LED RGB Controller
With RF-2.4GHz 4-Group Remote

RC-16
(Optional)

Model: CT-318

SUMMARY:

RF2.4GHz Series LED controller with advanced micro-computer control technology and 2.4GHz transmission. RC-16 Remote Control provides 4-Group RGB LED Control and higher-performance LED lighting control functions for up to 4 separate CT-318 Controllers. Each Controller can be programmed with the RC-16 Remote Control to perform different RGB color change functions and patterns or synchronized to light together. RC-16 Remote Control touch sensitive buttons and color-ring are adjusted with the touch of a finger.

FEATURES:

- 3 channel constant voltage output (R/G/B), each channel can drive 6A max.
- Uses 2.4GHz RF remote control for long distance transmission.
- Up to 4 controllers remotely controlled individually.
- Stylish remote with touch sensitive buttons and color-ring.
- Each Controller is preloaded with 17 modes (color changing patterns).
- Compatible with most RGB LED lighting; RGB modules, RGB strip light, RGB Flex Neon, etc...
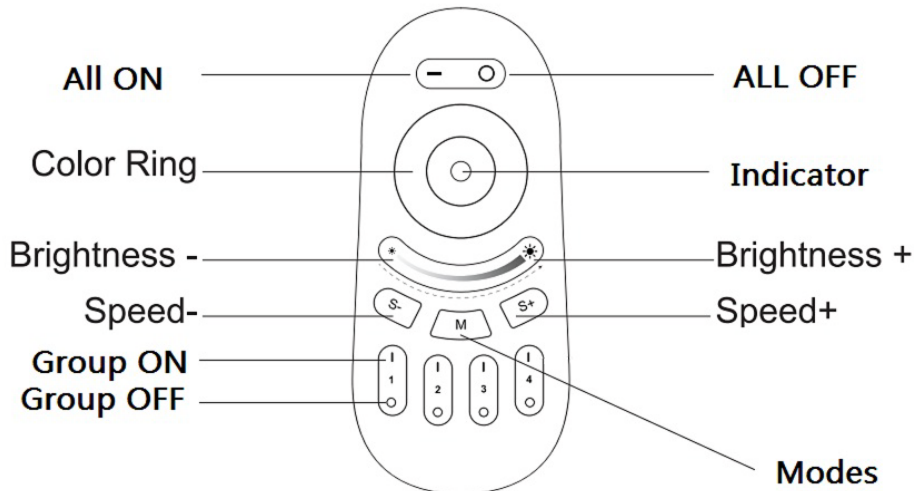
Specifications

- **LED controller:**

Channels	3 channels (R/G/B)
Input Voltage	12-24V DC
Output Voltage	12-24V DC
Output Current Max	Max 18A; 6A * 3CH
Color modes	17 modes
Protections	Short-circuit protect, Over current protect, Over temper protect.
Dimensions	6.6"x2"x0.9" (168*51*22mm)
N.G	100g

- **Remote:**

Power	Takes 2 AAA batteries
Remote Distance Max	66' (20 Meters)
Wireless Frequency	2.4Ghz ISM
Material	ABS
Dimensions	4.75"x2"x0.75" (120*52.5*20.5mm)
Weight	2oz (54g)

REMOTE INSTRUCTIONS:

- **ALL ON/ALL OFF**: Press the button to turn on or off ALL LED controllers that are matched to the remote.
- **Color ring:** Touch the color ring to enter static color mode, in this mode, slide your finger on the color ring to dial in the static color you desire.

- **Brightness-/Brightness+**: Adjusts the LED brightness.
- **Speed-/Speed+:** Increases or decreases the speed of lights in color flashing modes.
- **Group ON/Group OFF:** Press the button to turn on or turn off the lights that are matched to this group.
- **Modes:** Change between the pre-loaded mode settings.

1. Matching code and grouping：

The remote control can be used after the remote matches codes with an LED RGB controller:

Choose the LED controller group that you want to match, then turn off the power for 10 seconds, then turn on the power and within 5 seconds press the "Group ON" button of the group you want to assign. The lights corresponding to the led controller will flicker 3 times indicating the group is match successfully. Repeat the procedure for each other group to be matched.

Remark：Each LED controller can only be matched to one group on same remote, but can be matched with up to 10 remotes. Each group can be matched to infinite LED controllers.

2. Clear the code and regroup:

If LED layouts are changed, or you want to make adjustments to patterns, you may want to change programmed groups. To change groups, you need to clear the code as follows:

Choose the LED controller you want to clear the code on. Turn off the power for 10 seconds, then turn on the power again, within 5 seconds, press the "Group ON" button of the group you want 6 times. The lights connected to the LED controller will flicker 6 times quickly indicating the code has been cleared successfully.

After the code is cleared, the method of setting the group is the same as the procedure for "matching the code and grouping"

If you want to control ALL lights on the remote at once, first press the "ALL ON" button, then choose the option (dim, color, mode, speed) you want. To do this with an individual lighting group, first press the matched "Group ON" button, then choose the option.
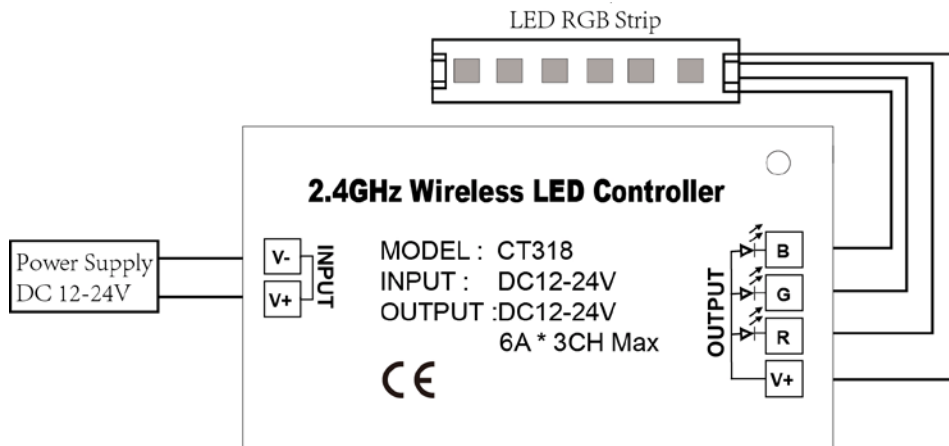
Attention: When installing batteries, do not touch any keys or the color ring. Wait 5 seconds after installing batteries before using the remote. If the touch keys seem difficult to use (not sensitive), reinstall the batteries wait 5 seconds and try again.

MODE LIST

1	Red fade	10	Green Strobe
2	Green fade	11	Blue Strobe
3	Blue fade	12	White Strobe
4	RG Fade	13	RG Strobe
5	RB Fade	14	GB Strobe
6	GB Fade	15	RB Strobe

7	RGB Fade	16	RGB Strobe
8	Rainbow changing	17	7 colors Strobe
9	Red Strobe		

Wiring Diagram

Troubleshooting:

Problem	Cause	Actions
No light	1. No power 2. The breaker to power supply is tripped 3. Incorrectly wired	1. Check the power 2. Check the fault, then power on again 3. Check wire connections
No response from the remote	4. Wrong battery installation 5. Beyond controllable distance	4. Install the battery correctly 5. Reduce remote control distance
Delayed response from the remote	6. battery power is not enough or incorrect step when installing batteries	6. Replace battery or reinstall battery
Uneven intensity between first & last LEDs, voltage drop, high resistance	7. Output cable is too long 8. Wire diameter is too small 9. Overload beyond dimmer or power supply capability	7. Shorten cable 8. Use higher dia. wire 9. add power amplifier
Signal chaos between dimmer and remote	10. Controller may be controlled by other remotes	10. Clear the memory for all remote groups and re-program (See matching code and grouping)