LED Single Color Controller
User Manual

(Please read through this manual carefully before use)

1、Brief Introduction

LED Dimming controller is dedicated to control single color changes (common anode), adopted the most advanced PWM (Pulse-Width Modulation) digital brightness-adjusting technology at present. Extensively used in all kinds of LED lighting decoration. It can be used together with our power repeater to achieve unlimited output power repeating. With RF remote, it can be controller in 30-60meters.

2、Specifications

Model	No RF remote	With RF remote
Input Voltage	DC5V-DC24V	DC12V-DC24V
Max current load	8A/CH×3	8A/CH×3
Max output power	120W(5V)290W(12V)/580W(24V)	290W(12V)/580W(24V)
Scale level	4096 levels×3	4096 levels×3
Dimension	L165×W56×H36(mm)	L165×W56×H36(mm)
Package Size	L170×W60×H40(mm)	L170×W60×H40(mm)
Weight (G.W)	160g	190g
Remote Distance	None	30m with obstacles; 60m without obstacles

3、Basic Features

1. Automatically adapts to the LED lights which works between DC5-24V or DC12-24V.
2. Real 0~100% brightness adjust, 4096 grey scales. Lamplight soft and stable, no strobe flash, welcome to compare.
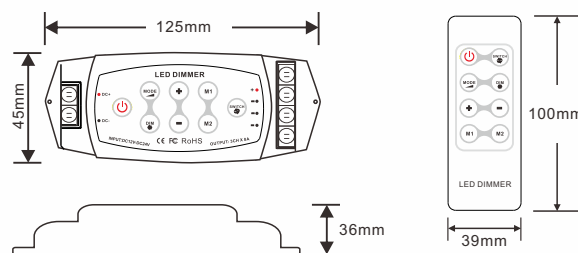
3. 3-Channel output control, maximum output 8A per Channel, 24A in total.
4. 8 modes, Brightness can be adjusted in static mode; speed can be adjusted in dynamic mode.
5. sustain to full-load working, can be equipped with power repeater to expand power.
6. Power loss memory function.

4、Safety warnings

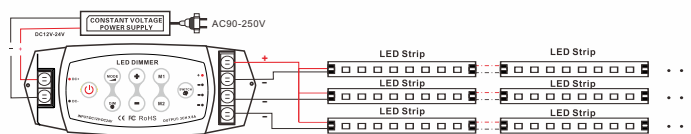Please don't install this controller in lightening, intense magnetic and high-voltage fields.
1. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection
2. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
3. Check if the voltage and power adapter suit the controller
   (please select DC12-24V power supply with constant voltage)
4. Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.
5. Please don't open controller cover and operate if problems occur.
The manual is only suitable for this model; any update is subject to change without prior notice.
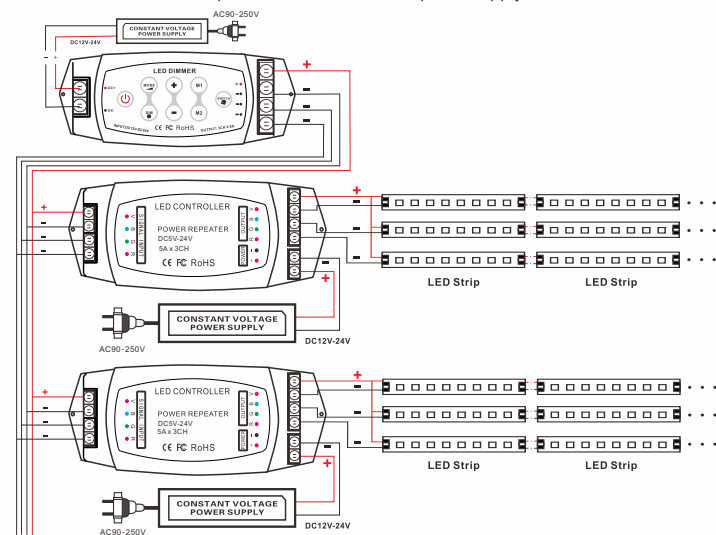
5. Dimensions

6. Conjunction Diagram

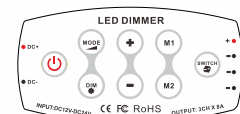1. Take single color LED Strip as an example as follows:

2. If one controller is not enough, you can add a power amplifier to expand the load.
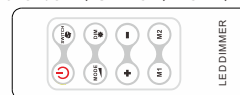   •The dimmer and the amplifier can share the same power supply

7、Operating instructions

1.About the button:
The controller has 8 function buttons: ON/OFF、MODE、DIM、+、-、、M1、M2、SWITCH

The 8 keys on the remote are: ON/OFF、SWITCH、MODE、DIM、+、-、M1、M2.

The remote control ID learning guide: Press ON/OFF button on the controller, and press any of the button on the remote, when the light flashes, the ID is set.

2.The detailed definition of the button

Sign	Button	Description
⏻	ON/OFF	ON/OFF: to turn on/off the controller, at OFF status, press any key to turn on the controller.
SWITCH	SWITH	SWITCH: at dimming mode, press this key to select the dimming channel, the current dimming channel flashes 3 times, then press +/- to dim.Long press this key to turn on/off the buzzer.
MODE	MODE	MODE: Press this key to select 3 dynamic modes.
DIM	DIM	DIM: Press this key to dim, 5 brightness selection: 0%, 25% , 50%,100%.
+	BRT+/SPEED+	In static mode: press this key (BRT+) to increase the brightness, short press to fine dimming, long press for 2 seconds for fast dimming. In dynamic mode:press this key (SPEED+) to increase the speed, short press for fine adjusting speed.
-	BRT-/SPEED-	In static mode: press this key (BRT-) to decrease the brightness, short press to fine dimming, long press for 2 seconds for fast dimming. In dynamic mode: press this key (SPEED-) to decrease the speed, short press for fine adjusting speed.
M1	M1	M1 : Long press this key for 2 seconds to save the DIY mode, short press to select the saved mode.
M2	M2	M2 : Long press this key for 2 seconds to save the DIY mode, short press to select the saved mode.

3. Three dynamic mode:

Sequence	Modes	Description
1	Color strobe	8 levels speed adjustment
2	3 channel color skipping	8 levels speed adjustment
3	Gradual dark and gradual bright	8 levels speed adjustment

8、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.
7. Product has been updated.

9、Kindly Reminder

1.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.