

IOTZONE[®]

Smart lighting and energy-
saving management

4-Channel web Relay Controller User Manual

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Product Introduction

1. Function Introduction

1.1 Manual control

You can use the original switch to manually switch and control household appliances.

1.2 Remote control

Control your device anytime, anywhere, and at will, even if you are far away from home.

1.3 Accurate feedback of control status

Whether you are a local area network or remote, whether you are network control or local switch, no matter who is operating, you can accurately see the status after execution.

1.4 Custom Device Name

Allow you to customize the device name and output channel name, making your operations more intuitive, and support software and webpage customization name synchronization.

1.5 Supports PCB onboard temperature and humidity sensors

Supports high precision temperature and humidity PCB onboard, facilitates the measurement of temperature and humidity environment around the controller, and allows for interactive control.

1.6 Secure System Architecture

LAN control adopts device hardware password verification, remote control adopts account and password verification, and the password can be customized by the user.

1.7 Simpler to use

You don't have to worry about not being able to use it, nor do you have to worry about configuration errors that may cause the controller to malfunction. The controller supports hardware one click restore.

1.8 Support for multiple platforms

(1) The web method supports IOS, Android, Windows, Linux, Mac OS, any mobile phone with a browser, and cloud TV.

(2) Support the multi-channel centralized management platform software provided by Zhenming Electronics on the PC side.

(3) Support Android and Apple iOS mobile app control.

1.9 Rich language versions

The web version currently supports Simplified Chinese, Traditional Chinese, and English. As long as you contact our business, no matter how much quantity you have, we can customize the language version for free.

1.10 Supports device interoperability

Two LAN devices are allowed to control each other, and two networked devices are allowed to control each other remotely.

1.11 Supports 315MHz remote control

Supports 315MHz remote control accessories.

1.12 Perfect Cloud Platform Support

The device is directly connected to Zhenming Electronics' own cloud server, without the need for peanut shells and unlimited broadband, greatly increasing stability and controllability. If customers need to access their own cloud platform, please contact us for business.

1.13 Customer Customization

We can customize hardware, software, and system solutions according to the actual needs of customers.

1.14 Secondary Development

For enterprises, research institutions, and hardware enthusiasts, we provide publicly available TCP sockets and UDP communication protocols, making it easier for users to develop and more flexible.



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2. Technical parameters

- 2.1 Power supply voltage: 5V, standard 5V/1A power supply;
- 2.2 Output ports: 4 independent passive outputs,
- 2.3 Input ports: 4 independent active inputs;
- 2.4 Sensor interface: PCB onboard temperature and humidity sensor
- 2.5 Standby power consumption: 0.8W, maximum power consumption: 3W
- 2.6 Maximum allowable voltage/current of output port: AC250V/10A, over 100000 times;
- 2.7 Shell size: 115 * 90 * 40mm
- 2.8 Working temperature: -25~80 degrees Celsius;
- 2.9 Storage temperature: -40~85 degrees Celsius;
- 2.10 Storage humidity: 5%~95% RH

3. System parameters

The default parameters of the controller system are shown in the following table:

Parameter	Default Parameter Values	Support modification or not
HTTP PORT	80	√
TCP PORT	1234	√
DHCP	prohibit	√
Host name	iotzone	√
Subnet Mask	255.255.255.0	√
MAC Address	Random	√
Preferred DNS Server	114.114.114.114	√
Alternate DNS server	8.8.8.8	√
user name	admin	×
Password	12345678	√
Http Maximum Users	6	×

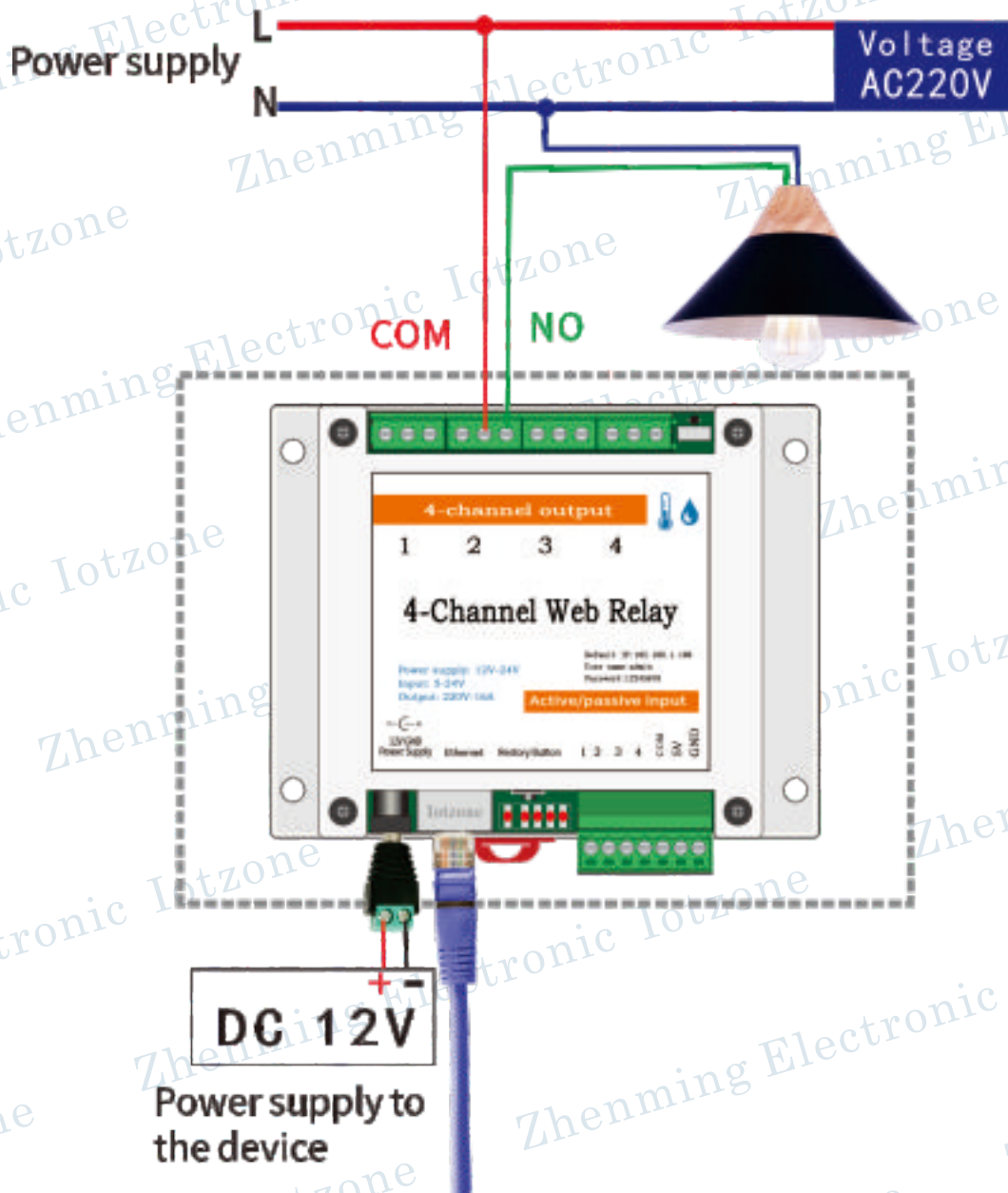
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Hardware connection

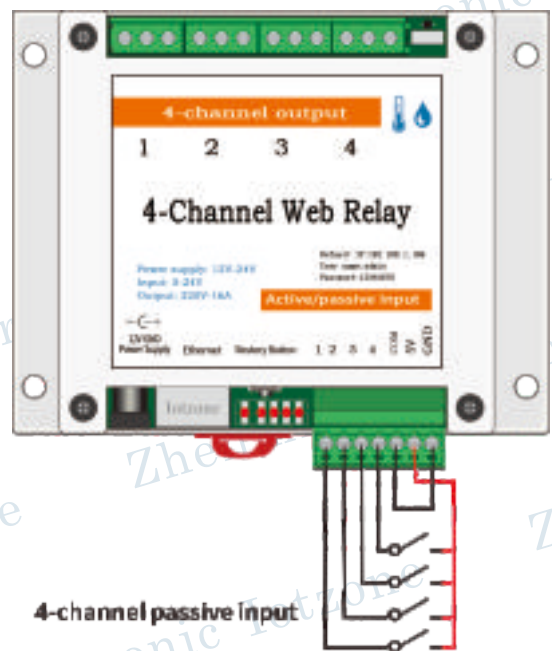
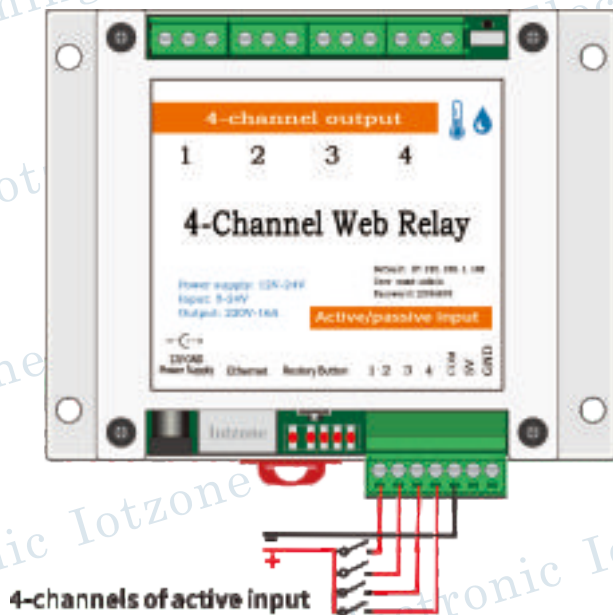
1.The basic hardware connection is as follows:

AC 220V equipment wiring method



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2. Interface Introduction

The entire board contains 3 * 4 wiring terminals above, each containing 4 sets of relay outputs. When the relay is closed, both wiring terminals are disconnected; In the open state of the relay, both wiring terminals are conducting. A relay is similar to a switch.

From left to right, there are external power inputs, network cable interfaces, initialization buttons, and four input terminals below the PCB board.

The standard power supply is 5V/1A, and this product does not support wide voltage input and cannot be connected to 12V.

The initialization button is used to initialize network parameters. Connect the network port to a router or computer for communication.

Four input nodes, with active and passive input connections as shown in the basic hardware connection diagram on the previous page

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Network Configuration

1. Connect to computer (DHCP prohibited)

Just ensure that the computer and controller are on the same network segment and do not used automatically obtain IP, as shown in the right figure.

2. Connect the router

2.1 Non DHCP Access

You need to configure the IP of the controller to be in the same network segment as the router Incoming device IP.

Connect the controller to the network cable and plug it into the LAN port of the router, computer. Connect to the same router and enter in the browser <http://iotzone/>.

3. Controller configuration

The default parameters of the controller are as follows, which you can modify based on your local area network.



[Switch Control](#) | [User Settings](#) | [System Settings](#) | [Sensor](#)

System Settings

Here you can change the network settings, all settings take effect after re-power up.

Item	Settings
IP	192.168.1.166
Netmask	255.255.255.0
Default Gateway	192.168.1.1
Primary DNS Server	114.114.114.114
Secondary DNS Server	8.8.8.8

OK Undo

User	admin
Password	*****
Retype Password	*****
Power-down state of save	<input type="checkbox"/>
Pulse in	<input type="checkbox"/>
DHCP Enable	<input type="checkbox"/>
Restart	<input type="button" value="Save"/> <input type="button" value="Enable"/> <input type="button" value="Enable"/> <input type="button" value="Restart"/>

OK Undo

After modifying the HTTP port and MAC address, power on 2 minutes after powering off. If you have multiple controllers connected to the local area network unable to access in the network, please check for IP conflicts or MAC conflicts.

Users can choose whether the relay needs to be saved after power failure based on their own functions, and can also choose whether the input and output need to be associated (association means that the input changes, and the relay output also changes).

The default communication input is enabled and it is not recommended for customers to modify it themselves, as this feature is hardware related.

If you need to customize the static IP settings, please turn off the DHCP function and modify parameters such as IP, gateway, DNS, and then restart the device. At this time, you can access the controller using the set IP address.

Reboot the device to achieve software restart function, which is consistent with the effect of power outage restart.

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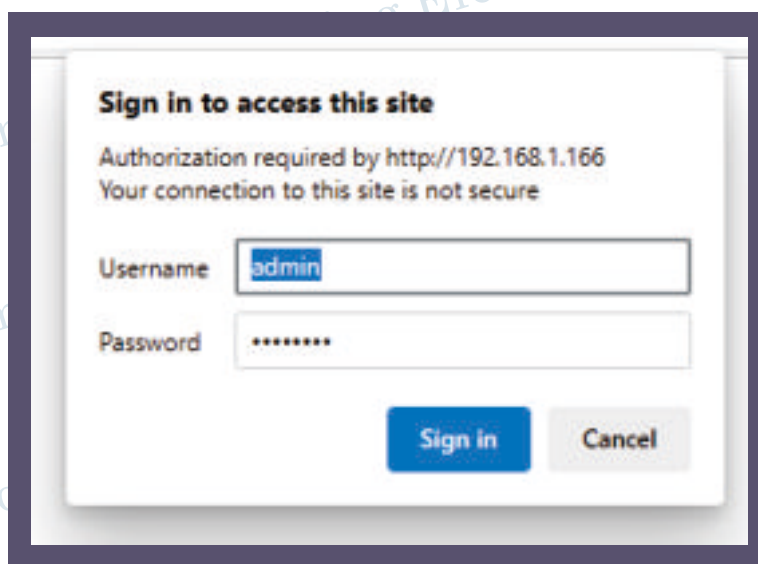
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Operation and usage

1. Reset button usage

(1) Emergency shutdown of all relays: In working mode, pressing the reset button can turn off all relays;

(2) Reset parameters: In the power off state, press and hold the button, power on, wait for 30 seconds, and then release the button.

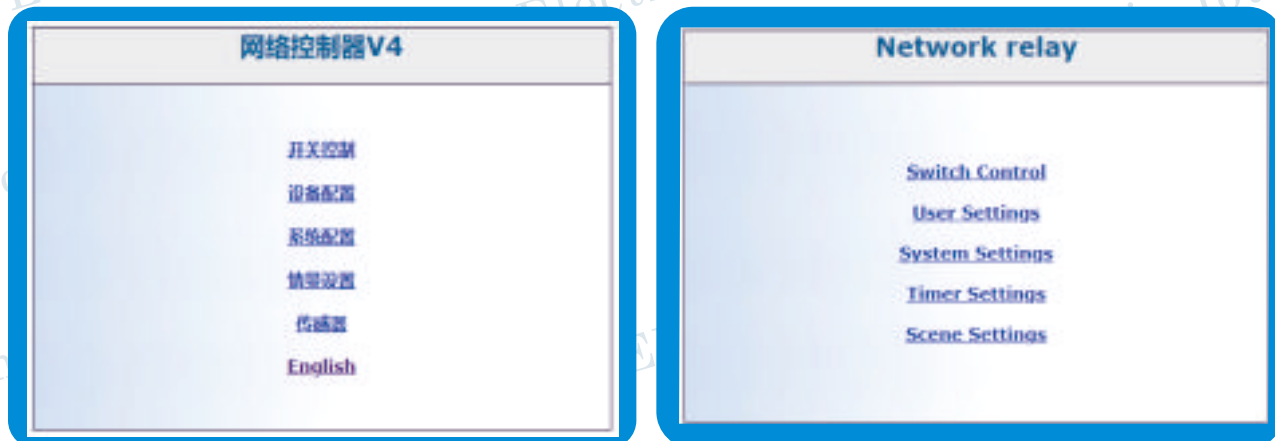


2. LAN access

(1) Enter HTTP://IOTZONE/ in the Google Chrome browser, and the following will appear on the right:

(2) In the username box, enter the ADMIN password and enter 12345678. If you have changed the password, please enter your modified password.

(3) Click Login, the main page of the web page appears, and select the English interface



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3. Device configuration

This page can view the device number and device QR code, and can also set the device touch time, which can be set to 0.1-6000 seconds, and the actual touch time = setting time * 0.1s.

[Switch Control](#) | [User Settings](#) | [System Settings](#) | [Sensor](#)

User Settings

Here you can customize the touch time settings, the default value of 0.1 seconds, up to 6000 seconds.

Item	Settings	Pulse(0.1S)
SN code	1488 55e	
Relay 1	10	
Relay 2	10	
Relay 3	10	
Relay 4	10	



4. LAN access

The relay can be operated on and off through the switch control. The light bulb icon is blue when the relay is off, and yellow when the relay is on. If you want to get the current status, please refresh the webpage. Touch to automatically close the relay after a delay period of time when it is opened. The delay time is described in the device parameter settings.

[Switch Control](#) | [User Settings](#) | [System Settings](#) | [Sensor](#)

Switch Control

Item	Settings
Relay1	Open Close Pulse
Relay2	Open Close Pulse
Relay3	Open Close Pulse
Relay4	Open Close Pulse
All	Open All Close All

5. Sensor

Displays (the environment in which the device is placed) temperature and humidity

[Switch Control](#) | [User Settings](#) | [System Settings](#) | [Sensor](#)

Sensor

Item	Value
Temperature	26.9
Hum(RH%)	27 %

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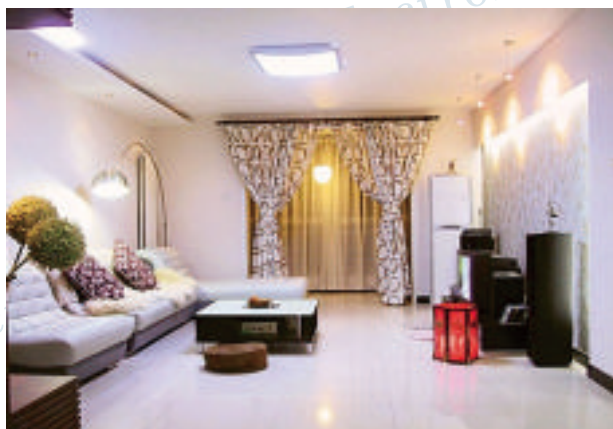
Secondary development

Support the "ZMRN1016S3-V10 Communication Protocol .pdf" of Zhenming Electronics, which can be obtained from our company.

Application occasions

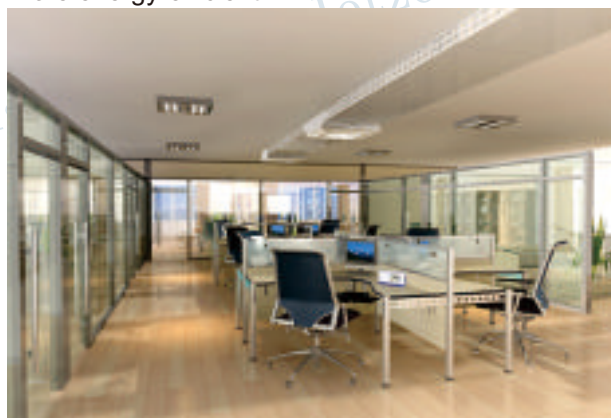
Home Furnishings

Forget to turn off the lights when you go out, you don't have to turn back halfway. Lying in bed in winter, don't worry about the kitchen lights still on. You can turn on your home appliances anytime, anywhere, as you please.



Office

You don't have to worry about turning off the water dispenser after work every day. Come to the office early to make a cup of coffee and start a new day of work. The company's lights, computers, water dispensers, etc. do not have to be in standby mode all the time, making the office smarter and more energy-efficient.



Industry

The machines in the workshop and the lights on the assembly line can be controlled reasonably by sitting in front of a computer, making it more energy-efficient.



Agriculture

The vegetables and fruits in the greenhouse need to be watered again. You don't need to run into the hot greenhouse, you can irrigate them at home.



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Precautions for use

High voltage and strong current, please do not touch! Do not short-circuit! Please disconnect the power supply when wiring the controller! Please have a professional electrician perform the wiring operation!

After sales support

Three year warranty

Marketing Department:

TEL:(+86) 15061962326

Email:djbgreen@163.com

Technical Department:

TEL: (+86) 18651957324

Email: 286115417@qq.com