



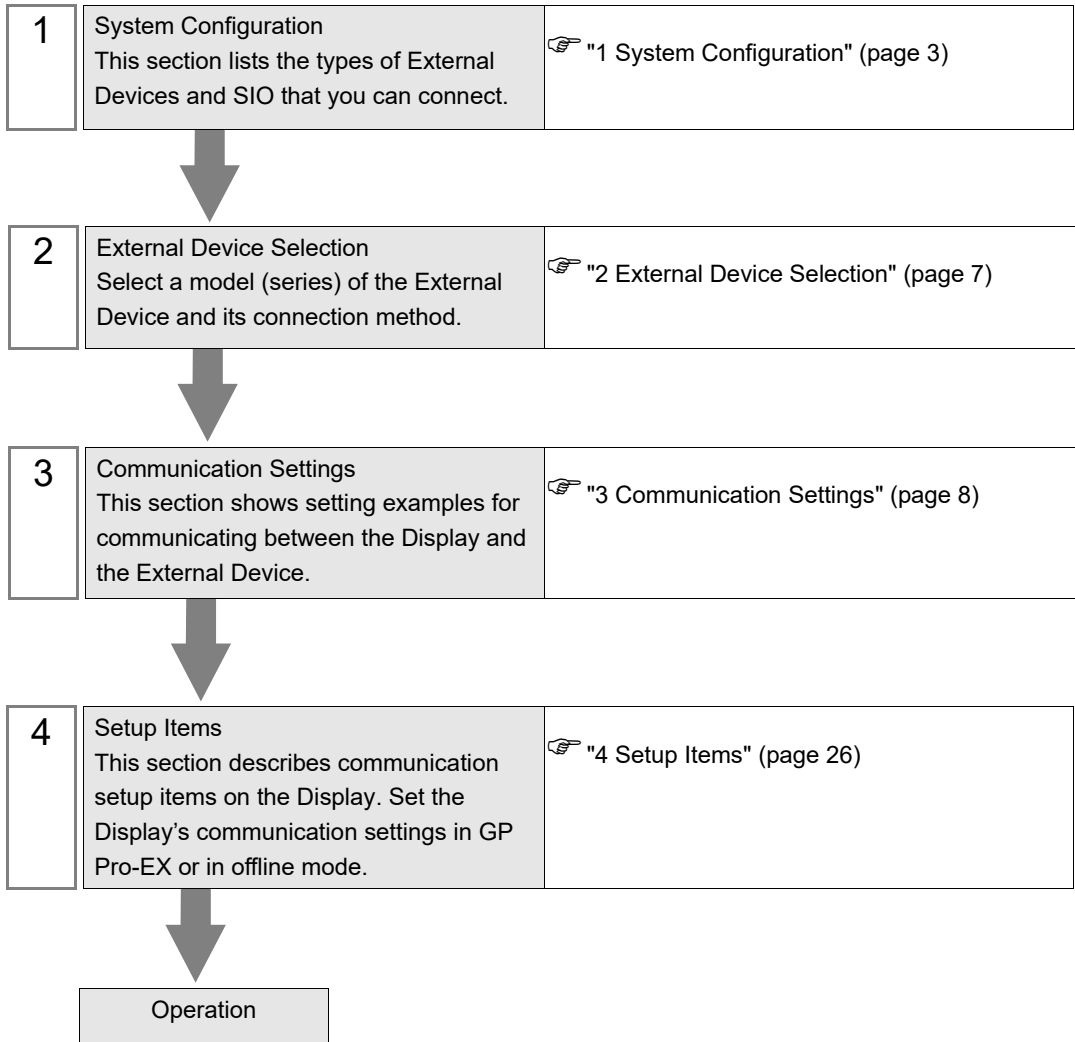
# iQ-R/F Ethernet (SLMP Client) Driver

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## Introduction

This manual describes how to connect the Display and the External Device (target PLC).

In this manual, the connection procedure will be described in the sections identified below:



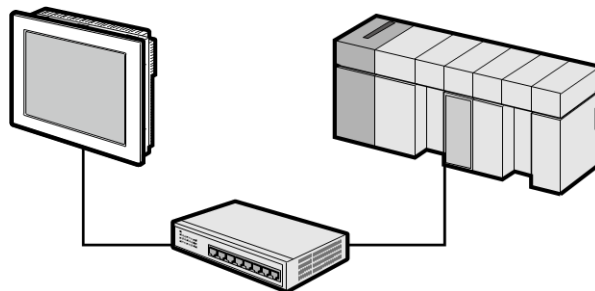
# 1 System Configuration

The system configuration in the case when the External Device of Mitsubishi Electric Corporation and the Display are connected is shown.

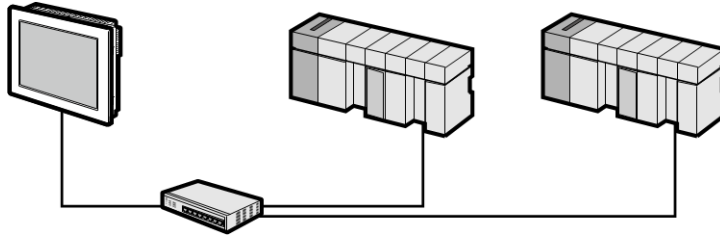
Series	CPU	Link I/F	SIO Type	Setting Example	
iQ-R Series	R00CPU R01CPU R02CPU R04CPU R08CPU R16CPU R32CPU R120CPU	Ethernet Port on CPU Unit	Ethernet (UDP)	Setting Example 1 (page 8)	
	R04ENCPU R08ENCPU R16ENCPU R32ENCPU R120ENCPU		Ethernet (TCP)	Setting Example 2 (page 11)	
	R08PCPU R16PCPU R32PCPU R120PCPU R08SFCPU R16SFCPU R32SFCPU R120SFCPU R08PSFCPU R16PSFCPU R32PSFCPU R120PSFCPU	RJ71EN71	Ethernet (UDP)	Setting Example 3 (page 14)	
			Ethernet (TCP)	Setting Example 4 (page 17)	
	iQ-F Series	FX5UCPU FX5UCCPU FX5UJCPU	Ethernet Port on CPU Unit	Ethernet (UDP)	Setting Example 5 (page 20)
				Ethernet (TCP)	Setting Example 6 (page 23)

## Connection Configuration

- 1:1 Connection



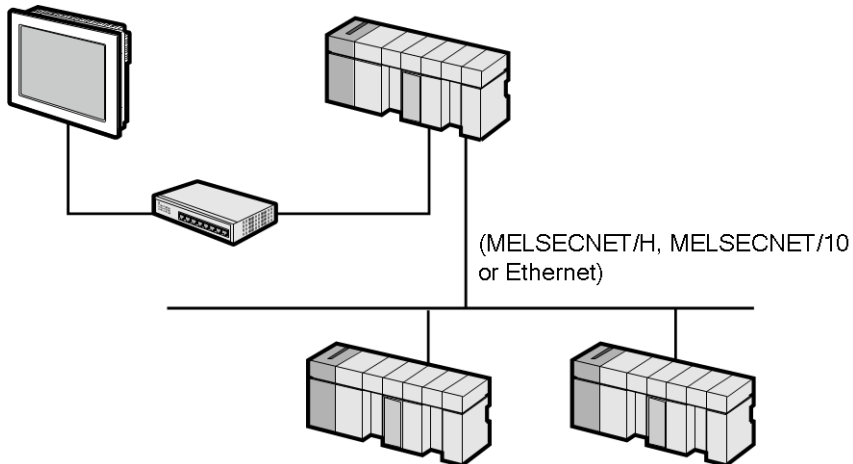
- 1:n Connection



**NOTE**

- The maximum number of External Devices you can connect is as follows.  
 TCP/IP connection: 16  
 UDP/IP connection: 32

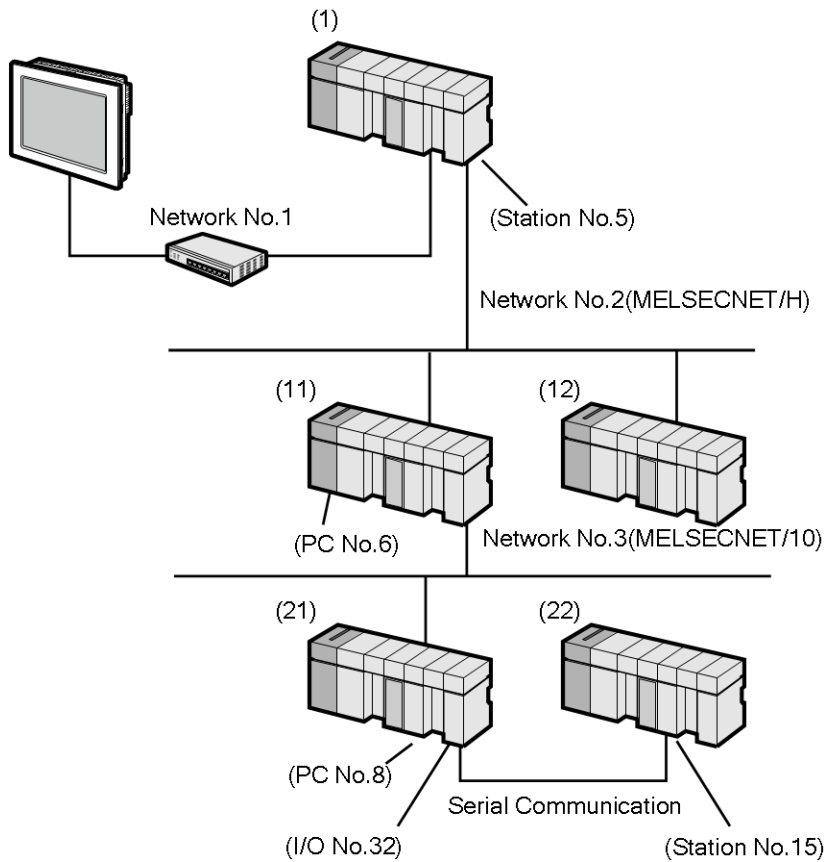
- 1:n Connection (When using the iQ-R Series as a relay to access the network)



**NOTE**

- When communication over the network, set the timeout to a value greater than the relay station's response monitoring time.
- The maximum number of External Devices you can connect is as follows.  
 TCP/IP connection: up to 16  
 UDP/IP connection: up to 32

The following is an example setup on a network. Check the details of the setup items in "Setup Items"  
 ☞ "4 Setup Items" (page 26)



#### Communication settings

	IP Address	Port No.
Display	192.168.1.1	1025

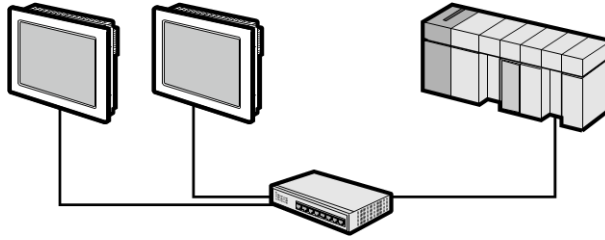
#### [Individual Device Settings] dialog box

External Device to Access	IP Address*1	Port No.*2	Network No.	PC No.	Request destination module I/O No.	Request destination module Station No.
PLC1	192.168.1.2	1025	0	255	1023	0
PLC2	192.168.1.2	1026	2	6	1023	0
PLC3	192.168.1.2	1027	3	8	32	15

\*1 Set the IP address of the relay station (PLC1).

\*2 The defined port number must be opened on the relay station (PLC1).

- n:1 Connection



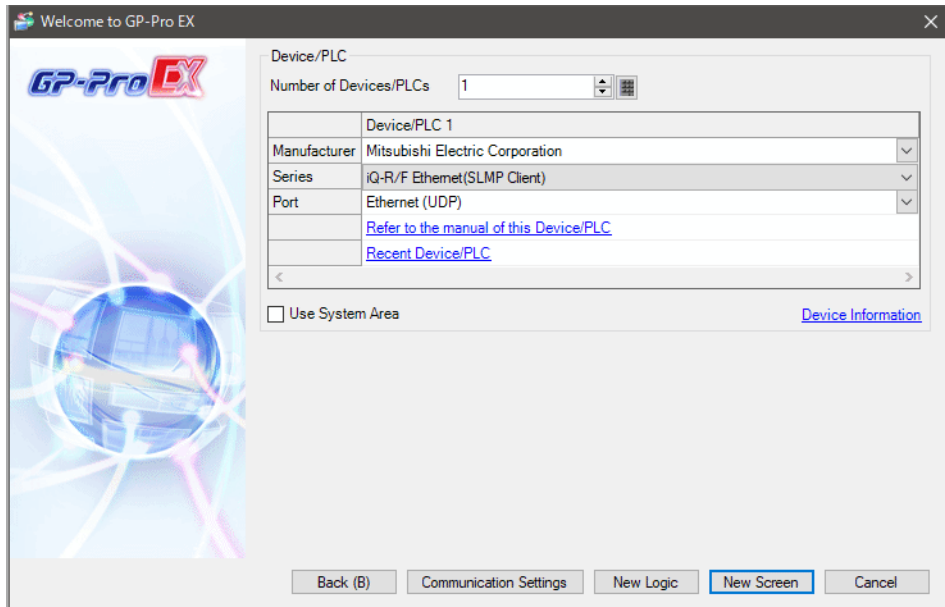
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**NOTE**

- The maximum number of Displays you can connect is as follows.  
iQ-R series  
CPU unit's Ethernet port: 16  
RJ71EN71: 64  
iQ-F series: 8
-

## 2 External Device Selection

Select the External Device to be connected to the Display.



Setup Items	Setup Description
Number of Devices/PLCs	Enter an integer from 1 to 4 to define the number of Devices/PLCs to connect to the display.
Manufacturer	Select the manufacturer of the External Device to connect. Select "Mitsubishi Electric Corporation".
Series	Select the External Device model (series) and the connection method. Select "iQ-R/F Ethernet(SLMP Client)". In System configuration, make sure the External Device you are connecting is supported by "iQ-R/F Ethernet(SLMP Client)". "1 System Configuration" (page 3)
Port	Select the Display port to be connected to the External Device.
Use System Area	Check this option to synchronize the system data area of the Display and the device (memory) of the External Device. When synchronized, you can use the External Device's ladder program to switch the display or display the window on the Display. Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)" This feature can also be set in GP-Pro EX or in the Display's offline mode. Cf. GP-Pro EX Reference Manual "System Settings [Display Unit] - [System Area] Settings Guide" Cf. Maintenance/Troubleshooting Guide "Main Unit - System Area Settings"

## 3 Communication Settings

This section provides examples of communication settings recommended by Pro-face for the Display and the External Device.

### 3.1 Setting Example 1

#### ■ Settings of GP-Pro EX

##### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

Device/PLC 1 [Change Device/PLC](#)

**Summary**

Manufacturer  Series  Port

Text Data Mode  [Change](#)

**Communication Settings**

Port No.

Timeout  (sec)

Retry

Wait To Send  (ms)


**Device-Specific Settings**

Allowable Number of Devices/PLCs  [Add Device](#) [Increase Allowable Number of Devices/PLCs](#)

No.	Device Name	Settings	Add Indirect Device
1	<input type="text" value="PLC1"/>	<input type="text" value="Series=Q-R,IP Address=192.168.003.039,Port No.=10"/>	<input type="button" value="Add Indirect Device"/>

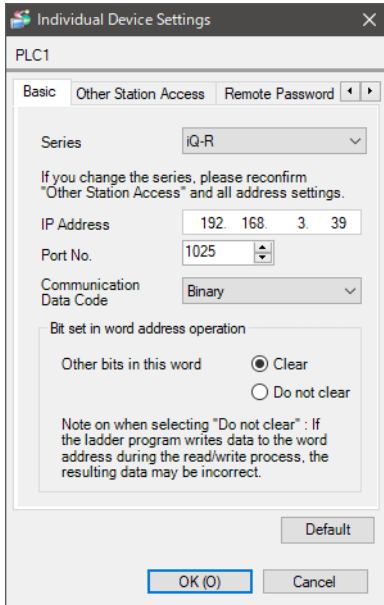


## ◆ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings] .

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

[Basic] tab



Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Series: iQ-R

If you change the series, please reconfirm "Other Station Access" and all address settings.

IP Address: 192 168 3 39

Port No.: 1025

Communication Data Code: Binary

Bit set in word address operation

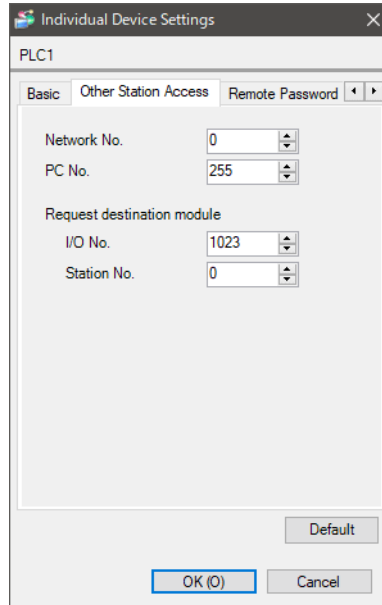
Other bits in this word:  Clear  Do not clear

Note on when selecting "Do not clear": If the ladder program writes data to the word address during the read/write process, the resulting data may be incorrect.

Default

OK (O) Cancel

[Other Station Access] tab



Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Network No.: 0

PC No.: 255

Request destination module

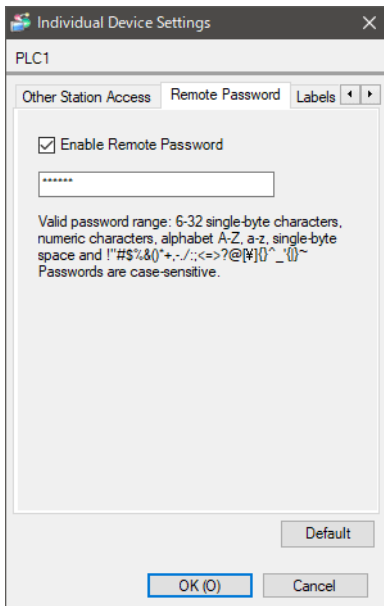
I/O No.: 1023

Station No.: 0

Default

OK (O) Cancel

[Remote Password] tab



Individual Device Settings

PLC1

Other Station Access Remote Password Labels

Enable Remote Password

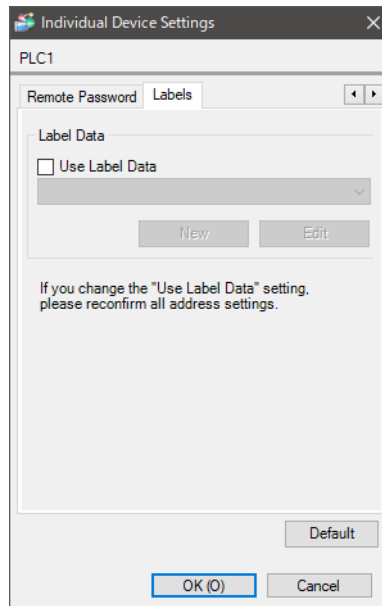
\*\*\*\*\*

Valid password range: 6-32 single-byte characters, numeric characters, alphabet A-Z, a-z, single-byte space and !"#%&'()\*+,-./:;<>?@[¥]`\_{}~  
Passwords are case-sensitive.

Default

OK (O) Cancel

[Labels] tab



Individual Device Settings

PLC1

Remote Password Labels

Label Data

Use Label Data

New Edit

If you change the "Use Label Data" setting, please reconfirm all address settings.

Default

OK (O) Cancel

## ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.

## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 Open the [Module Parameter] window for the target CPU.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.39
Subnet Mask	255.255.255.0
Enable/Disable Online Change	Enable All(SLMP)
Communication Data Code	Binary
Opening Method	Do Not Open by Program

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	UDP
PLC Port No.	1025
Existence Confirmation	UDP

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.

## 3.2 Setting Example 2

### ■ Settings of GP-Pro EX

#### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

Device/PLC 1

Summary [Change Device/PLC](#)

Manufacturer: Mitsubishi Electric Corporation Series: iQ-R/F Ethernet(SLMP Client) Port: Ethernet (TCP)

Text Data Mode: 2 [Change](#)

Communication Settings

Port No.: 1025  Auto

Timeout: 3 (sec)

Retry: 2

Wait To Send: 0 (ms) [Default](#)

Device-Specific Settings

Allowable Number of Devices/PLCs: 16 [Add Device](#) [Increase Allowable Number of Devices/PLCs](#)

No.	Device Name	Settings	Add Indirect Device
1	PLC1	Series=iQ-R,IP Address=192.168.003.039,Port No.=10	

#### ◆ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings]

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

[Basic] tab

Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Series: iQ-R

If you change the series, please reconfirm "Other Station Access" and all address settings.

IP Address: 192 168 3 39

Port No.: 1025

Communication Data Code: Binary

Bit set in word address operation

Other bits in this word:  Clear  Do not clear

Note on when selecting "Do not clear": If the ladder program writes data to the word address during the read/write process, the resulting data may be incorrect.

[Default](#)

[OK \(O\)](#) [Cancel](#)

[Other Station Access] tab

Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Network No.: 0

PC No.: 255

Request destination module

I/O No.: 1023

Station No.: 0

[Default](#)

[OK \(O\)](#) [Cancel](#)

[Remote Password] tab

Individual Device Settings

PLC1

Other Station Access Remote Password Labels

Enable Remote Password

\*\*\*\*\*

Valid password range: 6-32 single-byte characters, numeric characters, alphabet A-Z, a-z, single-byte space and !\"#\$%&()\*+,-./:;<>?@[\\]^\_`{|}~ Passwords are case-sensitive.

Default

OK (O) Cancel

[Labels] tab

Individual Device Settings

PLC1

Remote Password Labels

Label Data

Use Label Data

New Edit

If you change the "Use Label Data" setting, please reconfirm all address settings.

Default

OK (O) Cancel

## ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.

## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 Open the [Module Parameter] window for the target CPU.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.39
Subnet Mask	255.255.255.0
Enable/Disable Online Change	Enable All(SLMP)
Communication Data Code	Binary
Opening Method	Do Not Open by Program

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	TCP
PLC Port No.	1025
Existence Confirmation	KeepAlive(Default)

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.


### 3.3 Setting Example 3

#### ■ Settings of GP-Pro EX

##### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

##### ◆ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings] .

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

[Basic] tab

[Other Station Access] tab

[Remote Password] tab

Individual Device Settings

PLC1

Other Station Access Remote Password Labels

Enable Remote Password

\*\*\*\*\*

Valid password range: 6-32 single-byte characters, numeric characters, alphabet A-Z, a-z, single-byte space and !"#%&()\*+,-./:;<=>?@[|]^\`\_{}~  
Passwords are case-sensitive.

Default

OK (O) Cancel

[Labels] tab

Individual Device Settings

PLC1

Remote Password Labels

Label Data

Use Label Data

New Edit

If you change the "Use Label Data" setting, please reconfirm all address settings.

Default

OK (O) Cancel

## ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.

## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 From the navigation window's [Module Information], open the [Port 1 Module Parameter] window for the target link I/F.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.40
Subnet Mask	255.255.255.0
Enable/Disable Online Change	Enable All(SLMP)
Communication Data Code	Binary
Opening Method	Do Not Open by Program
Communications by Network No./ Station No.	Disable

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	UDP
PLC Port No.	1025
Existence Confirmation	UDP

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.




## 3.4 Setting Example 4

### ■ Settings of GP-Pro EX

#### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

#### ◆ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings] .

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

[Basic] tab

[Other Station Access] tab

[Remote Password] tab

Individual Device Settings

PLC1

Other Station Access Remote Password Labels

Enable Remote Password

\*\*\*\*\*

Valid password range: 6-32 single-byte characters, numeric characters, alphabet A-Z, a-z, single-byte space and !"#%&()\*+,-./:;<=>?@[|]`^\_~ Passwords are case-sensitive.

Default

OK (O) Cancel

[Labels] tab

Individual Device Settings

PLC1

Remote Password Labels

Label Data

Use Label Data

New Edit

If you change the "Use Label Data" setting, please reconfirm all address settings.

Default

OK (O) Cancel

## ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.

## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 From the navigation window's [Module Information], open the [Port 1 Module Parameter] window for the target link I/F.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.40
Subnet Mask	255.255.255.0
Enable/Disable Online Change	Enable All(SLMP)
Communication Data Code	Binary
Opening Method	Do Not Open by Program
Communications by Network No./ Station No.	Disable

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	TCP
PLC Port No.	1025
Existence Confirmation	KeepAlive(Default)

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.


### 3.5 Setting Example 5

#### ■ Settings of GP-Pro EX

##### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

##### ◆ Device Setting

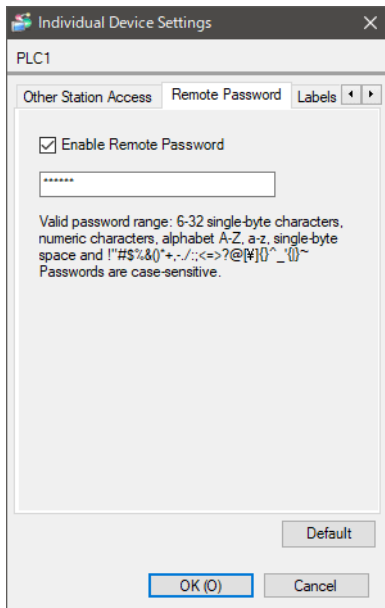
To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings] .

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

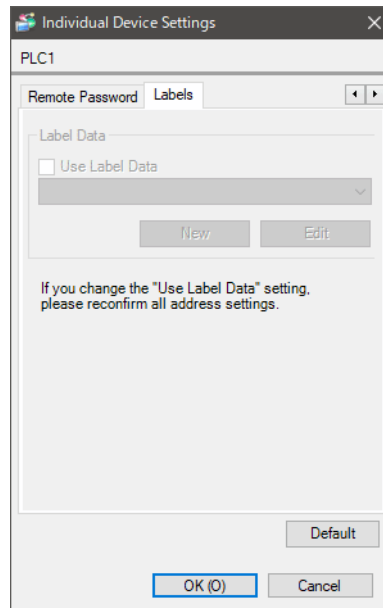
[Basic] tab

[Other Station Access] tab

[Remote Password] tab



[Labels] tab



#### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.

## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 Open the [Module Parameter] window for the target CPU.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.250
Subnet Mask	255.255.255.0
Communication Data Code	Binary

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	UDP
PLC Port No.	1025
Sensor/Device IP Address	192.168.3.10 (Display's IP Address)

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.

## 3.6 Setting Example 6

### ■ Settings of GP-Pro EX

#### ◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].

Device/PLC 1

Summary [Change Device/PLC](#)

Manufacturer  Series  Port

Text Data Mode  [Change](#)

Communication Settings

Port No.   Auto

Timeout  (sec)

Retry

Wait To Send  (ms)

Device-Specific Settings

Allowable Number of Devices/PLCs 16 [Add Device](#) [Increase Allowable Number of Devices/PLCs](#)

No.	Device Name	Settings	Add Indirect Device
1	<input type="text" value="PLC1"/>	<input type="text" value="Series=iQ-F,IP Address=192.168.003.250,Port No.=10"/>	<input type="button" value="Add Indirect Device"/>

#### ◆ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings]

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

[Basic] tab

Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Series

If you change the series, please reconfirm "Other Station Access" and all address settings.

IP Address

Port No.

Communication Data Code

Bit set in word address operation

Other bits in this word  Clear  Do not clear

Note on when selecting "Do not clear" : If the ladder program writes data to the word address during the read/write process, the resulting data may be incorrect.

[Other Station Access] tab

Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Network No.

PC No.

Request destination module

I/O No.

Station No.

[Remote Password] tab

Individual Device Settings

PLC1

Other Station Access Remote Password Labels

Enable Remote Password

\*\*\*\*\*

Valid password range: 6-32 single-byte characters, numeric characters, alphabet A-Z, a-z, single-byte space and !\"#\$%&()\*+,-./:;<>?@[\\]^\_`{|}~ Passwords are case-sensitive.

Default

OK (O) Cancel

[Labels] tab

Individual Device Settings

PLC1

Remote Password Labels

Label Data

Use Label Data

New Edit

If you change the "Use Label Data" setting, please reconfirm all address settings.

Default

OK (O) Cancel

## ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device address in the [Individual Device Settings] dialog box.
- You need to set IP address on the Display in the offline mode of the Display.



## ■ External Device Settings

Use the programming software MELSOFT GX Works3 to set up communication settings on the External Device.

For details on communication settings, please refer to the manual for the External Device.

- 1 Start the programming software.
- 2 Open the [Module Parameter] window for the target CPU.
- 3 From the [Basic Settings], set up the following in [Own Node Settings].

Setup Items	Setup Description
IP Address	192.168.3.250
Subnet Mask	255.255.255.0
Communication Data Code	Binary

- 4 From [External Device Configuration], click [Detailed Setting] and the [Ethernet Configuration] window opens.
- 5 From the [Module List] window's [Ethernet Device (General)] area, select [SLMP Connection Module] and drag and drop to the settings screen.
- 6 In the settings screen's [SLMP Connection Module], set up the following.

Setup Items	Setup Description
Protocol	TCP
PLC Port No.	1025

- 7 To save the settings, in the [Module Parameter] window click [Apply].
- 8 The project is saved and sent to the External Device.  
Make sure the [Module Parameter] check box is selected.
- 9 Either turn the External Device power OFF/ON, or reset the External Device, to verify the changes.

### ◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.

## 4 Setup Items

Set up the Display's communication settings in GP-Pro EX or in the Display's offline mode.

The setting of each parameter must match that of the External Device.

 "3 Communication Settings" (page 8)

### NOTE

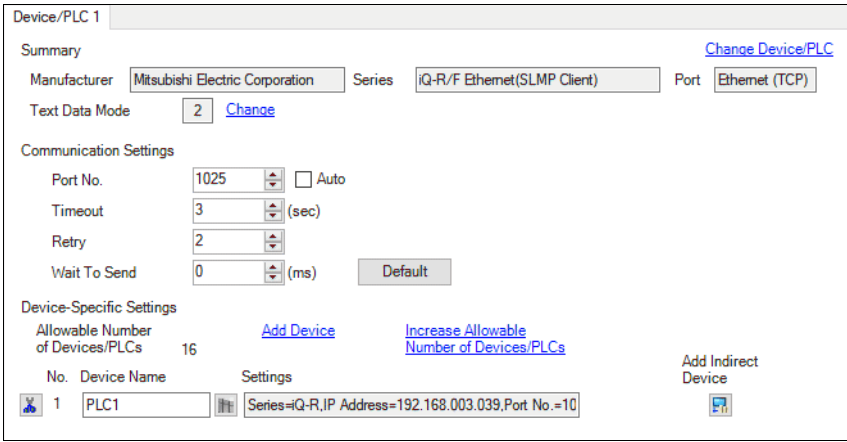
- Set the Display's IP address in offline mode.

Cf. Maintenance/Troubleshooting Guide "Ethernet Settings"

### 4.1 Setup Items in GP-Pro EX

#### ■ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].



The screenshot shows the 'Device/PLC 1' configuration window. It is divided into three main sections:

- Summary:** Includes fields for Manufacturer (Mitsubishi Electric Corporation), Series (iQ-R/F Ethernet(SLMP Client)), Port (Ethernet (TCP)), and Text Data Mode (2). A 'Change Device/PLC' link is visible.
- Communication Settings:** Includes Port No. (1025), Timeout (3 sec), Retry (2), and Wait To Send (0 ms). There is an 'Auto' checkbox for Port No. and a 'Default' button.
- Device-Specific Settings:** Includes 'Allowable Number of Devices/PLCs' (16) with 'Add Device' and 'Increase Allowable Number of Devices/PLCs' links. Below is a table with columns for No., Device Name, and Settings.

No.	Device Name	Settings
1	PLC1	Series=Q-R,IP Address=192.168.003.039,Port No.=10


Setup Items	Setup Description
Port No.	Enter a port number of the External Device, using 1025 to 65535. Check into [Auto], and a port number is set automatically.  <b>NOTE</b> • [Auto] option is available to set only when you select "Ethernet (TCP)" in [Connecting Method].
Timeout	Use an integer from 1 to 127 to enter the time (s) for which Display waits for the response from External Device.
Retry	In case of no response from the External Device, use an integer from 0 to 255 to enter how many times the Display retransmits the command.
Wait To Send	Use an integer from 0 to 255 to enter standby time (ms) for the Display from receiving packets to transmitting next commands.

### NOTE

- Refer to the GP-Pro EX Reference Manual for Indirect Device.

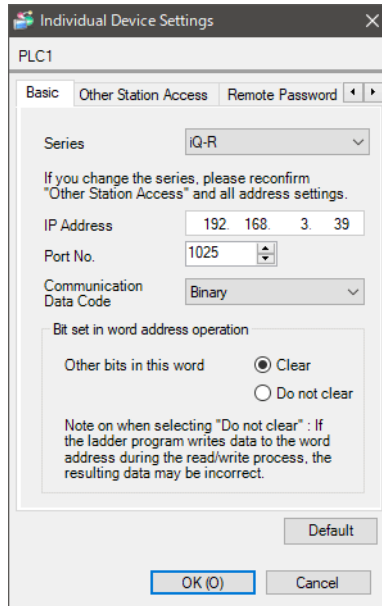
Cf. GP-Pro EX Reference Manual "Changing the Device/PLC at Runtime (Indirect Device)"

## ■ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the External Device and click [Settings] .

To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.

### ◆ [Basic] tab



Setup Items	Setup Description						
Series	Select a model of the External Device.						
IP Address	Set IP address of the External Device. <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;"><b>NOTE</b></div> <ul style="list-style-type: none"> <li>Check with a network administrator about IP address. Do not set the duplicate IP address.</li> </ul>						
Port No.	Use an integer from 1025 to 65535 to enter the port No. of the External Device.						
Communication Data Code	Select a format for the communication data. The format that you can select depends on the selected external device model. <table border="1" style="width: 100%; margin-top: 5px;"> <thead> <tr> <th>Series</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>iQ-R Series</td> <td>"Binary" or "ASCII"</td> </tr> <tr> <td>iQ-F Series</td> <td>"Binary", "ASCII (X.Y OCT)" or "ASCII (X.Y HEX)"</td> </tr> </tbody> </table>	Series	Code	iQ-R Series	"Binary" or "ASCII"	iQ-F Series	"Binary", "ASCII (X.Y OCT)" or "ASCII (X.Y HEX)"
Series	Code						
iQ-R Series	"Binary" or "ASCII"						
iQ-F Series	"Binary", "ASCII (X.Y OCT)" or "ASCII (X.Y HEX)"						
Other bits in this word	Select "Clear" or "Do not clear" for the handling of other bit data in the same word when a bit operation is performed to a bit specified word address.						

## ◆ Other Station Access] tab

Individual Device Settings

PLC1

Basic Other Station Access Remote Password

Network No. 0

PC No. 255

Request destination module

I/O No. 1023

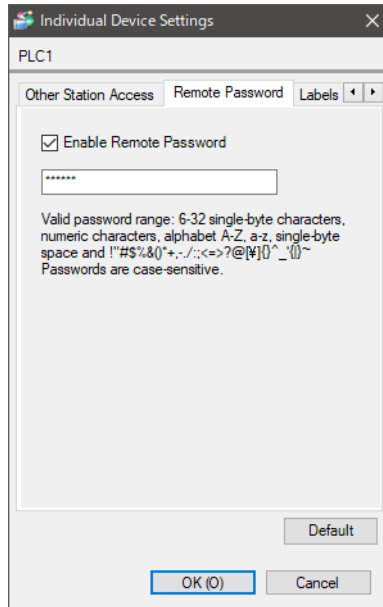
Station No. 0

Default

OK (O) Cancel

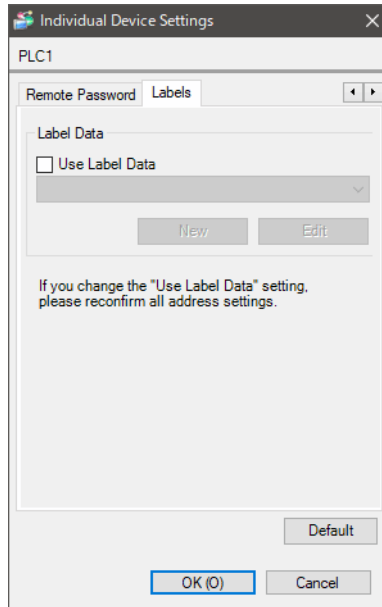
Setup Items	Setup Description
Network No.	Set up this property when you communicate via the network. Use an integer from 0 to 239 or 254 to define the Network No. of the associated External Device. If communication is not done via a network, enter 0.
PC No.	Set up this property when you communicate via the network. Use an integer from 0 to 120 or 125 to 126 to define the PC No. of the associated External Device. If communication is not done via a network, enter 255.
I/O No.	Set up this property when you communicate via the network. Use an integer from 0 to 511 to define the I/O No. of the associated External Device. If communication is not done via a network, enter 1023.
Station No.	Enter the station number of the External Device, from 0 to 31.

## ◆ [Remote Password] tab



Setup Items	Setup Description
Enable Remote Password	To use a remote password, select the check box and enter the remote password.

◆ [Labels] tab



Setup Items	Setup Description
Use Label Data	Select The check box when using the label data (Symbol Address), and select the label data to be used. ➔ "5.3 MELSEC iQ-R Series (Label)" (page 39)

**NOTE**

- When iQ-F series is selected, you cannot select Use Label Data.
- When GP-4100 series is selected, you cannot select Use Label Data.

## 4.2 Setup Items in Offline Mode

### NOTE

- Refer to the Maintenance/Troubleshooting guide for information on how to enter offline mode or about the operation.

Cf. Maintenance/Troubleshooting Guide "Offline Mode"

### ■ Communication Settings

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Settings] in offline mode. Touch the External Device you want to set from the list that appears.

Comm.	Device			
iQ-R/F Ethernet(SLMP Client)			[UDP]	Page 1/1
Port No.	<input checked="" type="radio"/> Fixed <input type="radio"/> Auto	<input type="text" value="1025"/> ▼ ▲		
Timeout(s)		<input type="text" value="3"/> ▼ ▲		
Retry		<input type="text" value="2"/> ▼ ▲		
Wait To Send(ms)		<input type="text" value="0"/> ▼ ▲		
	Exit		Back	2022/12/04 11:56:43

Setup Items	Setup Description
Port No.	Set the Port No. of the display. In UDP connection, entered port No. will be assigned regardless of whether you select [Fixed] or [Auto]. In TCP connection, select either of [Fixed] or [Auto]. When you select [Fixed], use an integer from 1025 to 65535 to enter the port No. of the display. When you select [Auto], the port No. will be automatically assigned regardless of the entered value.
Timeout	Use an integer from 1 to 127 to enter the time (s) for which Display waits for the response from External Device.
Retry	In case of no response from the External Device, use an integer from 0 to 255 to enter how many times the Display retransmits the command.
Wait To Send	Use an integer from 0 to 255 to enter standby time (ms) for the Display from receiving packets to transmitting next commands.

## ■ Device Setting

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Settings]. Touch the External Device you want to set from the displayed list, and touch [Device].

(Page 1/2)

Comm.	Device			
iQ-R/F Ethernet(SLMP Client)		[UDP]	Page 1/2	
Device/PLC Name <input type="text" value="PLC1"/>				
Series		iQ-R		
IP Address		<input type="text" value="192"/> <input type="text" value="168"/> <input type="text" value="0"/> <input type="text" value="1"/>		
Port No.		<input type="text" value="1025"/> ▼ ▲		
Com Data Code		Binary		
Network No.		<input type="text" value="0"/> ▼ ▲		
PC No.		<input type="text" value="255"/> ▼ ▲		
Request destination module				
I/O No.		<input type="text" value="1023"/> ▼ ▲		
Station No.		<input type="text" value="0"/> ▼ ▲		
Remote Password		<input checked="" type="radio"/> Do not use <input type="radio"/> Use		
<input type="text"/>				➔
Exit		Back		2022/12/04 11:57:14

Setup Items	Setup Description
Device/PLC Name	Select the External Device to set. Device/PLC name is the title of the External Device set with GP-Pro EX. (Initial value [PLC1])
Series	Display a model of the External Device.
IP Address	Set IP addresses used by the External Device. <b>NOTE</b> <ul style="list-style-type: none"> <li>Check with a network administrator about IP address. Do not set the duplicate IP address.</li> </ul>
Port No.	Use an integer from 1025 to 65535 to enter the port No. of the External Device.
Com Data Code	Displays the communication data format.
Network No.	Set up this property when you communicate via the network. Use an integer from 0 to 239 or 254 to define the Network No. of the associated External Device. If communication is not done via a network, enter 0.
PC No.	Set up this property when you communicate via the network. Use an integer from 0 to 120 or 125 to 126 to define the PC No. of the associated External Device. If communication is not done via a network, enter 255.
I/O No.	Set up this property when you communicate via the network. Use an integer from 0 to 511 to define the I/O No. of the associated External Device. If communication is not done via a network, enter 1023.
Station No.	Enter the station number of the External Device, from 0 to 31.
Remote Password	Set whether or not to use the Remote Password. Enter the Remote Password when using this feature.



(Page 2/2)

Comm.	Device			
iQ-R/F Ethernet(SLMP Client)		[UDP]	Page 2/2	
Device/PLC Name		[PLC1]		
Bit set in word address operation				
Other bits		Clear		
				←
Exit		Back		2022/12/04 11:57:22

Setup Items	Setup Description
Device/PLC Name	Select the External Device to set. Device/PLC name is the title of the External Device set with GP-Pro EX. (Initial value [PLC1])
Bit set in word address operation	Displays "Clear" or "Do not clear" for the handling of other bit data in the same word when a bit operation is performed to a bit specified word address. (Cannot be set in offline mode.)

















## 5 Supported Devices

The following table shows the range of supported device addresses. Please note that the actual supported range of the devices varies depending on the External Device to be used. Please check the actual range in the manual of your External Device.

### 5.1 MELSEC iQ-R Series

     : This address can be specified as system data area.


Device	Bit Address	Word Address	32 bits	Remarks
Input Relay	X0000 - X2FFF	X0000 - X2FF0	L / H	<span style="border: 1px solid black; padding: 2px;">***0</span> <sup>*1</sup>
Output Relay	Y0000 - Y2FFF	Y0000 - Y2FF0		<span style="border: 1px solid black; padding: 2px;">***0</span> <sup>*2</sup>
Internal Relay	M00000000 - M99999999	M00000000 - M99999984		<span style="border: 1px solid black; padding: 2px;">÷16</span>
Special Relay	SM0000 - SM4095	SM0000 - SM4080		<span style="border: 1px solid black; padding: 2px;">÷16</span>
Latch Relay	L00000 - L32767	L000000 - L32752		<span style="border: 1px solid black; padding: 2px;">÷16</span>
Annunciator	F00000 - F32767	F00000 - F32752		<span style="border: 1px solid black; padding: 2px;">÷16</span>
Edge Relay	V00000 - V32767	V00000 - V32752		<span style="border: 1px solid black; padding: 2px;">÷16</span>
Link Relay	B0000000 - B9A61FFF	B0000000 - B9A61FF0		<span style="border: 1px solid black; padding: 2px;">***0</span>
Special Link Relay	SB0000000 - SB9A61FFF	SB0000000 - SB9A61FF0		<span style="border: 1px solid black; padding: 2px;">***0</span>
Timer (Contact)	TS0000000 - TS8993439	-		
Timer (Coil)	TC0000000 - TC8993439	-		
Retentive Timer (Contact)	SS0000000 - SS8993439	-		
Retentive Timer (Coil)	SC0000000 - SC8993439	-		
Counter (Contact)	CS0000000 - CS8993439	-		
Counter (Coil)	CC0000000 - CC8993439	-		
Timer (Current Value)	-	TN0000000 - TN8993439		
Retentive Timer (Current value)	-	SN0000000 - SN8993439		
Long Timer (Current Value)	-	L_TN0000000 - L_TN2529407		
Long Retentive Timer (Current value)	-	L_SN0000000 - L_SN2529407		
Counter (Current Value)	-	CN0000000 - CN8993439		
Long Counter (Current Value)	-	L_CN0000000 - L_CN4761215		
Data Register	-	D0000000 - D10117631	<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*3</sup>	
Special Register	-	SD0000 - SD4095	<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*3</sup>	
Link Register	-	W000000 - W9A61FF	<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*3</sup>	
Special Link Register	-	SW000000 - SW9A61FF	<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*3</sup>	
Link Input	J001-X0000 - J255-X3FFF	J001-X0000 - J255-X3FF0	<span style="border: 1px solid black; padding: 2px;">***0</span> <sup>*4</sup>	

Device	Bit Address	Word Address	32 bits	Remarks
Link Output	J001-Y0000 - J255-Y3FFF	J001-Y0000 - J255-Y3FFF0	<b>L/H</b>	 *4
Link Relay	J001-B0000 - J255-B7FFF	J001-B0000 - J255-B7FFF0		 *4
Link Special Relay	J001-SB0000 - J255-SB1FFF	J001-SB0000 - J255-SB1FFF0		 *4
Link Register	-	J001-W00000 - J255-W1FFFF		 *3 *4
Link Special Register	-	J001-SW000 - J255-SW1FF		 *3 *4
Module Access Device	-	U000-G00000000 - U1FF-G99999999		 *3 *5
CPU Buffer Memory Access Device	-	U3E0-G00000000 - U3E3-G99999999		 *3 *6
CPU Buffer Memory (Periodic Communication Area)	-	U3E0-HG00000 - U3E3-HG12287		 *3 *6
File Register (Normal)	-	R00000 - R32767		 *3
File Register (Block switching is not necessary)	-	ZR00000000 - ZR10027007		 *3
File Register (0R - 31R)	-	0R00000 - 0R32767		 *3
	-	1R00000 - 1R32767		 *3
	-	2R00000 - 2R32767		 *3
	:	:		 *3
	-	30R00000 - 30R32767	 *3	
	-	31R00000 - 31R32767	 *3	

\*1 If the CPU is R00CPU/R01CPU/R02CPU, the bit address is "X0000 - X1FFF" and the word address is "X0000 - X1FF0".

\*2 If the CPU is R00CPU/R01CPU/R02CPU, the bit address is "Y0000 - Y1FFF" and the word address is "Y0000 - Y1FF0".

\*3 The access method when specifying bits is different depending on the setting of "Other bits in this word" in "Individual Device Settings".

[Clear] ..... 

[Do not clear] ..... When bits are written, the Display reads the corresponding word address from the External Device, sets particular bits of that word address to ON, and then returns the resulting address to the External Device. Note that the data may not be written correctly if you write to the word address using the ladder program while the Display is reading data from, and writing data to, the External Device.

\*4 Link direct device to access the network link module's internal memory. The first three digits of the address is the network number (1-255).

\*5 Device for accessing SLMP compatible devices, as well as the intelligent function unit's buffer memory. The first three digits of the address specifies the intelligent module's starting I/O number.


\*6 Device that can access CPU buffer memory. The first three digits of the address specifies the CPU number:  
 3E0H: CPU No.1  
 3E1H: CPU No.2  
 3E2H: CPU No.3  
 3E3H: CPU No.4

**NOTE**

- Please refer to the GP-Pro EX Reference Manual for system data area.


Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)"










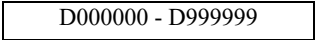












- Refer to the precautions on manual notation for icons in the table.









 "Manual Symbols and Terminology"


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## 5.2 MELSEC iQ-R Series (when communicating via the network)


 : This address can be specified as system data area.

Device	Bit Address	Word Address	32 bits	Remarks
Input Relay	X0000 - X2FFF	X0000 - X2FF0	<b>L/H</b>	 * <sup>1</sup>
Output Relay	Y0000 - Y2FFF	Y0000 - Y2FF0		 * <sup>2</sup>
Internal Relay	M000000 - M999999	M000000 - M999984		 * <sup>3</sup>
Special Relay	SM0000 - SM4095	SM0000 - SM4080		 * <sup>3</sup>
Latch Relay	L00000 - L32767	L00000 - L32752		 * <sup>3</sup>
Annunciator	F00000 - F32767	F00000 - F32752		 * <sup>3</sup>
Edge Relay	V00000 - V32767	V00000 - V32752		 * <sup>3</sup>
Link Relay	B000000 - BFFFFFF	B000000 - BFFFFFF0		 * <sup>3</sup>
Special Link Relay	SB000000 - SBFFFFFF	SB000000 - SBFFFFFF0		 * <sup>3</sup>
Timer (Contact)	TS000000 - TS999999	-		* <sup>3</sup>
Timer (Coil)	TC000000 - TC999999	-		* <sup>3</sup>
Retentive Timer (Contact)	SS000000 - SS999999	-		* <sup>3</sup>
Retentive Timer (Coil)	SC000000 - SC999999	-		* <sup>3</sup>
Counter (Contact)	CS000000 - CS999999	-		* <sup>3</sup>
Counter (Coil)	CC000000 - CC999999	-		* <sup>3</sup>
Timer (Current Value)	-	TN000000 - TN999999		* <sup>3</sup>
Retentive Timer (Current value)	-	SN000000 - SN999999		* <sup>3</sup>
Counter (Current Value)	-	CN000000 - CN999999		* <sup>3</sup>
Data Register	-	 D000000 - D999999		 * <sup>3</sup> * <sup>4</sup>
Special Register	-	SD0000 - SD4095		 * <sup>4</sup>
Link Register	-	W000000 - W9A61FF		 * <sup>4</sup>
Special Link Register	-	SW000000 - SW9A61FF		 * <sup>4</sup>
Link Input	J001-X0000 - J255-X3FFF	J001-X0000 - J255-X3FF0		 * <sup>5</sup>
Link Output	J001-Y0000 - J255-Y3FFF	J001-Y0000 - J255-Y3FF0		 * <sup>5</sup>
Link Relay	J001-B0000 - J255-B7FFF	J001-B0000 - J255-B7FF0		 * <sup>5</sup>
Link Special Relay	J001-SB0000 - J255-SB1FFF	J001-SB0000 - J255-SB1FF0		 * <sup>5</sup>
Link Register	-	J001-W00000 - J255-W1FFFF	 * <sup>4</sup> * <sup>5</sup>	
Link Special Register	-	J001-SW000 - J255-SW1FF	 * <sup>4</sup> * <sup>5</sup>	
CPU Buffer Memory Access Device	-	U3E0-G000000 - U3E3-G999999	 * <sup>4</sup> * <sup>6</sup>	
CPU Buffer Memory (Periodic Communication Area)	-	U3E0-HG000000 - U3E3-HG12287	 * <sup>4</sup> * <sup>6</sup>	


Device	Bit Address	Word Address	32 bits	Remarks
File Register (Normal)	-	R00000 - R32767	<b>L/H</b>	 *4
File Register (Block switching is not necessary)	-	ZR00000000 - ZR10027007		 *4
File Register (0R - 31R)	-	0R00000 - 0R32767		 *4
	-	1R00000 - 1R32767		 *4
	-	2R00000 - 2R32767		 *4
	:	:		 *4
	-	30R00000 - 30R32767		 *4
-	31R00000 - 31R32767	 *4		


- \*1 If the CPU is R00CPU/R01CPU/R02CPU, the bit address is "X0000 - X1FFF" and the word address is "X0000 - X1FF0".
- \*2 If the CPU is R00CPU/R01CPU/R02CPU, the bit address is "Y0000 - Y1FFF" and the word address is "Y0000 - Y1FF0".
- \*3 Device range is limited.
- \*4 The access method when specifying bits is different depending on the setting of "Other bits in this word" in "Individual Device Settings".  
 [Clear] .....   
 [Do not clear] ..... When bits are written, the Display reads the corresponding word address from the External Device, sets particular bits of that word address to ON, and then returns the resulting address to the External Device. Note that the data may not be written correctly if you write to the word address using the ladder program while the Display is reading data from, and writing data to, the External Device.
- \*5 Link direct device to access the network link module's internal memory. The first three digits of the address is the network number (1-255).
- \*6 Device that can access CPU buffer memory. The first three digits of the address specifies the CPU number:  
 3E0H: CPU No.1  
 3E1H: CPU No.2  
 3E2H: CPU No.3  
 3E3H: CPU No.4

**NOTE**

- Please refer to the GP-Pro EX Reference Manual for system data area.  
 Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)"
- Refer to the precautions on manual notation for icons in the table.  
 "Manual Symbols and Terminology"

## 5.3 MELSEC iQ-R Series (Label)

 : This address can be specified as system data area.

Data Type		Bit Address	Word Address	32bits	Note
BOOL	Single Tag	<LABELNAME>			
	1D Array	<LABELNAME>[xl] - <LABELNAME>[xh]			*1 *2 *3
	2D Array	<LABELNAME>[xl,yl] - <LABELNAME>[xh,yh]			
	3D Array	<LABELNAME>[xl,yl,zl] - <LABELNAME>[xh,yh,zh]			
INT WORD	Single Tag	<LABELNAME>.00 - <LABELNAME>.15	<LABELNAME>		*1 *2 *3 *4
	1D Array	<LABELNAME>[xl].00 - <LABELNAME>[xh].15	<LABELNAME>[xl] - <LABELNAME>[xh]		
	2D Array	<LABELNAME>[xl,yl].00 - <LABELNAME>[xh,yh].15	<LABELNAME>[xl,yl] - <LABELNAME>[xh,yh]		
	3D Array	<LABELNAME>[xl,yl,zl].00 - <LABELNAME>[xh,yh,zh].15	<LABELNAME>[xl,yl,zl] - <LABELNAME>[xh,yh,zh]		
REAL TIME	Single Tag		<LABELNAME>		*1 *2 *3
	1D Array		<LABELNAME>[xl] - <LABELNAME>[xh]		
	2D Array		<LABELNAME>[xl,yl] - <LABELNAME>[xh,yh]		
	3D Array		<LABELNAME>[xl,yl,zl] - <LABELNAME>[xh,yh,zh]		
DINT DWORD	Single Tag	<LABELNAME>.00 - <LABELNAME>.31	<LABELNAME>		*1 *2 *3
	1D Array	<LABELNAME>[xl].00 - <LABELNAME>[xh].31	<LABELNAME>[xl] - <LABELNAME>[xh]		
	2D Array	<LABELNAME>[xl,yl].00 - <LABELNAME>[xh,yh].31	<LABELNAME>[xl,yl] - <LABELNAME>[xh,yh]		
	3D Array	<LABELNAME>[xl,yl,zl].00 - <LABELNAME>[xh,yh,zh].31	<LABELNAME>[xl,yl,zl] - <LABELNAME>[xh,yh,zh]		
STRING	Single Tag		<LABELNAME>		*1 *2 *3 *5
	1D Array		<LABELNAME>[xl] - <LABELNAME>[xh]		
	2D Array		<LABELNAME>[xl,yl] - <LABELNAME>[xh,yh]		
	3D Array		<LABELNAME>[xl,yl,zl] - <LABELNAME>[xh,yh,zh]		

Data Type		Bit Address	Word Address	32bits	Note
TIMER	C	<LABELNAME>.C	-	-	*6
	S	<LABELNAME>.S			
	N	-			
RETENTIVE TIMER	C	<LABELNAME>.C	-	-	*6
	S	<LABELNAME>.S			
	N	-			
COUNTER	C	<LABELNAME>.C	-	-	*6
	S	<LABELNAME>.S			
	N	-			
LTIMER	C	<LABELNAME>.C	-	-	*7
	S	<LABELNAME>.S			
	N	-			
LRETENTIVE TIMER	C	<LABELNAME>.C	-	-	*7
	S	<LABELNAME>.S			
	N	-			
LCOUNTER	C	<LABELNAME>.C	-	-	*7
	S	<LABELNAME>.S			
	N	-			

\*1 <LABELNAME>: For structures, the LABELNAME will include the structure name. The maximum number of characters for the LABELNAME is 255, which includes the delimiter and address.

Example)

BOOL type single Label:	"BOOLVAR"
BOOL array element:	"BOOLARRAY[0012]"
INT type single Label:	"INTVAR"
DINT type bit address:	"DINTVAR.30"
REAL type 3D array:	"REALARRAY[1,2,3]"
INT member of a structure ("TIMER"):	"TIMERVER.N"
STRING type variable:	"MYSTRINGVAR"

The following input rules apply to LABELNAME and member names.

- Maximum of 255 single-byte characters.
  - You can use alphanumeric characters (uppercase, lowercase), underscore, and double-byte characters (such as kanji).
  - The first character cannot be a number.
  - You cannot start names with any of the following text:  
LS, USR, SCR, PRT
  - You cannot use ! " # \$ % ' \* & + , . / : ; < = > ? @ [ \ ] ^ ` { | } ~ and spaces.
  - You cannot use data type keywords. ("WORD", "BOOL", "ARRAY", and so on)
  - Label names are case-insensitive.
  - You cannot use names reserved by IEC instructions. (\*)
  - You cannot use device names defined in MELSEC. (\*)
  - You cannot use function blocks or function names defined by the manufacturer or MELSEC instruction names. (\*)
- \* GP-Pro EX error check cannot identify these names. If you use these names, a communication error will occur. Please refer to the External Device manual for names that are used.




- \*2 The number of elements in each dimension is displayed as l (minimum number of elements) to h (maximum number of elements).
- \*3 Array element numbers defined on a label start from 0.  
You can calculate the size of the array with the number of elements in each dimension.  
Example)  
Word array "Array [0 ...15, 0 ...14, 0 ...13]", evaluates to array size of 3360 (= 16 × 15 × 14).  
The maximum size of each device is as follows.  
BOOL, INT, WORD, TIMER, COUNTER, RETENTIVETIMER: 2147483648  
DINT, DWORD, LTIMER, LCOUNTER, LRETENTIVETIMER, TIME: 1073741824  
STRING: 2147483648 ÷ size of STRING device
- \*4 The system data area is initially set up with 16 words of items. If you set up less than 16 words of items, after allocating a 16 word or larger array of tags in the system data area, select only the necessary items.
- \*5 The STRING label defines the maximum number of characters (up to 255) in the data type settings.
- \*6 C (coil) and S (contact) are BOOL type devices. N (current value) is a WORD type device.
- \*7 C (coil) and S (contact) are BOOL type devices. N (current value) is a DWORD type device.

**IMPORTANT**

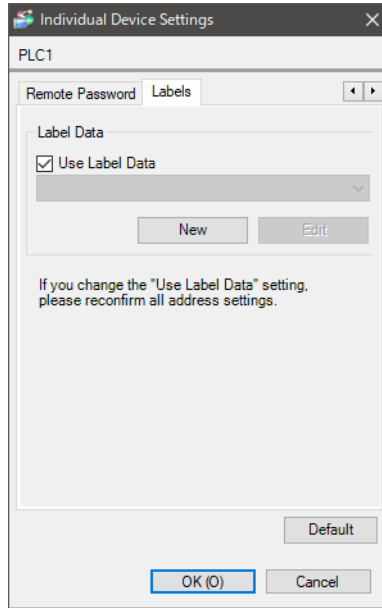
- When using the tag, it is necessary to import the label data (symbol address).  
Please refer to the GP-Pro EX Reference Manual for import procedure.  
Cf. GP-Pro EX Reference Manual "Using Device/PLC Tags"
- If the CPU is R00CPU/R01CPU/R02CPU, you cannot import label data (symbol address).
- The tag import feature is supported in GP-Pro EX V3.01.000 or later (or in the case of GP-4\*01TM, V3.10.000 or later).

**NOTE**

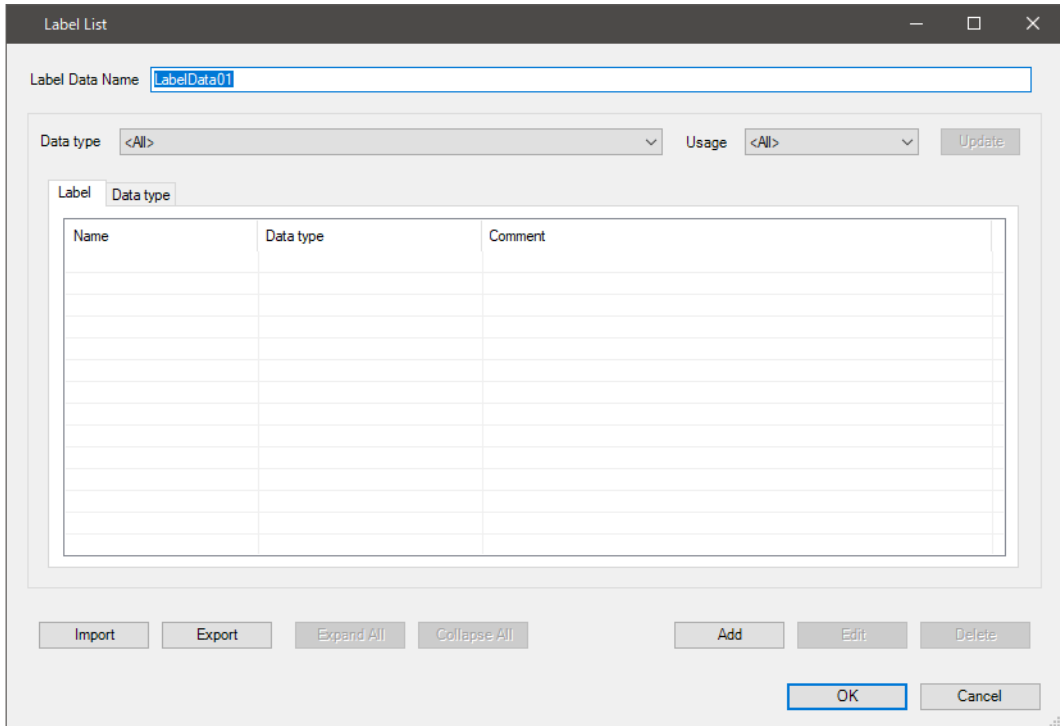
- Please refer to the GP-Pro EX Reference Manual for system data area.  
Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)"
- Refer to the precautions on manual notation for icons in the table.  
 "Manual Symbols and Terminology"

## ■ Importing Label Data

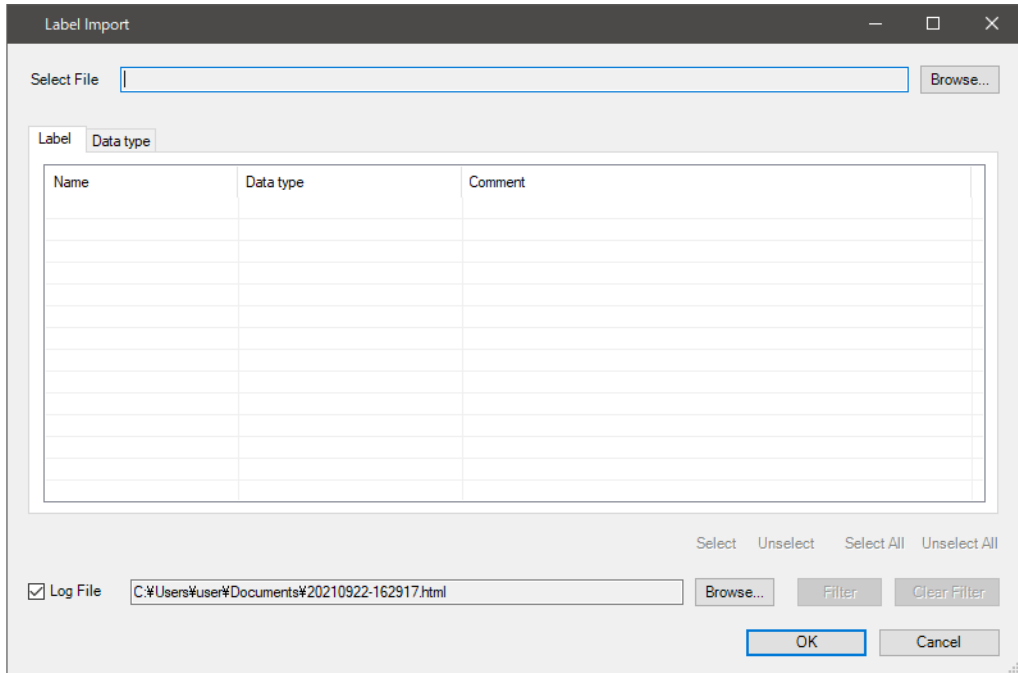
- 1 In GP-Pro EX, open the [Individual Device Settings] dialog box, and from the [Series] drop-down list, select "iQ-R".
- 2 From the [Labels] tab, select the [Use Label Data] check box.



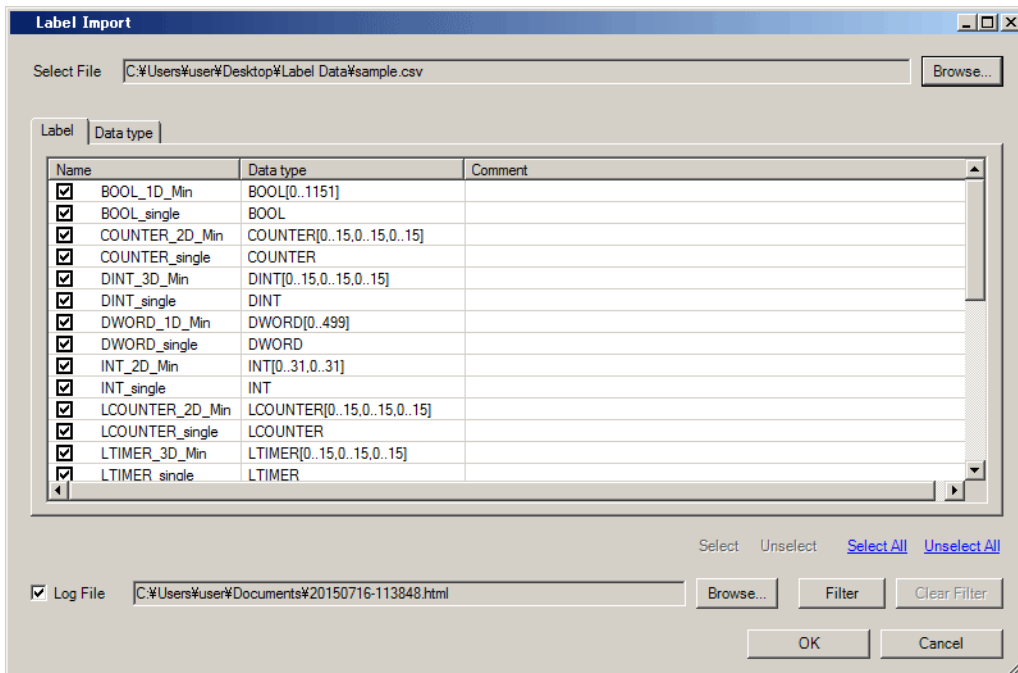
- 3 Click [New] to open the [Label List] window.



## 4 Click [Import].

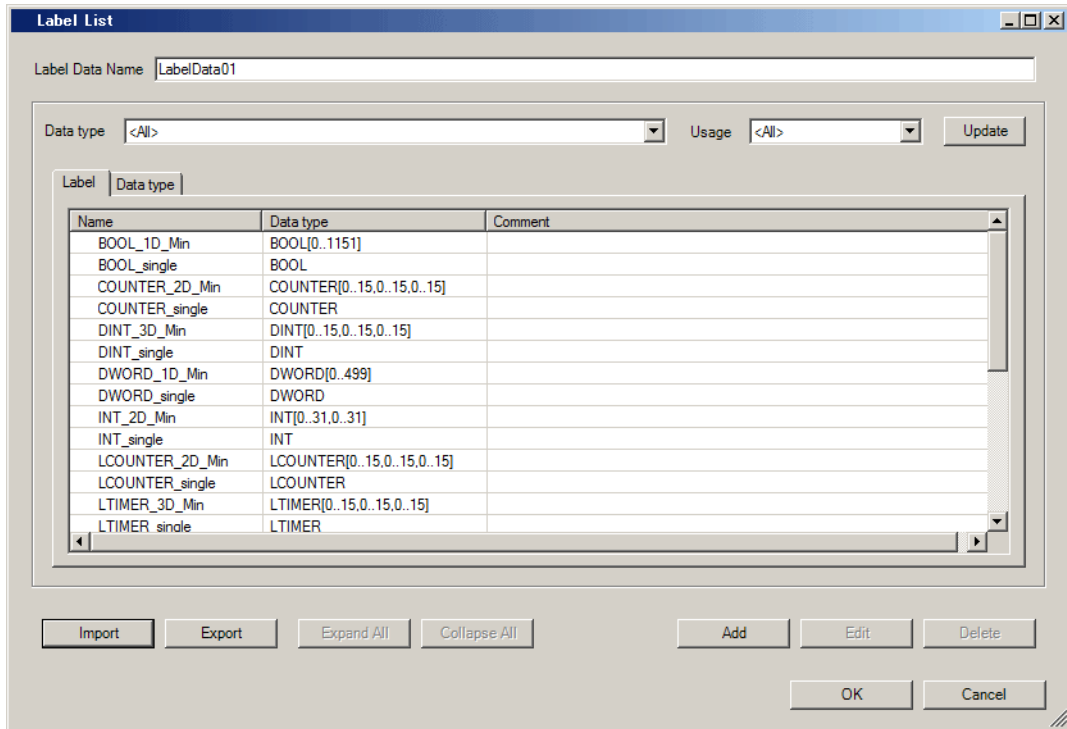


## 5 From the [Select File] field, click [Browse..], and then select the CSV file.

**IMPORTANT**

- Generate the label data using the programming software (MELSOFT GX Works 3). Labels you can import into GP-Pro EX include "Global Label File", "User Defined Data Structure File" and "Module-Defined Data Structure File".
- Place in the same folder, the label data you want to import. In GP-Pro EX, when you select [Global Label File] as the label data to import, imported data includes "User Defined Data Structure File" and "Module-Defined Data File" in the same folder.

6 Check the labels to import, and click [OK].



## 5.4 MELSEC iQ-F Series

     : This address can be specified as system data area.

Device	Bit Address	Word Address	32 bits	Remarks
Input Relay	X0000 - X1777	X0000 - X1760	L/H	<span style="border: 1px solid black; padding: 2px;">OCT 8</span> <sup>*1</sup>
Output Relay	Y0000 - Y1777	Y0000 - Y1760		<span style="border: 1px solid black; padding: 2px;">OCT 8</span> <sup>*1</sup>
Internal Relay	M00000 - M32767	M00000 - M32752		<span style="border: 1px solid black; padding: 2px;">÷ 16</span>
Special Relay	SM0000 - SM9999	SM0000 - SM9984		<span style="border: 1px solid black; padding: 2px;">÷ 16</span>
Latch Relay	L00000 - L32767	L000000 - L32752		<span style="border: 1px solid black; padding: 2px;">÷ 16</span>
Annunciator	F00000 - F32767	F00000 - F32752		<span style="border: 1px solid black; padding: 2px;">÷ 16</span>
Step Relay	S0000 - S4095	S0000 - S4080		
Link Relay	B0000 - B7FFF	B0000 - B7FF0		<span style="border: 1px solid black; padding: 2px;">*** 0</span>
Special Link Relay	SB0000 - SB7FFF	SB0000 - SB7FF0		<span style="border: 1px solid black; padding: 2px;">*** 0</span>
Timer (Contact)	TS0000 - TS1023	-		
Timer (Coil)	TC0000 - TC1023	-		
Retentive Timer (Contact)	SS0000 - SS1023	-		
Retentive Timer (Coil)	SC0000 - SC1023	-		
Counter (Contact)	CS0000 - CS1023	-		
Counter (Coil)	CC0000 - CC1023	-		
Long Counter (Contact)	L_CS0000 - L_CS1023	-		
Long Counter (Coil)	L_CC0000 - L_CC1023	-		
Timer (Current Value)	-	TN0000 - TN1023		
Retentive Timer (Current value)	-	SN0000 - SN1023		
Counter (Current Value)	-	CN0000 - CN1023		
Long Counter (Current Value)	-	L_CN0000 - L_CN1023		
Data Register	-	D0000 - D7999		<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2</sup>
Special Register	-	SD00000 - SD11999		<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2</sup>
Link Register	-	W0000 - W7FFF		<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2</sup>
Special Link Register	-	SW0000 - SW7FFF		<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2</sup>
Module Access Device	-	U000-G00000 - U1FF-G65535		<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2 *3</sup>
File Register	-	R00000 - R32767	<span style="border: 1px solid black; padding: 2px;">Bit F</span> <sup>*2</sup>	

\*1 Define the word address in increments of 20 (octal).  
Example: X0000, X0020, X0040...X1760

\*2 The access method when specifying bits is different depending on the setting of "Other bits in this word" in "Individual Device Settings".

[Clear]..... Bit F

[Do not clear] ..... When bits are written, the Display reads the corresponding word address from the External Device, sets particular bits of that word address to ON, and then returns the resulting address to the External Device. Note that the data may not be written correctly if you write to the word address using the ladder program while the Display is reading data from, and writing data to, the External Device.

- \*3 Device for accessing SLMP compatible devices, as well as the intelligent function unit's buffer memory. The first three digits of the address specifies the intelligent module's starting I/O number.


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**NOTE**

- Please refer to the GP-Pro EX Reference Manual for system data area.

Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)"

- Refer to the precautions on manual notation for icons in the table.

 "Manual Symbols and Terminology"

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## 6 Device Code and Address Code

Use device code and address code when you select "Device Type & Address" for the address type in data displays.

**NOTE**

- When using the label, the device code and address code can not be used.

### 6.1 MELSEC iQ-R Series

Device	Device Name	Device Code (HEX)	Address Code
Input Relay	X	0x0080	Word Address ÷ 0x10
	1/X	0x0180	
	2/X	0x0280	
	3/X	0x0380	
	4/X	0x0480	
Output Relay	Y	0x0081	Word Address ÷ 0x10
	1/Y	0x0181	
	2/Y	0x0281	
	3/Y	0x0381	
	4/Y	0x0481	
Internal Relay	M	0x0082	Word Address ÷ 16
	1/M	0x0182	
	2/M	0x0282	
	3/M	0x0382	
	4/M	0x0482	
Special Relay	SM	0x0083	Word Address ÷ 16
	1/SM	0x0183	
	2/SM	0x0283	
	3/SM	0x0383	
	4/SM	0x0483	
Latch Relay	L	0x0084	Word Address ÷ 16
	1/L	0x0184	
	2/L	0x0284	
	3/L	0x0384	
	4/L	0x0484	
Annunciator	F	0x0085	Word Address ÷ 16
	1/F	0x0185	
	2/F	0x0285	
	3/F	0x0385	
	4/F	0x0485	

Device	Device Name	Device Code (HEX)	Address Code
Edge Relay	V	0x0086	Word Address ÷ 16
	1/V	0x0186	
	2/V	0x0286	
	3/V	0x0386	
	4/V	0x0486	
Link Relay	B	0x0088	Word Address ÷ 0x10
	1/B	0x0188	
	2/B	0x0288	
	3/B	0x0388	
	4/B	0x0488	
Special Link Relay	SB	0x0089	Word Address ÷ 0x10
	1/SB	0x0189	
	2/SB	0x0289	
	3/SB	0x0389	
	4/SB	0x0489	
Timer (Current Value)	TN	0x0060	Word Address
	1/TN	0x0160	
	2/TN	0x0260	
	3/TN	0x0360	
	4/TN	0x0460	
Retentive Timer (Current Value)	SN	0x0062	Word Address
	1/SN	0x0162	
	2/SN	0x0262	
	3/SN	0x0362	
	4/SN	0x0462	
Long Timer (Current Value)	L_TN	0x0063	Word Address
	1/L_TN	0x0163	
	2/L_TN	0x0263	
	3/L_TN	0x0363	
	4/L_TN	0x0463	
Long Retentive Timer (Current Value)	L_SN	0x0064	Word Address
	1/L_SN	0x0164	
	2/L_SN	0x0264	
	3/L_SN	0x0364	
	4/L_SN	0x0464	
Counter (Current Value)	CN	0x0061	Word Address
	1/CN	0x0161	
	2/CN	0x0261	
	3/CN	0x0361	
	4/CN	0x0461	



Device	Device Name	Device Code (HEX)	Address Code
Long Counter (Current Value)	L_CN	0x0065	Word Address
	1/L_CN	0x0165	
	2/L_CN	0x0265	
	3/L_CN	0x0365	
	4/L_CN	0x0465	
Data Register	D	0x0000	Word Address
	1/D	0x0100	
	2/D	0x0200	
	3/D	0x0300	
	4/D	0x0400	
Special Register	SD	0x0001	Word Address
	1/SD	0x0101	
	2/SD	0x0201	
	3/SD	0x0301	
	4/SD	0x0401	
Link Register	W	0x0002	Word Address
	1/W	0x0102	
	2/W	0x0202	
	3/W	0x0302	
	4/W	0x0402	
Special Link Register	SW	0x0003	Word Address
	1/SW	0x0103	
	2/SW	0x0203	
	3/SW	0x0303	
	4/SW	0x0403	
Link Input	Jn-X	0x0170 - 0xFF70	Word Address $\div 0x10^{*1}$
Link Output	Jn-Y	0x0171 - 0xFF71	Word Address $\div 0x10^{*1}$
Link Relay	Jn-B	0x0172 - 0xFF72	Word Address $\div 0x10^{*1}$
Link Special Relay	Jn-SB	0x0173 - 0xFF73	Word Address $\div 0x10^{*1}$
Link Register	Jn-W	0x0174 - 0xFF74	Word Address $^{*1}$
Link Special Register	Jn-SW	0x0175 - 0xFF75	Word Address $^{*1}$
Module Access Device	U000-G - U1FF-G	0x0076 - 0x1F76	Word Address $^{*2}$
CPU Buffer Memory Access	U3En-G	0x3E76	Word Address
CPU Buffer Memory (Periodic)	U3En-HG	0x3E78	Word Address
File Register (Normal)	R	0x000F	Word Address
	1/R	0x010F	
	2/R	0x020F	
	3/R	0x030F	
	4/R	0x040F	

Device	Device Name	Device Code (HEX)	Address Code	
File Register (Block switching is not necessary)	ZR	0x000E	Word Address	
	1/ZR	0x010E		
	2/ZR	0x020E		
	3/ZR	0x030E		
	4/ZR	0x040E		
File Register (0R - 31R)	0R	0x0010	Word Address	
	1/0R	0x0110		
	2/0R	0x0210		
	3/0R	0x0310		
	4/0R	0x0410		
	1R	0x0011	Word Address	
	1/1R	0x0111		
	2/1R	0x0211		
	3/1R	0x0311		
	4/1R	0x0411		
	2R	0x0012	Word Address	
	1/2R	0x0112		
	2/2R	0x0212		
	3/2R	0x0312		
	4/2R	0x0412		
	:	:		
	29R	0x002D	Word Address	
	1/29R	0x012D		
	2/29R	0x022D		
	3/29R	0x032D		
	4/29R	0x042D		
	30R	0x002E	Word Address	
	1/30R	0x012E		
	2/30R	0x022E		
	3/30R	0x032E		
	4/30R	0x042E		
	31R	0x002F	Word Address	
	1/31R	0x012F		
	2/31R	0x022F		
	3/31R	0x032F		
	4/31R	0x042F		

\*1 Network number is defined in the device code's high byte.

\*2 Specify the Device Name with the Device Code (HEX) and the value in bits 28 to 31 for the address number. For example, for **UIFF-G**, the device code is "0x1F76", and bits 28 to 31 in the address part is set to "F".

## 6.2 MELSEC iQ-F Series

Device	Device Name	Device Code (HEX)	Address Code
Input Relay	X	0x0080	Word Address ÷ 20 (octal)
Output Relay	Y	0x0081	Word Address ÷ 20 (octal)
Internal Relay	M	0x0082	Word Address ÷ 16
Special Relay	SM	0x0083	Word Address ÷ 16
Latch Relay	L	0x0084	Word Address ÷ 16
Annunciator	F	0x0085	Word Address ÷ 16
Step Relay	S	0x0087	Word Address ÷ 16
Link Relay	B	0x0088	Word Address ÷ 0x10
Special Link Relay	SB	0x0089	Word Address ÷ 0x10
Timer (Current Value)	TN	0x0060	Word Address
Retentive Timer (Current Value)	SN	0x0062	Word Address
Counter (Current Value)	CN	0x0061	Word Address
Long Counter (Current Value)	L_CN	0x0065	Word Address
Data Register	D	0x0000	Word Address
Special Register	SD	0x0001	Word Address
Link Register	W	0x0002	Word Address
Special Link Register	SW	0x0003	Word Address
Module Access Device	U000-G - U1FF-G	0x0076 - 0x1F76	Word Address <sup>*1</sup>
File Register	R	0x000F	Word Address

\*1 Specify the Device Name with the Device Code (HEX) and the value in bits 28 to 31 for the address number. For example, for U1FF-G, the device code is "0x1F76", and bits 28 to 31 in the address part is set to "F".

## 7 Error Messages

Error messages are displayed on the Display screen as follows: "No.: Device Name: Error Message (Error Occurrence Area)". Each description is shown below.

Item	Description
No.	Error No.
Device Name	Name of the External Device where error occurs. Device name is a title of the External Device set with GP-Pro EX. (Initial value [PLC1])
Error Message	Displays messages related to the error which occurs.
Error Occurrence Area	<p>Displays IP address or device address of the External Device where error occurs, or error codes received from the External Device.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• IP address is displayed such as "IP address(Decimal): MAC address( Hex)".</li> <li>• Device address is displayed such as "Address: Device address".</li> <li>• Received error codes are displayed such as "Decimal[Hex]".</li> </ul>

Display Examples of Error Messages

"RHAA035: PLC1: Error has been responded for device write command (Error Code: 2 [02H])"

**NOTE**

- Refer to your External Device manual for details on received error codes.
- Refer to "Display-related errors" in "Maintenance/Troubleshooting Guide" for details on the error messages common to the driver.

### ■ Error Messages Unique to External Device

Message ID	Error Message	Description
RHxx133	(Node Name): The specified password is incorrect (Error Code:[(Hex)]).	Unable to unlock because the password is incorrect.
RHxx134	(Node Name): Remote Password: Illegal Format.	Invalid password format.

**NOTE**

- If an error related to Remote Password occurs, communication stops, regardless of the Retry setting. Reset the Remote Password in either GP-Pro EX or the offline screen.