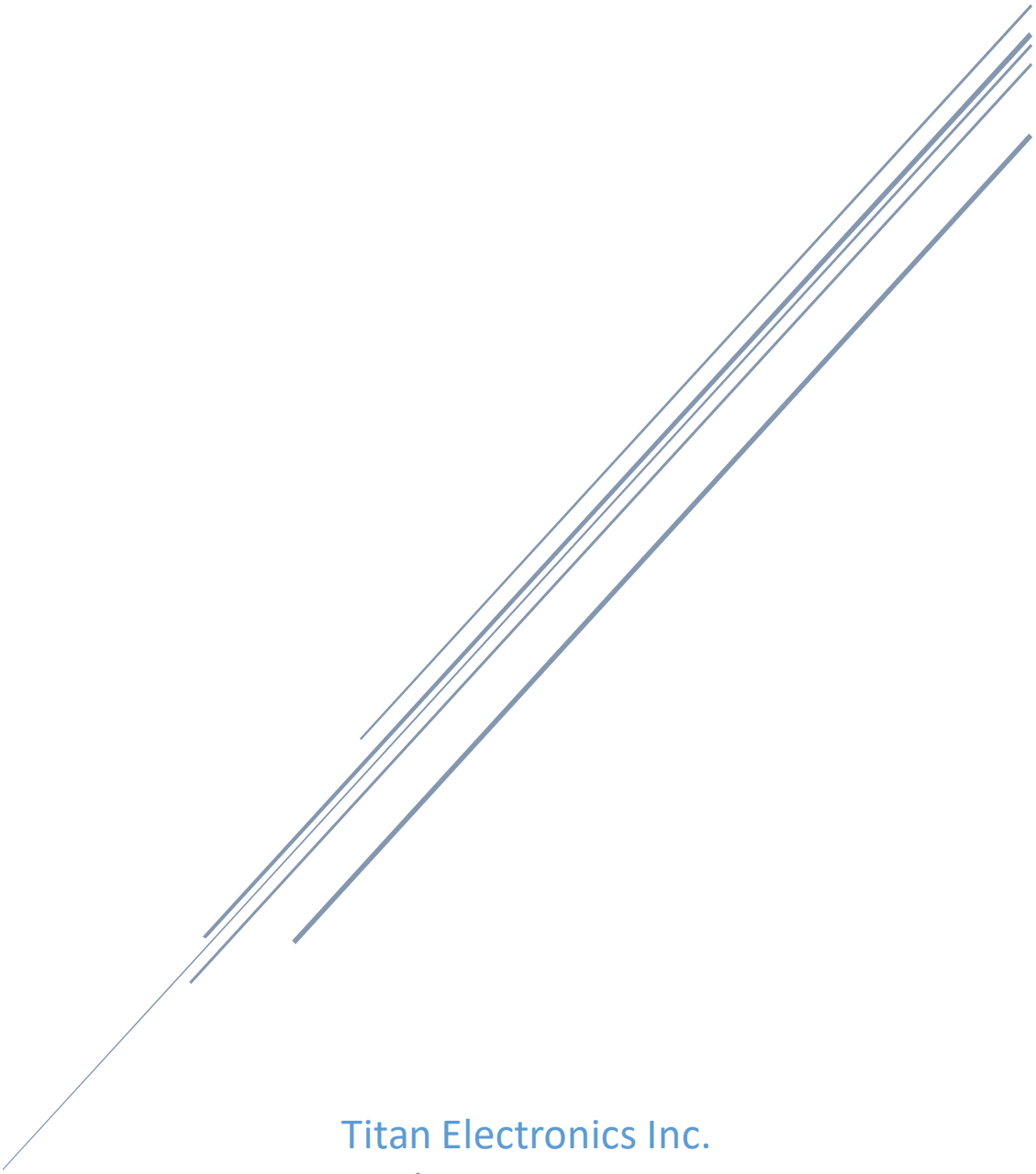
NCOM SERIAL DEVICE SERVER 4XX SERIES USER'S MANUAL

2017-07-07 Edition



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1. INTRODUCTION

References to NCOM-413 in this document represents NCOM-413, NCOM-412 and NCOM-411, unless stated otherwise.

NCOM-413 is a network-based serial device server. It is designed to control your serial devices located virtually anywhere through a TCP/IP or UDP/IP network connection. The serial device server can map TCP/IP connections and UDP broadcasts to a virtual serial port. Applications include accessing a faraway device for functions such as remote control and data transmission. NCOM-413 serves as a transparent virtual serial port without limitations on operating systems and distances. The virtual serial port redirection uses the protocol known as RFC2217.

NCOM-413 supports several operation modes, including Driver mode, RFC2217 Server/Client mode, Pair Connection mode, TCP Server/Client mode and UDP mode. It also supports Windows virtual serial port driver, allowing you to add four virtual serial ports in your Windows system to work over a TCP/IP network. The virtual serial port functions as a native Windows COM port and is compatible with Windows serial communication applications. It is installed in the device manager of the operating system. This in turn will allow communications with the connected serial device in the same manner as a device physically connected to the COM port on a PC. The serial port supports high serial speeds up to 460.8kbps in RS-232 for NCOM-411, RS-422/485 for NCOM-412 or RS-232/RS-422/485 for NCOM-413.

Serial port operation mode can be easily changed in NCOM-413/NCOM-412 via software. This can be done using our Windows utility software or the web console interface.

NCOM-413 serial device server supports automatic IP configuration protocol (DHCP) and fixed static IP configuration via the handy web browser console. NCOM-413 provides a utility software for Windows, called NCOM Virtual Serial Port Manager. This program can detect, manage and configure NCOM serial device server in your network.

This manual covers three different models of four-port serial device server:

NCOM-411 Quad RS-232
NCOM-412 Quad RS-422/485
NCOM-413 Quad RS-232/422/485

In general, the software installation and operation is the same on all models, except for the different software settings for the configuration of serial operation modes on NCOM-413 and NCOM-412.

1.1 Key Features

The NCOM-413 has the following features:

- Adds four virtual serial COM ports via network connection
- NCOM-413 fully supports the "COM Port Control" protocol known as RFC2217
- Supports network protocols such as TCP and UDP client/server
- Serial port operation mode can be easily changed via our Windows utility software or the web console interface
- Firmware upgradable for future firmware revisions
- Supports virtual serial port driver for Windows OS (Windows XP up to Windows 10)
- Supports pair connection mode for connecting two serial device servers over a network without a PC
- Easy-to-use Windows utility software for easy configuration and installation
- 10/100Mbps Ethernet with auto-detection
- Configuration via web console interface or utility software
- Windows utility software automatically finds NCOM devices on the network
- Supports "reset" button for system reset
- Supports "default" button to restore to factory settings
- Data rates: 300bps to 460.8kbps
- Auto transmit buffer control for 2-wire RS-485 half-duplex operation (NCOM-413 and NCOM-412 only)
- Termination resistors installed on-board (NCOM-413/NCOM-412 only)
- Supported RS-232 signals: DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS (NCOM-413 and NCOM-411 only)
- Supported RS-422, RS-485 4-wire signals: TxD-, TxD+, RxD+, RxD- (NCOM-413 and NCOM-412 only)
- Supported RS-485 2-wire signals: data-, data+ (NCOM-413 and NCOM-412 only)
- LEDs indicating Ethernet port's link and activity statuses
- LEDs indicating serial port's TxD and RxD statuses
- LEDs indicating serial port's TxD and RxD statuses (NCOM-413 and NCOM-412 only)
- Virtual serial port drivers for Windows 10, 8.1, 8, 7, Vista, 2003, XP
- Built-in 15kV ESD protection for all serial signals

1.2 Specifications

LAN	
Ethernet	10/100Mbps
Connector	RJ-45 connector
Protection	Built-in 1.5kV magnetic isolation

NCOM-413 Serial Interface	
Interface	RS-232/422/485
No. of Ports	Four
Connector	DB9 male connector
Max. Speed	460.8kbps for serial data transmission & reception
RS-232 Signals	DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS
RS-422 Signals	TxD-, TxD+, RxD+, RxD-, GND
RS-485 Signals	4-wire TxD-, TxD+, RxD+, RxD-, GND 2-wire Data-, Data+, GND
Protection	15kV ESD for all signals
RS-485 Data Direction	Automatic RS-485 direction control

NCOM-412 Serial Interface	
Interface	RS-422/485
No. of Ports	Four
Connector	DB9 male connector
Max. Speed	460.8kbps for serial data transmission & reception
RS-422 Signals	TxD-, TxD+, RxD+, RxD-, GND
RS-485 Signals	4-wire TxD-, TxD+, RxD+, RxD-, GND 2-wire Data-, Data+, GND
Protection	15kV ESD for all signals
RS-485 Data Direction	Automatic RS-485 direction control

NCOM-411 Serial Interface	
Interface	RS-232
No. of Ports	Four
Connector	DB9 male connector
Max. Speed	460.8kbps for serial data transmission & reception
RS-232 Signals	DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS
Protection	15kV ESD for all signals

Serial Communication Parameters	
Data Bits	5, 6, 7, 8
Parity	None, Odd, Even, Mark, Space
Stop Bit	1, 1.5, 2
Flow Control	Hardware (RTS, CTS)

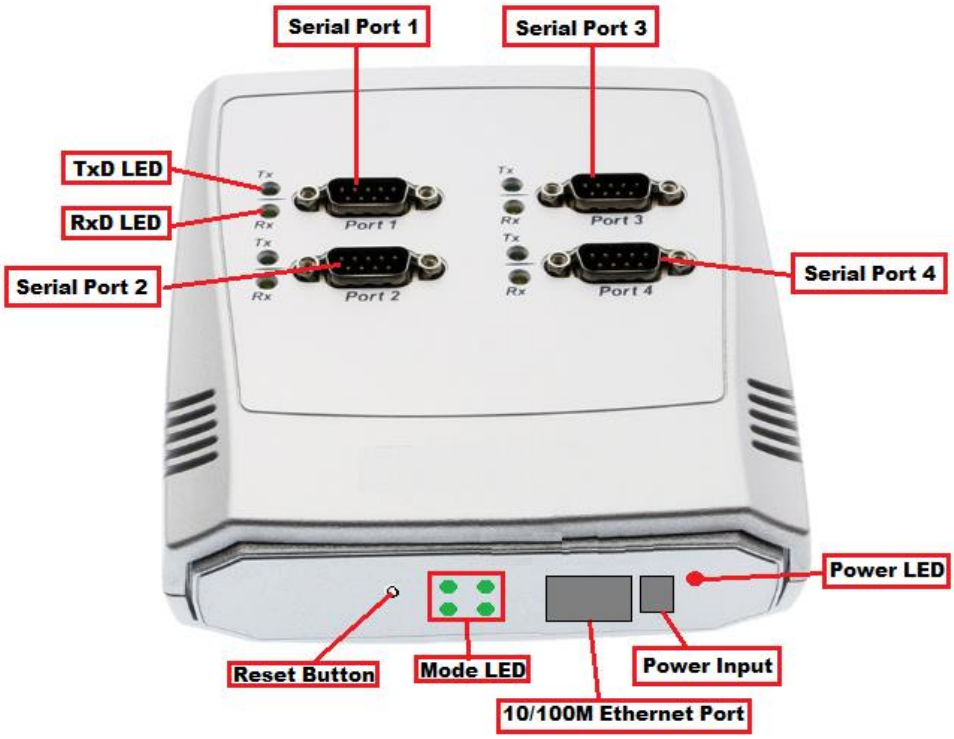
Software Features	
Protocols	ICMP, IP, TCP, UDP, DHCP, DNS, HTTP
Utility	NCOM management tool for Windows OS
OS Driver Support	Virtual serial port driver for Windows OS
Configuration	Web console, Windows utility

Power Requirement	
Power Input	9VDC to 48VDC
Power Consumption	NCOM-413: 200mA@12VDC, 90mA@48VDC NCOM-412: 180mA@12VDC, 80mA@48VDC NCOM-411: 140mA@12VDC, 60mA@48VDC

Environment	
Operating Temperature	0°C to 55°C (32°F to 131°F)
Storage Temperature	-20°C to 75°C (-4°F to 167°F)
Humidity	5% to 95% RH
Safety Approvals	CE, FCC

Mechanical	
Casing	Plastic, ABS
Dimensions	133mm × 125mm × 41mm (L × W × H)
Weight	240g

2. PANEL LAYOUT OF NCOM-413



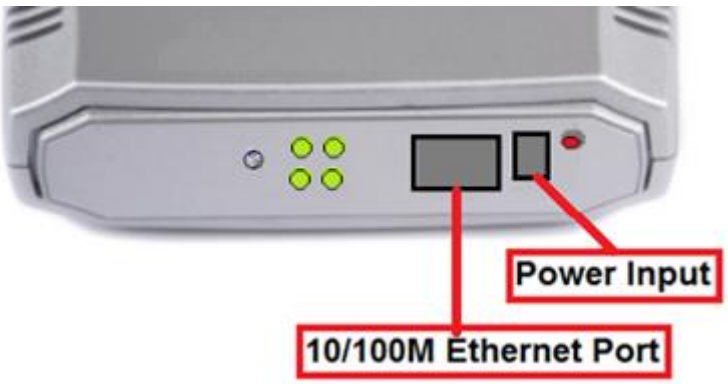
Note: The layouts of NCOM-413, NCOM-412 and NCOM-411 are the same.

3. CONNECTING THE HARDWARE

Before connecting the NCOM serial device server for the first time, you may want to follow these instructions for testing purposes. We will describe how to connect to the network, power, your serial devices, and also state the functions of the LED indicators.

Step 1 – Connecting to the Network

First, connect an Ethernet cable to NCOM's Ethernet port. Once the Ethernet cable is connected, connect the other end of the cable to your network. This can be a free Ethernet port on your DSL router, Ethernet hub/switch, or 802.11n router/base station. If you do not have a network, you can connect NCOM directly to the Ethernet port on your computer.

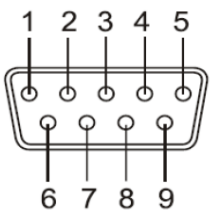


Step 2 – Connecting the Power

Connect the included power supply to NCOM's power input connector. Once the NCOM is powered, the "PWR" LED turns ON. After a few seconds, the "PWR" LED will flash two times to indicate that the NCOM serial device server is ready.

Step 3 – Connecting to a Serial Device

Connect the serial data cable between NCOM and the serial device. The NCOM-411's serial port provides RS-232, the NCOM-412 provides RS-422/485 and the NCOM-413 provides RS-232/422/485 interface for data transmission. The port uses a standard male DB9 pin assignment.



DB9 Male connector pin numbers

3.1 Serial Port Pin-Out Information of DB9 Connector

Pin Number	Pin Type	Description
1	Input	DCD Data Carrier Detect
2	Input	RxD Receive Data
3	Output	TxD Transmit Data
4	Output	DTR Data Terminal Ready
5	Ground	GND Signal Ground
6	Input	DSR Data Set Ready
7	Output	RTS Request To Send
8	Input	CTS Clear To Send

RS-232 pin-out for DB9 connector

Pin Number	Pin Type	Description
1	Output	TxD- Transmit Data, negative polarity
2	Output	TxD+ Transmit Data, positive polarity
3	Input	RxD+ Receive Data, positive polarity
4	Input	RxD- Receive Data, negative polarity
5	Ground	GND Signal Ground

RS-422/485 full duplex pin-out for DB9 connector

Pin Number	Pin Type	Description
1	Output/Input	Data- Transmit/Receive Data, negative polarity
2	Output/Input	Data+ Transmit/Receive Data, positive polarity
5	Ground	GND Signal Ground

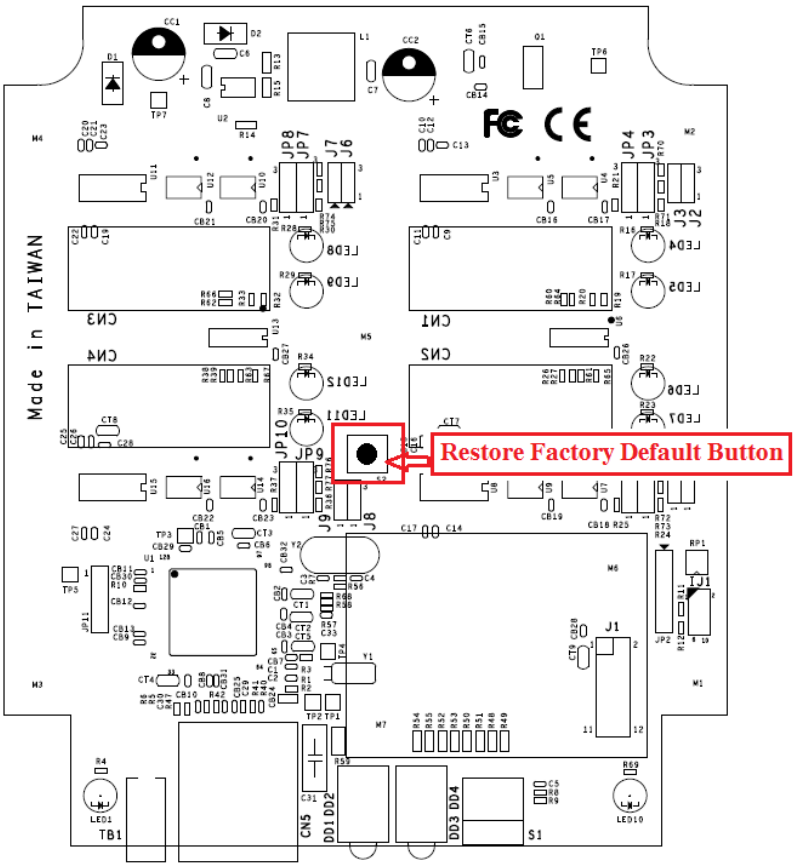
RS-485 half duplex pin-out for DB9 connector

3.2 Hardware Reset Button

NCOM-413 has a hardware reset button for resetting the device. When the hardware reset button is pressed for a short duration, NCOM's power will be reset.

3.2.1 Hardware Restore Factory Defaults Button

The NCOM-413 serial device server has a hardware restore factory defaults button to restore all settings to factory default states. You will need to open up the case, turn the power on and press the hardware restore factory defaults button until the "PWR" LED flashes.



3.3 Changing Serial Port Operation Mode in NCOM-413/NCOM-412

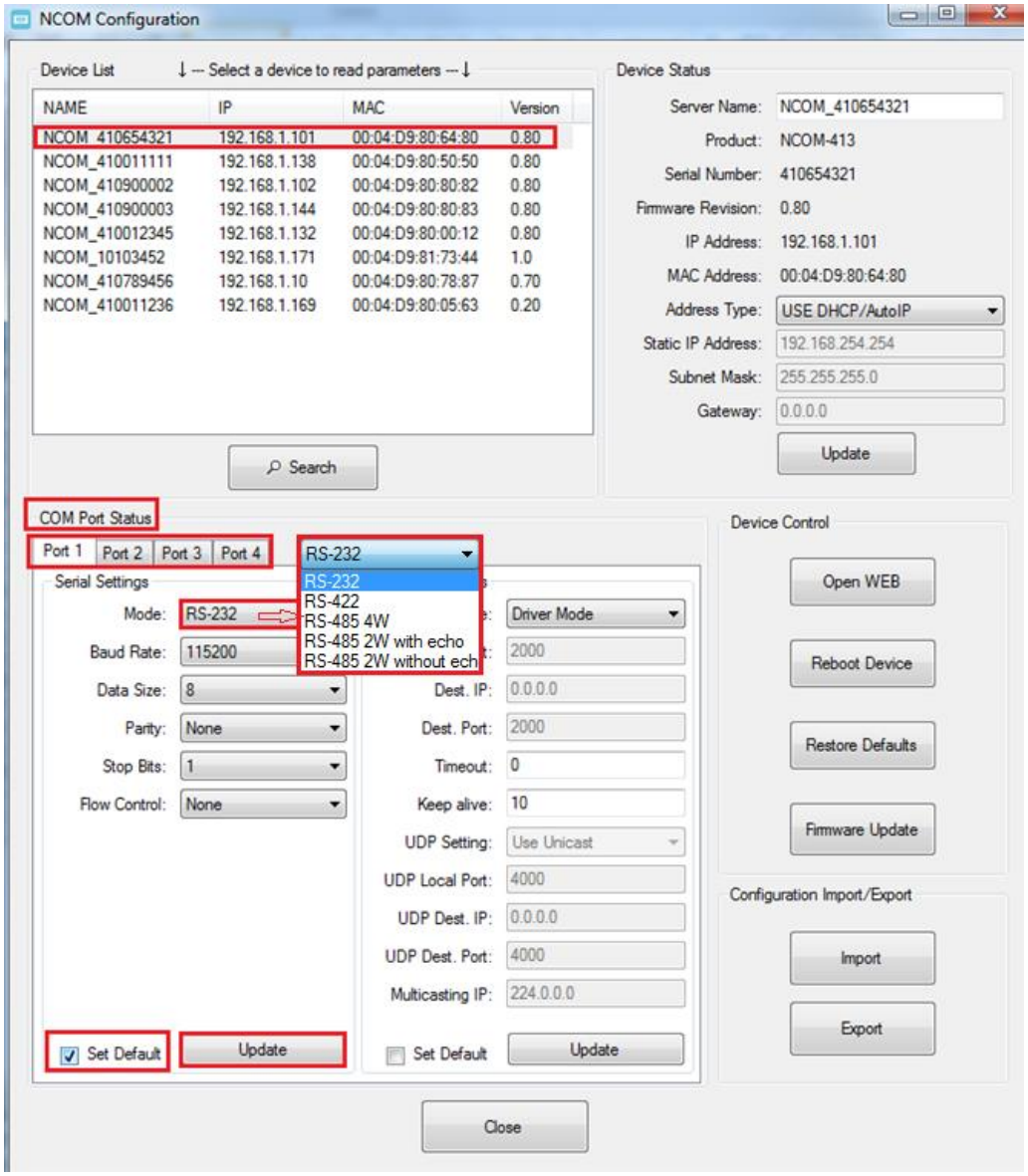
Serial port operation mode of NCOM-413/NCOM-412 can be easily changed via software. This can be done using our Windows utility software or the web console interface.

The web console interface is used to configure the serial device server. Open any web browser and enter the device's IP address in the address bar to access the firmware's "HOME" page.

Under the firmware's "HOME" page, select "SERIAL SETTINGS" under "Port 1 Settings", "Port 2 Settings", "Port 3 Settings" and "Port 4 Settings". Under "Mode", select the proper serial port operation mode, check the "Make these the default settings" box and click "Submit" to set your device into the proper serial port operation mode.

The serial port operation mode can also be configured with our Windows utility software, NCOM Virtual Serial Port Manager.

After running NCOM Virtual Serial Port Manager, click on “Configuration” to enter the control menu page. Select an attached device to configure the virtual serial port parameters. You will find “Device Status”, “COM Port Status”, “Device Control” and “Configuration Import/Export” on the main window of NCOM Configuration.

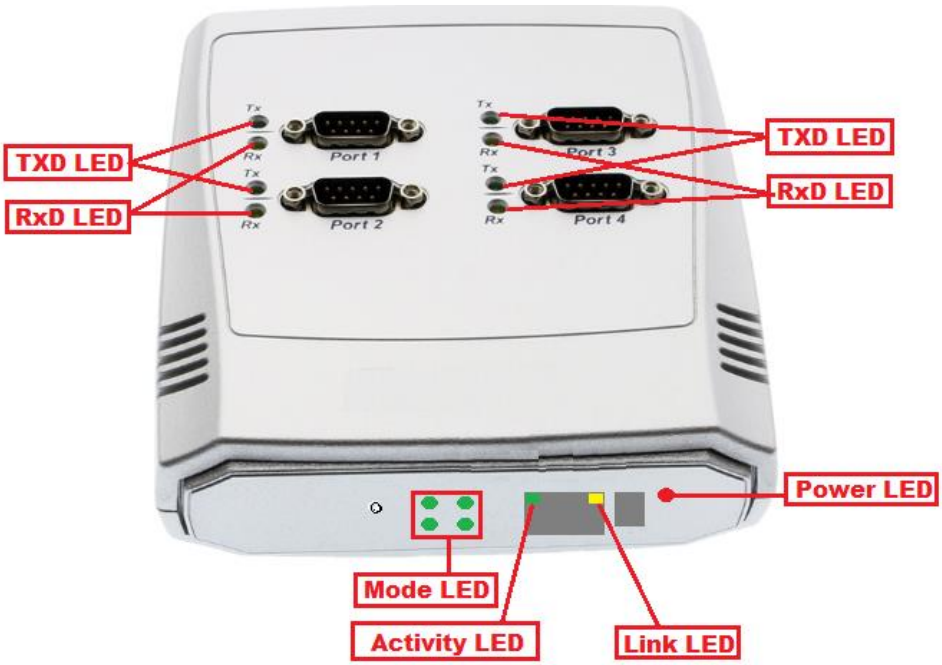


Under the “COM Port Status” window, select “Port 1”, “Port 2”, “Port 3” or “Port 4”. Under “Mode”, select the proper serial port operation mode, then check “Set Default” and click “Update” to set your NCOM-413/NCOM-412 in the proper serial port operation mode.

3.4 LED Indicators

The NCOM-413 has 15 LED indicators, as described in the following table:

LED Name	LED Color	LED Function
PWR	Red	Steady on: Power is on and functioning normally. Steady off: Power is off. Flashes two times to indicate the device is ready.
Link	Yellow	Steady on: The Ethernet link has established. Steady off: Ethernet cable is disconnected.
ACT	Green	Steady on/blinking: Ethernet data transmission is occurring. Steady off: Ethernet cable not connected.
Tx	Green	Blinking: The serial port is transmitting data.
Rx	Yellow	Blinking: The serial port is receiving data.
Mode	Green Red	Steady off: The port is working in RS-232 mode. Green LED steady on: The port is working in RS-422 or RS-485 full duplex (4-wire) mode. Red LED Steady on: The port is working in RS-485 half duplex (2-wire) mode.



3.5 RS-422/485 Termination Resistors Option for NCOM-413/NCOM-412

In some critical environments, when transmitted RS-422/485 signals arrive at the end of a cable, they are reflected. This causes the signals to travel on the cable more than once, which is called ringing. This can cause false reading of transmitted data. For long cables, termination resistors are required. These increase the damping in order to reduce reflections. The value of the termination resistor must match the impedance of the cable, which is typically 120Ω. Generally, this must be done in the cabling, since this depends on the installation of connections. Before applying the option, check your cable specification for proper impedance matching.

Inside NCOM-413/NCOM-412, there are eight 3-pin 2.54mm pitch header blocks (JP3~JP10) for jumper caps to enable TxD, RxD 120Ω termination resistors and eight 3-pin 2mm pitch header blocks (J2~J9) for jumper caps to enable TxD 750Ω biasing resistors. You will need to open up the case and set the jumper settings for RS-422 mode or RS-485 mode, as per the requirements of your application.

Termination must not be installed in the middle of the cable. It is only permitted at both ends. Since a computer controlled serial port is almost always at one end of the cable, termination is disabled by default.

Biasing of data lines must only occur at a single point anywhere in the cabling. NCOM-413/NCOM-412 provides biasing for ease of installation. If your cabling doesn't provide biasing, please be sure to enable this inside the unit.

Settings are listed as follows:

3-pin Header for Termination Option Configuration

Serial Port 1

Jumper			Function
JP3	**1-2**	**Enable**	Enable TxD+/- 120Ω termination resistor.
	2-3	**Disable**	Disable TxD+/- 120Ω termination resistor.
JP4	**1-2**	**Enable**	Enable RxD+/- 120Ω termination resistor.
	2-3	**Disable**	Disable RxD+/- 120Ω termination resistor.

Jumper			Function
J2	**1-2**	**Enable**	Enable TxD+ pull-high 750Ω biasing resistor.
	2-3	**Disable**	Disable TxD+ pull-high 750Ω biasing resistor.
J3	**1-2**	**Enable**	Enable TxD- pull-low 750Ω biasing resistor.
	2-3	**Disable**	Disable TxD- pull-low 750Ω biasing resistor.

Serial Port 2

Jumper			Function
JP5	1-2	Enable	Enable TxD+/- 120Ω termination resistor.
	2-3	Disable	Disable TxD+/- 120Ω termination resistor.
JP6	1-2	Enable	Enable RxD+/- 120Ω termination resistor.
	2-3	Disable	Disable RxD+/- 120Ω termination resistor.

Jumper			Function
J4	1-2	Enable	Enable TxD+ pull-high 750Ω biasing resistor.
	2-3	Disable	Disable TxD+ pull-high 750Ω biasing resistor.
J5	1-2	Enable	Enable TxD- pull-low 750Ω biasing resistor.
	2-3	Disable	Disable TxD- pull-low 750Ω biasing resistor.

Serial Port 3

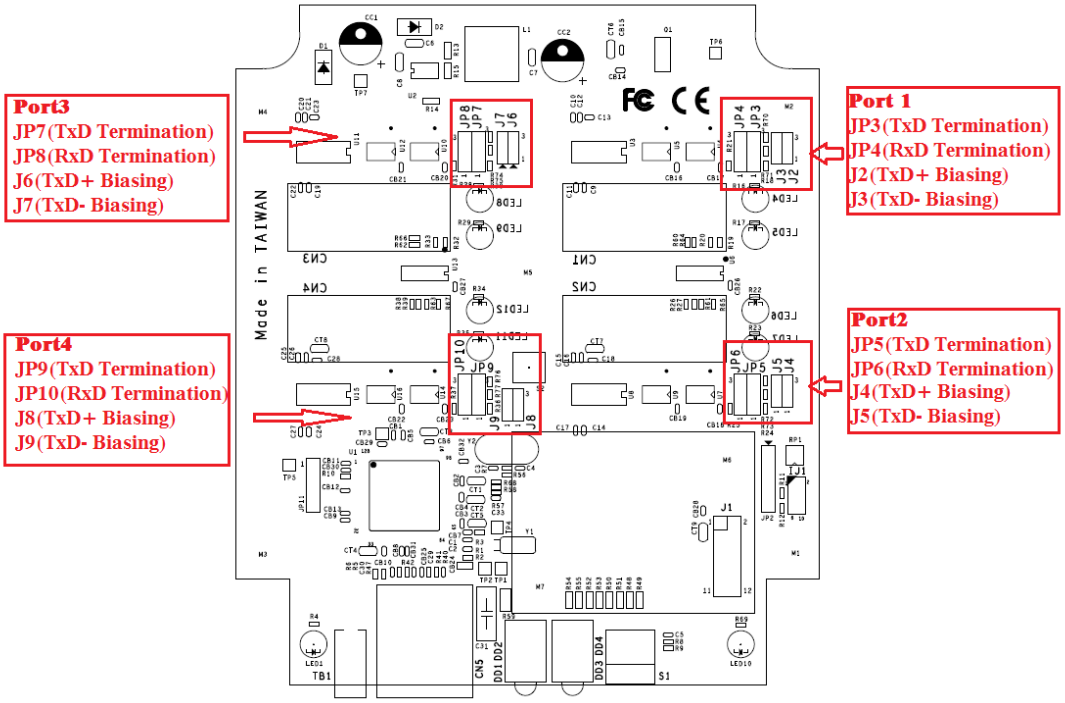
Jumper			Function
JP7	1-2	Enable	Enable TxD+/- 120Ω termination resistor.
	2-3	Disable	Disable TxD+/- 120Ω termination resistor.
JP8	1-2	Enable	Enable RxD+/- 120Ω termination resistor.
	2-3	Disable	Disable RxD+/- 120Ω termination resistor.

Jumper			Function
J6	1-2	Enable	Enable TxD+ pull-high 750Ω biasing resistor.
	2-3	Disable	Disable TxD+ pull-high 750Ω biasing resistor.
J7	1-2	Enable	Enable TxD- pull-low 750Ω biasing resistor.
	2-3	Disable	Disable TxD- pull-low 750Ω biasing resistor.

Serial Port 4

Jumper			Function
JP9	1-2	Enable	Enable TxD+/- 120Ω termination resistor.
	2-3	Disable	Disable TxD+/- 120Ω termination resistor.
JP10	1-2	Enable	Enable RxD+/- 120Ω termination resistor.
	2-3	Disable	Disable RxD+/- 120Ω termination resistor.

Jumper			Function
J8	1-2	Enable	Enable TxD+ pull-high 750Ω biasing resistor.
	2-3	Disable	Disable TxD+ pull-high 750Ω biasing resistor.
J9	1-2	Enable	Enable TxD- pull-low 750Ω biasing resistor.
	2-3	Disable	Disable TxD- pull-low 750Ω biasing resistor.



The NCOM serial device server hardware installation is now complete. Please proceed to the next step to start the first time configuration NCOM-413.

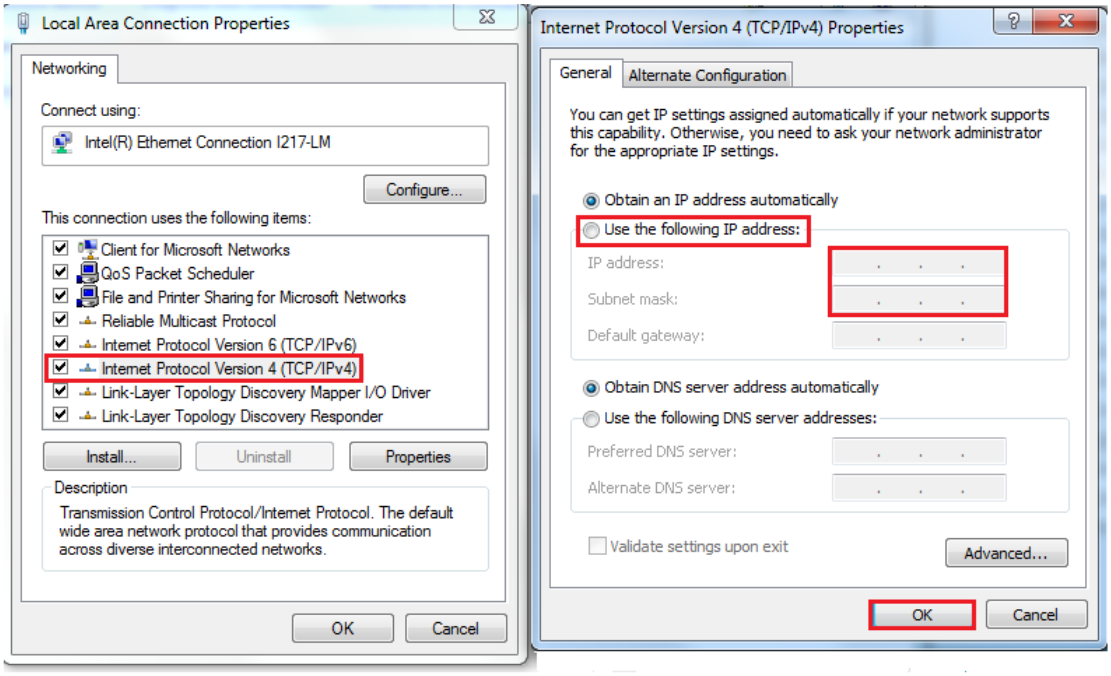
4. CONFIGURING NCOM-413 FOR THE FIRST TIME

4.1 Configuring Static IP Address

When setting up your NCOM-413 for the first time, it is important to configure the IP address in order to operate in your network. The NCOM-413 products are configured with the following default private IP address:

Default private IP address: 192.168.254.254

You need to set up your client computer to static IP address manually. Please go to "Internet Protocol Version 4 (TCP/IPv4)" under "Local Area Connection Properties" to change the IP address to a static IP address. (This can be found from Start → Settings → Control Panel → Network and Internet → Network and Sharing Center → Change Adapter Settings → Local Area Connection → Properties).



Under "Internet Protocol Version 4 (TCP/IPv4)", select "Use the following IP address:" and enter the static IP address 192.168.254.XXX (such as 192.168.254.253) and Subnet mask (such as 255.255.255.0) then click "OK" to set your client computer to static IP address.

After setting your client computer to static IP address and connecting to NCOM-413, you can configure NCOM-413 via its web console interface.

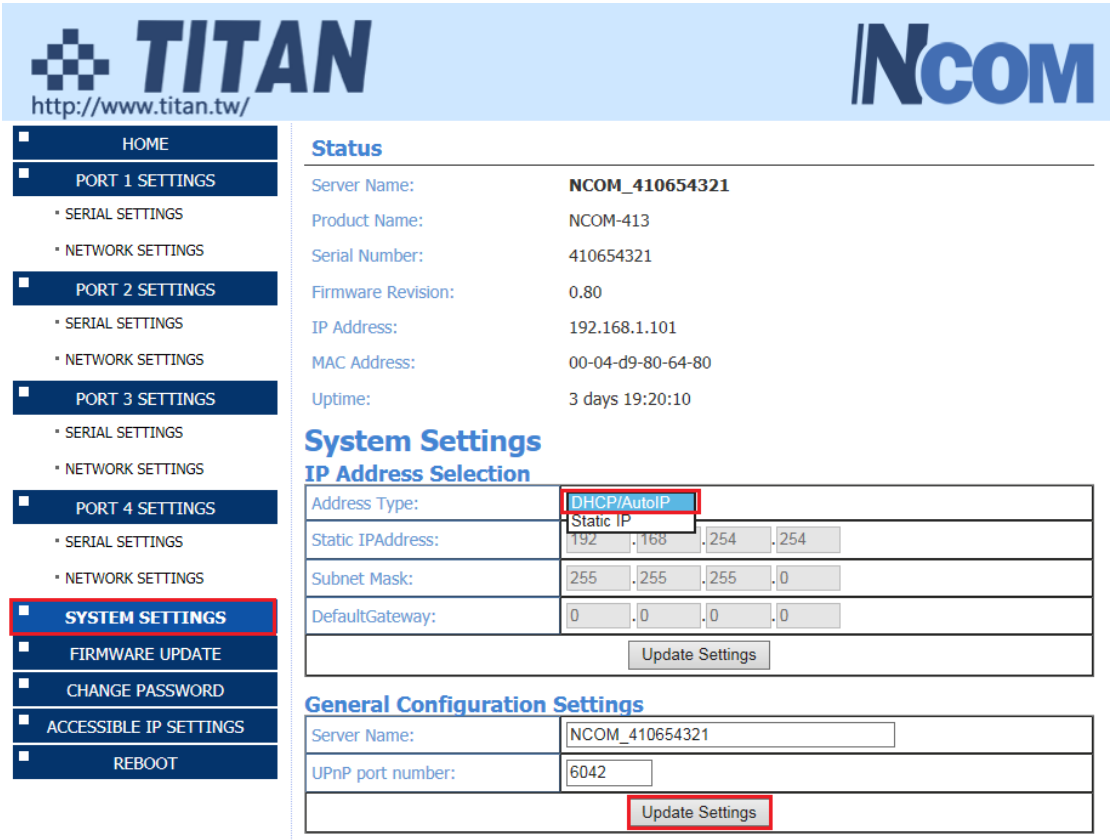
4.2 Opening the Web Console Interface of NCOM-413

NCOM-413 offers a web console interface to configure the serial device server. Open any web browser and enter “192.168.254.254” in the address bar to access the “HOME” page of NCOM-413’s firmware.

4.3 Setting NCOM-413 to Work in DHCP Networks

Many networks are DHCP networks, which assign IP addresses for client computers and NCOM-413 automatically, in which case you would need to set the NCOM-413's IP address to DHCP/AutoIP mode.

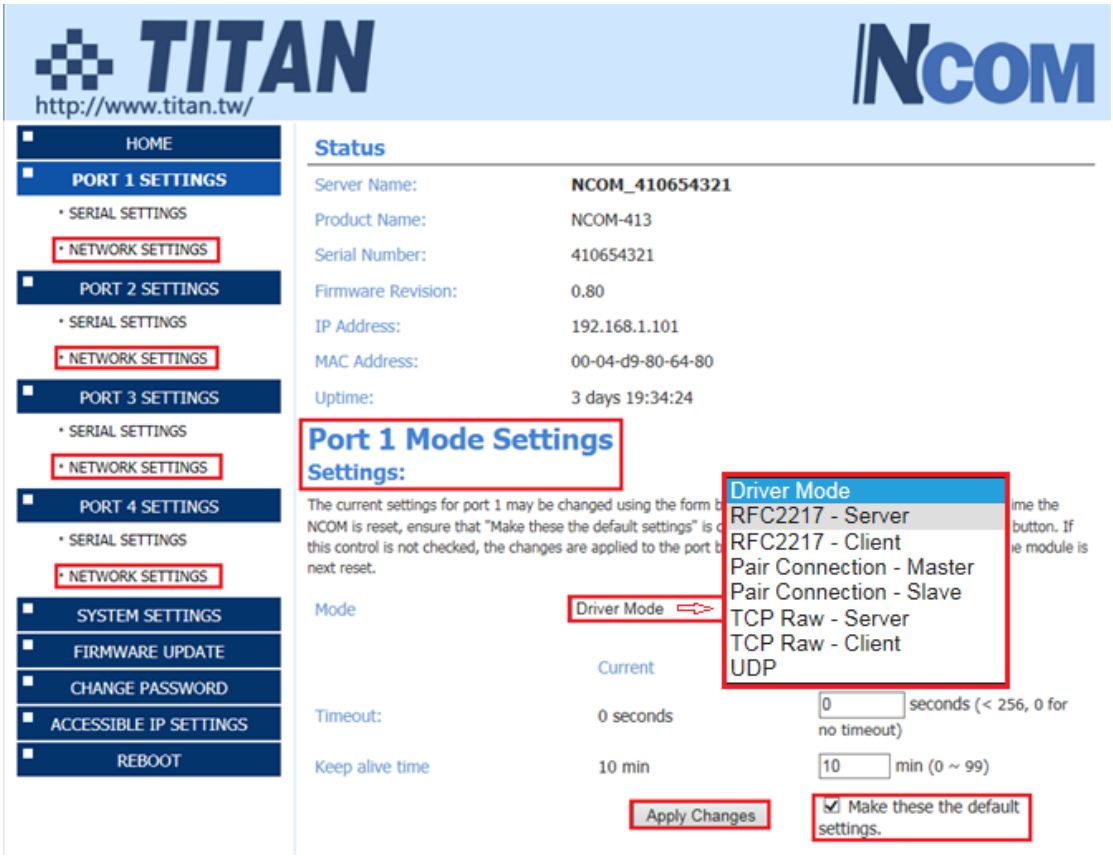
Under the "HOME" page of NCOM-413's firmware, select "SYSTEM SETTINGS". Under "Address Type:", select "DHCP/AutoIP" and click "Update Settings". After clicking "OK", NCOM-413 will be set to DHCP mode.



5. SETTING THE PROPER OPERATION MODE

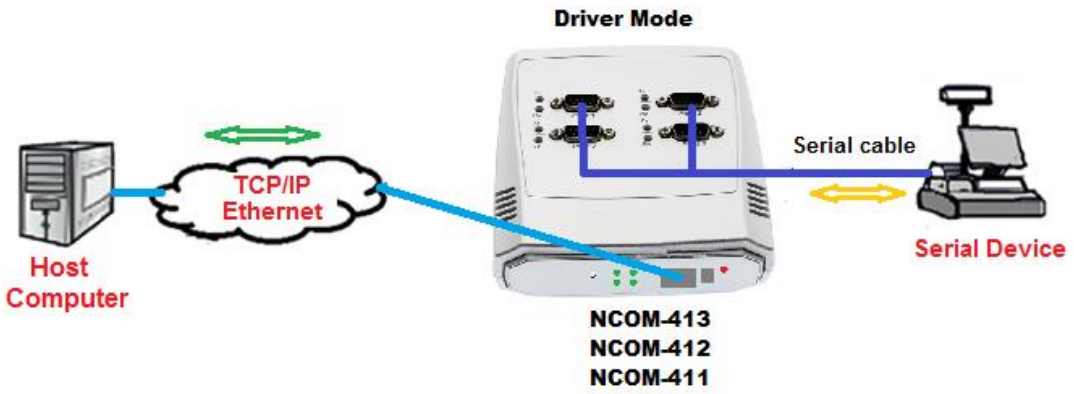
NCOM-413 provides various operation modes, including Driver Mode, RFC2217 Server Mode, RFC2217 Client Mode, Pair Connection Master Mode, Pair Connection Slave Mode, TCP Raw Server Mode, TCP Raw Client Mode and UDP Mode. You need to choose the proper operation mode to control your serial devices located virtually anywhere through a network connection.

Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1 Mode Settings", "Port 2 Mode Settings", "Port 3 Mode Settings" and "Port 4 Mode Settings" window. Under "Mode", select the proper operation mode, check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 in the proper operation mode.

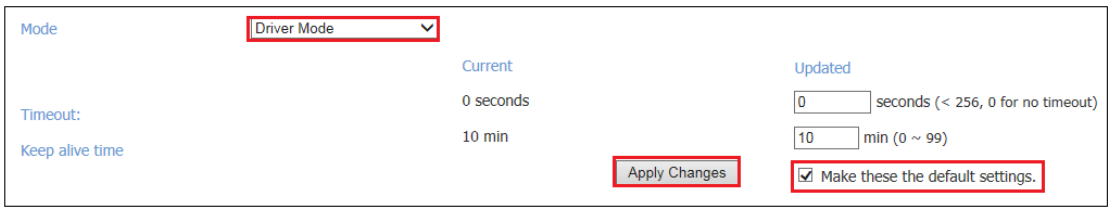


5.1 Driver Mode

Driver mode uses a virtual serial redirection driver installed on Windows systems. The virtual serial redirection driver establishes a transparent connection between host computers and serial devices. This allows users to communicate using serial hardware and serial communication software, with the virtual serial port acting as a native Windows COM port compatible with Windows serial communication applications.

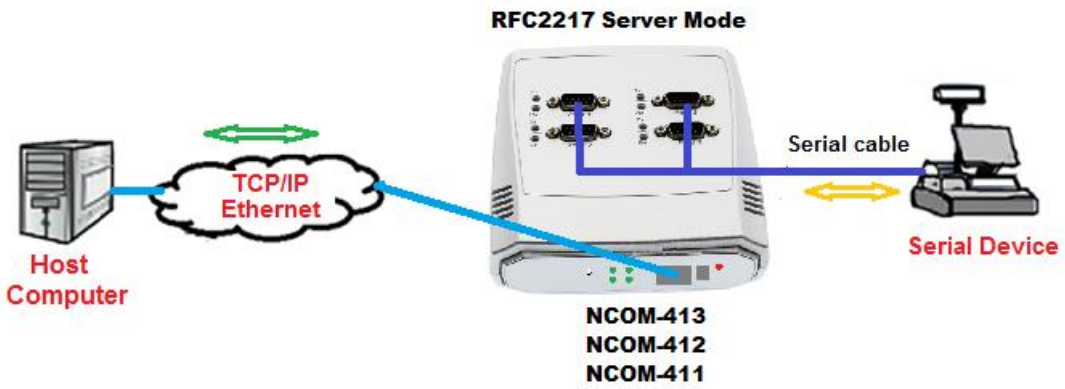


Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "Driver Mode" and check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into Driver Mode.

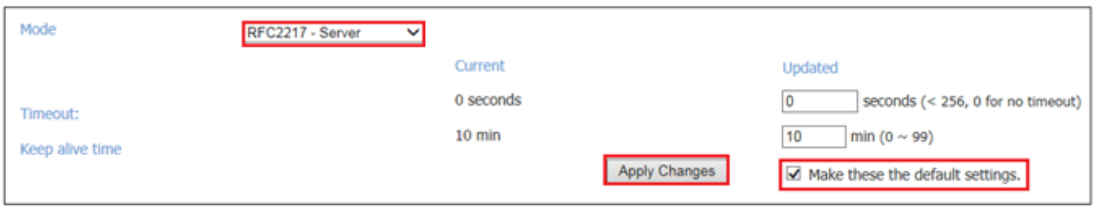


5.2 RFC2217 Server Mode

RFC2217 Server Mode is similar to Driver Mode, which also uses a virtual serial redirection driver to establish a transparent connection between host computers and serial devices. The RFC2217 Mode defines general COM port control options based on the standard Telnet protocol, which allows users to use anything that supports RFC2217 protocol's virtual serial redirection driver (such as com0com + com2tcp for Windows OS and microcom for Linux OS). The virtual serial port functions as a native COM port.

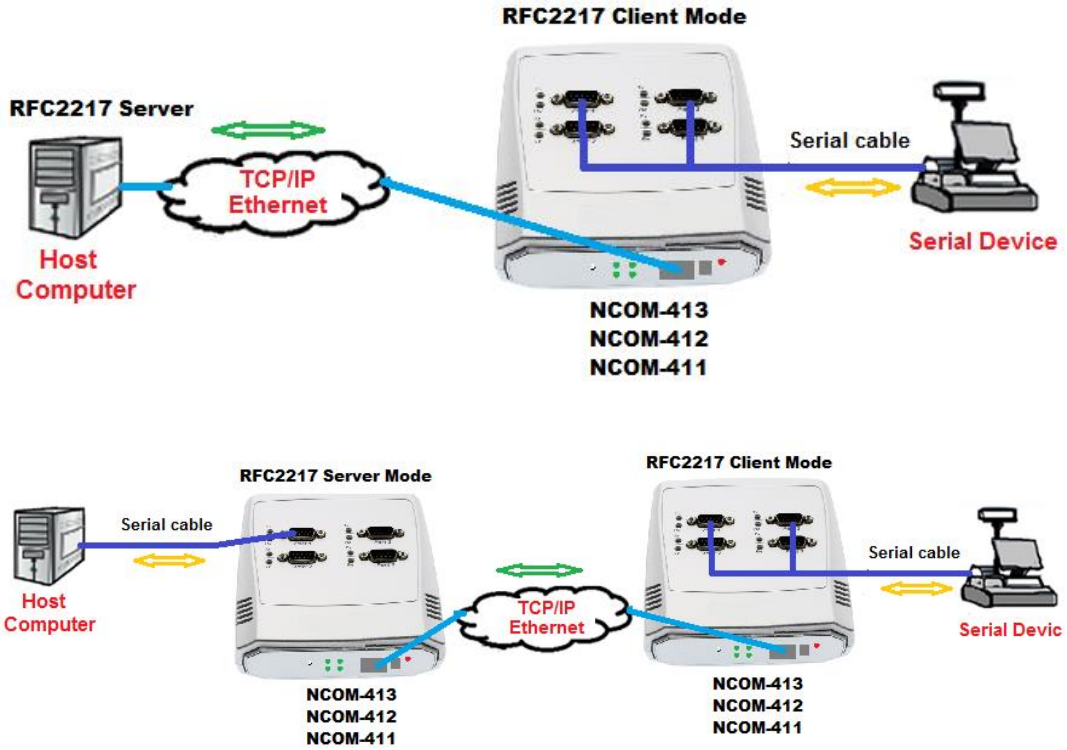


Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "RFC2217-Server" and check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into RFC2217 Server Mode.

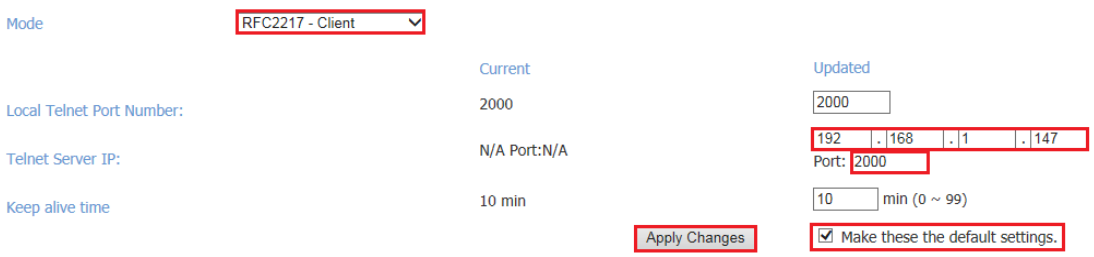


5.3 RFC2217 Client Mode

In RFC2217 Client Mode, NCOM-413 can establish a TCP connection with a pre-determined host computer or a serial device server working in RFC2217 Server Mode. You need to define the IP address (telnet server's IP) to establish a TCP connection with a pre-determined host computer or a serial device server.

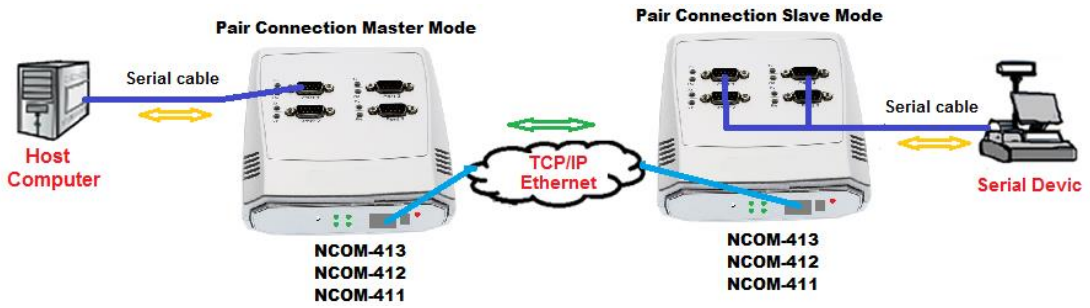


Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "RFC2217-Client" and type "Telnet Server's IP" and "Port" respectively (e.g. 192.168.1.147 Port: 2000) to establish a TCP connection with a pre-determined host computer or a serial device server. Check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into RFC2217 Client Mode.



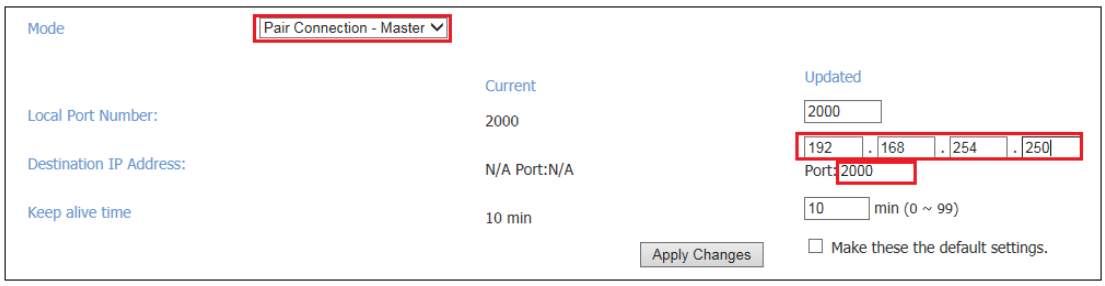
5.4 Pair Connection Mode

Pair Connection Mode uses two NCOM devices in tandem, with one NCOM device in Pair Connection Master Mode and the other in Pair Connection Slave Mode. Two NCOM serial device servers are then connected to each other through Ethernet. Both may either be connected to the same LAN or over a WAN (i.e. through one or more routers). Pair Connection Mode transparently transfers both serial data and modem control signal without distance limitation.



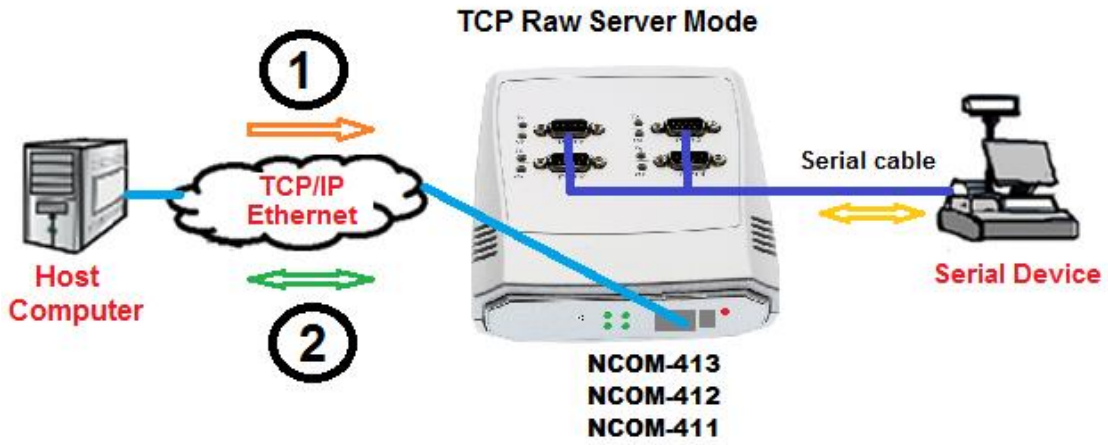
When setting two NCOM-413 devices in Pair Connection Mode, you need to set the "Destination IP Address" of the master serial device server as the IP address of the slave serial device server.

Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "Pair Connection - Master" and type "Destination IP address" and "Port" of the slave serial device server respectively (e.g. 192.168.254.250 Port: 2000) to connect to a serial device server in Pair Connection Slave Mode. Check the "Make these the default settings" box and click "Apply Changes" to set two NCOM-413 devices in Pair Connection Mode.



5.5 TCP Raw Server Mode

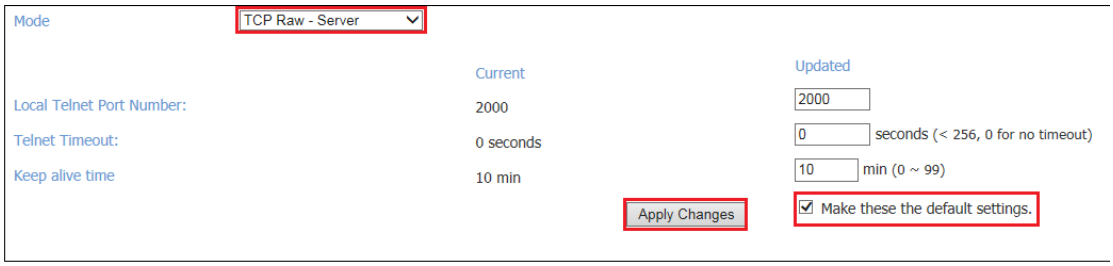
In TCP Raw Server Mode, NCOM-413 is configured with a unique IP & Port combination on a TCP/IP network. It waits passively to be contacted by a host computer. After a host computer establishes a transparent connection, it then proceeds with data transmission.



In the figure, the data transmission proceeds as follows:

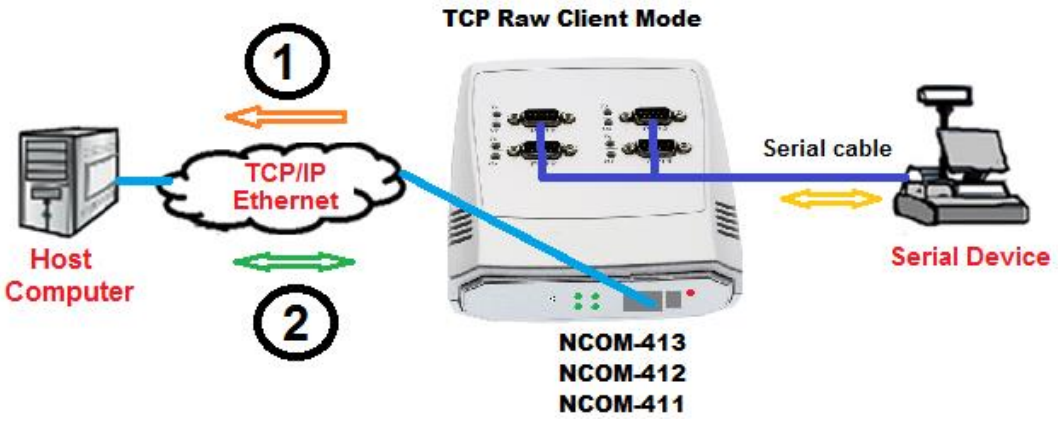
1. The host computer requests a connection from NCOM-413 configured for TCP Raw Server Mode.
2. Once the connection is established, data can be transmitted in both directions – from the host computer to NCOM-413 and from NCOM-413 to the host computer.

Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "TCP Raw - Server" and check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into TCP Raw - Server Mode.



5.6 TCP Raw Client Mode

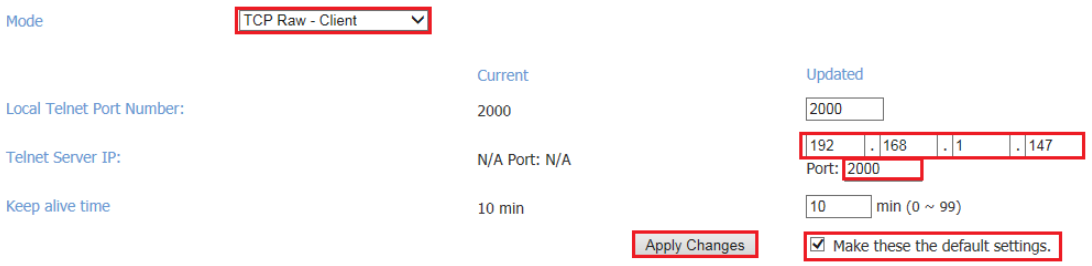
In TCP Raw Client Mode, NCOM-413 can establish a TCP connection with pre-determined host computers when serial data arrives.



In the figure, the data transmission proceeds as follows:

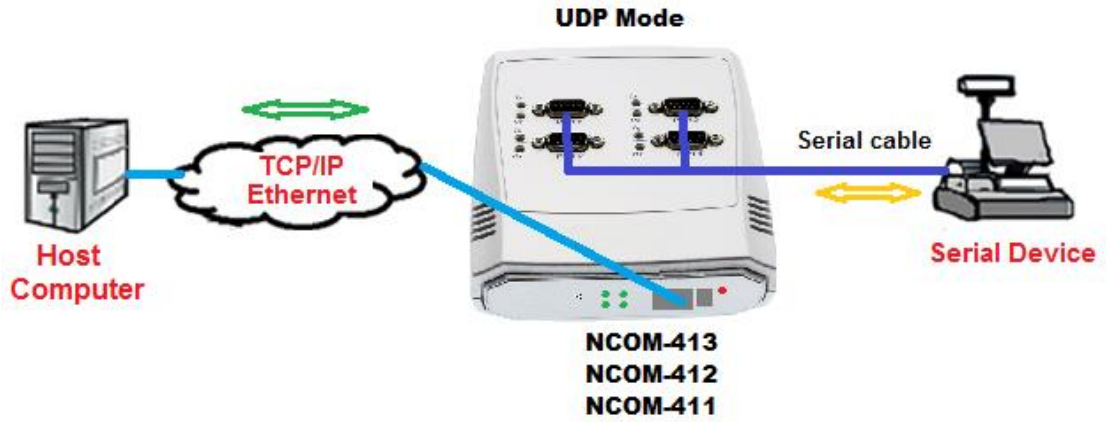
1. NCOM-413 configured for TCP Raw Client Mode requests a connection from the host computer.
2. Once the connection is established, data can be transmitted in both directions – from the host computer to NCOM-413 and from NCOM-413 to the host computer.

Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "TCP Raw - Client" and type "Telnet Server's IP" and "Port" respectively (e.g. 192.168.1.147 Port: 2000) to establish a TCP connection with a pre-determined host computer or a serial device server in TCP Raw Server Mode. Check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into TCP Raw Client Mode.



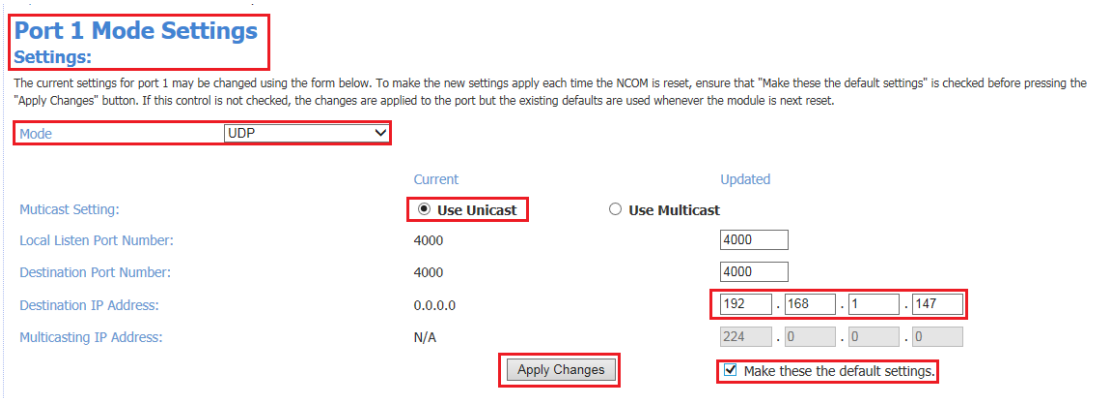
5.7 UDP Mode

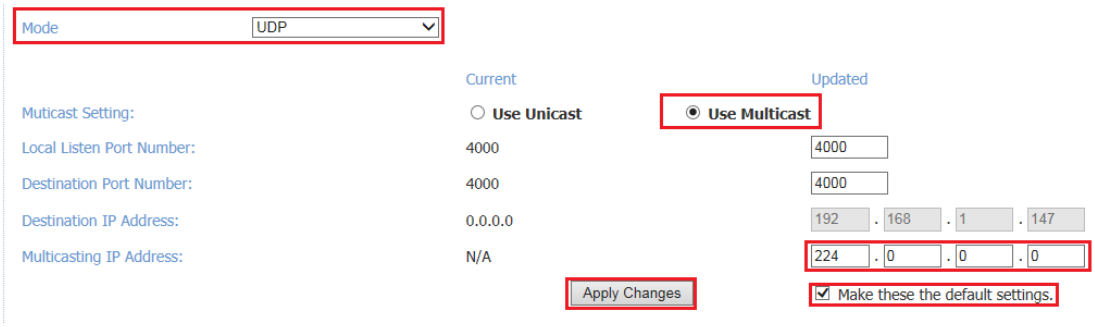
The UDP mode is a faster and more efficient mode. In UDP mode, you can unicast or multicast data from the serial device to one or multiple host computers, or receive data from one or multiple host computers. The UDP mode is ideal for applications such as message display.



In the figure, UDP mode directly proceeds with data transmission with no connection required.

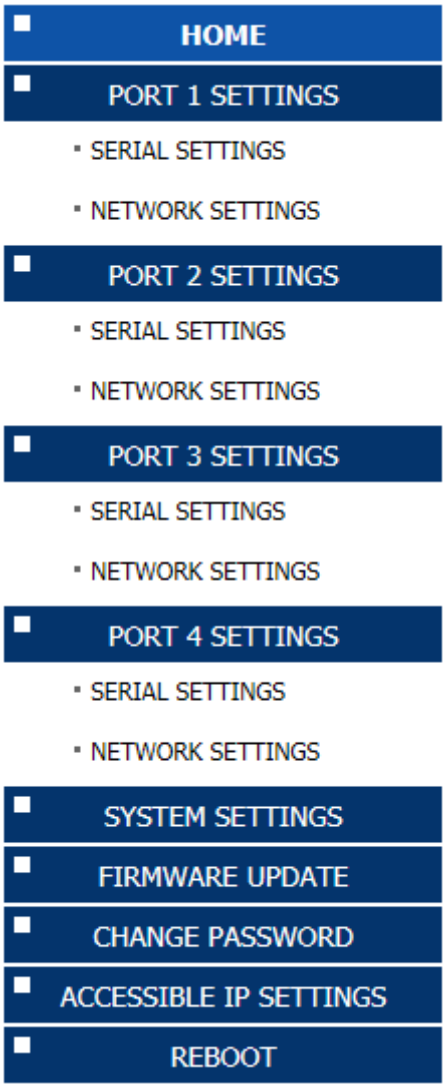
Under the "HOME" page of NCOM-413's firmware, select "NETWORK SETTINGS" to find the "Port 1/2/3/4 Mode Settings" window. Under "Mode", select "UDP" and choose "Use Unicast" or "Use Multicast" under "Multicast Setting". When selecting "Use Unicast", you need to type a "Destination IP Address" (such as 192.168.1.147) to establish a UDP connection with a pre-determined host computer or serial device in UDP unicasting mode. When selecting "Use Multicast", you need to type "Multicasting IP Address" (such as 224.0.0.0) for UDP multicasting group. Check the "Make these the default settings" box and click "Apply Changes" to set your NCOM-413 into UDP Mode.




Mode
UDP
Current
Updated
Muticast Setting:
Use Unicast
Use Multicast
Local Listen Port Number:
4000
4000
Destination Port Number:
4000
4000
Destination IP Address:
0.0.0.0
192 . 168 . 1 . 147
Multicasting IP Address:
N/A
224 . 0 . 0 . 0
Apply Changes
Make these the default settings.

6. WEB CONSOLE CONFIGURATION INTERFACE

The web console interface allows configuration of NCOM-413. These settings include “PORT 1 SETTINGS”, “PORT 2 SETTINGS”, “PORT 3 SETTINGS” and “PORT 4 SETTINGS” (“SERIAL SETTINGS” & “NETWORK SETTINGS”), “SYSTEM SETTINGS”, “FIRMWARE UPDATE”, “CHANGE PASSWORD”, “ACCESSIBLE IP SETTINGS” and “REBOOT”.

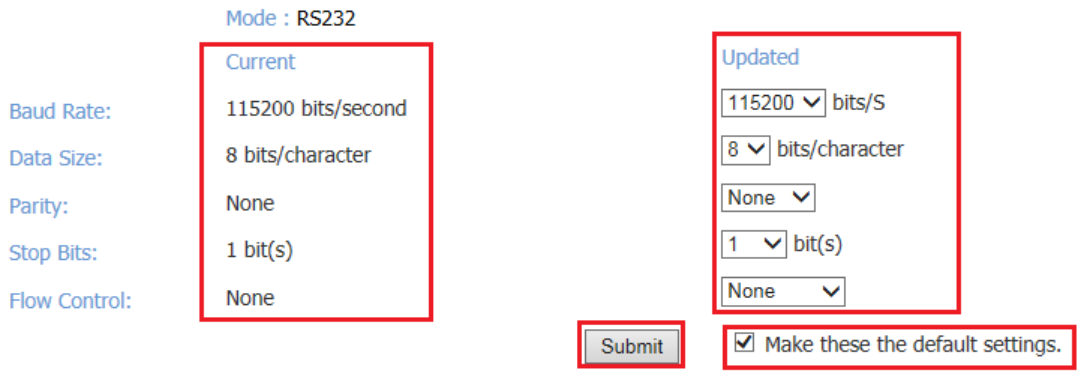


To access the web console interface to configure the device, open any web browser and enter NCOM-413’s IP address in the address bar to access the “HOME” page of NCOM-413’s firmware.

6.1 Port 1, 2, 3 and 4 Settings

The “PORT 1/2/3/4 SETTINGS” include “SERIAL SETTINGS” and “NETWORK SETTINGS”.

Click “SERIAL SETTINGS” to display the current serial port settings for NCOM-413. To modify the serial settings for a particular port, select appropriate options located on the right side of “Port 1/2/3/4 Serial Settings”.



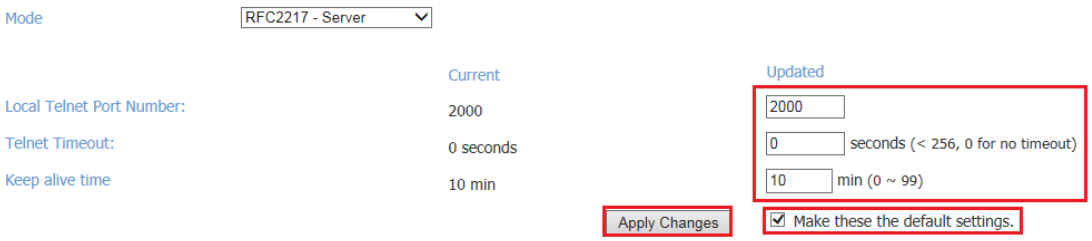
You can modify the following serial parameters for your NCOM-413 serial device server:

Serial Parameters	Setting	Default Values
Mode	RS-232, RS-422, RS-485 4W, RS-485 2W	RS-232
Baud Rate	300bps to 460800bps	115200bps
Data Size	5, 6, 7, 8 bits/character	8 bits/character
Parity Check	None, Odd, Even, Mark, Space	None
Stop Bits	1, 2, 1.5 bit(s)	1 bit
Flow Control	None or Hardware	None

Note: The default mode for NCOM-412 is RS-422.

After you modify the serial parameters for your NCOM-413, please check the “Make these the default settings” and click “Submit” to update the serial parameters for your device.

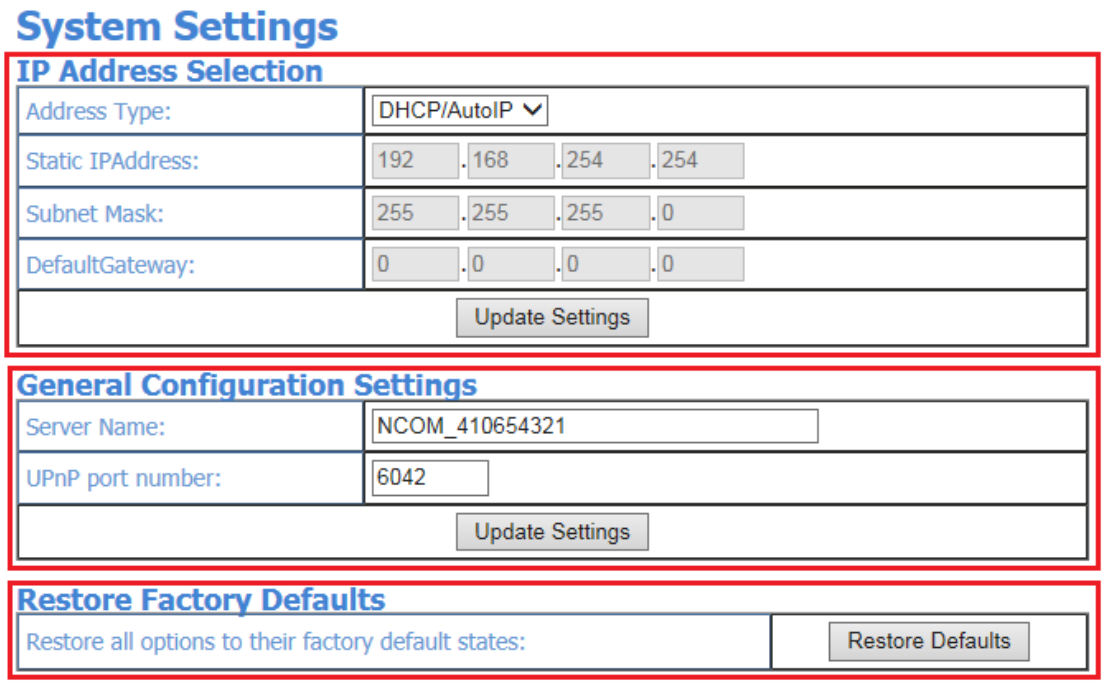
Click “NETWORK SETTINGS” to display the current network settings for NCOM-413. To modify the operation mode, refer to Chapter 5 for more detailed information. You can also modify the network parameters of NCOM-413. To modify the network parameter settings, select appropriate options located on the right side of “Port 1/2/3/4 Mode Settings”. Options include “Local Telnet Port Number”, “Telnet Timeout”, and “Keep alive time”.



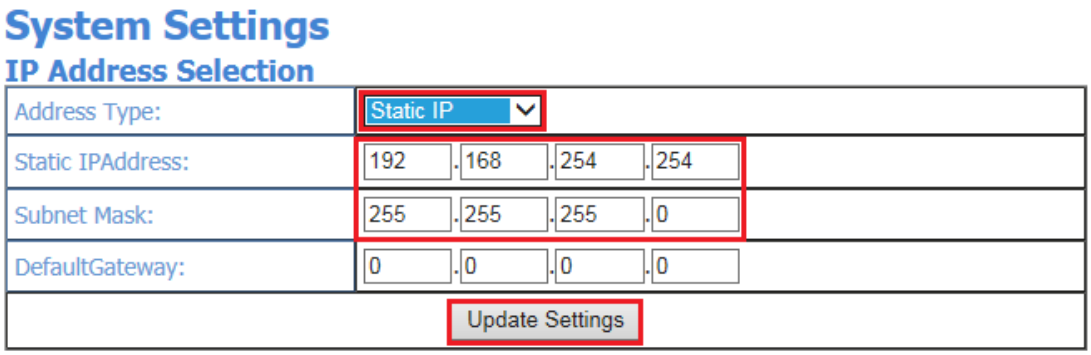
After you modify the network parameters for your NCOM-413, please check the "Make these the default settings" and click "Apply Changes" to update the network parameters for your device.

6.2 System Settings

The "SYSTEM SETTINGS" for NCOM-413 includes "IP Address Selection", "General Configuration Settings" and "Restore Factory Defaults".

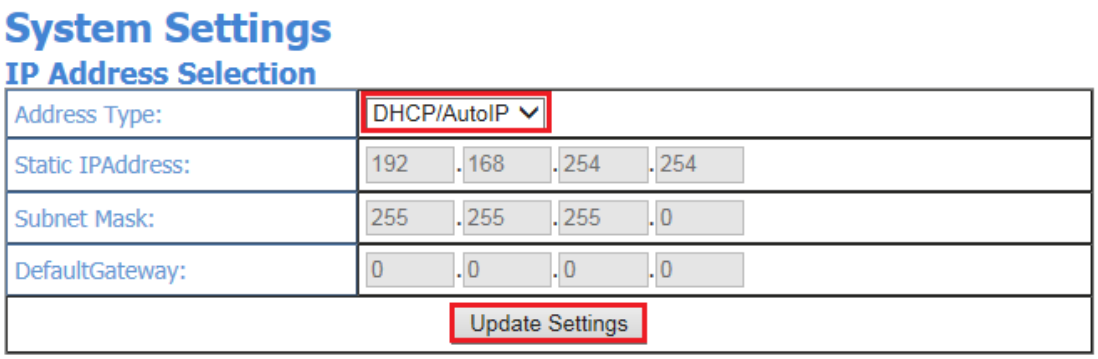


Click "Address Type", located under "IP Address Selection", to select IP address type (DHCP/AutoIP or Static IP) for NCOM-413. When you select "Static IP", you need to enter the static IP address (such as 192.168.254.254) and Subnet Mask (such as 255.255.255.0) then click "Update Settings" to set your device to static IP address.

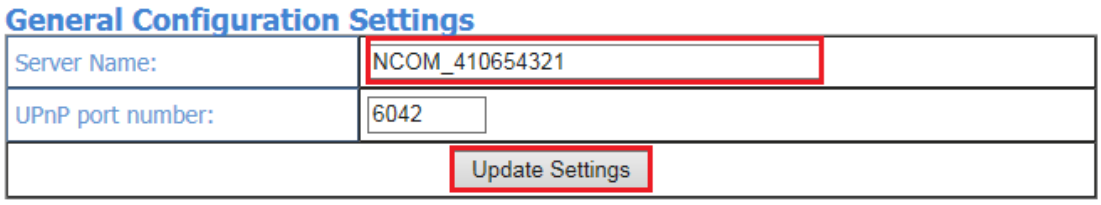


Note: The NCOM-413's Default IP address is 192.168.254.254

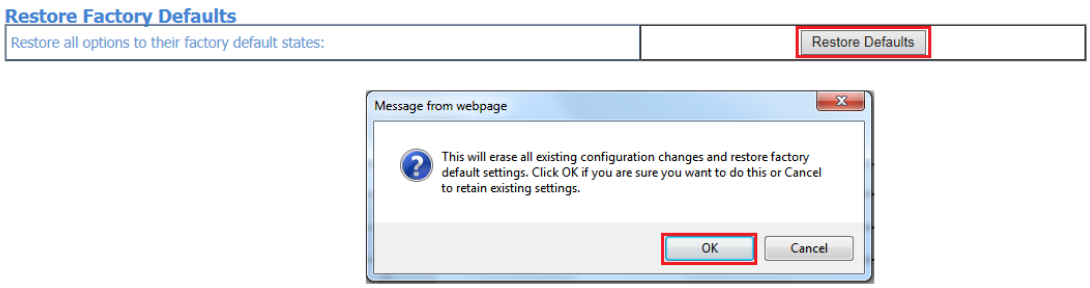
If you are working in a DHCP network, you need to select "DHCP/AutoIP" and click "Update Settings" to assign IP address for the NCOM-413 automatically.



You can change NCOM serial device server's name by modifying the "Server Name" under "General Configuration Settings". You need to enter a new name (such as NCOM-413) and click "Update Settings" to set your serial device server to a new name.



The NCOM-413's firmware provides a function to restore settings to factory defaults. You can do so by clicking "Restore Defaults" under "Restore Factory Defaults". After clicking "OK", NCOM-413 will restore all options to factory default states.



Following are the values of default states:

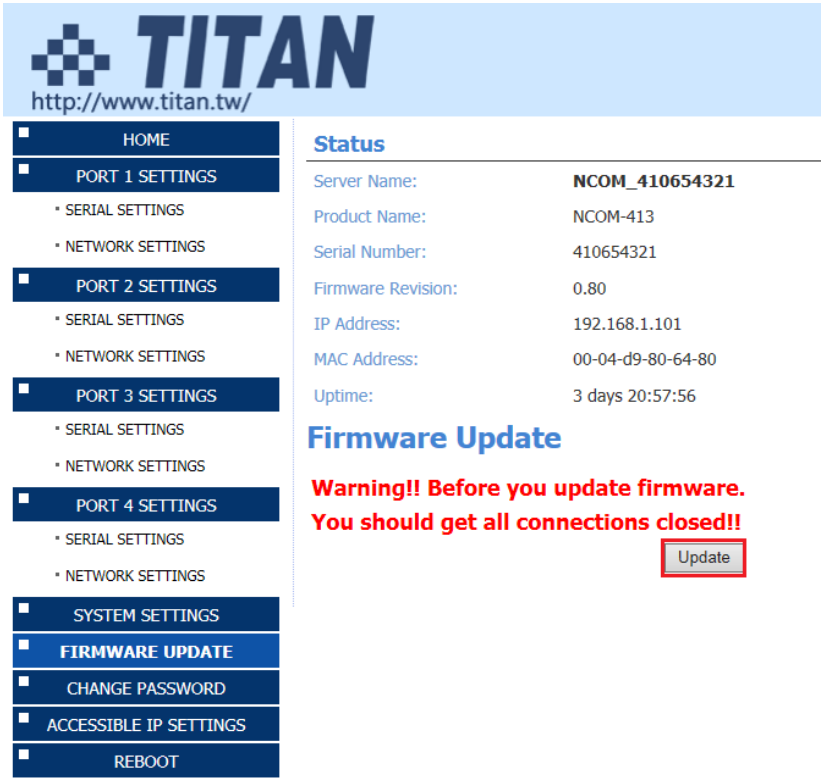
Network Parameters	Default Values
Mode	Driver Mode
Timeout	0 seconds
Keep alive time	10 minutes
Address Type	Static IP
Static IP address	192.168.254.254
Subnet Mask	255.255.255.0

Serial Port Parameters	Default Values
Mode	RS-232
Baud Rate	115200bps
Data Size	8 bits/character
Parity Check	None
Stop Bits	1 bit
Flow Control	None

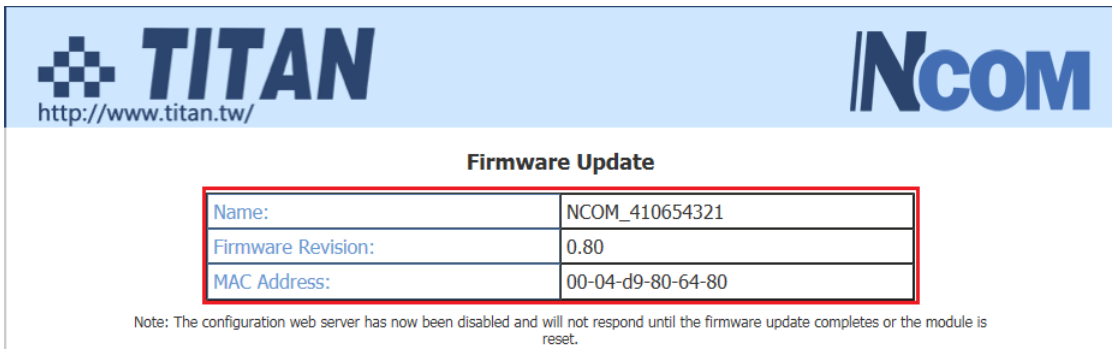
Note: The default mode for NCOM-412 is RS-422.

6.3 Firmware Update

Under the web console interface, select “FIRMWARE UPDATE” and click “Update” to enable the firmware update interface to upgrade to a new firmware.



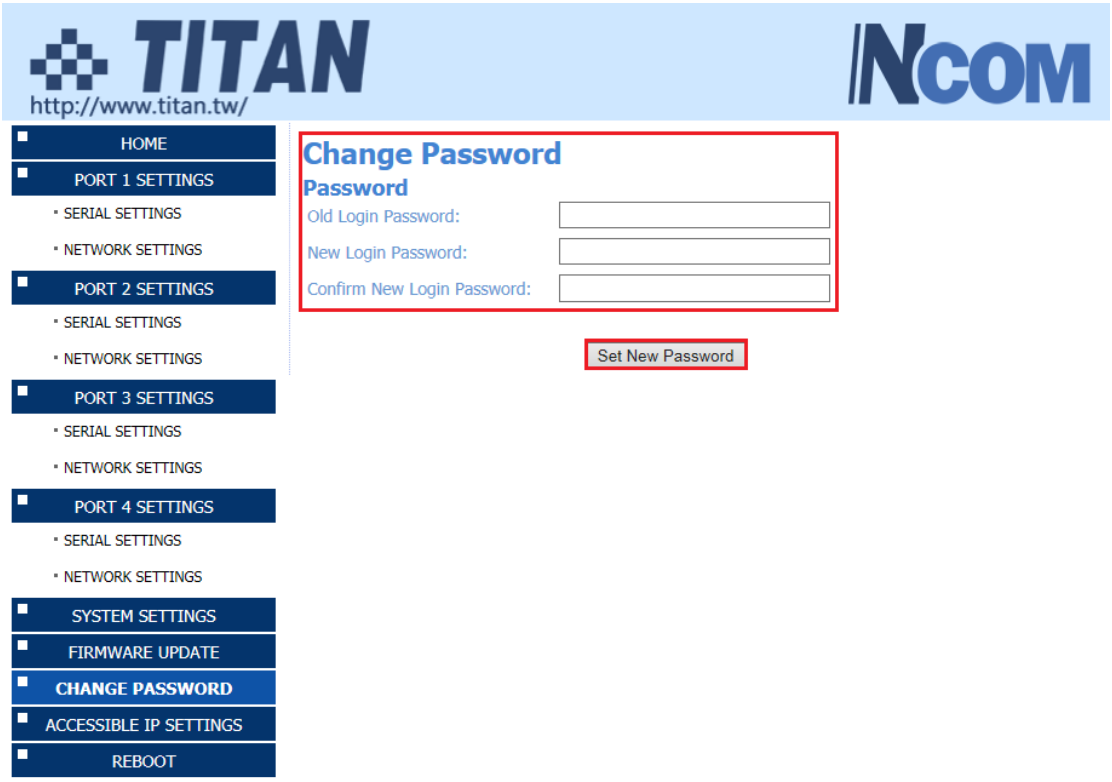
When you click “Update”, you will find the following message. The web console interface then waits for the firmware update tool program to launch in order to continue upgrading NCOM-413’s firmware.



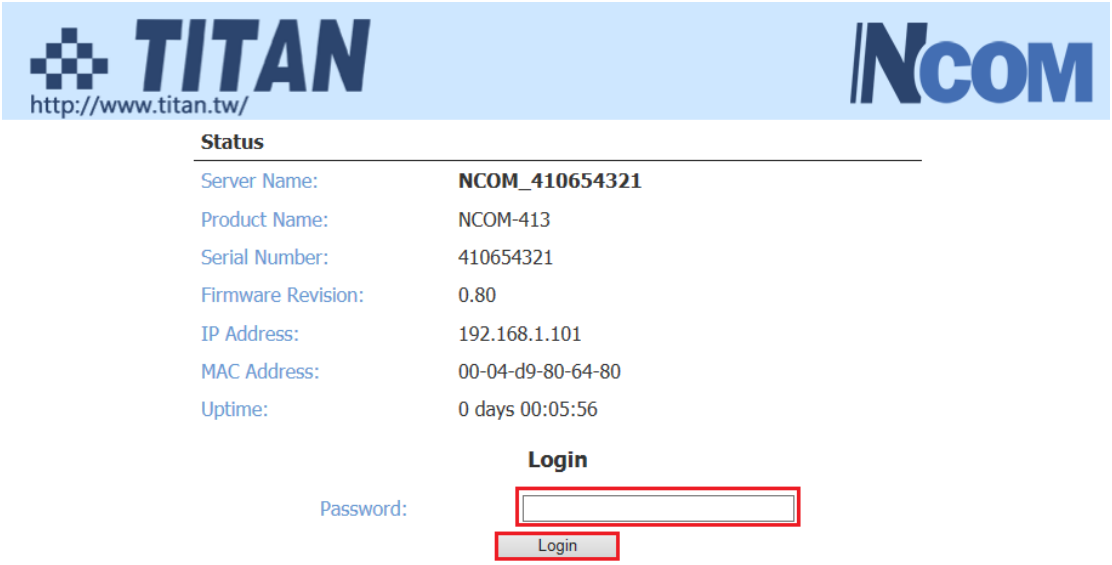
After enabling firmware update from the web console, please refer to page 64~66, 85~87 for instructions on how to launch the firmware update tool program to upgrade NCOM-413’s firmware.

6.4 Change Password

Input the “Old Login Password”, “New Login Password” and “Confirm New Login Password” to change the login password. After clicking “Set New Password” the NCOM-413 will have password protection.



When password protection is enabled, you need to input the “Password” then click “Login” to access NCOM-413’s firmware to configure the device.



If you **forget the password**, the ONLY way to configure NCOM-413 is by using the hardware restore factory defaults button to restore factory defaults. The factory default settings have password protection disabled, allowing you to log in without a password.

6.5 Accessible IP Settings

The NCOM-413's firmware provides accessible IP settings. It uses an IP address based filtering method to control accessible IP addresses.

Accessible IP settings allows you to pass or block remote host IP addresses to prevent unauthorized access. Access to NCOM-413 is controlled by IP address. If a host's IP address is in the accessible IP table, then the host will be allowed to access the device. You can allow one of the following rules by setting the accessible IP table parameter.

1. Only one host with a specific IP address can access NCOM-413.

Check the "Enable" checkbox then enter IP address and "255.255.255.255" for Netmask.

In this example, only the host with an IP address of 192.168.1.122 can access the device.

2. Hosts on a specific subnet can access NCOM-413.

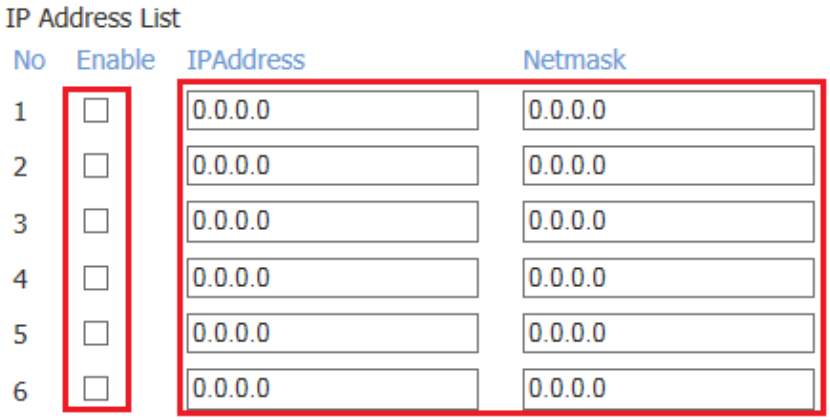
Check the "Enable" checkbox then enter IP address and "255.255.255.0" for Netmask.

In this example, only hosts with an IP address from 192.168.1.1 to 192.168.1.254 can access the device.

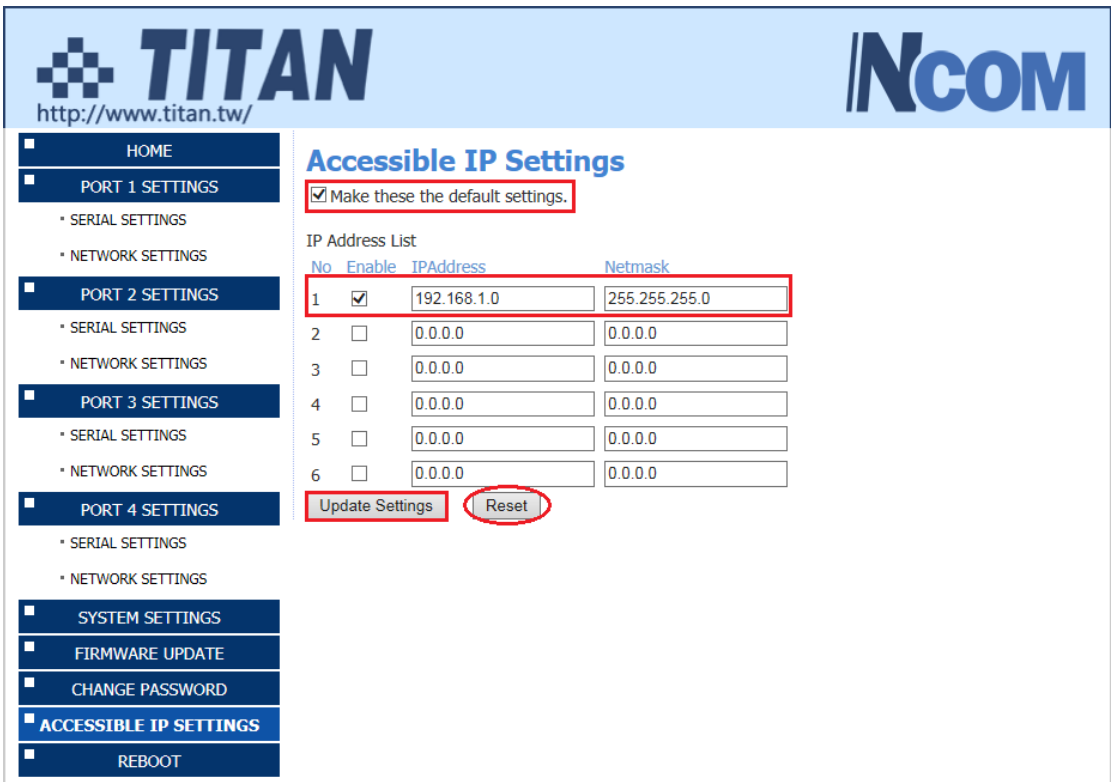
In this example, only hosts with an IP address from 192.168.0.1 to 192.168.255.254 can access the device.

3. Any host can access NCOM-413.

Disable this function by unchecking "Enable".



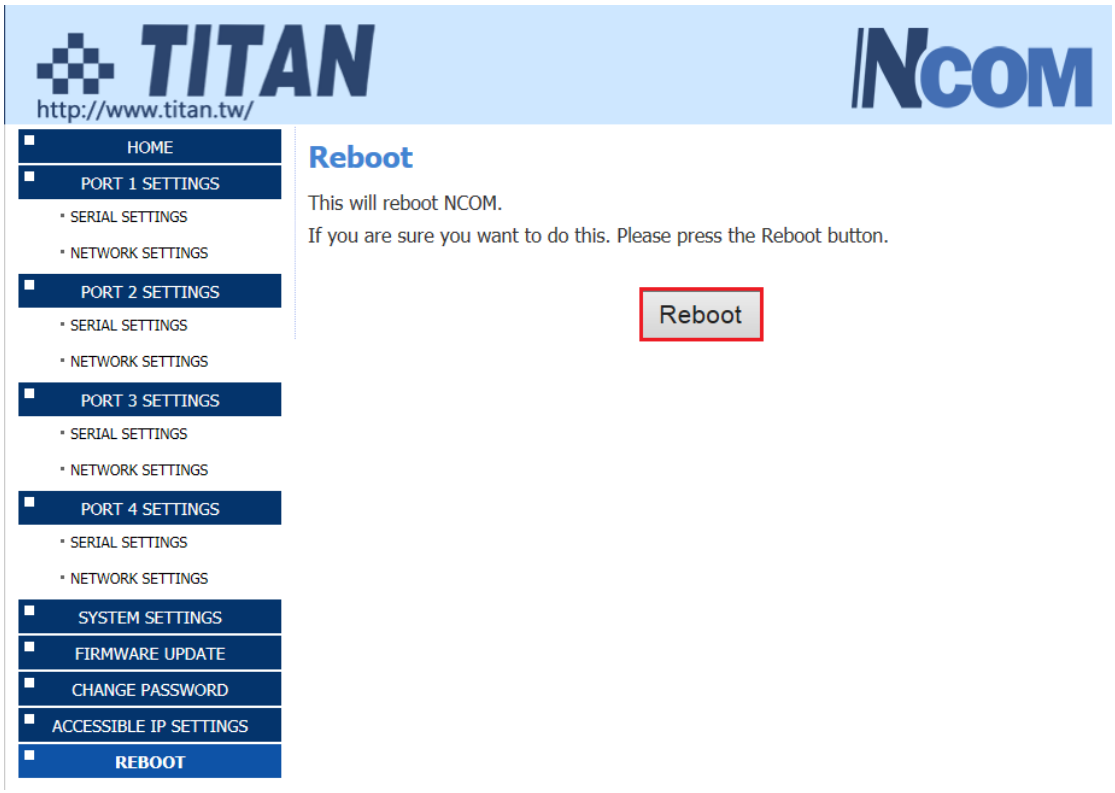
After you enter “IP address” and “Netmask” to set accessible IP for your NCOM-413 serial device server, please check the “Make these the default settings” and click “Update Settings” to update the accessible IP settings table for NCOM-413.



You can click “Reset” to allow any host to access NCOM-413. **The default accessible IP setting is to allow all hosts to access.**

6.6 Reboot

You can click “Reboot” to reboot/reset your NCOM-413 serial device server.



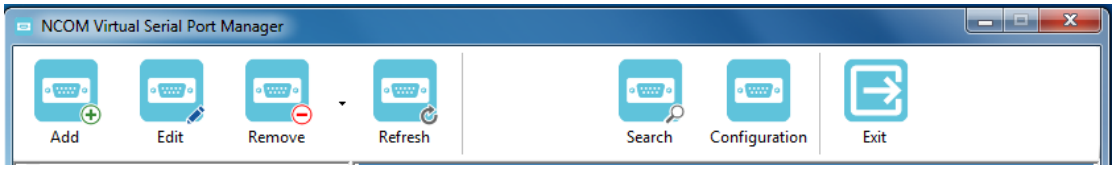
7. NCOM VIRTUAL SERIAL PORT MANAGER AND DRIVER INSTALLATION

7.1 NCOM Virtual Serial Port Manager

Note: The virtual serial port driver is bundled with NCOM Virtual Serial Port Manager and is automatically installed when you install NCOM Virtual Serial Port Manager!

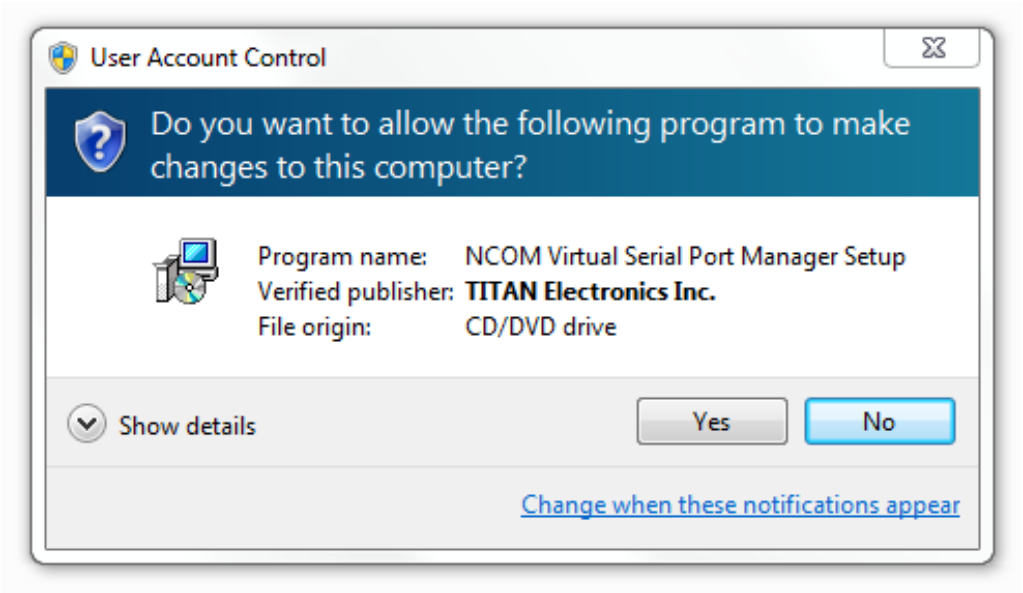
The NCOM Virtual Serial Port Manager is an advanced software-based solution that allows you to communicate with serial device servers over networks easily. Thus, any serial device connected to your NCOM serial device server could be accessed from anywhere in the world (via internet or LAN) as if it were attached directly to the remote PC.

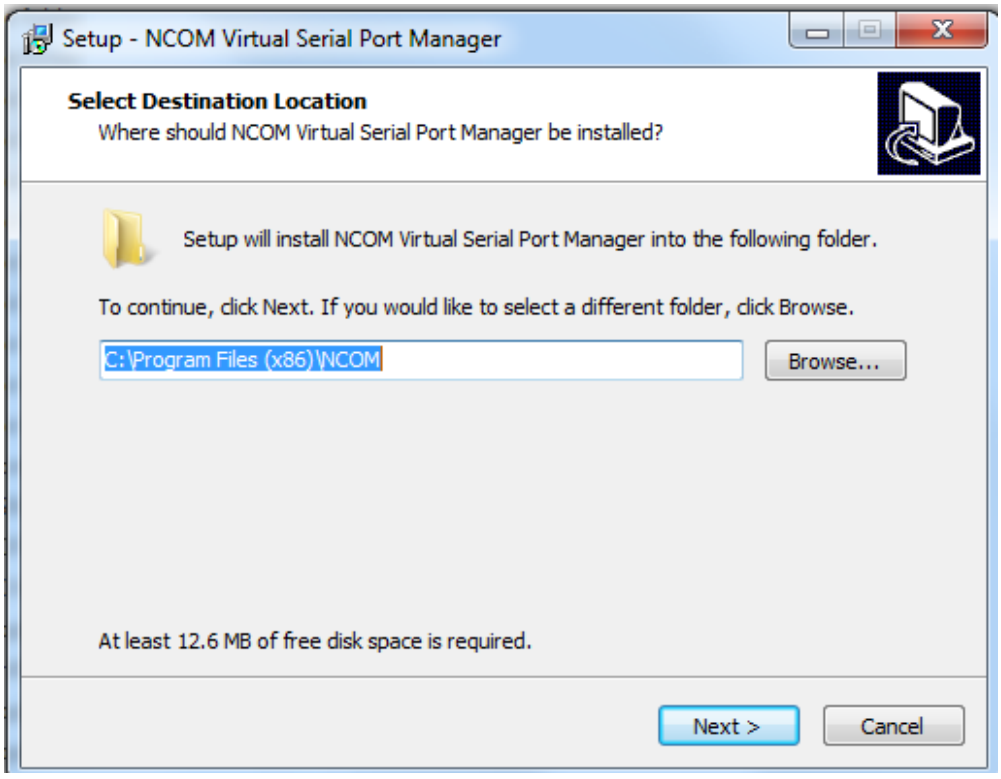
When the attached serial port device sends communication data it is actually transmitted over TCP/IP network and back from the network to your serial device. NCOM Virtual Serial Port Manager has options to configure NCOM-413 with the options “Add” (add virtual serial port), “Edit” (edit virtual serial port parameters), “Remove” (remove virtual serial port), “Refresh” (refresh virtual serial port), “Search” (search all attached NCOM devices), “Configuration” (configure virtual serial port parameters) and “Exit” (exit NCOM Virtual Serial Port Manager).



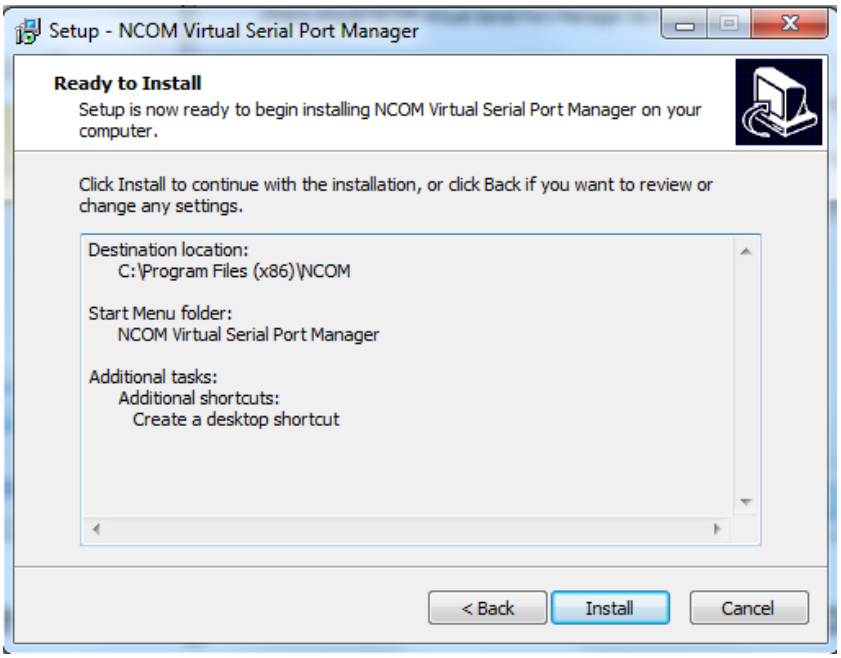
7.2 Installing NCOM Virtual Serial Port Manager

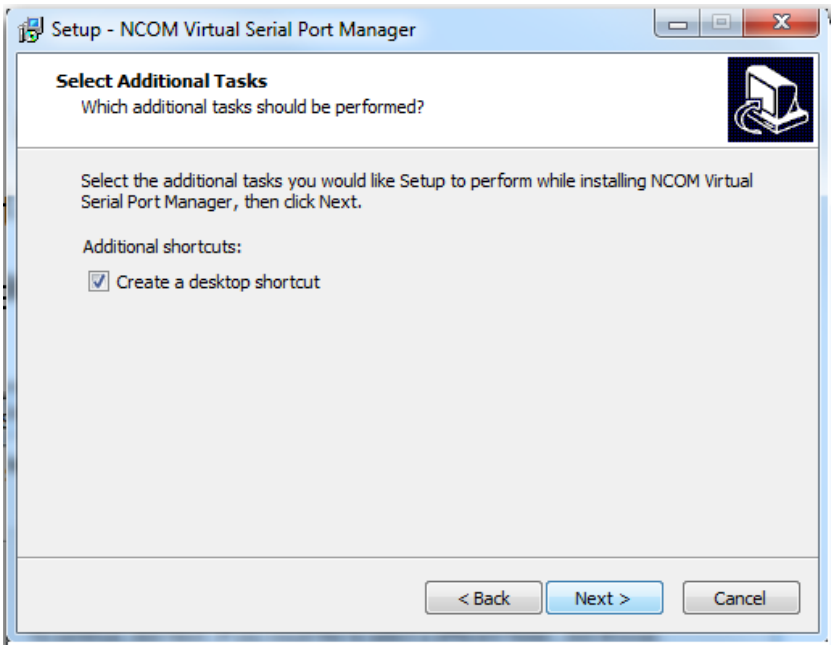
1. Insert the software CD into your CD-ROM or DVD-ROM drive.
2. Open files in the CD and double click “NCOM_setup” to install NCOM Virtual Serial Port Manager.
3. When the confirmation for “User Account Control” appears, click “Yes” and the “Setup - NCOM Virtual Serial Port Manager” message appears. Click “Next” to proceed with the installation of NCOM Virtual Serial Port Manager



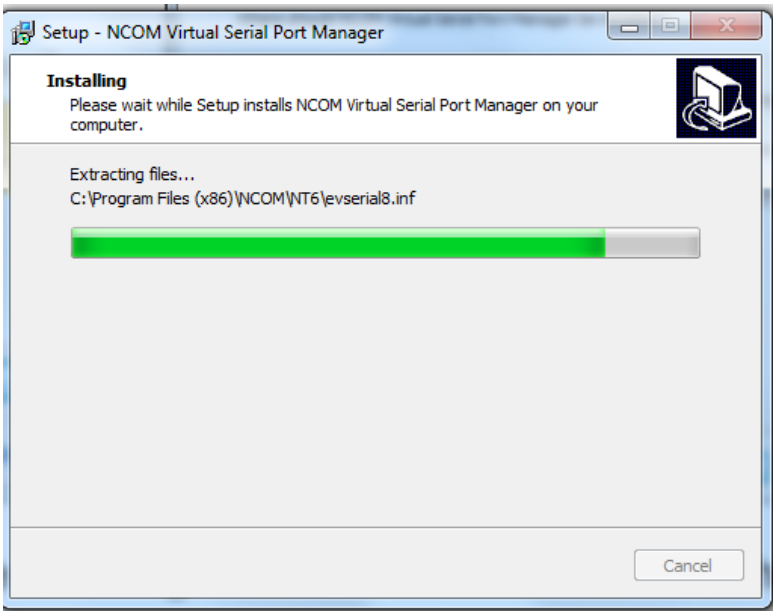


4. After you click “Next”, you will see following information. Click on “Next” and the “Ready to Install” message appears. Click “Install” to install NCOM Virtual Serial Port Manager.

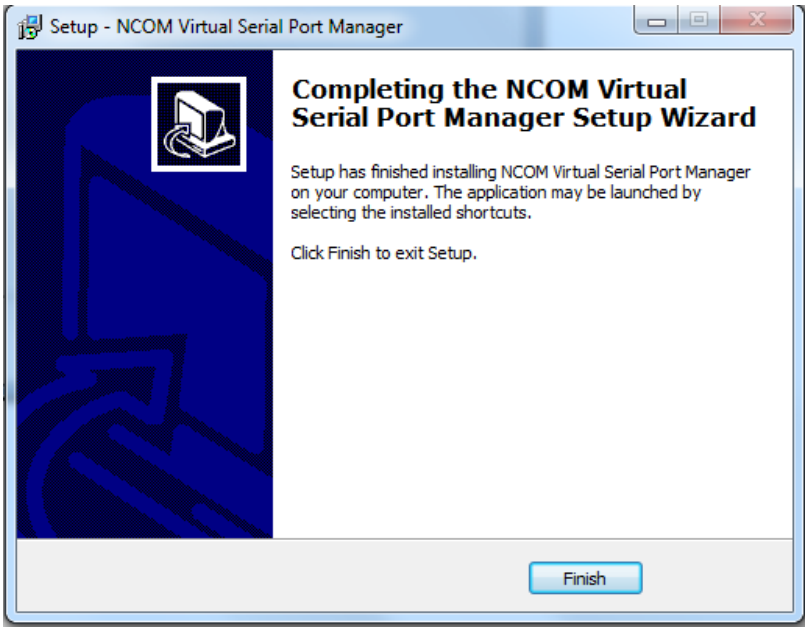




5. After you click “Install” to install NCOM Virtual Serial Port Manager and virtual serial port driver for NCOM devices, you will see the following information.

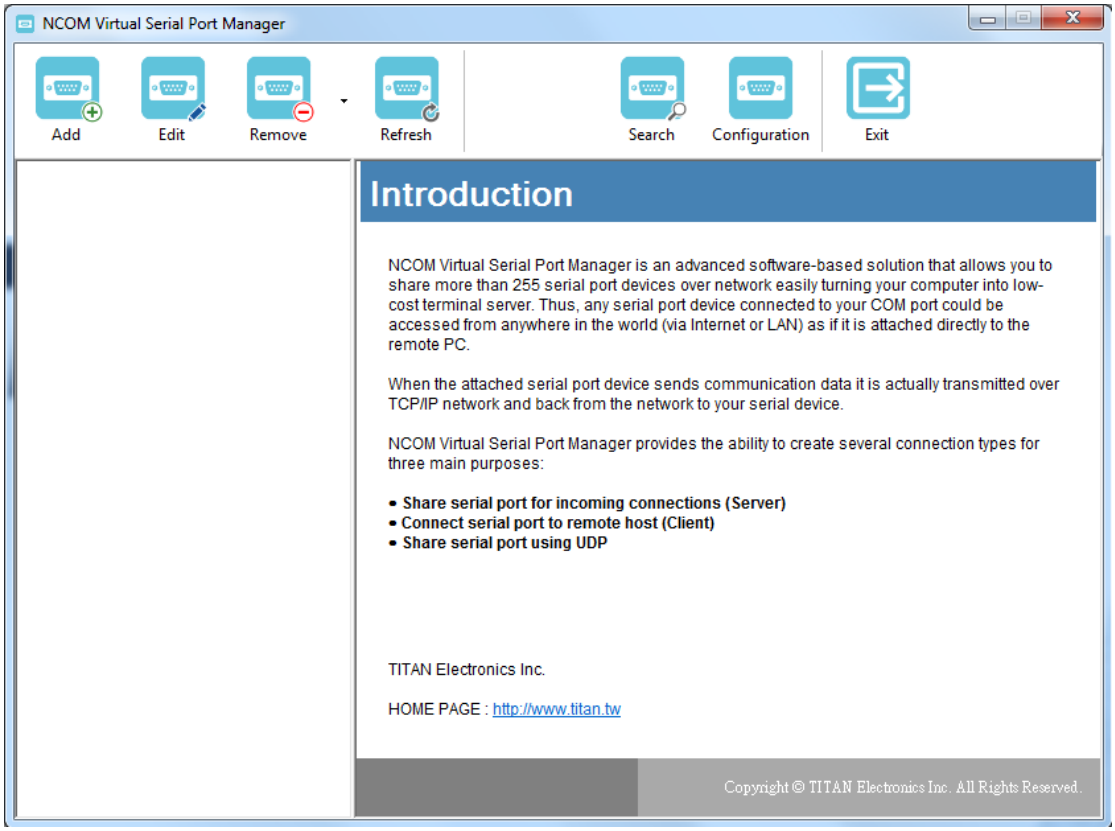


6. When the message “Completing the NCOM Virtual Serial Port Manager Setup Wizard” appears, click “Finish” to finish the installation and exit setup program.



7. Double click the shortcut icon of “NCOM Virtual Serial Port Manager” on the desktop to launch NCOM Virtual Serial Port Manager.

8. You will see the main window of NCOM Virtual Serial Port Manager.


NCOM Virtual Serial Port Manager
Add
Edit
Remove
Refresh
Search
Configuration
Exit
Introduction
NCOM Virtual Serial Port Manager is an advanced software-based solution that allows you to share more than 255 serial port devices over network easily turning your computer into low-cost terminal server. Thus, any serial port device connected to your COM port could be accessed from anywhere in the world (via Internet or LAN) as if it is attached directly to the remote PC.
When the attached serial port device sends communication data it is actually transmitted over TCP/IP network and back from the network to your serial device.
NCOM Virtual Serial Port Manager provides the ability to create several connection types for three main purposes:
• Share serial port for incoming connections (Server)
• Connect serial port to remote host (Client)
• Share serial port using UDP
TITAN Electronics Inc.
HOME PAGE : http://www.titan.tw
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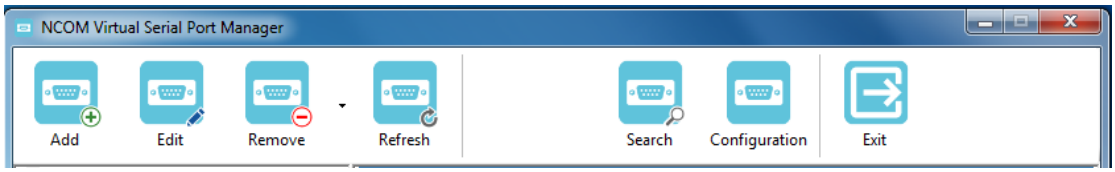
8. RUNNING NCOM VIRTUAL SERIAL PORT MANAGER

After installing NCOM-413 hardware and NCOM Virtual Serial Port Manager, double click the shortcut icon of “NCOM Virtual Serial Port Manager” on the Desktop to start NCOM Virtual Serial Port Manager.

8.1 NCOM Virtual Serial Port Manager Functions

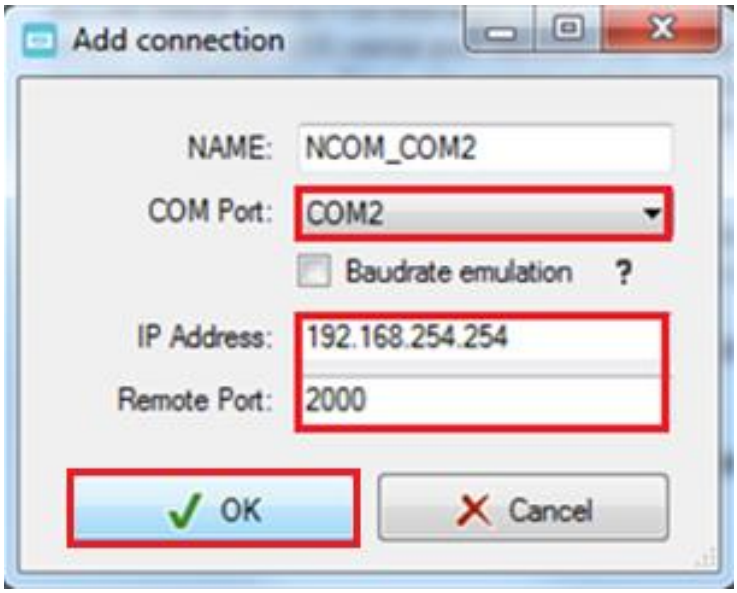
NCOM Virtual Serial Port Manager has options to configure NCOM-413 with the options “Add” (add virtual serial port), “Edit” (edit virtual serial port parameters), “Remove” (remove virtual serial port), “Refresh” (refresh virtual serial port), “Search” (search all attached NCOM devices), “Configuration” (configure virtual serial port parameters) and “Exit” (exit NCOM Virtual Serial Port Manager).



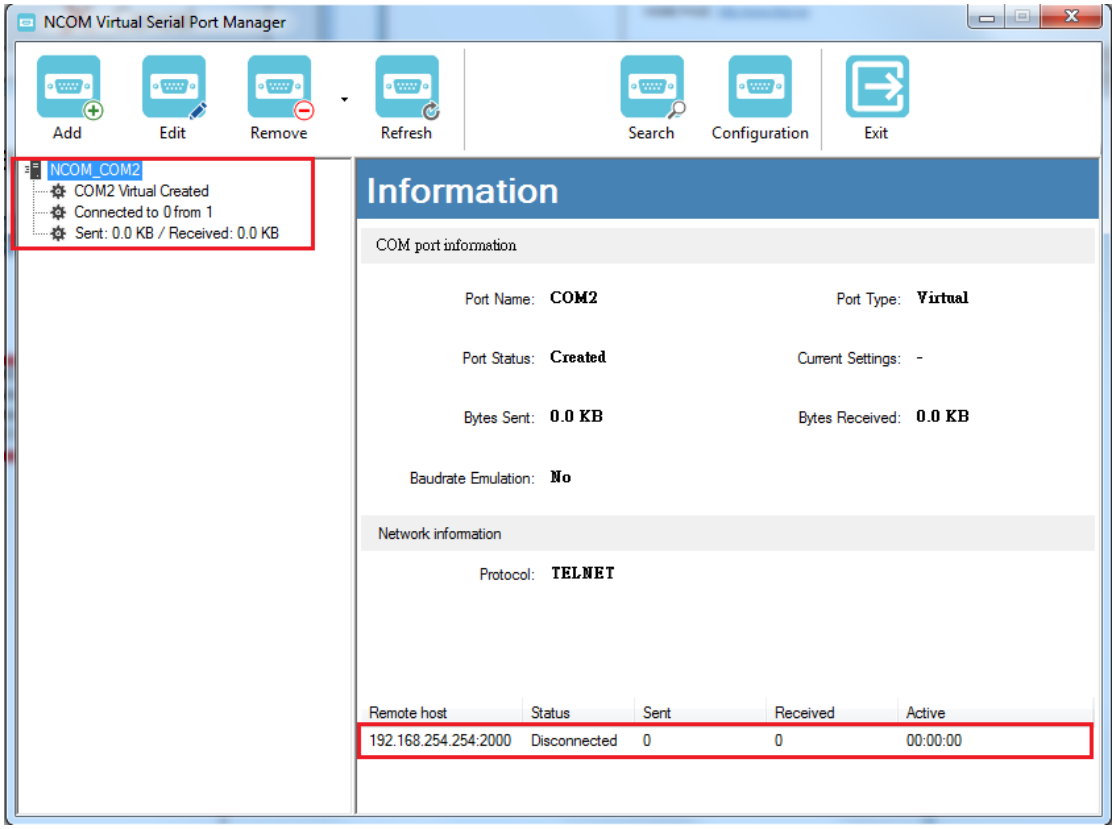
8.2 Manually Add Virtual Serial Port for NCOM Devices

After opening NCOM Virtual Serial Port Manager, click “Add” to open the “Add connection” window.

Under “Add connection”, select an available COM port (e.g. COM2. Note that NCOM Virtual Serial Port Manager will show your next available COM port) and type your NCOM device’s IP address and port in “IP Address” and “Remote Port” respectively (e.g. IP Address: 192.168.254.254 Port: 2000). After setting the COM port, IP address and remote port, click “OK” to add a new virtual serial port.

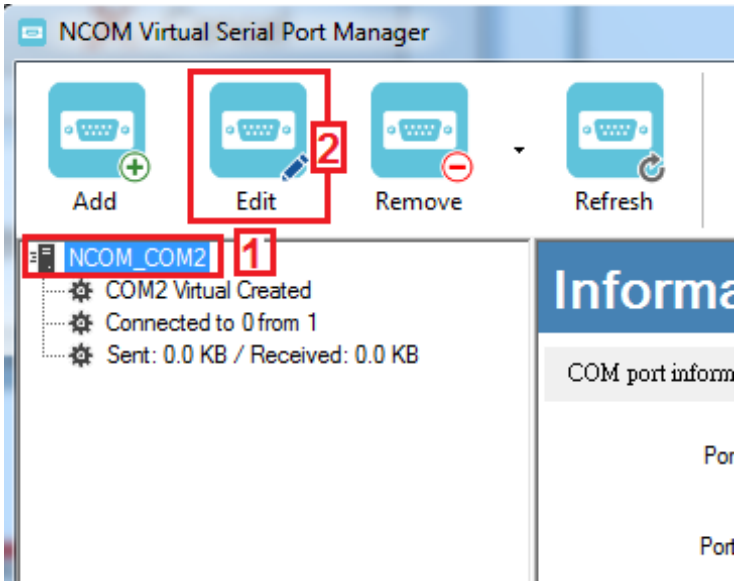


After adding a new virtual serial port for NCOM devices, you will find information about the virtual serial port in the main window of NCOM Virtual Serial Port Manager.

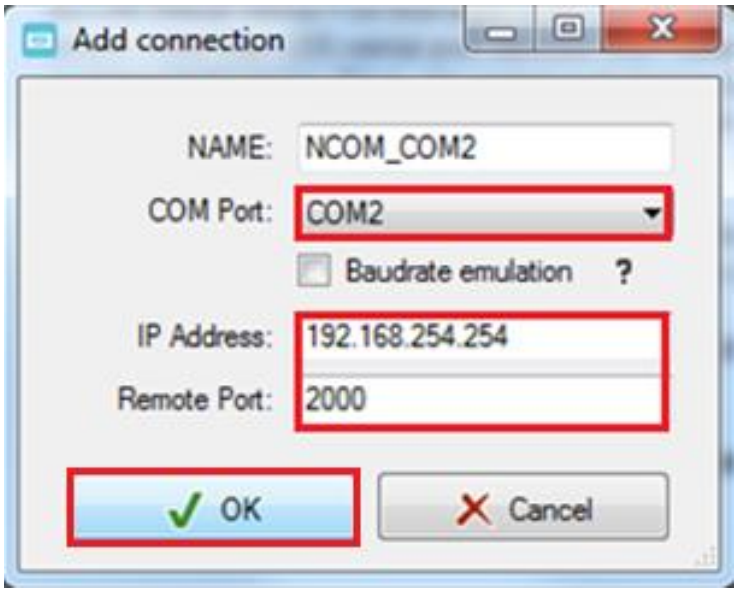

NCOM Virtual Serial Port Manager
Add
Edit
Remove
Refresh
Search
Configuration
Exit
NCOM_COM2
COM2 Virtual Created
Connected to 0 from 1
Sent: 0.0 KB / Received: 0.0 KB
Information
COM port information
Port Name: COM2
Port Type: Virtual
Port Status: Created
Current Settings: -
Bytes Sent: 0.0 KB
Bytes Received: 0.0 KB
Baudrate Emulation: No
Network information
Protocol: TELNET
Remote host
Status
Sent
Received
Active
192.168.254.254:2000
Disconnected
0
0
00:00:00

8.3 Manually Edit Existing Virtual Serial COM Ports for NCOM Devices

To edit existing virtual serial COM port for NCOM devices, select the existing virtual serial COM port and click “Edit” to open the “Add connection” window.

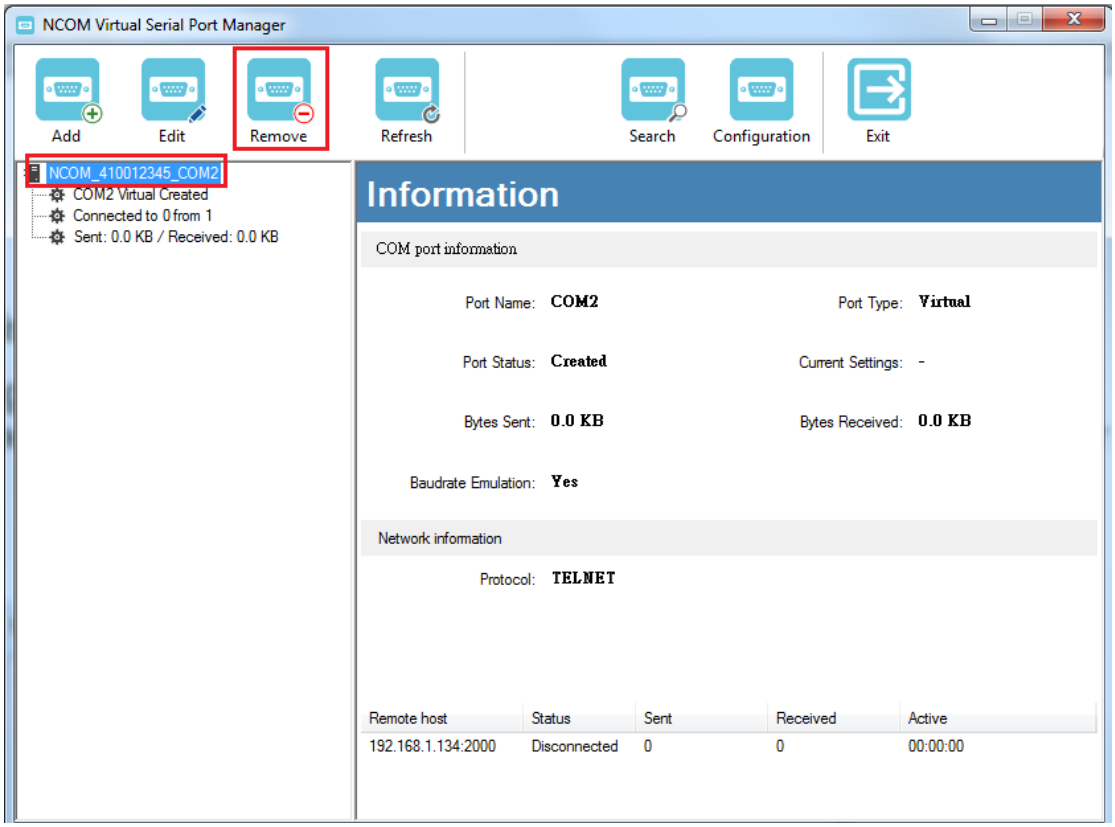


Under “Add connection”, you can change the COM port number with the “COM Port” option (e.g. changing from COM2 to COM3) or change the IP address and remote port with the “IP Address” and “Remote Port” options respectively. After you change the settings, click “OK” to confirm the changes of the virtual serial port for NCOM devices.

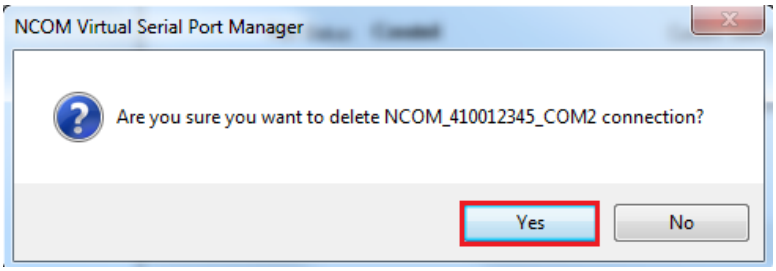


8.4 Manually Remove Existing Virtual Serial COM Ports for NCOM Devices

To remove an existing virtual serial port for NCOM devices, select an existing virtual serial port and click “Remove”.

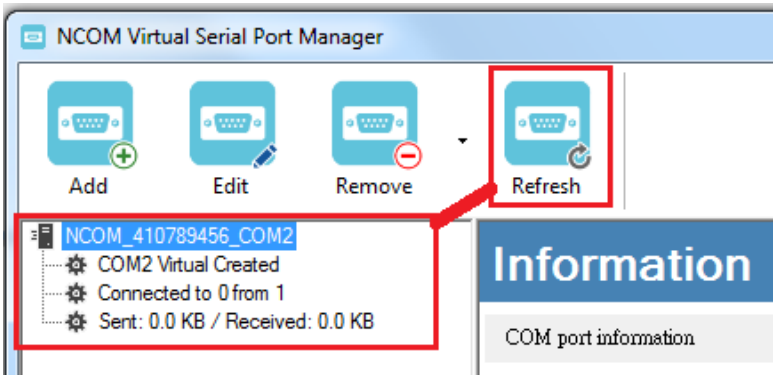


After clicking “Remove”, a confirmation message will appear asking “Are you sure you want to delete NCOM_xxxxxxxx_COMx connection?”. Confirm by clicking on “Yes”.



8.5 Refreshing Virtual Serial Port Information

The virtual serial port information on the main window of NCOM Virtual Serial Port Manager may be incorrect or absent in some cases. In case this happens, you can click “Refresh” to recover the virtual serial port information.



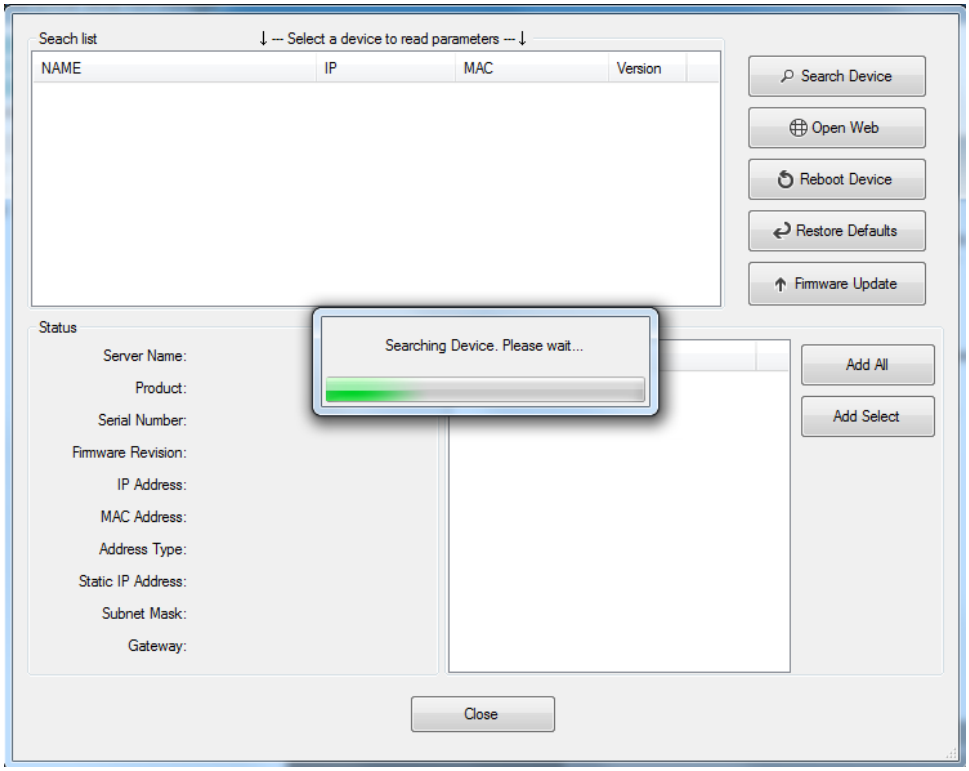
8.6 Automatically Search for NCOM Devices

NCOM Virtual Serial Port Manager provides a search function, which can search all attached NCOM devices and can also automatically install virtual serial port driver for NCOM devices. You may also open the web console interface to configure NCOM, reboot NCOM devices, restore factory defaults and execute firmware update from here.

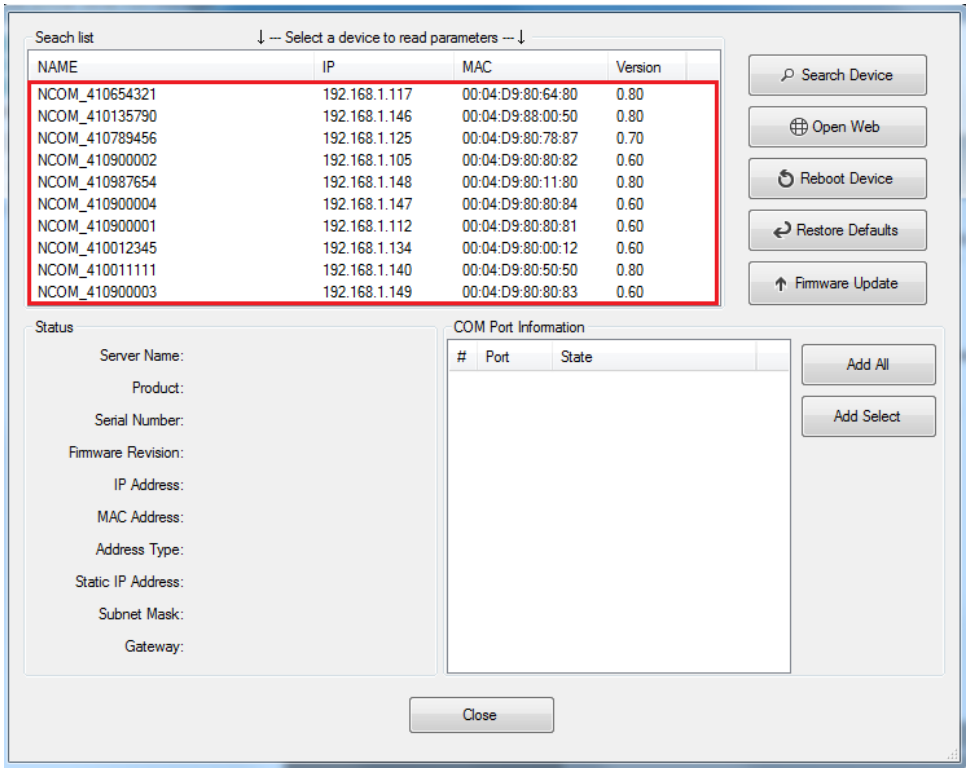
"**Search**" (search all attached NCOM devices automatically).

Clicking on "Search

" takes you to the control menu page shown below:

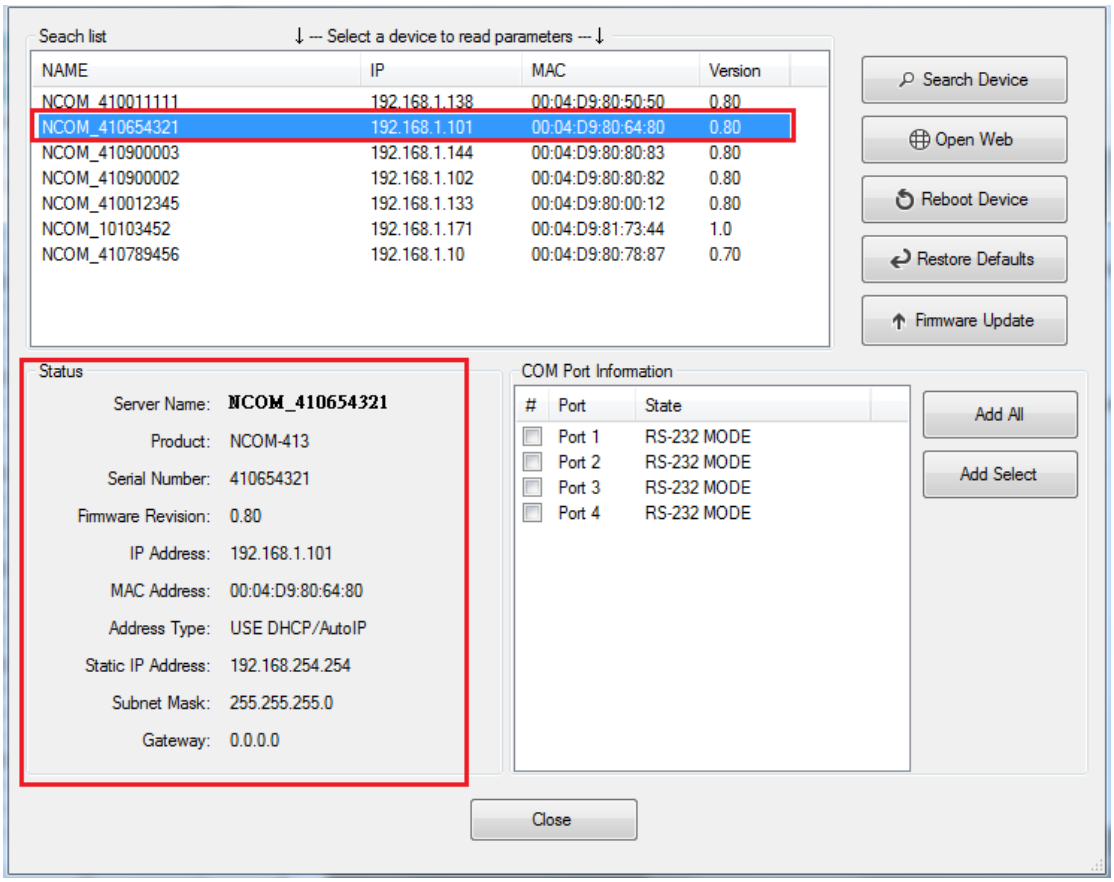


After a few seconds the NCOM Virtual Serial Port Manager will search and display all attached NCOM devices automatically.


Seach list
↓ --- Select a device to read parameters --- ↓
NAME
IP
MAC
Version
NCOM_410654321 192.168.1.117 00:04:D9:80:64:80 0.80
NCOM_410135790 192.168.1.146 00:04:D9:88:00:50 0.80
NCOM_410789456 192.168.1.125 00:04:D9:80:78:87 0.70
NCOM_410900002 192.168.1.105 00:04:D9:80:80:82 0.60
NCOM_410987654 192.168.1.148 00:04:D9:80:11:80 0.80
NCOM_410900004 192.168.1.147 00:04:D9:80:80:84 0.60
NCOM_410900001 192.168.1.112 00:04:D9:80:80:81 0.60
NCOM_410012345 192.168.1.134 00:04:D9:80:00:12 0.60
NCOM_410011111 192.168.1.140 00:04:D9:80:50:50 0.80
NCOM_410900003 192.168.1.149 00:04:D9:80:80:83 0.60
Search Device
Open Web
Reboot Device
Restore Defaults
Firmware Update
Status
Server Name:
Product:
Serial Number:
Firmware Revision:
IP Address:
MAC Address:
Address Type:
Static IP Address:
Subnet Mask:
Gateway:
COM Port Information
#
Port
State
Add All
Add Select
Close

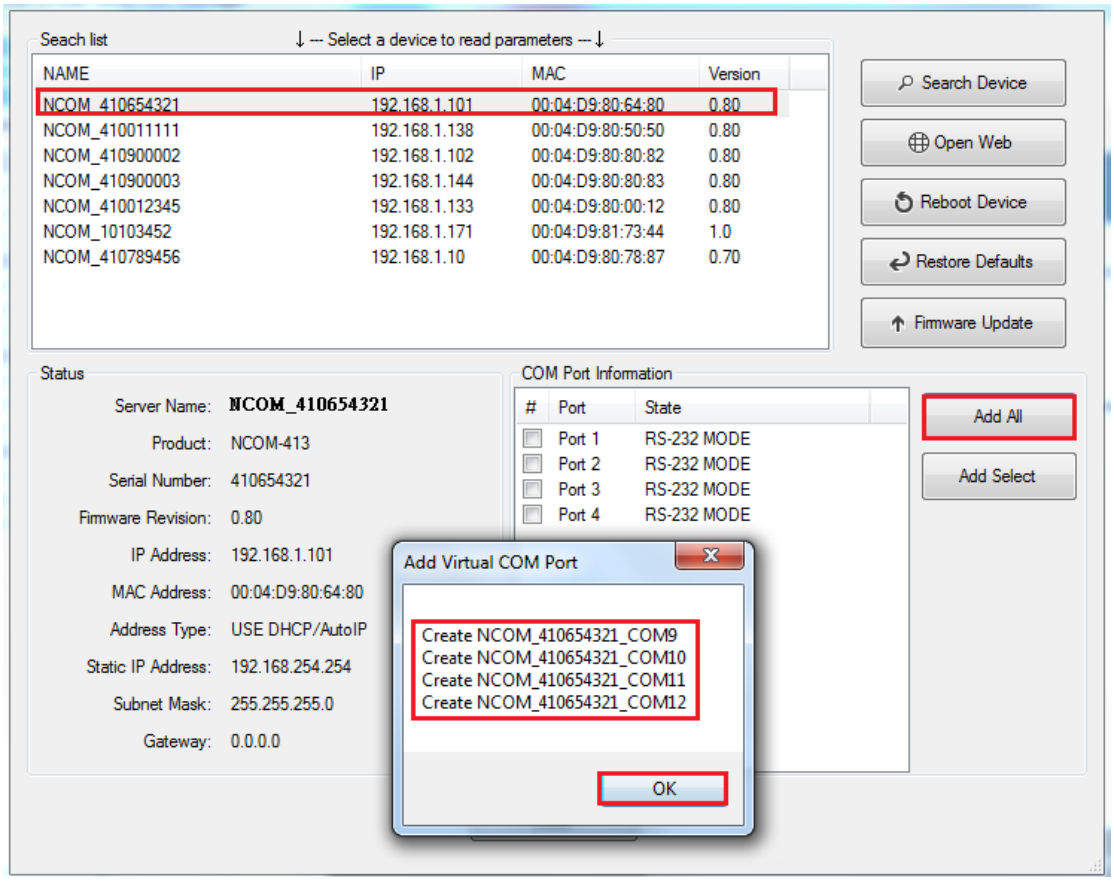
8.6.1 Selecting an NCOM Device to Read Parameters

After you select an attached NCOM device to configure the virtual serial port parameters, you will find the NCOM device information on the main window of NCOM Virtual Serial Port Manager. The information includes “Server Name”, “Product”, “Serial Number”, “Firmware Revision”, “IP Address”, “MAC Address”, “Address Type”, “Static IP Address”, “Subnet Mask” and “Gateway”.



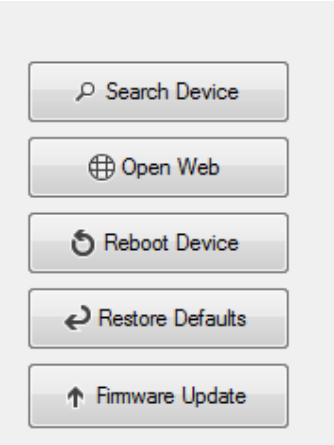
8.6.2 Installing Virtual Serial Port Driver for NCOM Devices

The search function can also create virtual COM ports and install virtual serial port drivers automatically. After selecting an attached NCOM device from the control menu click "**Add All**" button to install virtual serial port drivers automatically. After installation you will find four "Create NCOM_XXXXXXXXX_COMX" messages and the virtual serial ports created for the attached NCOM device.



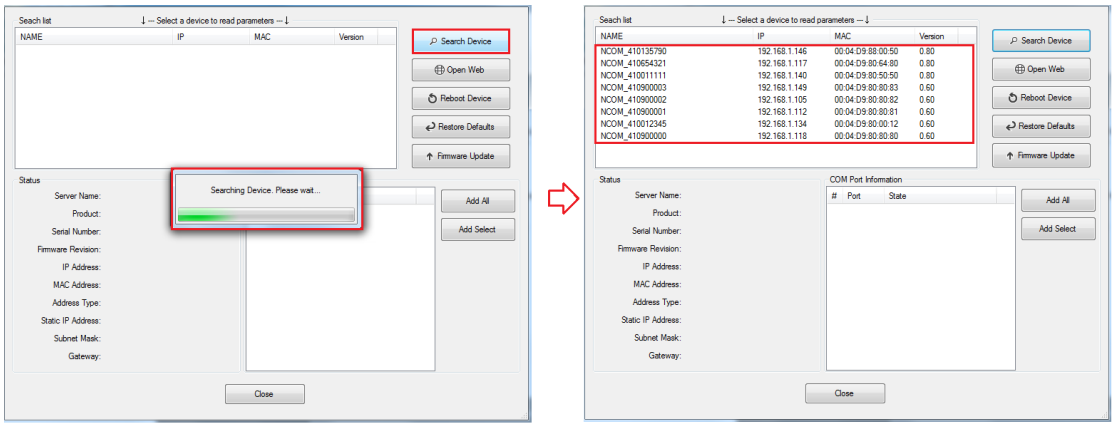
Click "OK" to finish creating virtual serial ports for your NCOM device.

In the “Search” window, there are five control buttons: “**Search Device**”, “**Open Web**”, “**Reboot Device**”, “**Restore Defaults**” and “**Firmware Update**”.



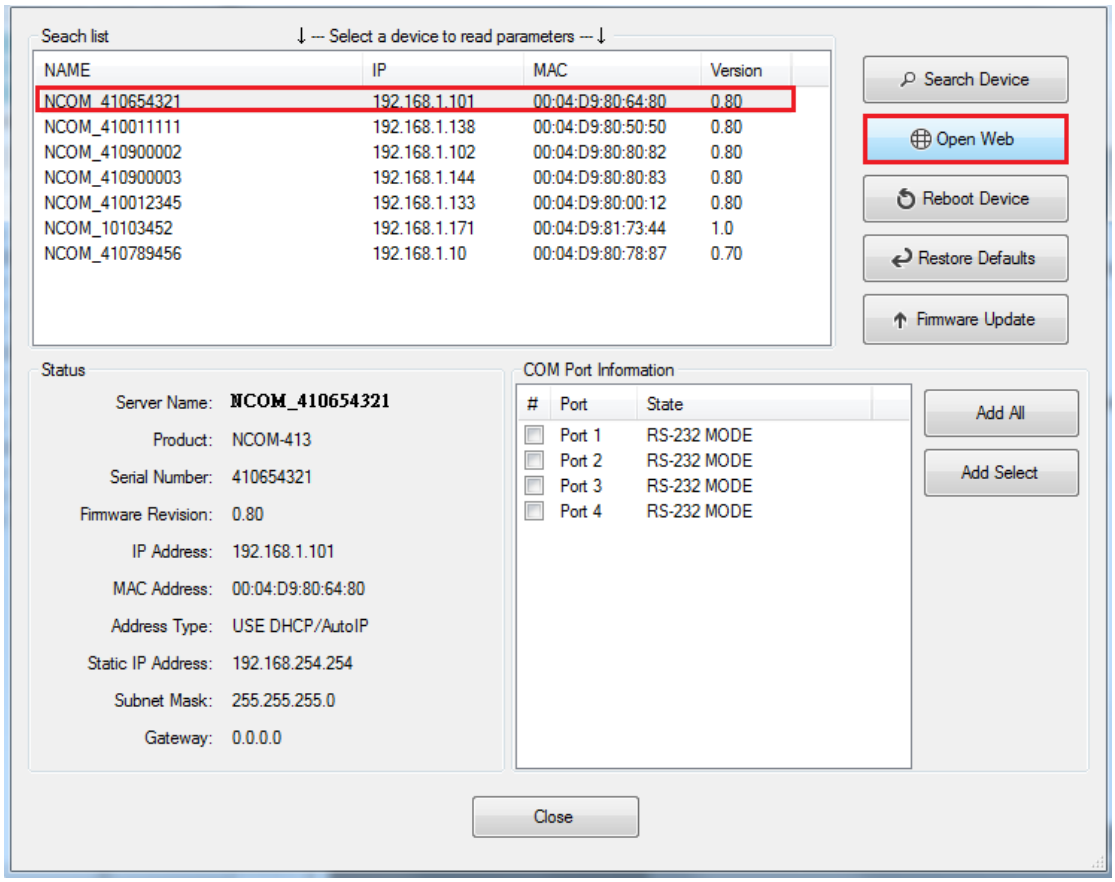
8.6.3 Manually Search for NCOM Devices

The “**Search Device**” button searches for all attached NCOM device. If a new NCOM device is attached to the network system, you can click “Search Device” to find new NCOM devices.



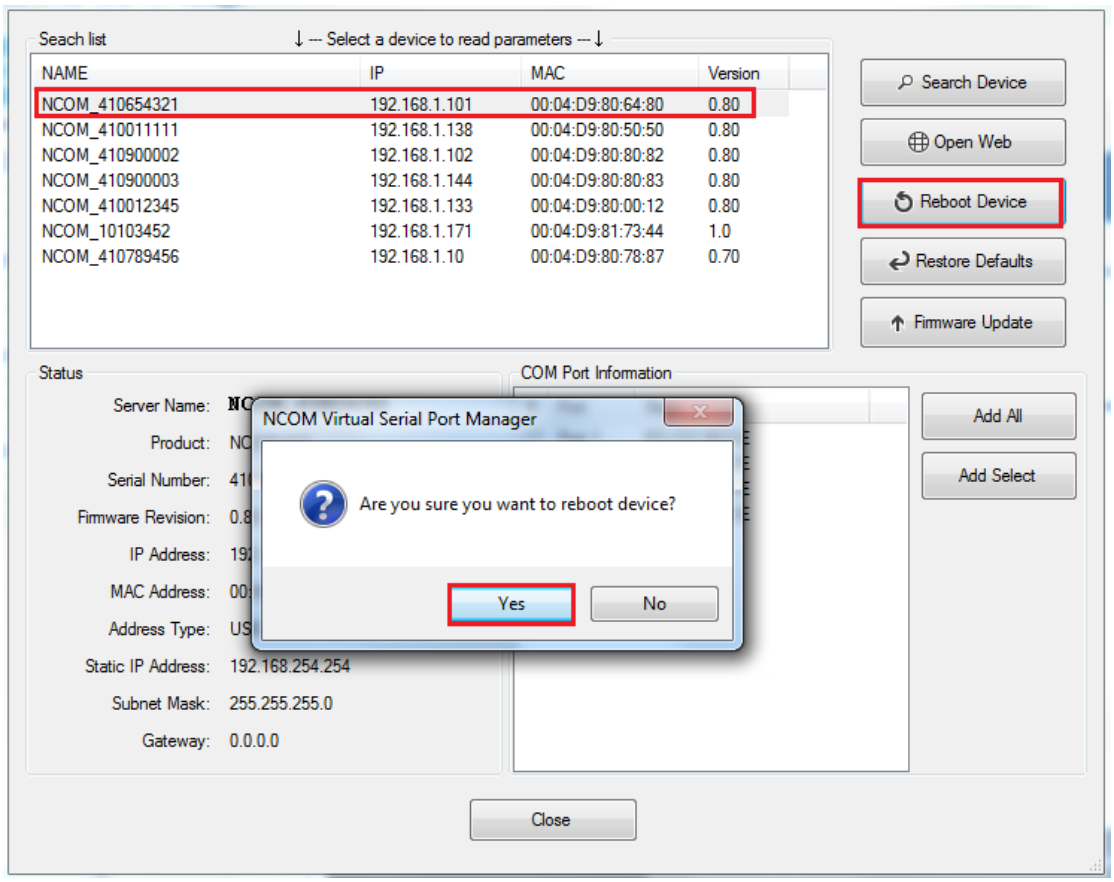
8.6.4 Opening the Web Console Interface

The "**Open Web**" button can be used to open the web console interface to configure NCOM. After selecting an attached NCOM device, click "Open Web" to open web console interface for that particular NCOM device.



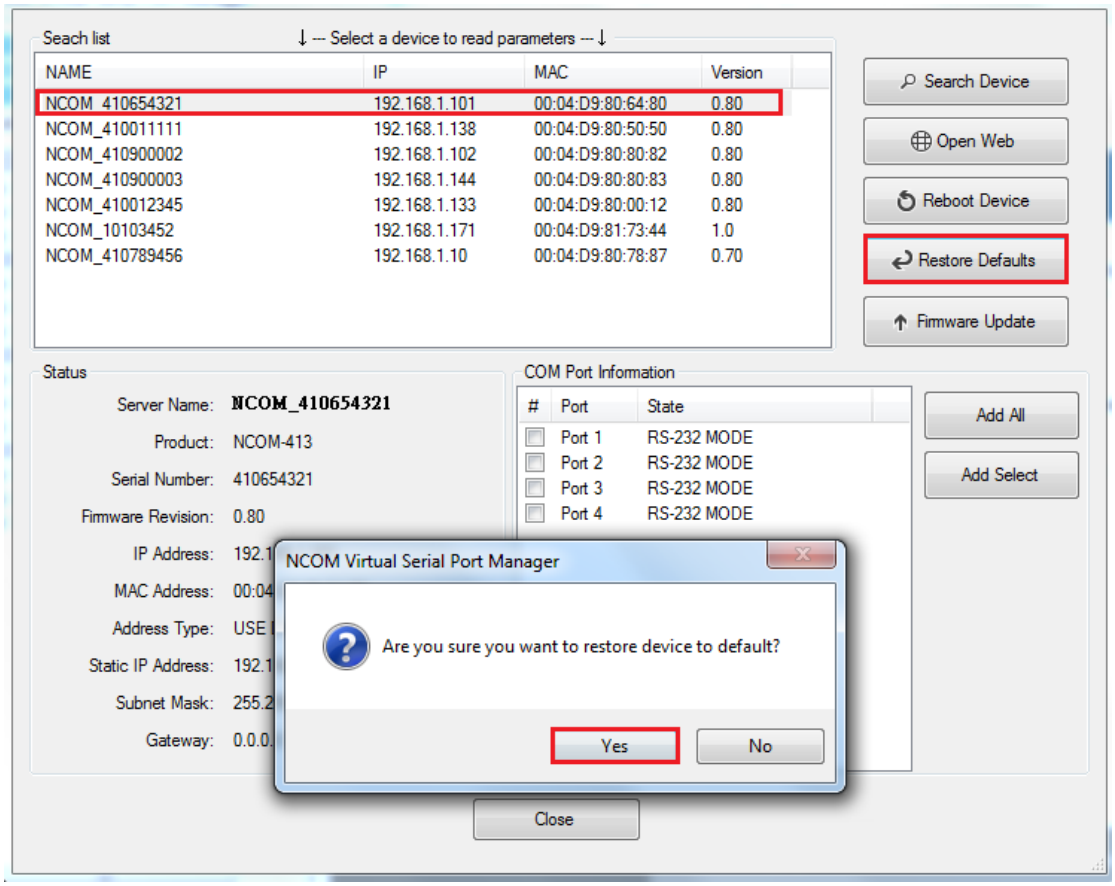
8.6.5 Rebooting NCOM Devices

The "**Reboot Device**" button reboots/resets your NCOM device. After selecting an attached NCOM device, click "Reboot Device" and a message will ask "Are you sure you want to reboot device?". Click "Yes" to reboot/reset your NCOM device.



8.6.6 Restoring to Factory Defaults

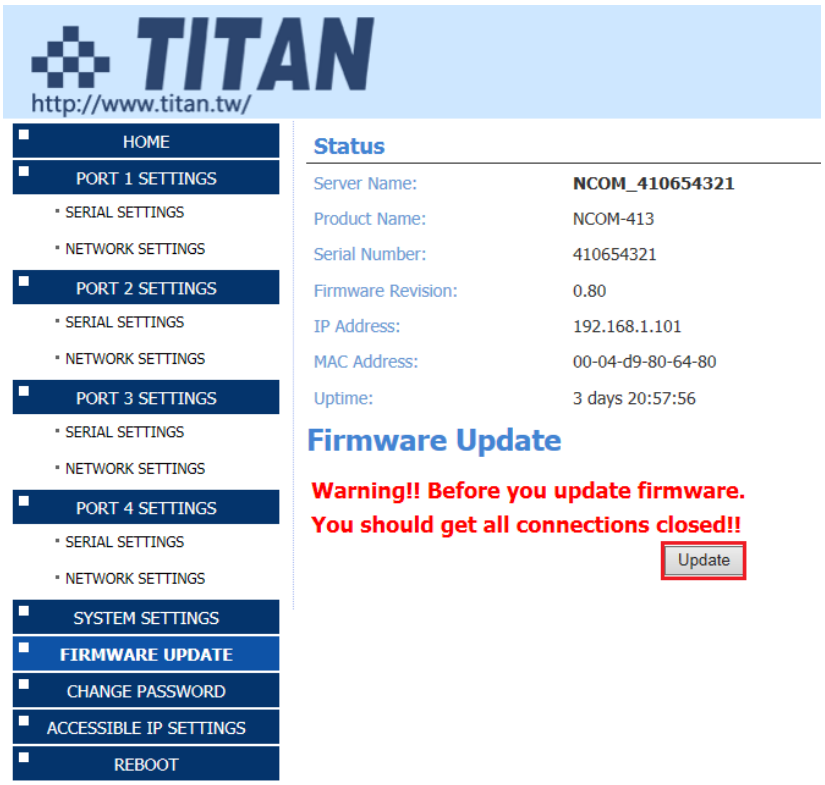
The "**Restore Defaults**" button restores the firmware to factory defaults. When you select an attached NCOM device, you can restore all options to factory default states by clicking the "Restore Defaults" button; After clicking "Restore Defaults", a message will ask "Are you sure you want to restore device to default?". Confirm by clicking "Yes" and the NCOM device will restore all options to factory defaults.



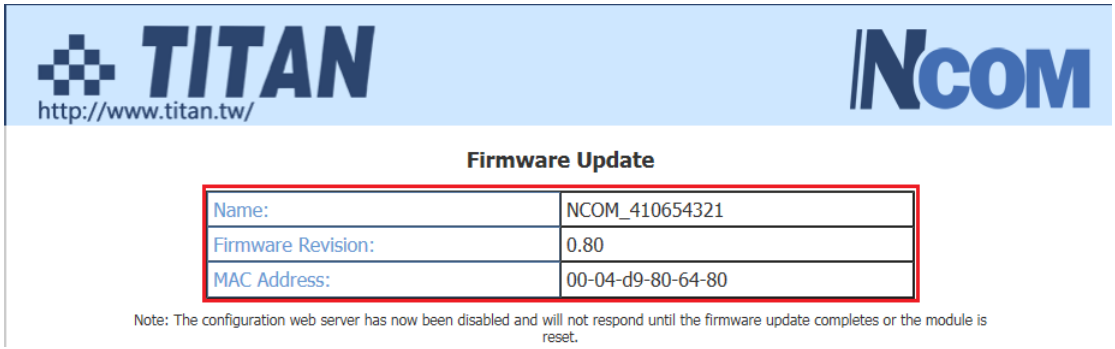
8.6.7 Firmware Update Tool

The "**Firmware Update**" button opens the firmware update tool to upgrade NCOM-413 firmware contents via Ethernet port. Before you click "Firmware Update", please go to the web console interface of NCOM device firmware. Enable firmware update interface via Ethernet port in order to upgrade NCOM-413.

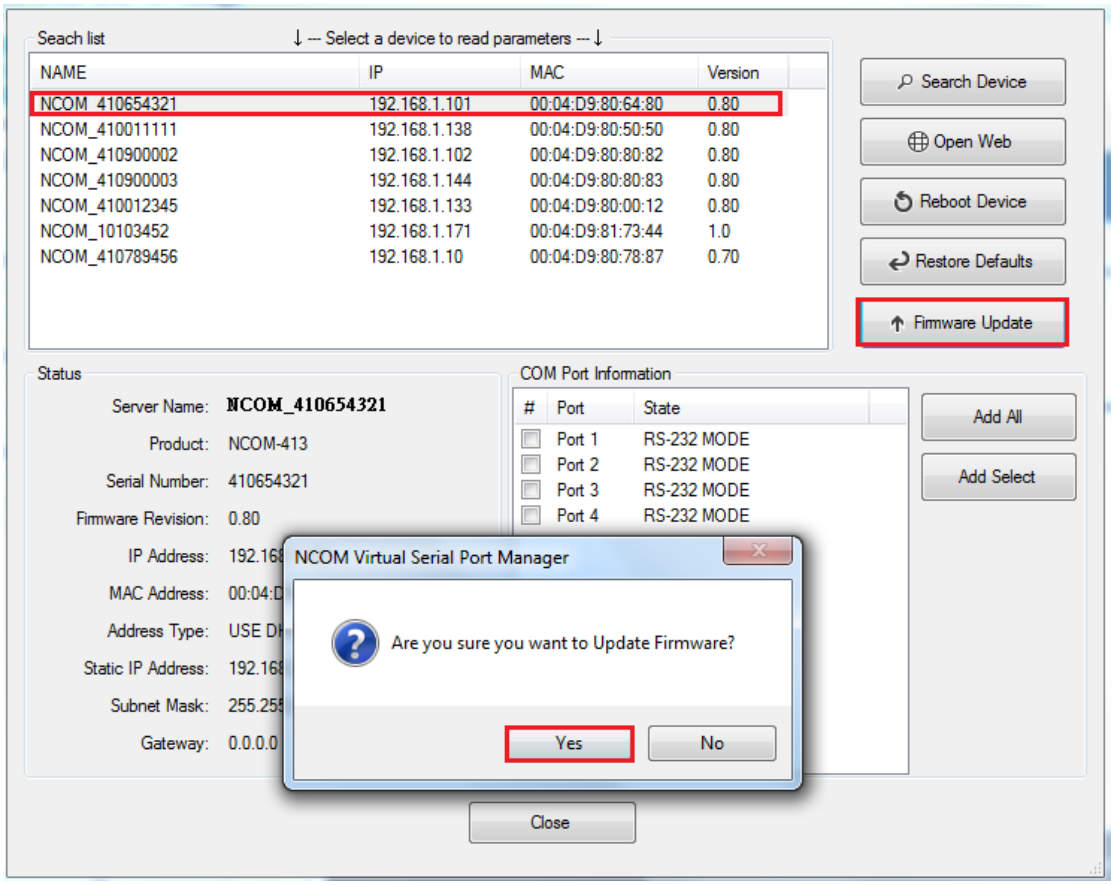
Under the web console interface, select "FIRMWARE UPDATE" and click "Update" to enable the firmware update interface to upgrade to a new firmware.



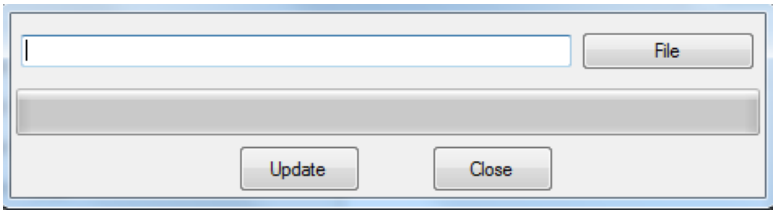
When you click "Update", you will find the following message. The web console interface then waits for the firmware update tool program to launch in order to continue upgrading NCOM-413's firmware.



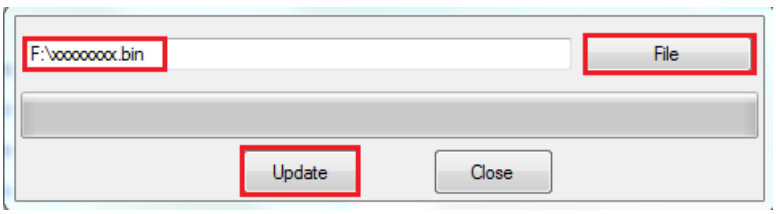
After enabling the firmware update interface, please select this NCOM device then click the “Firmware Update” button.



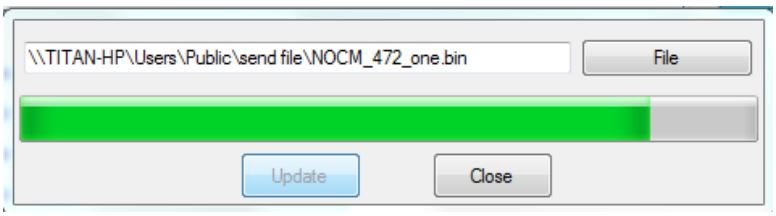
When you click “Firmware Update”, a message will ask “Are you sure you want to update firmware?”. Confirm by clicking “Yes” and the message “Input new firmware file” will appear.



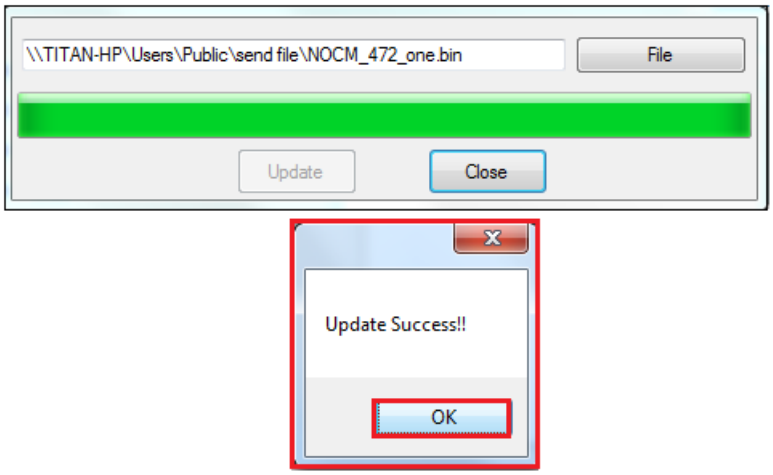
Use the “File” button to browse to the new firmware file and click on “Update” to start upgrading NCOM-413’s device firmware.



While upgrading, you will find the following message.



After successfully upgrading the firmware contents, there will be a message stating "Update Success!!".



Click on "OK" to finish the firmware update procedure.

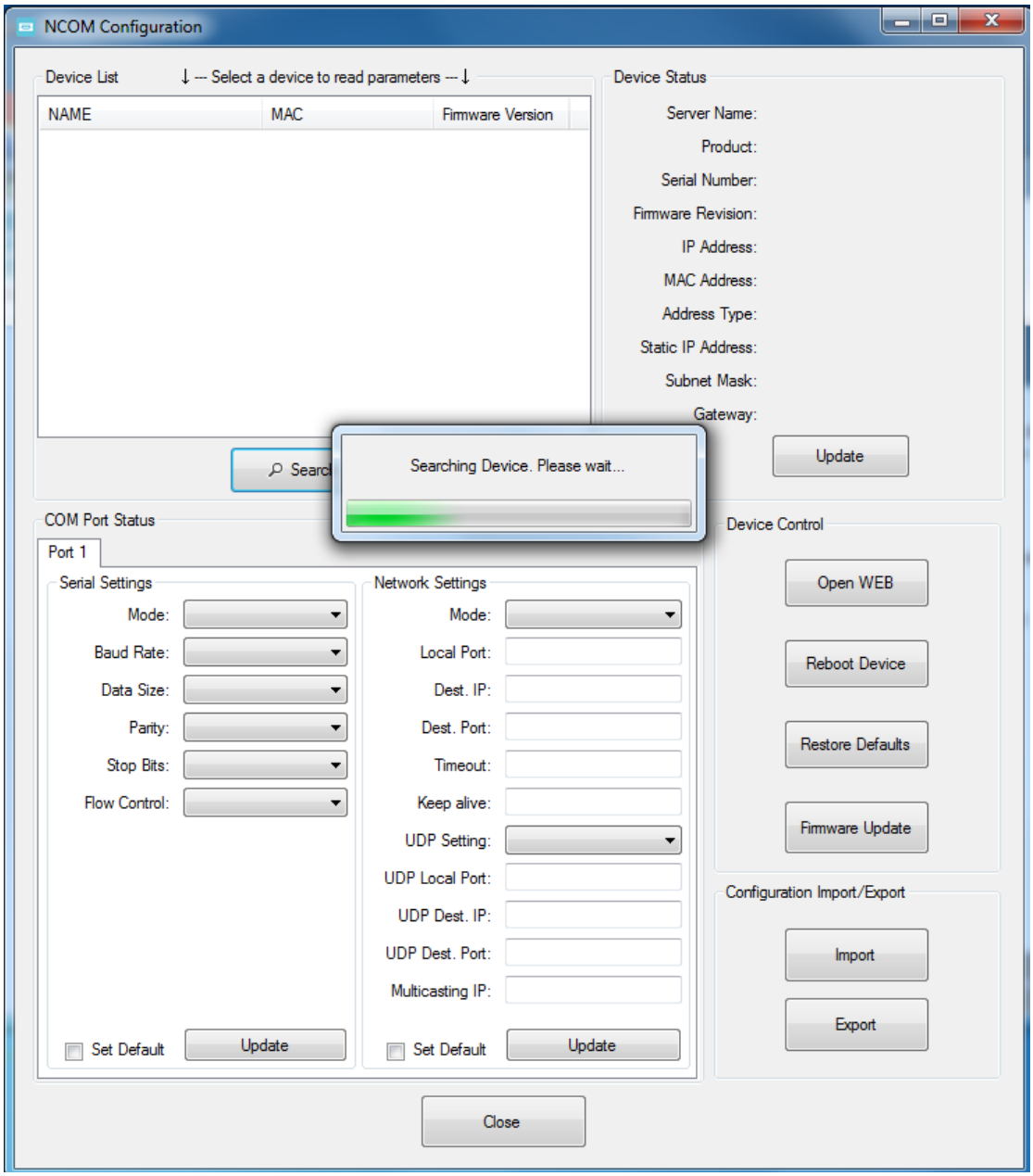
8.7 Configuring NCOM Devices

NCOM Virtual Serial Port Manager has a configuration function which can configure all attached NCOM devices. It can also import/export configuration files for NCOM devices, open web console interface to configure NCOM device, reboot NCOM devices, restore factory defaults and execute firmware update.

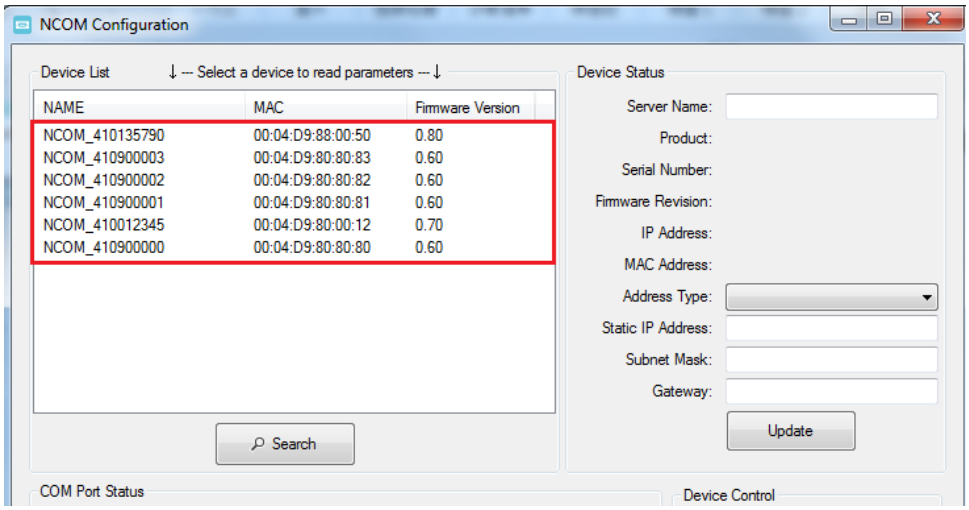
"**Configuration**" (configure all attached NCOM devices).

Clicking on "Configuration

" takes you to the control menu page shown below:

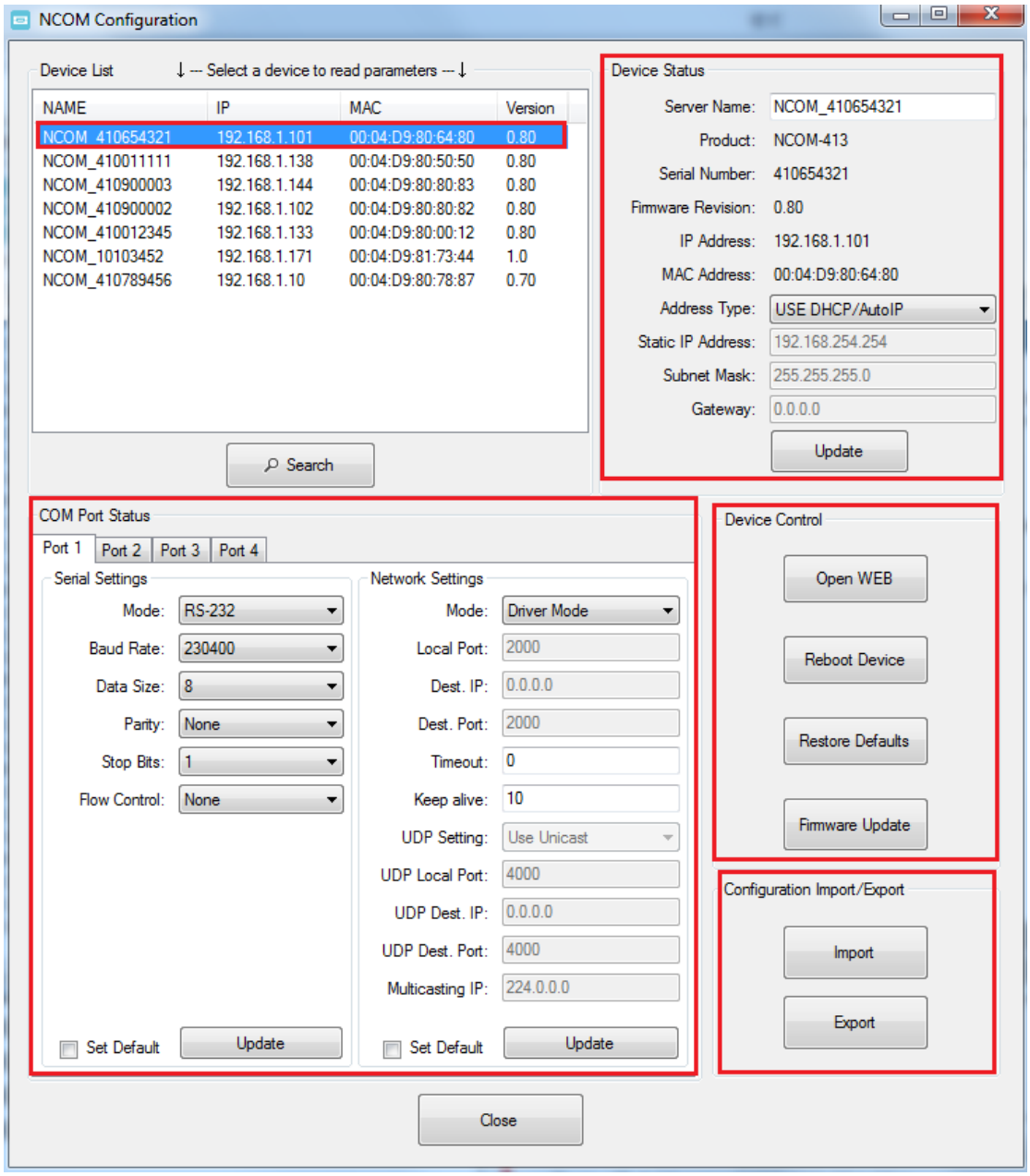


After a few seconds, NCOM Virtual Serial Port Manager will search all attached NCOM devices automatically, and you will find a device list information for all NCOM devices.



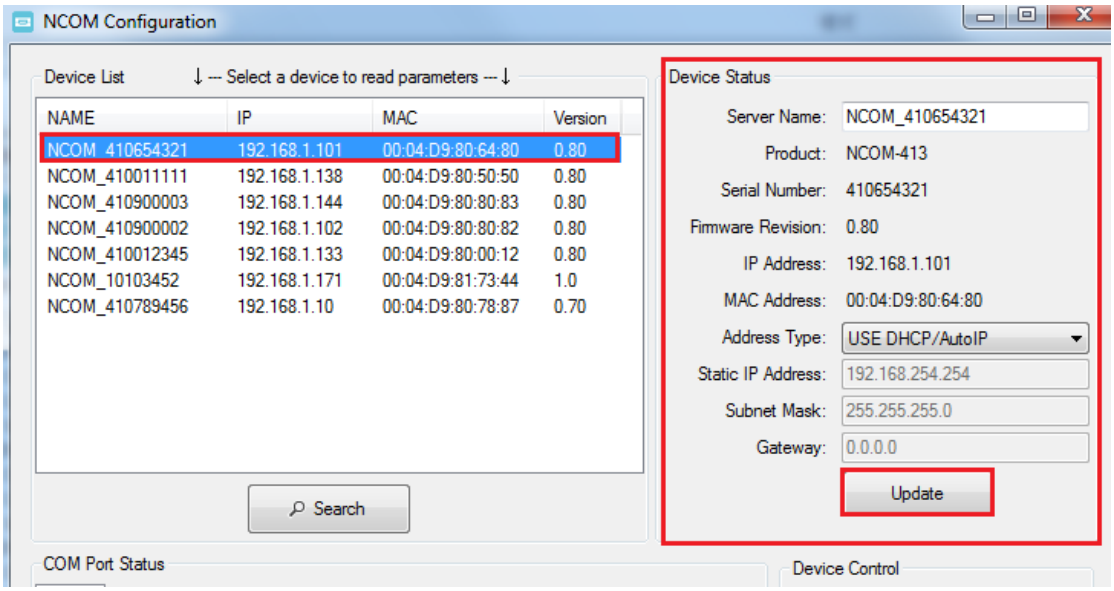
8.7.1 Selecting an NCOM Device to Configure Parameters

When you select an attached NCOM device to configure the virtual serial port parameters, you will find “Device Status”, “COM Port Status”, “Device Control” and “Configuration Import/Export” on the main window of NCOM Configuration.



8.7.2 Device Status

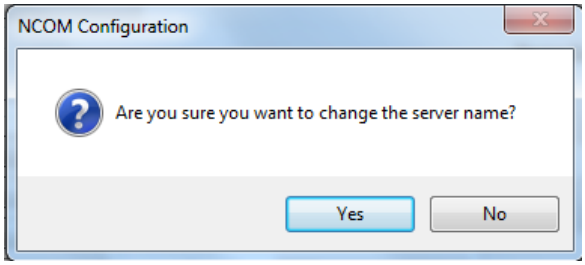
The “Device Status” section indicates the following information: “Server Name”, “Product”, “Serial Number”, “Firmware Revision”, “IP Address”, “MAC Address”, “Address Type”, “Static IP Address”, “Subnet Mask” and “Gateway”.



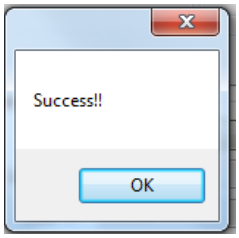
In “Device Status”, you can modify “Server Name”, “Address Type”, “Static IP Address”, “Subnet Mask” and “Gateway” depending on your application.

To change the serial device server name, modify the “Server Name” under “Device Status”. You need to enter a new name (such as NCOM-413) and click “Update” to set your serial device server to a new name.

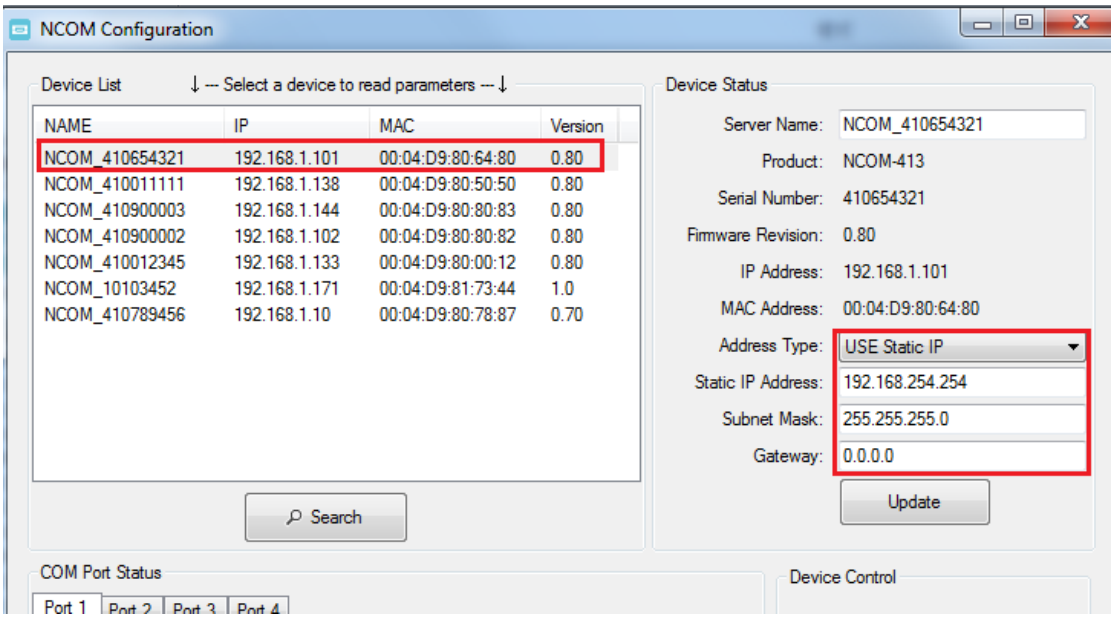
After clicking “Update” a confirmation message will ask “Are you sure you want to change server name?”. Confirm by clicking “Yes”.



After NCOM-413 successfully changes to a new name, a message will indicate “Success!!”. Click on “OK” to finish the procedure.

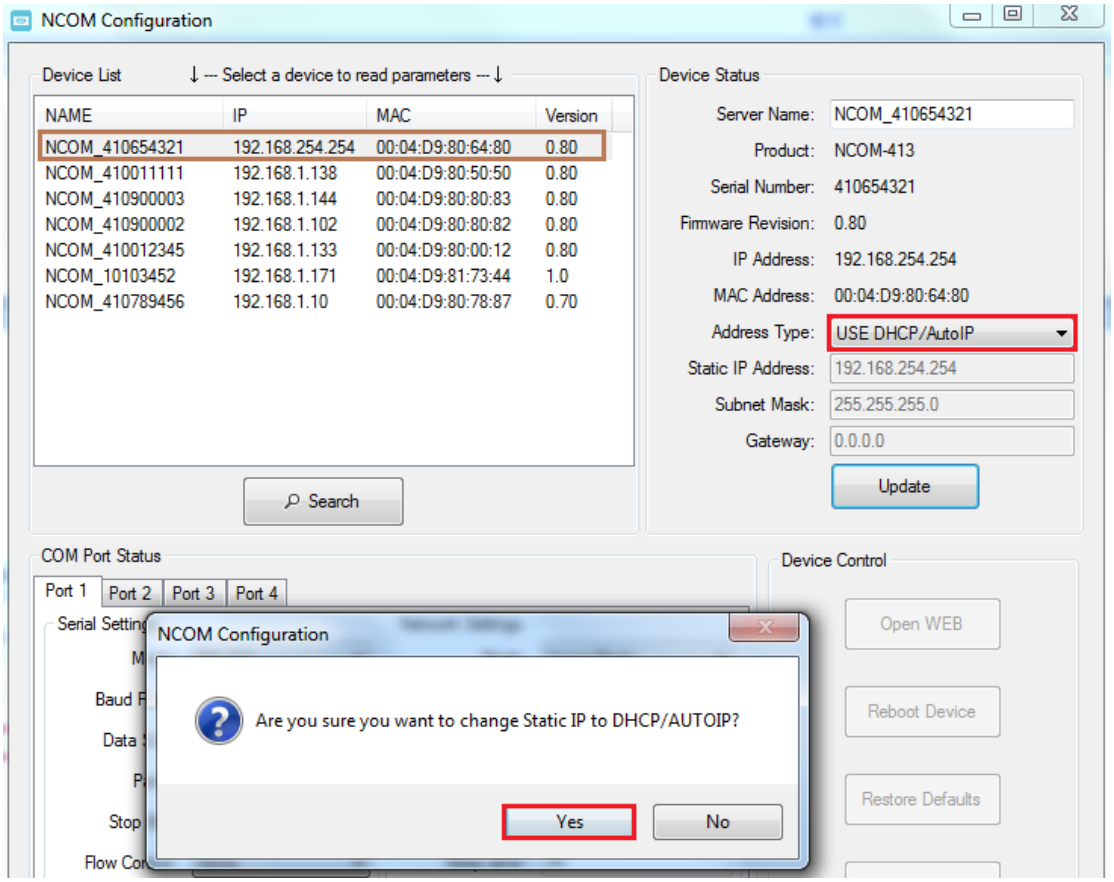


NCOM-413 serial device server is configured with a default private IP address (static IP address): **192.168.254.254.**

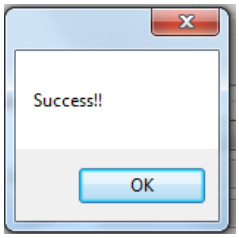


Many networks work in a DHCP network, which assigns IP addresses for client computers and NCOM-413 automatically. In this case, you need to set NCOM-413’s IP address to DHCP/AutoIP mode.

Under “Device Status” of NCOM Configuration, select “USE DHCP/AutoIP” under “Address Type:” and click “Update”. A message will ask “Are you sure you want to change Static IP to DHCP/AUTOIP?”, confirm by clicking “Yes” and NCOM-413 will be set to DHCP/AutoIP mode.



After successfully setting NCOM-413 to DHCP/AutoIP mode, a message will indicate "Success!!". Click on "OK" to finish changing the IP address type.



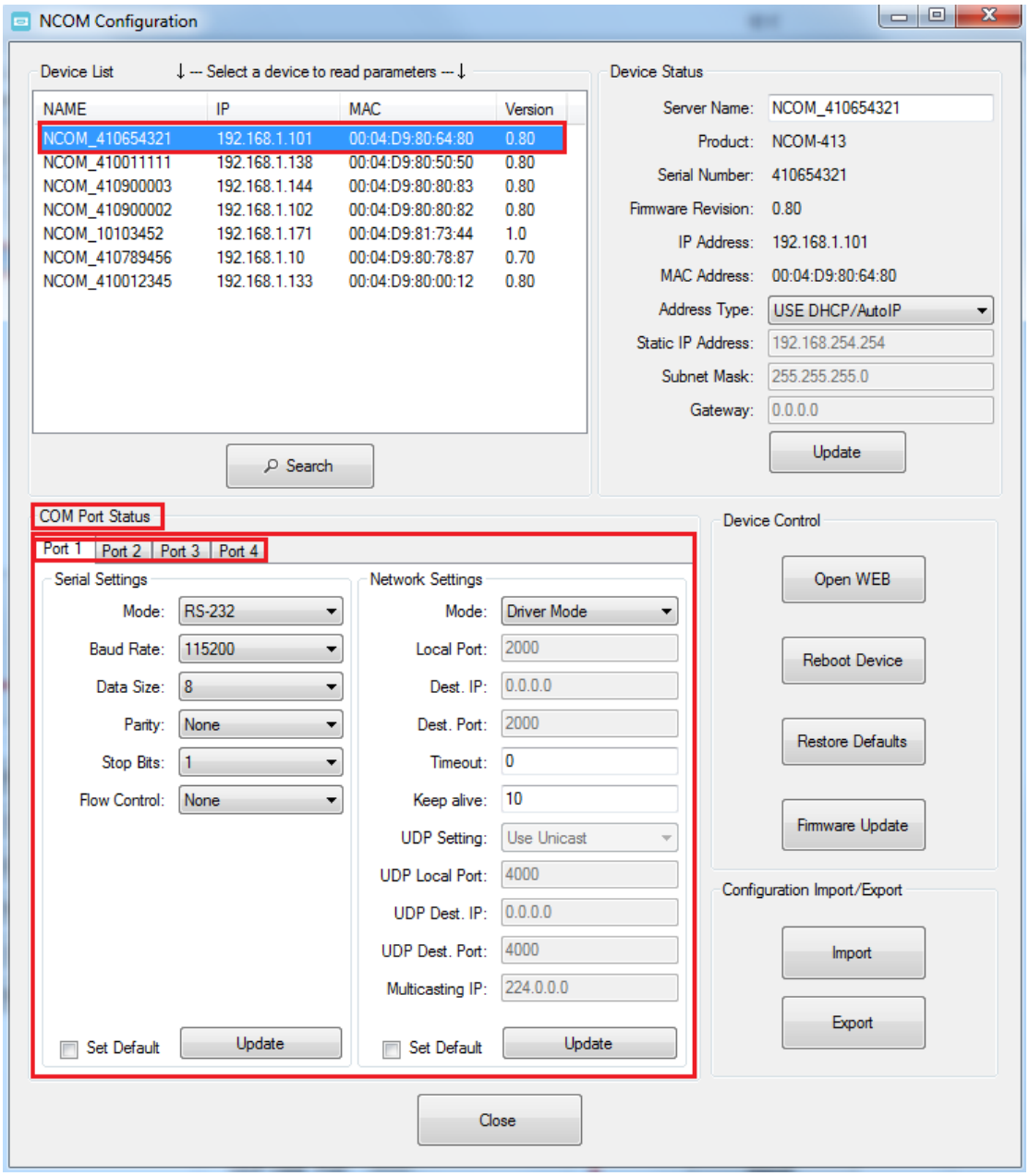
When NCOM-413 is working in a static network environment, you need to set NCOM-413 to a fixed IP address mode.

Under "Device Status" of NCOM Configuration, select "USE Static IP" under "Address Type:" and enter a new static IP address (such as 192.168.0.1), subnet mask (such as 255.255.255.0) and gateway (such as 0.0.0.0). Afterwards, click "Update" to set NCOM to a new static IP address for static network environments.

After clicking "Update", a confirmation message saying "Are you sure you want to change new Static IP?" will appear. Confirm by clicking "Yes" and NCOM-413 will be set to a new static IP address.

8.7.3 COM Port Status

The “COM Port Status” section indicate the following information: “Port X”, “Serial Settings” and “Network Settings”.



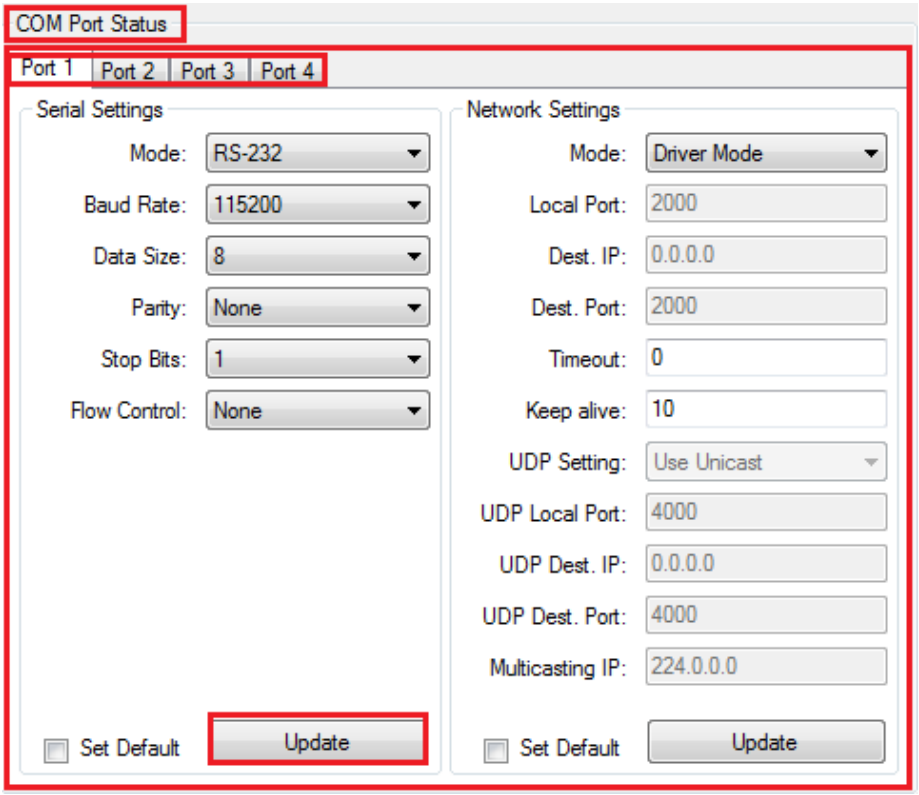
8.7.3.1 Changing Serial Parameters

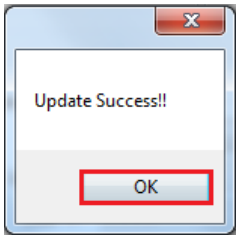
To change serial parameters under “Serial Settings” for a virtual serial port, click “Port1”, “Port2”, “Port3” or “Port4” under “COM Port Status”. You can modify the following serial parameters:

Serial Parameter	Setting	Default Values
Mode	RS-232, RS-422, RS-485 4W, RS-485-2W	RS-232
Baud Rate	300bps to 460800bps	115200bps
Data Size	5, 6, 7, 8 bits/character	8 bits/character
Parity Check	None, Odd, Even, Mark, Space	None
Stop Bits	1, 2, 1.5 bit(s)	1 bit
Flow Control	None or Hardware	None

Note: The default mode for NCOM-412 is RS-422.

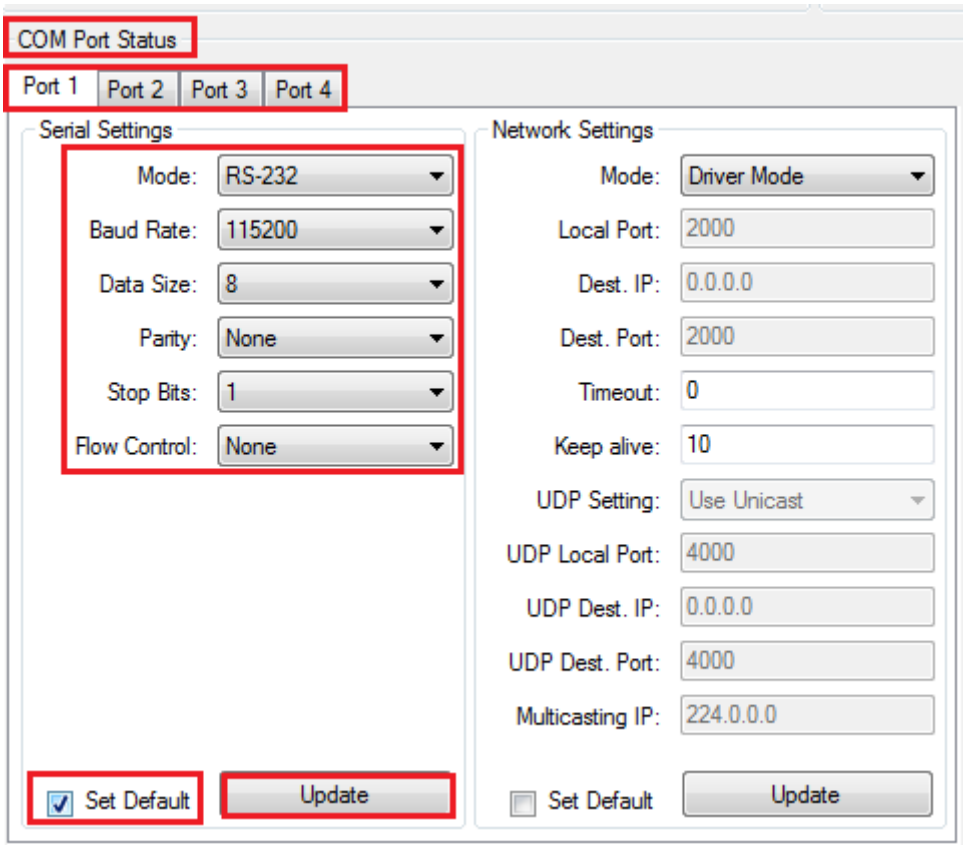
After changing the serial parameters, click “Update” to activate the new serial parameters. When the serial parameters are changed successfully, a message will indicate “Update Success!!”.

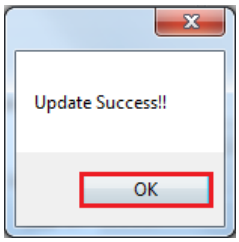




Click on “OK” to finish changing the serial parameters.

If you want to save these serial parameters as defaults, you need to check “Set Default” and click on “Update”. When the new serial parameters are saved, a message will indicate “Update Success!!”.



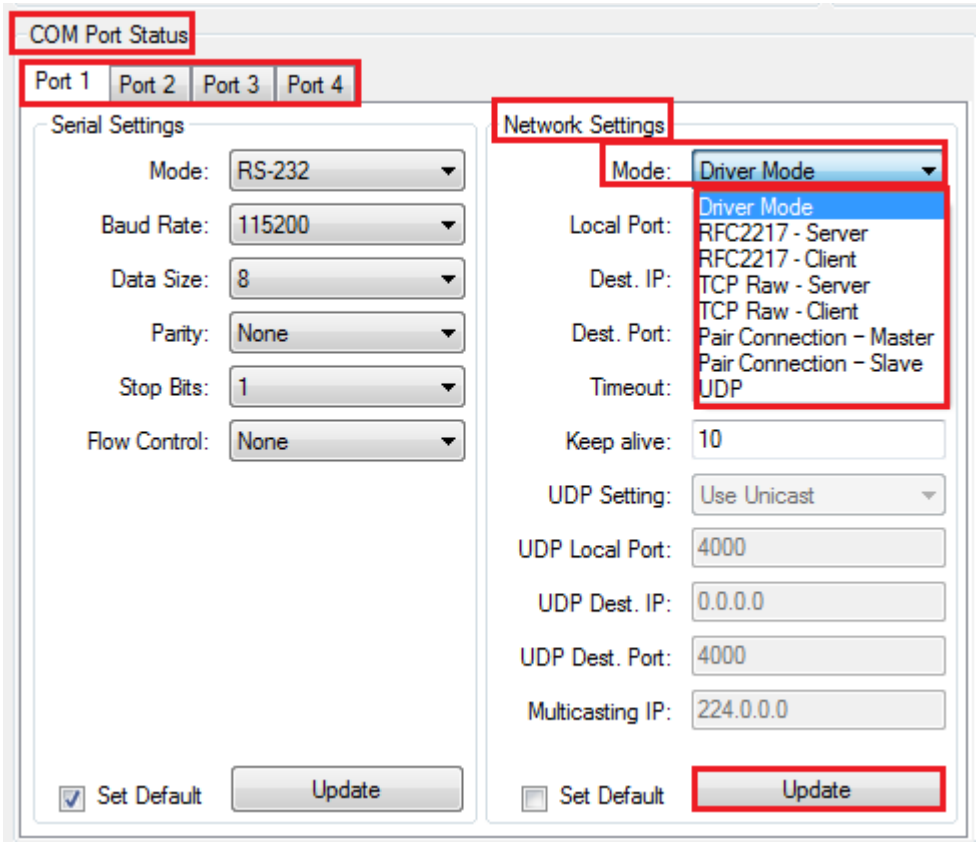


Click on “OK” to finish modifying serial parameters and saving new serial parameters.

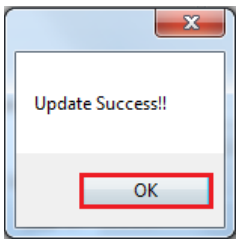
8.7.3.2 Changing Network Operation Mode

To change the network operation mode of a virtual serial port, click “Port1” under “COM Port Status”. Under “Network Settings”, you may choose “Driver Mode”, “RFC2217 - Server”, “RFC2217 - Client”, “TCP Raw - Server”, “TCP Raw - Client”, “Pair Connection Master Mode”, “Pair Connection Slave Mode” and “UDP” depending on your application.

After selecting an operation mode, click “Update” to set your NCOM-413 into the proper operation mode.

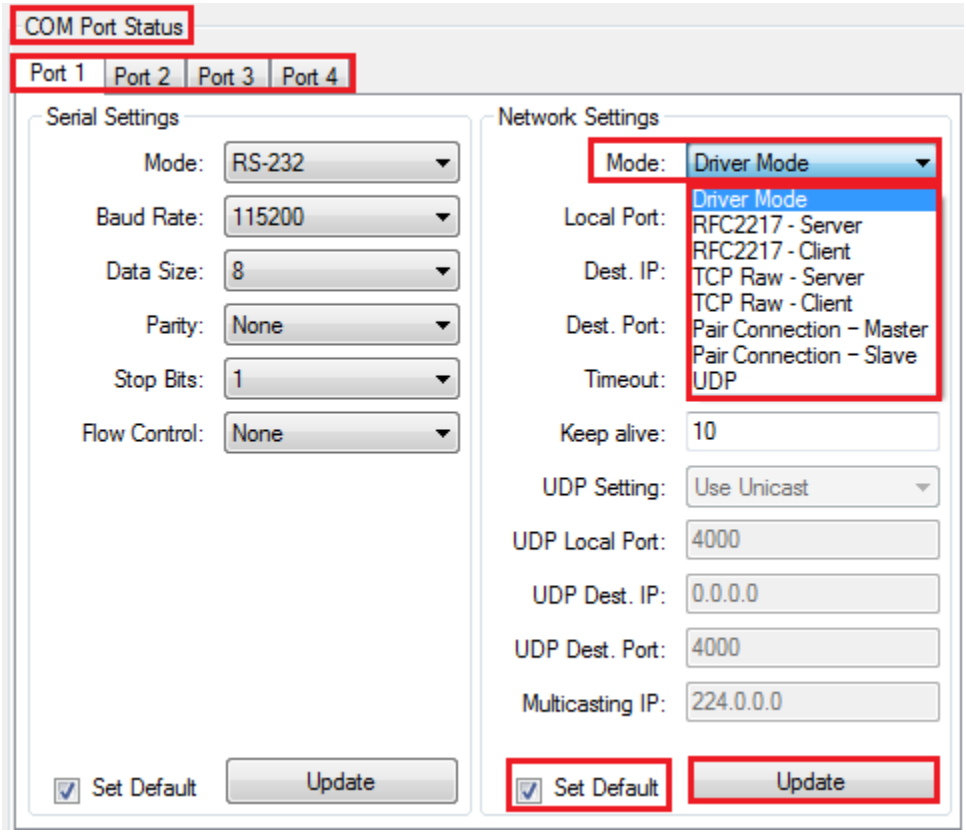


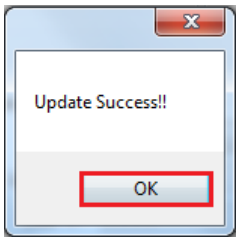
After clicking “Update” to set your NCOM-413’s operation mode, a message will indicate “Update Success!!”.



Click on “OK” to finish change operation mode procedure.

If you want to save the new operation mode as defaults, you need to check on “Set Default” and click on “Update”. When the new operation mode is saved, a message will indicate “Update Success!!”.





Click on “OK” to finish changing and saving a new operation mode.

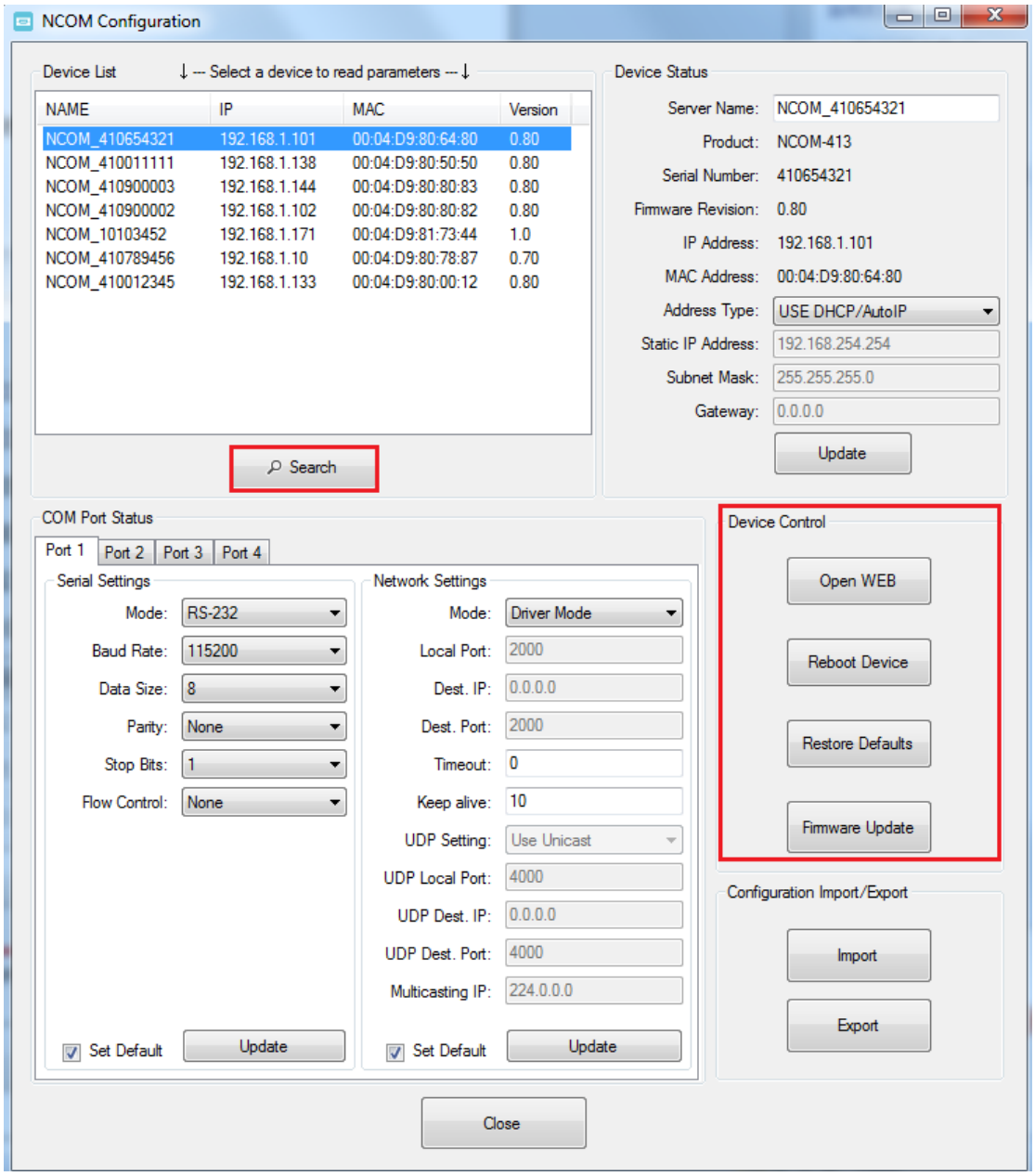
To modify the network settings for a chosen operation mode please refer to Chapter 5 for detailed information. You can also modify the network parameter settings for your NCOM-413 serial device server.

Following are the default values of network parameters:

Network Parameters	Default Values
Mode	Driver Mode
Timeout	0 seconds
Keep alive time	10 minutes
Address Type	Static IP
Static IP address	192.168.254.254
Subnet Mask	255.255.255.0

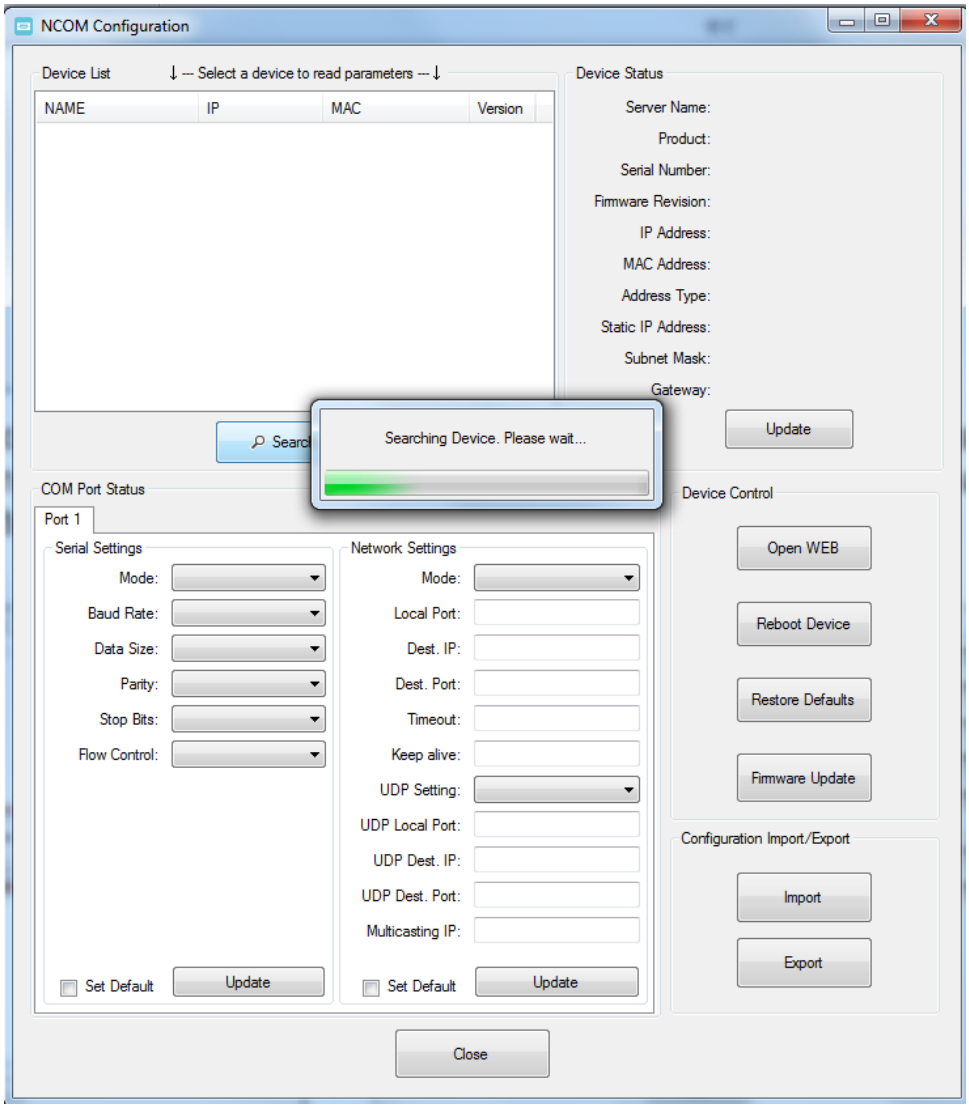
8.7.4 Device Control

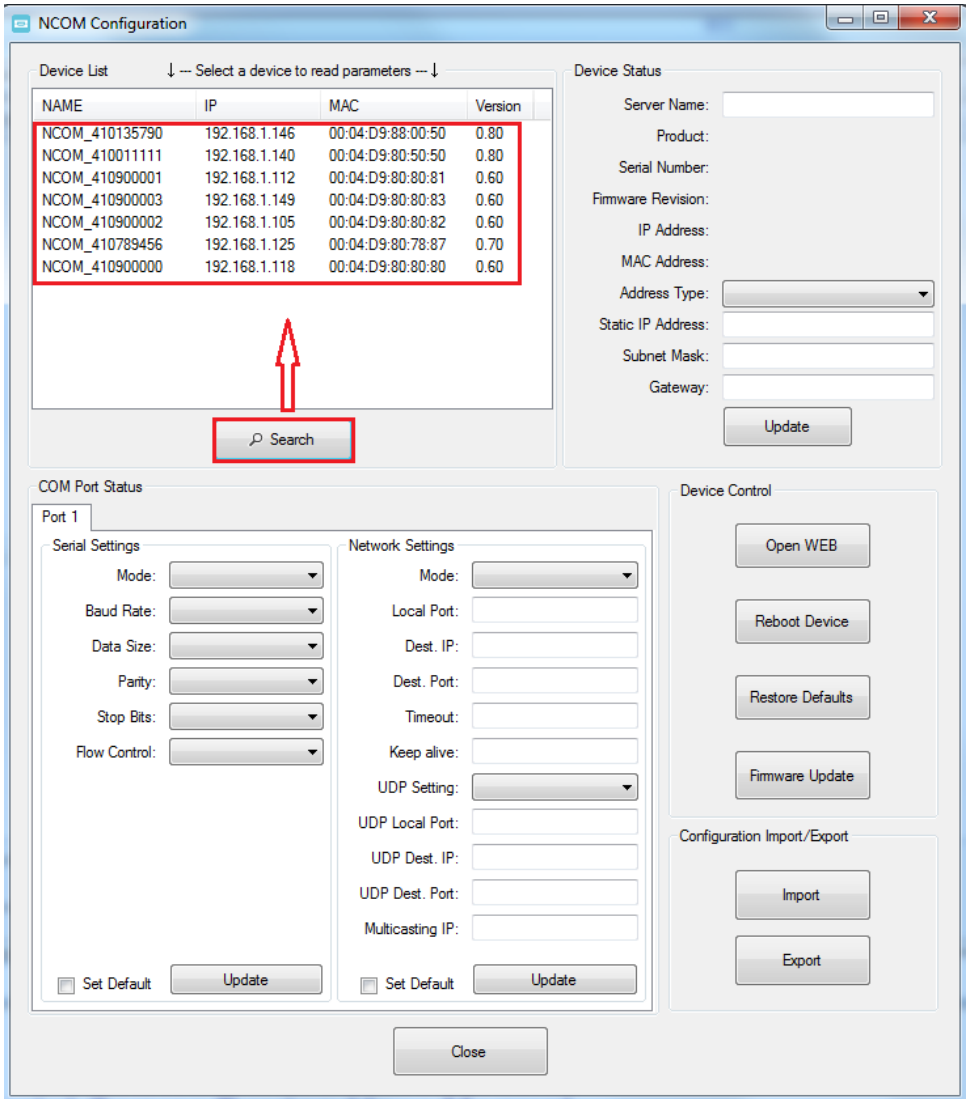
The “Device Control” section contains the “Search Device”, “Open Web”, “Reboot Device”, “Restore Defaults” and “Firmware Update” functions.



8.7.4.1 Manually Search for NCOM Devices

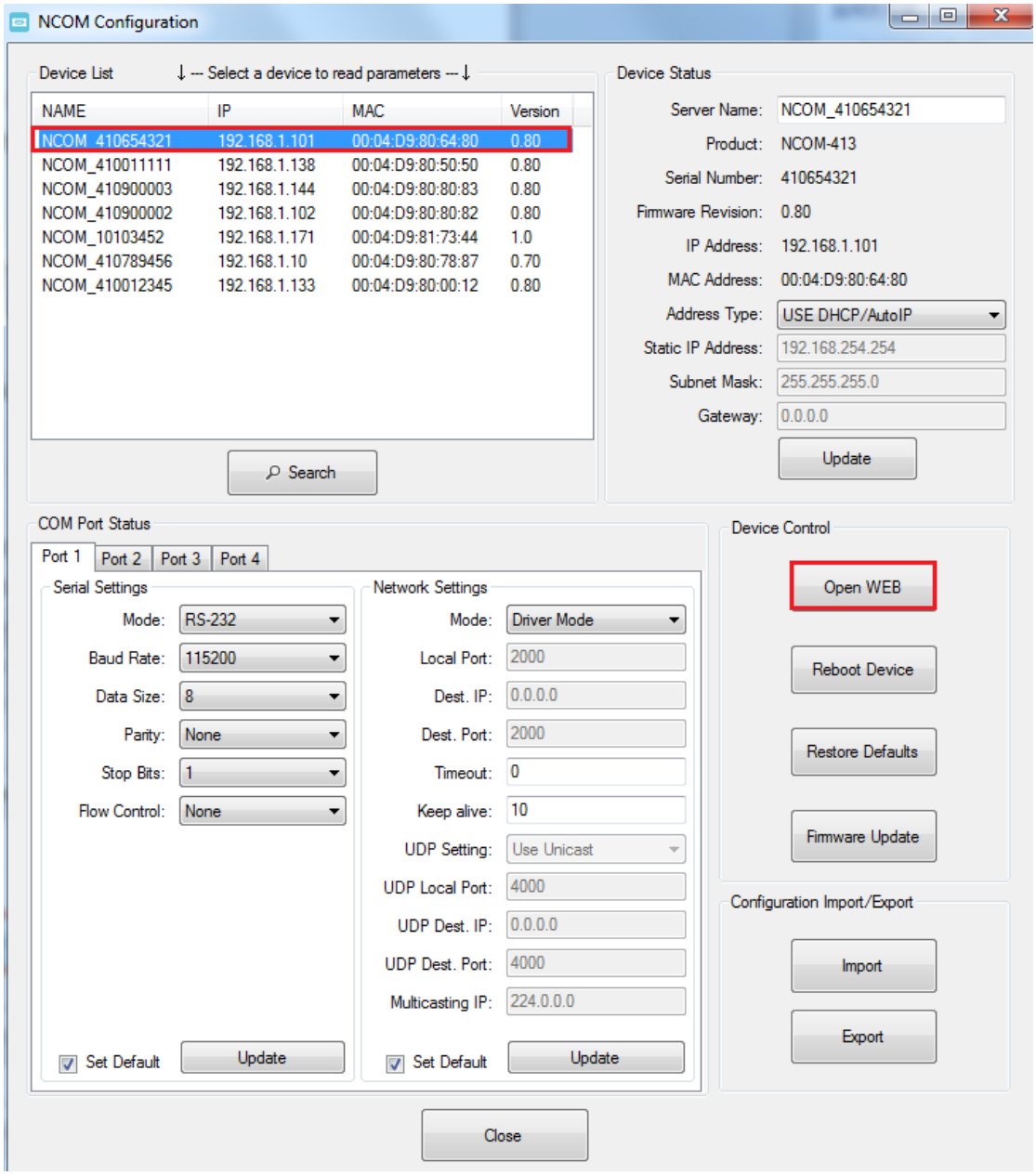
The “Search” button searches for all attached NCOM devices. If a new NCOM device is attached to the network system, you can click “Search Device” to find new NCOM devices.




NCOM Configuration
Device List
↓ --- Select a device to read parameters --- ↓
NAME
IP
MAC
Version
NCOM_410135790 192.168.1.146 00:04:D9:88:00:50 0.80
NCOM_410011111 192.168.1.140 00:04:D9:80:50:50 0.80
NCOM_410900001 192.168.1.112 00:04:D9:80:80:81 0.60
NCOM_410900003 192.168.1.149 00:04:D9:80:80:83 0.60
NCOM_410900002 192.168.1.105 00:04:D9:80:80:82 0.60
NCOM_410789456 192.168.1.125 00:04:D9:80:78:87 0.70
NCOM_410900000 192.168.1.118 00:04:D9:80:80:80 0.60
Search
Device Status
Server Name:
Product:
Serial Number:
Firmware Revision:
IP Address:
MAC Address:
Address Type:
Static IP Address:
Subnet Mask:
Gateway:
Update
COM Port Status
Port 1
Serial Settings
Mode:
Baud Rate:
Data Size:
Parity:
Stop Bits:
Flow Control:
Set Default
Update
Network Settings
Mode:
Local Port:
Dest. IP:
Dest. Port:
Timeout:
Keep alive:
UDP Setting:
UDP Local Port:
UDP Dest. IP:
UDP Dest. Port:
Multicasting IP:
Set Default
Update
Device Control
Open WEB
Reboot Device
Restore Defaults
Firmware Update
Configuration Import/Export
Import
Export
Close

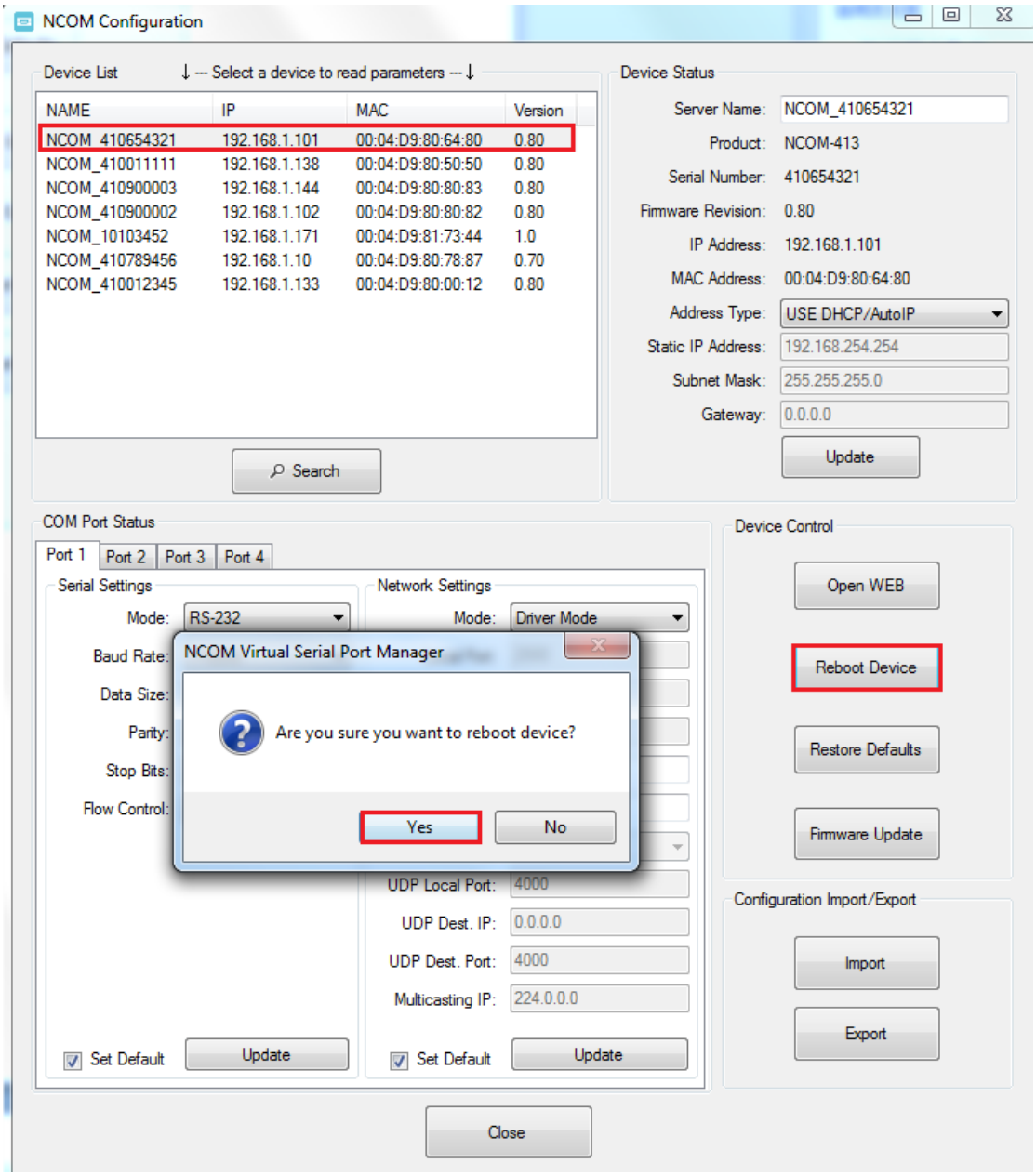
8.7.4.2 Opening the Web Console Interface

The “Open Web” button can be used to open the web console interface to configure NCOM. After selecting an attached NCOM device, click “Open Web” to open web console interface for that particular NCOM device.



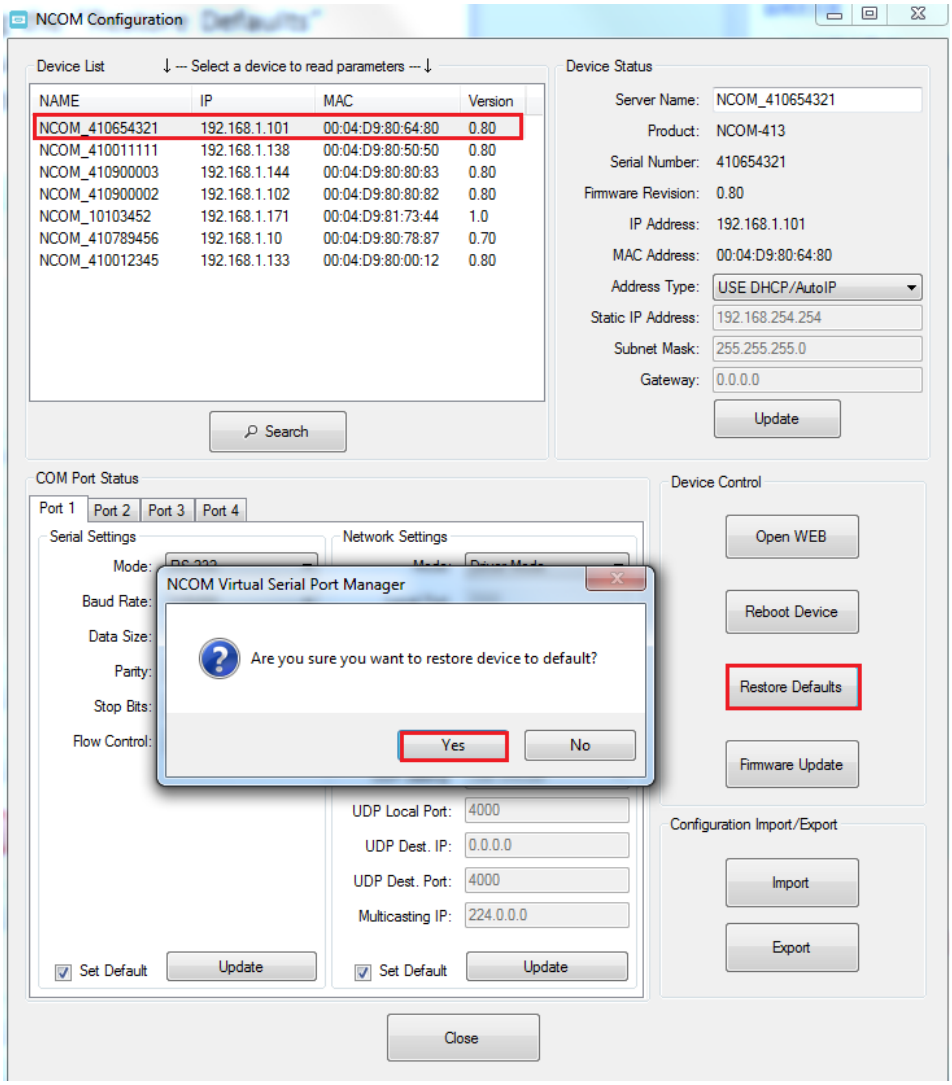
8.7.4.3 Rebooting NCOM Devices

The “Reboot Device” button reboots/resets your NCOM device when you need to. After selecting an attached NCOM device, click “Reboot Device” and a message will ask “Are you sure you want to reboot device?”. Click “Yes” to reboot/reset your NCOM device.

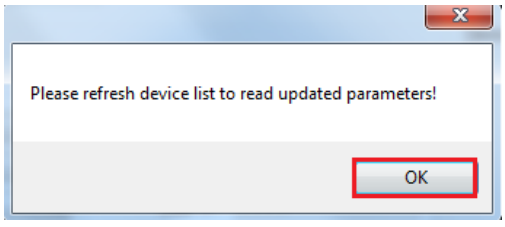


8.7.4.4 Restoring to Factory Defaults

The “Restore Defaults” button restores the firmware to factory defaults. When you select an attached NCOM device, you can restore all options to factory default states by clicking the “Restore Defaults” button; After clicking “Restore Defaults”, a message will ask “Are you sure you want to restore device to default?”. Confirm by clicking “Yes” and the NCOM device will restore all options to factory defaults.



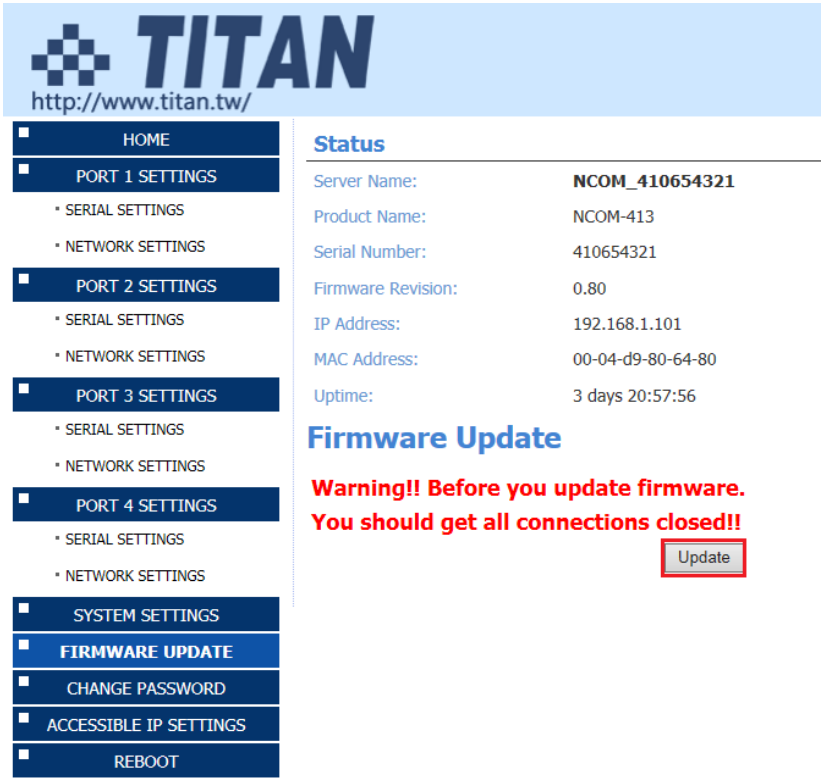
After the NCOM device restores all options to factory default states, a message will indicate “Please refresh device list to read updated parameters!”. Click on “OK” to finish restoring device to factory defaults.



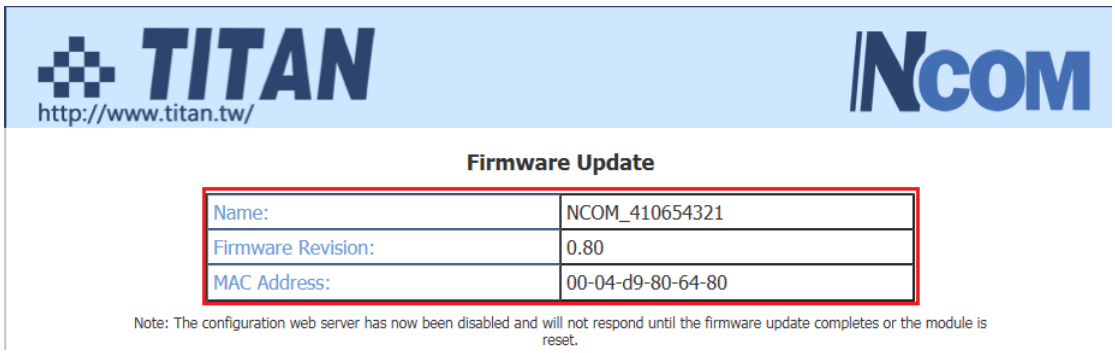
8.7.4.5 Firmware Update Tool

The “Firmware Update” button opens the firmware update tool to upgrade NCOM-413 firmware contents via Ethernet port. Before you click “Firmware Update”, please go to the web console interface of NCOM device firmware. Enable firmware update interface via Ethernet port in order to upgrade NCOM-413.

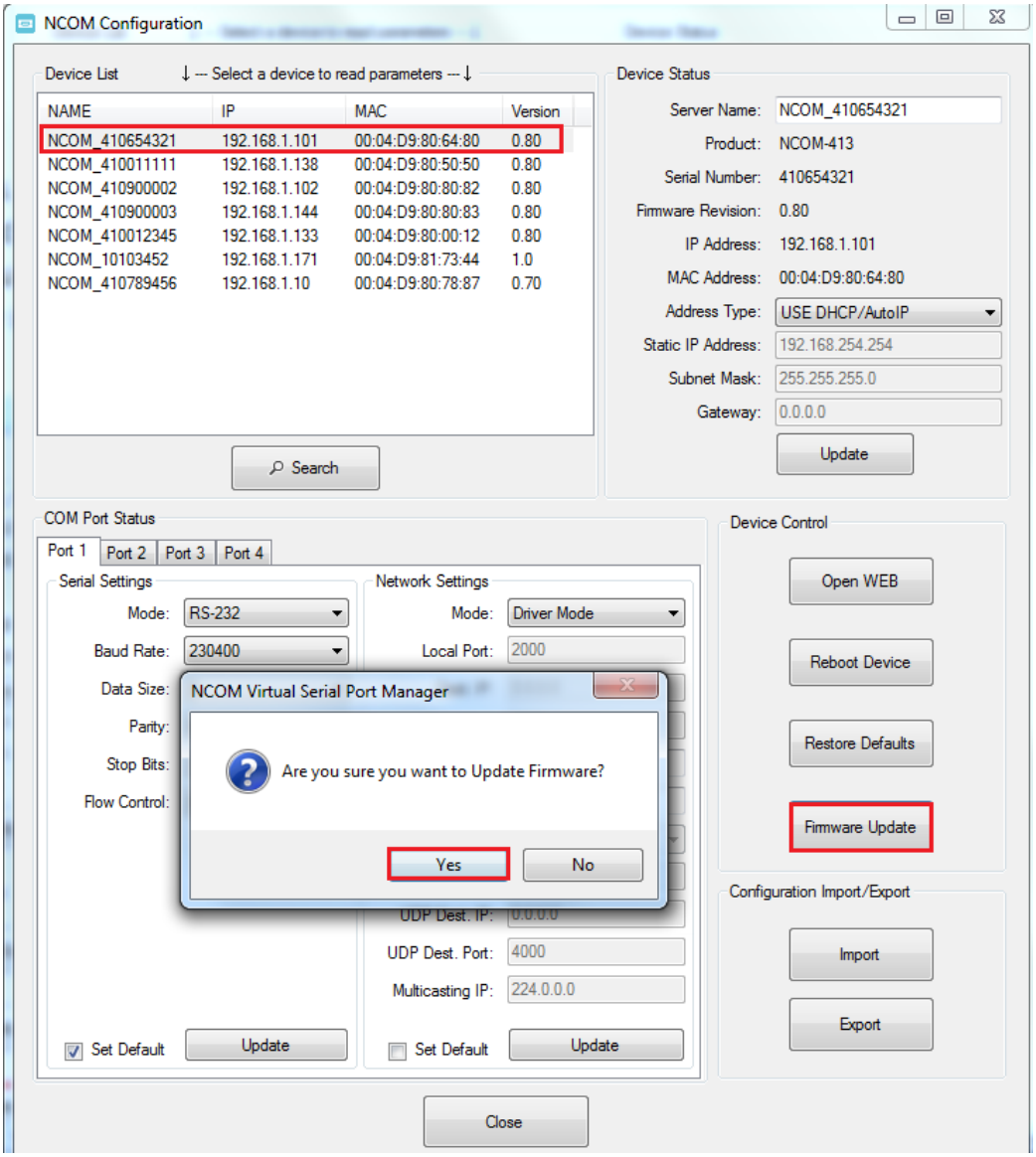
Under the web console interface, select “FIRMWARE UPDATE” and click “Update” to enable the firmware update interface to upgrade to a new firmware.



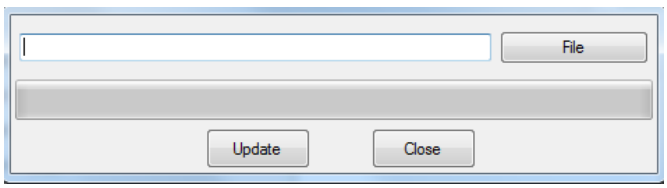
When you click “Update”, you will find the following message. The web console interface then waits for the firmware update tool program to launch in order to continue upgrading NCOM-413’s firmware.



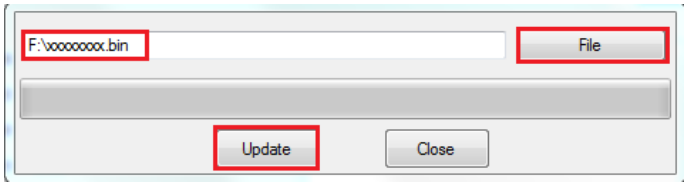
After enabling the firmware update interface, please select this NCOM device then click the “Firmware Update” button.



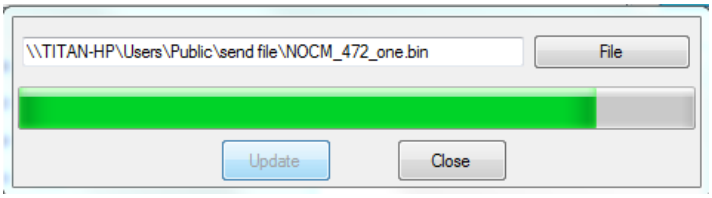
When you click “Firmware Update”, a message will ask “Are you sure you want to update firmware?”. Confirm by clicking “Yes” and the message “Input new firmware file” will appear.



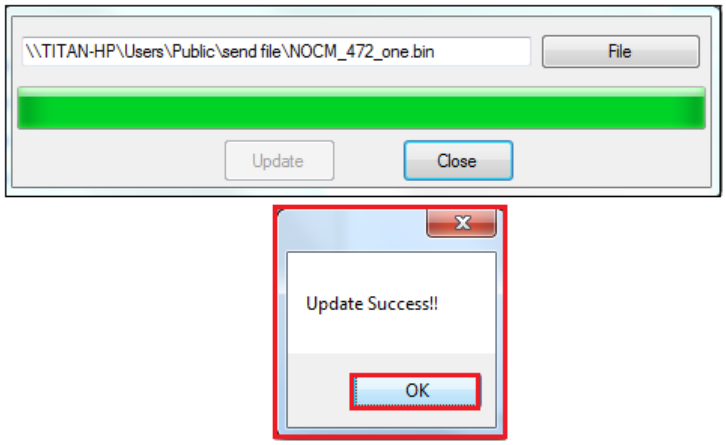
Use the “File” button to browse to the new firmware file and click on “Update” to start upgrading NCOM-413’s device firmware.



While upgrading, you will find the following message.



After successfully upgrading the firmware contents, there will be a message stating "Update Success!!".



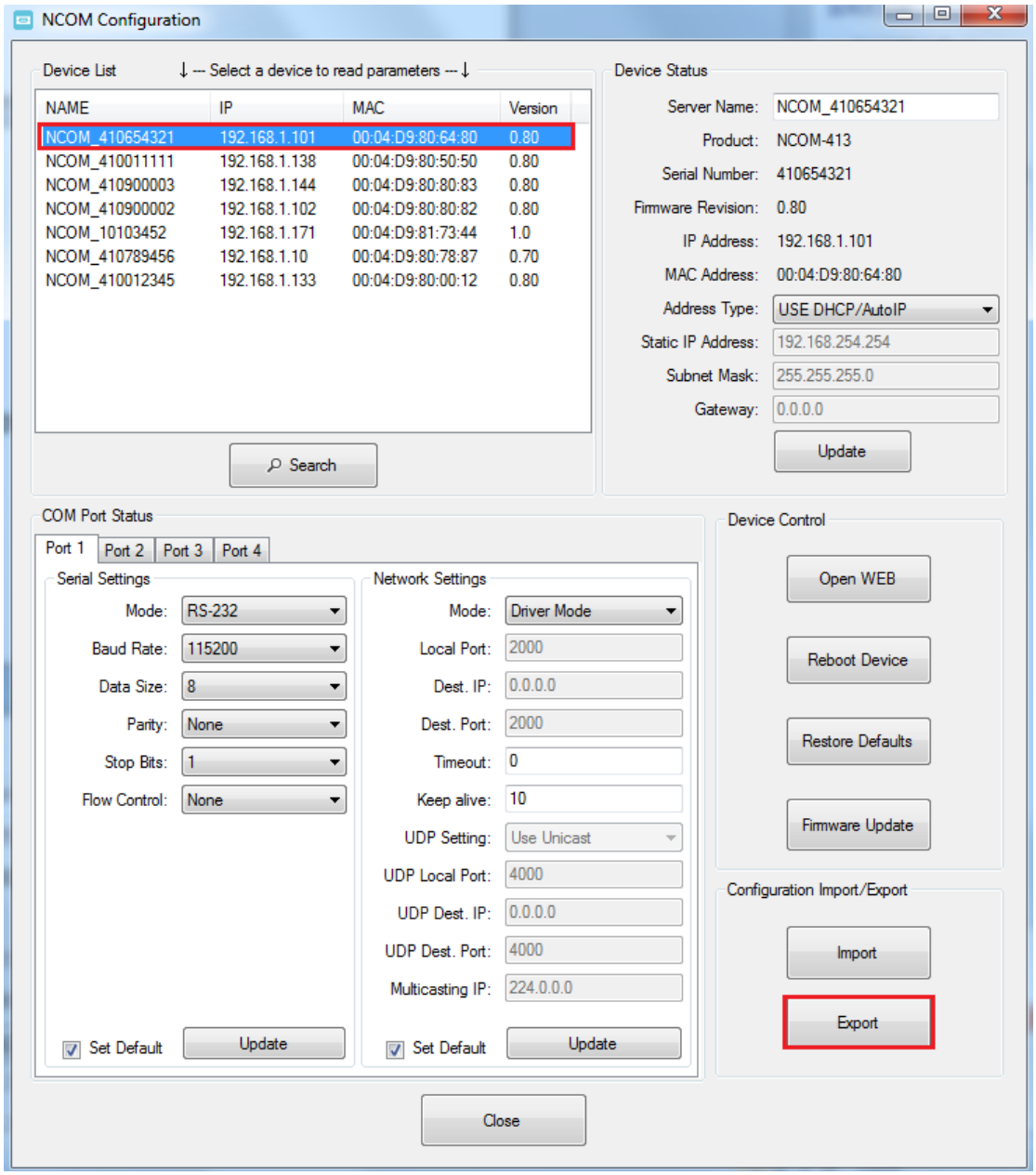
Click on "OK" to finish the firmware update procedure.

8.7.5 Importing/Exporting Configuration Settings

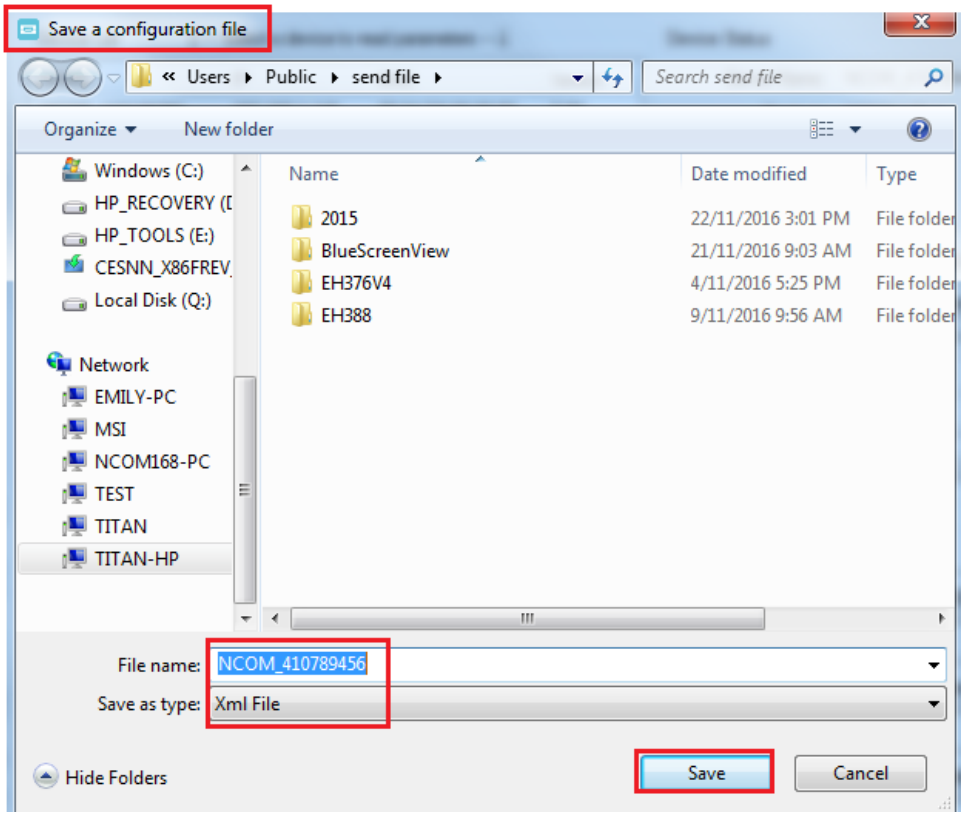
The “Configuration Import/Export” function allows you to back up and recover your NCOM device configuration settings.

8.7.5.1 Exporting Configuration Settings

Select an attached NCOM device then click the “Export” button.

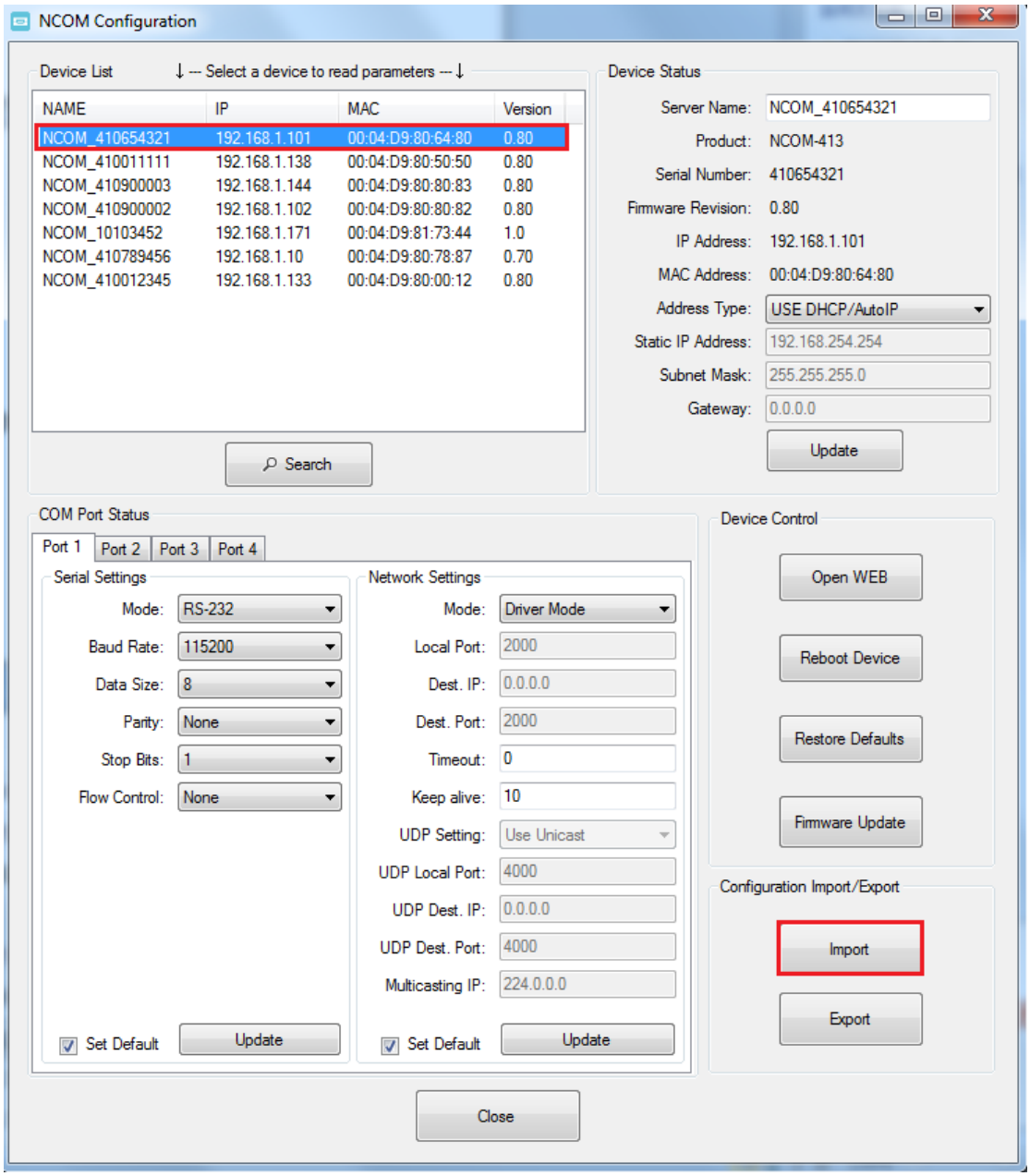


After you click “Export” you will find a “Save a configuration file” page. Click on “Save” to store the NCOM device configuration data to a NCOM_XXXXXXXXX.xml file.

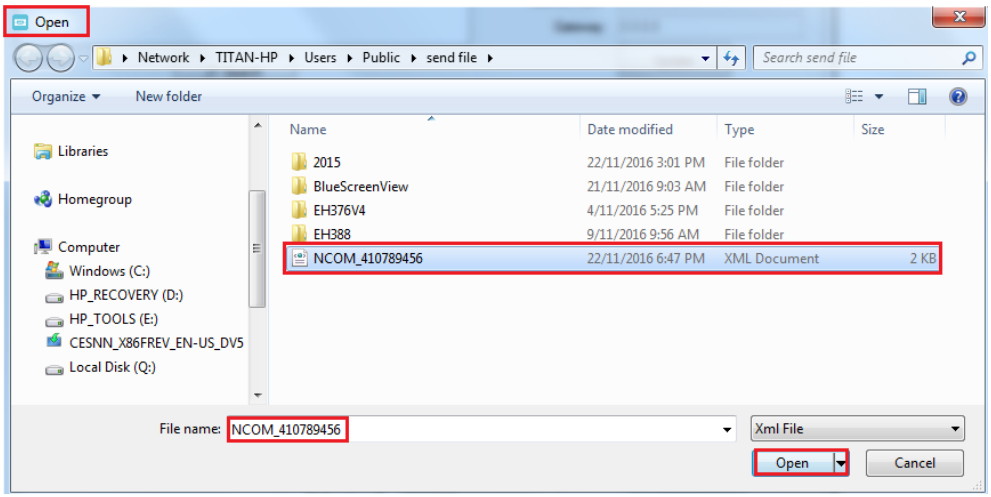

Save a configuration file
Users ▸ Public ▸ send file ▸
Search send file
Organize
New folder
Windows (C:)
HP_RECOVERY (D
HP_TOOLS (E:)
CESNN_X86FREV
Local Disk (Q:)
Network
EMILY-PC
MSI
NCOM168-PC
TEST
TITAN
TITAN-HP
Name
Date modified
Type
2015
22/11/2016 3:01 PM
File folder
BlueScreenView
21/11/2016 9:03 AM
File folder
EH376V4
4/11/2016 5:25 PM
File folder
EH388
9/11/2016 9:56 AM
File folder
File name:
NCOM_410789456
Save as type:
Xml File
Hide Folders
Save
Cancel

8.7.5.2 Importing Configuration Settings

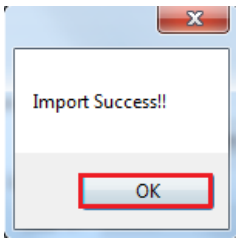
Select an attached NCOM device then click the “Import” button.



After you click “Import” you will find an “Open” page, select a NCOM configuration file and click “Open” to start uploading configuration data into NCOM.



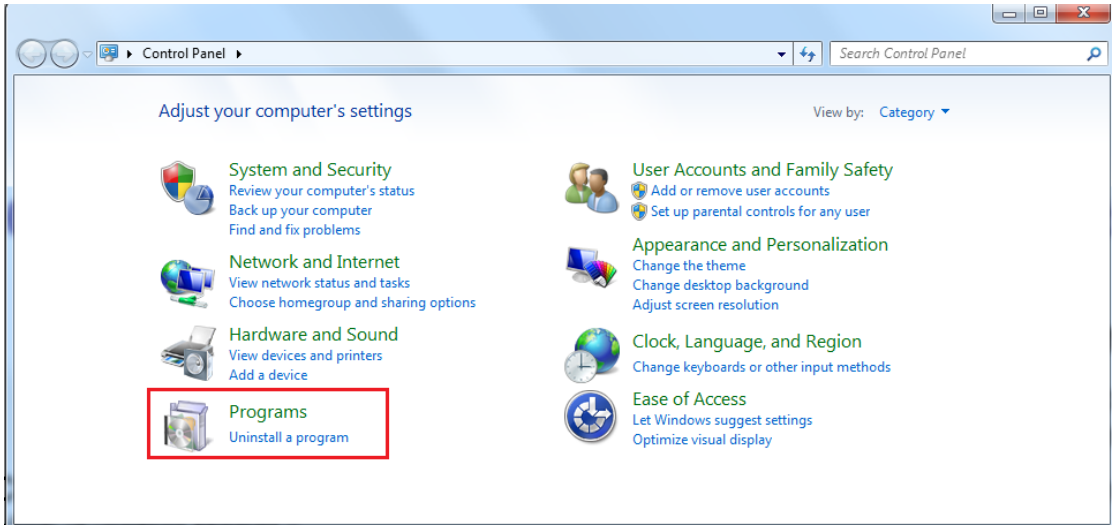
After all configuration data is uploaded into NCOM device, a message will indicate “Import Success!!”. Click on “OK” to finish importing configuration data.



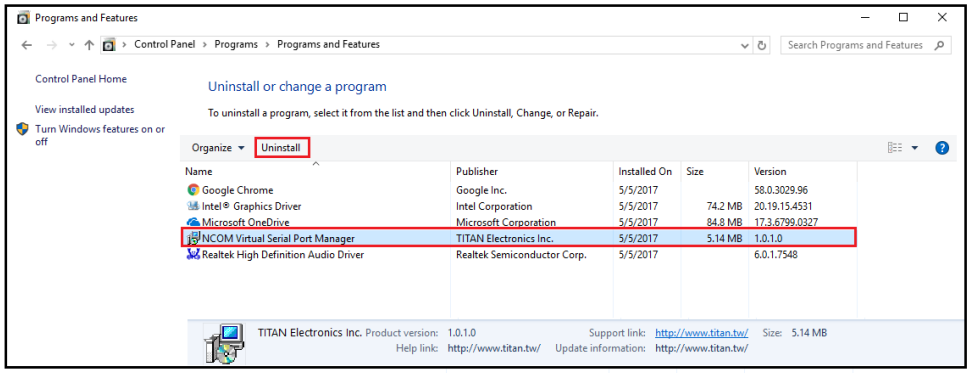
9. NCOM VIRTUAL SERIAL PORT MANAGER AND DRIVER UNINSTALLATION

Uninstalling NCOM Virtual Serial Port Manager and Virtual COM Port Driver

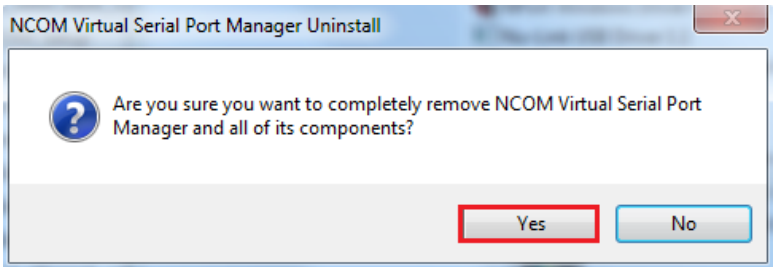
To uninstall NCOM Virtual Serial Port Manager and virtual serial port driver, click the "Start" button and navigate to “Control Panel”. Choose "Uninstall a program" under “Programs”.



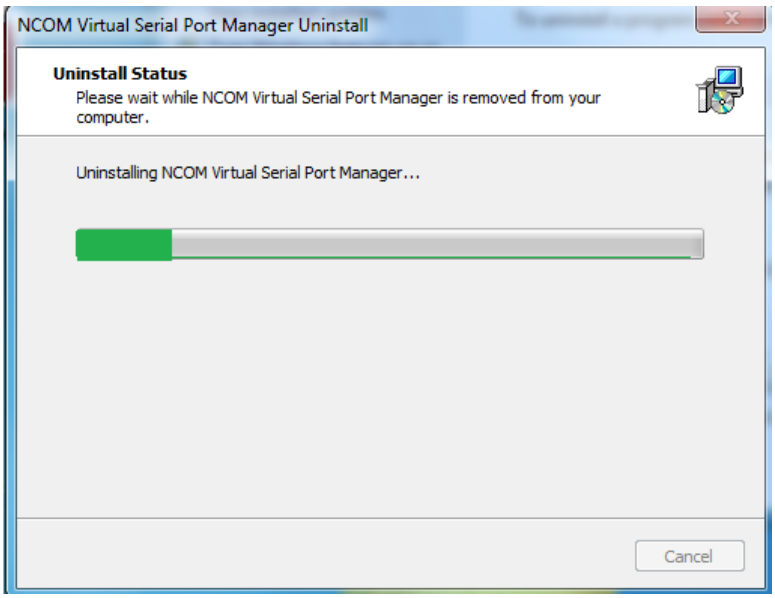
After you click “Uninstall a program”, a page with a list of all your installed programs will be shown. Select “NCOM Virtual Serial Port Manager” and click on “Uninstall” to uninstall NCOM Virtual Serial Port Manager and virtual serial port driver.



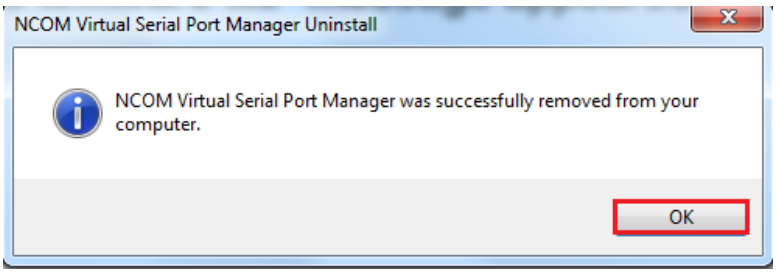
When you click on “Uninstall”, a message will ask “Are you sure you want to completely remove NCOM Virtual Serial Port Manager and all of its components?”. Confirm by click “Yes”.



When uninstalling NCOM Virtual Serial Manager Port and virtual serial port driver in, you will find the following message.



After successfully removing NCOM Virtual Serial Port Manager and virtual serial port driver, a message stating that “NCOM Virtual Serial Port Manager was successfully removed from your computer” will be shown.



Click on “OK” to finish removing NCOM Virtual Serial Port Manager and virtual serial port driver.