

LT-311

LED Dim controller

USER'S MANUAL



(Kindly please read through this manual carefully before use)

Forward

Thanks for choosing our LT-311 LED Dim controller. Before installation and usage, we strongly recommend you to read through this manual carefully.

After-Sales

From the day you purchase our products within a year, 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, flooding 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.

Safety warnings

1. Please don't install this controller in lightning, 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 (**please select DC5-24V power supply with constant voltage**)
5. Don't connect cables with power on, make sure 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 change without prior notice.

Product Brief

LT-311 multi-functional LED Dim controller is dedicated to control single color changes (common anode), LED lamp's brightness and synchronic color changing effect. Extensively used in all kinds of LED lighting decoration.

If used together with our LT-3060 power repeater, each can control twice the quantity of LED lights by every adding one more, which can achieve the unlimited output power repeating.

I . Technical Specs

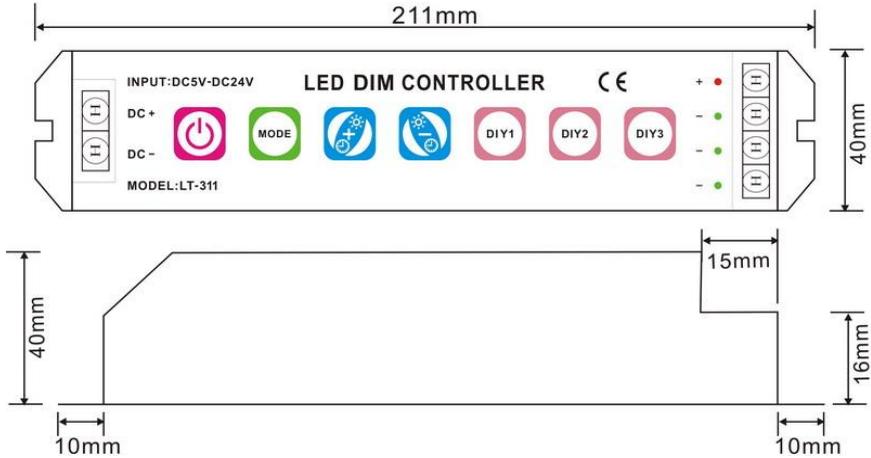
Input voltage	DC5V~DC 24V
Max current load	6A/CH×3
Max output power	90W/220W/450W(5V/12V/24V)
Scale level	256level
Dimension	L211×W40×H30(mm)
Package Size	L215×W43×H33(mm)
Weight (G.W)	160g

II . Features

- 1、 Auto switch to LED lights with voltage from DC5-24V,
- 2、 ON/OFF button function available,
- 3、 3-Channel RGB full color control, maximum outputs 6A per Channel,
- 4、 Speed of each mode is adjustable separately from 1-8 level, and the color depth can be 256 levels,
- 5、 Three color changing modes for choice: color strobe, color skipping and color gradual, 8 levels speed changing,
- 6、 5 easy brightness selecting function, 64 levels brightness gradual adjustment,
- 7、 0%、 25%、 50%、 75%、 100% brightness easy select,

- 8、 3 DIY modes,
- 9、 Remote controllable (optional) .

III. Size



IV. Tables of changing modes

Sequence	Modes	Description
1	Static brightness 1	0% brightness, support BRT adjustment
2	Static brightness 2	25% brightness, support BRT adjustment
3	Static brightness 3	50% brightness, support BRT adjustment
4	Static brightness 4	75% brightness, support BRT adjustment
5	Static brightness 5	100% brightness, support BRT adjustment
6	Color strobe	8 levels speed adjustment,
7	3 channel color skipping	8 levels speed adjustment,
8	Gradual dark and gradual bright	8 levels speed adjustment,

V. Operating instructions



The controller has 7 function buttons:

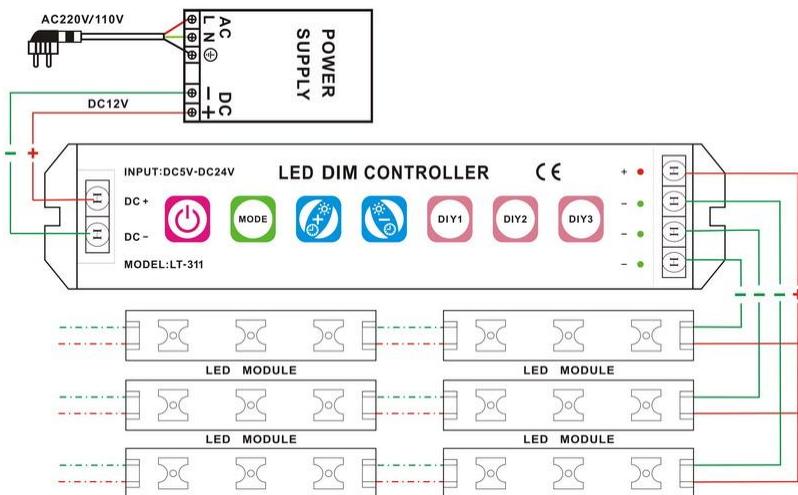
ON/OFF、MODE、BRT/ SPEED+、BRT/ SPEED-、DIY1、DIY2、DIY3

Sign	Button	Description
	ON/OFF	on/off: start or turn off the controller At the Off status, press any button to start the controller
	MODE	Mode: press it to enter into next mode
	BRT/ SPEED+	BRT/ SPEED+: press it at the BRT status to increase the brightness, press it at the Speed status to increase the speed
	BRT/ SPEED-	BRT/ SPEED-: press it at the BRT status to decrease the brightness, press it at the Speed status to decrease the speed

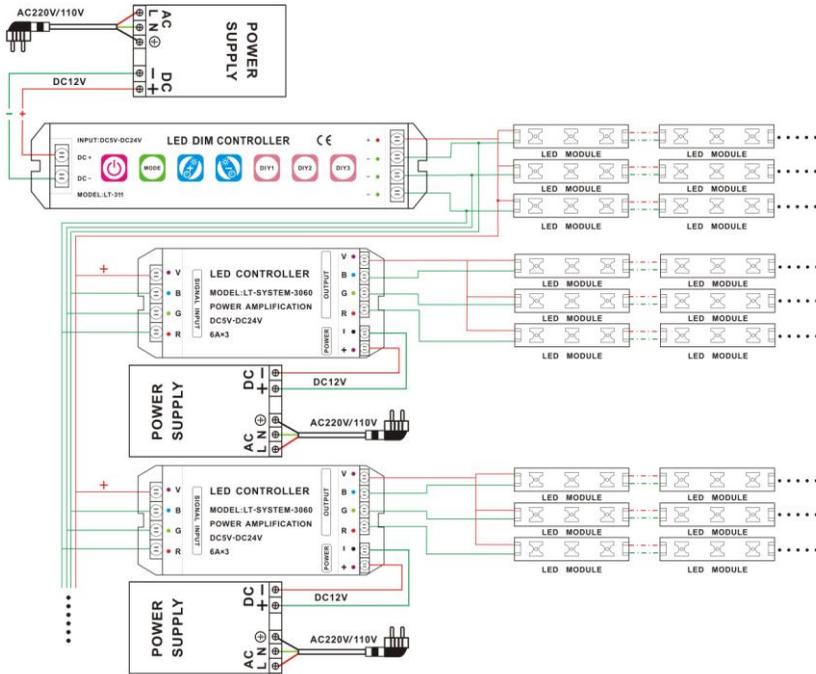
	<p>DIY1</p>	<p>DIY1: Press it for 3 seconds, LED flashes twice, and then remember the current brightness or color changing effect and speed, just press it once then enter into pre-setup status</p>
	<p>DIY2</p>	<p>DIY 2: The same as above</p>
	<p>DIY3</p>	<p>DIY 3: The same as above</p>

VI. Connecting scheme

1. Take single color LED Module as an example as follows



VII. If one controller is not enough, you can add a 3060 power amplifier to expand the load.



VIII. Exception Handles

Malfunction	Causation	Settle
No Light	<ol style="list-style-type: none"> 1、 No power from plug 2、 Power supply protector works 3、 Incorrect connection 	<ol style="list-style-type: none"> 1、 Check the socket 2、 Check the malfunction, re-power on 3、 Check connection
LED BRT is not smooth or even	<ol style="list-style-type: none"> 4、 Output wire too long 5、 Wire diameter too thin 6、 Overload beyond controller capability 	<ol style="list-style-type: none"> 4. reduce wire length or use loop circuit to power on 5. Calculate the current and change to a thicker wire 6. Change the power supplier or add a power amplifier