

# SWP

## LED Dimmable Controller Instruction manual



M-1



RF M-1



M-3 amplifier

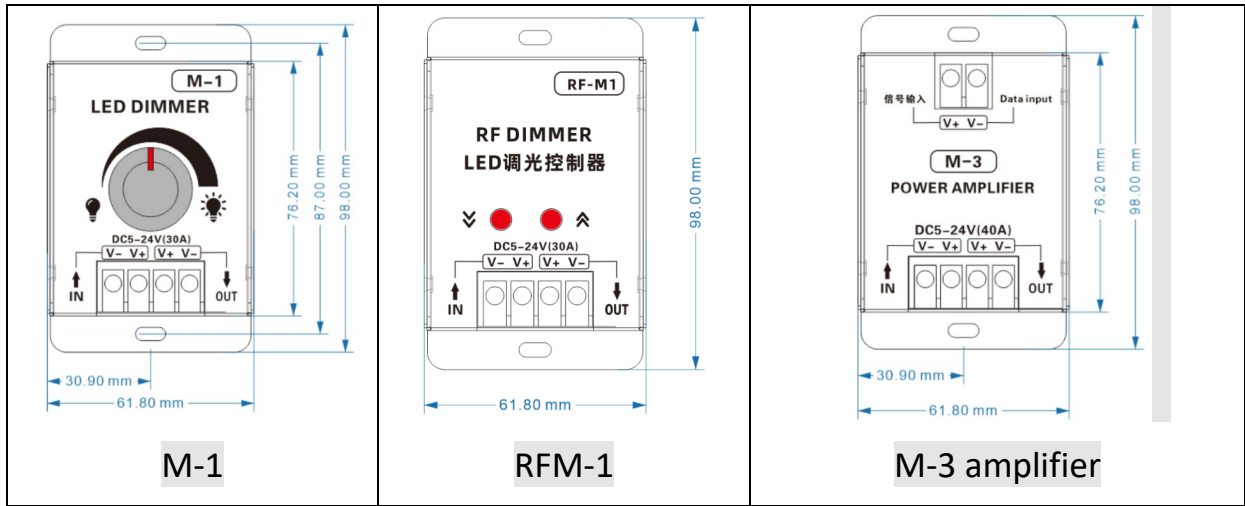
### To our honorable users:

Thank you for purchasing M-1 / R FM-1 / M-3 LED dimmable controller products. Please read this manual carefully before installation and use for your better use, so that it can be installed and used correctly, and at the same time, please keep this manual for future maintenance and use.

### Functional Features:

- 0-100% brightness adjustment, knob type stepless dimming ;
- 256 levels of gray scale, adjust the light soft and stable, no flicker phenomenon ;
- PWM digital dimming eliminates current surges for better LED service life ;
- Constant current and voltage, beyond the load range can be connected to the signal amplifier, unlimited power expansion ;
- Mainly used for single-color DC5-24V between the LED (lamp) light source brightness adjustment ;

**Product illustrations:**



**Model parameters:**

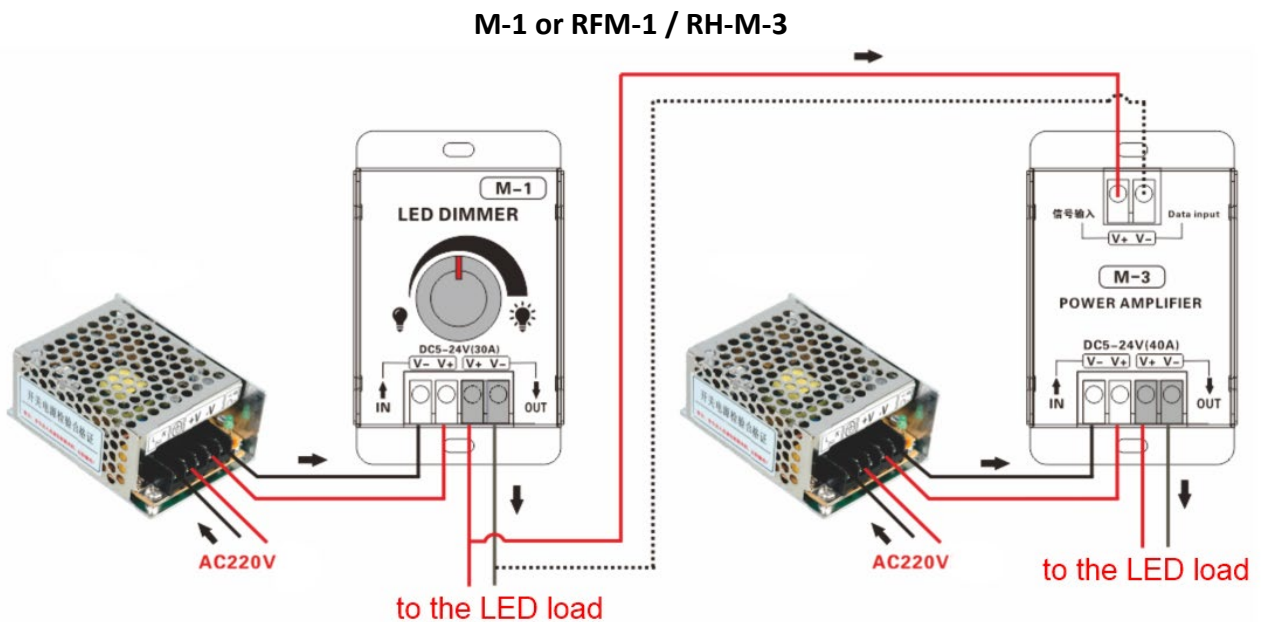
Model No.: M-1 / R FM-1 / M-3 LED (must be used with master control)

Scope of application: commercial plazas, KTV, hotels, museums, home furnishings, industrial furnishings and any other places where the brightness of the light source needs to be adjusted (DC 5-24V).

model	Type of control	Input/ Output	Power 5V	Power 12V	Power 24V	light source	operating temperature	Dimming method
RH-M-1	Knob Dimming	DC5-24V	120W	300W	610W	LED	-5°C-55°C	PWM
RH-RF-1	Remote control+keys	DC5-24V	120W	300W	610W	LED	-5°C-55°C	PWM
RH-M-3	Sub-control (must be connected to the main control for use)	DC5-24V	120W	300W	610W	LED	-5°C-55°C	PWM

\* Power values are based on a recommended 20% margin.

**Installation and wiring diagram:**



**Installation Note:**

1. First connect the load line, and then connect the power line; ensure that there is no short-circuit between the connecting wires before powering up (RH-M-3, according to the power of unlimited series connection) ;
2. Using rotary control, when the knob is rotated to the right, the brightness gradually becomes brighter, when it is rotated to the right most, the brightness is maximum, and vice versa when it is rotated to the left most, the light is off.
3. Use the buttons on the remote control (controller) to adjust the desired brightness value

**Failure analysis and solutions**

fault	Cause analysis	method settle an issue
LED lights do not light up	There is no power to the switching power supply;	Check the switching power supply
	Power supply positive and negative wires are reversed;	Correct it. ;
	Dimmer input shorted	Check the wiring to make sure there are no short circuits
	Miswired or not secure;	Check wiring; reinforce wiring
	Bad LEDs;	Replacement of LED lights
Uneven brightness of front and rear LEDs	Power supply to dimmer wires too long or too thin	Shorten the distance from the power supply to the dimmer, and thicken the power supply wire diameter, the general wire diameter is 2.5mm <sup>2</sup> ;
	The output wire from the dimmer to the LEDs is too long or too thin;	Shorten the distance from the dimmer to the LED lights, and thicken the diameter of the four wires to the LED lights, generally recommended 4mm <sup>2</sup> (depending on how many LED lights)
	LED product connections exceeding standard lengths	Connection according to the standard length of the LED
	power load	Recommended power supply load less than 80% of full load
	The dimmer is overloaded;	Reduced LED lights, using dimmer loads less than 80% of full load