

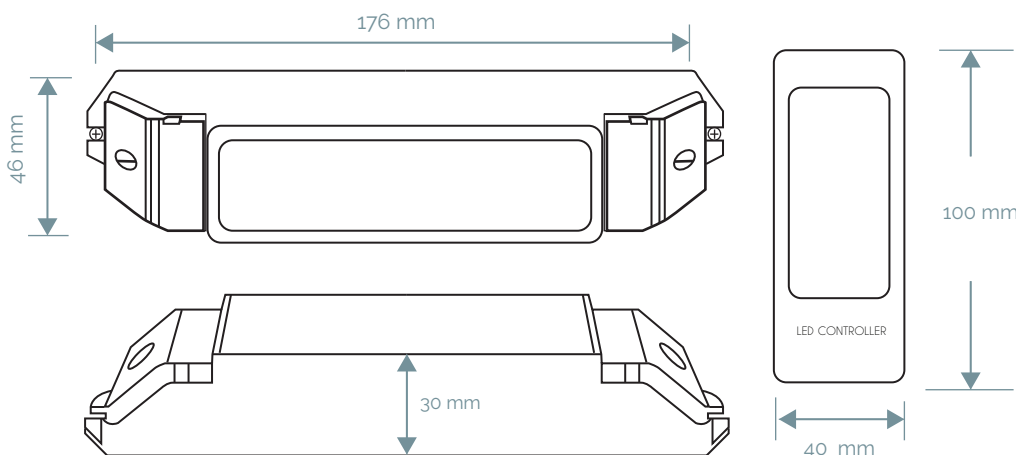


Multi-Function LED RGBW Controller

This 4 channel rotary controller is a universal high-performance dimmer designed to control RGBW LEDs. It utilizes 7.2 kHz high frequency PWM dimming technology for flicker-free use on camera. It provides an industry standard common anode constant voltage output. It can control our FlexLED tape, FlexLED modules, and many more low voltage LED light products. It can be controlled via DMX 1/0 with a very handy RF remote control. Brightness is adjustable via RDM, brightness, and on/off controls. It also has onboard digital readout which provides accurate, repeatable output levels. Input: 12 to 24VDC - Output: 5A x4 channels.



Input DC 12V - DC 24V	Output 5A/4CH 240W (12V)/480W (24V)	Temperature Range -20°C to +60°C	Scale Levels 4096 level x 4	Mode 37 Modes
Over Current Protection	Speed Levels 16 Levels	Weight 210g	Remote Control Distance 30m with obstacle 60m without obstacle	Short Circuit Protection
Dimensions L 176 mm 6.92" W 46 mm 1.81" H 30 mm 3.46"	Brightness Level 16 Levels	PWM Frequency 7.2 kHz		



DO NOT install with power applied to device.
DO NOT expose device to excessive moisture.

XFDIMMER4CH12V24V7KHZ

FUNCTION & FEATURES

- 1: Input voltage equals output voltage. Use with constant voltage 12-24VDC power supplies.
- 2: 37 Colour changing modes including strobe, colour fade, etc. RGBW 4096 grey scale levels for smooth changes.
- 3: The four readouts indicates brightness levels, modes, and speed settings.
- 4: Four Rotary knobs for dimming and colour control provides precision accuracy.
- 5: Save your custom colours and playback via the remote.
- 6: Over current protection and short circuit protection.
- 7: One unit can be combined with our power amplifier to control virtually limitless amounts of LED.
- 8: Display times out after ~3 minutes. To return, just turn any potentiometer.

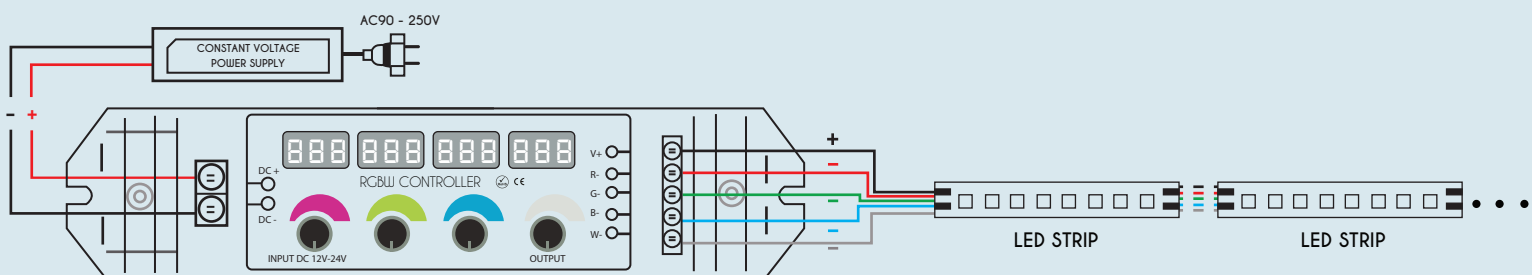
SAFETY WARNINGS

- 1: To ensure the safe operation of this product, please read the entire user manual before energizing.
- 2: Do not install the product near any strong magnetic field or in a high voltage area.
- 3: Ensure all connections to the input and output terminals are secure before energizing.
- 4: Please ensure the dimmer is installed in a well ventilated area and not next to any heat sources in order to ensure the unit does not overheat.
- 5: The dimmer must be connected to a DC constant voltage power supply that is appropriate for use of the LED dimmer ratings as well as the ratings of the LED load on the output of the dimmer.
- 6: Test all wiring connections with a continuity multimeter prior to energizing to ensure there are no short circuits.
- 7: Do not open the dimmer for repairs. please contact Moss LED or your local distributor for any questions or concerns.
- 8: Do not stack.

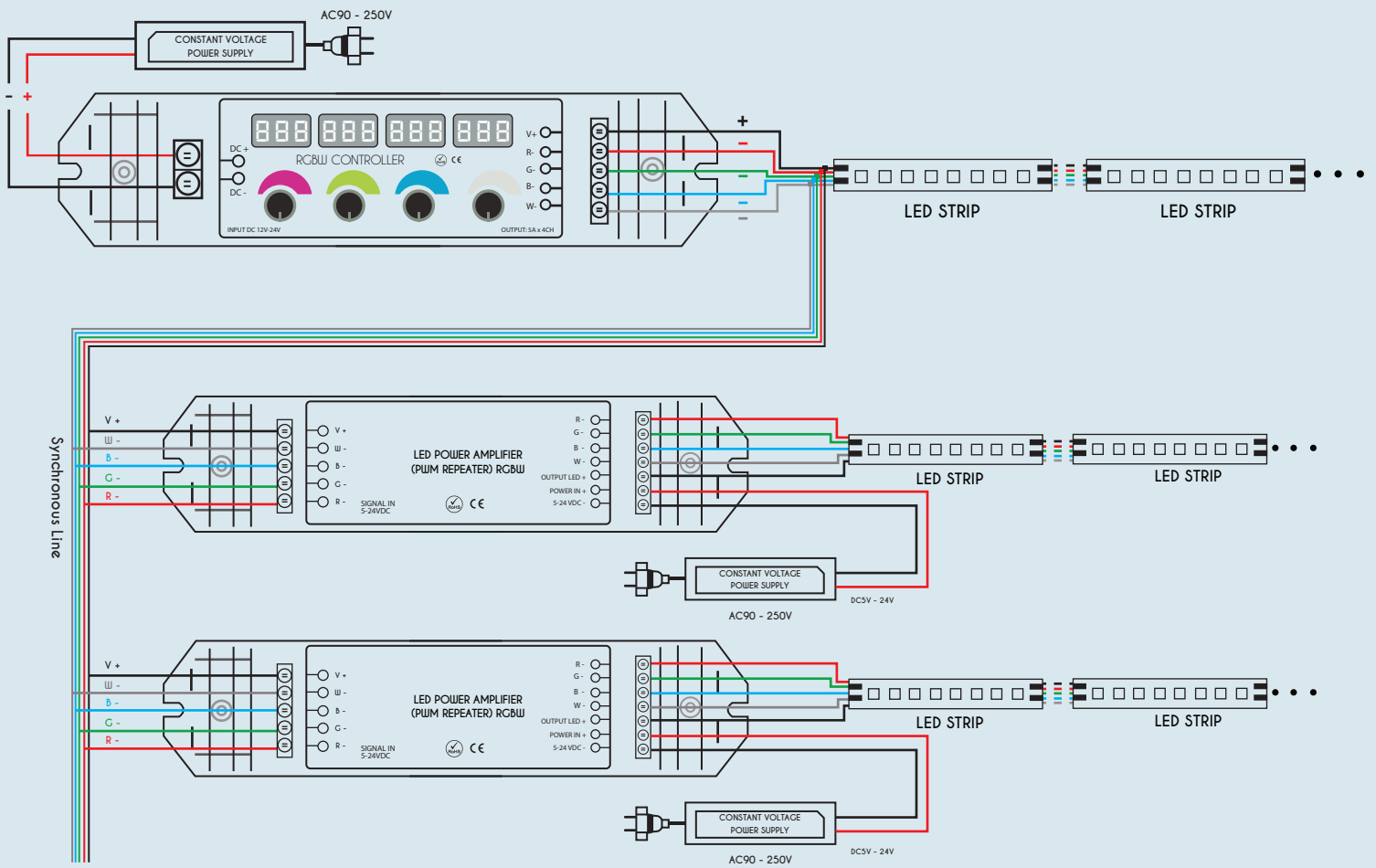
INSTALLATION & USAGE

1: Wiring Diagram:

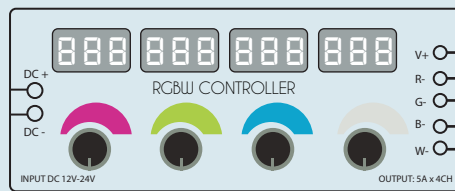
- 1) Power supply output must match LED strip voltage (ex. 24VDC power supply can only be used with 24VDC LED products)
- 2) Only use constant voltage power supply & LED products.
- 3) Use proper wire type and gauge that matches your power requirements (AWG 26-12)



2: Wiring Diagram for using Power Amplifier (4 channel rotary controller dimmer can share the same power supply with the power amplifier)



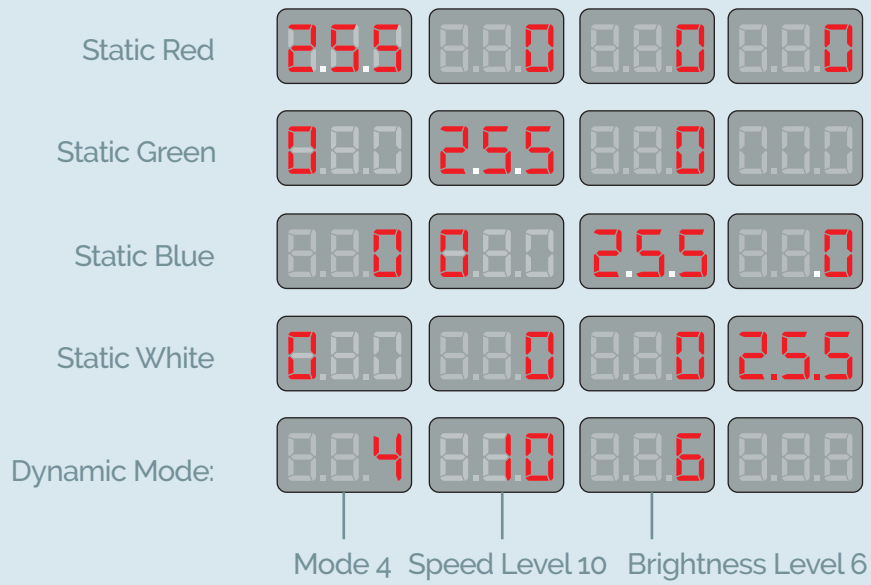
3: Operation Instructions:



Four rotary knobs are able to individually control four LED channels. These channels can be Red, Green, Blue, White (RGBW) or any other type of constant voltage LED. When adjusting the knobs, the operation mode automatically changes to mode 1 and the readout above each rotary knob shows the output level of the respective channel. In effect mode, the readouts indicate current mode, speed, and brightness.

To select or change mode please see the Remote Control section.

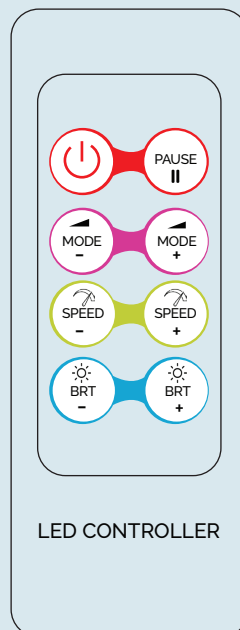
Example of Mode 1:



When the controller is overloaded or short-circuited, the controller will automatically shut off all LED outputs. The LED display will change and show "ERR" on the corresponding display channel where the overload occurred as below:











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



REMOTE CONTROL ID LEARNING GUIDE:

Turn off all other nearby controllers, otherwise they will all be controlled by this remote. Press and hold the ON / OFF button on the remote controller. When the light blinks, press and hold the Pause button on the remote control. When the light blinks again, the ID is set.

SIGN	BUTTON	DESCRIPTION
	ON/OFF	Turn on/off the controller Any button can start the controller in OFF status.
	PAUSE	Press to hold the current output levels. Press again to resume output levels changing.
	MODE +	Press to select next mode. Hold for 3 seconds, when the LED flashes 3 times, the controller enters into cycle mode
	MODE -	Press to select previous mode. Hold for 3 seconds, when the LED flashes 3 times the controller enters into cycle mode.
	SPEED +	Press to increase speed. There are 1-16 speed levels. Hold for 3 seconds, when the LED flashes 3 times, it indicates the speed of all modes have been reset to default.
	SPEED -	Press to decrease speed. There are 1-16 speed levels. Hold for 3 seconds, when the LED flashes 3 times, it indicates the speed of all modes have been reset to default.
	BRT +	Press to increase the brightness level. There are 16 different brightness levels. Hold for 3 seconds, when the LED flashes 3 times, it indicates the brightness of all modes have been reset to default
	BRT -	Press to decrease the brightness level. There are 16 different brightness levels. Hold for 3 seconds, when the LED flashes 3 times, it indicates the brightness of all modes have been reset to default.

TABLES OF CHANGING MODE

MODE NO:	MODE	REMARK	MODE NO:	MODE	REMARK
01	DIY static color	Manual RGBW Adjustment	20	Cyan Fading	Brightness, Speed Adjustable
02	Static Red	Brightness Adjustable	21	White Fading	Brightness, Speed Adjustable
03	Static Green	Brightness Adjustable	22	RGB Fading	Brightness, Speed Adjustable
04	Static Blue	Brightness Adjustable	23	Red Green Smooth	Brightness, Speed Adjustable
05	Static Yellow	Brightness Adjustable	24	Red Blue Smooth	Brightness, Speed Adjustable
06	Static Purple	Brightness Adjustable	25	Green Blue Smooth	Brightness, Speed Adjustable
07	Static Cyan	Brightness Adjustable	26	Red Yellow Smooth	Brightness, Speed Adjustable
08	Static White	Brightness Adjustable	27	Green Cyan Smooth	Brightness, Speed Adjustable
09	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 Increasing	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 Cycling (Repeats)
19	Purple Fading	Brightness, Speed Adjustable	-	-	-

TROUBLESHOOTING

MALFUNCTION	ISSUE	SOLUTION
No Light	1. No power from the outlet or power supply	1. Check the outlet and power supply
	2. Reverse connection of power +/-	2. Ensure + is connected to the positive wire and - is connected to the negative wire
	3. Wrong or loose connection	3. Ensure all terminals are securely fastened to the wires
Wrong Color	4. RGBW wrong wiring	4. Re-wire RGBW
Brightness of the LED is not even	5. Voltage drop; output wire is too long	5. Reduce wire length, OR attach wire to both ends of the LED, OR use a wire that is a thicker gauge..
	6. Voltage drop; the output wire is too thin	6. Calculate the current and change to a thicker wire.
	7. Power supply overloads (shuts down)	7. Change to a large power supply
	8. Controller overloads	8. Add a power repeater where required
Mode not change	9. The speed is too low	9. Press the SPEED + button to increase speed
Can't be Remote Controlled	10. The remote control is no longer functional	10. Replace battery
	11. The remote control is no longer functional	11. Ensure you are within RF distance range

WARRANTY

This product comes with it a 3 year warranty. If you notice a defect, please contact us immediately. This 3 year warranty does not cover the following cases:

1. Any damage caused by improper operation.
2. Any damage caused by wiring this controller to an improper power supply.
3. Any damages caused by unauthorized removal, maintenance, modifying circuit, or opening the chassis housing.
4. Any damage due to physical impacts, or water damage.
5. Any damage caused by natural disasters.
6. Any damage caused by negligence, or usage in inappropriate locations due to surrounding environment.

NOTES

Power Source Selection:

The power source must be a DC constant voltage between 12 ~ 24VDC. The power source must match the voltage of LED strip. The power supply must be capable of supplying at least 20% power over the draw of the LED. For example, if your LED draws 100 watts, please use a power supply rated for 120 watts.