

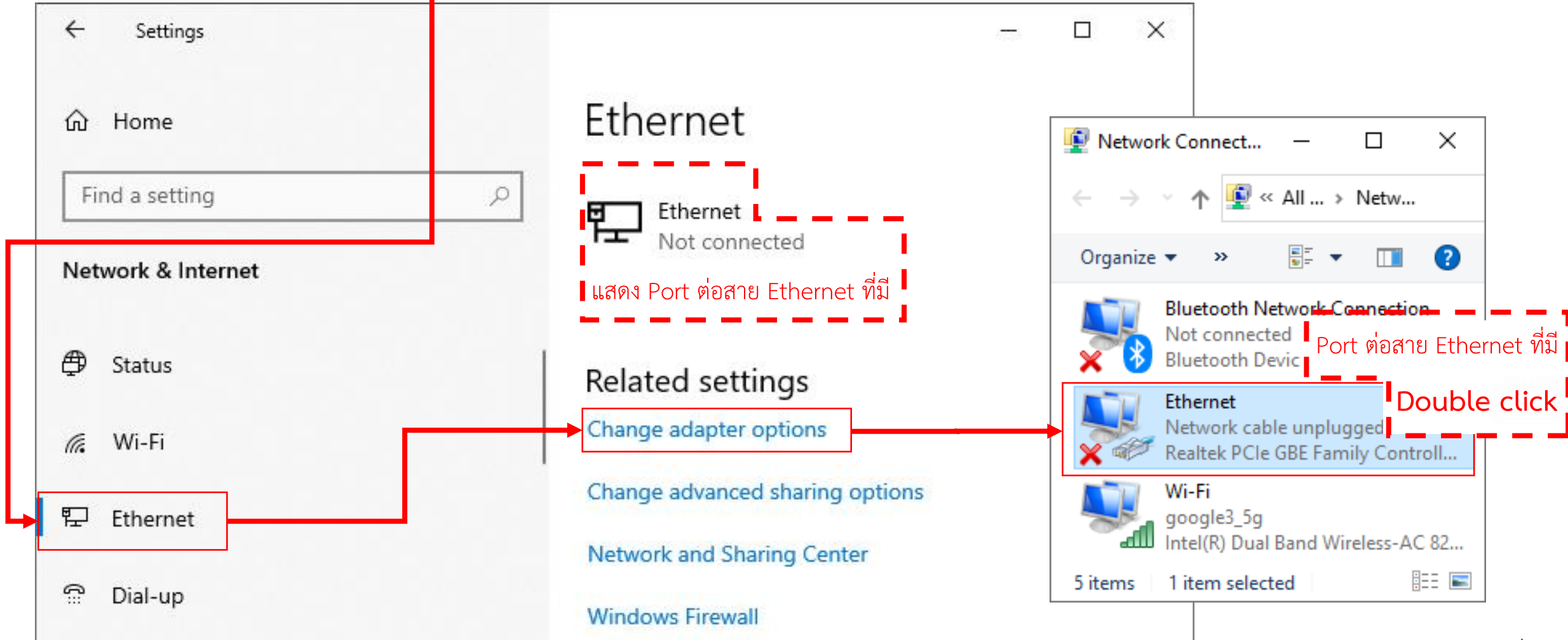
การต่อคอมพิวเตอร์กับ FX5U ผ่าน Ethernet

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

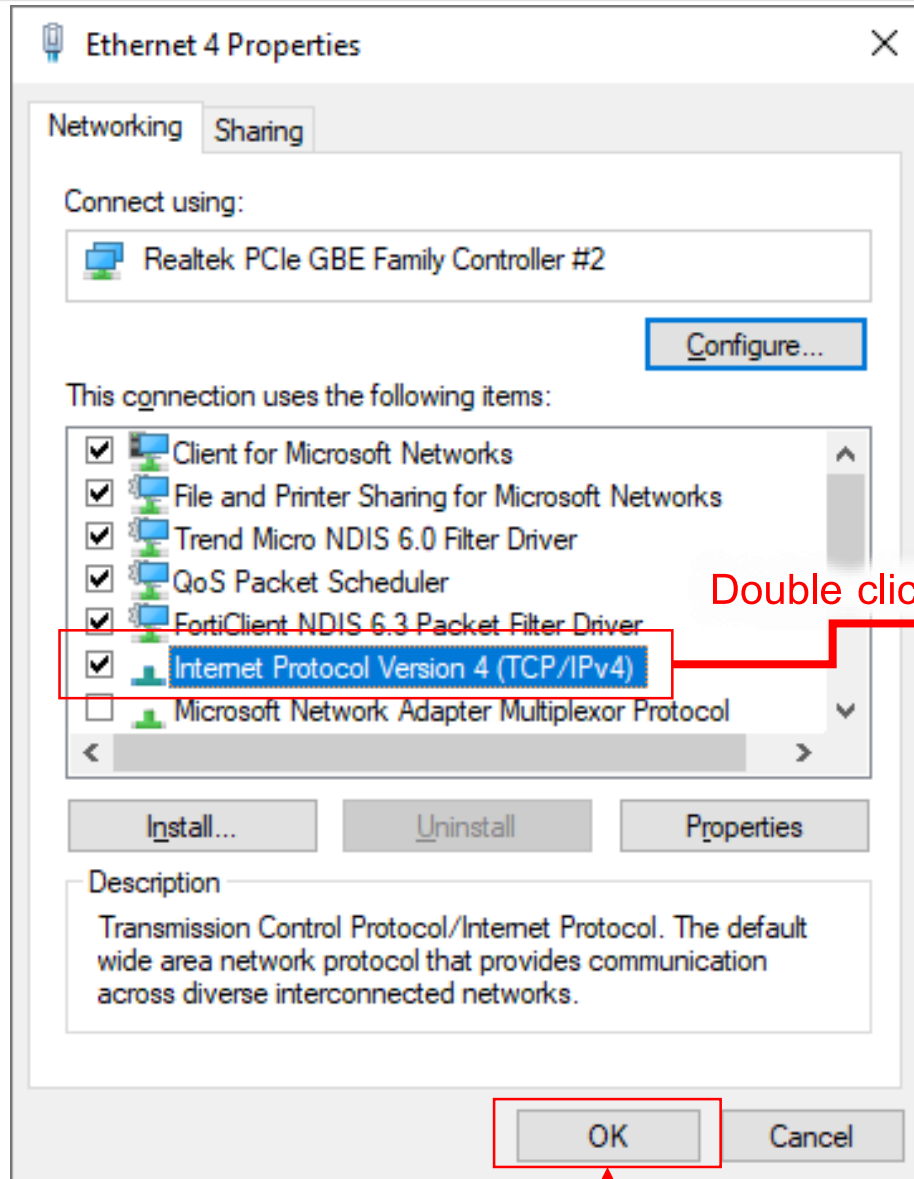


The screenshot shows the Windows 10 Settings application. The path to the Ethernet adapter settings is highlighted with red arrows and dashed boxes:

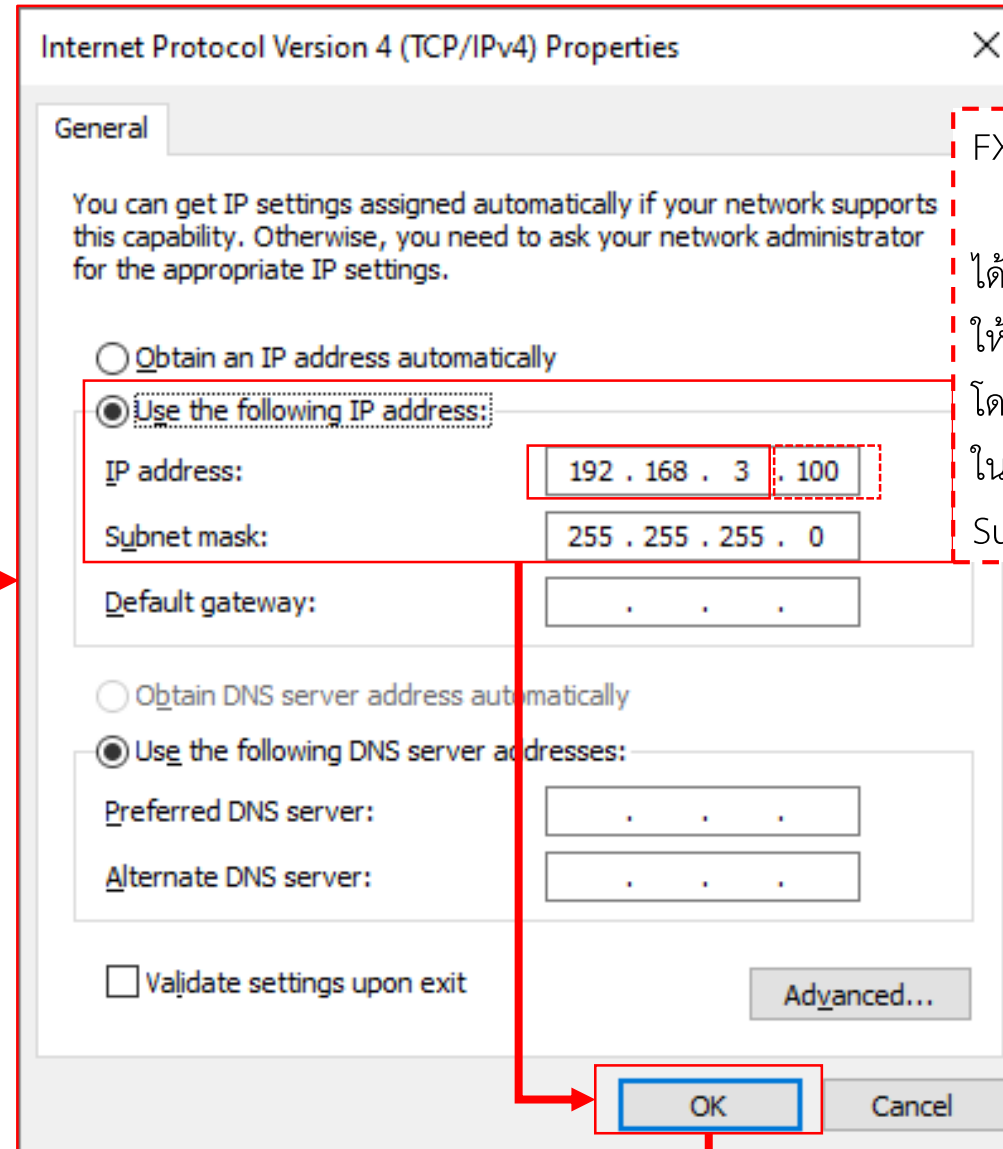
- Settings** (Main window)
- Network & Internet** (Left sidebar)
- Ethernet** (Left sidebar, selected)
- Ethernet** (Main content area, showing "Not connected")
- Change adapter options** (Link in "Related settings")
- Network Connections** (Sub-window showing the list of network adapters)
- Ethernet** (Selected adapter in the list, showing "Network cable unplugged")

Red dashed boxes and text annotations highlight the steps:

- แสดง Port ต่อสาย Ethernet ที่มี** (Show Ethernet port that has)
- Port ต่อสาย Ethernet ที่มี** (Ethernet port that has)
- Double click** (Double click)

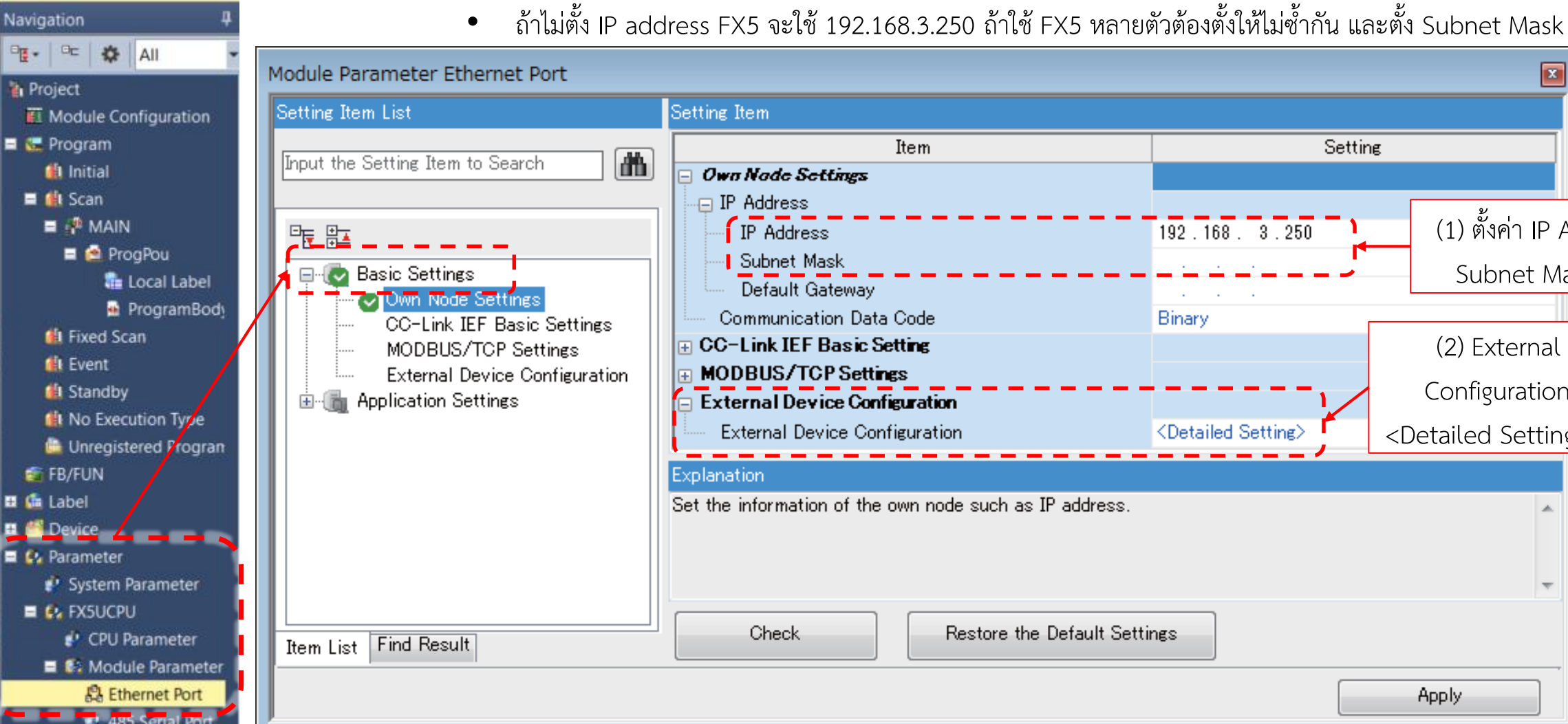


Double click



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



The screenshot shows the GX Works3 interface. On the left is the Navigation window with a tree structure. The 'Ethernet Port' option under 'FX5UCPU' is highlighted with a red dashed box. A red arrow points from this box to the 'Basic Settings' option in the 'Module Parameter Ethernet Port' dialog box. The dialog box has two panes: 'Setting Item List' and 'Setting Item'.

Setting Item List:

- Basic Settings (checked)
- Own Node Settings (checked)
- 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>

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

Buttons at the bottom: Check, Restore the Default Settings, Apply.

Annotations:

- (1) ตั้งค่า IP Address และ Subnet Mask ถ้าจำเป็น (Indicated by a red dashed box around the IP Address and Subnet Mask settings in the 'Setting Item' pane).
- (2) External Device Configuration ตั้งค่าใน <Detailed Setting> หน้าถัดไป (Indicated by a red dashed box around the 'External Device Configuration' setting in the 'Setting Item' pane).

(4) Close with Reflecting the Setting แล้วกลับไปกด Apply ในหน้าเดิม

ถ้าไม่ตั้งจะใช้ Host Station ให้ FX5 ต่ออุปกรณ์อื่นได้ 1 ตัว

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 Conne	TCP		192.168.3.250	

(3) Drag and drop จาก MELSOFT Connection Module

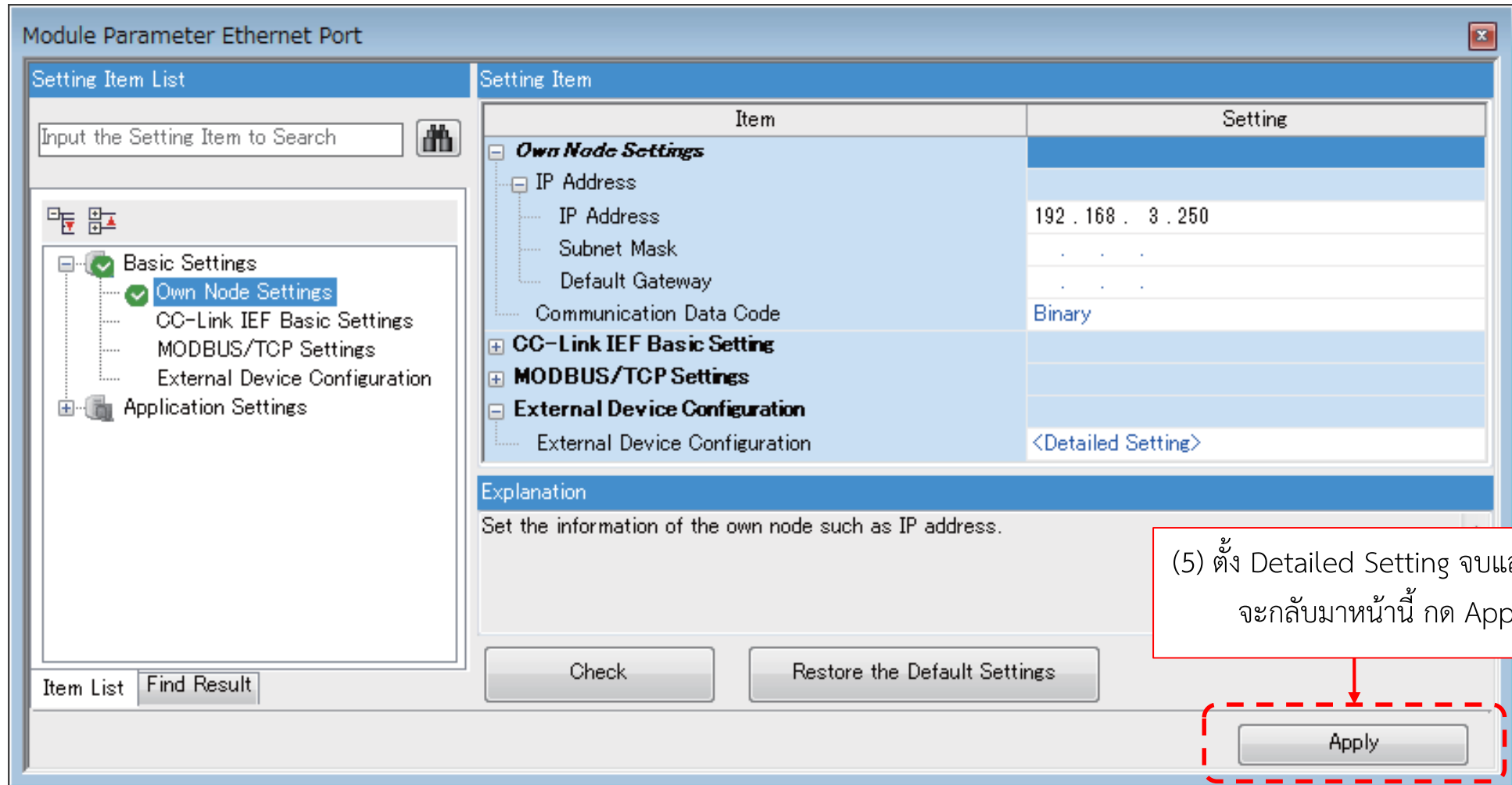
เพิ่ม 1 รายการ ต่ออุปกรณ์เพิ่มได้ 1 ตัว
เพิ่มเกินจำนวนอุปกรณ์ที่ต่อจริงได้

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



- ต้อง Write to PLC ด้วยการต่อแบบปกติ และ Reset PLC ก่อนต่อหลายอุปกรณ์ได้


- Online → Current Connection Destination

Connection Destination Simple Setting Connection

☐ Direct Coupled Setting

Please select the direct connection method with CPU module.

☒ Ethernet



Directly communicate with the CPU module without using a hub.
It is not required to specify the IP address of CPU module.

* This setting is applied to all Ethernet port direct coupled settings.

Adapter: Not Specified

IP Address of: []

☒ Other Connection Method

Select this method if you want to connect to CPU module with a connection method other than the direct coupled setting.

Specify Connection Destination Connection

PC side I/F: Serial USB, Ethernet Board


PLC side I/F: **PLC Module** (3)

PLC side I/F Detailed Setting of PLC Module

PLC Mode: FX5CPU

☐ Ethernet Port Direct Connection

☒ Connection via HUB (4)



* Please select 'Connection via HUB' when you use HUB even if there is only one target device to communicate.
If HUB is connected to other devices and also 'Ethernet Port Direct Connection' is selected during communication, the line

(5) พิมพ์ IP address ของ PLC

☒ IP Address: 192 | 168 | 3 | 250

IP Input Format: DEC

(6) OK

Specify Connection Destination Connection

PC side I/F



Serial
USB



Ethernet
Board

PLC side I/F



PLC
Module



Ethernet
Module



GOT



CC IE
TSN/Field
Module

Network No. - Station No. - Protocol TCP

IP Address/Host Name

192.168.3.250

แสดง IP address ของ PLC

PLC Mode FX5CPU

Other
Station
Setting



No Specification



Other Station(Single
Network)

Network
Communication
Route



CC IE TSN
CC IE Field



Ethernet



CC-Link

Time Out

10

Retry

0

Connection Channel List...

CPU Module Direct Coupled Setting

Connection Test

ทดลอง Connection Test ได้

PLC Type

System Image...

(7)

OK

Cancel

Please keep in touch:



www.MitsubishiElectric.com/FA



Mitsubishi Electric|FA|Global



Mitsubishi Electric FA Global
@MitsubishiElectricFAGlobal



Mitsubishi Electric|FA|Global
@Mitsubishi_FA



MITSUBISHI ELECTRIC Factory Automation Global

Legal Disclaimer (must not be removed)

The contents of this document are provided as illustrative subject matter. No license, expressly or implied to any intellectual property rights is granted by this document. With regard to the products and services of Mitsubishi Electric referred to within this document, Mitsubishi Electric and its group companies assume no liability whatsoever and disclaim any express or implied warranty, relating to the use and/or sale of those products and services including liability or warranties relating to fitness for purpose, or infringement of any intellectual property right such as, but not limited to, patents, copyrights etc. except as provided by Mitsubishi Electric's terms and conditions of sale for those products and services.

All dates, figures, product specifications, service data, are based on Mitsubishi Electric's current understanding and are subject to change without notice.

Due to copyright controls around the images used in this presentation on no account may any of the images be copied, extracted, edited or otherwise reused and disseminated separately. If you have any questions regarding this please contact Mitsubishi Electric Corporation, 2-7-3 Marunouchi, Chiyoda-Ku, Tokyo, Factory Automation Systems Group, Overseas Marketing Division, Promotion Group Manager.

Where forward looking statements and proposals are provided these are based on Mitsubishi Electric's current expectations and are subject to risks and uncertainties that affect their validity, for example , but not limited to;

- the availability of information disclosed to Mitsubishi Electric
- changes in the state of the general business and economic environment
- effects triggered by changes in currency exchange rates and interest rates
- the development and adoption of new technologies
- the introduction and acceptance of new products and services

Other customers of Mitsubishi Electric may be listed within this documentation as illustrative examples, Mitsubishi Electric does not make any representations or endorsements of the products or services of those customers.

Mitsubishi Electric believe that an intrinsic part of building automation solutions is the ability to work with partners and third party company products, however, where such companies, their products and or services are referred to, Mitsubishi Electric does so in good faith but expressly does not make representations or warranties regarding their quality, reliability, functionality, compatibility or general suitability.

Such references to third party companies, products and services may change without notice.

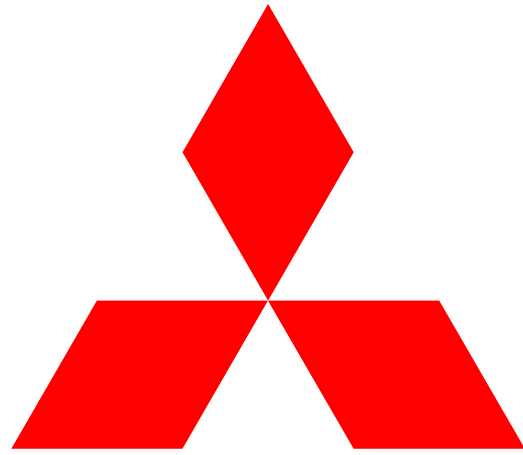
Other names, trademarks, brands may be claimed as the property of others and as such are acknowledged.

Mitsubishi Electric, e-F@ctory, MELSEC, MELSERVO, FREQROL, MELFA, iQ Platform and their associated logos are trademarks of Mitsubishi Electric Corporation in Japan and/or other countries.

Copyright © 2022 Mitsubishi Electric Corporation.

All rights reserved.

It is not allowed to delete this disclaimer from the slide deck – the slide deck will be accompanied by an original version in PDF format for reference.



**MITSUBISHI
ELECTRIC**

Changes for the Better