Multi-function LED RGBW Controller
User Manual

（Please read through this manual carefully before use）

1. Brief Introduction

Welcome to use this RGBW controller, it is a universal high-performance power controller for entire color changing which adopted PWM(Pulse-Width-Modulation) controlling technology. Controls all common anode constant voltage RGBW LED light, such as RGBW full color LED module,LED strip,LED SMD tape, etc. It can be controlled by the RF remote within the effective area no matter the direction and obstacles.

2. Specifications

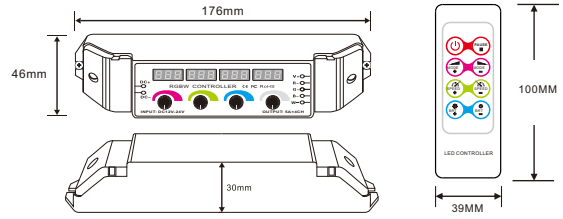| Model	Rotary RGBW controller
Input voltage	DC12V-DC24V
Output current	5A/4CH
Output power	240W(12V)/480W(24V)
Scale levels	4096 level×4
Mode	37modes
Speed level	16 levels
Brightness level	16levels
Remote control distance	30m with obstacle, 60m without obstacle
Dimension	L176×W46×H30(mm)
Weight	210g

3. Function and feature

1. Automatically adapted input voltage DC12V-24V.
2. 37 changing modes such as skipping , smooth,etc., RGBW 4096 grey scale levels each.
3. The LED digital tube indicates current mode, speed and brightness, very straightforward.
4. 4 dimming rotary knobs, conforms to the special treatment of human eye's feature, can DIY your favorite color.
5. Over current protection and short circuit protection
6. Work with power repeater, the power can be amplified unlimitedly.

4. Safety warnings

1. To ensure your safety and product properly usage, please read the user manual carefully.
2. To avoid installed the product in minefield, strong magnetic field and high voltage area.
3. To ensure the wiring is correct and firm avoiding short circuit damages to components and cause fire.
4. Please install the product in a well ventilated area to ensure appropriate temperature environment.
5. The product must be worked with DC constant voltage power supply.
Please check the consistence of input power with the product, if the output voltage of the power comply with that of the product.
6. Connect the wire with the power on is forbidden. Ensure proper wiring first then check to ensure no short-circuit, then power on !
7. Don't repair it by yourself whenever an error occur. Contact the supplier for any inquiry.
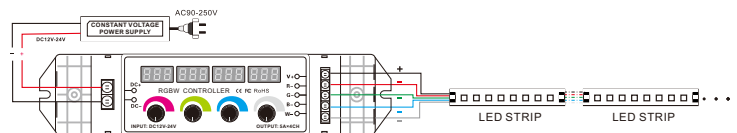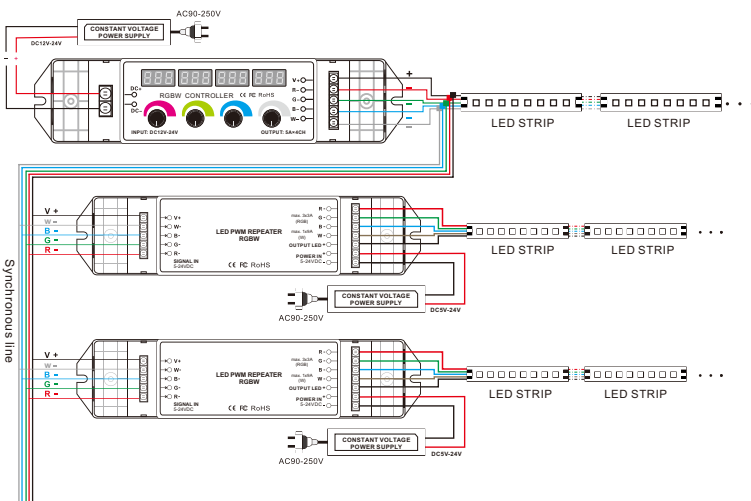
5. Installation and usage

1. Dimension

2. Conjunction diagram
1)Conjunction diagram of LED constant voltage strip
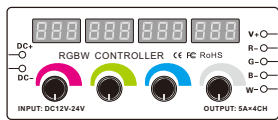

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2) Connect to power repeater (the controller and the amplifier can share the same power supply)

3、Operation instruction

Four rotary knobs to dim Red , Green , Blue and White colors, When rotating the knobs the operation mode shifts to mode 1 automatically, and the LED digital tube shows the grey scale level of Red, Green, Blue and White under this mode.
The LED digital tube indicates current mode, speed and brightness.

Such as Mode1:

Static red
Static green

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Static blue
Static white
Dynamic mode:

Mode 4　Speed level 10　Brightness level 6

When it is overload or short-circuits, the controller automatically stop output,LED display twinkles and shows:" ERR", as below:

The 8 buttons on remote controller are：ON/OFF、PAUSE、MODE+、MODE-、SPEED+、SPEED -、BRT+、BRT-.

The remote control ID learning guide: Long press ON/OFF button on the controller ,when the light flashed, press pause key on the remote control, when the light flashed again, the ID set.

Sign	Button	Description
⏻	ON/OFF	ON/OF: Turn on/off the controller. Any button can start the controller at off status
PAUSE	PAUSE	PAUSE: Press this button will rest at current color, press it again, will continue to change.
MODE+	MODE+	Mode+: Press this button to select next mode . Hold the button for 3 seconds, when the led flashes three times, the controller enters into cycle mode.
MODE-	MODE-	Mode-: Press this button & back to previous mode. Hold the button for 3 seconds, when the led flashes three times, the controller enters into cycle mode.
SPEED+	SPEED +	Speed+: Press this button to select 1-16 speed changing levels, speed up. Hold the button for 3 seconds, when the LED flashes 3 times, it indicates the speed of all modes have been reset to default.
SPEED-	SPEED-	Speed-: Press this button to select 1-16 speed changing levels, speed down. Hold the button for 3 seconds, when the LED flashes 3 times, it indicates the speed of all modes have been reset to default.
BRT+	BRT+	BRT+: Press this button to select 1-16 brightness adjustment levels. Brightness up. Hold the button for 3 seconds, when the LED flashes 3 times, it indicates the brightness of all modes have been reset to default.
BRT-	BRT-	BRT-: Press this button to select 1-16 brightness adjustment levels. Brightness down. Hold the button for 3 seconds, when the LED flashes 3 times, it indicates the brightness of all modes have been reset to default.

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Tables of changing modes

Mode No.	Model	Remark	Mode No.	Model	Remark
1	DIY static color		20	Cyan fading	Brightness, speed adjustable
2	Static red	Brightness adjustable	21	White fading	Brightness, speed adjustable
3	Static green	Brightness adjustable	22	RGB fading	Brightness, speed adjustable
4	Static blue	Brightness adjustable	23	Red green smooth	Brightness, speed adjustable
5	Static yellow	Brightness adjustable	24	Red blue smooth	Brightness, speed adjustable
6	Static purple	Brightness adjustable	25	Green blue smooth	Brightness, speed adjustable
7	Static cyan	Brightness adjustable	26	Red yellow smooth	Brightness, speed adjustable
8	Static white	Brightness adjustable	27	Green cyan smooth	Brightness, speed adjustable
9	3 color skipping	Brightness, speed adjustable	28	Blue purple smooth	Brightness, speed adjustable
10	7 color skipping	Brightness, speed adjustable	29	Red purple smooth	Brightness, speed adjustable
11	White strobe	Brightness, speed adjustable	30	Green yellow smooth	Brightness, speed adjustable
12	RGBW strobe	Brightness, speed adjustable	31	Blue cyan smooth	Brightness, speed adjustable
13	7 color strobe	Brightness, speed adjustable	32	Red white smooth	Brightness, speed adjustable
14	White speed-up strobe	White strobe increasingly	33	Green white smooth	Brightness, speed adjustable
15	Red fading	Brightness, speed adjustable	34	Blue white smooth	Brightness, speed adjustable
16	Green fading	Brightness, speed adjustable	35	Yellow purple cyan smooth	Brightness, speed adjustable
17	Blue fading	Brightness, speed adjustable	36	Full color smooth	Brightness, speed adjustable
18	Yellow fading	Brightness, speed adjustable	37	Cycle mode	All recycling
19	Purple fading	Brightness, speed adjustable			

6、Exception Handles

Malfunction	Causation	Solution
No Light	1.No power from the socket	1.Check the socket
	2.Reverse connection of power +/-	2.Modify the connection
	3. Wrong or loose connection	3.Check connection
Wrong color	4.RGBW wrong wiring	4.Re-wire RGBW
Brightness of the LED is not even	5.Output wire too long, voltage drops	5. Reduce cable or use loop connection
	6.Wire diameter too slim, voltage drops	6.calculate the current and change to a wider wire
	7.Power supplier overloads	7.Change to another large power supplier
	8.Controller overload	8.Add a power repeater
Mode not change	9.The setting of speed is too low	9.Press the button to increase speed
Can't be remote controlled	10.The battery has run down	10.Change battery
	11.Out of the controlling distance	11.Shorten the controlling distance

7. 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.

8. Kindly Reminder

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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