

# **USR-N5xx realize Modbus RTU Master&Modbus TCP Slave communication**

File Version: V1.0.0

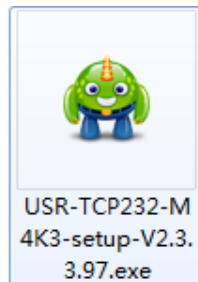
## Overview

This manual is to configure USR-N5xx(include USR-N510/N520/N540) to realize communication between Modbus RTU Master and Modbus TCP slave.

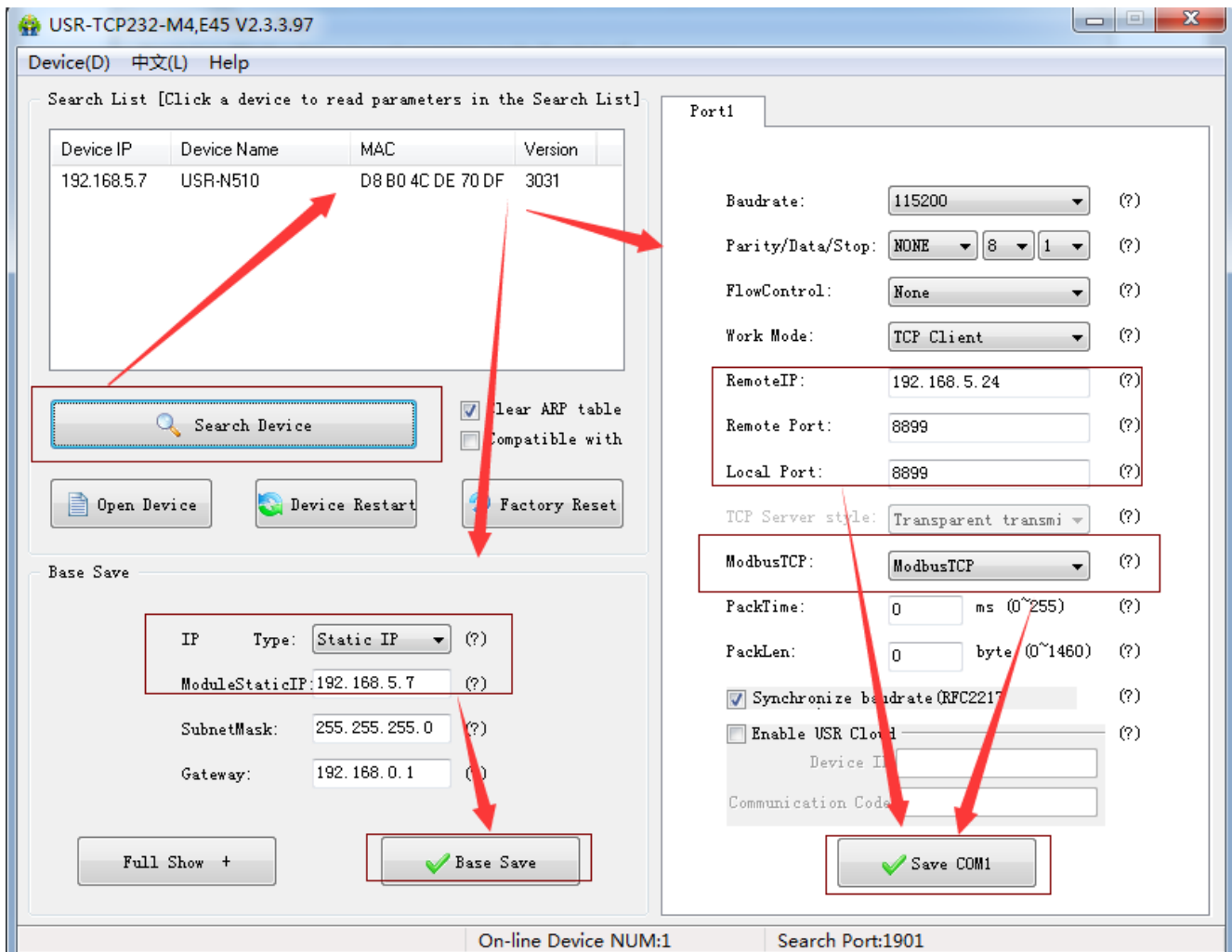
## 1.Configuration

In this manual, we test with USR-N510. Connect USR-N510 to PC by RS232 cable and also connect USR-N510 to PC or same router as PC by Ethernet cable.

Firstly, run setup software for USR-N510 to configure module.



Then, configure N510 as follow:



The screenshot shows the configuration software interface for USR-TCP232-M4,E45 V2.3.3.97. The interface includes a search list, base save settings, and port configuration options. Red arrows and boxes highlight the following steps:

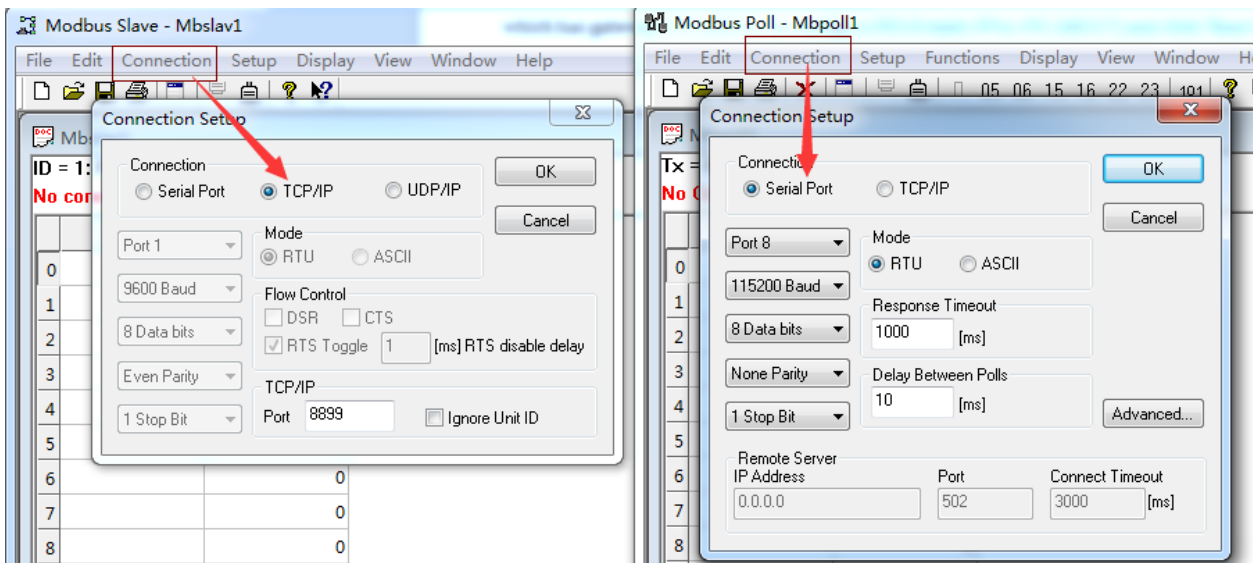
- Clicking the **Search Device** button.
- Selecting the device **USR-N510** in the search list.
- Setting the **IP Type** to **Static IP** and the **ModuleStaticIP** to **192.168.5.7**.
- Setting the **RemoteIP** to **192.168.5.24**.
- Setting the **ModbusTCP** mode.
- Clicking the **Base Save** button.
- Clicking the **Save COM1** button.

Step 1: Click 'Search Device' to search N510 in LAN.

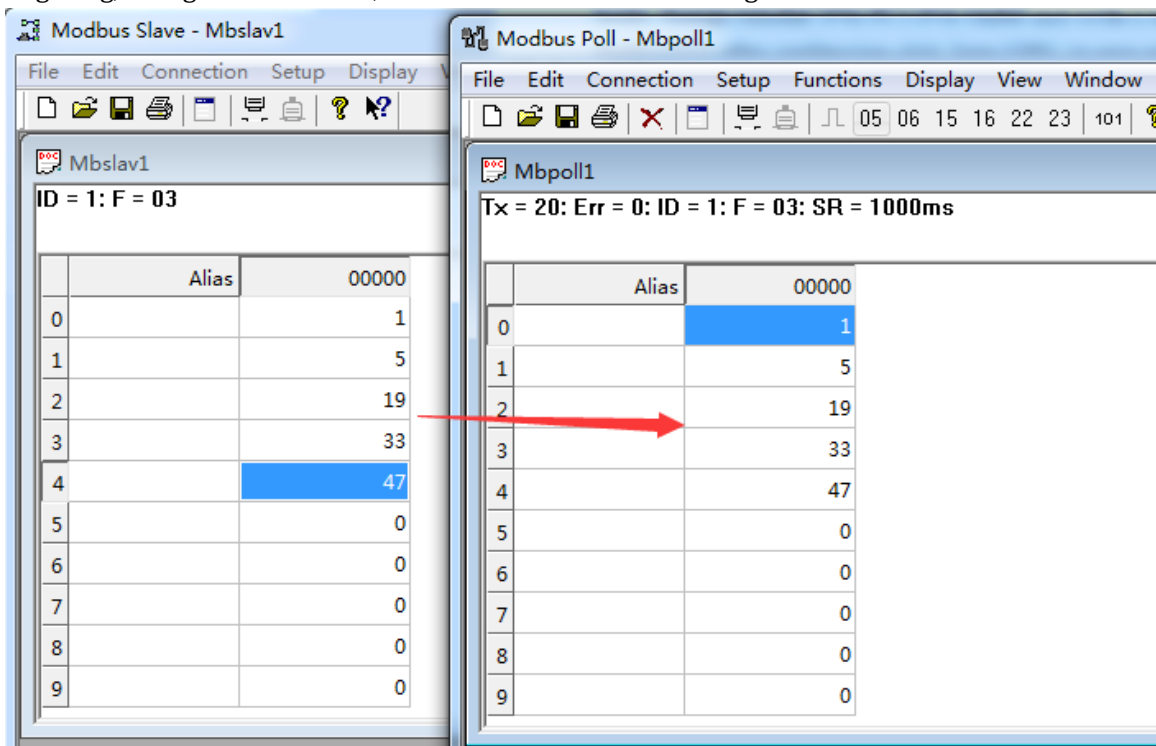
Step 2: Change module static IP to in same network segment as PC(We connect N510 to same router with PC which has gateway 192.168.5.1, so configure N510 static IP to 192.168.5.7) and click 'Base Save' to save and reset.

Step 3: After resetting module, search device again and configure Port1 parameters: Choose TCP Client as work mode, change remoter IP to PC's IP in router and write a remote port which is available on PC; enable ModbusTCP. After configuring, click 'Save COM1' to save and reset.

After configuring N510, run Modbus Slave software and Modbus Poll software to simulate Modbus TCP slave and Modbus RTU Master as follow:



After configuring, change value in Slave, values in master will also change.



## 2.Contact Us

Company: Jinan USR IOT Technology Limited

Address: Floor 11, Building 1, No. 1166 Xinluo Street, Gaoxin District, Jinan, Shandong, 250101, China

Web: [www.usriot.com](http://www.usriot.com)

Support: [h.usriot.com](http://h.usriot.com)

Email: [sales@usr.cn](mailto:sales@usr.cn)

Tel: 86-531-88826739/86-531-55507297

## 3.Disclaimer

This document provides the information of USR-N5xx products, it hasn't been granted any intellectual property license by forbidding speak or other ways either explicitly or implicitly. Except the duty declared in sales terms and conditions, we don't take any other responsibilities. We don't warrant the products sales and use explicitly or implicitly, including particular purpose merchant-ability and marketability, the tort liability of any other patent right, copyright, intellectual property right. We may modify specification and description at any time without prior notice.

## 4.Update History

2017-12-21 V1.0.0 established.