Product Specifications

Name: 2.4G Full-color Controller
Model: U-RF201

Summarization

2.4G controller is newly introduced wireless high-power LED controller of our company. It equips with touch remote control, touch remote control adopts high precision capacitance touch control technology, you can select the color you need by one button. It is convenient and easy. Each controller has a globally unique address code, in order to prevent confusion caused by controlling repeated address code. Each controller can be equipped with four remote controls, can achieve multiple controllers synchronization control. It is used for controlling a variety of lamp whose source of light is LED. For instance, point source of light, flexible light strip, wall washer lamp, glass wall light etc. It has many advantages such as convenient to connect, easy to use and others. According to the actual need of customers, it can carry out jumpy changing, gradual changing, stroboflash and other effects of change.

Technical Parameters

Controller

working temperature: -20-60℃
supply voltage: DC5V-24V
output: 3 channels
connection mode: common anode
external dimension: L120ⅩW62ⅩH24mm
packing size: L185ⅩW145ⅩH52 mm
net weight: 226g
gross weight: 320g
static power consumption: <1W
output current: <8A (each channel)

output power: 12V:<288W, 24V:<576W

Touch Remote Control

working temperature: -20-60℃
power supply mode: AAA * 3
supply voltage: 1.5V * 3
transmission frequency: 2.4Ghz
standby power consumption: 0.015mW
standby current: 60uA
working current: 200uA
emission current: 10mA
remote distance: about 30m
standby time: 6 months
remote control weight: 94g

External Dimension (mm)

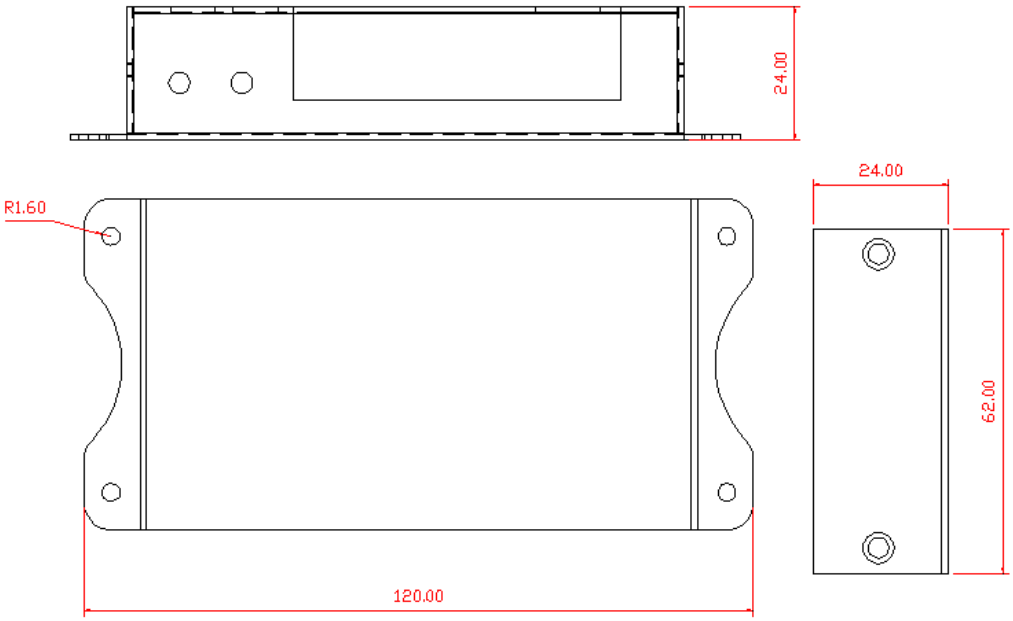

Figure 1

Controller Instruction for Use

Figure 2

1. Antenna: 2.4G remote control signal receiving antenna;
2. Function: on/off and mode key, long press the button, you can turn on/off the output of controller, short press the button, you can switch the mode;
3. Match: match code key, refer to 4 for use methods; clear code, in the process of using controller, if you no longer want to use the remote control that already code, then you can achive it by clearing code, methods of operation: controller is powered off, press and hold “Match” key, then power on, test it with remote control, if you could not control with the remote control, indicates the operation is successful, otherwise repeat this operation.
4. DIP: as shown in Figure 3. It is used for matching four groups of address codes of the controller.

Figure 3

5. Power: power indicator, it lights when connected with external power supply;
6. Signal: RF signal indicator, it flashes when receiving correct remote control signal;
7. Input/ Output interface: the controller power supply input and load output port, please refer to Figure 4 and Table 1 for detailed description.

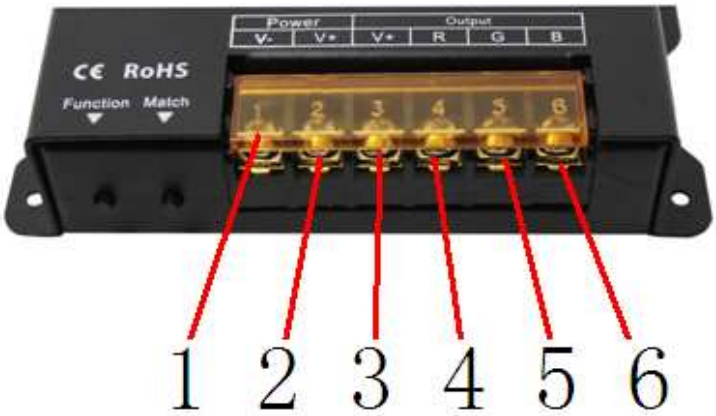

Figure 4

No.	Name	Type	Description
1	V-	Input	The negative power supply
2	V+	Input	The positive power supply
3	V+	Output	Common terminal
4	R	Output	Red
5	G	Output	Green
6	B	Output	Blue

Table 1

Remote Control Direction for use

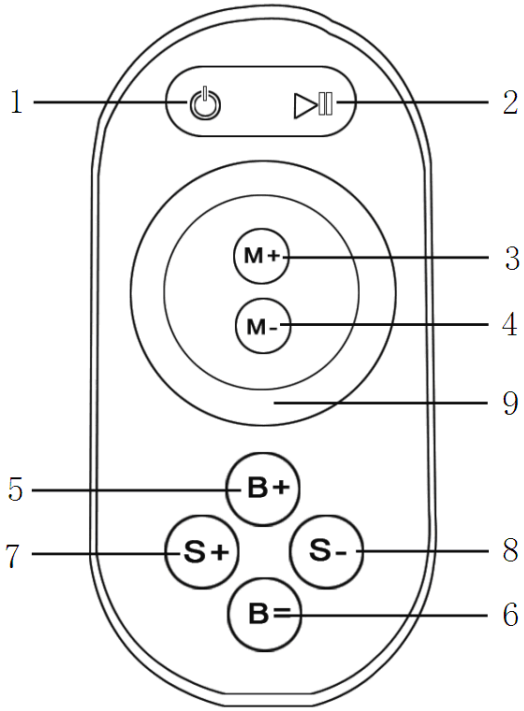

Figure 5

1. on/off key 2. pause key 3. mode+ 4. mode-
5. brightness+ 6. brightness- 7. speed+ 8. speed- 9. color pulley key

1. Match the code of remote control

The controller can be controlled simultaneously by four remote controls, firstly, you need to match the controller with remote control. When matching code, you need to use “match” with “DIP”. In the working process of controller, if the first dial is “on” (Figure 6), press the “Match” key, and then press on/off key on remote control, if the indicator “Signal” flashes, that means the address code is matched successfully, other three groups is the same.

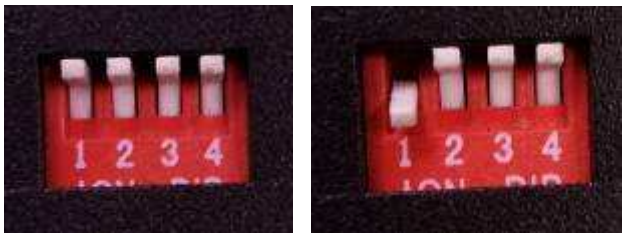

Figure 6

2. Button Description

There are 64 touch keys (points) on the panel of touch remote control, the function of each key is as below:

(1) on/off key: you can turn on/off controller output at any state;
(2) pause key, in dynamic mode, you can make the controller stop at the current state;
(3) mode increase key, when the current control mode is pulley mode, if you want to realize the mode of M+ key, you can press this button;
(4) mode reduce key, when the current control mode is pulley mode, if you want to realize the mode of M+ key, you can press this button;
(5) brightness increase key, every time you press this button, the brightness series add 1, altogether 25 levels;
(6) brightness reduce key, every time you press this button, the brightness series minus 1, altogether 25 levels;
(7) speed increase key, every time you press this button, the speed series add 1, altogether 100 levels;
(8) speed reduce key, every time you press this button, the speed series minus 1, altogether 100 levels;
(9) multicolor pulley touch key, static mode choose key, more than 55 touch points, the button has two function:
    1) pulley static color choice key, so when the current control mode is M key mode (color), if must realize pulley static color, you can press this key;
    2) pulley color switch key, you can switch static color as the pulley shown.

3. Power supply management

Stop to use the remote more than 15-20s, the remote control will enter the standby state automatically, to extend the battery life. Color ring can not be used at this time, The next time use, first touch key wake up the remote control, then the remote will come back to the normal working state.

4. The standard change functions of M key standards change model table:

No	Patterns	Remarks	No	Patterns	Remarks
1	Static red	Brightness is adjustable, Speed is unadjustable.	12	Red stroboflash	Speed and brightness are adjustable
2	Static green		13	Green stroboflash	
3	Static blue		14	Blue stroboflash	
4	Static purple		15	Purple stroboflash	
5	Static yellow		16	Cyan stroboflash	

6	Static cyan		17	Yellow stroboflash	
7	Static white		18	White stroboflash	
8	Three-color jumpy changing	Speed and brightness are adjustable	19	R/B crossfade	Speed is adjustable, brightness is unadjustable
9	Three-color gradual changing		20	B/G crossfade	
10	Seven-color jumpy changing		21	G/R crossfade	
11	Seven-color gradual changing		22	Automatic mode	

Table 2

Typical Application

The controller can achieve synchronous control, that is one remote control can control multiple controllers at the same time, to achieve synchronous control function. The series 2.4G controllers can be equipped with four remote controls, easy for user to use. As shown in Figure 7, one remote control can control four controllers at the same time (not only can control four controllers simultaneously, as long as the controller is in the emission range of remote control, it can be controlled)

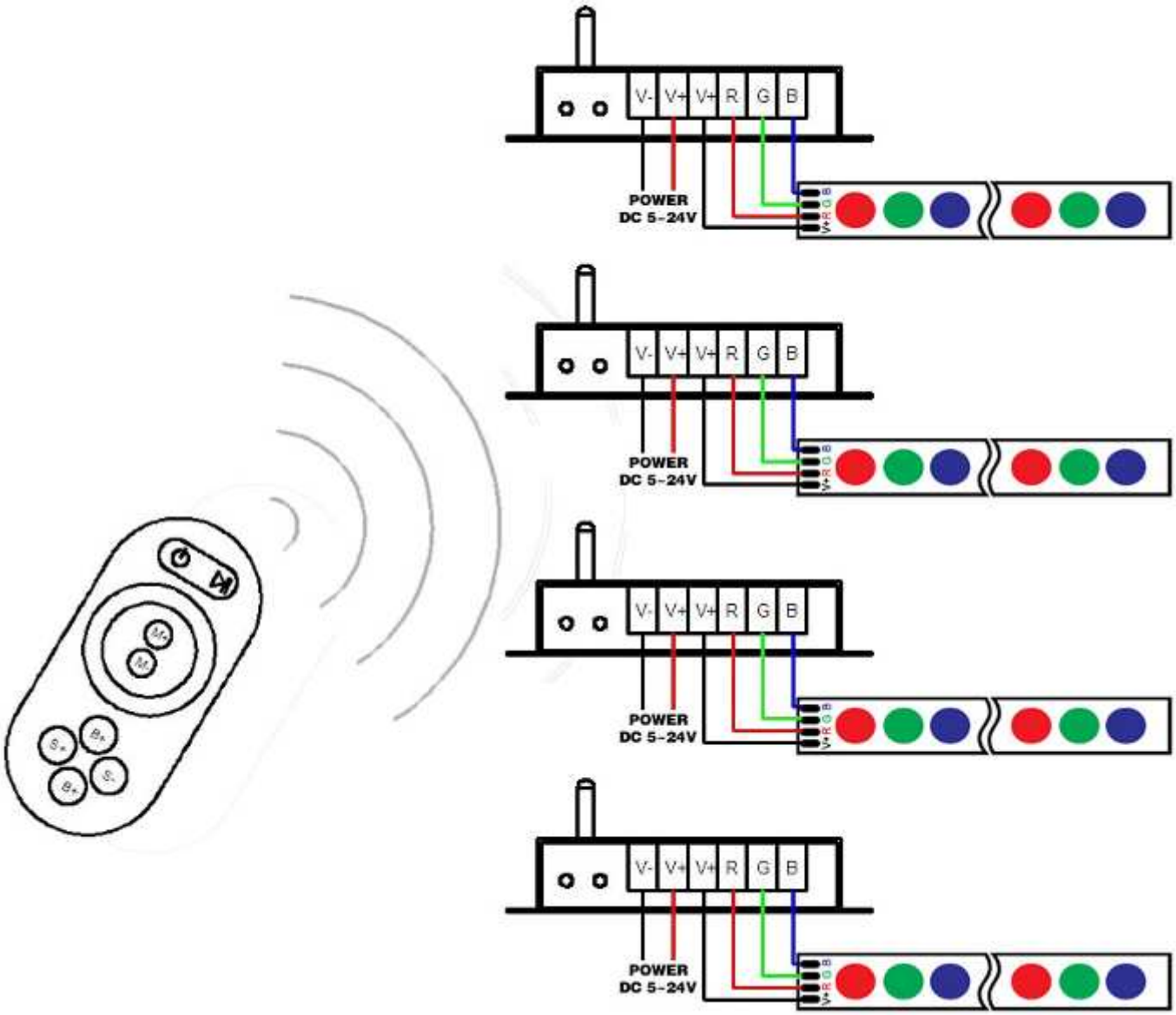

Figure 7

Remarks:

1. Connect the load wire at first, following by the power wire; **Please ensure short circuit can not occur between connecting wire before you turn on the power**;
2. Power supply voltage range is DC5~24V, more than voltage range maybe burn out the controller.
3. When not use touch remote control for long time, we suggest you to take down the batteries.