

# LT-3800-350 Constant Current LED Controller

## USER'S MANUAL



**(Please kindly read through instructions before use)**

## Forword

Thanks for choosing our LT-3800-350 Controller. Before installation and use, we strongly recommend you to read through this manual carefully. If device has been damaged during transport, please report it to your supplier immediately. Please don't take any action without contacting your supplier

## After-sales Service

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 unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
3. Any damages due to transportation, vibration etc after the purchase.
4. Any damages caused by earthquake, fire, lightning strike, pollution and abnormal voltage.
5. Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
6. Product has been updated

## 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 & if anode or cathode definition is the same as the controller's.
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 attempt any repairs yourself; doing so will void your manufacture's warranty.

For update information, kindly please consult with your supplier.

## Product Brief

LT-3800-350 RGB controller is a unique DIY version as well as a powerful combination that can control color changes of LED lights with 4-pin 3-loop cables (common anode), built-in 18 modes with touch functional buttons, provided with IR wireless remote control panel, users can control color changes of LED light by pressing the button on the controller or on the remote control panel, very users friendly.

### I . Technical Specs

#### Model: LT-3800-350

Input/Output Voltage:	DC12V~DC48V
Output Current:	CC350mA x3CH
Output Power:	16.8Wx3CH
Driving quantity	1~12pcs hi-power 1WLEDx3CH Drive 1-3pcs LEDs/CH at DC12V Drive 1-6pcs LEDs/CH at DC24V Drive 1-10pcs LEDs/CH at DC36V Drive 1-12pcs LEDs/CH at DC48V
Changing Mode:	18 modes
Grey Scale:	256 levels per RGB
Static Brightness:	16 levels per RGB
Product Size:	L142xW73xH30mm
Package Size:	L145xW88xH46mm
Gross Weight::	0.35Kg

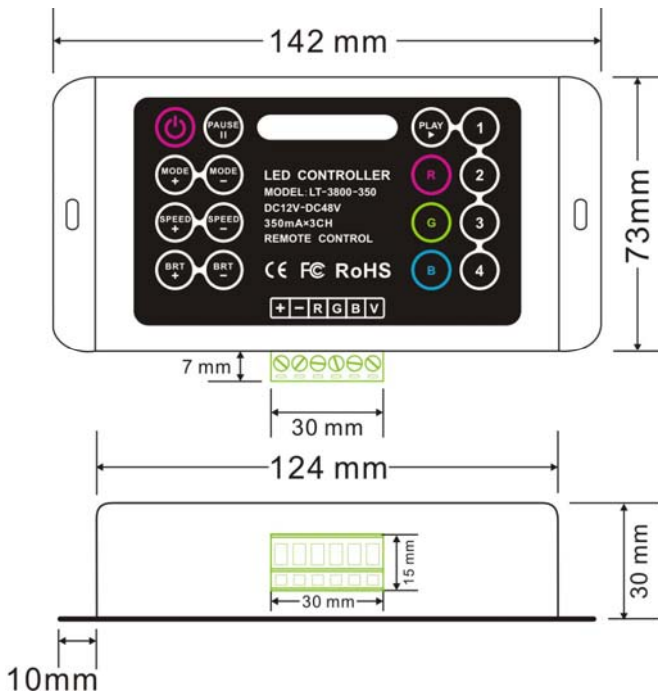
### II . Features

1. Automatically output an accurate voltage as per the LED quantity at each channel;
2. With 24 Buttons IR Wireless remote control; reliable control distance can

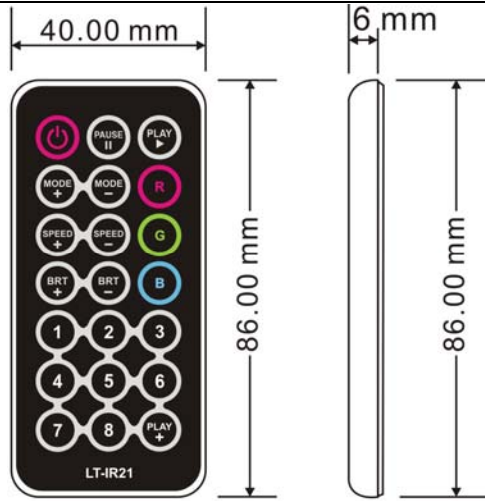
reach as far as 10m.

3. Several DIY Storage Buttons, to record your favorite effect .
4. 0-100% dimming and 16 levels of static brightness per RGB, can mix 4096 colors.
5. 256 Grey steps per RGB, color-smooth effect is gentle and accurate.
6. Can choose changing speed separately and adjust the brightness of each mode.
7. Can rest at current color and color depth by selecting PAUSE function.
8. Working with our power repeater to connect more LEDs.

### III. Product Dimension



Dimension of controller



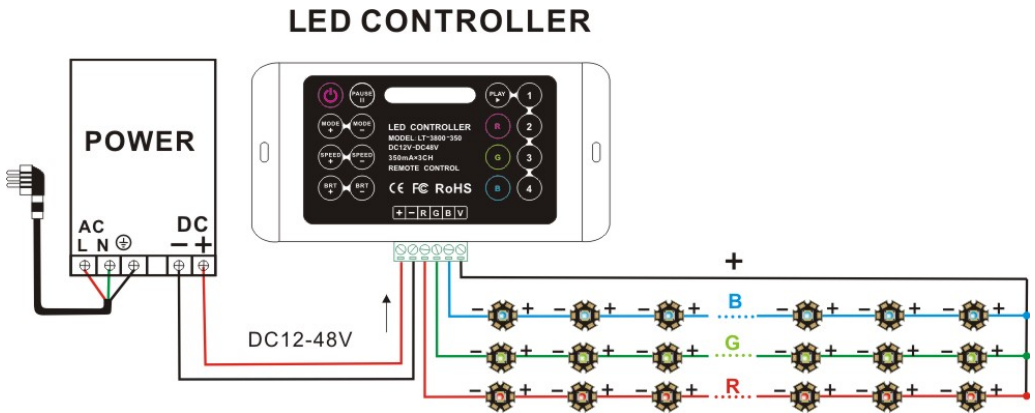
Dimension of IR remote

#### IV. Conjunction diagram



**Note:**

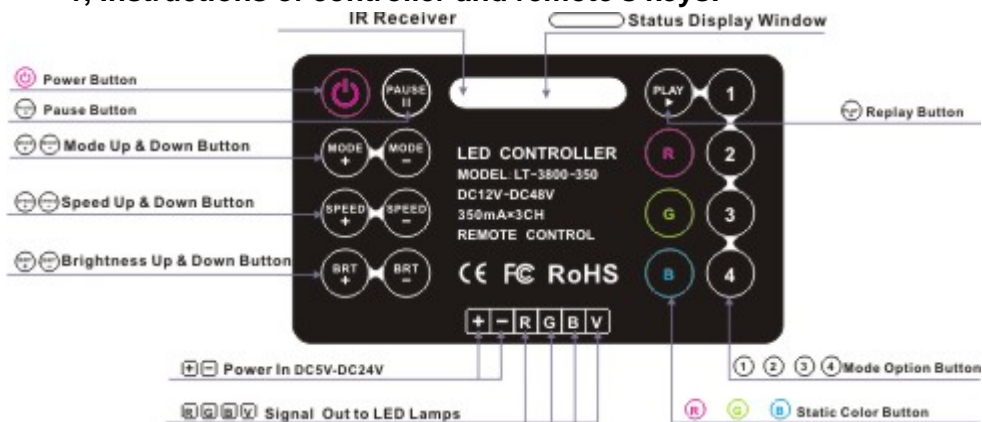
The LED quantity at each channel can be different; this CC controller can automatically check & output a proper voltage to each channel as per its different LED quantities.



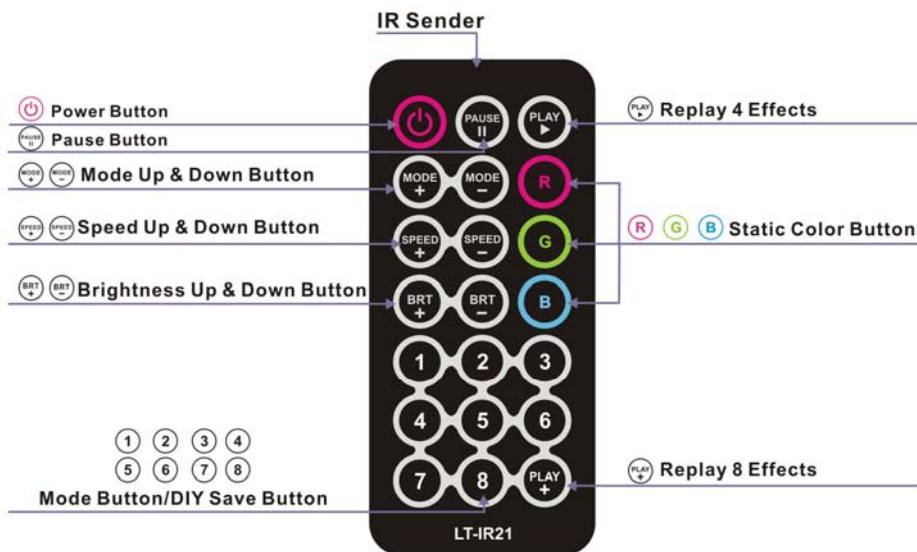
Drives 1-12 1W hi-power led

## V. Operating instructions

### 1, Instructions of controller and remote's keys:








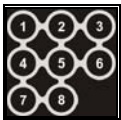





Instruction of controller's buttons



Instruction of IR remote's buttons

## 2. Detailed key functions

Sign	Button	Description
	<b>ON /OFF</b>	Turn on/off the controller  Any button can start the controller at off status.
	<b>PAUSE</b>	Press this button will rest at current color, it will continue to change if press again. Press this button in 3 seconds, the buzzer can be on or off.
	<b>MODE+ MODE-</b>	Press them to select next mode or back to previous mode (pls refer to the VI item) , press MODE+ or press MODE- over 3s to enter cycle mode.
	<b>SPEED+ SPEED-</b>	Press them to quicken or slower speed, press SPEED+ or SPEED- over 3s, current speed is restored to Default status.
	<b>BRT+ BRT-</b>	Press them to increase or decrease brightness, press any one over 3s, current brightness is restored to Default status.
	<b>DIY modes</b>	Press them over 3s, LED flickers twice, then remember current change mode on this button, it can save 4 modes, just press it once then enter into pre-setup mode.
	<b>DIY modes of remote</b>	Press them over 3s, LED flickers twice, then remember the current mode on this button, it can save 8 modes, later can reach your pre-setup mode by just pressing it once.
	<b>PLAY</b>	Cycle play the 4 pre-setup modes in controller.

	<p><b>PLAY+</b></p>	<p>Cycle play the 8 pre-setup modes in IR remote controller.</p>
	<p><b>RGB Dimming key</b></p>	<ol style="list-style-type: none"> <li>1. Press single R, G, B key continuously to change the brightness of RGB LED.</li> <li>2. In single R, G or B dimming status, press BRT+/BRT- key to increase/decrease the brightness of current LED</li> </ol>

**Note:** 1. The functions of 1-4 DIY keys on the controller are the same with the 1-4 DIY keys on the remote controller.

2. The cycle play buttons can only play the dynamic changing effects, if DIY reserved a static color, the static color will be skipped when pressing the cycle play button.

## VI. Tables of changing modes

Sequence	Modes	Description	Remark
1	Static red	Normally on red	Brightness adjustable
2	Static green	Normally on green	Brightness adjustable
3	Static blue	Normally on blue	Brightness adjustable
4	Static yellow	Normally on yellow	Brightness adjustable
5	Static purple	Normally on purple	Brightness adjustable
6	Static cyan	Normally on cyan	Brightness adjustable
7	Static white	Normally on white	Brightness adjustable
8	3-color skipping	Red, green and blue 3-color skipping	Brightness and speed adjustable
9	7-color skipping	Red, green, blue, yellow, purple, cyan, white 7-color shipping	Brightness and speed adjustable
10	White color strobe	White (with all red, green and blue on) strobe	Brightness and speed adjustable
11	3-color smooth	RGB 3-color gradual changes	Brightness and speed adjustable



12	Full smooth color	All 7-color gradual changes	Brightness and speed adjustable
13	RG smooth color	Red, green 2-color gradual changes	Brightness and speed adjustable
14	RB smooth color	Red, blue 2-color gradual changes	Brightness and speed adjustable
15	GB smooth color	Green, blue 2-color gradual changes	Brightness and speed adjustable
16	White fade & change color &	white (with red, green & blue on) gradual bright & fade	Brightness and speed adjustable
17	Great cycle	All changing modes overlap cycle	/
18	RGB static dimming	0-100% dimming per RGB	16 levels of brightness per RGB

### VIII. Exception Handles

Malfunction	Causation	Settle
No light	1、 No power from plug 2、 Power supply protection works 3、 Incorrect connection or cable loose	1、 Check the socket 2、 Check the malfunction, re-power on 3、 Check connection
Incorrect color	4、 Incorrect RGB output wire connection	4、 Re-connect RGB wires correspondently
No changes for certain mode	5、 Speed is too slow	5、 Press Speed to accelerate
Output current less than 350mA	6、 The LEDs at each channel are not in series 7、 the LED quantity in series is beyond the capacity 8、 the input voltage is lower than the total voltage of all the LEDS in series	6, Connect LEDS in series 7, reduce the LED quantity 8, replace a suitable power supply



### Friendly remind:

The effective power of the power supply in market is 80% of what it is written, so customers should choose a higher power supply than the actual LED load, at least 20% higher.