



HM-12RGB6A3-RC LED RGB CONTROLLER

(Version V1.00)

Manual



(Please kindly read this manual carefully before use)

Foreword

Thanks for choosing our HM-12RGB6A3-RC Full Color Multifunction Controller. Before installation and usage, we strongly recommend you to read through this manual carefully.

After-sales service

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:



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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, vibration etc after the purchase.
4. Any damages caused by earthquake, fire, lightning strike, pollution and abnormal voltage.
5. Any damages 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 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 & if anode or cathode definition is the same as the controller's.
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.

For update information, kindly please consult with your supplier.

Product brief

HM-12RGB6A3-RC Full-color Multifunction Controller is dedicated to control color changes of LED lights with 4-pin 3-loop cables (common anode). It can be controlled through manual buttons and its match remote controller. Also this unit can run standalone or networking with multi controller (working with 3060 power expansion, output voltage can be unlimitedly expanded)

I . Performance Parameter:

Model : HM-12RGB6A3-RC

Input Power : DC5V-DC24V	Speed : 16 level
Output Current : 6A/CHx3	Brightness Adjust : 0-32 level
Consumption : <1W	Protection : auto Overload Protection
Output Power : 1~90W(5V) 1~220W(12V) 1~450W(24V)	Working Tem : -35°C – 55°C
Mode : 10	Dimension : L211xW40xH30(mm)
Gray Scale : 256 level per RGB	Package : L220xW43xH33(mm)
Remote Control : 100 m	Weight : 200g

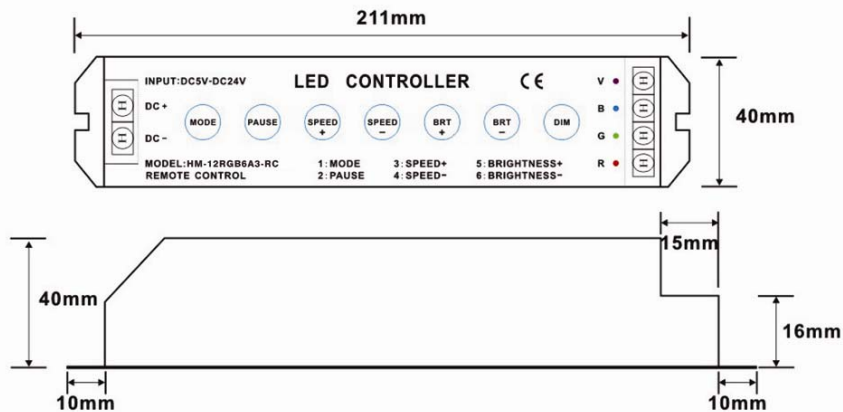


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II. Functions:

1. Controlled both by manual buttons and its fitting remote controller, control distance can reach as far as 100m. If in the spacious place or add signal antenna, the control distance can be up to 1000m.
2. Three RGB channels, Output current: 6A/ch x3
3. 10 skip, gradual changing modes, Gray grade: 256 levels per RGB
4. 1-16 speed level for each mode, can be chosen separately
5. 0-32 brightness level for each mode, can be choose separately
6. The current color depth of LED light can be stored with the function of Pause
7. Used independently or connected to HM-12RGB6A3-RC power extension module, unlimited quantities, to have an unlimited power expansion output
8. Auto load protection , auto default recovery.

III. Product Structure:



IV. Changing Modes List

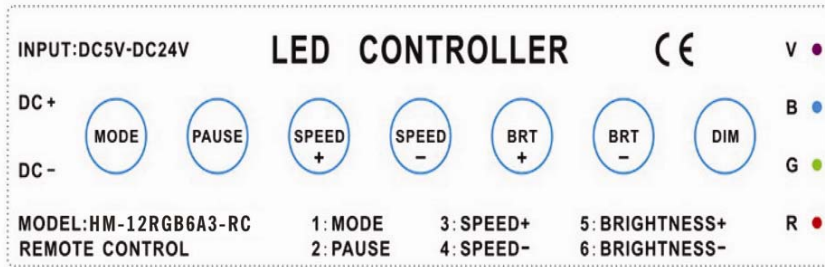
No.	Modes	Description
1	AUTO PROGRAM	AUTO CYCLE
2	WHITE CHANGE	SCREEN FLASH
3	RGB CHANGE	RGB SKIPPING
4	COLOR GHANGE	7 COLOR SKIPPING
5	RGB SMOOTH	RGB GRADUAL
6	COLOR SMOOTH	7 COLOR GRADUAL
7	RG SMOOTH	RED GREEN GRADUAL
8	RB SMOOTH	RED BLUE GRADUAL
9	GB SMOOTH	GREEN BLUE



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10	BLACK	ALL BLACK
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V. How to use it



RC button	Controller button	Instruction
1	MODE	Press to change modes
2	PAUSE	Press to stay at the current color, press again any button, color change continues.
3	SPEED+	To increase speed by every press.
4	SPEED-	To decrease speed by every press.
5	BRT+	To increase LED brightness by every press.
6	BRT-	To decrease LED brightness by every press.
/	DIM	To switch LED running status indicator

VI. Exception Handles:

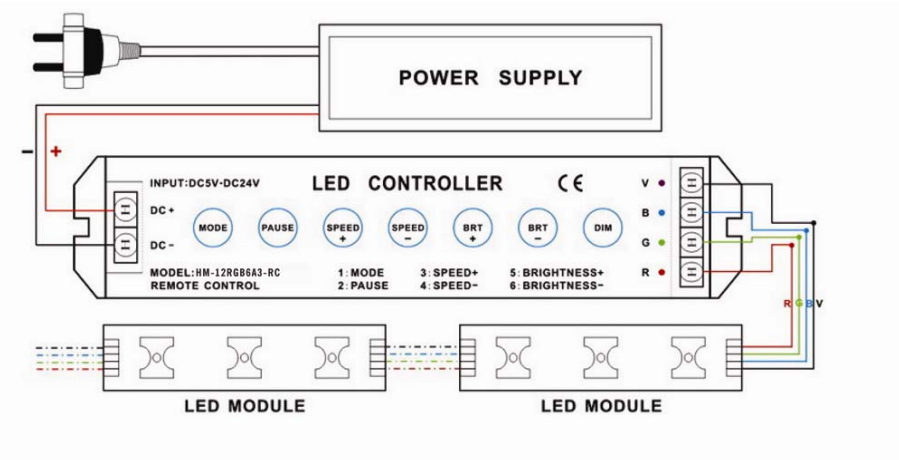
Fault Case	Reasons	Solutions
No light	1、No power from plug 2、At black mode 3、The fuse broken 4、Incorrect connection	1、Change the socket 2、Change the running mote 3、Replace the fuse 4、Check the connection



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Incorrect Color, not synchronous	5、Incorrect RGB connection	5、Check RGB
	6、Wrong sync-cable connection	6、Check sync-cable
No running light	7、Running light off.	7、Press DIM to turn on.

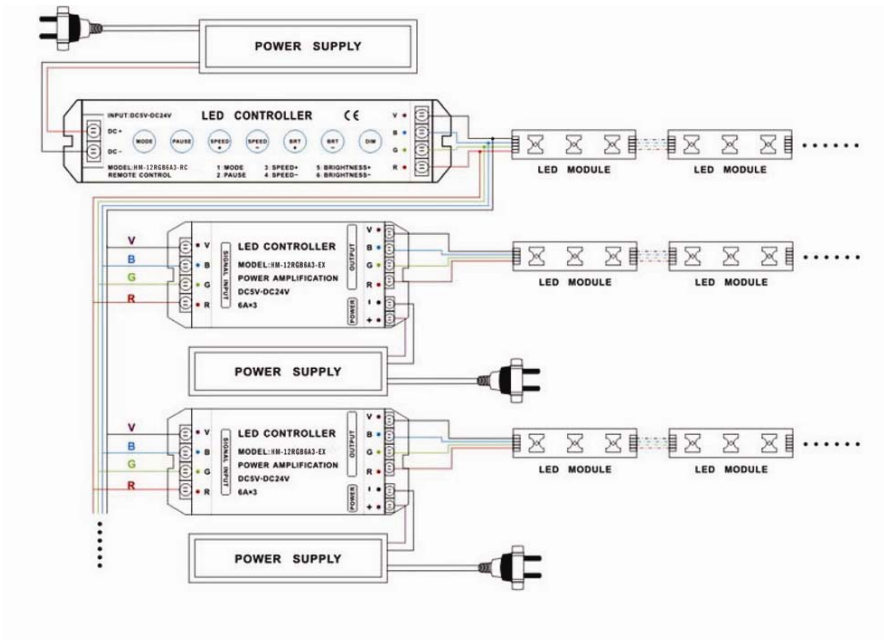
VI. Conjunction Diagram (LED module as an example)



VII. Connecting to power extension (LED module as an example)

Usually 3 connecting methods, these 3 methods can be mixed in applications.

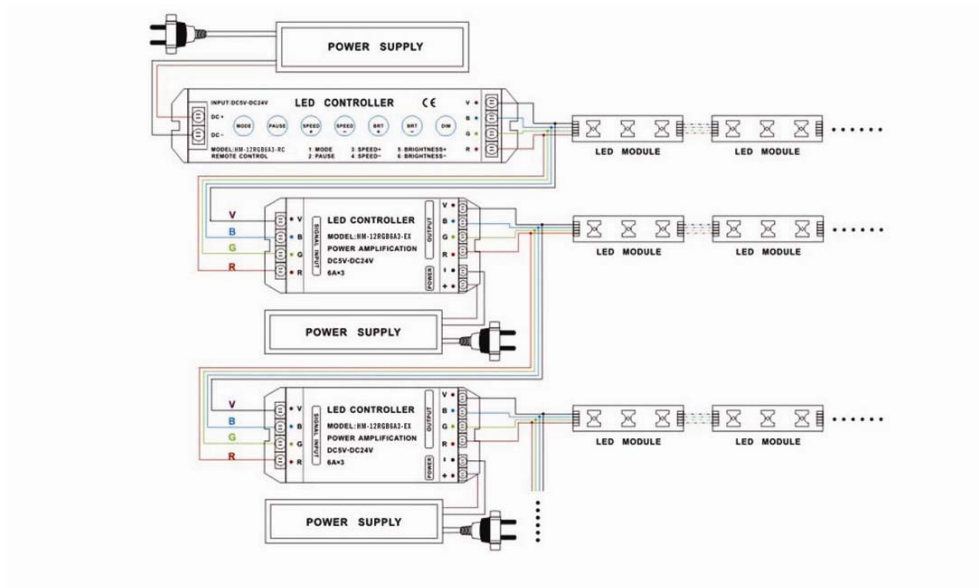
Method 1:



Method 2:



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Method 3:

