

10 | Switches

This chapter explains how to use "Switches" in GP-Pro EX and the basic operations to place a switch.

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10.1 Settings Menu

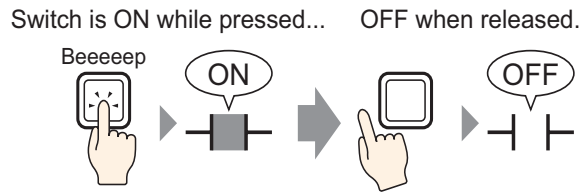
Creating a Bit Switch	
<p>Switch is ON while pressed... OFF when released.</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-5) Introduction (page 10-4)
Inverting a Bit ON/OFF	
<p>Touch and ON Touch and OFF</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-8) Introduction (page 10-7)
Writing a Value	
<p>Touch and... Constant data is written to the designated Word Address</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-11) Introduction (page 10-10)
Increasing/Decreasing a Value	
<p>Each time Switch is touched... Data is increased/decreased.</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-14) Introduction (page 10-13)
Conditionally ON Bit Switches (Comparison)	
<p>If the conditions are satisfied, Switch turns ON when touched</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-17) Introduction (page 10-16)
Using Interlock to Prevent Malfunctions	
<p>The bit address which disables touch (Interlock Address) turns ON and... According to the condition Input is not accepted.</p>	<ul style="list-style-type: none"> Setup Procedure (page 10-20) Introduction (page 10-19)

Creating a Delayed Operation Switch	
<p>Touch continuously for 3 seconds and ... ON</p> <p>(After 3 seconds)</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-23) ☞ Introduction (page 10-22)
Setting a Delay Time for Switch OFF	
<p>Release Switch and 3 seconds later...OFF</p> <p>(After 3 seconds)</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-26) ☞ Introduction (page 10-25)
Confirming Before Turning a Switch ON (Double Touch)	
<p>Touch and Switch starts blinking (input wait state). Touch again and Switch turns ON.</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-29) ☞ Introduction (page 10-28)
Creating a Color-Changing Switch	
<p>Turn bit ON by touch and... The switch's color changes.</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-32) ☞ Introduction (page 10-31)
Performing Multiple Functions with One Switch	
<p>Many operations are executed with the touch of a single Switch</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-36) ☞ Introduction (page 10-35)
Creating a Radio Switch	
<p>Only one Switch is turned ON at a time</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-40) ☞ Introduction (page 10-39)
Creating a Switch to Select Features From a List	
<p>Display the list to touch Set the switch to choose the function</p>	<ul style="list-style-type: none"> ☞ Setup Procedure (page 10-44) ☞ Introduction (page 10-43)

10.2 Creating a Bit Switch

10.2.1 Introduction

■ Bit Momentary



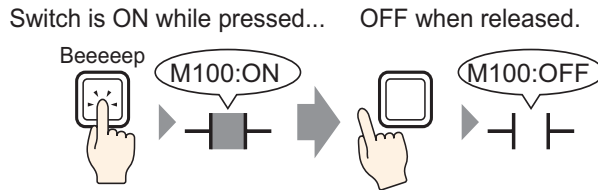
The specified bit will be turned ON as long as you press the Switch. When you take your finger off the Switch, it turns OFF.


10.2.2 Setup Procedure

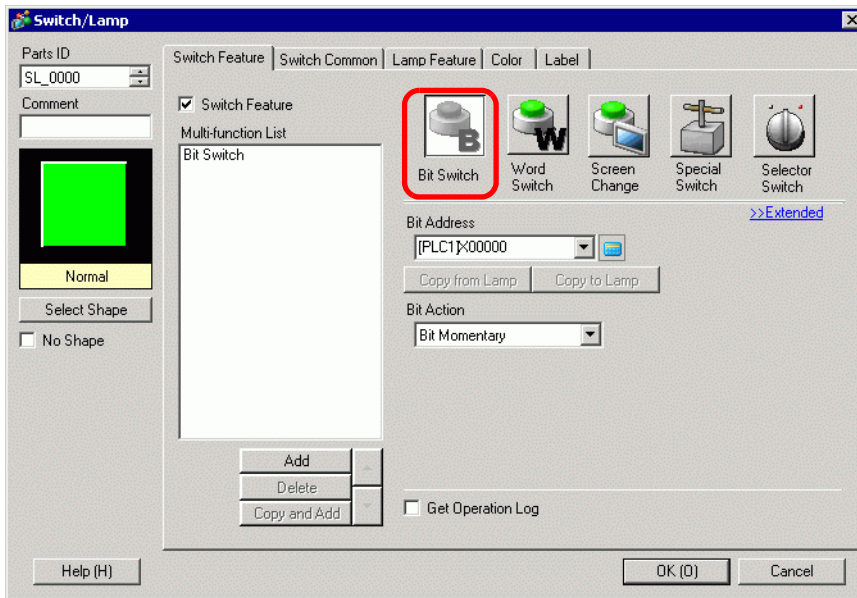
NOTE

- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a switch that turns ON a bit address (M100) for as long as it is pressed.



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

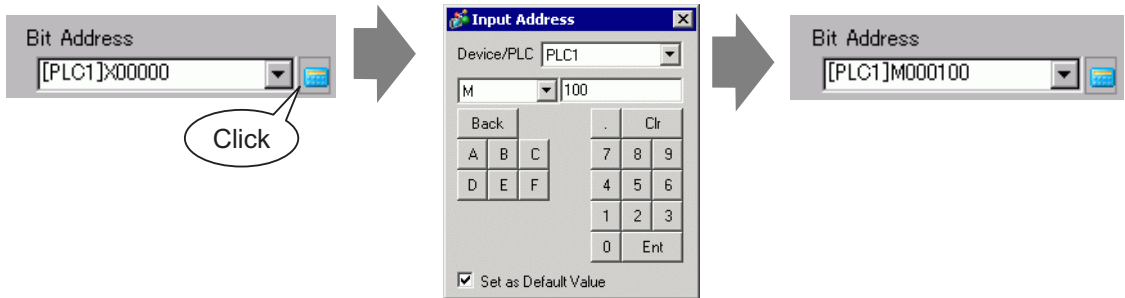


- 3 In [Select Shape], select the Switch shape.

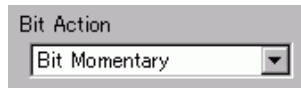
4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.



5 Confirms that [Bit Momentary] has been selected for [Bit Action].



NOTE

- If you change the [Bit Action], you can also create a bit ON switch (Bit Set) or a bit OFF switch (Bit Reset).

6 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

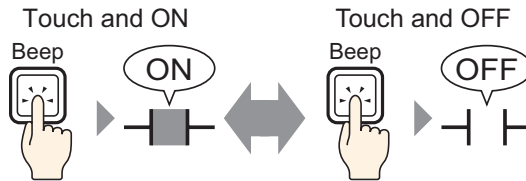
NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.3 Inverting a Bit ON/OFF

10.3.1 Introduction

■ Bit Invert



Touch the Switch and the specified bit will turn ON. (Even if you release the switch, it will remain ON.)

Touch the same Switch again, and the specified bit will now be turned OFF. The switch remains off until the next touch.

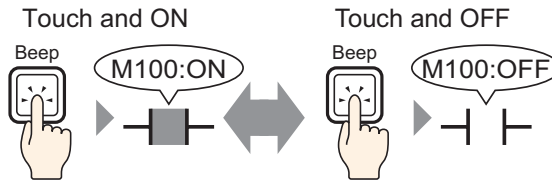
The switch alternates between ON/OFF each time it is pressed.


10.3.2 Setup Procedure

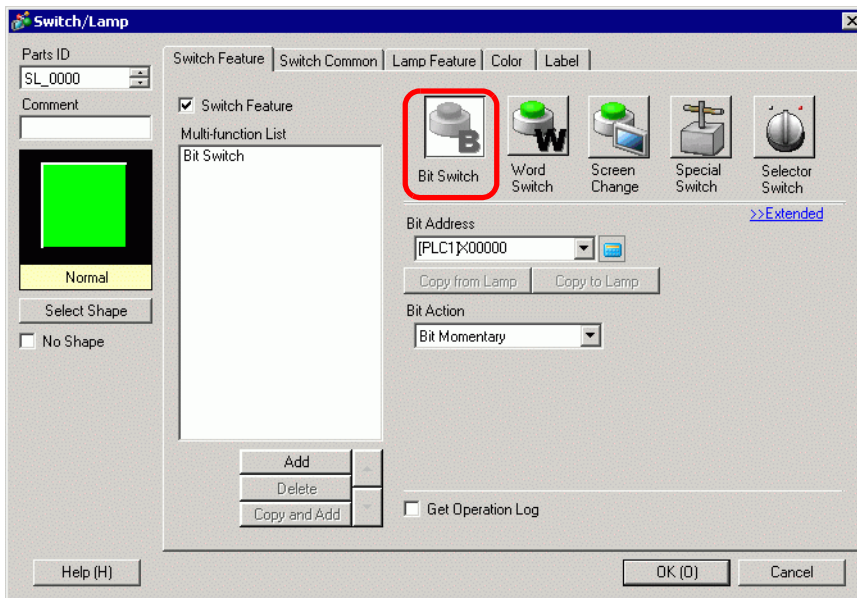
NOTE

- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a switch that inverts a bit address (M100) ON/OFF when pressed.



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

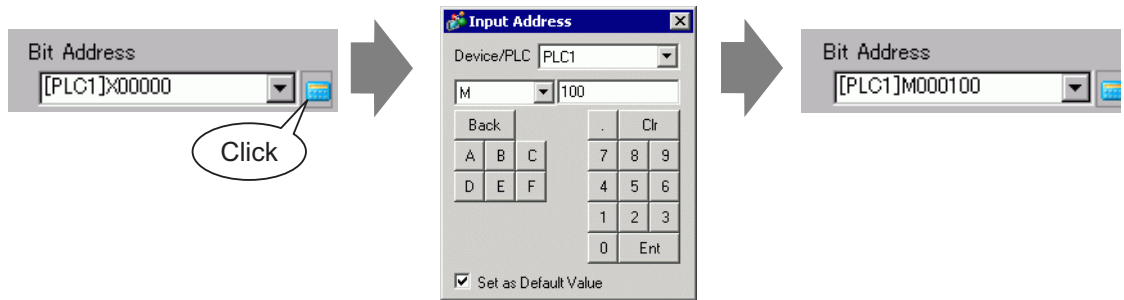


- 3 In [Select Shape], select the Switch shape.

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.



5 From [Bit Action], choose [Bit Invert].



6 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

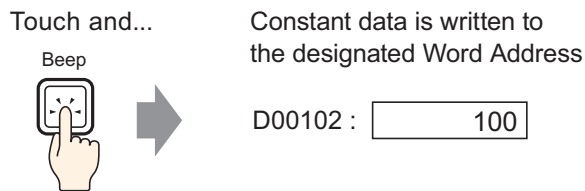
NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.4 Writing a Value

10.4.1 Introduction

■ Write Data



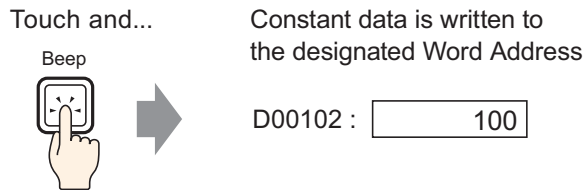
Touch the Switch and a constant (for example, 100) will be written to the address specified in [Word Address] (for example, D00102).


10.4.2 Setup Procedure

NOTE

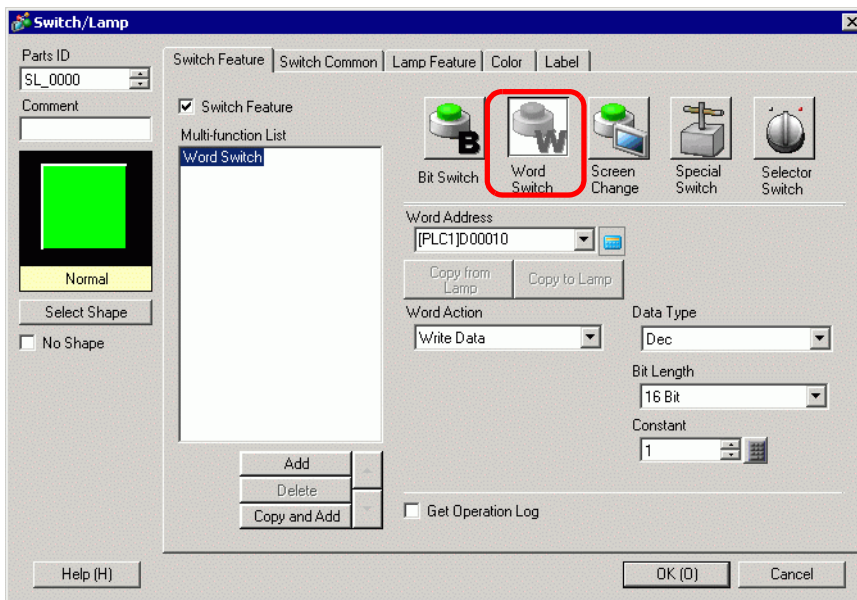
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a switch for writing constant data (for example, 100) to the Word Address (for example, D102).



1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Word Switch (W)] or click . Place the Part on the screen.

2 Double-click the placed Switch part. The following dialog box appears.

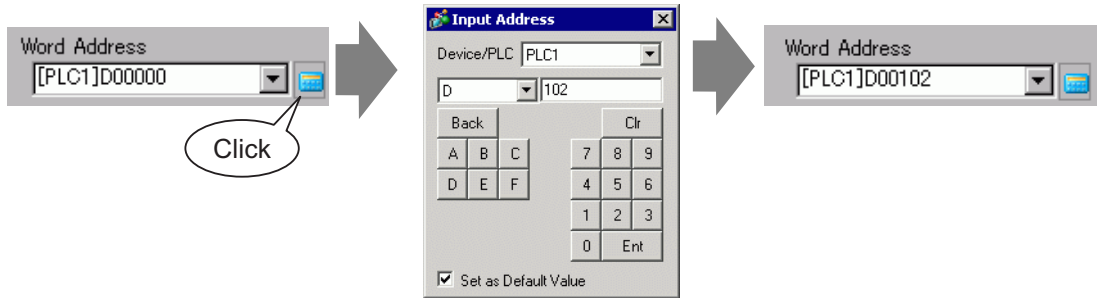


3 In [Select Shape], select the Switch shape.

4 Set the Word Address (D102) where you want to write data in [Word Address].

Click the icon to display an address input keypad.

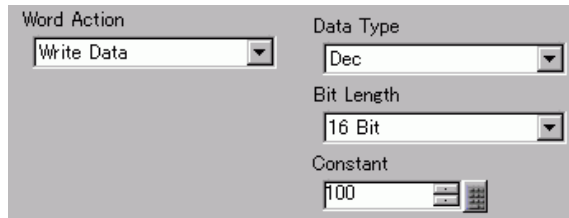
For the device select "D", and for the address enter "102".



5 From [Word Action] choose [Write Data].



6 Type "100" in [Constant].



7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE

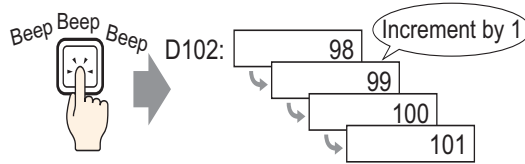
- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.5 Increasing/Decreasing a Value

10.5.1 Introduction

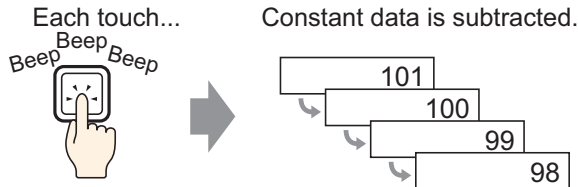
■ Add Data

Each time Switch is touched... Data is increased.



Every time the Switch is pressed, a positive constant (for example, 1) will be added to the current value (for example, 98) of the specified Word Address (for example, D102).

■ Subtract Data



Every time the Switch is pressed, a negative constant (for example, -1) will be added to the current value (for example, 101) of the specified Word Address.

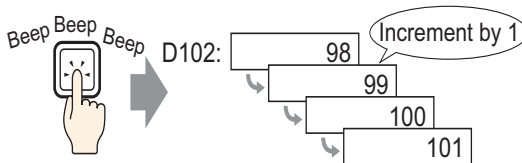
10.5.2 Setup Procedure


NOTE

- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

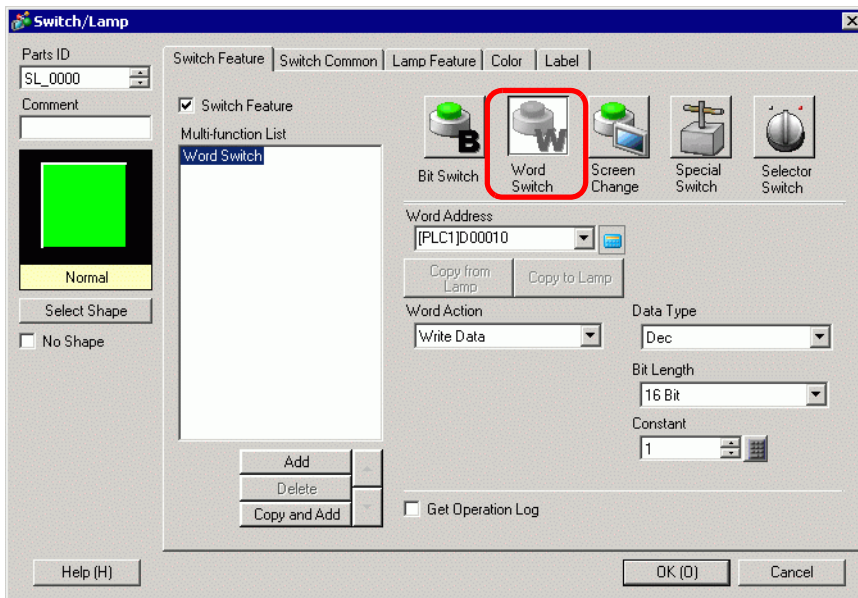
Create a switch to increment the value stored in a Word Address (D102) by 1 each time.

Each time Switch is touched... Data is increased.



1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Word Switch (W)] or click . Place the Part on the screen.

2 Double-click the placed Switch part. The following dialog box appears.

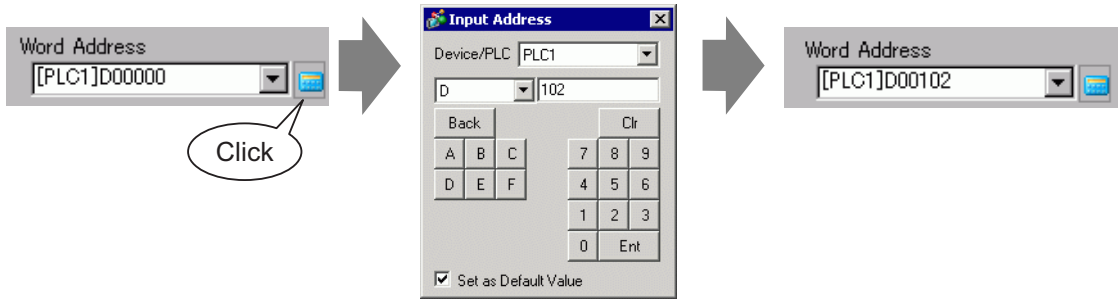


3 In [Select Shape], select the Switch shape.

4 In [Word Address], set the address (D102) which will store the result (value) of the addition.

Click the icon to display an address input keypad.

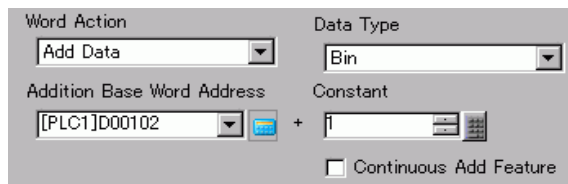
For the device select "D", and for the address enter "102".



5 From [Word Action] choose [Add Data].



6 In [Addition Base Word Address], set the address (D102) where the source data is stored, and input "1" in [Constant].



7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE

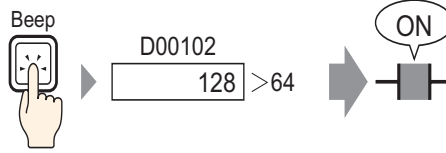
- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key, you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.6 Conditionally ON Bit Switches (Comparison)

10.6.1 Introduction

■ Comparison

If the conditions are satisfied, Switch turns ON when touched



When the Switch is pressed, the Word Address data (for example, 128) and a preset constant (for example, 64) are compared. If the condition is met (for example, "Word Address data is larger than the constant"), the specified bit is turned ON.

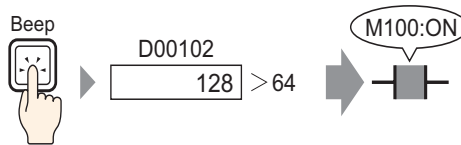
10.6.2 Setup Procedure


NOTE

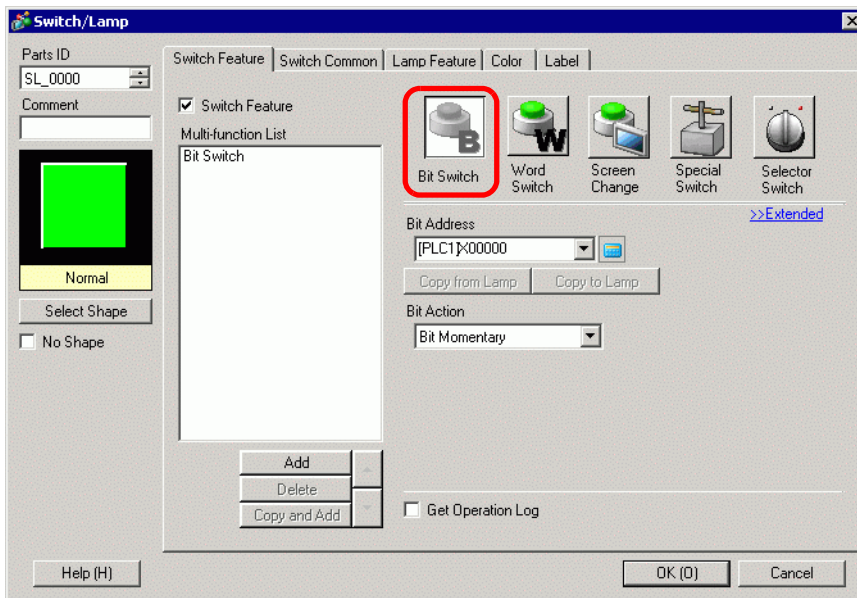
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a switch to turn ON the specified bit address by touch when the value of the world address is over 64.

If the conditions are satisfied, Switch turns ON when touched



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

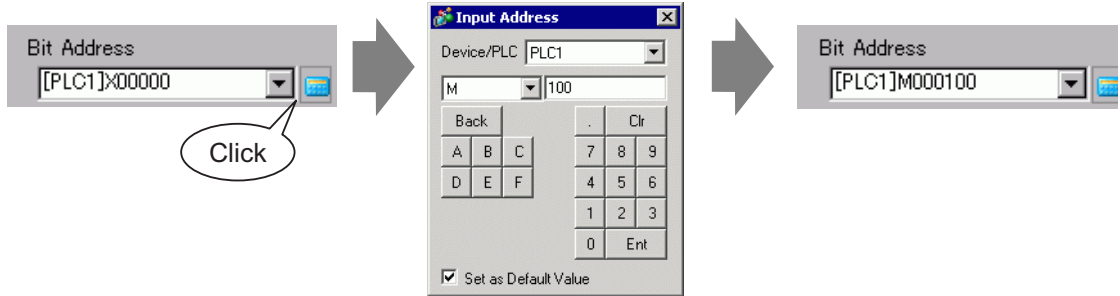


- 3 In [Select Shape], select the Switch shape.

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

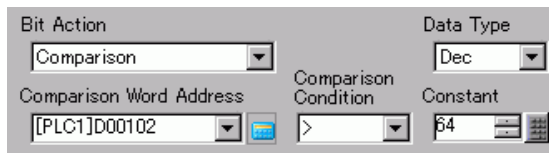
Select device "M", input "100" as the address, and press the "Ent" key.



5 From [Bit Action] choose [Comparison].



6 Set the Word Address (D102) to compare in [Comparison Word Address], select ">" for the [Comparison Condition], and input "64" for the [Constant].



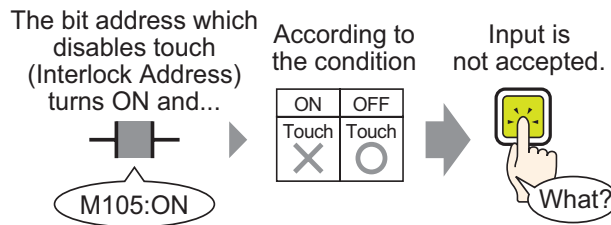
7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.7 Using Interlock to Prevent Malfunctions

10.7.1 Introduction



The touch action will only be executed if the Bit Address specified in the Interlock Address meets the Touch Enable Condition.

If the Touch Enable Condition is set to [Bit ON]:The touch action will only work when the Interlock Address is ON.

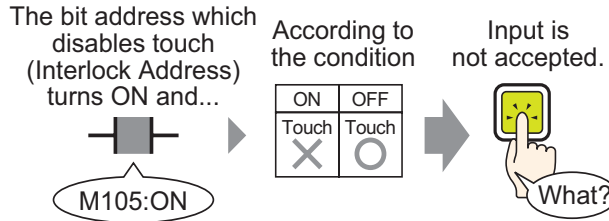
If the Touch Enable Condition is set to [Bit OFF]:The touch action will only work when the Interlock Address is OFF.


10.7.2 Setup Procedure

NOTE

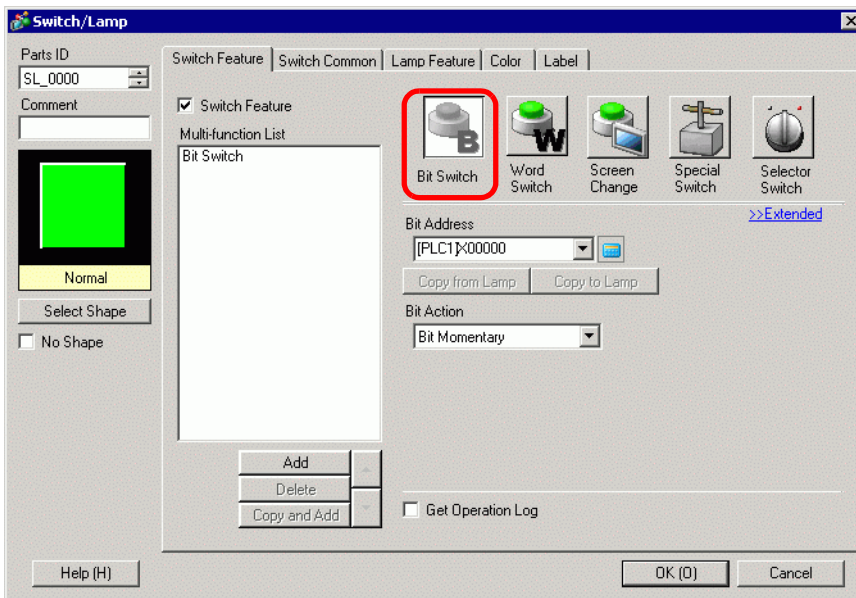
- Please refer to the Settings Guide for details.
 - ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 - ☞ "8.6.1 Editing Parts" (page 8-44)

Create a Switch to turn ON a Bit Address (M100) only when the designated Bit Address (M105) is OFF.



1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.

2 Double-click the placed Switch part. The following dialog box appears.

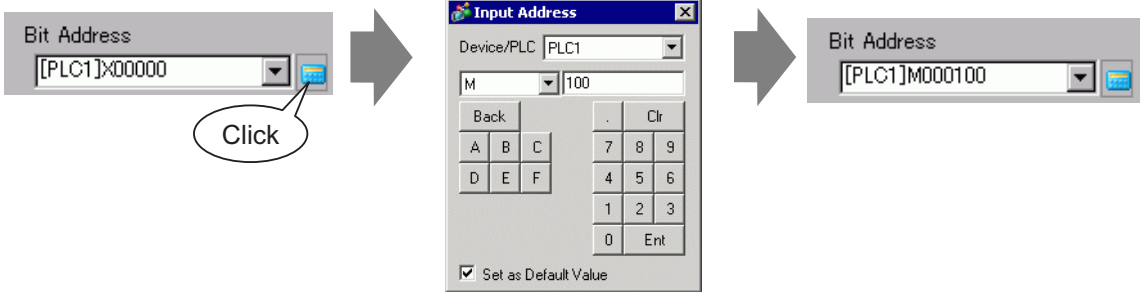


3 In [Select Shape], select the Switch shape.

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.

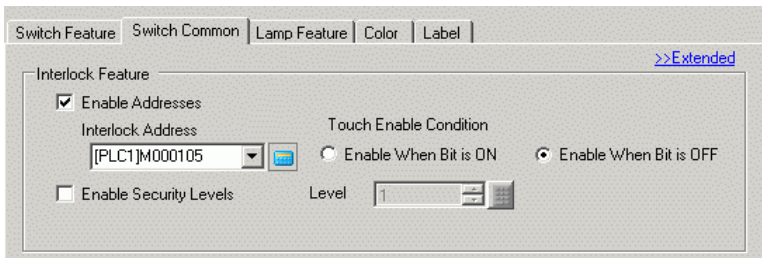


5 From [Bit Action] choose [Bit Set].



6 Open the [Switch Common] tab and select the [Enable the Address] check box.

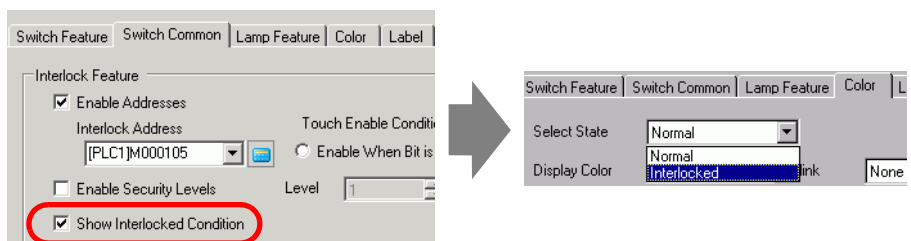
In [Interlock Address], set the bit address (M105) to enable/disable touch, and for the [Touch Enable Condition] select [Enable when Bit is OFF].



7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

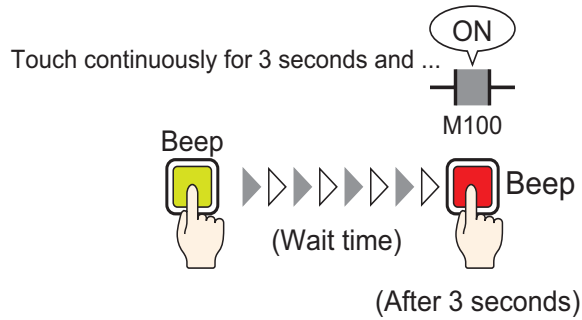
NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.
- If you want a color and label to change when it is Interlocked, select the [Show Interlock Condition] check box in [Switch Common] tab - [Extended]. You can set [Interlocked] on the [Color] and [Label] tabs' [Select State].



10.8 Creating a Delayed Operation Switch

10.8.1 Introduction



If the Switch is pressed continuously for a set time (for example, 3 seconds), the specified bit will turn ON. This is useful in preventing accidental input.

If you stop pressing the Switch before it becomes active, the Switch action will not execute and the buzzer will not sound.

As well, the switch appearance will return to its OFF state.

10.8.2 Setup Procedure


NOTE

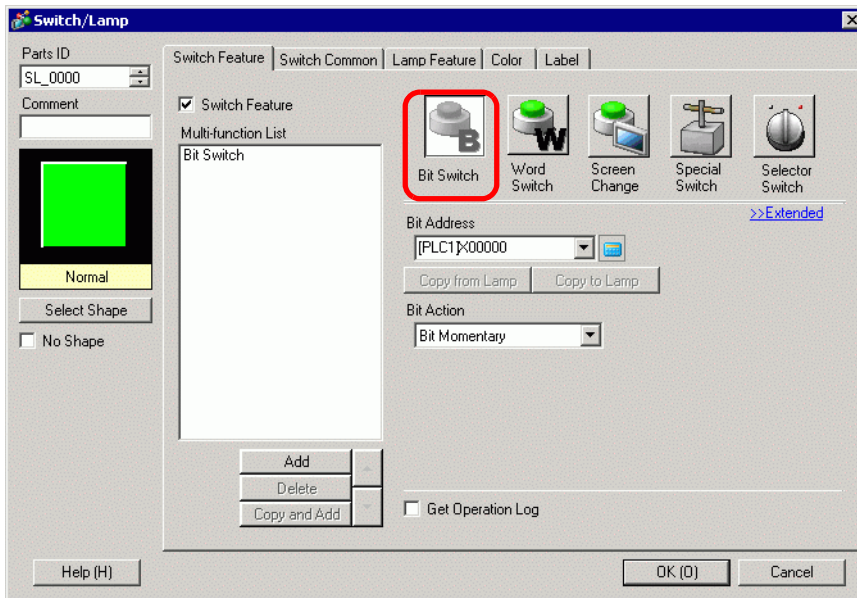
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a switch that turns ON a bit address (M100) after it is pressed for 3 seconds.

Touch continuously for 3 seconds and ... ON



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

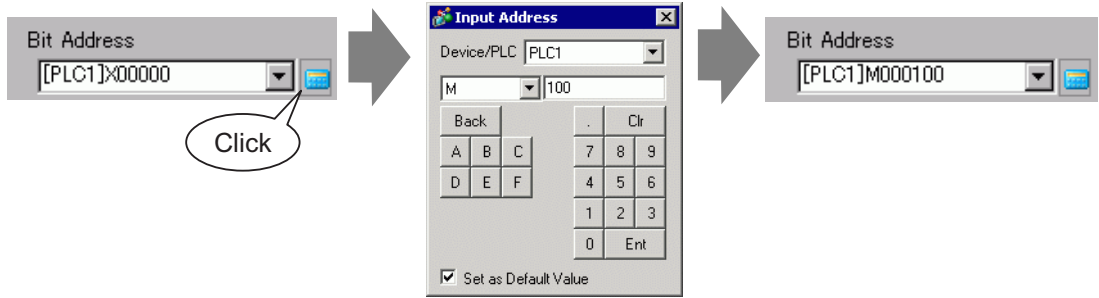


- 3 In [Select Shape], select the Switch shape.

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.



5 From [Bit Action] choose [Bit Set].



6 On the [Switch Common] tab, select the [Delay Feature] check box, and select [ON Delay] for the [Delay Action]. Set 3 seconds for the [Delay Time].



7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

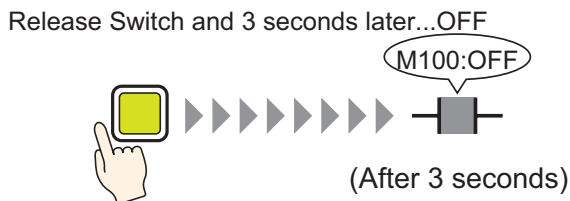
NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.
- If you want to show that the delay feature is in progress by changing the switch color or label, in the [Switch Common] tab, expand the display and select the [Show In-Delay Status] check box. Then in the [Color] and [Label] tabs, set [Select State] to [In Delay].



10.9 Setting a Delay Time for Switch OFF

10.9.1 Introduction



After the Switch is pressed and released, the specified bit will wait a set amount of time (for example, 3 seconds) before turning OFF.

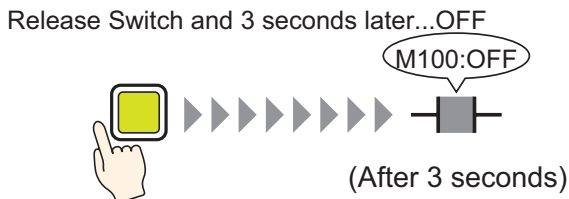
If the Switch is pressed again while waiting to turn OFF, there will be another wait time for example 3 seconds after it is depressed before the specified bit turns OFF.


10.9.2 Setup Procedure

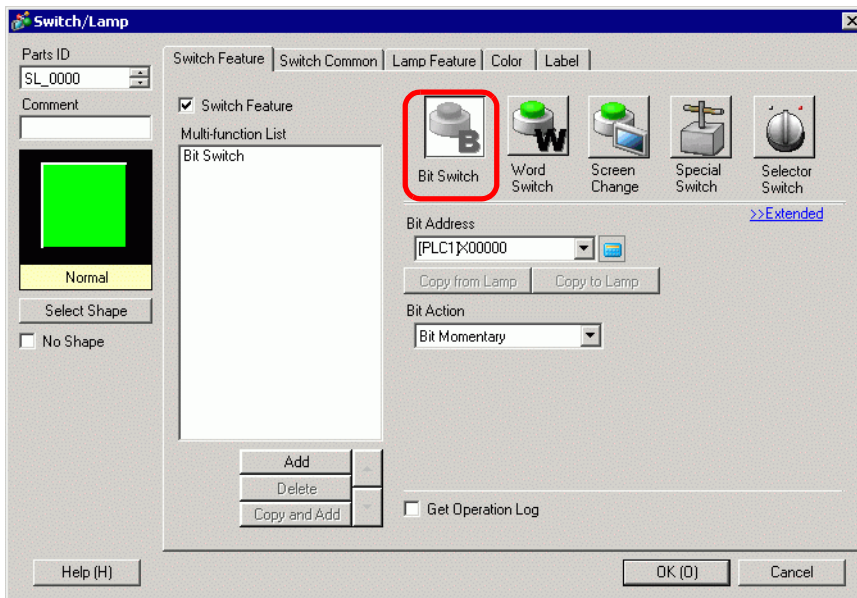
NOTE

- Please refer to the Settings Guide for details.
 ↳ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ↳ "8.6.1 Editing Parts" (page 8-44)

Create a Momentary Switch that turns OFF a bit address (M100) 3 seconds after it is released.



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click  to place the Switch Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

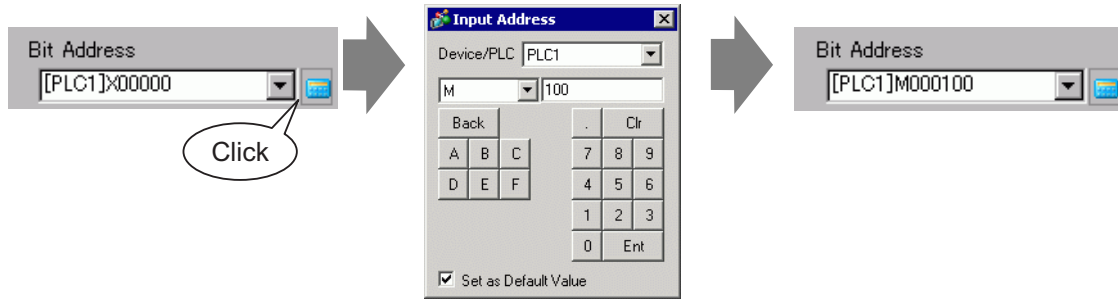


- 3 In [Select Shape], select the Switch shape.

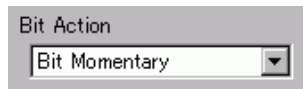
4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.



5 Confirms that [Bit Momentary] has been selected for [Bit Action].



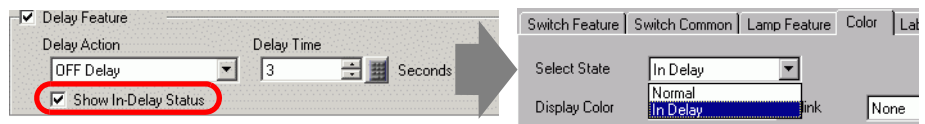
6 On the [Switch Common] tab, select the [Delay Feature] check box, and select [OFF Delay] for the [Delay Action]. Set 3 seconds for the [Delay Time].



7 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE

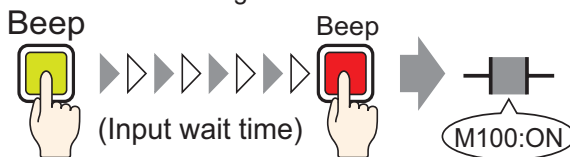
- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.
- If you want to show that the delay feature is in progress by changing the switch color or label, in the [Switch Common] tab, expand the display and select the [Show In-Delay Status] check box. Then in the [Color] and [Label] tabs, set [Select State] to [In Delay].



10.10 Confirming Before Turning a Switch ON (Double Touch)

10.10.1 Introduction

Touch and Switch starts blinking (input wait state).
Touch again and Switch turns ON.



When the Switch is touched the first time, it starts flashing. It is now waiting for further input. When the Switch is touched a second time while flashing (input wait state), the specified bit turns ON. This is useful in preventing accidental input.

If the Switch is not touched a second time while flashing (input wait state), the specified bit will not turn ON.

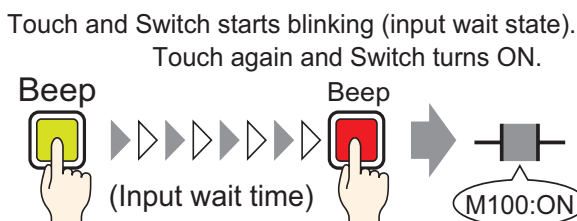
Also, if another Switch is pressed during the wait state, the wait state ends and the specified bit does not turn ON.

10.10.2 Setup Procedure

NOTE

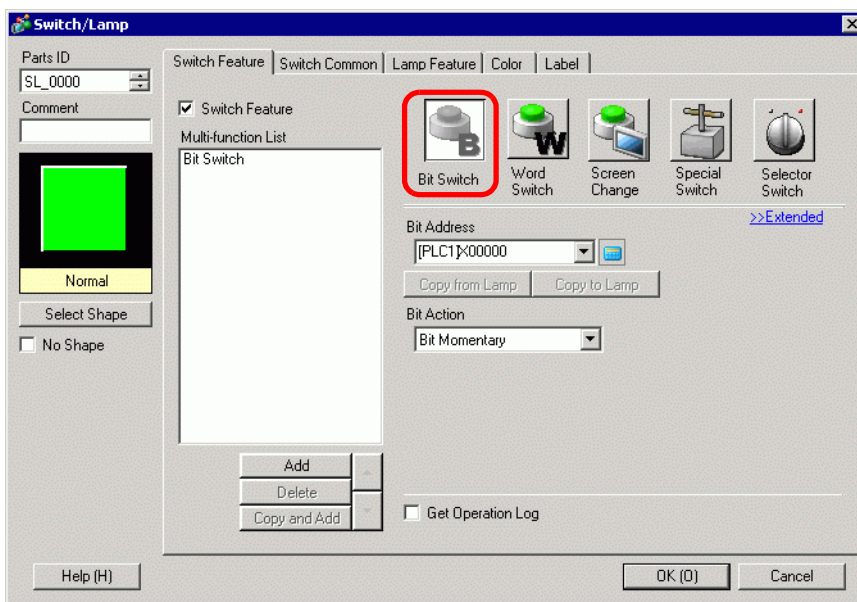
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a Switch to turn ON a Bit Address (M100) if pressed twice within 5 seconds.



1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.

2 Double-click the placed Switch part. The following dialog box appears.



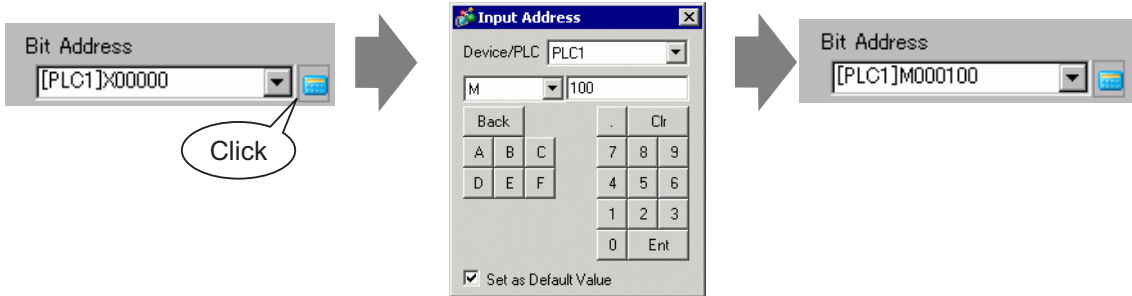
3 In [Select Shape], select the Switch shape.

Confirming Before Turning a Switch ON (Double Touch)

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

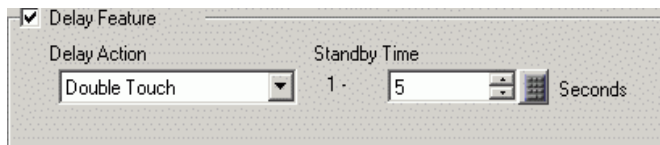
Select device "M", input "100" as the address, and press the "Ent" key.



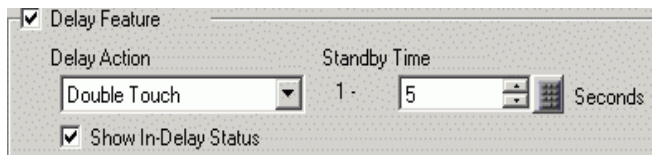
5 From [Bit Action] choose [Bit Set].



6 On the [Switch Common] tab, select the [Delay Feature] check box, and select [Double Touch] for the [Delay Action]. Set 5 seconds for the [Standby Time].



7 Click [Extended] and select the [Show In-Delay Status] check box.



8 On the [Color] tab, set [Select State] to [In Delay]. In [Display Color], set the color while in waiting for input and set [Blink] to [Medium].



NOTE

- Depending on the shape, you may not be able to change the color.

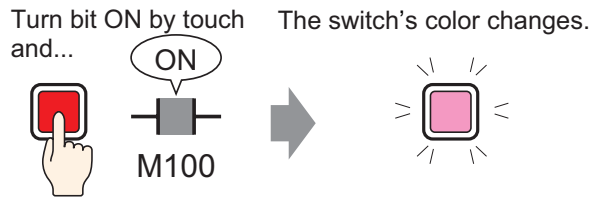
9 As needed, set the label that will display while in delay on the [Label] tab, and click [OK].

NOTE

- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.11 Creating a Color-Changing Switch

10.11.1 Introduction



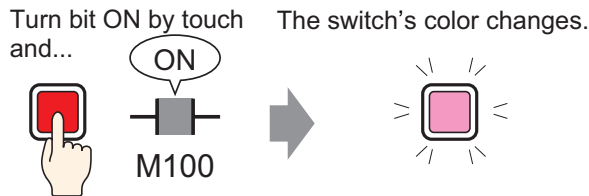
Combine a Switch with the Lamp Feature and you can change the color according to the designated state (ON/OFF).

10.11.2 Setup Procedure

NOTE

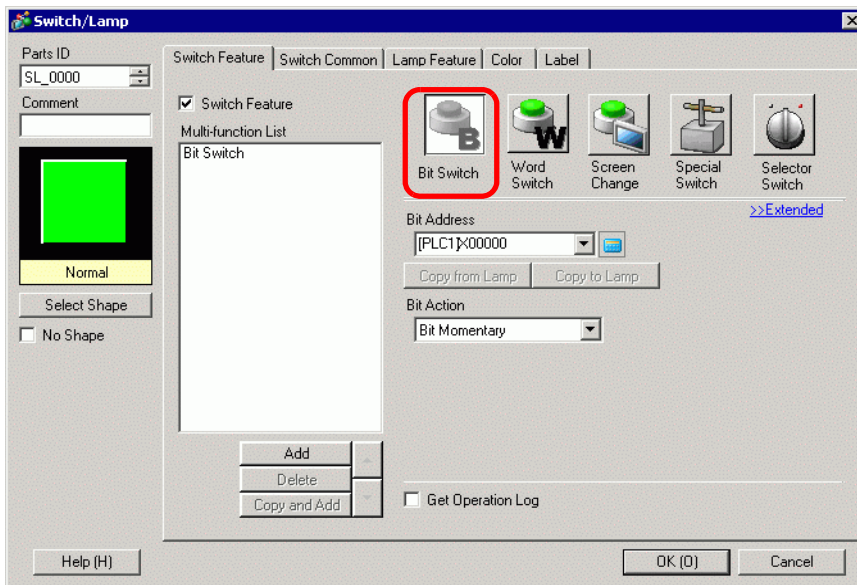
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a Switch which changes color (OFF: Green, ON: Red) each time it is pressed and the Bit Address (M100) operation occurs.



1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Bit Switch (B)], or click . Place the Switch Part on the screen.

2 Double-click the placed Switch part. The following dialog box appears.

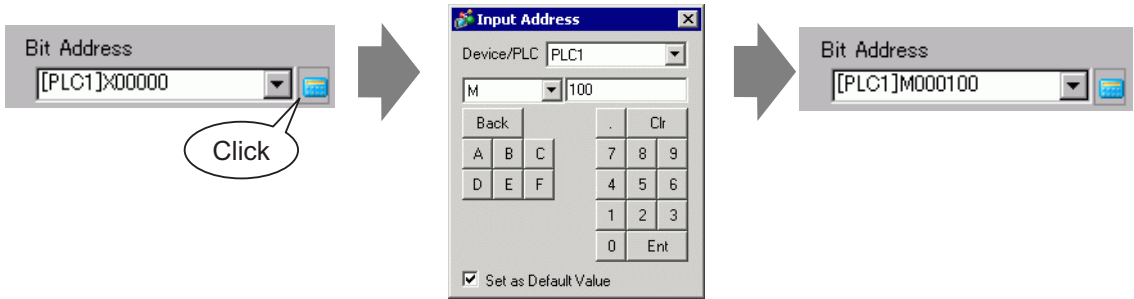


3 In [Select Shape], select the Switch shape.

4 Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

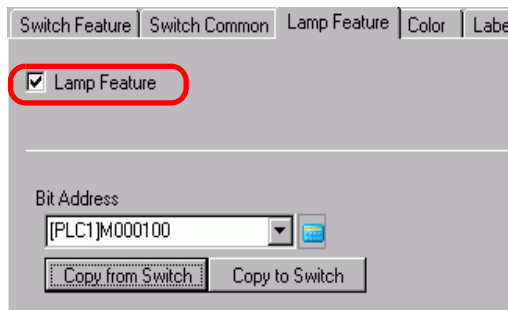
Select device "M", input "100" as the address, and press the "Ent" key.



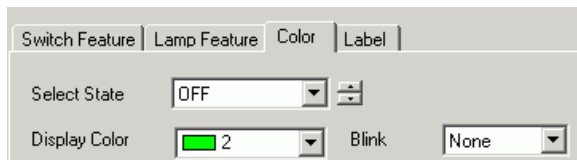
5 From [Bit Action], choose [Bit Invert].



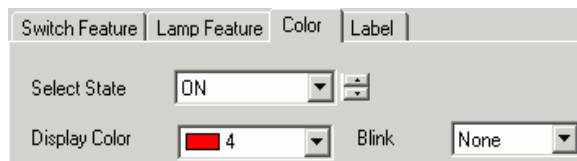
6 On the [Lamp Feature] tab, select the [Lamp Feature] check box and click [Copy from Switch]. The same address as the one designated on the [Switch Feature] tab will appear in [Bit Address].



7 On the [Color] tab, set the OFF state switch color (green).



8 In [Select State], select [ON] and set the ON state switch color (red).



9 As needed, set the text to display in each state on the [Label] tab, and click [OK].

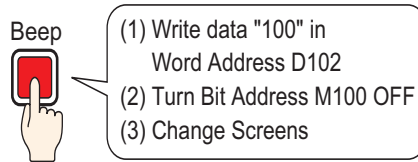
NOTE

- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.
-

10.12 Performing Multiple Functions with One Switch

10.12.1 Introduction

Many operations are executed with the touch of a single Switch



A single Switch can be set with a maximum of 16 Switch Operations.

When the first registered Switch address is activated, the Switch Operations are executed in the order they were registered. You can set the order of the Switch Operations. The Screen Change Action will run if it is registered as the last operation in the sequence. This feature is useful for screens with limited space.

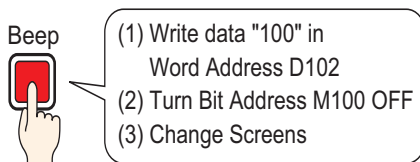
10.12.2 Setup Procedure


NOTE

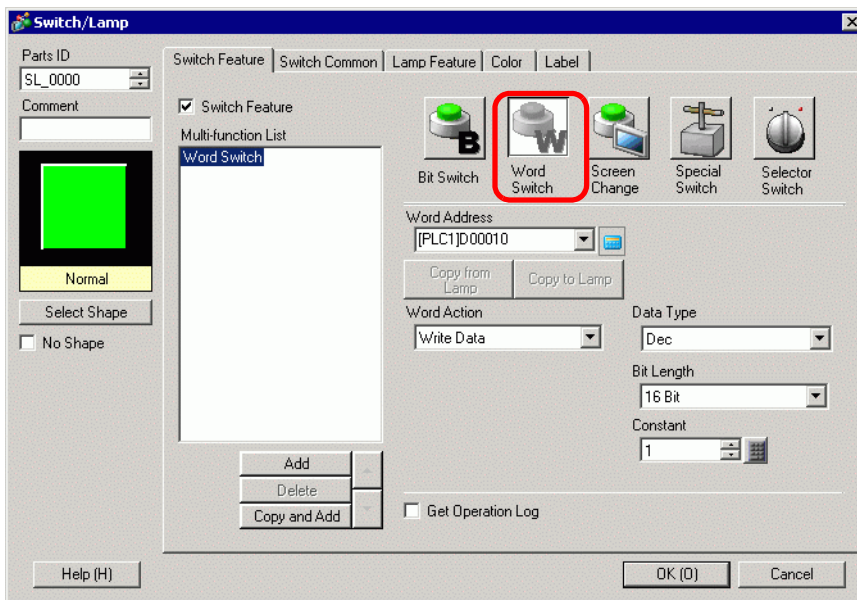
- Please refer to the Settings Guide for details.
 ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

Create a Switch to write data "100" to a Word Address (D102), turn OFF a Bit Address (M100) and then return to the previous screen.

Many operations are executed with the touch of a single Switch



- 1 From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Word Switch (W)] or click . Place the Part on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

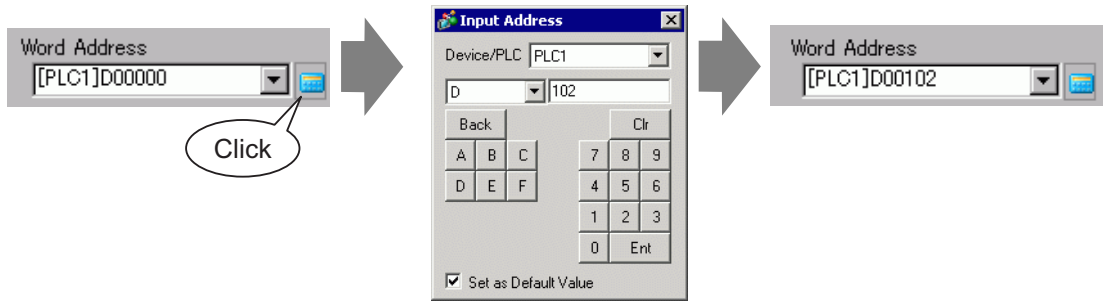


- 3 In [Select Shape], select the Switch shape.

4 Set the address (D102) where you want to write data when you touch the switch in [Word Address].

Click the icon to display an address input keypad.

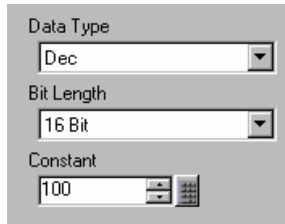
For the device select "D", and for the address enter "102".



5 From [Word Action] choose [Write Data].

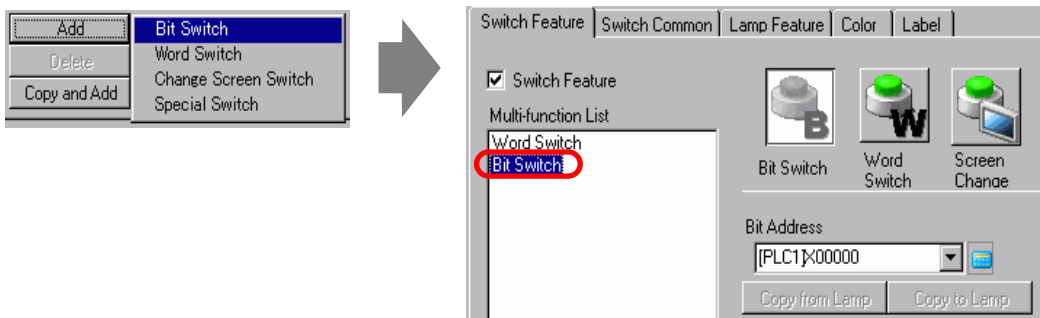


6 Set [Constant] to "100" and word switch's function is complete.



7 Click [Add] and select [Bit Switch].

When the screen changes to the bit switch settings, the bit switch is added to the display in [Multi-function List].



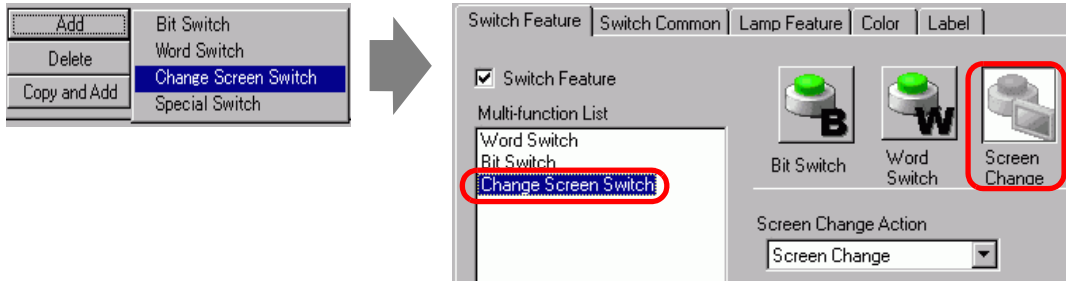
8 Specify the [Bit Address] (M100) that you want to turn OFF.

9 In [Bit Action], select [Bit Reset] and the bit switch feature settings are complete.



10 Click [Add] and select [Change Screen Switch].

When the screen changes to the Change Screen Switch settings, the Change Screen Switch is added to the display in [Multi-function List].



11 In [Screen Change Action], select [Previous Screen]. The Change Screen Switch settings are complete.

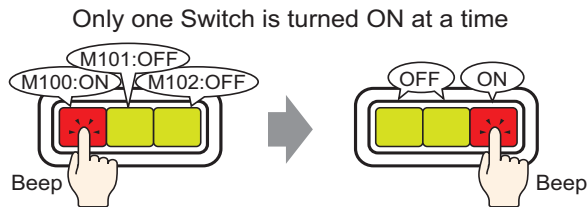
12 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK].

NOTE

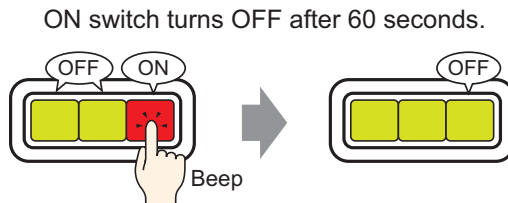
- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

10.13 Creating a Radio Switch

10.13.1 Introduction



If you register multiple Switches into a single Group, when one Switch from the group is touched and the specified bit is turned ON, the remaining Switches will be turned OFF. When another Switch in the same Group is touched, the same action will apply.



NOTE

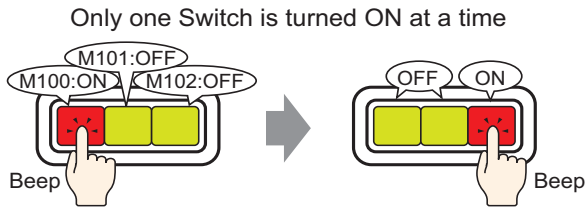
- Set [Group with Auto OFF], and the bit will automatically turn OFF when the screen changes or the Window closes.


10.13.2 Setup Procedure

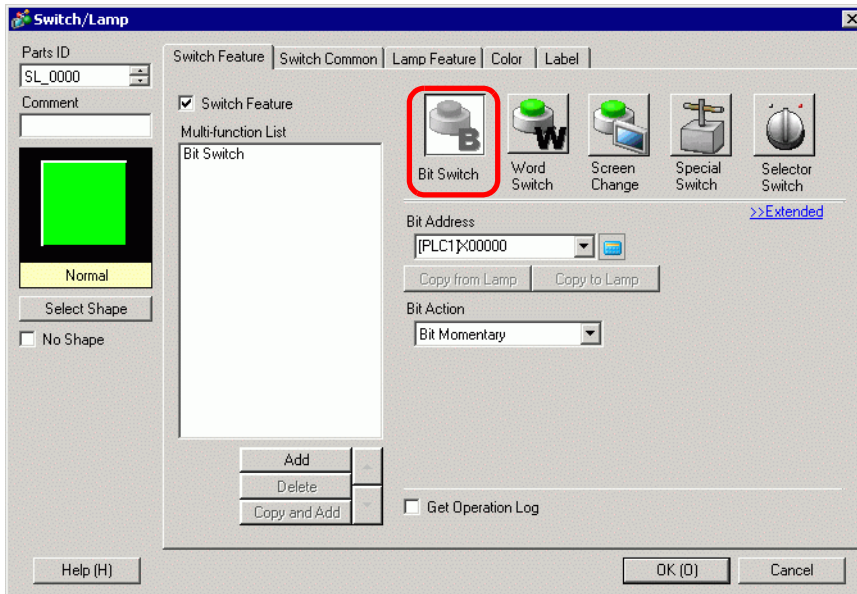
NOTE

- Please refer to the Settings Guide for details.
 - ☞ "10.15 Switch Lamp Parts Settings Guide" (page 10-48)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 - ☞ "8.6.1 Editing Parts" (page 8-44)

Create a Radio Switch that contains a group of 3 Bit Address switches: M100, M101, and M102.



- 1 On the [Parts (P)] menu, point to [Switch Lamp (C)], and select [Bit Switch (B)], or click  to place it on the screen.
- 2 Double-click the placed Switch part. The following dialog box appears.

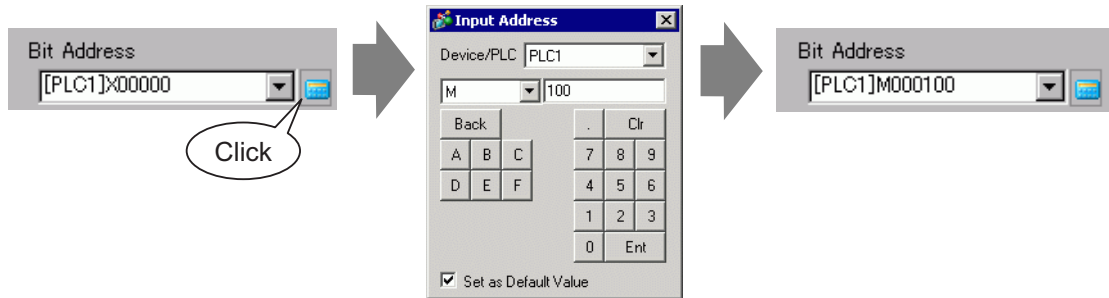


- 3 In [Select Shape], select the Switch shape.

4 Specify the one [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

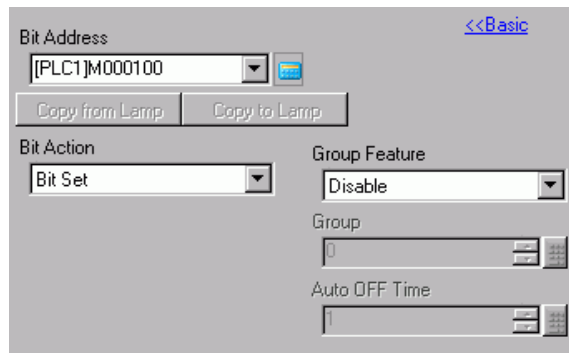
Select device "M", input "100" as the address, and press the "Ent" key.



5 From [Bit Action] choose [Bit Set].



6 Click [Extended].



7 In [Group Feature], select [Group] and set the [Group No.]

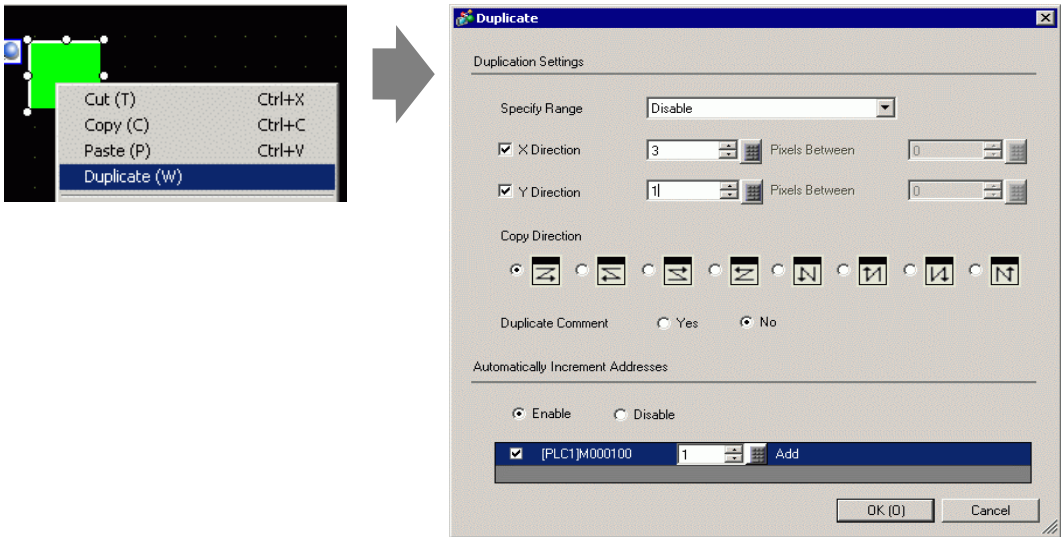
8 As needed, set the color and display text on the [Color] tab and [Label] tab, and click [OK]. The switch that turns ON M100 is complete.

NOTE

- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label. [Text Table], when selected, enables you to change the current Text Table.

9 Select the created switch, right-click, and select [Duplicate (W)].

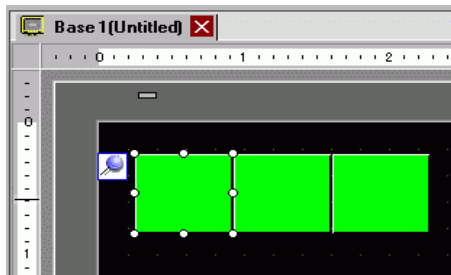
When the [Duplicate] dialog box appears, set [X Direction] = 3 and [Y Direction] = 1. Set [Automatically Increment Addresses] to [Enable], and confirm the increment amount is set to 1. This value is used to increment addresses from the original address of M100. Click [OK (O)].



NOTE

- For more details about Duplicate, please refer to "8.4.5 Duplicate" (page 8-28).

Complete the Radio Switch with the consecutive 3 bit addresses in the same Group Number

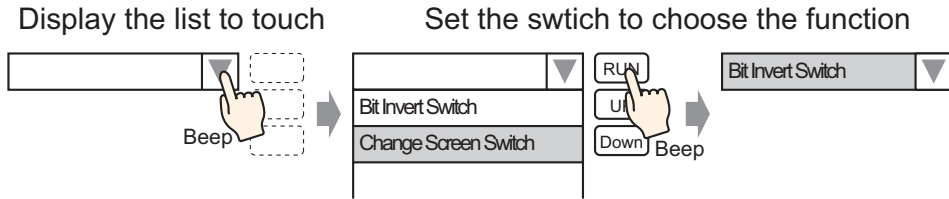


NOTE

- To group three switches together without copying them, set all the switches to the same [Group Number].
- You can place the same switch using [Copy] and [Paste] without using [Duplicate].
- For [Duplicate], you can create automatically added copies of addresses depending on the [Assign Addresses] and [Increment Each Address by] settings, but if you make switches without consecutive addresses into a Group, you will need to change the [Bit Address] of the 2nd and 3rd switch.

10.14 Creating a Switch to Select Features From a List

10.14.1 Introduction



You can register multiple switch features (maximum 256) to the selector list and the switch feature to run by touching the list display button.

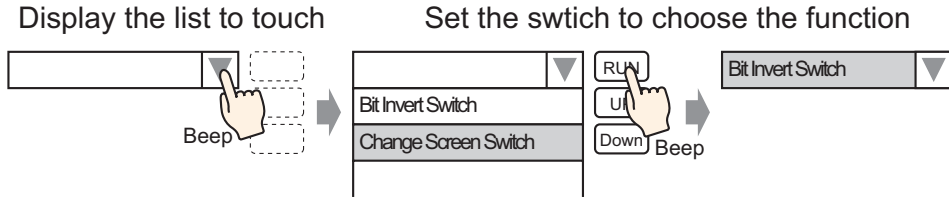
Using a selector list allows you to reduce the number of switches to draw on the screen.

10.14.2 Setup Procedure

NOTE

- Please refer to the Settings Guide for details.
 ☞ "10.16 Selector List Parts Settings Guide" (page 10-88)
- For details on how to draw parts and define addresses, shapes, color, and labels, refer to the section on "Editing Parts".
 ☞ "8.6.1 Editing Parts" (page 8-44)

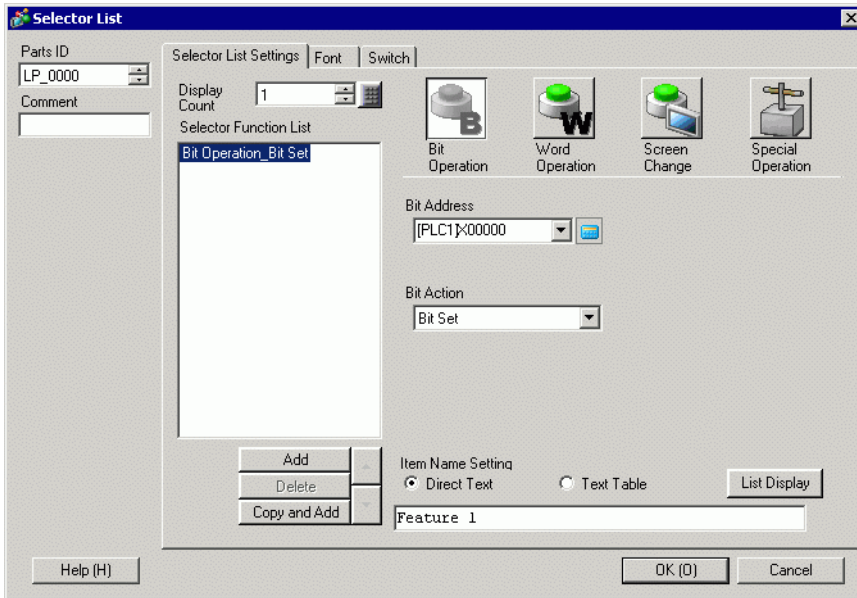
Create a switch in which the bit operation inverts (ON/OFF) bit address M100, and changes the screen to the registered screen number.



NOTE

- The registered order does not affect the process. This is the order in which it is displayed in the list.
 You can change the display order in the [Selector Function List].

- 1 From the [Parts (P)] menu, select [Selector List (E)], or click and place the part on the screen.
- 2 Double-click the placed selector list to open the setting dialog box.

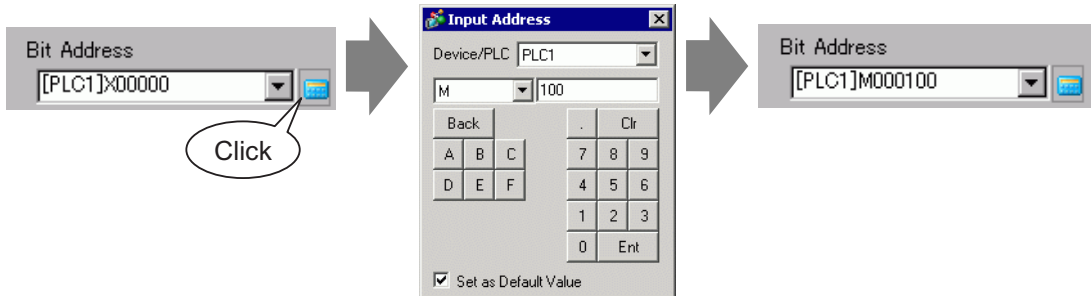


3 Create the switch to operate the bit.

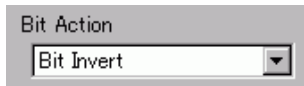
Specify the [Bit Address] (M100) that you want to operate when the switch is touched.

Click the icon to display an address input keypad.

Select device "M", input "100" as the address, and press the "Ent" key.

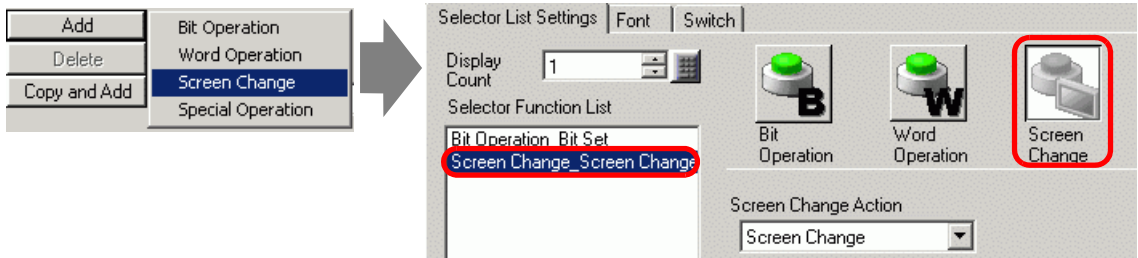


4 In [Bit Action], select [Bit Reset] to complete the bit switch feature settings.



5 Click [Add] and select [Screen Change].

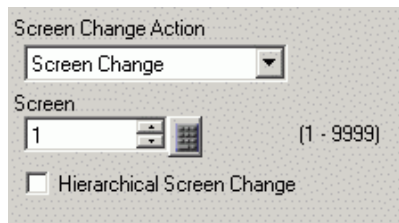
The dialog box will show the screen change settings, and [Screen Change] is added to the [Selector Function List].



NOTE

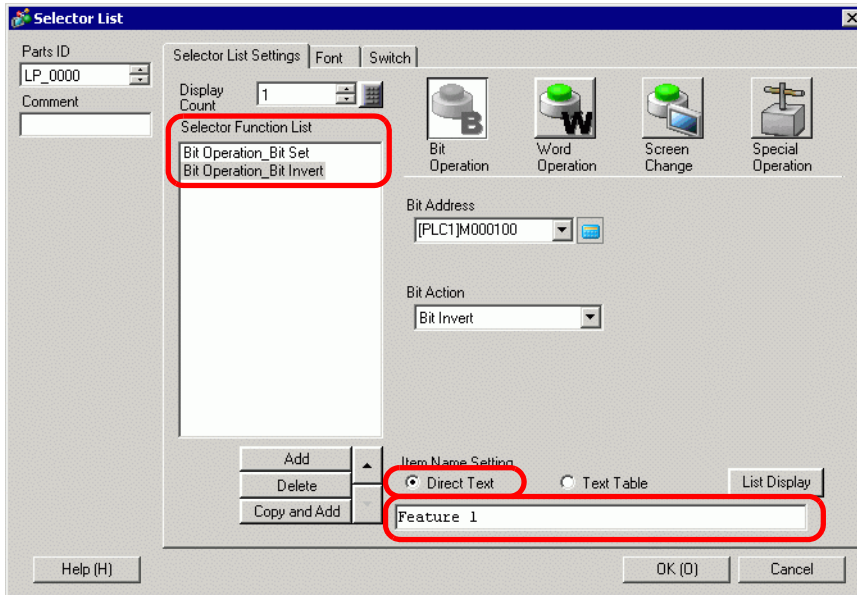
- In the selector function list, when you select and right-click the feature and select [Default (D)], the feature will be registered as a switch to be displayed on the top of the list. For the feature to display on the top of the list, it is useful to set the features frequently used as default, because the procedure to select from the list by touch operation is not necessary.

6 From the [Screen Change Action] drop-down list, select [Screen Change].



7 Enter the screen number of the screen to display in the [Screen Number]. The Change Screen feature settings are complete.

- 8 [Select the registered feature in the [Selector Function List], click [Direct Text] in the [Item Name Settings] and enter an item name to be displayed on the list.

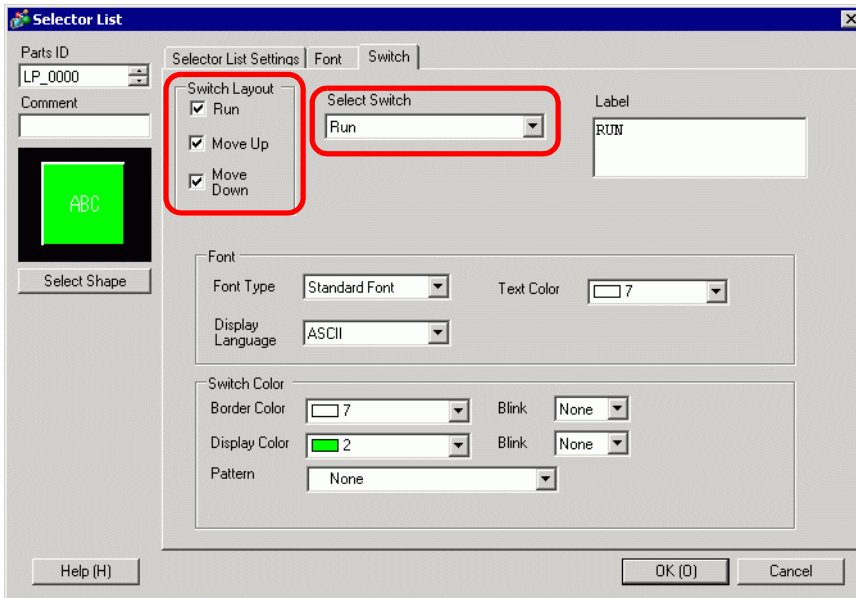


NOTE

- Open [Font Settings] to change the font type, size, or color of the item name you entered.

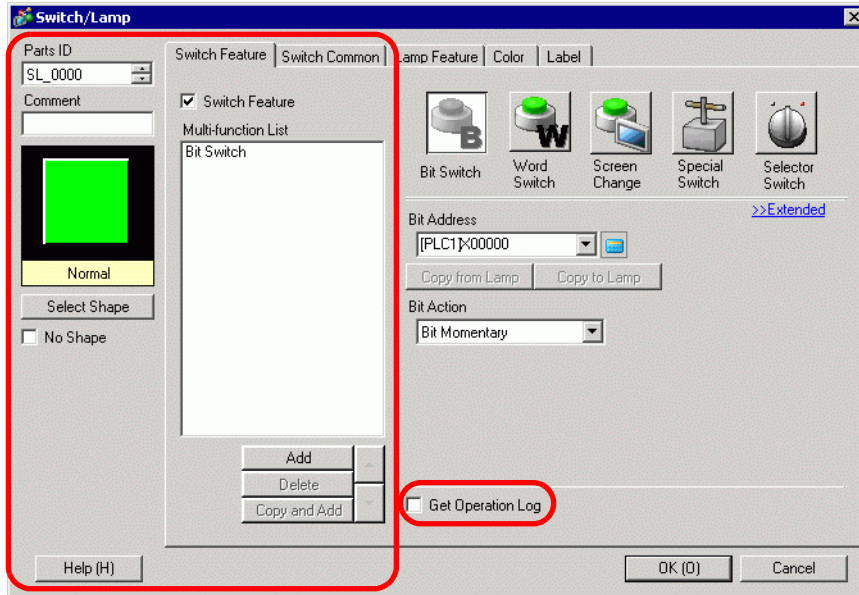
- 9 Open the [Switch] tab and select the [Run], [Move Upward], or [Move Downward] check boxes.

Select the required switch from the [Select Switch] list and define the switch's colors and text, then click [OK].

**NOTE**

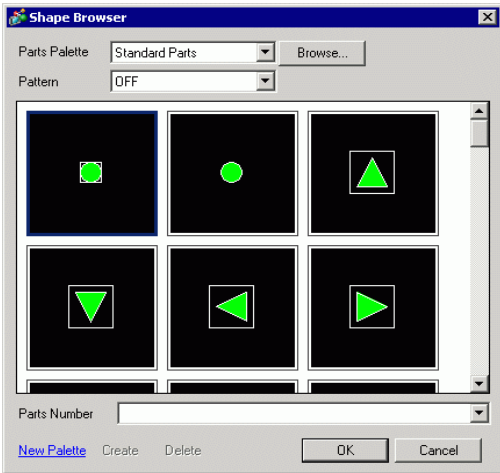






- Depending on the shape, you may not be able to change the color.
- When you select a switch and press the [F2] key you can directly edit the text on the label.

10.15 Switch Lamp Parts Settings Guide



Setting	Description
Part ID	Parts are automatically assigned an ID number. Switch Lamp Part ID: SL_**** (4 digits) The letter portion is fixed. You can change the number portion within the range of 0000-9999.
Comment	The comment for each Part can be up to 20 characters.
Status Display	Displays the shape and status of the Part selected in [Select Shape]. When combining the Switch Feature and Lamp Feature, you can display different settings for each state (ON state/OFF state) by changing [Select State] on the [Color] tab and [Label] tab.

Continued

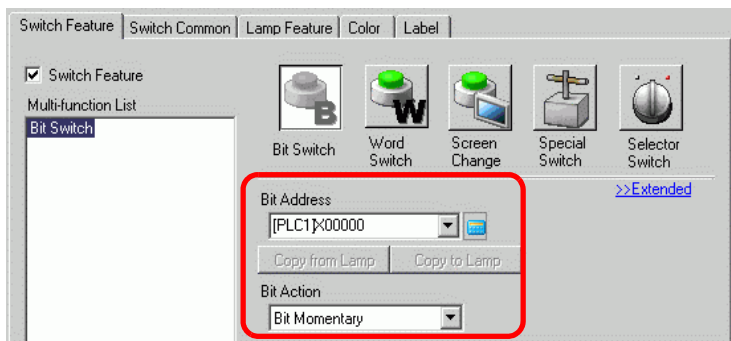
Setting	Description
Select Shape	<p>Open the Select Shape dialog box to choose the shape.</p>  <p>Clicking  to the right of the [Parts Palette] or [Browse] displays the Parts Palette. There are parts with 65536, 256 or 64 colors. Select a parts palette according to the number of colors on your model. Depending on the shape, you may not be able to change the color.</p>
No Shape	<p>Select whether the part will be transparent with no shape. This can only be set if the Lamp Feature is not used.</p>
Switch Feature	<p>Designate whether or not to use the Switch Feature.</p> <p>NOTE</p> <ul style="list-style-type: none"> When using the Lamp Feature, you do not need to designate this.
Types of Switches	<ul style="list-style-type: none"> Bit Switch Turns a specified bit ON/OFF.  "10.15.1 Bit Switch" (page 10-51) Word Switch Sets data into a specified Word Address.  "10.15.2 Word Switch" (page 10-65) Screen Change Changes the screen.  "10.15.3 Change Screen Switch" (page 10-69) Special Switch It has special features, such as changing the GP into offline mode and displaying a Window.  "10.15.4 Special Switch" (page 10-70) Selector Switch When touched, it turns ON the specified bits (up to a maximum of 4 bits) in order.  "10.15.5 Selector Switch" (page 10-86)
Multi-function List	<p>Displays the type of set Switches.</p> <p>When setting multiple features to a single Switch, the set features will display in order in a list starting from the top. Processing occurs in order starting at the top of this list.</p>

Continued

Setting	Description
Add	When setting multiple features to a single Switch, adds a feature. Click this button, select the Switch you want to add, and the feature will be added to the [Multi-function List].
Delete	When a switch is set up with multiple switch operations, deletes the operation selected in the [Multi-function List] pane.
Copy and Add	When a switch is set up with multiple switch operations, copies the operation selected in the [Multi-function List] pane and pastes it at the end.
Move Up/Move Down	Moves the feature selected in the [Multi-function List] one position up (or down) the list. This will not change the order of the [Change Screen Switch].
Get Operation Log	<p>Specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> • When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature. • There are some [Special Switch] operations that cannot be logged. <ul style="list-style-type: none"> ☞ "10.15.4 Special Switch" (page 10-70)

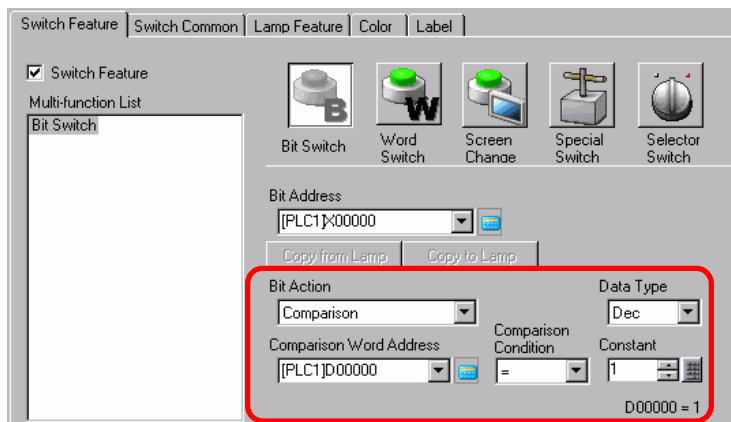
10.15.1 Bit Switch

■ Switch Feature/Basic



Setting	Description
Bit Address	Specify the Bit Address that you want to operate.
Bit Action	<p>Select the Bit action.</p> <ul style="list-style-type: none"> • Bit Set Touch the switch and the bit specified in [Bit Address] will turn ON. • Bit Reset Touch the switch and the bit specified in [Bit Address] will turn OFF. • Bit Momentary While the Switch is touched, the bit specified in [Bit Address] will turn ON. The address turns OFF when the Switch is released. • Bit Invert Touch the switch and the bit specified in [Bit Address] will be alternated (ON-OFF or OFF-ON). • Comparison Touch the switch and the Word Address data and a constant are compared.If the required condition is met as a result of the comparison, the bit specified in [Bit Address] is turned ON. ☞ " ◆ Comparison" (page 10-52) <p>NOTE</p> <ul style="list-style-type: none"> • Bit Momentary operations are enabled by touch regardless of the [Touch Panel Detection] option in the System Settings window, [Display Unit] page, [Operation] tab.
Copy from Lamp	The [Lamp Feature] tab's [Bit Address] setting is copied to the [Switch Feature] tab's [Bit Address]. This is used when setting a Lamp Feature and Switch Feature to the same address.
Copy to Lamp	The [Switch Feature] tab's [Bit Address] setting is copied to the [Lamp Feature] tab's [Bit Address]. This is used when setting a Lamp Feature and Switch Feature to the same address.

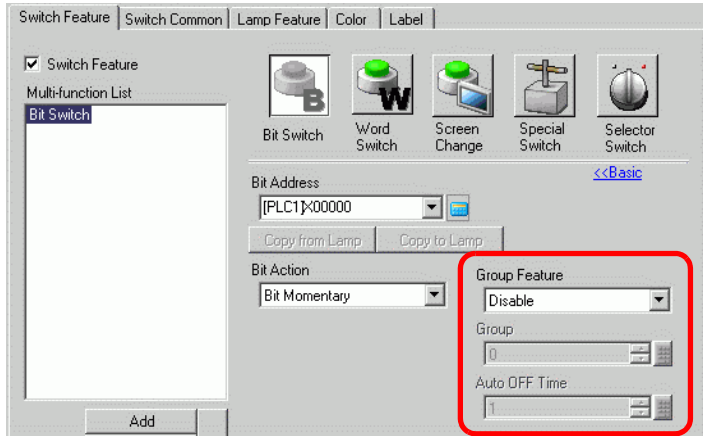
◆ Comparison



Setting	Description
Comparison Word Address	Specify the Word Address (16 bit) to be compared. The data stored in this Word Address will be compared to the [Constant], and if the conditions are met the [Bit Address] will be turned ON.
Comparison	Select the comparison condition from: =, <, >, <>, <=, or >=.
Constant	Specify the value to be compared. Each [Data Type] has a different size range. Dec: - 32,768 to 32,767 BCD: 0 to 9999 Hex: 0 to FFFF
Data Type	Choose the constant's data type from [Dec], [BCD], or [Hex].

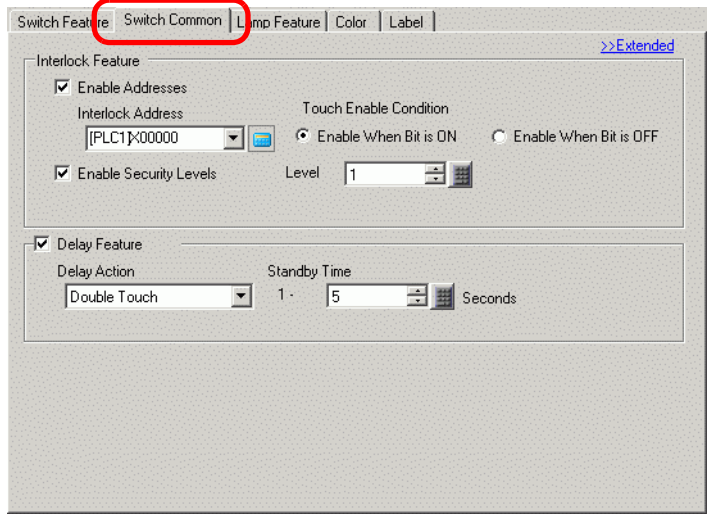
■ **Switch Feature/Extended**

When a bit action is [Bit Set], [Bit Momentary], or [Bit Invert], the Group Feature can be used.




Setting	Description
Groups	<p>Select whether or not to use the Group Feature. When a bit's action is [Bit Set], [Bit Momentary], or [Bit Invert], the Group Feature can be used.</p> <ul style="list-style-type: none"> • Do Not Use Do not use the Group Feature. • Group Handles multiple switches as a single Group. When one of the switches in the Group turns ON, the other switches turn OFF. This can only be set when [Bit Action] is [Bit Set]. • Group with Auto OFF Handles multiple switches as a single Group. When one of the switches in the Group turns ON, the other switches turn OFF. When one of the switches in the Group turns ON, after the time set in [Auto OFF Time] passes, that switch automatically turns OFF.
Group	<p>When the [Group Feature] is [Group] or [Group with Auto OFF] is selected, this will appear. Switches on the same screen and with the same Group Number will be handled as a single group. The following shows the settings range for Group Nos. on one screen.</p> <p>Group: 0 to 255 Group with Auto OFF: 0 to 63</p> <p>IMPORTANT</p> <ul style="list-style-type: none"> • Even if the Group numbers in [Group] and [Group with Auto OFF] are the same, the groups are handled as separate groups.
Auto OFF Time	<p>When [Group with Auto OFF] is selected for the [Group Feature], set the auto off time from 0 to 60 seconds. When Auto OFF Time is set to "0", you can set a Group which will not turn OFF automatically.</p>

■ Switch Common/Basic



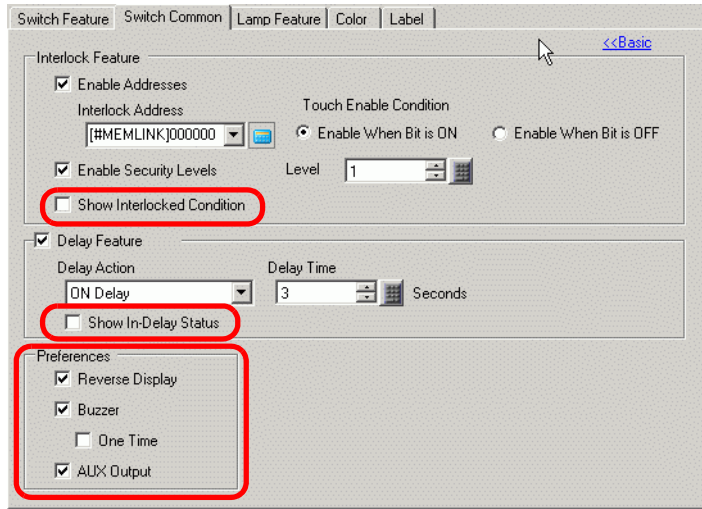
Setting	Description
Interlock	Specify whether or not to use the address or security level when Interlock is used. Interlock is a feature that enables touch only when a defined condition is satisfied. NOTE <ul style="list-style-type: none"> While a switch is interlocked, and the switch is made visible or invisible using Visibility animation, touch operations will be enabled regardless of the visibility or invisibility state. However, switch functions will be disabled.
Enable Address	This function allows input only when the bit in the [Interlock Address] matches the state in the [Touch Enable Condition] property. Select the check box to use Interlock.
Interlock Address	Specify the bit address used in conjunction with the [Touch Enable Condition] property. Touch is enabled or disabled depending on the state of this address.
Touch Enable Condition	Select the condition that enables touch. <ul style="list-style-type: none"> Enable when Bit is ON Touch is enabled when the defined [Interlock Address] is ON. Enable when Bit is OFF Touch is enabled when the defined [Interlock Address] is OFF.
Enable Security Levels	When operating the switch, touch operations are enabled when the security level is higher than the operation screen. <ul style="list-style-type: none"> Level Specify the security level, from 1 to 15.

Continued

Setting	Description
Delay Feature	<p>Select whether or not to use the delay feature. This function delays the effect of touching a switch by the specified amount of time.</p> <p>NOTE</p> <ul style="list-style-type: none"> • Regardless of the System Settings window, [Display Unit] page, [Operation] tab's [Touch Panel Detection] option, operation is enabled when touched. • This function cannot be used with a Selector Switch. • When used with Visibility Animation, and it switches between visible and invisible, the switch operates as follows. <ul style="list-style-type: none"> ON Delay: Delay status is canceled and the switch function does not work. OFF Delay: Delay Status continues and the switch function works. Double Touch: Delay status continues and the switch function works.
Delay Action	<p>Choose the condition that will enable the switch feature: [ON Delay], [OFF Delay], or [Double Touch].</p> <ul style="list-style-type: none"> • ON Delay <ul style="list-style-type: none"> If you continuously press the switch for the period designated in [Delay Time], the Switch feature is enabled. The switch will not operate if you release it before the [Delay Time] has elapsed. • OFF Delay <ul style="list-style-type: none"> Turns OFF when the amount of time specified by [Delay Time] has elapsed after releasing the switch. Only enabled when [Bit Action] is set to [Bit Momentary]. • Double Touch <ul style="list-style-type: none"> After pressing the switch the first time, if you press it again within the [Standby Time] period, the switch feature is enabled. The switch is not enabled when you press it again after the [Standby Time] has elapsed.
Delay Time	<p>When the [Delay Action] is [ON Delay] or [OFF Delay], set the time period for the delay. The value can be from 1 to 30 seconds.</p>
Standby Time	<p>When the [Delay Action] is [Double Touch], set how many seconds the switch will wait for the second touch after the first touch. You can enter a value of between 2 and 30 seconds.</p> <p>NOTE</p> <ul style="list-style-type: none"> • The monitor time starts from the point when the switch is released. 

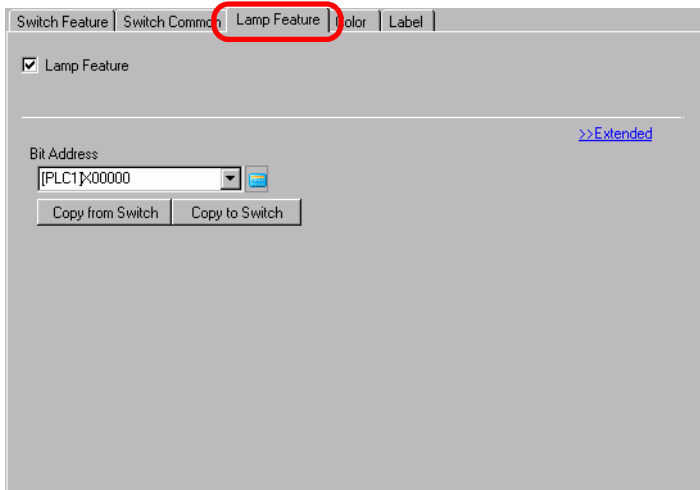
■ Switch Common/Extended

You can set further options for the Switch Feature during touch, including sound options and Reverse Display.



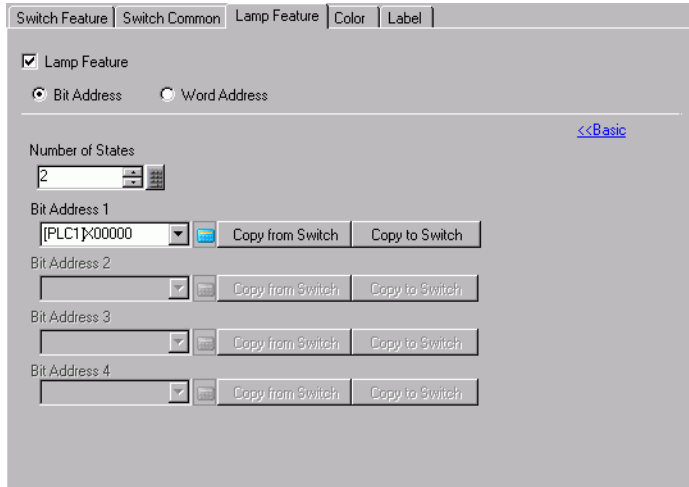
Setting	Description
Show Interlocked Condition	When using the Interlock feature, designate whether or not to configure display settings to show a switch is Interlocked. When this is designated, the [Interlocked] option will be added to [Select State] on the [Color] tab and [Label] tab, and you can set the switch color and label for the Interlock state.
Show In-Delay Status	When using the Delay feature, designate whether or not to configure display settings to show a switch is In Delay. When this is designated, the [In Delay] option will be added to [Select State] on the [Color] tab and [Label] tab, and you can set the switch color and label for the In Delay state.
Reverse Display	Select whether or not to reverse the color while the Switch is pressed. When the [Lamp Feature] is set, this setting cannot be used. NOTE • The Reverse Display color cannot be changed.
Buzzer	Select whether or not to emit a buzzer. NOTE • When the switch becomes invisible due to Visibility Animation while the buzzer sounds, the buzzer stops when the switch becomes invisible.
One Shot	You can set the buzzer to sound continuously while the Momentary Switch is or to sound for just a moment. This can only be set when [Bit Momentary] is selected for [Bit Action].
AUX Output	Designate whether or not to sound the buzzer from a connected external device (speaker) when a switch is pressed. Models that do not have an AUX interface cannot output the buzzer sound.

■ Lamp Feature/Basic



Setting	Description
Lamp Feature	Set whether or not to use the lamp feature. When combined with the Switch feature, you can create a Switch that changes color and label depending on the designated bit state.
Bit Address	Designate the Bit Address to operate the state (light ON/light OFF).
Copy from Switch	The [Switch Feature] tab's [Bit Address] setting is copied to the [Lamp Feature] tab's [Bit Address]. This is used when setting a Lamp Feature and Switch Feature to the same address.
Copy to Switch	The [Lamp Feature] tab's [Bit Address] setting is copied to the [Switch Feature] tab's [Bit Address]. This is used when setting a Lamp Feature and Switch Feature to the same address.

■ Lamp Feature/Extended



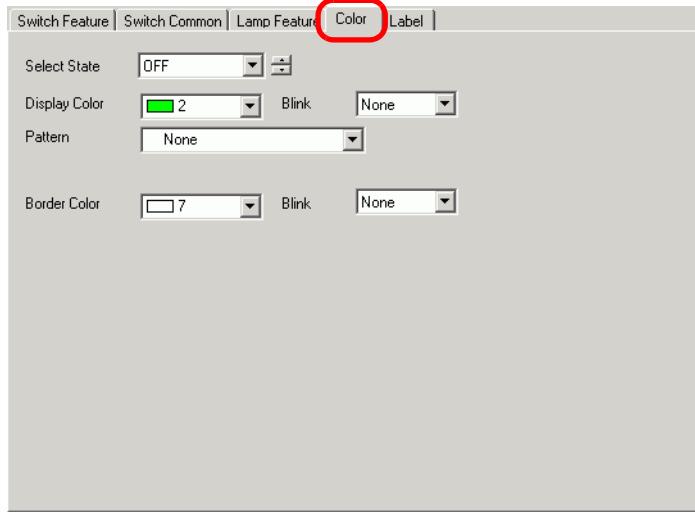
Setting	Description
Address Type	Designate the address to operate the state from [Bit Address] or [Word Address].
Bit Address (1 to 4) / Word Address	Set the addresses. The lamp display will change depending on the bit status of the address designated here and the [State Switch Condition].
Number of States	<p>Set the number of display states. The range will differ depending on the [State Switch Condition] and whether a Bit Address or Word Address is set.</p> <ul style="list-style-type: none"> • Bit Address <ul style="list-style-type: none"> For [Change Condition by Bit]: 3 to 5 For [Change Condition by Bit Combination]: 2 to 16 • Word Address <ul style="list-style-type: none"> For [Change Condition by Bit]: 3 to 17 For [Change Condition by Data]: 2 to 256
State Switch Condition	<p>When the [Number of States] is 3 or more, select the condition that will change the status.</p> <ul style="list-style-type: none"> • Change Condition by Bit <ul style="list-style-type: none"> This can be set for either [Bit Address] or [Word Address]. The status is judged by which bits are ON. • Change Condition by Bit Combination <ul style="list-style-type: none"> This can only be set for [Bit Address]. The status is judged by the combination of bits that are ON from Bit Address 1 to 4. • Change Condition by Data <ul style="list-style-type: none"> Available when [Word Address] is selected. The state is defined by the value of the bottom eight bits in the word address. <p>NOTE</p> <ul style="list-style-type: none"> • When [Change Condition by Bit] is selected and multiple bits are ON, the status is judged by the earliest bit set for Bit Address and by the most recent bit for Word Address.

◆ State List

	[Select State] option	Bit Address		Word Address	
		Change condition by Data	Change Condition by Bit Combination	Change condition by Data	Change condition by Data
When [Number of States] is 1	Normal	-	-	-	-
When [Number of States] is 2	OFF	-	-	-	-
	ON	-	-	-	-
When [Number of States] is 3 or more	State 0	All OFF	All OFF	All OFF	Data 0
	State 1	Bit 1 is ON	Bit 1 is ON	00 Bit is ON	Data 1
	State 2	Bit 2 is ON	Bit 2 is ON	01 Bit is ON	Data 2
	State 3	Bit 3 is ON	Bit 1 and 2 are ON	02 Bit is ON	Data 3
	State 4	Bit 4 is ON	Bit 3 is ON	03 Bit is ON	Data 4
	State 5	-	Bit 1 and 3 are ON	04 Bit is ON	Data 5
	State 6	-	Bit 2 and 3 are ON	05 Bit is ON	Data 6
	State 7	-	Bits 1, 2, and 3 are ON	06 Bit is ON	Data 7
	State 8	-	Bit 4 is ON	07 Bit is ON	Data 8
	State 9	-	Bit 1 and 4 are ON	08 Bit is ON	Data 9
	State 10	-	Bit 2 and 4 are ON	09 Bit is ON	Data 10
	State 11	-	Bits 1, 2, and 4 are ON	10 Bit is ON	Data 11
	State 12	-	Bit 3 and 4 are ON	11 Bit is ON	Data 12
	State 13	-	Bits 1, 3, and 4 are ON	12 Bit is ON	Data 13
	State 14	-	Bits 2, 3, and 4 are ON	13 Bit is ON	Data 14
	State 15	-	All ON	14 Bit is ON	Data 15
	State 16	-	-	15 Bit is ON	Data 16
	State 17	-	-	-	Data 17
State 255	-	-	-	Data 255	
Interlock	Interlocked	-			
Delay	In Delay	-			

- NOTE**
- The lamp does not display normally if using a state outside one of the defined [Select State] options. For example, if the [Number of States] is 3 with the [Change Condition by Bit] option, you can use states 0, 1, and 2. Turning on bits 1 and 2 creates invalid state 3, and the lamp continues to display its previous valid state.

■ **Color**



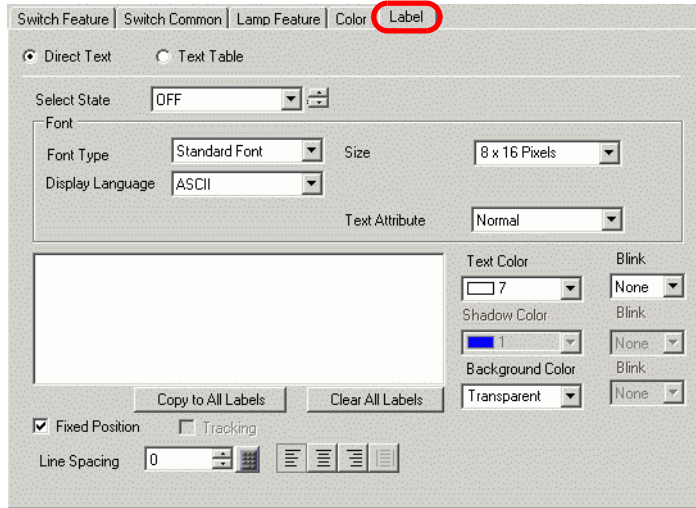
Setting	Description
Select State	<p>Select the state. If the Lamp Feature is not used, only [Normal] can be selected. If the Lamp Feature is used, set the Switch color corresponding to the state.</p> <p>NOTE</p> <ul style="list-style-type: none"> To set a color that is interlocked or in delay, click the [Switch Common] tab's [Extended], then designate [Show Interlock Condition] or [Show In-Delay Status]. This will add the [Select State] choice.
Display Color	Select the Switch color.
Pattern	Select the pattern from among 9 types.
Pattern Color	<p>Select the pattern color. The Switch color appears as a combination of the [Display Color] and [Pattern Color].</p>
Border Color	Select a border color for the Switch.
Blink	<p>Select the blink speed. You can choose different blink settings for the [Display Color], [Pattern Color], and [Border Color].</p> <p>NOTE</p> <ul style="list-style-type: none"> There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings]. <p>☞ "8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36)</p>

NOTE

- Depending on the shape, you may not be able to set a [Display Color], [Pattern Color], or [Border Color].

■ **Label**

Define the text to draw on the Switch Lamp. You can change the text to match the state of the parts.

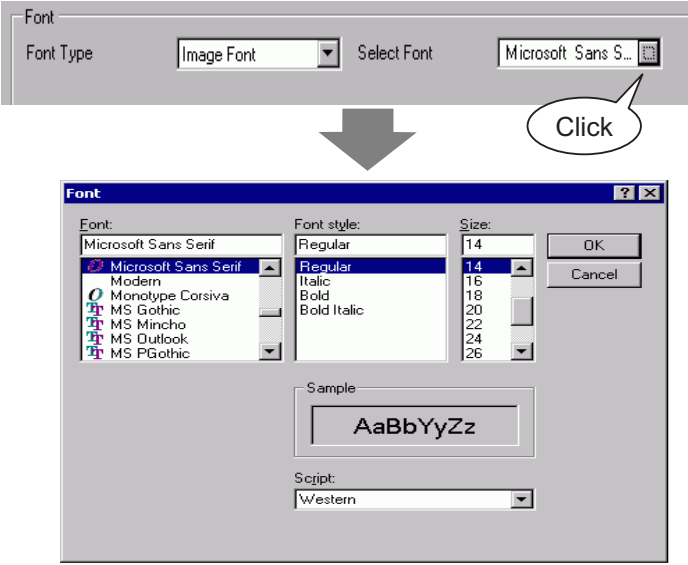


Setting	Description
Text Type	<p>Select the text type.</p> <ul style="list-style-type: none"> • Direct Text Input the text into the text window, and it is placed directly as fixed text. • Text Table Use text from a previously saved Text Table. <small>☞ "17.9.4 Switch/Lamp - Label (Enable Text Table) Settings Guide" (page 17-68)</small> <p>NOTE</p> <ul style="list-style-type: none"> • When you select a switch and press the [F2] key you can directly edit the text on the label. When [Text Table] is selected, you can change which Text Table to display.
Select State	<p>Select the state.</p> <p>If the Lamp Feature is not used, only [Normal] can be selected.</p> <p>If the Lamp Feature is used, set the label corresponding to the state.</p> <p>NOTE</p> <ul style="list-style-type: none"> • To set a label that is interlocked or in delay, set the [Switch Common] tab's Detail Settings to [Show Interlocked Condition] or [Show In-Delay Status]. This will add the [Select State] choice.

Continued

Setting	Description
Font	Select the font type as [Standard Font], [Stroke Font], or [Image Font].
Font Type	<ul style="list-style-type: none"> • Standard Font The vertical and horizontal dimensions of a character can be specified in bitmap font. When you magnify/shrink characters, the outline may become rough or the letter may appear compressed. • Stroke Font This is an outline font where the ratio of the character height/width is fixed. The letters will have a smooth outline even if you magnify/shrink them. However, this font uses more disk space on the GP. • Image Font Displays a Windows font as image data. Therefore, it cannot be edited as text data. This can only be selected when the Text Type is [Direct Text].
Font Type	<p>NOTE</p> <ul style="list-style-type: none"> • Image Fonts are a main cause of large project files. Text used an Image Font has a size of 50 bytes per character string. • When Image Font is selected, text cannot be set to Vertical.
Size	<p>Select the text size. Each font type has a different size range.</p> <ul style="list-style-type: none"> • Size Standard Font: You can select the font size from either [8 x 8 pixels] to [64 x 128 pixels] in increments of 8 pixel units, or a fixed font size from [6 x 10 pixels], [8 x 13 pixels], or [13 x 23 pixels]. When using fixed sizes, you can display only single-byte alphanumeric characters. Stroke Font: 6 to 127 If you select [Automatically Adjust Text Size], you can adjust the [Maximum Size] and [Minimum Size]. • Fixed Size Available when [Standard Font] is selected. You can choose between 6x10 dots, 8x13 dots, or 13x23 dots. This font supports single-byte characters only. When using 6x10 fonts, you cannot set the [Text Attribute] to [Bold].
Display Language	<p>Select the display language for the label from [ASCII], [Japanese], [Chinese (Simplified)], [Chinese (Traditional)], [Korean], [Cyrillic], or [Thai]. This can only be set when [Font Type] is [Standard Font] or [Stroke Font].</p> <p>NOTE</p> <ul style="list-style-type: none"> • This cannot be set when [Text Table] is selected.
Text Attributes	<p>When [Font Type] is [Standard Font] or [Stroke Font], select from the following text attributes. Standard Font: Choose from [Standard], [Bold], [Shadow]. (When using the [6x10] font size, select either [Standard] or [Shadow].) Stroke Font: Choose from [Standard], [Bold], [Outline].</p>

Continued

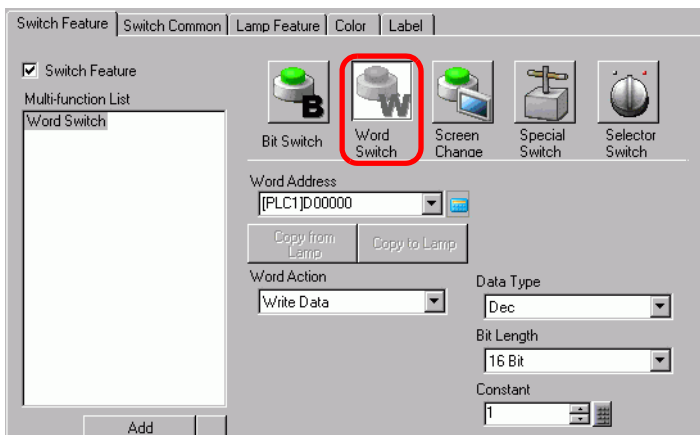
Setting	Description
<p>Font</p> <p>Select Font</p>	<p>This appears when [Font Type] is set to [Image Font]. The [Font] dialog box appears. Select the font, style, and size.</p> 
<p>Input Text Field</p>	<p>If [Direct Text] is selected, input the character string. Up to 400 characters (100 characters per row, 4 rows) can be inputted.</p>
<p>Copy to All Labels</p>	<p>Copies the text and fonts to all states in the [Select State] list.</p> <p>NOTE</p> <ul style="list-style-type: none"> • This cannot be used if the Lamp Feature is not set.
<p>Clear All Labels</p>	<p>Clear the contents of [Input Text Field] for all states. All of the [Label] tab's other setting, such as Font Type and Color, will remain the same.</p> <p>NOTE</p> <ul style="list-style-type: none"> • This cannot be used if the Lamp Feature is not set.
<p>Text Color</p>	<p>Set the display color for the text.</p>
<p>Background Color</p>	<p>Set the background color for the text.</p>
<p>Shadow Color</p>	<p>If the [Font Type] is [Standard Font], and [Shadow] has been selected from the [Text Attribute] menu, choose a color for the shadow.</p>
<p>Blink</p>	<p>Select whether or not the Part will blink and the blink speed. You can choose different blink settings for [Text Color] and [Background Color].</p> <p>NOTE</p> <ul style="list-style-type: none"> • There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings]. ☞ "8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36)
<p>Fixed Position</p>	<p>Set whether or not to fix the Label in the center of the Part.</p>

Continued

Setting	Description
Tracking	<p>After the Part is placed, any changes made to the size or position will be copied to all the other states. To change the size or position of an individual state's Label without affecting the other states, do not use this option.</p> <p>NOTE</p> <ul style="list-style-type: none"> • When [Fixed Position] is set, this setting cannot be used. • This cannot be set when [Text Table] is selected.
Line Spacing	<p>Set a value from 0 to 255. This cannot be set when [Font Type] is [Image Font].</p>
Align	<p>Select the alignment of the text from [Align Left], [Align Center], or [Align Right]. When the [Font Type] is set to [Image Font], you can also select [Align on Both Sides].</p>

10.15.2 Word Switch

■ Switch Feature

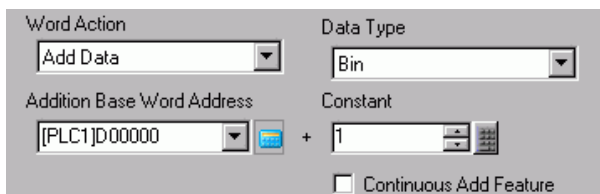


Setting	Description
Word Address	Specify the Word Address where the data will be stored.
Word Action	<p>Select the Word action.</p> <ul style="list-style-type: none"> • Write Data Touch the switch and data will be written to the device/PLC's address specified in [Word Address]. • Add Data/Subtract Data Touch the switch and the data value is added to (subtracted from) the data currently in the device's specified Word Address. The result is then written to the [Word Address]. ☞ " ◆ Add Data/Subtract Data" (page 10-66) • Digit Addition/Digit Subtraction Every time the Switch is pressed, the specified digit is increased or decreased by one, then written to the [Word Address]. Only the specified digit changes, and does not affect the rest of the value. ☞ " ◆ Digit Addition/Digit Subtraction" (page 10-67) • Scripts Performs a boolean logic operation (AND/OR/XOR) between the Word Address value and a constant. The result is stored back in the [Word Address]. ☞ " ◆ Scripts" (page 10-68)
Data Type	Choose the constant's data type from [Dec], [BCD], or [Hex].
Bit Length	Choose the constant's bit length from [16 Bit] or [32 Bit].

Continued

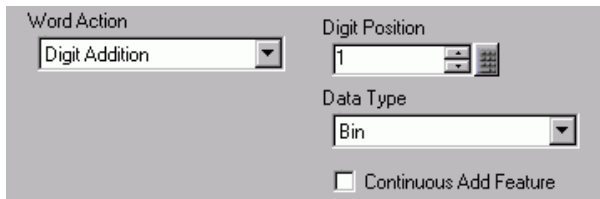
Setting	Description																	
Constant	Set the value to write to the designated [Word Address]. Each [Data Type] has a different size range.																	
	<table border="1"> <thead> <tr> <th>Bit Length</th> <th>Data Type</th> <th>Constant</th> </tr> </thead> <tbody> <tr> <td rowspan="3">16 bit</td> <td>Dec</td> <td>-32768 to 32767</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> <tr> <td>Hex</td> <td>0 to FFFF</td> </tr> <tr> <td rowspan="3">32 bit</td> <td>Dec</td> <td>-2147483648 to 2147483647</td> </tr> <tr> <td>BCD</td> <td>0 to 99999999</td> </tr> <tr> <td>Hex</td> <td>0 to FFFFFFFF</td> </tr> </tbody> </table>	Bit Length	Data Type	Constant	16 bit	Dec	-32768 to 32767	BCD	0 to 9999	Hex	0 to FFFF	32 bit	Dec	-2147483648 to 2147483647	BCD	0 to 99999999	Hex	0 to FFFFFFFF
	Bit Length	Data Type	Constant															
	16 bit	Dec	-32768 to 32767															
		BCD	0 to 9999															
		Hex	0 to FFFF															
	32 bit	Dec	-2147483648 to 2147483647															
BCD		0 to 99999999																
Hex		0 to FFFFFFFF																

◆ Add Data/Subtract Data



Setting	Description													
Addition Base Word Address (Subtraction Base Word Address)	The designated [Constant] is added to (subtracted from) this data, and the result is then written to [Word Address].													
Data Type	Choose the constant's data format from [Bin] or [BCD].													
Constant	Specify the value to be added/subtracted. Each [Data Type] has a different size range.													
	<table border="1"> <thead> <tr> <th>Word Action</th> <th>Data Type</th> <th>Constant</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Add</td> <td>Bin</td> <td>0 to 32767</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> <tr> <td rowspan="2">Subtract</td> <td>Bin</td> <td>0 to 32768</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> </tbody> </table>	Word Action	Data Type	Constant	Add	Bin	0 to 32767	BCD	0 to 9999	Subtract	Bin	0 to 32768	BCD	0 to 9999
	Word Action	Data Type	Constant											
	Add	Bin	0 to 32767											
		BCD	0 to 9999											
Subtract	Bin	0 to 32768												
	BCD	0 to 9999												
Continuous Add Feature (Continuous Subtract Feature)	Specify whether to use a function that repeatedly adds or subtracts a value while pressing the switch.													
	<p>NOTE</p> <ul style="list-style-type: none"> • If the Continuous Add Feature is set, the Delay Feature cannot be used. • This feature does not work if [Touch Panel Detection] is set to [Off Detect] in the [System Settings] window, [Display Unit] page, [Operation] tab. 													

◆ Digit Addition/Digit Subtraction



Setting	Description
Digit Position	Select the position of the digit to be increased (decreased). Value can be from 1 to 4.
Data Type	Choose the data type from [Bin] or [BCD].
Continuous Add Feature (Continuous Subtract Feature)	<p>Specify whether to repeatedly add or subtract the selected digit while pressing the switch.</p> <p>NOTE</p> <ul style="list-style-type: none"> • If the Continuous Add Feature is set, the Delay Feature cannot be used. • This feature does not work if [Touch Panel Detection] is set to [Off Detect] in the [System Settings] window, [Display Unit] page, [Operation] tab.

◆ **Scripts**



Setting	Description																
Operation Base Word Address	Specify the Word Address to reference for the operation. The operation occurs with the data stored in the address designated here and the constant, and the result is then written to [Word Address].																
Operator	<p>Select from [AND], [OR], or [XOR].</p> <ul style="list-style-type: none"> • AND (Logical AND) Result is "0" when either of the two bits is "0", and "1" when both bits are "1". • OR (Logical OR) Result is "1" when either of the two bits is "1", and "0" when both bits are "0". • XOR (Exclusive OR) Result is "0" when both bits are the same value, and "1" when they are a different value. <p>For example, when [Operation Base Word Address] value is 5, [Constant] is 3.</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>AND</th> <th>OR</th> <th>XOR</th> </tr> </thead> <tbody> <tr> <td>Operation Base Word Address</td> <td style="border: 1px solid black; padding: 2px;">0101</td> <td style="border: 1px solid black; padding: 2px;">0101</td> <td style="border: 1px solid black; padding: 2px;">0101</td> </tr> <tr> <td>Constant</td> <td style="border: 1px solid black; padding: 2px;">0011</td> <td style="border: 1px solid black; padding: 2px;">0011</td> <td style="border: 1px solid black; padding: 2px;">0011</td> </tr> <tr> <td>Operation Result (Word Address)</td> <td style="border: 1px solid black; padding: 2px;">0001</td> <td style="border: 1px solid black; padding: 2px;">0111</td> <td style="border: 1px solid black; padding: 2px;">0110</td> </tr> </tbody> </table>		AND	OR	XOR	Operation Base Word Address	0101	0101	0101	Constant	0011	0011	0011	Operation Result (Word Address)	0001	0111	0110
	AND	OR	XOR														
Operation Base Word Address	0101	0101	0101														
Constant	0011	0011	0011														
Operation Result (Word Address)	0001	0111	0110														
Constant	Designate the operation value. The value range is 0 to FFFF.																

■ **Switch Common/Lamp Feature/Color/Label**

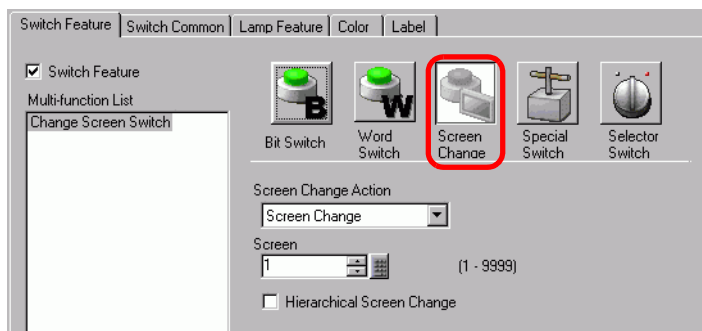
Configure settings that are common regardless of the type.

- ☞ "10.15.1 Bit Switch ■ Switch Common/Basic" (page 10-54)
- ☞ "10.15.1 Bit Switch ■ Lamp Feature/Basic" (page 10-57)
- ☞ "10.15.1 Bit Switch ■ Color" (page 10-60)
- ☞ "10.15.1 Bit Switch ■ Label" (page 10-61)

10.15.3 Change Screen Switch

Create a switch that changes the base screen.

■ Switch Feature



Setting	Description
Screen Change Action	<p>Select the Screen Change action.</p> <ul style="list-style-type: none"> • Screen Change Touch the Switch, and the screen changes (jumps) to the specified screen. • Previous Screen Touch the Switch, and the previously displayed screen will reappear. For screens that are organized hierarchically, the screen one level up (the parent screen) will reappear. <p>NOTE</p> <ul style="list-style-type: none"> • In the [Screen Settings] window, [Display Unit] link's [Display] tab, when the [Reflect in Device/PLC] check box is enabled, change screen switches set up with the [Previous Screen] function may not work properly.
Screen	<p>Specify the number of the Screen you want to display from 1 to 9,999. This can only be set when [Screen Change Action] is set to [Screen Change].</p>
Hierarchical Screen Change	<p>You can set a level hierarchy to the Screen Change. This can only be set when [Screen Change Action] is set to [Screen Change]. A maximum of 32 levels can be set.</p>

■ Switch Common/Lamp Feature/Color/Label

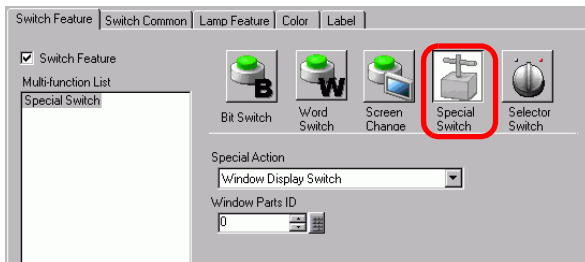
Configure settings that are common regardless of the type.

- ☞ "10.15.1 Bit Switch ■ Switch Common/Basic" (page 10-54)
- ☞ "10.15.1 Bit Switch ■ Lamp Feature/Basic" (page 10-57)
- ☞ "10.15.1 Bit Switch ■ Color" (page 10-60)
- ☞ "10.15.1 Bit Switch ■ Label" (page 10-61)

10.15.4 Special Switch

Create a Switch with special features.

■ Switch Feature



Setting	Description
Special Action	<p>Select the Special action.</p> <ul style="list-style-type: none"> • Window Display Switch This is the same as the Switch attached to a Window part which triggers the Window. Press the Switch and the designated Window displays. Press it again and the Window closes. • Alarm History Switch This is the same as the Switch which is attached to the Alarm part. Creates a Switch to manage (Acknowledge/Move/Clear) the displayed Alarm History. ☞ " ◆ Alarm History Switch" (page 10-73) • Text Alarm Switch This is the same as the Switch which is attached to the Text Alarm part. Creates a Switch to show the displayed Text Alarm's scroll or Sub Screen. ☞ " ◆ Text Alarm Switch" (page 10-74) • Historical Trend Graph Switch This is the same as the Switch which is attached to the Historical Trend Graph. Creates a Switch to display and scroll through historical data. ☞ " ◆ Historical Trend Graph Switch" (page 10-74) • Sampling Data Display Switch This is the same as the Switch which is attached to the Sampling Data Display part. Creates a Switch to scroll through a Sampling Data Display. ☞ " ◆ Sampling Data Display Switch" (page 10-75) • Switch for selector list This is the same as the Switch which is attached to the Text Alarm part. Create a scroll of the displayed list or a switch that operates the selected function. ☞ " ◆ Switch for Selector List Parts" (page 10-75) • Operation Lock When multiple GP is connected to one PLC via GP-Viewer or Ethernet, as one GP/ GP-Viewer starts its operation, you cannot operate with another GP/GP-Viewer. It can be used for canceling "disable." ☞ " ◆ Operation Lock" (page 10-76) • Security Create a switch to change a password while communicating with the Device/PLC. ☞ " ◆ Security" (page 10-77)

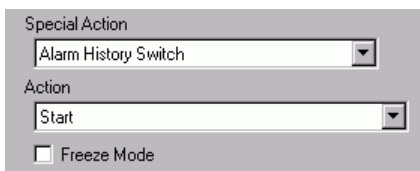
Continued

Setting	Description
Special Action	<ul style="list-style-type: none"> • File Item Switch This is the same as the Switch which is attached to the Special Data Display [Filing]. Creates a Switch to transfer filing data, scroll through a Filing Display, and so on. ☞ " ◆ File Item Switch" (page 10-78) • File Manager Display Switch This is the same as the Switch which is attached to the Special Data Display [File Manager]. Creates a Switch to display the File Manager on the screen. • Data Transfer Switch This is the same as the Switch which is attached to the Special Data Display [Data Transmission]. Creates a Switch to transfer CSV data, scroll through a Data Transfer Display, and so on. ☞ " ◆ Data Transfer Switch" (page 10-79) • Switch for CSV Display This is the same as the Switch which is attached to the Special Data Display [Show CSV]. Creates a Switch to scroll through a CSV Display or print CSV data. ☞ " ◆ Switch for CSV Display" (page 10-79) • Movie Player Switch This is the same as the switch attached to the movie player. Create the switch to operate the screen for movie playback. ☞ " ◆ Movie Player Switch" (page 10-80) • Start monitor switch Create a switch to display the Device monitor and the Ladder monitor on the screen. ☞ " ◆ Start Monitor Switch" (page 10-83) • Application Trigger Create a switch to directly specify and start the application executable file when using WinGP. You can specify settings such as the startup parameters and the watch on multiplex start. ☞ " ◆ Application Trigger" (page 10-84) • WinGP, exiting Create a switch to exit WinGP. ☞ " ◆ WinGP, exiting" (page 10-84) • Reset Create a switch to reset the Display. • Offline Create a switch to transfer to offline mode (no communication with the device/PLC) for the Display. <p>NOTE</p> <ul style="list-style-type: none"> • [Reset] and [Offline] cannot to be a multifunctional switch (multiple operations with one switch).

Continued

Setting	Description
Special Action	<ul style="list-style-type: none"> • Remote PC Access window display Switch This is the same as the switch attached to the Remote PC Access Window Display. Display the RPA Window Screens on the screen. ☞ "36.3 Display or Operate a Computer from the GP" (page 36-4) • Transfer Device/PLC Data When using Yaskawa Electric Corporation's MP Series Ethernet (Extended) as the Device/PLC, you can create a switch that goes to the GP to Device/PLC MP program transfer screen. <p>NOTE</p> <ul style="list-style-type: none"> • To enable the MP program transfer function, in the [System Setting] window's [Device/PLC] link, in the [Extended Function] select the [Enable Program Transfer Function] check box. • For more details on transfer settings, refer to the device/PLC Manual of the driver.
Window Parts ID	Set the ID of the Window to display when the switch is touched. Zero to 383 is the set up range.

◆ Alarm History Switch



Setting	Description
Action	Select the alarm history switch operation: [Start], [End], [Acknowledge], [Move], [Clear], [Sort], [Scroll], [Sub Display], or [Alarm Number Acquisition Key].
Freeze Mode	When the [Action] is [Start], designate whether or not to use Freeze Mode (stops the Alarm display in the current state and does not perform updates).
Details	<p>When [Action] is selected as [Acknowledge], [Move], [Clear], or [Sort], select the details.</p> <ul style="list-style-type: none"> • Acknowledge Choose from [Acknowledge] or [Check All]. • Move Choose from [Move Upward], [Move Downward], [Scroll Up], or [Scroll Down]. <div data-bbox="643 875 868 1000" style="border: 1px solid gray; padding: 2px; margin: 10px 0;"> <p>Action: [Move] ▼</p> <p>Detail: [Scroll Up] ▼</p> <p>Number of Scroll Up/Scroll Down Moves: [1] [↑] [↓]</p> <p><input checked="" type="checkbox"/> Continuous UP and Down Feature</p> </div> <ul style="list-style-type: none"> • Clear Choose from [Clear], [Clear All], [Clear Recovered Alarm], [Clear Acknowledged Alarm], [Clear All Recovered Alarm], [Clear All Number of Occurrences Fields], [Clear Individual Number of Occurrences Fields], [Clear All Accumulated Time Field] or [Clear Individual Accumulated Time Field]. • Sort Choose from [Sort by Triggered Date and Time], [Sort by Number of Occurrences], [Sort by Accumulated Time], [Alarm Sort by Registration Order], [Sort by Level & Date and Time], [Sort by Level & Number of Occurrences], or [Sort in Reverse]. • Scroll Select either [Scroll Right] or [Scroll Left].
Continuous Move Feature	When [Detail Action] is selected as [Move Upward] or [Move Downward], select whether or not to move continuously while the Switch is pressed. This function does not exist on the Alarm part.
Number of Scroll Up/Scroll Down Moves	When [Detail Action] is [Scroll Up] or [Scroll Down], set the number of moves the Switch will scroll when pressed once. The setting range is from 1 to 768.

Continued

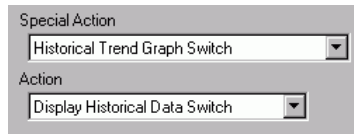
Setting	Description
Continuous Up-and-Down Feature	When [Detail Action] is selected as [Scroll Up] or [Scroll Down], select whether or not to scroll up (or down) continuously while the Switch is pressed. This function does not exist on the Alarm part.
Get Operation Log	When selecting [Acknowledged] or [Clear] under [Action], specify whether to get the operation log. NOTE <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Text Alarm Switch



Setting	Description
Action	Choose the action from [Move Upward], [Move Downward], [Scroll Up], [Scroll Down], [Sub Display], or [End].
Continuous Move Feature	When [Action] is selected as [Move Upward] or [Move Downward], select whether or not to move continuously while the Switch is pressed. This function does not exist on the Text Alarm part.
Number of Scroll Up/Scroll Down Moves	When [Action] is [Scroll Up] or [Scroll Down], set the number of moves the Switch will scroll when pressed once. The setting range is from 1 to 512.
Continuous Up-and-Down Feature	When [Action] is selected as [Scroll Up] or [Scroll Down], select whether or not to scroll up (or down) continuously while the Switch is pressed. This function does not exist on the Text Alarm part.

◆ Historical Trend Graph Switch

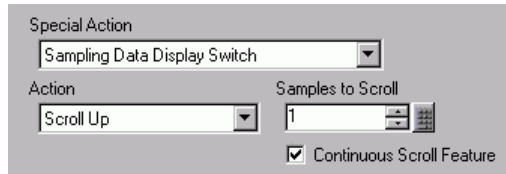


Setting	Description
Action	Select the Display Historical Data switch operation for the Historical Trend Graph: [Display Historical Data Switch], [Scroll for Old Data], [Scroll for New Data], [Zoom Display], and [Zoom Out Display].

Continued

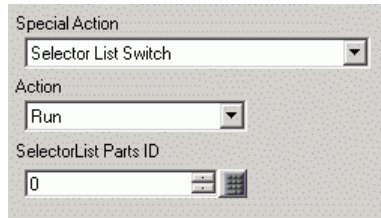
Setting	Description
Samples to Scroll	When [Action] is [Scroll for the Old Data] or [Scroll for New Data], set the number of samples to scroll with one touch. The setting range is from 1 to 65535.
Continuous Scroll Feature	When [Action] is [Scroll for the Old Data] or [Scroll for New Data], designate whether or not to scroll continuously when the Switch is pressed. This feature does not exist on the Historical Trend Graph part.
Use only in Display Historical Data	When selecting [Zoom In] or [Zoom Out] under [Action], specify whether to use it only when displaying Historical Data.
Historical Trend Graph Parts ID	When selecting [Zoom In] or [Zoom Out] under [Action], set the historical trend graph parts that reflect the display condition.

◆ Sampling Data Display Switch



Setting	Description
Action	Choose the action from [Scroll Up], [Scroll Down], [Scroll Left], or [Scroll Right].
Samples to Scroll	Set the number of samples to scroll when pressed once. The setting range is 1 to 65,535 for [Scroll Up] and [Scroll Down], and 1 to 514 for [Scroll Left] and [Scroll Right].
Continuous Scroll Feature	Designate whether or not to scroll continuously when the Switch is pressed. This function does not exist on the Sampling Display part.

◆ Switch for Selector List Parts



Setting	Description
Action	Choose the switch action that operates selector list from [Run], [Move Upward] or [Move Downward].

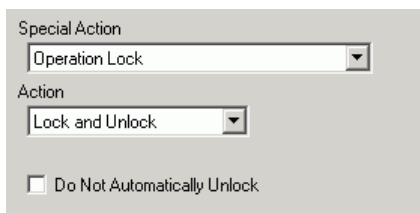
Continued

Setting	Description
Get Operation Log	<p>When selecting [Run] as the [Action], specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.
Selector List Parts ID	Specify the selector list part ID associated with the switch.

NOTE

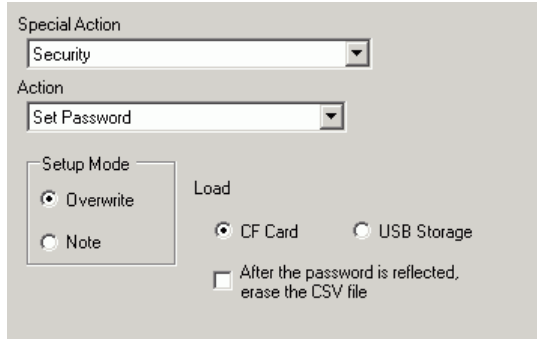
- The list closes when the switch becomes invisible due to Visibility Animation while the selector list is displayed. When the switch becomes visible again, the list will remain closed.

◆ **Operation Lock**



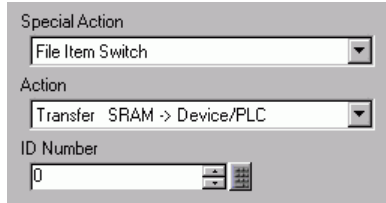
Setting	Description
Action	Choose the action of operation lock switch from [Lock and Unlock], [Lock] or [Unlock].
Do not automatically unlock.	When selecting, the lock does not automatically unlock even after the time set in [Time Out] in [Operation Lock Settings] in the Display Unit [Extended Settings] has passed.
Get Operation Log	<p>When selecting [Run] as the [Action], specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Security



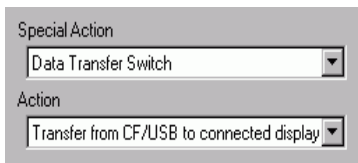
Setting	Description
Action	Choose the action of the set password switch: [Set Password], [Log In] or [Log Off].
Setting Mode	When [Set Password] is the defined [Action], select [Overwrite] or [Add]. <ul style="list-style-type: none"> • Overwrite Overwrite the password that was read-in to the existing passwords. • Add Add the password that was read-in to the existing passwords.
Load	Choose where to load the password from: [CF Card] or [USB Storage].
After reflecting the password, delete the CSV file.	After showing the password from the [Load] operation, specify whether to delete the CSV file.
Log Off Screen	When selecting [Log Off] as the [Action], choose the log off screen from [Start Screen], [Select Screen], or [No Screen Movement]. <ul style="list-style-type: none"> • Screen When using [Select Screen], specify the screen number to display when logging off.
Get Operation Log	Specify whether to get the operation log. <p>NOTE</p> <ul style="list-style-type: none"> • When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ File Item Switch



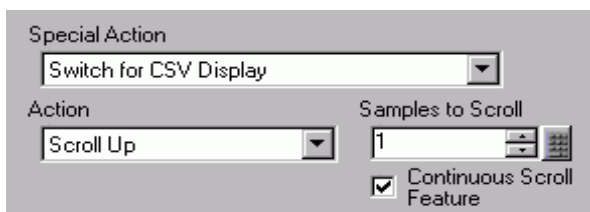
Setting	Description
Action	Choose the action of the switch in the Special Data Display [Filing]: [Transfer from SRAM to Device/PLC], [Transfer from SRAM to Internal Device], [Transfer from Device/PLC to SRAM], [Transfer from Device/PLC to Internal Device], [Transfer from Internal Device to SRAM], [Transfer from Internal Device to Device/PLC], [Move Upward] or [Move Downward].
ID Number	Set the ID number of the Special Data Display [Filing] you want to operate with the Special Switch. The value can be from 0 to 255.
Number of Moves	When [Action] is [Move Upward] or [Move Downward], set the number of moves for one touch from 1 to 2,048.
Continuous Move Feature	When [Action] is selected as [Move Upward] or [Move Downward], select whether or not to move continuously while the Switch is pressed. This feature does not exist on a Special Data Display [Filing].
Get Operation Log	<p>Specifies whether to get the operation log when one of the following actions occur: [Transfer from SRAM to Device/PLC], [Transfer from SRAM to Internal Device], [Transfer from Device/PLC to SRAM], [Transfer from Device/PLC to Internal Device], [Transfer from Internal Device to SRAM], or [Transfer from Internal Device to Device/PLC].</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Data Transfer Switch



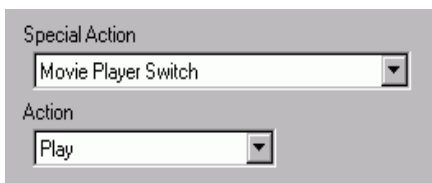
Setting	Description
Action	Select the switch operation for the Special Data Display [Data Transmission]: CF/USB to Device/PLC], [Transfer from Device/PLC to CF/USB], [Scroll Up], [Scroll Down] or [CSV Data Display].
Samples to Scroll	When [Action] is [Scroll Up] or [Scroll Down], set the number of moves for one touch from 1 to 100.
Continuous Scroll Feature	When [Action] is selected as [Scroll Up] or [Scroll Down], select whether or not to move continuously while the Switch is pressed. This feature does not exist on a Special Data Display [Data Transmission].
Get Operation Log	Specifies whether to get the operation log when [Transfer from CF/USB to Device/PLC] or [Transfer from Device/PLC to CF/USB] is selected as the [Action]. NOTE <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Switch for CSV Display



Setting	Description
Action	You can set the Special Data Display [CSV Display] switch's action to [Scroll Up], [Scroll Down], [Scroll Left], [Scroll Right], [Print-All], or [Print-Display].
Samples to Scroll	When selecting [Scroll Up], [Scroll Down], [Scroll Left], or [Scroll Right], set the number of moves for one touch from 1 to 1000.
Continuous Scroll Feature	When selecting [Scroll Up], [Scroll Down], [Scroll Left], or [Scroll select whether or not to move continuously while the Switch is pressed. This feature does not exist on a Special Data Display [Show CSV].

◆ **Movie Player Switch**

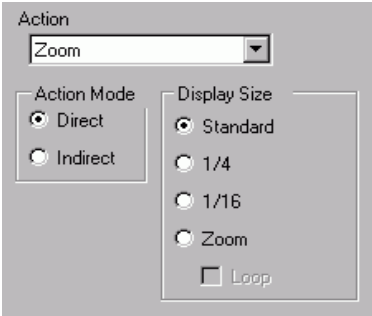


Setting	Description
Action	Select the switch function for playing a movie with [Movie Player] from [Play], [Stop], [Pause], [Fast Forward], [Rewind], [Slow Motion], [Forward 1 Frame], [Back 1 Frame], [Change Movie], [Zoom], [Move], or [Video Display].
Speed	When selecting [Slow Motion] under [Action], specify the play speed from [x 1/2], [x 1/4] or [x 1/8]. <div data-bbox="679 625 950 848" style="border: 1px solid gray; padding: 5px; margin: 10px auto; width: fit-content;"> Action Slow Motion Speed <input checked="" type="radio"/> 1/2 <input type="radio"/> 1/4 <input type="radio"/> 1/8 </div>
Step Forward Settings	When the [Action] is set to [Forward 1 Frame], select [Frame Width (Large)] or [Frame Width (Small)]. This setting can be used only during [Pause]. <div data-bbox="602 979 1037 1242" style="border: 1px solid gray; padding: 5px; margin: 10px auto; width: fit-content;"> Special Action Movie Player Switch Action Forward 1 Frame <input checked="" type="checkbox"/> Forward Step Forward Settings <input checked="" type="radio"/> Multiple frames <input type="radio"/> Single frame </div>
Forward (Backward)	When selecting [Forward 1 Frame] (or [Back 1 Frame]) under [Action], while holding down the switch, specify whether to continuously forward (or reverse) the movie frame by frame.

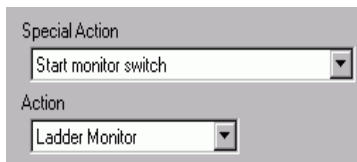
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Setting	Description									
Details	<p>When selecting [Change Movie] as the [Action], select [Next], [Previous], or [Specify Range].</p> <ul style="list-style-type: none"> • Loop When selecting [Next] or [Previous], specify whether to loop to the when at the beginning or end. • Specify Range Specify the Index Number from 0 to 99 of the movie to play. <p>When selecting [Move] under [Action], select [Top], [Bottom], [Left], or [Right]. The following describes the range in which a movie can be moved at one time.</p> <table border="1" data-bbox="408 542 1236 832"> <thead> <tr> <th data-bbox="408 542 655 614">Direction</th> <th data-bbox="655 542 1020 614">When playing an SDX file</th> <th data-bbox="1020 542 1236 614">When playing a video</th> </tr> </thead> <tbody> <tr> <td data-bbox="408 614 655 687">Landscape direction</td> <td data-bbox="655 614 1020 687">2 dot unit</td> <td data-bbox="1020 614 1236 687">2 dot unit</td> </tr> <tr> <td data-bbox="408 687 655 832">Portrait direction</td> <td data-bbox="655 687 1020 832">Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit</td> <td data-bbox="1020 687 1236 832">1 dot unit</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Continuous While holding down the switch, specify whether to move the movie. 	Direction	When playing an SDX file	When playing a video	Landscape direction	2 dot unit	2 dot unit	Portrait direction	Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit	1 dot unit
Direction	When playing an SDX file	When playing a video								
Landscape direction	2 dot unit	2 dot unit								
Portrait direction	Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit	1 dot unit								
Details	<p>When selecting [Video] as the [Action], select [Video ON], [Video OFF], or [Video ON/OFF].</p>									

Continued

Setting	Description
Action Mode	<p>When selecting [Zoom] as the [Action], select [Direct] or [Indirect].</p> <ul style="list-style-type: none"> • Display Size When selecting [Direct], select the display size from [Normal], [1/4], [1/16], or [Zoom]. The [Zoom] option zooms a movie in or out in this order: Normal -> 1/4 -> 1/16 -> 1/4 -> Normal, and so on, each time the switch is pressed. [Loop], when selected, zooms the movie in and out in the order of "Normal -> 1/4 -> 1/16 -> Normal -> 1/4...".  <ul style="list-style-type: none"> • Word Address Designate an address to store the display size when [Indirect] is selected. The display sizes are as follows. 0: Standard 1: 1/4 2: 1/16 3 to 0xFFFFE Reserved (no change) 0xFFFF: Normal (return to the main screen)

◆ Start Monitor Switch



Setting	Description
Action	<p>Select from [Ladder monitor], [Ladder monitor (Cache)] or [Device monitor].</p> <ul style="list-style-type: none"> • Ladder Monitor Start the ladder monitor screen. The ladder is displayed after start and [Read]. The ladder is not displayed at start up. • Ladder Monitor (Cache) Displays the previous ladder saved on the CF card upon exiting. • Device Monitor Start the Device monitor screen. ☞ "A.2 Monitoring the Value of Device Addresses (Device Monitor)" (page A-46) <p>NOTE</p> <ul style="list-style-type: none"> • To use the Ladder monitor, you need the ladder monitor tool (sold separately) on your PLC. Refer to the ladder monitor operation manual in the ladder monitor CD-ROM.
Get Operation Log	<p>Specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> • When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ **Application Trigger**

Use the Start Application switch for starting the application by touch when using WinGP.

Setting	Description
Path	Enter the absolute path of the executable file (.exe) that you want to start. You can enter up to 255 characters.
Parameter	Enter the argument of the executable file on start up. You can enter up to 255 characters.
Prevent multiple instances	Set [Window Title] to watch multiple instances. You can enter up to 63 characters. If a window matching [Window Title] is found, the application does not start. [Window Title], if there are no settings in this field, multiple starts are allowed.
Find whole window titles only	If a window matching the title specified in [Window Title] is found, the specified application does not start.
Get Operation Log	Specify whether to get the operation log. NOTE • When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ **WinGP, exiting**

Exit WinGP.





Setting	Description
Display Confirmation Dialog Box	Display a confirmation dialog when exiting WinGP.

Continued

Setting	Description
Get Operation Log	<p>Specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

■ Switch Common/Lamp Feature/Color/Label

Configure settings that are common regardless of the type.

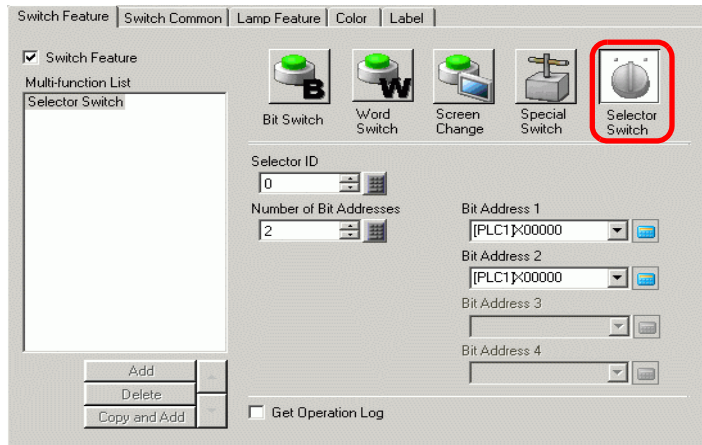
-  "10.15.1 Bit Switch ■ Switch Common/Basic" (page 10-54)
-  "10.15.1 Bit Switch ■ Lamp Feature/Basic" (page 10-57)
-  "10.15.1 Bit Switch ■ Color" (page 10-60)
-  "10.15.1 Bit Switch ■ Label" (page 10-61)

10.15.5 Selector Switch

Create a Rotary Selector Switch (a switch that turns ON bits in order with each touch).

- NOTE**
- After the power is turned ON and you touch the Selector Switch, the data for each set bit address is read from the device/PLC, that information is stored inside the GP, and at the same time the Selector action occurs (the bit following the currently selected bit address turns ON). After that, the Selector action occurs without reading the device/address data, based on information stored in the GP (which bit address was ON last time). After the first touch, even if the bit address data changes, it will not be reflected right away in the Selector Switch. Data will be overwritten the next time you touch the Switch.
 - When setting the addresses of multiple devices/PLCs, if a communication error occurs in one of the devices, writing will continue normally to that device until the write occurs, and a write error will be displayed at the time of writing to the device. The displayed write error will be erased once you change screens after communication recovers.

■ Switch Feature







Setting	Description
Selector ID	<p>Set the Selector ID number. The setting range is from 0 to 2047.</p> <p>NOTE</p> <ul style="list-style-type: none"> • Selected selector ID is common to all screens in the project file. When placing a selector switch for which the same selector ID and bit address are selected on multiple screens, the operation from the previous screen will continue even when changed to another screen. • When placing multiple selector switches with the same selector ID, when you set other bit address to individual switch, the switch will not function properly.
Number of Bit Addresses	Set the number of bit addresses to operate in a single Selector Switch from 2 to 4.

Continued

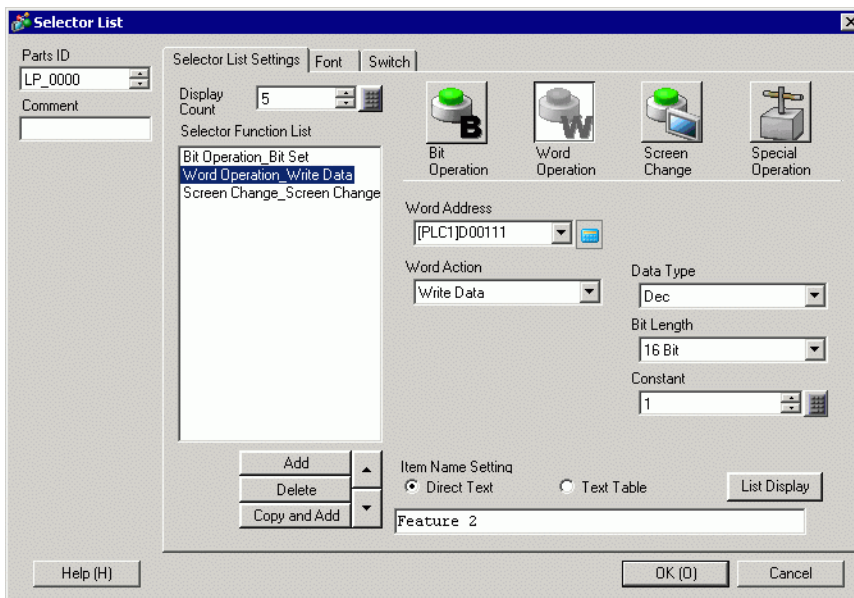
Setting	Description
Bit Address 1 to 4	Set the bit addresses for the amount designated in [Number of Bit Addresses].

■ Switch Common/Lamp Feature/Color/Label

Configure settings that are common regardless of the type.

-  "10.15.1 Bit Switch ■ Switch Common/Basic" (page 10-54)
-  "10.15.1 Bit Switch ■ Lamp Feature/Basic" (page 10-57)
-  "10.15.1 Bit Switch ■ Color" (page 10-60)
-  "10.15.1 Bit Switch ■ Label" (page 10-61)

10.16 Selector List Parts Settings Guide



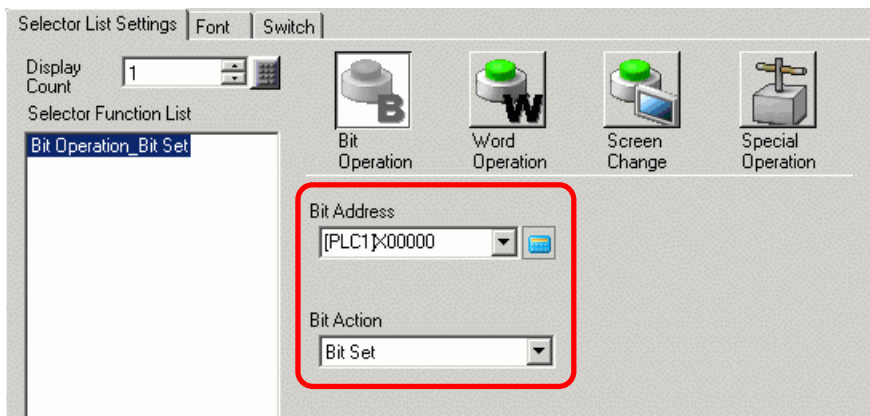
Setting	Description
Part ID	Parts are automatically assigned an ID number. Selector List Parts IDLP_**** (4 digits) The letter portion is fixed. You can change the number portion within the range of 0000-9999.
Comment	The comment for each Part can be up to 20 characters.
Display Count	Set the number of operations to display on the list, from 1 to 16. When it is 16 or less, display only the added number.
Type of Operation	<ul style="list-style-type: none"> • Bit Operation Turns a specified bit ON/OFF. ☞ "10.16.1 Bit Operation" (page 10-90) • Word Operation Sets data into a specified Word Address. ☞ "10.16.2 Word Operation" (page 10-95) • Screen Change Operates Screen Change ☞ "10.16.3 Screen Change" (page 10-99) • Special Operation Handles special features, such as changing the GP into offline mode and displaying a Window. ☞ "10.16.4 Special Operation" (page 10-100)

Continued

Setting	Description
Selector Function List	<p>Displays the type of selected Switches. Up to 256 passwords can be added.</p> <p>NOTE</p> <ul style="list-style-type: none"> In the selector function list, when you select and right-click the feature and select [Default (D)], the feature will be registered as a switch to be displayed on the top of the list. For the feature to display on the top of the list, it is useful to set the features frequently used as default, because the procedure to select from the list by touch operation is not necessary.
Add	Click this button, and select the operation you want to add to the [Selector Function List].
Delete	Delete the operation selected in the [Selector Function List].
Copy and Add	Copy the operation selected in the [Selector Function List] and add it to the last.
Move Up/Move Down	Moves the feature selected in the [Selector Function List] one position up (or down) the list to change the display order of the list.

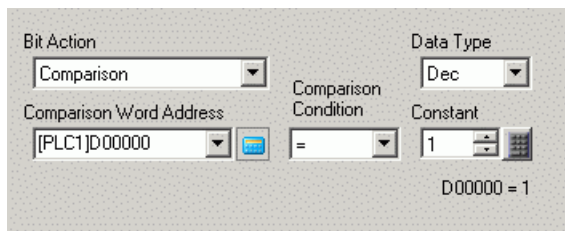
10.16.1 Bit Operation

■ Selector List Settings



Setting	Description
Bit Address	Specify the Bit Address that you want to operate.
Bit Action	<p>Select the Bit action.</p> <ul style="list-style-type: none"> • Bit Set Touch the switch and the bit specified in [Bit Address] will turn ON. • Bit Reset Touch the switch and the bit specified in [Bit Address] will turn OFF. • Bit Invert Touch the switch and the bit specified in [Bit Address] will be alternated (ON-OFF or OFF-ON). • Comparison Touch the switch and the Word Address data and a constant are compared.If the required condition is met as a result of the comparison, the bit specified in [Bit Address] is turned ON.

◆ Comparison

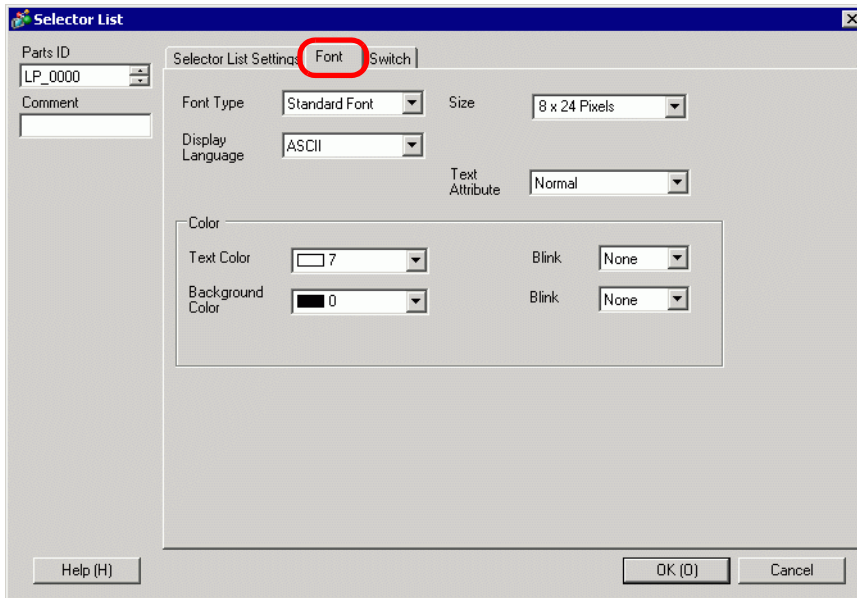


Setting	Description
Comparison Word Address	Specify the Word Address (16 bit) to be compared. The data stored in this Word Address will be compared to the [Constant], and if the conditions are met the [Bit Address] will be turned ON.
Comparison	Select the comparison condition from: =, <, >, <>, <=, or >=.

Continued

Setting	Description
Constant	Specify the value to be compared. Each [Data Type] has a different size range. Dec: - 32,768 to 32,767 BCD: 0 to 9999 Hex: 0 to FFFF
Data Type	Choose the constant's data type from [Dec], [BCD], or [Hex].

■ Font Settings

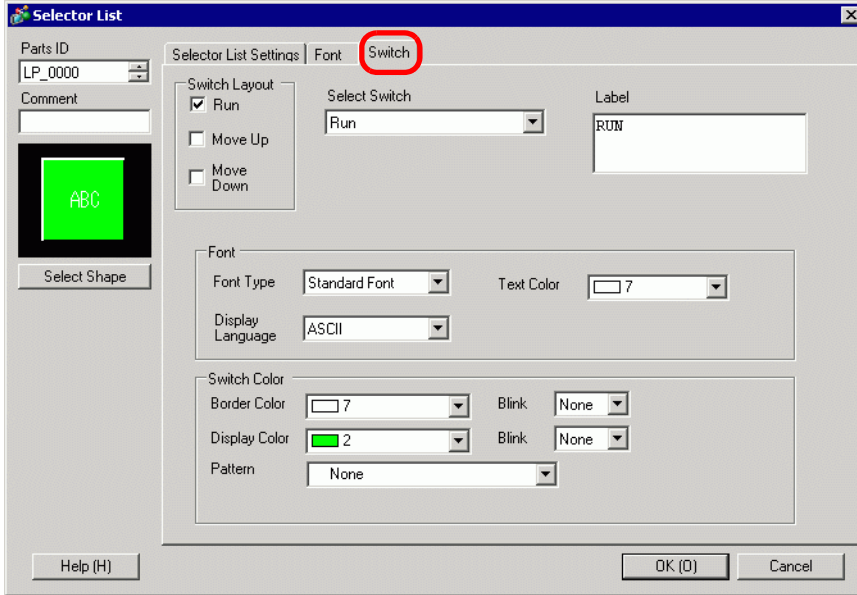


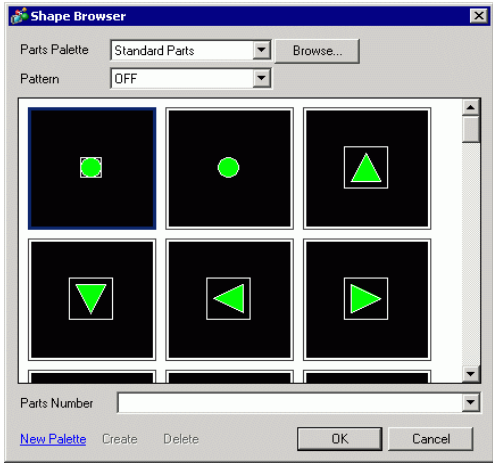

Setting	Description
Font Type	Select the font type as [Standard Font] or [Stroke Font]. <ul style="list-style-type: none"> • Standard Font The vertical and horizontal dimensions of a character can be specified in bitmap font. When you magnify/shrink characters, the outline may become rough or the letter may appear compressed. • Stroke Font This is an outline font where the ratio of the character height/width is fixed. The letters will have a smooth outline even if you magnify/shrink them. However, this font uses more disk space on the GP.

Continued

Setting	Description
Size	<p>Select the text size. Each font type has a different size range.</p> <ul style="list-style-type: none"> • Size <p>Standard Font: You can select the font size from either [8 x 8 pixels] to [64 x 128 pixels] in increments of 8 pixel units, or a fixed font size from [6 x 10 pixels], [8 x 13 pixels], or [13 x 23 pixels]. When using fixed sizes, you can display only single-byte alphanumeric characters.</p> <p>Stroke Font: 6 to 127 If you select [Automatically Adjust Text Size], you can adjust the [Maximum Size] and [Minimum Size].</p> • Fixed Size <p>Available when [Standard Font] is selected. You can choose between 6x10 dots, 8x13 dots, or 13x23 dots. This font supports single-byte characters only.</p> <p>When using 6x10 fonts, you cannot set the [Text Attribute] to [Bold].</p>
Display Language	<p>Select the display language for the label from [ASCII], [Japanese], [Chinese (Simplified)], [Chinese (Traditional)], [Korean], [Cyrillic], or [Thai].</p>
Text Attributes	<p>The following text attributes can be set to each, depending on the selected font.</p> <p>Standard Font: Choose from [Standard], [Bold], [Shadow] (When using the [6x10] font size, select either [Standard] or [Shadow].)</p> <p>Stroke Font: Choose from [Standard], [Bold], [Outline]</p>
Text Color	<p>Set the display color for the text.</p>
Background Color	<p>Set the background color for the text.</p>
Shadow Color	<p>When [Font Type] is [Standard Font] and [Text Attribute] is [Shadow], select the shadow color of the text.</p>
Blink	<p>Select the blink speed. You can choose different blink settings for the [Display Color], [Pattern Color], and [Border Color].</p> <p>NOTE</p> <ul style="list-style-type: none"> • There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings]. ☞ "8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36)

■ Switch Settings



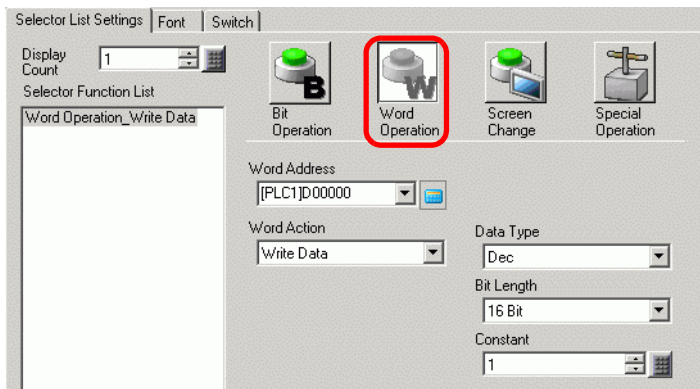
Setting	Description
Status Display	Displays the shape and status of the Part selected in [Select Shape].
Select Shape	<p>Open the Select Shape dialog box to choose the shape.</p>  <p>Clicking  to the right of the [Parts Palette] or [Browse] displays the Parts Palette. There are parts with 65536, 256 or 64 colors. Select a parts palette according to the number of colors on your model. Depending on the shape, you may not be able to change the color.</p>
Switch Layout	<p>Specify whether to place a switch that operates a list.</p> <ul style="list-style-type: none"> • Run Run the operation selected from the list. • Move Up Scroll up the drop-down list. • Move Down Scroll down the drop-down list.

Continued

Setting	Description
Select Switch	Choose a switch that sets action or label, or color, etc., from the disabled switches in [Switch Layout].
Number of Moves	When selecting [Move Upward] or [Move Downward], select the number of Scroll moves.
Continuous Move Feature	When [Detail Action] is selected as [Move Upward] or [Move Downward], select whether or not to move continuously while the Switch is pressed. This function does not exist on the Alarm part.
Label	Enter the text of label to display on the switch. You can enter up to 400 characters (100 characters per row, 4 rows). NOTE <ul style="list-style-type: none"> When you select a switch and press the [F2] key you can directly edit the text on the label.
Font Type	Select the font type as [Standard Font] or [Stroke Font]. <ul style="list-style-type: none"> Standard Font The vertical and horizontal dimensions of a character can be specified in bitmap font. When you magnify/shrink characters, the outline may become rough or the letter may appear compressed. Stroke Font This is an outline font where the ratio of the character height/width is fixed. The letters will have a smooth outline even if you magnify/shrink them. However, this font uses more disk space on the GP.
Text Color	Set the display color for the text.
Display Language	Select the display language for the label from [ASCII], [Japanese], [Chinese (Simplified)], [Chinese (Traditional)], [Korean], [Cyrillic], or [Thai].
Border Color	Select a border color for the Switch.
Display Color	Select the Switch color.
Pattern	Select the pattern from among 9 types.
Pattern Color	Select the pattern color. The Switch color appears as a combination of the [Display Color] and [Pattern Color].
Blink	Select the blink speed. You can set up blink settings for the [Border Color], [Display Color], and [Pattern Color]. NOTE <ul style="list-style-type: none"> There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings]. ☞ "8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36)

10.16.2 Word Operation

■ Selector List Settings

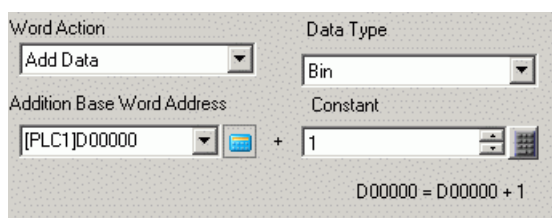


Setting	Description
Word Address	Specify the Word Address where the data will be stored.
Word Action	<p>Select the Word Operation action.</p> <ul style="list-style-type: none"> • Write Data Touch the switch and data will be written to the device/PLC's address specified in [Word Address]. • Add Data/Subtract Data Touch the switch and the data value is added to (subtracted from) the data currently in the device's specified Word Address. The result is then written to the [Word Address]. ☞ " ◆ Add Data/Subtract Data" (page 10-96) • Digit Addition/Digit Subtraction Every time the Switch is pressed, the specified digit is increased or decreased by one, then written to the [Word Address]. Only the specified digit changes, and does not affect the rest of the value. ☞ " ◆ Digit Addition/Digit Subtraction" (page 10-97) • Scripts Performs a boolean logic operation (AND/OR/XOR) between the Word Address value and a constant. The result is stored back in the [Word Address]. ☞ " ◆ Scripts" (page 10-98)
Data Type	Choose the constant's data type from [Dec], [BCD], or [Hex].
Bit Length	Choose the constant's bit length from [16 Bit] or [32 Bit].

Continued

Setting	Description																	
Constant	Set the value to write to the designated [Word Address]. Each [Data Type] has a different size range.																	
	<table border="1"> <thead> <tr> <th>Bit Length</th> <th>Data Type</th> <th>Constant</th> </tr> </thead> <tbody> <tr> <td rowspan="3">16 bit</td> <td>Dec</td> <td>-32768 to 32767</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> <tr> <td>Hex</td> <td>0 to FFFF</td> </tr> <tr> <td rowspan="3">32 bit</td> <td>Dec</td> <td>-2147483648 to 2147483647</td> </tr> <tr> <td>BCD</td> <td>0 to 999999999</td> </tr> <tr> <td>Hex</td> <td>0 to FFFFFFFF</td> </tr> </tbody> </table>	Bit Length	Data Type	Constant	16 bit	Dec	-32768 to 32767	BCD	0 to 9999	Hex	0 to FFFF	32 bit	Dec	-2147483648 to 2147483647	BCD	0 to 999999999	Hex	0 to FFFFFFFF
	Bit Length	Data Type	Constant															
	16 bit	Dec	-32768 to 32767															
		BCD	0 to 9999															
		Hex	0 to FFFF															
	32 bit	Dec	-2147483648 to 2147483647															
BCD		0 to 999999999																
Hex		0 to FFFFFFFF																

◆ Add Data/Subtract Data



Setting	Description													
Addition Base Word Address (Subtraction Base Word Address)	The designated [Constant] is added to (subtracted from) this data, and the result is then written to [Word Address].													
Data Type	Choose the constant's data format from [Bin] or [BCD].													
Constant	Specify the value to be added/subtracted. Each [Data Type] has a different size range.													
	<table border="1"> <thead> <tr> <th>Word Action</th> <th>Data Type</th> <th>Constant</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Add</td> <td>Bin</td> <td>0 to 32767</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> <tr> <td rowspan="2">Subtract</td> <td>Bin</td> <td>0 to 32768</td> </tr> <tr> <td>BCD</td> <td>0 to 9999</td> </tr> </tbody> </table>	Word Action	Data Type	Constant	Add	Bin	0 to 32767	BCD	0 to 9999	Subtract	Bin	0 to 32768	BCD	0 to 9999
	Word Action	Data Type	Constant											
	Add	Bin	0 to 32767											
		BCD	0 to 9999											
	Subtract	Bin	0 to 32768											
BCD		0 to 9999												

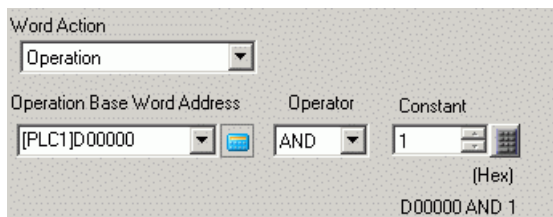
◆ Digit Addition/Digit Subtraction

The screenshot shows a configuration window with the following fields:

- Word Address:** A dropdown menu showing "[PLC1]D00000" and a small icon to its right.
- Word Action:** A dropdown menu showing "Digit Addition".
- Digit Position:** A numeric spinner control showing the value "1".
- Data Type:** A dropdown menu showing "Bin".

Setting	Description
Digit Position	Select the position of the digit to be increased (decreased). Value can be from 1 to 4.
Data Type	Choose the data type from [Bin] or [BCD].

◆ **Scripts**



Setting	Description																
Operation Base Word Address	Specify the Word Address to reference for the operation. The operation occurs with the data stored in the address designated here and the constant, and the result is then written to [Word Address].																
Operator	<p>Select from [AND], [OR], or [XOR].</p> <ul style="list-style-type: none"> • AND (Logical AND) Result is "0" when either of the two bits is "0", and "1" when both bits are "1". • OR (Logical OR) Result is "1" when either of the two bits is "1", and "0" when both bits are "0". • XOR (Exclusive OR) Result is "0" when both bits are the same value, and "1" when they are a different value. <p>For example, when [Operation Base Word Address] value is 5, [Constant] is 3.</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>AND</th> <th>OR</th> <th>XOR</th> </tr> </thead> <tbody> <tr> <td>Operation Base Word Address</td> <td style="border: 1px solid black; text-align: center;">0101</td> <td style="border: 1px solid black; text-align: center;">0101</td> <td style="border: 1px solid black; text-align: center;">0101</td> </tr> <tr> <td>Constant</td> <td style="border: 1px solid black; text-align: center;">0011</td> <td style="border: 1px solid black; text-align: center;">0011</td> <td style="border: 1px solid black; text-align: center;">0011</td> </tr> <tr> <td>Operation Result (Word Address)</td> <td style="border: 1px solid black; text-align: center;">0001</td> <td style="border: 1px solid black; text-align: center;">0111</td> <td style="border: 1px solid black; text-align: center;">0110</td> </tr> </tbody> </table>		AND	OR	XOR	Operation Base Word Address	0101	0101	0101	Constant	0011	0011	0011	Operation Result (Word Address)	0001	0111	0110
	AND	OR	XOR														
Operation Base Word Address	0101	0101	0101														
Constant	0011	0011	0011														
Operation Result (Word Address)	0001	0111	0110														
Constant	Designate the operation value. The value range is 0 to FFFF.																

■ **Font Settings/Switch Settings**

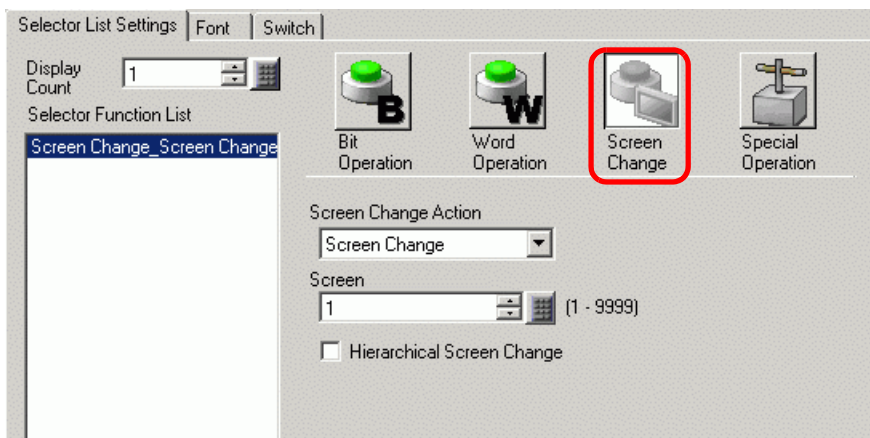
Configure settings that are common regardless of the type of operation.

- ☞ "10.16.1 Bit Operation ■ Font Settings" (page 10-91)
- ☞ "10.16.1 Bit Operation ■ Switch Settings" (page 10-93)

10.16.3 Screen Change

Create a switch that changes the base screen.

■ Selector List Settings



Setting	Description
Screen Change Action	Select the Screen Change action. <ul style="list-style-type: none"> • Screen Change Touch the Switch, and the screen changes (jumps) to the specified screen. • Previous Screen Touch the Switch, and the previously displayed screen will reappear. For screens that are organized hierarchically, the screen one level up (the parent screen) will reappear.
Screen	Specify the number of the Screen you want to display from 1 to 9,999. This can only be set when [Screen Change Action] is set to [Screen Change].
Hierarchical Screen Change	You can set a level hierarchy to the Screen Change. This can only be set when [Screen Change Action] is set to [Screen Change]. A maximum of 32 levels can be set.

■ Font Settings/Switch Settings

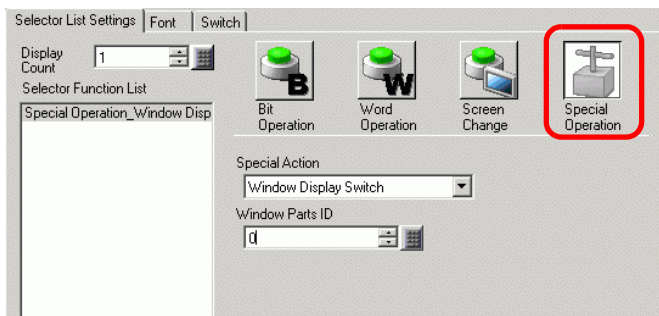
Configure settings that are common regardless of the type of operation.

- ☞ "10.16.1 Bit Operation ■ Font Settings" (page 10-91)
- ☞ "10.16.1 Bit Operation ■ Switch Settings" (page 10-93)

10.16.4 Special Operation

Create a Switch with special features.

■ Selector List Settings



Setting	Description
Special Action	<p>Select the Special Operation action.</p> <ul style="list-style-type: none"> • Window Display Switch This is the same as the Switch attached to a Window part that triggers the Window. Press the Switch and the designated Window displays. Press it again and the Window closes. • Alarm History Switch This is the same as the Switch that is attached to the Alarm part. This creates a Switch to manage (Acknowledge/Move/Clear) the displayed Alarm History. ☞ " ◆ Alarm History Switch" (page 10-103) • Text Alarm Switch This is the same as the Switch that is attached to the Text Alarm part. Creates a Switch to show the displayed Text Alarm's scroll or Sub Screen. ☞ " ◆ Text Alarm Switch" (page 10-104) • Historical Trend Graph Switch This is the same as the Switch that is attached to the Historical Trend Graph. Creates a Switch to display and scroll through historical data. ☞ " ◆ Historical Trend Graph Switch" (page 10-104) • Sampling Data Display Switch This is the same as the Switch that is attached to the Sampling Data Display part. Creates a Switch to scroll through a Sampling Data Display. ☞ " ◆ Sampling Data Display Switch" (page 10-105) • Operation Lock Create an operation switch to set to enable other GP/GP-Viewer when one GP/GP-Viewer begins operating, and to cancel that setting, when multiple GP is connected to one PLC via GP-Viewer or Ethernet, ☞ " ◆ Operation Lock" (page 10-105) • Security Create an operation switch to change password during the online mode (communicating to the device/PLC). ☞ " ◆ Security" (page 10-106)

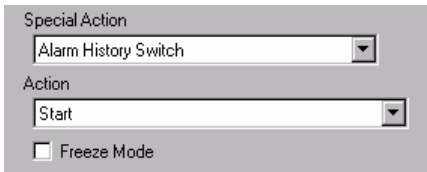
Continued

Setting	Description
Special Action	<ul style="list-style-type: none"> • File Item Switch This is the same as the Switch that is attached to the Special Data Display [Filing]. Creates a Switch to transfer filing data, scroll through a Filing Display, etc. ☞ " ◆ File Item Switch" (page 10-107) • File Manager Display Switch This is the same as the Switch that is attached to the Special Data Display [File Manager]. Creates a Switch to display the File Manager on the screen. • Data Transfer Switch This is the same as the Switch that is attached to the Special Data Display [Data Transmission]. Creates a Switch to transfer CSV data, scroll through a Data Transfer Display, etc. ☞ " ◆ Data Transfer Switch" (page 10-107) • Switch for CSV Display This is the same as the Switch that is attached to the Special Data Display [Show CSV]. Creates a Switch to scroll through a CSV Display or print CSV data. ☞ " ◆ Switch for CSV Display" (page 10-108) • Movie Player Switch This is the same as the switch attached to the movie player. Create the switch to operate the screen for movie playback. ☞ " ◆ Movie Player Switch" (page 10-108) • Start monitor switch Create a switch to display the Device monitor and the Ladder monitor on the screen. ☞ " ◆ Start monitor switch" (page 10-110) • Application Trigger Create a switch to directly specify and start the application executable file when using WinGP. You can specify settings such as the startup parameters and the watch on multiplex start. ☞ " ◆ Application Trigger" (page 10-111) • WinGP, exiting Create a switch to exit WinGP. ☞ " ◆ WinGP, exiting" (page 10-112) • Reset Create a switch to reset the Display. • Offline Create a switch to transfer to offline mode (no communication with the device/PLC) for the Display. • Remote PC Access window display Switch This is the same as the switch attached to the Remote PC Access Window Display. Display the RPA Window Screens on the screen. ☞ "36.3 Display or Operate a Computer from the GP" (page 36-4)

Continued

Setting	Description
Special Action	<ul style="list-style-type: none"> • Transfer Device/PLC Data When selecting MP Series Ethernet (extended) of Yasukawa Electric Corporation to the device/PLC, create a switch to change to the Ladder Transfer Screen from GP to device/PLC. <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">NOTE</div> <ul style="list-style-type: none"> • To enable Ladder Transfer Feature, you need to select [Extended Settings] in [Device/PLC Settings] of [System Settings] and select the [Enable Program Transfer Feature] check box. • For more details on transfer settings, refer to the device/PLC Manual of the driver.
Window Parts ID	Set the ID of the Window to display when the switch is touched. 0 to 383 is the set up range.

◆ Alarm History Switch

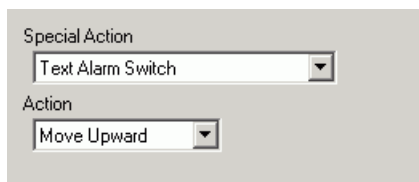


Setting	Description
Action	Select the alarm history switch operation: [Start], [End], [Acknowledge], [Move], [Clear], [Sort], [Scroll], [Sub Display], or [Alarm Number Acquisition Key].
Freeze Mode	When the [Action] is [Start], designate whether or not to use Freeze Mode (stops the Alarm display in the current state and does not perform updates).
Details	<p>When [Action] is selected as [Acknowledge], [Move], [Clear], or [Sort], select the details.</p> <ul style="list-style-type: none"> • Acknowledge Choose from [Acknowledge] or [Check All]. • Move Choose from [Move Upward], [Move Downward], [Scroll Up], or [Scroll Down]. <div data-bbox="559 909 1126 1116" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Action</p> <p>Move</p> <p>Details</p> <p>Scroll Up</p> <p>Number of Scroll Up/Scroll Down Moves</p> <p>1</p> </div> <ul style="list-style-type: none"> • Clear Choose from [Clear], [Clear All], [Clear Recovered Alarm], [Clear Acknowledged Alarm], [Clear All Recovered Alarm], [Clear All Number of Occurrences Fields], [Clear Individual Number of Occurrences Fields], [Clear All Accumulated Time Field] or [Clear Individual Accumulated Time Field]. • Sort Choose from [Sort by Triggered Date and Time], [Sort by Number of Occurrences], [Sort by Accumulated Time], [Alarm Sort by Registration Order], [Sort by Level & Date and Time], [Sort by Level & Number of Occurrences], or [Sort in Reverse]. • Scroll Select either [Scroll Right] or [Scroll Left].
Number of Scroll Up/ Scroll Down Moves	When [Detail Action] is [Scroll Up] or [Scroll Down], set the number of moves the Switch will scroll when pressed once. The setting range is from 1 to 768.

Continued

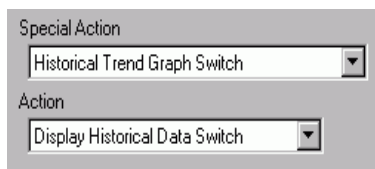
Setting	Description
Get Operation Log	<p>When selecting [Acknowledged] or [Clear] under [Action], specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Text Alarm Switch



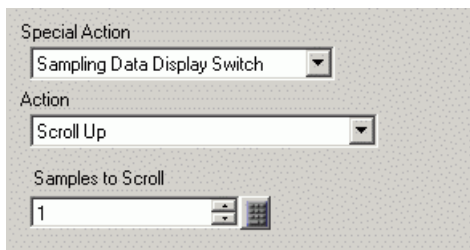
Setting	Description
Action	Choose the action from [Move Upward], [Move Downward], [Scroll Up], [Scroll Down], [Sub Display], or [End].
Number of Scroll Up/ Scroll Down Moves	When [Action] is [Scroll Up] or [Scroll Down], set the number of moves the Switch will scroll when pressed once. The setting range is from 1 to 512.

◆ Historical Trend Graph Switch



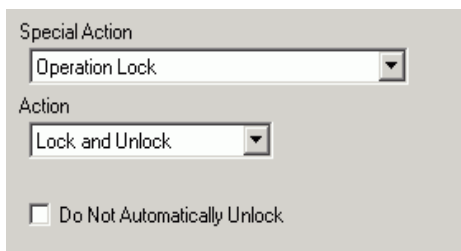
Setting	Description
Action	Select the Display Historical Data switch operation for the Historical Trend Graph: [Display Historical Data Switch], [Scroll for Old Data], [Scroll for New Data], [Zoom Display], and [Zoom Out Display].
Samples to Scroll	When [Action] is [Scroll for the Old Data] or [Scroll for New Data], set the number of samples to scroll with one touch. The setting range is from 1 to 65535.
Use only in Display Historical Data	When selecting [Zoom In] or [Zoom Out] under [Action], specify whether to use it only when displaying Historical Data.
Historical Trend Graph Parts ID	When selecting [Zoom In] or [Zoom Out] under [Action], set the historical trend graph parts that reflect the display condition.

◆ **Sampling Data Display Switch**



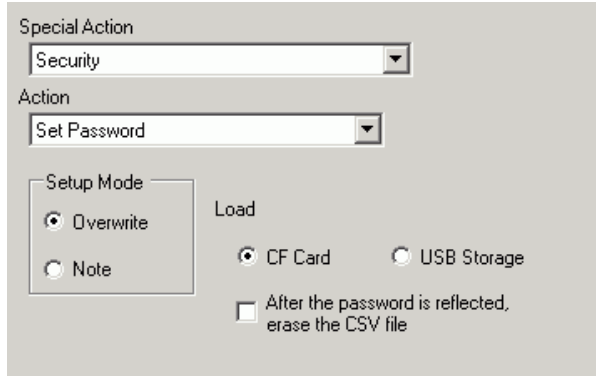
Setting	Description
Action	Choose the action from [Scroll Up], [Scroll Down], [Scroll Left], or [Scroll Right].
Samples to Scroll	Set the number of samples to scroll when pressed once. The setting range is 1 to 65,535 for [Scroll Up] and [Scroll Down], and 1 to 514 for [Scroll Left] and [Scroll Right].

◆ **Operation Lock**



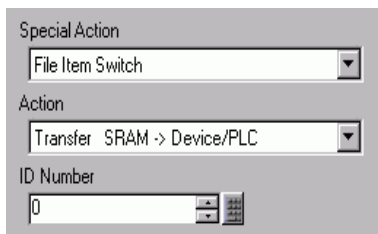
Setting	Description
Action	Choose the action of operation lock switch from [Lock and Unlock], [Lock] or [Unlock].
Do not automatically unlock.	When selecting, the lock does not automatically unlock even after the time set in [Time Out] in [Operation Lock Settings] in the Display Unit [Extended Settings] has passed. To unlock, [Action] needs to place a special switch for which [Lock and Unlock] or [Unlock] is set.

◆ Security



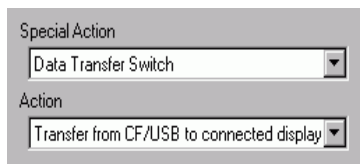
Setting	Description
Action	Choose the action of the set password switch: [Set Password], [Log In] or [Log Off].
Setting Mode	When [Set Password] is the defined [Action], select [Overwrite] or [Add]. <ul style="list-style-type: none"> • Overwrite Overwrite the password that was read-in to the existing passwords. • Add Add the password that was read-in to the existing passwords.
Load	Choose where to load the password from: [CF Card] or [USB Storage].
After reflecting the password, delete the CSV file.	After showing the password from the [Load] operation, specify whether to delete the CSV file.
Log Off Screen	When selecting [Log Off] as the [Action], choose the log off screen from [Start Screen], [Select Screen], or [No Screen Movement]. <ul style="list-style-type: none"> • Screen When using [Select Screen], specify the screen number to display when logging off.
Get Operation Log	Specify whether to get the operation log. <p>NOTE</p> <ul style="list-style-type: none"> • When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ File Item Switch



Setting	Description
Action	Choose the action of the switch in the Special Data Display [Filing]: [Transfer from SRAM to Device/PLC], [Transfer from SRAM to Internal Device], [Transfer from Device/PLC to SRAM], [Transfer from Device/PLC to Internal Device], [Transfer from Internal Device to SRAM], [Transfer from Internal Device to Device/PLC], [Move Upward] or [Move Downward].
ID Number	Set the ID number of the Special Data Display [Filing] you want to operate with the Special Switch. The value can be from 0 to 255.
Number of Moves	When [Action] is [Move Upward] or [Move Downward], set the number of moves for one touch from 1 to 2,048.
Get Operation Log	Specifies whether to get the operation log when one of the following actions occur: [Transfer from SRAM to Device/PLC], [Transfer from SRAM to Internal Device], [Transfer from Device/PLC to SRAM], [Transfer from Device/PLC to Internal Device], [Transfer from Internal Device to SRAM], or [Transfer from Internal Device to Device/PLC]. NOTE <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Data Transfer Switch

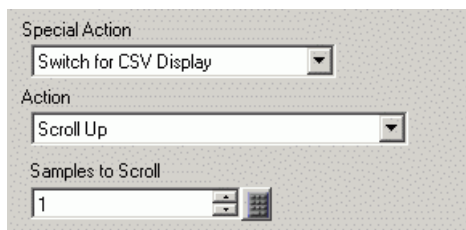


Setting	Description
Action	Select the switch operation for the Special Data Display [Data Transmission]: CF/USB to Device/PLC], [Transfer from Device/PLC to CF/USB], [Scroll Up], [Scroll Down] or [CSV Data Display].
Samples to Scroll	When [Action] is [Scroll Up] or [Scroll Down], set the number of moves for one touch from 1 to 100.

Continued

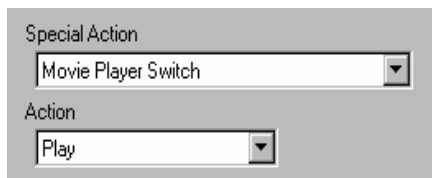
Setting	Description
Get Operation Log	<p>Specifies whether to get the operation log when [Transfer from CF/USB to Device/PLC] or [Transfer from Device/PLC to CF/USB] is selected as the [Action].</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ Switch for CSV Display



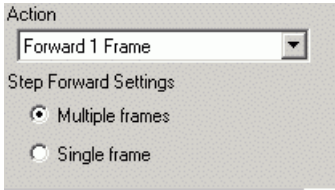
Setting	Description
Action	You can set the Special Data Display [CSV Display] switch's action to [Scroll Up], [Scroll Down], [Scroll Left], [Scroll Right], [Print-All], or [Print-Display].
Samples to Scroll	When selecting [Scroll Up], [Scroll Down], [Scroll Left], or [Scroll Right], set the number of moves for one touch from 1 to 1000.

◆ Movie Player Switch

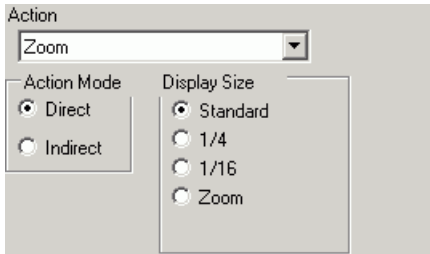


Setting	Description
Action	Select the switch function for playing a movie with [Movie Player] from [Play], [Stop], [Pause], [Fast Forward], [Rewind], [Slow Motion], [Forward 1 Frame], [Back 1 Frame], [Change Movie], [Zoom], [Move], or [Video Display].
Speed	When selecting [Slow Motion] under [Action], specify the play speed from [x 1/2], [x 1/4] or [x 1/8].

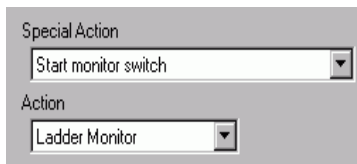
Continued

Setting	Description									
Step Forward Settings	<p>When the [Action] is set to [Forward 1 Frame], select [Frame Width (Large)] or [Frame Width (Small)]. This setting can be used only during [Pause].</p> 									
Details	<p>When selecting [Change Movie] as the [Action], select [Next], [Previous], or [Specify Range].</p> <ul style="list-style-type: none"> • Loop When selecting [Next] or [Previous], specify whether to loop to the when at the beginning or end. • Specify Range Specify the Index Number from 0 to 99 of the movie to play. <p>When selecting [Move] under [Action], select [Top], [Bottom], [Left], or [Right]. The following describes the range in which a movie can be moved at one time.</p> <table border="1" data-bbox="412 879 1208 1172"> <thead> <tr> <th>Direction</th> <th>When playing an SDX file</th> <th>When playing a video</th> </tr> </thead> <tbody> <tr> <td>Landscape direction</td> <td>2 dot unit</td> <td>2 dot unit</td> </tr> <tr> <td>Portrait direction</td> <td>Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit</td> <td>1 dot unit</td> </tr> </tbody> </table>	Direction	When playing an SDX file	When playing a video	Landscape direction	2 dot unit	2 dot unit	Portrait direction	Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit	1 dot unit
Direction	When playing an SDX file	When playing a video								
Landscape direction	2 dot unit	2 dot unit								
Portrait direction	Normal size 2 dot unit 1/4 and 1/16 sizes 1 dot unit	1 dot unit								
Details	<p>When selecting [Video] as the [Action], select [Video ON], [Video OFF], or [Video ON/OFF].</p>									

Continued

Setting	Description
Action Mode	<p>When selecting [Zoom] as the [Action], select [Direct] or [Indirect].</p> <ul style="list-style-type: none"> • Display Size When selecting [Direct], select the display size from [Normal], [1/4], [1/16], or [Zoom]. The [Zoom] option zooms a movie in or out in this order: Normal -> 1/4 -> 1/16 -> 1/4 -> Normal, and so on, each time the switch is pressed.  <ul style="list-style-type: none"> • Word Address Designate an address to store the display size when [Indirect] is selected. The display sizes are as follows. 0: Standard 1: 1/4 2: 1/16 3 to 0xFFFFE: Reserved (no change) 0xFFFF: Normal (return to the main screen)

◆ Start monitor switch



Setting	Description
Action	<p>Select from [Ladder monitor], [Ladder monitor (Cache)] or [Device monitor].</p> <ul style="list-style-type: none"> • Ladder Monitor Start the ladder monitor screen. The ladder is displayed after start and [Read]. The ladder is not displayed at start up. • Ladder Monitor (Cache) Displays the previous ladder saved on the CF card upon exiting. • Device Monitor Start the Device monitor screen. ☞ "A.2 Monitoring the Value of Device Addresses (Device Monitor)" (page A-46) <p>NOTE</p> <ul style="list-style-type: none"> • To use the Ladder monitor, you need the ladder monitor tool (sold separately) on your PLC. Refer to the ladder monitor operation manual in the ladder monitor CD-ROM.

Continued

Setting	Description
Get Operation Log	<p>Specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

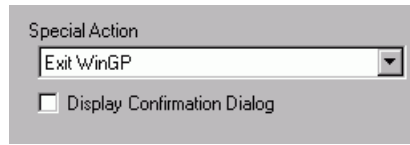
◆ **Application Trigger**

Use the Start Application switch for starting the application by touch when using WinGP.

Setting	Description
Path	Enter the absolute path of the executable file (.exe) that you want to start. You can enter up to 255 characters.
Parameter	Enter the argument of the executable file on start up. You can enter up to 255 characters.
Prevent multiple instances	Set [Window Title] to watch multiple instances. You can enter up to 63 characters. If a window matching [Window Title] is found, the application does not start. [Window Title], if there are no settings in this field, multiple starts are allowed.
Find whole window titles only	If a window matching the title specified in [Window Title] is found, the specified application does not start.
Get Operation Log	<p>Specify whether to get the operation log.</p> <p>NOTE</p> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

◆ **WinGP, exiting**

Exit WinGP.



Setting	Description
Display Confirmation Dialog Box	Display a confirmation dialog when exiting WinGP.
Get Operation Log	Specify whether to get the operation log. <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">NOTE</div> <ul style="list-style-type: none"> When [Enable Operation Log Function] is not selected in the Common Settings [Operation Log settings], the message "unable to get the operation log for individual parts" will appear. [Enable Operation Log Function] check box enables the operation log feature.

■ **Font Settings/Switch Settings**

Configure settings that are common regardless of the type.

- ☞ "10.16.1 Bit Operation ■ Font Settings" (page 10-91)
- ☞ "10.16.1 Bit Operation ■ Switch Settings" (page 10-93)

10.17 Restrictions

10.17.1 Restrictions for Switches

- As the display unit utilizes analog touch panel technology, please avoid touching multiple spots simultaneously (two or three-point touch.)
- Please be careful when handling momentary switches. While holding down a momentary switch and you hold down another touch area unoccupied by any switches, even though you release the momentary switch it will remain on until the other touch area is also released.
- Immediately after changing screens, in order to draw the new screen, Switches may be disabled.
- When operating on the bit of device/Word Address with a [Bit Set], [Bit Reset], or [Bit Momentary] switch, all other bits in the Word Address will be turned OFF. For Internal Device Word Addresses, you can only operate on the specified bit.
- If you change screens from the device/PLC while a [Bit Momentary] switch is pushed, the specified bit will turn OFF.
- For the Bit Switch [Bit Invert] and [Comparison] functions and the Word Switch [Add Data/Subtract Data] and [Operation] functions, data is read into the PLC or other connected device after the screen has changed. The data used by the process is the data that was current when the Switch was pressed. If a switch is pushed immediately after the screen changes, it is possible that invalid data will be written because the valid data has not yet been read.
- If you press a switch immediately after the screen changes, please set that switch's address to the read area. For the Bit [Bit Invert] and [Comparison], and the Word [Add Data/Subtract Data] and [Operation], the write action occurs for data read from the device/PLC. A Switch pressed rapidly in succession may write to the device/PLC before the value can be read. Therefore, sometimes the value will not reflect the actual amount of times the Switch was pressed.

(For example, 1) If you push an [Add Data] Switch which adds +1 to a Word data two times in rapid succession, it may not add +2 to the data.

(For example, 2) If the same Word Address contains 2 bit switches (bit [0] and bit [1]) and both switches are pushed in rapid succession, in some cases the bits will not toggle as normal.
- For a Word [Add Data/Subtract Data], if the [Data Type] is BCD and the result of an operation is a negative value, it will be treated the following way.

For example, $1 - 10 = 9991$ ($10001 - 10$)
 $9 - 10 = 9999$ ($10009 - 10$)
- When a Word [Add Data/Subtract Data] or [Digit Addition/Digit Subtraction] is set with the Continuous feature, the Delay feature cannot be used.
- When a Word [Add Data/Subtract Data] or [Digit Addition/Digit Subtraction] is set with the Continuous feature, data writing that depends on communication with the device/PLC is sometimes temporarily interrupted.
- While a Switch is pressed, its color is displayed in reverse. The Reverse Display color cannot be changed.

- When the Lamp Feature is set, Reverse Display will not function. Also, when a Switch is pressed (during Reverse Display), it cannot change to Interlocked Condition Display or In-Delay Status Display. The Part's color display has the following priority order.
 - (1) Interlocked Condition Display High Priority
 - (2) In-Delay Status Display \updownarrow
 - (3) Reverse Display or Lamp Display Low Priority
- When you select an Image Part (BPD file) from [Select Shape], the color is set on the Image Part itself, so the color cannot be changed.
- A Part's reduction is sometimes limited according to the label's size (number of characters and rows).
- When using [Text Table] on the Label Settings, the placed part will be displayed corresponding to the size of the Characters x Number of Rows. Even if the table changes, the size will not.
- Label text that is displayed in the screen creation software and the way text is actually displayed on the GP may be different.
- Switches set up with the interlock feature will not operate during a screen change or power up sequence when communication does not occur with the device/PLC address defined in the [Interlock Address]. (If the associated address is an internal address, then the interlock switch will operate properly.)
- When you touch two different areas, the touch input will not be recognized. Thus, do not press two points at the same time.
- When holding down another area unoccupied by any switch while pressing the momentary switch, even though you release the momentary switch, it will remain ON until the other touch area is also released.

10.17.2 Restrictions on the Delay Feature

- The [Selector Switch] cannot use the Delay feature.

■ ON Delay

- If you take your finger off the switch before the Switch feature is enabled, it will have no effect. In that case, the switch appearance (color, label) will remain in the normal state and the buzzer (touch tone) will not sound.
- If the Interlock feature is set, when Interlock is enabled, the ON Delay action will not occur. Also, if Interlock is enabled during the ON Delay action (wait state), the wait state is canceled and the action does not occur.
- If the screen changes or the Window closes during the ON Delay action (wait state), the wait state is canceled at the change time and the action does not occur.
- If a bit operation occurs from the device/PLC during the ON Delay action (wait state), the ON Delay feature is disabled.

■ OFF Delay

- For [Bit Momentary], the designated bit turns OFF. For [Bit Set], [Bit Invert], [Word Switch], etc., Switches that do not have the Momentary action cannot turn OFF.
- If the screen changes during the OFF Delay action (OFF wait state), the screen changes after the OFF wait state is over. Also, if a switch is on the window during the OFF Delay action, the window will close after the OFF wait state is over.

- If a screen change request from the device/PLC occurs during the OFF Delay action, touch is disabled for the period of the delay time starting from after the screen change request.

■ Double Touch

- If the specified time passes, the second touch has no effect.
- If the Interlock feature is set, when Interlock is enabled, the double touch wait state will not occur. Also, when Interlock is enabled during the double touch wait state, the 2nd touch cannot occur so the Switch will not become enabled.
- If you touch a different Switch during the designated time, the double touch wait state is canceled.
- If the screen changes or the Window closes during the designated time, the double touch wait state is canceled at the change time.

10.17.3 Restrictions on the Multifunction Feature

- A single Switch can be set with a maximum of 16 switch features.
- The [Screen Change] action is handled last. You cannot change the order.
- The following Switch features cannot be used for multifunction.
 - Bit Switches set with the Group feature ([Group] or [Group with Auto OFF])
 - Special [Reset Display Unit] or [Offline] Switch
 - Selector Switch
- The following Switch features cannot be set multiple times on the same Switch
 - Special Switch
 - Change Screen Switch
 - A Switch not set with Multifunction
- Even if you have a bit switch set with [Bit Momentary] in the middle of its multiple features, the buzzer will only ring while the Switch is pressed.
- When multiple operations are set up on a switch that includes [Screen Change] and [Bit Momentary] operations, even though the [Bit Momentary] operation turns ON it may not be detected. To make sure you detect this condition, use [Bit Set] instead of [Bit Momentary] and turn this bit OFF using scripts or a trigger action on screen change.

10.17.4 Group Function Limitations

- You cannot turn a Switch that uses the Group feature into a multifunction Switch (where a single Switch executes multiple features).
- Even if you set a Switch on the Base Screen and a Switch on the Window Screen which it calls to the same Group Number, the two switches will not be handled as the same Group.
- The Group Number for [Group] and [Group with Auto OFF] are handled as different entities.
- When you set [Group with Auto OFF], the bit will automatically turn OFF when the screen changes. Even if it is placed on the window, the bit will be turned OFF when the window closes.

10.17.5 Restrictions for Selector List Parts

- When multiple selector list parts are placed, multiple selector function lists cannot be displayed at the same time.
- The window of selector function list is specified by four dots.
- On the Call Screen, etc., when the location for creating a window is not 4 dots, it will be displayed off-center.
- When the angle is 0/180 degrees and the horizontal width is not 4 dots, it will be displayed in a small size in accordance with the 4 dots in total size of the scroll bar if there is any.
If there is no scroll bar, the horizontal width of the display of the selector function list will be smaller.
(Move by maximum 3 dots)
- When the angle is 90/270 degrees and the horizontal width is not 4 dots, the area in the last selector function list will be displayed larger in accordance with the total 4 dots.
(Moves by a maximum of 3 dots)
- The selector list parts cannot be displayed, even if you place the same parts ID on one screen. It cannot be operated.
When you call parts having the same ID such as Call Screen, only the initially displayed part will work.
- It cannot be set on the window screen.
- Even when you set it as Call Screen on the window, nothing will be displayed.