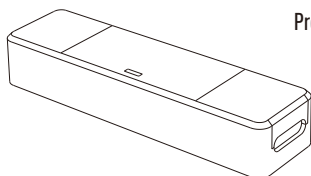


Umi Smart Wireless

LED Controller

Model: NM10 / NM20 / NM30 / NM40 (-A/-P)

Single color to RGBW Model
Remote + Smartphone
Press key option
Group / Scene



BLE Mesh



Remote + Phone



Full Protection



Compact Size



Group / Scene



Press Key

2. Press key input (-P model only)

Connect to a normally open type press key switch for -P version models. (*The press-key is not included in the packing)

Three operation method is available for the press key:

Single press: Turn on/off.

Double click: Change color or color temperature.

Hold press: Dimming.

3. Work status indicator

This indicator shows all working status of the controller. It displays different events as following:

Steady green: Normal working.

Short green blink: Command received.

Green blink for 3 times: Confirmation or identification.

Single yellow flash : Edge of the content.

Red flash: Overload protection.

Yellow flash: Overheat protection.

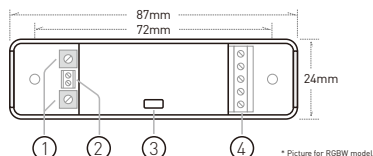
4. LED output

Connect to LED loads. The LED loads must be constant voltage driving type and compatible with PWM modulation. For multi-channel models, the LED connection need to be common anode. Please make sure the LED rated voltage is same as the power supply and each channel's maximum load current is in range of the controller's rated current.

■ Introduction

This series LED controllers are designed to drive constant voltage LED products in voltage range of DC5-24V. They can be controlled by the Umi compatible remote controllers and Smartphone app (-A version). With advanced BLE mesh technology, controllers can work synchronously with a robust connection. With on-board press key on/off and dimming control (-P version), user can setup lighting project with multiple operation method.

■ Function & Size



* Picture for RGBW model

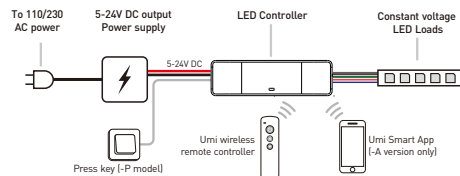
1. Power supply input

Connect to power supply. The controller can accept supply voltage from DC 5V to 24V, the maximum cable gauge is AWG12 or 2.5mm². The controller's output voltage is at same level as the power input voltage, please make sure the power supply voltage is correct and the power is capable for the load wattage. The power input '+' unit is directly connected to the output terminal '+' unit inside the controller.

1

■ Wiring

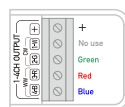
Please connect the controller output to LED loads and power supply to the controller power input. The power supply voltage must be same as the LED load's rated voltage. Check all cables to be well connected and insulated before power on.



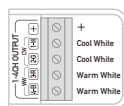
Model NM40-A supports 1-4 channel application from single color to RGB+CCT, please refer to following diagram for multiple application output wiring.



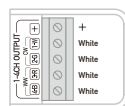
RGBW



RGB



CCT



Single Color

2

3

■ Operation

5. Pairing remote controllers

The controller can be paired with compatible Umi remote controller for operation. To pair or unpair the remote controller, user needs to connect and disconnect the power of controller and press specific combo keys on the remote controller. For detailed method, please refer to the remote controller's user's manual. Each controller can be paired up to total 5 remote controllers.

6. Control by smartphone

For -A version controller, besides Umi wireless remote controllers, it can also be controlled by Umi Smart app.

User can operate the controller from remote and/or Umi Smart app. The status and group/scene features will be synchronized from remote controller and App. Please search and download 'Umi Smart' app from Apple app store or Google play market to setup. There will also be a QR code on the controller for app download link.

■ Advanced features

7. Change model function

For NM40-A model, the function can be changed from 1 channel (single color) to 4 channels (RGB+White) by Umi Smart app.

To change the model function, please use the Umi Smart app and detect factory default devices in 'Discover nearby' function and then tap the item icon and select 'change function' menu to proceed.

4

8. Force turning on

The controller will restore to the last on/off status on each power on. To force turn on the controller at OFF status, user need to connect and disconnect the power of the controller for 3 times in a short time. After this operation, the controller will be rest to ON status.

9. Protection function

The controller has full protection function against wrong wiring, load short circuit, overload and overheat. The controller will stop working and the indicator will flash with red / yellow color to indicate the malfunction. The controller will try to recover from protection status in a short time when the working condition is good.

For protection issues, please check the situation with different indicator information:

Red flash: Check the output cables and load, make sure no short circuit and the load current is in rated range. Also the load must be constant voltage type.

Yellow flash: Check the installation environment, make sure in a rated temperature range and with good ventilation or heat dissipation condition.

5

■ Specification

Model	NM10	NM20	NM30	NM40
Function	Single color	CCT	RGB	4-in-1
Working voltage	DC 5-24V			
Rated output current	10A	2x5A	3x4A	4x3A
Wireless connection	Umi protocol based on SIG BLE Mesh			
Smartphone app support	Yes, -A version only			
Press key function	Yes, -P version only			
Communication distance	>20 meters at open area			
Output mode	PWM constant voltage			
Output adjust range	0-100% with gamma correction			
Physical PWM level	4000 steps			
Dynamic effect	9 effects	NA	42 effects	42 effects
Overload protection	Yes			
Overheat protection	Yes			
Working temperature (Ta)	-20°C~+55°C			
Dimension	87x24x15mm			

App download link: (for -A version only)

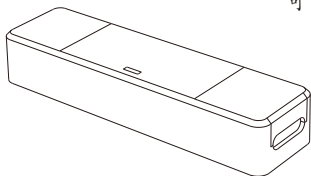


6

Umi智能无线 LED控制器

型号: NM10/NM20/NM30/NM40 (-A/-P)

单色到 RGBW多机型
遥控器+智能手机
可选按键功能
群组/场景



蓝牙自组网



遥控+手机



全功能保护



小尺寸



群组/场景

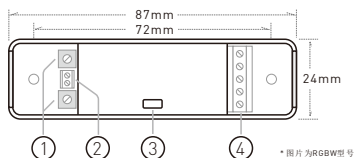


按键调光

简介

该系列LED控制器用于驱动电压范围为DC 5-24V的恒压LED产品。用户可以通过Umi兼容的遥控器或智能手机App(-A版本)进行控制。基于先进的蓝牙自组网技术，控制器之间可以形成稳定可靠的无线连接并实现多机同步功能。本机还可以通过有线按键(-P版本)进行操作。

功能和尺寸



* 图片为RGBW型号

1. 电源输入

连接到电源。控制器可接受直流5V至24V的供电电压，端子可安装的最大电缆规格为 2.5mm^2 。控制器的输出电平与电源输入电压相同，安装前请确保电源电压正确且功率储备满足控制器和负载的需求。请注意电源输入的“+”极与输出端子的“+”极在控制器内部直接相连。

2. 按键输入 (仅限-P机型)

连接到常开型按键开关，用于开关和调光操作。

按键开关有三种操作方式：

单按：切换开关状态

快速双按：调节颜色或色温

长按：调节亮度

3. 工作状态指示灯

该指示灯显示控制器的工作状态，指示灯的闪烁方式与工作状态的对应关系如下：

绿色常亮：正常工作

绿色单闪：收到命令

绿灯慢闪3次：变更设置或设备识别

黄色单闪：已调至最高或最低

红色闪烁：过载保护

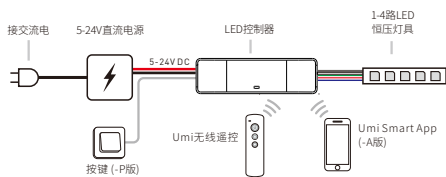
黄色闪烁：过热保护

4. LED输出

连接到LED灯具。LED灯具必须为恒压型且适用于PWM驱动。对于多通道应用，各通道需为共阳极连接方式。请确保LED的额定电压与电源相同，并且每个通道的最大负载电流在控制器的额定电流范围内。

接线方法

请将控制器输出连接到合适的恒压LED灯具，并将电源连接到控制器电源输入端子。电源电压必须与LED负载的额定电压相同。在通电前请检查所有电缆是否连接良好并已可靠绝缘。



NM40机型支持从单色到RGBW的应用，在不同应用下输出端子的功能定义如下：



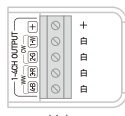
RGBW



RGB



冷暖白



单色

■ 操作方法

5. 配对遥控器

控制器可与兼容的Umi遥控器配对进行操作。要对遥控器进行配对或取消配对，用户需要连接和断开控制器的电源或者在app上激活配对模式，然后按遥控器上的特定组合键。具体方法请参考遥控器使用说明书。每个控制器最多可配对5个遥控器。

6. 通过智能手机操控

对于-A版控制器，除了使用无线遥控器外，还可以同时通过Umi Smart App进行控制。

用户可以仅使用遥控器、仅使用app或者同时使用遥控器和app进行操作。控制器的工作状态、分组状态和场景模式在遥控器和app上可以实现同步。请扫描机身上的二维码或者在各大应用市场搜索“Umi Smart”来安装App。

■ 高级功能

7. 变更机型功能(仅适用于NM40)

对于NM40-A机型，可以通过Umi Smart app更改控制器功能，以实现从单色到RGBW的各种应用模式。

如需更改机型功能，请使用Umi Smart APP并在“发现附近”功能中搜索未配置的设备，然后点击项目图标并选择“更改功能”，并选择需要的功能。

8. 强制开启

控制器将在每次通电时会恢复到上次的开/关状态。要把通电后在‘关’的状态的控制器强制开启，用户需要在短时间内连接和断开控制器电源3次，即可将控制器强制开启。

9. 保护功能

本产品具有完善的保护功能，可以最大程度的防止因接线错误、负载短路、过载或过热而引起的产品损坏。当发生以上异常状态时控制器将停止工作，同时指示灯会闪烁红色或黄色。当工作状态良好时，控制器会尝试恢复正常工作。

当控制器停止工作时，请检查指示灯的状态，在不同的闪烁状态下应检查相应的故障：

红色闪烁：请检查输出电缆是否短路、负载电流是否过高，并且请确保所驱动灯具为恒压驱动类型。

黄色闪烁：请检查控制器的安装环境以及负载功率，并确保控制器散热条件良好且负载功率在额定范围内。

4

5

■ 规格

型号	NM10	NM20	NM30	NM40
功能	单色	双色	RGB	4合1
工作电压	DC 5-24V			
额定输出电流	10A	2x5A	3x4A	4x3A
无线通讯协议	Umi协议，基于SIG BLE Mesh			
手机APP	支持，仅限-A版			
按键调光	支持，仅限-P版			
工作距离	空旷地带>20米			
输出方式	PWM恒压			
输出可调范围	0-100%带伽马校正			
PWM阶数	4000级			
动态效果	9种	NA	42种	42种
过载保护	支持			
过热保护	支持			
工作环境温度范围	-20°C~+55°C			
尺寸	87x24x15mm			

扫码下载Umi Smart APP: (仅限-A版)



6