CT302-RF

RGB LED Controller/Dimmer with Color Ring Remote



Description:

This is a multi-functional RGB LED controller/dimmer with touchable static color function and 10 preset color-changing modes. It uses the most advanced PWM technology for RGB color changing of full color, 4-wire LED lights with 3-channel (common anode), such as RGB LED modules, RGB LED flexible strips, and other RGB LED lights.

I. Technical Specs:

Model: CT302-RF				
Input Voltage:	DC12/24V	Wireless mode	touchable/RF	
Loadable Current:	Max.6A×3CH	Output Power:	216W/12V, 432W/24V	
Color Modes:	10 modes	Grey Steps:	256 steps per RGB	
Remoter material	ABS+PC	Controller Size:	6.5″L x 2″W x 1″H (167*52*24mm)	
Intensity Steps:	8 Steps	Remote size:	4.5″L x 2.2″W x 0.83″H (113.5*55*21mm)	
Working Temp:	-31°F-131°F (-35°C-55°C)	Package Size:	6.75″L x 2.5″W x 2.13″H (120*72*50mm)	
Controllable Distance:	Max 65' (20m)	Gross Weight:	3.3oz (93 g)	
Accessories:	3 pcs AAA batteries	Lifespan:	40000 hours	
Protection	Short Circuit Protection	Power:	3(1.5V) AAA batteries	
(with warring led)	Over Current Protection Over Temp Protection	Warranty:	2 Years	

Remarks:

1. Memory: Automatic parameter memory function remembers last program set.

2. Protection: The controller will cut off output and the red warning lamp will light when short circuit, over current or over temperature occurs. It will return to normal after the problem is resolved.

II. Remote Function/Symbols:

Symbol	Button Function	Description	
On/Off (1)		Press Key 1 to turn on/off in any state.	
	Preset color	Press Key 2 to activate color changing mode.	
8	changing	Press again to advance to the next mode.	
	modes (2)	Hold 3 seconds to reset to mode 1.	
`̈̈́	White Light (3)	Press Key 3 to activate white light mode	
☀	Intensity up (4)	Increase the brightness by pressing up to	
		8 times.	
14	Intensity down(5)	Decrease the brightness by pressing up to	
		8 times.	
		Touch the color ring to enter static color mode.	
	Color Ring	Slide your finger around the color ring until the	
		desired static color is obtained.	
		The color ring will only respond to a finger.	

Changing Color Mode List:

1	RBG gradual change		RGB Jump change	
2	RG gradual change		full color Jump change	
3	RB gradual change	8	Red fade	
4	GB gradual change	9	Green fade	
5	full color gradual change	10	Blue fade	

III. Matching Remote with LED Controller:

The wireless remote controller range is about 65' (20 meters). One remote can simultaneously control all valid code within this distance. please operate per the following:

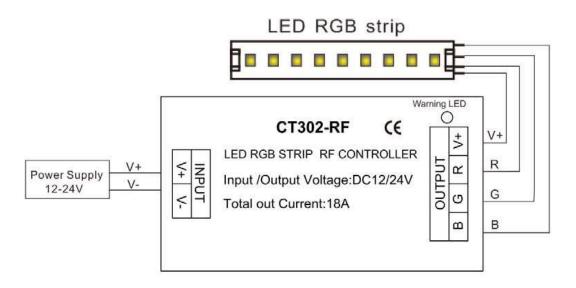
- 1. Press ***** (4#) button on the remote 3 seconds before turning on. The white indicator will blink 3 times when the controller and remote have been paired.
- 2. The remote will remain paired with the controller even after the batteries are exhausted and will not require re-pairing after battery replacement.
- To un-pair the remote controller from the LED lighting controller, press (4#) key 6 times within 3 seconds. When pairing is successfully disabled, the LEDs will blink 6 times quickly.

III. Remote Control Battery Installation:

The remote control requires 3 AAA (1.5V) batteries. Open the Battery compartment cover and load 3 AAA batteries as per the positive and negative instructions posted inside the battery compartment.

Notice: When loading the batteries, do not touch the color ring with fingers or palm. Wait at least 5 seconds after installing batteries before using remote control. ***If you have accidentally touched the color ring during battery replacement, the remote may not respond after this. In this instance, remove the batteries and reload them without touching the color ring. Wait 5 seconds and try the remote again.

IV. Wiring Diagram:



V. Troubleshooting:

Problem	Cause	Solution
No light	 No power; The protection of the power supply is active; Wrong connection 	 Check the power Check the fault, then power on again; Check the connection
Incorrect color	4. Wrong connection from RGB	4. Re-connect RGB wires
Amplifier not in phase	wire to controller	correctly
	5. In-phase cable connected wrong	5. Re-connect in-phase wires correspondently
No response from the remote	6. Wrong battery installation;	 6. Install batteries correctly;
	7. Beyond controllable distance	7. Reduce remote controllable distance
Delay response from the remote	8. battery power is not enough or error when loading batteries	8. Replace batteries or reload Batteries correctly
Uneven light intensity between front and rear lighting due to voltage drop	9. Output cable is too long 10. Wire diameter is too small 11. Overload beyond controller or power supply capability	 9. Reduce cable or use loop supply. 10. Change to larger wire 11. Add repeater/amplifier
Signal chaos between controller and remote	12. Controlled may be controlled by other remotes;	12. Clear the memory as in Sec III/No. 3 (See Matching Remote with LED Controller)
Warning LED On	13, Protection is action, Dimmer may have short, overload or temperature too high	13, check if dimmer is shorted, or if load or temperature is out of range

VI. Warranty

Two Year Warranty from the date of purchase when used properly in accordance with instructions. Free repair or replacement except in 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 majeure of natural disasters.
- 5. Any damage caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
- 6. Product has been updated.

Safety warnings

- 1. Please don't install this dimmer 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 an operable temperature.
- 4. Check if the voltage and power adapter suit the dimmer
- 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 dimmer cover and operate if problems occur.