



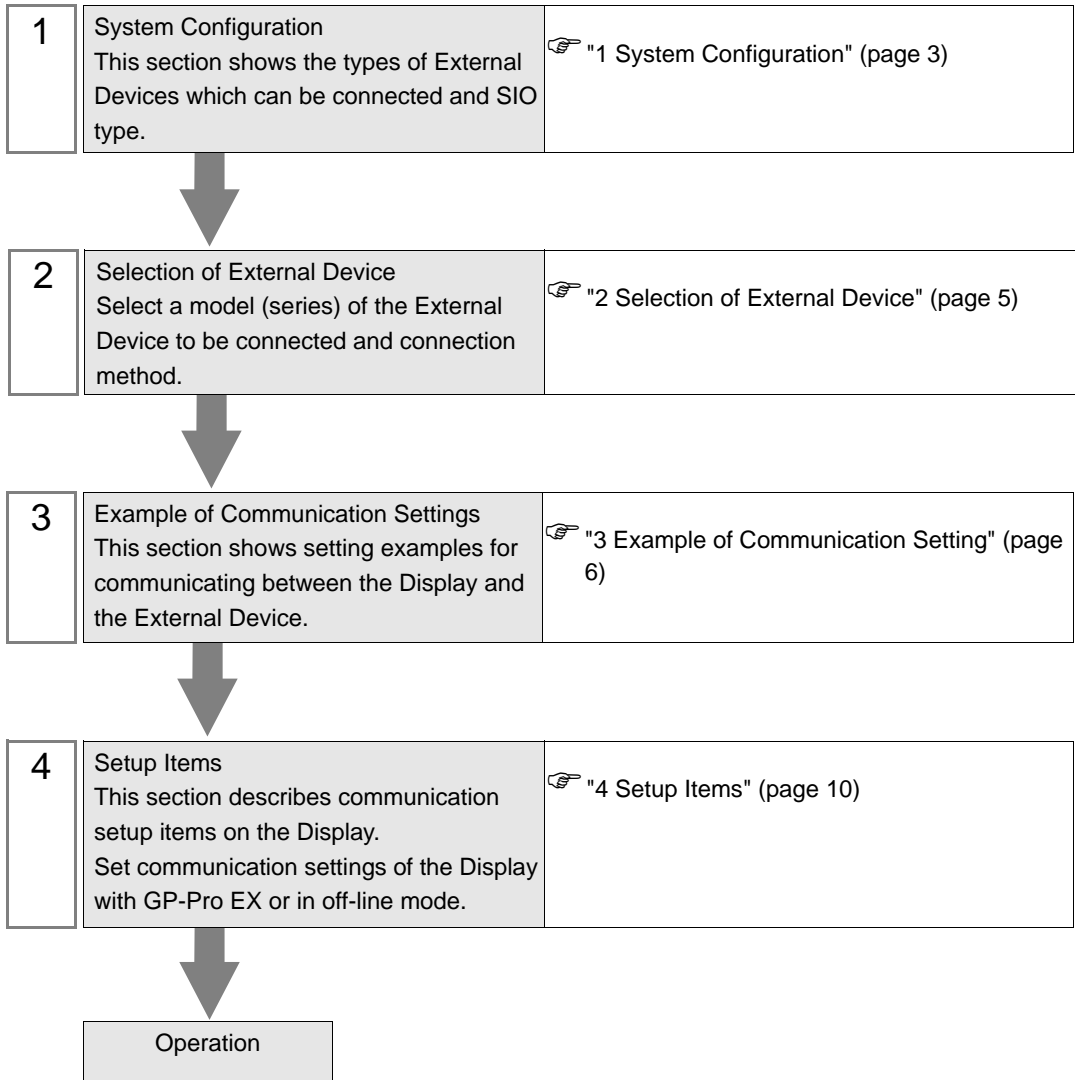
# JW Series Computer Link Ethernet Driver

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## PREFACE

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

In this manual, the connection procedure will be described by following the below sections:



# 1 System Configuration

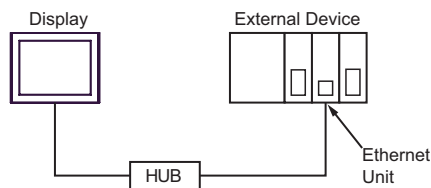
The system configuration in the case when the External Device of SHARP MS Corporation and the Display are connected is shown.

| Series Name | CPU            | Link I/F <sup>*1</sup> | SIO Type       | Setting Example               |
|-------------|----------------|------------------------|----------------|-------------------------------|
| JW          | 311CU          | JW-25TCM<br>JW-255CM   | Ethernet (UDP) | Setting Example 1<br>(page 6) |
|             | 312CU          |                        |                |                               |
|             | 321CU          |                        |                |                               |
|             | 322CU          |                        |                |                               |
|             | 331CU          |                        |                |                               |
|             | 332CU          |                        | Ethernet (TCP) | Setting Example 2<br>(page 8) |
|             | 341CU          |                        |                |                               |
|             | 342CU          |                        |                |                               |
|             | 352CU<br>362CU |                        |                |                               |

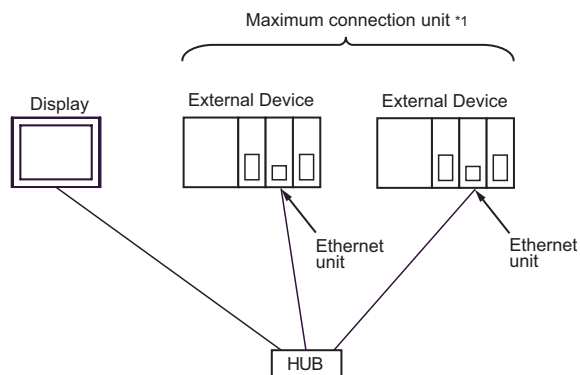
\*1 Available with the Ethernet units compatible with JW300."300" is labeled on the front of JW300-compatible units. For more information, contact the manufacturer of the External Device.

## ■ Connection Configuration

[1:1 Connection]

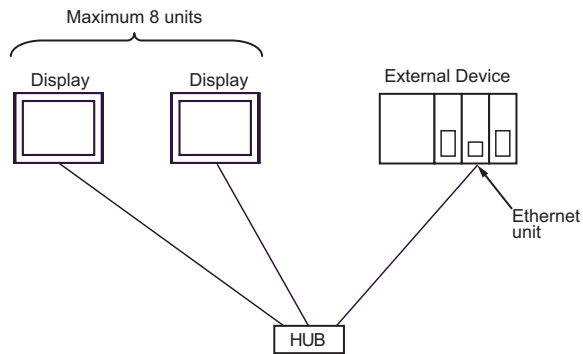


[1:n Connection]

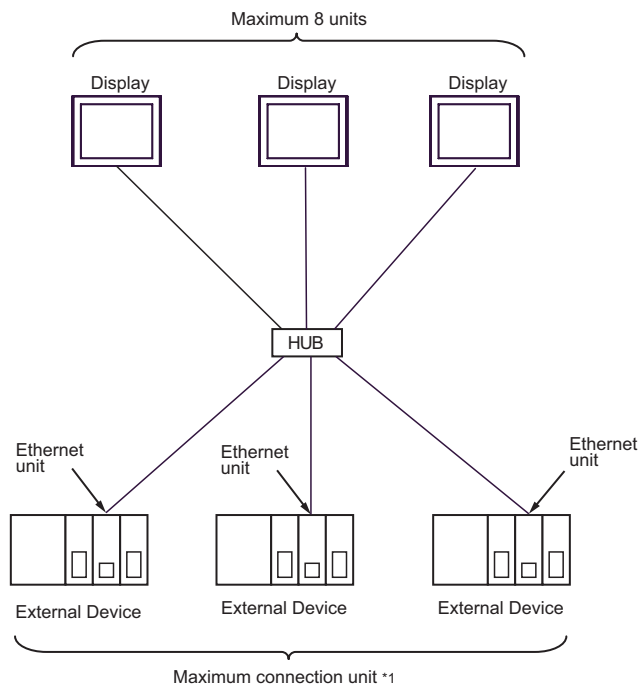


\*1 You can connect up to 32 units of External Device for UDP, and 16 units of External Device for TCP at the same time.

## [n:1 Connection]



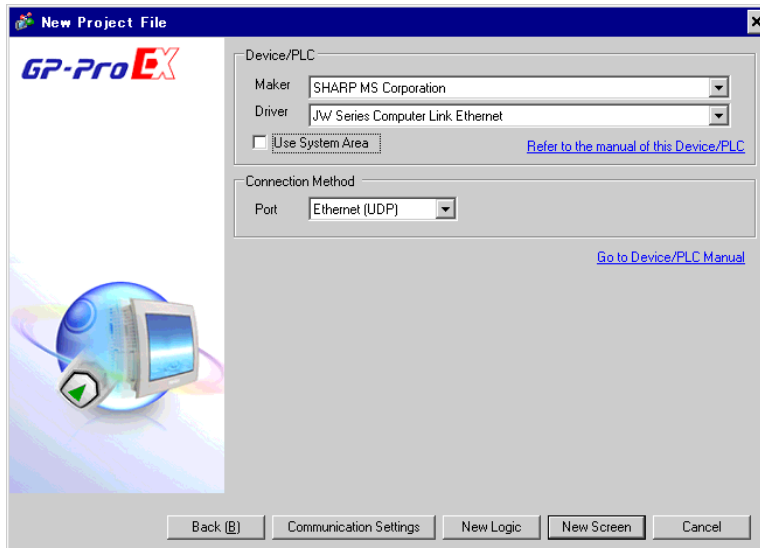
## [n:m Connection]



\*1 You can connect up to 32 units of External Device for UDP, and 16 units of External Device for TCP at the same time.

## 2 Selection of External Device

Select the External Device to be connected to the Display.



| Setup Items     | Setup Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maker           | Select the maker of the External Device to be connected. Select "SHARP MS Corporation".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Driver          | Select a model (series) of the External Device to be connected and connection method. Select "JW Series Computer Link Ethernet".<br>Check the External Device which can be connected in "JW Series Computer Link Ethernet" in system configuration.<br>☞ "1 System Configuration" (page 3)                                                                                                                                                                                                                                                                                                                                                                                                             |
| Use System Area | Check this option when you synchronize the system data area of the Display and the device (memory) of the External Device. When synchronized, you can use the ladder program of the External Device to switch the display or display the window on the Display.<br>Cf. GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"<br><br>This can be also set with GP-Pro EX or in off-line mode of the Display.<br>Cf. GP-Pro EX Reference Manual "5.14.6 Setting Guide of [System Setting Window] ■ Setting Guide of [Main Unit Settings] ■ System Area Setting"<br><br>Cf. Maintenance/Troubleshooting "2.14.1 Settings common to all Display models ◆ System Area Settings" |
| Port            | Select the port of the Display to be connected to the External Device from "Ethernet (UDP)" and "Ethernet (TCP)".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### 3 Example of Communication Setting

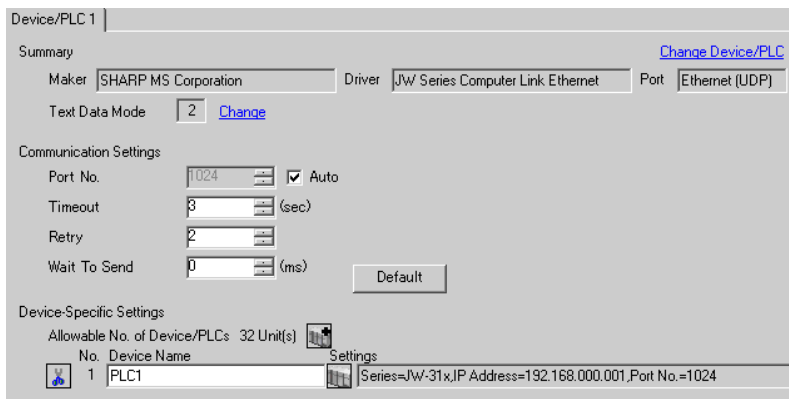
Examples of communication settings of the Display and the External Device, recommended by Digital Electronics Corp., are shown.

#### 3.1 Setting Example 1

##### ■ Settings of GP-Pro EX

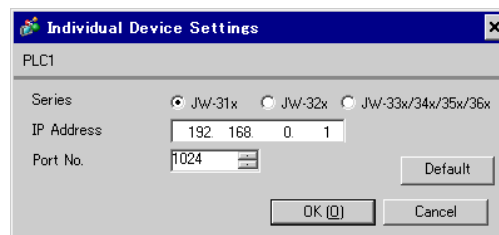
##### ◆ Communication Settings

To display the setting screen, select [Device/PLC Settings] from [System setting window] in workspace.



##### ◆ Device Setting

To display the setting screen, click ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].



##### ■ Settings of External Device

Use the ladder software (JW-300SP) for the communication settings of the Ethernet unit.

To set the Ethernet unit No., use the unit No. switch on the back of the unit.

Please refer to the manual of the External Device for more details on the settings.

##### ◆ Settings of Ethernet Module

1. Set the unit No. using the unit No. switch on the back of the Ethernet unit. You can select from 0 to 7.

---

**IMPORTANT** • Be sure not to duplicate unit Nos. between different units.

---

2. Start up the ladder software.

3. To transfer the communication settings from the ladder software to the External Device, follow these steps:

From the [Online] menu, select [Communication Settings] to display the [Communication Settings] dialog box.

Select [PLC(PG)] and then click the [Detail Settings] button to display the [PLC Device Parameter Settings] dialog box. In this dialog box, set the communication settings.

4. Create a new project. In the [Device Selection] dialog box displayed when you create the project, select the External Device to use.

In the confirmation dialog box displayed when you complete the project, click [Yes] to read out the unit configuration of the External Device.

5. The read out unit configuration is displayed.

Enter the Ethernet unit No. in [Unit No.SW] of [Option Unit].

6. Right-click [Option Unit], select [Additional Change] - [Option Unit] from the displayed menu, and then select the External Device to use.

When you select the External Device, the parameter settings dialog box appears. Set the communication settings of the Ethernet unit.

- IP Address

| Setup Items | Setup Description                                                 |
|-------------|-------------------------------------------------------------------|
| IP Address  | Enter the IP address of the External Device.<br>(ex. 192.168.0.1) |
| Subnet Mask | Enter the subnet mask of the External Device.                     |

- Connection Settings

| Setup Items     | Setup Description |
|-----------------|-------------------|
| No.             | 0                 |
| Open Method     | UDP               |
| Source Port No. | 1024              |
| Port Setting    | DCML              |

7. From the [Online] menu, select [PLC Transfer] - [Write] to transfer the communication settings to the External Device.

#### ◆ Notes

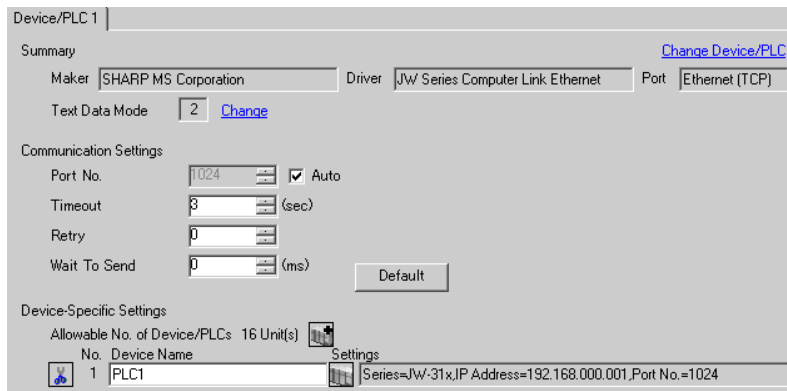
- Check with the network administrator about the IP address.
- Be sure not to duplicate IP addresses on the same network.

## 3.2 Setting Example 2


### ■ Settings of GP-Pro EX

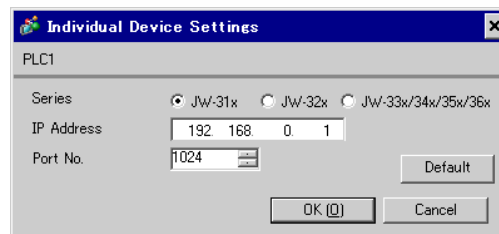
#### ◆ Communication Settings

To display the setting screen, select [Device/PLC Settings] from [System setting window] in workspace.



#### ◆ Device Setting

To display the setting screen, click  ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].



### ■ Settings of External Device

Use the ladder software (JW-300SP) for the communication settings of the Ethernet unit.

To set the Ethernet unit No., use the unit No. switch on the back of the unit.

Please refer to the manual of the External Device for more details on the settings.

#### ◆ Settings of Ethernet Module

1. Set the unit No. using the unit No. switch on the back of the Ethernet unit. You can select from 0 to 7.

---

**IMPORTANT** • Be sure not to duplicate unit Nos. between different units.

---

2. Start up the ladder software.
3. To transfer the communication settings from the ladder software to the External Device, follow these steps:  
From the [Online] menu, select [Communication Settings] to display the [Communication Settings] dialog box. Select [PLC(PG)] and then click the [Detail Settings] button to display the [PLC Device Parameter Settings] dialog box. In this dialog box, set the communication settings.
4. Create a new project. In the [Device Selection] dialog box displayed when you create the project, select the External Device to use.



In the confirmation dialog box displayed when you complete the project, click [Yes] to read out the unit configuration of the External Device.

5. The read out unit configuration is displayed.

Enter the Ethernet unit No. in [Unit No.SW] of [Option Unit].

6. Right-click [Option Unit], select [Additional Change] - [Option Unit] from the displayed menu, and then select the External Device to use.

When you select the External Device, the parameter settings dialog box appears. Set the communication settings of the Ethernet unit.

- IP Address

| Setup Items | Setup Description                                                 |
|-------------|-------------------------------------------------------------------|
| IP Address  | Enter the IP address of the External Device.<br>(ex. 192.168.0.1) |
| Subnet Mask | Enter the subnet mask of the External Device.                     |

- Connection Settings

| Setup Items     | Setup Description |
|-----------------|-------------------|
| No.             | 0                 |
| Open Method     | TCP_Passive       |
| Source Port No. | 1024              |
| Port Setting    | DCML              |

7. From the [Online] menu, select [PLC Transfer] - [Write] to transfer the communication settings to the External Device.

#### ◆ Notes

- Check with the network administrator about the IP address.
- Be sure not to duplicate IP addresses on the same network.

## 4 Setup Items

Set communication settings of the Display with GP-Pro Ex or in off-line mode of the Display.

The setting of each parameter must be identical to that of External Device.

☞ "3 Example of Communication Setting" (page 6)

### 4.1 Setup Items in GP-Pro EX

#### ■ Communication Settings

To display the setting screen, select [Device/PLC Settings] from [System setting window] in workspace.

Device/PLC 1

Summary

Maker [SHARP MS Corporation] Driver [JW Series Computer Link Ethernet] Port [Ethernet (UDP)] [Change Device/PLC](#)

Text Data Mode [2] [Change](#)

Communication Settings

Port No. [1024] ☒ Auto

Timeout [3] (sec)

Retry [2]

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


Device-Specific Settings


Allowable No. of Device/PLCs 32 Unit(s)

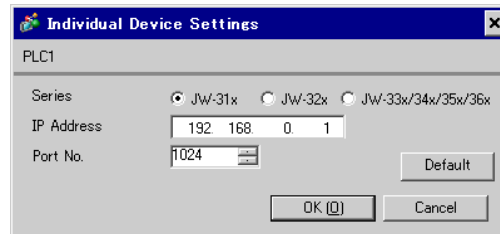
| No. | Device Name | Settings                                               |
|-----|-------------|--------------------------------------------------------|
| 1   | PLC1        | Series=JW-31x, IP Address=192.168.0.001, Port No.=1024 |

| Setup Items  | Setup Description                                                                                                                            |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Port No.     | Use an integer from "1024 to 65535" to enter the port No. of the Display. If you check [Auto], the port No. will be automatically set.       |
| Timeout      | Use an integer from "1 to 127" to enter the time (s) for which the Display waits for the response from the 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, click  ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

When connecting multiple External Devices, you can click  from [Device-Specific Settings] of [Device/PLC Settings] to add the External Device which is available to set.



| Setup Items | Setup Description                                                                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series      | Select a model of the External Device.                                                                                                                         |
| IP Address  | Set the IP address of the External Device.<br><b>MEMO</b><br>Check with the network administrator about the IP address. Be sure not to duplicate IP addresses. |
| Port No.    | Use an integer from "1024 to 65535" to enter the port No. of the External Device.                                                                              |

## 4.2 Settings in Off-Line Mode

**MEMO**

- Please refer to Maintenance/Troubleshooting for more information on how to enter off-line mode or about operation.

Cf. Maintenance/Troubleshooting "2.2 Offline Mode"

### ■ Communication Settings

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Equipment Settings] in the off-line mode. Touch the External Device you want to set from the displayed list.

| Comm.                                                                                                               | Device |      |  |                        |
|---------------------------------------------------------------------------------------------------------------------|--------|------|--|------------------------|
| JW Series Computer Link Ethernet [UDP] Page 1/1                                                                     |        |      |  |                        |
| Port No. <input type="radio"/> Fixed <input checked="" type="radio"/> Auto<br><input type="text" value="1024"/> ▼ ▲ |        |      |  |                        |
| Timeout(s) <input type="text" value="3"/> ▼ ▲                                                                       |        |      |  |                        |
| Retry <input type="text" value="2"/> ▼ ▲                                                                            |        |      |  |                        |
| Wait To Send(ms) <input type="text" value="0"/> ▼ ▲                                                                 |        |      |  |                        |
| Exit                                                                                                                |        | Back |  | 2006/09/12<br>16:22:24 |

| Setup Items  | Setup Description                                                                                                                                                                                                                                                        |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port No.     | Set the Port No. of the Display.<br>Select either "Fixed" or "Auto". If you select [Fixed], use an integer from "1024 to 65535" to enter the port No. of the Display. If 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 the Display waits for the response from the 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 Equipment Settings]. Touch the External Device you want to set from the displayed list, and touch [Device Settings].


|                                                 |        |             |  |                        |
|-------------------------------------------------|--------|-------------|--|------------------------|
| Comm.                                           | Device |             |  |                        |
| JW Series Computer Link Ethernet [UDP] Page 1/1 |        |             |  |                        |
| Device/PLC Name                                 |        | PLC1 ▼      |  |                        |
| Series                                          |        | JW-31x      |  |                        |
| IP Address                                      |        | 192 168 0 1 |  |                        |
| Port No.                                        |        | 1024 ▼ ▲    |  |                        |
| Exit                                            |        | Back        |  | 2006/09/12<br>16:22:48 |












| Setup Items     | Setup Description                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Device/PLC Name | Select the External Device to set. Device name is a title of the External Device set with GP-Pro EX. (Initial value[PLC1])                                     |
| Series          | Displays a model of the External Device.                                                                                                                       |
| IP Address      | Set the IP address of the External Device.<br><b>MEMO</b><br>Check with the network administrator about the IP address. Be sure not to duplicate IP addresses. |
| Port No.        | Use an integer from "1024 to 65535" to enter the port No. of the External Device.                                                                              |

## 5 Supported Device

Range of supported device address is shown in the table below.

### 5.1 JW-31x Series

 : This address can be specified as system data area.

| Device                                               | Bit Address     | Word Address      | 32 bit                                                                                | Remarks                                                                                                                                                                        |
|------------------------------------------------------|-----------------|-------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relay                                                | 000000 - 075777 | A00000 - A07576   |  |                                                                                             |
| Timer (Contact)                                      | T00000 - T01777 | -                 |                                                                                       |                                                                                                                                                                                |
| Counter (Contact)                                    | C00000 - C01777 | -                 |                                                                                       |                                                                                                                                                                                |
| Timer/Counter (Current Value)                        | -               | B00000 - B03776   |                                                                                       |                                                                                             |
| Timer/Counter (Current Value)                        | -               | TC00000 - TC01777 |                                                                                       |                                                                                                                                                                                |
| Register<br>(09, 19, 29, 39, 49, 59, 69, 79, 89, 99) | -               | 09000 - 09776     |                                                                                       | <br>     |
|                                                      | -               | 19000 - 19776     |                                                                                       |                                                                                                                                                                                |
|                                                      | ...             | ...               |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | 89000 - 89776     |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | 99000 - 99776     |                                                                                       |                                                                                                                                                                                |
| Register<br>(E0, E1, E2, E3, E4, E5, E6, E7)         | -               | E0000 - E0776     |                                                                                       | <br> |
|                                                      | -               | E1000 - E1776     |                                                                                       |                                                                                                                                                                                |
|                                                      | ...             | ...               |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | E6000 - E6776     |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | E7000 - E7776     |                                                                                       |                                                                                                                                                                                |
| Register<br>(109 to 389)                             | -               | 109000 - 109776   |                                                                                       | <br> |
|                                                      | -               | 119000 - 119776   |                                                                                       |                                                                                                                                                                                |
|                                                      | ...             | ...               |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | 379000 - 379776   |                                                                                       |                                                                                                                                                                                |
|                                                      | -               | 389000 - 389776   |                                                                                       |                                                                                                                                                                                |
| Register Z                                           | -               | Z000 - Z377       |                                                                                       |                                                                                           |
| File Register                                        | -               | -                 |                                                                                       |                                                                                                                                                                                |
| System Memory (#)                                    | -               | SYS0000 - SYS2776 |                                                                                       | <br>*1                                                                                    |


\*1 Write disable

**MEMO**

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


Cf. GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"














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

 "Manual Symbols and Terminology"

---

## 5.2 JW-32x Series

 : This address can be specified as system data area.

| Device                                               | Bit Address     | Word Address            | 32 bit                                                                              | Remarks                                                                                                                                                                        |
|------------------------------------------------------|-----------------|-------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relay                                                | 000000 - 153777 | A00000 - A15376         |  |                                                                                             |
| Timer (Contact)                                      | T00000 - T03777 | -                       |                                                                                     |                                                                                                                                                                                |
| Counter (Contact)                                    | C00000 - C03777 | -                       |                                                                                     |                                                                                                                                                                                |
| Timer/Counter (Current Value)                        | -               | B00000 - B07776         |                                                                                     |                                                                                             |
| Timer/Counter (Current Value)                        | -               | TC00000 - TC03777       |                                                                                     |                                                                                                                                                                                |
| Register<br>(09, 19, 29, 39, 49, 59, 69, 79, 89, 99) | -               | 09000 - 09776           |                                                                                     | <br>     |
|                                                      | -               | 19000 - 19776           |                                                                                     |                                                                                                                                                                                |
|                                                      | ...             | ...                     |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | 89000 - 89776           |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | 99000 - 99776           |                                                                                     |                                                                                                                                                                                |
| Register<br>(E0, E1, E2, E3, E4, E5, E6, E7)         | -               | E0000 - E0776           |                                                                                     | <br>   |
|                                                      | -               | E1000 - E1776           |                                                                                     |                                                                                                                                                                                |
|                                                      | ...             | ...                     |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | E6000 - E6776           |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | E7000 - E7776           |                                                                                     |                                                                                                                                                                                |
| Register<br>(109 to 389)                             | -               | 109000 - 109776         |                                                                                     | <br> |
|                                                      | -               | 119000 - 119776         |                                                                                     |                                                                                                                                                                                |
|                                                      | ...             | ...                     |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | 379000 - 379776         |                                                                                     |                                                                                                                                                                                |
|                                                      | -               | 389000 - 389776         |                                                                                     |                                                                                                                                                                                |
| Register Z                                           | -               | Z000 - Z377             |                                                                                     |                                                                                           |
| File Register                                        | -               | 1-00000000 - 1-00077776 |                                                                                     | <br> |
| System Memory (#)                                    | -               | SYS0000 - SYS2776       |                                                                                     | <br>*1                                                                                    |

\*1 Write disable




**MEMO**

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


Cf. GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"




















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

 "Manual Symbols and Terminology"

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## 5.3 JW-33x/34x/35x/36x Series

 : This address can be specified as system data area.

| Device                                               | Bit Address     | Word Address            | 32 bit                                                                                | Remarks                                                                                                                                                                                         |
|------------------------------------------------------|-----------------|-------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relay                                                | 000000 - 543777 | A00000 - A54376         |  |                                                                                                              |
| Timer (Contact)                                      | T00000 - T17777 | -                       |                                                                                       |                                                                                                                                                                                                 |
| Counter (Contact)                                    | C00000 - C17777 | -                       |                                                                                       |                                                                                                                                                                                                 |
| Timer/Counter (Current Value)                        | -               | B00000 - B37776         |                                                                                       |                                                                                                              |
| Timer/Counter (Current Value)                        | -               | TC00000 - TC17777       |                                                                                       |                                                                                                                                                                                                 |
| Register<br>(09, 19, 29, 39, 49, 59, 69, 79, 89, 99) | -               | 09000 - 09776           |                                                                                       | <br>                      |
|                                                      | -               | 19000 - 19776           |                                                                                       |                                                                                                                                                                                                 |
|                                                      | ...             | ...                     |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | 89000 - 89776           |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | 99000 - 99776           |                                                                                       |                                                                                                                                                                                                 |
| Register<br>(E0, E1, E2, E3, E4, E5, E6, E7)         | -               | E0000 - E0776           |                                                                                       | <br>                    |
|                                                      | -               | E1000 - E1776           |                                                                                       |                                                                                                                                                                                                 |
|                                                      | ...             | ...                     |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | E6000 - E6776           |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | E7000 - E7776           |                                                                                       |                                                                                                                                                                                                 |
| Register<br>(109 to 389)                             | -               | 109000 - 109776         |                                                                                       | <br>                  |
|                                                      | -               | 119000 - 119776         |                                                                                       |                                                                                                                                                                                                 |
|                                                      | ...             | ...                     |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | 379000 - 379776         |                                                                                       |                                                                                                                                                                                                 |
|                                                      | -               | 389000 - 389776         |                                                                                       |                                                                                                                                                                                                 |
| Register Z                                           | -               | Z000 - Z377             |                                                                                       |                                                                                                            |
| File Register                                        | -               | 1-00000000 - 1-00377776 |                                                                                       | JW-33x Series<br><br> |
|                                                      | -               | 1-00000000 - 1-01777776 |                                                                                       | JW-34x Series<br><br> |
|                                                      | -               | 1-00000000 - 1-07777776 |                                                                                       | JW-35x Series<br><br> |
|                                                      | -               | 1-00000000 - 1-37777776 |                                                                                       | JW-36x Series<br><br> |
| System Memory (#)                                    | -               | SYS0000 - SYS2776       |                                                                                       | <br>*1                                                                                                     |


\*1 Write disable

**MEMO**

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

Cf. GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"

- Please 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.

| Device                        | Device Name | Device Code (HEX) | Address Code                       |
|-------------------------------|-------------|-------------------|------------------------------------|
| Relay                         | A           | 0080              | Value of word address divided by 2 |
| Timer/Counter (Current Value) | B           | 0061              | Value of word address divided by 2 |
| Timer/Counter (Current Value) | TC          | 0060              | Word Address                       |
| Register (09)                 | 09          | 0000              | Value of word address divided by 2 |
| Register (19)                 | 19          | 0001              | Value of word address divided by 2 |
| Register (29)                 | 29          | 0002              | Value of word address divided by 2 |
| Register (39)                 | 39          | 0003              | Value of word address divided by 2 |
| Register (49)                 | 49          | 0004              | Value of word address divided by 2 |
| Register (59)                 | 59          | 0005              | Value of word address divided by 2 |
| Register (69)                 | 69          | 0006              | Value of word address divided by 2 |
| Register (79)                 | 79          | 0007              | Value of word address divided by 2 |
| Register (89)                 | 89          | 0008              | Value of word address divided by 2 |
| Register (99)                 | 99          | 0009              | Value of word address divided by 2 |
| Register (E0)                 | E0          | 000a              | Value of word address divided by 2 |
| Register (E1)                 | E1          | 000b              | Value of word address divided by 2 |
| Register (E2)                 | E2          | 000c              | Value of word address divided by 2 |
| Register (E3)                 | E3          | 000d              | Value of word address divided by 2 |
| Register (E4)                 | E4          | 000e              | Value of word address divided by 2 |

| Device         | Device Name | Device Code (HEX) | Address Code                       |
|----------------|-------------|-------------------|------------------------------------|
| Register (E5)  | E5          | 000f              | Value of word address divided by 2 |
| Register (E6)  | E6          | 0010              | Value of word address divided by 2 |
| Register (E7)  | E7          | 0011              | Value of word address divided by 2 |
| Register (109) | 109         | 0040              | Value of word address divided by 2 |
| Register (119) | 119         | 0041              | Value of word address divided by 2 |
| Register (129) | 129         | 0042              | Value of word address divided by 2 |
| Register (139) | 139         | 0043              | Value of word address divided by 2 |
| Register (149) | 149         | 0044              | Value of word address divided by 2 |
| Register (159) | 159         | 0045              | Value of word address divided by 2 |
| Register (169) | 169         | 0046              | Value of word address divided by 2 |
| Register (179) | 179         | 0047              | Value of word address divided by 2 |
| Register (189) | 189         | 0048              | Value of word address divided by 2 |
| Register (199) | 199         | 0049              | Value of word address divided by 2 |
| Register (209) | 209         | 004a              | Value of word address divided by 2 |
| Register (219) | 219         | 004b              | Value of word address divided by 2 |
| Register (229) | 229         | 004c              | Value of word address divided by 2 |
| Register (239) | 239         | 004d              | Value of word address divided by 2 |
| Register (249) | 249         | 004e              | Value of word address divided by 2 |
| Register (259) | 259         | 004f              | Value of word address divided by 2 |
| Register (269) | 269         | 0050              | Value of word address divided by 2 |

| Device            | Device Name | Device Code (HEX) | Address Code                       |
|-------------------|-------------|-------------------|------------------------------------|
| Register (279)    | 279         | 0051              | Value of word address divided by 2 |
| Register (289)    | 289         | 0052              | Value of word address divided by 2 |
| Register (299)    | 299         | 0053              | Value of word address divided by 2 |
| Register (309)    | 309         | 0054              | Value of word address divided by 2 |
| Register (319)    | 319         | 0055              | Value of word address divided by 2 |
| Register (329)    | 329         | 0056              | Value of word address divided by 2 |
| Register (339)    | 339         | 0057              | Value of word address divided by 2 |
| Register (349)    | 349         | 0058              | Value of word address divided by 2 |
| Register (359)    | 359         | 0059              | Value of word address divided by 2 |
| Register (369)    | 369         | 005a              | Value of word address divided by 2 |
| Register (379)    | 379         | 005b              | Value of word address divided by 2 |
| Register (389)    | 389         | 005c              | Value of word address divided by 2 |
| Register Z        | Z           | 0037              | Word Address                       |
| File Register     | 1-          | 0039              | Value of word address divided by 2 |
| System Memory (#) | SYS         | 0062              | Value of word address divided by 2 |

## 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> <div style="border: 1px solid black; padding: 2px; width: fit-content;">MEMO</div> <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])"

**MEMO**

- Please refer to the manual of the External Device for more detail of received error codes.
- Please refer to "If the error is displayed (Error Code List)" in "Maintenance/Troubleshooting Guide" for more detail of the error messages common to the driver.

