

DIM/CT/RGB/RGBW/RGBCW LED Controller

- Small size and light weight. The housing is made from V0 flame retardant PC materials from SAMSUNG/COVESTRO.
- Soft-on and fade-in dimming function enhances your visual comfort.
- 2.4GHz wireless signal , eliminating the need for signal wiring.
- 1-5 channel constant voltage output.
- Control DIM, CT, RGB, RGBW, RGBCW light.
- Work with a MINI series RF 2.4GHz remote.
- P3, P4 and P5 have 9 built-in dynamic modes.
- One controller can be paired up with 10 remotes .
- Sync dynamic effects between controllers in the same group/zone.

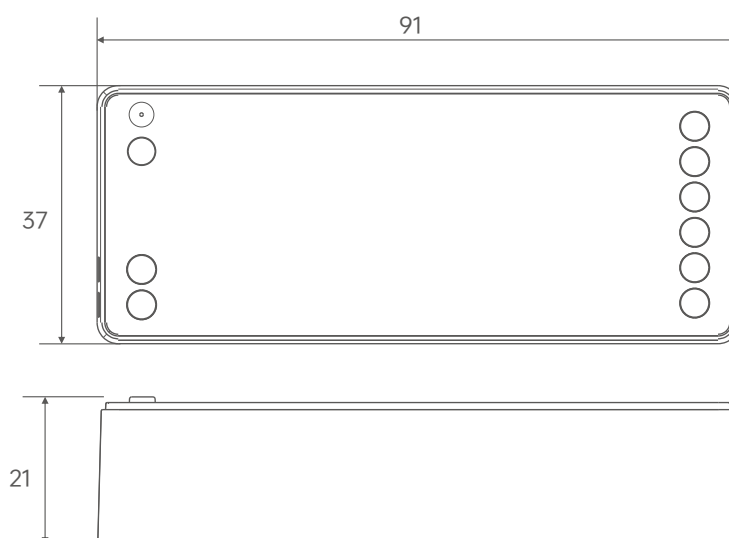


Technical Specs

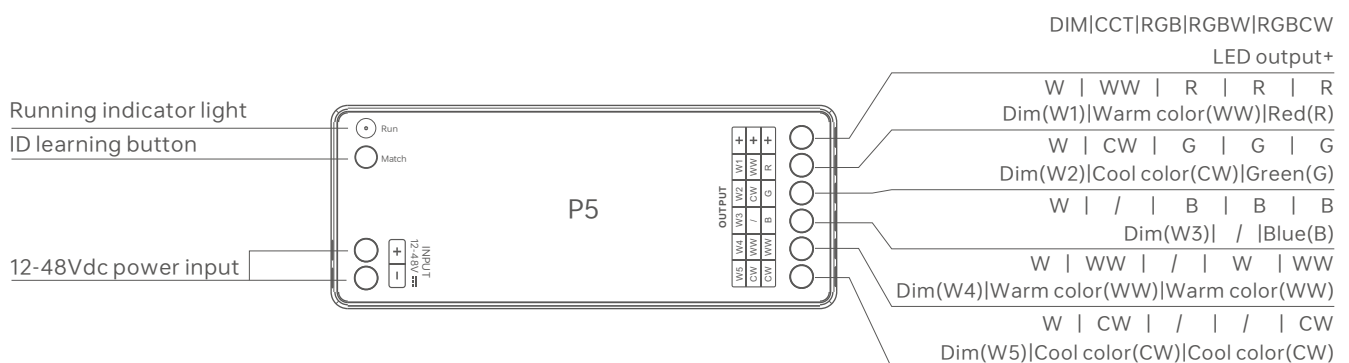
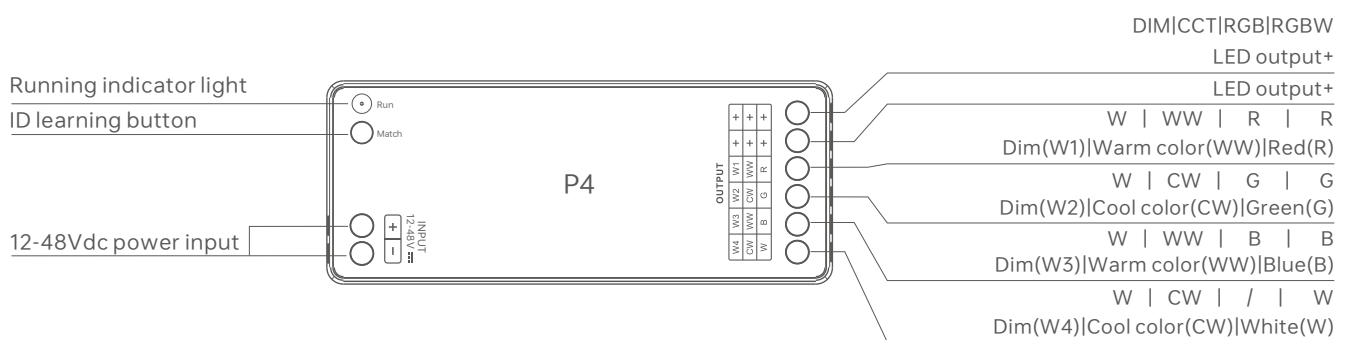
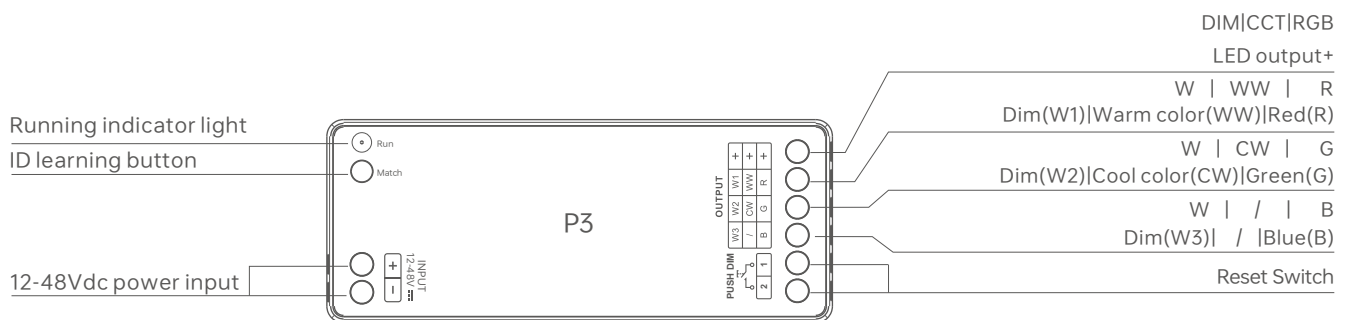
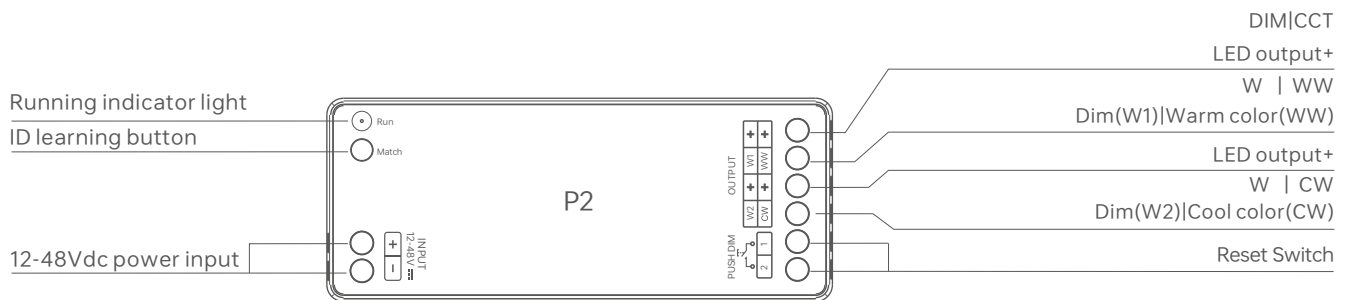
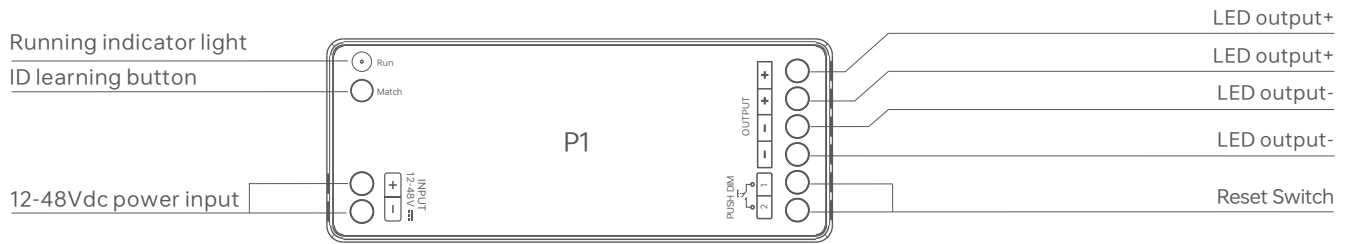
Model	P1	P2	P3	P4	P5
Input Signal	RF2.4GHz				
Input Voltage	12-48V ---				
Output Voltage	12-48V ---				
Channels	1 CH	2 CH	3 CH	4 CH	5 CH
Reset Switch	Yes	Yes	Yes	No	No
Load Current	Max. 11A	Max. 12A	Max. 15A	Max. 15A	Max. 15A
Load Power	132W@12V 240W@24V 288W@36V 384W@48V	144W@12V 240W@24V 288W@36V 384W@48V	180W@12V 360W@24V 432W@36V 432W@48V	180W@12V 288W@24V 360W@36V 480W@48V	180W@12V 360W@24V 450W@36V 600W@48V
Compatible Remote Control Models	Single-zone: M1A/M1B Multi-zone: M1C/M1D Programmable: M9	Single-zone: M1A/M1B/M2A/M2B Multi-zone: M1C/M1D/M2C/M2D Programmable: M9	Single-zone: M1A/M1B/M2A/M2B/ M4A/M4B Multi-zone: M1C/M1D/M2C/M2D/ M4C/M4D Programmable: M9	Single-zone: M1A/M1B/M2A/M2B/ M4A/M4B Multi-zone: M1C/M1D/M2C/M2D/ M4C/M4D Programmable: M9	Single-zone: M1A/M1B/M2A/M2B/ M4A/M4B/M5A/M5B Multi-zone: M1C/M1D/M2C/M2D/ M4C/M4D/M5C/M5D Programmable: M9
Protection	Short circuit protection, over-temperature protection, over-current protection, and reverse connection prevention protection				
Working Temp.	-25°C ~ 50°C				
Dimension	L91×W37×H21(mm)				
Package Size	L94×W39×H22(mm)				
Weight(G.W.)	46g				

Product Size

Unit: mm

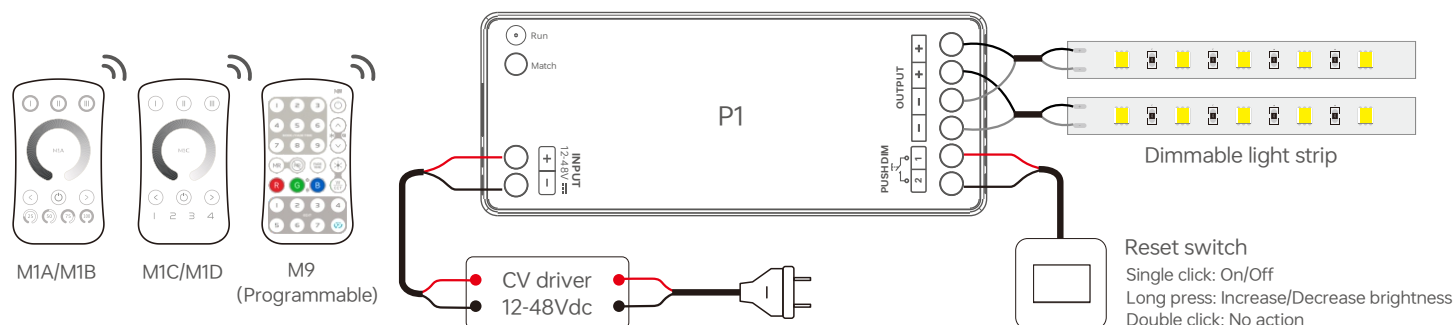


Terminal Description

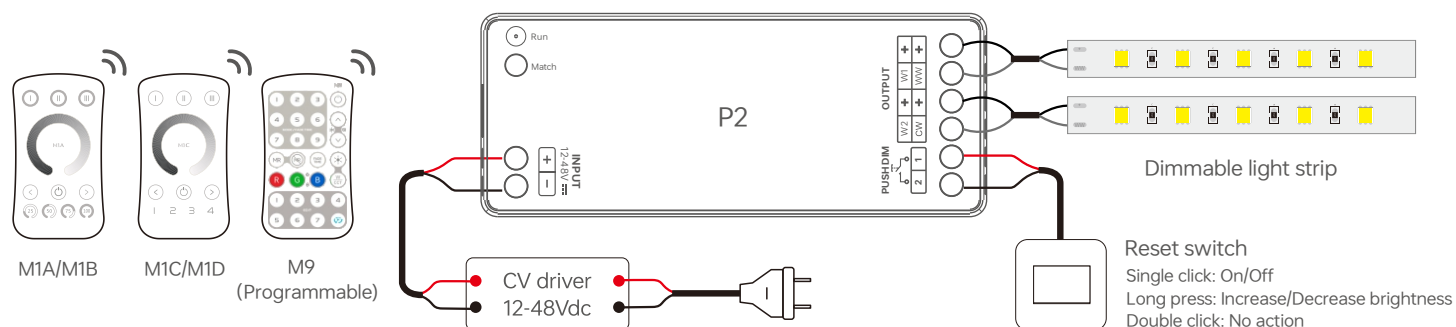


Wiring Diagram

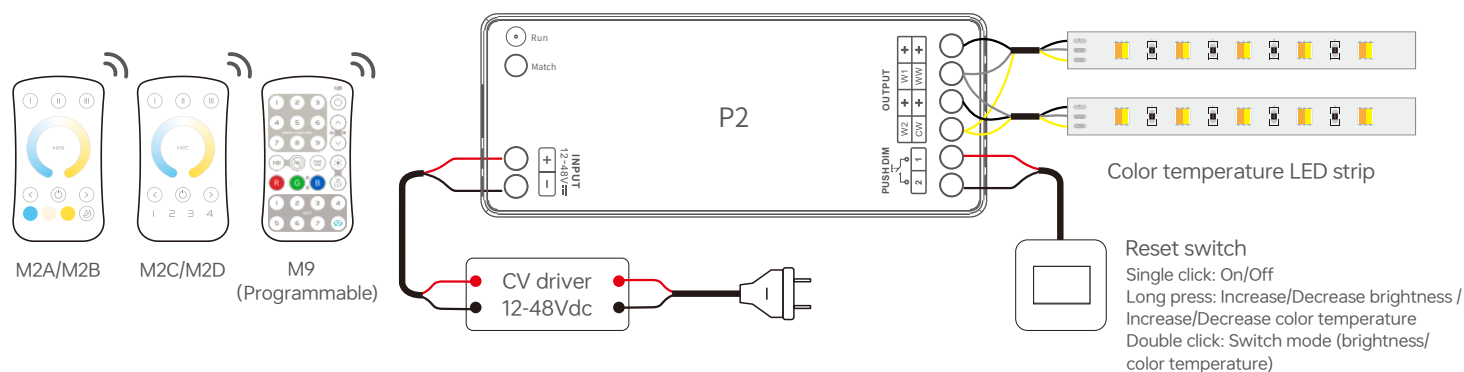
When P1 is connected to the dimmable light strip



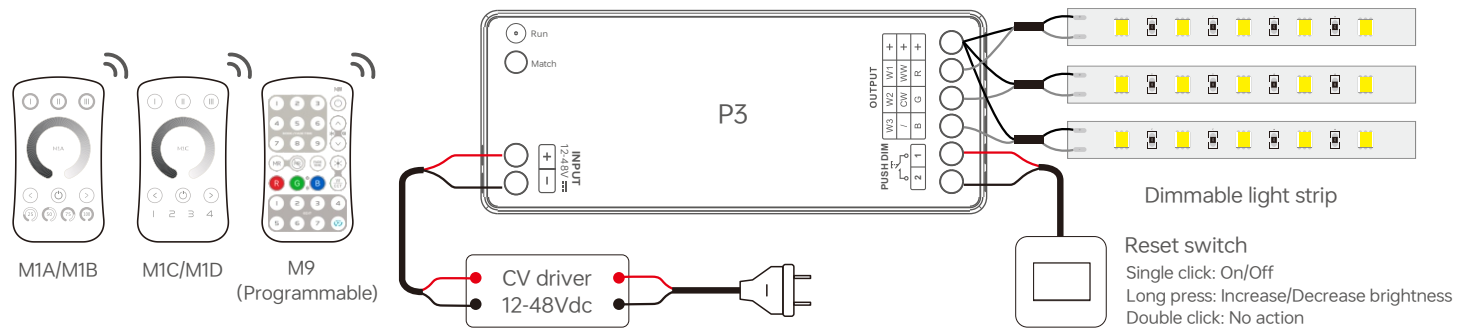
When P2 is connected to the dimmable light strip



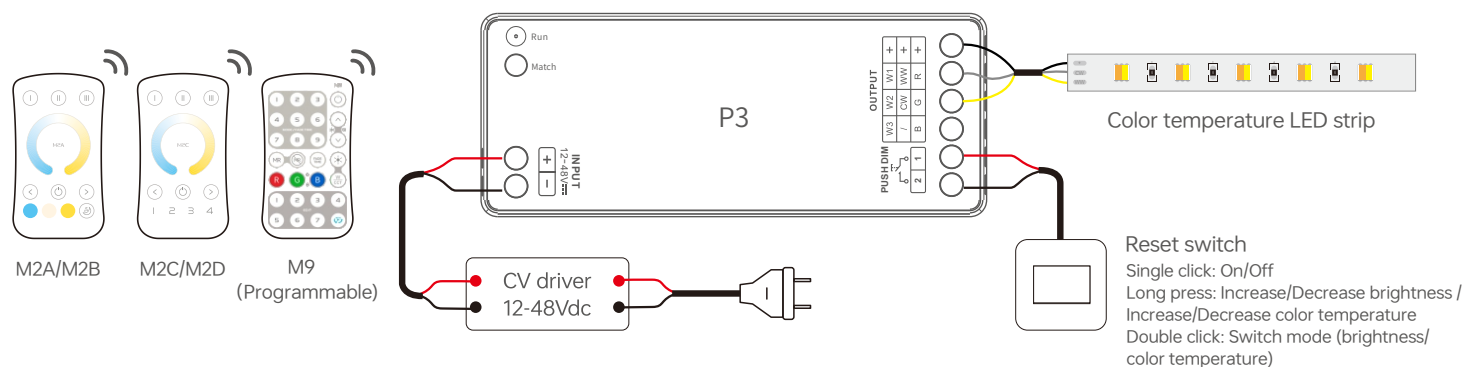
When P2 is connected to the color temperature light strip



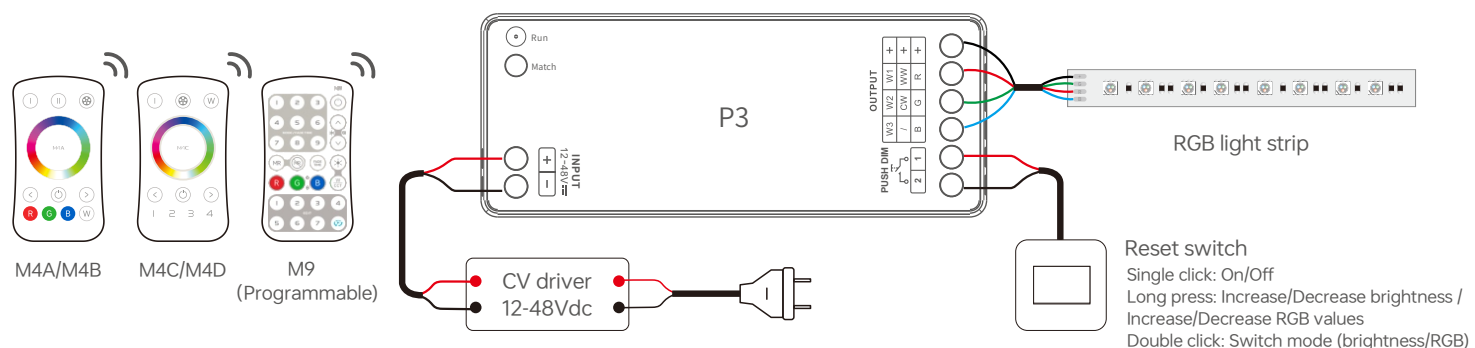
When P3 is connected to the dimmable light strip



When P3 is connected to the color temperature light strip

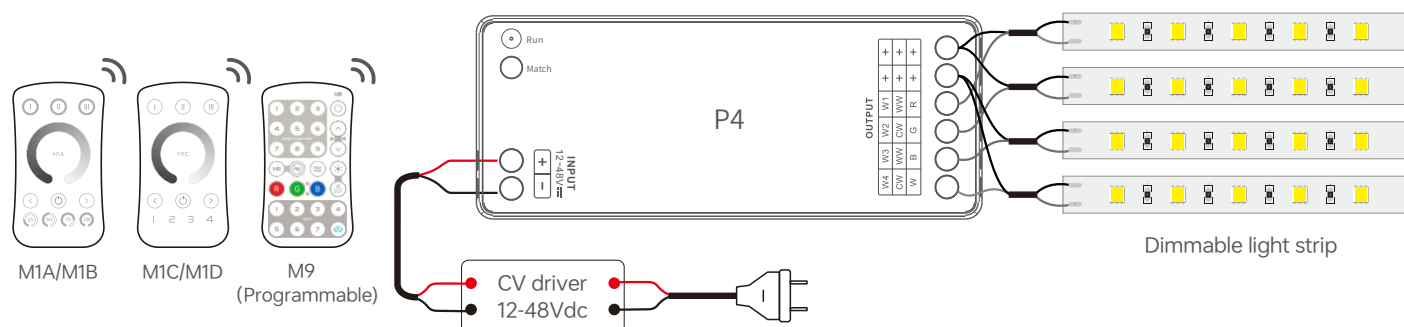


When P3 is connected to the RGB light strip

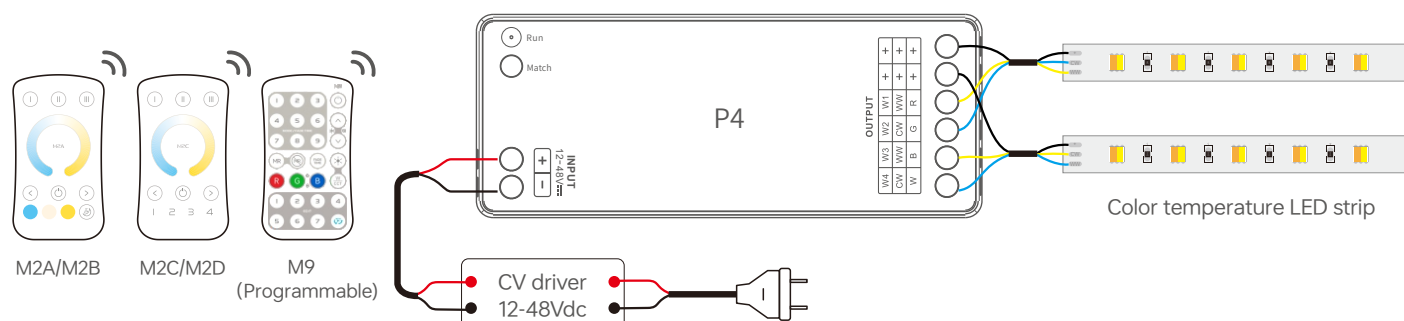


Note: The control type of PUSH DIM will switch according to the type of the remote control.

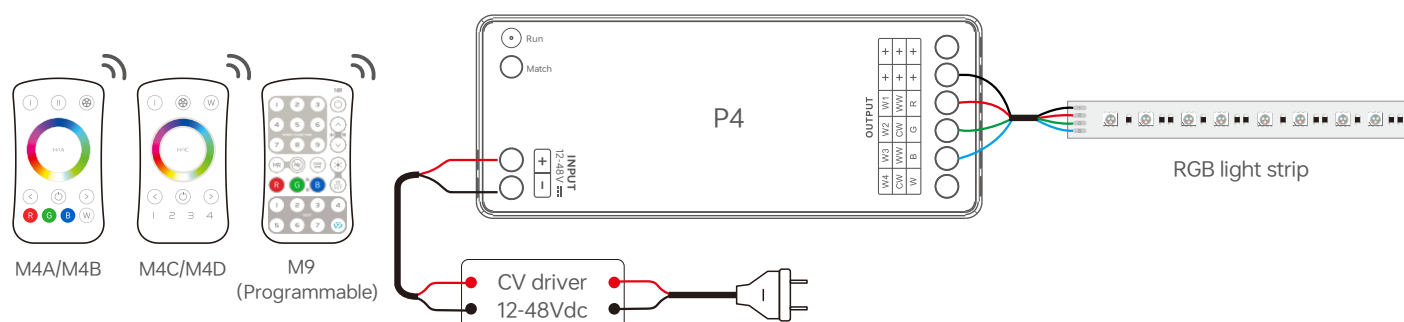
When P4 is connected to the dimmable light strip



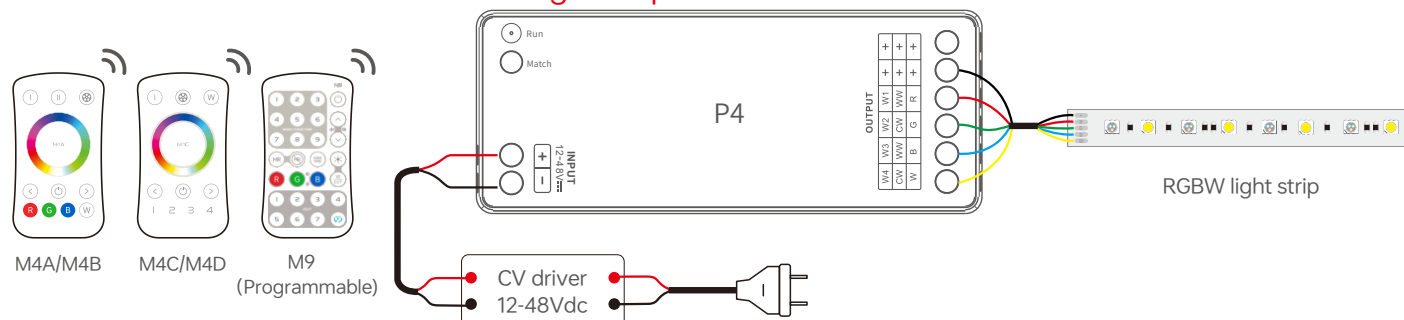
When P4 is connected to the color temperature light strip



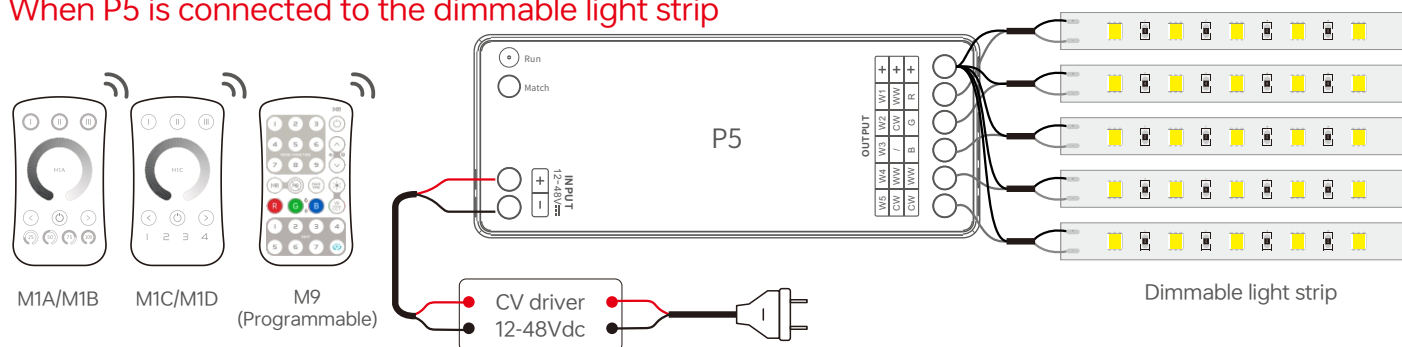
When P4 is connected to the RGB light strip



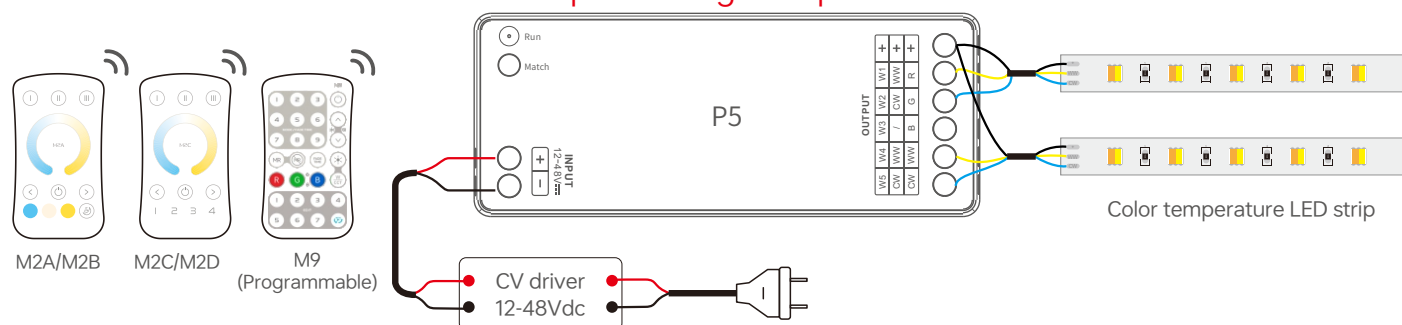
When P4 is connected to the RGBW light strip



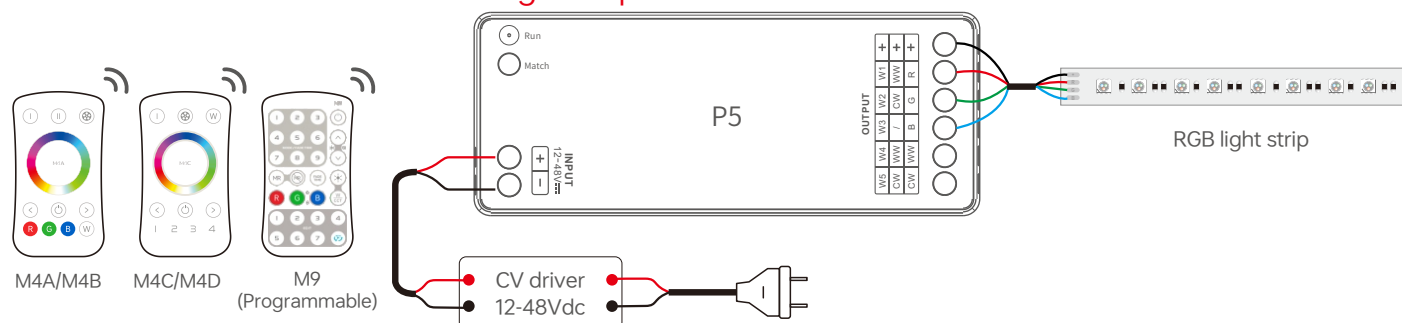
When P5 is connected to the dimmable light strip



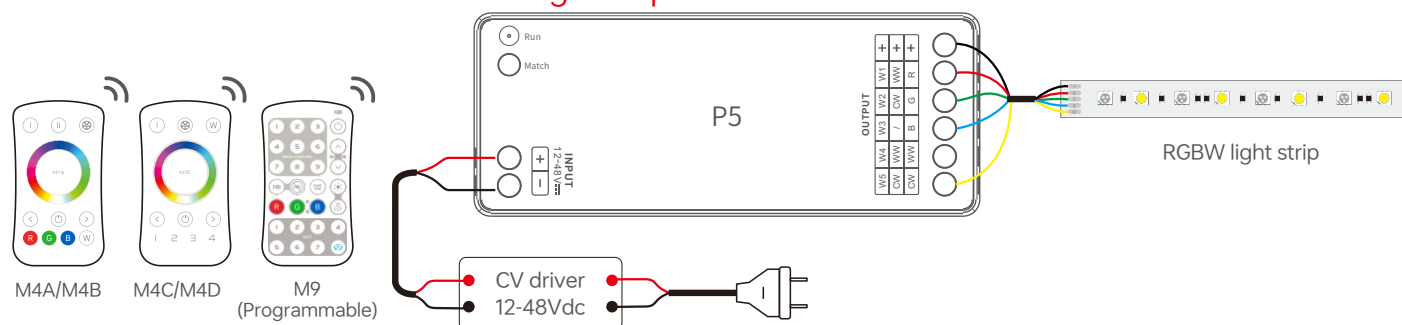
When P5 is connected to the color temperature light strip



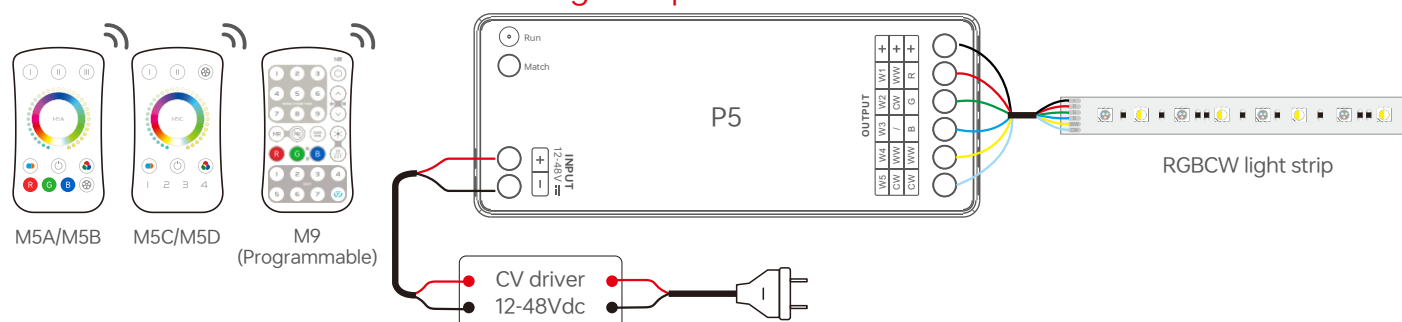
When P5 is connected to the RGB light strip



When P5 is connected to the RGBW light strip



When P5 is connected to the RGBCW light strip



Pair the remote

Pair the remote by using the button

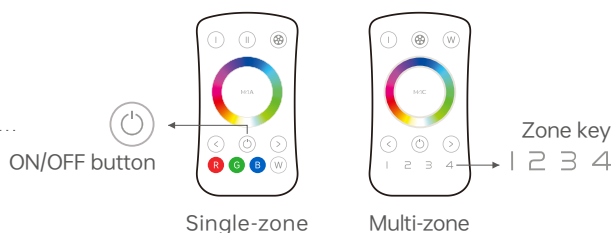
1.Short press the ID learning button on the controller and the indicator light flashes. Please complete the following steps within 10 seconds.

2.Pair the MINI series remote:

Single-zone MINI remote: Long press the ON/OFF button until the controller's indicator light flashes fast.

Multi-zone MINI remote: Long press zone button until the controller's indicator light flashes fast.

3.When the load light of the controller flashes slowly and then stays on constantly, the learning is successful.



Pair the remote by powering on the controller

1. Power off the controller first.

2.Pair the MINI series remote:

Single-zone MINI remote: Long press the ON/OFF button and power on the controller at the same time until the controller's indicator light flashes fast.

Multi-zone MINI remote: Long press zone button and power on the controller at the same time until the controller's indicator light flashes fast.

3.When the load light of the controller flashes slowly and then stays on constantly, the learning is successful.

Note: A controller can be paired with a maximum of 10 remotes. Pairing more than 10 remotes will automatically delete the earliest remote ID codes.

Unpair the remote

Unpair the remote by using the button:

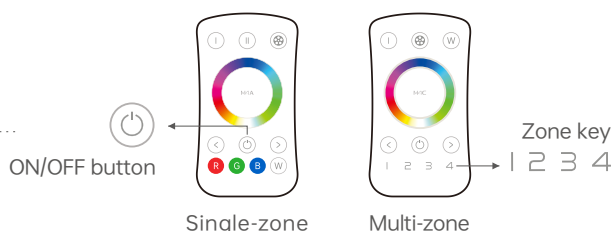
1. Delete all remote pairings

Long press the ID learning button on the controller for 10 seconds, and then short press it for 6 times. When controller's indicator light flashes and then stays on, pairing removal is successful.

2. Delete a single remote pairing

Single-zone Mini: Press and hold the ID learning key of the controller for 5 seconds. Within 10 seconds, press the on/off key three times briefly. When the load light flashes slowly and then stays on constantly, the code clearing is successful.

Multi-zone Mini: Press and hold the ID learning key of the controller for 5 seconds. Within 10 seconds, press the zone key three times briefly. When the load light flashes slowly and then stays on constantly, the code clearing is successful.



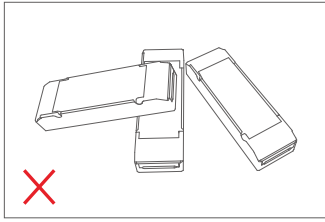
Unpair the remote by powering on the controller

Delete a single remote pairing

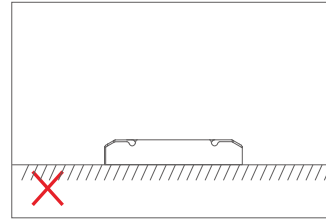
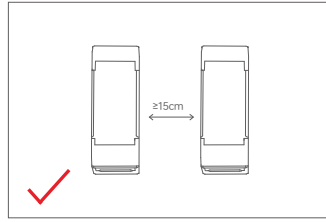
Single-zone Mini: Power on the controller for 2 seconds, then power it off for 2 seconds, and power it on again. Press the on/off key three times briefly within 3 seconds. When the load light flashes slowly and then stays on constantly, the code clearing is successful.

Multi-zone Mini: Power on the controller for 2 seconds, then power it off for 2 seconds, and power it on again. Press the zone key three times briefly within 3 seconds. When the load light flashes slowly and then stays on constantly, the code clearing is successful.

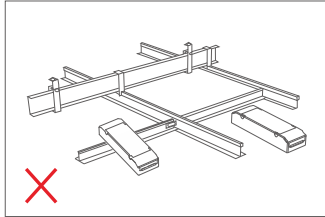
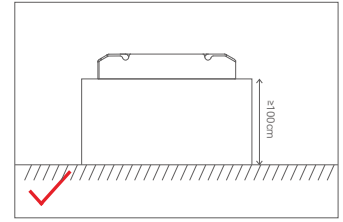
Installation Precautions



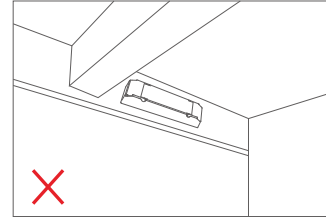
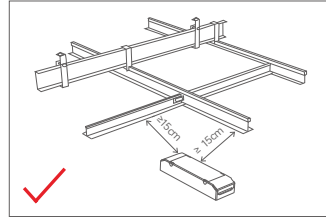
Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.



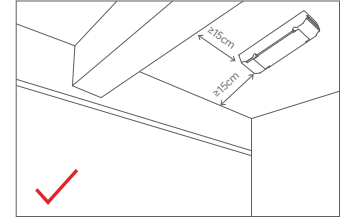
Please do not place the products on the floor. The distance between the product and the floor should be $\geq 100\text{cm}$ so as to avoid signal interference.



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.



Note: The temperature within the installation area should be within the working temperature range of the products. Please do not install products inside LED fixtures to avoid temperature exceeding the working temperature that may affect the product lifetime.

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 extend the life the product. Please install the product in a environment with good ventilation.
- During installation, avoid being close to large-area metallic objects or stacking the devices, so as to prevent signal interference from affecting the usage.
- Avoid installing in thunderstorm-prone areas, areas with strong magnetic fields, and high-voltage areas.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- Please check whether the working voltage used complies with the parameter requirements of the product.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.

* 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:

- 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 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, and release in written form shall prevail.

DIM/CT/RGB/RGBW/RGBCW LED 控制器

- 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
- RF 2.4GHz无线信号，免布信号线
- 1-5通道恒压输出
- 可控制调光、色温、RGB、RGBW、RGBCW灯具
- 可搭配 RF 2.4GHz的Mini系列遥控器使用
- P3/P4/P5内置9种动态模式
- 一台控制器可配对10个遥控器
- 同一组或同一分区的控制器具有动态同步功能



RoHS

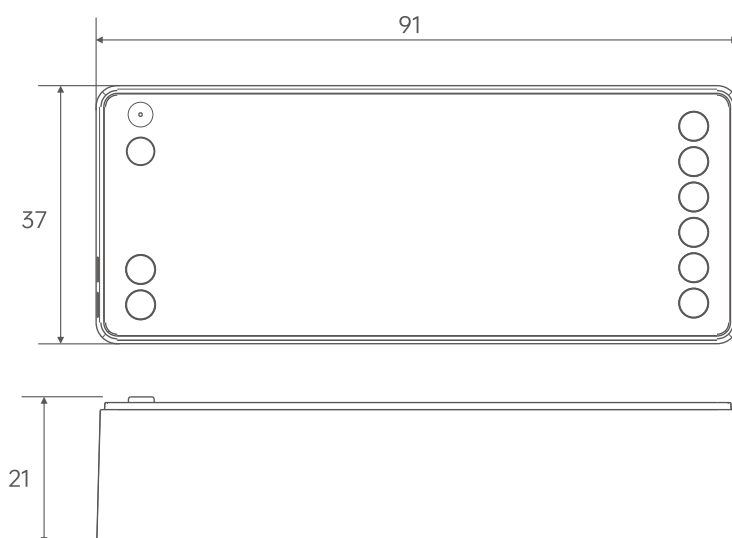


技术参数

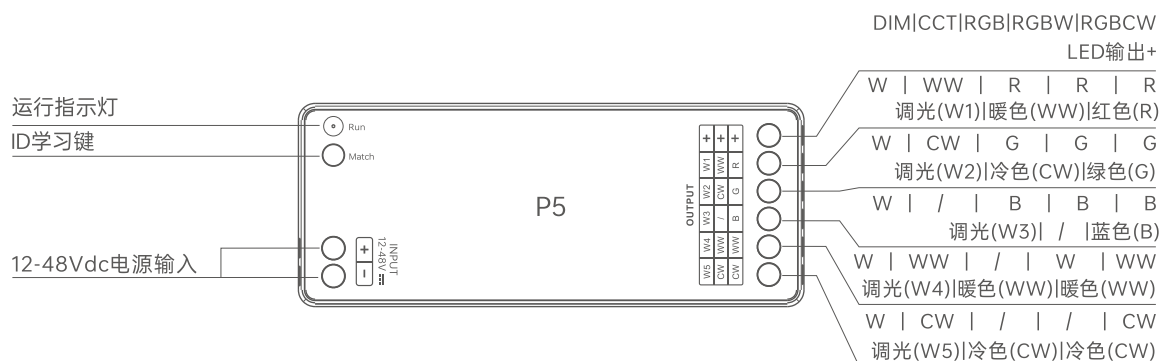
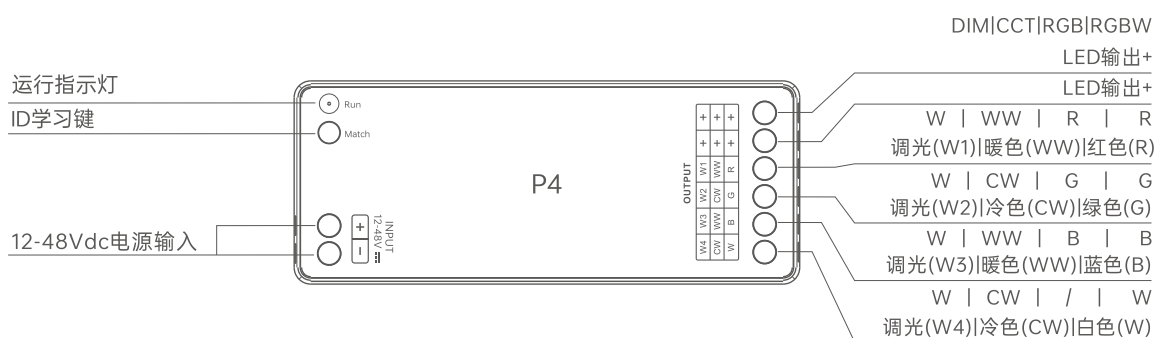
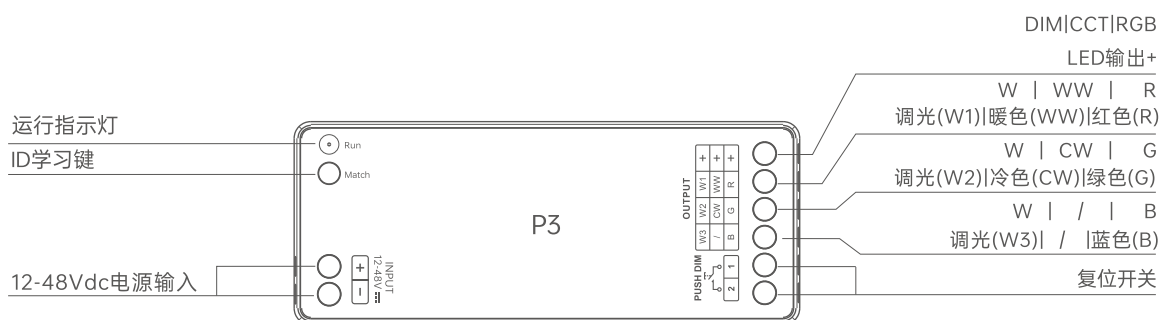
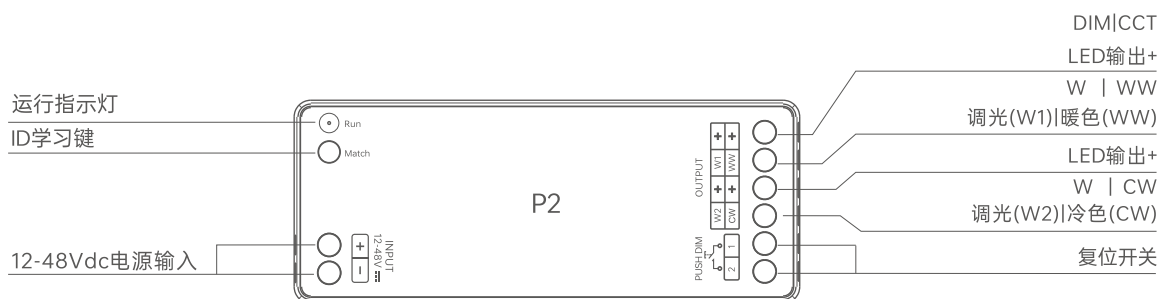
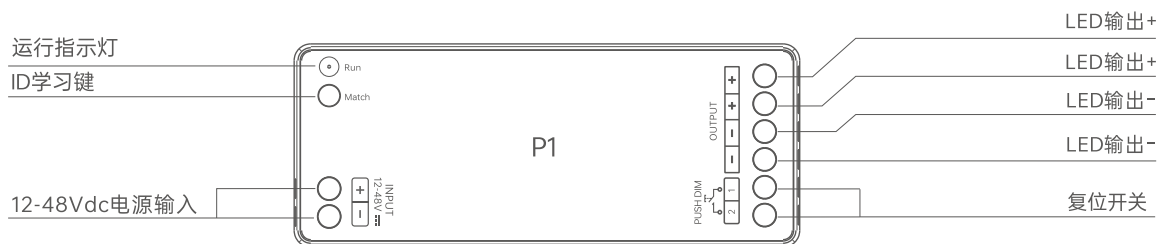
型号	P1	P2	P3	P4	P5
输入信号	RF2.4GHz				
输入电压	12-48V---				
输出电压	12-48V---				
通道数量	1通道	2通道	3通道	4通道	5通道
复位开关	有	有	有	无	无
负载电流	Max. 11A	Max. 12A	Max. 15A	Max. 15A	Max. 15A
负载功率	132W@12V 240W@24V 288W@36V 384W@48V	144W@12V 240W@24V 288W@36V 384W@48V	180W@12V 360W@24V 432W@36V 432W@48V	180W@12V 288W@24V 360W@36V 480W@48V	180W@12V 360W@24V 450W@36V 600W@48V
可搭配使用的遥控器型号	单区: M1A/M1B 多区: M1C/M1D 编程: M9	单区: M1A/M1B/ M2A/M2B 多区: M1C/M1D/ M2C/M2D 编程: M9	单区: M1A/M1B/M2A/ M2B/M4A/M4B 多区: M1C/M1D/M2C/ M2D/M4C/M4D 编程: M9	单区: M1A/M1B/M2A/ M2B/M4A/M4B 多区: M1C/M1D/M2C/ M2D/M4C/M4D 编程: M9	单区: M1A/M1B/M2A/ M2B/M4A/M4B/ M5A/M5B 多区: M1C/M1D/M2C/ M2D/M4C/M4D/ M5C/M5D 编程: M9
保护	短路、过温、过流保护、防反接保护				
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

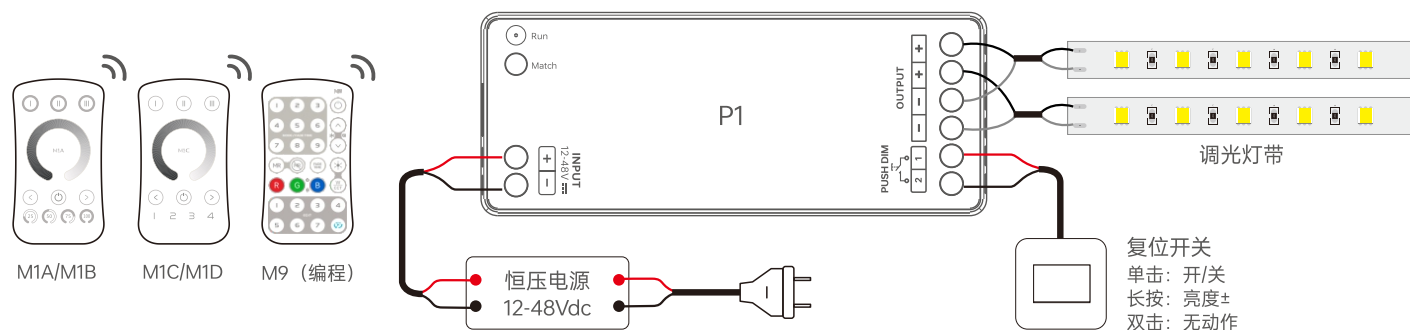


机械结构和安装

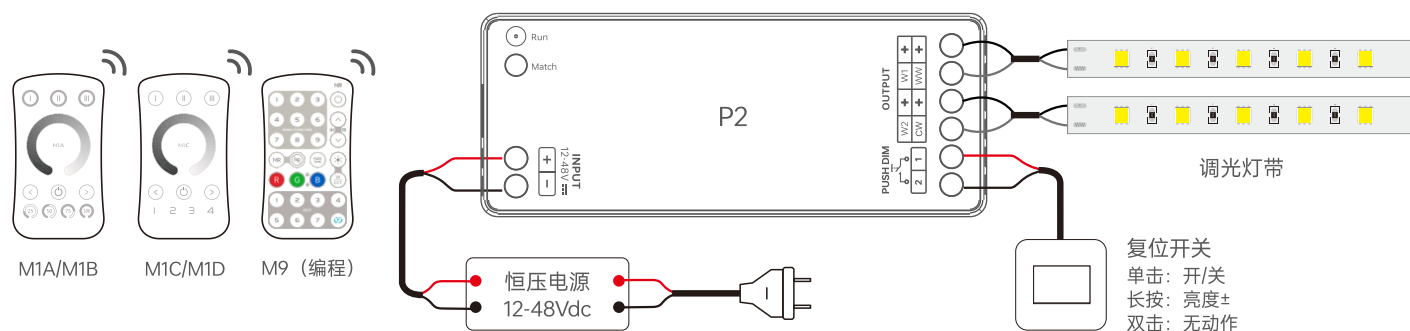


接线图

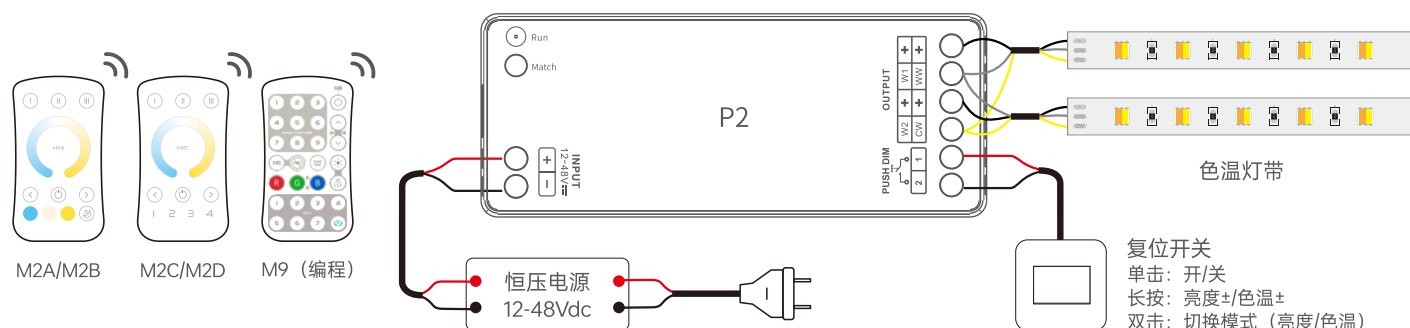
当P1接调光灯带时



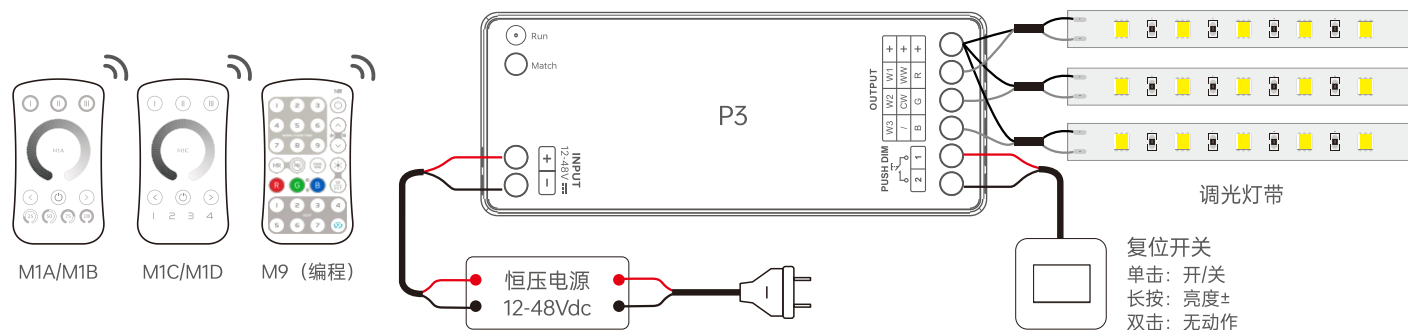
当P2接调光灯带时



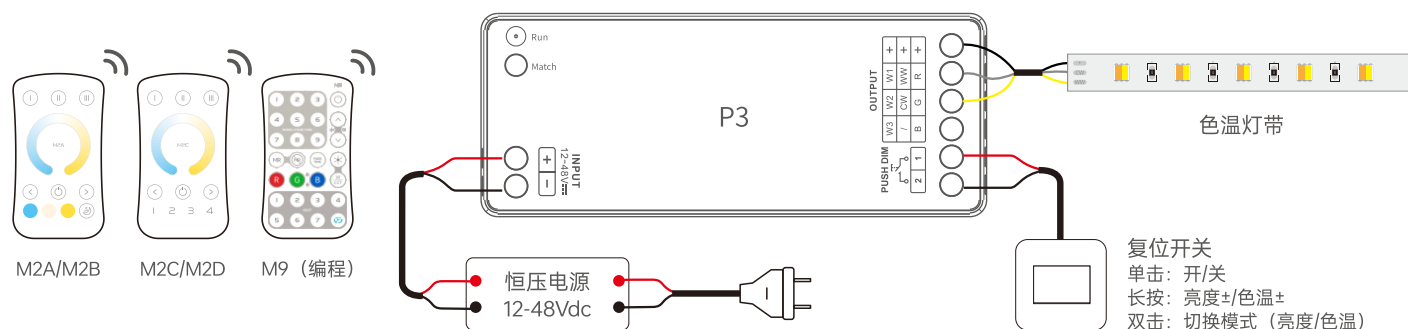
当P2接色温灯带时



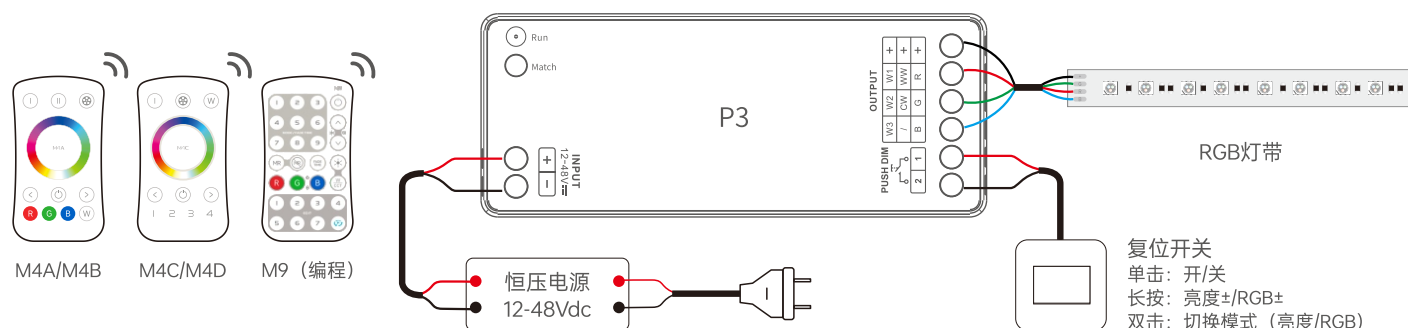
当P3接调光灯带时



当P3接色温灯带时

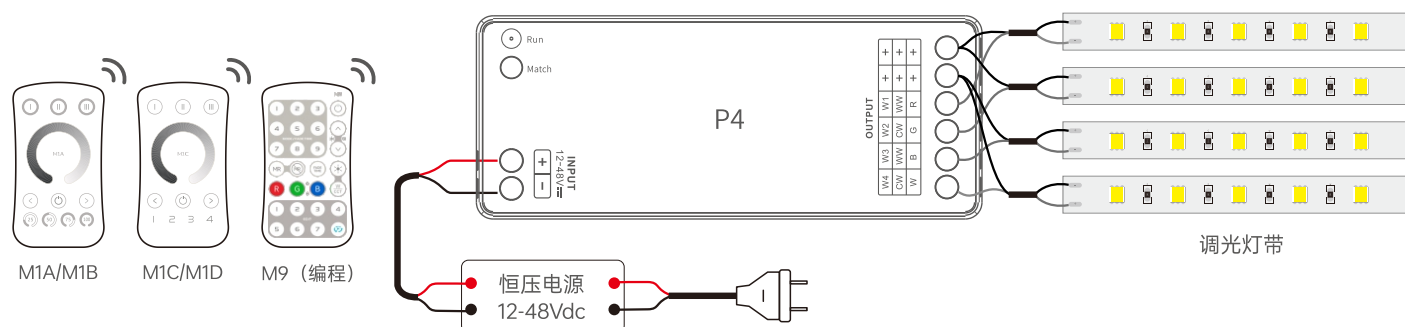


当P3接RGB灯带时

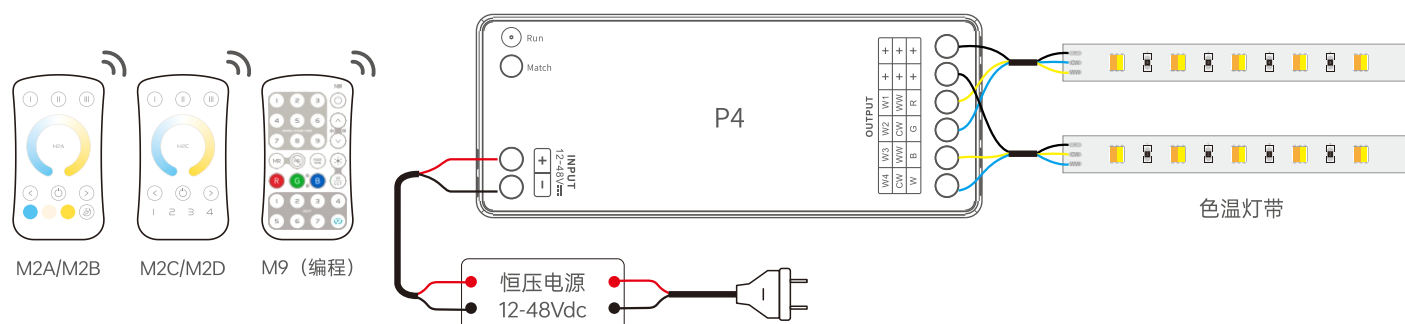


注: PUSH DIM控制类型跟随遥控器类型切换。

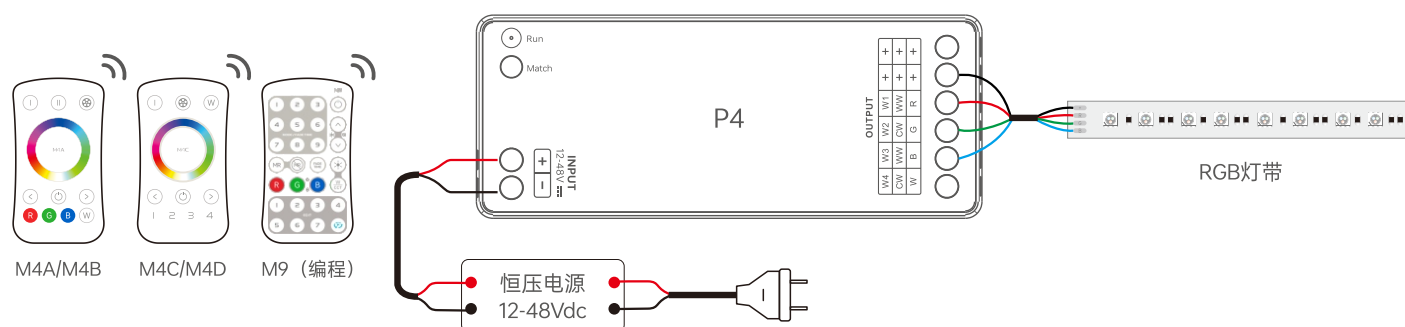
当P4接调光灯带时



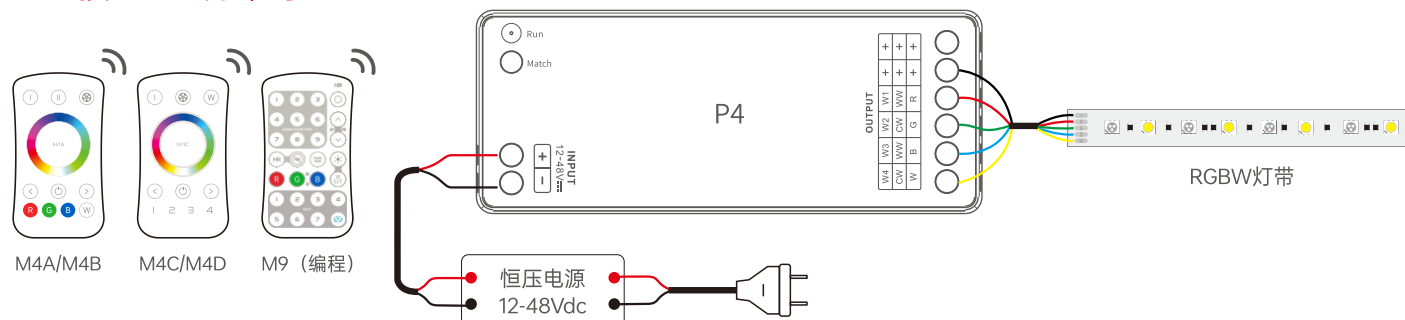
当P4接色温灯带时



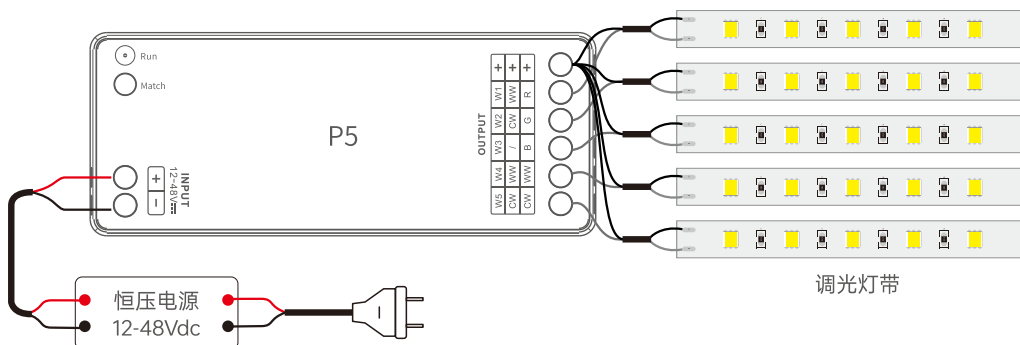
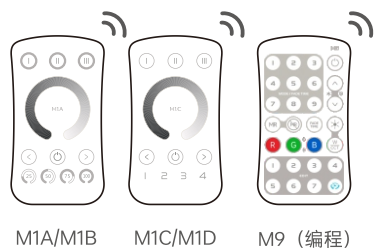
当P4接RGB灯带时



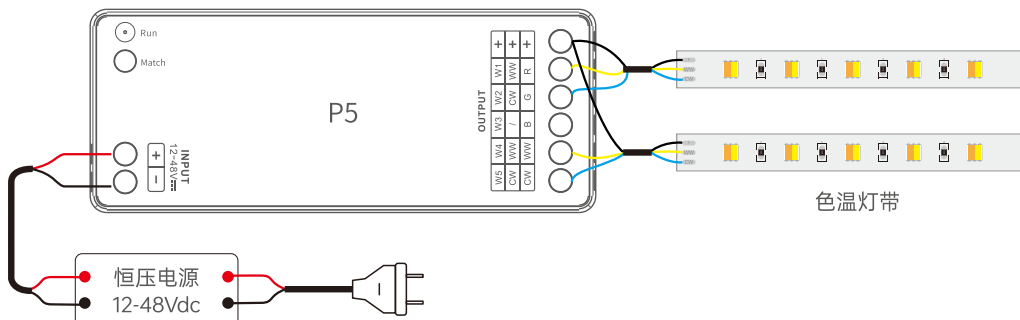
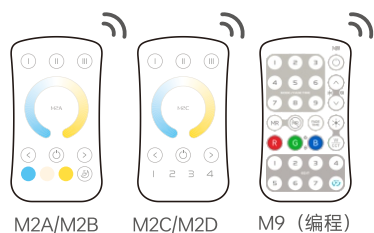
当P4接RGBW灯带时



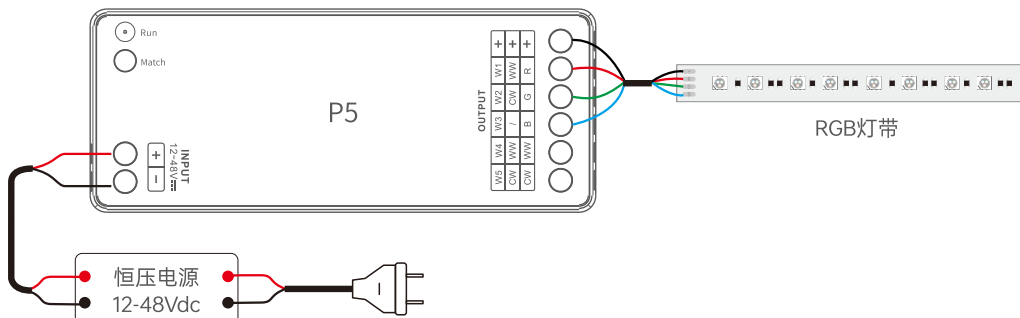
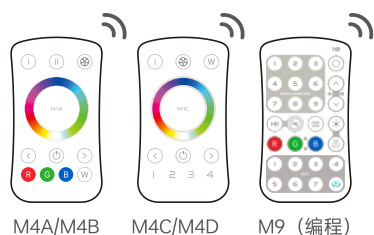
当P5接调光灯带时



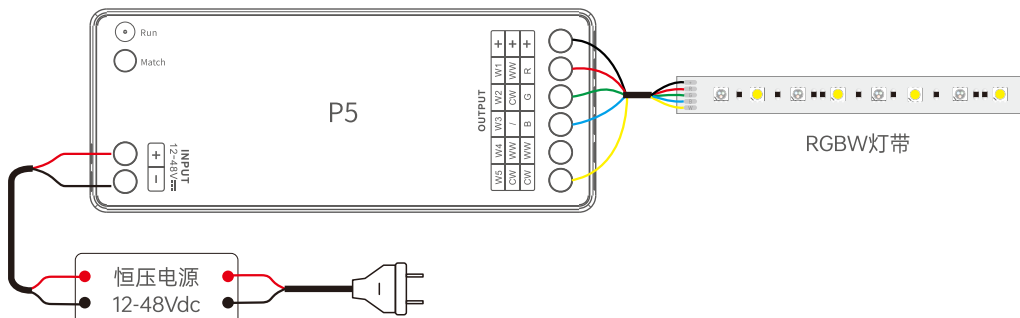
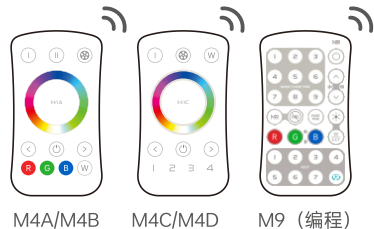
当P5接色温灯带时



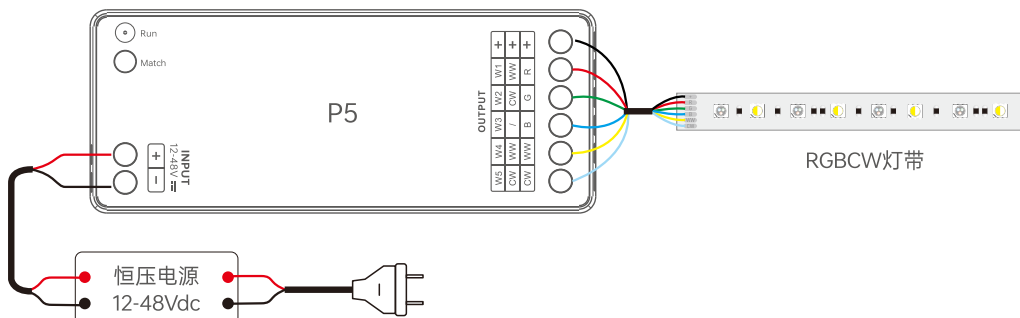
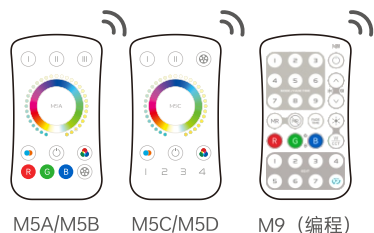
当P5接RGB灯带时



当P5接RGBW灯带时



当P5接RGBCW灯带时



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系列遥控：

单区MiNi：长按开关键，直到控制器负载灯慢闪。

多区MiNi：长按分区键，直到控制器负载灯慢闪。

3.控制器负载灯慢闪后常亮，学习成功。



上电对码

1. 控制器断电；

2.对码MiNi系列遥控：

若使用单区MiNi：长按开关键，控制器上电后，直到控制器负载灯慢闪。

多若使用区MiNi：长按分区键，控制器上电后，直到控制器负载灯慢闪。

3.控制器负载灯慢闪后常亮，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

按键清码方法：

1. 删除全部遥控方式

长按控制器ID学习键10秒，3秒内短按ID学习键3次，控制器负载灯快闪烁常亮，清码成功。

2. 删除单个遥控方式

单区MiNi：长按控制器ID学习键5秒，10秒内短按开关键3次，负载灯慢闪后常亮，清码成功。

多区MiNi：长按控制器ID学习键5秒，10秒内短按分区键3次，负载灯慢闪后常亮，清码成功。



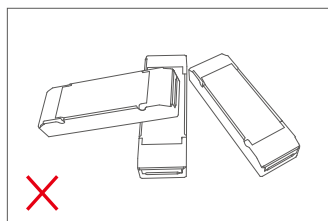
上电清码方法：

删除单个遥控方式

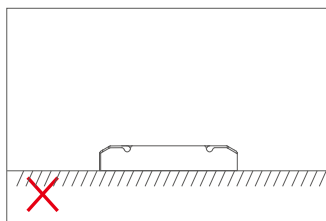
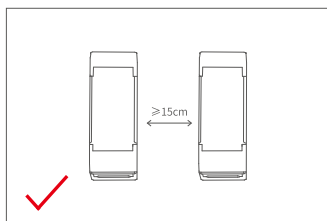
单区MiNi：控制器上电2秒后断电2秒，再次上电，3秒内短按开关键3次，负载灯慢闪后常亮，清码成功。

多区MiNi：控制器上电2秒后断电2秒，再次上电，3秒内短按分区键3次，负载灯慢闪后常亮，清码成功。

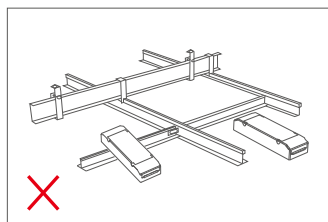
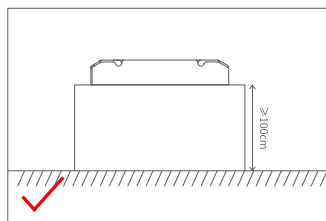
安装注意事项



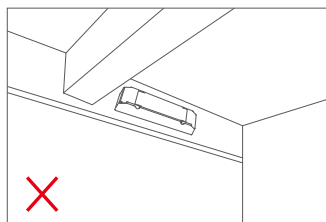
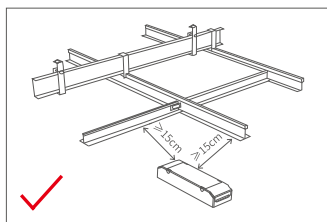
请勿将产品堆叠摆放，产品与产品间隔距离应 $\geq 15\text{cm}$ ，避免影响产品散热和使用寿命。



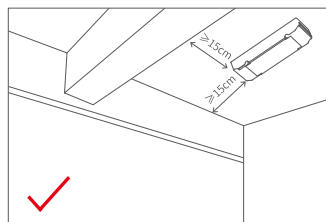
请勿将产品放置地面，与地面间隔距离应 $\geq 100\text{cm}$ ，以免信号干扰影响使用。



请勿将产品大面积接触金属物体(如：龙骨架)，间隔距离应 $\geq 15\text{cm}$ ，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。



注：安装需符合产品的环境工作温度，切勿安装到灯具内部，以免超出产品环境工作温度影响产品寿命。

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。
- 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，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雷特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；
- 无雷特签订的合同或发票凭证。

1. 修理或更换是雷特对客户的唯一补救措施。雷特不承担任何附带引起的损害赔偿赔偿责任，除非在适用法律范围之内。

2. 雷特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。