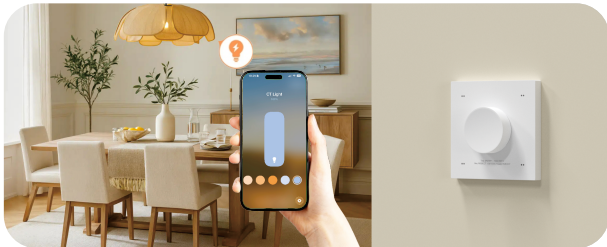


Matter-DMX512 Knob Panel

Model: E6M-MA1/E6M-MA2/E6M-MA5



Manual



Product Introduction

- It features a stylish exterior design paired with innovative multi-color status indicators, delivering intuitive tech interaction.
- This device is a protocol converter that translates Matter to the standard DMX512 protocol. It supports dimmable lights, color temperature adjustable lights, and enhanced color lights, and complies with the Matter over Thread certification specifications.
- It supports control via mainstream smart home platforms, including Apple Home, Google Home, Amazon Alexa, SmartThings and more.
- Voice control is available with Apple Siri, Google Assistant, Amazon Alexa, Samsung Bixby, etc.
- Equipped with standard Matter OTA online firmware update capability, it continuously receives new features and security patches to ensure long-term stable operation of the device.
- Parameters such as the starting address and scene actions can be configured via the NFC Lighting APP, enabling quick setup and commissioning of lighting scenes.
- It fits both European and Chinese standard wall boxes, suitable for a wide range of installation scenarios.



matter

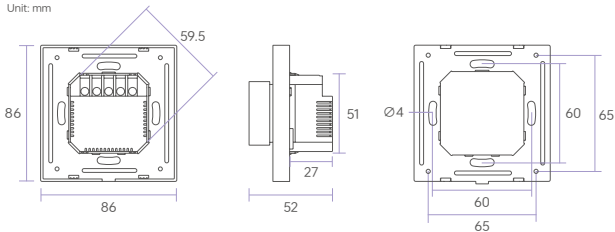


RoHS

NFC

Product Size

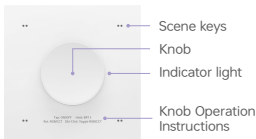
Unit: mm



Specification Parameters

Model	E6M-MA1	E6M-MA2	E6M-MA5
Control Type	DIM	CT	RGBCW
Wireless type	Matter over Thread, BLE(Network Configuration & Debugging), NFC(DMX Parameter Setting)		
Rated Parameters	100-240Vac, 50/60Hz		
Output Signal	DMX512		
Compatible Driver	DMX driver, DMX decoder		
Compatible APP	NFC Lighting, Apple Home, Smarthings, Google Home, Amazon, Aqara, Tuya		
Working Temperature	-25°C~50°C		
Dimensions	86×86×52mm (L×W×H)		
Package Size	102×102×73mm (L×W×H)		
Product Weight	130g		

Product Function Description



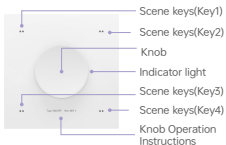
Front view



100 - 240V~ power input

DMX signal output

① E6M-MA1 Dimming Panel



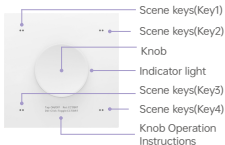
Scene Keys: The factory default settings include four brightness levels (Key1: 25% brightness, Key2: 50% brightness, Key3: 75% brightness, Key4: 100% brightness). Press briefly to trigger a scene, or press and hold for 2 seconds to save the current lighting state. To customize scene actions, you can reconfigure them using the NFC Lighting app.

Knob: Supports Tap (ON/OFF), Rotate (Adjust BRT) and Hold (Adjust BRT). Three sensitivity levels (High / Medium / Low) are available for setting.

Indicator light: Illuminates white while adjusting brightness.

Factory Reset: Long press the knob for 15 seconds until the indicator flashes slowly, then release it. Shortly press the knob 3 times within 3 seconds. Rapid flashing of the indicator means factory reset is completed.

② E6M-MA2 Color Temperature Panel



Scene Keys: The device comes with four factory-preset color temperature settings (Key1: 2700K, Key2: 3500K, Key3: 5000K, Key4: 6500K).

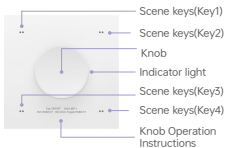
Press briefly to activate a scene, or press and hold for 2 seconds to save the current lighting state. To customize scene actions, you can reconfigure them using the NFC Lighting app.

Knob: Supports Tap (ON/OFF), Double click (Switch mode: CCT / BRT), Rotate (Adjust current mode: CCT / BRT), and Hold (Adjust BRT). Three sensitivity levels (High / Medium / Low) are available for setting.

Indicator Light: Turns white when adjusting BRT, and yellow when adjusting CCT.

Factory Reset: Long press the knob for 15 seconds until the indicator flashes slowly, then release it. Shortly press the knob 3 times within 3 seconds. Rapid flashing of the indicator means factory reset is completed.

③ E6M-MA5 RGB+CCT Dimming Panel



Scene Keys: The device comes with four factory-preset color temperature settings (Key1: Pink, Key2: Rose red, Key3: Cyan, Key4: White).

Press briefly to activate a scene, or press and hold for 2 seconds to save the current lighting state. To customize scene actions, you can reconfigure them using the NFC Lighting app.

Knob: Supports Tap (ON/OFF), Double click (Switch mode: RGB color / CCT color), Rotate (Adjust current mode: RGB color / CCT color), and Hold (Adjust current mode BRT: RGB BRT / CCT BRT). Three sensitivity levels (High / Medium / Low) are available for setting.

Indicator light: Yellow when adjusting CCT, and purple when adjusting RGB.

Factory Reset: Long press the knob for 15 seconds until the indicator flashes slowly, then release it. Shortly press the knob 3 times within 3 seconds. Rapid flashing of the indicator means factory reset is completed.

Installation Steps

① Turn off the main power switch and ensure that there is no cement or other debris attached to the inner wall of the 86 mounting box. Trim the power wires inside the box to a length of approximately 10 cm. Use a flathead screwdriver to pry open the base of the rotary panel, and locate the NFC Sensing Area on the plastic component.

Typical junction boxes



European style



86-type box



NFC Sensing Area

② Open the NFC Lighting APP on your smartphone. On the home page, tap [Read/Write Smart Device], then place the NFC sensing area of your phone close to the NFC marking on the rotary panel to read the panel parameters. Adjust the parameters as needed (see details on P11), then tap the [Write] button in the upper right corner. Place the phone's NFC sensing area near the NFC marking again to write the settings directly to the rotary panel.



③ As shown in Figure 1, after reading and writing parameters via NFC, connect the live wire to the L terminal and the neutral wire to the N terminal of the knob panel. Ensure the power wires are securely connected to the terminals, with no exposed copper. (The front-end protection device for the electronic switch must not exceed 35A.) As shown in Figure 2, use screws to fix the base box into the wall-mounted 86 box, making sure the base sits flush against the wall.

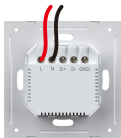


Figure 1



Figure 2

④ Tilt the panel and snap it onto the base box. Turn on the main power switch. Press the rotary panel, if the lighting can be controlled normally, the installation is successful.

Note: Always disconnect the power supply before installing the panel. Live wiring may cause device malfunction.

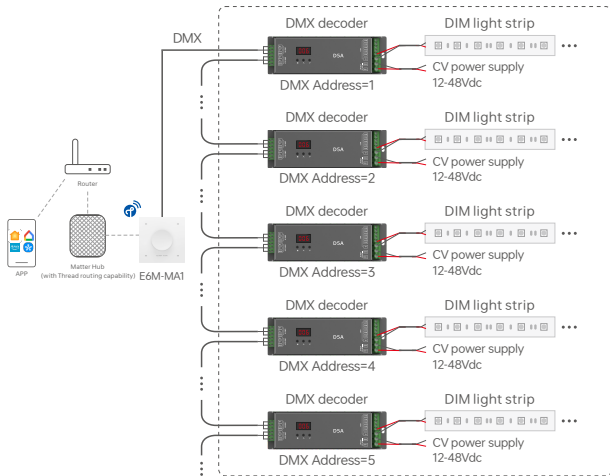


Step 1: Snap the panel in from the top.

Step 2: Press to secure the bottom.



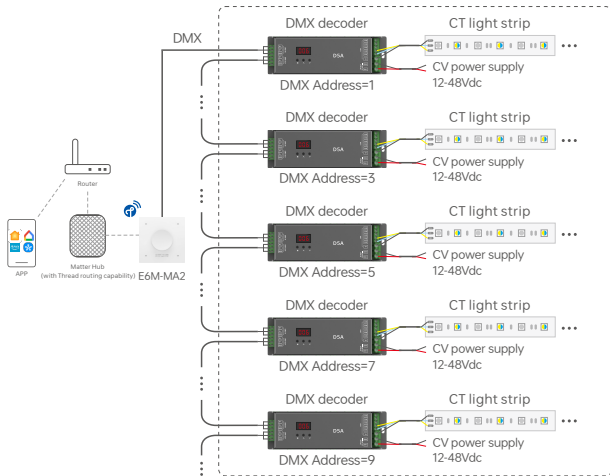
Schematic Diagram for DMX Application of E6M-MA1



* If there are more than 32 DMX decoders connected, a DMX signal amplifier should be added, and the signal amplification should not be continuous for more than 5 times. When there are more than 32 DMX/RDM decoders connected, if it is necessary to modify their parameter settings, one RDM signal amplifier can be added, or after the parameter settings are completed, 1 to 5 DMX signal amplifiers can be added.

* When the signal wire is too long or the wire quality causes signal reflection that affects performance, try connecting a 0.25W 90-120Ω terminating resistor at the end of each signal line to resolve the issue.

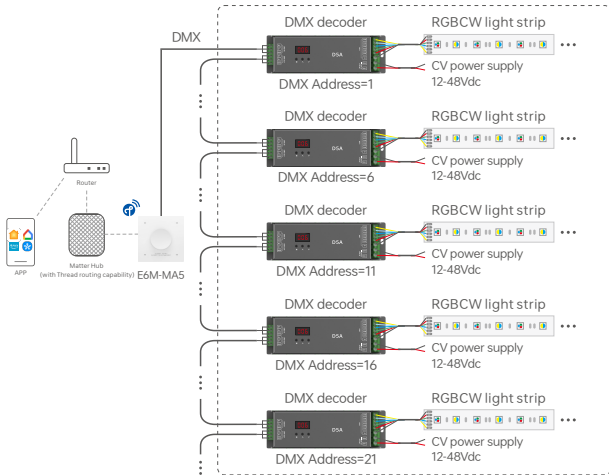
Schematic Diagram for DMX Application of E6M-MA2



* If there are more than 32 DMX decoders connected, a DMX signal amplifier should be added, and the signal amplification should not be continuous for more than 5 times. When there are more than 32 DMX/RDM decoders connected, if it is necessary to modify their parameter settings, one RDM signal amplifier can be added, or after the parameter settings are completed, 1 to 5 DMX signal amplifiers can be added.

* When the signal wire is too long or the wire quality causes signal reflection that affects performance, try connecting a 0.25W 90-120Ω terminating resistor at the end of each signal line to resolve the issue.

Schematic Diagram for DMX Application of E6M-MA5



* If there are more than 32 DMX decoders connected, a DMX signal amplifier should be added, and the signal amplification should not be continuous for more than 5 times. When there are more than 32 DMX/RDM decoders connected, if it is necessary to modify their parameter settings, one RDM signal amplifier can be added, or after the parameter settings are completed, 1 to 5 DMX signal amplifiers can be added.

* When the signal wire is too long or the wire quality causes signal reflection that affects performance, try connecting a 0.25W 90-120Ω terminating resistor at the end of each signal line to resolve the issue.

DMX Channel Output Table

Model Tpye Address	E6M-MA1	E6M-MA2		E6M-MA5
	DIM	CT	CT2(Default)	RGBCW
1	DIM	C	BRT	R
2	DIM	W	CT	G
3	DIM	C	BRT	B
4	DIM	W	CT	C
5	DIM	C	BRT	W
6	DIM	W	CT	R
7	DIM	C	BRT	G
8	DIM	W	CT	B
9	DIM	C	BRT	C
10	DIM	W	CT	W
11	DIM	C	BRT	R
12	DIM	W	CT	G
13	DIM	C	BRT	B
14	DIM	W	CT	C
⋮	⋮	⋮	⋮	⋮
510	DIM	W	CT	W
511	DIM	C	BRT	/
512	DIM	W	CT	/

※ Refer to the illustration above, and apply similarly for the following.

Use with NFC Lighting APP

1. Install the software

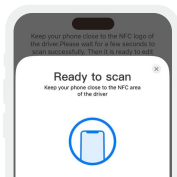
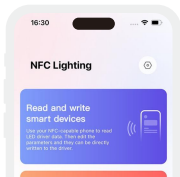
Scan the QR code below with your phone and follow the prompts to complete the APP installation.
(Due to performance requirements, the phone model is required for Apple: iPhone 8 and above, and operating system iOS 13 and above; Android: NFC-functional model)



* Device parameters must be set while the device is powered off.

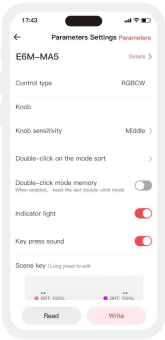
2. Read/write knob panel

Click [Read/Write Smart Device] on the "Homepage" of the APP, and bring the phone's sensing area close to the NFC Sensing Area of the knob panel (Figure P5) to read the knob panel parameters.

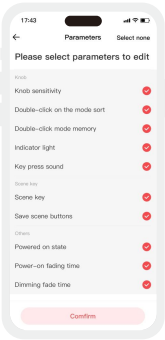


3.Paramaters Settings Settings

Parameters Management: Tap "Parameters" to edit advanced settings such as Knob sensitivity, Double-click on the mode sort, Double-click mode memory, Indicator lights, Key press sound, Scene key, Save scene buttons, Powered on state, Power-on fading time, Dimming fade time, and more.



Parameters Settings

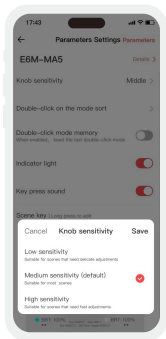


Parameters

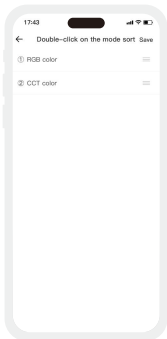
4. Knob and Scene Keys Settings

Knob: Click Knob sensitivity to select low, medium or high sensitivity. Click "Double-Tap Mode Sorting" to adjust the sequence of RGB Color/CCT Color (E6M-MA5) and CT/BRT (E6M-MA2) when double-tapping the knob. Enable or disable double-click mode memory (enabled by default), indicator light (enabled by default) and key press sound (enabled by default).

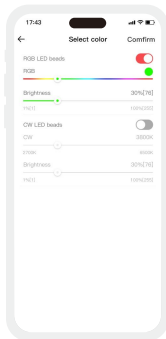
Scene key: Long press a scene button to bind execute an action. Enable or disable Save scene buttons (enabled by default).



Knob Settings



Double-click on the mode sort Settings



Scene Action Settings

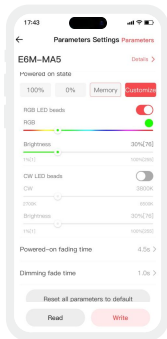
5. Other Settings and Factory Reset Operations

Power-on State: 100% / 0% / Memory / Customize are optional, with Memory as default.

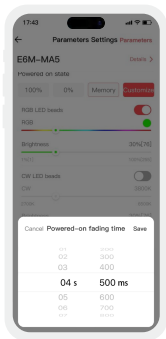
Power-on Fading Time: Fade duration after power restoration, default is 4.5 seconds.

Dimming Fading Time: Fade time for brightness adjustment (E6M-MA1), color temperature adjustment (E6M-MA2) and color adjustment (E6M-MA5), default is 1 seconds.

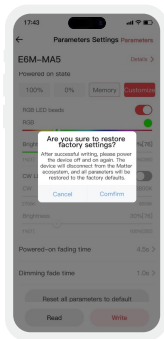
Factory Reset: Click the Restore Factory Settings button to restore all page parameters to factory defaults. Then click the Write button to save parameters to the device. The reset takes effect after device power restart.



Power-on Status



Power-on fading time



Restore factory settings

Add to Matter Platform Instructions

1. This device supports control via major smart home platforms, including Apple Home, SmartThings, Amazon Alexa, Google Home, 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 Echo 5, Pro 5, 6, 6 Plus, Max 7 etc.	Samsung SmartThings Hub v3

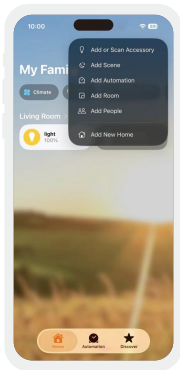
3. This guide uses Apple Home as an example. First, prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest firmware, along with an Apple HomePod mini also running the latest firmware. Then connect your iPhone or iPad to your home Wi-Fi network, launch the Apple Home app,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

*For iPhone models 15 and above, no Matter hub is required; devices can be added directly.

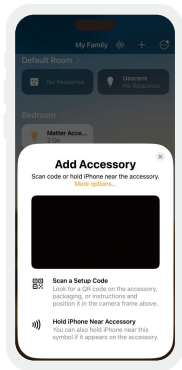
Add Steps(Taking Apple Home as an Example)

1. Add accessories

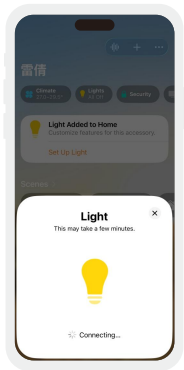
Open the Apple Home app and tap “Add or Scan Accessories.” Add the device to the Home app by scanning the QR code sticker on the device, as shown below.



Add or Scan Accessory



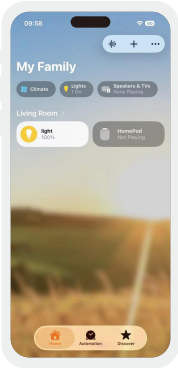
Scan the accessory QR code



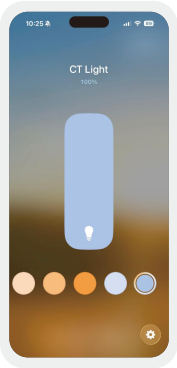
Connect the accessory

2.Control device

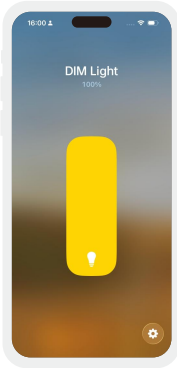
After successfully adding a device, click the device icon to turn it on or off; click the device card to enter the brightness, color temperature and colored light control interface.



Home Devices



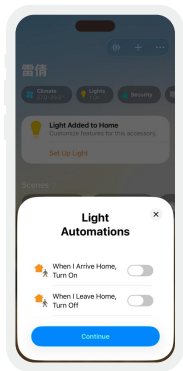
CCT Light Control



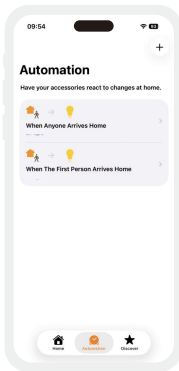
Dimmer Control

3. Advanced Features

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



Create Automation



Created Automations

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 to do if the prompt "Device platform addition limit reached" appears when adding a device?

A device can be added to a maximum of 5 platforms (Apple Home accounts for 2 slots). If the limit is exceeded, remove infrequently used or idle Matter platforms, then try adding a new platform again.

3. 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.

4. 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.

5. 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.

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

6.1 The router must have the IPv6 option enabled.

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

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

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.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

Warranty Agreement

- Warranty periods from the date of manufacture: 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 or invoice 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. The warranty that issues in writting shall prevail.
- * 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.