

LED full color lighting control system

JM1 Sub-controller

Rev. A/0

User's Manual

United East Electronic Industrial Limited

Dear valued customer,

Thank you for buying UE LED full color lighting control system. The system can edit any desired program as you need, design lighting effect at will, download program promptly, run offline, transmit long distance signal (1.5Km max.), RGB full color output control, high refresh frequency, each second can refresh maximum of 90 frames, change lighting smoothly, install easily and connect conveniently. It applies on various lighting decoration of city, scenery, road, bridge, building, entertainment area, outer door advertisement, and inside house lighting projects etc.

Before you use the LED full color lighting control system, in order to operate the system properly, please read this manual carefully.

UE LED full color lighting control system has applied a patent, with number **200720050043.6**

I. Important Safety Information

The product uses ABS plastic outer case and flameproof PCB

1. Must be far away from flammable and explosive articles
2. Please use high quality of power supply, or it may cause controller to work wrongly and damage circuit
3. Be careful on waterproof protection

II. Package

1. JM1-12-24V single pixel slave controller



2. accessories

1). Main-controller



2). USB cable



3). Switching power supply



4). Power cord



5). signal T cable

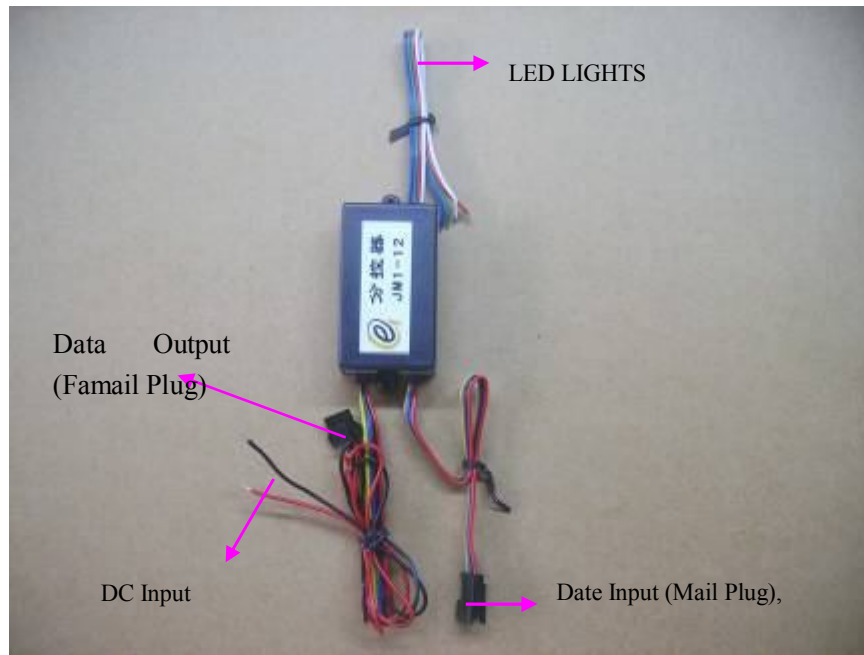


6). Light source



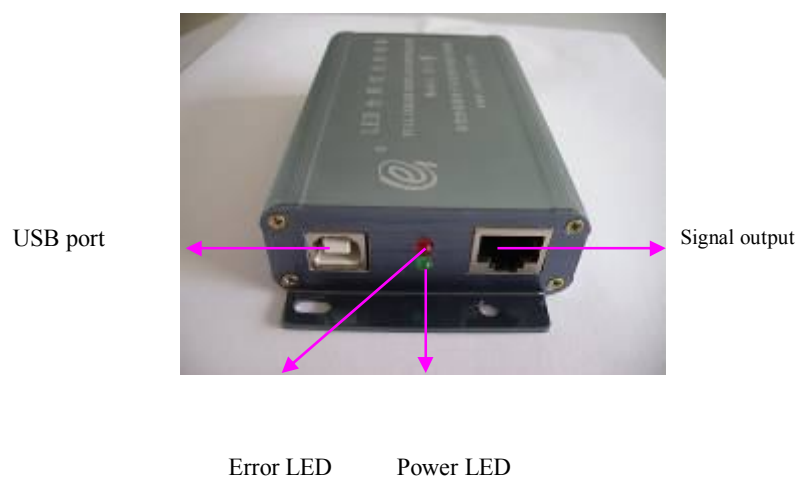
III. Sub-controller key functions

- 1、 Work with main-controller JC-1A/JC-1AS as a decode output,
- 2、 PWM output resolution of 256,
- 3、 Single pixel of 3 line outputs (each line contents RGB full color output),
- 4、 Control signals connect in serial, easy to operate,
- 5、 Convenient connection with all kinds of LED light sources,
- 6、 Be able to run separately with in-built program,
- 7、 Partial light source or slave controller failure will not impact other light sources and slave controller operation,
- 8、 Replacement of neon lighting controller.



IV. Main-controller Key Functions

- 1、 Need to work with Color Edit software,
- 2、 USB port download, run offline,
- 3、 Support single pixel and 4 pixels decode slave controllers



V. How to use this controller

- 1、Connect one side of the signal T connector into the master controller; the other side of the signal T connector has red / black wires and female connector, the red / black wires connect to DC 12V switching power (main-controller power supply), the female connector connects to the male connector on JM1 single pixel sub-controller, see figure 1. Then connect the red / black wires on JM1 single pixel controller to DC switching power, and then connect the slave cables with light source by V+, R, G, B order. Connect the first slave female connector to the male connector on the second slave controller, see figure 2, and connect the second power with light source correctly, and so on. All slave controllers can be connected as above steps and align the light sources in order. Power on, several of JM1-12V slave controllers operate under the master controller programming. The master controller program can be edited and modified by Color Edit software, then downloaded by PC, see details in Color Edit software users' manual.
- 2、Take JM1 single pixel sub-controller from the main-controller, the JM1 single pixel controller will not be controlled by the master controller, its lighting changes by in-built program.



Male connector



Female connector

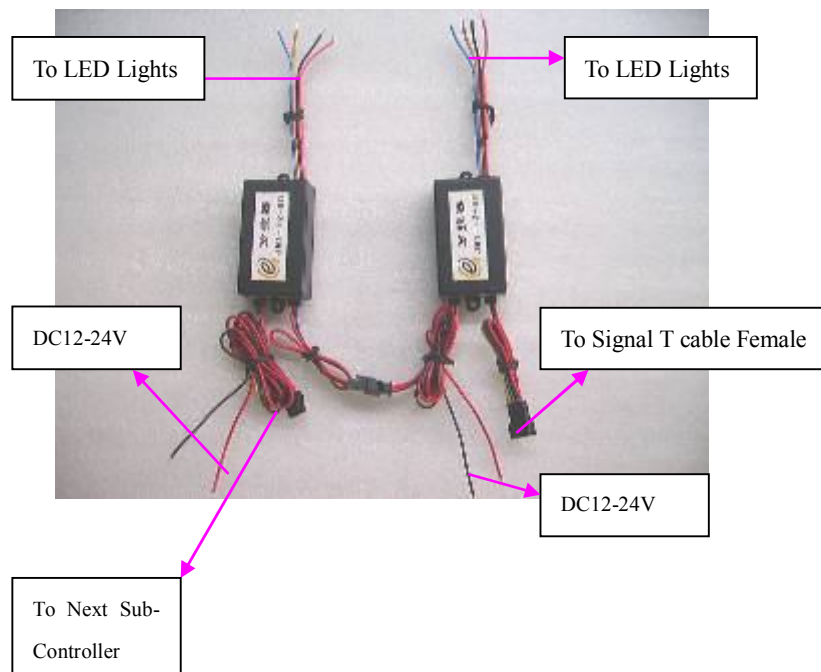


Figure 1

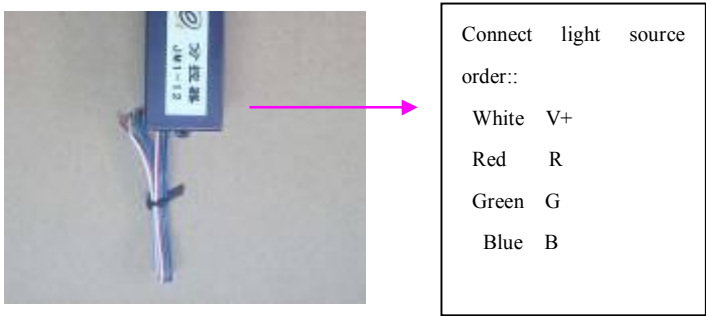
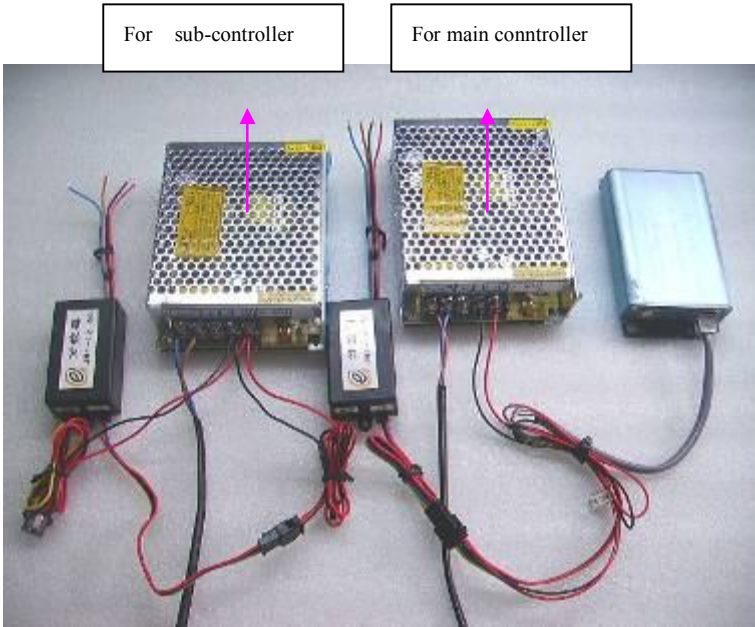


Figure 2

VI.Alignment result



VII. Specifications

1、Circuit running environment

- ①surrounding temperature: -10°C — 40°C ;
- ②relative humidity: 10%—90%。

2、Power supply

- ①switching power supply ranges: AC 100—240V
- ②JM1 slave controller voltage: DC $12\text{--}24\text{ V}\pm 0.5\text{V}$
- ③main-controller voltage: DC $12\text{V}\pm 0.5\text{V}$
- ④R, G, B line current of each slave controller, max 2A

VIII. Service and Maintenance

The company provides service based on stipulates of *the consumer protection law*, and under the sight of receipt / invoice.

- 1) within 1 year of purchasing the product, and not damaged by the user, the company will repair the failed product freely
- 2) damaged by improper usage or maintenance, the company will repair the product with a certain service charge
- 3) please contact UE company or the distributors when having quality problems
- 4) any updates on the manual will not notice further, if you have any questions please call the company phone directly

-- The End --