User's Manual
CT402-RF

LED RGBW controller

Product Brief

This is a multi-functional LED controller, a common RGBW controller with touchable function. 4 channels (common anode), total output 20A, it's can connect RGBW LED module, LED strip, LED flexible tape.

Ⅰ. Technical Parameters:

Model：CT402-RF			
Input Voltage：	DC 12/24V	Control mode	touchable/RF
Loadable Current：	Max.5A×4CH	Output Power：	Max.480W
Remoter material	ABS+PC	Remoter Size：	L113.5×W55×H21(mm)
Brightness Steps：	8 Steps	Controller size：	L65×W64×H24(mm)
Working Temp：	-35℃－55℃	Packing Size：	L120×W72×H50(mm)
Controllable Distance：	Max 20M	Gross Weight：	130g
Battery life：	1 year	Product Lifespan：	40000 hours

Ⅱ.Features

1. Have matching code and clear code function
2. 10 Built-in mode for selection (mode can be customized according to customer demand)
3. Wireless control mode, the maximum effective distance of 20 m
4. Power off memory function
5. The maximum output current 5A per channel
6. Easy to setup and control
7. Pass CE testing

Ⅲ. Function Instructions

Sign	This button	Description
	On/Off	Press this button to turn on/off LED in any state.
	Dynamic change mode	Press this button to activate dynamic change mode, 10 modes to select. And if you longtime press this button 3 seconds, the mode will change to first mode.
	white light mode	Press this button once to activate white light mode
	Brightness up	Increase the brightness by this button
	Brightness down	Decrease the brightness by this button.
	Color Ring	In any mode, slide your finger on the color ring, choose the color you need optionally, and the color ring is only effective for the body finger.

Mode description:

1.RBG**gradual change**	2.RG**gradual change**	3.RB**gradual change**	4.GB**gradual change**	5. **full color gradual change**
6.RBG hop change	7. full color hop change	8.Red fade	9.Green fade	10.Blue fade

Ⅳ. **Matching of controller and remoter**

The distance of wireless control is about 20 meters. One remoter can simultaneously control all valid code within the effective distance, please operate as per the following ways:

1. Press the brightness up button ☀ of the remoter one time within 3 seconds when power on, the white indicator will blinker 3 times, and then the controller can be controlled by this remoter.

2. It's will not affect the finished matching after changing the battery, no need additional setting after reloading the new battery, it can be used directly.

3. When you don't want to use the remoter to control the controller, power off then power on, and press brightness up ☀ button six times within 3 seconds, the lamp will blinker 6 times quickly, clearing way is successful.
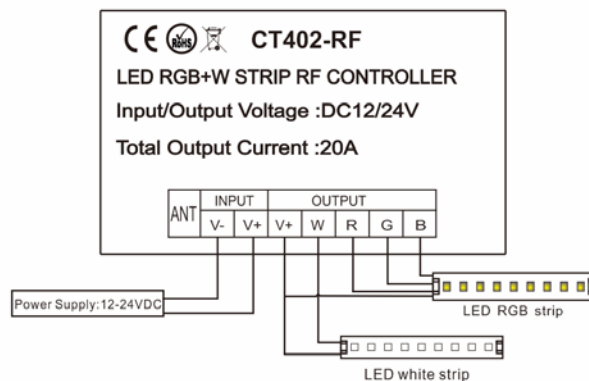
Ⅴ. **Installation battery of the Remoter**

This remoter is used 3 PCS AAA batteries, each voltage is 1.5V.

Open the cover of the remoter; load 3PCS AAA batteries correctly as per the positive and negative instructions in the battery pack.

Notice: When loading the battery, please remember not to touch the color ring or use the palm to cover the color ring, use the remoter 5 seconds later. If happening to touch the color ring, the remoter has no reaction after changing the battery, please take off the batteries, and reload the battery 10 seconds later.

Ⅵ. **Wiring Description**

Ⅶ. **Exception Handbook**

Malfunction	Causation	Settle
No light	1. No power; 2. The protection of the power supply is active; 3. Wrong connection	1. Check the power 2. Check the fault, then power on again; 3. Check the connection

Incorrect color	4. Wrong connection from RGB wire	4. Re-connect RGB wires correspondently
No response from the remoter	5. Wrong battery installation; 6. Beyond controllable distance	5. Install the battery correctly; 6. Reduce remote controllable distance;
Delay response from the remoter	7. Battery power is not enough;	7. Replace battery;
Uneven Brightness between front and rear, with voltage drop	8. Output cable is too long 9. Wire diameter is too small 10. Overload beyond controller or power supply capability	8. Reduce cable or use loop supply. 9. Change wider wire 10. add power amplifier
Signal chaos between controller and remoter	11. Controller may be controlled by other remoter;	11. Clear the memory as the No. 3 and No.1(See Matching of controller and remoter)

Friendly reminding: The effective power of switching mode power supply is 80%, the actual power should be more than actual load of LED lights, usually at least 20% more.

Ⅷ.After Sales

From the day you purchase our products within a year, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:
1. Any defects caused by wrong operations..
2. Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
3. Any damages due to transportation, breaking, flooding water after the purchase.
4. Any damages caused by earthquake, fire, flood, lightning strike etc force majored of natural disasters.
5. Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
6. Product has been updated.

Ⅸ.Safety warnings

1. Please don't install this controller in lightening, intense magnetic and high-voltage fields.
2. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection
3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
4. Check if the voltage and power adapter suit the controller (please select DC 12/24V power supply with constant voltage)
5. Don't connect cables with power on, make sure a correct connection and no short circuit checked with instrument before power on.
6. Please don't open controller cover and operate if problems occur.

The manual is only suitable for this model; any update is subject to change without prior notice.