Infrared remote control 0-10V dimmer instruction manual

深圳市驰茂科技有限公司（**CM**） 红外遥控调光器（**IR Dimmer IRD**） **0-10V（010）or1-10V（110）**

I.Product Features：

The CM-IRD010/IRD110 is a safety-isolated standard 0/1-10V intelligent dimming controller. It employs the most advanced PWM (Pulse Width Modulation) digital brightness adjustment technology to control various dimmable LED drivers and dimmable electronic ballasts that use 0/1-10V as dimming signals, enabling brightness adjustment of LED lighting fixtures. It supports stepless manual knob brightness adjustment and wireless remote dimming and on/off control via infrared remote. The dimming range is 1-100%, with a 0% off switch. It also features brightness hotkeys (25%, 50%, 75%, 100%) and a 1-4 hour timer function.

II.Technical Specifications：

1. Maximum switching load power: 110V 1000W, 220V 2000W
2. Power supply voltage: 100-240Vac, Frequency: 50/60Hz
3. Output circuit: 2 parallel, synchronously adjustable circuits
4. Employs a safety isolation circuit design to protect the load from damage due to voltage fluctuations；
5. Includes a 10A relay design for reliable shutdown (complete light shutdown).
6. Effective dimming signal current: ≤ 250mA
7. Adjustable voltage: 0.5-10V, 0V off
8. Dimming range: 1-100% stepless dimming, flicker-free
9. Output voltage: Optional standard 0-10V or 1-10V signal (default 0-10V output)

10．100% compatible with drivers on the market that use standard 0/1-10V as dimming signals; special functions can be customized according to customer requirements.

11. With indicator lights: red light indicates off/standby, red light off indicates normal operation, red light flashing during remote control operation indicates command received.
12. Standard 86-type panel, size 86*86mm
13. Remote control specification:

Standby current: <=2uA

Remote control distance:

greater than or equal to 10 meters under no interference conditions,

requires pointing at the dimmer.

Dimensions: 86*40*7(mm)

Control Method：

1. Supports multiple control methods (knob, infrared remote control) to meet different usage habits.

III.Instructions for use：

Instructions: Connect the load and signal lines first, then connect the AC input line. Before powering on, ensure that there are no short circuits between the connecting lines.

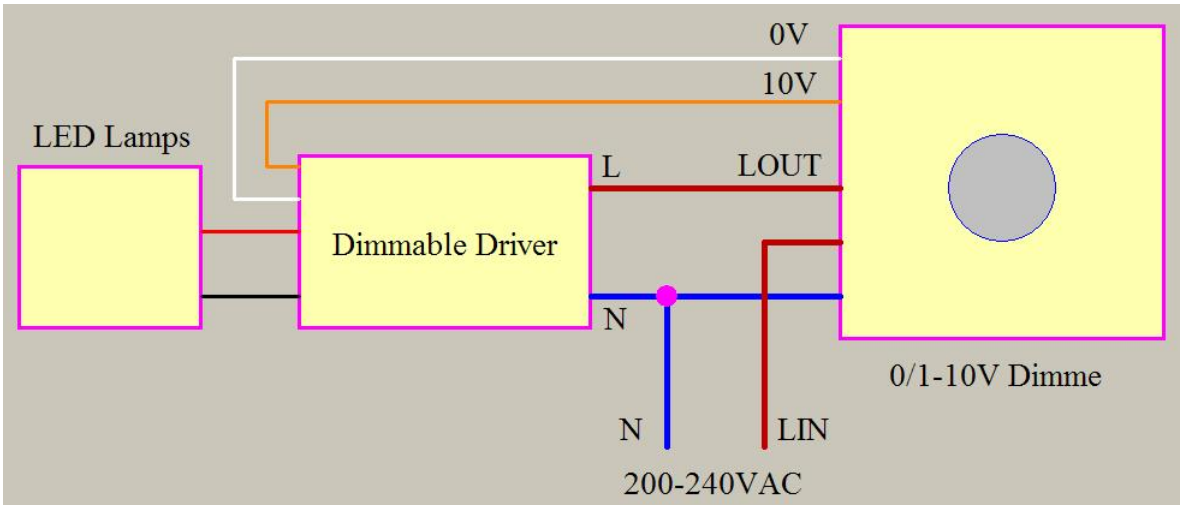
1、 N is the neutral line, shared by all

2、 L IN is the Fire Wire input.

3、 L OUT is the live wire output, connected to the L input terminal of the 0-10V dimming LED driver.

4、 Dimming signal output: 0V is the common terminal, with two adjustable 10V signals; either one can be connected to either signal.

5. When the power is first turned on or after a power outage, the lights are off by default. Press the remote control or turn the knob to turn on the lights. The purpose of this design is to prevent the lights from remaining on after a sudden power outage when people leave, which is both unsafe and wasteful of energy.



Knob control:

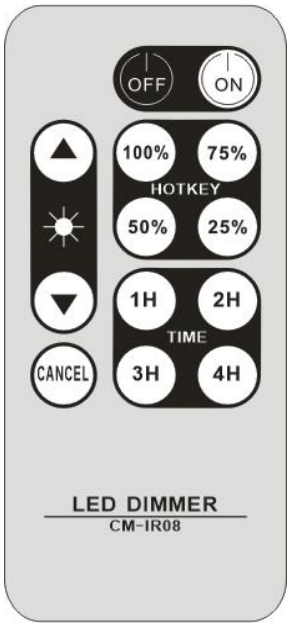
1. Panel knob: Rotating the knob clockwise increases brightness, rotating it counterclockwise decreases brightness, and turning it to the minimum brightness turns the light off. The red indicator light will illuminate when the light is off.

Remote control：

1. Remote Control Button Function Description

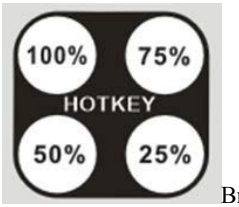
（1） OFF：To turn off the lights with the remote, press this button. The lights will gradually dim until they turn off, and the red indicator light will illuminate.；

（2） ON：To turn on the light with the remote, press this button. The light will gradually change to its brightest setting or the brightness it was before the remote turned off, and the red indicator light will turn off；



（3） Press and hold this button to gradually increase the brightness; release to maintain the current brightness.

（4） Press and hold this button to gradually decrease the brightness; release to maintain the current brightness.

（5）  Brightness hotkeys allow for quick selection of the desired brightness.

（6） The timer function allows you to set a timer to turn off the lights. 1H means the lights will turn off after 1 hour, 2H means after 2 hours, 3H means after 3 hours, and 4H means after 4 hours. When you press the timer button, the red LED indicator will flash every 1 second to remind you that the timer is in timer mode.

（7） The timer function can be canceled by pressing this button while in timer mode. The red LED indicator will turn off.