

# Constant Voltage LED RGB Controller User Manual



(Please read through this manual carefully before use)

## 1. Brief Introduction

This Constant Voltage Multi-function RGB Controller is a universal RGB controller for entire color changing, which adopted high-performance microchip and the most advanced PWM (Pulse-Width Modulation) controlling technology at present. It can control all 4-pin 3-loop LED RGB full color lights. This series with RF remote controller and it is available only within the valid range.

## 2. Specifications

Model	Constant Voltage 4A
Input voltage	DC12V-DC24V
Max current load	4A/CH×3
Max Output Power	144W (12V)/288W (24V)
Scale levels	4096 scale×3CH
Product Dimension	L125×W45×H36(mm)
Weight (G.W)	100g
Remote control distance	30m with obstacles; 60m without obstacles
Control type	Common anode

## 3. Basic Features

1. Automatically adapt to LED light which works from DC12V-24V.
2. On-off controller function.
3. 3 channels RGB full color control, 4A per channel, totally 12A.

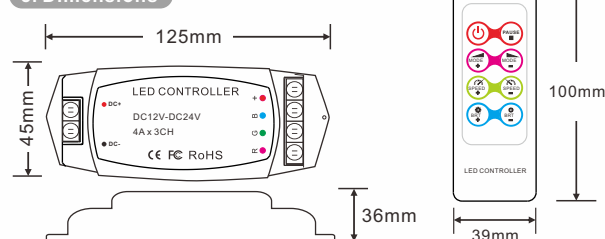
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4. 17 fantastic modes such as color smooth , color skipping, horserace, strobe, etc.
5. Can choose a changing speed and brightness in a certain mode independently.
6. Can stop at static single color, speed & brightness adjustable at pause status.
7. Factory default is available.
8. Working with power repeater to expand power output unlimitedly.
9. Power loss memory function.

## 4. Safety warnings

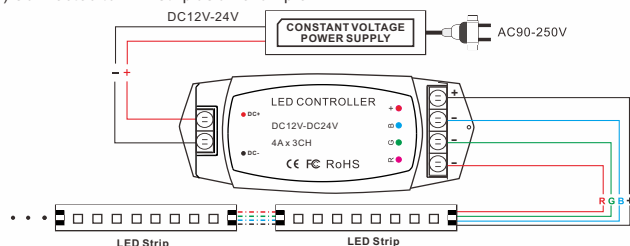
- Please don't install this controller in lightening, intense magnetic and high-voltage fields.
- 1.reduce the risk of component damage and fire caused by short circuit, make sure correct connection.
  - 2.Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
  - 3.Check if the voltage and power adapter suit the controller. (please select DC12-24V power supply with constant voltage)
  - 4.Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.
  - 5.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.

## 5. Dimensions



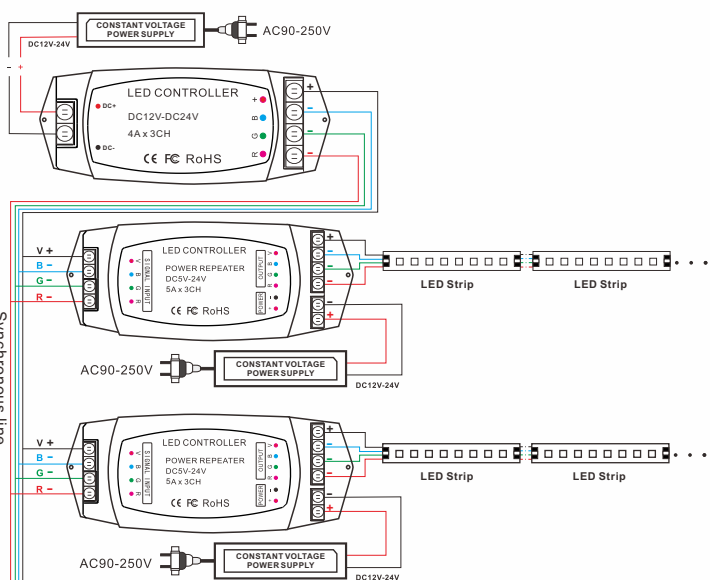
## 6. Conjunction Diagram

1) Connected to LED strip as an example:



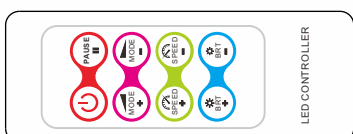
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2) Conjunction diagram, working with our power repeater, the controller and the amplifier can share the same power supply.



## 7. Operating instructions

1. On the controller, there are 6 function keys: ON/OFF, PAUSE, MODE+, MODE-, SPEED+, SPEED-, BRT+, BRT-



**The remote control ID learning guide:** Press ON/OFF button till the light flashes, then press PAUSE button, the light flashes again, the ID is set.

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Sign	Button	Description
	ON/OFF	ON/OFF: Turn on/off the controllerAny button can start the controller at off status
	PAUSE	PAUSE: Press this button will rest at current color, press it again, will continue to change.
	MODE+	Mode+: Press this button to select next mode
	MODE-	Mode-: Press this button & back to previous mode
	SPEED +	Speed+: speed up. Press this button to select 1-8 speed changing levels.
	SPEED -	Speed-: speed down. Press this button to select 1-8 speed changing levels.
	BRT+	BRT+: Press this button to select 1-8 brightness adjustment levels. Brightness up.
	BRT-	BRT-: Press this button to select 1-8 brightness adjustment levels. Brightness down.

**Note:** press MODE+, MODE-SPEED+SPEED-, BRT+, BRT- button over 3 seconds, if LED flickers twice, it means it has restored to Default status.

## 2. Tables of changing modes

Sequence	Modes	Description
1	Static red	Static red, brightness adjustable
2	Static green	Static green, brightness adjustable
3	Static blue	Static blue, brightness adjustable
4	Static yellow	Static yellow, brightness adjustable
5	Static purple	Static purple, brightness adjustable
6	Static cyan	Static cyan, brightness adjustable
7	Static white	Static white, brightness adjustable
8	3 color skipping	Red, green and blue 3-color skipping
9	7 color skipping	Red, green, blue, yellow, purple, cyan, white 7-color skipping
10	White color strobe	White (with all red, green and blue on) strobe
11	3 color smooth	Red, green and blue 3-color gradual changes
12	Full color smooth	All 7-color gradual changes
13	RG color smooth	Red, green 2-color gradual changes
14	R B color smooth	Red, blue 2-color gradual changes
15	GB color smooth	Green, blue 2-color gradual changes
16	White color fade & change	white (with red, green & blue on) gradual bright & fade
17	Great cycle	All changing modes overlap cycle

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## 8. After-Sales

From the day you purchase our products within 3 years, 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 inappropriate power supply or abnormal voltage.
- 3.Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
- 4.Any damages due to transportation, breaking, flooded water after the purchase.
- 5.Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
- 6.Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
- 7.Product has been updated.

## 9. Kindly Reminder

- 1.Power Source Selection  
Power source must be DC constant voltage type of power supply. Due to the efficient output in some power supplies are only 80% of total, so please select at least 20% higher output power supply than the consumption of LED lights.

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