

LED Controller

(Single-zone)



RoHS

The Mini Pro series LED remote control uses RF 2.4GHz wireless transmission technology, with a control distance (unobstructed) of up to 30 meters.

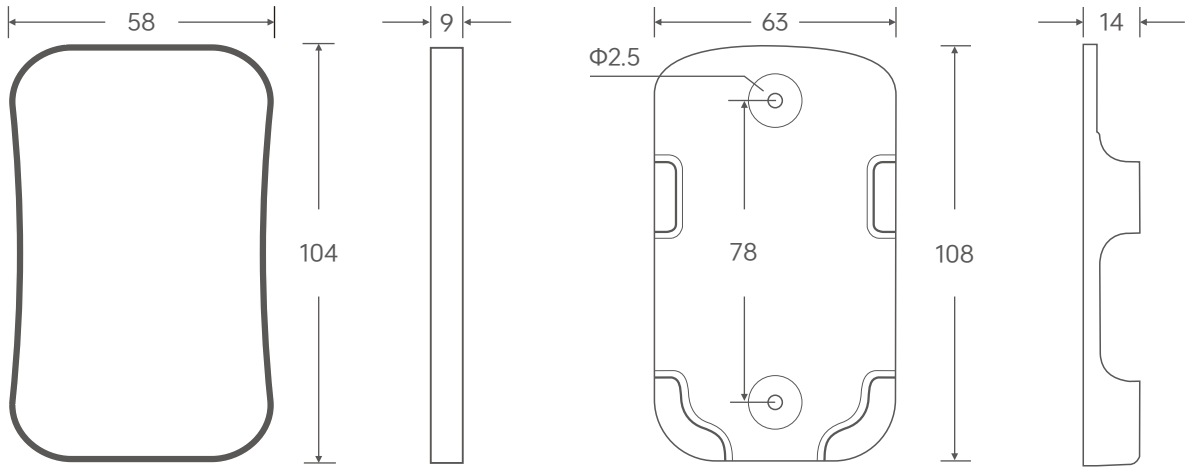
When paired with the P-series controllers (P1/P2/P3/P4/P5), one controller is compatible with 5 outputs, supporting five types of lighting fixtures: DIM/CT/RGB/RGBW/RGBCW. One remote control can control numerous controllers within its effective range, enabling functions such as turning lights on/off, adjusting brightness, adjusting color temperature and RGB static colors, dynamic mode effects, and scene recall, meeting users' needs for different lighting applications. For example, the dimming remote (M1A/M1B) has a quick brightness function, allowing one-button switching of brightness percentage; the color temperature remote (M2A/M2B) has a night light function, allowing one-button switching to low brightness; the RGBW remote (M4A/M4B) and RGBCW remote (M5A/M5B) can switch between dynamic mode and static mode via the mode button, or achieve a 9 dynamic mode via remote control combination keys.

Technical Parameters

| Model | M1A | M1B | M2A | M2B | M4A | M4B | M5A | M5B |
|--------------------|--|-------|-------|-------|-----------|-------|-------|-------|
| Color | White | Black | White | Black | White | Black | White | Black |
| Dimming Type | DIM | | CT | | RGB/ RGBW | | RGBCW | |
| Wireless type | RF 2.4GHz | | | | | | | |
| Working voltage | 3Vdc (Button battery CR2032×1) | | | | | | | |
| Standby current | < 2uA | | | | | | | |
| Distance of remote | 30M (Under unobstructed conditions) | | | | | | | |
| Working temp. | -25°C~50°C | | | | | | | |
| Weight | 40g±10g | | | | | | | |
| Dimensions | 104×58×9mm (remote), 108×63×14mm (remote+hold) | | | | | | | |

Dimensions

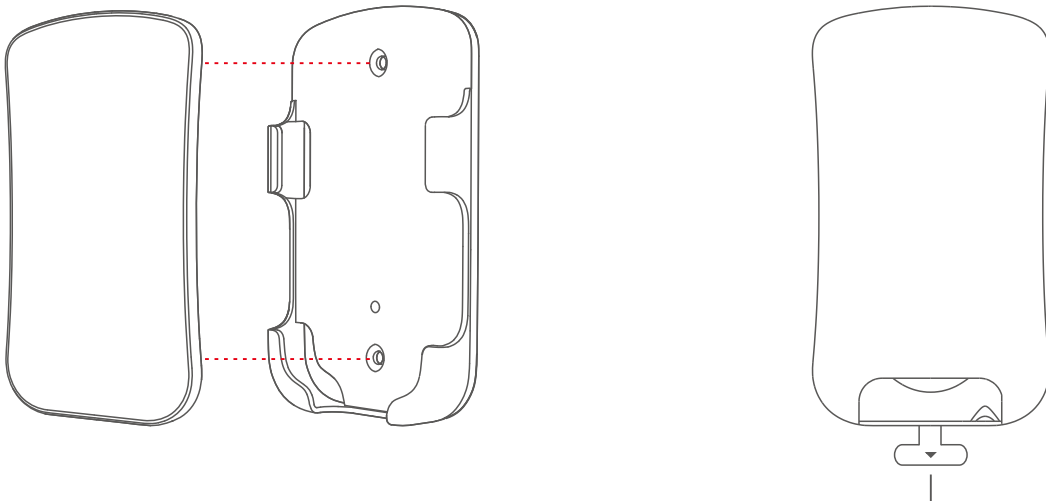
Unit: mm



Remote

Remote holder

Product Installation



Two ways to fix the remote holder :

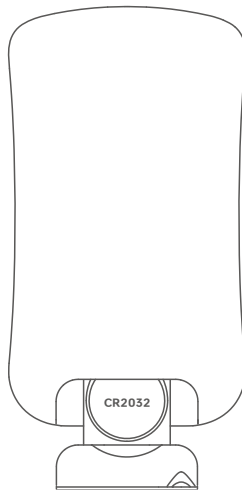
1. Fix the remote holder in the wall with two screws.
2. Fix the remote holder in the wall with a 3M adhesive.

Note: Please pull out the battery tab before first use

Replacement Battery



① Use a screwdriver to unscrew the bottom screw.



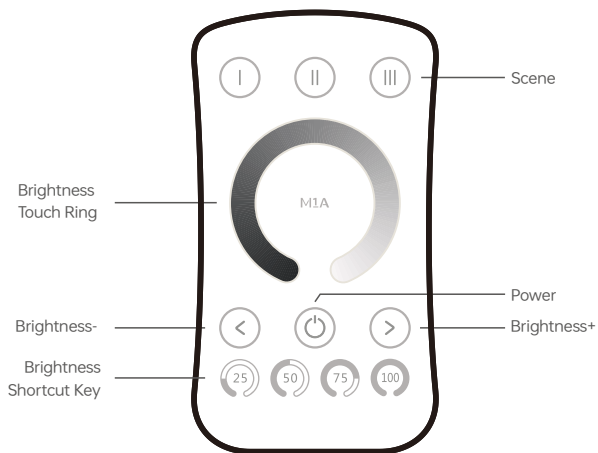
② Pull out the battery compartment and replace the battery.



③ Tighten the screw after replacing the battery.

Button Functions

Dimming Remote Control M1A/M1B



Power: Turns the light on or off.

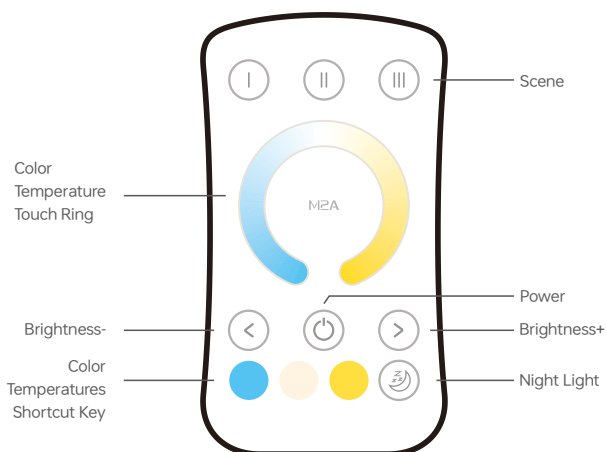
Brightness Touch Ring: Touch to change the light's brightness.

Brightness +/-: Adjusts the brightness; short press for 11 levels; long press for 1-6 seconds for 255 levels of continuous adjustment.

Brightness Shortcut Key: 25%, 50%, 75%, 100% .

Scene: Short press to recall a scene; long press for 2 seconds to save the current light state to the scene.

Color Temperature Remote Control M2A/M2B



Power: Turns the light on or off.

Color Temperature Touch Ring: Touch to change the light's color temperature.

Night Light: Switches to low brightness, night light mode.

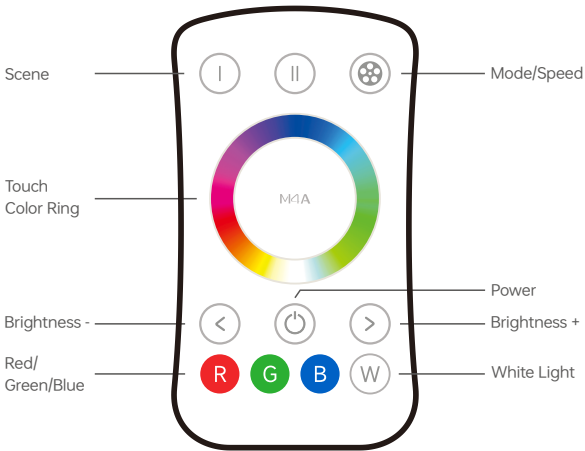
Brightness +/-: Adjusts brightness; short press for 11 levels; long press for 1-6 seconds for 255 levels of continuous adjustment.

Color Temperatures Shortcut Key: Cool White, White Light, Warm Light.

Scene: Short press to recall a scene; long press for 2 seconds to save the current light state to the scene.

Button Functions

RGB/RGBW Remote Control M4A/M4B



Power: Turns the lights on or off.

Touch Color Ring: Touch the RGB color ring to select a color.

Mode/Speed: Short press to switch between dynamic mode and static mode; In dynamic mode, press and hold to adjust the speed.

Short press both "R" and "W" keys simultaneously to cycle through dynamic modes.

Brightness +/-: Adjust brightness; short press for 11 levels; long press for 1-6 seconds for 255 levels of continuous adjustment.

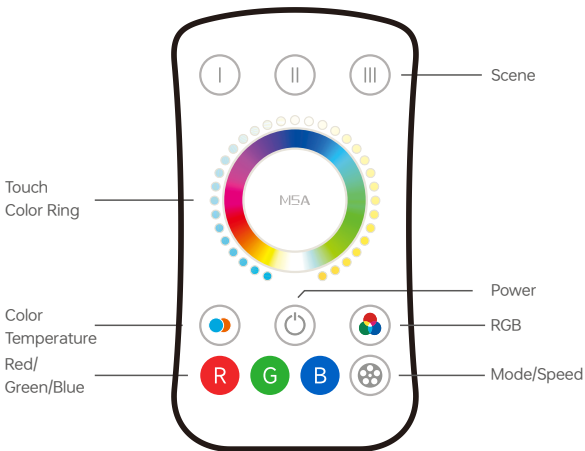
Red/Green/Blue: Short press to turn the static red/green/blue channels on or off.

Long press for 1-6 seconds to continuously adjust the brightness of the current channel.

White Light: For RGBW lamps: short-press to turn the W channel on or off; press and hold for 1-6 seconds to adjust the W channel brightness continuously in 255 levels.

Scene: Short press to recall the scene; long press for 2 seconds to save the current lighting state to the scene.

RGBCW Remote Control M5A/M5B



Power: Turns the lights on or off.

Touch Color Ring: Select colors using the touch color temperature/RGB color ring.

Mode/Speed: Short press to switch between dynamic mode and static mode; In dynamic mode, press and hold to adjust the speed.

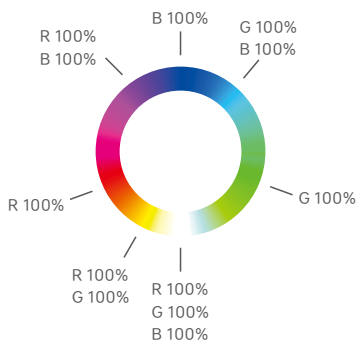
Short press the "R" and "⚙️" keys simultaneously to cycle through dynamic modes.

Color Temperature: Short-press to select the color temperature channel, and touch the color ring to switch it to the color temperature touch ring; Press and hold for 1-6 seconds to adjust the brightness of the current color temperature continuously in 256 levels; Double-click to activate 100% color temperature brightness.

RGB: Short-press to select the RGB channel, and touch the color ring to switch it to the RGB touch ring; Press and hold for 1-6 seconds to adjust the brightness of the current color continuously in 256 levels; Double-click to activate 100% RGB brightness.

Red/Green/Blue: Short press to turn the static red/green/blue channel on or off. Press and hold for 1-6 seconds to adjust the brightness of the current channel continuously in 255 levels.

Scene: Short press to recall the scene; long press for 2 seconds to save the current lighting state to the scene.



| Color | R/G/B values |
|--------|-------------------|
| Red | R100% G0% B0% |
| Yellow | R100% G100% B0% |
| Green | R0% G100% B0% |
| Cyan | R0% G100% B100% |
| Blue | R0% G0% B100% |
| Purple | R100% G0% B100% |
| White | R100% G100% B100% |

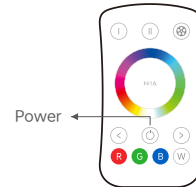
| Dynamic mode | Dynamic mode | | Static mode | Static mode | |
|--------------|--------------|---|-------------|-------------------|-------------|
| | Index | Description | | Index | Description |
| Dynamic mode | 1 | Red-purple gradient | 10 | Red | |
| | 2 | Blue-purple gradient | 11 | Green | |
| | 3 | Color temperature gradient (warm yellow, cool white) | 12 | Blue | |
| | 4 | Three-color gradient (RGB) | 13 | Yellow | |
| | 5 | Six-color gradient (red, green, blue, yellow, purple, cyan) | 14 | Purple | |
| | 6 | Seven colors changing (red, green, blue, yellow, purple, cyan, white) | 15 | Cyan | |
| | 7 | Seven-color gradient (red, green, blue, yellow, purple, cyan, white) | 16 | Mixed light white | |
| | 8 | Three-color gradient (RGB) | | | |
| | 9 | White gradually brightens and darkens | | | |

Used with P-series controllers

Code Pairing

Key pairing code

1. Short press the controller's ID learning button. The load indicator will start flashing. Please complete the following steps within 10 seconds.
2. Pairing with Mini Pro series Single-zone remote control:
Press and hold the Power button until the load indicator flashes quickly and stays on and the color ring changes. Pairing complete.



Power-on code pairing

1. After the controller powers off and back on, please complete the following steps within 10 seconds.
2. Pairing with Mini Pro series Single-zone remote control:
Press and hold the Power button until the load indicator flashes quickly and stays on and the color ring changes. Pairing complete.

Note: One controller can be paired with a maximum of 10 remote controllers. If more than 10 remote controllers are paired, the ID code of the first remote controller will be automatically deleted.

Clear Code

To delete all remote controls:

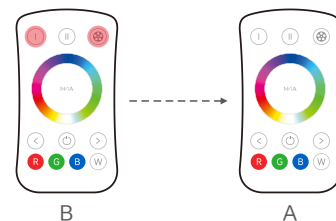
Press and hold the controller ID learning button for 6 seconds. The controller load light will flash 4 times quickly and then stay on, indicating successful code clearing.



Use the Remote Controls Together

Code Pairing (assuming B learns from A)

1. Simultaneously press and hold the top two buttons on remote control B until the indicator light stays on, then release.
 2. Within 5 seconds, press any button on remote control A. The indicator light on remote control B will turn off, indicating successful learning.
- *Remote controls of the same model can learn from each other.



Clear Code

Simultaneously press and hold the top two buttons on the remote control for 6 seconds until the indicator light flashes twice, indicating successful code clearing.



Indicator Light Status

- When the light is on, press any button, and the remote control's indicator light will turn red.
- If no button is pressed for 6 seconds, the remote control will enter sleep mode. To exit sleep mode, press any button.

Note: If the LED light does not turn on when the button is pressed, the battery may be dead. Please replace the battery in a timely manner.

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

- Please use in a dry indoor environment;
 - When installing the battery, please connect the positive and negative terminal correctly. If the remote will not be used for a long period, take the battery out;
 - When the remote distance is shorten and or the remote doesn't work frequently, please change the battery in time;
 - Please carefully take it and put it down to prevent falls that cause damage;
 - 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 replacementservices:

- 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.

⚠ WARNING

- INGESTION HAZARD: This product contains a button cell or coin battery.
- DEATH or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause Internal chemical Burns in as little as 2 hours.
- KEEP new and used batteries OUT OF REACH Of CHILDREN
- Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



- a) Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- b) Even used batteries may cause severe injury or death.
- c) Call a local poison control center for treatment information.
- d) The compatible battery type: CR2032.
- e) The nominal battery voltage: 3Vdc.
- f) Non-rechargeable batteries are not to be recharged.
- g) Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- h) Ensure the batteries are installed correctly according to polarity (+ and -).
- i) Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
- j) Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- k) Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

Update Log

| Version | Updated Time | Update Conten | Updated by |
|---------|--------------|---|--------------|
| A0 | 20231222 | Original version | Siyu Li |
| A1 | 20240822 | Optimized the typesetting and the description of controller parameters. | Weiling Yang |
| A2 | 20251120 | Added UL certification | Shaoyun He |
| A3 | 20260121 | Optimized the operation of the [RGB] key and [Color Temperature] key; upgraded the pairing method; Optimized the dynamic mode effects, added the static mode. | Shaoyun He |

LED控制器

(单区)



RoHS

Mini Pro系列LED遥控器采用RF 2.4GHz无线传输技术，控制距离（无障碍时）最远可达30米。

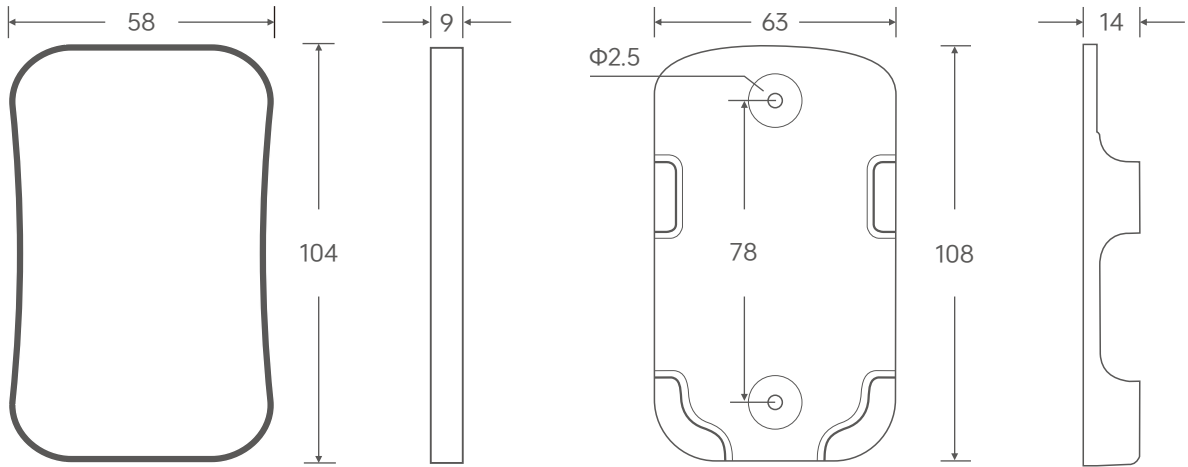
搭配P系列控制器（P1/P2/P3/P4/P5），一台控制器兼容5路输出，支持DIM/CT/RGB/RGBW/RGBCW五种灯具类型，一个遥控器在有效的控制范围内可控制无数个控制器，实现灯光开/关、亮度调节、调节色温和RGB静态色、动态模式效果、场景调用等功能，满足用户对不同灯光应用的需求。如：调光遥控（M1A/M1B）带有亮度快捷功能，可一键切换亮度百分比；色温遥控（M2A/M2B）带有小夜灯功能，可一键切换低亮度；RGB/RGBW遥控（M4A/M4B）和RGBCW遥控（M5A/M5B）可通过模式键切换动态模式和静态模式，亦可通过遥控器组合键的方式实现9种动态模式循环播放的效果。

技术参数

| 产品型号 | M1A | M1B | M2A | M2B | M4A | M4B | M5A | M5B |
|------|---------------------------------------|-----|-----|-----|-----------|-----|-------|-----|
| 产品颜色 | 白色 | 黑色 | 白色 | 黑色 | 白色 | 黑色 | 白色 | 黑色 |
| 调光类型 | DIM | | CT | | RGB/ RGBW | | RGBCW | |
| 无线类型 | RF 2.4GHz | | | | | | | |
| 工作电压 | 3Vdc (纽扣电池CR2032×1) | | | | | | | |
| 待机电流 | < 2uA | | | | | | | |
| 遥控距离 | 30米 (无障碍时) | | | | | | | |
| 工作温度 | -25°C~50°C | | | | | | | |
| 产品重量 | 40克±10克 | | | | | | | |
| 规格尺寸 | 104×58×9mm (遥控器)，108×63×14mm (遥控器+背托) | | | | | | | |

产品尺寸

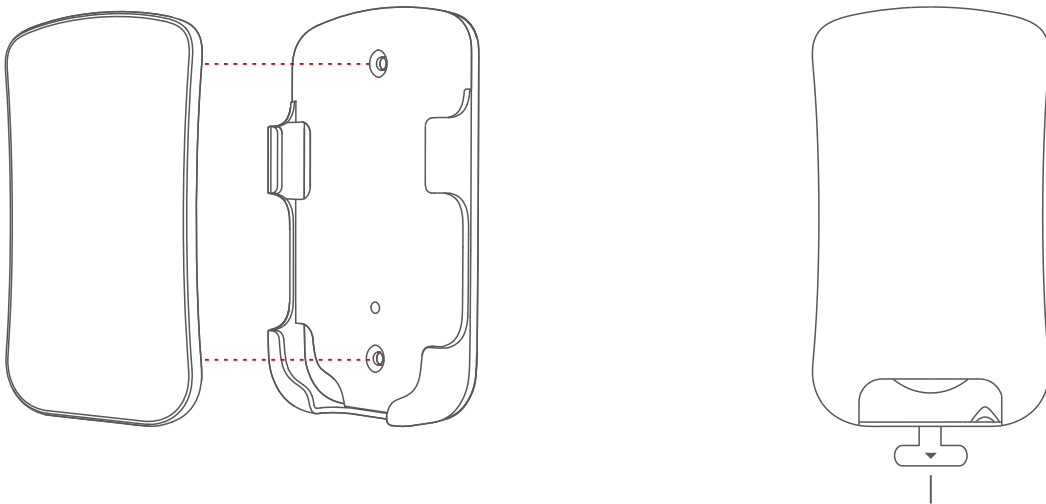
单位: mm



遥控器

遥控器背托

产品安装

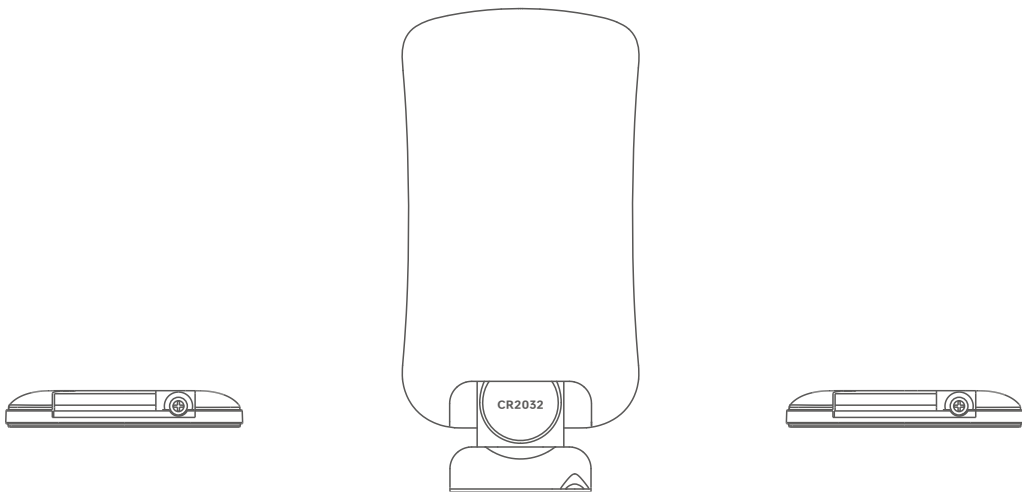


可以选择2种方式固定遥控器背托:

1. 用两个螺丝将遥控器背托固定在墙上。
2. 用3M胶将遥控器背托固定在墙上。

注意: 首次使用前, 请抽出电池绝缘片

更换电池



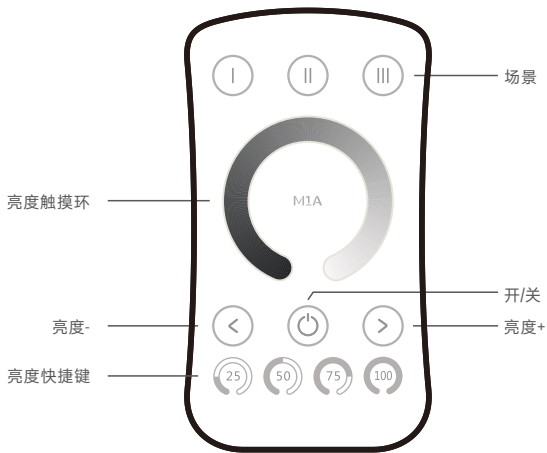
① 使用螺丝刀将底部螺丝拧开。

② 抽出电池仓, 更换电池。

③ 更换电池后, 拧紧螺丝。

按键功能

调光遥控器 M1A/M1B



开/关：开启或关闭灯光。

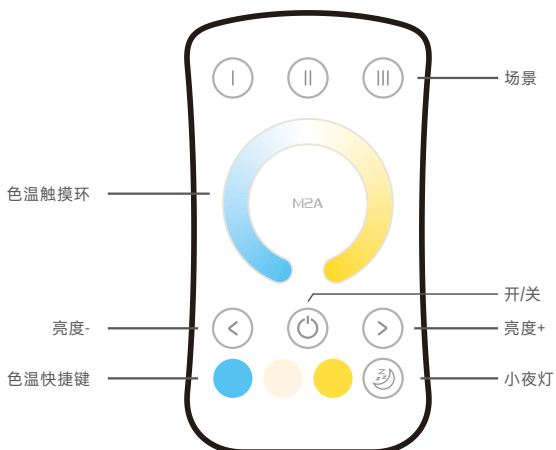
亮度触摸环：触摸改变灯光的亮度。

亮度+/-：调节亮度±，短按十一级；长按1-6秒连续255级调节。

亮度快捷键：25%、50%、75%、100%。

场景：短按调用场景；长按2秒将当前灯光状态保存到场景中。

色温遥控器 M2A/M2B



开/关：开启或关闭灯光。

色温触摸环：触摸改变灯光的色温。

小夜灯：切换为低亮度，夜灯模式。

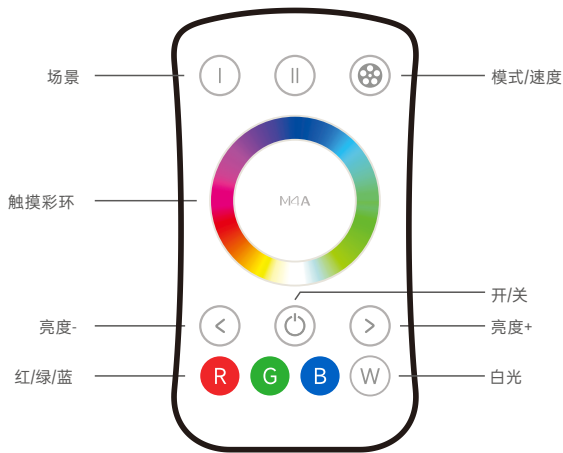
亮度+/-：调节亮度±，短按十一级；长按1-6秒连续255级调节。

色温快捷键：冷白、白光、暖光。

场景：短按调用场景；长按2秒将当前灯光状态保存到场景中。

按键功能

RGB/RGBW遥控器 M4A/M4B



开/关：开启或关闭灯光。

触摸彩环：触摸RGB色环选色。

模式/速度：短按切换动态模式和静态模式；在动态模式时，长按调节速度；
同时短按“R”“W”键循环播放动态模式。

亮度+/-：调节亮度±，短按十一级；长按1-6秒连续255级调节。

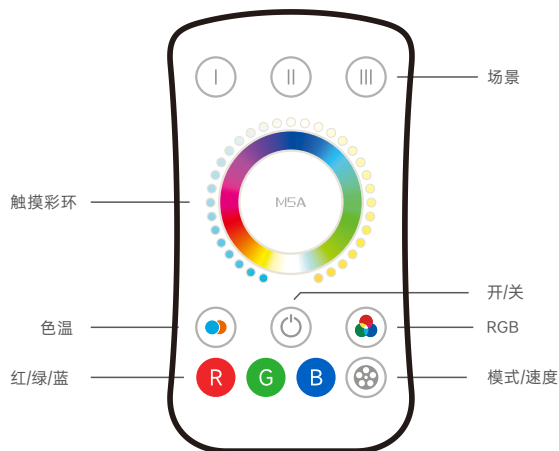
红/绿/蓝：短按打开或关闭静态红色/绿色/蓝色通道；

长按1-6秒连续255级调节当前通道的亮度±。

白光：对于RGBW灯，短按打开或关闭W通道；长按1-6秒连续255级调节W亮度±。

场景：短按调用场景；长按2秒将当前灯光状态保存到场景中。

RGBCW遥控器 M5A/M5B



开/关：开启或关闭灯光。

触摸彩环：触摸色温/RGB色环选色。

模式/速度：短按切换动态模式和静态模式；在动态模式时，长按调节速度快慢；
同时短按“R”“⊗”键循环播放动态模式。

色温：短按选中色温通道，触摸彩环切换为色温触摸环；

长按1-6秒连续256级调节当前色温的亮度±；双击调用100%色温亮度。

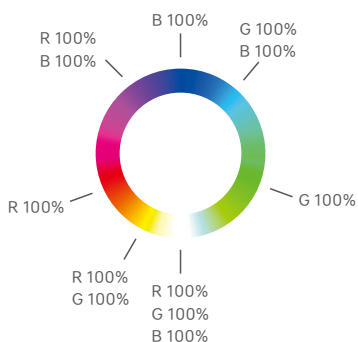
RGB：短按选中RGB通道，触摸彩环切换为RGB触摸环；

长按1-6秒连续256级调节当前颜色的亮度±；双击调用100%RGB亮度。

红/绿/蓝：短按打开或关闭静态红色/绿色/蓝色通道；

长按1-6秒连续255级调节当前通道的亮度±。

场景：短按调用场景；长按2秒将当前灯光状态保存到场景中。



| 颜色 | R/G/B数值 |
|----|-------------------|
| 红色 | R100% G0% B0% |
| 黄色 | R100% G100% B0% |
| 绿色 | R0% G100% B0% |
| 青色 | R0% G100% B100% |
| 蓝色 | R0% G0% B100% |
| 紫色 | R100% G0% B100% |
| 白色 | R100% G100% B100% |

| 动态模式 | 1 | 红紫渐变 | 静态模式 | 10 | 纯红 |
|------|---|---------------|------|----|-----|
| | 2 | 蓝紫渐变 | | 11 | 纯绿 |
| | 3 | 色温渐变(暖黄、冷白) | | 12 | 纯蓝 |
| | 4 | 三色渐变(RGB) | | 13 | 纯黄 |
| | 5 | 六色渐变(红绿蓝黄紫青) | | 14 | 纯紫 |
| | 6 | 七色渐变(红绿蓝黄紫青白) | | 15 | 纯青 |
| | 7 | 七色渐变(红绿蓝黄紫青白) | | 16 | 混光白 |
| | 8 | 三色渐明明暗(RGB) | | | |
| | 9 | 白色渐明明暗 | | | |

与P系列控制器搭配使用

对码

按键对码

1.短按控制器的ID学习键，负载灯闪烁，请在10秒内完成以下操作。

2.对码Mini Pro系列单区遥控：

长按开关键，直到控制器负载灯快闪后常亮，且触摸色环有变化，学习成功。

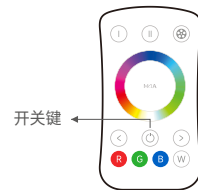


上电对码

1. 控制器断电后重新上电，请在10秒内完成以下操作。

2.对码Mini Pro系列单区遥控：

长按开关键，直到控制器负载灯快闪后常亮，且触摸色环有变化，学习成功。



注：一台控制器最多可配对10个遥控器，配对超过10个遥控器将会自动删除最前面的遥控器ID码。

清码

删除全部遥控器方法：

长按控制器ID学习键6秒，控制器负载灯快闪4次后常亮，清码成功。



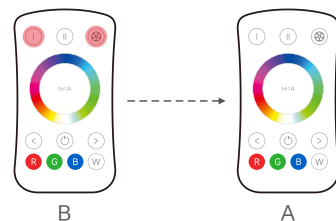
遥控器之间搭配使用

对码(假设B学习A)

1.同时短按B遥控器最上面两按键直到指示灯常亮后松手。

2.在5秒内按下A遥控器的任意键，B遥控器指示灯灭，学习成功。

*同型号遥控器才能互学。



清码

同时长按遥控器最上面两按键6秒直到指示灯闪烁2次，清码成功。



指示灯状态

- 灯开启时，任意按键，遥控指示灯显示红色。
- 6秒后无按键操作，遥控器将进入睡眠状态，需按任意键退出睡眠状态。

注意：如果按下按键LED灯不亮，有可能是电池没电，请及时更换电池。

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

- 本产品限室内与干燥环境使用；
- 安装电池时，注意电池的正负极，长时间不使用遥控器，请取出电池；
- 当遥控距离变小或遥控频繁失效时，请及时更换电池；
- 应轻拿轻放，避免跌落造成损坏；
- 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，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 | 20231222 | 正稿 | 李思雨 |
| A1 | 20240822 | 优化排版方式，优化控制器参数描述 | 杨魏玲 |
| A2 | 20251120 | 增加UL认证 | 何少云 |
| A3 | 20260121 | 优化【RGB】键和【色温】键操作；升级对码方法；优化动态模式效果，增加静态模式。 | 何少云 |