MODBUS-TCP Instructions

Для работы надо установить H0-00=2 , при этом перестанет работать связь по RS485.

一、 MODBUS External Address Table

MODBUS address	Function Code	SPI mapping address	Function
40001	03H, 06H, 10H	None	Update IP address
40002...40005	03H, 06H, 10H	None	IP address
40006...40016	03H, 06H, 10H	None	Reserved
40017...40032	03H, 06H, 10H	0x0000...0X000F	A0 group parameters, 16
40033...40056	03H, 06H, 10H	0x0100...0x0117	Group A1 parameters, 24
40057...40080	03H, 06H, 10H	0x0200...0x0217	Group B0 parameters, 24
40081...40104	03H, 06H, 10H	0x0300...0x0317	Group B1 parameters, 24
40105...40128	03H, 06H, 10H	0x0400...0x0417	Group B2 parameters, 24
40129...40152	03H, 06H, 10H	0x0500...0x0517	C0 group parameters, 24
40152...40176	03H, 06H, 10H	0x0600...0x0617	C1 group parameters, 24
40177...40208	03H, 06H, 10H	0x0700...0x071F	C2 group parameters, 32
40209...40224	03H, 06H, 10H	0x0800...0x080F	C3 group parameters, 16
40225...40264	03H, 06H, 10H	0x0900...0x0927	C4 group parameters, 40
40265...40296	03H, 06H, 10H	0x0A00...0x0A1F	D0 group parameters, 32
40297...40320	03H, 06H, 10H	0x0B00...0x0B17	D1 group parameters, 24
40321...40352	03H, 06H, 10H	0x0C00...0x0C1F	D2 group parameters, 32
40353...40384	03H, 06H, 10H	0x0D00...0x0D1F	D3 groups of parameters, 32
40385...40408	03H, 06H, 10H	0x0E00...0x0E17	D4 groups of parameters, 24
40409...40440	03H, 06H, 10H	0x0F00...0x0F1F	D5 groups of parameters, 32
40441...40464	03H, 06H, 10H	0x1000...0x1017	D6 groups of parameters, 24
40465...40480	03H, 06H, 10H	0x1100...0x110F	E0 group parameters, 16
40481...40496	03H, 06H, 10H	0x1200...0x120F	E1 group parameters, 16
40497...40528	03H, 06H, 10H	0x1300...0x131F	F0 group parameters, 32
40529...40552	03H, 06H, 10H	0x1400...0x1417	F1 group parameters, 24
40553...40592	03H, 06H, 10H	0x1500...0x1527	Group F2 parameters, 40
40593...40608	03H, 06H, 10H	0x1600...0x160F	F3 group parameters, 16
40609...40672	03H, 06H, 10H	0x1700...0x173F	F4 groups of parameters, 64
40673...40712	03H, 06H, 10H	0x1800...0x1827	F5 groups of parameters, 40
40713...40776	03H, 06H, 10H	0x1900...0x193F	F6 groups of parameters, 64
40777...40792	03H, 06H, 10H	0x1A00...0x1A0F	H0 group parameters, 16
40793...40824	03H, 06H, 10H	0x1B00...0x1B1F	H1 group parameters, 32
40825...40832	03H, 06H, 10H	0x1C00...0x1C07	H2 group parameters, 8
40833...40840	03H, 06H, 10H	0x1D00...0x1D07	L0 group parameters, 8
40841...40848	03H, 06H, 10H	0x1E00...0x1E07	L1 group parameters, 8

40849...40920	03H, 06H, 10H	0x1F00...0x1F47	U0 group parameters, 72
40921...40952	03H, 06H, 10H	0x2000...0x201F	U1 group parameters, 32
40953...40968	03H, 06H, 10H	0x2100...0x210F	U2 group parameters, 16
40969...41000	03H, 06H, 10H	0x2200...0x221F	N0 groups of parameters, 32
41001...41008	03H, 06H, 10H	0x2300...0x2307	N1 group parameters, 8
41009...41032	03H, 06H, 10H	0x6200...0x6214	Control parameters, 24 (21 available)
41033...41072	03H, 06H, 10H	0x6300...0x6327	Status parameters, 40

二、 Testing tools

PC, network cable, Modbus Poll software

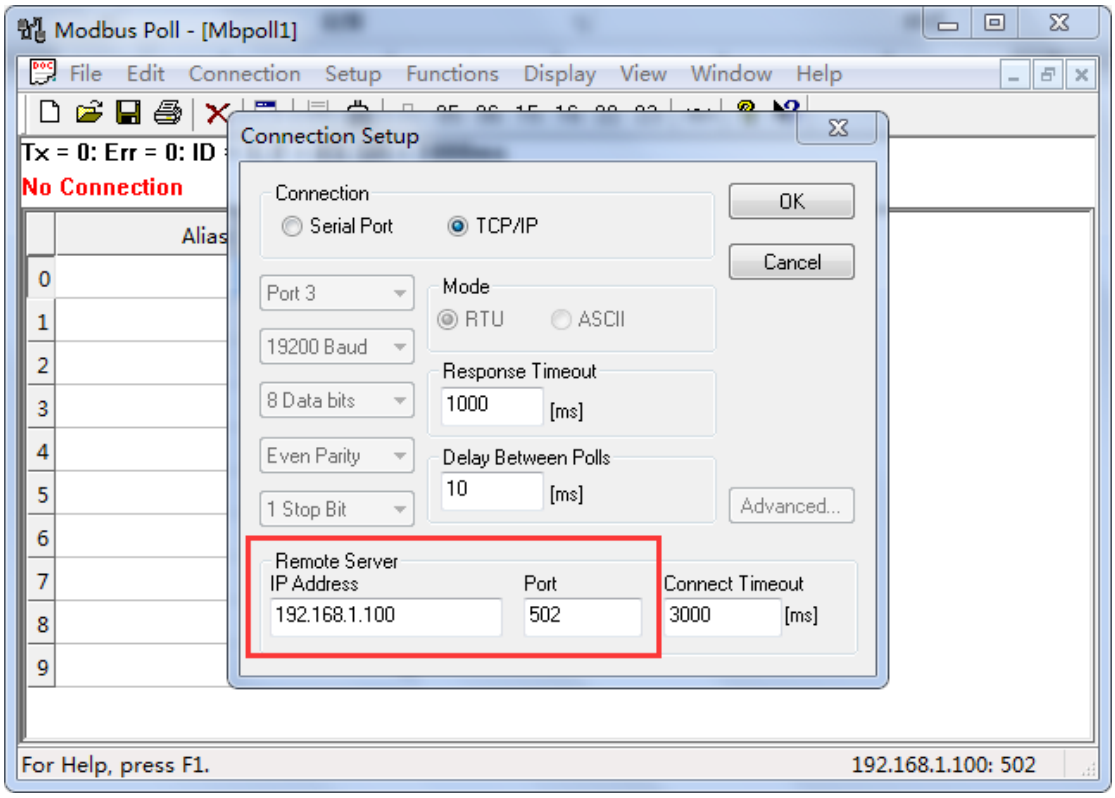
三、 Board restores factory parameters

1. The factory default IP address of the board is: 192.168.1.100
2. If you need to restore the factory IP, the operation is as follows: insert the short connector in the position of 1, re-power the board, wait for about 1~2 seconds, the LE4 indicator on the board will be on. The LE4 indicator on the board will be on, which means that the factory parameters have been restored. Then power off, reinsert the stub into position 2 and power up the board again to work according to the default IP.

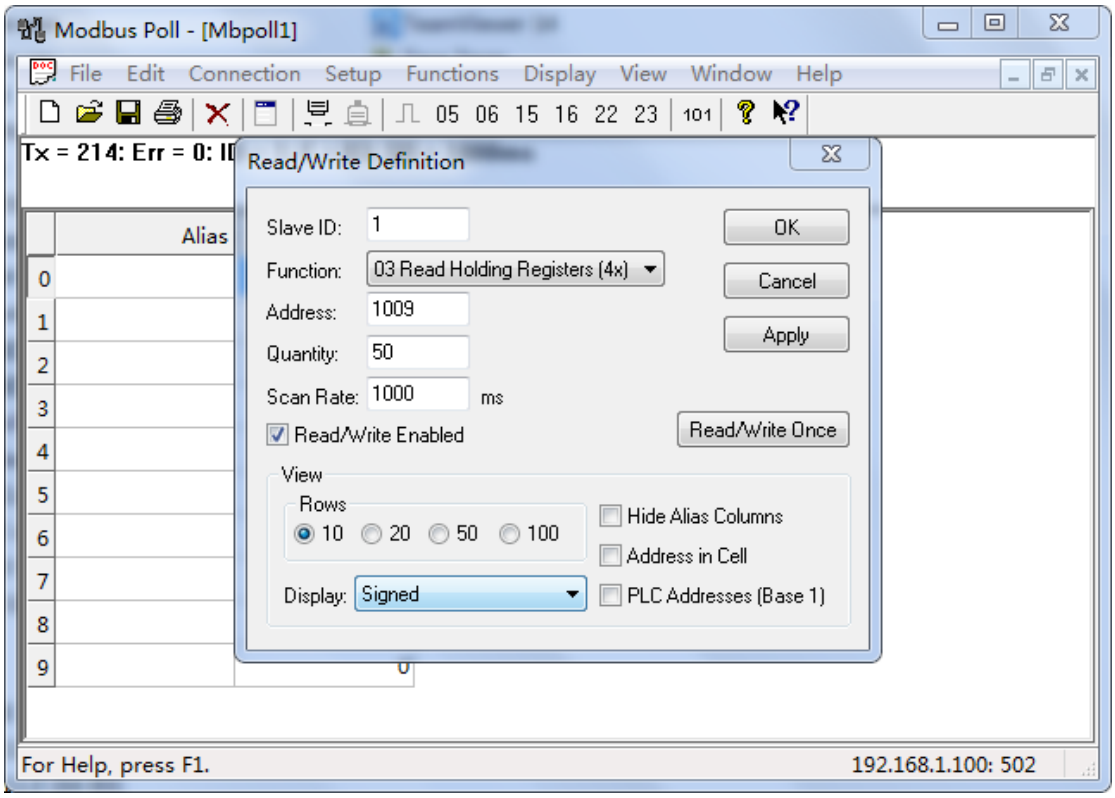


四、 Test communication with Modbus Poll software

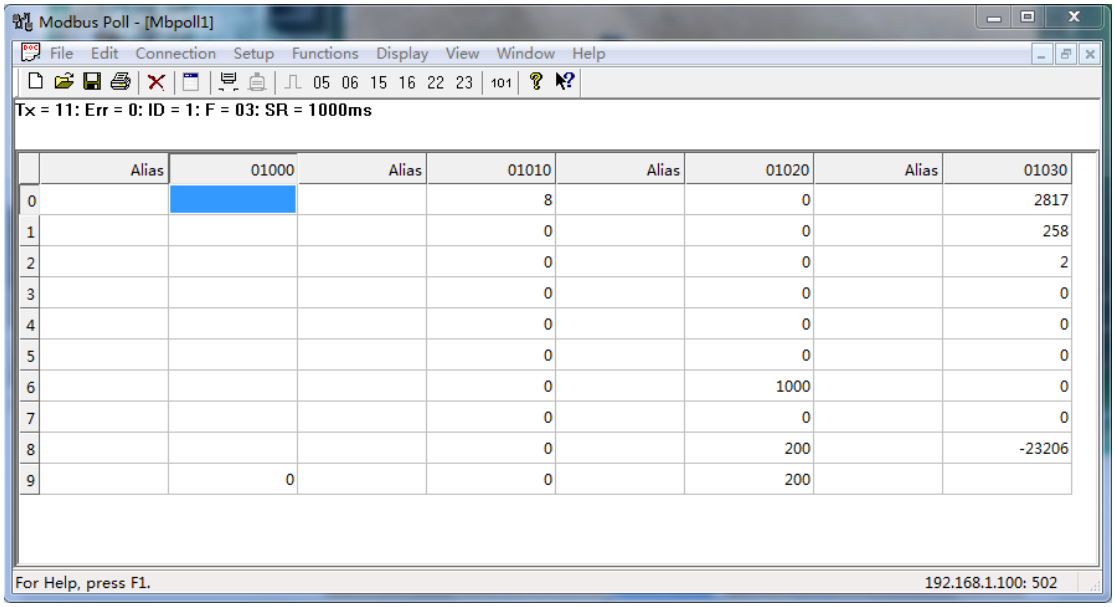
1. Set the IP of the computer to the same network segment as the board.
2. Open the Modbus Poll software, click on the menu bar "Connection" ---- "Connect...", set the connection properties, fill in the remote IP address of the board's current The IP address of the remote end should be filled in with the current IP address of the board, the port number should be 502 and then click OK to start communication.



3. Click on the menu bar "Setup" ---- "Read/Write Definition..." to set the read/write properties. The Slave ID can be ignored; Function selects 03 function code, corresponding to area 4xxxx; Address and Quantity in the figure below indicate that 50 data are to be read from address 1009. Note that Quantity cannot exceed 62, and the user should not exceed 62 data in a single packet when reading or writing to us.

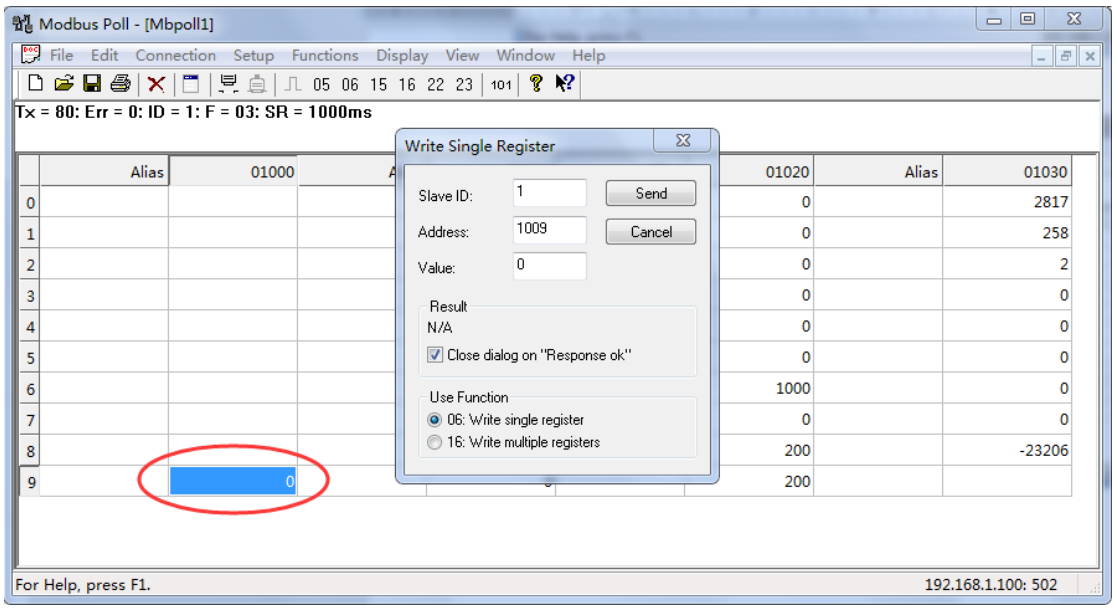


4. You can see some data coming up from the reading.

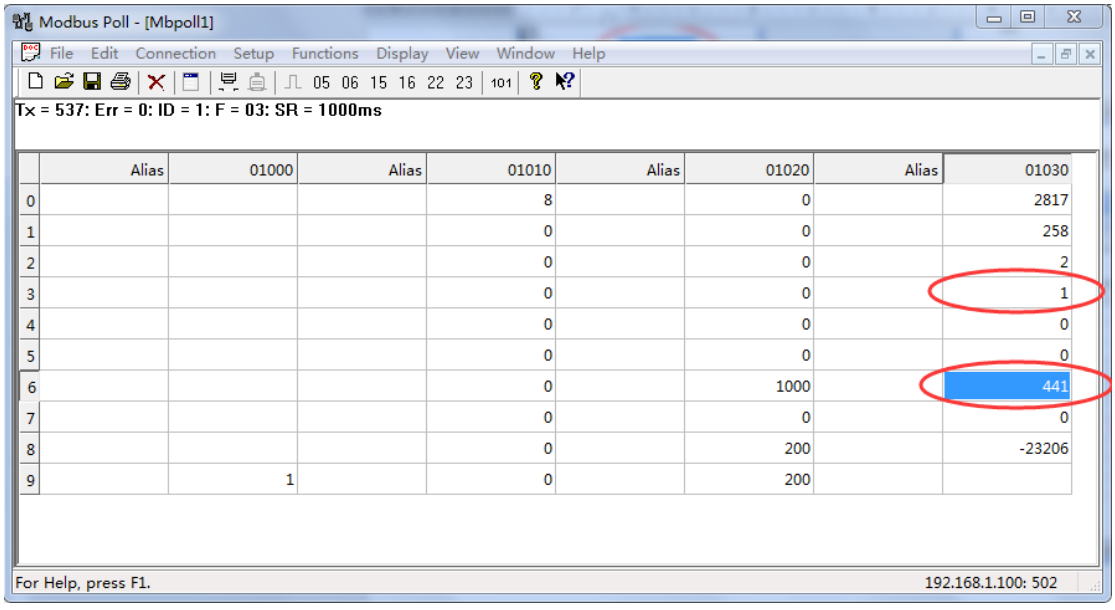


5. Double click on the location 1009 in the software to bring up the dialog box for writing data. According to the address table, 1009 indicates the control word of the internal 6200. In the dialog box, change Value to 1 and select either 06 or 16 for the function

code, then click send.



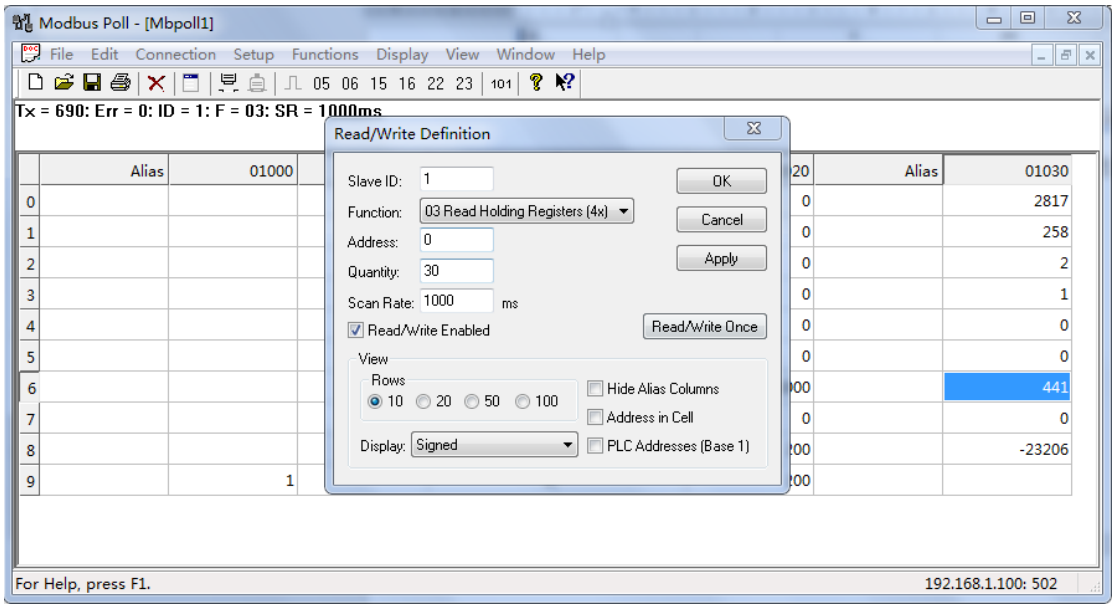
6. At this point the inverter base board can be seen to start running, while address 1033 corresponds to a start status feedback of 1 and address 1036 feeds an output voltage of 441.



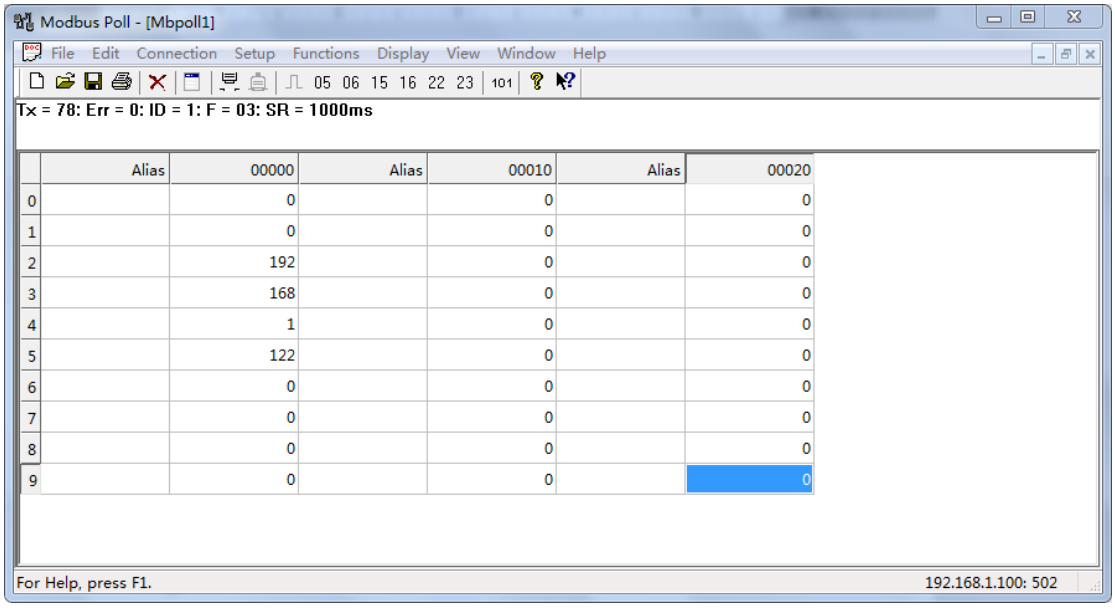
7. Similarly, set 1009 to 0 to stop the inverter. Refer to this for other communication commands.

五、 Modify the board's IP address online

1. Set the read/write command to read from 0.

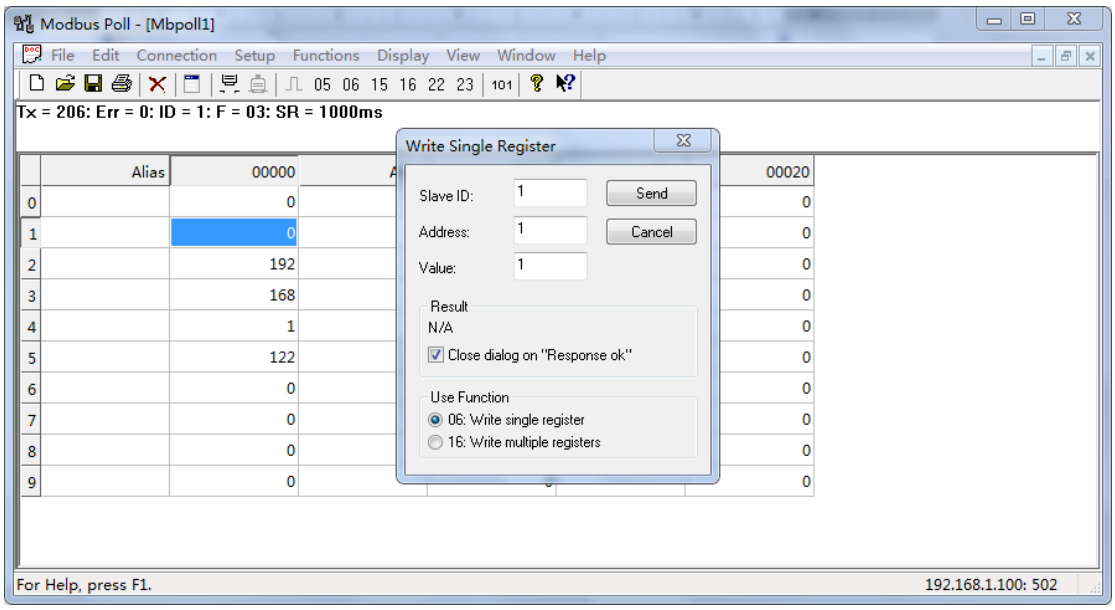


2. In turn, the data of addresses 2 to 5 will be modified to 192, 168, 1, 122, at this time the IP address 192.168.1.122 has been temporarily stored on the board, but not effective.



3. Change the value of address 1 to 1. At this point you can see that the board appears to have been reset and that the board is

now working according to the new IP address.



4. After modifying the IP, the Modbus Poll connection has been disconnected and you need to restart the Modbus Poll software and connect according to the new 192.168.1.122.

六、 **Indicator light**

LC2: indicates MODBUS-TCP protocol.

LC4 during normal operation: 3 flashes on power up, LC4 on when MODBUS-TCP connection is established, LC4 off when disconnected.

LC4 when restoring the factory: 1~2 seconds after power on, LC4 lights up, indicating that the restoration is complete.