

Qingjun Test Software Manual

V2020.8.22.0

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Chapter One Overview

Software Description

Welcome to Qingjun testing software!

The purpose of this software is to facilitate customers to quickly become familiar with the company's products and to test the products.

Applicable to all products of our company with 232 communication, 485 communication and network ports.

Software Environment

This software currently only supports Windows7, Windows8 and Windows10.

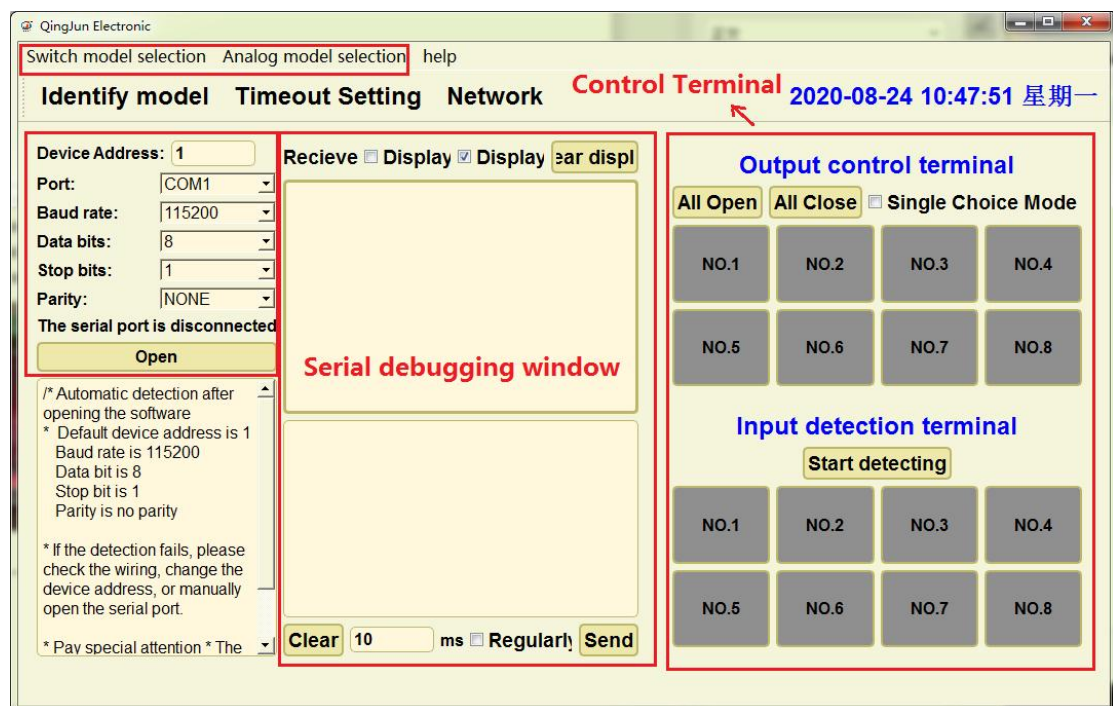
WindowsXP and Linux are not currently supported.

Software Installation

This software is a free installation version. After the software compression package is decompressed, double-click "HuaQingJun.exe" to run it.

Software Introduction

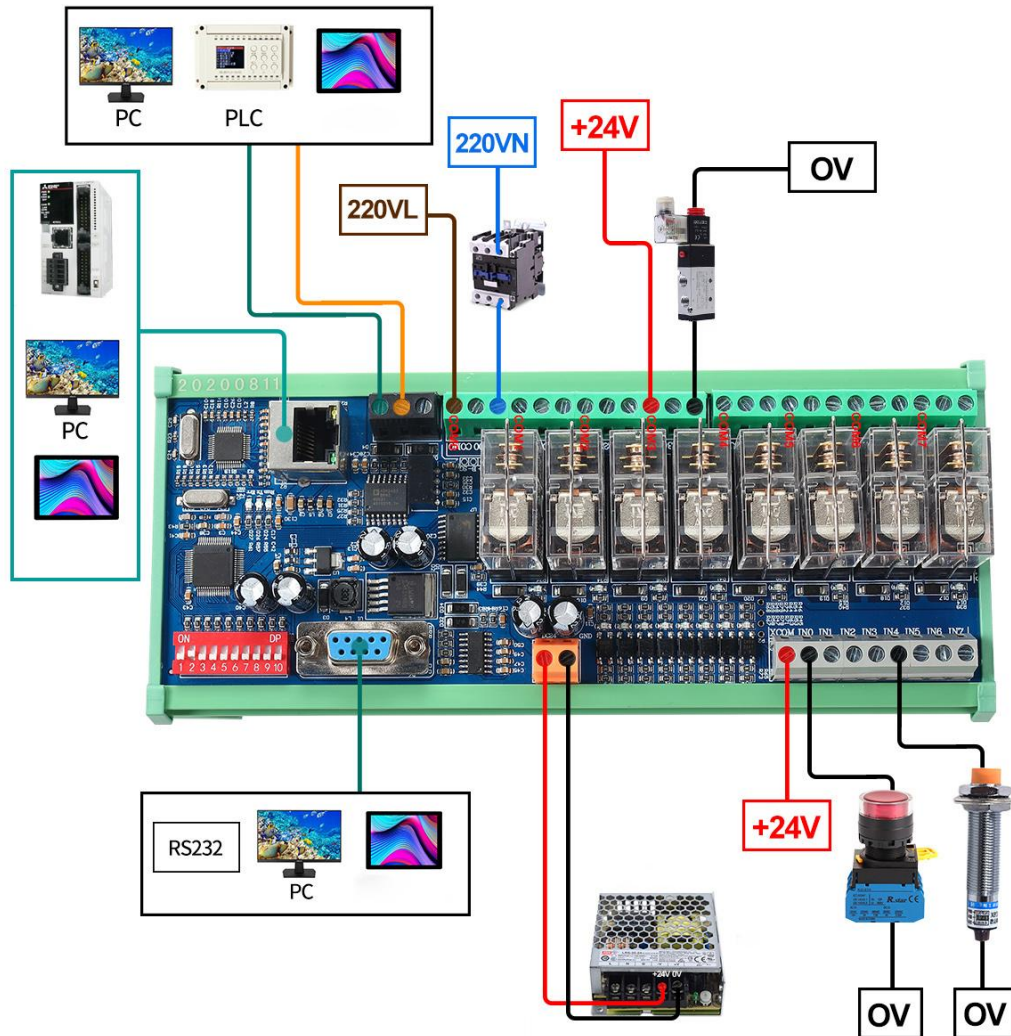
The interface is briefly introduced, as shown in the figure, including serial port and network debugging, and the serial port can be directly clicked and controlled, which is very convenient.



Chapter Two Software Operation

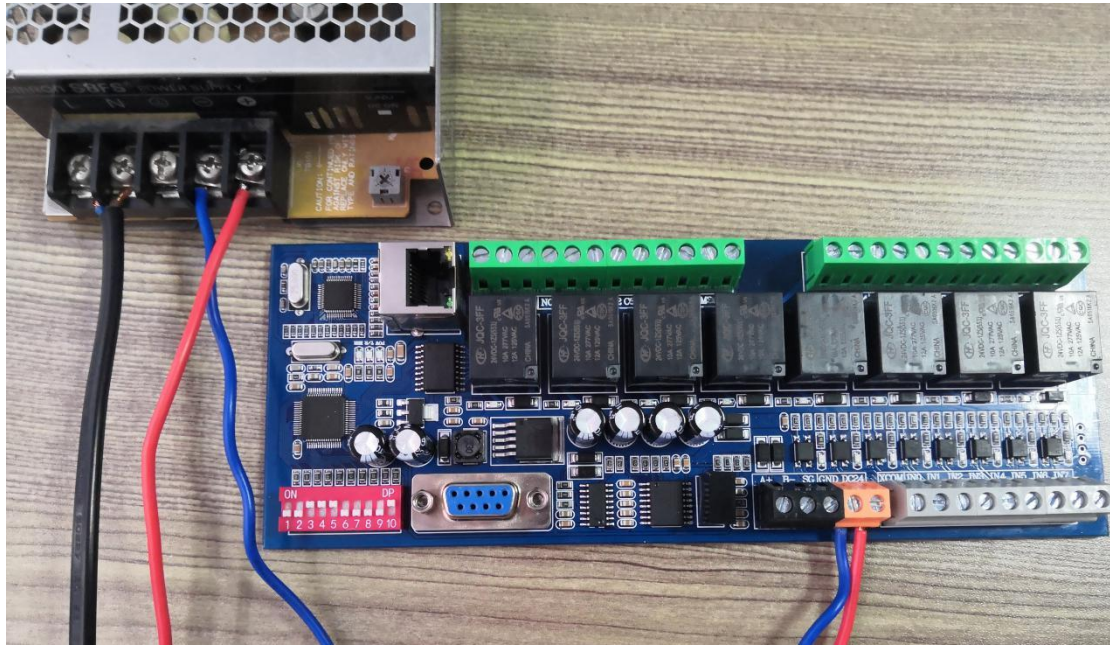
Main Points Before Operating

Make a simple understanding of the product before software operation, take the switch quantity 8 in 8 out as an example, as shown in the figure:



Power wiring

Switching power supply's \oplus to connect module's DC24, \ominus connect GND.
Special attention: Switching power supply should select the appropriate voltage of the module. Do not power on after wiring, wait for all wires to be connected before power on.



232 or 485 Communication Test

Step 1

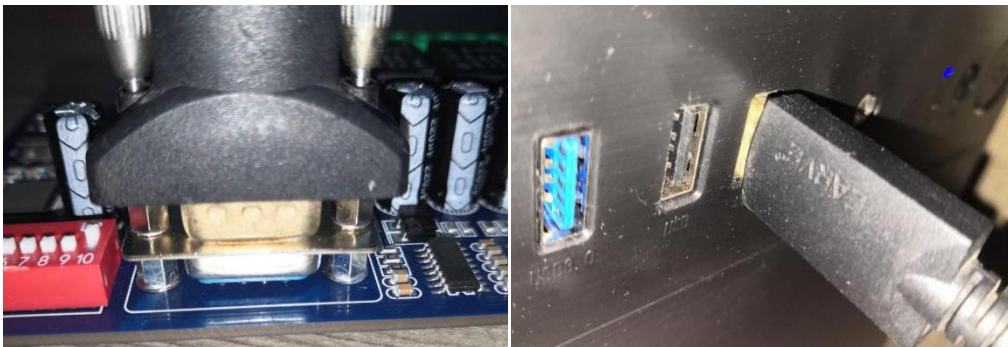
First, prepare an RS232 to USB cable and an RS485 to USB cable, as shown in the figure:



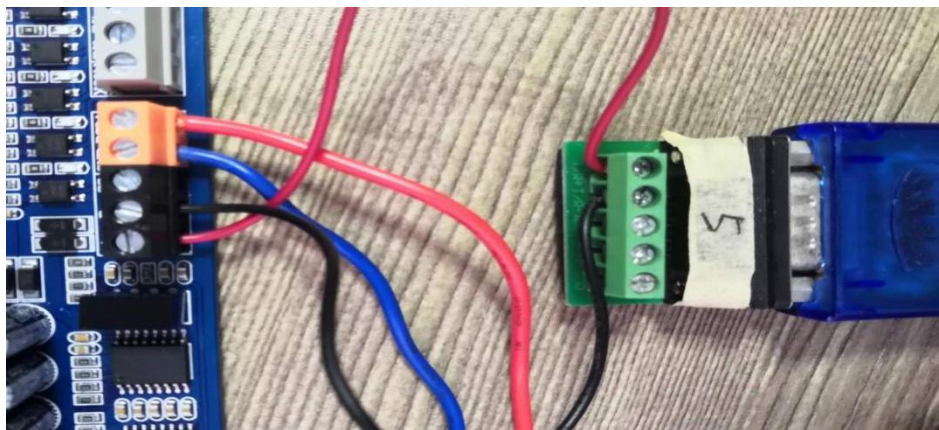


Step 2

Then connect the RS232 wiring, one end to the module, one end to the computer, as shown in the figure:

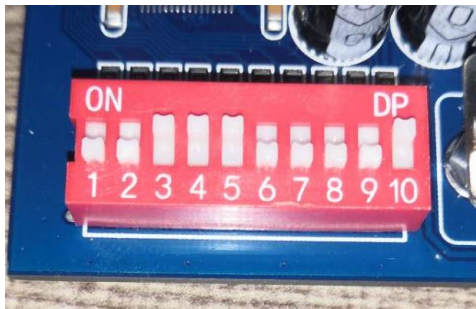


If it is RS485, the wiring is as shown in the figure,



Step 3

Then check the dial switch and turn it to the correct position, as shown in the figure:




meaning is:

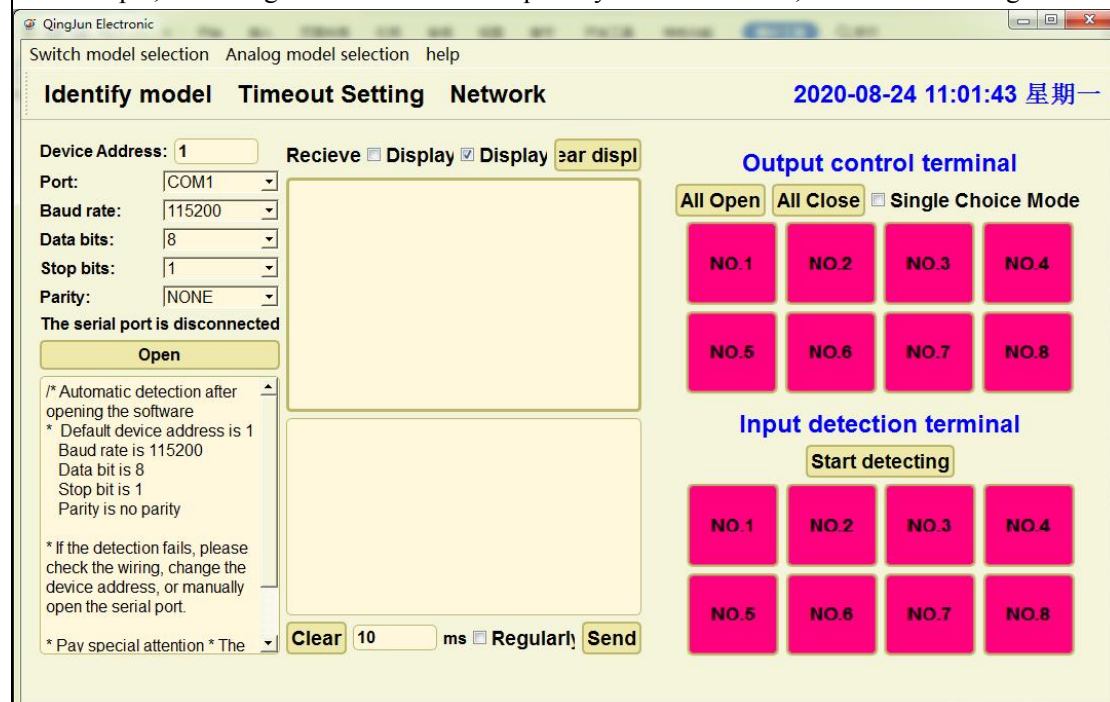
Parity check none

Baud rate 115200

device address is 01

Step 4

Then power on the power supply, then double-click to open , after opening the software, the software automatically recognizes the product, For example, it is recognized that the switch quantity is 8 in and 8 out, as shown in the figure:

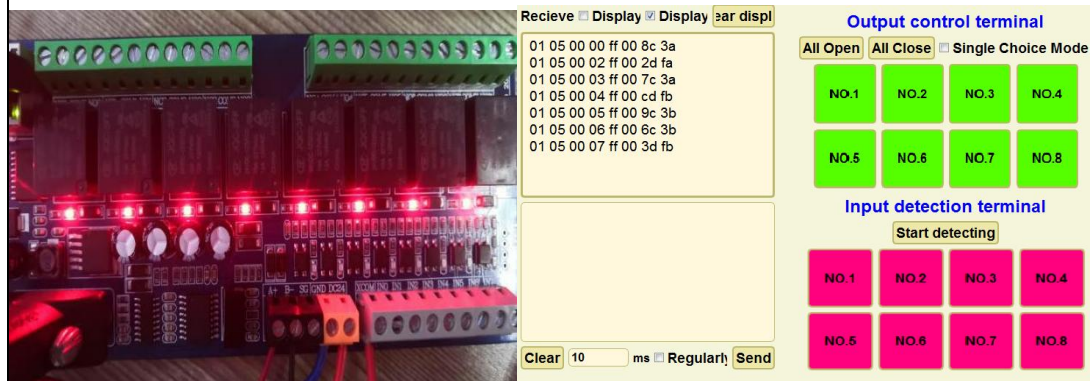


Note: The old-generation products may not be recognized. Don't panic at this time. Manually select the corresponding port and baud rate, click "Open", and then select the corresponding model.

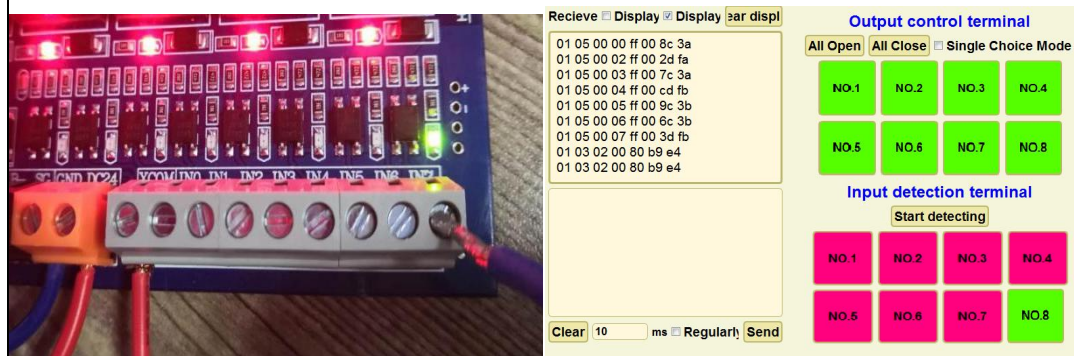
Step 5

Click the button on the output control terminal to control the module's output on and off. Red means off state, and green means on state. At the same time, the receiving end will display the return code. For the specific meaning of the return code, please refer to the module manual.

As shown in the figure, it is all connected.



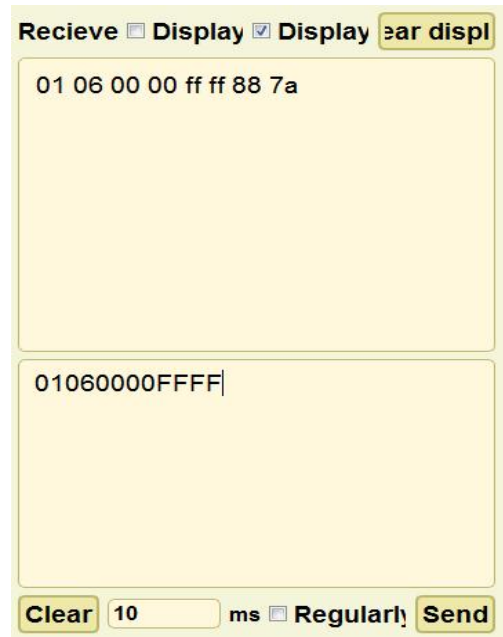
Click "Start Detection" on the input detection terminal, and the 03 code will be sent to the module at a certain time interval, indicating that you want to obtain the current input status, and then judge whether the channel is on or off according to the return code. This time interval varies according to the baud rate, the greater the baud rate, the smaller the time interval. as the picture shows:



Step 6

If you are familiar with our company's products, you can try to enter various commands in the input box, and the receiving end will also receive the return code, such as input 01060000FFFF.

Note: You don't need to input CRC check at the end. as the picture shows:

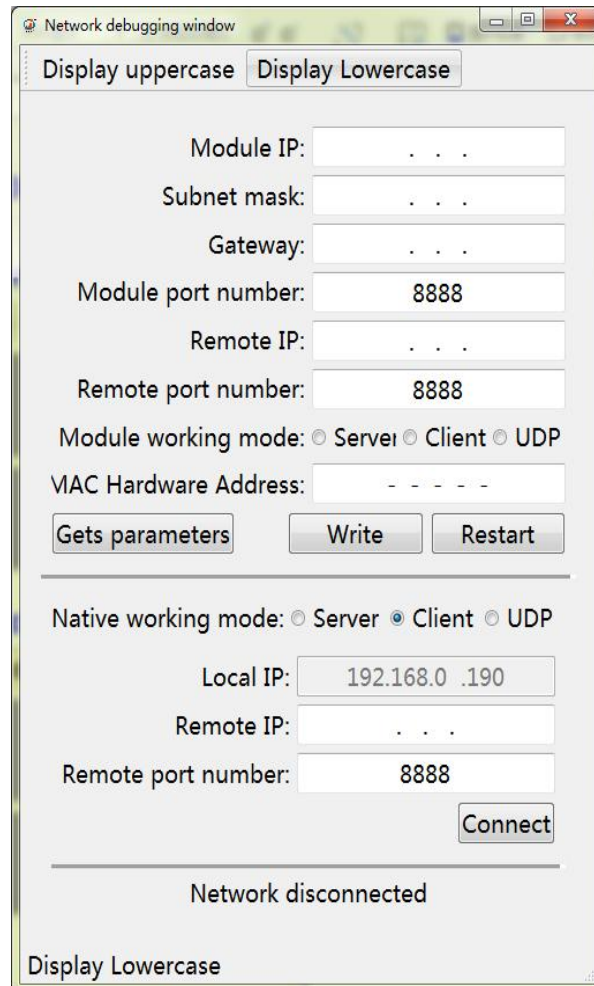


The screenshot shows a serial communication interface with a yellow background. At the top, there are three checkboxes: 'Recieve' (unchecked), 'Display' (checked), and 'Display' (checked), followed by a button labeled 'ear displ'. Below this, there are two text boxes. The top text box contains the received data '01 06 00 00 ff ff 88 7a'. The bottom text box contains the sent data '01060000FFFF|'. At the bottom of the interface, there is a 'Clear' button, a text input field with '10', a 'ms' label, a 'Regularly' checkbox, and a 'Send' button.

Key point: This time just take the switch quantity 8 input and 8 output as an example, other RS232 and RS485 products of our company operate in the same way.

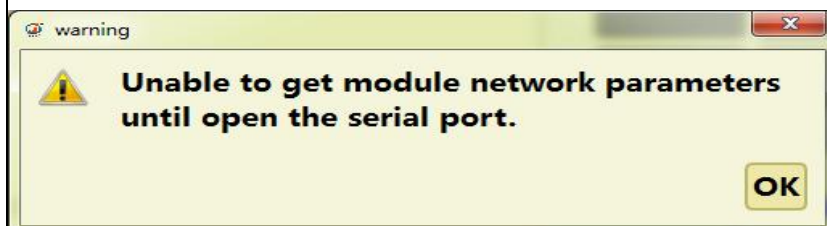
Network Communication Test

Use the network cable to connect the module and the computer, and then click **Network** (Network debugging), At this time, the network debugging window pops up, as shown in the figure:



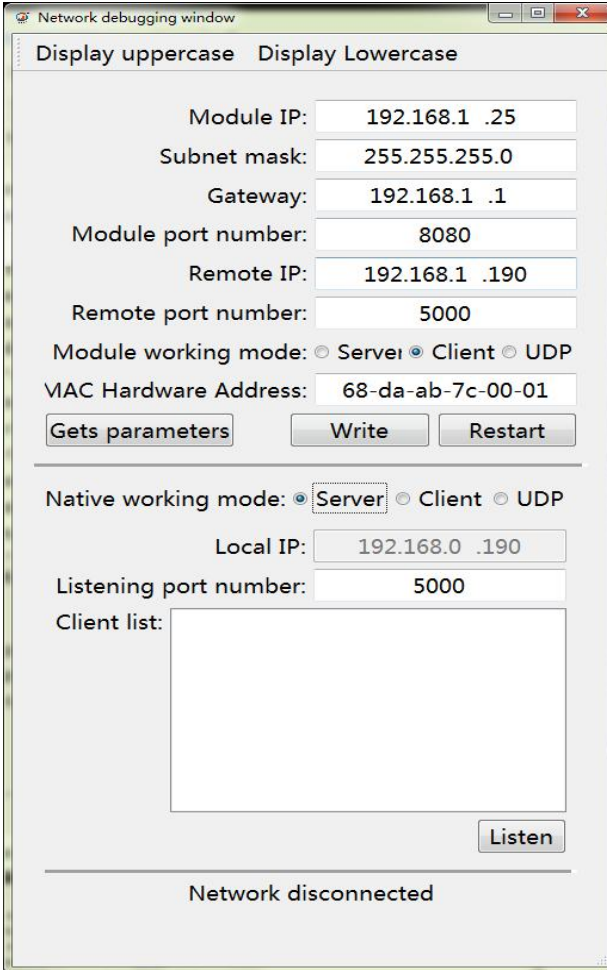
The screenshot shows a window titled "Network debugging window". It has two tabs: "Display uppercase" and "Display Lowercase", with "Display Lowercase" selected. The window contains several input fields and buttons. The fields are: "Module IP:" (three dots), "Subnet mask:" (three dots), "Gateway:" (three dots), "Module port number:" (8888), "Remote IP:" (three dots), "Remote port number:" (8888), "Module working mode:" (radio buttons for Server, Client, and UDP, with Client selected), and "MAC Hardware Address:" (five dashes). Below these fields are three buttons: "Gets parameters", "Write", and "Restart". A horizontal line separates this section from the "Native working mode:" section, which also has radio buttons for Server, Client, and UDP (with Client selected). Below this are fields for "Local IP:" (192.168.0.190), "Remote IP:" (three dots), and "Remote port number:" (8888), followed by a "Connect" button. At the bottom, it says "Network disconnected" and "Display Lowercase" in the status bar.

Click "Get module network parameters", if it is not connected to RS232 or RS485, it will display



, at this time, you need to know the parameters of the module in advance, and enter the network parameters yourself to connect to the module.

If it is connected to RS232 or RS485, it will display parameters like this.



Network debugging window

Display uppercase Display Lowercase

Module IP: 192.168.1 .25

Subnet mask: 255.255.255.0

Gateway: 192.168.1 .1

Module port number: 8080

Remote IP: 192.168.1 .190

Remote port number: 5000

Module working mode: ☐ Server ☒ Client ☐ UDP

MAC Hardware Address: 68-da-ab-7c-00-01

Native working mode: ☒ Server ☐ Client ☐ UDP

Local IP: 192.168.0 .190

Listening port number: 5000

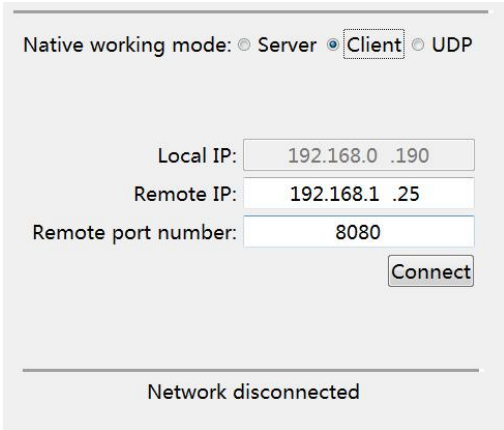
Client list:

Network disconnected

Indicates that the module network parameters are successfully obtained.

Then the machine automatically corresponds to the mode. If it is a display server, select "Monitor" to connect to the module. Before that, you need to modify the computer's IP address to the remote IP of the module, otherwise the connection will fail. As shown in the figure, the local IP is not modified!

If the client is displayed, click "Connect",
as the picture shows:



Native working mode: ☐ Server ☒ Client ☐ UDP

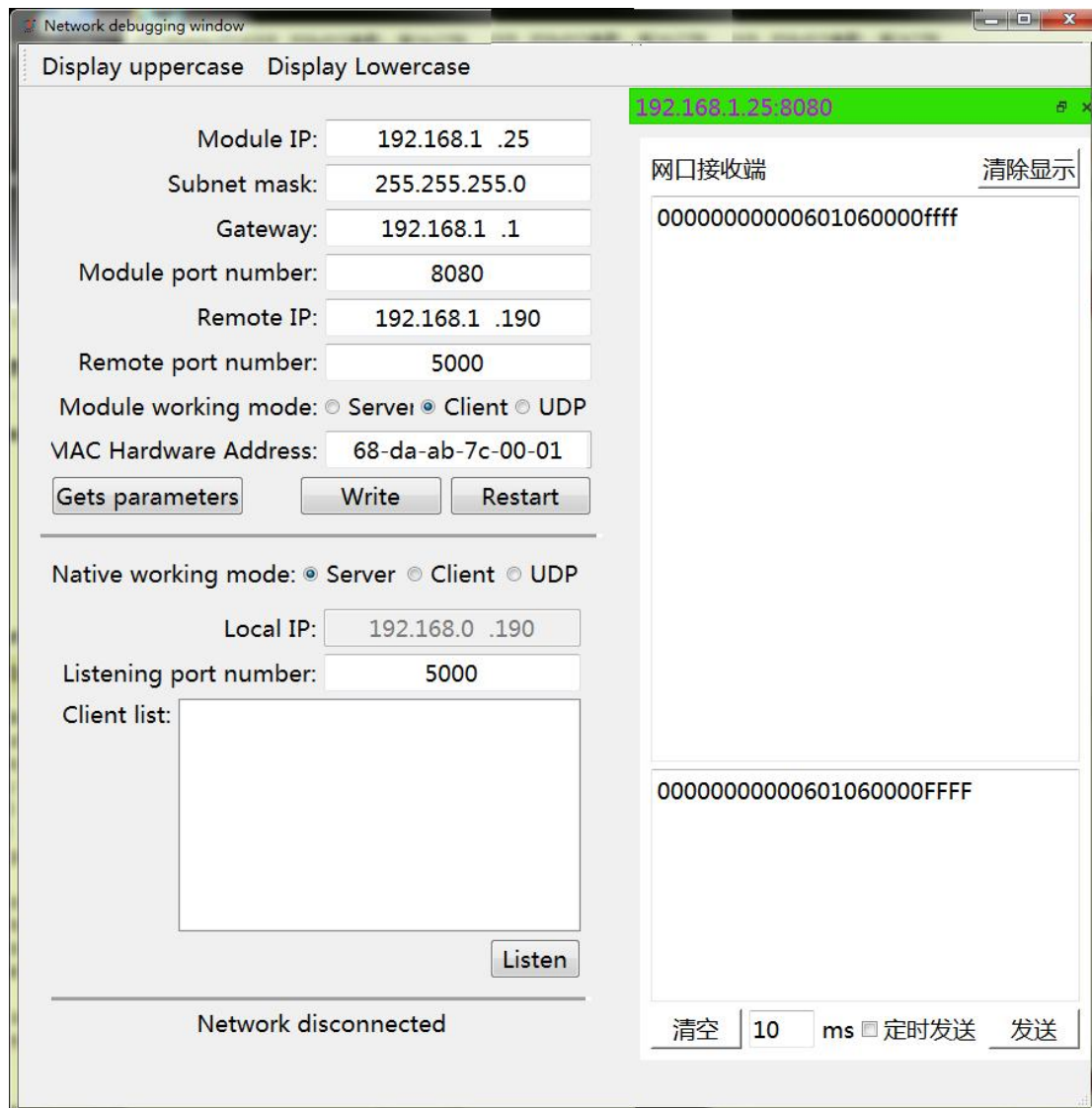
Local IP: 192.168.0 .190

Remote IP: 192.168.1 .25

Remote port number: 8080

Network disconnected

The connection is successful as shown in the figure:



At this point, the software test is completed.