

## Upgrading firmware method of Serial-to-Ethernet products

File Version: V1.0.2

## Overview

This manual introduces upgrading firmware methods of Serial to Ethernet products (Include USR-K2/K3/N510/N520/N540, USR-TCP232-ED2/E2/T2/S2/410S/302/304/306). And manual introduces two methods: One is normal upgrading method and another is special method to upgrade Serial to Ethernet products when user upgrades Serial to Ethernet product by normal method unsuccessfully and can't search module in LAN any more.

## 1. Normal upgrading method

**Note:** Please be cautious to upgrade firmware. If upgrading firmware by normal upgrading method and special upgrading method both unsuccessfully, user has to return module to repair and pay the freight by self.

Before upgrading, user should note the following several points: close the windows firewall, close antivirus program, disable wireless network card, disable other wired network cards except the wired network card which is connecting to Serial to Ethernet product or same router as Serial to Ethernet product.

### 1.1. Hardware connection

Plug in DC power adaptor to power the module. Then connect module to PC by Ethernet cable or connect module to router/switcher which in same network as PC by Ethernet cable. (If user connects module to router/switcher which in same network as PC by Ethernet cable, user must configure module's static IP address in same network segment as router)

### 1.2. Upgrade firmware

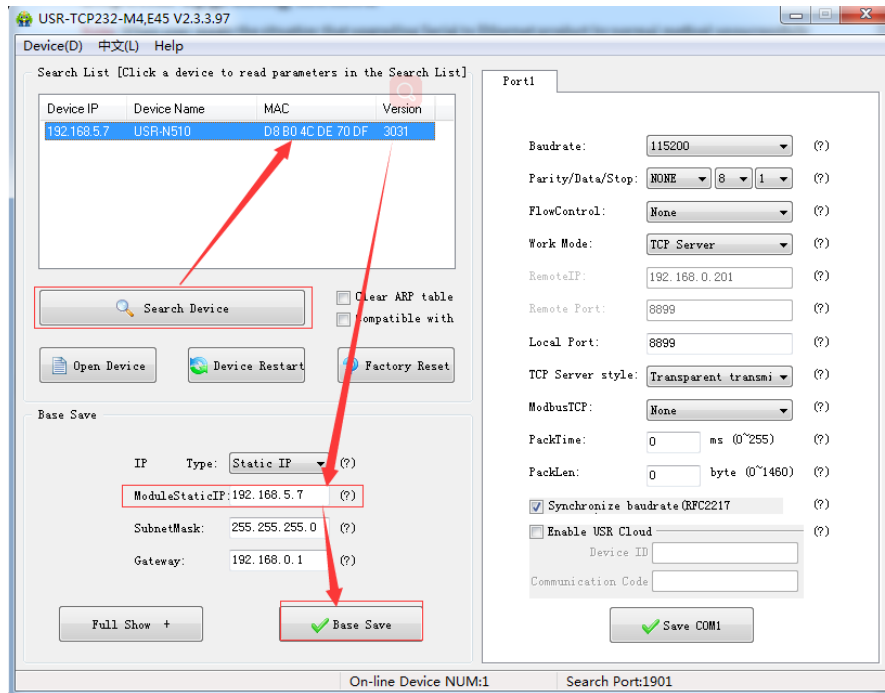
User needs setup software for Serial to Ethernet product to upgrade firmware and can download setup software from:

<http://www.usriot.com/usr-tcp232-m4k3-setup-software/> (For USR-TCP232-ED2/E2/410S/, USR-K3/N510/N520/N540)

<http://www.usriot.com/usr-m0-setup-software/> (For USR-TCP232-T2/S2/302/304/306, USR-K2)

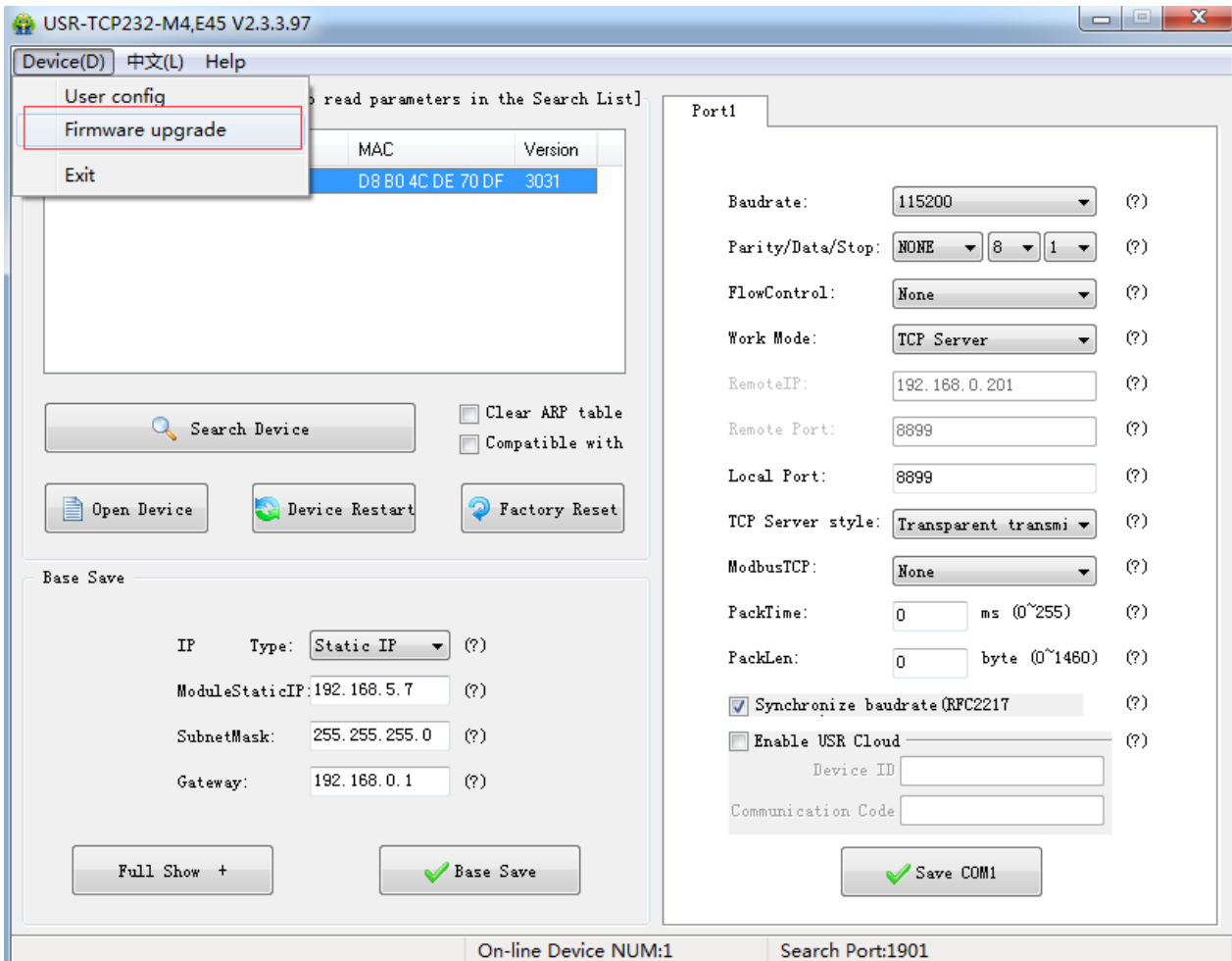
Take USR-N510 as example and connect N510 to router by Ethernet cable.

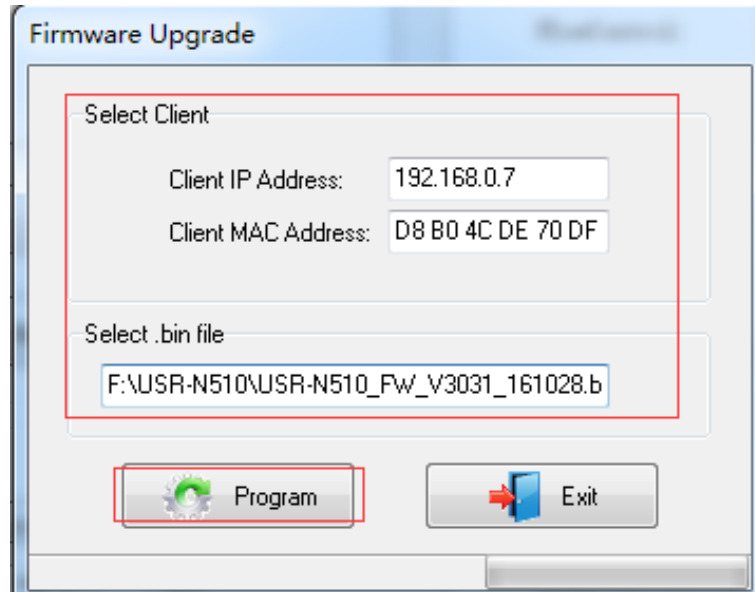
**Step 1:** After running the setup software [USR-TCP232-M4K3 Setup Software V2.3.3.97](#), search the N510 in LAN. Then configure N510 static IP address in same network segment as router.



**Figure 1 Search module and configure static IP**

**Step 2:** After saving above configuration and restarting the module, user can upgrade firmware as follow:

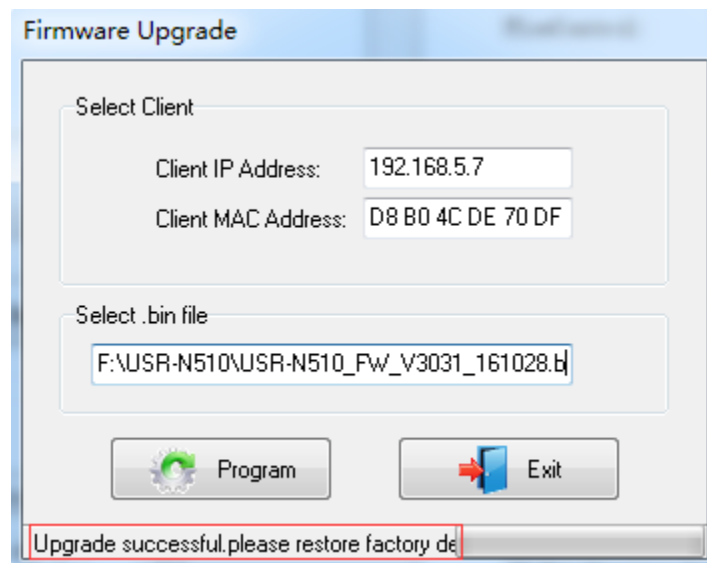




**Figure 2 Upgrade firmware**

Write correct module IP address and MAC address, then choose firmware file and click 'Program' to upgrade firmware.

Displaying 'Upgrade successfully, please restore factory' as follow figure means upgrading successfully. Then user should reset module to default settings.



**Figure 3 Upgrade successfully**

## 2. Special upgrading method

**Note:** When user meets the situation that upgrading Serial to Ethernet product by normal method unsuccessfully and can't search module in LAN, and tries to upgrade firmware by this special method, please confirm that upgrading unsuccessfully doesn't caused by upgrading environment (such as firewall, antivirus program) firstly.

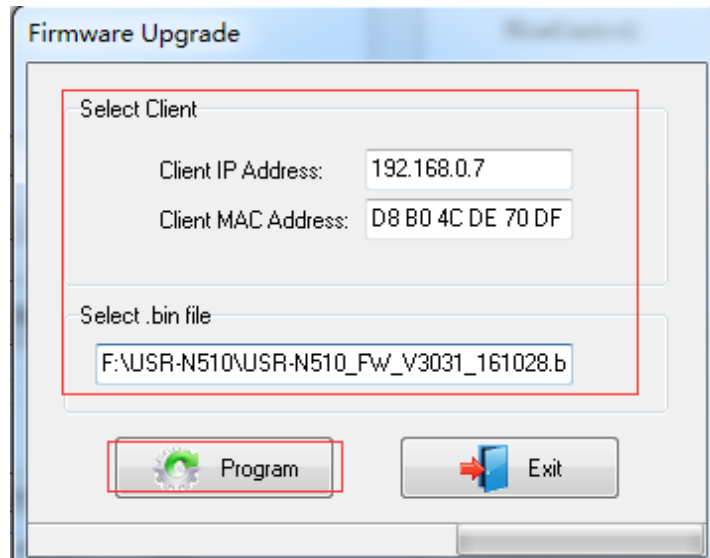
### 2.1. Hardware connection

Plug in DC power adaptor to power the module and connect module to PC by Ethernet cable **directly**.

## 2.2. Upgrade firmware

Take USR-N510 as example.

**Step 1:** Run the setup software **USR-TCP232-M4K3 Setup Software V2.3.3.97** and open 'Firmware Upgrade' interface as **1.2.Upgrade firmware Step 2.**



**Figure 4 Upgrade firmware**

On 'Firmware Upgrade' interface, configure parameters as follows:

- Client IP Address: Write IP address in same network segment as module.(Because module directly connects to PC by Ethernet cable, so user can write default IP address of module if don't change static IP. And if user change module IP address to other network segment, this Client IP Address must in same network segment as module's current IP)
- Client MAC Address: Just needing to write a correct and valid MAC Address.(Such as 01 02 03 04 05 06, can't include 00)

Then select firmware file and click 'Program' to upgrade firmware.

**Note:** Please keep powering the module and keep connection between PC and module by Ethernet cable during upgrading process.

### 3. Contact Us

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### 4. Disclaimer

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### 5. Update History

2017-12-14 V1.0.0 established.

2018-01-11 V1.0.1 updated. Added matters needing attention before upgrading. Optimized whole manual arrangement.

2018-04-17 V1.0.2 updated. Replaced products series by product specific model. Optimized whole manual arrangement. Modified verbal error. Added some detail description.