



RLY-8-POE Relay Controller DFR0289



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Introduction

With ethernet relay, IOT has become so easy. RLY-8-POE-USB is a POE&USB controlled 8 channel relay controller based on STM32. With this module users can be able to do remote control/switching power supply centralized management, the purpose of this product can be directly by net POE power supply switch power supply is connected to the Internet, so you just need to a cable link equipment, suitable for: home decoration, hotel, shopping mall management, Internet cafes, karaoke time, daily office, stores monitoring, networking, industrial control equipment, test equipment, power control, unattended, underground pipes, mining equipment, ships, machine room, street lamp management, intelligent management and centralized management.

RLY-8-POE-USB is an open communication protocol of network relay control products (wide area network operation on the router need to add port mapping) which can use all kinds of network tools to directly establish TCP connection and control.(DFRobot provides you with a set of control tools as a reference.)

This product supports USB function, Plug the USB directly into the computer. The control and parameter setting can be controlled by using binary communication protocol through USB. Of course, you can also use the other controller directly control the RLY-8 through USB.

This product can be achieved through a wide area network or LAN control relay module. So as to realize the remote control electric appliance switch to achieve the purpose of centralized management of power supply.

This product can be used in ordinary power adapter as power supply, but also through the POE as power supply switch to direct power and networking. So you can only need to connect a cable connected to the device, you can achieve power supply and network control functions.



PoE compatibility issue:

We have passed the test on PoE Switches as

ONV POE31004P
Tenda TEF1008P

However, as reported by our customer, the PoE feature failed on these PoE switches:

TP-LINK TL-SG3424P 24-Port Gigabit L2 Managed PoE Switch
100-POE4 Industrial Midspan Power Injector

Specification

- Operating Voltage: DC:7-23V
- Relay number: 8
- Data Communication: TCP, USB-UART
- Network Configuration: support for DHCP static IP
- Power Consumption: Max 3.5W
- Maximum Control: 277VAC-10A/125VAC-12A
- Control Mode: Based on the IP address, the network sends the TCP data packets / through the USB-UART port to control the on-board relay switch.
- Factory Settings: IP:192.168.1.10, port number: 2000
- Weight: 530g
- Size: 90.10mm * 144.8mm * 40mm

Tutorial

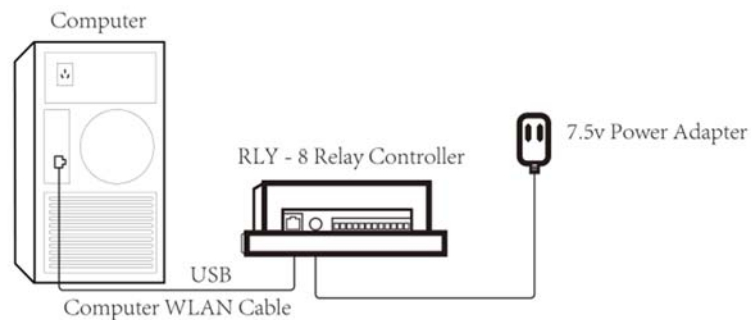
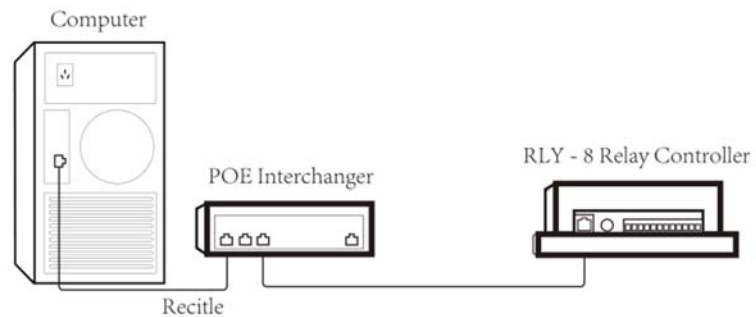
This tutorial will teach you how to configure and use RLY-8-POE Relay Controller.

Requirements

- **Hardware**
 - POE Relay x1
 - PC X1
 - USB to UART or ethernet cable
 - POE Ethernet switch or ordinary Ethernet switch
- **Software**
 - updata computer software & usb driver [Click to Download](https://github.com/nxcosa/RLY-8-Relay-Controller)
<https://github.com/nxcosa/RLY-8-Relay-Controller>

Connection Diagram

We have two ways for the connection, one is through the cable, the other is through the USB, of course, you can use them the same time.



NOTE: If you choose directly connect to the computer. Then the computer have to be set to a fixed IP, you can set computer's IP as 192.168.1.8, netmask 255.255.255.0, gateway 192.168.1.1

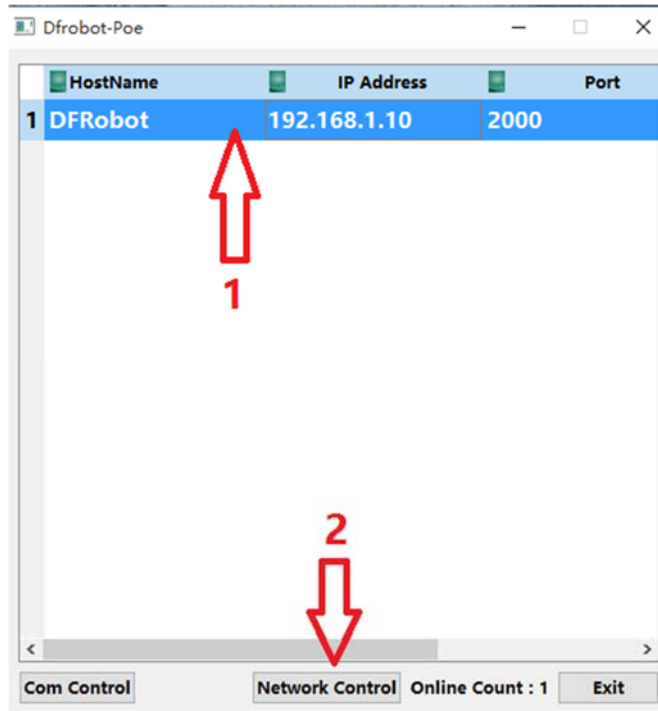
PC Control POE Relay

Open the Software

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designer	2015/4/21 9:59	文件夹	
imageformats	2015/4/21 10:03	文件夹	
platforms	2015/4/21 10:37	文件夹	
sqldrivers	2015/4/21 10:00	文件夹	
Internet_Com_Control.exe	2015/11/4 10:07	应用程序	725 KB
icudt53.dll	2014/10/16 18:34	应用程序扩展	21,061 KB
icuin53.dll	2014/10/16 18:34	应用程序扩展	3,671 KB
icuuc53.dll	2014/10/16 18:33	应用程序扩展	2,045 KB
libgcc_s_dw2-1.dll	2014/10/23 18:27	应用程序扩展	118 KB
libstdc++-6.dll	2014/10/23 18:27	应用程序扩展	1,003 KB
libwinpthread-1.dll	2014/10/23 18:27	应用程序扩展	48 KB
Qt5Core.dll	2015/3/31 9:01	应用程序扩展	4,716 KB
Qt5Gui.dll	2014/12/6 1:43	应用程序扩展	5,090 KB
Qt5Multimedia.dll	2014/12/6 2:41	应用程序扩展	766 KB
Qt5Network.dll	2014/12/6 1:38	应用程序扩展	1,477 KB
Qt5Script.dll	2014/12/6 5:42	应用程序扩展	2,266 KB
Qt5SerialPort.dll	2014/12/6 2:10	应用程序扩展	94 KB
Qt5Widgets.dll	2014/12/6 1:49	应用程序扩展	6,315 KB

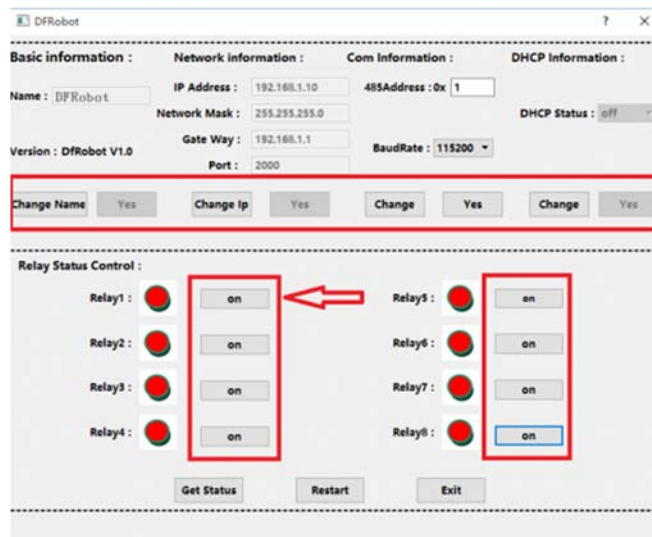
Enter control panel

Select the network, and then select the Network Control button, enter the network control interface



NOTE: It may take some time when the RIY-8 has just started to plug in the electric, please be patient waiting for the emergence of network list

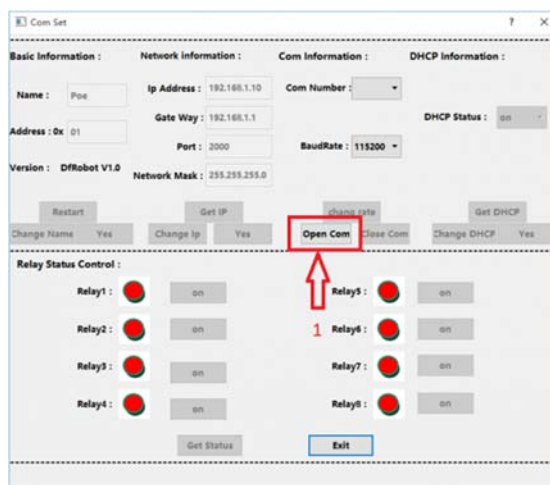
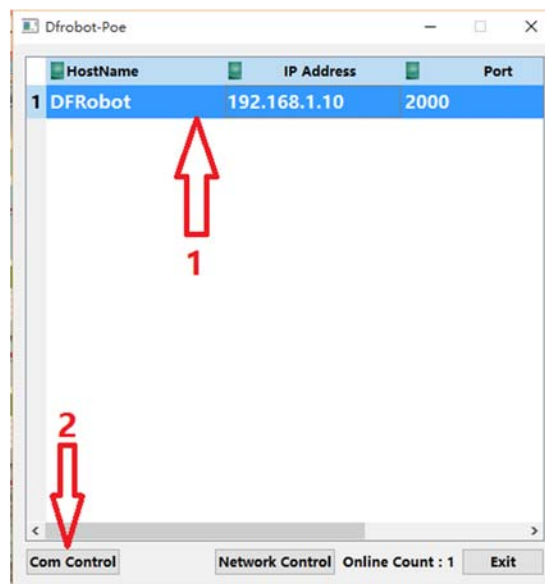
Control the POE relay with network



NOTE: It is recommended to click the Get Status button to get the current state when you want to control the relay.

Control the POE relay with USB

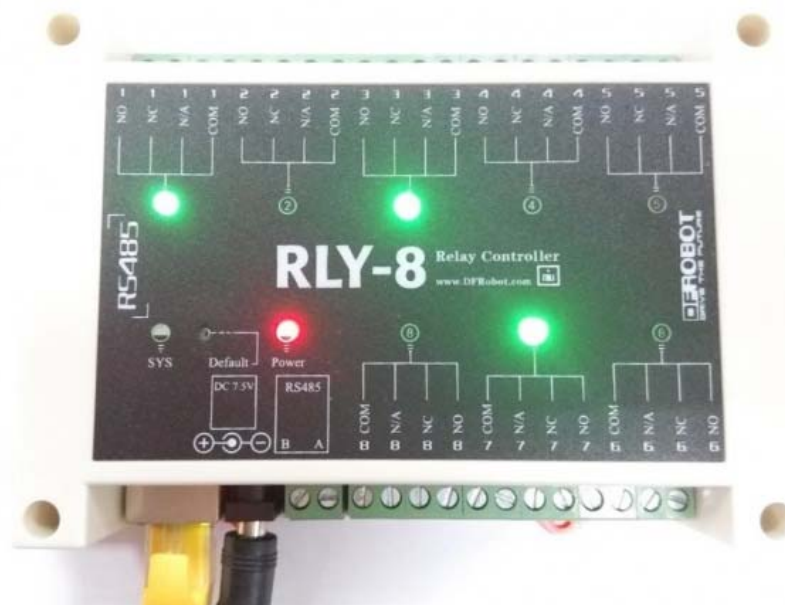
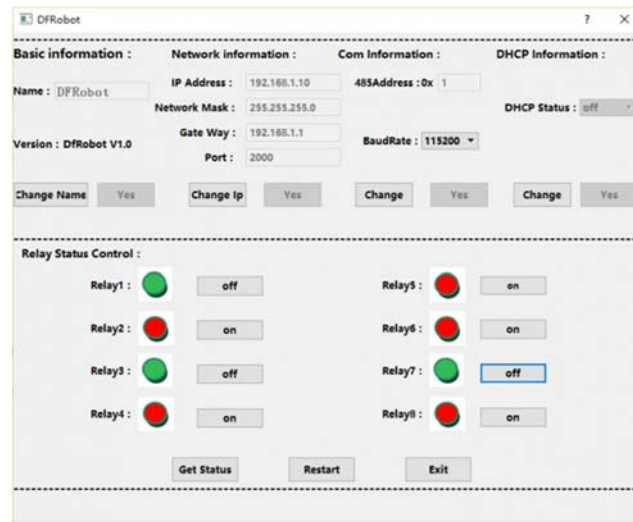
RLY-8 is using STM32 MCU, please install the driver first!



Reset and Restore Factory Settings

On the device has a Reset button, Keep holding, when the lights began to flash, Has been bright, said the resumption of factory success.

Result



FAQ

There is no question about this product yet, if you have any problem or suggestions, you are welcome to email to us or post on our Forum! Thank you!

For any questions/advice/cool ideas to share, please visit the [DFRobot Forum](#) or email to techsupport@dfrobot.com