-C2	MA-C5
Input Signal	Matter over Thread		
Input Voltage	12-48V ---		
Output Voltage	12-48V ---		
Channels	1CH	2CH	5CH
Push Dim	Yes	Yes	No
Load Current	10A@12V 10A@24V 10A@36V 10A@48V	10A/CH@12V 10A/CH@24V 9A/CH@36V 9A/CH@48V	RGB Max.15A 5A/CH CW Max.10A
Load Power	120W@12V 240W@24V 360W@36V 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

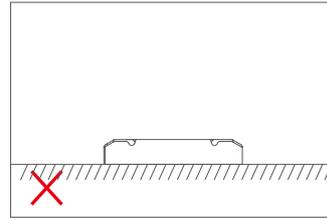
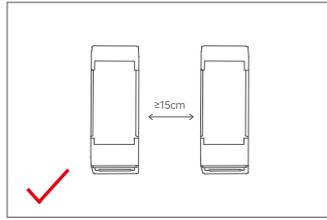
Unit: mm



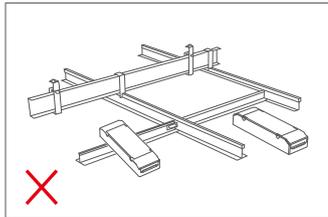
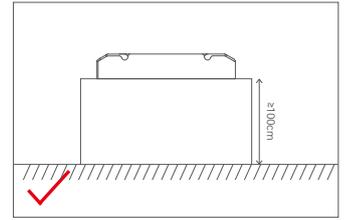
Installation Precautions



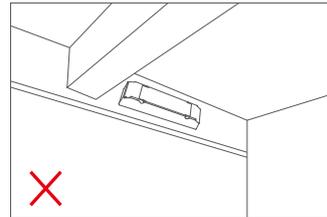
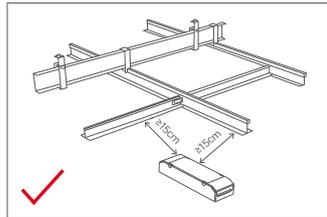
Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.



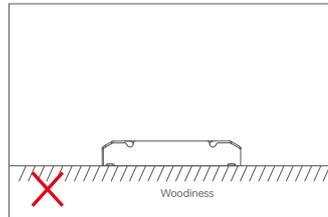
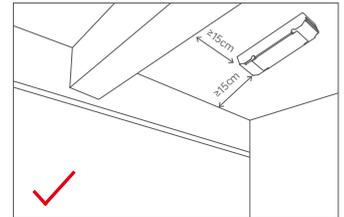
Please do not place the products on the floor. The distance between the product and the floor should be $\geq 100\text{cm}$ so as to avoid signal interference.



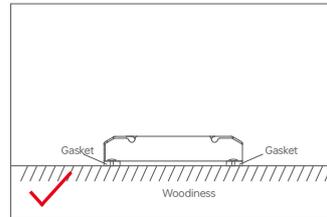
Please do not place the products near a large area of metal objects (such as metal stud ceilings). The distance between the product and the metal object should be $\geq 15\text{cm}$ so as to avoid signal interference.



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.



Do not fix the product screws tightly against the wooden board. Instead, add a washer with a thickness of $\geq 7\text{mm}$ under the fixing screws. Leaving some gaps can effectively dissipate heat, preventing any impact on the product's heat dissipation performance and service life.



Add to Matter Platform Instructions

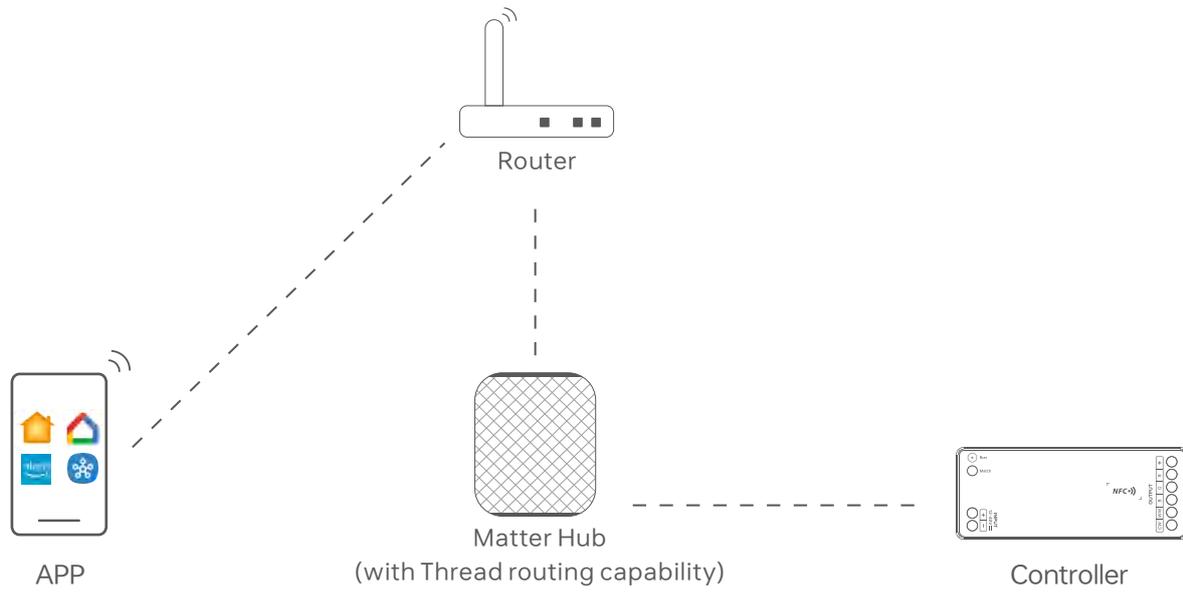
1. This device supports control via major smart home platforms, including Apple Home, Amazon Alexa, Google Home, SmartThings, and others.
2. To connect Matter over Thread devices, you need a Matter hub supporting Thread border router functionality from major platforms. Refer to the image below for compatible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

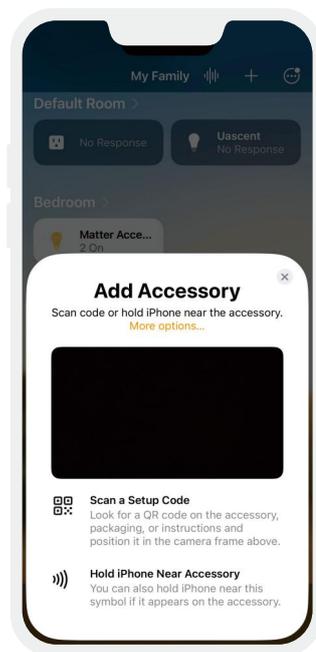
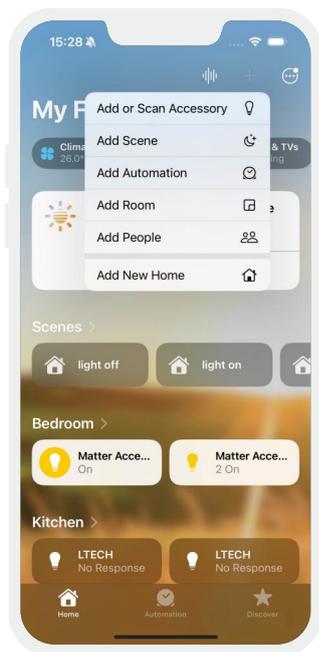


Add Steps

1. Add accessories

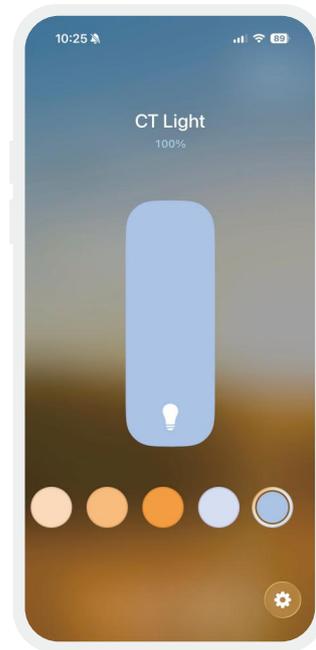
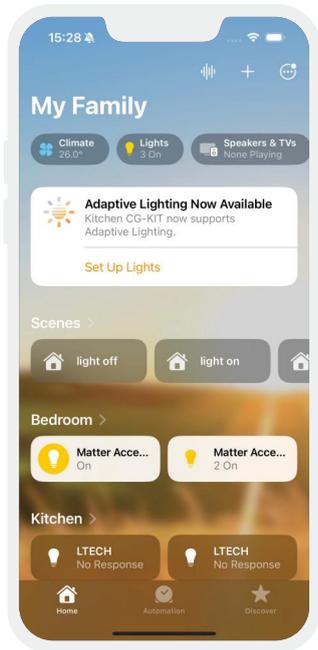
Open the Apple Home app and tap “Add or Scan Accessories.” Add the device to the Home app by scanning the QR code sticker on the device, as shown below.

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



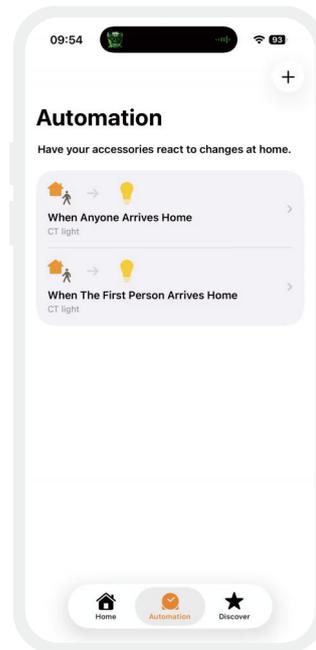
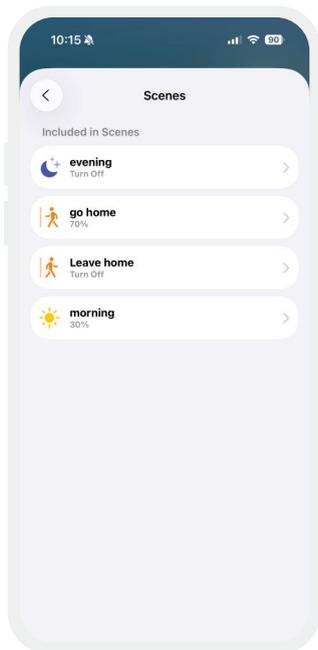
2. Control device

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.



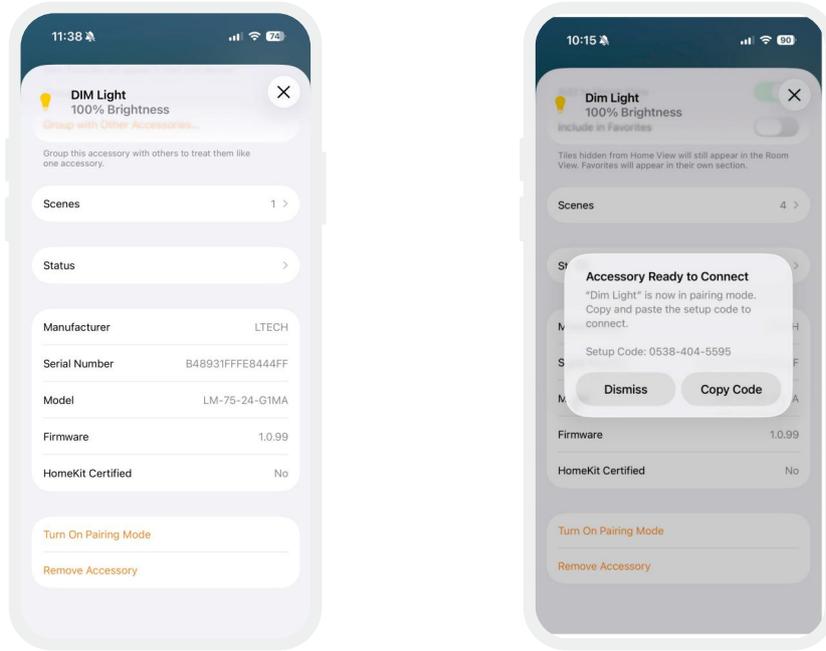
3. Advanced Features

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

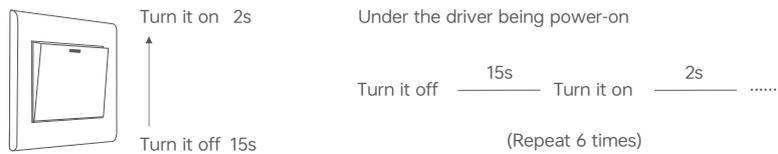
If the product needs to be added to two or more ecosystems, go to the device settings page, tap “Enable Pairing Mode,” obtain the pairing code, and add it to the third-party platform.



恢复出厂设置

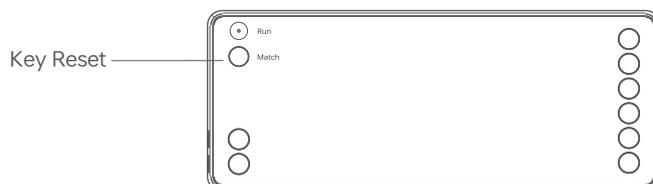
Method 1: Power-cycle reset

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

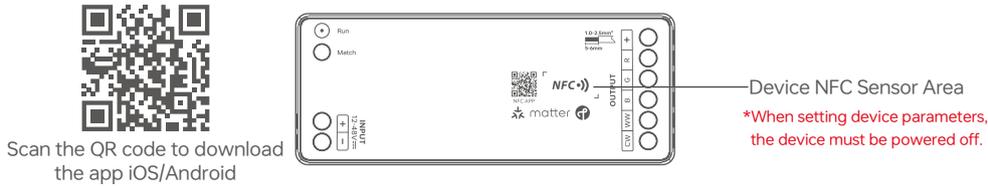
Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iPhone 8 and later that are compatible with iOS 13 or higher).

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.

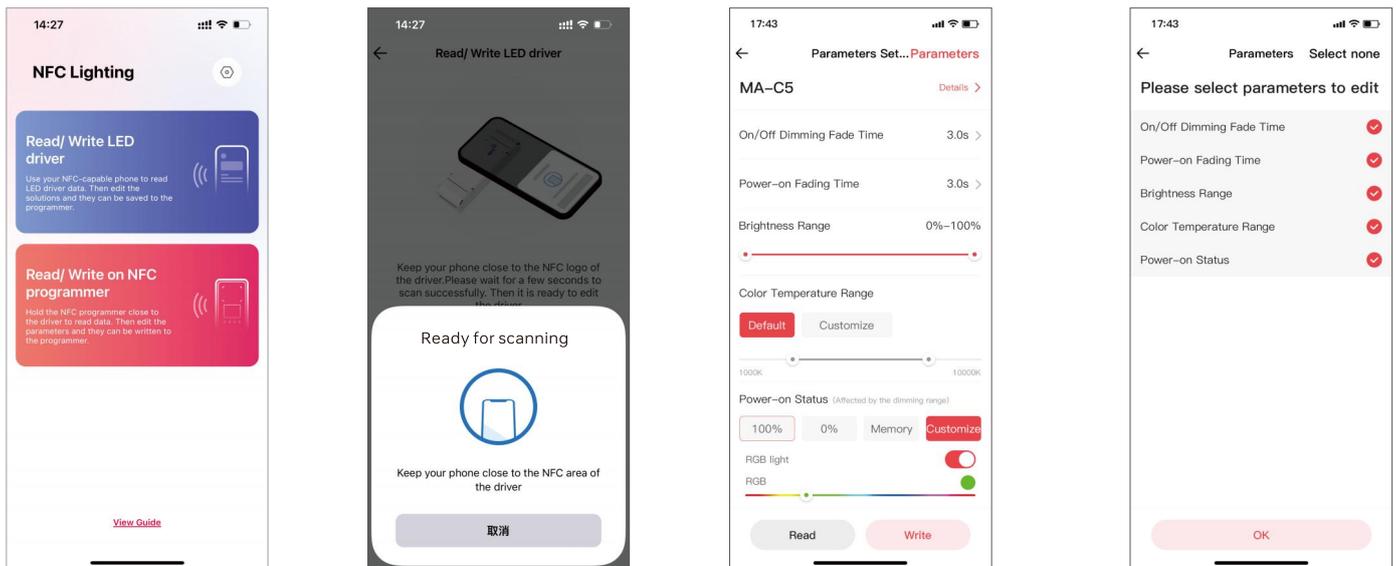


2. Edit Parameters

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.



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:

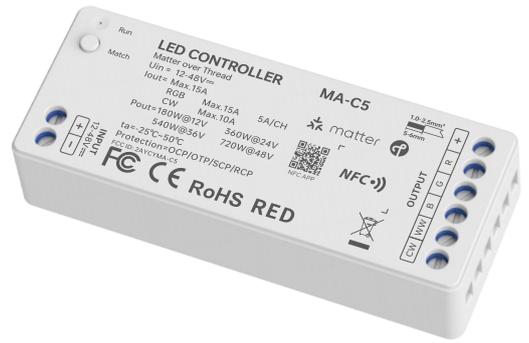
Following conditions are not within the guarantee range of free repairing or replacement services:

- 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

- 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。

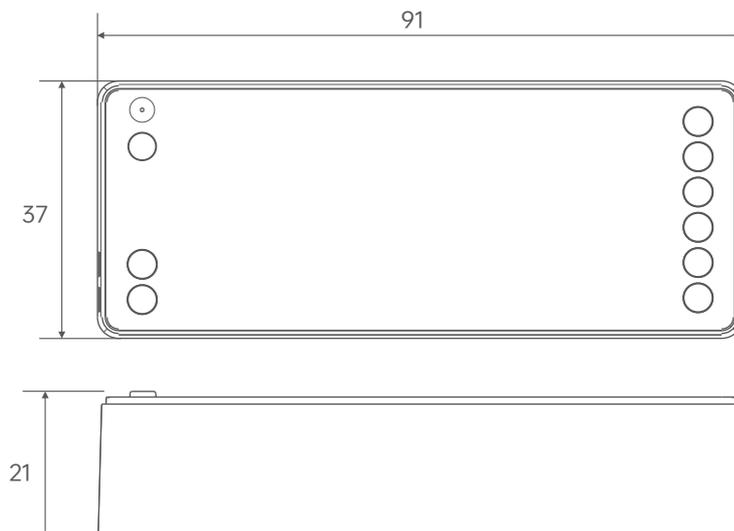


技术参数

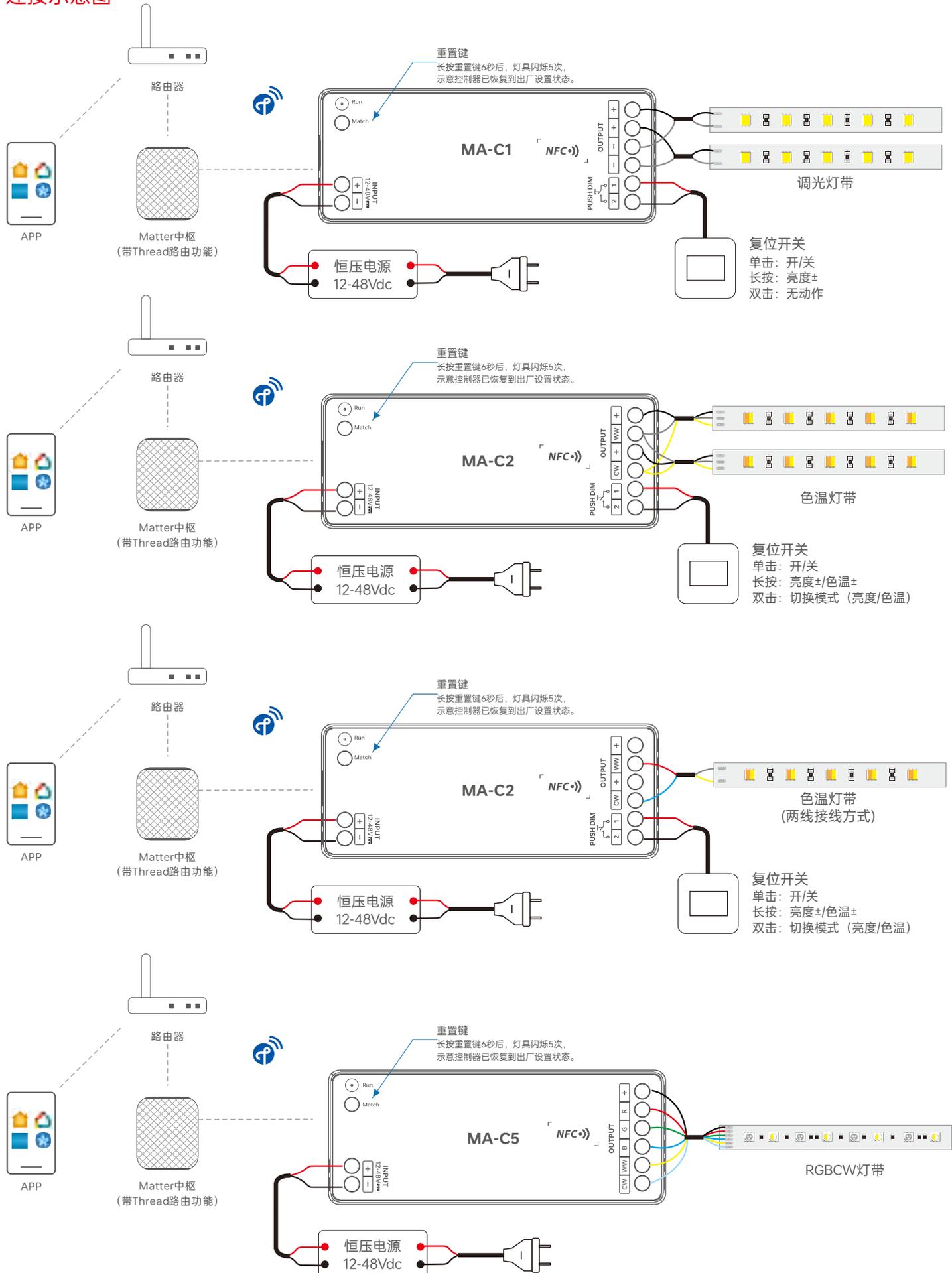
型号	MA-C1	MA-C2	MA-C5
输入信号	Matter over Thread		
输入电压	12-48V Ǝ		
输出电压	12-48V Ǝ		
通道数量	1通道	2通道	5通道
复位开关	有	有	无
负载电流	10A@12V 10A@24V 10A@36V 10A@48V	10A/CH@12V 10A/CH@24V 9A/CH@36V 9A/CH@48V	RGB Max.15A 5A/CH CW Max.10A
负载功率	120W@12V 240W@24V 360W@36V 480W@48V	120W@12V 240W@24V 324W@36V 432W@48V	180W@12V 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

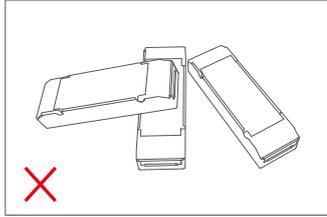
单位: mm



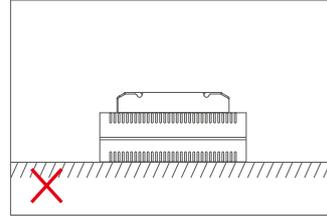
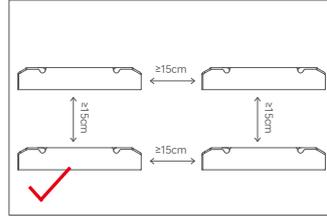
连接示意图



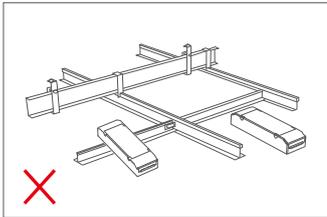
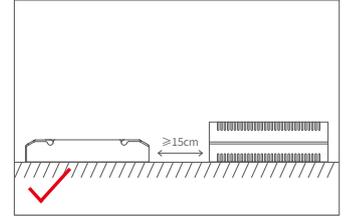
安装注意事项



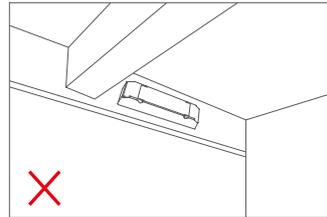
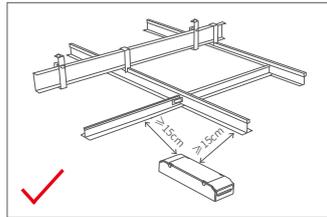
请勿将产品堆叠摆放，产品与产品间隔距离应 $\geq 15\text{cm}$ ，避免影响产品散热和使用寿命。



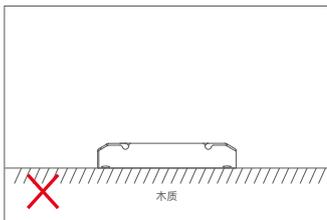
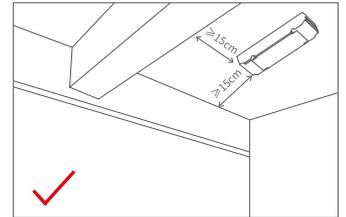
请勿将产品置于电源上方，与电源间隔距离应 $\geq 15\text{cm}$ ，避免影响产品散热而减少使用寿命。



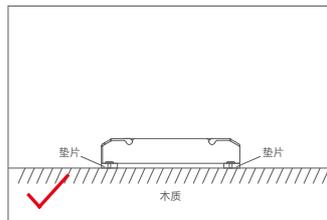
请勿将产品大面积接触金属物体(如: 龙骨架)，间隔距离应 $\geq 15\text{cm}$ ，以免信号干扰影响使用。



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



请勿将产品螺丝固定紧贴于木板，应在固定螺丝下增加 $\geq 7\text{mm}$ 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。



添加到Matter平台说明

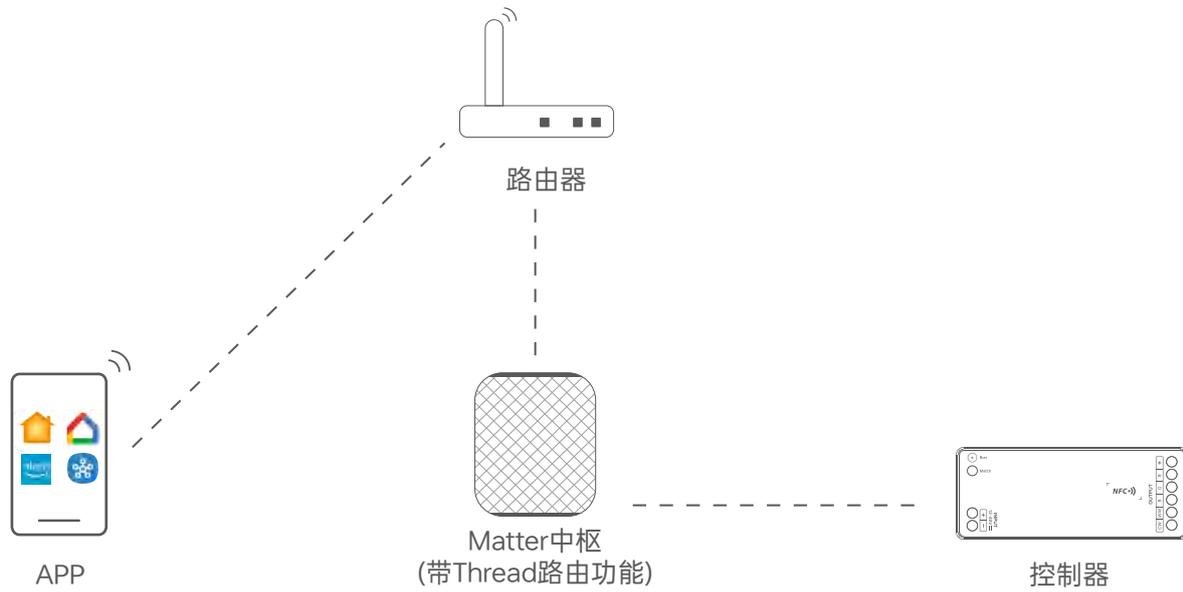
- 1.本设备支持各大主流智能家居平台控制，包括Apple Home、Amazon Alexa、Google Home、SmartThings等。
- 2.要连接Matter over Thread设备，需要准备各大平台支持Thread边界路由功能的Matter中枢，型号可以查看下图。

 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

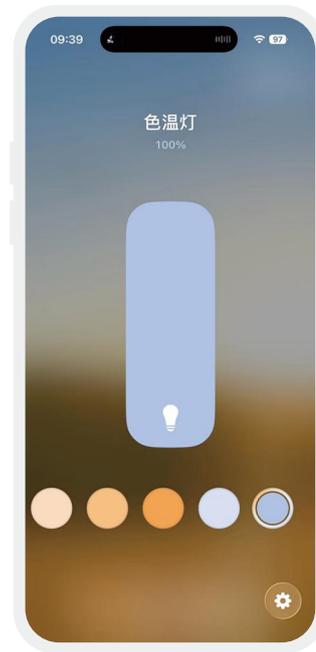
打开苹果“家庭”app，并点击“添加或扫描配件”，通过扫描设备上的二维码贴纸，将设备添加到“家庭”APP，如下图所示。

*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。



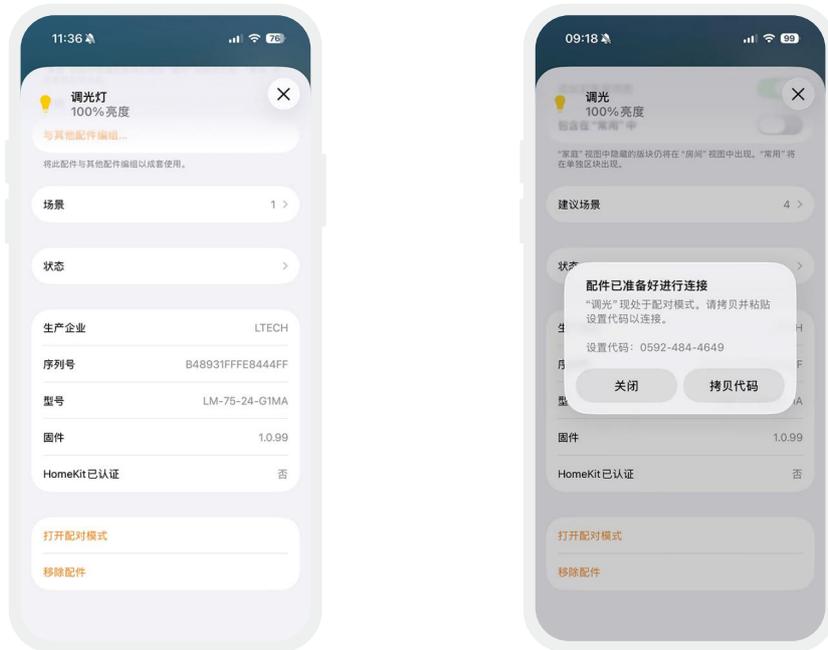
3. 高级功能

支持创建组、场景、自动化、进行远程控制和定时控制，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

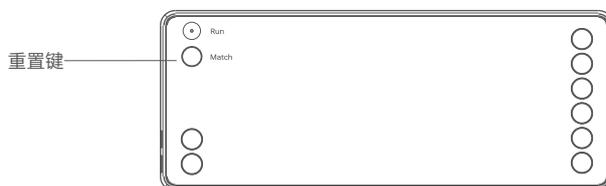
方式一：断上电复位

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 Lighting 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)



设备NFC感应区

*设置设备参数时，
必须在设备断电情况下进行操作。

1. 读取设备

在APP【首页】点击“读/写智能电源”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。



注意事项

- 本产品请由具有专业资格的人员进行调试安装；
- 我司产品（专有型号除外）不能防水防雷，需避免日晒雨淋，如安装在户外，请用防水箱和防雷装置；
- 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；
- 安装时，避免靠近大面积金属物体，或堆叠摆放，以免信号干扰影响使用；
- 避免安装在雷区、强磁场和高压区域；
- 请检查使用的工作电压是否符合产品的参数要求；
- 通电调试前，确保所有接线正确且牢固，以免短路损坏部件，触发事故；
- 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，请与供应商联系。

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