4 Remote Intelligent WIFI Switch

1. Overview

Elsai 4-way remote intelligent WIFI switch is equipped with original WIFI modules from well-known domestic manufacturers, embedded with IoT intelligent control program, only a router with Internet access and an Android / IOS mobile phone can be used to remotely control household appliances anytime, anywhere , And supports local buttons, 433M wireless remote control, can be used to upgrade and modify existing household appliances, so that it becomes smart in seconds!

2. Features

1. Onboard intelligent Internet of Things WIFI module, simple configuration and powerful function;

2. Support "Ewelink" mobile APP remote control via WIFI and 4G / 3G network;

3. Support multiple control methods such as timing, delay, device sharing, and intelligent scenes when using mobile phone APP control;

4. Support real-time feedback of switch status when the device and APP are online;

5. Support three modes: self-locking, jog and interlock, the default opening time of jog is 1S;

6. Support local button or 433MHz remote control, independent of WIFI / 4G / 3G function, can control normally even when the device is offline;

7. 4 on-board 5V, 10A / 250V AC 10A / 30V DC relays, which can be continuously attracted 100,000 times, with diode bleed protection and short response time;

8. Power supply voltage: DC5V / DC7-30V / AC85-250V, controlled voltage: DC0-30V / AC0-250V;

9, the number of channels: 4 channels, the maximum overcurrent per channel: 10A, the maximum total power of 4 channels: 3500W;

10. Onboard mode selection, WIFI status indicator, relay switch indicator;

11. The PCB plates and materials used in the intelligent switch adopt lead-free technology, which are superior in materials, environmentally friendly and safe.

3. Hardware introduction and description

Board size: 93 * 87mm

3.1. Onboard resource introduction:

L, N: AC power supply voltage or AC / DC controlled voltage, positive and negative input;

DC +, DC-: DC power supply voltage, positive and negative input;

N1, N2, N3, N4: AC / DC controlled voltage, negative output; L1, L2, L3, L4: AC / DC controlled voltage, positive output;

Mode key: self-locking, jog, interlock mode switching key, default self-locking;

S1, S2, S3, S4: local control buttons, corresponding to channel 1-channel 4;

M1, M2, M3: Mode indicator, when lit, it represents self-locking, jog, interlock mode; D6, D7, D8, D9: switch status indicator (red), when lit, it means that the switch is on, corresponding Channel 1--Channel 4;

D5: WIFI status indicator (green), steady light means normal connection, please refer to appendix for other status.

3.2. Mode introduction:

3.2.1. Self-locking mode: each channel is controlled independently, click to open, then press again to close;

3.2.2. Jog mode: each channel is controlled independently, click to open, and it will automatically close after delaying 1S;

3.2.3. Interlocking mode: channels are not independent, that is, only one switch can be open at a time; mode switching method: default self-locking mode, press the Mode key to switch, and the corresponding mode indicator will be

Light up. M1 (red) lights for self-locking; M2 (blue) lights for jog; M3 (green) lights for interlock.

3.3. Version introduction:

According to the input power supply voltage, it can be divided into DC5V / DC7-30V / AC85-250V, and it can be divided into 2 types according to whether there is no 433M remote control, so there are 6 combinations, users can choose the corresponding equipment according to actual needs The version and corresponding operation are shown in the following table:

| Number	Version	Internal coding	Function description
1	5V	LC-EWL-4R-NS-D5	Support APP, local key control; power supply voltage DC5V, controlled voltage DC0-30V or AC0-250V; support self-locking, jog, interlock mode
2	5V+433M	LC-EWL-4R-NS-D5RF	Support APP, local buttons, 433M remote control; power supply voltage DC5V, controlled voltage DC0-30V or AC0-250V; Support self-locking, jog, interlock mode
3	7-30V	LC-EWL-4R-NS-D7	Support APP, local key control; supply voltage DC7-30V, controlled voltage DC0-30V or AC0-250V; support self-locking, jog, interlock mode
4	7-30V+433M	LC-EWL-4R-NS-D7RF	Support APP, local keys, 433M remote control; power supply voltage DC7-30V, controlled voltage DC0-30V or AC0-250V; Support self-locking, jog, interlock mode
5	220V	LC-EWL-4R-NS-A2	Support APP, local key control; at this time, the power supply voltage is the controlled voltage, range: AC85-250V; Support self-locking, jog, interlock mode
6	220V+433M	LC-EWL-4R-NS-A2RF	Support APP, local buttons, 433M remote control; at this time, the power supply voltage is also controlled voltage, range: AC85-250V; Support self-locking, jog, interlock mode

4. Wiring guidelines:

4.1. 5V and 5V + 433M versions:

AC 0−250V
/DC 0−30V   DC 5V

4.2. 7-30V and 7-30V + 433M versions:

AC 0−250V
/DC 0−30V   DC 7−30V
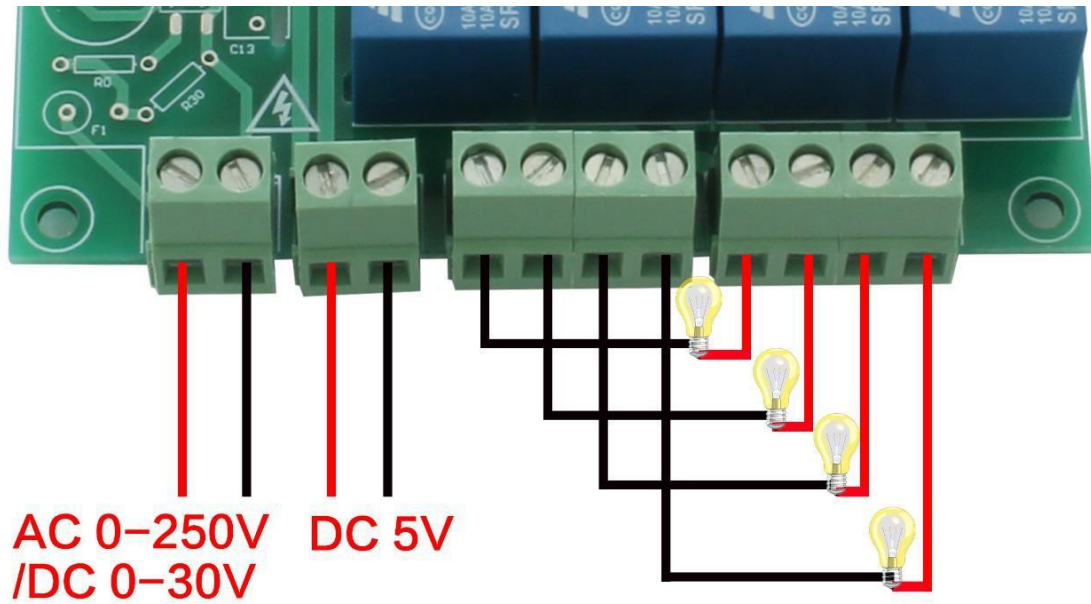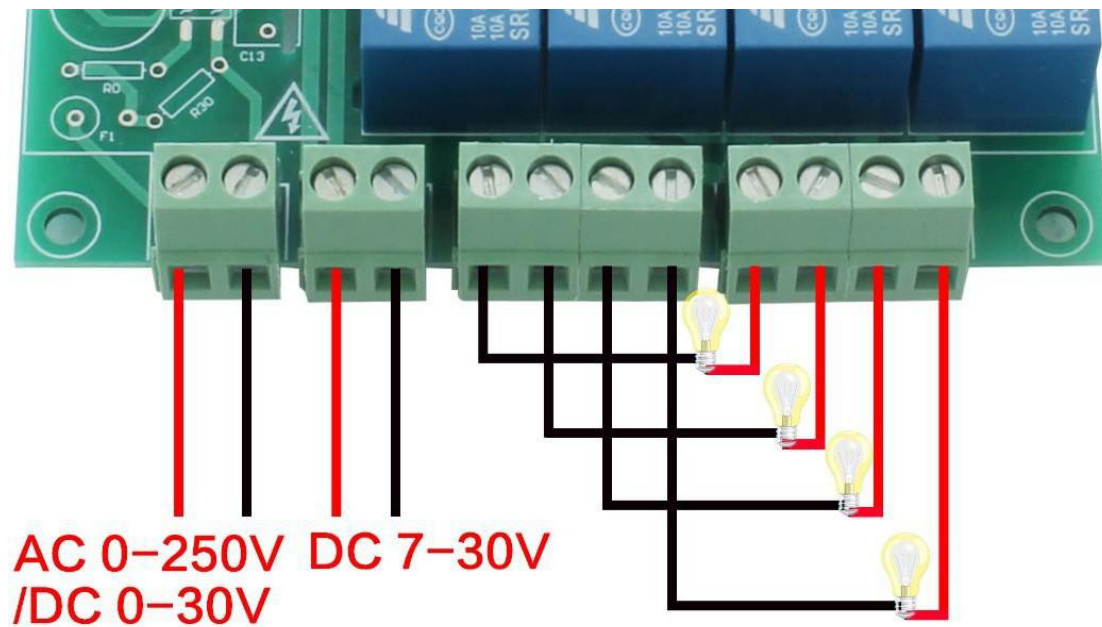
4.3. 7-30V and 7-30V + 433M versions:

AC 85−250V
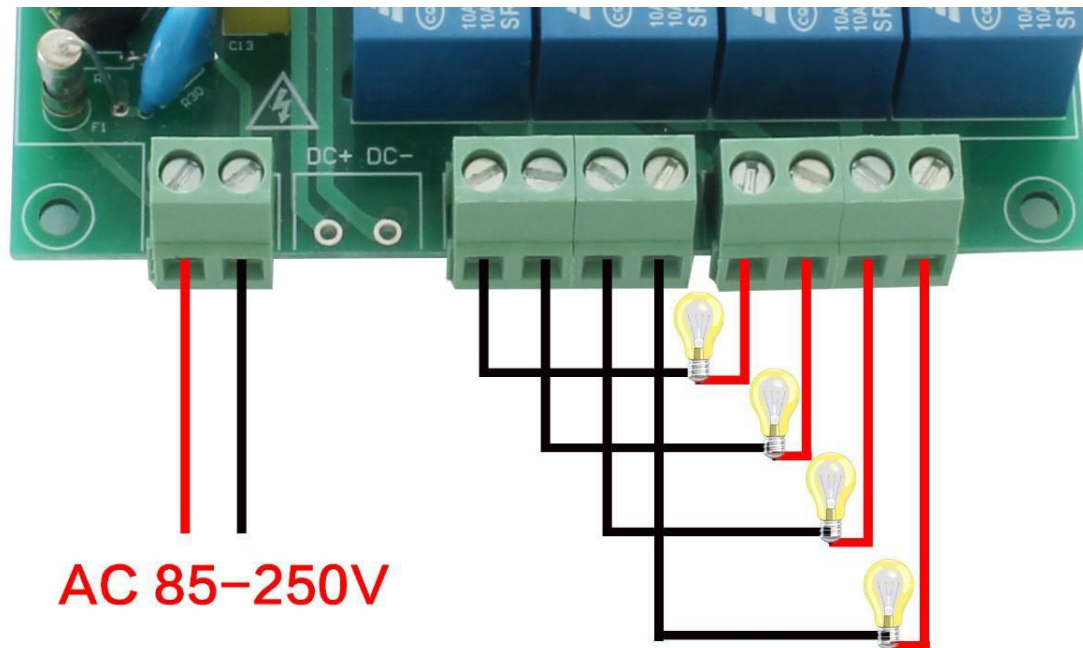
5. Guidelines for use:

For the convenience of explanation, the following tests take the "220V + 433M" version as an example. L and N are connected to the AC220V live and neutral lines respectively, so that (L1, N1) (L2, N2) (L3, N3) (L4, N4) Make up 4 channels of 220V live and neutral output, the specific steps are as follows:

5.1. Mobile APP control:

(1) APP download and installation: search and install "eWelink" APP in the Android / IOS application store
(2) Open the APP, register an eWelink account and log in:
(3) Device registration on the network: Press and hold any one of the S1 / S2 / S3 / S4 keys for more than 7S. When the WIFI status indicator (D5) flashes quickly (blinks 2 times and lights up for (2), the device is in the state of waiting for pairing At this time, the mobile phone is connected to the WIFI router, click the "+" button in the APP interface, use the APP to complete the addition, the indicator D5 changes from fast flashing to constant light.
(4) APP control device switch: After the addition is completed, the mobile phone can remotely control the device through the WIFI / 4G / 3G network. For example, use APP to turn on the first switch. At this time, channel 1 (L1, N1) turns on, channel 1 indicator D6 lights up, and the full-color light connected to channel 1 works
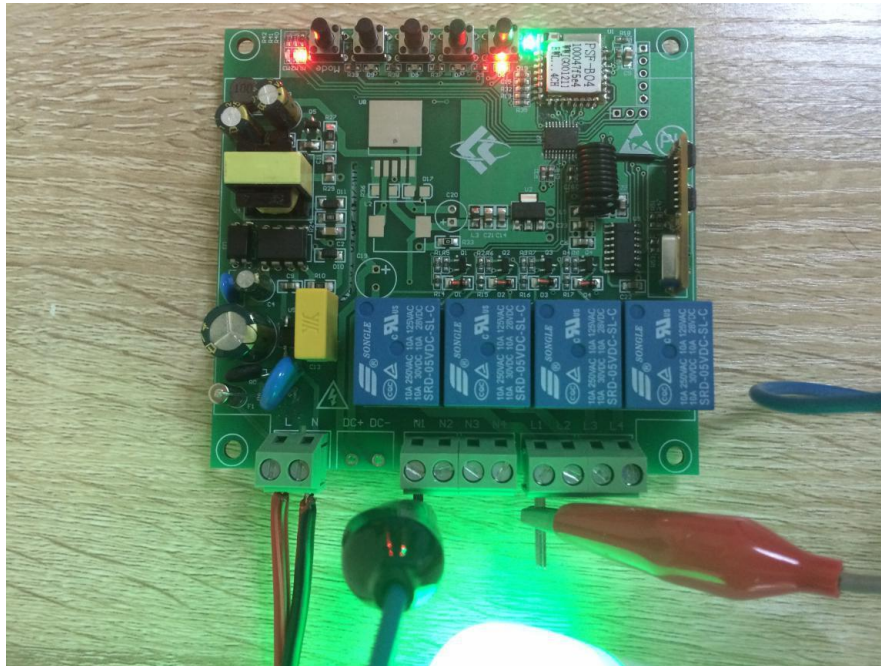
(5) Device sharing, timing and delay function: After using the mobile phone APP to connect the device to the network, the device has been bound to the mobile phone, and the device can be shared with family and friends through the APP; in addition, the timing and delay only support integer trigger For example, if I set a delay of 2 minutes at 13:10:16 and turn on the switch of channel 1, the device will perform the operation at 13:12:00 instead of 13:12:16.

(5.2) Local key control: The device not only supports APP control, but can also be controlled by local keys when the network disconnected device is offline. For example, pressing the S2 key can make channel 2 (L2, N2) connected, and the second switch indicator D7 point On, the motor connected to channel 2 works.
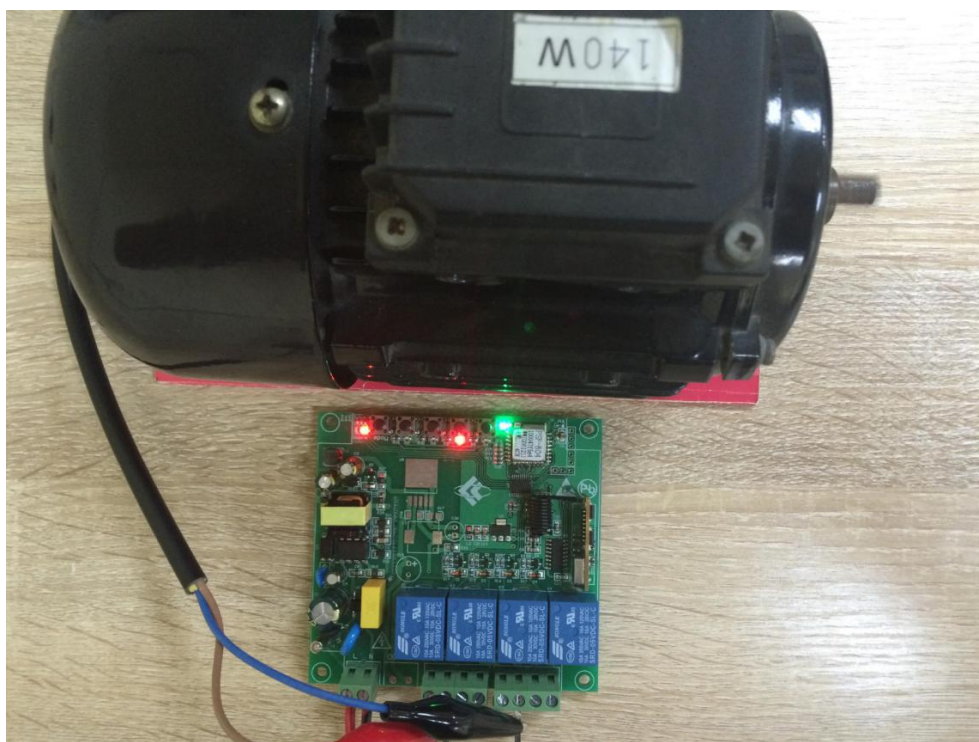
(5.3) 433M remote control: Press A-D on the remote to control switches 1 to 4, respectively, for example, press C to turn on channel 3 (L3, N3), channel 3 indicator D8 points On, the socket connected to channel 3 is connected, as shown below:


The remote control has been paired with the 433M module in the device by default. If you need to pair another remote control, the method is as follows:

(1) Code matching method: press and hold the button 2S on the 433M module inside the device, the indicator light is on, then release, then press any key on the remote control, the indicator light flashes 4 times to indicate successful pairing;

(2) Code clearing method: Press and hold the button above the 433M module inside the device for more than 8S, the indicator light goes out, indicating that all remote controls have been successfully cleared.

Note: When the device and APP are online, when the device is controlled by a local button or 433M remote control, the switch status will be automatically fed back to the APP.

Appendix: Description of Wi-Fi Status Light Flashing Mode
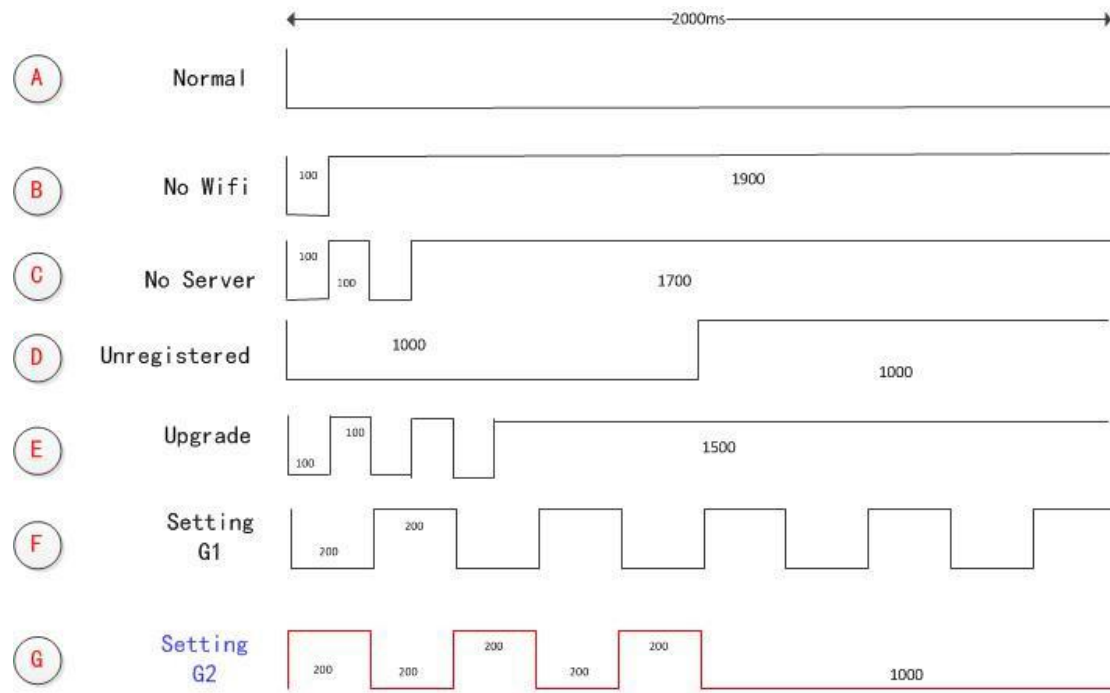
状态灯定义（2秒钟为一个周期，低电平灯亮、高电平灯灭）

The flashing characteristic of the Wi-Fi status light takes 2 seconds as a cycle. As shown in the figure, the low-level light is on and the high-level light is off. Detailed explanation of each state:

A.Normal: The device works normally, and the connection to the cloud server is normal. At this time, you can control the device through the APP. In any other mode, the device cannot be controlled through the APP.

B. No Wifi: The device cannot connect to the wireless router.

C. No Server: The device has been connected to a wireless router, but cannot connect to the server (that is, "Unable to access the Internet" as is commonly understood).

D. Unregistered: indicates that the device has not been bound to any account. Generally, the device needs to be connected with ewelink CoolKit

Account binding is required to communicate with the cloud server. You can complete the binding operation by "adding device" in the ewelink app.

E. Upgrade: indicates that the device is upgrading firmware.

F. Setting G1: The device is in AP mode. The configuration mode is used by the device to obtain the necessary information provided by the mobile terminal APP to join the service network, including the router ssid, password, server IP, and port number.

G.Setting G2: indicates that the device is in ESPTOUCH mode. The configuration mode is used by the device to obtain the necessary information provided by the mobile terminal APP to join the service network, including the router ssid, password, server IP, and port number.