LED Push & 1-10V Dimmer Mini Mono User Manual



1. Product Description

With this dimming module it is possible to dim LED modules by means of constant voltage. This can be done in 3 different ways.

- 1. by means of commercially available push-buttons (push or switch dimming function)
- 2. by 1-10V voltage
- 3. by 1-10V dimmer (100 kOhm potentiometer <0.2mA)

2. Performance Parameter

input voltage	12-24VDC
max. output current	1x6A
input signal	1-10V or PUSH DIM
output signal	PWM constant voltage with ~980Hz
max. output power	1x72W (12V) or 1x144W (24V)
product dimensions (l x w x h)	135 x 30 x 20mm
weight	48g
ambient temperature	-20°C bis +45°C

3. Description

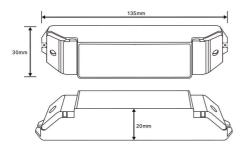
- 1. operating voltage 12-24VDC
- 2. 1 channel with max. 6A output current
- 3. PUSH DIM input voltage AC/DC 12-230V
- 4. 1-10V to PWM dimming signal conversion
- 5. short circuit protection, over current protection
- 6. Several dimmers can be controlled simultaneously and synchronously, or by using an LED PWM repeater can reduce the output power of the dimmer as well be extended as desired.
- 7. Status after mains return dependent on input signal at 1-10V modus. last selected value at push \dim modus

4. Safety warnings

- 1. Please don't install this controller in lightening, intense magnetic and high-voltage fields.
- 2. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection.
- 3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
- 4. Check if the voltage and power adapter suit the controller and the connected LED strip.
- 5. Don't connect cables with power on, make sura a correct connection and no short circuit checked with instrument before power on.
- 6. Please don't open controller cover and operate if problems occur.

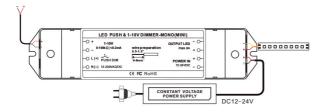
The manual is only suitable for this model, any update is subject to cahnge without prior notice.

5. Dimensions

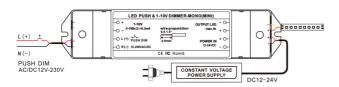


6. Conjunction Diagram

6.1. 1 - 10V Input



6.2. Push Dim Input



PUSH DIM Description:

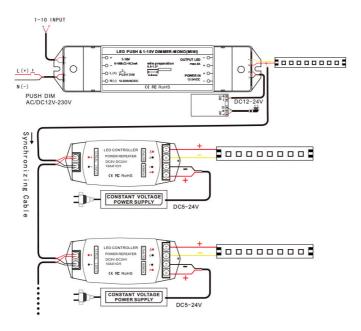
- 1. Short press PUSH DIM button (< 0,5 sec.) to control the light ON/OFF.
- 2. Long press PUSH DIM button (> 0,5 sec.), adjust the light brightness.

After each adjustment, the changing goes opposite.

- 3. When the light is OFF, long press PUSH DIM button, the light turn ON and dim.
- This makes it possible to synchronize multiple dimmers, if they have different dimming values.
- 4. Keep the button pressed for a long time change the brightness, dimmable range of 1-100%., short press will turn OFF the light.
- 5. When you switch off the light, the last set dimming value is saved and called again when switched on again.

At the output of the controller, LED PWM repeaters can be connected in parallel to expand the output power of the controller as desired. In this case, the LEDs may only be connected to the LED PWM repeaters and not to the controller itself.

In this case, the controller serves only as a signal generator for the LED PWM repeater. If one were to connect LEDs to both the controller and the LED PWM repeater, it would be too slight brightness differences between the LEDs come. Especially in the lower dimming area



7. Remark

At the output of the controller the power source must be a DC constant voltage source. This should never be fully utilized, but operated with about 25% power reserve.