# LT-3800
# LED Multi-function Controller

# USER INSTRUCTIONS



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

## Forword

Thanks for choosing our LT-3800 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 first.

## 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 RGB controller is a unique DIY version as well 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
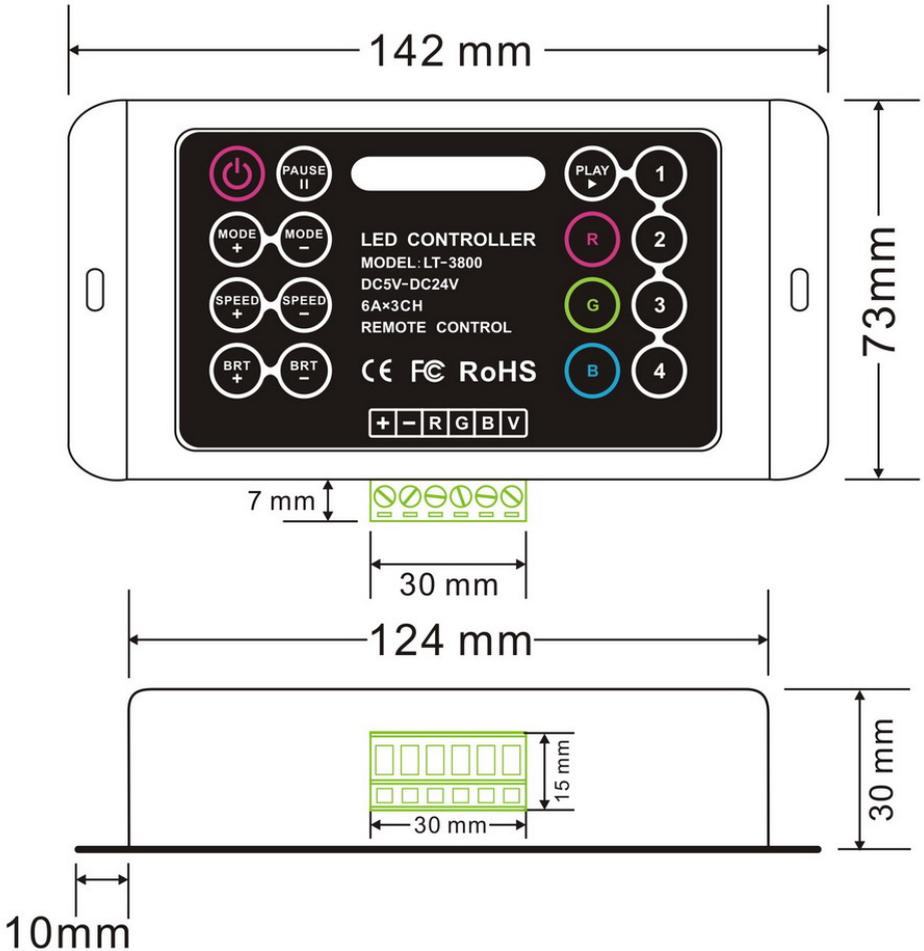
Input/Output Voltage:          DC5V-DC24V
Output Current:                6A/CH＊3CH
Output Power:                  90W(5V) 220W(12V) 450W(24V)
Changing Mode:                 18 modes
Grey Scale:                    256 levels per RGB
Static Brightness:             16 levels per RGB
Product Size:                  L142×W73×H30mm
Package Size:                  L145×W88×H46mm
Gross Weight::                 0.35kg
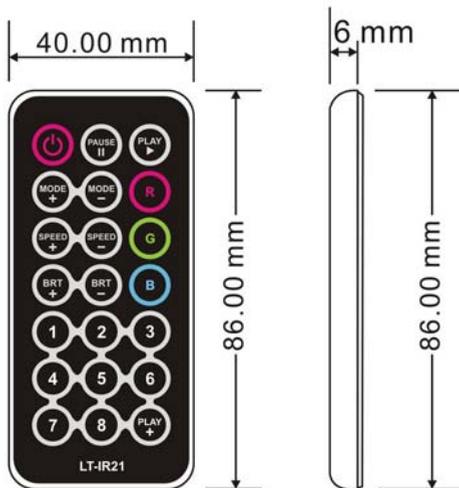
## Ⅱ. Features

1.    Automatic switch from DC5-DC24V;
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.    3-Channel RGB full color control, maximum outputs 6A per Channel.
6.    256 Grey scales per RGB, color-smooth effect is gentle and accurate.

7.    Can choose separately change speed and brightness of each mode.

8.    Can rest at current color and color depth by selecting PAUSE function.

9.    To work together with our LT-3060, can expand unlimited power.
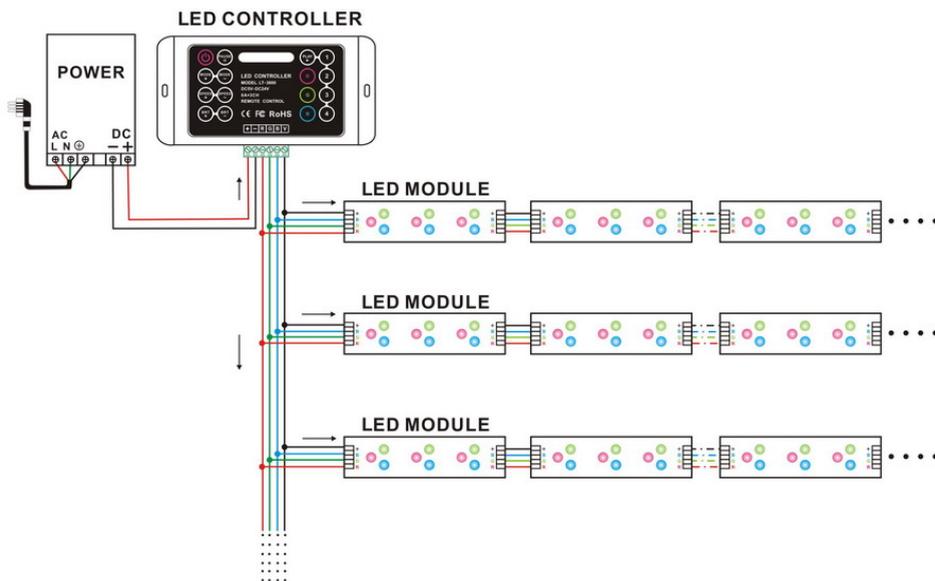
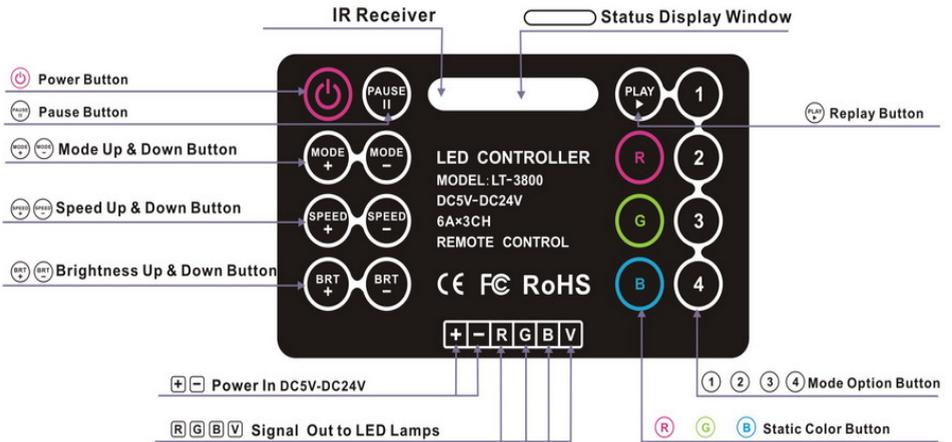## Ⅲ. Product Dimension



Dimension of controller

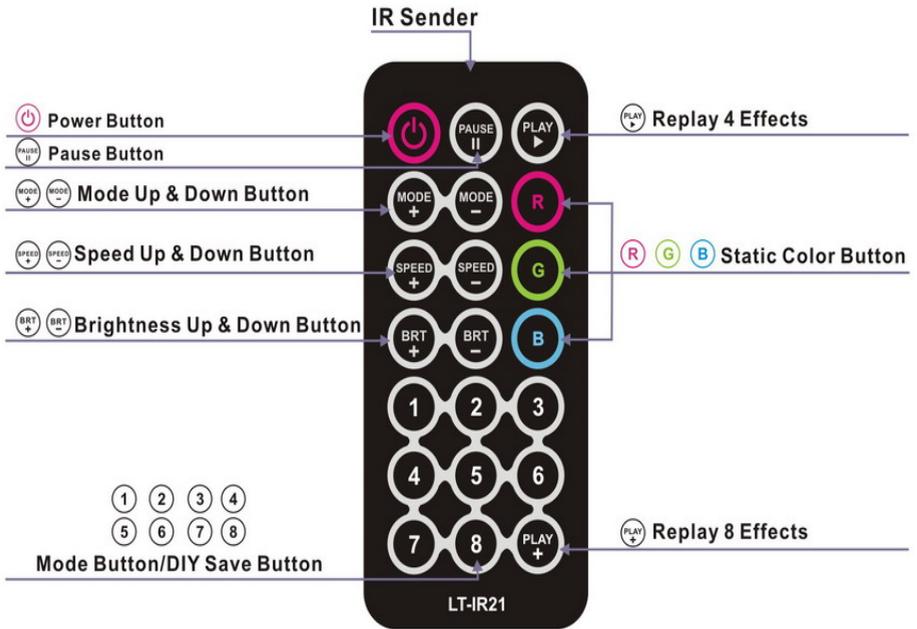Dimension of IR remote

# Ⅳ. Conjunction diagram

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 |
|------|--------|-------------|
|  | ON /OFF | Turn on/off the controller <br> 📑 Any button can start the controller at off status. |
|  | PAUSE | Press this button will rest at current color, press it again, will continue to change. |
|  | MODE+ MODE- | Press them to select next mode or back to previous mode, press MODE+ or press MODE- over 3s to enter cycle mode. |
|  | SPEED+ SPEED- | Press them to quicken or slower speed, press SPEED+ or SPEED- over 3s, current speed is restored to Default status. |
|  | BRT+ BRT- | Press them to increase or decrease brightness, press any one over 3s, current brightness is restored to Default status. |
|  | DIY modes | 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. |
|  | DIY modes of remote | 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. |
|  | PLAY | Cycle play the 4 pre-setup modes in controller. |

| | PLAY+ | Cycle play the 8 pre-setup modes in IR remote controller. |
|---|---|---|
| | **RGB Dimming** | 0-100% dimming per RGB, 16 levels of brightness per RGB, you can get kinds of color effects. R16×B16×G16＝4096, you can mix 4096 static colors. |

## 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 color smooth | All 7-color gradual changes | Brightness and speed adjustable |
| 13 | RG color smooth | Red, green 2-color gradual changes | Brightness and speed adjustable |
| 14 | RB color smooth | Red, blue 2-color gradual changes | Brightness and speed adjustable |
| 15 | GB color smooth | Green, blue 2-color gradual changes | Brightness and speed adjustable |
| 16 | White color fade & change | 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 |

| | 6. Output cable is too long | |
|---|---|---|
| Uneven brightness of LED between front and rear | 7. Wire diameter is too small | 6、 Reduce cable or use daisy-chain power |
| | 8. Overload beyond power capability | 7、 Change wider wire |
| | | 8、 Change power supply |
| | 9. Overload beyond controller capability | 9、 Add power amplifier |

📝 Kind 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.