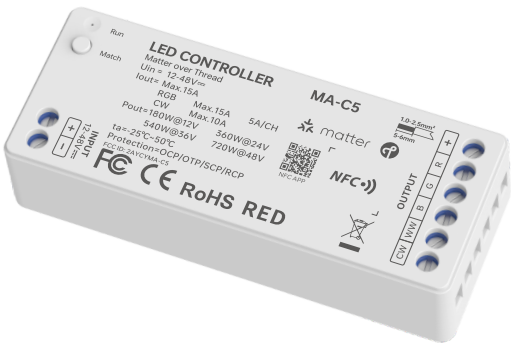


DIM/CCT/RGB+CCT Matter LED Controller

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.

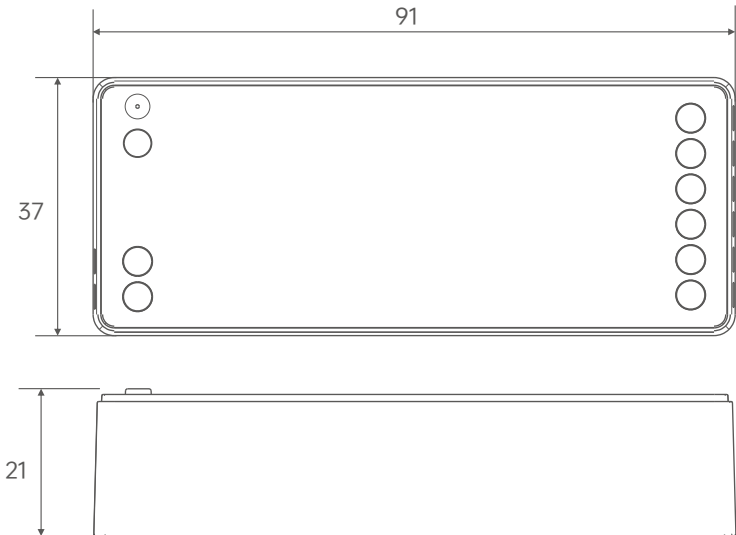


Technical Specifications

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		

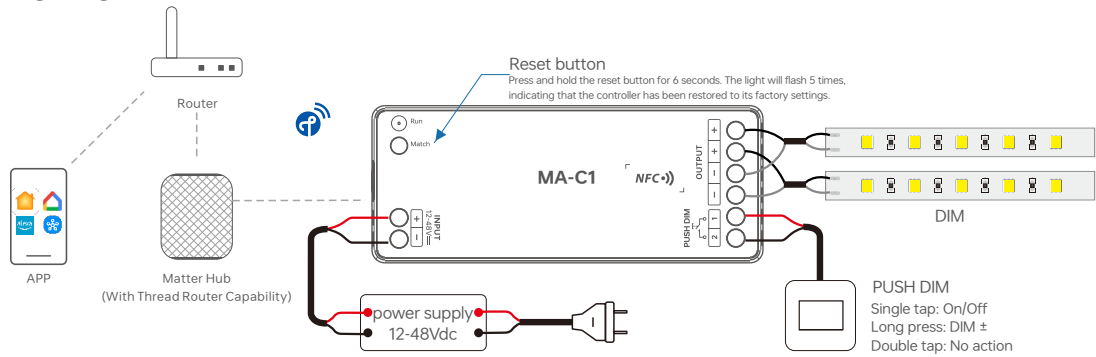
Dimension Drawing

Unit: mm



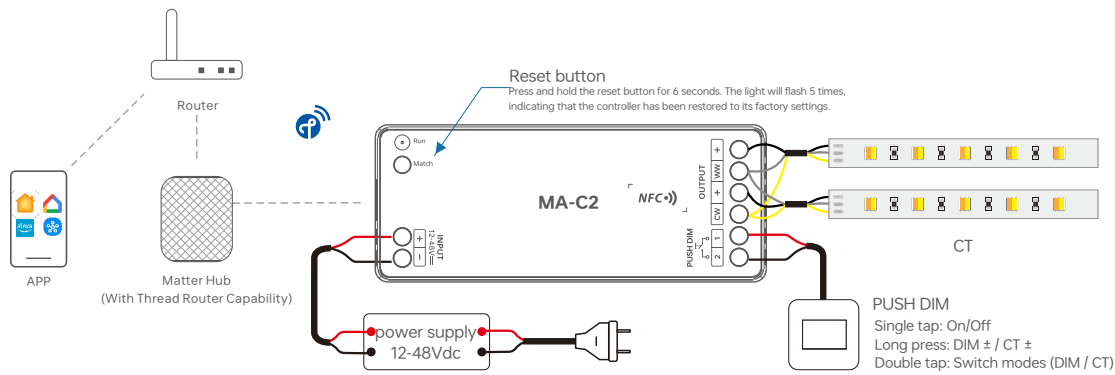
Connection Diagram

1. MA-C1 Wiring Diagram



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

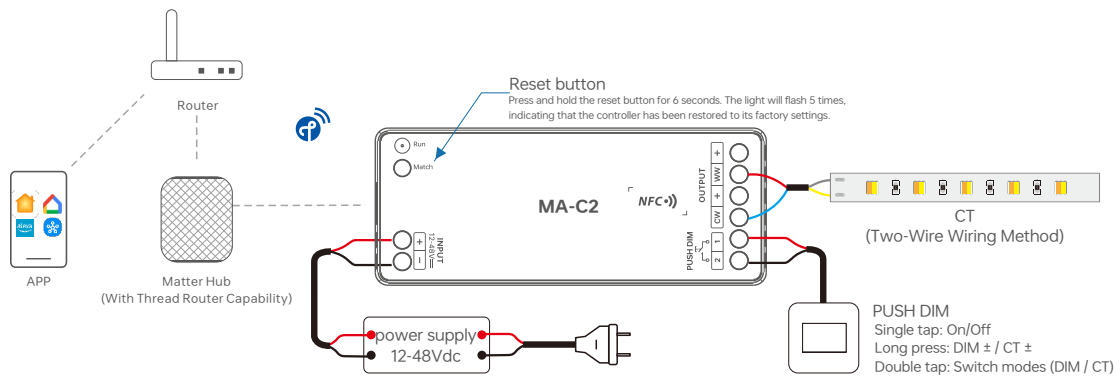
Note: If you need to connect a 2-wire color temperature light strip, you must switch it via the NFC Lighting app.



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.

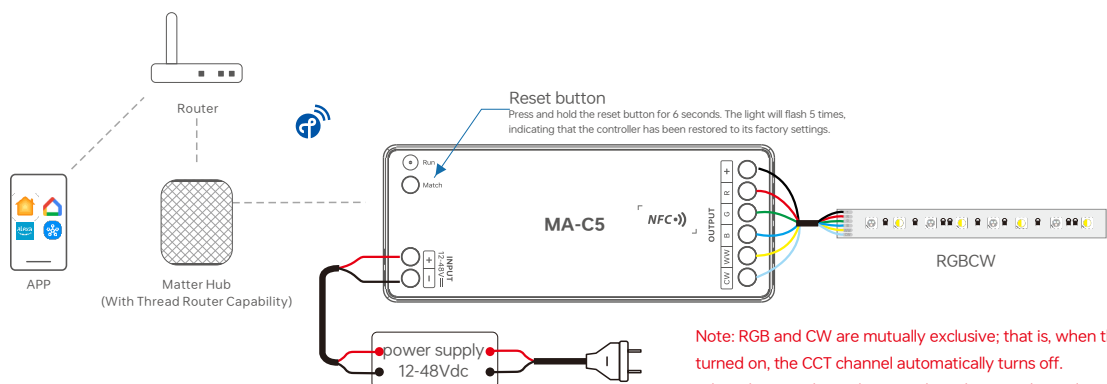
3. MA-C2 Wiring Diagram (Two-Wire Color Temperature Light Strip)

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

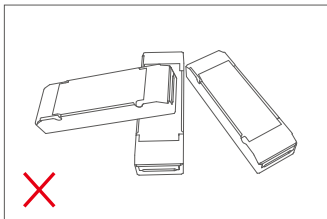


Note: Each unit must be connected to its own power supply and must not be powered alongside other units.
Otherwise, the load indicator light will flash.

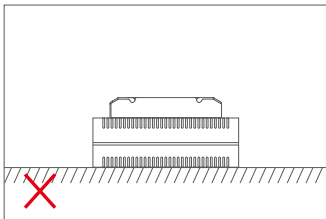
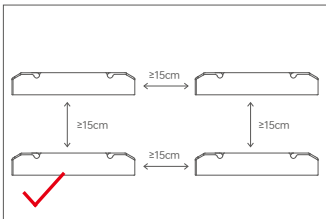
4. MA-C5 Wiring Diagram



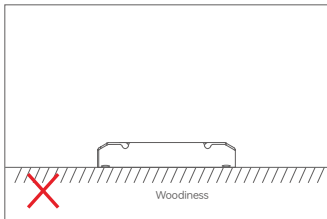
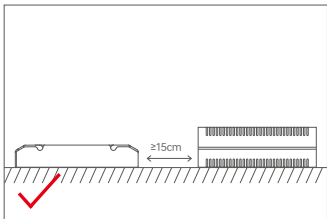
Installation Precautions



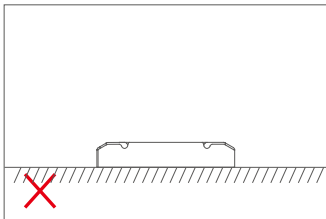
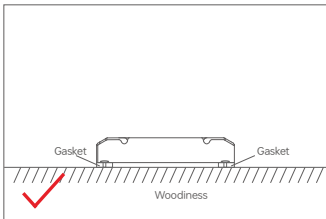
Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.



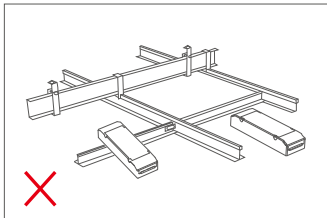
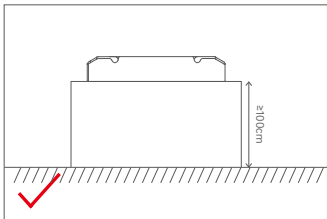
Do not place the product on top of a power supply. The distance between the product and the power supply should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the product.



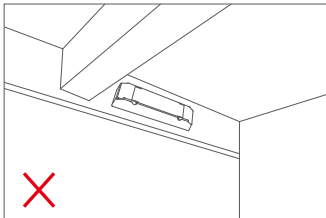
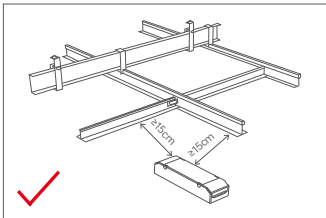
Do not fix the product tightly against the wooden board with screws. Please add a washer $\geq 7\text{mm}$ thick under the mounting screws to leave a gap for effective heat dissipation, so as to avoid affecting the heat dissipation and service life of the product.



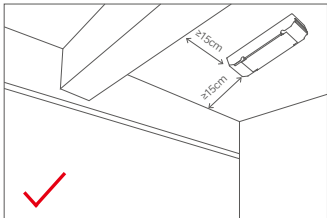
Please do not place the products on the floor. The distance between the product and the floor should be $\geq 100\text{cm}$ so as to avoid signal interference.



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

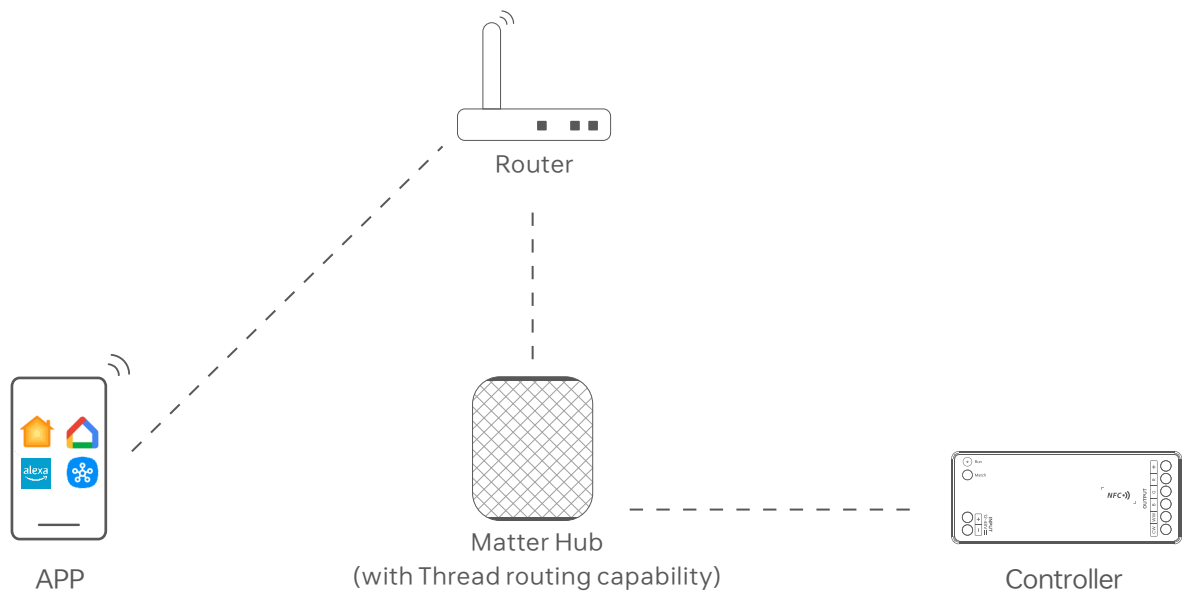
1. This device supports control via major smart home platforms, including Apple Home, Amazon Alexa, Google Home, SmartThings, and others.
2. To connect Matter over Thread devices, you need a Matter hub supporting Thread border router functionality from major platforms. Refer to the image below for compatible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

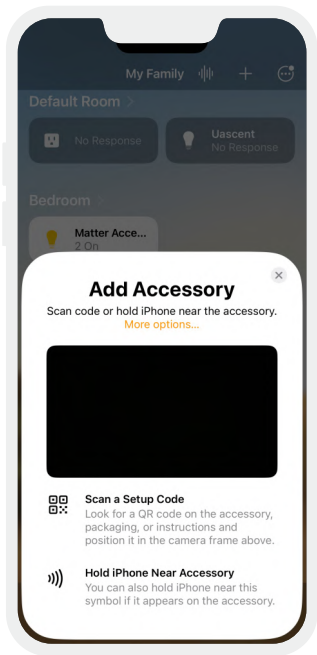
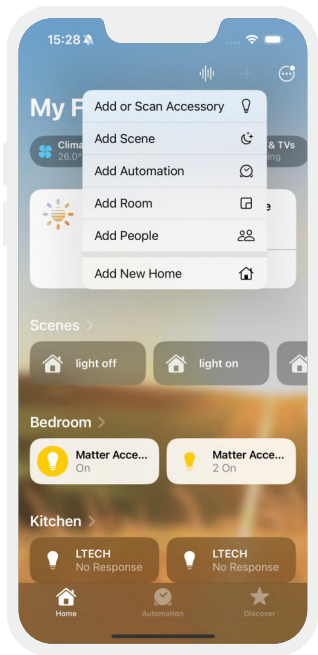


Add Steps

1. Add accessories

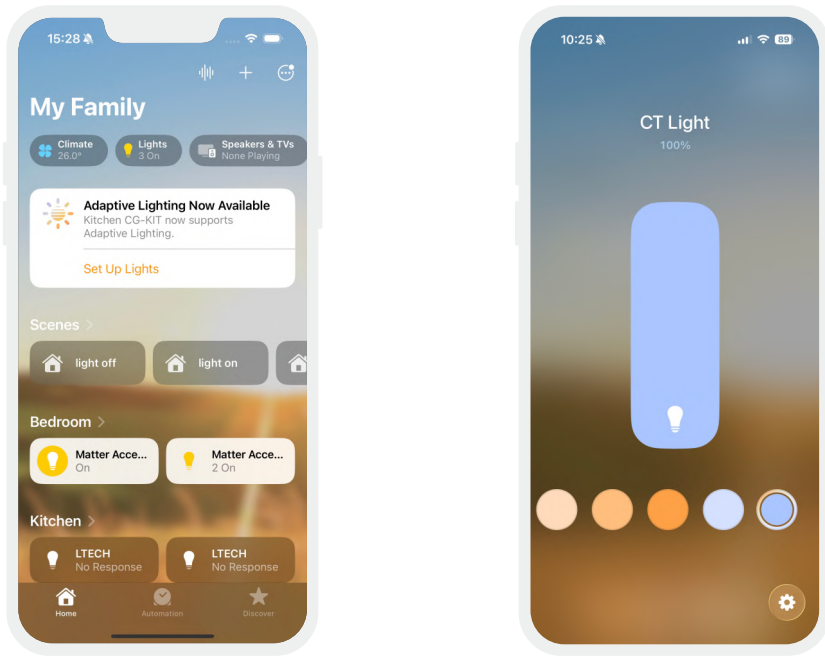
Open the Apple Home app and tap “Add or Scan Accessories.” Add the device to the Home app by scanning the QR code sticker on the device, as shown below.

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



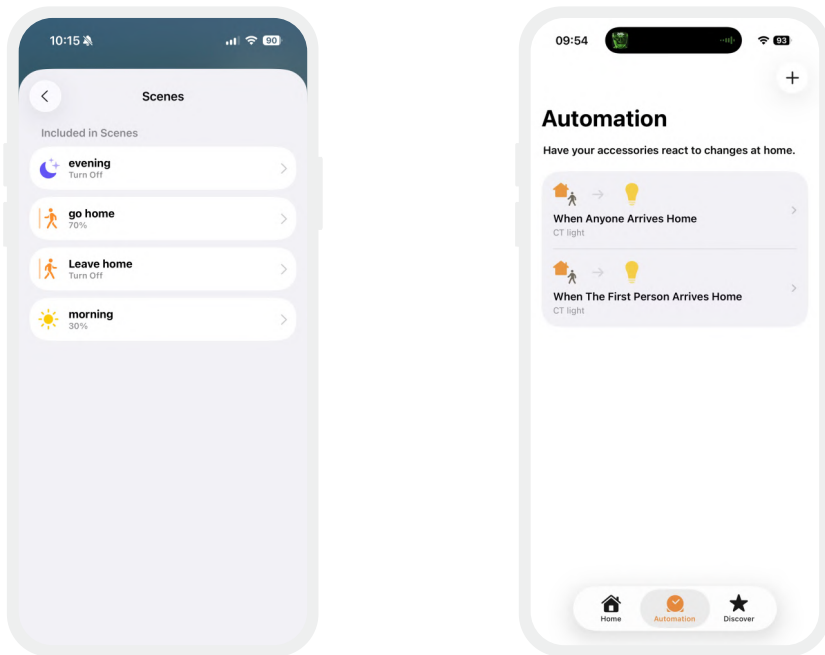
2.Control device

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.



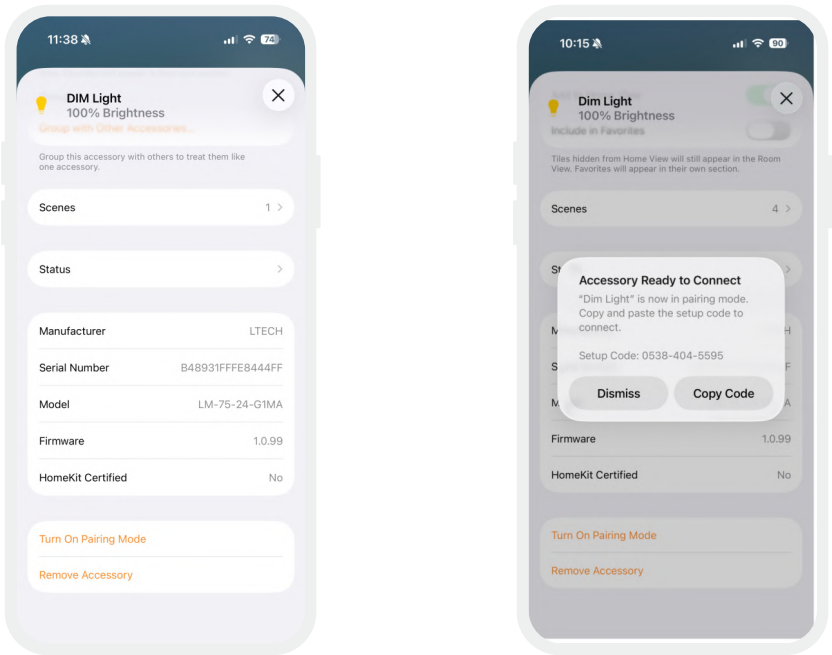
3. Advanced Features

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

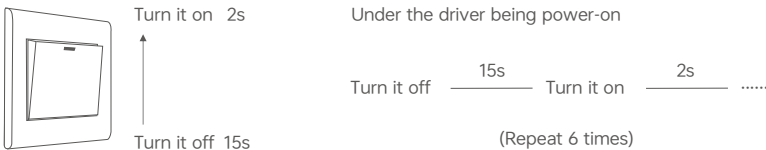
If the product needs to be added to two or more ecosystems, go to the device settings page, tap “Enable Pairing Mode,” obtain the pairing code, and add it to the third-party platform.



Restore factory settings

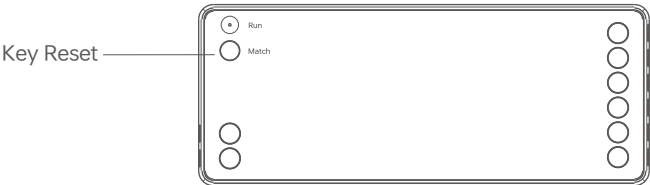
Method 1: Power-cycle reset

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

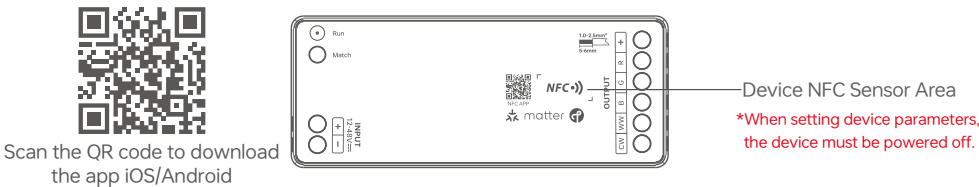
Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).

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.

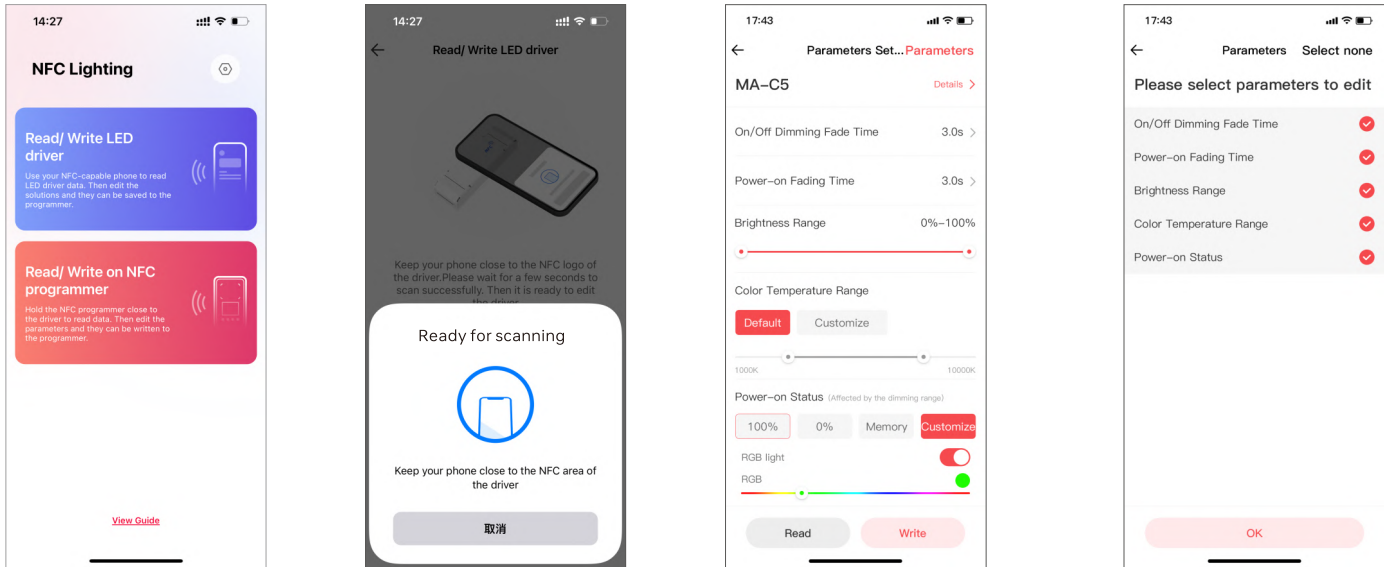


2. Edit Parameters

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