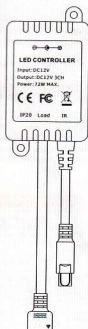


User Manual



LED RGB controller

-with IR control

Rev:1

Summarization

It is an intelligent LED controller, which controls the color and brightness of the RGB lights by IR remote controller. Meanwhile, the IR remote controller can control the color, mode and change speed with light dimmer, turning on / turning off and pause functions. This LED controller can be matched with all kinds of low-voltage RGB lights, such as RGB rigid light strip, flexible light strip, RGB panel light, RGB modules and so on.

Features

1. Adaptable to low temperature environment, still available in extremely low temperature environment.
2. Six color DIY function keys, user could DIY the color they need.
3. The newest PWM control technology, delicate light performance, no flicker.
4. High power dimmer control MOS tube with stable and reliable performance.
5. 6-8 meters IR remote control distance.
6. Multi-level, multi-color, multi-change flexible control effects, with power input polarity protection.
7. Multi-type memory functions for color, modes, speed, and brightness.
8. Smart appearance, standard input and output port, easy installation and high cost performance.

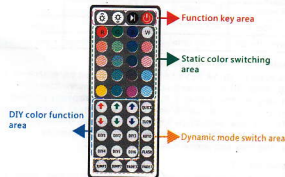
Technical parameters

| Controller | | |
|------------------|-------------------------------------|--|
| Supply voltage | DC12V ■ DC24V □ | |
| Loadable current | 2A×3CH 6A MAX. | |
| Output channels | 3CH | |
| Output power | 72W | |
| Control method | IR | |
| Connection mode | Common anode | |
| Dimming method | PWM | |
| Grey steps | 256 | |
| Protection | The power input polarity protection | |

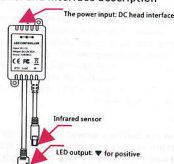
| Remote Controller | |
|----------------------|--------------------|
| Working voltage | 3VDC |
| Remote control way | IR |
| Controlable distance | 6-8m |
| Battery types | Li battery, CR2052 |
| Key Number | 44 keys |

Control method

- ◆The remote control panel description



- ◆The controller panel and interface description



- ◆ The controller is IR LED controller with 44 buttons, following is the mode table:

| Brightness+ | Brightness- | Pause | On/off |
|--------------------|-------------------|---------------------|---------------------|
| Static red | Static green | Static blue | Static white |
| Static orange | Static pea green | Static pea green | Static milky white |
| Static dark yellow | Static cyan | Static brown | Static red white |
| Static yellow | Pea blue | Static pink | Static green white |
| Static pea yellow | Static sky blue | Static purple | Static blue white |
| Red brightness+ | Green brightness+ | Blue brightness+ | Speed + |
| Red brightness- | Green brightness- | Blue brightness- | Speed - |
| DIY color 1 | DIY color 2 | DIY color 3 | Auto |
| DIY color 4 | DIY color 5 | DIY color 6 | strobe |
| 3 base color jump | 7 base color jump | 3 color fade change | 7 color fade change |

◆ Method of change line sequences

This type of IR 44 keys LED controller can be matched with RGB, GRB, BGR line sequences via the multi-function key - last key on the panel (Fade7). Our preprogrammed line sequence is RGB, so if you want to adjust to match with different line sequence LED strip, please press the on-off key to switch off, then press Fade7 Key, then press on-off key, the line sequence has been adjusted.

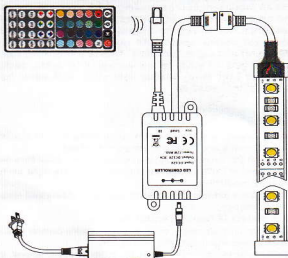
◆ Method of Color DIY

This product is equipped with six DIY function Keys with maximum of 6 color modes controlled by 9 buttons on the remote controller. If one certain color need DIY, pressing any buttons among DIY1-DIY6, then the controller comes into DIY mode, Customers could use ◆ ◆ ◆ ◆ ◆ to modify the RGB color chromaticity so as to get desired colors, then pressing the DIY button you pressed just now, then the color DIY is finished. Copy the same operation, 6 colors could be designed at most. When customers need to use the DIY color, just press the corresponding DIY button to get what they want.

◆ Note

To avoid the Battery power running out by extrusion during production and transportation, insulation film will be inserted between the battery and the circuit. Please take out the insulation film when it is used for the first time.

Type applications



Safety warnings

1. Please install the products by professional electrician.
2. This product can not waterproof, please put into waterproof tank if the clients want to use it outdoor.
3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
4. Please don't install this controller in lightening, intense magnetic and high-voltage fields.
5. Check if the voltage and power adapter suit the controller and LED lights.
6. Please make sure the wires can sufficiently load the LED lights for avoiding accident.
7. Please make sure all the wires are connected correctly before switching on the power.
8. Please do not repair or maintain privately, any query, please contact suppliers.

After-sale service

1. The customers enjoy lifelong technical support for our products.
2. The customers enjoy free maintenance or replacement for quality problems within one year upon date of purchasing.
3. If the free warranty time is overdue, We will charge certain cost of raw materials for repair or maintenance.
4. Following cases are excluded free warranty terms:
 - ◆ Any defects caused by wrong operations.
 - ◆ Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
 - ◆ Any damages due to transportation, breaking, flooding water after the purchase.
 - ◆ Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
 - ◆ Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
5. Our company would take up the biggest responsibility to replace the same type and quantity accordingly.
6. The clients please inform suppliers the faulty phenomena, using environment etc. for speeding up the maintenance process.
7. The manual is only suitable for this model, any update is subject to change without prior notice.

Exception Handles

| Malfunction | Causation | Solution |
|--|---|---|
| No light | 1. No power 2. The protection of the power supply is active 3. Wrong connection | 1. Check the power 2. Check the fault then power on again 3. Check the connection |
| Incorrect color | 1. Wrong connection from RGB wire 2. Wrong connection of in-phase cable | 1. Re-connect RGB wires correspondently 2. Re-connect in-phase wires correspondently |
| No response from the remoter | 1. battery power is not enough 2. The distance between controller and LED lights is too far. | 1. Change or install the battery accordingly 2. Shorten the remote distance |
| Delay response from the remoter | 1. The distance between controller and LED lights is too far 2. Wire diameter is too small 3. Overload beyond controller or power supply capability | 1. Reduce cable or use loop supply 2. Change wider wire 3. add power amplifier |
| Uneven intensity between front and rear, with voltage drop | 1. Output cable is too long 2. Wire diameter is too small 3. Overload beyond controller or power supply capability | 1. Reduce cable or use loop supply 2. Change wider wire 3. add power amplifier |
| Signal chaos between controller and remoter | 1. May be there are more than one remote controller controlling the same LED lights at the same time | 1. Find out other remote controllers and closed |