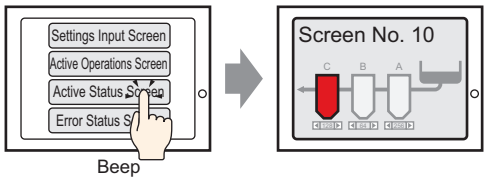
12 Changing and Saving Screens

This chapter explains about changing and Saving Screens in GP-Pro EX, and the basic operations used to change settings. Please start by reading “12.1 Settings Menu” (page 12-2) , and then turn to the corresponding page.

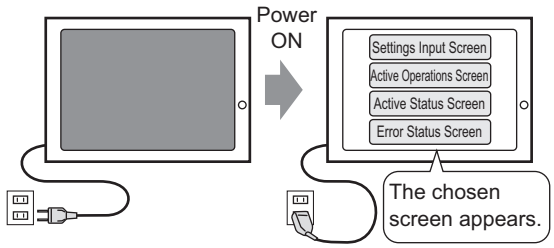
12.1 Settings Menu

Changing the Displayed Screen By Touch



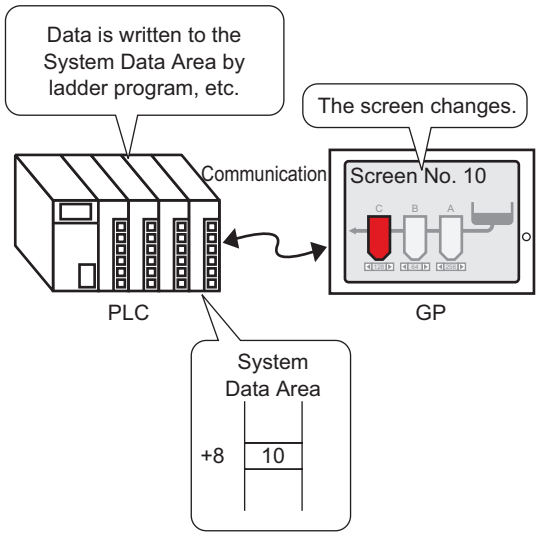
☞ Setup Procedure (page 12-5)
☞ Details (page 12-4)

Choosing the Screen that will Display when the GP Turns on



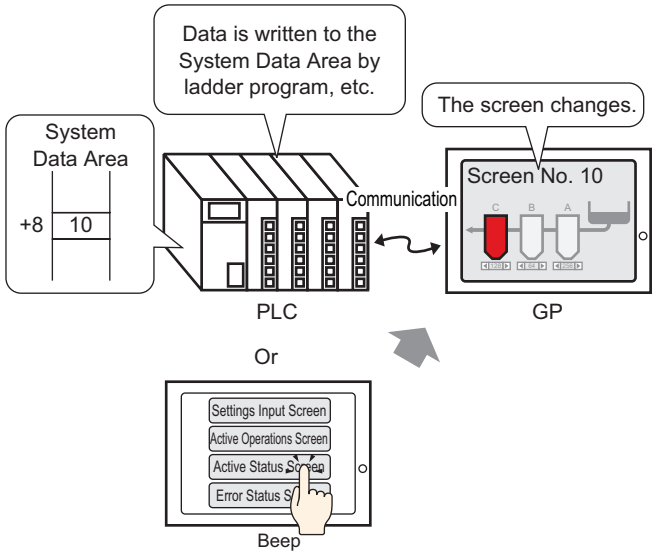
☞ Setup Procedure (page 12-8)
☞ Details (page 12-7)

Changing Screens from a Device/PLC



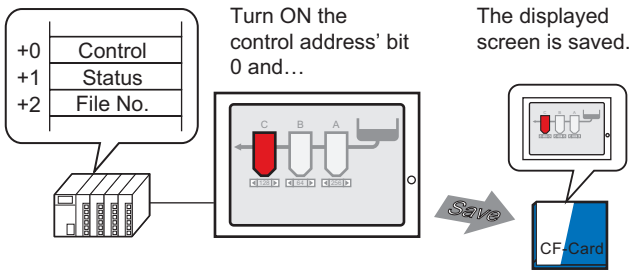
☞ Setup Procedure (page 12-11)
☞ Details (page 12-10)

Changing the Displayed Screen from both Touch and a Device/PLC



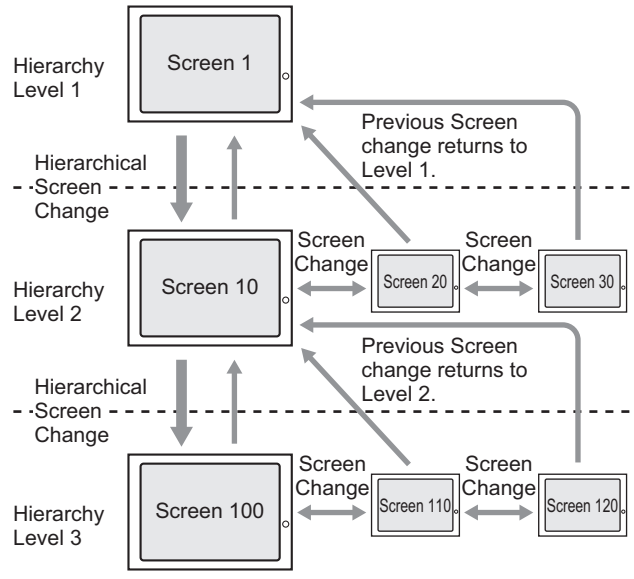
☞ Setup Procedure (page 12-14)
☞ Details (page 12-13)

Saving the Displayed Screen



☞ Setup Procedure (page 12-19)
☞ Details (page 12-18)

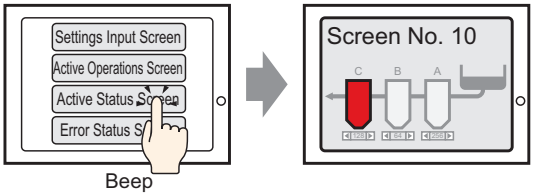
Changing the Displayed Screen by Hierarchical Structure



☞ Setup Procedure (page 12-22)
☞ Details (page 12-21)

12.2 Changing the Displayed Screen By Touch

12.2.1 Details



Place the switch on the screen, set it to “Screen Change”, and you can create a switch which changes to the desired screen.

NOTE

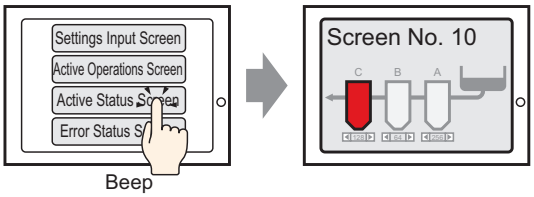
- A password can be set so that only certain people can switch the screen.
☞ “ 22.2 Creating Screens that Only Specific People can Use” (page 22-3)

12.2.2 Setup Procedure

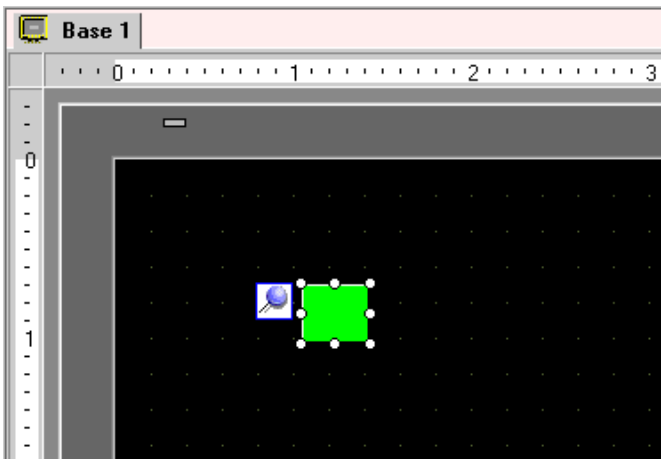
NOTE

- Please refer to the settings guide for details.
  ☞ "11.14.3 Change Screen Switch" (page 11-60)
- For details about placing parts or setting addresses, shapes, colors, and labels, please refer to the "Part Editing Procedure".
  ☞ "9.6.1 Editing Parts" (page 9-37)

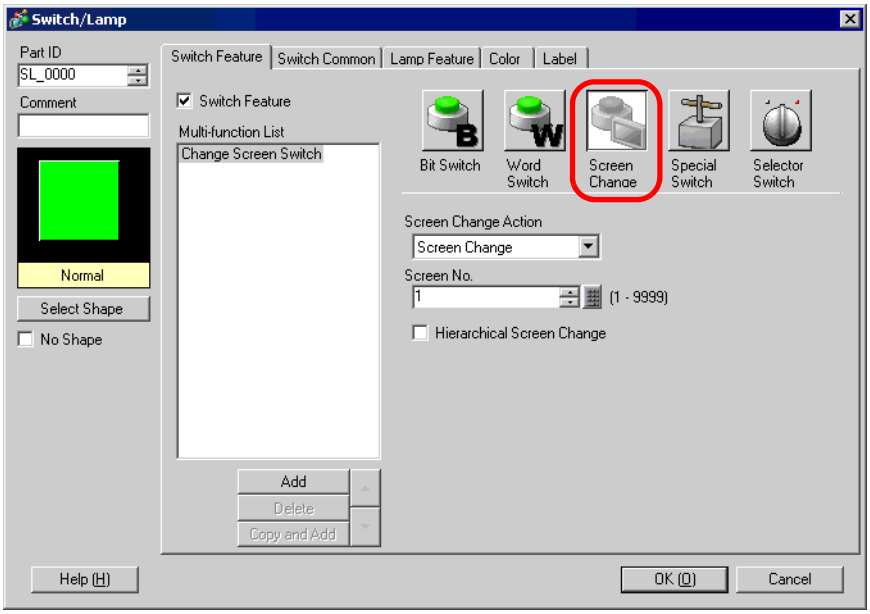
Create a Switch that changes the screen to Base Screen 10 when you touch it.



1 Select the [Part (P)] menu - [Switch Lamp (C)] option - [Change Screen Switch (C)] command, or click from the toolbar, and place it on the screen.

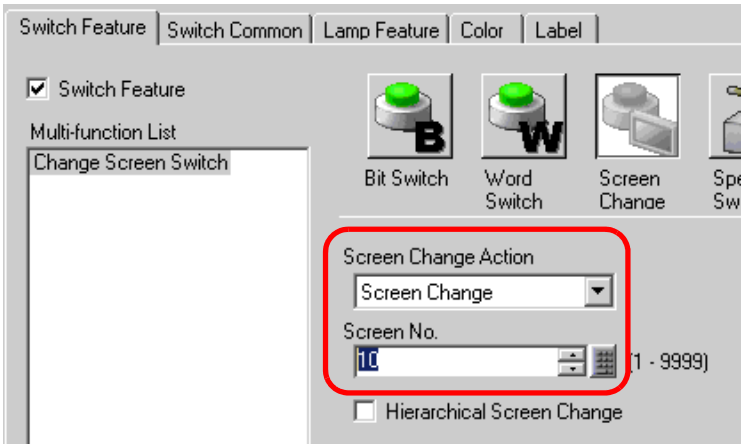


2 Double-click the placed Switch and the settings dialog box opens.



3 Select the Switch's shape from [Select Shape].

4 Select [Screen Change] for the [Screen Change Action]. Set [Screen No.] to the destination screen number (e.g.: 10).

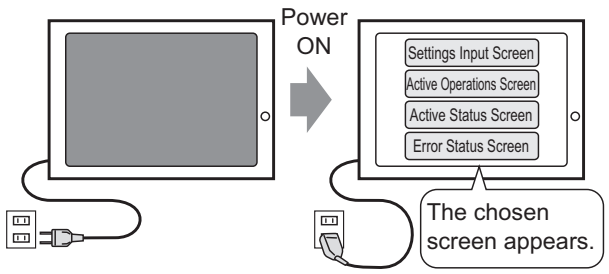


5 As needed, set the Switch's color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE • Depending on the switch's shape, you may not be able to change the color.

12.3 Choosing the Screen that will Display when the GP Turns on

12.3.1 Details



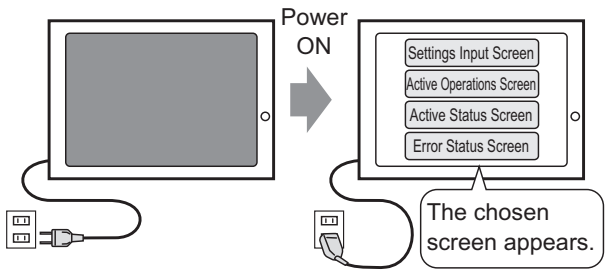
You can specify which screen will be initially displayed when the GP's power turns ON.

12.3.2 Setup Procedure

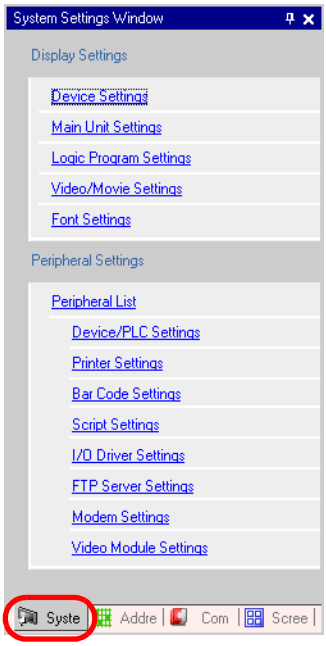
NOTE

- Please refer to the settings guide for details.
  ☞ "5.13.6 [System Settings Window] Settings Guide ■ [Main Unit Settings] Settings Guide ◆ Display Settings" (page 5-100)

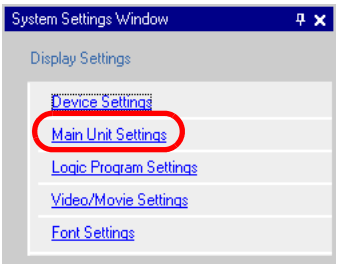
Configure settings to display screen "1" when you turn ON the power.



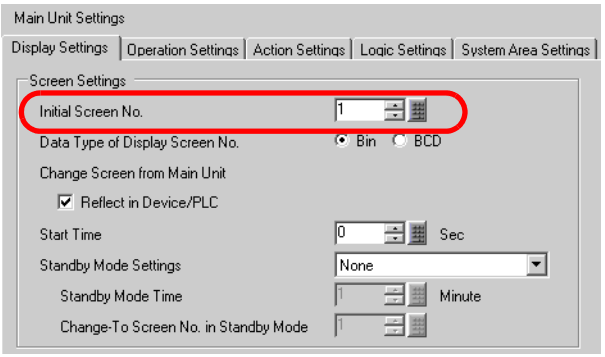
1 Select the [System Settings Window] tab to open the System Settings Window.



2 Select [Main Unit Settings] from [Display Settings].

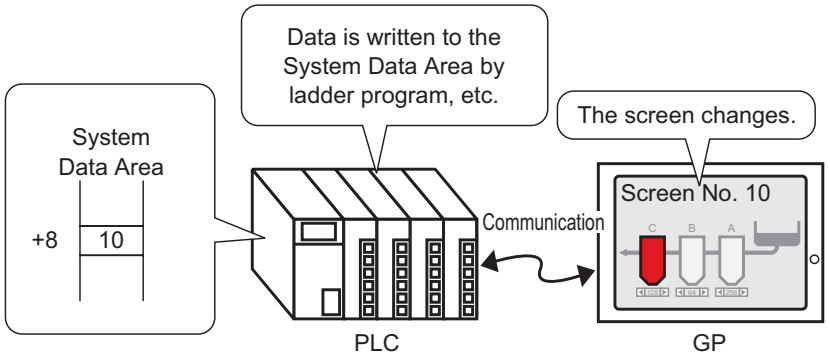


3 [Display Settings] tab - [Initial Screen No.] option, set the screen number you want to display "1". This screen will be displayed as the initial screen when the power is turned ON.



12.4 Changing Screens from a Device/PLC

12.4.1 Details



Method for changing the GP screen from a PLC

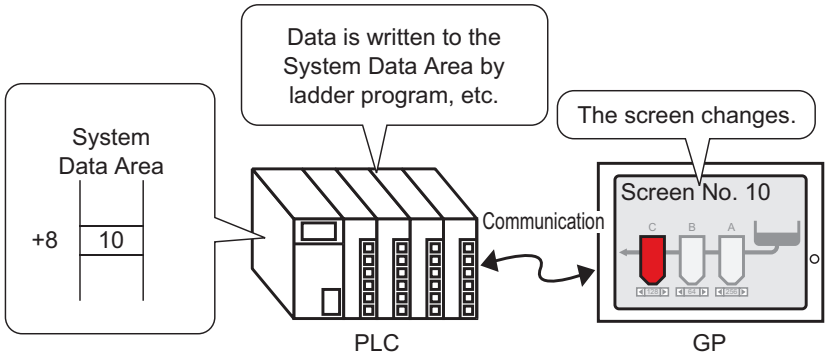
Usually, the GP communicates with a device/PLC and gets the data needed for displaying. Also, by using a portion of the device/PLC's area and placing the necessary information for the GP's operations, you can check the GP's status or change operations from the device/PLC.

12.4.2 Setup Procedure

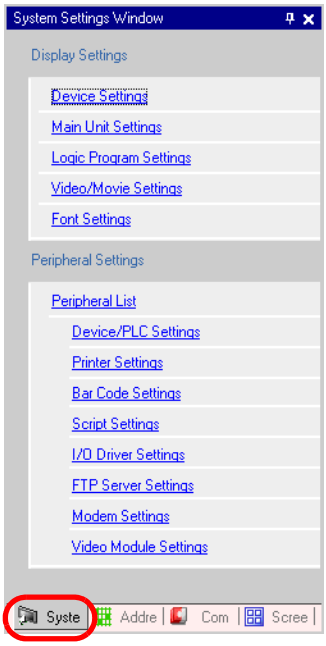
NOTE

- Please refer to the settings guide for details.
  ☞ "5.13.6 [System Settings Window] Settings Guide ■ [Main Unit Settings] Settings Guide ◆ Display Settings" (page 5-100)
- For more information about the System Data Area, please refer to the following.
  ☞ "A.1.4.2 System Data Area" (page A-10)

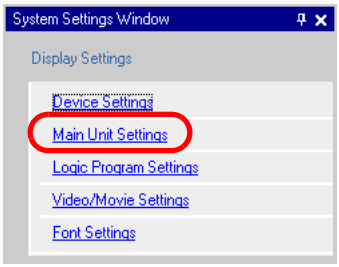
Configure settings to change screens from a device/PLC.



1 Select the [System Settings Window] tab to open the System Settings Window.

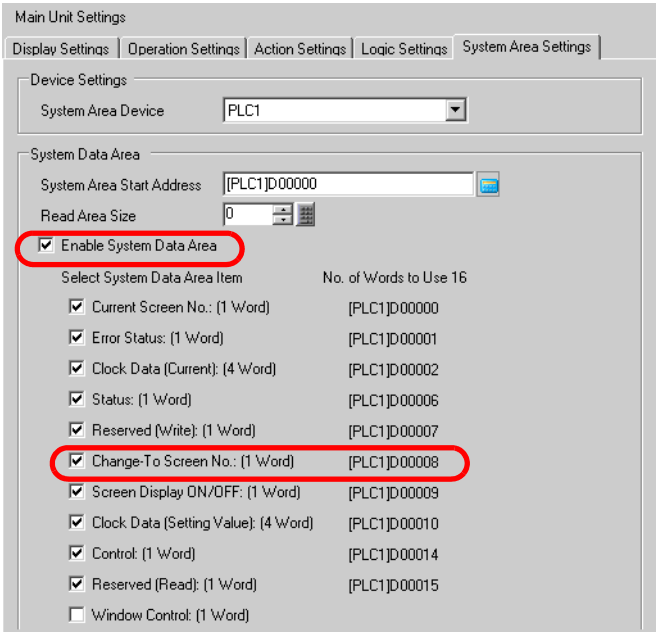


2 Select [Main Unit Settings] from [Display Settings].



3 Open the [System Area Settings] tab and set the [System Area Start Address].

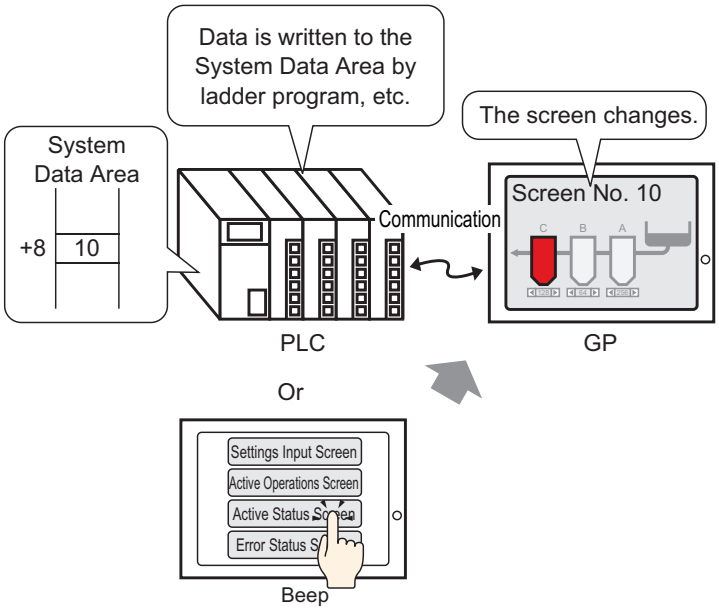
4 Put a check mark next to the [Enable System Data Area] box, and confirm that the [Change-To Screen No.: (1 Word)] box is selected.



5 Write the logic program or program console (PROCON) of the destination screen number to the [Change-To Screen No.: (1 Word)]'s address (e.g.: [PLC1]D00008), and the displayed screen will change to the destination screen.

12.5 Changing the Displayed Screen from both Touch and a Device/PLC

12.5.1 Details



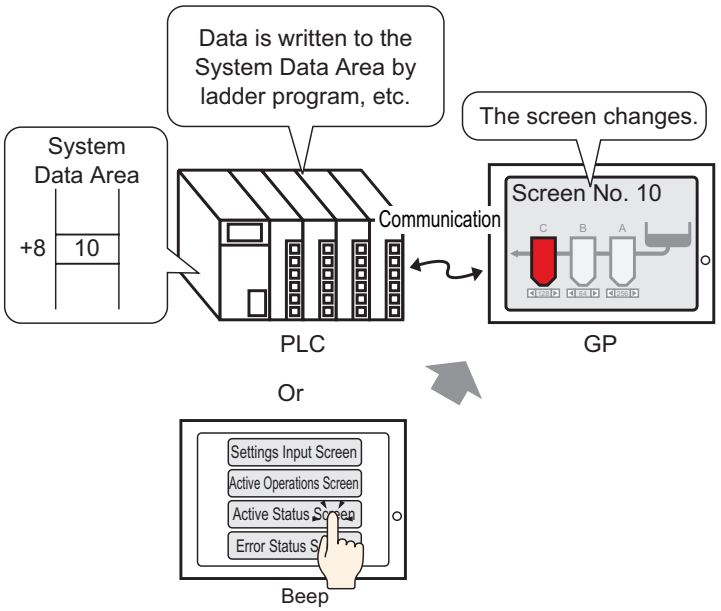
You can effect screen changes either from a Change Screen Switch or the device/PLC.

12.5.2 Setup Procedure

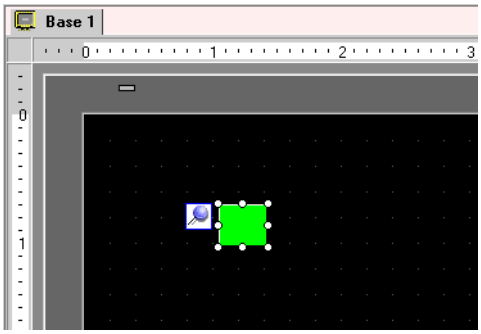
NOTE

- Please refer to the settings guide for details.
  ☞ "11.14.3 Change Screen Switch" (page 11-60)
- For details about placing parts or setting addresses, shapes, colors, and labels, please refer to the "Part Editing Procedure".
  ☞ "9.6.1 Editing Parts" (page 9-37)

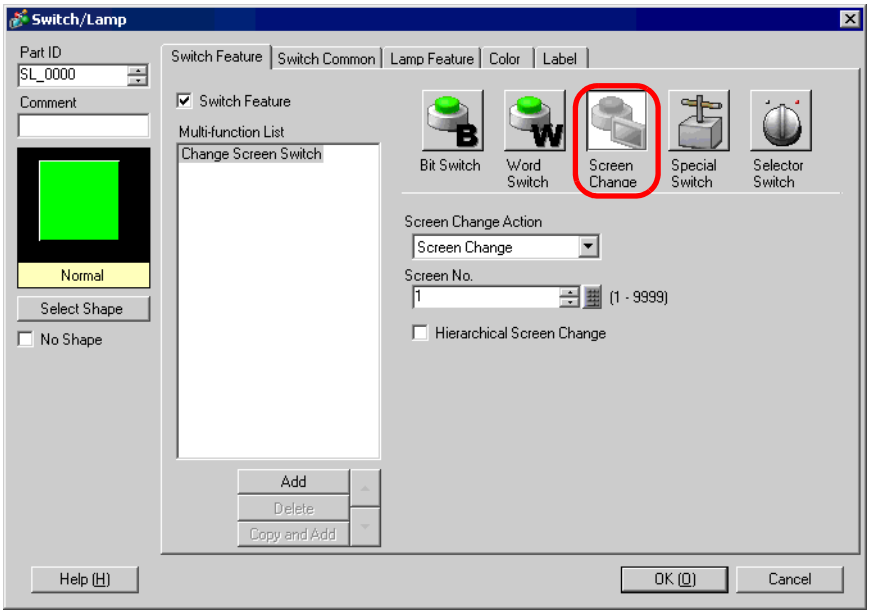
Configure settings to change the displayed screen by both touch and from a device/PLC. (For touch, the settings will change the screen to screen "10".)



1 Select the [Part (P)] menu - [Switch Lamp (C)] option - [Change Screen Switch (C)] command, or click  from the toolbar, and place it on the screen.

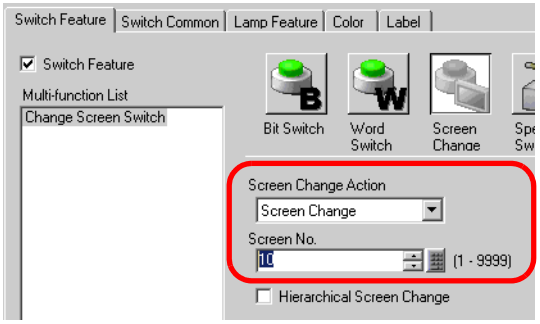


2 Double-click the placed Switch and the settings dialog box opens.



3 Select the Switch's shape from [Select Shape].

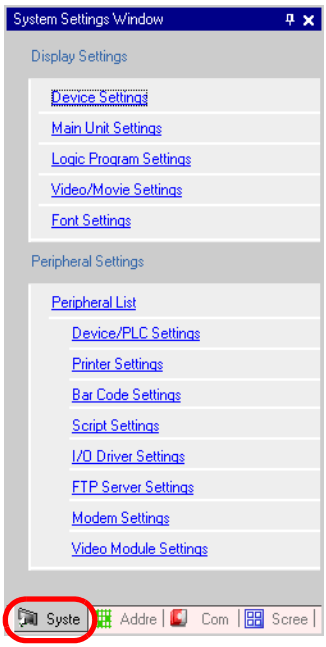
4 Select [Screen Change] for the [Screen Change Action]. For the [Screen No.], set the destination screen number "10".



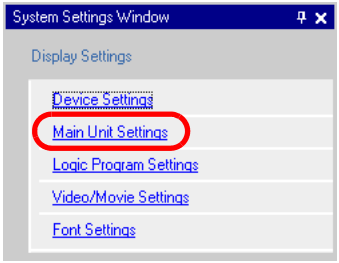
5 As needed, set the Switch's color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE • Depending on the switch's shape, you may not be able to change the color.

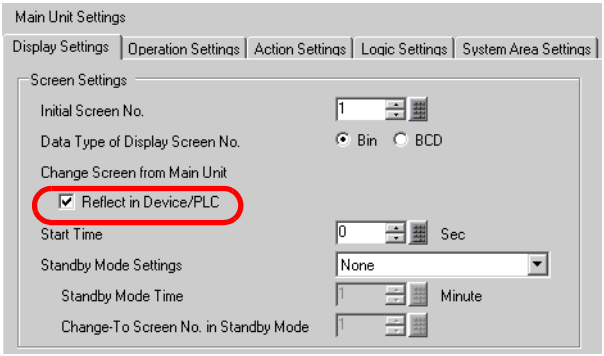
6 Select the [System Settings Window] tab to open the System Settings Window.



7 Select [Main Unit Settings] from [Display Settings].



8 Open the [Display Settings] tab and put a check mark next to the [Reflect in Device/PLC] box.

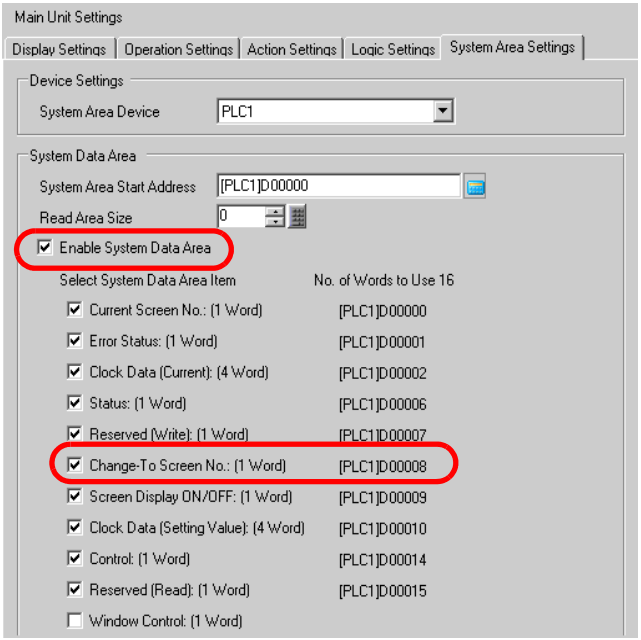


NOTE

- When you select the [Reflect in Device/PLC] box, the screen number changed by touch (the currently displayed screen number) will be written to the [Change-To Screen No.: (1 Word)]'s address in the following method. If this setting is not selected, there are cases where the changed screen number will not be written and you cannot change screens from the device/PLC when the switch is touched.

9 Open the [System Area Settings] tab and set the [System Area Start Address].

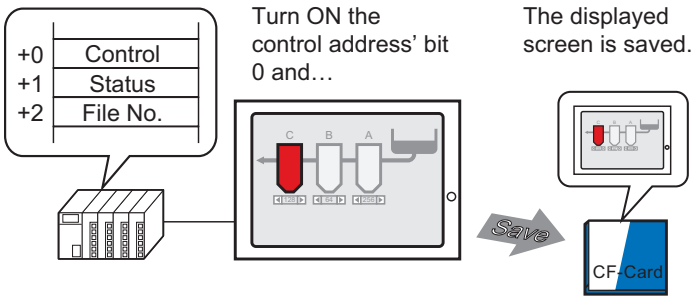
10 Put a check mark next to the [Enable System Data Area] box, and confirm that the [Change-To Screen No.: (1 Word)] box is selected.



11 To change the displayed screen by touch, use the [Change Screen Switch]. To change the displayed screen from the device/PLC, write the destination screen number to the [Change-To Screen No.: (1 Word)]'s address (e.g.: [PLC]D00008). You can now change the displayed screen either by touch or from the device/PLC.

12.6 Saving the Displayed Screen

12.6.1 Details



You can save the screen that is currently running on the GP in to the CF-card (screen capture). The saved screen will be stored as a JPEG file (∗.jpg).

NOTE

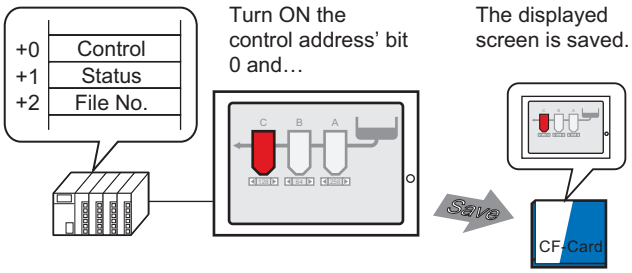
- The Screen Capture feature can be used only on GP models with a CF-card slot.

12.6.2 Setup Procedure

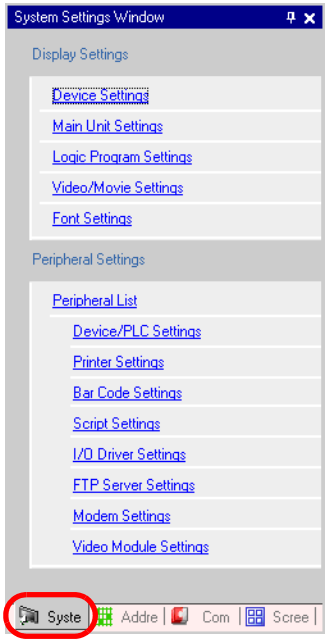
NOTE

- Please refer to the settings guide for details.
  ☞ "5.13.6 [System Settings Window] Settings Guide ■ [Main Unit Settings] Settings Guide ◆ Operation Settings" (page 5-103)

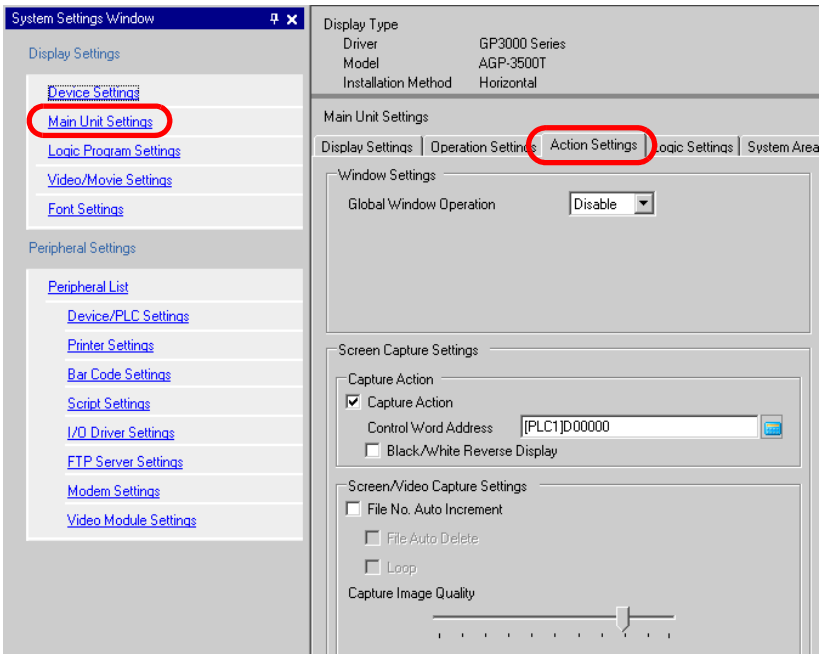
Configure settings to capture the displayed screen in the GP. (Use "D100" as the control address for the capture.)



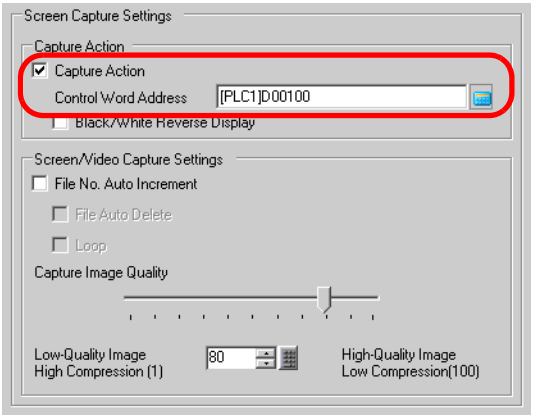
1 Select the [System Settings Window] tab to open the System Settings Window.



2 Select the [Action Settings] tab from [Display Settings]'s [Main Unit Settings].



3 Put a check mark next to the [Capture Action] box in [Screen Capture Settings], and designate the [Control Word Address] as "D100".



4 After storing the file number in the [Control Word Address]+2's address "D102", a screen capture will occur when the [Control Word Address] "D100"'s lower bit (bit 0) turns ON. (In the file name [CP*****.jpg], ***** represents the file number portion.)

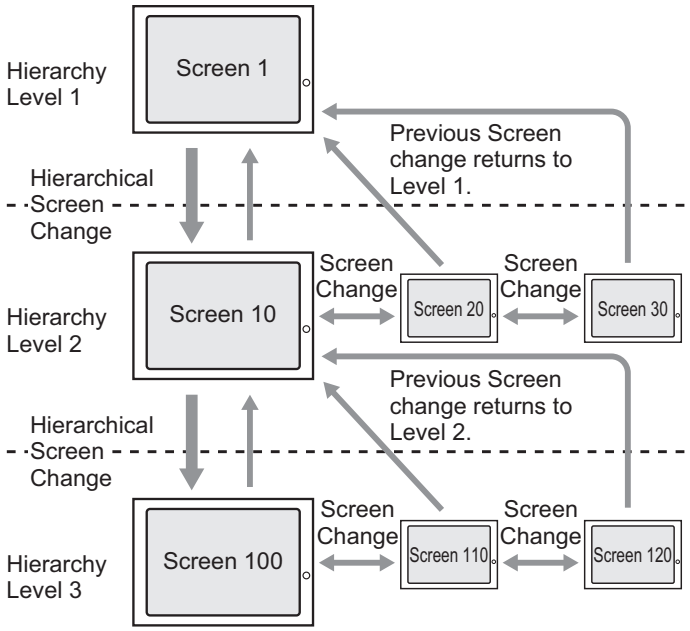
D100	Control	0	0	~		0	0	1
D101	Status							
D102	File No.							

For the screen capture, three consecutive words will be used starting from the specified [Control Word Address].

When the screen capture completes normally, the [Control Word Address] +1's address "D101"'s bit 1 turns ON. Confirm this bit ON and then turn OFF "D100" Bit 0.

12.7 Changing the Displayed Screen by Hierarchical Structure

12.7.1 Details



You can create a hierarchical structure for the screen changes.
When changing screens with a Switch configured with Change Screen Switch settings and the [Hierarchical Screen Change] box selected, you can change screens on the same hierarchy level.
Next, when changing screens with a Switch without the [Hierarchical Screen Change] box selected, touch a Switch with [Previous Screen] selected and you will return up one hierarchy level.

NOTE

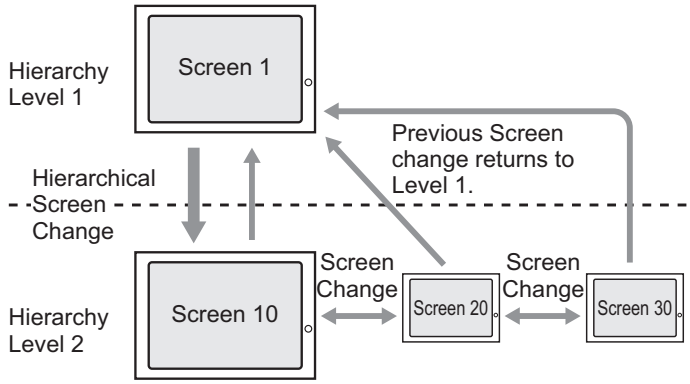
- If [Hierarchical Screen Change] is not selected, the screen changes will be on the same hierarchy level.
- A maximum of 32 levels can be set.
- You cannot force a Hierarchical Screen Change from the device/PLC. You can only change screens within the same hierarchy level.

12.7.2 Setup Procedure

NOTE

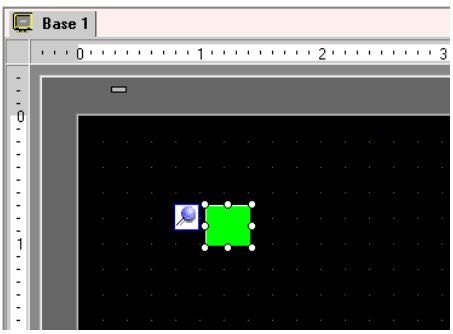
- Please refer to the settings guide for details.
  ☞ "11.14.3 Change Screen Switch" (page 11-60)
- For details about placing parts or setting addresses, shapes, colors, and labels, please refer to the "Part Editing Procedure".
  ☞ "9.6.1 Editing Parts" (page 9-37)

Create a Change Screen Switch to return to Hierarchy Level 1 (Screen "1") from any screen in Hierarchy Level 2 (Screen "10", "20", "30"), even if the screen has been changed within Hierarchy Level 2.

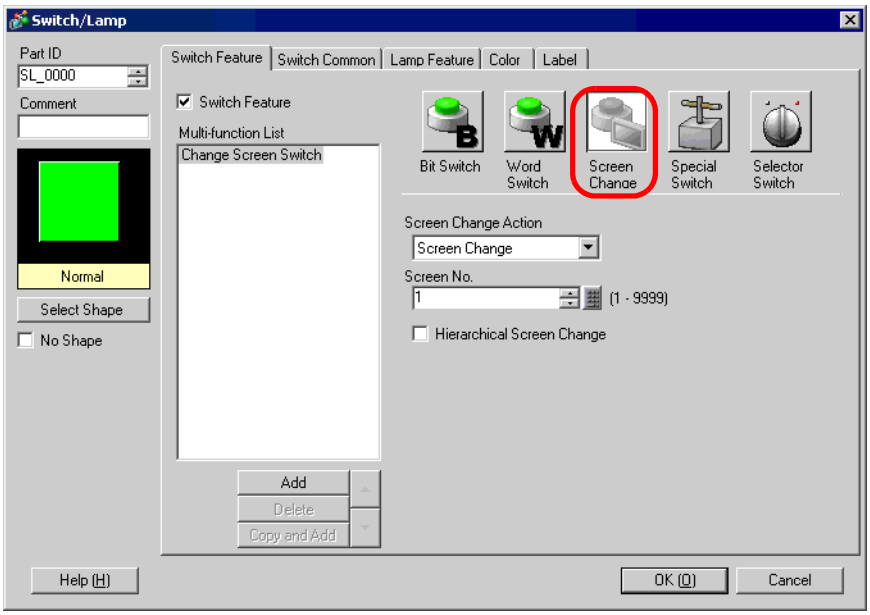


First, place a Switch on Base Screen "1" to change from Hierarchy Level 1 (Screen "1") to Hierarchy Level 2 (Screen "10").

1 Select the [Part (P)] menu - [Switch Lamp (C)] option - [Change Screen Switch (C)] command, or click  from the toolbar, and place it on Base Screen 1.

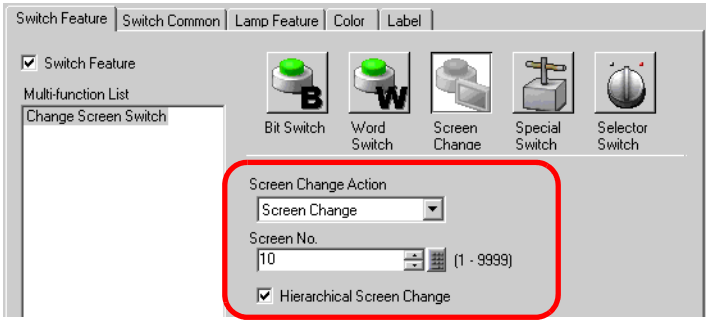


2 Double-click the placed Switch and the settings dialog box opens.



3 Select the Switch's shape from [Select Shape].

4 Select [Screen Change] for the [Screen Change Action]. For the [Screen No.], set the destination screen number "10". Select the [Hierarchical Screen Change] check box.



5 As needed, set the Switch's color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE • Depending on the switch's shape, you may not be able to change the color.

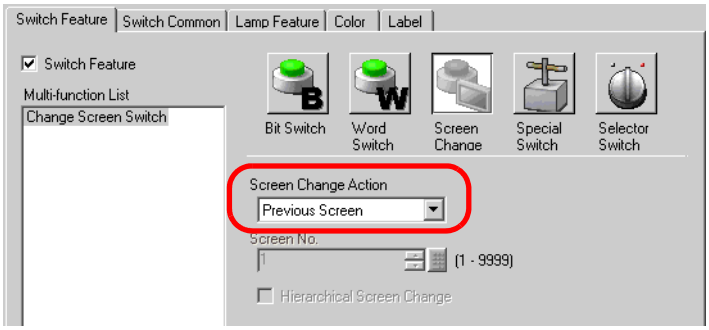
Next, place a Switch on each screen to return from Hierarchy Level 2 (Screen "10", Screen "20", Screen "30") back to Hierarchy Level 1 (Screen "1").

6 Open Base Screen "10" select the [Part (P)] menu - [Switch Lamp (C)] option - [Change Screen Switch (C)] command, or click  from the toolbar, and place it on the screen.

7 Double-click the placed Switch and open the settings dialog box.

8 Select the Switch's shape from [Select Shape].

9 Set the [Screen Change Action] to [Previous Screen].



10 As needed, set the Switch's color and display text on the [Color] tab and [Label] tab, and click [OK].

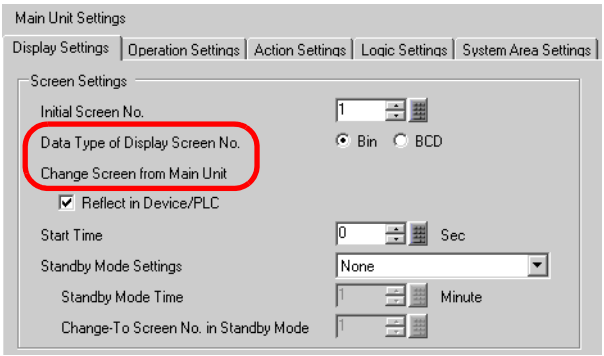
NOTE • Depending on the switch's shape, you may not be able to change the color.

11 Place an identical switch on Base Screen "20" and "30". When you touch the Switch placed on any screen on Hierarchy Level 2 (Screen "10", "20", "30") it does not return to the previous screen, but to the screen in Hierarchy Level 1 (Screen "1").

12.8 Restrictions

12.8.1 Restrictions for Screen Change

- When a screen number that does not exist is set, a screen change will not function.
- LS8 viewed by direct access method and address 15 viewed by memory link method are internally the same. However, if [Reflect in Device/PLC] is not selected in the system settings, LS8 will change from communication in direct access mode immediately after writing with memory link mode, therefore a screen change using true memory link mode becomes impossible.



NOTE

- For more information about the System Data Area, please refer to the following.
☞ "A.1.4.2 System Data Area" (page A-10)

12.8.2 Restrictions for Screen Capture

- The time taken for a screen capture depends on the image quality and screen size. The file size for a screen quality of 80 will be around 200 KB and the capture will take about 5-6 seconds.
- The screen's display (Parts, screen change, etc.) will not update during a screen capture.
- When capturing a screen set with Blink, the blinking will stop for the capture.
- When the [File No. Auto Increment] feature is set but neither the [File Auto Delete] feature nor [Loop] feature are used, when the CF-card has no empty space or the highest file number (65,535) exists, the screen capture will not occur even when the [Control Address]'s bit 0 turns ON.
- When the [File Auto Delete] feature is set, if the file to be deleted is read-only or is currently open it cannot be deleted. Therefore, the screen capture will not execute. A "CF Write Error" will occur.
- The more JPG files exist, the more time it takes for the [File Auto Delete]. It may take several minutes to several tens of minutes.
- When the [Loop] feature is set, if the file to be overwritten is read-only or is currently open, the screen capture will not execute. A "CF Write Error" will occur.
- When overwriting a file, the CF-card must have enough free room to allow the data. If the data is larger than the available space, a write error will occur.
- If a write error occurs, any file that has not finished loading may remain on the CF-Card.

- When saving to the CF-card, if the target folder (\CAPTURE) does not exist, a folder will be automatically created, and the data will be saved there. However, if the CF-card does not reset or the folder can not be created, a write error will occur.
- 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).

■ CF-Card Usage Warnings

- When removing the CF-card, please 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, please make sure you have the correct side up and the correct location for the CF-card connecter. If installed incorrectly, damage can occur to the data or to the CF-card/GP unit.
- Please use a CF-card made by Pro-face. If using another company's CF-card, damage may occur to the CF-card's 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 connecters directly
    - Disassembling or modifying the CF-card