

12-24V LOVO™ LED DIAL MULTI-FUNCTION RGB/RGBW CONTROLLER



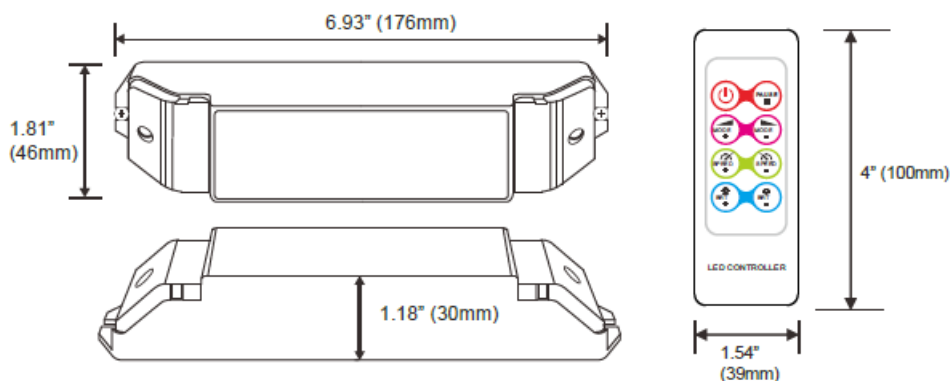
LOVO™ LED DIAL RGB/RGBW controller is a universal high-performance power controller for complete color changing with adopted Pulse-Width-Modulation (PWM) controlling technology. Controls work for all common RGB/RGBW LED light, such as RGB/RGBW full color LED module, LED strip, LED SMD tape, and more RGB/RGBW compatible LED lighting. The LOVO™ LED Dial comes with a RF remote with a range of up to 100ft. RGBW controller has 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 display shows the grey scale level of Red, Green, Blue and White under this mode.



SPECIFICATIONS

Product Number	8000-CTRL-RGBW-DIAL
Input Voltage	12-24VDC
Output Current	5A x 4CH (Max wattage per Channel 120W)
Output Power	240W(12V)/480 (24V)
Output Power/Channel	60W(12V)/96W(24V)
Scale Levels	4096 level x 4
Mode	37 modes
Speed Level	16 levels
Brightness Level	16 levels
Remote Control Distance	100ft (30M)
IP Rating	IP20
Dimensions	6.93" L x 1.81" W x 1.18" H (176L x 46W x 30Hmm)
Warranty	3 Years
Protection	Over current and short circuit protection
Certification	CE FCC

DIMENSIONS

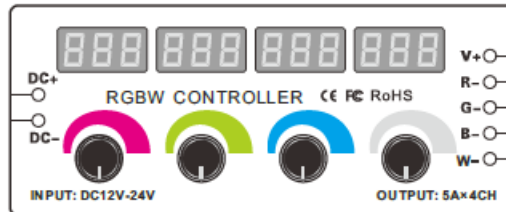
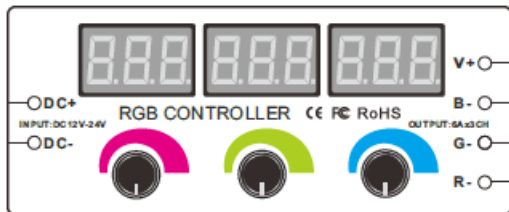


12-24V LOVO™ LED DIAL MULTI-FUNCTION RGB/RGBW CONTROLLER



OPERATING INSTRUCTIONS

1. Operating Instructions:



RGB controller three rotary knobs to dim Red, Green and Blue colors, rotate the knobs the operation mode shifts to mode 1 automatically. The LED digital tubes shows the grey scale level of Red, Green and Blue under this mode. The LED digital tube indicates current mode, speed and brightness

RGBW controller 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	255	000	000	000
Static green	000	255	000	000
Static blue	000	000	255	000
Static white	000	000	000	255
Dynamic mode	004	010	006	000
	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:



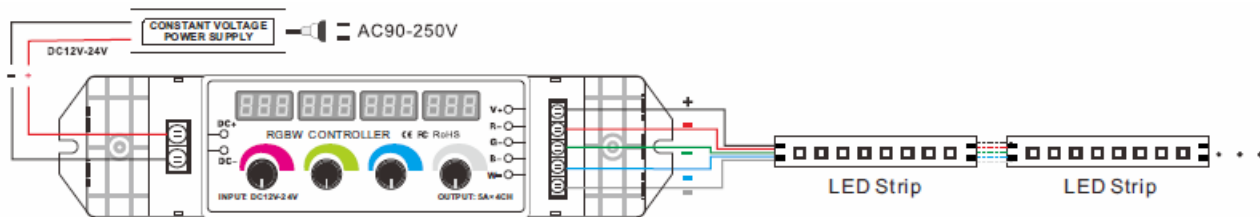
12-24V LOVO™ LED DIAL MULTI-FUNCTION RGB/RGBW CONTROLLER



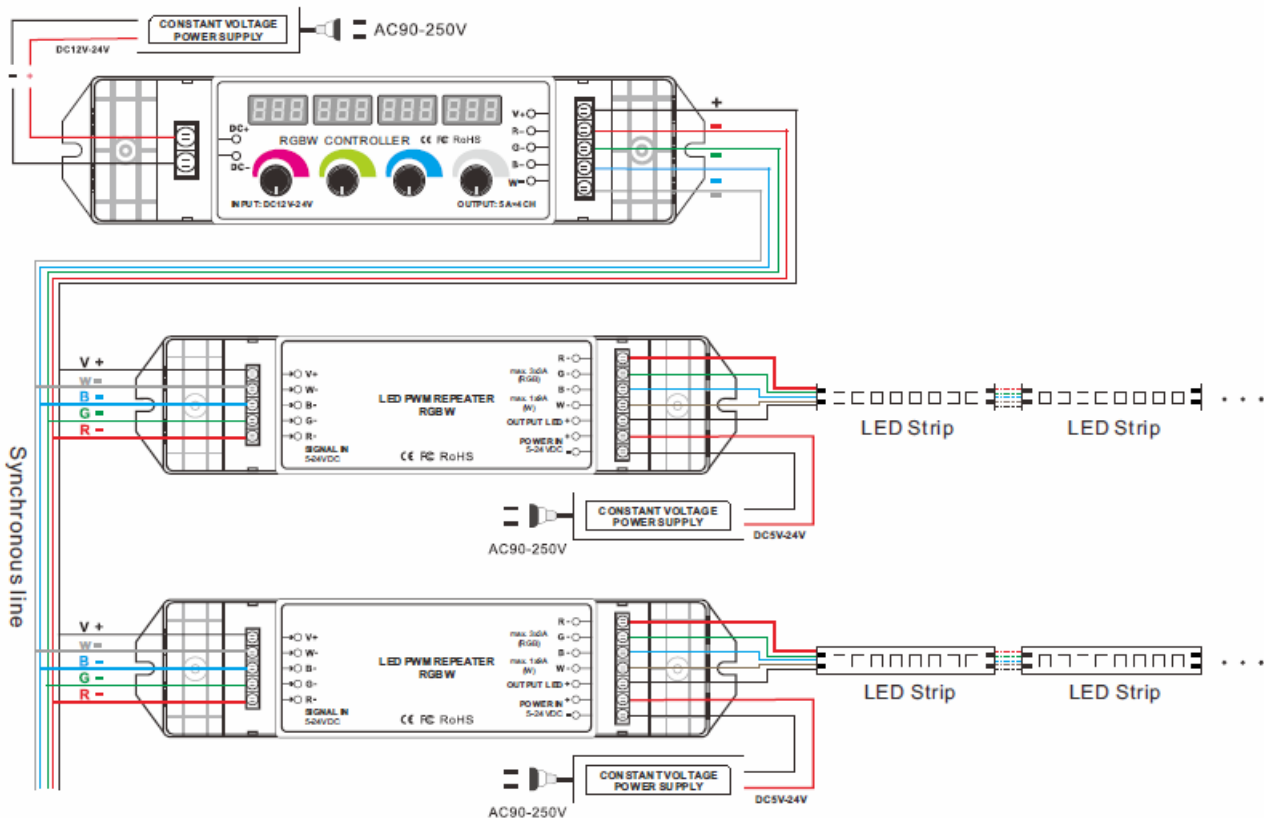
OPERATING INSTRUCTIONS

2. Conjunction diagram(take RGBW dimmer as example)

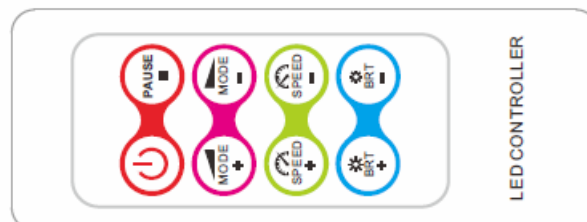
1) Connect to RGBW constant voltage strip



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



3) 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.

12-24V LOVO™ LED DIAL MULTI-FUNCTION RGB/RGBW CONTROLLER



OPERATING INSTRUCTIONS

Sign	Button	Description
	ON/OFF	ON/OFF: Turn on/off the controller, any 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, hold the button for 3 seconds, when the led flashes three times, the controller enters into cycle 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+: 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-: 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+: 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-: 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.

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	RGB/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			

Note: mode 12, in RGB model is RGB strobe, and in RGBW model is RGBW strobe.

12-24V LOVO™ LED DIAL MULTI-FUNCTION RGB/RGBW CONTROLLER



TROUBLESHOOT

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.RGB/RGBW wrong wiring	4.Re-wire RGB/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

Note: mode 12, in RGB model is RGB strobe, and in RGBW model is RGBW strobe.