1. PLC Setting

1. Computer and PLC Connection

- 1) Connect to your PC and PLC to the Ethernet.
- Execute GX Works3, create new connection and select series FX5CPU. Model Type: FX5U.

| Series | E FX5CPU | - |
|------------------|----------|---|
| Туре | FX5U | • |
| Mode | | Ŧ |
| Program Language | FBD/LD | • |

Figure 3.1 New Connection

3) Select Online => Current Connection Destination

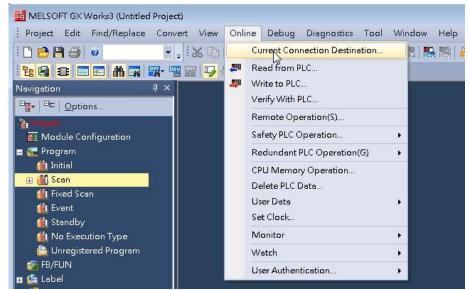


Figure 3.2 Current Connection Destination

Click "Connection Test" Button, test if your PC has connected to PLC. As figure
 3.3. If the connection goes down, please refer to the PLC manual.



| | tion Destination Connection | 2 | | X |
|-----------------------------|-----------------------------|---------------------------------|---------------------|--|
| PC side I/F | Serial Etherne USB Board | | | |
| PLC side I/F | PLC GOT | | | |
| | IP Address/Host Name | Ethernet Port Direct Connection | PI | LC Mode FX5CPU |
| Other Station Setting | No Specification | MELSOFT GX Works3 | d with the FX5UCPU. | Connection Channel List CPU Module Direct Coupled Setting |
| Network | Time Out (Sec.) 30 | | 確定 | Connection Test PLC Type FX5U |
| Communication Route | CC IE Field | | | System Image |
| | | | | |
| | | | | |
| | | | | ОК |
| | | | | Cancel |

Connection Test

2. Ethernet Port Connection

1. Configure IP Address.

- Double Click Navigation => Parameter => Module Parameter => Ethernet Port. And the IP Setting Page will show up.
- Set IP Address Subnet Mask and Default Gateway.
- Double Click Detailed Setting and it will show the protocol setting page.



| 👪 MELSOFT GX Works3 C:\Users\josepl | h.chiu\Documents\03-07.g×3 - [Module Pa | rameter Ethernet Port] | | |
|--|---|-------------------------------------|--------------------------------------|-----------------|
| Project Edit Find/Replace Com | vert View Online Debug Diagnosti | cs Tool Window Help | | |
| i 🗅 🔁 💾 🎒 🕘 👻 | . i 🔏 🗈 🖺 🗠 🛥 🖼 🖼 🙀 🗸 | • 🔊 🔊 🛤 🛤 🛤 🖗 | I 🗳 🚚 🛼 🛼 🛼 🕀 🗨 🗣 | - , i 🕫 💷 🥝 🖉 N |
| | 🛛 🎬 🔽 🎊 🏇 🐨 🖕 | | | |
| Navigation 🛛 📮 🗙 | A Module Parameter Ethernet P × | | | 4 ۵ 🗸 |
| □ <u>[</u> + □□ <u>O</u> ptions | Setting Item List | Setting Item | | |
| h Project | Input the Setting Item to Search | Item | Setting | |
| Module Configuration | | 😑 Own Node Settings | | |
| 🖬 🗺 Program | | IP Address | 170 10 0 000 | |
| | E - C Basic Settings | - IP Address | 172.18.2.220 2 255.255.255.0 | |
| 🖬 🚰 Device | 🗄 🚡 Application Settings | Default Gateway | 255.255.0 | |
| 🖬 🛃 Parameter | | Communication Data Code | Binary | |
| 🔮 System Parameter = 🚱 FX5UCPU | | 😑 External Device Configuration | | |
| CPU Parameter | | External Device Configuratio | m <detailed setting=""> 3</detailed> | |
| 🔳 🛃 Module Parameter 🔤 | | | | |
| Ethernet Port | | | | |
| 485 Serial Por | | | | |
| 🔮 High Speed I/O 🥑 Input Response Tim | | | | |
| Analog Input | | Explanation | | |
| 🜮 Analog Output | | Set the information of the own node | e such as IP address. | * |
| 🛃 Expansion Board | | | | |
| Module Information | | | | |
| Remote Password | | | | - |
| | | Check | D. J. B. D. C. B.C. H. | |
| | Item List Find Result | CRECK | Restore the Default Settings | |
| | | | | Apply |

Figure 3.4 IP Setting

 Configure Protocol and the Comport: In Module List. Move the SLMP Connection Module from 1 to 2, and enter the Port No.

| | 1.1 | | 1. E b VC 6 | st of real to | 1 C 11 | | | | | |
|----------------|-------|-----------|--|-------------------------|--------------|--------------------------|---------------------|----------|----------------|---|
| | ernet | et Contri | guration Edit View C | lose with Discarding | g the Settin | g Close with R | Reflecting the Sett | | | Module List |
| | | | | | | | | | | Ethernet Selection Find Module M 4 |
| | | 1 | | | | Fixed Buffer | PLC | c | ensor/Devic | 1221 12 日本 12 × |
| | | No. | Model Name | Communication Method | Protocol | Send/Receiv e Setting | IP Address | Port No. | MAC Address | Ethernet Device (General) MELSOFT Connection Module - |
| | | | Host Station | 7 | | | 172.18.2.220 | | Hadress | SLMP Connection Module - |
| V | S | 1 | SLMP Connection Module | SLMP | TCP | | 172.18.2.220 | 1025 | | UDP Connection Module 1 - |
| | S | 2 | SLMP Connection Module | SLMP | TCP | - | 172.18.2.220 | 6000 | | Active Connection Module - |
| | | | | | | | | | | E Fullpassive Connection Module - |
| 本函 Con 2 | . < □ | ed Count | TI Connection Connection No.1 No.2 t SLMP SLMP | | | | | | | Fullpassive Connection Module - |

Figure 3.5 Module List Setting

3. RS-485 Serial Port Connection

1. Double Click Navigation => FX5UCPU => Module Parameter => 485 Serial Port.

Then the RS-485 setting page will show up. Basic Setting:



- Communication Protocol: Choose **MC Protocol**.
- Sum Check Code: Choose Added.
- Other Setting, Such as Data Length, Parity, Stop Bit, Baud Rate ..., etc. should be identical with Edgelink COM port setting.

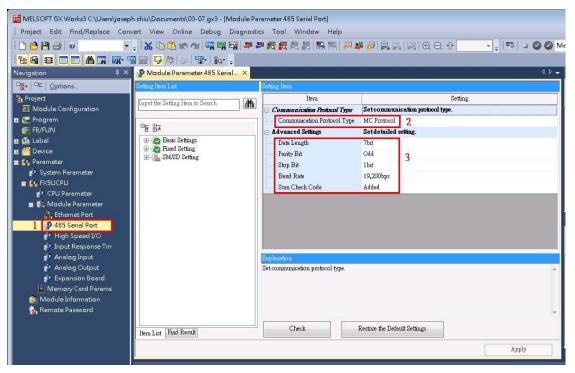


Figure 3.6 RS-485 Basic Setting

- 2. Fixed Setting:
- Set Station Number.
- Message Pattern: Choose Pattern 4.

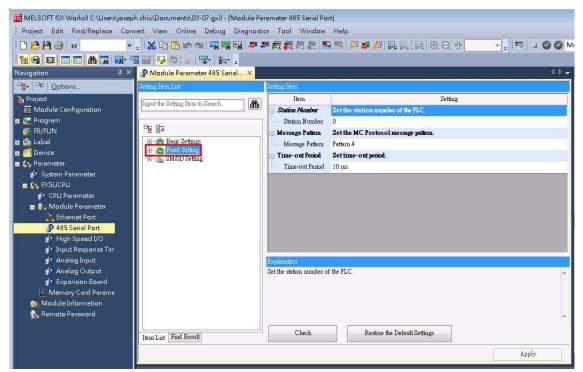




Figure 3.6 RS-485 Fixed Setting

3. Reboot the PLC after the setting is downloaded.

1. Edgelink Setting

2.1 Device Configuration

1) Ethernet

| Name: | NewDevice | |
|-----------------|-------------------------------|-----------|
| Device Type: | Mitsubishi MELSEC-Fx5 Series | PLC (MC |
| Device Model | Double Click to Select Device | Template |
| Unit Number: | 1 | |
| Tag Write Type: | Single Write | Į |
| Description: | | - |
| | | |
| | | |
| | | |
| Add device name | as prefix to IO tags | Bulk Copy |
| Add device name | as prefix to IO tags | Bulk Copy |
| | as prefix to IO tags | Bulk Copy |

- Device type: Select MELSEC-Fx5.
- Unit Number: Anything is OK. It is meaningless in Ethernet.

2) Serial



| Name: | NewDevice | | |
|-----------------|---------------------------------------|--------|--|
| Device Type: | Mitsubishi MELSEC-Fx5 Series PLC (MC | · • | |
| Device Model | Double Click to Select Device Templat | te ··· | |
| Unit Number: | 0 | | |
| Tag Write Type: | Single Write | • | |
| Description: | | - | |
| | | + | |

- Device type: Select MELSEC-Fx5.
- Unit Number: Station number of PLC.

3.2 Add Tags

| Basic | | | Advanced | | |
|----------------|-----------------|---------------------|--------------|----|-------------------------------------|
| Name: | NewTag | | ScalingType: | No | o Scale 🔹 |
| Data Type: | Analog | • | Formula: | | |
| Conversion | Unsigned Intege | r 🔹 | | | |
| Address: | | | Scale: | 0 | |
| Start Bit: | 0 | Defects address for | Offset: | 0 | |
| Length(bit): | 16 | Default Address Cor | nguration | | Clamp to span low |
| Span High: | 1000 | Address Template: | X000 | • | Clamp to span high Clamp to zero |
| Span Low: | 0 | Address: | X000 | | |
| Initial Value: | 0.0 | Address: | X000 | | |
| Scan Rate: | 1 | ОК | Cancel | | |
| Read Write: | Read/Write | | 1 | | |
| Description: | | + | | | |
| | | | | | |
| | | ~ | | | |
| | | | <u>.</u> | | OK Close |

We have address Template for customer to use. Below is the details.

| Paramet er | Туре | Description |
|---------------|--------|-----------------|
| CN | Analog | Counter Current |
| D | Analog | Data Register |



| Paramet | Туре | Description |
|---------|---------|--------------------------|
| er | | |
| R | Analog | File Register |
| SD | Analog | Special Register |
| SN | Analog | Retentive Timer Current |
| SW | Analog | Special Link Register |
| TN | Analog | Timer Current |
| W | Analog | Link Register |
| Z | Analog | Index Register |
| ZR | Analog | File Register |
| В | Digital | Link Relay |
| СС | Digital | Counter Coil |
| CS | Digital | Counter Contact |
| DX | Digital | Direct Inout |
| DY | Digital | Direct Output |
| F | Digital | Annunciator |
| L | Digital | Latch Relay |
| М | Digital | Internal Relay |
| S | Digital | Step Relay |
| SB | Digital | Special Link Relay |
| SC | Digital | Retentive TImer Coil |
| SM | Digital | Special Relay |
| SS | Digital | Rententive Timer Contact |
| тс | Digital | Timer Coil |
| TS | Digital | Timer Contact |
| V | Digital | Edge Relay |
| Х | Digital | Inout Relay |
| Y | Digital | Output Relay |
| TEXT | Text | TEXT |

