



Rayrun TM10 LED Controller Instruction Manual

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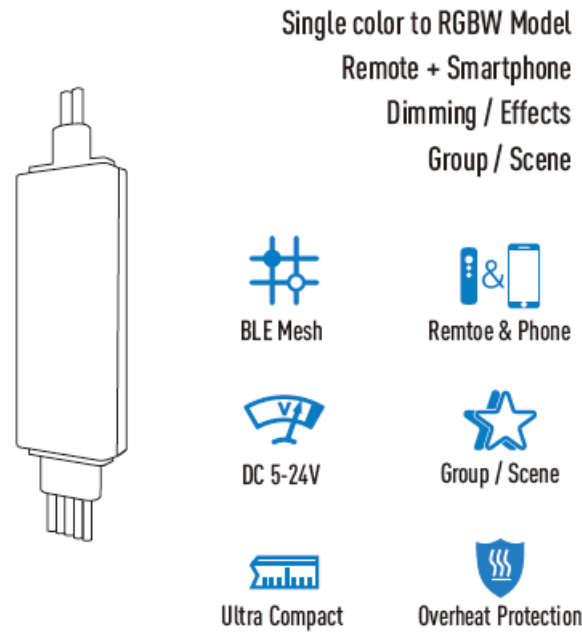
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Rayrun TM10 LED Controller



overview



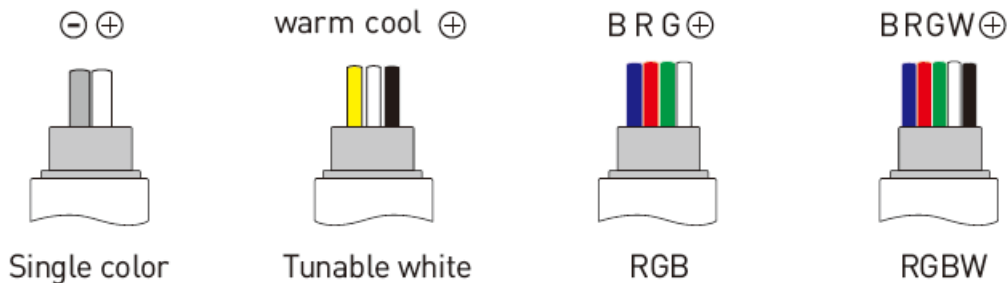
LED output

Connect constant voltage LED loads to these cables.

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 rated current.

Please refer to following output wiring diagram for different models:

CAUTION! The controller will be permanently damaged if output cables short circuit. Please make sure the output cables are well insulated to each other.



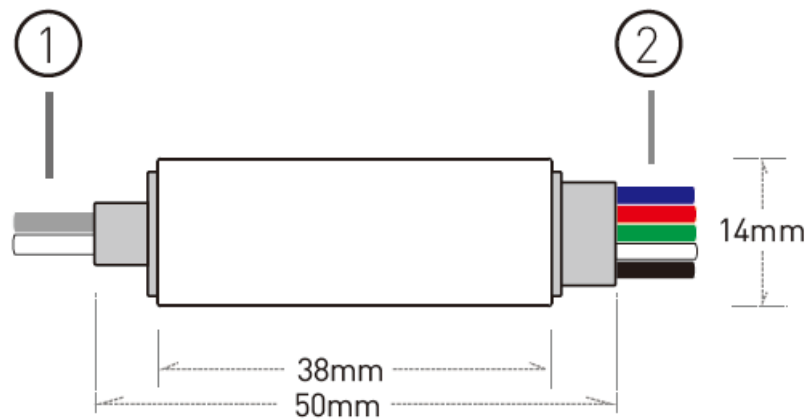
Model TM40-A can be configured to different application for single color, CCT, RGB or RGBW. For different application, the 1-4 channel function is mapped as following table:

TM40 Application	CH1 (white cable)	CH2 (green cable)	CH3 (red cable)	CH4 (blue cable)
Single color	White	White	White	White
CCT	Cool white	Cool white	Warm white	Warm white
RGB	No use	Green	Red	Blue
RGBW	White	Green	Red	Blue

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 only). With advanced BLE mesh technology, controllers can work synchronously with a robust connection. With the ultra compact design, user can set up LED applications flexibly and conveniently.

Function & Size

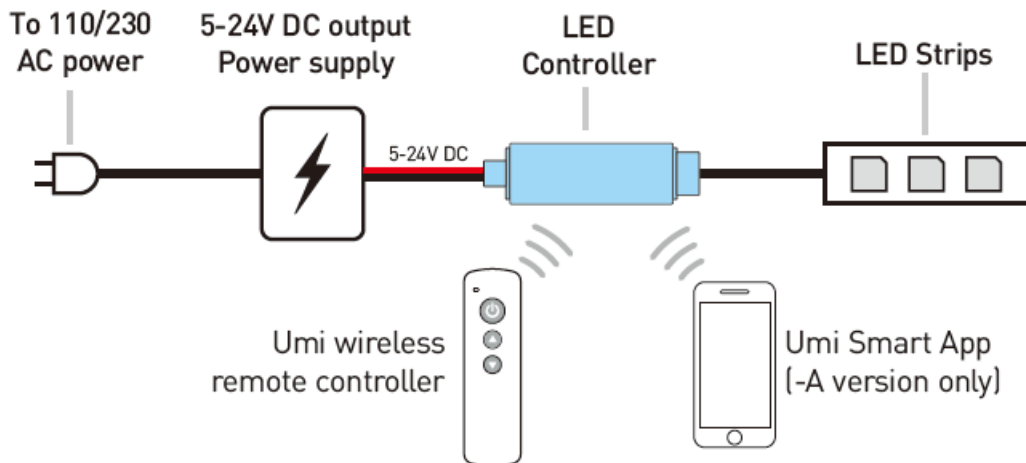


Power supply input

The controller supply voltage range is from DC 5V to 24V. The white power cable should be connected to power positive and gray to negative (For other cable color, please refer to the labels). The LED output voltage is at same level as the power voltage, please make sure the power supply voltage is correct and the power rating is capable for the load.

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.



Operation

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.

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

Change model function (TM40 only)

TM40-A controller's 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.

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.

Specification

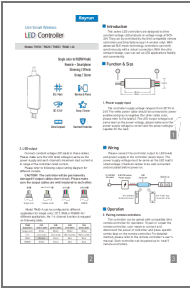
Model	TM10	TM20	TM30	TM40
Function	Single color	CCT	RGB	4-in-1
Working voltage	DC 5-24V			
Rated output current	6A	2x4A	3x3A	4x2A
Wireless connection	Umi protocol based on SIG BLE Mesh			
Smartphone app support	Yes, -A version only			
Communication distance	>20 meters at open area			
Output mode	PWM constant voltage			
Physical PWM level	4000 steps			
Dynamic effects	9 effects	NA	42 effects	42 effects
Overheat protection	Yes			
Dimension	50x15x7mm			

Overheat Protection

The controller has overheat protection feature and it can protect the controller from damage for some abnormal usage such as overloading which generates excess heat. The controller will stop working and try to recover when temperature drops to a safe range. Please check the output current and make sure it's under the controller's rated value at this situation.

App download link: (for -A version only)





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TM10, TM20, TM30, TM40, TM10 LED Controller, TM10, LED Controller, Controller