

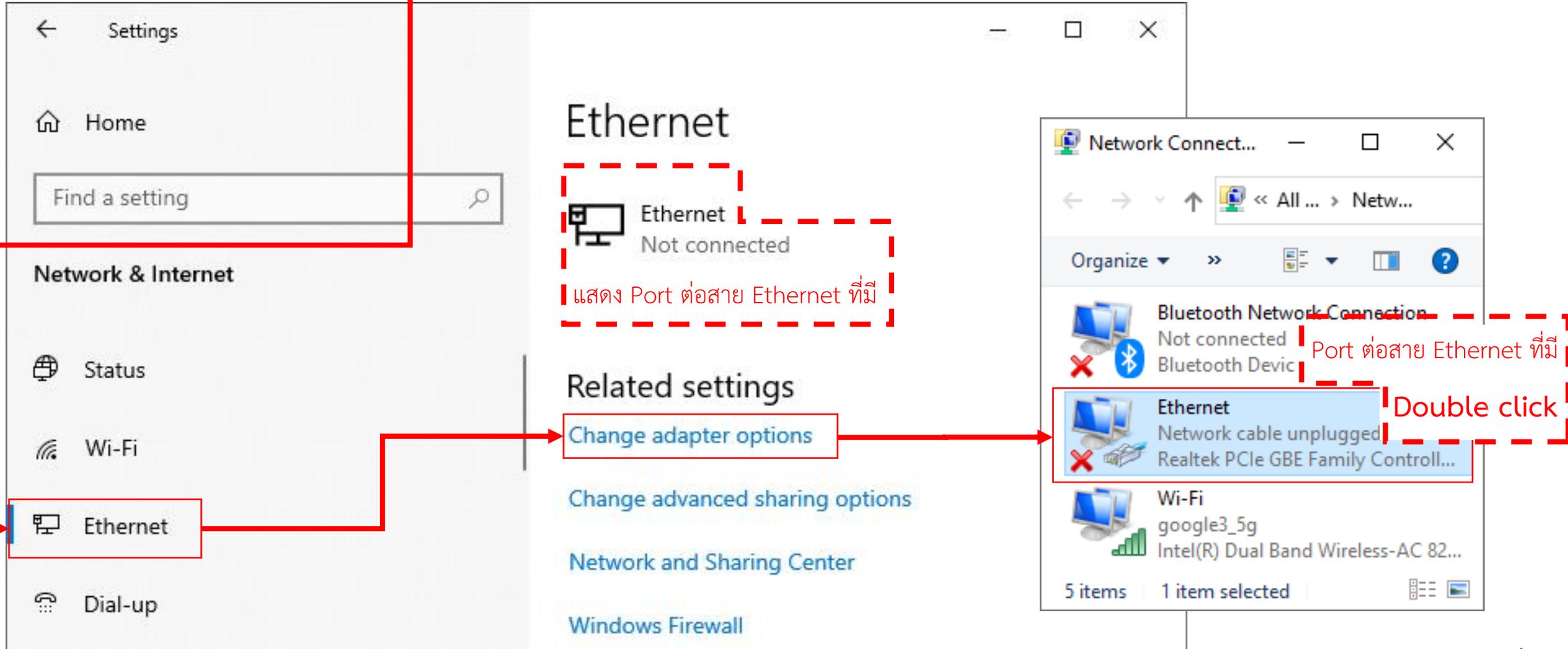
การต่อคอมพิวเตอร์กับ FX5U ผ่าน Ethernet

2023/11

Mitsubishi Electric Factory Automation (Thailand) Co., Ltd.

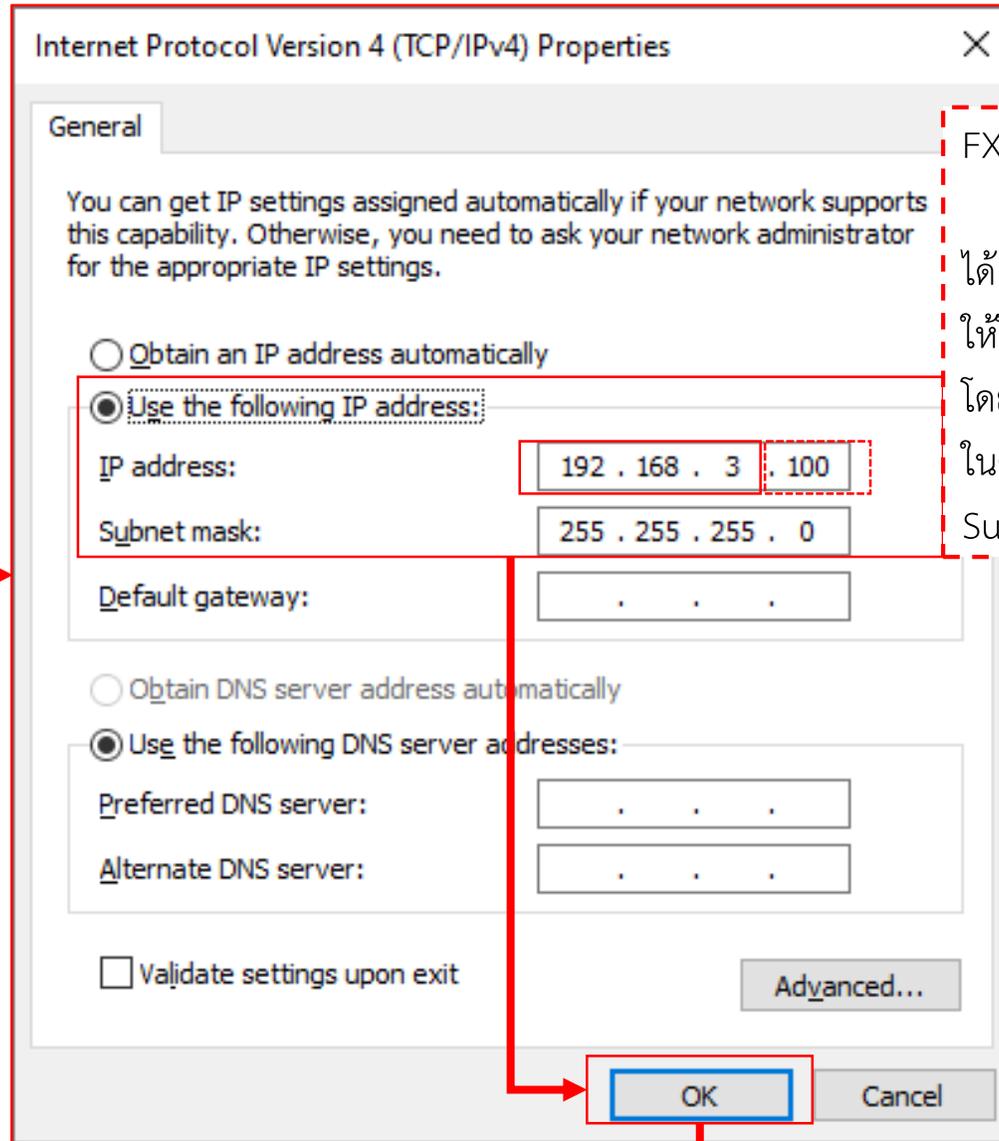
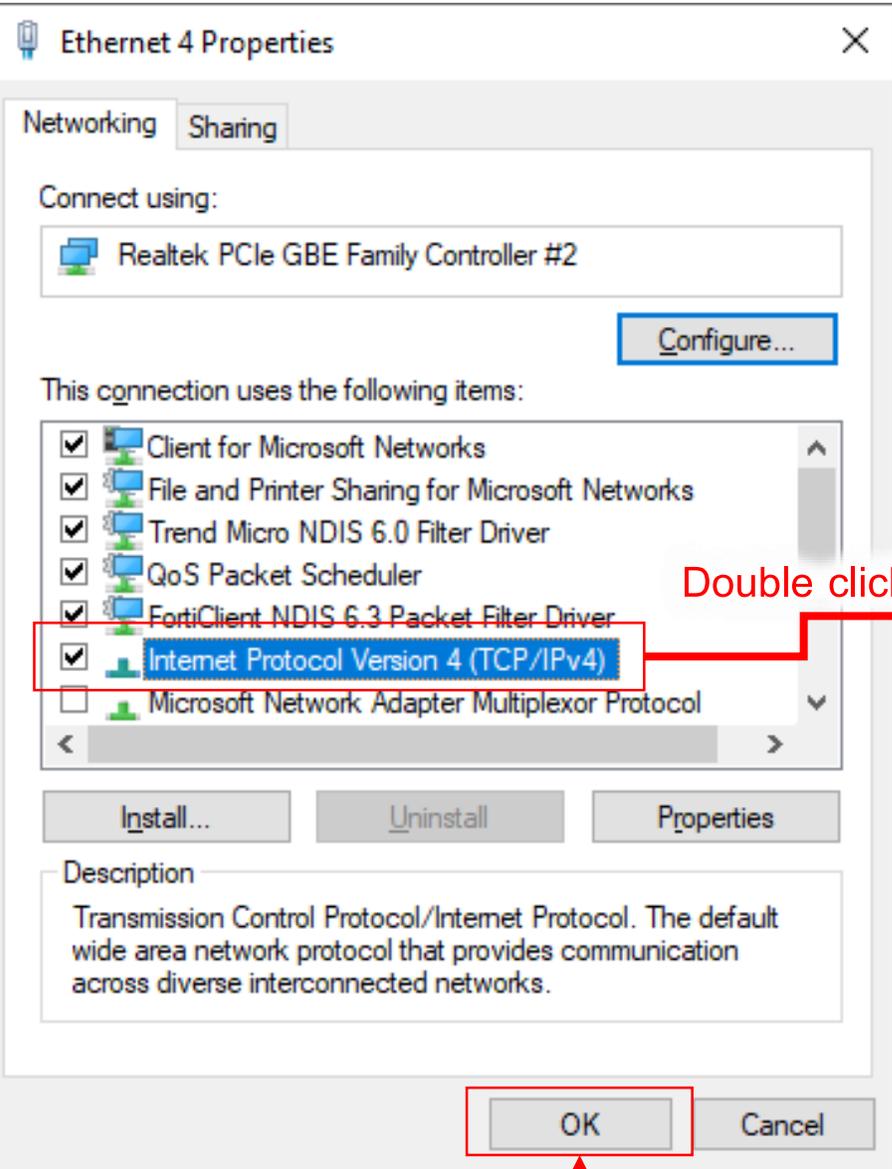
- ต้องตั้ง IP address ของคอมพิวเตอร์ให้อยู่ Network address เดียวกับ PLC
- ตัวอย่าง Windows 10 ยังไม่ต่อสาย Ethernet ของคอมพิวเตอร์กับ PLC (FX5 ใช้ IP address 192.168.3.250, Subnet mask 255.255.225.0)

Start → Settings → Network & Internet



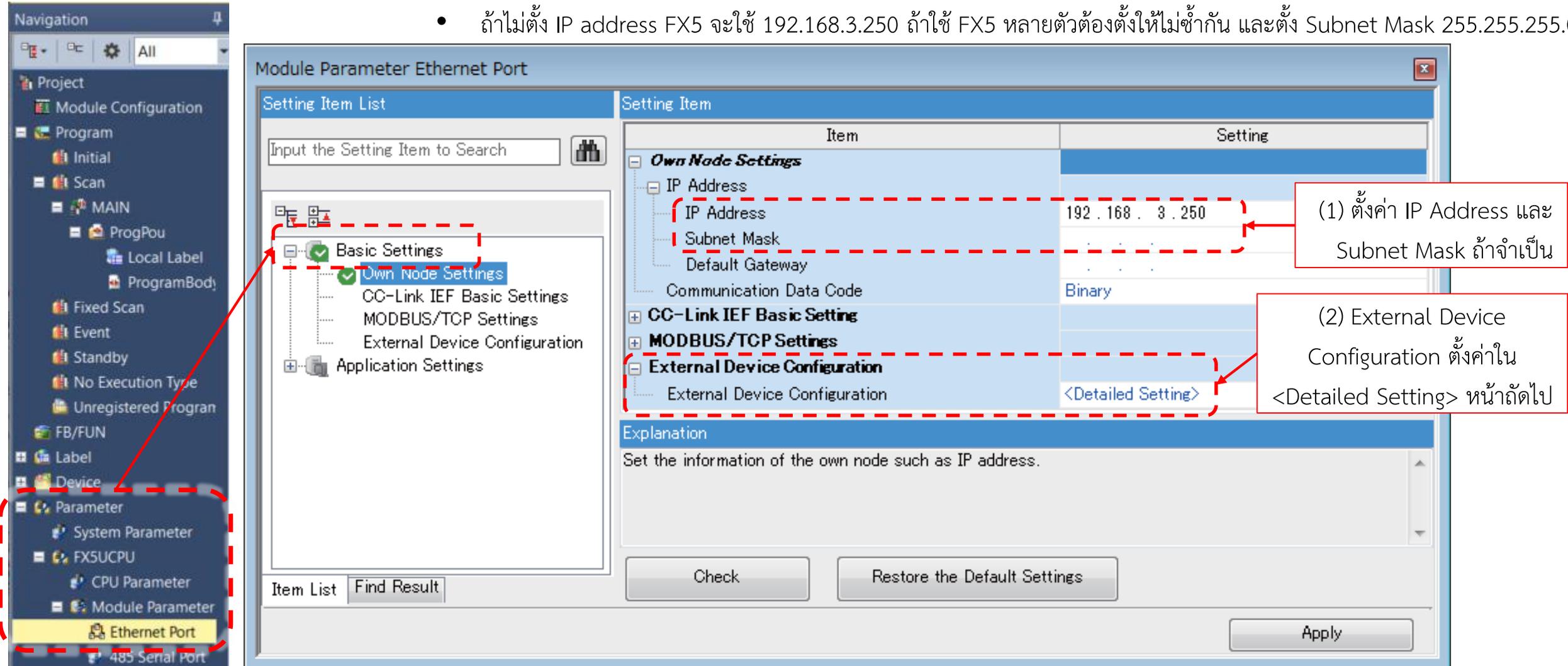
The screenshot illustrates the steps to access the Ethernet adapter settings in Windows 10:

- Settings App:** The 'Network & Internet' section is selected in the left sidebar. The 'Ethernet' option is highlighted with a red box.
- Ethernet Status Page:** The 'Ethernet' status is shown as 'Not connected'. A red dashed box highlights this status with the text 'แสดง Port ต่อสาย Ethernet ที่มี' (Show Ethernet port that is available).
- Related settings:** The 'Change adapter options' link is highlighted with a red box.
- Network Connections Window:** A window titled 'Network Connections' is open, showing a list of network adapters. The 'Ethernet' adapter (Realtek PCIe GBE Family Controller) is highlighted with a red box and labeled 'Double click'. A red dashed box around it contains the text 'Port ต่อสาย Ethernet ที่มี' (Ethernet port that is available).



FX5 ใช้ IP address 192.168.3.250
Subnet mask 255.255.255.0
ได้ Network address 192.168.3.0
ให้ใช้ IP address เริ่ม 192.168.3
โดยไม่ซ้ำ และใช้ Subnet mask เดิม
ในตัวอย่างใช้ 192.168.3.100
Subnet mask 255.255.255.0

- ต้องตั้ง IP address ของคอมพิวเตอร์และอุปกรณ์อื่นให้อยู่ Network address เดียวกับ PLC และ IP address ไม่ซ้ำกัน
- GX Works3 Navigation window → Parameter → FX5UCPU → Module Parameter → Ethernet Port → Basic Settings
 - ถ้าไม่ตั้ง IP address FX5 จะใช้ 192.168.3.250 ถ้าใช้ FX5 หลายตัวต้องตั้งให้ไม่ซ้ำกัน และตั้ง Subnet Mask 255.255.255.0



Navigation

Project

- Module Configuration
- Program
- Initial
- Scan
- MAIN
- ProgPou
- Local Label
- ProgramBody
- Fixed Scan
- Event
- Standby
- No Execution Type
- Unregistered Program
- FB/FUN
- Label
- Device
- Parameter
 - System Parameter
 - FX5UCPU
 - CPU Parameter
 - Module Parameter
 - Ethernet Port**
 - 485 Serial Port

Module Parameter Ethernet Port

Setting Item List

Input the Setting Item to Search

- Basic Settings
- Own Node Settings
- CC-Link IEF Basic Settings
- MODBUS/TCP Settings
- External Device Configuration
- Application Settings

Setting Item

Item	Setting
Own Node Settings	
IP Address	
IP Address	192 . 168 . 3 . 250
Subnet Mask	
Default Gateway	
Communication Data Code	Binary
CC-Link IEF Basic Setting	
MODBUS/TCP Settings	
External Device Configuration	
External Device Configuration	<Detailed Setting>

(1) ตั้งค่า IP Address และ Subnet Mask ถ้าจำเป็น

(2) External Device Configuration ตั้งค่าใน <Detailed Setting> หน้าถัดไป

Explanation

Set the information of the own node such as IP address.

Check

Restore the Default Settings

Apply

(4) Close with Reflecting the Setting แล้วกลับไปกด Apply ในหน้าเดิม

ถ้าไม่ตั้งจะใช้ Host Station ให้ FX5 ต่ออุปกรณ์อื่นได้ 1 ตัว

(3) Drag and drop จาก MELSOFT Connection Module

เพิ่ม 1 รายการ ต่ออุปกรณ์เพิ่มได้ 1 ตัว
เพิ่มเกินจำนวนอุปกรณ์ที่ต่อจริงได้

No.	Model Name	Communication Method	Protocol	Fixed Buffer Send/Receive Setting	PLC	
					IP Address	Port No.
	Host Station				192.168.3.250	
1	MELSOFT Connection Mod	MELSOFT Conner	TCP		192.168.3.250	

Module List

Ethernet Selection | Find Module | My Favorites

Ethernet Device (General)

- MELSOFT Connection Module
- SLMP Connection Module
- UDP Connection Module
- Active Connection Module
- Unpassive Connection Module
- Fullpassive Connection Module
- MODBUS/TCP Connection Module

Ethernet Device (Mitsubishi Electric Corpo)

- Code Reader
- GOT2000Series
- General-Purpose AC Servo
- Inverter (FR-A800 Series)
- Inverter (FR-F800 Series)

[Outline]
MELSOFT Connection Module

[Specification]
Use when specify open method by MELSOFT

Output

Module Parameter Ethernet Port

Setting Item List

Input the Setting Item to Search

- Basic Settings
 - Own Node Settings
 - CC-Link IEF Basic Settings
 - MODBUS/TCP Settings
 - External Device Configuration
- Application Settings

Item	Setting
Own Node Settings	
IP Address	
IP Address	192 . 168 . 3 . 250
Subnet Mask	. . .
Default Gateway	. . .
Communication Data Code	Binary
CC-Link IEF Basic Setting	
MODBUS/TCP Settings	
External Device Configuration	
External Device Configuration	<Detailed Setting>

Explanation

Set the information of the own node such as IP address.

Check Restore the Default Settings

Apply

(5) ตั้ง Detailed Setting จบแล้ว จะกลับมาหน้านี้ กด Apply

- ต้อง Write to PLC ด้วยการต่อแบบปกติ และ Reset PLC ก่อนต่อหลายอุปกรณ์ได้

- Online → Current Connection Destination

The image shows a multi-step software interface for configuring a connection. The main window is titled "Specify Connection Destination Connection" and is divided into "PC side I/F" and "PLC side I/F".

Step 1: In the "Connection Destination Simple Setting Connection" window, the "Ethernet" radio button is selected. Below it, a diagram shows a computer connected to an "Ethernet Board" which is connected to an "Ethernet" port. A red box labeled (1) highlights the "Other Connection Method" radio button at the bottom left.

Step 2: A red box labeled (2) highlights the "Other Connection Method (Open the Specify Connection Destination window)" button at the bottom center.

Step 3: A red box labeled (3) highlights the "PLC Module" icon in the "PLC side I/F" section of the "Specify Connection Destination Connection" window.

Step 4: A red box labeled (4) highlights the "Connection via HUB" radio button in the "PLC side I/F Detailed Setting of PLC Module" window. The "PLC Mode" is set to "FX5CPU". Below this, a diagram shows a laptop connected to a hub, which is then connected to two other PLC units.

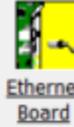
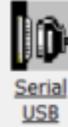
Step 5: A red box labeled (5) highlights the "IP Address" input field in the "Connection via HUB" section, which contains the value "192.168.3.250". The "IP Input Format" is set to "DEC".

Step 6: A red box labeled (6) highlights the "OK" button at the bottom right of the "Specify Connection Destination Connection" window.

Red arrows indicate the flow from step 1 to 2, 2 to 3, 3 to 4, 4 to 5, and 5 to 6. A red squiggly line is also present between steps 3 and 4.

Specify Connection Destination Connection

PC side I/F



PLC side I/F



Other Station Setting



Network Communication Route



Network No. - Station No. - Protocol TCP

IP Address/Host Name

192.168.3.250

แสดง IP address ของ PLC

PLC Mode FX5CPU

Connection Channel List...

CPU Module Direct Coupled Setting

Connection Test

ทดลอง Connection Test ได้

PLC Type

System Image...

(7)

OK

Cancel

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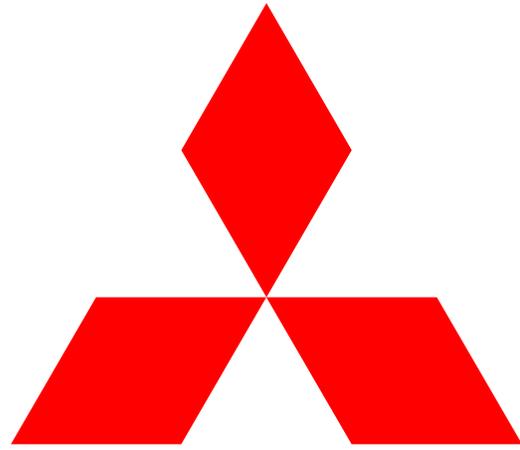
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