# 5 Start to Finish

This chapter covers the basics of GP-Pro EX from start to finish, including basic operations such as file management, project file backups, and address block conversion. Start with "5.1 Settings Menu" (page 5-2), and then turn to the corresponding page.

| 5.1  | Settings Menu   | 5-2   |
|------|---|-------|
| 5.2  | Starting/Creating/Saving/Finishing                        | 5-7   |
| 5.3  | Backing Up a Project File                                 | 5-20  |
| 5.4  | Entering a Password in a Project File                     | 5-25  |
| 5.5  | Confirming the Address List Used in a Project File        | 5-29  |
| 5.6  | Converting Multiple Addresses                             | 5-37  |
| 5.7  | Viewing Project Information                               | 5-41  |
| 5.8  | Copying a Screen from Another Project                     | 5-45  |
| 5.9  | Registering Addresses with Comprehensive Names            | 5-49  |
| 5.10 | Using Headers and Footers on a Screen                     | 5-57  |
| 5.11 | Changing the Screen Number/Title/Screen Color             | 5-63  |
| 5.12 | Copying/Deleting a Screen                                 | 5-66  |
| 5.13 | Searching/Replacing Parts Addresses, Labels, and Comments | 5-71  |
| 5.14 | Settings Guide  | 5-75  |
| 5.15 | Restrictions  | 5-164 |

# 5.1 Settings Menu











# 5.2 Starting/Creating/Saving/Finishing

#### 5.2.1 Introduction

This section explains the work flow from starting GP-Pro EX to creating, saving, and editing project files.



#### **Project File**

A file created in GP-Pro EX is called a "Project File".

A project file (\*.prx) contains the project screens, settings and functions for the display unit. Once you transfer a project file to a display, the display communicates with the device/PLC so that you can display and operate on the file.



#### 5.2.2 Setup Procedure

```
NOTE
```

• Refer to the settings guide for details.

"5.14.2 [New] Settings Guide" (page 5-78)

"5.14.6 [System Settings] Setting Guide" (page 5-111)



#### Starting

1 Double-click the shortcut GP-Pro EX on the desktop screen or from the [Start] menu, point to [Programs], then [Pro-face], then [GP-Pro EX] and select [GP-Pro EX].

|     |         |            | Ē. | Pro-face                  | • | 👼 GP-Pro EX 1.10 Beta 🔸 | ( <del>]</del> | Manual (Help) 🔹 🕨 |
|-----|---------|------------|----|---------------------------|---|-------------------------|----------------|-------------------|
|     |         |            | (  | Accessories               | ۲ |                         | ő              | GP-Pro EX         |
|     |         |            | e  | Startup                   | ۲ |                         |                | Readme            |
|     |         |            | C  | Internet Explorer         |   |                         | G              | Project Converter |
|     |         |            | Ę, | Outlook Express           |   |                         | ្ឋើ            | TransferTool      |
|     |         |            |    | Adobe                     | × |                         | 6              | Uninstall         |
|     | <b></b> | Pro estato |    | PrintMe Internet Printing | × |                         |                |                   |
| Ë   | 1 525   | Programs   |    | Adobe Reader 6.0          |   |                         |                |                   |
| l S |         | Documents  | •  |                           |   |                         |                |                   |
| ofe | -       | Settings   | •  |                           |   |                         |                |                   |
| 8   |         | Search     | •  |                           |   |                         |                |                   |
| Ř   | 2       | Help       |    |                           |   |                         |                |                   |

**2** GP-Pro EX opens and the screen appears as below.



**3** The [Welcome to GP-Pro EX] dialog box appears. Select [Create new project] and click [OK].



|      | • To create a new project, from the [Project (F)] menu, select [New (N)]. You |
|------|---|
| NOTE | can also click the 🗋, to create a new project. The [New Project File] dialog  |
|      | box appears.  |

4 The following dialog box appears. In the [Series] drop-down list, select the appropriate GP series. In the [Model] drop-down list, select the appropriate model. In the [Orientation] drop-down list, select the method to use. Click [Next (N)].
<sup>(3)</sup> 3 Supported Model List" (page 3-7).





# • [Specifications] shows the detailed specifications of the selected display model.

- If you select [GP2000 Series], GP-Pro EX exits and GP-PRO/ PB III for Windows starts. If GP-PRO/PB III for Windows is not installed, the application cannot start and you will return to GP-Pro EX.
- If you select [IPC Series], no [Orientation] settings are necessary. Specify the display size for the screen data in [Screen Size].
- 5 The following dialog box appears. In the [Maker] drop-down list, select the manufacturer of the PLC. In the [Series] drop-down list, select the appropriate series. In the [Port] drop-down list, select the port to connect through. Click [Communication Settings].

| 💰 New Project File |  | ×  |
|--------------------|--|--|
| GZ-ZCO             | Device/PLC   |  |
|                    | Maker Mitsubishi Electric Corpora                        | ation  |
|                    | Series Q/QnA Serial Communicat                           | ion 🗾  |
|                    | Recent Device/PLC  | ention LT Deiver                                   |
|                    | Digital Electronics Corpor<br>Digital Electronics Corpor | ration <u>ET Driver</u><br>ration General Ethernet |
|                    | Digital Electronics Corpor                               | ration Memory Link                                 |
|                    | 🗖 Use System Area  | Refer to the manual of this Device/PLC             |
|                    | Connection Method  |  |
|                    | Port COM1 💽  |  |
|                    |  | Go to Device/PLC Manual                            |
|                    | _  |  |
|                    |  |  |
|                    |  |  |
| Back (             | Communication Settings                                   | ew Logic New Screen Cancel                         |

NOTE

• To create a screen without configuring communication settings for the device/PLC series, click [New Screen] to display the drawing screen [Base 1].

To create a logic program, click [New Logic] to display the new logic screen [MAIN].

<sup>CP</sup> "Chapter 29 Logic Programming" (page 29-1)

- If you specify [Use System Area], you can assign the GP internal system data area to the device/PLC.
  - <sup>™</sup> System Area Settings" (page 5-135)

6 When the [New Project File] dialog box closes and the [Peripheral List] appears in the main window, click [Device/PLC1].

|   | Display Unit    |   |  |
|---|-----------------|---|--|
|   | Series          | GP3000 Series                           |  |
|   | Model           | AGP-3500T                               |  |
|   | Orientation     | Landscape                               |  |
|   | Peripheral List | List of Device/PLC Management Addresses |  |
| ( | Device/PLC1     |   |  |
| 1 | maker : Mits    | ubishi Electric Corporation Port: COM1  |  |
|   | Series :Q/0     | InA Serial Communication V1.10.02       |  |
|   | <u>Printer</u>  |   |  |
|   | Type :Disa      | able                                    |  |
|   | Bar code 1      |   |  |
|   | Type :Disa      | able                                    |  |
|   | Bar code 2      |   |  |
|   | Type :Disa      | able                                    |  |
|   | Remote PC Acce  | ss Input                                |  |
|   | Type :Disa      | able                                    |  |
|   | Script1         |   |  |
|   | Type :Dis       | able                                    |  |
|   | Code 10         |   |  |
|   | <u>SCIIPt2</u>  | -bla                                    |  |
|   | Type Disc       | anic                                    |  |
|   | <u>VM Unit</u>  |   |  |
|   | Touch Output    | :None                                   |  |
|   |                 |   |  |

7 When [Device/PLC] is displayed, specify the communication settings.

| Sum  | mary  |  |   |                |                       |           | Change Device/PLC                |     |
|------|---|--|---|----------------|-----------------------|-----------|----------------------------------|-----|
|      | Maker Mitsubishi  | Electric Corporation   | n Series                                  | Q/Qn∆          | Serial Communication  |           | Port COM1                        |     |
|      | Text Data Mode  | 2 <u>Change</u>  |   |                |                       |           |                                  |     |
| Com  | munication Settings   |  |   |                |                       |           |                                  |     |
|      | SIO Type  | RS232C   | C RS422/485(2                             | ?wire)         | C RS422/485(4wir      | e)        |                                  |     |
|      | Speed   | 19200  | •   |                |                       |           |                                  |     |
|      | Data Length   | O 7  | <b>©</b> 8                                |                |                       |           |                                  |     |
|      | Parity  | C NONE   | C EVEN                                    | ۲              | ODD                   |           |                                  |     |
|      | Stop Bit  | € 1  | C 2                                       |                |                       |           |                                  |     |
|      | Flow Control  | C NONE   | • ER(DTR/CTS                              | 5) C           | XON/XOFF              |           |                                  |     |
|      | Timeout   | 3 📫 (s   | ec)                                       |                |                       |           |                                  |     |
|      | Retry   | 2 🔅  |   |                |                       |           |                                  |     |
|      | Wait To Send  | 0 🕂 (n   | ns)                                       |                |                       |           |                                  |     |
|      | RI / VCC  |  | O VCC                                     |                |                       |           |                                  |     |
|      | In the case of RS23<br>or VCC (5V Power 9<br>Isolation Unit, please | 2C, you can select<br>Supply). If you use<br>a select it to VCC. | t the 9th pin to RI<br>the Digital's RS23 | (Input)<br>32C | Defa                  | iult      |                                  |     |
| Devi | ce-Specific Settings  |  |   |                |                       |           |                                  |     |
|      | Allowable Number of D   | )evices/PLCs   | 16 📷                                      |                |                       |           |                                  |     |
|      | Number Device Na  | me   | Settings                                  | - No =01       | Jetwork No =0 PC No = | :255 Beg  | uest destination module I/O No = |     |
|      | <b>m</b> . h.con  |  | Ref Jorgan                                | 11100,1        |                       | -200,1100 | dov dovination module i/ 0 mo    |     |
|      |   |  |   |                |                       |           |                                  |     |
|      | • The [0  | Communi  | cation Set                                | tting          | s] details dif        | fer d     | epending on the devi             | ce/ |
|      |   |  |   | 0              | -                     |           |                                  |     |

It is recommended to keep the initial settings for [Timeout], [Retry], and [Wait to Send].

#### Creating/Saving

1 Open the Screen List window and double-click the base screen.

| Screen List       |         | 4 X        |
|-------------------|---------|------------|
| Screens of Type   | sil     | •          |
| Search method     | ïtle    | •          |
| Refine Search     |         | Search     |
| 🔁 🚭 🕮 🗙   🚆       | l 💋 💺   |            |
| 😳 Base Screens    |         |            |
|                   | 0001    | (Untitled) |
| Sy Windon Ocreans |         |            |
| 🚱 Logics          |         |            |
|                   | INIT    | (Untitled) |
|                   | MAIN    | (Untitled) |
| §% I∕O            |         |            |
|                   |         |            |
|                   |         |            |
|                   |         |            |
|                   |         |            |
|                   |         |            |
|                   |         |            |
|                   |         |            |
| 📲 Əys I 🇱 Ad I 🔍  | bea   🔛 | o 🛗 Ser    |

#### NOTE

- If the [Screen List] window is not open, from the [View (V)] menu, point to [Work Space (W)] and select [Screen List (G)].
- To create a logic program, double-click the logic screen currently displayed. If you select a model that does not support the logic features, you can create the logic program but the program will not run on the display. \*\* "Chapter 29 Logic Programming" (page 29-1)
- 2 The following [Base Screen] appears.



#### 3 Create a screen.

| Screen List 🛛 📮 🗙    | 🛄 Base 1 (Untitled) 🗙 🖉 🖉              |
|----------------------|--|
| Screens of Type All  | ···· • • • • • • • • • • • • • • • • • |
| Search method Title  |  |
| Refine Search Search |  |
| 🖆 🕘 🏨 🗙  🗮 🎒 🍇       |  |
| 🚱 Base Screens       |  |
|                      |  |
|                      |  |
| 🐝 Window Screens     |  |
| 🚱 Logics             |  |
| - INIT               |  |
| INIT (Untitled)      |  |
| MAIN                 |  |
| MAIN (Untitled)      |  |
| s 1/0                |  |
| Ğ                    |  |
|                      |  |
|                      |  |
|                      |  |
|                      |  |
| ۱. F                 |  |

4 Add a new screen.

From the [Screen (S)] menu, select [New Screen (N)] or click  $\Box$ . The [New Screen] dialog box appears. Select a [Screens of Type], specify the screen number in [Screen] and [Title], and click [New].

| 💰 New Screen                                |                             | X |
|---|-----------------------------|---|
| Screens of Type                             | Base                        |   |
| Screen                                      | 2 🗄 🏢                       |   |
| Title                                       | Untitled                    |   |
| Use Template                                |                             |   |
| <u>Select Templa</u><br><u>Recently Use</u> | ate from List<br>d Template | _ |
|   | New Cancel                  |   |

5 The [Base 2] screen appears. Create a screen.



NOTE

You can check the display state of the screen, even during drawing mode, by clicking the Preview icon 🔊 on the State toolbar. Colors display using the display unit color settings. You can preview the Base and Window screens only. From the [View (V)] menu, point to [Workspace (W)] and select [Properties (P)] to check simple operation changes such as the displaying or hiding of Window parts, changing the state of Switch Lamps, and displaying values in Data Displays.



You can save the displayed preview screen to a JPEG file by selecting from the [Screen Capture (C)] menu [Export to File (F)].

To exit the preview, click the [Edit] icon 2 on the State tool bar which returns you to the screen editor.

6 From the [Project (F)] menu select [Save as (A)] or click the Save icon



7 The [Save As] dialog box appears. Set the file storage location and file name and click [Save].

|      | Save As  |
|------|--|
|      | Save jn: 🔄 Database 🖉 🗲 🖻 📸 🖬 -  |
|      | Wy Desktop         My Documents         My Documents         My Computer         Save         Save as type:         Project File (*.prx)         Cancel  |
|      | Title  |
|      |  |
|      |  |
| NOTE | <ul> <li>Your file name can contain up to 255 characters, including the file extension.<br/>The default location is \Program Files\Pro-face\GP-Pro EX\ Database.</li> <li>The following error message is displayed in the [Error Check] window if there is a problem saving the file.</li> </ul> |
|      | "33.9 Checking Errors" (page 33-54)  |
|      | Error Check  |
|      | 🖤 🛱 ᄛ 📧 🛛 😝 Even if you save this data, you can't transfer it to the main unit.  |
|      | Level Error Numbe Screen-Location Summary  |
|      | Error 1000 Peripheral Setting Ports settings are duplicated. Check the Peripheral List.  |

### Modifying

1 From the [Project (F)] menu, select [Open (O)] or click the Open icon 🝺.



2 When the [Open File] dialog box appears, specify the location the file is saved in. Select the project file (\*.prx) you wish to open and click [Open].

| Open File  |                  |                      |           | <u>? ×</u> |
|--|------------------|----------------------|-----------|------------|
| Look in:   | 🔁 Database       |                      | + 🛍 📥 🖬 + |            |
| History<br>History<br>Desktop<br>My Documents<br>My Computer | Jest pro         |                      |           |            |
|  | File name:       | l.                   | -         | Open       |
| My Network P   | Files of type:   | Project File (*.prx) |           | Cancel     |
|  | Title<br>Display |                      |           |            |

**3** The project file main window opens.

| Course Link           |       |            |
|-----------------------|-------|------------|
| Screen List           |       | 4 X        |
| Screens of Type All   |       | •          |
| Search Method         | le .  |            |
|                       |       |            |
| Refine Search         |       | Search     |
| 🔁 🛃 🏨 🗙   💂           | 🛃 💺   |            |
| Base Screens          |       |            |
|                       |       |            |
| 9                     | 0001  | (Untitled) |
|                       |       |            |
|                       | 0002  | (Untitled) |
| 3) Mar 1 - C          |       |            |
| Window Screens        |       |            |
|                       |       |            |
| <u>₩</u>              | INIT  | (Untitled) |
| 40-                   |       |            |
|                       | MAIN  | (Untitled) |
|                       |       |            |
| si 1/0                |       |            |
|                       |       |            |
| 4                     |       |            |
| 📬 Suste 🚟 Addre       | C Com |            |
| And obere 1000 - 1000 | - Com |            |
| L                     | • `   | You can    |
| NOTE                  |       | the manage |
|                       | (     | *.prx).    |
|                       | • }   | You can    |

4 From the [Screen List] window, select the Base Screen you want to modify. The screen appears in the editing area.



NOTE

• From the [Screen List] window, select the logic screen you want to modify. The screen appears in the editing area. 5 Modify the screen.



6 To save the changes, from the [Project (F)] menu, select [Save (S)] or click the Save icon [].



#### Finishing

1 To close the project, from the [Project (F)] menu, select [Exit (X)] or click the 🗙 icon in the top right corner.



**2** If you change a project file and try to exit the application without saving it, the [Confirm Project File Save] dialog box appears.

| 💰 Confirr | n Project File Save  | × |
|-----------|--|---|
| ?         | test.prx has been updated and needs to be saved. Continue? |   |
|           | Yes (Y) No (N) Cancel                                      |   |

If you click [Yes (Y)], the project is saved in the current state and closed.

If you click [No (N)], the project closes with the last saved information.

If you click [Cancel], the project returns to the state before the operation without being closed.

# 5.3 Backing Up a Project File

#### 5.3.1 Introduction



To protect against loss of work, you can create a backup file (\*.bak) for your project. To recover the project file, change the .bak file extension to .prx.



#### 5.3.2 Setup Procedure

#### ■ Backup as a History Procedure





1 From the [View (V)] menu, select [Preferences (O)]. The [Preferences] dialog box appears. Select the [Save Backup on Overwriting an Existing Project File] check box.

| General                     | General Settings for the Editor                     |
|-----------------------------|---|
| Screen Edit Style<br>Script | Set Online Update                                   |
| Toolbar<br>Logic Edit Style | Check for Update when the program starts            |
| Monitor Step                | Set Editor Language                                 |
| Endroneok                   | Language English                                    |
|                             | Backup  |
|                             | Save Backup on Overwriting an Existing Project File |
|                             | Ealtor Memory Condition                             |
|                             | 🔽 Enable  |
|                             |   |
|                             |   |
|                             |   |
|                             |   |
|                             |   |
|                             |   |
|                             |   |
|                             | OK ( <u>O</u> ) Cancel                              |

NOTE

A backup file is saved as "Original Project File Name.bak". A backup file is saved in the same location where the original file exists.

#### Back Up on Abnormal Termination and File Startup

When the program closes improperly, a backup file is created in the "backup" folder. When you reopen GP-Pro EX, the following dialog box appears.

| 💰 Welcome to GP-Pro EX |  | ×                          |
|------------------------|--|----------------------------|
| GP-Pro                 | A file auto-saved before the abnormal    | termination was found.     |
|                        | Please select it from the list and execu | te Edit/Delete.            |
|                        | File Name                                | Save Date                  |
|                        | C:¥Program Files¥Pro-face¥GP-Pro EX¥     | Databa 2006/04/26 11:47:16 |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        | Restore                                  | Delete                     |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  |                            |
|                        |  | Next (N)                   |
|                        |  |                            |

#### ♦ What to do if the program closes improperly

1 Select the file you want to fix. Select the [Restore] check box and click [Next].

| 💰 Welcome to GP-Pro EX |   | ×              |
|------------------------|---|----------------|
| GP-Pro                 | A file auto-saved before the abnormal termination was found.    |                |
|                        | Please select it from the list and execute Edit/Delete.         |                |
|                        | File Name Save (  | <del>dio</del> |
|                        | C:¥Program Files¥Pro-face¥GP-Pro EX¥Databas 2006/04/26 11:47:16 |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        | Restore   | Delete         |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   |                |
|                        |   | Next (N)       |
|                        |   |                |

2 The file is fixed and opened as an "Auto-saved file". After startup, files in the backup folder are automatically deleted.



**3** From the [Project (F)] menu select [Save as (A)] to save the file in the defined location and with the defined file name.

#### Starting GP-Pro EX without Fixing the Project File

1 Select the file that does not need to be fixed and click [Delete]. The file automatically saved in the "backup" folder is deleted.

| 💰 Welcome to GP-Pro EX |  | ×             |  |
|------------------------|--|---------------|--|
| GP-Pro                 | A file auto-saved before the abnormal termination was found. |               |  |
|                        | Please select it from the list and execute Edit/             | Delete.       |  |
|                        | File Name  | Save Date     |  |
|                        |  |               |  |
|                        | Restore  | <u>Delete</u> |  |
|                        |  | Next (N)      |  |

2 Click [Next], and start a project file as usual. The project file opens in its most recently saved state.

| NOTE | • If you click [Next] without deleting and start GP- Pro EX normally, the next |
|------|--|
|      | time you start GP-Pro EX the dialog box will appear again.                     |

## 5.4 Entering a Password in a Project File

#### 5.4.1 Introduction



You can protect a project file by setting a password for the file editing or transfer. When you edit or transfer a project file, a dialog box that confirms the password appears. If you enter a password and it is confirmed, you can edit or transfer the project file.

| NOTE | • Be sure to remember your password in order to edit/transfer a project file. |
|------|---|
| NOTE | • For information on setting a transmission password, see:                    |
|      | "33.6 Transferring with Passwords" (page 33-31)                               |

#### 5.4.2 Setup Procedure

```
NOTE
```

Refer to the settings guide for details.
 <sup>C</sup> " ◆ Passwords" (page 5-86)

#### ■ Settings for an Edit Project File Password

When you open a project file, a dialog box to input a password appears.



1 From the [Project (F)] menu, point to [Information (I)] and select [Passwords (P)].



2 The [Project Information] dialog box appears with [Passwords] option displayed.

| File Information                             | Passwords  |
|--|--|
| Send Data                                    | Edit   |
| SRAM Information<br>Destination<br>Passwords | Edit Project File Set Password   |
| Logio Monory                                 | Send/Receive   |
|  | Send/Receive Project File Set Password                                     |
|  | To open, send and receive you will need this password.<br>Keep it at hand. |
|  | OK ( <u>Q</u> ) Cancel   |

**3** In the [Edit] section, click [Set Password]. The following dialog box appears:

| Set a Project File    | e Edit Management password.                  |
|-----------------------|--|
| Password              |  |
| Confirm               |  |
| Caution               |  |
| You will r            | need this password to open the Project File. |
| Keep you<br>location. | r password private and save it in a secure   |

4 Enter a password. The password can contain up to ten characters. Confirm the password.

| Set a Project File E | dit Management password. |
|----------------------|--------------------------|
| Password             | ****                     |
| Confirm              | *****                    |

**5** Click [OK] to complete the password settings.

| NOTE | • When opening a password-protected project file, the [Release Protection] dialog box appears. You must type the password to open and edit the project file.  |  |  |  |
|------|---|--|--|--|
|      | Protection Release - A manufacture syst       Image: Comparison of the system         PassWord       Image: Comparison of the system         This project file is protected.       Please enter the password.         OK (D)       Cancel |  |  |  |

#### ■ Changing the Project Password Settings

Use the [Project Information] dialog box to change or delete the password.

1 From the [Project (F)] menu, point to [Information (I)] and select [Passwords (P)]. The [Project Information] dialog box appears.

| 💰 Project Informa          | tion 👂   | < |
|----------------------------|--|---|
| File Information           | Passwords  |   |
| Send Data                  | Edit   |   |
| Destination<br>Destination | Edit Project File Set Password   |   |
| Logic Memory               | Send/Receive   |   |
|                            | Send/Receive Project File Set Password                                     |   |
|                            | To open, send and receive you will need this password.<br>Keep it at hand. |   |
| ,                          | OK (D) Cancel  |   |

2 In the Edit section, click [Set Password]. The following dialog box appears.

| Project File Transfer ManagementSet Password                    |  |  |  |  |
|---|--|--|--|--|
| Set a Project File Transfer Management password.                |  |  |  |  |
| Password  |  |  |  |  |
| Confirm   |  |  |  |  |
| Caution   |  |  |  |  |
| You will need this password to send/receive the Project File.   |  |  |  |  |
| Keep your password private and save it in a secure<br>location. |  |  |  |  |
| OK ( <u>O</u> ) Cancel  |  |  |  |  |

**3** Enter the currently set password.

| Set a Project File | Transfer Management password. |
|--------------------|-------------------------------|
| Password           | ****                          |

4 Enter the new password. The password can contain up to ten characters. Confirm the new password.

To delete the password, leave the fields blank and click [OK].

| Set a Project File Transfer Management password. |  |  |  |
|--|--|--|--|
| Password   |  |  |  |
| Confirm  |  |  |  |

# 5.5 Confirming the Address List Used in a Project File

#### 5.5.1 Introduction

You can check the addresses specified in a project file in the two following ways.

#### Map Format

| Madress | 4 X                          |                            |                  |          |         |                            |          |                          |           |
|---------|------------------------------|----------------------------|------------------|----------|---------|----------------------------|----------|--------------------------|-----------|
| O Devic | e Address 🔿 Symbol Variable  | List Format                |                  |          |         |                            |          |                          |           |
| Туре    | Bit Address                  |                            |                  |          |         |                            |          |                          |           |
| Address | [PLC1]M000018                | 💰 Cross Reference          |                  |          |         |                            |          |                          | ×         |
| м       | 2 3 4 5 6 7 8 9 101112131415 | Target                     | Devic            | e/PLC    | Туре    |                            |          | Address Black Conserving | 1         |
| 000016  |                              | All                        | PLC1             | •        | Bit Add | ress                       | <b>-</b> | Address block Conversion |           |
| 000032  |                              | Address                    | Screen           | Location |         |                            |          | Feature                  |           |
| 000064  |                              | [PLC1]M0012                | Base 1           | SL_0000  |         | Bit Address<br>Bit Address |          |                          |           |
| 000080  |                              | [PLC1]M0013                | Base 1           | SL_0001  |         | Bit Address<br>Bit Address |          |                          |           |
| 000030  |                              | [PLC1]M0014                | Base 1           | SL_0002  |         | Bit Address                |          |                          |           |
| 000128  |                              | [PLC1]M0035<br>[PLC1]M0036 | Base 2<br>Base 2 | SL_0001  |         |                            |          |                          |           |
| 000144  |                              | [PLC1]K00100               | Base 2           | SL_0000  |         |                            |          |                          |           |
| 000176  |                              |                            |                  |          |         |                            |          |                          |           |
| 000192  |                              |                            |                  |          |         |                            |          |                          |           |
| 000208  |                              |                            |                  |          |         |                            |          |                          |           |
| Feature | Location Screen              |                            |                  |          |         |                            |          |                          |           |
|         | SL_0000 // - X 2             |                            |                  |          |         |                            |          |                          | Close (C) |
|         |                              |                            |                  |          |         |                            |          |                          |           |
|         |                              |                            |                  |          |         |                            |          |                          |           |
| 🕅 Syst  | t 🗰 Addr 🔍 Sear 🕼 Com 🔡 Scre |                            |                  |          |         |                            |          |                          |           |

#### 5.5.2 Setup Procedure

```
NOTE
```

Refer to the settings guide for details.

 <sup>C</sup> " ■ Cross Reference" (page 5-93)

#### Viewing the List of Addresses

Displays a list of the addresses specified in a project file.

1 From the [Project (F)] menu, point to [Utility (T)] and select [Cross Reference (R)]. The [Cross Reference] dialog box appears.

| 💰 Cross Reference    |                  |          |      |                          |                          | ×         |
|----------------------|------------------|----------|------|--------------------------|--------------------------|-----------|
| Target               | Device/          | PLC      | Туре |                          | AU 01 10 1               | 1         |
| All                  | ▼ All            | •        | All  | <b>v</b>                 | Address Block Conversion |           |
| Address              | Screen           | Location | V    |                          | Feature                  | <b></b>   |
| #H_CurrentYear       | Logic System (Re | •        |      | •                        |                          |           |
| #H_CurrentMonth      | Logic System (Re | •        |      | •                        |                          |           |
| #H_CurrentDay        | Logic System (Re | •        |      | •                        |                          |           |
| #H_CurrentHour       | Logic System (Re | •        |      |                          |                          |           |
| #H_CurrentMinute     | Logic System (Re |          |      |                          |                          |           |
| #H_CurrentSecond     | Logic System (Re | •        |      |                          |                          |           |
| #H_CurrentDayofTheW/ | Logic System (Re | •        |      | -                        |                          |           |
| [PLC1]D00000         | Display Unit     |          |      | System Area Start Addres | \$\$                     |           |
| [PLC1]D00000         | Display Unit     |          |      | Watchdog Write Address   | 8                        |           |
| [#INTERNAL]LS0020    | Video Modules    | •        |      | Video Control Address    |                          |           |
| [#INTERNAL]LS0021    | Video Modules    |          |      | Video Control Address    |                          |           |
| [#INTERNAL]LS0022    | Video Modules    |          |      | Video Control Address    |                          |           |
| [#INTERNAL]LS0023    | Video Modules    |          |      | Video Control Address    |                          | •         |
|                      |                  |          |      |                          | Г                        | Close (C) |

2 Select the screen or setting to be displayed from [Target].

| 💰 Cross Reference 👘 👘 |       |  |  |  |
|-----------------------|-------|--|--|--|
| Target                |       |  |  |  |
|                       |       |  |  |  |
| Address               | S     |  |  |  |
| #H_CurrentYear        | Logic |  |  |  |

**3** Select the [Device/PLC] of the target to be displayed.

| Device/PLC |   |
|------------|---|
| PLC1       | - |

4 Select the [Type] of the address to be displayed.

| Туре        |   |
|-------------|---|
| Bit Address | • |

**5** The list of addresses in use is displayed.

NOTE

| 💰 Cross Reference |         |           | ×                        |
|-------------------|---------|-----------|--------------------------|
| Target<br>All     | Device. | /PLC Type | Address Block Conversion |
| Address           | Screen  | Location  | Feature                  |
| [PLC1]M0012       | Base 1  | SL_0000   | Bit Address              |
| [PLC1]M0011       | Base 1  | SL_0007   | Bit Address              |
| [PLC1]M0013       | Base 1  | SL_0001   | Bit Address              |
| [PLC1]M0014       | Base 1  | SL_0002   | Bit Address              |
| [PLC1]M0035       | Base 2  | SL_0001   |                          |
| [PLC1]M0036       | Base 2  | SL_0002   |                          |
| [PLC1]×00100      | Base 2  | SL_0000   |                          |
|                   |         |           |                          |
|                   |         |           |                          |
|                   |         |           |                          |
|                   |         |           |                          |

• To sort by descending or ascending order, click the Addresses header. The column is sorted alphanumerically.

| 💰 Cross Reference                       |        |
|---|--------|
| Target                                  |        |
| All                                     |        |
|   |        |
| Address                                 |        |
| [PLC1]DUUUUU                            | L      |
| [PLC1]D00000                            | F      |
| Address<br>[PLC1]D00000<br>[PLC1]D00000 | E<br>F |

- To convert the listed addresses as a block, click [Address Block Conversion]. (5.6 Converting Multiple Addresses" (page 5-37)
- If you specify [All] in the Cross Reference [Target] field, the address information may take longer to be displayed.
- You can open and edit the [Base Screen] and [Window Screen] by doubleclicking on the screen name.

#### Setting Procedure to View Addresses in the Address Map

• Refer to the settings guide for details. ☞ "■ Address Settings" (page 5-99)

Displays the list of the addresses specified in a project file with a map.

| Address         |                              | <b># x</b> |
|-----------------|------------------------------|------------|
| O Device        | e Address 🔿 Symbol Variable  |            |
| Type<br>Address | Bit Address<br>[PLC1]M000018 | -          |
| м               | 2 3 4 5 6 7 8 9 1011121314   | 15         |
| 000016          |                              |            |
| 000032          |                              |            |
| 000048          |                              |            |
| 000064          |                              |            |
| 000080          |                              |            |
| 000096          |                              |            |
| 000112          |                              |            |
| 000128          |                              |            |
| 000144          |                              |            |
| 000160          |                              |            |
| 000176          |                              |            |
| 000192          |                              |            |
| 000208          | •                            | Ì          |
| Feature         | Location Screen              |            |
|                 | SL_0000 ペース 2                |            |
|                 |                              |            |
|                 |                              |            |

#### 1 Click [Address] in the Work Space.



NOTE

• If the [Address] tab is not displayed in the Work Space, from the [View (V)] menu, point to [Work Space (W)] and select [Address (A)].

2 The following [Address] dialog box appears.

| Address | 7 🗙<br>e Address 🔿 Symbol Variable |
|---------|------------------------------------|
| Туре    | Bit Address                        |
| Address | [PLC1]X00000                       |
| Х       | 0 1 2 3 4 5 6 7 8 9 A B C D        |
| 00000   |                                    |
| 00010   |                                    |
| 00020   |                                    |
| 00030   |                                    |
| 00040   |                                    |
| 00050   |                                    |
| 00060   |                                    |
| 00070   |                                    |
| 00080   |                                    |
| 00090   |                                    |
| 000 A0  |                                    |
| 000B0   |                                    |
| 000C0   |                                    |
| Feature | Location Screen                    |
|         |                                    |
| Syst 🔊  | 🏭 A 🔍 Sear   🚺 Com   🔡 S           |

**3** Select the target to display from [Device Address] or [Symbol Variable].

|   | Address        |                   | - <b>#</b> > | ł |
|---|----------------|-------------------|--------------|---|
| ( | Oevice Address | C Symbol Variable |              |   |

4 In the [Type] drop-down list, select the address type from [Bit Address] or [Word Address].



5 Select the address of the target to display. (For example M010)



6 You can verify which addresses are used on the address map.



#### Changing Addresses Used in Screen Parts from the Address Map

1 Open the screen with the part whose address you want to change.



2 Click [Address] in the Work Space. Open the appropriate address [Type].



**3** Drag an address from the list onto the part in the screen. Do not release the mouse button. The [Feature List] dialog box is displayed. With the mouse button held down, select the appropriate row in this box.



4 Release the mouse button. The address is assigned to the part.


# 5.6 Converting Multiple Addresses

## 5.6.1 Introduction



You can convert addresses by specifying the start/end addresses before conversion and the start address after conversion.

You can convert multiple addresses at one time using two conversion methods. Use [Whole Project] to convert all the addresses in a project. Use [Individual Settings] to convert addresses on a target screen.

#### 5.6.2 Setup Procedure

```
NOTE
```

• Refer to the settings guide for details. <sup>(2)</sup> "■ Address Block Conversion" (page 5-90)

Converts the addresses set on the specified screens as a block.



You can convert addresses by specifying the start/end addresses before conversion and the start address after conversion.

1 From the [Project (F)] menu, point to [Utility (T)] and select [Convert Addresses (A)]. The [Address Block Conversion] dialog box appears.

| Addres                  | s Block Conversion 🗙                       |
|-------------------------|--|
| Target to               | be converted                               |
| Whole Pr                | roject <u>Individual Settings &gt;&gt;</u> |
| Address 7               | уре  |
| <ul> <li>Bit</li> </ul> | C Word                                     |
| Address E               | Before Conversion                          |
| Start                   | [PLC1]X00000                               |
| End                     | [PLC1]X00000                               |
| Address A               | After Conversion                           |
| Start                   | [PLC1]X00000                               |
|                         | Convert Close                              |

2 Click [Individual Settings] to display the setting items for each conversion target.

| 💰 Address Block Conversion          |                  |                       | ×               |
|-------------------------------------|------------------|-----------------------|-----------------|
| Target to be converted              | Screen Alarm Con | nmon                  |                 |
| Individual Settings K Whole Project | Screen           | <u>Current Screen</u> | All Screens     |
| Address Type                        | Base Screens     | End Screen            | 9999 🕂 📷        |
|                                     | Window Screens   |                       | ,               |
| Address Before Conversion           | Start Screen 1   | End Screen            | 2000 🚊 🏢        |
| Start [PLC1]X00000 📃                | Video Modules    |                       |                 |
| End [PLC1]X00000 🚾                  | Start Screen     | 🗄 🧾 End Screen        | р <u>12</u> 🗄 🏢 |
| Address After Conversion            | Header/Footer    |                       |                 |
| Start [PLC1]X00000                  | Cogics           |                       |                 |
|                                     |                  | Convert               | Close           |

3 Set the screen you want to convert and the screen number or features.

| 💰 Address Block Conversion  |                   |                  | ×           |
|---|-------------------|------------------|-------------|
| Target to be converted  | Screen Alarm Comm | non              |             |
| Individual Settings </th <th>Screen</th> <th>Current Screen</th> <th>All Screens</th> | Screen            | Current Screen   | All Screens |
| Address Type  | ▼ Base Screens    |                  |             |
|   | Start Screen 1    | End Screen       |             |
| ● Bit C Word  | Window Screens    |                  |             |
| Address Before Conversion   | Start Screen      | \Xi 🧾 End Screen | 2000 🛨 🏢    |
| Start [PLC1]X00000 🔤  | 🔲 Video Modules   |                  |             |
| End [[PLC1]X00000   | Start Screen      | 🗄 🧮 End Screen   | 512 🛨 🏢     |
|   | Header/Footer     |                  |             |
| Address After Conversion  |                   |                  |             |
| Start [PLC1]X00000 🚾  | Logics            |                  |             |
|   |                   |                  |             |
|   |                   | Convert          | Close       |
|   |                   |                  |             |

4 Select the [Address Type] from [Bit] or [Word].



5 In the [Address Before Conversion] section, set the [Start] and [End]. For example, the start address is M10 and the end address is M17.

| Address Before Conversion |               |  |  |
|---------------------------|---------------|--|--|
| Start                     | [PLC1]M000010 |  |  |
| End                       | [PLC1]M000017 |  |  |

NOTE

• You cannot specify addresses from different registers.

6 In the [Address After Conversion] section, set the [Start]. For example, the start address is M200.

| Address Before Conversion |               |  |  |
|---------------------------|---------------|--|--|
| Start                     | [PLC1]M000200 |  |  |

NOTE

7 Click [Convert]. A dialog box appears to confirm that the conversion is complete. Click [OK].

|                                | 💰 Addres | s Block Conversion                                   | ×                     |
|--------------------------------|----------|--|-----------------------|
|                                | •        | Address Block Conversion was completed successfully. |                       |
|                                |          | (OK (Q)  |                       |
|                                |          |  |                       |
| <ul> <li>If you sel</li> </ul> | lected [ | Symbol Variable] for the addresse                    | s, the [Address Block |
| Conversi                       | on] wil  | l not work properly.                                 |                       |

• If the total number of addresses (End Address - Start Address) before conversion is greater than the total number of addresses (End Address - Start Address) after conversion, the last device address is assigned to all the unconverted addresses.

# 5.7 Viewing Project Information

#### 5.7.1 Introduction

| Project Informat  | ion   |                        |                 | ×      |
|---|---|------------------------|-----------------|--------|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | File Information<br>File Name<br>Last Saved<br>Creator<br>Title | Unsaved<br>GP_User<br> |                 |        |
|   |   |                        | OK ( <u>0</u> ) | Cancel |

From the [Project Information] dialog box, you can view: File Creator and Last Saved Date; the Model and Device/PLC; the data sent by Project Transfer; backup SRAM usage; the logic program you are creating; the registered variable size, and so on.

You can also specify a destination folder and a password.

#### 5.7.2 Setup Procedure

```
NOTE
```

• Refer to the settings guide for details. <sup>(27)</sup> "■ Project Information" (page 5-81)

## Checking [Project Information]

1 From the [Project (F)] menu, point to [Information (I)] and select [Project Information (I)].



**2** The [Project Information] dialog box appears. If you click each item in the left window, the displayed information changes.

| 💣 Project Informati  | on                      |         | ×                     |
|--|-------------------------|---------|-----------------------|
| File Information   | File Information        |         |                       |
| Display Unit<br>Send Data<br>SRAM Information<br>Destination | File Name<br>Last Saved | Unsaved | _                     |
| Logic Memory   | Creator                 | GP_User |                       |
|  | Title                   | -       |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         |                       |
|  |                         |         | OK ( <u>D)</u> Cancel |

**3** Change any information as necessary and click [OK] to close the [Project Information] dialog box.

#### Setting the Destination folder

Specifies the location to temporarily store data before saving it on a CF Card or USB storage device.

1 From the [Project (F)] menu, point to [Information (I)] and select [Destination Folder (C)].



2 The [Project Information] dialog box appears. Select [Destination] and the checkbox beside either [Enable CF Card] or [USB Storage].

| 💰 Project Informal  | tion  | × |
|---|---|---|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | CF-Card Destination Folder  |   |
|   | USB Storage Folder<br>USB Storage<br>USB Storage Destination Folder<br>C#Program Files#Pro-face#GP-Pro Ex#Dat<br>Browse |   |
|   | OK ( <u>D</u> ) Cancel  |   |

3 Click [Browse...] and designate the folder.

| Browse For Folder | ? ×        |
|-------------------|------------|
|                   |            |
|                   |            |
| 🖃 🧰 Module        | <b></b>    |
| - 🔂 backup        |            |
| CFA00             |            |
| 😟 🕀 🗀 CML         |            |
| 🕀 🔂 CMLUSB        |            |
| 🕀 🔂 Database      |            |
| en 🔁              |            |
| - 🔁 en font_fix   |            |
|                   |            |
| - Di Fonts        | -1         |
|                   | <b>•</b>   |
| OK Cancel         | New Folder |



• In the initial settings, \Program Files\Pro-face\GP-Pro EX \*.\*\* (\*.\*\* shows the version) \A database\ (folder with the same name as the project file) is automatically selected for the destination folder.

Click [OK] to return to the [Project Information] dialog box.

4 Click [OK]. If you specify the destination folder for the first time, the following message appears to confirm. Click [Yes (Y)].

| 💰 Destination Folder Warning 🛛 🛛 🛛 |                        |                 |  |  |
|------------------------------------|------------------------|-----------------|--|--|
| ?                                  | Folder does<br>Create? | not exist.      |  |  |
| (                                  | Yes <u>(Y</u> )        | No ( <u>N</u> ) |  |  |

A folder ([data], [file]) is automatically created to store the data to be saved to the CF Card or the USB storage device.

# 5.8 Copying a Screen from Another Project

#### 5.8.1 Introduction

You can copy a screen created in another project to the project currently being edited. There are two copying methods: specify necessary screens and copy them, or copy all the screens of another project.

Copying the specified screens in another project



#### Copying all the screens from another project

| A.prx  |         |      |            | B.prx    |         |      |            |
|--------|---------|------|------------|----------|---------|------|------------|
| 🎲 Base | Screens |      |            | 🍪 Base   | Screens |      |            |
|        |         | 0001 | (Untitled) |          |         | 0001 | (Untitled) |
|        | Ø       | 0002 | (Untitled) | <u>.</u> | 2       | 0002 | (Untitled) |
|        | •       | 0003 | (Untitled) |          |         | 0003 | (Untitled) |

#### 5.8.2 Setup Procedure

• Refer to the settings guide for details. NOTE <sup>G</sup> " ♦ Whole Project" (page 5-90)

Copy the project "A.prx" Base Screen: 10 to the project "B.prx".

Copy from another Project



- 1 Open the project into which you want to copy the screens.
- 2 From the [Project (F)] menu, point to [Utility (T)] and select [Copy from Another Project (C)].



3 In the [Copy from Another Project] dialog box, click [Browse...].

| e                  |            |       |        |        | Brow: | se   |   |
|--------------------|------------|-------|--------|--------|-------|------|---|
| Convert Resolution |            |       |        |        |       |      |   |
| Copy Extent        | © All      | C Sp  | pecify | Ranges |       | ,    |   |
| Copy From          |            |       |        |        |       |      |   |
| 🔽 Base Screens     |            | Start | ſ      | ÷.     | End   | 9999 |   |
| 🔽 Include Hea      | der and Fo | oter  |        |        |       |      |   |
| 🔽 Window Screen    | S          | Start | 1      | -      | End   | 2000 |   |
| 🔽 Keypads          |            | Start | 1      | · .    | End   | 8999 | ÷ |
| 🔽 Video Modules    |            | Start | 1      |        | End   | 512  | - |
| Сору То            |            |       |        |        |       |      |   |
| Base Screens       |            | Start | 1      | -      |       |      |   |
| Window Screens     |            | Start | 1      | ÷.     |       |      |   |
| Keypads            |            | Start | 1      |        |       |      |   |
| Video Modules      |            | Start | 1      |        |       |      |   |

4 Specify the [Look in] and [File name] fields and click [Open].

| Open a Project F   | ile to Copy from       |              |   |           | ? ×          |
|--|------------------------|--------------|---|-----------|--------------|
| Look jn:   | 🔁 Database             |              | • | ⇔ 🗈 💣 💷 ◄ |              |
| History<br>History<br>Desktop<br>My Documents<br>My Computer | р <sup>35</sup> А. ріх |              |   |           |              |
| 62   | File <u>n</u> ame:     | A.prx        |   | <b>T</b>  | <u>O</u> pen |
| My Network P   | Files of type:         | Project File |   | •         | Cancel       |

5 Select the [Specify Ranges] radio button. In the [Copy From] section, select the [Base Screens] check box and set the [Start] and [End] numbers, (For example, [Start][End]10).

| 💰 Copy from Another Project 🛛 🛛 🗙 |                                 |      |       |          |       |     | ×  |  |   |
|-----------------------------------|---------------------------------|------|-------|----------|-------|-----|----|--|---|
| File                              | C:\Program Files\Pro-face\A.prx |      |       |          | Brows | e   |    |  |   |
| Convert                           | Resolution                      |      |       |          |       |     |    |  |   |
| Copy Exten                        | t                               | C AI | ⊙ Sj  | becify R | anges |     |    |  |   |
| Copy Fro                          | m                               |      |       |          |       |     |    |  |   |
| 🖬 в                               | ase Screens                     |      | Start | 10       | •     | End | 10 |  | # |

6 In the [Copy To] section, set the [Base Screens] [Start] number.

| Сору То        |             |
|----------------|-------------|
| Base Screens   | Start 🛛 🔁 🧮 |
| Window Screens | Start 📃 🧮   |

7 Click [Copy].

| NOTE | • If a screen of the same number exists in the copy destination, the following confirmation dialog box appears. |
|------|---|
|      | Confirm Screen Overwrite  The Base Screen 1 already exists in the project and will be overwritten. Continue?    |
|      | Yes All (A) Yes (Y) No (N) All No (L) Cancel  |

8 When the copy is complete, the following message appears. Click [OK].

| 💰 Copy from Another Project |   |  |  |  |  |
|-----------------------------|---|--|--|--|--|
| ٩                           | Copy from another project was successfully completed. |  |  |  |  |
|                             | OK (O)  |  |  |  |  |

9 When the [Copy from Another Project] dialog box appears, click 🗴 to close it.

| 💰 Copy fron | n Another Pi | oject         |        |        |          |     |      |      |       | × |
|-------------|--------------|---------------|--------|--------|----------|-----|------|------|-------|---|
| File        | C:¥Program   | Files¥Pro-fa  | ce¥¥A. | prx    |          | B   | rows | e    |       |   |
| Convert     | Resolution   |               |        |        |          |     |      |      |       |   |
| Copy Exter  | nt           | o aii         | 🖲 Sp   | pecify | Range    | 3   |      |      |       |   |
| Copy Fr     | om           |               |        |        |          |     |      |      |       |   |
| 🔽 В         | ase Screens  |               | Start  | 10     | ÷        | 靈 E | End  | 10   |       |   |
| V           | Include He   | ader and Foot | er     |        |          |     |      |      |       |   |
| E W         | indow Screer | ns            | Start  | 1      | ÷        | H E | End  | 2000 |       |   |
| П К         | eypads       |               | Start  | 1      |          | H E | End  | 8999 |       |   |
| ΠV          | ideo Modules | :             | Start  | 1      | ÷        | E   | End  | 512  |       |   |
| Сору Та     | )            |               |        |        |          |     |      |      |       |   |
| Base        | Screens      |               | Start  | 20     |          | 퐾   |      |      |       |   |
| Wind        | ow Screens   |               | Start  | 1      | ÷        | #   |      |      |       |   |
| Кеур        | ads          |               | Start  | 1      | <u>.</u> | #   |      |      |       |   |
| Vide        | o Modules    |               | Start  | 1      | ÷        | #   |      |      |       |   |
|             |              |               |        |        |          | ору |      | 0    | ancel |   |

## 5.9 Registering Addresses with Comprehensive Names

#### 5.9.1 Introduction



Each address has a "symbol" name. Parts and other objects can use the symbol name in address fields. You can change the address associated with a symbol when necessary, without affecting address settings in Parts and other objects that use the symbol.

## 5.9.2 Setup Procedure

|      | • Refer to the settings guide for details.                     |
|------|--|
| NOTE | 🐨 " 🗖 Address Settings" (page 5-99)                            |
|      | "5.14.8 [Common Settings] Setting Guide" (page 5-155)          |
|      | • For the addresses that can be used with logic features, see: |
|      | "29.3 Registering Addresses" (page 29-13)                      |

Name each address.

| Address | Symbol Name       |  |
|---------|-------------------|--|
| D100    | Line A Production |  |
| D101    | Line B Production |  |
| D102    | Line C Production |  |
| D103    | Line D Production |  |



#### Registering the [Symbol Variable]

1 From the [Common Settings (R)] menu, select [Symbol Variable (V)].



**2** The following screen appears.

| Base 1 (Untitled)     | 🗙 🏱 Symbol 🗙 |       |       |         |           | 4 ▷ 🗙          |  |
|-----------------------|--------------|-------|-------|---------|-----------|----------------|--|
| Edit Symbol Variables |              |       |       |         |           | <u>Utility</u> |  |
| Name                  | ∠ Type       | Array | Count | Address | Retentive | Comment        |  |
| ×                     |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |
|                       |              |       |       |         |           |                |  |

**3** Click a cell in the [Name] column and specify the symbol variable name.

| C.   | Base 1 (Untitled) 🛛 ≽ Symbol |               |
|------|------------------------------|---------------|
| Edit | Symbol Variables             |               |
|      | Name                         | Type A        |
| 1    | LineA_Production             | V ord Address |
| 2    | LineB_Production             | V ord Address |
| 3    | LineC_Production             | V ord Address |
| 4    | LineD_Production             | V ord Address |
| ×    |                              |               |
|      |                              |               |

4 For each cell in the [Type] column, select the symbol's address type.



5 Click in each cell in the [Address] column to display 2. Set each symbol's address.
 (For example, Line A Production: D100, Line B Production: D101, Line C Production: D102. Line D Production: D103)

| Click the icon to display an address input keypad. | Select device "D", input<br>"100" as the address, and<br>press the "Ent" key.  |              |
|--|--|--------------|
|  | Input Address         ×           Device/PLC         PLC1         ▼           D         ▼         100           Back         CIr           A         B         C           D         E         F           4         5         6           1         2         3           0         Ent         0 | [PLC1]D00100 |

- 6 The settings to register an address as a symbol are complete.
- 7 Next, set the symbols for your Data Display element. From the [Parts (P)] menu, point to [Data Display (D)] and select [Numeric Display (N)], or click the icon, and place the Data Display element on the screen.

8 Double-click the placed element. The Data Display dialog box appears.

| 💰 Data Display    | ×   |
|-------------------|---|
| Parts ID          | Basic Display Alarm/Color Processing          |
| DD_0000           | Display Data                                  |
| Comment           |   |
|                   | Numeric Date/Time Statistical Show Limit      |
|                   | Display Display Data Display Value            |
| ABC               | Monitor Word Address  >>Extended              |
|                   | [PLC1]D00000                                  |
| Select Shape      | 🥅 Specify Input/Display Range                 |
| 🥅 No Shape        | Data Type 16 Bit Dec 💌 🗖 Sign +/- 🗖 Round Off |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
| Help ( <u>H</u> ) | OK (Q) Cancel                                 |

- **9** Click [Select Shape] and select the appropriate shape.
- 10 In the [Monitor Word Address] drop-down list, select the symbol to store the value.



11 In the [Data Type] drop-down list, set the type of data to display (for example "16 Bit Dec").



- 12 As needed, specify the Data Display's color and text on the [Alarm/Color] tab and [Display] tab, and click [OK].
- 13 Set the Data Displays for the symbols of "Line B Production", "Line C Production", and "Line D Production" as well.
  - Without registering the symbol first, you can directly enter the symbol name in the address control box when designating the address. Once you enter the symbol, press the [Enter] key. When the following message appears, click [Register as Symbol]. Once registered, you can check the symbol in the Common Settings [Symbol Variable].



• For the [Register Variable] field, if you select [Variable Format] and [Register as Symbol] it is registered as a symbol of "word address" type. When you click [Register as Variable], it is registered as a variable of "integer variable" type.

If you select [Address Format], the following message appears. Click [Yes] to register it as a "word address" type symbol.



### Confirming the Symbol Registration

1 Click [Address] in the Work Space.

| Address  | <b>₽ ×</b>                  |
|----------|-----------------------------|
| O Device | e Address 🔿 Symbol Variable |
| Туре     | Bit Address                 |
| Address  | [PLC1]X00000                |
| х        | 0 1 2 3 4 5 6 7 8 9 A B C D |
| 00000    |                             |
| 00010    |                             |
| 00020    |                             |
| 00030    |                             |
| 00040    |                             |
| 00050    |                             |
| 00060    |                             |
| 00070    |                             |
| 00080    |                             |
| 00090    |                             |
| 000 A0   |                             |
| 000B0    |                             |
| 000C0    |                             |
| Feature  | Location Screen             |
|          |                             |
| 🗊 Synt   | 🇱 A 🔾 Sear   🚺 Com   🔡 S    |



• If the [Address] tab is not displayed in the Work Space, from the [View (V)] menu, point to [Work Space (W)] and select [Address (A)].

2 Select [Symbol Variable].



**3** From the [Type] drop-down list select the symbol's address type.

| Туре      | Word Address 💌                  |
|-----------|---------------------------------|
| Attribute | All<br>Bit Address              |
| Name      | Word Address                    |
|           | Integer Variable                |
|           | Real Variable<br>Timer Variable |

4 In the [Attribute] drop-down list, select the device/PLC for the symbol variable to display. The symbol variable's address list is displayed.

| -         | Word A      | ddress  | •            | Ц |
|-----------|-------------|---------|--------------|---|
| Attribute | All         |         | •            | ] |
| Name      | ⊿ Type      |         | Address      |   |
| LineA_Pro | ductic Word | Address | [PLC1]D00100 |   |
| LineB_Pro | ductic Word | Address | [PLC1]D00101 |   |
| LineC_Pro | ductic Word | Address | [PLC1]D00102 | 2 |
| LineD_Pro | ducti Word  | Address | [PLC1]D00103 | } |
|           |             |         |              |   |
| 4         |             |         |              | - |
| •         | 1           |         | l l'anne ann |   |

| NOTE | • To associate an address with a part, you can drag the address to a part   |
|------|---|
|      | displayed on the screen.  |
|      | • By double-clicking the address in the list, you can open the [Edit Symbol |
|      | Variables] dialog box.  |

# 5.10 Using Headers and Footers on a Screen

### 5.10.1 Introduction



You can display a footer for each screen.

You can display the same header/footer on multiple screens. You can create up to 20 headers and 20 footers.

#### 5.10.2 Setup Procedure



You can display a footer for each screen.

1 You can display a header or footer on each screen. To display the footer screen area, from the [View (V)] menu, select [Footer (F)] or click the [Edit Footer] button at the bottom of the drawing screen.

|   | 530        |     | ~~~~ | <br> | 4 | 9 | _   | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _  | _ | _ | _  | _ | _ | _       | _        | _       | _ | _       | _ | _ | _ | _  | _ | _        | _        | _ | _ | _ | _ | _       | _   | _  | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _  | 4  |
|---|------------|-----|------|------|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|----|---|---|----|---|---|---------|----------|---------|---|---------|---|---|---|----|---|----------|----------|---|---|---|---|---------|-----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
|   |            | 0 • | • •  | •    | 1 | ÷ | e i |   |   |   |   |   | 1 |   |   | 1 | 2 |   | ł. | ÷ | 1 | 1  | 1 |   | ł.      | 1        | ł       | 1 | 1       | 3 | • | • | ł  | • |          | 1        | • | • | • | • | 4       | \$  | •  | • | 1 | 1 | 1 |   | • | • | ł | • | 6 |   |   | • | ł | 1 | 1 | 1 | 1 | 1 |   | • | 5 | • | • | • | ł. | r. |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            | ١.  |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| l |            | L   |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | J  |    |
| l |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | U  |    |
|   | <b> </b> ∼ | 1   |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Î  |    |
|   | ×          |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   | P | la |   | 2 | 0<br>ar | 10<br>20 | el<br>m |   | IS<br>A | 8 | u |   | 16 | i | ie<br>Ie | IT<br>ei | 1 | 1 | ļ | 2 | 0<br>ar | rt: | e) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | l  |    |
| l |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   | <b>.</b> |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | l  | D  |
| ł |            |     |      |      |   |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ł  |    |
|   |            | 1   |      | 1    | 2 |   |     |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |         |          |         |   |         |   |   |   |    |   |          |          |   |   |   |   |         |     |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | C | 3 | ١ |   |   | I |   |   | I  |    |

NOTE

To display the header screen area, from the [View (V)] menu, select [Header (H)] or click the [Edit Header] button
 at the top of the drawing screen.

**2** Create a screen in the footer editing area.



- To delete the created footer area, click
  - To create another footer, click the [Next Footer] button ▶, or click the [Select Footer] 🚰 button and in the footer list click [New].

**3** Click the [Disable footer edit] button **[** to close the footer area.

| _ | - | 50 1 | 10 | nτ | τĸ  | æ  | ~  |     | _  | _  | _   | _ | _ | _  | _   | _  | _   | _  | _  | _   | _  | _   |   | _    |     | _    | _  | _   | _  |     | _   | _ | _   |   |     | _  | _ | _   |     |     | _   | _   | _ | _  |
|---|---|------|----|----|-----|----|----|-----|----|----|-----|---|---|----|-----|----|-----|----|----|-----|----|-----|---|------|-----|------|----|-----|----|-----|-----|---|-----|---|-----|----|---|-----|-----|-----|-----|-----|---|----|
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|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 18 |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 18 |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 18 |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 8  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     |    |    |     |    |    |     |   |   |    |     |    |     |    |    |     |    |     |   |      |     |      |    |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    |    |     | _  |    |     |    |    | _   |   |   |    | _   |    |     |    |    |     |    | _   |   | 1000 |     |      |    |     |    |     |     |   |     |   | _   |    |   |     |     |     |     |     |   | 1  |
|   |   |      |    | Se | ett | ti | nq | ß   | Ir | p  | ut  |   |   | AC | ti  | LV | Э   | Op | æ  | rat | :i | on  | 5 |      | Act | i    | re | PK  | ni | .tc | ri  | n |     |   |     | 1. |   | n , | a   | -   | an  |     |   | 1  |
|   |   |      |    | S  | m   | Be | n  |     |    |    |     |   |   | So | cre | ee | 1   |    |    |     |    |     |   |      | SCI | . ee | n  |     |    |     |     |   |     |   |     |    |   |     |     |     |     |     | 8 | 18 |

NOTE

- You can create up to 20 headers and 20 footers.
- You can specify a comment in each header/footer. The comment is displayed in the bottom right corner of a header/footer. To specify a comment, from the [View (V)] menu, point to [Work Space (W)] and select [Properties (P)]. In the Properties dialog box, enter your comments.
- If you change from a high resolution GP model to a low resolution model, the headers and footers are not scaled down. After changing the display model, you need to adjust the header/footer size and position.

#### Reusing a Header/Footer

- 1 From the [Screen (S)] menu, select [New Screen (N)] or click the [New Screen] button 🛅.
- 2 In the [New Screen] dialog box, specify [Screens of Type], [Screen], [Title], and click [New].

| <i>ố</i> New Screen | ×                 |
|---------------------|-------------------|
| Screens of Type     | Base              |
| Screen              | 2 📑 🏢             |
| Title               | Untitled          |
| Use Template        |                   |
| Select Templa       | te from List      |
| Recently Used       | <u>i Template</u> |
|                     | New Cancel        |

**3** From the [View (V)] menu, select [Footer (F)] or click the [Edit Footer] button **—** at the bottom of the drawing screen.

| <br>0 • • | • • | • • | • | • • | 1.) | • • |   | • • | • • | 2 | • • | • • | • • | • • | • 3 | • • | • • | • • | • • | • 4 | • • | • • |   | • • | • 5 | • • | • • | • • | • • | - 6 |  |
|-----------|-----|-----|---|-----|-----|-----|---|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|--|
|           |     | -   |   |     |     |     | 1 | 1   |     |   |     |     |     |     |     |     |     | 1   |     |     |     | 1   | 1 |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
| 1         |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
| 1         |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
| - ·       |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |
|           |     |     |   |     |     |     |   |     |     |   |     |     |     |     |     |     |     |     |     |     |     |     |   |     |     |     |     |     |     |     |  |

4 The footer screen editing area is displayed. Click the [Select Footer] button  $\square$ .



**5** The registered footers are listed. Select the footer you wish to use and click [OK].



6 The selected footer is displayed. Click the [Disable footer edit] button \_\_\_\_\_ to close the editing area.



#### Removing a Header/Footer

1 Open the screen with the footer you want to remove and click the [Edit Footer] button





- To view a header, from the [View (V)] menu, select [Header (H)] or click the [Edit Header] button at the top of the drawing screen.
- 2 Click the [Next Footer] button ▶ or the [Select Footer] button and select a blank footer.



**3** Click the [Disable footer edit] button **[1]** to close the editing area.



# 5.11 Changing the Screen Number/Title/Screen Color

## 5.11.1 Introduction



You can change the screen number, screen title, and screen color in a project file.

## 5.11.2 Setup Procedure

| NOTE | <ul> <li>Refer to the settings guide for details.</li> <li><sup>GP</sup> " ■ Screen List" (page 5-103)</li> </ul> |
|------|---|
|      |   |

| Bas | e Screen   |      |             |
|-----|--|------|-------------|
|     | B1 Menu Screen   | 0001 | Menu Screen |
| Bas | e Screen   | nge  |             |
|     | B100<br>Menu Screen<br>Internet<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Con | 0100 | Main Screen |

1 From [Screen List] window, select the screen with the attribute you want to change and click the [Change Screen Attribute] icon 📃.

| Screen List     |       | <del>4</del> × |  |
|-----------------|-------|----------------|--|
| Screens of Type | All   | •              |  |
| Search method   | Title | •              |  |
| Refine Search   |       | Search         |  |
| 🍅 🔂 🏨 🗙         | 💻 🖟 👯 |                |  |
| 🚳 Base Screens  |       |                |  |
|                 | 0001  | (Untitled)     |  |
| window Screens  |       |                |  |
| 🍪 Logics        |       |                |  |
| - INIT          | П     |                |  |

2 The [Change Screen Attribute] dialog box appears.



NOTE

• Alternatively, double-click the screen title bar in the upper editing area to display the [Change Screen Attribute] dialog box.

**3** Change the [Screen], [Title] and [Background Color]. (For example, Screen: 100, Title: Main Screen)

| Screen           | 100       |      |       |        |   |
|------------------|-----------|------|-------|--------|---|
| Title            | Main Scre | en   |       |        | - |
| Background Color | 1         | -    | Blink | None   | • |
| Pattern          | None      |      |       | -      | ſ |
| Pattern Color    | 0         | -    | Blink | None   | 1 |
| Security Level   | p         |      |       |        |   |
|                  |           |      |       |        |   |
|                  |           | Chan | ge    | Cancel |   |

| NOTE | h |
|------|---|
| NOTE |   |

• To specify the [Security Level], see: <sup>(2)</sup> "22.2 Creating Limited Access Screens" (page 22-3)

4 The screen attribute is updated.

| Screen List       |       | <b>₽ ×</b>    |
|-------------------|-------|---------------|
| Screens of Type A | ill   | •             |
| Search method     | ïtle  | •             |
| Refine Search     |       | Search        |
| °o 🕘 🛍 🗙   💂      | l 💋 💺 |               |
| Dece Sereene      |       |               |
|                   | 0100  | (Main Screen) |
| 👺 Window Screens  |       |               |
| 🍪 Logics          |       |               |
| -INIT             |       |               |

# 5.12 Copying/Deleting a Screen

## 5.12.1 Introduction



You can copy or delete a screen.

## 5.12.2 Setup Procedure

| • Refer to the settings guide for details.<br>☞ "■ Screen List" (page 5-103) |  |
|--|--|
|--|--|



#### Copying a Screen

1 In the [Screen List], select the screen you want to copy from and click [Copy] 🔁.



2 Click the [Paste] icon 🖺.

| Screen List           |       | <b>₽ x</b> |  |  |  |  |  |
|-----------------------|-------|------------|--|--|--|--|--|
| Screens of Type       | All   | •          |  |  |  |  |  |
| Search method Title 💌 |       |            |  |  |  |  |  |
| Refine Search         |       | Search     |  |  |  |  |  |
| ° <b>¤ 4 🙉 x</b>   1  | 🖳 💋 💺 |            |  |  |  |  |  |
| 🍪 Base Screens        |       |            |  |  |  |  |  |
|                       | 0010  | (Untitled) |  |  |  |  |  |
| 🍪 Window Screens      |       |            |  |  |  |  |  |
| 🍪 Logics              |       |            |  |  |  |  |  |
|                       | INIT  | (Untitled) |  |  |  |  |  |

**3** In the [Paste Screen] dialog box, specify the [Paste-To Start Screen Number] and [Screen Number after Paste] and click [Paste]. (For example, [Paste-To Start Screen Number] 20)

| 🏂 Paste Screen 🛛 🔀           |
|------------------------------|
| Paste-To Start Screen Number |
| 20 🖃 🏢                       |
| Screen Number after Paste    |
| B0020                        |
|                              |
|                              |
|                              |
|                              |
| ,                            |
| Paste Cancel                 |
|                              |

4 A thumbnail view of the pasted screen is displayed in the [Screen List].

| Screen List 🛛 📮 🗙     |       |            |  |  |  |  |
|-----------------------|-------|------------|--|--|--|--|
| Screens of Type All   |       |            |  |  |  |  |
| Search method Title 🔽 |       |            |  |  |  |  |
| Refine Search         |       | Search     |  |  |  |  |
| °o 🕘 🛍 🗙              | 💻 💋 🍇 |            |  |  |  |  |
| 🚱 Base Screens        |       |            |  |  |  |  |
| 9                     | 0010  | (Untitled) |  |  |  |  |
| I 0020 (Untitled)     |       |            |  |  |  |  |
| 😴 Window Screens      |       |            |  |  |  |  |



• To select multiple screens at a time, select the target screens on the [Screen List] with the [Shift] key + click, or the [Ctrl] key + click.

#### Delete a Screen

1 In the [Screen List], select the screen you want to delete from and click the [Delete] icon  $\times$ .

| Screen List         |       | <del>4</del> × |  |  |  |  |  |
|---------------------|-------|----------------|--|--|--|--|--|
| Screens of Type     | All   | •              |  |  |  |  |  |
| Search method Title |       |                |  |  |  |  |  |
| Refine Search       |       | Search         |  |  |  |  |  |
| °= 🕰 🛍 🗙            | 르 🎒 💺 |                |  |  |  |  |  |
| 🐼 Base Screens      |       |                |  |  |  |  |  |
|                     | 0010  | (Untitled)     |  |  |  |  |  |
|                     | 0020  | (Untitled)     |  |  |  |  |  |
| 🚱 Window Screens    | s     |                |  |  |  |  |  |
| 🍪 Logics            |       |                |  |  |  |  |  |

2 The screen is deleted from the [Screen List].

| Screen List     |        | <b>₽ x</b> |
|-----------------|--------|------------|
| Screens of Type | All    | •          |
| Search Method   | Title  | •          |
| Refine Search   |        | Search     |
| 🎾 省 🛍 🗙         | 💻 💋 🍇  |            |
| 🍪 Base Screens  |        |            |
|                 | 0020   | (Untitled) |
| 🍪 Window Screen | s      |            |
| 🍪 Logics        |        |            |
|                 | > INIT | (Untitled) |



• To select multiple screens at a time, select the target screens on the [Screen List] with the [Shift] key + click, or the [Ctrl] key + click.

# 5.13 Searching/Replacing Parts Addresses, Labels, and Comments

#### 5.13.1 Introduction



You can search and replace the addresses, labels, and comments of the parts used on the screen.

| NOTE<br>• Yo<br>se<br>sc<br>• Yo<br>se<br>bo<br>Fo | <ul> <li>You cannot search addresses and texts if they are used in the [Common] settings. You can search parts or drawings found on a base screen, window screen, video screen, and header/footer.</li> <li>You cannot search addresses and comments if they are used in scripts. To search texts used in scripts, go to the [Search] menu in the Settings dialog box. For example, Global D-Script</li> </ul> |  |  |  |        |                |        | non]<br>window<br>ots. To<br>dialog |  |
|--|--|--|--|--|--------|----------------|--------|-------------------------------------|--|
| 💣 Global D-Script                                  |  |  |  |  |        |                |        |                                     |  |
|  | File (E) Edit (E) View (V) Search (S) Help (H)   |  |  |  |        |                |        |                                     |  |
|  | 🎸 🐎 👗 🔁 🛍 🔍 🛛 🔍 Search (E) 🛛 Ctrl+F  |  |  |  |        |                |        |                                     |  |
|  | Function   |  |  |  | Replac | e ( <u>R</u> ) | Ctrl+R |                                     |  |

Built-In Function (Instruction 📑 Jump to Specified Line (L)Ctrl+L

#### 5.13.2 Setup Procedure

```
NOTE
```

• Refer to the settings guide for details. \*5.14.5 [Work Space] Settings Guide" (page 5-97)

1 Click the [Search] tab in the work space.



NOTE

• If the work space does not have the [Search] tab displayed, from the [View] menu, point to [Work Space (W)] and select [Search (F)].

2 The [Search] window appears. Select the search target from [Search Type]. (For example, [Label/Text])

| Search         |                    |                           |                  |         | 4 x  |
|----------------|--------------------|---------------------------|------------------|---------|------|
| Search Type    | Comment            |                           |                  |         |      |
| Find Comme     | nt                 | Comme<br>Label/<br>Addres | ent<br>Text<br>S |         |      |
| Range Settin   | <u>es &gt;&gt;</u> | Parts I                   | U                | Geard   | -    |
| Parts ID       | Screen             |                           | Comme            | nt      |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
|                |                    |                           |                  |         |      |
| Replace Settin | <u>gs &gt;&gt;</u> |                           |                  |         |      |
| 🕅 Sy 🕌         | Addr               | 🔍 Sea                     | ar 🚺 🤇           | >om   🔡 | Scre |
**3** Enter the text you want to search for (For example, Agitator A).

| NOTE | • To search for [Comment] or [Label/Text], the following search is also |
|------|---|
| NOTE | available.  |
|      | For example, 1) In [Find Comment], enter [Alarm?]                       |
|      | -> You can find [Alarm A] but not [Alarm AB] with a different number    |
|      | of words.   |
|      | For example, 2) In [Find Comment], enter [Alarm*]                       |
|      | -> You can find both [Alarm A] and [Alarm AB].                          |
|      |   |

4 Click [Search]. The search results appear.

| Search                                 | <del>4</del> ×  |
|--|---|
| Search Type                            | e Label/Text 💌  |
| Search for                             | aditator A  |
| Range Setti                            | Search  |
| Trange Detti                           |   |
| Parts ID                               | Screen Label/Text   |
| Parts ID<br>Text                       | Screen Laber/Text<br>Base Screens1 aditator A control sc  |
| Parts ID<br>Text<br>SL_0000            | Screen Laber/Text<br>Base Screens1 aditator A control sc<br>Base Screens1 aditator A run                                  |
| Parts ID<br>Text<br>SL_0000<br>SL_0001 | Screen Laber/Text<br>Base Screens1 aditator A control sc<br>Base Screens1 aditator A run<br>Base Screens1 aditator A stop |

**5** To replace the found text into another text, click [Replace Settings]. From the search results, select the line of the parts you wish to replace and enter the new text and click [Replace].

| Replace Settings >> |                         |
|---------------------|-------------------------|
| 🕅 Sy… 🏢 Add         | r 🔍 Sear 🚺 Com   🞛 Scre |
|                     |                         |
|                     |                         |
|                     |                         |
| Replace Settings << |                         |
| Find                | aditator A              |
| Replace with        | aditator B              |
|                     |                         |
| Next                | Replace Replace All     |

#### NOTE

• To replace all the texts of multiple parts from the search result, select the relevant line with pressing the CTRL key. Use the SHIFT key to select multiple lines in sequence.

### NOTE

- You can only replace [Comment], [Label/Text], and [Address]. You cannot replace [Parts ID].
- To replace [Address], select the address to replace from the search result. Once entering [Replace with], click [Replace] or [Replace All].

| Search          |                    |         |          |          | # <b>x</b> |
|-----------------|--------------------|---------|----------|----------|------------|
| Search Type     | [                  | Addres  | s        |          | •          |
| Device Ac       | ldress             | 0.8     | öymbol ∖ | /ariable |            |
| Туре            | [                  | Bit Add | lress    |          | •          |
| Find Address    | [                  | [PLC1]  | 4000100  |          | <b></b>    |
| Range Setting   | <u>(s &gt;&gt;</u> |         |          | Search   |            |
| Parts ID        | Screen             |         | Address  | 40001.00 |            |
| Replace Setting | <u>15 &lt;&lt;</u> |         |          |          |            |
| Replace with    | [                  | [PLC1]I | M000200  | Benlac   | e All I    |
| Sy              | Addr (             | 🔍 Sea   | r 🚺 C    | om   🔡   | Scre       |

# 5.14 Settings Guide

# 5.14.1 Main Window Part Names

The following explains the basic screens and names in GP-Pro EX.

| Title Bar              | > GP-Bro EX - GEPro EX - GEPro EX STEP31Module (Database Unitited-new prx )<br>Project (E) Edit (E) View (E) Common Settings (G) Draw (E) Parts (E) Screen (S) Heip (E)  |  |  |  |
|------------------------|--|--|--|--|
| Menu Bar               |  |  |  |  |
| Operation<br>State Bar | ↓ A   • / ∧ □ ◊ ○ / 『日期間』●   ♀   田] ■ ▷   ⑭   ⑭   ⑭   ⑭   ⑭   ⑭   ⑭   ⑭   ⑭  |  |  |  |
| Tool Bar               | 0         1         2         3         1  |  |  |  |
|                        | Search Method Trile  |  |  |  |
| Work Space             | Helme Search Description   |  |  |  |
|                        |  |  |  |  |
|                        | Window Screens Logics |  |  |  |
|                        |  |  |  |  |
|                        |  |  |  |  |
| Status Bar             |  |  |  |  |
|                        |  |  |  |  |

| Setting             | Description  |
|---------------------|--|
| Title Bar           | Displays a project file name or screen title.  |
| Menu Bar            | Displays GP-Pro EX operation menus, which change depending on what you are editing.  |
| Operation State Bar | <ul> <li>Select from [System Settings], [Edit], [Preview], [Transfer Project], or<br/>[Monitor] to switch to the operation screen.</li> <li>System Settings: Displays the System Settings window and in the<br/>editing area the previously selected settings.<br/>"5.14.6 [System Settings] Setting Guide" (page 5-111)</li> <li>Edit: Displays the screen editor where you can draw graphics and define<br/>common settings.</li> <li>Preview: Displays the preview screen where you can check the display<br/>state of screens. You can copy previews to the clipboard or save them as<br/>JPEG files.</li> <li>Transfer Project: Launches the Transfer Tool.<br/>"33.10 Setting Up Transfer Tool" (page 33-57)</li> <li>Monitor: When the display unit is connected to the PC, you can view the<br/>operation and state of the logic program on the display unit from the PC.<br/>"29.10 Monitoring Logic Programs (Online Monitor)" (page 29-77)</li> </ul> |

| Setting                             | Description   |
|-------------------------------------|---|
| Tool Bar                            | <ul> <li>Displays command icons, such as Part, Draw or Edit. Click one of these icons with the mouse to execute the operation.</li> <li>You can show or hide the toolbar. From the [View (V)] menu, select [Toolbar (T)]. Also, the bar can be moved by dragging and placing it on the left, right, top, or bottom of the screen. Listed are the following sections on the Tool Bar.</li> <li>NOTE</li> <li>You can customize the toolbar depending on frequency of use. On the [View (V)] menu, point to [Preferences (O)], select [Toolbar], and click [Toolbar Settings]. The Toolbar Settings window appears. It allows you to add and delete icons. Alternatively, right-click the icon on the tool bar to display the Toolbar Settings window.</li> </ul> |
| Standard                            | 📔 📁 🕄 🔔 🕒 😼 🖄 🖋 📎 👗 🔁 📾 🛪 100% 🕞  |
| Edit                                | 38  김 福 김 임 임 문 의 하 쓰 속 아 땕   👶 🖧 🚸 🔶 🐁   |
| View                                | -State 0 (OFF) 🔹 Table1 🔹 🔟 🗾 🔟 🔄 🔜   |
| Draw                                |   |
| Parts                               | 🖷 · 💡 · 📼 · 🏙 🗢 · i 🏨 · 🔯 · 🔯 · 🚳 · 🗟 · 🗟 · 🖬 · 🗖 🛍 🛃 🐺 · 🖉   |
| Instruction                         | 西日日 日   |
| Package                             |   |
| Common<br>Settings                  |   |
| Editing Area<br>Tiling              |   |
| Change part state                   | 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 1 D  |
| Work Space                          | Displays a Window. By dragging a Window, you can move and place it in the desired position. Displays the following types of Windows.  |
| System Settings<br>Address Settings | Displays [System Settings], [Address], [Common Settings], [Screen List], [Search].  |
| Common<br>Settings                  | <ul> <li>System Settings</li> <li><sup>C</sup> " ■ System Settings" (page 5-97)</li> <li>Address Settings</li> </ul>  |
| Screen list                         | <ul> <li>G<sup>®</sup> "■ Address Settings" (page 5-99)</li> <li>Common Settings</li> </ul>   |
| Search window                       | <ul> <li><sup>C</sup> "■ Common Setting" (page 5-101)</li> <li>• Screen List Window</li> <li><sup>C</sup> "■ Screen List" (page 5-103)</li> </ul>   |
|                                     | • Search<br>☞ "■ Search" (page 5-107)   |

| Setting      |                     | Description  |
|--------------|---------------------|--|
| Space        | Properties          | Displays the selected part or screen's attributes to confirm or edit the attributes.<br><sup>(C)</sup> "■ Properties" (page 5-105)<br>NOTE   |
|              | Parts Toolbox       | • This window is displayed the first time you start up the GP.<br>The window lists the part shapes. This allows you to select the parts  |
|              |                     | shapes you wish to use and drag & drop the parts to place them on the screen.  |
| Work         | Screen Data List    | Displays a list of drawings and Parts on the screen.<br>☞ "■ Screen Data List Window" (page 5-106)   |
|              | Comment<br>Settings | G <sup>™</sup> "■ Comment List Window" (page 5-110)  |
|              | Watch List          | <sup>™</sup> "29.14.2 [Work Space] Settings Guide ■ Watch List Window" (page 29-142)   |
|              | Error Check         | Displays a list of errors found on the created screen. You can execute an error check by clicking the icon in the window.<br><sup>(G)</sup> "■ Error Check" (page 5-154)   |
|              | PID Monitor         | <sup>™</sup> "29.14.2 [Work Space] Settings Guide ■ PID Monitor Window" (page 29-138)  |
| Editing Area |                     | This is the area used to edit a screen. The editing area displays Base<br>Screens, Window Screens, or the registration of each functionís<br>[Common Settings] and setting screens.<br>You can change the display method of the editing area using the [Editing<br>Area (B)] option from the [View (V)] menu. Also, when displaying Base<br>Screens or Window Screens, you can change the display state by using<br>[Zoom (Z)] or [Change Language (L)]. |
| Status Bar   |                     | Displays the specified model and the coordinate position of the mouse<br>pointer in the editing area.  |
| Zoom Box     |                     | The window displays the enlarged image around the cursor.<br>From the [View (V)] menu, select [Zoom Box] to display/hide the screen<br>or to change the enlargement percentage.  |

# 5.14.2 [New] Settings Guide

To create a new project, from the [Project (F)] menu, select [New (N)] or click []. The [New Project File] dialog box appears. Set the display model.

# Display Settings

| 💰 New Project File | ×   |
|--------------------|---|
| GP-Pro             | Display Unit<br>Series GP3000 Series  |
|                    | AGP35** Series  |
|                    | Model AGP-3500T<br>Orientation Landscape  |
|                    | Specifications         Screen Size       10.4 inch         Resolution       640x480 Pixels (VGA)         Display Unit       TFT Color LCD         Display Colors       65536 Colors         Internal Memory       8 MB         Backup Memory       320 KB         COM1       RS-422(RS-422(RS-485))         COM2       RS-422(RS-485)         USB       2 Ports         LAN       1 Ports         CF       Available         Video Input       None         Internal Board       None |
|                    | Back ( <u>B</u> ) Next ( <u>N</u> ) Cancel  |

| Setting       | Description  |
|---------------|--|
| Select Series | <ul> <li>Select the display unit to use from [GP3000 Series], [GP2000 Series], [ST3000 Series], [LT3000 Series], or [IPC Series].</li> <li>NOTE</li> <li>If you select [GP2000 Series], the following dialog box appears. Click the icon to exit GP-Pro EX and start GP-PRO/PB3. GP-PRO/PB does not start if not installed.</li> </ul> |
|               | Carcel         Display Unit         Series         Orientation         Orientation         Sharta GP-         PRO/PB3  |

| Setting        |             | Description  |
|----------------|-------------|--|
| Display Unit   |             | Set the Display Unit.  |
|                | Series      | Select the Series.   |
|                | Model       | Select one of the models from the series.  |
|                | Orientation | Select the display orientation from [Landscape] and [Portrait]. This is not displayed if [IPC Series] is selected. |
|                | Screen Size | Only when [IPC Series] is selected, sets the display size for the screen data.                                     |
| Specifications |             | Displays the specifications of the display specified in [Display Unit].  |

# Device/PLC Series Settings

Click [Next] after the setting the display and the following dialog box appears. Select the Device/PLC.



| Setting                    |  | Description  |
|----------------------------|--|--|
| Device/PLC                 |  | Set the device/PLC.  |
|                            | Maker  | Select the device/PLC maker name.  |
|                            | Series                                       | Select the series for the device/PLC selected in [Maker].  |
|                            | Recent Device/<br>PLC                        | Displays the maker name and series name of up to three devices/PLCs recently specified in the [New Project File] dialog box. Click each display to specify the [Maker] and [Series]. |
|                            | Use System<br>Area                           | Designate whether or not to assign the GP internal system data area to the device/PLC.<br><sup>G</sup> " ◆ System Area Settings" (page 5-135)  |
|                            | Refer to the<br>manual of this<br>Device/PLC | Displays the page in "GP-Pro EX Device Connection Manual" that describes the device/PLC selected.  |
| Со                         | nnection Method                              | Set the connection method of the GP and device/PLC.  |
|                            | Port   | Select the port to allocate to the device/PLC from [COM1], [COM2],<br>[Ethernet (UDP)], and<br>[Ethernet (TCP)].   |
| Go to Device/PLC<br>Manual |  | Displays the top page of "GP-Pro EX Device Connection Manual."   |

# 5.14.3 [Properties] Settings Guide

This section covers the Project Information dialog box. To open this dialog box, from the [Project (F)] menu, select [Information (I)].

#### Project Information

The Project Information dialog box displays the settings for communicating with the display unit.

#### File Information

Displays information of a project file.

| 💰 Project Informati   | on  |                    |                 | ×      |
|---|---|--------------------|-----------------|--------|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | File Information<br>File Name<br>Last Saved<br>Creator<br>Title | Unsaved<br>GP_User | 1               |        |
|   |   | [                  | OK ( <u>O</u> ) | Cancel |

| Setting    | Description  |
|------------|--|
| File Name  | Displays a project file name.  |
| Last Saved | Displays the year, date, day of the week, and time when the last project file was saved.<br>The format is [Day of the Week], [Month], [Date], [Time (hh:mm:ss)], and [Year]. |
| Creator    | Set the name of the project file creator. You can input up to 30 characters.   |
| Comment    | Set a comment for the project file. You can input up to 60 characters.   |

# ♦ Display Unit

Displays the type or name of the specified devices/PLC and peripheral devices. Displays [Unused] for unused devices.

| Project Informat  | ion  | ×   |
|---|--|---|
| File Information  | Display Unit Co  | nfiguration   |
| Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | Main Unit<br>Device/PLC 1<br>Device/PLC 2<br>Device/PLC 3<br>Device/PLC 4<br>Printer<br>Bar Code 1<br>Bar Code 2<br>Script 1 | AGP-3500T<br>Mitsubishi Electric Corporation Q/QnA Serial<br>Communication COM1<br>(Unused)<br>(Unused)<br>(Unused)<br>(Unused)<br>(Unused)<br>(Unused)<br>(Unused)<br>(Unused) |
|   | Script 2   | (Unused)  |

| Setting      | Description  |
|--------------|--|
| Display Unit | Displays the display model name.                                   |
| Device/PLC 1 | Displays the specified device/PLC's series.                        |
| Device/PLC 2 | ** "5.14.6 [System Settings] Setting Guide" (page 5-111)           |
| Device/PLC 3 |  |
| Device/PLC 4 |  |
| Printer      | Displays the specified printer type.                               |
|              | "34.6.2 System Settings [Printer] Settings Guide" (page 34-48)     |
| Bar Code 1   | Displays the specified bar code type.                              |
| Bar Code 2   | *8.4.1 [Input Equipment Settings] Settings Guide" (page 8-21)      |
| Script 1     | Displays the specified script type.                                |
| Script 2     | <sup>™</sup> "■ [Script I/O Settings] Settings Guide" (page 5-145) |

# Send Data

Displays information of the data to transfer to the display.

| Project Informal  | tion 🔀  | ( |
|---|---|---|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | Send Data           Send Size         76,456 Bytes (0.9%)           Fonts to Use         Japanese Standard Font           English Standard Font         English Standard Font           English Stoke Font         Chinese[Traditional] Standard Font           Chinese[Simplified] Standard Font         Korean Stanard Font |   |
|   | OK ( <u>0</u> ) Cancel  |   |

| Setting      | Description   |
|--------------|---|
| Send Size    | Displays the total size of the project data to send. The data exceeding the maximum size that the GP can accept is displayed with red characters.           |
| Fonts to Use | Displays a list of fonts to send. Designate the fonts for a project in [System Settings]> [Font].<br><sup>(G)</sup> "6.4 [Font] Settings Guide" (page 6-19) |

# ♦ SRAM Information

Displays information of GP's backup SRAM capacity.

| 💕 Project Informa  | tion   |  | × |
|--|--|--|---|
| Project Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | tion SRAM Information Alarm Backup Sampling Backup Area Recipe Total Size Remaining Capacity | Capacity: 320 KB<br>0 Bytes<br>0 Bytes<br>0 Bytes<br>0 Bytes<br>2,320 Bytes<br>325,360 Bytes | × |
|  |  |  |   |

| Setting            | Description   |
|--------------------|---|
| Capacity           | Displays the specified display's backup SRAM capacity in KB.  |
| Alarm Backup       | Displays the SRAM size used for Alarm History.  |
| Sampling           | Displays the SRAM size used for Sampling.   |
| Backup Area        | Displays the SRAM size used for the GP internal device backup.  |
| Recipe             | Displays the SRAM size used for Recipe.   |
| Total Size         | Displays the total size used for the SRAM by the byte.  |
| Remaining Capacity | Displays the remaining capacity by the byte. If the total size exceeds the capacity, the value is displayed with a minus. |

# Destination

Specifies the location to save data you transfer to a CF Card and USB storage inserted to GP.

| Project Information   | ×  |
|---|--|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | CF-Card Destination Folder<br>✓ Enable CF Card<br>CF Card Folder<br>C:¥Program Files¥Pro-face¥QP-Pro EX¥<br>Browse |
|   | USB Storage Folder USB Storage USB Storage Destination Folder C:¥Program Files¥Pro-face¥GP-Pro EX¥ Browse          |
|   | OK (D) Cancel  |

| Setting                           | Description   |
|-----------------------------------|---|
| Enable CF Card                    | Select whether or not to use a CF Card in a project.  |
| CF Card Folder                    | Specifies the location to store data you save on the CF Card. Click<br>[Browse] to display the dialog box that designates the directory. In the<br>initial settings, \Program Files\Pro-faceGP-Pro EX *.** (*.** show the<br>version) \Database\ (folder with the same name as the project file) is<br>specified. |
| USB Storage                       | Select whether to use USB storage in the project.   |
| USB Storage<br>Destination Folder | Specifies the location to store data you save in USB storage. Click<br>[Browse] to display the dialog box that designate the directory. In the<br>initial settings, \Program Files\Pro-face\GP-Pro EX *.** (*.** shows the<br>version) \Database\ USB is specified.   |

# Passwords

Set a password for editing or transferring a project file.

| 💰 Project Informati   | ion X   |
|---|---|
| File Information<br>Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | Passwords Edit Edit Project File Send/Receive Send/Receive Project File Send/Receive Project File To open, send and receive you will need this password. Keep it at hand. |
|   | OK (0) Cancel   |

| Setting                          | Description   |
|----------------------------------|---|
| Edit                             | Set a password to protect the project file.   |
| Edit Project Fi                  | Displays the password as "*****".   |
| Set Password                     | Click this button and the following dialog box appears:   |
| Edit Project Fil<br>Set Password | <ul> <li>Displays the password as "*****".</li> <li>Click this button and the following dialog box appears:         <ul> <li>Click this button and the following dialog box appears:</li> <li>Set a Project File Edit Management Set Password.</li> <li>Password Confirm</li> <li>Caution</li> <li>You will need this password to open the Project File.</li> <li>Keep your password private and save it in a secure location.</li> <li>OK @ Cancel</li> </ul> </li> <li>If you click [Set Password] when a password is already set, the following dialog box appears. Change or remove the password.</li> <li>Project File Edit Management Set Password.</li> <li>Password _ remove the password.</li> <li>Password _ remove Tile Edit Management password.</li> <li>Password _ remove the password.</li> <li>Password _ remove the file Edit Management password.</li> <li>Password _ remove the password.</li> <li>Password _ remove the file Edit Management password.</li> <li>Password _ remove the password.</li></ul> |
|                                  | Keep your password private and save it in a secure location.  |
|                                  | OK (Q) Cancel   |

| Setting   |                              | Description   |  |  |  |  |  |  |
|---|------------------------------|---|--|--|--|--|--|--|
|   | Password                     | Set a password with up to 10 characters.  |  |  |  |  |  |  |
| ÷   | Confirm                      | Confirm the password.   |  |  |  |  |  |  |
| Е   |                              | NOTE  |  |  |  |  |  |  |
|   |                              | • If you click [OK] leaving this box blank, the password is not set.  |  |  |  |  |  |  |
| Se  | nd/Receive                   | Set a password to Permit a project transfer.  |  |  |  |  |  |  |
|   | Send/Receive<br>Project File | Displays a password for sending/receiving with "*****".   |  |  |  |  |  |  |
|   | Set Password                 | Click this button and the following dialog box appears:   |  |  |  |  |  |  |
|   |                              | If you click [Set Password] when a password is already set, the following dialog box appears. Change or remove the password grivate and save it in a secure location         If you click [Set Password] when a password is already set, the following dialog box appears. Change or remove the password is already set, the following click [Set Project File Transfer ManagementSet Password]         If enter the current Project File Transfer ManagementSet Password         If enter the current Project File Transfer ManagementSet Password         Password         If enter the current Project File Transfer Management password         Password         If enter the current Project File Transfer Management password         Password         If enter the current Project File Transfer Management password         Password         If enter the current project File Transfer Management password         Password         If enter the current project File Transfer Management password         Password         If enter the current project File Transfer Management password         Password       Imagement password         If enter the current project File Transfer Management password         If you will need this password to ared/receive the Project File.         If enter the care in a secure location.         Imagement in a secure location.         Imagement in a secure location. |  |  |  |  |  |  |
|   | Password                     | Set a password with up to 24 characters.  |  |  |  |  |  |  |
|   | Confirm                      | Confirm the password.   |  |  |  |  |  |  |
|   |                              | NOTE  |  |  |  |  |  |  |
| • If you click [OK] leaving this box blank, the password is not s |                              |   |  |  |  |  |  |  |

# ◆ Logic Memory

You can check the current logic capacity, symbol variable capacity, address points, and comment memory of the logic program. You can also change the proportion of the logic capacity and comment memory as required.

| 💣 Project Information   |  |                            | ×                   |  |  |
|---|--|----------------------------|---------------------|--|--|
| File Information  | Logic Memory   |                            |                     |  |  |
| Display Unit<br>Send Data<br>SRAM Information<br>Destination<br>Passwords<br>Logic Memory | Logic Capacity (Steps)   | Configure Memory<br>3 / 15 |                     |  |  |
|   | Variable Capacity  |                            | 0 / 6000<br>Details |  |  |
|   | Number of Addresses Used in Logic  |                            | 7 / 256<br>Details  |  |  |
|   | Comment Memory<br>Number of Variable Comments<br>Number of Rung Comments | 0 / 210<br>0 / 55          |                     |  |  |
|   |  | OK ( <u>O</u> )            | Cancel              |  |  |

| Setting                         | Description  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|
| Configure Memory                | Click this button and the following dialog box appears.                            |  |  |  |  |  |
| Logic Capacity                  | Displays the number of Steps that you can create.                                  |  |  |  |  |  |
| Variable<br>Comment<br>Capacity | Sets the upper limit for the symbol variable comment memory, ranging from 0 to 15. |  |  |  |  |  |
| Rung Comment<br>Capacity        | Sets the upper limit for the rung comment capacity, ranging from 0 to 15.          |  |  |  |  |  |

| Setting        |                   | Description  |  |  |  |  |  |  |  |
|----------------|-------------------|--|--|--|--|--|--|--|--|
| Va             | riable Capacity   | Displays the current and total configurable number of symbol variables used. |  |  |  |  |  |  |  |
|                | Details           | Click this button and the following dialog box appears. You can check        |  |  |  |  |  |  |  |
|                |                   | the number of symbol variables currently used and the possible               |  |  |  |  |  |  |  |
|                |                   | configurable number, as well as the total number of symbol variables.        |  |  |  |  |  |  |  |
|                |                   | 🎸 Variable Capacity Detail   |  |  |  |  |  |  |  |
|                |                   | Variable Capacity Retentive Variable Volatile Variable                       |  |  |  |  |  |  |  |
|                |                   | Bit Variable 0 items 0 / 8000  |  |  |  |  |  |  |  |
|                |                   | Bit Variable Input 0 rtems 0 / 256   |  |  |  |  |  |  |  |
|                |                   | Bit Variable Output 0 items 0 / 256  |  |  |  |  |  |  |  |
|                |                   | Integer Variable 0 items 0 / 8000  |  |  |  |  |  |  |  |
|                |                   | Integer Variable Input 0 ritems 0 7 64                                       |  |  |  |  |  |  |  |
|                |                   | Integer Variable Output 0 items 0 / 64                                       |  |  |  |  |  |  |  |
|                |                   | Proat variable 0 items 0 / 126   |  |  |  |  |  |  |  |
|                |                   | Timer Variable 0 items 0 / 512   |  |  |  |  |  |  |  |
|                |                   | Counter Variable 0 items 0 / 512   |  |  |  |  |  |  |  |
|                |                   | Date Variable 0 items 0 / 64   |  |  |  |  |  |  |  |
|                |                   | Time Variable 0 items 0 / 64   |  |  |  |  |  |  |  |
|                |                   | PID Variable 0 items 0 / 8   |  |  |  |  |  |  |  |
|                |                   | Total 0 items  |  |  |  |  |  |  |  |
|                |                   | ОК (Q)   |  |  |  |  |  |  |  |
| Nu             | mber of Addresses | Displays the number of addresses currently used in the logic program and     |  |  |  |  |  |  |  |
| Us             | ed in Logic       | the possible configurable number.  |  |  |  |  |  |  |  |
|                | Details           | Click this button and the following dialog box appears. You can check        |  |  |  |  |  |  |  |
|                |                   | the current number used, the possible configurable number, as well as the    |  |  |  |  |  |  |  |
|                |                   | total number of bit variables, integers, and system variables.               |  |  |  |  |  |  |  |
|                |                   | So Number of Addresses Used in Logic   |  |  |  |  |  |  |  |
|                |                   | Bit 0 items 0 / 256  |  |  |  |  |  |  |  |
|                |                   | Integer 0 items 0 / 256  |  |  |  |  |  |  |  |
|                |                   | System Variable 7 items 7 / 64   |  |  |  |  |  |  |  |
|                |                   |  |  |  |  |  |  |  |  |
|                |                   |  |  |  |  |  |  |  |  |
|                |                   |  |  |  |  |  |  |  |  |
| Comment Memory |                   | Displays the current and configurable number of symbol variable and rung     |  |  |  |  |  |  |  |
|                |                   | comments.  |  |  |  |  |  |  |  |

# Destination Folder

Specifies the designation folder for the CF Card or the USB storage.

# Protect Data

Set a password for editing or transferring a project file. <sup>(C)</sup> • ◆ Passwords" (page 5-86)

# 5.14.4 [Utility] Settings Guide

This section covers the Utilities. To open the utilities, from the [Project (F)] menu select [Utility (T)].

# Address Block Conversion

Converts the sequential addresses specified in a project. There are two conversion methods: [Whole Project] converts the addresses in the whole project as a block, and [Individual Settings] converts the selected target screens or features.

#### Whole Project

| 💰 Address Block Conversion 🛛 🔀 |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| Target to be converted         |   |  |  |  |  |  |  |
| Whole Pr                       | oject <u>individual Settings &gt;&gt;</u> |  |  |  |  |  |  |
| Address Type                   |   |  |  |  |  |  |  |
|                                |   |  |  |  |  |  |  |
| Address E                      | Before Conversion                         |  |  |  |  |  |  |
| Start                          | [PLC1]X00000                              |  |  |  |  |  |  |
| End                            | [PLC1]X00000                              |  |  |  |  |  |  |
| Address A                      | Ifter Conversion                          |  |  |  |  |  |  |
| Start                          | [PLC1]X00000                              |  |  |  |  |  |  |
|                                |   |  |  |  |  |  |  |
|                                | Convert Close                             |  |  |  |  |  |  |

| Setting  |                 | Description   |  |  |  |  |
|--|-----------------|---|--|--|--|--|
| Co   | nversion Target | Displays the conversion target.                                   |  |  |  |  |
|  | Whole Project   | Display this when converting all the addresses in a project file. |  |  |  |  |
|  | Individual      | Goes to the mode that sets the selected target individually.      |  |  |  |  |
|  | Settings        | <sup>C</sup> " ◆ Individual Settings" (page 5-91)                 |  |  |  |  |
| Ad   | dress Type      | Select the address type to convert from [Bit] or [Word].          |  |  |  |  |
| Address Before   |                 | Set the range of sequential addresses to convert.                 |  |  |  |  |
| Co   | nversion        |   |  |  |  |  |
|  | Start           | Set the start address to convert.                                 |  |  |  |  |
|  | End             | Set the end address to convert.                                   |  |  |  |  |
| Ad   | dress After     | Set the addresses after conversion.                               |  |  |  |  |
| Co   | nversion        |   |  |  |  |  |
| Start  |                 | Set the start address of the convert destination.                 |  |  |  |  |
|  |                 | You cannot specify addresses from different registers.            |  |  |  |  |
| NOIE I If the total number of addresses (End Address Stort Address) hefere |                 |   |  |  |  |  |

# Individual Settings

Sets the address conversion target screens individually and converts them.

| 💰 Address Block Conversion           | ×   |
|--------------------------------------|---|
| Target to be converted               | Screen Alarm Common                             |
| Individual Settings << Whole Project | Screen <u>Current Screen</u> <u>All Screens</u> |
| Address Type                         | ✓ Base Screens     Start Survey                 |
| ⊙ Bit ⊂ Word                         | ✓ Window Screens                                |
| Address Before Conversion            | Start Screen 1 🗄 🏢 End Screen 2000 🚍 🏢          |
| Start [PLC1]X00000 🚾                 | Video Modules                                   |
| End [PLC1]X00000                     | Start Screen 👖 🛨 🏢 End Screen 🏼 🛱 🏥             |
| Address After Conversion             | I Header/Footer                                 |
| Start [PLC1]X00000                   | I Logics  |
|                                      | Convert Close                                   |

| Setting  | Description   |  |  |  |  |
|--|---|--|--|--|--|
| Screen   | Select the block of target screens to convert.  |  |  |  |  |
| Current Screen   | Converts addresses as a block only for the screens that are currently being edited.             |  |  |  |  |
| All Screens  | Runs address block conversion on all screens by selecting check boxes for all screen types.     |  |  |  |  |
| Base Screens   | Set whether or not to include Base Screens.   |  |  |  |  |
| Start Screen   | Set the start screen number of the Base Screens from 1 to 9,999.                                |  |  |  |  |
| End Screen   | Set the end screen number of the Base Screens from 1 to 9,999.                                  |  |  |  |  |
| Window Screen<br>*1  | Set whether or not to include Window Screens.   |  |  |  |  |
| Start Screen Set the start screen number of the Window Screens from 1 to 2 |   |  |  |  |  |
| End Screen   | Set the end screen number of the Window Screens from 1 to 2,000.                                |  |  |  |  |
| Video Modules  | Determines whether to include the Video Module window in the conversion.                        |  |  |  |  |
| Start Screen   | Specifies the first Video Module window number to be included in the conversion from 1 to 512.  |  |  |  |  |
| End Screen   | Specifies the last Video Module window number to be included in the conversion from 1 to 512.   |  |  |  |  |
| Header/ Footer   | Set whether or not to include the addresses specified for Headers/Footers among the conversion. |  |  |  |  |
| Logics   | Determines whether to include the logic screen in the conversion.                               |  |  |  |  |

| Set    | ting   | Description  |  |  |  |  |  |
|--------|--|--|--|--|--|--|--|
| Alarms |  | Select the Alarm Settings.   |  |  |  |  |  |
|        |  |  |  |  |  |  |  |
|        |  | Alarm Select All   |  |  |  |  |  |
|        |  | Alarm History  |  |  |  |  |  |
|        |  | I Banner Message   |  |  |  |  |  |
|        |  | I ✓ Alarm Summary  |  |  |  |  |  |
|        |  | Common   |  |  |  |  |  |
| _      |  |  |  |  |  |  |  |
|        | Alarms   | Select the conversion Alarm features from [Alarm History], [Banner     |  |  |  |  |  |
|        |  | Message], [Alarm Summary], or [Common].                                |  |  |  |  |  |
|        | Select All   | Runs address block conversion on all alarm settings by selecting check |  |  |  |  |  |
|        |  | boxes for all alarm types.   |  |  |  |  |  |
| Cor    | nmon   | Runs address block conversion on the features selected in [Common      |  |  |  |  |  |
|        |  | Settings].   |  |  |  |  |  |
|        |  | Screen Alarm Common  |  |  |  |  |  |
|        |  | Common Select All  |  |  |  |  |  |
|        |  | Sampling Global D-Script   |  |  |  |  |  |
|        |  | Recipe Extended Script   |  |  |  |  |  |
|        |  | Security 🔽 User Defined Functions                                      |  |  |  |  |  |
|        |  | Time Schedule  |  |  |  |  |  |
|        |  | 🔽 Sound 🔽 Symbol   |  |  |  |  |  |
|        |  | I Text Table   |  |  |  |  |  |
|        |  |  |  |  |  |  |  |
| F      | Common   | Select the conversion features from [Sampling] [Recipe] [Security]     |  |  |  |  |  |
|        | [Time Schedule], [Sound], [Text Table], [Global D-Script], [Extend |  |  |  |  |  |  |
|        |  | Script], [User Defined Functions], [Backlight Color Settings] or       |  |  |  |  |  |
|        |  | [Symbol].  |  |  |  |  |  |
|        | Select All   | Runs address block conversion on all Common settings by selecting      |  |  |  |  |  |
|        |  | check boxes for all the features, except for alarms.                   |  |  |  |  |  |

# Cross Reference

Displays the addresses used by screens and placed parts in a project.

| 💰 Cross Reference   |                 |          |             | ×                         |
|---------------------|-----------------|----------|-------------|---------------------------|
| Target<br>All       | Device/         | PLC      | Type<br>All | Address Block Conversion  |
| Address             | Screen          | Location |             | Feature 🔺                 |
| #H_CurrentYear      | Logic System (F | -        |             | -                         |
| #H_CurrentMonth     | Logic System (F | -        |             | -                         |
| #H_CurrentDay       | Logic System (F | -        |             | -                         |
| #H_CurrentHour      | Logic System (F | -        |             | -                         |
| #H_CurrentMinute    | Logic System (F | -        |             | -                         |
| #H_CurrentSecond    | Logic System (F | -        |             | -                         |
| #H_CurrentDayofTheW | Logic System (F | -        |             | -                         |
| [PLC1]D00000        | Display Unit    | -        |             | System Area Start Address |
| [PLC1]D00000        | Display Unit    | -        |             | Watchdog Write Address    |
| [#INTERNAL]LS0020   | Video Modules   | -        |             | Video Control Address     |
| [#INTERNAL]LS0021   | Video Modules   | -        |             | Video Control Address     |
| [#INTERNAL]LS0022   | Video Modules   | -        |             | Video Control Address     |
| f#INTERNALLS0023    | Widen Modules   | -        |             | Video Control Address 🗾   |
|                     |                 |          |             | Close (C)                 |

| Setting                     | Description  |
|-----------------------------|--|
| Target                      | Select the contents to display on the Cross Reference from [All], [Current<br>Screen], [Base Screen], [Window Screen], [Header/Footer], [Logics], [I/O],<br>[Alarm], [Sampling], [Recipe], [Security], [Time Schedule], [Sound], [Text<br>Table], [Global D-Script], [Extended Script], [User Defined Functions],<br>[Backlight Color Settings], [Video Modules] or [System Settings]. |
| Device/PLC                  | Select the contents to display on the Cross Reference from [All],<br>[Symbol Variable], [PLC1] (device/PLC), [#INTERNAL] (internal<br>device address), or [#MEMLINK] (only when using memory link).  |
| Туре                        | Select the address type to display from [All], [Bit Address], [Word<br>Address], [Bit Variable], [Integer Variable], [Float Variable], [Real<br>Variable], [Timer Variable], [Counter Variable], [Date Variable], [Time<br>Variable], [PID Variable], [System Variable (Bit)], [System Variable<br>(Integer)].   |
| Address Block<br>Conversion | Displays the [Address Block Conversion] dialog box. Converts the addresses specified in a project as a block. There are two conversion methods: [Whole Project], which converts the addresses in the whole project as a block, and [Individual Settings], which sets and converts the conversion target screens individually.<br><sup>©</sup> "■ Address Block Conversion" (page 5-90) |
| Address                     | Displays the address or symbol name in use.  |
| Screen                      | Displays the screen numbers, Alarms, Common Settings' types in use.  |
| Location                    | Displays the part IDs in use or the group, block number, or rung number<br>an address belongs to.  |
| Feature                     | Displays the usage of each address.  |

# Copy from Another Project

Specifies another project file to copy necessary screens.

| 🌮 Copy from Another Project 🛛 🛛 🔀 |            |                |     |     |      |          |  |  |
|-----------------------------------|------------|----------------|-----|-----|------|----------|--|--|
| File C:¥Program Files¥Pro         | -face¥¥A.; | face¥¥A.prx    |     |     | se   |          |  |  |
| Convert Resolution                |            |                |     |     |      |          |  |  |
| Copy Extent C All                 | 🖲 Sp       | Specify Ranges |     |     |      |          |  |  |
| Copy From                         |            |                |     |     |      |          |  |  |
| ✓ Base Screens                    | Start      | 1              |     | End | 9999 |          |  |  |
| 🔽 Include Header and F            | ooter      |                |     |     |      |          |  |  |
| 🔽 Window Screens                  | Start      | 1              |     | End | 2000 | <u></u>  |  |  |
| 🔽 Keypads                         | Start      | 1              |     | End | 8999 | <u> </u> |  |  |
| Video Modules                     | Start      | 1              | =   | End | 512  | <u>.</u> |  |  |
| Сору То                           |            |                |     |     |      |          |  |  |
| Base Screens                      | Start      | 1              |     |     |      |          |  |  |
| Window Screens                    | Start      | 1              |     |     |      |          |  |  |
| Keypads                           | Start      | 1              |     |     |      |          |  |  |
| Video Modules                     | Start      | 1              |     |     |      |          |  |  |
|                                   |            |                | Cop | /   |      | ancel    |  |  |

| Setting            | Description  |  |  |
|--------------------|--|--|--|
| File               | Displays the copy-from file.   |  |  |
| Convert Resolution | Specifies whether or not to adjust part size, position, and text size to the display resolution when copying the screen from a project with a different resolution. Some scale magnification may not convert properly due to text size and resolution limitations. |  |  |
| Browse             | Click this button and the following dialog box appears. Set the copy-<br>from file's storage location and select a file.   |  |  |
| Copy Extent        | Select the copy target from [All] or [Specify Ranges].   |  |  |
|                    | Continued  |  |  |

| Setting      |                               | g            | Description   |  |  |  |
|--------------|-------------------------------|--------------|---|--|--|--|
| Со           | py F                          | rom          | Set the target screens in Copy From when [Specify Ranges] is selected.      |  |  |  |
| Base Screens |                               | se Screens   | Copies Base Screens in another project file.                                |  |  |  |
|              |                               | Start        | Set the copy-from Base Screen start number from 1 to 9,999.                 |  |  |  |
|              |                               | End          | Set the copy-from Base Screen end number from 1 to 9,999.                   |  |  |  |
|              | Include Header<br>and Footer. |              | Set whether or not to copy the header/footer in another project file.       |  |  |  |
|              | Wi                            | ndow Screens | Copies Window Screens in another project file.                              |  |  |  |
|              |                               | Start        | Set the copy-from Window Screen start number from 1 to 2,000.               |  |  |  |
|              |                               | End          | Set the copy-from Window Screen end number from 1 to 2,000.                 |  |  |  |
|              | Keypads                       |              | Copies the keypad screen from another project file.                         |  |  |  |
| en           |                               | Start        | Specifies the first copy-from keypad screen number from 1 to 8999.          |  |  |  |
| cre          |                               | End          | Specifies the last copy-to keypad screen number from 1 to 8999.             |  |  |  |
| S<br>E       | Video Modules                 |              | Copies the Video Module window from another project file.                   |  |  |  |
| ppy froi     |                               | Start        | Specifies the first copy-from Video Module window number from 1 to 512.     |  |  |  |
| ŏ            |                               | End          | Specifies the last copy-from Video Module window end number from 1 to 512.  |  |  |  |
| Co           | ру Т                          | Го           | Specifies the copy-to screen numbers.                                       |  |  |  |
| Base Screens |                               | se Screens   | Specifies the copy-to Base Screen start number from 1 to 9,999.             |  |  |  |
|              | Wi                            | ndow Screens | Specifies the copy-to Window Screen top number from 1 to 1,999.             |  |  |  |
|              | Ke                            | ypads        | Specifies the first copy-to keypad screen start number from 1 to 8999.      |  |  |  |
|              | Video Modules                 |              | Specifies the first copy-to Video Module window start number from 1 to 512. |  |  |  |

# Error Check

Checks whether an error exists in the settings in a project.

| No error     | Enro Chesk  | ₽X |
|--------------|---|----|
|              | ♡ 笠 ♥ 團   |    |
|              | Level Enor Numb Screen-Location Summary   |    |
|              | Errar No Errar  |    |
|              |   |    |
|              |   |    |
| Error ovists |   |    |
| LIIUI EXISIS | Ling Creck  | ÷x |
|              | 🖤 🛱 🖗 📧 🛛 😝 Even il pou save this data, you can't transfer it to the main unit.         |    |
|              | Level Error Numbel Screen-Location Summary  |    |
|              | Error 1000 Peripheral Setting Ports settings are duplicated. Check the Peripheral List. |    |
|              |   |    |
|              |   |    |
|              |   |    |

| Setting  |                |   | Description   |  |
|--|----------------|---|---|--|
| ဖွ All 岸   |                | ALL.  | Checks for errors in all settings.  |  |
| 2  | Logic only     | ₽,  | Checks for errors in logic screen settings.   |  |
| ration   | Screen<br>only | Ş   | Checks for errors in the new screen settings.   |  |
| Ope  | Settings       | E   | Displays the [Error Check] dialog box under [Preferences].  |  |
| Level  |                |   | Displays the level of error as either an [Error] or a [Warning].                                    |  |
| Error Number   |                |   | Displays the error number. For details about error numbers, refer to "Maintenance/Troubleshooting." |  |
| Screen-Location  |                | creen-Location Displays the screen Number, part Number, or Row Number where the error occurred. |   |  |
| Summary:   |                |   | Displays the error details.   |  |
| • Error checks are automatically performed when saving projects. |                |   |   |  |

# 5.14.5 [Work Space] Settings Guide

This section covers the Work Space settings. To open each Work Space, from the [View (V)] menu, point to [Work Space (W)] and select the Work Space to open.

# System Settings

This window is used to configure system settings for a project file.



| Setting Description |                | Description  |  |
|---------------------|----------------|--|--|
| Display             |                | Configures the display settings.                                       |  |
|                     | Display        | Displays the display settings and specifications.                      |  |
|                     |                | ☞ " ■ [Display]" (page 5-111)  |  |
|                     | Display Unit   | Configures detailed settings for the display main unit.                |  |
|                     |                | Image: General Settings Guide" (page 5-112)                            |  |
|                     | Logic Programs | Configures the logic feature settings.                                 |  |
|                     |                | <sup>(27)</sup> "29.14.1 [Logic Programs] Setting Guide" (page 29-136) |  |
|                     | Video/Movie    | Configures the settings for video play and movie recording.            |  |
|                     |                | <sup>(CP</sup> "27.9.1 [Video/Movie] Settings Guide" (page 27-73)      |  |
|                     | Font           | Sets a font to use on the display.                                     |  |
|                     |                | "6.4 [Font] Settings Guide" (page 6-19)                                |  |

| Setting             | Description  |  |  |  |
|---------------------|--|--|--|--|
| Peripheral Settings | Configure settings for each peripheral device.   |  |  |  |
| Peripheral List     | Displays a list of the specified peripheral devices.                                   |  |  |  |
|                     | " ■ [Peripheral List] Settings Guide" (page 5-139)                                     |  |  |  |
| Device/PLC          | Configure settings for a device/PLC.   |  |  |  |
|                     | G <sup>e</sup> "■ [Device/PLC] Setting Guide" (page 5-142)                             |  |  |  |
| Printer             | Configure settings to communicate with the printer.                                    |  |  |  |
|                     | "34.6.2 System Settings [Printer] Settings Guide" (page 34-48)                         |  |  |  |
| Input Equipment     | Configures the settings to communicate with the input device.                          |  |  |  |
| Settings            | *8.4.1 [Input Equipment Settings] Settings Guide" (page 8-21)                          |  |  |  |
| Script I/O          | Configure Script I/O Settings.   |  |  |  |
| Settings            | <sup>(27)</sup> "20.8.1 D-Script/Common [Global D-Script] Settings Guide" (page 20-53) |  |  |  |
| I/O Driver          | Configures the I/O series settings.  |  |  |  |
|                     | "31.2.1 [I/O Driver] Settings Guide" (page 31-12)                                      |  |  |  |
| FTP Server          | Registers FTP servers.   |  |  |  |
|                     | <sup>(C)</sup> "27.9.2 [FTP Server] Settings Guide" (page 27-91)                       |  |  |  |
| Modem               | Configures the settings for the modem connected to the display unit.                   |  |  |  |
|                     | <sup>(CF)</sup> "33.10.2 [Modem] Setttings Guide" (page 33-65)                         |  |  |  |
| Video Modules       | Configures the Video Module window settings.   |  |  |  |
|                     | <sup>(CP)</sup> "27.9.6 [Video Module] Settings Guide" (page 27-124)                   |  |  |  |

# Address Settings

Displays a map of the device/PLC addresses in use or a list of the symbol variables.

| Address  | <b>₽ x</b>                  | Address 9              | ettings         |                                   |         | <b>#</b> > |
|----------|-----------------------------|------------------------|-----------------|-----------------------------------|---------|------------|
| O Device | e Address 🔿 Symbol Variable | C Devic                | e Address       | <ul> <li>Symbol Variat</li> </ul> |         |            |
| Туре     | Bit Address                 | Туре                   | All             |                                   |         | •          |
| Address  | [PLC1]X00000                | Attribute              | All             |                                   |         | •          |
|          | ,                           | Name                   | 1               | Туре                              | Address | P          |
| Х        | 0 1 2 3 4 5 6 7 8 9 A B C D | #L_Scan                | Time            | System Variable(                  | lr      |            |
| 00000    |                             | #L_Statu:              | s               | System Variable(                  | lr      |            |
| 00000    |                             | #L_StopF               | Pending         | System Variable(                  | В       |            |
| 00010    |                             | #L_StopS               | icans           | System Variable(                  | lr      |            |
| 00020    |                             | #L_Time                |                 | System Variable                   | lr      |            |
| 00020    |                             | #L_Unlati              | chClear         | System Variable(                  | В       |            |
| 00030    |                             | #L_Versio              | n               | System Variable(                  | lr      |            |
| 00040    |                             | #L_Watc                | hdogTime<br>-   | System Variable(                  | lr      |            |
| 00050    |                             | IceSupply              | Button          | Bit Variable                      |         |            |
| 00000    |                             | Lamp                   |                 | Bit Variable                      |         |            |
| 00000    |                             | LargeLup               | Button          | Counter Variable                  | 1       |            |
| 00070    |                             | MediumU                | upButton        | Lounter Variable                  | :       |            |
| 00080    |                             | PowerUtt               |                 | Bit Variable                      |         |            |
| 00000    |                             | PowerUn                | 1.0             | Bit Variable                      |         |            |
| 00090    |                             | Sericesu<br>CarallCura | орусир<br>Энжен | Dit Variable                      |         |            |
| 000A0    |                             | SmallCup               | Ducentitu       | Counter Mariable                  |         | _          |
| 000B0    |                             | Sodalpier              | stionTime       | Timer Variable                    |         |            |
| 00000    |                             |                        | Morrine         | Timer Valiable                    |         | Þ          |
|          |                             | Feature                |                 | Location S                        | creen   |            |
| Feature  | Location Screen             | TON Sod                | alnjectionTi    | me 3 M                            | IAIN    |            |
|          |                             | MOV 400                | 0 Sodalnjec     | tion' 5 M                         | IAIN    |            |
|          |                             | NC Sodal               | njectionTim     | e.Q.6 M                           | IAIN    |            |
|          |                             |                        |                 | <b>w</b>                          | - 1     |            |
|          |                             | 🐖 Sys                  | :   👪 Scre      | 🚟 Addr 🔛                          | Com   🦷 | Com        |
| Syst     | 🗰 A••• 🔍 Sear 📓 Com 🔠 S•••  |                        |                 |                                   |         |            |

| Setting   |              | Description  |  |  |
|---|--------------|--|--|--|
| Select Model  |              | Select the target for a list from [Device Address] or [Symbol Variable].       |  |  |
| De  | vice Address | Displays a map of the device/PLC addresses used in a project.                  |  |  |
|   | Туре         | Select the address type to list.   |  |  |
|   |              | When the [Register Variable] is [Variable Format], select [Bit Address]        |  |  |
|   |              | or [Word Address] as the type.   |  |  |
|   |              | When the [Register Variable] is [Address Format], select [Bit Address],        |  |  |
|   |              | [Word Address], [Float Variable], [Real Variable], [Timer Variable],           |  |  |
|   |              | [Counter Variable], [Date Variable], [Time Variable], or [PID Variable] as the |  |  |
|   |              | type.  |  |  |
| Address   |              | Select the address of the target to display in the map area.                   |  |  |
| Map Area         Displays a map of how the addresses are used |              | Displays a map of how the addresses are used                                   |  |  |

Continued

| Setting  | Description   |  |  |  |
|--|---|--|--|--|
| Symbol Variable  | Displays the symbol variables used in the project.  |  |  |  |
| Туре   | Select the address type to list.<br>When the [Register Variable] is [Variable Format], select [All], [Bit<br>Address], [Word Address], [Bit Variable], [Integer Variable], [Float<br>Variable], [Real Variable], [Timer Variable], [Counter Variable], [Date<br>Variable], [Time Variable], [PID Variable], [System Variable (Bit)], or<br>[System Variable (Integer)] as the type.<br>When the [Register Variable] is [Address Format], select [Bit Address],<br>[Word Address], [System Variable (Bit)], or [System Variable (Integer)]<br>as the type. |  |  |  |
| Attribute  | Select the symbol variable usage from [All], [In Use], or [Unused].   |  |  |  |
| Display Area   | Displays a list of the symbol variables.  |  |  |  |
| Feature  | Displays the usage of each address.   |  |  |  |
| ID Location  | Displays the part IDs in use or the group, block number, or rung number<br>an address belongs to.   |  |  |  |
| Screen   | Displays the screen numbers, Common Settings type.  |  |  |  |
| • Double-click either Feature, Location, or Screen and the selected screen for the parts appears in front. |   |  |  |  |

# Common Setting

Calls features common to a project file.



| Setting        |                      |                               | Description  |  |  |
|----------------|----------------------|-------------------------------|--|--|--|
| Alarm Settings |                      |                               | Displays the setting screen to register an alarm message.<br><sup>(27)</sup> "19.9.1 Common (Alarm) Settings Guide" (page 19-63)   |  |  |
| Sampling       | Sampli               | ng List                       | Displays a list of each setting content for sampling groups.<br><sup>(2)</sup> "24.8.1 Common [Sampling] Settings Guide" (page 24-37)  |  |  |
| Recipe         | Transfer CSV Data    | Condition<br>CSV File<br>List | Displays the screen to configure condition settings for transferring<br>CSV data.<br><sup>(G)</sup> "■ Transfer CSV Data (Condition)" (page 25-56)<br>Displays the screen to register CSV data.<br><sup>(G)</sup> "■ Transferring CSV Data (CSV File List)" (page 25-61)                             |  |  |
|                | Transfer Filing Data | Action<br>Filing<br>Data List | <ul> <li>Displays the screen to specify the filing data's transfer actions.</li> <li><sup>(G)</sup> "■ Transfer Recipe Data Settings" (page 25-63)</li> <li>Displays the screen to register filing data.</li> <li><sup>(G)</sup> "■ Transferring Recipes (Filing Data List)" (page 25-67)</li> </ul> |  |  |

| Setting                |                | Description  |  |  |
|------------------------|----------------|--|--|--|
| Security               | Security       | Displays the screen to specify a security level and password.  |  |  |
|                        | Password       | "22.5.2 Security Level List" (page 22-11)  |  |  |
|                        | Security Level | Displays a list of the screens with the security settings and the  |  |  |
|                        | List           | security level.  |  |  |
|                        |                | "22.5.1 Password Settings" (page 22-9)   |  |  |
| Time Sch               | nedule         | Displays a list of actions with the time schedule settings.  |  |  |
|                        |                | "23.4 Common Time Schedule Settings Guide" (page 23-11)  |  |  |
| Sound                  |                | Displays the screen to specify sound.  |  |  |
|                        |                | "26.5 Settings Guide" (page 26-13)   |  |  |
| Text Tabl              | e              | Displays the text table to specify text.   |  |  |
|                        |                | "15.7.3 Text Table Settings Guide" (page 15-51)  |  |  |
| Global D               | -Script        | Displays a list of existing global D-scripts.  |  |  |
|                        |                | <sup>(CP)</sup> "20.8.1 D-Script/Common [Global D-Script] Settings Guide" (page 20-  |  |  |
|                        |                | 53)  |  |  |
| Extended               | l Script       | Displays the screen to program extended scripts.   |  |  |
|                        |                | <sup>(2)</sup> "20.8.1 D-Script/Common [Global D-Script] Settings Guide" (page 20-   |  |  |
|                        |                |  |  |  |
| Change Backlight Color |                | Configures the operation conditions to switch the backlight to red   |  |  |
|                        |                | Image: Section of the section of |  |  |
| Image Re               | egistration    | Displays the [Image Registration] screen to register images.   |  |  |
|                        |                | "10.5.1 Common (Image Registration) Settings Guide" (page 10-23)   |  |  |
| Text Reg               | istration      | Displays the screen to register text.  |  |  |
|                        |                | "15.7.2 Common [Text Registration] Settings Guide" (page 15-49)  |  |  |
| Mark Reg               | gistration     | Displays the screen to register marks.   |  |  |
|                        |                | "9.12.3 Common (Mark Registration) Settings Guide" (page 9-81)   |  |  |
| Keypad F               | Registration   | Displays the screen to edit a keypad.  |  |  |
|                        |                | <sup>(C)</sup> "16.5.2 Common (Keypad Registration) Settings Guide" (page 16-23)   |  |  |
| Movie                  |                | Displays the [Movie] screen for creating a movie list file.  |  |  |
|                        |                | "27.9.3 Common [Movie] Settings Guide" (page 27-93)  |  |  |
| Video Modules          |                | Displays the screen for specifying the Video Module settings.  |  |  |
|                        |                | "27.9.5 Common [Video Module] Settings Guide" (page 27-115)  |  |  |
| Symbol \               | /ariable       | Displays a screen to register a symbol.  |  |  |
|                        |                | <sup>™</sup> "■ Registering the [Symbol Variable]" (page 5-51)   |  |  |
|                        |                | "29.3 Registering Addresses" (page 29-13)  |  |  |

# Screen List

Displays a list of existing Base Screens or Window Screens.

| Screen List 🛛 🕂 🗙    | 📮 Base 1 (Untitled) 🔀                 |
|----------------------|---------------------------------------|
| Screens of Type      |                                       |
| Search Method Title  | -                                     |
| Refine Search Search |                                       |
| "= 44 电 🗙 📃 🎒 😼      |                                       |
| Base Screens         |                                       |
| _                    |                                       |
| Untitled)            |                                       |
| 🐝 Window Screens     |                                       |
| S Logics             |                                       |
| INIT (Untitled)      | 2                                     |
|                      | · · · · · · · · · · · · · · · · · · · |
| MAIN (Untitled)      |                                       |
| © 1/0                | 3                                     |
| 3                    |                                       |
|                      | -                                     |
|                      |                                       |
|                      | 4                                     |

| Setting         |                       | Description   |  |  |
|-----------------|-----------------------|---|--|--|
| Screens of Type |                       | Select the screens to list from [All], [Base Screen], [Window Screen],  |  |  |
| _               |                       |   |  |  |
| Search Method   |                       | Select the screen search method from [Screen] or [Title].   |  |  |
| Refine Search   |                       | Enter your search term, up to 128 characters.   |  |  |
|                 | New Screen 🛅          | Displays the [New Screen] dialog box.   |  |  |
|                 | Copy (C) 🔁            | Copies the selected screen.   |  |  |
|                 | Paste 👔               | Pastes the copied screen on the Screen List.  |  |  |
|                 | Delete 🗙              | Deletes the selected screen from the project.   |  |  |
| cons            | Change 📃<br>Attribute | The following dialog box appears. You can change the screen number, title, and color.   |  |  |
| L<br>L          |                       | 💰 Change Screen Attribute   |  |  |
| Operatio        |                       | Screen Image: Screen   Title Image: Screen   Background Color Image: Screen   Pattern None   Pattern Color Image: Screen   Security Level Image: Screen   Change Cancel |  |  |

| Setting         |                                | Description  |  |  |
|-----------------|--------------------------------|--|--|--|
| Operation Icons | Change<br>Display<br>Unit Mode | Changes the screen list to show or not show a thumbnail preview of the screen.<br>Reduced Screen Display          Screen List       # X         Screen List       # X         Screen List       # X         Screen List       # X         Screen Method       Title         Refine Search       Screens         Screens       0001         (Untitled)       0001         Window Screens       0001 |  |  |
|                 | Nesting 🙀                      | Displays the screens hierarchically.   |  |  |
| Screen List     |                                | Displays a list of screens existing in a project. Double-click the screen<br>row you want to view and the screen is displayed in the right editing area.<br>You can also select a screen and copy or delete it.  |  |  |

### Properties

Displays the selected part or screen attributes/settings. Using this window, you can check the attributes or change the settings.

| NOTE | <ul> <li>Not all of the setting information for the selected part will be displayed in this<br/>window.</li> </ul> | • |
|------|--|---|
|      |  |   |

 Attributes and settings for parts whose placement position and setting information is fixed with fixed pins information is fixed with fixed pins information be displayed. For more details on the fixed pins, refer to

When Creating Logic

• "9.6.3 Fixing/Unfixing Objects" (page 9-49)

#### When Creating a Screen

#### Properties x Properties Switch/Lamp Logics MAIN Rungs 11 🍁 🔤 💠 Steps 16 Lable List Attribute Name Value Label Name Rung comments 1 - MAIN START 4 - LABEL-001 Parts Informa Parts ID SL\_0001 11 - MAIN END Comment Coordinate Top Left X-Coordinat 340 Top Left Y-Coordinat 120 Attribute Name Value Logic Width 141 Title Untitled Height 61 🔻 Rung Switch Feature 2 Rung Number Comment Switch Feature Enable Ladder Instructions 🔻 Bit Switch Instruction Name NO Bit Action Bit Set OperandS1 Bit Address [PLC1]M000011 Value/Address Name Switch1 Switch Common Туре Bit Variable ▼ Detail Settings Lamp Feature Color Array Size 0 Volatile Label Retentive Comment

| Setting  |                     | Description   |  |
|--|---------------------|---|--|
| Part Name Display<br>Area<br>(When creating a<br>screen) |                     | The name of the selected part or screen is displayed. If multiple parts are selected, the number of selected parts is displayed.  |  |
| Part Name Display<br>Area<br>(When creating logic)       |                     | For more information about creating a logic program using the [Logic Program Window], refer to "29.13.5 Using Reference Features to Search Logic Programs" (page 29-127). |  |
|  | Logics              | When creating a [MAIN], [INT], or subroutine screen, select the logic screen from [SUB-01] to [SUB-32].   |  |
|  | Rungs               | Displays the total number of rows in the logic program.   |  |
|  | Steps               | Displays the total number of Steps in the logic program.  |  |
|  | Label List          | Displays a list of the labels in the logic program.   |  |
| Button Area  |                     | Opens and closes the attributes list.   |  |
|  | Expand All          | Expands and displays all categories.  |  |
|  | Collapse All 🛛 🔁    | Reduces and hides all categories.   |  |
|  | Expand to 1st Level | Expands and displays only top level categories.   |  |

| Setting            | Description   |
|--------------------|---|
| Attribute Display/ | Displays the setting content for each attribute. You can change the |
| Setting Area       | attributes in this list.  |

# Screen Data List Window

Displays a list of the Parts and Draw on the screen.

| Screen Data Li | st           |   | X |
|----------------|--------------|---|---|
| Target All     | -            |   |   |
|                |              |   |   |
| Draw/Parts     | Information  |   |   |
| MD_0000        | [PLC1]X00000 |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
|                |              |   |   |
| L              |              |   |   |
| Edit           | Delete       | A | - |

| Setting           |                 | Description   |
|-------------------|-----------------|---|
| Target            |                 | Select the targets to display in the list from [All], [Draw], or [Parts].   |
| Target Assistance |                 | Select the type of targets to display in the list when the [Target] is [Draw] or [Parts].   |
| Display List      |                 | Displays a list of the Parts and Draw placed on the screen. Double-click a row and to open the Settings dialog box.   |
| Draw/Parts        |                 | Displays the Draw type when the [Target] is [Draw] or the Part ID<br>number when the [Target] is [Parts]. Displays "Group Object 1" for a<br>grouped target. And displays "D-script" when [D-Script] is selected.   |
|                   | Information     | Displays the coordinate when the [Target] is [Draw] or all the Partís<br>addresses when the [Target] is [Parts]. Displays the ID number and<br>comment when [D-Script] is selected or the coordinate and all the<br>addresses in a group when Group Object is selected. |
|                   | Show Fixed Pins | Shows whether or not the part or drawing is fixed. For more details on the fixed pins , see<br>** "9.6.3 Fixing/Unfixing Objects" (page 9-49)   |
| Edit              |                 | Displays the setting dialog box for the Part/Draw selected on the display list.   |
| Delete            |                 | Deletes the Part/Draw selected on the display list.   |
| Order (Up)        |                 | Moves the item selected up the display list.  |
| Order (Down)      |                 | Moves the item selected down the display list.  |

# Search

Searches all screens in the project file for the parts that meet the specified conditions. Based on the search results, you can change the attributes.

| Search 🛛 🕂 🗙 |                    |         |  |
|--------------|--------------------|---------|--|
| Search Type  | Comme              | nt 💌    |  |
| Find Comme   | nt autorun         |         |  |
| Range Settin | <u>es &gt;&gt;</u> | Search  |  |
| Parts ID     | Screen             | Comment |  |
| SL_0000      | Base Screens2      | autorun |  |
| SL_0006      | Base Screens3      | autorun |  |
| SL_0001      | Base Screens5      | autorun |  |
|              |                    |         |  |
| •            |                    | F       |  |

| Setting     | Description   |  |
|-------------|---|--|
| Search Type | Select the search method from [Comment], [Label/Text], [Address], or [Parts ID].                              |  |
| Comment     | Searches for the text entered in the parts' [Comment]. In [Find<br>Comment], enter the text you wish to find. |  |
|             | Search 🕂 🗸  |  |
|             | Search Type Comment   |  |
|             | Find Comment autorun  |  |
| Label/Text  | Searches for the parts' [Label] or Drawing text. In [Search for], enter the text you wish to find.            |  |
|             | Search 🛛 📮 🗙  |  |
|             | Search Type Label/Text 💌  |  |
|             | Search for autorun  |  |
|             | Continued   |  |

| Setting   |  | Description  |  |  |
|-----------|--|--|--|--|
| 0         | Address                                | Searches for the address used in the parts. Select [Device Address] or<br>[Symbol Variable]. If you select [Device Address], enter [Type] and<br>[Find Address]. If you select [Symbol Variable], enter [Find Address]<br>only.  |  |  |
| arch Type |  | Search 📮 🗙   |  |  |
|           |  | Search Type Address 💌  |  |  |
| S         |  | <ul> <li>Device Address</li> <li>Symbol Variable</li> </ul>  |  |  |
|           |  | Type Bit Address   |  |  |
|           |  | Find Address [PLC1]M000100   |  |  |
|           | Parts ID                               | Search the Parts ID. Select [All Parts] or [Define Part ID (No.only)].   |  |  |
|           |  | Search 🕂 🗸   |  |  |
|           |  | Search Type Parts ID   |  |  |
|           |  | All Parts  |  |  |
|           |  | O Define Parts ID  |  |  |
| Ran       | ge Settings                            | Click to display a dialog box to specify the search area.  |  |  |
|           |  | <sup>C</sup> " ◆ Range Settings Dialog Box" (page 5-110)   |  |  |
| Sea       | rch button                             | Click to start the search. During the search, the [Stop] button will appear.   |  |  |
| Sea       | rch Result                             | Click the search results to call the screen where the part is used. The  |  |  |
|           |  | the parts setting dialog box.  |  |  |
|           | Parts ID                               | Displays the parts numbers found.  |  |  |
|           | Screen                                 | Displays the screen where the found parts are placed.  |  |  |
|           | Comment or<br>Label/Text or<br>Address | According to the search type specified, Comment, Label/Text, or<br>Address is displayed. You can change the Comment, Label/Text, or<br>Address directly on the screen.   |  |  |
|           |  | Search       # x         Search Type       Label/Text         Search for       Alarm         Range Settings >>       Search         Parts ID       Screen         Screenst Alarm       Text         Base Screenst Alarm Report List       SL_0000         Text       Base Screenst Alarm Streen         Text       Base Screenst Alarm Streen         SL_0000       Base Screenst Alarm Streen         SL_0000       Footer1         Alarm       SL_0000         Footer1       Alarm History         OK (Q)       Cancel |  |  |
|                     | -  |  |  |
|---------------------|--|--|--|
| Setting             | Description  |  |  |
| Replace Settings << | Click to display the following items. You can change the specified |  |  |
|                     | Comment, Label/Text, or Address.                                   |  |  |
|                     | Replace Settings <   |  |  |
| Find                | Enter the text you wish to replace.                                |  |  |
| Replace with        | Enter the new text you want to use.                                |  |  |
| Next                | Searches the replace target in the current search result.          |  |  |
| Replace             | Replaces the items selected in the search results.                 |  |  |
| Replace all         | Replaces all the items selected in the search result.              |  |  |

Range Settings Dialog Box

| ð | 🕯 Range Seti   | ings   |       |       |            | × |
|---|--|--|-------|-------|------------|---|
| [ | -Screen  |  |       |       |            | 1 |
|   | 🔽 Base   | Screens  |       |       |            |   |
|   | Start  | 1 🗄  | #     | End   | 9999 🚊 🏢   |   |
|   | 🔽 Windo  | w Screens  | _     |       | _          |   |
|   | Start  |  | #     | End   | 2000 \Xi 🏢 |   |
|   | 🔽 Кеура  | d Screens  |       |       |            |   |
|   | Start  |  | #     | End   | 8999 🚊 🏢   |   |
|   | 🔽 Video  | Modules Screen                                       | ns    |       |            |   |
|   | Start  |  | #     | End   | 512 🚊 🏢    |   |
|   | 🔽 Heade  | r/Footer   |       |       |            |   |
| l |  |  |       |       |            | ] |
| [ | -Parts   |  |       |       |            | 1 |
|   | ♥ Swit<br>♥ Data<br>♥ Key<br>♥ Graj<br>♥ Hist                            | ch/Lamp<br>a Display Parts<br>oh<br>orical Trend Gra | aph   |       | Select All |   |
|   | <ul> <li>✓ Data</li> <li>✓ Alar</li> <li>✓ Tex</li> <li>✓ Mes</li> </ul> | a Block Display<br>m<br>t Alarm<br>sage Display      | Graph | •     | Clear All  |   |
|   |  |  |       |       |            |   |
|   |  |  |       |       |            |   |
|   |  |  | Ok    | ((0)) | Cancel     |   |

| Setting                 | Description  |
|-------------------------|--|
| Base Screens            | Specifies whether to search the base screen as well as the search range from 1 to 9999.    |
| Window Screens          | Specifies whether to search the window screen as well as the search range from 1 to 2000.  |
| Keypad Screens          | Specifies whether to search the keypad screens as well as the search range from 1 to 8999. |
| Video Module<br>Screens | Specifies whether to search the video modules as well as the search range from 1 to 512.   |
| Header/Footer           | Specifies whether to search the header/footer.   |
| Parts                   | Select the type of parts you want to find.   |
| Select All              | Searches for all parts.  |
| Clear All               | Clears all the parts selected for search.  |

#### Comment List Window

"■ Comment List Window" (page 29-137)

### Watch List Window

"■ Watch List Window" (page 29-142)

### PID Monitor

"
 ■ PID Monitor Window" (page 29-138)

### 5.14.6 [System Settings] Setting Guide

This section reviews the information in the [System Settings].

### ■ [Display]

Displays the specified display unit specifications.

| System Settings 🛛 📮 🗙                 |   | Display  |  |                            |
|---------------------------------------|---|--|--|----------------------------|
| Display<br>Display<br>Display Unit    |   | Display Unit<br>Series<br>Model<br>Orientation | GP3000 Serie:<br>AGP-3500T<br>Landscape  | <u>Change Display Unit</u> |
| Logic Programs<br>Video/Movie<br>Font |   | Specifications<br>Screen Size<br>Resolution    | 10.4 inch<br>640x480 Pixels (VGA)        |                            |
| Peripheral Settings                   |   | Display Unit                                   | FFT Color LCD                            |                            |
| Peripheral List Device/PLC            |   | Internal Memory<br>Backup Memory               | 8 MB<br>320 KB                           |                            |
| Printer Input Equipment Settings      |   | COM1<br>COM2                                   | RS-232C/RS-422(RS-485)<br>RS-422(RS-485) |                            |
| Script I/O Settings                   |   | USB  | 2 Ports                                  |                            |
| FTP Server                            |   | CF   | 1 Ports<br>Available                     |                            |
| <u>Modem</u><br><u>Video Modules</u>  | U |  |  |                            |

| Setting  |                | Description   |  |  |
|----------|----------------|---|--|--|
| Display  | Unit           | Displays the display unit model number.   |  |  |
|          |                | NOTE  |  |  |
|          |                | • Commonly displayed on all the screens called from the System Settings.                            |  |  |
| Seri     | es             | Displays the series name of a display unit.   |  |  |
| Mod      | lel            | Displays the model name that supports the display unit series.                                      |  |  |
| Orie     | entation       | Displays the display unit installation method with [Landscape] or [Portrait].                       |  |  |
| Specific | ations         | Displays the specifications of the display unit specified in [Display Unit].                        |  |  |
| Change   | e Display Unit | The following dialog box appears. Change the display unit model to be<br>used for the project file. |  |  |

| Se | tting                 | Description   |
|----|-----------------------|---|
|    | Current Display       | Displays the series name, model name and installation method of the currently specified display unit.   |
|    | New Display           | Specifies [Series], [Model], [Orientation] of the display to change. If you select IPC series, select [Screen Size] instead of [Orientation].   |
|    | Convert<br>Resolution | Specifies whether or not to adjust part size, position, and text size to the display resolution if the previous resolution is different. Some scale magnification may not convert properly due to text size and resolution limitations. |

# ■ [Display Unit] Settings Guide

# Display

| System Settings 7 ×<br>Display<br>Dicolari  | Display Unit<br>Series GP3000 Series<br>Model AGP-5500T<br>Orientation Landscape   |
|---|--|
| Display Unit<br>Logic Programs<br>Video Movine<br>Eant<br>Peripheral Settings<br>Peripheral List<br>Device/PLO<br>Printer<br>Input Equipment Settings | Display Unit<br>Display Unit<br>Display Operation   Mode   Logic   System Area   Extended Settings  <br>Screen Settings<br>Initial Screen Number  Data Type of Display Screen Numbers  But Change Screen from Main Unit<br>F Reflect in Device/PLC<br>Start Time  Seconds<br>Standby Mode None   |
| Script I/O Settings<br>I/O Driver<br>FTP Server<br>Modem<br>Video Modules   | Standby Mode Time Minutes Change-To Screen in Standby Mode Display Settings Color 16384 Colors, 3-Speed Blink  Reverse Display Solar Show Brightness/Contrast Control Bar  |
| 4   | Faded Color Bink       C Black       C Faded Color         D-Script_debug0 Function Feature       C Enable       Disable         Menu and Error Settings       System Language       English       Vertine Language         System Language       English       Vertine Language       English       Vertine Language         Show System Menu       Lower Part       Show Error Online       Clear at Recovery       Vertine Language         Error Position       C Upper Part       C Lower Part         Auto Recovery on System Error       C Enable       C Disable |

Screen Settings

| -Screen Settings              |                 |          |
|-------------------------------|-----------------|----------|
| Initial Screen Number         |                 |          |
| Data Type of Display Screen N | lumbers 💽 Bin C | BCD      |
| Change Screen from Main Unit  |                 |          |
| ▼ Reflect in Device/PLC       |                 |          |
| Start Time                    | P 🗄 🏾 🖽 Se      | conds    |
| Standby Mode                  | None            |          |
| Standby Mode Time             | 🕅 📰 🛅 Mi        | nutes    |
| Change-To Screen in Stand     | by Mode 🕴       | <u> </u> |

| Setting                                | Description  |
|--|--|
| Initial Screen<br>Number               | Set the number of the screen that to appear at startup.<br>"" "12.3 Choosing the Screen to Display when the GP Turns on" (page 12-7)<br>NOTE<br>• Set the screen number from 1 to 9 999 when the [Data Type of Display]  |
|  | Screen numbers] is [Bin], and from 1 to 7,999 for [BCD].   |
| Data Type of Display<br>Screen numbers | Select the data type of the screen number specified when changing screens from [Bin] or [BCD].   |
| Change Screen from<br>Display Unit     | Set whether or not to reflect the settings in the device/PLC when the screen is changed from the main unit.  |
| Reflect in<br>Device/PLC               | The currently displayed screen number is written into the connected<br>device's [System Area Start Address] + 8 address. This option must be<br>set to change screens from a Screen Change switch and connected<br>device.<br><sup>(2)</sup> "12.5 Changing the Displayed Screen from both Touch and a Device/PLC"<br>(page 12-12)   |
| Start Time                             | Set the time it takes for the display to start up after the power turns ON from 0 to 255 seconds.  |
| Standby Mode                           | <ul> <li>Select the standby mode from [None], [Screen OFF], or [Screen Change].</li> <li>No Check Box Selected The screen does not change to the standby mode.</li> <li>[Screen OFF] Clears the screen if there is no screen touch, screen change or alarm message display after the [Standby Mode Time] passes.</li> <li>Screen Change Changes to the screen specified in [Change-To Screen in Standby Mode] if there is no screen touch, screen change or alarm message display after the [Standby Mode Time] passes.</li> </ul> |
| Standby Mode<br>Time                   | Set the time to automatically clear the screen to protect the display from 1 to 255 minutes. Automatically clears the screen display or changes to the specified screen when the specified time passes without any display operations.   |
| Change-To<br>Screen in<br>Standby Mode | <ul> <li>If [Screen Change] is selected for [Standby Mode], specifies the base screen number to switch to after [Standby Mode Time] passes.</li> <li>NOTE</li> <li>Set the screen number from 1 to 9,999 when the [Data Type of Display Screen numbers] is [Bin], and from 1 to 7,999 for [BCD].</li> <li>If the global window is displayed, the window remains even when the base screen changes.</li> </ul>  |

Display Settings

| -Display Settings                      |                               |  |  |  |
|--|-------------------------------|--|--|--|
| Color                                  | 16384 Colors, 3-Speed Blink 💌 |  |  |  |
| 🗖 Reverse Display                      |                               |  |  |  |
| ☑ Show Brightness/Contrast Control Bar |                               |  |  |  |
| Faded Color Blink                      | C Black 💿 Faded Color         |  |  |  |
| D-Script_debug0 Function Fe            | ature 💿 Enable 🔿 Disable      |  |  |  |

| Setting  | Description  |  |  |
|--|--|--|--|
| Color  | Set the color for the display.   |  |  |
|  | Туре   | Color Setting Range                                      |  |
|  | TFT Display  | 65,536 Colors, No Blink and 16,384 Colors, 3-Speed Blink |  |
|  | STN Display  | 4,096 Colors, 3-Speed Blink                              |  |
|  | Monochrome   | Monochrome 16 Levels 3-Speed Blink                       |  |
| Reverse Display  | Set whether or not   | to display the screen with black/white reversed.         |  |
|  | NOTE   |  |  |
|  | • This can be set only when a monochrome display is selected.                |  |  |
| Show Brightness/<br>Contrast Control BarSelect to control with touch inputs the brightness and contra<br>display unit. |  | ith touch inputs the brightness and contrast on the      |  |
|  |  |  |  |
| Faded Color Blink  | Select [Black] or [Faded Color] for the alternating color of a part or       |  |  |
|  | picture with blink. If you select [Faded Color], the blink is a darker shade |  |  |
|  | of the color specified in the part or picture.                               |  |  |
| D-Script_debug ()  | ) Set whether or not to execute the debug() function data described in I     |  |  |
| Function Feature script.   |  |  |  |
|  | "21.7.1 Debug F  | unction" (page 21-65)                                    |  |

• Menu and Error Settings

| Menu and Error Settings      |                           |
|------------------------------|---------------------------|
| System Language              | English                   |
| Offline Language             | English                   |
| Show System Menu             | Lower Part                |
| Show Error Online            | Clear at Recovery         |
| Error Position               | ○ Upper Part ⊙ Lower Part |
| Auto Recovery on System Erro | or C Enable 🖲 Disable     |

| Setting          | Description  |
|------------------|--|
| System Language  | Set the system language to either [English] or [Japanese]. The system language controls the language for the system menu, Brightness/Contrast Control, and error messages. |
| Offline Language | Select the offline menu display language from either [English] or [Japanese].  |

| Setting                          | Description   |
|----------------------------------|---|
| Show System Menu                 | Select the system menu position: [Do Not Display], [Upper Part], or [Lower Part].   |
| Show Error Online                | Select the timing for clearing online error displays: [None], [Clear at Recovery], or [Clear on Screen Change].   |
|                                  | • The error message that occurs when the device/PLC cannot be written<br>to due to a communication error will not be deleted from the GP screen,<br>even if [Clear at Recovery] is specified. You can delete this error<br>message by initiating a screen change. |
| Error Position                   | Select the error display position: [Upper Part] or [Lower Part].  |
| Auto Recovery on<br>System Error | Set whether or not to perform auto recovery on system errors.   |

# Operation

| System Settings 🛛 📮 🗙    | Display Unit                            |                       |                               |               |
|--------------------------|---|-----------------------|-------------------------------|---------------|
| Display                  | Series                                  | GP3000 Series         |                               |               |
| Display                  | Orientation                             | AGP-35001             |                               |               |
| Display                  | Chentation                              | Lanuscape             |                               |               |
| Display Unit             | Display Unit                            |                       |                               |               |
| Logic Programs           | Displat Operation                       | n Node Logic Sys      | stem Area   Exten             | ided Settings |
| <u>Video/Movie</u>       | System Password                         | ī                     | 0                             | 0:No Password |
| <u>Font</u>              | Touch Panel Dete                        | ection                | <ul> <li>ON Detect</li> </ul> | C OFF Detect  |
| Peripheral Settings      | Touch Buzzer                            | Sound                 |                               |               |
| Peripheral List          | 🔽 Output to Exte                        | ernal Buzzer Terminal |                               |               |
| Device/PLC               | Touch Panel Oper<br>Light Off Detection | ration on Back        | 🖲 Enable 🛛 🔿                  | Disable       |
| Printer                  |   |                       |                               |               |
| Input Equipment Settings |   |                       |                               |               |
| Script I/O Settings      |   |                       |                               |               |
| <u>I/O Driver</u>        |   |                       |                               |               |
| FTP Server               |   |                       |                               |               |
| Modem                    |   |                       |                               |               |
| Video Modules            |   |                       |                               |               |
|                          |   |                       |                               |               |

| Setting   | Description   |
|---|---|
| System Password   | Set the system password for the initial settings or to go offline from 0 to 99,999,999. Set "0" when a system password is unnecessary.      |
| Touch Panel<br>Detection                                | Select the detection timing from [ON Detect] (when touching the touch panel) or [OFF Detect] (when taking your finger off the touch panel). |
| Touch Buzzer Sound                                      | Set whether or not to sound the built-in buzzer when touching the screen.   |
| Output to External<br>Buzzer Terminal                   | Set whether or not to output the touch panel buzzer to the external buzzer terminal.  |
| touch Panel<br>Operation on Back<br>Light Off Detection | Set whether or not to enable touch panel operations when the backlight is burned out.   |

### ♦ Mode

| System Settings 0 x Display Di | Display Unit<br>Series GP3000 Series<br>Model AGP-5600T<br>Orientation Landscape<br>Display Oper tion Mode Logic System Area Extended Settings<br>Window Settings<br>Global Window Operation Disable | Backup Internal Device<br>Backup Start Address<br>Backup Area Size  |
|--|--|---|
| isout Eaujonent Settings<br>Script VO Settings<br>VO. Driver<br>ETP: Server<br>Modem<br>Video. Modules   | -Screen Capture Settings Capture Action Capture Action Save in CCF Card C USB Storage C FTP Serve Control Word Address Reverse Block/White   | Memory Card Settings Save Data Save in C OF Card C USB Storage Control Word Address OF Card Free Space Free Space Storage Address |
|  | Corren/Video Capture Settings  | UBB Storage Free Space Free Space Storage SRAM Auto Backup Control Word Address   |
| 🔹 🕒 🕨 🕅 🖓 Sea 📓 Co 🔛 Scr   |  |   |

• Window Settings

Set the Global Window display settings.

| -Window Settings        |           |
|-------------------------|-----------|
| Global Window Operation | Disable 💌 |
|                         |           |
|                         |           |
|                         |           |
|                         |           |
|                         |           |

| Se  | tting  | Description   |  |  |  |
|---|--|---|--|--|--|
| Glo   | bal Window   | Select the action of the Global Window, which displays on all screens:  |  |  |  |
| Op  | eration  | [Disable], [Direct], or [Indirect].   |  |  |  |
|   | Disable  | Does not use a Global Window.   |  |  |  |
|   | Direct   | Displays the Window Screen number to display and its position in a fixed                                      |  |  |  |
|   |  | State.  |  |  |  |
|   |  | device/PLC to which the system data area is assigned.   |  |  |  |
|   |  | Setting Screen Internal Device Addresses to Use   |  |  |  |
|   |  | Global Window Operation Direct  |  |  |  |
|   |  | Window Screen LS0017 (Reserved)   |  |  |  |
|   |  | Display Position X-Coordinate 220 International LS0018 (Reserved)   |  |  |  |
|   |  | LS0019 (Reserved)   |  |  |  |
|   |  | • Control Address<br>Controls the display of a Global Window. If you turn ON Bit 0, a<br>Window is displayed. |  |  |  |
|   |  | 15 2 1 0  |  |  |  |
|   |  | Reserved (0)  |  |  |  |
|   |  | Window Interchange —<br>0: Interchange is valid.<br>1: Interchange is invalid.                                |  |  |  |
|   |  | 0 - 1: Display window ———   |  |  |  |
|   | • To use a system data area on the device/PLC, use four sequential words |   |  |  |  |
| from the assigned address.                            |  |   |  |  |  |
| G <sup>™</sup> * ◆ System Area Settings" (page 5-135) |  |   |  |  |  |
|   | Window<br>Screen   | Set the Global Window screen number from 1 to 2000.   |  |  |  |

| Setting          |          | 9   | Description  |
|------------------|----------|---|--|
|                  | Direct   | Display<br>Position X-<br>Coordinate/<br>Y-Coordinate | Set the Global Window display position. Even if the screen changes, the<br>Window is displayed in the same position. The coordinate specified here<br>is the top left corner of the Window.<br>X-Coordinate<br>Y-Coordinate<br>Window<br>Base Screen   |
| on               |          |   | <ul> <li>NOTE</li> <li>Specifies the X-coordinate by 4 dots. If the display position is not specified by 4 dots, the position is automatically corrected by 4 dots to the left of the specified coordinate to display the Global Window.</li> </ul>  |
| Il Window Operat | Indirect |   | Set the Window Screen number to display and its position by storing datain the GP internal device address (LS16 to LS19). If you assign a systemdata area to the device/PLC, you can switch Window Screens or changethe display position from the device/PLC.Setting ScreenInternal Device Addresses to Use  |
| Globa            |          |   | Global Window Operation       Indirect       LS0016       Control Address         Data Type <ul> <li>Bin</li> <li>BCD</li> <li>LS0017</li> <li>Window Screen No.</li> <li>LS0018</li> <li>Display Position (X-Coordinate</li> <li>LS0019</li> <li>Display Position (Y-Coordinate</li> <li>Display Position (Y-Coordinate</li></ul> |
|                  |          |   | • Control Address<br>Controls the display of a Global Window. If you turn ON Bit 0, a<br>Window is displayed.  |
|                  |          |   | 15     2     1     0       Reserved (0)       Window Interchange       0: Interchange is valid.       1: Interchange is invalid.   |
|                  |          |   | <ul> <li>0 - 1: Display window ——</li> <li>Window Screen Number<br/>Specify the number of the Window Screen you want to display from 1 to<br/>2000.</li> </ul>   |

| Setting                 |           | Description   |
|-------------------------|-----------|---|
| Global Window Operation | Indirect  | <ul> <li>Display Position X-Coordinate/Y-Coordinate<br/>Set the Global Window display position. If you change the value to store<br/>in the address, you can move the Window. The coordinate specified here<br/>is the top left corner of the Window.</li> <li>X-Coordinate<br/>Y-Coordinate<br/>Y-Coordinate<br/>Y-Coordinate<br/>Window<br/>Base Screen</li> <li>NOTE</li> <li>To use a system data area on the device/PLC, use four sequential words<br/>from the assigned address.</li> <li>System Area Settings" (page 5-135)</li> </ul> |
|                         | Data Type | Select the type of data to store in the address from [Bin] or [BCD].  |

• Screen Capture Settings Prints hard copy of the GP screen or video screen.

| Screen Capture Settings                                  |
|--|
| Capture Action   |
| Capture Action   |
| Save in  |
| Control Word Address [#MEMLINK]0000                      |
| Elack/White  |
| Screen/Video Capture Settings                            |
| Auto Increment File Number                               |
| Auto Delete File   |
| Loop   |
|  |
| Capture Image Quality                                    |
| Ţ  |
|  |
| Low quality/high 80 🛨 🏙 High quality/low compression (1) |
|  |

| Setting |                         | Description  |  |  |  |
|---------|-------------------------|--|--|--|--|
|         | Capture Action          | Set whether or not to perform a screen capture.  |  |  |  |
|         | Save in                 | Select the location to save the captured screen from the [CF Card], [USB Storage], or [FTP Server].  |  |  |  |
|         | Control Word<br>Address | Set the control word address to trigger the screen capture. Three words<br>are used starting from the designated [Control Word Address] to check<br>the file number, file output execution, and saving results (status). |  |  |  |
|         |                         | About Address  |  |  |  |
| ĺ       |                         | Address +0 Control   |  |  |  |
|         |                         | Address +1 Status  |  |  |  |
| S       |                         | Address +2 Hard Copy File No.  |  |  |  |
| setting |                         | * [Hardcopy File Number] is available only when CF, USB storage are selected.  |  |  |  |
| ture (  |                         | Control 15 0 Bit   |  |  |  |
| Cap     |                         | Reserved   |  |  |  |
|         |                         | Bit 0: File output start bit   |  |  |  |
|         |                         | [0] changes to [1].  |  |  |  |
|         |                         | Status   |  |  |  |
|         |                         | 15 12 1 0 Bit  |  |  |  |
|         |                         | Reserved   |  |  |  |
|         |                         | JPEG Error Code Bit 1: File output completed —<br>[0]: Unoutputted<br>[1]: Output completed  |  |  |  |
|         |                         | Bit 0: File outputting<br>[0]: Unoutputted<br>[1]: Outputting  |  |  |  |
|         | •                       | Continued  |  |  |  |

| Setting  |              | Description  |   |   |  |
|----------|--------------|--|---|---|--|
|          | Control Word | Details of JPEG Error Code                               |   |   |  |
|          | Address      |  |   |   |  |
|          |              |  | Bit<br>12-15  | Description   | Details  |
|          |              |  | 0000  | Completed<br>Successfully   | Occurs when the process was<br>completed successfully.   |
|          |              |  | 0001  | Reserved  |  |
|          |              |  | 0010  | Reserved  |  |
|          |              |  | 0011  | Reserved  |  |
|          |              |  | 0100  | CF Card/USB<br>No storage   | Occurs during snapshot or JPEG data<br>display, either the CF Card/USB<br>storage is not inserted or the CF Card<br>hatch is open.   |
|          |              |  | 0101  | Write Error   | Occurs when the CF Card/USB storage<br>does not have sufficient free space for<br>snapshot or when it is removed during<br>writing.  |
|          |              |  | 0110  | Reserved  |  |
|          |              |  | 0111  | CF Card/USB<br>storage error  | Occurs when the CF Card/USB storage has not been formatted.  |
|          |              |  | 1000  | Reserved  |  |
| Settings |              |  | 1001  | Excess of Number<br>of Auto Increment<br>Files  | Occurs when the file number exceeds 65,535 in the auto increment feature.  |
| Capture  |              |  | 1010  | FTP server<br>connection error  | Occurs when the FTP server cannot be accessed.   |
|          |              |  | 1011  | FTP Login Error   | Occurs when an attempt to log into the FTP server failed.  |
|          |              |  | 1100  | Write error   | Occurs when an attempt to write data to the FTP server fails.  |
|          |              | NC   | DTE   |   |  |
|          |              | • T<br>S<br>T<br>F<br>(Ha<br>• S<br>T<br>[2<br>st<br>• S | he timeou<br>erver is co<br>he time sta<br>or exampl<br>name is<br>ard Copy F<br>aving on a<br>his feature<br>CP*****.j<br>Auto Incre<br>tores the fi<br>aving on F | t for the FTP Server<br>onnected after the tin<br>amp will be saved i<br>e, When the file is s<br>s CP060527_15234<br>ile Number)<br>a CF Card or in USE<br>e designates the "**<br>pg" The value can b<br>ment File Number]<br>le number.<br>TP server | <ul> <li>is 75 seconds. An error occurs if the FTP meout period elapses.</li> <li>n a file name.</li> <li>saved 2006/05/27, 15:23:46", the file 6.jpg.</li> <li>8 storage</li> <li>**" portion in a screen capture file name be from 0 to 65,535. When using the function, this address automatically</li> </ul> |
|          |              | T<br>n   | he file nur<br>ot refer to  | nber of the screen-c<br>the [Control Addre  | captured file uses the time stamp and does ss]+2 value.  |

| Se                                       | etting      | Description   |            |                        |                       |  |  |  |
|--|-------------|---|------------|------------------------|-----------------------|--|--|--|
| Control Word • Details of Capture Action |             |   |            |                        |                       |  |  |  |
|  | Address     | In the file output completion bit, the status address Bit 1 turns ON when   |            |                        |                       |  |  |  |
|  |             | the capture process is completed. Then, confirm that the file output  |            |                        |                       |  |  |  |
|  |             | completion bit is ON and turn OFF the file output bit from the device/  |            |                        |                       |  |  |  |
|  |             | PLC. If the file  | output     | bit is turned OFF, the | e GP turns Ol         | FF the file output                           |  |  |
|  |             | completion bit.   | Contro     | I and status timing c  | luring captur         | e 1s as follows                              |  |  |
|  |             | File Output Bit<br>(Control)  |            | ON<br>OFF              |                       | <b>•</b>                                     |  |  |
|  |             | File Outputting<br>(Status)   | Bit        | ON<br>OFF              |                       |  |  |  |
|  |             | File Output Co<br>(Status)  | mpletior   | OFF                    |                       | φ  |  |  |
|  |             | Capture Proces  | SS         | —                      | Capture<br>Processing |  |  |  |
|  |             |   | С          | )=GP turns OFF. 🛛 🔷    | =Turn OFF t           | he bit.                                      |  |  |
|  |             | NOTE  |            |                        |                       |  |  |  |
|  |             | • If you turn OFF the file output bit (control) before the file output completion bit turns ON, the file output completion bit is automatically |            |                        |                       |  |  |  |
| gs                                       |             | • If an error occurs while processing screen capture, the status area is not  |            |                        |                       |  |  |  |
| ttin                                     |             | cleared when the control address trigger bit is turned OFF. It will be  |            |                        |                       |  |  |  |
| Se                                       |             | cleared next time the process is completed successfully.  |            |                        |                       |  |  |  |
| :ure                                     | Black/White | Specifies whether to save the screen captured on a CF Card in black and   |            |                        |                       |  |  |  |
| apt                                      |             | white reverse dis   | play.      |                        |                       |  |  |  |
| 0  |             | NOTE  |            |                        |                       |  |  |  |
|  |             | • On a monochrome or color model, the black/white reverse states are  |            |                        |                       |  |  |  |
|  |             | displayed as fo   | llows.     |                        |                       | ise states are                               |  |  |
|  |             |   |            |                        | Black/White R         | everse Display                               |  |  |
|  |             | PC Screen   | GP<br>Type | GP Screen              | (in CF                | -Card)                                       |  |  |
|  |             |   | Type       |                        | Enable                | Disable                                      |  |  |
|  |             |   | e          | (Normal)               |                       |  |  |  |
|  |             |   | hrom       | Black                  |                       |  |  |  |
|  |             |   | ouoc       | (Reverse)              | Black                 | White  |  |  |
|  |             |   | ž          | White                  | Diddix                | Winte  |  |  |
|  |             | (White O)   |            | Winte                  |                       |  |  |  |
|  |             |   |            |                        |                       |  |  |  |
|  |             |   |            | White                  | Black                 | White  |  |  |
|  |             |   | Colo       |                        |                       |  |  |  |
|  |             |   |            |                        |                       |  |  |  |
|  |             | (Other Colors)<br>e.g.: Green   |            | Green                  | Green                 | Green  |  |  |
|  |             | You can reverse   | e only h   | lack or only white     | I                     | <u>                                     </u> |  |  |
|  |             | Color inversion   | is not     | available.             |                       |  |  |  |
|  |             |   |            |                        |                       |  |  |  |

| Auto Increment<br>File Number       When a screen is captured, a new file is created with a file name<br>automatically assigned by adding 1 (numbering) to the highest number of<br>the existing files. The feature is available when saving to [CF Card] or<br>[USB Storage].         The automatically numbered file number will be written to designated<br>[Control Word Address] +2.         Numbering occurs to a maximum of 65535. After that screen capture will<br>not function. To continue, use [Auto Delete File] or [Loop].         NOTE         • The GP searches for the highest file number upon GP power-up, upon<br>opening/closing of the CF Card cover, and upon insertion/removal of the<br>CF Card/USB storage.         • When using this function, file numbers specified to the designated<br>[Control Word Address] +2 are ignored. | Setting                       |                               | Description   |
|--|-------------------------------|-------------------------------|---|
|  | Screen/Video Capture Settings | Auto Increment<br>File Number | <ul> <li>When a screen is captured, a new file is created with a file name automatically assigned by adding 1 (numbering) to the highest number of the existing files. The feature is available when saving to [CF Card] or [USB Storage].</li> <li>The automatically numbered file number will be written to designated [Control Word Address] +2.</li> <li>Numbering occurs to a maximum of 65535. After that screen capture will not function. To continue, use [Auto Delete File] or [Loop].</li> <li>NOTE</li> <li>The GP searches for the highest file number upon GP power-up, upon opening/closing of the CF Card cover, and upon insertion/removal of the CF Card/USB storage.</li> <li>When using this function, file numbers specified to the designated [Control Word Address] +2 are ignored.</li> </ul> |

| Setting                       |                            | na                  | Description  |  |  |  |  |  |  |
|-------------------------------|----------------------------|---------------------|--|--|--|--|--|--|--|
|                               |                            | Auto Delete<br>File | Deletes existing files and allows new files to be saved when the file<br>number exceeds the maximum of 65535 or the CF Card/USB storage<br>does not have sufficient free space.  |  |  |  |  |  |  |
|                               |                            |                     | When a file with the highest file number exists<br>If the CF Card/USB storage already has the maximum number (65535)<br>file, it deletes all the existing files and creates new files starting with the<br>file number 0.  |  |  |  |  |  |  |
|                               |                            |                     | For example, When "CP65535.JPG" exists in the CF Card  |  |  |  |  |  |  |
|                               |                            |                     | CF-Card CF-Card  |  |  |  |  |  |  |
| ettings                       | nber                       |                     | CP00100.JPG<br>CP00101.JPG<br>CP00102.JPG<br>:<br>:<br>CP65535.JPG<br>CP00000.JPG  |  |  |  |  |  |  |
| Screen/Video Capture Settings | Auto Increment File Number |                     | All screen capture files in the CF Card "CP *****.JPG" are deleted and<br>"CP00000.JPG" is saved.<br>NOTE<br>• All files are deleted so this can take from a few seconds to a few<br>minutes.<br>When the CF Card/USB does not have sufficient free space<br>This feature deletes the file with the lowest file number and creates a file<br>with the highest file number + 1.<br>For example, Files with file numbers CP00100.JPG to CP00300.JPG are<br>saved on the CF Card.<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card<br>CF-Card |  |  |  |  |  |  |
|                               |                            |                     | The file with the smallest number, "CP00100.JPG", is deleted and the new file "CP00301.JPG" is created.  |  |  |  |  |  |  |

| Se            | ettir          | ng   | Description   |  |  |  |  |  |
|---------------|----------------|--|---|--|--|--|--|--|
|               |                | Loop   | During screen capture a new file number is created by adding 1 to the<br>nost recently time stamped file number in the CF Card/USB storage.<br>When 65535 files exist on the CF Card, the files from 00000 will be<br>overwritten sequentially and the screen captures will continue.<br><b>NOTE</b><br>File timestamps are checked each time a file is created.<br>The latest file has the highest file number<br>When the latest file number is 65535, the next file is number 00000.<br>For example, Files with file numbers "CP65531.JPG" to "CP65535.JPG"<br>are saved on the CF Card. |  |  |  |  |  |
|               |                |  | CF-Card CF-Card   |  |  |  |  |  |
| ettings       | umber          |  | CP65531.JPG       9:00         CP65532.JPG       10:00         CP65533.JPG       11:00         CP65534.JPG       12:00         CP65535.JPG       13:00  |  |  |  |  |  |
| rre S         | le N           |  | A new file, "CP00000.JPG", is created.  |  |  |  |  |  |
| en/Video Capt | to Increment F | o Increment F  | If the CF Card/USB does not have sufficient free space<br>During screen capture, the oldest file is deleted and the new file is saved<br>with a file number 1 larger than the latest file.  |  |  |  |  |  |
| Scre          | Au             |  |   |  |  |  |  |  |
|               |                | The oldes<br>"CP0000<br><b>NOTE</b><br>• When a<br>the USH | CP-00000.JPG       14:00         CP65531.JPG       9:00         CP65532.JPG       10:00         CP65533.JPG       11:00         CP65535.JPG       12:00         CP65535.JPG       13:00   |  |  |  |  |  |
|               |                |  | The oldest file, "CP65531.JPG", is deleted and the new file<br>'CP00001.JPG" is created.<br>NOTE<br>When a file is deleted due to insufficient free space on the CF Card or<br>the USB storage, the oldest file is deleted in order to create a new file. In<br>such a case, it may take twice as long to save a file compared to saving  |  |  |  |  |  |
|               |                |  | <ul><li>when there is sufficient free space.</li><li>When saving to FTP, the auto increment file number feature is not available.</li></ul>   |  |  |  |  |  |

| Setting                       |                          | Description  |
|-------------------------------|--------------------------|--|
| Screen/Video Capture Settings | FTP Server               | It is displayed only when you select [FTP Server] for the Save in<br>location. Select the FTP server number to use. (FTP server number is the<br>number that you registered in the system settings [FTP Server Settings].<br>NOTE<br>• The time stamp is given to the file name. |
|                               | Capture Image<br>Quality | <ul> <li>Set the capture image quality from 1 to 100. You can also specify by directly inputting numeric values.</li> <li>1 : Low-Quality Image, High Compression</li> <li>100: High Quality Image, Low Compression</li> </ul>   |

### Backup Internal Device

Copies data stored in the internal device addressís user area to the backup SRAM. If you specified the Backup Internal Device, the GP will start up maintaining the data stored in the internal device address when you turn ON the GP again.

| IMPORTANT | • | The data stored in the GP internal device is cleared when turning OFF the |
|-----------|---|---|
|           |   | GP or when the GP goes offline. You can use this function to back up the  |
|           |   | data in the user area.  |

| Ì | Backup Internal Device |
|---|------------------------|
|   | E Backup               |
|   | Backup Start Address   |
|   | Backup Area Size 🛛 🚍 🧱 |
|   |                        |
|   |                        |

| Setting | Description  |                            |       |                                |      |  |  |
|---------|--|----------------------------|-------|--------------------------------|------|--|--|
| Backup  | Set whether or not to backup the GP internal device.   |                            |       |                                |      |  |  |
|         | NOTE   |                            |       |                                |      |  |  |
|         | • Backs up the data stored in sequential addresses in the user area. Select the user area range from LS or USR (system area or USR for the memory link method). You cannot back up multiple ranges. If you select the LS area in the direct access method, only one of the two user areas (red frame portion) is backed up. This holds true for selecting the system area in the memory link method. |                            |       |                                |      |  |  |
|         | Dir  | ect Access Meth<br>LS Area | od Me | emory Link Meth<br>System Area | od   |  |  |
|         | LS0000   | System Data                |       | System Data                    | 0000 |  |  |
|         | LS0020   | Area<br>Read               |       | Area                           | 0020 |  |  |
|         | (LS0276)   | Area<br>User               |       | User<br>Area                   |      |  |  |
|         | LS2032   | Area<br>Special Relay      |       | Special Relay                  | 2032 |  |  |
|         | LS2048   | Area                       |       | Area                           | 2048 |  |  |
|         | LS2096   | Reserved Area              |       | Reserved Area                  | 2096 |  |  |
|         | User User<br>Area Area   |                            |       |                                |      |  |  |
|         | LS8999   |                            |       |                                | 8999 |  |  |

| Setting                 | Description   |  |  |  |
|-------------------------|---|--|--|--|
| Backup Start<br>Address | Set the start address of the internal device to back up. Set the start<br>address within the range to ensure the [Backup Area Size].<br>For direct access method, the start address should be specified within the<br>range of LS20 to LS2031, LS2096 to LS8999, or USR0 to USR29999.<br>For memory link method, the start address should be specified within the<br>range of 20 to 2031, 2096 to 8999, or USR0 to USR29999.  |  |  |  |
| Backup Area Size        | <ul> <li>Set the internal device size to back up.</li> <li>MPORTANT</li> <li>If the [Backup Start Address] + [Backup Area Size] exceeds the valid range of the internal device backup, the backup function will not work.</li> <li>NOTE</li> <li>For the LS area or M to M device (memory link), specify from 1 to 6,096. For the USR area, specify from 1 to 30,000.</li> <li>The internal device's backup size depends on the backup area size.</li> <li>Calculation 16 + (4<sup>*1</sup> x Backup Area Size) For example,</li> </ul> |  |  |  |
|                         | Settings       Description         Backup Start Address       LS2096         Backup Area       6096         Calculation Result       (16) + (4 x 6096) = 24,400 bytes (approximately 24 KB)         *1 The value is 4 for the LS device address and the memory link. The value is 2 for the USR device address. If the Backup Area Size is an odd number, add 1 to the value.   |  |  |  |

• Memory Card Settings Configures the settings for saving data to various memory cards.

| Memory Card Settings          |                                 |       |  |  |  |  |
|-------------------------------|---------------------------------|-------|--|--|--|--|
| 🔽 Save Data                   | Save Data                       |       |  |  |  |  |
| Save in 🖝 OF Ca               | Save in 🕜 OF Card 🔿 USB Storage |       |  |  |  |  |
| Control Word Address          | [PLC1]D00000                    |       |  |  |  |  |
| CF Card Free Space            |                                 |       |  |  |  |  |
| Free Space Storage<br>Address |                                 |       |  |  |  |  |
| 🔲 USB Storage Free Spac       | e .                             |       |  |  |  |  |
| Free Space Storage<br>Address | <u> </u>                        |       |  |  |  |  |
| 🔲 SRAM Auto Backup            |                                 |       |  |  |  |  |
| Control Word Address          |                                 | Lazal |  |  |  |  |
|                               |                                 |       |  |  |  |  |
|                               |                                 |       |  |  |  |  |
|                               |                                 |       |  |  |  |  |
|                               |                                 |       |  |  |  |  |
|                               |                                 |       |  |  |  |  |
|                               |                                 |       |  |  |  |  |

| Setting      | Descriptio   | n   |  |  |  |  |
|--------------|--|---|--|--|--|--|
| Save Data    | Specifies w  | hether t  | to save the data stored in the backup SRAM when the      |  |  |  |
|              | GP is active, such as filing data or CSV files (Alarm, Sampling), on a |   |  |  |  |  |
|              | [CF Card] or in [IISB Storage]   |   |  |  |  |  |
|              | F "E 15 2 Destrictions on Soving Date" (nage 5 169)                    |   |  |  |  |  |
| -            | * "5.15.2 Restrictions on Saving Data" (page 5-168)                    |   |  |  |  |  |
| Control Word | This addres  | ss contro   | ols writing data. It writes a command to the address     |  |  |  |
| Address      | after design   | nating a  | file number.   |  |  |  |
|              |  |   |  |  |  |  |
|              |  | Cor   | ntrol Word Address Command/Status                        |  |  |  |
|              |  |   | +1 File No.  |  |  |  |
|              |  | <b>.</b>  |  |  |  |  |
|              | Command/   | Status  |  |  |  |  |
|              | Enters a co  | mmand   | to write data to a CF Card or a USB storage device       |  |  |  |
|              | The proces   | sing res  | ults (status) are reflected in the address.              |  |  |  |
|              | Mode   | Data  | Description  |  |  |  |
|              | Command  | 0001h   | Filing Data  |  |  |  |
|              | Command  | 0002h   | GP-PRO/PB III for Windows Logging data (compatible)      |  |  |  |
|              |  | 0003h   | GP-PRO/PB III for Windows Line Chart data (compatible)   |  |  |  |
|              |  | 0004h   | GP-PRO/PB III for Windows Sampled data (compatible)      |  |  |  |
|              |  | 0005h   | Block 1's Alarm History data                             |  |  |  |
|              |  | 0006h   | Block 2's Alarm History data                             |  |  |  |
|              |  | 0007h   | Block 3's Alarm History data                             |  |  |  |
|              |  | 0008h   | Block 4's Alarm History data                             |  |  |  |
|              |  | 0009h   | Block 5's Alarm History data                             |  |  |  |
|              |  | 000ah   | Block 6's Alarm History data                             |  |  |  |
|              |  | 000bh   | Block 7's Alarm History data                             |  |  |  |
|              |  | 000ch   | Block 8's Alarm History data                             |  |  |  |
|              |  | 0020h   | GP-PRO/PB III for Windows Logging loop auto-save start   |  |  |  |
|              |  | 00216   | (compatible)   |  |  |  |
|              |  | 002111  | completion (compatible)                                  |  |  |  |
|              | Status   | 0000h   | Completed Successfully                                   |  |  |  |
|              | Clarao   | 0100h   | Write Error  |  |  |  |
|              |  | 0200h   | No CF Card is inserted, or the cover is open.            |  |  |  |
|              |  | 0300h   | No data to be loaded (when no data is specified)         |  |  |  |
|              |  | 0400h File Number Error (File number is outside of range) |  |  |  |  |
|              |  | 0500h Conflict error with the Pro-Server request          |  |  |  |  |
|              |  | 2000h   | GP-PRO/PB III for Windows Logging loop auto-save         |  |  |  |
|              |  |   | responding correctly (compatible)                        |  |  |  |
|              |  |   | While the Control Address has this value, the auto-save  |  |  |  |
|              |  |   | mode continues. When the value is changed, the auto-save |  |  |  |
|              |  |   | mode linishes.   |  |  |  |

| Setting      | Descriptio   | Description   |                         |  |  |  |
|--------------|--|---|-------------------------|--|--|--|
| Control Word | File Name  | ile Name and Save Location  |                         |  |  |  |
| Address      | When [En:  | a [Enable multiple folders] is specified for filing data, specify withi |                         |  |  |  |
|              | the range of   | of 1 to 8,999. When it is not specified, the file num                   | ber is fixed            |  |  |  |
|              | with "1".  |   |                         |  |  |  |
|              | For example, after writing a command, Alarm History data is saved to |   |                         |  |  |  |
|              | the [ALAF  | ALARM] folder on the CF Card or USB storage device with the             |                         |  |  |  |
|              | following  | name.   |                         |  |  |  |
|              |  | Z1*****.CSV   |                         |  |  |  |
|              |  |   |                         |  |  |  |
|              |  | Data Pile No.   |                         |  |  |  |
|              |  | Block NO.   |                         |  |  |  |
|              | e.   | g.)   |                         |  |  |  |
|              |  | Control Word Address 0005h  | 7100002 001/            |  |  |  |
|              |  | +1 0002h  | 2100002.CSV             |  |  |  |
|              |  |   |                         |  |  |  |
|              | NOTE   |   |                         |  |  |  |
|              | • When th  | e CF Card is reset by the GP unit, a folder is creat                    | ed to save              |  |  |  |
|              | data.  |   |                         |  |  |  |
|              | Folder   | Data to be saved  | File Name               |  |  |  |
|              | \FILE  | Filing Data   | F****.BIN               |  |  |  |
|              |  | Transfer CSV Data   | ZR*****.CSV             |  |  |  |
|              | \LOG   | GP-PRO/PB III for Windows Logging data                                  | ZL*****.CSV             |  |  |  |
|              |  | (compatible)  |                         |  |  |  |
|              | DATA   | Image Screen  | I*****.BIN              |  |  |  |
|              |  | Sound Data  | U <sup>*****</sup> .BIN |  |  |  |
|              | F  | Video Capture   | CPJPG                   |  |  |  |
|              |  | Movie File  | *.SDX                   |  |  |  |
|              | \TREND   | GP-PRO/PB III for Windows Line Chart data                               | ZT*****.CSV             |  |  |  |
|              |  | (compatible)  |                         |  |  |  |
|              |  | GP-PRO/PB III for Windows Sampled data                                  | ZS*****.CSV             |  |  |  |
|              |  | (compatible)  |                         |  |  |  |
|              | ALARM  | Block 1's Alarm History data  | Z1*****.CSV             |  |  |  |
|              |  | Block 2's Alarm History data  | Z2*****.CSV             |  |  |  |
|              |  | Block 3's Alarm History data  | Z3*****.CSV             |  |  |  |
|              |  | Block 4's Alarm History data  | Z4 .CSV                 |  |  |  |
|              |  | Block 6's Alarm History data  | Z5 .C3V                 |  |  |  |
|              |  | Block 0's Alarm History data Z0   |                         |  |  |  |
|              |  | Block 8's Alarm History data 78****                                     |                         |  |  |  |
|              | \SRAM  | Backup SRAM data  | ZD*****.BIN             |  |  |  |
|              | \SAMP01  | Sampling Group 1's data   | SA*****.CSV             |  |  |  |
|              | -  | -   | -                       |  |  |  |
|              | -  | -   | -                       |  |  |  |
|              | -  | -   | -                       |  |  |  |
|              | \SAMP64  | Sampling Group 64's data  | SA*****.CSV             |  |  |  |

| Setting                       | Description  |
|-------------------------------|--|
| CF Card Free Space            | Set whether or not to store the CF Cardís free space in an internal device.<br>You can then view the CF Cardís free space.   |
| Free Space Storage<br>Address | <ul> <li>Set the address to store CF Card free space.</li> <li>For direct access method, the start address should be specified within the range of LS20 to LS2031, LS2096 to LS8999, or USR0 to USR29999.</li> <li>For direct access method, the start address should be specified within the range of 20 to 2031, 2096 to 8999, or USR0 to USR29999.</li> <li>Stores the value within the range of 0 to 65,535 (FFFFh) in the specified address. The unit of a value to be stored is in KB.</li> <li><b>NOTE</b></li> <li>When a CF Card is not inserted, the GP cannot check the free space successfully and displays it as 0 KB.</li> <li>The CF Card free space is only an estimate. You may not always be able to save data exactly the size of the free space.</li> <li>If free space exceeds 65,535 (FFFFh) KB, the value of the LS area is 65,535 (FFFFh).</li> </ul>  |
| USB Storage Free<br>Space     | Determines whether to save the free space in the external memory to the internal device. The approximate free space in the external memory is displayed.   |
| Free Space Storage<br>Address | <ul> <li>Configures the address where the free space in the external memory is saved.</li> <li>For direct access method, the start address should be specified within the range of LS20 to LS2031, LS2096 to LS8999, or USR0 to USR29999.</li> <li>For direct access method, the start address should be specified within the range of 20 to 2031, 2096 to 8999, or USR0 to USR29999.</li> <li>Stores the value within the range of 0 to 65,535 (FFFFh) in the specified address. The unit of a value to be stored is in KB.</li> <li><b>NOTE</b></li> <li>When no USB storage is inserted, the GP cannot check the free space successfully and simply displays 0 byes.</li> <li>The free space in the external memory is only an estimate. You may not always be able to save data exactly the size of the free space.</li> <li>If free space exceeds 65,535 (FFFFh) KB, the value of the LS area is 65,535 (FFFFh).</li> </ul> |
| SRAM Auto Backup              | Set whether or not to automatically transfer all the backup SRAM data to the CF Card.  |

| Setting                 | Description  |   |   |
|-------------------------|--|---|---|
| Control Word<br>Address | Backs up the SI<br>control address<br>address created  | RAM data to a CF Ca<br>to trigger the backup<br>from the specified co<br>+0 Control   | ard in operating mode. Specify the<br>. The processing status is saved to an<br>ontrol address +1.  |
|                         | -  | +1 Status   |   |
|                         | • Control<br>Turn On Bit (   | ) to start the backup.  |   |
|                         | 15   | Tra   | 0   |
|                         | When the tran<br>Completion F<br>0 of the contr<br>automatically<br>15<br>Error St<br>[0000]:<br>[0100]:<br>[0101]:<br>[0111]: | nsfer has successfully<br>Flag) turns ON. Confi<br>ol address. The transf<br>7.<br>12<br>12<br>atus<br>Completed Successfully<br>No CF Card<br>CF Card Write Error<br>CF Card Error | completed, Bit 0 (Transfer<br>rm that Bit 0 is ON, and turn OFF Bit<br>fer completion bit will then turn OFF<br>0<br>Transfer Completion Elag<br>[0]->[1] |
|                         | The details of   | f error codes are as fo   | llows.  |
|                         | Error Code   | Error Name  | Details   |
|                         | 0000   | Completed<br>Successfully   | When the backup process is completed successfully.  |
|                         | 0100   | No CF Card  | When a CF Card is not inserted at backups or the CF Card hatch is open.   |
|                         | 0101   | CF Card Write Error   | When there is no sufficient free space<br>in the CF Card at backups or the CF<br>Card is removed while the data is<br>written.                            |
|                         | 0111   | CF-Card Error   | Occurs when the CF Card is unformatted.   |

| Setting                 | Description  |  |  |
|-------------------------|--|--|--|
| Control Word<br>Address | The timing during transfer is as follows.  |  |  |
|                         | Transfer Trigger Bit ON<br>(Control) OFF   |  |  |
|                         | Transfer Completion Bit ON<br>(Status) OFF   |  |  |
|                         | SRAM→CF-Card<br>Transfer Action  |  |  |
|                         | O=GP turns OFF <b></b>   |  |  |
|                         | NOTE   |  |  |
|                         | <ul> <li>After confirming that the data is not being saved in the CF Card by another feature and that the [Transfer Completion Flag] is OFF, transfer SRAM data to the CF Card.</li> <li>When transferring SRAM data to the CF Card, make sure the [Transfer Trigger Bit] and [Transfer Completion Flag] are OFF at the start of operation in case the power is turned OFF during transfer.</li> </ul> |  |  |
|                         | • Set the time to turn ON and OFF [Transfer Trigger Bit] longer than the time set in either [Communication Cycle Time] <sup>*1</sup> or [Display Scan Time] <sup>*2</sup> .  |  |  |

- \*1 The Communication Cycle Time is the time from when the GP requests data from the external device to when the data arrives. This value is stored in internal device LS2037 as a binary value, in units of 10 milliseconds.
- \*2 Display Scan Time is the time required to process one screen. This value is stored in internal device LS2036 as a binary value, in millisecond units.

# ♦ Logic

| System Settings 🛛 📮 🗙    | Display Unit        |                  |                  |             |  |
|--------------------------|---------------------|------------------|------------------|-------------|--|
| Display                  | Series G            | P3000 Series     |                  |             |  |
| www.                     | Model A             | GP-35001         |                  |             |  |
| Display                  | Orientation La      | andscape         |                  |             |  |
| Display Unit             | Display Unit        |                  |                  |             |  |
| Logic Programs           | Display Operation   | Mode Logic Syste | m Area 🛛 Extende | ed Settings |  |
| <u>Video/Movie</u>       | – System Settings – |                  |                  |             |  |
| Font                     | Fixed Scan Ti       | me               | 10               | 🔆 🧾 ms      |  |
| Peripheral Settings      | C CPU Scan Per      | centage          | 50               | <u> </u>    |  |
| Peripheral List          | WDT(Watchdog T      | ïmer) Settings   | 500              | 🗄 🏢 ms      |  |
| Device/PLC               |                     |                  | · ·              | >>Extended  |  |
| Printer                  |                     |                  |                  |             |  |
| Input Equipment Settings |                     |                  |                  |             |  |
| Script I/O Settings      | Logic               |                  |                  |             |  |
| L/O Dairea               | Run at Start Up     |                  |                  |             |  |
| DO Driver                | RUN                 | C STOP           |                  |             |  |
| FTP Server               |                     |                  |                  |             |  |
| Modem                    | Exclude External    | 1/0              |                  |             |  |
| Video Modules            | Enable              | C Disable        |                  |             |  |
|                          | Minor Errors        |                  |                  |             |  |
|                          | RUN                 | C STOP           |                  |             |  |
|                          |                     |                  |                  |             |  |

| Setting   | Description  |
|---|--|
| System Settings   | Configures the system settings for logic features.   |
| Fixed Scan Time/CPU<br>Scan Percentage  | <ul> <li>Selects the mode for logic scan time.</li> <li>If you select [Fixed Scan Time], you can specify the logic time frequency from 10 ms to 2000 ms.</li> <li><sup>(2)</sup> " ◆ Fixed Scan Time" (page 29-120)</li> </ul> |
|   | <ul> <li>If you select [CPU Scan Percentage], you can specify the logic time occupancy. The settings range from 0% to 50%.</li> <li><sup>CP</sup> " ◆ CPU Scan Percentage" (page 29-121)</li> </ul>                            |
| WDT (Watchdog Timer)<br>Settings  | You can configure the monitoring time for the logic scan time. An<br>error occurs if the logic scan time exceeds the WDT (Watchdog<br>Time).<br>The settings range from 100 ms to 3000 ms.                                     |
| >>Extended/< <basic< td=""><td>Click [&gt;&gt;Extended] to specify the [Address Refresh] speed.</td></basic<> | Click [>>Extended] to specify the [Address Refresh] speed.   |
| Address<br>Refresh  | Select the address refresh speed from [Slow], [Medium], and [Fast].  |
|   | Address Refresh Medium 💌   |
|   | G <sup>P</sup> "■ Address Refresh" (page 29-123)   |
|   | Continued  |

| Set   | tting           | Description   |
|-------|-----------------|---|
| Logic |                 | Click [Retentive Settings] to display the [Retentive Settings]<br>dialog box.<br>[Variable Format] specifies the symbol variable retentive/volatile<br>points. [Address Format] specifies the symbol variable retentive/<br>volatile range. |
|       | Run at Start Up | Select the logic program status at display start up from [Run] or [Stop].   |
|       | External I/O    | Select whether to enable input/output from the I/O unit from [Enable] or [Disable].   |
|       | Minor Errors    | Select whether to [Run] or [Stop] the logic program when a minor error occurs.  |

# ♦ System Area Settings

| n Settings I             |   |  |
|--------------------------|---|--|
|                          | Series GP3000 Series  |  |
| piay                     | Model AGP-3500T   |  |
| Display<br>Display Link  | Unentation Landscape  |  |
| Logic Programs           |   |  |
| Logic Programs           | Display   Operation   Mode   Lingic   System Area   Extended Settings |  |
| <u>Video/Movie</u>       | Display   |  |
| ron                      | System Area Device PLC1   |  |
| ripheral Settings        | System Data Area  |  |
| Peripheral List          | System Area Start Address [PLC1]D00000                                |  |
| Device/PLC               | Read Area Size D 🛨 🗮  |  |
| Printer                  | ✓ Enable System Data Area   |  |
| Input Equipment Settings | System Data Area Items Number of Words in use: 16                     |  |
| Script I/O Settings      | Current Screen: (1 Word) (PLC1)D00000                                 |  |
| 1/0 Driver               | Error Status: (1 Word)     (PLC1]D00001                               |  |
| FTP Server               | Clock Data (Current): (4 Word) [PLC1]D00002                           |  |
| Modem                    | V Statu:: (1 Word) (PLC1)D00006                                       |  |
| Video Modules            | Reserved (Write): (1 Word) [PLC1[D00007                               |  |
|                          | Change-To Screen: (1 Word) (PLC1/D00008                               |  |
|                          | Screen Display ON/OFF: (1 Word) [PLC1/D00009                          |  |
|                          | Clock Data (Preset Value): (4 Word) IPI C11D00010                     |  |
|                          | Control: (1 Word) IPLC1/D00014  |  |
|                          | Reserved (Read): (1 Word) IPI C11000015                               |  |
|                          | Window Control (1 Word)   |  |
|                          | Window Screen: (1 Word)   |  |
|                          | Window Disnlaw Position: (2 Words)                                    |  |
|                          |   |  |
|                          | Watchdog Settings   |  |
|                          | Watchdog Timer Settings 0 🚔 🗮 Seconds 0 : None                        |  |
|                          | Watchdog Write Address [PLC1]D00000                                   |  |

| Setting          |                       | Description  |
|------------------|-----------------------|--|
| Dis              | splay                 | Specify a device/PLC.                                  |
|                  | System Area<br>Device | Select the device/PLC to specify the system data area. |
| System Data Area |                       | Set the system data area.                              |

| Se                | tting                        | Description   |
|-------------------|------------------------------|---|
|                   | System Area<br>Start Address | Designate the start address used for the system area.   |
|                   | Read Area Size               | <ul> <li>Set the number of words in the [Read Area] that stores the data used commonly on all screens or the line chart block display data from 0 to 256.</li> <li>NOTE</li> <li>Cannot be specified when a device/PLC is connected with the memory link method.</li> </ul> |
|                   | Enable System<br>Data Area   | Set whether or not to enable the system data area.  |
|                   | System Data<br>Area Items    | Set the system data area items to use. For details of the direct access method, refer to "A.1.4.2 System Data Area" (page A-11), and for the memory link method "A.1.5.2 System Data Area" (page A-26).   |
|                   | Number of<br>Words in Use:   | Displays the total number of words for the items specified to the system data area.   |
| Watchdog Settings |                              | Monitors the communication state of the GP and the PLC.<br>The GP writes "00FF" to the PLC word address at every setting time. The<br>PLC confirms at every setting time that "00FF" has been written and that<br>communication is performed.                               |
|                   | Watchdog Timer<br>Settings   | Set the watchdog's monitoring cycle time from 0 to 65,535.  |
|                   | Watchdog Write<br>Address    | Set the write address for the watchdog.   |

#### Extended Settings

Available extensions differ depending on the model. Please check whether your model supports the feature before use.

"1.3 List of Supported Functions by Device" (page 1-5)

| System Settings 7 🗙<br>Display | Display Unit<br>Series GP3000 Series<br>Model AGP-3500T    |  |
|--------------------------------|--|--|
| Display                        | Orientation Landscape                                      |  |
| <u>Display Unit</u>            | Display Unit   |  |
| Logic Programs                 | Display Operation Mode Logic System Area Extended Settings |  |
| <u>Video/Movie</u>             | Deutice Musiker Setting                                    |  |
| Font                           | Device Monitor Settings                                    |  |
| Peripheral Settings            | Global Window is set to Indirect.                          |  |
| Peripheral List                |  |  |
| Device/PLC                     | Remote PC Access Key Code                                  |  |
| <u>Printer</u>                 | Settings   |  |
| Input Equipment Settings       |  |  |
| Script I/O Settings            |  |  |
| <u>I/O Driver</u>              |  |  |
| FTP Server                     |  |  |
| Modem                          |  |  |
| <u>Video Modules</u>           |  |  |

| Setting          | Description  |
|------------------|--|
| Device Monitor   | Specifies whether to use the device monitor feature.   |
|                  | NOTE   |
|                  | • For the device monitor feature, see below.   |
|                  | * A.2 Monitoring the Value of Device Addresses (Device Monitor)" (page A-41)   |
| Remote PC Access | Enter the key code necessary for using the RPA feature. Click [Settings]   |
| Key Code         | and the [Remote PC Access Key Code Settings] dialog box appears.   |
|                  | Enter the 12-digit key code and click [OK(O)].   |
|                  | Remote PC Access Key Code Settings       -       OK (Q)   Cancel   |
|                  | NOTE   |
|                  | <ul> <li>If you enter the wrong key code, an error message appears and no settings are allowed. Enter the correct key code.</li> <li>When you place the Remote PC Access Window Display, an error message appears. You cannot transfer the project file unless the key code is set.</li> </ul> |

### IPC Settings

This item only appears when you select [IPC Series] for the display unit. "37.9.1 System Settings [Display Unit Settings]-[IPC Settings] Settings Guide" (page 37-155)

### ■ Logic Program Settings Guide

<sup>(C)</sup> "29.14.1 [Logic Programs] Setting Guide" (page 29-136)

### ■ [Video Module Window] Settings Guide

(27.9.1 [Video/Movie] Settings Guide" (page 27-73)

#### ■ [Font] Settings Guide

(Font] Settings Guide" (page 6-19)

# ■ [Peripheral List] Settings Guide

Displays a list of the specified peripheral devices.

| System Settings T X<br>Display<br>Display   | Display Unit<br>Series GP3000 Series<br>Model AGP-3500T<br>Orientation Landscape   |
|---|--|
| <u>Display Unit</u><br>Logic Program <u>s</u><br>Video/Movie  | Peripheral List         List of Device/PLC Management Addresses           Device/PLC1         Maker         Mitsubishi Electric Corporation         Port: COM1           Series         : Q/QnA Serial Communication         V1.10.02         V1.10.02                         |
| Font Peripheral Settings Device/PLO Printer Input Equipment Settings Script I/O Settings I/O Driver | Printer         Type       : Disable         Bar code 1       Type         Type       : Disable         Bar code 2       Type         Type       : Disable         Remote PC Access Input         Type       : Disable         Script1       Type         Type       : Disable |
| <u>FTP Server</u><br><u>Modem</u><br><u>Video Modules</u>   | Script2<br>Type :Disable<br><u>VM Unit</u><br>Touch Output :None   |

| Setting                                       | Description   |
|---|---|
| List of Device/PLC<br>Management<br>Addresses | Displays a list of the specified device/PLC management addresses. |
| Device/PLC                                    | Displays the specified device/PLC series.                         |
| Device Name                                   | Displays the specified device/PLC names.                          |

| Setting                                 |                             | Description   |   |  |
|---|-----------------------------|---|---|--|
| List of Device/PLC Management Addresses | Communication<br>Cycle Time | Displays the internal device<br>communication cycle time (<br>Communication cycle time for<br>transfer request and import a<br>communication cycle times<br>with multiple devices/PLCs<br>here. | addresses to store the sp<br>unit: ms).<br>refers to the elapsed time<br>start from the GP to the<br>for each device/PLC wh<br>are stored using the add<br>LS AREA<br>Driver 1, Device Unit 1<br>Driver 1, Device Unit 32<br>Driver 2, Device Unit 32<br>Driver 3, Device Unit 32<br>Driver 3, Device Unit 32<br>Driver 4, Device Unit 32<br>Driver 4, Device Unit 32<br>time specified in the sys<br>rea]-[System Area Device<br>binary data (unit:10ms)<br>lue is stored in the lower | e between data<br>device/PLC. The<br>en communicating<br>ress scheme shown<br>stem window settings<br>te] is also stored in the<br>the stem. |
|   |                             | [Display Unit]-[System An   | rea]-[System Area Devic   | ce] is also stored in the  |
|   |                             | NOTE  |   |  |
| Lis                                     |                             |   |   |  |
| it of                                   |                             | LS9527  | Driver 4, Device Unit 32  |  |
| ď                                       |                             | :   |   |  |
| ∋vio                                    |                             | 1 \$9496  | Driver 4 Device Unit 1  |  |
| ie/F                                    |                             | :<br>I \$9/95   | Driver 3 Device Unit 32   |  |
| 2                                       |                             | LS9464  | Driver 3, Device Unit 1   |  |
| M                                       |                             | LS9463  | Driver 2, Device Unit 32  |  |
| ani                                     |                             | :   | Environ 1 Davido Lupit 22   |  |
| age                                     |                             | LS9432  | Driver 2, Device Unit 1   |  |
| me                                      |                             | LS9431  | Driver 1, Device Unit 32  |  |
| ant.                                    |                             | :   | :   |  |
| Add                                     |                             | LS9400  | Driver 1, Device Unit 1   |  |
| dre                                     |                             |   | LS AREA   |  |
| sse                                     |                             | nere.   |   |  |
| s                                       |                             | with multiple devices/PLCs are stored using the address scheme sho  |   |  |
|   |                             | communication cycle times   | for each device/PLC wh  | en communicating   |
|   |                             | transfer request and import   | start from the GP to the  | device/PLC. The  |
|   |                             | Communication cycle time refers to the elapsed time between   |   |  |
|   | Cycle Time                  | communication cycle time (  | unit: ms).  |  |
|   | Communication               | Displays the internal device  | addresses to store the sp   | becified device/PLC  |
| Setting                                 |                             | Description   |   |  |

| Setting     |  | Description   |  |
|-------------|--|---|--|
| SCAN ON/OFF |  | Displays the internal device address that controls whether to run or stop   |  |
|             |  | the set communication scan for the device/PLC.  |  |
|             |  | Controls the device/PLC using the displayed bit address as the start.   |  |
|             |  | LS AREA   |  |
|             |  | LS9550 Driver 1, Units 1 to 16  |  |
|             |  | LS9551 Driver 1, Units 1 to 32  |  |
|             |  | LS9552 Driver 2, Units 1 to 16  |  |
|             |  | LS9553 Driver 2, Units 1 to 32  |  |
|             |  | LS9554 Driver 3, Units 1 to 16  |  |
|             |  | LS9555 Driver 3, Units 1 to 32  |  |
|             |  | LS9556 Driver 4, Units 1 to 16  |  |
|             |  | LS9557 Driver 4, Units 1 to 32  |  |
|             |  | LS9558 Reserved   |  |
|             |  | LS9559 Reserved   |  |
|             |  | To stop the communication with the 1st device/PLC of Driver 1, turn ON the LS9550 bit. To resume, turn OFF the bit. |  |
|             |  | LS9550 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0  |  |
|             |  | NOTE  |  |
|             |  | • If you select [Enable System Data Area] for the device/PLC, you cannot  |  |
|             |  | turn OFF the communication scan.  |  |
|             |  | • If LS area is 32 bit, the value is stored in the lower 16 bits.   |  |
| De          | vice/PLC1                                | Displays the memory size of the font used in the user screen area. The  |  |
|             |  | user screen area capacity depends on the display model.   |  |
|             |  | "1.3 List of Supported Functions by Device" (page 1-5)  |  |
|             | Maker                                    | Displays the currently specified device/PLC maker.  |  |
|             | Series                                   | Displays the series for the currently specified PLC.  |  |
|             | Version                                  | Displays the device/PLC series  |  |
|             | Port                                     | Displays the ports that can be connected to a device/PLC  |  |
|             |  |   |  |
|             |  | NOTE  |  |
|             |  | • If the port is also used for other devices/PLCs, $\bigcirc$ is displayed to the right of the [Port].              |  |
| Pri<br>Ba   | nter, Bar Code 1,<br>r Code 2. Script 1. | Displays and edits the settings of the specified [Printer], [Bar Code 1],<br>[Bar Code 2] [Script 1] and [Script 2] |  |
| Script 2    |  | [2m code 2], [compt 1], and [compt 2].  |  |
|             | Туре                                     | Displays the types of the specified peripheral devices.   |  |
|             | Port                                     | Displays the connecting ports of the specified peripheral devices.  |  |
|             |  | NOTE  |  |
|             |  | • If the port is also used for other devices/PLCs • is displayed to the   |  |
|             |  | right of the [Port].  |  |

# ■ [Device/PLC] Setting Guide

Set the details of a device/PLC.

| System Settings 📮 🗙          | Display Unit<br>Series GP3000 Series  |
|------------------------------|---|
| Display                      | Model AGP-3500T   |
| Display                      | Orientation Landscape   |
| Display Unit                 | Device/PLC  |
| Logic Programs               | Add Device/PLC Delete Device/PLC  |
| <u>Video/Movie</u>           | Device/PLC 1  |
| Font                         | Summary Change Device/PLC   |
| Peripheral Settings          | Maker Mitsubishi Electric Corporation Series Q/QnA Serial Communication Port COM1   |
| Peripheral List              | Text Data Mode 2 Change   |
| Device/PLC                   | Communication Settings  |
| Printer                      | SID Type @ RS232C @ RS422/485(2wire) @ RS422/485(4wire)   |
| Input Equipment Settings     | Speed 19200   |
| Script I/O Settings          | Data Length C 7 C 8   |
| I/O Driver                   | Parity CINONE CIEVEN © DDD  |
| FTP Server                   | Stop Bit @ 1 C 2  |
| Modem                        | Flow Control C NONE @ ER(DTR/CTS) C XON/XOFF  |
| Video Modules                | Timeout 3 🔆 (sec)   |
|                              | Retry 2 😴   |
|                              | Wait To Send 0 📑 (ms)   |
|                              | RI/VCC @ RI C VCC   |
|                              | In the case of RS23CC, pouc as select the 9th pin to RI (input)<br>or VCC (BV Power Suppl). If you use the Digital's RS232C<br>Isolation Unit, please select it to VCC. Default |
|                              | Device-Specific Settings  |
|                              | Allowable Number of Devices/PLCs 16   |
|                              | Number Device Name Settings           Y         1         PLC1         Image: Station No =0 Network No =0 PC No =255 Bequest destination module 1/0 No =                        |
| 🎘 Sys 🗱 Add 🔍 Sea 🗳 Co 🔡 Scr |   |

| Setting           | Description  |  |
|-------------------|--|--|
| Add Device/PLC    | Adds the device/PLC settings. Use this setting when one display is   |  |
|                   | communicating with multiple devices/PLCs.  |  |
|                   | NOTE   |  |
|                   | • The number of device/PLC drivers that the GP can communicate with at   |  |
|                   | the same time depends on the type of GP.   |  |
|                   | "1.3 List of Supported Functions by Device" (page 1-5)   |  |
| Delete Device/PLC | Deletes the specified device/PLC.  |  |
| Change Device/PLC | Changes the settings of the device/PLC.  |  |
| Summary           | Displays the settings of the currently specified devices/PLCs.   |  |
|                   | NOTE   |  |
|                   | • Selecting the LT series model, shows the maker, series, and ports:   |  |
|                   | Summary     Change Device/PLC       Maker     Digital Electronics Corporation     Series     LT Driver     Port        Text Data Mode     1     Change |  |
|                   | [LT Driver] is the same as [Memory Link].  |  |
| Maker             | Displays the currently specified device/PLC maker.   |  |
| Series            | Displays the currently specified device/PLC series name.   |  |
| Port              | Displays the connection port of the currently specified device/PLC.  |  |
|                   | NOTE   |  |
|                   | • If the port is also used for other devices/PLCs, () is displayed to the right of the [Port].   |  |

| Se   | tting          | Description   |  |  |  |
|------|----------------|---|--|--|--|
|      | Text Data Mode | Displays the text data mode of the currently specified devices/PLCs.  |  |  |  |
|      | Change         | When the [Change Text Data Mode] dialog how is displayed, you can   |  |  |  |
|      | onange         | change the text data mode. Normally the text data mode is specified   |  |  |  |
|      |                | according to each device/PLC  |  |  |  |
|      |                |   |  |  |  |
|      |                | Select a text data mode from the following list.  |  |  |  |
|      |                | Data in Device         Bytes         Double-word         Text         Select           Addresses         LH/HL storage         LH/HL storage         Data Mode         Select |  |  |  |
|      |                | Store from Top  |  |  |  |
|      |                | Data HL Order 5 C<br>HL Order 1 C   |  |  |  |
|      |                | LH Order 6 C  |  |  |  |
|      |                | Data HL Order 8 C<br>HL Order 3 C   |  |  |  |
|      |                | Change Cancel   |  |  |  |
|      |                |   |  |  |  |
|      | Data in        | Select the data device storage order from [Store from Top Data] or [Store from Last Data].  |  |  |  |
|      | Device         |   |  |  |  |
| าลา) | Audresses      | Storing the text "ABCDE".   |  |  |  |
| nmr  |                | <ul> <li>Store from Lop Data: (When the [Text Data Mode] is "5")</li> <li>Store from Last Data: When the [Text Data Mode] is "8"</li> </ul>                                   |  |  |  |
| õ    |                |   |  |  |  |
|      |                |   |  |  |  |
|      |                | D102 E 00h D102 A B   |  |  |  |
|      |                |   |  |  |  |
|      |                | NULL= "00(h)"   |  |  |  |
|      | Bytes LH/HL    | Select the data storage order to specify in one word (16 bits) from [LH   |  |  |  |
|      | Storage        | Order] or [HL Order].   |  |  |  |
|      |                | Storing the text "ABCDE".   |  |  |  |
|      |                | • HL Order: (When the [Text Data Mode] is "5")  |  |  |  |
|      |                | • LH Order: (When the [Text Data Mode] is "4")  |  |  |  |
|      |                |   |  |  |  |
|      |                | H L H L   |  |  |  |
|      |                | D100 A B D100 B A   |  |  |  |
|      |                |   |  |  |  |
|      |                | D102 = 00h D102 = 00h E   |  |  |  |
|      |                | NULL= "00(h)"   |  |  |  |
|      |                |   |  |  |  |

| Setting                   |                  | g                               | Description  |  |
|---------------------------|------------------|---------------------------------|--|--|
| Summary                   | Change           | Double-word<br>LH/HL<br>Storage | Select the data storage order to specify in two words (32 bits) from [LH<br>Order] or [HL Order].<br>Storing the text "ABCDE".<br>• HL Order<br>(When the [Text Data Mode] is "1") (When the [Text Data Mode] is "4"<br>H L<br>D100<br>D102<br>H L<br>D100<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D102<br>D |  |
|                           |                  | Text Data<br>Mode               | Displays the combination number of the text data mode storage orders.  |  |
|                           |                  | Select                          | Select the text data mode to be used.  |  |
| Communication<br>Settings |                  | unication<br>IS                 | Configure the settings according to the device/PLC. The settings differ depending on the series. See "GP-Pro EX Device Connection Manual." It is recommended to keep the default settings for [Timeout], [Retry], and [Wait to Send].  |  |
| De<br>Se                  | vice<br>tting    | -Specific<br>Is                 | Set this according to each device/PLC.   |  |
|                           | Alle<br>Nu<br>De | owable<br>mber of<br>vices/PLCs | Displays the allowable number of devices/PLCs for the selected device/<br>PLC type.  |  |
|                           | [Ac<br>Bu        | ld Device<br>tton]              | Each time you click the [Add Device Button], one device/PLC is added.<br>This cannot be added when the [Allowable Number of Devices/PLCs] is<br>set to 1.  |  |
|                           | [De<br>Bu        | elete Device<br>tton]<br>]      | Deletes the device/PLC settings.   |  |
|                           | Nu               | <br>mber                        | Displays the specified device/PLC number.  |  |
|                           | De               | vice Name                       | <ul> <li>Set a device/PLC name with up to 20 characters.</li> <li>NOTE</li> <li>When adding the desired [Device Name], ensure not to use a repeated name.</li> </ul>   |  |
|                           | [Di<br>Bu        | splay Unit<br>tton]             | Set settings as needed for the device/PLC. Displays the [Individual<br>Display Unit] dialog box.<br>NOTE<br>• The [Individual Display Unit] differ depending on the PLC. For more  |  |
|                           |                  |                                 | information on the settings for each device/PLC, refer to "GP-Pro EX Device Connection Manual".  |  |
# [Printer] Settings Guide

(34.6.2 System Settings [Printer] Settings Guide" (page 34-48)

#### ■ [Input Equipment Settings] Settings Guide

"36.4.2 System Settings [Input Equipment Settings] - [Remote PC Access Input] Settings Guide" (page 36-20)

#### ■ [Script I/O Settings] Settings Guide

Configure settings to communicate with the device/PLC using scripts.

| System Settings 🛛 📮 🗙    | Display Unit                   |                                       |
|--------------------------|--------------------------------|---------------------------------------|
| Display                  | Series GP3000<br>Model AGR=250 | Series                                |
| Display                  | Orientation Landsca            |                                       |
| Display Unit             | Script I/O Settings            |                                       |
| Logic Programs           | Script 1 Script 2              |                                       |
| <u>Video/Movie</u>       | Summary                        |                                       |
| Font                     | Type Extended S                | cript - Port COM1 -                   |
| Peripheral Settings      | Communication Settings         | · · · · · · · · · · · · · · · · · · · |
| Peripheral List          | Туре                           | RS232C                                |
| Device/PLC               | Speed                          | 9600 💌                                |
| <u>Printer</u>           | Data Length                    | C 7 Bit ⊙ 8 Bit                       |
| Input Equipment Settings | Parity                         | None C Odd C Even                     |
| Script I/O Settings      | Stop Bit                       | C 2 Bit ⊙ 1 Bit                       |
| <u>I/O Driver</u>        | Flow Control                   | ○ None ④ RTS/CTS ○ ER(DTR/CTS)        |
| FTP Server               | 5V Power Supply                | C Enable 💿 Disable                    |
| Modem                    |                                |                                       |

| Setting       | Description  |
|---------------|--|
| Туре          | Select [D-Script/Global D-Script] to use the "SIO Port Operation"        |
|               | function, which communicates using a serial port for D-script or global  |
|               | D-script. Select [Extended Script] to use extended scripts.              |
| Port          | Select a port for scripts from [COM1] or [COM2].                         |
|               | NOTE   |
|               | • If the port is also used for other devices/PLCs, 😝 is displayed to the |
|               | right of the [Port].   |
| Communication | Configure communication settings.  |
| Settings      | NOTE   |
|               | • This is not displayed when the [Type] is [Do Not Use].                 |
|               | • [Communication Settings] differ depending on the device/PLC selected.  |
|               | For details on the settings of the device/PLC, see "GP-Pro EX Device     |
|               | Connection Manual."  |

Continued

| Setting     |                 | Description  |
|-------------|-----------------|--|
|             | Туре            | Select the communication method from [RS232C], [RS422/485 (4wire)], or [RS422/485 (2wire)].  |
|             | Speed           | Select a communication speed from [2400], [4800], [9600], [19200], [38400], [57600] or [115200].   |
| ting        | Data Length     | Choose the communication data length from [7 bit] or [8 bit].  |
| Set         | Parity          | Select the communication parity bit from [None], [Odd], or [Even].   |
| uo          | Stop Bit        | Choose the communication stop bit length from [2 bit] or [1 bit].  |
| Communicati | Flow Control    | If the communication method is [RS232C], select the communication control method from [None], [RTS/CTS] or [ER (DTR/CTS)].   |
|             | 5V Power Supply | If the communication method is [RS232C], designate whether or not to specify the 5V power supply. Only set it to [Enable] if the connected device requires a power supply. If a 5V power supply is not needed and you select Enable, damage can occur to the connected device or the GP. Confirm the specifications of the connected device and cable before setting this. |

## ■ [I/O Driver] Settings Guide

# ■ [FTP Server Settings] Setting Guide

<sup>(C)</sup> "27.9.2 [FTP Server] Settings Guide" (page 27-91)

# [Modem] Settings Guide

(33.10.2 [Modem] Setttings Guide" (page 33-65)

## 5.14.7 [Preferences] Settings Guide

This section explains each item on the [Preferences] dialog box. To open this dialog box, from the [View (V)] menu, select [Preferences (O)].

#### General

Configure general settings for the editor system.

| Preferences  |  | × |
|--|--|---|
| Preferences       General       Screan Edit Style       Script       Toolbar       Logic Edit Style       Monitor Step       Error Check | General Settings for the Editor Set Online Update  ✓ Check for Update when the program starts Set Editor Language Language English ✓ Backup ✓ Save Backup on Overwriting an Existing Project File Editor Memory Condition ✓ Enable |   |
|  | OK (Q) Cancel  |   |

| Setting                       |  | Description   |
|-------------------------------|--|---|
| Set Online<br>Update          | Check for<br>Update when<br>the program<br>starts            | Set whether or not to perform an online update when the program starts.   |
| Set Editor<br>Language        | Language   | Select the language, [Japanese] or [English], used in GP-Pro EX<br>for menus and so on.<br>NOTE<br>• You need to restart GP-Pro EX after making the settings.   |
| Backup                        | Save Backup<br>on Overwriting<br>an Existing<br>Project File | Before overwriting a project file, select whether or not you want<br>to create a backup of the project file.<br>☞ "■ Backup as a History Procedure" (page 5-21)   |
| Editor<br>Memory<br>Condition | Enable   | Specifies whether to keep the settings after exiting the project in<br>order to use the same screen environment the next time.<br>The application can remember which screens are open, which is<br>the active screen, and any System Setting windows displayed in<br>the editing area.<br>You can keep the environment from the most recent 5 projects. |

# Screen Edit Style

Configure settings relevant to Screen Edit Style.

| Preferences                   |  | × |
|-------------------------------|--|---|
| General<br>Sources Edit Stude | Settings for Screen Edit Style                 |   |
| Screen Edit Style             | Action   |   |
| Toolbar<br>Logic Edit Style   | Show Guide on Move or Resize                   |   |
| Monitor Step                  | 🔽 Left Edge 🛛 🔲 Horizontal Center 🔲 Right Edge |   |
| Error Check                   | 🔽 Upper Edge 🛛 🔽 Vertical Center 🗖 Bottom Edge |   |
|                               | 🖵 Snap to Grid                                 |   |
|                               | Grid Size (pixels) Width 20 🚍 Height 20 🚍      |   |
|                               | Display  |   |
|                               | ☑ Show Fixed Pin of Parts                      |   |
|                               | Show Ruler                                     |   |
|                               | Show Grid                                      |   |
|                               | Order Back 💌 Shape Dot 💌                       |   |
|                               | Show Parts ID                                  |   |
|                               | Show Address                                   |   |
|                               | 🔲 Show Touch Area                              |   |
| I                             | 🗖 Show Window Parts Screen                     |   |
|                               |  |   |
|                               | OK (O) Cance                                   |   |

| Setting |                                 | g                     | Description  |
|---------|---------------------------------|-----------------------|--|
| Action  |                                 |                       | Set the actions for editing screens.   |
|         | Show Guide on<br>Move or Resize |                       | When moving parts or pictures, this option shows guides to help align pictures or parts. |
|         |                                 | Left Edge             | Displays a guide on the left to help you align pictures and parts.                       |
|         |                                 | Horizontal<br>Center  | Displays a guide with a horizontal center to help you align pictures and parts.          |
|         |                                 | Right Edge            | Displays a guide on the right edge to help you align pictures and parts.                 |
|         |                                 | Upper Edge            | Displays a guide on the upper edge to help you align pictures and parts.                 |
|         |                                 | Vertical<br>Center    | Displays a guide with a vertical center to help you align pictures and parts.            |
|         |                                 | Bottom Edge           | Displays a guide on the bottom edge to help you align pictures and parts.                |
|         |                                 | Snap to Grid          | Displays a guide to help you align pictures and parts with the grid.                     |
|         |                                 | Grid Size<br>(pixels) | Set the grid size.   |
|         |                                 | Width                 | Set the grid size in the X-coordinate direction from 4 to 120.                           |
|         |                                 | Height                | Set the grid size in the Y-coordinate direction from 4 to 120.                           |
| Display |                                 | y                     | Set the display for editing screens.   |
|         | Show Fixed Pin                  |                       | Shows fixed pins of a Part.  |
|         | of Parts                        |                       | <sup>CP</sup> "■ Screen Data List Window" (page 5-106)                                   |
|         | Show Ruler                      |                       | Shows the ruler.   |
|         | Show Grid                       |                       | Shows the grid.  |

Continued

| Setting |                            | Description   |
|---------|----------------------------|---|
|         | Order                      | Select whether or not to show the grid at the [Front] or the [Back] of the pictures or parts. |
|         | Shape                      | Set the grid's shape from [Dot] or [Grid].  |
| ay      | Show Part ID               | Shows the picture or part label.  |
| Displ   | Show Address               | Shows the address of a Part with address settings.  |
|         | Show Touch<br>Area         | For touchable Parts, shows its touch area in orange.  |
|         | Show Window<br>Part Screen | Shows Window Screens that refer to window Parts.  |

#### Script

Configure settings relevant to D-Script, Global D-Script, Extended Script, and User Defined Function.

You can also specify these in the [Extended Script] and [Global D-Script] dialog boxes. \*\* "20.8.1 D-Script/Common [Global D-Script] Settings Guide" (page 20-53)

| Series Edit Style<br>Script<br>Script<br>Tooloar<br>Logic Edit Style<br>Monitor Step<br>Error Check | Settings for D-Script, Global D-Script, Extended Script, and User-Defined Functions Input Assistance  Solve |
|---|---|
|   | Font Type Font Size Number of spaces inserted by TAB  |
|   | OK (Q) Cancel   |

| Setting            | Description   |
|--------------------|---|
| Input Assistance   | Configure settings of input assistance in D-Script, Global D-Script,<br>Extended Script, and User Defined Function. |
| Show Row<br>Number | Shows the row number to the right of the program.   |

Continued

| Setting          |  | Description  |
|------------------|--|--|
|                  | Auto Indent<br>Control                 | If you insert line feeds as below, tabs are inserted according to the hierarchy.   |
|                  |  | Script Expression Area       Enlarge Script Expression Area         0001       if (b: [PLC1]D000000]==1)         0002       if (b: [PLC1]D000100]         0004       {         0005       b: [PLC1]D000200]==1         0006       >         0007       endif         0008       >         0009       endif |
| Input Assistance | Function Input<br>Assistance           | When the function and the initial bracket "(" are typed as below, the function's format is displayed.  |
|                  | Address Input<br>Dialog                | When creating a script, type a left-hand square bracket ([) and the [Input Address] dialog box appears. You can input addresses in this dialog box.  |
|                  | Auto Syntax<br>Completion              | When "if" or "loop" is typed from the keypad, the remaining syntax is completed.   |
|                  | Auto Syntax<br>Analysis                | When creating scripts, the expression is verified. The [Message Area]<br>displays the results if the expression is incorrect.<br>For example, "Line 1: The expression is incorrect."   |
| Fo               | rmat                                   | Set the format for scripts.  |
|                  | Font Type                              | Select the font to use.  |
|                  | Font Size                              | Set the font size to use from 8 to 72 in increments of 0.5.  |
|                  | Number of<br>Spaces Inserted<br>by Tab | Set the number of tab key indentations to use from 1 to 8.   |

# Tool Bar

Customize each Toolbar

| Preferences  | ×  |
|--|--|
| General<br>Screen Edit Style<br>Toolbar<br>Rogio Edit Otyle<br>Monitor Step<br>Error Check | Configure toolbar layout Parts  I Show Parts preview Ladder Instructions  Toolbar Settings |
|  | OK ( <u>O</u> ) Cancel   |

| Setting |                       | Description  |
|---------|-----------------------|--|
| Parts   | Show Parts<br>Preview | Set whether or not to display a preview of the part when you hover the mouse over the part's toolbar icon.   |
| Custo   | mize                  | Select the logic instruction icon to be displayed on the toolbar.  |
|         | Toolbar<br>Settings   | Opens the [Toolbar Settings] dialog box.         Image: Coolbar Settings         Image: Coolbar Settings |

# Logic Edit Style

| Preferences   |                                     |   |   |                             | × |
|---|-------------------------------------|---|---|-----------------------------|---|
| General<br>Screen Edit Style<br>Script<br>Toolbar<br>Logic Edit Style | Configure Logic<br>Edit<br>I Set up | Editor<br>operands when adding instructions |   |                             |   |
| Error Check   | Display<br>▼ Rung c<br>▼ I/O Add    | omments<br>dress                            |   |                             |   |
|   | Font:<br>Color:                     | MS UI Gothic, Standard, 9pt                 |   | Change Font<br>Change Color |   |
|   |                                     |   | 0 | K ( <u>O</u> ) Cancel       |   |

| Setting |   | Description  |  |  |
|---------|---|--|--|--|
| Edit    | Set up<br>operands<br>when adding<br>ladder<br>instructions | Specifies operands when you are inserting the instruction in the logic programming.            |  |  |
|         | Rung<br>Comments  | Displays rung comments on the logic screen.  |  |  |
| olay    | I/O Address   | Displays the I/O address if a symbol variable is allocated to an I/O terminal.                 |  |  |
| Disp    | Font  | Select the font to use for all the characters on the logic screen.                             |  |  |
|         | Color   | Select an option from the drop-down list, then click [Change Color] to set the option's color. |  |  |

# Monitor Step

Configures the settings for monitoring logic programs online.

| Preferences  |   | × |
|--|---|---|
| General<br>Screen Edit Style<br>Script                     | Configure Monitor Steps<br>Communication Settings                                 |   |
| Toolbar<br>Logic Edit Style<br>Monitor Step<br>Error Check | Port C USB C LAN<br>IP Address 0.0.0.0  |   |
|  | Frequency 500 == ms<br>Retry Count 3 == ms  |   |
|  | Visplay<br>✓ Rung Comments<br>✓ I/O Address<br>✓ Current Value<br>✓ Forces        |   |
|  | Font: MS UI Gothic, Standard, 9pt Change Font<br>Color: Background 🔽 Change Color |   |
|  | OK (Q) Cancel   |   |

| Setting                   |                  | Description  |
|---------------------------|------------------|--|
| u                         | Port             | Select the communication port for online monitoring from [USB] or [LAN].                       |
| Communication<br>Settings | IP Address       | If you select [LAN] for [Port], specify the IP Address.  |
| tor                       | Frequency        | Specifies the communication frequency from 200 to 3000.  |
| Monit                     | Retry Count      | Specifies the communication retry count from 0 to 10.  |
|                           | Rung<br>Comments | Displays rung comments on the logic screen.  |
|                           | I/O Address      | Displays the I/O address if a symbol variable is allocated to an I/O terminal.                 |
| olay                      | Current Value    | Displays the current values of symbol variables during online monitoring.                      |
| Disp                      | Forces           | Displays values that have been forced during online monitoring.                                |
|                           | Font             | Select the font to use for all the characters on the logic screen.                             |
|                           | Color            | Select an option from the drop-down list, then click [Change Color] to set the option's color. |

# Error Check

Configures the error check settings.

| Preferences  | ×  |
|--|--|
| General<br>Screen Edit Style<br>Script<br>Toolbar<br>Logic Edit Style<br>Monitor Step<br>Error Check | Error Check Settings<br>Display<br>© Display warnings<br>© Include Double Coil in warnings |
|  | OK (Q) Cancel  |

| Setting             | Description  |
|---------------------|--|
| Display warnings    | On running the error check, displays warnings in the error window.             |
|                     | When the check box is not selected: Displays only errors.                      |
|                     | When the check box is selected: Displays both errors and warnings.             |
| Include Double Coil | When the same address is used for multiple purposes, displays a warning in the |
| in warnings         | error window.  |

# 5.14.8 [Common Settings] Setting Guide



# Backlight Color Settings

This feature switches the backlight to red. It is useful when creating warning signals. There are 16 condition settings available.

|      | • This feature is available to limited models.         |
|------|--|
| NOTE | "1.3 List of Supported Functions by Device" (page 1-5) |

| 📃 Ba   | ise 1 (Untitled) | 🗙 📑 Backlight 🗙 |           | $\triangleleft  \triangleright  \mathbf{X}$ |
|--------|------------------|-----------------|-----------|---|
| Backli | ght Color Settir | igs             |           |   |
| Number | Action Mode      | Action Address  | Condition | Comment                                     |
| 1      |                  |                 |           |   |
| 2      |                  |                 |           |   |
| 3      |                  |                 |           |   |
| 4      |                  |                 |           |   |
| 5      |                  |                 |           |   |
| 6      |                  |                 |           |   |
| 7      |                  |                 |           |   |
| 8      |                  |                 |           |   |
| 9      |                  |                 |           |   |
| 10     |                  |                 |           |   |
| 11     |                  |                 |           |   |
| 12     |                  |                 |           |   |
| 13     |                  |                 |           |   |
| 14     |                  |                 |           |   |
| 15     |                  |                 |           |   |
| 16     |                  |                 |           |   |

| Setting        | Description  |
|----------------|--|
| Action Mode    |  |
| Action Address | Double-click the line to display the [Backlight Color Settings] settings |
| Condition      | dialog box. The selected settings are shown in the box.                  |
| Comment        |  |

# Selecting [Bit Action]

| 💰 Backlight Color Settings 🛛 🔀 |
|--------------------------------|
| Action Mode Bit Action         |
| Comment                        |
| Change condition to red        |
|                                |
|                                |
|                                |
| O 🔧 Bit OFF                    |
|                                |
| Bit Address [PLC1]X00000       |
|                                |
|                                |
| OK Cancel                      |

# Selecting [Word Action]

| ¢ | 🖇 Backlight Color Settings 🛛 🗙     |
|---|------------------------------------|
|   | Action Mode Word Action            |
|   | Comment                            |
|   | Change condition to red            |
|   | Word Address [PLC1]D00000          |
|   | Alarm Range                        |
|   |                                    |
|   | Upper Limit <mark>65535 🔆 🗄</mark> |
|   |                                    |
|   | Lower Limit                        |
|   |                                    |
|   |                                    |
|   | OK Cancel                          |
|   | OK Cancel                          |

| Setting             | Description  |
|---------------------|--|
| Action Mode         | Select either [Bit Action] or [Word Action].                           |
| Comment             | Enter your comment using up to 20 characters.                          |
| Change condition to | Configure the conditions for switching the backlight to red.           |
| red                 | • When you select [Bit Action] for [Action Mode]                       |
|                     | Specifies whether to switch the color to red upon the specified [Bit   |
|                     | Address] turning ON or OFF.  |
|                     | When you select [Word Action] for [Action Mode]                        |
|                     | Switches the color to red when the stored value in the specified [Word |
|                     | Address] is outside the specified range                                |
|                     | (higher than [Upper Limit] or lower than [Lower Limit]) is stored. The |
|                     | setting range between [Upper Limit] and [Lower Limit] is 0 to 65535.   |

NOTE

#### Symbol Variable Settings

Displays the screen for registering symbol variables.

• For details about registering symbol variables, refer to the following.

"29.3.2 Using Symbol Variables with Arbitrary Names (Variable Format)" (page 29-19)

<sup>&</sup>quot;29.3.3 Using Symbol Variables with Fixed Addresses (Address Format)" (page 29-30)



| Setting   | Description   |  |  |
|-----------|---|--|--|
| Name      | Specifies the symbol variable name.   |  |  |
| Туре      | Specifies the symbol variable type.   |  |  |
|           | When the [Register Variable] is [Variable Format], select [Bit Address],    |  |  |
|           | [Word Address], [Bit Variable], [Integer Variable], [Float Variable], [Real |  |  |
|           | Variable], [Timer Variable], [Counter Variable], [Date Variable], [Time     |  |  |
|           | Variable], or [PID Variable] as the type.                                   |  |  |
|           | When the [Register Variable] is [Address Format], select [Bit Address] or   |  |  |
|           | [Word Address] as the type.   |  |  |
| Array     | Determines whether to specify arrays.                                       |  |  |
| Count     | Specifies the array size of an [Array].                                     |  |  |
| Address   | If you specified [Bit Address] or [Word Address] for [Type], specify the    |  |  |
|           | Device/PLC address.   |  |  |
| Retentive | Select retentive/volatile.  |  |  |
| Comment   | Type any comments.  |  |  |
| Utility   | Import  |  |  |
|           | Imports CSV file format symbol variables.                                   |  |  |
|           | • Export  |  |  |
|           | Exports CSV file format symbol variables.                                   |  |  |

#### 5.14.9 [Screen] Settings Guide

This section explains about each item displayed by selecting the [Screen (S)] menu.

#### New Screen

To create a new screen, from the [Screen (S)] menu, select [New Screen (N)].

| New Screen                     | <b>د</b>                    | × |
|--------------------------------|-----------------------------|---|
| Screens of Type                | Base                        |   |
| Screen                         |                             |   |
| Title                          | Untitled                    |   |
| Use Template                   |                             |   |
| Select Templa<br>Recently Used | ate from List<br>d Template |   |
|                                | New Cancel                  |   |

| Se              | tting                        | Description   |  |
|-----------------|------------------------------|---|--|
| Screens of Type |                              | Select the screen type to create or select a template from [Base],  |  |
|                 |                              | [Window], or [Logic].   |  |
| Screen          |                              | If you selected [Base] for [Screens of Type], specify the number of the screen to create from 1 to 9,999. If you selected [Window], specify the number from 1 to 2,000. If you selected [Logic], specify from SUB-01 to SUB-32. |  |
| Titl            | e                            | Set the screen title, up to 30 characters, for the new screen.  |  |
| Us              | e Template                   | Select a template.  |  |
|                 | Select Template<br>from List | Displays the [Select Template] dialog box to select a template.   |  |
|                 | Recently Used<br>Template    | The names of recently used templates are displayed as popup.  |  |

# Open Screen

Opens a screen.

| 💕 Open Screen      |              | ×        |
|--------------------|--------------|----------|
| Screens of Type    | Base         | •        |
| 🔽 Screen Informati | on           |          |
|                    | Screen Title | 1        |
| Number Title       | Header       | Footer   |
|                    |              |          |
|                    | Oper         | n Cancel |

| Se              | tting            | Description  |  |
|-----------------|------------------|--|--|
| Screens of Type |                  | Select the type of a screen to open from [Base], [Window], [Logic], or [I/ |  |
|                 |                  | 0].  |  |
| Sc              | reen Information | Set whether or not to display the information and preview of a screen to   |  |
|                 |                  | open.  |  |
|                 | Screen           | Displays the screen number selected on the display list. If you change the |  |
|                 |                  | number, the preview is changed.  |  |
|                 | Title            | Displays the screen title in the preview.                                  |  |
| Dis             | splay List       | Displays a list of all the screens in a project file.                      |  |
|                 | Number           | Displays the screen number.  |  |
|                 | Title            | Displays the screen title.   |  |
|                 | Header           | When a Header is specified, the Header [Title] is displayed.               |  |
|                 | Footer           | When a Footer is specified, the Footer [Title] is displayed.               |  |

## Close Screen

Closes the drawing screen.

#### Screen Information

Displays the specified screen information.

| 💰 Screen Inform                 | ation  | × |
|---------------------------------|--|---|
| Screen Attribute                |  |   |
| Type<br>Number<br>Title         | Base<br>0001<br>Untitled                     |   |
| Security Level                  | 0  |   |
| Send Data                       |  |   |
| Send Size<br>Addresses<br>Parts | 8 Bytes (0.0%)<br>0 (Max1,152)<br>0 (Max384) |   |
| Information                     |  |   |
|                                 |  |   |

| Settin | ng            | Description  |
|--------|---------------|--|
| Scree  | en Attribute  | Displays the screen information.   |
| Ту     | уре           | Displays the type of the specified screen with [Base], [Window] or<br>[Logic]. If you open the [Screen Info] where the Header/Footer can be<br>edited, the Type is displayed as [Header] or [Footer] |
| Nu     | umber         | Displays the screen number.  |
| Tit    | itle          | Displays the screen title.   |
| Se     | ecurity Level | Displays the screen security level   |
| Send   | Data          | Displays the summary of data to send to the GP.  |
| Se     | end Size      | Displays the data size for one screen by the byte. Displays the usage rate of the screen total size in percentage in parenthesis.  |
| Ac     | ddresses      | Displays the total number of addresses used in screens in [Number of Addresses]. Displayed in red if it exceeds the maximum number of addresses.   |
| Pa     | arts          | Displays the total number of parts used for screens in Parts.  |
| Inform | nation        | Displays supplementary information.  |

#### Previous screen/Next screen

Displays the previous/next screen from that currently displayed.

• The previous screen/next screen feature is not available on movie screens.

#### ■ Change View

#### Edit Screen

Changes the view to the drawing screen.

#### Parts List

Displays a list of the attributes of the parts used on the selected screen. Does not display a list of [Draw], [Trigger Action], or [D-Script].

| Screen List         | <b>₽ x</b>     | 📮 Base 1 (l   | Untitled) 🔀   |         |                    |                | 4 Þ     | × |
|---------------------|----------------|---------------|---------------|---------|--------------------|----------------|---------|---|
| Screens of Type All | •              | Parts List (B | lase Screens) |         |                    |                |         |   |
| Search method Title | •              | Parts         |               | Filter  | Edit <u>Export</u> | Back to Screen |         |   |
| Refine Search       | Search         | Number ID     | Comment       | Feature | Feature Details    |                | Details |   |
| °• 🕘 🛍 🗙   🚊 👸      | 4 <u>4</u>     |               |               |         |                    |                |         |   |
| 🎲 Base Screens      |                |               |               |         |                    |                |         |   |
|                     | 001 (Untitled) |               |               |         |                    |                |         |   |
| 🎯 Window Screens    |                |               |               |         |                    |                |         |   |

| Setting        | Description  |  |
|----------------|--|--|
| Part           | Select the part type to list from all the parts placed on the screen.  |  |
| Filter         | The [Filter Settings] dialog box appears. Set whether or not to display [Address], [Feature Detail], and [Label Text] on the Parts List. |  |
| Edit           | Displays the setting dialog box for the part selected from the list.   |  |
| Export         | The [Export Parts List] dialog box appears. Set the location to save the [Parts List] in a CSV file (*.csv)                              |  |
| Back to Screen | Changes the view to the drawing screen.  |  |
| Display List   | Lists the details of parts.  |  |

Continued

| Se | tting                | Description   |
|----|----------------------|---|
|    | Number               | Numbers are sequentially assigned to the placed parts from the oldest, starting from 1.   |
|    | ID                   | Displays the part IDs.  |
|    | Comment              | Displays the parts comments.  |
|    | Feature              | Displays the part feature name.<br>For example, Bit - Comparison  |
|    | Address/Address<br>1 | Displays the address types and addresses specified to the parts.  |
|    | Feature Details      | Displays the detail text for a part's features.   |
|    | Label/State 0        | Displays the labels specified to the parts. If different labels are specified to each state of a part, a label is displayed for each state. |
|    | Details              | Displays other detailed information such as coordinates where parts are placed. The display contents depend on parts.                       |

# Template Registration

Register the parts placed on the drawing screen except the header/footer as a template.



| Setting           | Description   |
|-------------------|---|
| Register Template | Set the title of a template to create with up to 30 characters. |

#### **Restrictions** 5.15

#### **Restrictions for Creating Screens** 5.15.1

## Screens of Type

This section covers the types of screens created with project files.

A project file is mainly composed of two screens: a Base Screen and Window Screen. A Base Screen is a screen displayed on the GP. To display a screen on the GP, always use a Base Screen. A Window Screen is a screen called and displayed on a Base Screen. A Window Screen is used to display one screen on top of the other, such as a keypad input. P "18.3 Displaying Windows" (page 18-7)







For example,







Base Screen + Window Screen

NOTE

• The logic screen and I/O screen are used for creating logic programs. <sup>(2)</sup> "29.2.3 Logic Screens" (page 29-5) 

#### Number of Screens that can be Created

| Screens of Type  | Allowable Setting Number Range for Screens |
|------------------|--|
| Base Screen      | 1 to 9999                                  |
| Window Screen *1 | 1 to 2000                                  |
| Logic            | SUB-01 to SUB32                            |

#### Data Capacity per Screen

The maximum capacity per screen is approximately 1 MB. You cannot create a screen exceeding this capacity.

The maximum capacity of the area that can maintain created screen data ([User Screen Area]) depends on each GP model.

"1.3 List of Supported Functions by Device" (page 1-5)

#### Number of Features that can be Placed on a Screen

The maximum allowable number of parts and features placed on a single screen is as follows. This number is for newly created screens without any other settings.

• The maximum number of parts you can place per screen are 384 and the number of addresses you can specify per screen are 1,152. If you select [IPC Series] for the display unit, you can use up to 1000 parts and 3000 addresses.

| Part            | Feature Type                                 | Base Screen | Window Screen <sup>*1</sup> |
|-----------------|--|-------------|-----------------------------|
| Alarms          | Summary                                      | 1           | 1                           |
|                 | Show History                                 | 384         | ·                           |
| Text Alarm      | -  | 1           | 1                           |
| Graph           | Normal Graph                                 | 384         |                             |
|                 | Statistical Graph                            | -           |                             |
|                 | Meter Graph                                  | -           |                             |
| Key Part        | -  | 384         |                             |
| Data Display    | Numeric Display <sup>*2</sup>                | 384         |                             |
|                 | Text Display *2                              | 384         |                             |
|                 | Date/Time Display                            | 384         |                             |
|                 | Statistical Data Display                     | 384         |                             |
|                 | Show Limit Value                             | 384         |                             |
| Picture Display | ON/OFF Display                               | 384         |                             |
|                 | State Display                                | -           |                             |
|                 | CF Image Display                             | -           |                             |
|                 | Move Display (only when<br>Mark is selected) | 30          |                             |

Continued

| Part                                      | Feature Type                | Base Screen | Window Screen <sup>*1</sup> |
|---|-----------------------------|-------------|-----------------------------|
| Switch/Lamp                               | Bit Switch                  | 384         |                             |
|   | Word Switch                 |             |                             |
|   | Screen Change               |             |                             |
|   | Special Switch              |             |                             |
|   | Selector Switch             |             |                             |
|   | Lamp                        |             |                             |
| Window                                    | Window <sup>*3</sup>        | 384         | 0                           |
|   | Global Window <sup>*4</sup> |             |                             |
| Movie Player                              | -                           | 1           |                             |
| Video Module Display                      | -                           | 512*5       | 0                           |
| Message Display                           | Direct Input                | 384         |                             |
|   | Text Display                |             |                             |
| D-Script                                  | -                           | _*6         |                             |
| Sampled Data Display<br>*2                | -                           | 1           | 1                           |
| Historical Trend<br>Graph <sup>*7</sup>   | -                           | 8           |                             |
| Data Block Display<br>Graph <sup>*7</sup> | -                           |             |                             |
| Special Data Display                      | Data Transmission           | 1           | 1                           |
|   | Filing                      | 384         |                             |
|   | Show CSV *2                 | 1           | 1                           |
|   | File Manager                | 1           | 0                           |
| Trigger Action                            | Bit Action                  | 384         |                             |
|   | Word Action                 |             |                             |
|   | Screen Change               |             |                             |
|   | Draw Action                 |             |                             |
| Remote PC Access<br>Window Display        | -                           | 1*8         | -                           |

\*1 A maximum of three Windows can be displayed on the display screen at the same time. For more details about displaying Windows, refer to the following:

"18.8.2 Restrictions for Window Displays ■ Displaying Multiple Windows on a Single Screen" (page 18-30)

- \*2 You cannot draw a Sampled Data Display and Special Data Display (Show CSV) at the same time. The same applies to drawing a Special Data Display (Show CSV) and a Data Display set up with Allow Input.
- \*3 Up to three window parts with the [Continuous Read] option (two if using Global Windows) can be placed on a single screen. If three [Continuous Read] windows are placed on a screen, any additional windows will not operate.
- \*4 When the device monitor screen is displayed, the global window cannot be displayed.
- \*5 You can display only one video module per display screen at the same time.

- \*6 The maximum number of D-Scripts depends on the number of addresses you specify per screen (up to 1152) and the screen data capacity (up to 1 MB).
- \*7 Maximum eight [Historical Trend Graphs] and [Data Block Display Graphs].
- \*8 When three windows are already displayed (or two global window), this cannot be displayed.

#### Screen Display

• When you change the orientation from portrait to landscape, or from landscape to portrait, the drawing is displayed with 90-degree rotated. From the [Edit] menu, select [Rotate/ Flip] to edit. Be sure to check the screen after the change.



• If you change from a high resolution display type to a low resolution display type, the data that exceeds the range is not displayed. If you change back to a high resolution display type, the data that exceeded the range is displayed.

The maximum number of display characters on a part differs between a low resolution display type and a high resolution display type. If you change an alarm message created with a high resolution display type to a low resolution display type, any part that does not fall on the message screen is not displayed.

- If you convert resolution, the part size, position, and the text size to the display resolution is adjusted automatically. Some scale magnification may not convert properly due to text size and resolution limitations.
- When you reduce the screen edit area with the zoom function, some drawings may not display correctly, depending on the magnification.

#### 5.15.2 Restrictions on Saving Data

#### ■ CF Card/USB Storage Save Cautions

- During data writing onto a CF Card/USB storage, the parts and screen switching actions becomes slower.
- It may take several seconds to write data, depending on the amount.
- After the Status data is read out from the GP, at least one communication cycle or one Display Scan Time period must pass before the next command can be written.\*1\*2
- Do not call up screens that use the CF Card/USB storage when the CF Card/USB storage is not installed on the GP. If you do, they will not function properly.
- If a write error occurs, any file that has not finished loading may remain on the CF Card in the USB storage.
- To overwrite and save the CF Card/USB storage data existing, the CF Card/USB storage must have enough free space to allow the data. If the data is larger than the available space, a write error occurs.
- When saving data onto a CF Card or into USB storage and the target folder (\ALARM...) does not exit, the folder is automatically created to save the data. If the folder cannot be created, for example, if the CF Card/USB storage is not initialized, a write error results.
- There is a limit to the frequency that data can be written to the CF Card (500 KB of data can be rewritten around 100,000 times).
- To format the CF Card/USB storage on your PC, select FAT or FAT32. If you use NTFS for formatting, GP does not recognize the CF Card/USB storage.

- \*1 The Communication Cycle Time is the time from when the GP requests data from the external device to when the data arrives. This value is stored in internal device LS2037 as a binary value, in units of 10 ms.
- \*2 Display Scan Time is the time required to process one screen. This value is stored in internal device LS2036 as a binary value, in millisecond units.

#### CF Card Cautions for Use

- When removing the CF Card, verify that the access lamp is switched off. There is a chance that CF Card data can be lost or damaged.
- While accessing the CF Card, do not turn the GP unit off, reset the GP, or remove the CF Card. Create a preset verification screen for information about CF Card access. Turn off power, reset, open the CF Card cover, or remove the CF Card only after verifying that screen.
- When inserting the CF Card in the GP unit, make sure you have the correct side up and the correct location for the CF Card connector. If installed incorrectly, damage can occur to the data or to the CF Card/GP unit.
- Please use a CF Card made by Digital Electronics Corporation. If using another companyís CF Card, damage may occur to the CF Cardís data.
- Please make sure to back up all CF Card data.
- Please refrain from doing the following, as it can result in damage to data and equipment:
  - •Bending the CF Card
  - •Dropping the CF Card
  - •Spilling water on the card
  - •Touching the CF Card's connectors directly
  - •Disassembling or modifying the CF Card

### USB Storage Cautions for Use

• When accessing a USB storage device, do not reset the GP or remote/insert a USB storage device. Data in the USB storage device may be destroyed.

To remove the USB storage safely, design the system to turn ON the system variable #H\_Control\_USBDetachTrigger and confirm #H\_Status\_USBUsing is OFF before removal.

G<sup>™</sup> "■ Bit type" (page A-102)

- Please make sure to back up all data on USB storage devices.
- Do not connect more than 1 USB storage. If you do so, the USB devices may not be recognized properly.

## External Memory List for Saving Data

The following shows external memories you can use to save data in (or browse to).

• Available memories you can use to save data in differ depending on the model.

(Figure 1.3 List of Supported Functions by Device" (page 1-5)

| Feature   | CF Card | USB storage | FTP Server |
|---|---------|-------------|------------|
| Screen Capture  | 0       | 0           | 0          |
| Image Display on Picture Display                                | 0       | Х           | х          |
| Alarm History Data Save   | 0       | 0           | х          |
| Sampled Data Save   | 0       | 0           | х          |
| Recipe (CSV data) Transfer                                      | 0       | 0           | х          |
| Recipe (Filing Data) Save                                       | 0       | 0           | х          |
| File Display on File Manager                                    | 0       | Х           | х          |
| File Manager Copying Feature between<br>CF Card/External Memory | 0       | 0           | X          |
| Display on Display CSV Data                                     | 0       | Х           | х          |
| Sound Data Save   | 0       | Х           | х          |
| Movie File Save/Play  | 0       | Х           | 0          |
| Video Screen Capture (with VM Unit)                             | 0       | Х           | Х          |
| JPEG Display on Video Modules                                   | 0       | Х           | х          |
| Video Modules (memory loader)                                   | 0       | 0           | х          |
| Available Space Check   | 0       | 0           | х          |
| Backup SRAM Data Save   | 0       | Х           | х          |
| Offline Memory Initialization                                   | 0       | Х           | -          |
| D-script Functions for CF File Operations                       | 0       | Х           | Х          |

#### Precautions for GP Screen Captures

- It takes five to six seconds to capture a screen, and the file size is approximately 200 KB (when the Image Quality is 80).
- The file size and capture time depend on the image quality and screen size.
- Part displays are not updated during capture.
- If you capture a screen with the Blink option, the captured image is displayed with no blink.
- If you create a file with other actions than screen capture while the CF Card/USB storage device is inserted, the file is overwritten with the next [Auto Increment File Number].
- When you use [Auto Delete File], it may take some time to delete many files. All files are deleted so this can take from a few seconds to a few minutes.

### Precautions for SRAM Auto Backup

- Make sure the CF Card free space is larger than the backup SRAM size. Free space is checked before the process execution. If there is no sufficient free space in a CF Card, data is not saved in the CF Card.
- When you use the CF Card storage feature, confirm that the CF Card storage control address has no data. You can save the following data in a CF Card: Filing Data, Logging Data, Line Chart Data, Sampled Data (Data Samplingís Data), and Alarm Data
- The CF Card storage feature runs before SRAM backup. While SRAM backup is running, writing to the CF Card is interrupted.
- While executing the SRAM backup, the process of CF Card storage feature is interrupted. When automatically writing to the CF Card with the logging feature's loop action, the logging action is also interrupted until the write to the CF Card starts.
- Only one backup file can be saved in a CF Card.
- If you execute [Initialize CF Card] under [Initialize Memory] in GP offline mode, a SRAM folder will be created.
- If you execute CF Card → SRAM (Restore) in GP offline mode, all the saved data (such as sampled data) will be replaced with the newly stored data.
- If you execute CF Card → SRAM (Restore) in GP offline mode, the adjusted values for Brightness, Contrast, and Sound Volume will not change. The adjusted values will be applied after you turn ON the power again or after the GP goes into operation mode.
- If you execute CF Card → SRAM (Restore) in GP offline mode, the stored Japanese FEP learning information will be overwritten. For this reason, the display order of the convert-to characters may change according to the frequency of use.