

# Rayrun T140 RGBW LED Advanced RF Remote Controller **User Manual**

Home » RayRun » Rayrun T140 RGBW LED Advanced RF Remote Controller User Manual



#### **Contents**

- 1 Rayrun T140 RGBW LED Advanced RF Remote **Controller**
- 2 Introduction
- 3 Receiver & wiring
- 4 Remote controller function
- **5 Remote operation**
- **6 Overheat Protection**
- 7 Specification
- 8 Documents / Resources
- 9 Related Posts

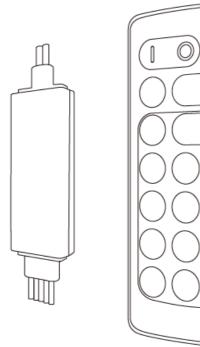


Rayrun T140 RGBW LED Advanced RF Remote Controller



Model: T140(-H)







Ultra Compact



Wide Voltage Range



Memory Function



Overheat Protection

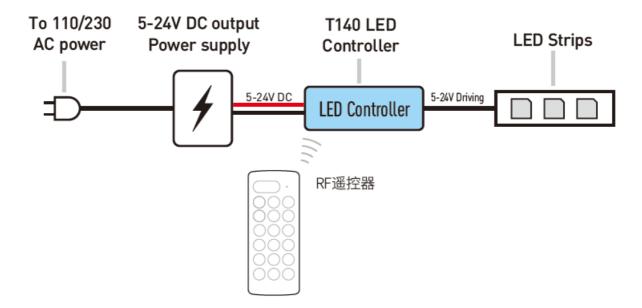
## **LED** output

Connect LED fixtures to this terminal. Install LED common anode cable into the terminal marked with '+' or black cable and each channel LED cables to the relevant color cables. Please make sure the LED rated voltage is same as the power supply and each channel's maximum load current is below the controller rated current.

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

# Wiring diagram

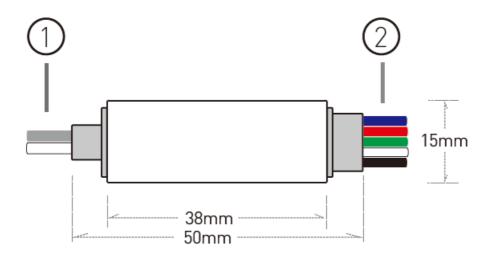
Please connect the controller output to LED loads and power supply to the controller power input. The output voltage of power supply must be same as the LED load's rated voltage. Check all cables to be well connected and insulated before power on.



### Introduction

T140 LED controller is designed to drive constant voltage RGB+White LED products with common anode connection in voltage range of DC5-24V. The receiver works with the RF remote controller, user can setup white LED brightness, RGB LED color, brightness and dynamic effects on the remote controller, the receiver is powered by DC power supply and receives remote controller commands to drive LED fixtures.

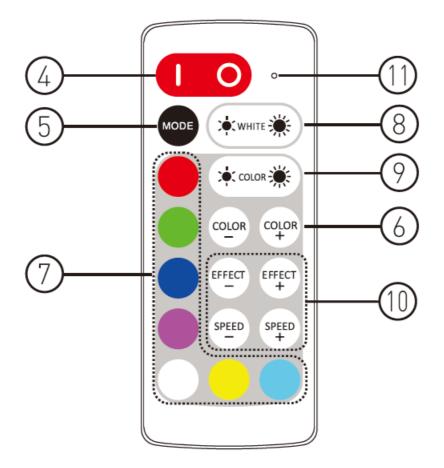
# **Receiver & wiring**



#### Power supply input

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

# **Remote controller function**



## Turn ON / OFF

Press 'I' key to turn on controller or press 'O' key to turn off. The controller will memorize the on/off status and will restore to the previous status on the next power on. Please use remote controller to turn on the unit if it was switched to off status before power cut.

## Light mode switch

Press **COLOR** – this **COLOR** + key to switch between RGB, white and RGB+White mode. In RGB mode, white channel will be disabled; In white mode, RGB channel will be disabled; In RGB+White mode, all channels are usable.

## Select static RGB color

Press and key to select color from the preset library colors.

#### **Shortcut color select**

Shortcut key to static colors. LED will run the relevant color when pressing the specific color key. The shortcut color is included in 'COLOR+' and 'COLOR-' content.

#### White brightness control

Press key to increase white LED brightness and press key to decrease.

# **RGB** brightness control

Press key to increase RGB LED brightness and press key to decrease.

# **RGB** dynamic effect

These keys control the RGB dynamic effects. Press **EFFECT** + and **EFFECT** – to select dynamic effects and press **SPEED** + and **SPEED** – key to set the running speed of the dynamic effects.

#### Remote indicator

This indicator blinks when remote controller is working. If the indicator flash slowly when pressing keys, it means the remote battery is nearly empty and please change the battery in this case. The battery model is CR2032.

# **Remote operation**

# Using the remote controller

Please pull out the battery insulate tape before using. The RF wireless remote signal can pass through some nonmetal barrier. For proper receiving remote signal, please do not install the controller in closed metal parts.

#### Pair a new remote controller

The remote controller and receiver is 1 to 1 paired as factory default. It's possible to pair maximum 5 remote controllers to one receiver and each remote controller could be paired to any receivers. To pair a new remote controller, please follow two steps:

- 1. Plug off the power of main unit and plug in again after more than 5 seconds.
- 2. Press keys simultaneously for about 3 seconds, within 10 seconds after the receiver powered on.

After this operation, the LED fixture will flash quickly to acknowledge that remote pairing is accomplished.

# Keep one remote and forget others

In some cases, one receiver might be paired with several remote controllers but extra remote controllers are no longer needed except current using one. User can simply pair the current using remote to receiver again, then the receiver will dis-pair all other remote controllers and recognize current one only.

# **Overheat Protection**

The controller has overheat protection feature and it can protect itself from damage caused by some abnormal usage such as overloading which generates excess heat. At overheat situation, the controller will shutdown the output for a short while and recover when temperature drops to a safe range. Please check the output current and make sure it under rated level at this situation.

# **Specification**

Output mode	PWM constant voltage
Working voltage	DC 5-24V

Rated output current	4x2A (Total max 6A)
Static color	30 colors
Dynamic effect	42 modes
White brightness grade	10 levels
Color brightness grade	5 levels
Speed grade	10 levels
Direct color select	7 direct keys
PWM frequency	1KHz
PWM physical grade	4000 steps
Overheat protection	Yes

Remote frequency	433.92MHz
Remote control distance	>15m at open area
Power off memorizing	Yes, restore to previous mode before off.
Controller dimension	50x15x7mm

## **Documents / Resources**



T140 RGBW LED Advanced RF Remote Controller, T140, T140 LED Remote Controller, RGB W LED Advanced RF Remote Controller, LED Remote Controller, RGBW LED Remote Controller, LED Advanced RF Remote Controller, LED Remote Controller, Advanced RF Remote Controller, LED Remote Controller, LED Remote Controller, LED Remote Controller, LED Remote Controller

Manuals+,