

# **LED RF-2.4GHz RGBW Controller**



Model: CT420 Operate with RC7 or RC16 remote controls (usually sold separately)

CT420 RF2.4GHz RGBW LED controller utilizes advanced micro-computer control technology and 2.4GHz transmission. The controller is designed to control RGBW color changing of full color LED lighting products as well as traditional RGBV+ LED products.

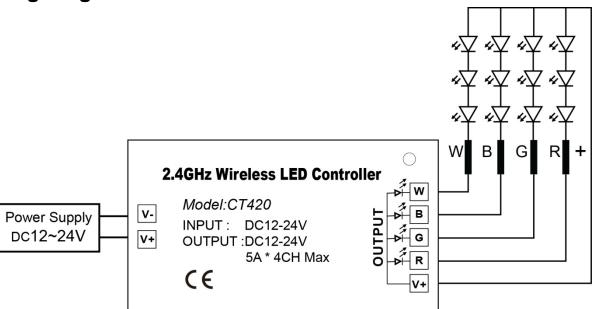
#### **FEATURES:**

- 4-channel constant voltage output (R/G/B/W), 20A max (5A max per channel)
- Use with compatible 2.4GHz RF remote controlsfor long distance transmission.
- May be used alone or grouped with additional controllers.
- Stylish remote with touch sensitive buttons and ccolor-ring.
- Controller is pre-loaded with 17 modes (color changing patterns).
- Compatible with most RGB LED lighting; RGB modules, RGB strip lights, RGB Flex Neon, etc...

### **TECHNICAL PARAMETERS:**

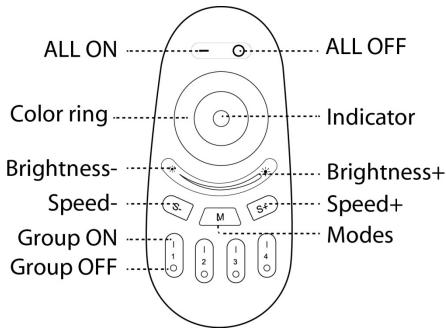
Channels	4 channels		
Input Voltage	12-24V DC		
Output Voltage	12-24V DC		
Output Current	Max 5A * 4CH		
Color modes	17 modes		
Protection Short-circuit protect, Over current protect, Over temprotect.			
Dimension	168*51*22 (mm)		
N.G	115g		
Packing	365*260*240(mm) 64pcs/8.5kg/Carton		

### Wiring Diagram:



Note: May also be used for RGBV+ LEDs with no 5th "W" LED wire. Leave the "W" wire block empty.

## **RC16 REMOTE FUNCTIONS:**



- ALL ON/ALL OFF: Press the button to turn on or turn off all led controller which be matched to this remote.
- Color ring: Touch the color ring to enter static color mode, in this 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.
- Brightness-/Brightness+: Adjust the led lights brightness.
- Speed-/Speed+: Increase or decrease the speed of light color flashing.
- **Group ON/Group OFF:** Press the button to choose, turn on or turn off the lights that are matched to the 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 or RGBW 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 flash 3 times indicating the group is match successfully. Repeat the procedure for each other group to be matched.

Note: 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 code and regroup:

if the room layout are changed, or you want to make a little adjustment upon your fond, then you may want to change the previous groups, before you change the groups, you need to clear the code, the method is as following:

Choose the led controller you want to clear the code, turn off the power for 10 seconds, then turn on the power again, within 5 seconds when you turn on the power of the led controller, press the button "ALL ON" for 6 times, the lights connecting to the led controller will flick for 6 times very quickly then the code is cleared successfully.

After successfully clearing the code, re-match the remote control with the LED controller using the "Matching code and grouping" procedure 1 above.

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.

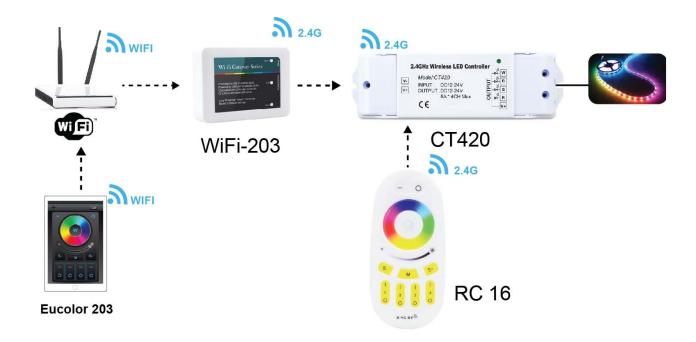
**Attention:** When installing batteries, **do not touch any keys or the color ring**. Wait 5 seconds after installing batteries before using the remote. If the touch keys seem difficult to use (not sensitive or irratic), reinstall the batteries wait 5 seconds and try again.

#### **MODE LIST:**

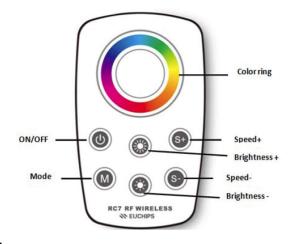
#	<b>Mode Description</b>	#	Mode Description
1	Red Fade	10	Green Strobe
2	Green Fade	11	Blue Strobe
3	Blue Fade	12	White Strobe
4	RG Fade	13	RG Strobe
5	RB Fade	14	GB Strobe
6	GB Fade	15	RB Strobe
7	RGB Fade	16	RGB Strobe
8	Rainbow Changing	17	7 Colors Strobe
9	Red Strobe		

### Wi-Fi Gateway Control Info:

The LED RGBW controller can also connect with Wi-Fi Gateway (Model: WiFi-203), so you can use your mobile smart phone or iPad to control the lightings. For more information on smart lighting system, please contact us for WiFi-203 specifications.



#### **RC7 REMOTE FUNCTIONS:**



## **Product Features:**

- Using 2.4GHZ RF remote control, for up to 65' transmission.
- Ability to adjust full-color, brightness, and pre-programmed color changing modes.
- Recommended for the following controllers: MCT309, CT302, CT318, CT420.
- Easy to use!

#### **Technical Parameters:**

- Power: Requires quantity 1 3V button battery (CR2032)
- Remote maximum distance: 65' (20m)
- Wireless frequency: 2.4Ghz ISM
- Material: PC + ABS
- Dimensions: 3.9"x2.4"x0.35" (100\*61.5\*9mm) (L\*W\*H)
- Weight: 16oz. (35g)

#### **Remote Control Features:**

- ON/OFF: Press only ONCE to turn on or off (Also used for matching & clearing codes see below).
  Attention: When matching the code, you will press the on/off button 3 times quickly, and when clearing the code, you will press the on/off button 6 times quickly. But, only press once for on/off functions.
- **Color ring:** Touch the color ring to enter static color mode, in this mode, slide your finger on the color ring to choose the color you want. Note: The color ring will only respond to human finger touch.
- **Brightness-/Brightness+**: Adjust the LED lights brightness. Hold down to adjust brightness more quickly.
- **Speed-/Speed+:** Increase or decrease the speed of light color change.
- Mode: Change the pre-loaded modes, hold down to change color to white.
  Note: The mode, brightness level and speed parameters are set in the LED controller, the remote controller is only used for sending the commands.

### **Programming:**

- 1. **Install battery:** If present, remove protective tape from battery and install battery with the positive (+) side facing the back of the remote control. When installing the battery, do not touch the color ring or any of the keys. Touching any of the controls while installing battery may result in erratic remotecontrol behavior. Wait 5 seconds after installing battery before use. If you experience erratic behavior when using any functions or color ring, please carefully re-install the battery as described above.
- 2. Matching code: The remote control can be used after matching its code with the LED controller. To match code: After putting battery in remote control, apply power to the LED controller. Then, power off the controller for 10 seconds. After 10 seconds, power on the LED controller. Within 5 seconds of power on, press the remote's "ON/OFF" button 3 times quickly, the LEDs connected to the LED controller will flash 3 times confirming code has been matched.
  - **Remark:** A remote control can be matched to numerous LED controllers. Also, each LED controller can be controlled by up to 10 remote controls at the same time.
- 3. Clear existing code and re-match: For various reasons, you may need to clear the code and rematch a controller and remote control pairing. Before re-matching you must clear the existing code as follows: Press the on/off button on the remote control, then power off the LED controller for 10 seconds. After 10 seconds, power on the LED controller. Within 5 seconds of power on, press the remote's "ON/OFF" button 6 times quickly, the LEDs connected to the LED controller will flash 6 times confirming code has been cleared. After successfully clearing the code, re-match the remote control with the LED controller using the "Matching code" procedure 1 above.
- **4.** The RC7 controller can be used to control several different **2.4GHz LED** controller models: For example: CT318, CT420, MCT309, CT302, RGBW bulb lights, etc.