SPI LED SUB CONTROLLER

CQ-8000S

Welcome to the CQ-8000S SPI LED sub controller, which is primarily used for a large number of LED pixel project. The sub controller supports 8 SPI output ports, each supporting 512 standard DMX channels, and supports extended protocols to support more LED channels.

The sub controller is compatible with most SPI LED drive chips, such as UCS1903, TM180, TM1812, MY9221, WS2811, SK6812, SM16703,etc. These chips can be addressed at the sub controller or SPI software via the output port, making them ideal for use in engineering projects. Sub-controllers automatically adapt to 100/1000M network, ensuring the stability of large area LED projects. The control system supports time control, DMX console control, GPS synchronization, UDP network control and other control methods, can be applied to a variety of LED lighting projects.

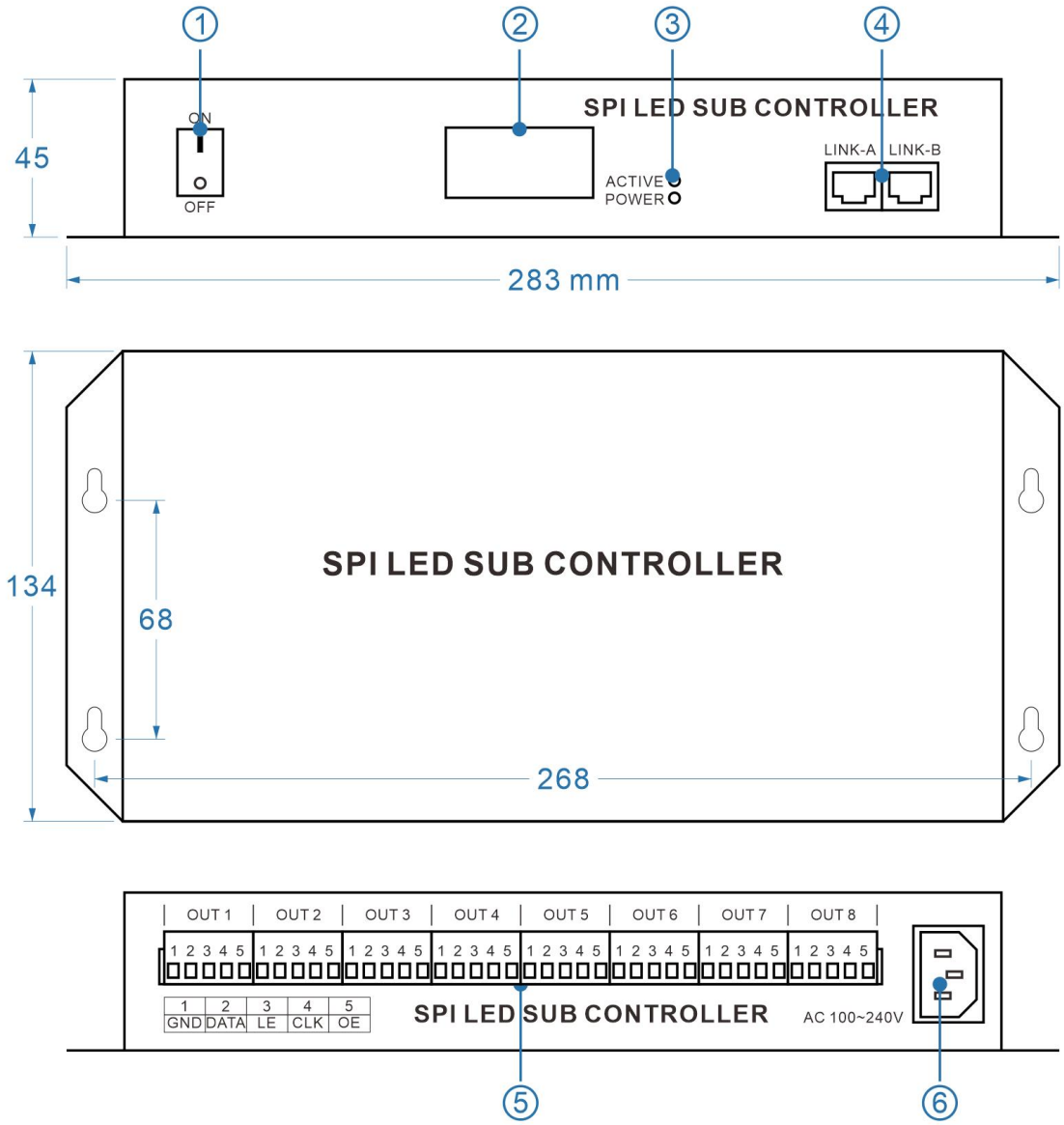
1. Features

- Compatible with most DMX LED driver IC: UCS1903, TM1809, TM1812, MY9221, WS2811, SK6812,SM16703 etc.
- 8 output, support 512 stand SPI channels, and extended protocols;
- Support single color, color temperature, RGB， RGBW LED;
- Support address the LED driver IC;
- Maximum distance between the controller is 80 meters;
- Support adjustable LED brightness, GAMMA, can achieve more accurate color mixing display;
- LCD displays parameters and status;
- Support import LED animation, video animation;
- Live control with PC and Stand Alone control with SD Card;
- The software support windows and multi language.

2. Specification

Part No.	CQ-8000S
Input Voltage	100~240V AC
Power Consumption	15W
Output	SPI 512
Standard DMX	8 * 512 Channels
Extended DMX	8 * 1024 Channels (Depending on the driver IC)
Others	Address the IC, Time trigger, GAMMA, Brightness adjustment
Dimensions	283*134*45mm (L*W*H)
Environment	IP20, 0~55℃

3. Dimension



① ON/OFF ② LCD ③ LED Indicator

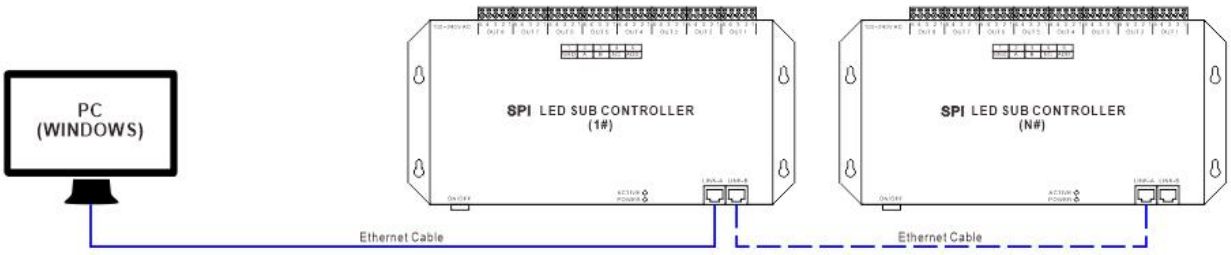
④ LINK Socket ⑤ DMX Output Port ⑥ Power Interface

DMX Output Port

1	2	3	4	5
GND	DATA	LE	CLK	OE

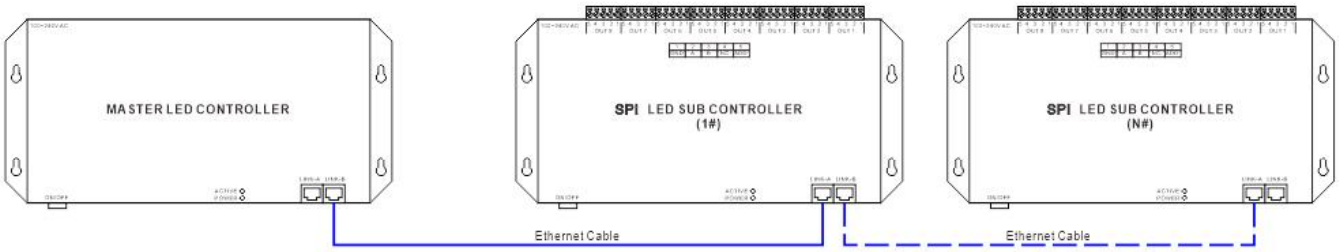
4. Live Control

When live control, the sub controller can be connected to your computer via a network cable. Through computer software, we can patch the LEDs, addressing the DMX ICs, LED, real-time preview lighting scene and animation effect.



5. Stand Alone Control

When used stand alone, export the lighting effects and save them to the SD Card. Through the master controller to play, the lighting program will automatic operation, and can be manual switching, DMX console switching, UDP control and other functions. Using the special master, you can also achieve a number of buildings between the wireless synchronization control, eliminating the problem of long-distance cable.



6. Notice

1. Computer, master controller, sub-controller, it is recommended to use more than Cat.5 network cable, and use 568B line sequence connection (orange, orange, green, blue, blue, green, brown, brown);

2. When the distance between the controller output port and the LED is too far, it is recommended to use the DMX cables;

3. When using Cat. 5 network cables as DMX signal lines, the recommended order is: orange-white (A / DMX +), orange (B / DMX -), brown-white / brown (GND), green (ADD);

4. Do not use a set of twisted pair wires to transmit a signal, for example, the orange-white/orange set of lines, using DMX +, or DMX -;

5. If necessary, the end of the LEDs can be added to a 120Ω terminal resistance (A and B of the signal line at the end of the LEDs);

6. The controller adopts the metal housing, the rated voltage is 100~240V AC, must ensure that the controller wire and the metal housing are effectively grounded;