

## Coolmay DCS for NET online simulation function introduction

Coolmay DCS is based on the Windows platform and is used to write HMI programs and generate a PC monitoring system. The software online simulation function can completely replace the HMI and communicate directly with the PLC, which can realize all functions of the HMI and PLC communication.

### **Software features:**

1. Data collection
2. Switch control
3. Real-time / historical trend graph display
4. Real-time / historical alarm display
5. Recipe display
6. Historical data display, storage
7. Historical data / alarm export
8. Picture and animation display
9. User rights management

### **Features advantages:**

1. Programming is easy to learn;
2. The address setting is convenient, no need to add cumbersome device variables;
3. The size of the online simulation window can be set according to the resolution of the computer;
4. The online simulation window supports voice broadcast;
5. The program supports multi-language display;
6. Support multiple communication protocols;
7. If you purchase a Coolmay touch screen, you do not need to rewrite the PC program;
8. Used in conjunction with the network module to achieve remote monitoring and control;
9. Powerful, cost-effective value;
10. It can replace the PC software such as Kingview etc;

Support for small systems within 2 sites, consistent with touch screen software. Filled the gap in the domestic group too software small system.

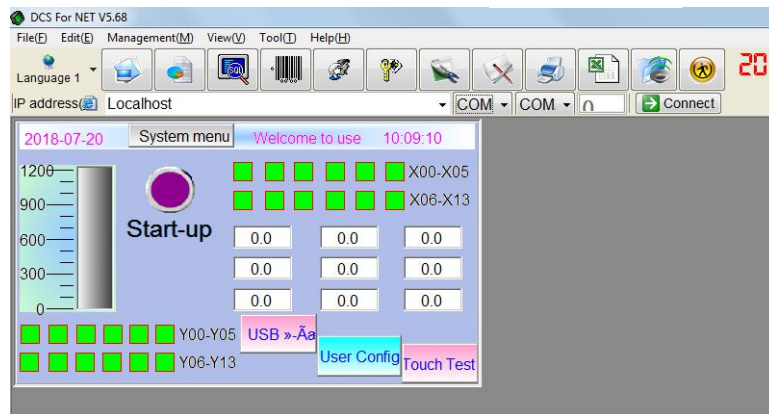
11. An authorization code is only for one computer to log in to the online simulation function of Coolmay configuration software. After the authorization code is registered, it will automatically identify the hardware information of the computer, such as network card, CPU, MAC address, etc.

12. When the online simulation function of Coolmay configuration software does not apply for authorization code, only when the test is used, the connection will be disconnected automatically every 30 minutes, and the connection can be clicked again after disconnection; if long-term connection is required, please contact Shenzhen Coolmay Technology Ltd. applies for an authorization code.

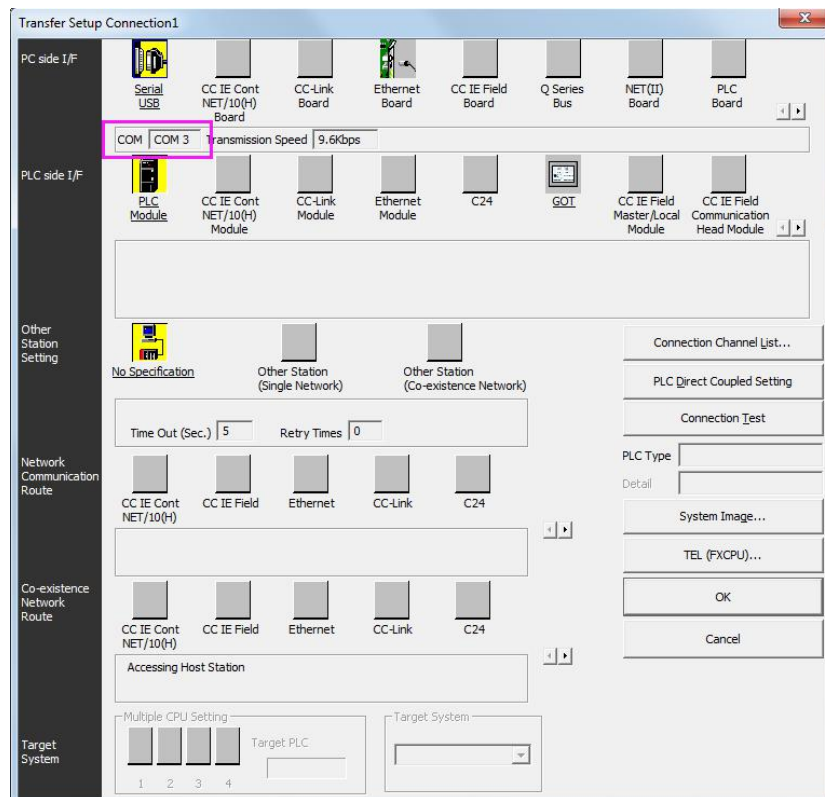
One authorization code charge: usd84.

## Setup steps:

1. Compile the prepared HMI program, select the online simulation (F10) option in software debugging, set the IP address to the default Localhost, and select the COM port corresponding to the PLC download line on the communication port of Link1, as shown in the following figure to be COM3;



Connect the computer to the PLC using the PLC download line. The COM port corresponding to the PLC download line is COM3:



2. After setting, click Connect, you can use this program to monitor and control the PLC program.

**The LAN and WAN monitor the PLC setting steps, by connecting the authorization code computer:**

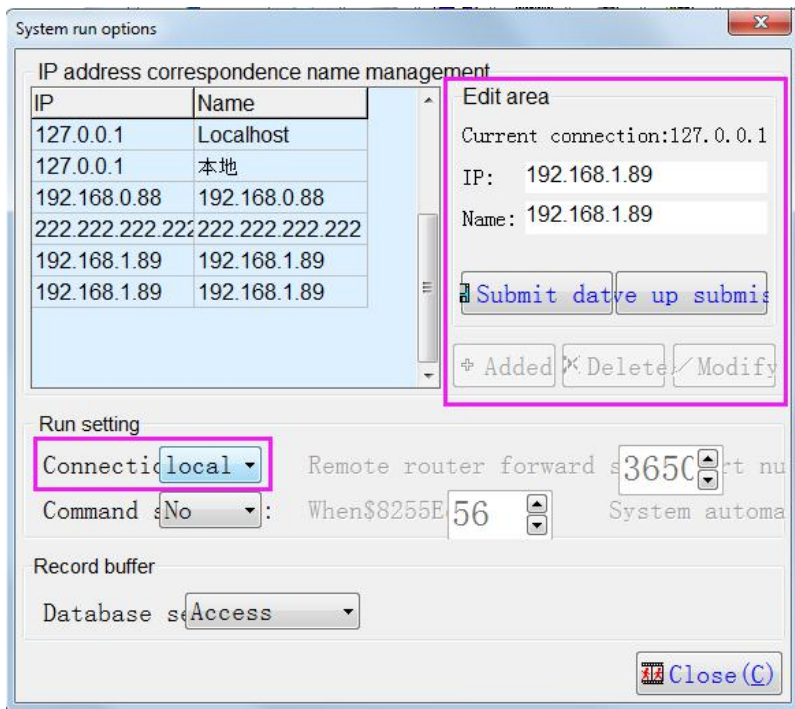
1. **Monitoring within the LAN:** Use environment: If the computer with the authorization code is registered and the computer to be monitored is in the same LAN, you can log in through the connection.

The IP of the authorization code computer indirectly controls the PLC. Set as follows:

A. Select the online simulation (F10) option in the software debugging, click “Add” in the editing area, input the IP address corresponding to the computer with the authorization code set.

Click Submit Data for 192.168.1.89 as shown in the screenshot below;

B. The connection mode is set to local;



C. Set the IP address as the default Localhost Link1 communication port is selected to correspond to the PLC download line of the authorization code computer.

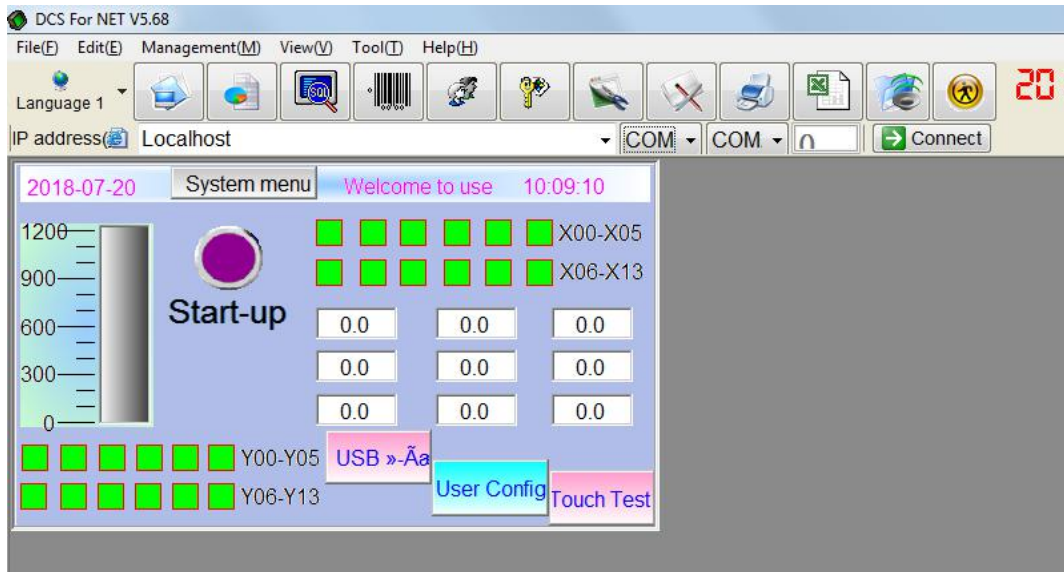
COM port, set to COM3 as shown below;



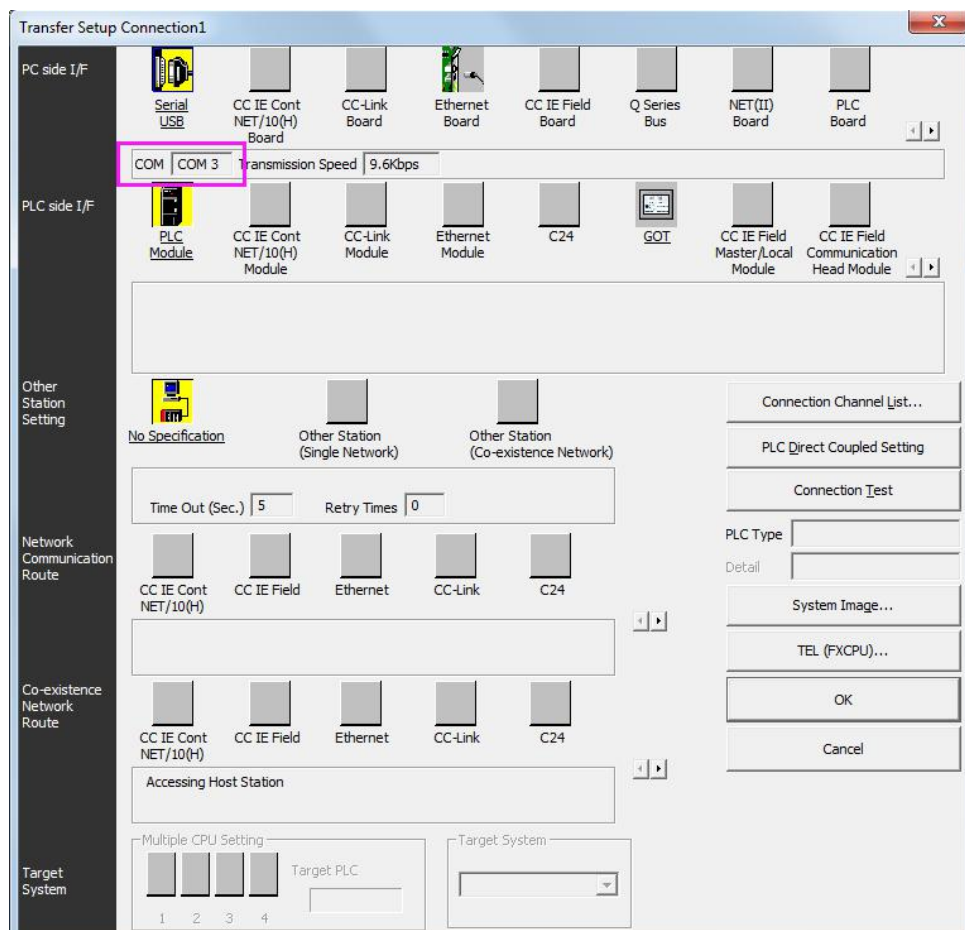
The IP address is set to the default Localhost.

This channel is the Link1 communication port.

This channel is the Link2 communication port.



The COM port corresponding to the PLC download line of the authorization code computer is set to COM3:



D. Click on the connection after setting to monitor and control the PLC.

2、WAN (remote) monitoring: use environment: If the computer with the authorization code is registered in Beijing, the control room in Shenzhen needs to simulate online through the touch screen.

Function monitoring PLC. That is, the authorization code computer and the computer to be monitored are on different networks, then the virtual port of the IP address of the computer that is registered with the authorization code is required.

Send, and then monitor the public network IP of the computer that is registered with the authorization code, and indirectly realize the control of the PLC by other computers through the authorization code. Set as follows:

A. Check the IP address of the computer that is logged in to the authorization code. The IP address is 192.168.1.89, and then enter the router to set the virtual port forwarding.

The router has a virtual port forwarding function, in which the open port is set to “wan\_pppoe1”, and the service name can be defined by itself. The external ports are set to 50000 (you can also set other unoccupied port numbers), the internal ports/interface are set to 36502 (must be set to 36502, the port number is the fixed port number of the touch screen online analog function), and the service protocol is set to TCP/UDP, the internal server IP is set to the IP address of the authorization code computer 192.168.1.89

**Virtual server**

虚拟服务

开放接口: wan1\_pppoe1 **Open Port**

服务名称: 触摸屏远程在线模拟测试 **Serve name**

外部端口: 50000 - 50000 **External port**

内部端口: 36502 - 36502 **Internal port**

服务协议: TCP/UDP **Service protocol**

内部服务器IP: 192.168.1.89 **Internal server IP**

启用/禁用规则:  启用  禁用

修改 清除 帮助

选择	序号	Serve name	Port	Service protocol	外部端口	内部端口	内部服务器IP	Statue	设置
<input type="checkbox"/>	1		wan1_pppoe1		<b>External port</b>			已启用	
<input type="checkbox"/>	2		wan1_pppoe1		<b>External port</b>			Open	
<input type="checkbox"/>	3	触摸屏远程在线模拟测试	wan1_pppoe1	TCP/UDP	50000-50000	36502-36502	192.168.1.89	已启用	

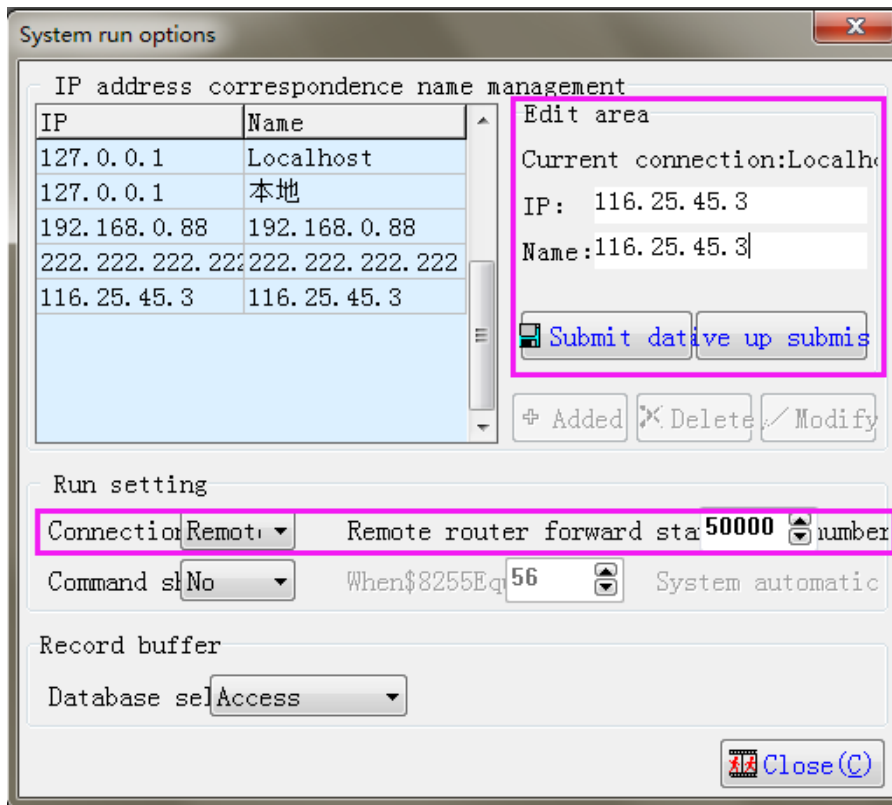
注意:  
"内部服务器IP"必须为局域网地址。

B. View the public network IP address corresponding to the IP code of the authorization code. You

can view or open Google/Baidu in the router and enter the public IP address to view it, as shown below:

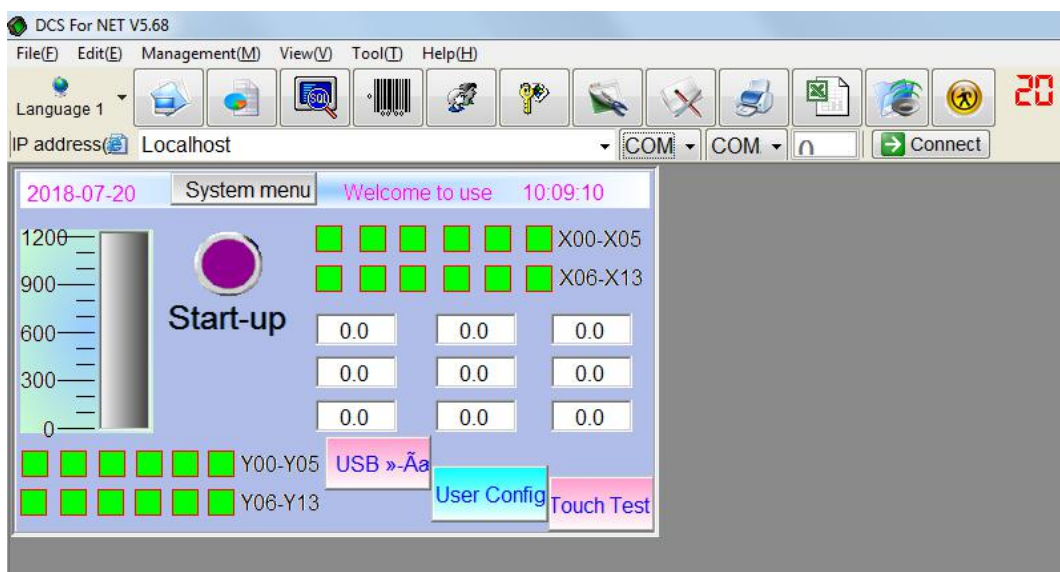


- C. Select the online simulation (F10) option in the software debugging, click Add in the editing area, and input the IP address of the public network corresponding to the authorized code computer.
  - As shown in the screenshot below, click Submit Data for 116.25.45.3;
- D. The connection mode is set to remote, and the remote router forwarding start port number is set to 50000;



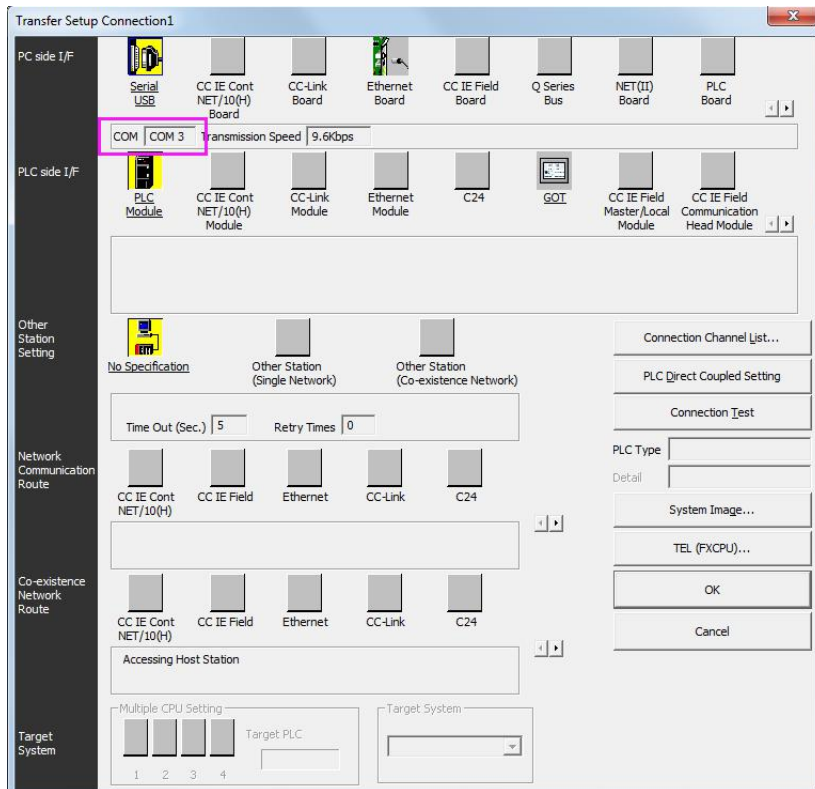
E. Set the IP address as the default Localhost Link1 communication port to be selected as the PLC download line of the authorization code computer.

COM port, set to COM3 as shown below;



The COM port corresponding to the PLC download line of the authorization code computer is set to

COM3:



F. After setting, click Connect to monitor and control the PLC.