

LED PWM Dimmer Mono - User Manual



Item No: LC-001-001

1. Brief Introduction

The LED PWM Dimmer Mono is used exclusively for constant voltage LEDs.

Via 2 operating buttons the brightness can be adjusted via the PWM (Pulse Width Modulation) signal. The dimmer has one output channel with max. 15A output current and dimming via 12-bit processor (4096 dimming stages).

The dimming value can be set between 0-100% via the three-digit 7-segment display.

2. Specifications

input voltage	12-24VDC
max. load current	1 channel x 15A
max. output power	1x180W (12V) or 1x360W (24V)
grey scale	4096
output signal	1xPWM constant current with ~980Hz
terminals	terminal block with max. 2,5mm ²
dimensions (L x W x H)	135 x 30 x 20mm
weight	57g

3. Basic Features

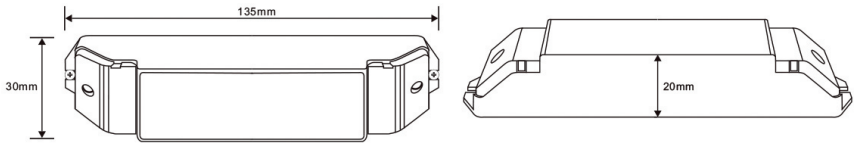
1. input voltage 12-24VDC
2. display of the dimming level from 0-100% with a three-digit 7-segment display
3. 1 output channel with 15A and 4096 dimming levels with a logarithmic dimming behavior
4. keylock function
5. power loss memory function
6. over current and short circuit protection
7. working with power repeater to expand power output

4. Safety Warnings

Please don't install this controller in lightning, 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. (pls 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. Operating Instructions

Two function keys: +, -

Key/Operation	short press	long press
+	by 1% increase	stepless increase up to 100%
-	by 1% decrease	stepless decrease up to 0%

The three-digit 7-segment display shows the current status of the dimmer.

Different values show the respective brightness level in percent. The dimmer has an automatic keylock. This is activated if no key is pressed for 15 seconds. To deactivate, keep one of the two control buttons pressed for approx. 2 seconds.

The display will automatically turn off after 1 minute if no input has been made in time and will switch back on automatically as soon as one of the two controll buttons is pressed. if the dimmer is overloaded or a short circuit is present, the display shows „ERR“ as shown below and the dimmer automatically blocks the output channel.

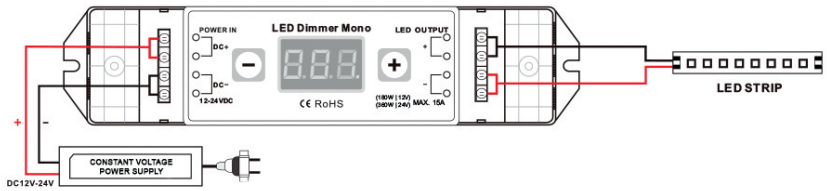


Dimmerdisplay for setting: 0-100% :

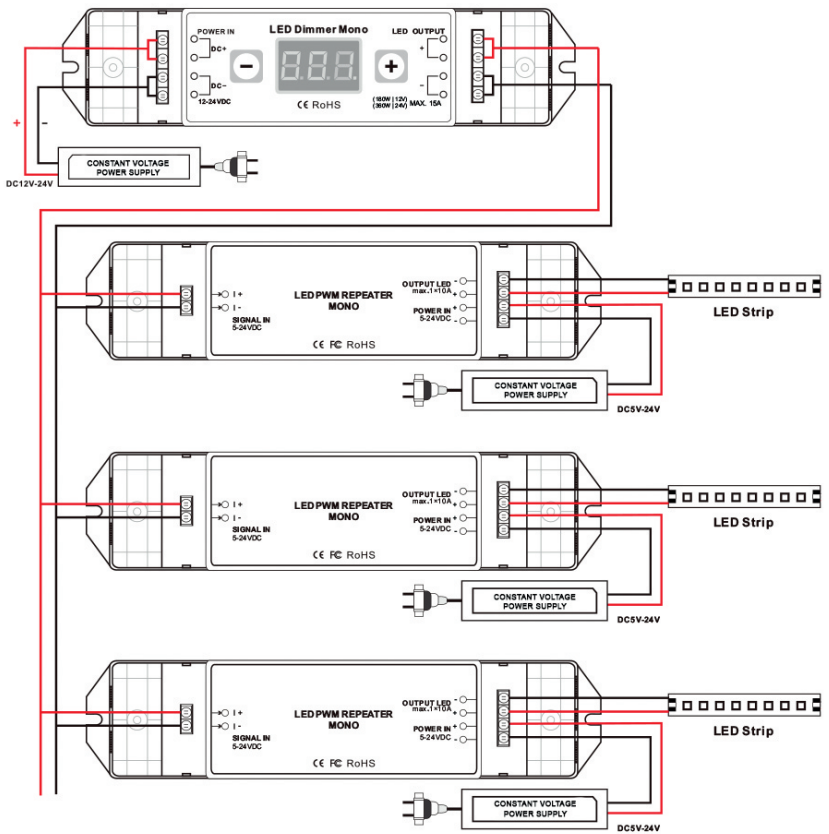


7. Wiring Diagram

1. Connecting to LED Strip:



2. Connecting with LED PWM Repeater:



8. Exception Handles

Malfunction	Reasons	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 the connection
Brightness of the LED is not even	4. output wire too long, voltage drops	4. reduce cable or use loop connection
	5. wire diameter too slm, voltage drops	5. calculate the current and change to a wider wire
	6. power supplier overloads	6. change to another large power supplier
	7. controller overload	7. add a power repeater