

Chapter 1

Menu Screen

Chapter 1 Menu Screen (Initial Screen when GP starts. Change Screen Switches to each screen are placed.)

1 . 1 Menu Screen

What’s a Menu Screen? 1 - 3

1 . 2 Drawing

Various Drawing Method 1 - 5

How to place a line 1 - 6

How to place a square/rectangle 1 - 7

How to place a Circle/Oval 1 - 8

How to place Text 1 - 9

How to edit Objects 1 - 12

Let’s place a title on the menu screen. 1 - 16

1 . 3 Change Screen

How to change screens (Function Switch Settings) 1 - 19

Let’s place a Change Screen Switch. 1 - 21

1. 1

Menu Screen

Here, it will be explained what a Menu Screen is.



What's a Menu Screen?

• What can be done?

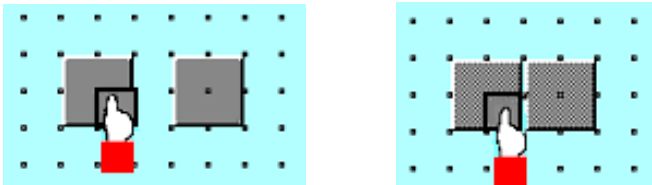
In the Menu Screen, placing a Change Screen SW that changes the screen to each screen like Run, Unit, Alarm, Unit Operation/Guidance, Setup enables you to change screens. Mainly it's used as an initial screen.

• Suggestions for drawing

One touch area of the Touch Panel has 20x20 dots.
In GP2500 (No. of display dots: 640 x 480), the number of touch areas on one screen is 32 x 24. When two switches share one touch area, an incorrect operation might be caused. For example, the undesired switch responds. When placing switches, make sure that plural switches do not share one touch area.

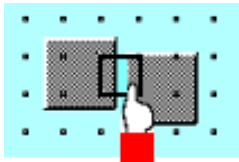
Ex.1: Correct Placement (OK)

There's no problem because 2 switches don't overlap in one touch area.



Ex.2: Incorrect Placement (NG)

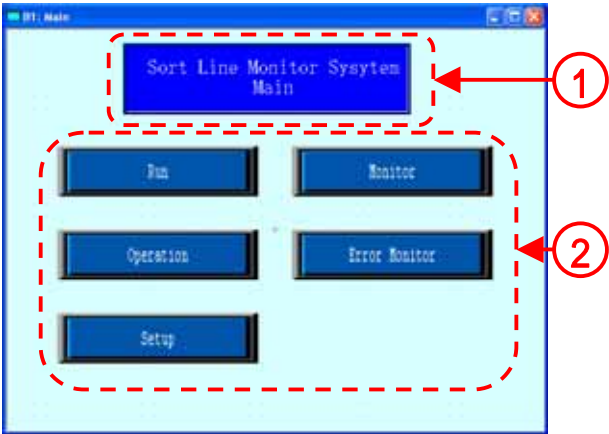
2 switches share one touch area.
Please avoid such a placement.



• Menu Screen

Displays the title of the screen.

Switches that change the screen to Run/Unit Monitor/Error Monitor/Unit Operation/Setup.



1.2

Drawing

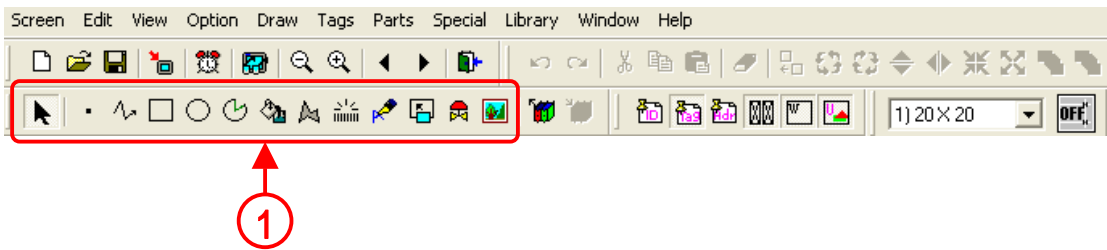
Here, Drawing Function will be described.












Various Drawing Methods

- Using Drawing Function enables you to place lines, squares, circles, texts on a screen.

• Each Drawing Function (Selection from the Drawing Tool Bar)



- **Dot:**Dots can be drawn in 1,2,3 and 5 dot units.
-  **Line/Poly-line:** In order to draw a line, simply click to designate the line's start and end points.
-  **Square/Rectangle:**To draw a square, click on and designate the diagonal two points.
-  **Circle/Oval:** To draw a circle or an oval, click on its center point and drag the mouse to the circumference point, and click again.
-  **Arc/Pie:** You will need to first draw a circle, and then, click on the arc's beginning and end points.
-  **Fill:** To use the Fill command, simply left-click your cursor on top of an object's enclosed area.
-  **Filled Polygon:**To draw a Polygon, select the Polygon's vertices. To complete the Polygon, right-click to automatically connect the beginning and end points.
-  **Scale:**To draw or create a Scale, input the number of divisions desired and then left-click the mouse's cursor to designate the scale's beginning and end points.
-  **Text:**From the keyboard enter the text and then place it on the screen.
-  **Convert(Import) Image:**Converts image data (BMP file and JPEG file) for use on a GP Image screen



Point

This time we selected Drawing Function from the icons on the Tool Bar. But it's also possible to select Drawing Function from [Drawing] of the menu bar.



How to place a line

(1) How to select Line/Poly-line

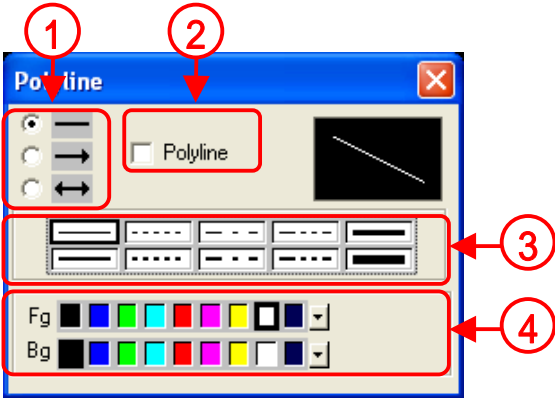
Click on the icon of [Line/Poly-line] from the tool bar (Drawing).



(2) Line/Poly-line Settings

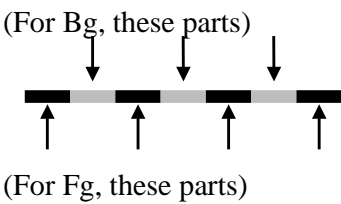
Select a line type (with or without arrows)

When the Polyline check box is checked, every time each point is clicked, Polylines can be drawn. Finally click on the right mouse button at the end point of the line.



Select a line type.

Select a color. If it's a solid line, set a color with Fg. For a color of Bg, set it when the line type is a broken line.

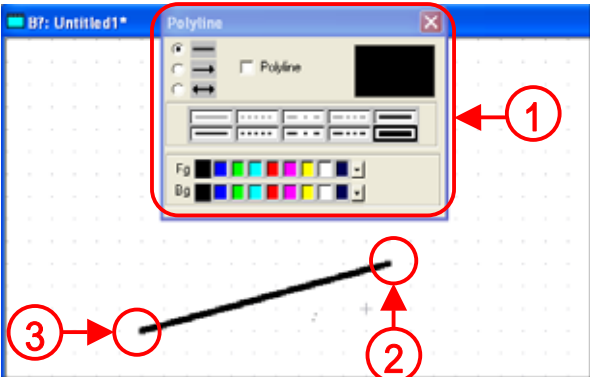


(3) How to draw a (straight) line

Set Line/Poly-line.

Click the beginning point.

Click the end point.





How to place a square/rectangle

(1) How to select a square/rectangle

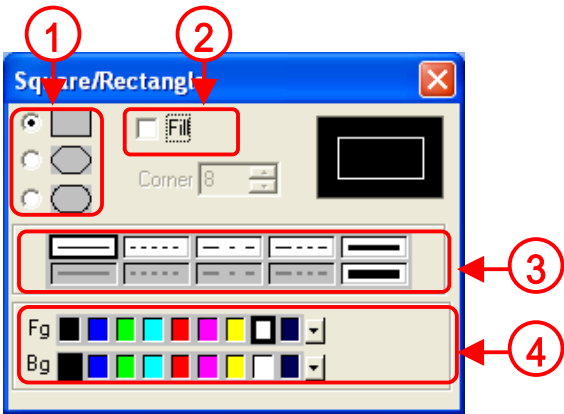
Click the icon of [Square/Rectangle] from the the tool bar (Drawing)



(2) Square/Rectangle Settings

Select the type of Square/Rectangle.
When selecting Beveling types, input a bevel dot number. The dot value sets up the size of the bevel.

Check this check box when drawing a filled Square/Rectangle.



Select a line type. When the Fill is checked, select one of the tiling patterns.

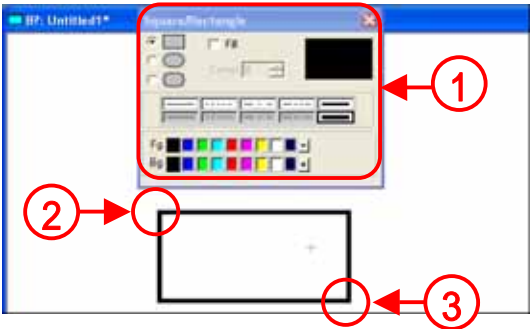
Select a color. When the Fill is checked, select the filling color.

(3) How to draw a (straight) line

Select a square/rectangle.

Click the beginning point.

Click the end point.



Point

- When Fill is checked, a filled square/rectangle can be drawn.
When drawing a filled square/rectangle, selecting the Fill can avoid leakage of the filled color.
- When you wish to change a background color of a base screen, go to the menu bar, [Option]->[Screen Properties]->[Color]->[Screen Background] and then change it.



How to place a Circle/Oval

(1) How to select a Circle/Oval

Click the icon of [Circle/Oval] from the tool bar (Drawing).

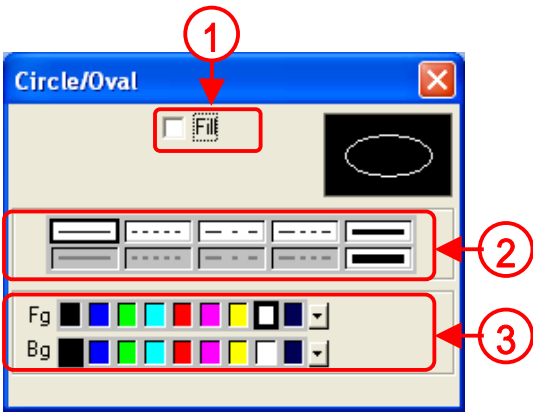


(2) Circle/Oval Settings

When Fill is checked, a filled circle/oval can be drawn.

Select a line type. When Fill is checked, select one of the tiling patterns.

Select a color of the line. When Fill is checked, select one of the tiling pattern.

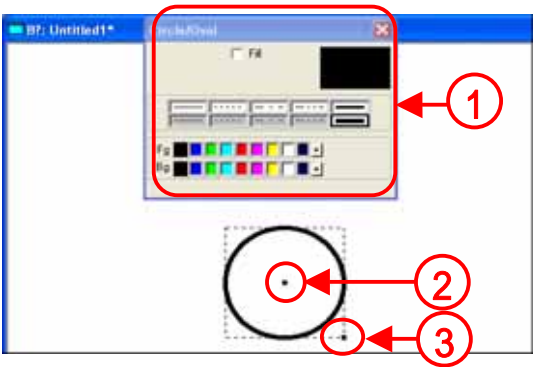


(3) How to draw a Circle/Oval

Select a circle/oval.

Click the center point of the circle.

Click the points of the radiuses of the X axis and Y axis of the circle.





How to place Text

(1) How to select Text

Click the icon of [Text] from the tool bar (Drawing).

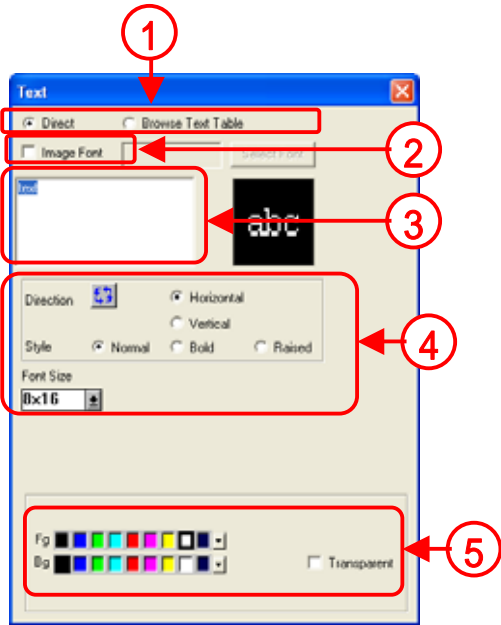


(2) Text Settings

- Direct Text:** Inputs characters to display directly
- Browse Text Table:** Selects the Text registered in the Text Table Editor and displays it.

When using Image Font, Windows Font can be displayed as BMP data. (Image Font is supported by the GP2000 series only).

Enter characters desired to display.




Direction: Set the direction of the Text with Horizontal and Vertical.

Ex.) Horizontal: **TEXT** Vertical: **T
E
X
T**

Style: Set a type of the characters

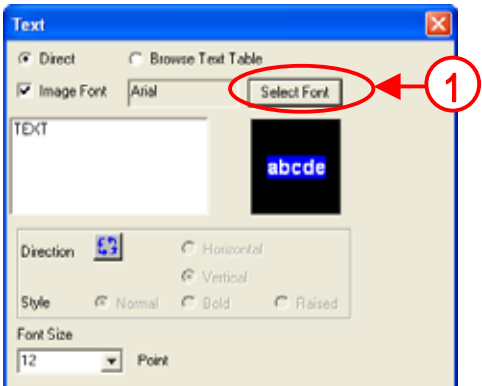
Ex.)
Normal: **TEXT** Bold: **TEXT** Raised: **TEXT**

Font Size: Specify the character size.
Selecting the  icon causes the grid frame to be displayed.
Using this grid, specify the character size.

- Set the character color.
- Fg: a color of the characters
- Bg: a background color of the characters
- When [Transparent] is checked, the background color becomes transparent.

(3) Image Font Settings

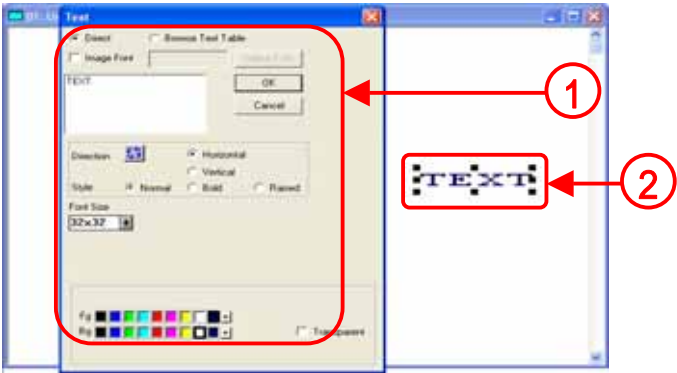
Click [Select Font], and the screen below will appear.
Specify the Font, Style and Size here.



(4) How to place Text

Set the Text to place.

Click on any desired point.
The top left corner of the text box is the base point used for positioning.



★ Point

- When a GP does not support 256 colors for a display color, 256 cannot be set.
For display colors, refer to the catalog.
- For 64-color display,a Blink can be set. For 256-color display, it cannot.
- When you desire a transparent background color, check [Transparent].

(When Bg is white)



(Bg is transparent)





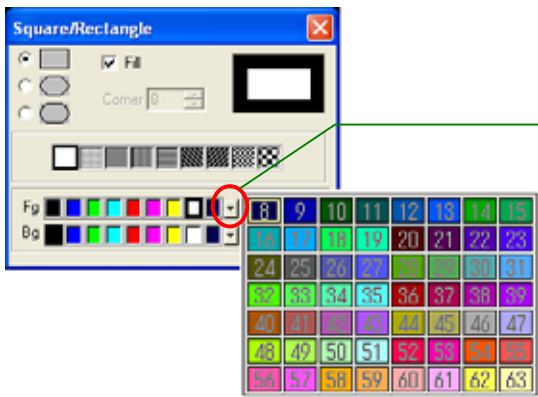
Setting the number of colors


In the product with TFT Color Liquid Crystal of GP2000 series installed, it's possible to select the No. of colors from [64 colors, Blk] and [256 colors, No Blk].

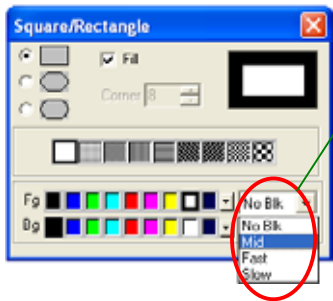
Ex.) Square/Rectangle Color Setting

1.64 colors, Blk

(*[Blk (Blink)] means [Blinking Display].)



Clicking  on the right end of the color palette allows you to select desired colors from 4-color palette for Fg and Bg.

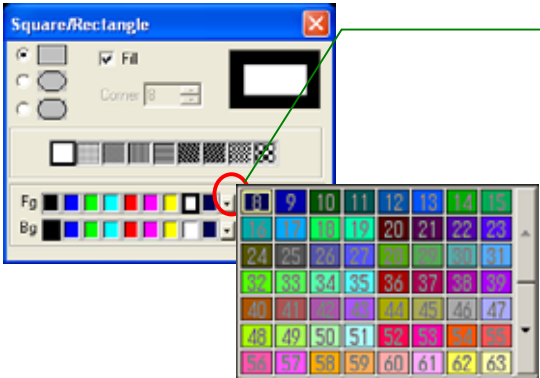



With 3-speed blink display, it's possible to blink the selected colors.

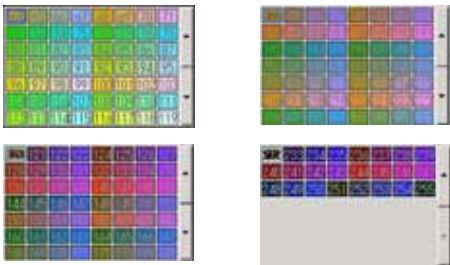
Blink Speed
[No Blk]:not blink
[Mid]:blinks about every second
[Fast]:blinks about every 0.5 second
[Slow]:blinks about every 2 secnds

2.256 colors, No Blk

(* There's no Blink Setting for 256-color display)



Clicking  on the right end of the color palette allows you to select desired colors from the 256-color palette for Fg and Bg.



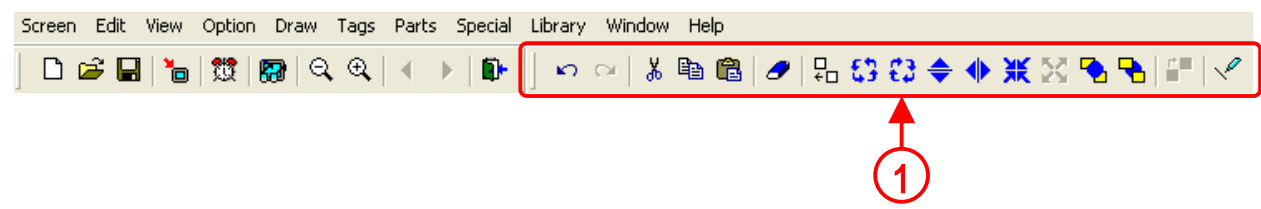


How to edit Objects

- Parts, objects, text, and Tags previously placed or drawn (these are called Objects) can be edited using various functions, such as Copy and Delete.





• Editing Functions (selection from the Tag Tool Bar)



-
- Undo:** Undoes the previous operation
 - Redo:** Redoes the undone operation
 - Cut:** Deletes the selected Object and saves it in the clip board temporarily
 - Copy:** Copies the selected Object to the clip board
 - Paste:** Pastes the cut or copied Objects in the clip board
 - Delete:** Deletes the selected Objects
 - Align:** Sets the position of the selected Object with Horizontal and Vertical and aligns it
 - Rotate Left:** Rotates the selected Object to left by 90 degrees
 - Rotate Right:** Rotates the selected Object to right by 90 degrees.
 - Mirror X-axis:** Takes X axis on the center of the selected Object and moves it along the X axis.
 - Mirror Y-axis:** Takes Y axis on the center of the selected Object and moves it along the Y axis.
 - Group:** Groups the selected plural Objects.
 - Ungroup:** Release grouping the selected Objects.
 - Being to Front:** Puts the selected Object to front and displays it.
 - Send to Back:** Puts the selected Object to back and displays it.
 - Change Attribute:** Changes the attributes of the selected Objects.
 - Redraw Screen:** Puts the current screen in the latest condition and displays it.

(1)How to select Objects

In order to edit an optional Object, it’s necessary to select which Object is edited.
Two methods are available for selecting Objects: 1)clicking on an Object directly, or 2)dragging the mouse to enclose and select single or multiple Objects. Also you can select individual Objects that have other Objects either on top of , or overlapping them.

When the tool bar’s  icon is clicked on (active), an Object can be selected. To activate this icon, click on  directly, or select the pull down [Edit] menu’s [Select] command. Also, while drawing Objects, right-clicking anywhere on a desired Object allows you to select it.



*Either a  or a  mark will be displayed on the sides of the selected Object.
These square marks are called “**handles**”.

How to select one Object

1) Clicking on an Object directly

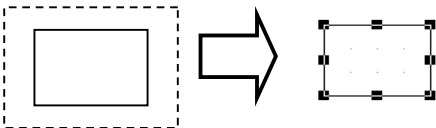
Put a cursor on the desired Object and click it.
The Object has handles and shows that it’s been selected.



Notes:When the Object is a square or a circle drawn with lines and frames, put a cursor right on the line.

2) Dragging the mouse to enclose and select single or multiple Objects

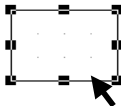
Drag the mouse to enclose the desired Object to designate the range.
The enclosed Object has handles and show that it’s been selected.



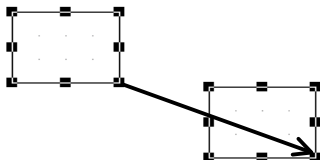
Notes: Enclose the whole desired Object.

(2)How to move Objects

Click the desired Object.

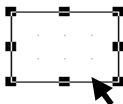


Move the cursor anywhere except handles and after the cursor changes to a mark, drag the Object to the desired position.

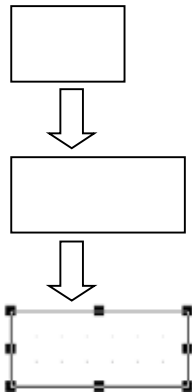


(3) How to scale up/down Objects

Click the desired Object.



Move the cursor on the handles of the desired Object and drag it until it becomes the desired size.



The direction of scaling up/down varies depending on which handle is dragged.

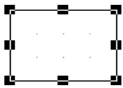
Ex.) Scaling up/down a square


- Handles of 4 corners: both Horizontal and Vertical
- Handles of top and bottom: Vertical only
- Handles of left and right: Horizontal only

(4) How to change attributes

You can change any of an Object’s attributes, i.e. its color, address, etc.
Also, with Objects of the same type, you can change the same attribute of all the Objects of that type at the same time.

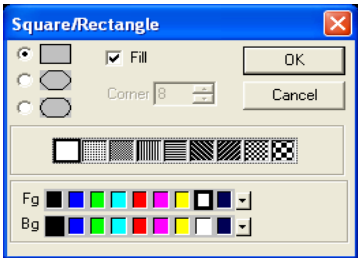
First, select an Object, to change its’ attributes.



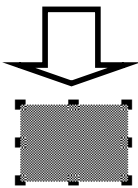
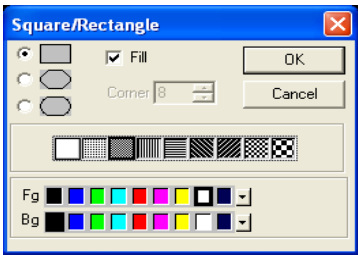
Select  (Change Attribute).
(You can click [Change Attribute] command from the short-cut menu displayed by right-click.)



Select a new attribute from the dialog box.
Ex.: Here, check ☒ Fill and select the third pattern from the left.



Click 



*You can simply double-click on the Object when selecting it.



Let's place a title on the menu screen.

Let's create a title of the menu screen.

The way to draw a title placed on the sample screen will be explained in the order shown below.
Creating a square (with Fill checked) -> a square (without Fill checked)->Creating a square (without Fill checked)->Creating Text

• Flow of creating a title

1. Open the base screen [B1]

2. Place a square (with Fill checked)

3. Place a square (without Fill checked)

4. Place a Text

(1) Select the Square/Rectangle

Click the [Square/Rectangle] icon from the tool bar (Drawing).



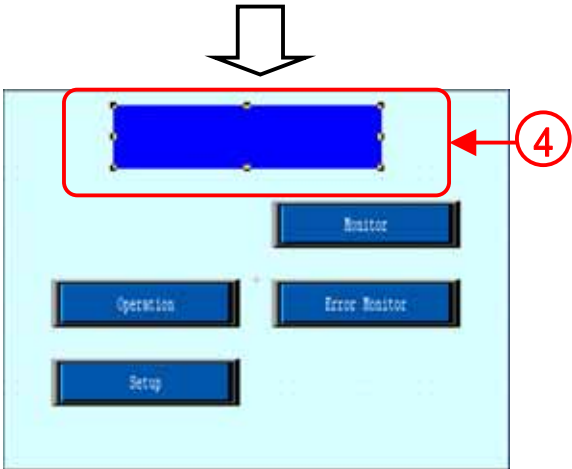
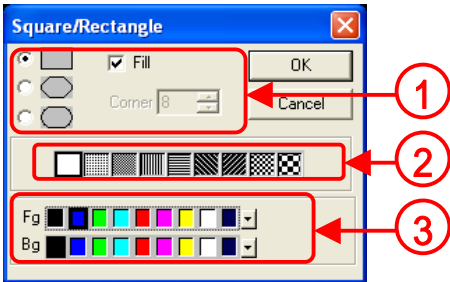
(2) Place a square/rectangle (with Fill checked).

Select the non-beveled square and check Fill.

Select the left end of the tiling patterns.

Select the desired color for [Fg].

Draw a square/rectangle that can enclose a title on the screen.



1.3

Change Screen

Here, the way to change screens displayed on GP will be described.

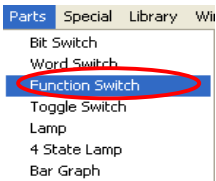


How to change screens (Special Switch Settings)

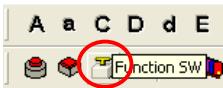
- When you place a switch on the screen and change screens, using a function switch enables you to change screens by designating the desired screen number for change directly and placing the switch only.

(1) How to select a function switch

Select [Function Switch] from [Parts] of the menu bar.



Or click the [Function Switch] icon.



• Menu Bar

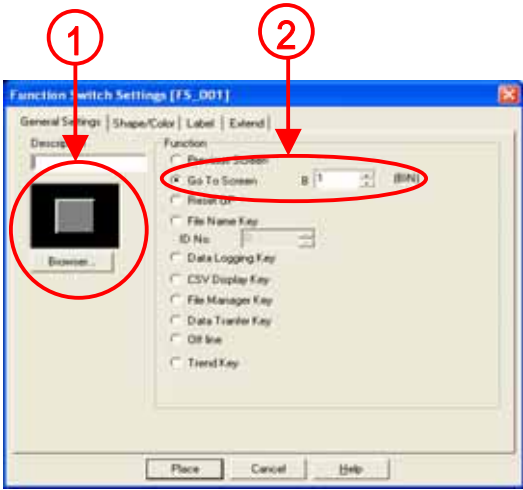
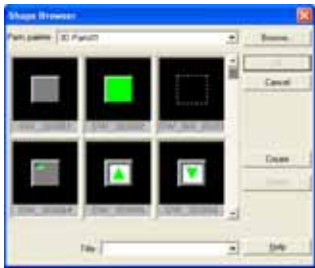


• Tag Tool Bar



2) General Settings

The picture of the currently selected switch is displayed.
Click [Browser], and pictures will be selected.

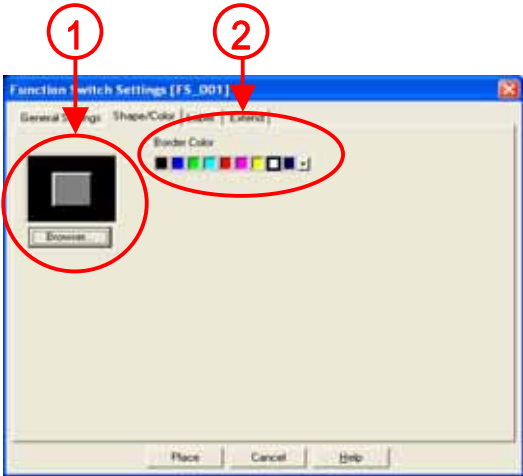


Check [Go To Screen] and set the desired screen number directly.

(3) General Settings

The picture of the currently selected switch is displayed.
Click [Browser], and pictures of the switch will be selected.

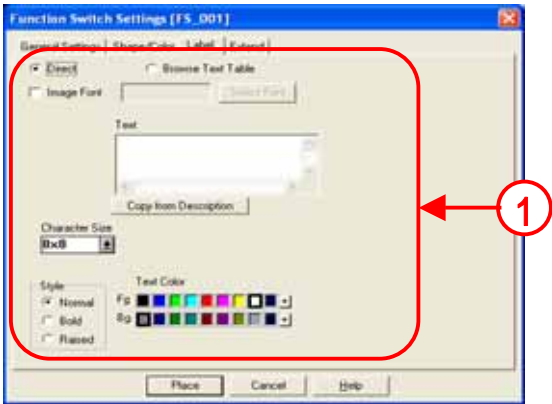
Set a color of the switch.



(4) Label Settings

Enter Text to place on the switch.

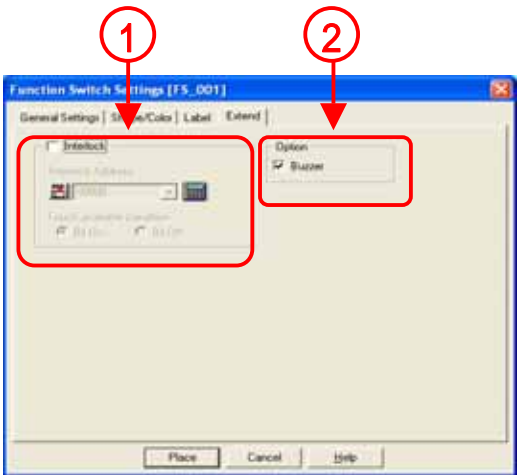
*For details, refer to P.1-9



(5) Extend Settings

- Interlock:** Only when the bit address set in Interlock Address becomes the same as Touch Available Condition, the switch operation is enabled.
- [Touch Available Condition:Bit ON]:**Only when Interlock address is ON, a switch operation is enabled.
- [Touch Available Condition:Bit OFF]:**Only when Interlock address is OFF, a switch operation is enabled.

With Buzzer checked, when you touch the switch, the buzzer sounds.





Let's place a Change Screen Switch.

With Function Switch, let's place a Change Screen Switch.

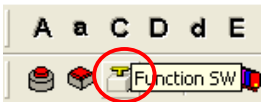
The way to draw a Change Screen Switch placed on the sample screen will be explained. It will be explained in the order below.
General Settings->Label Setting->Extend Setting->Place

(1) Flow of placing [Change Screen Switch]

1. Open the base screen, [B1].
2. Set a Function Switch and place it.

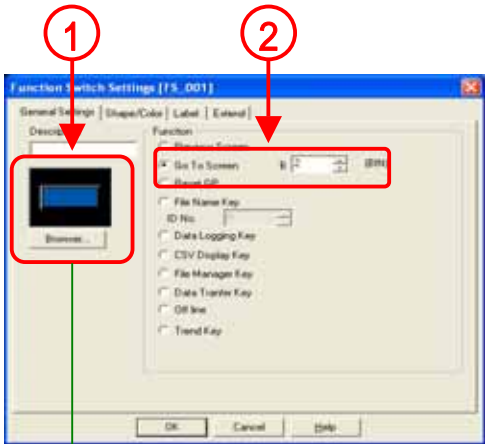
(2) Open Function Switch Settings

Click the [Function Switch] icon from the Parts Tool Bar.

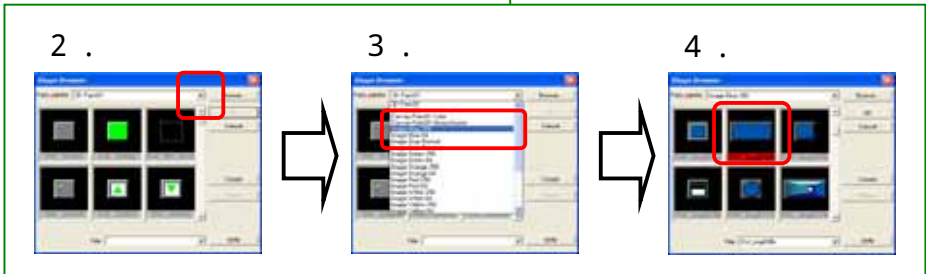


(3) General Settings

1. Click [Browser].
2. Click Parts Palette.
3. Select [IMG_BLUE256.BPD].
4. Click [SW_img008b] and click [OK].



Check [Go To Screen] and set [2] for the screen number.



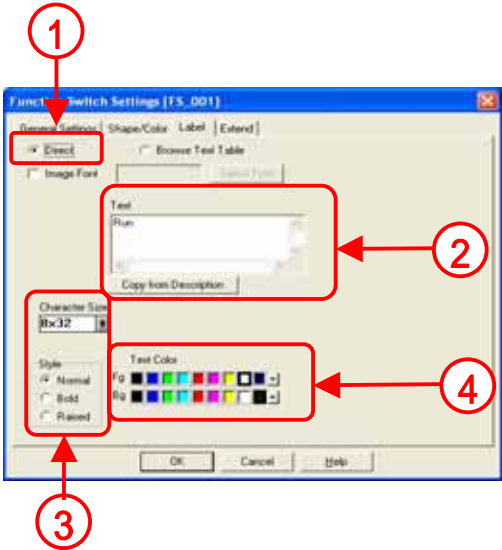
(3) Label Setting

Check [Direct] .

Input [Run] on Label.

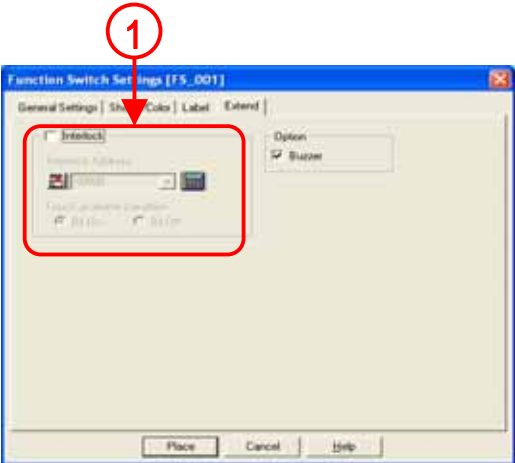
Set [8x32] for [Character Size], [Normal] for [Style].

Set [White] for [Fg] of Text Color.



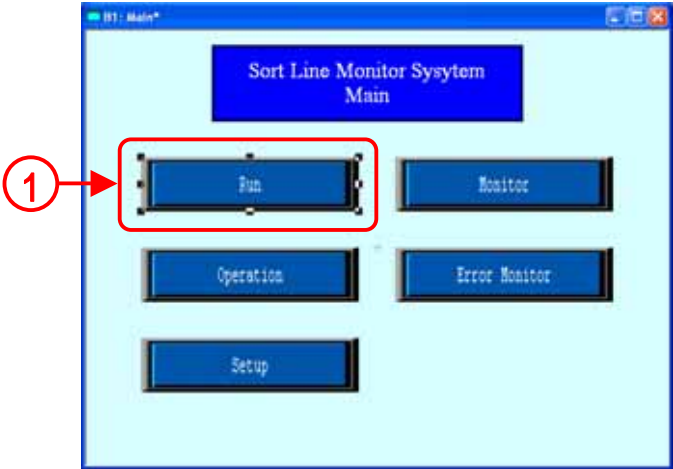
(4) Extend Setting

Confirm that [Interlock] is not checked.



(5) Place a Function Switch

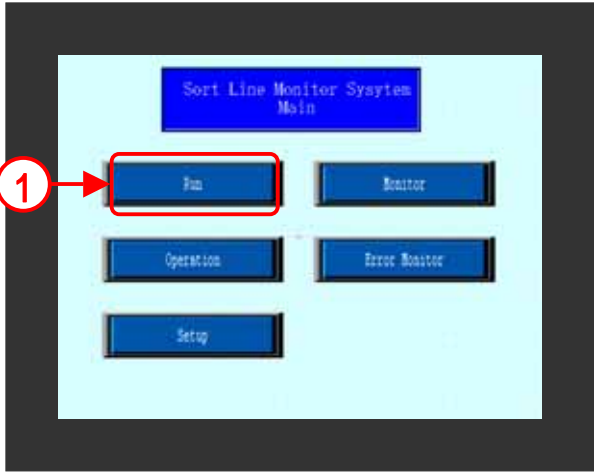
After setting all, click Place and place the function switch on the screen.



(5) Check the operation of the function switch

- Transfer the screen data to the display.

Touch the Change Screen Switch to Run, and the display screen will be changed to the Run screen.



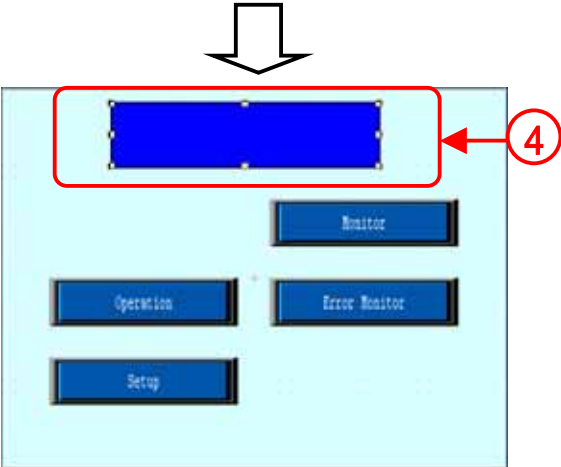
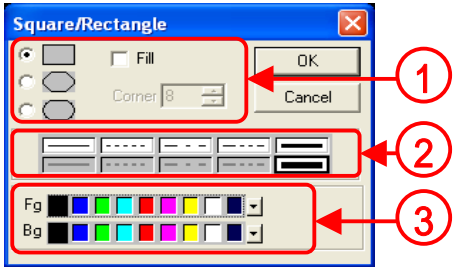
(3) Place a square/rectangle (without Fill checked)

Select the non-beveled square and confirm that Fill is Not checked.

Select the bold solid line right below.

Select the desired color for [Fg].

Draw a square/rectangle over the previously drawn Filled square.



(4) Place a Text.

Check [Direct Text] and [Image Font].
Click [Select Font] and select the desired font.

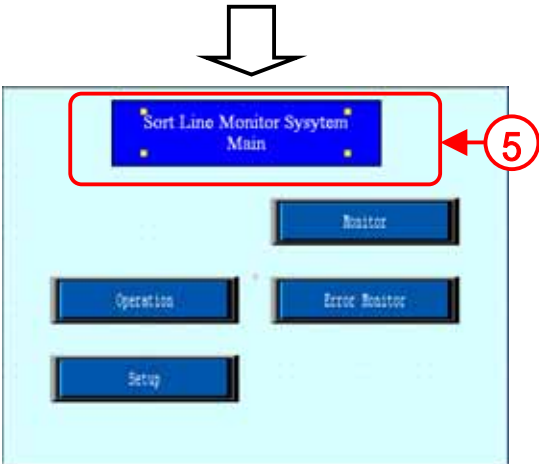
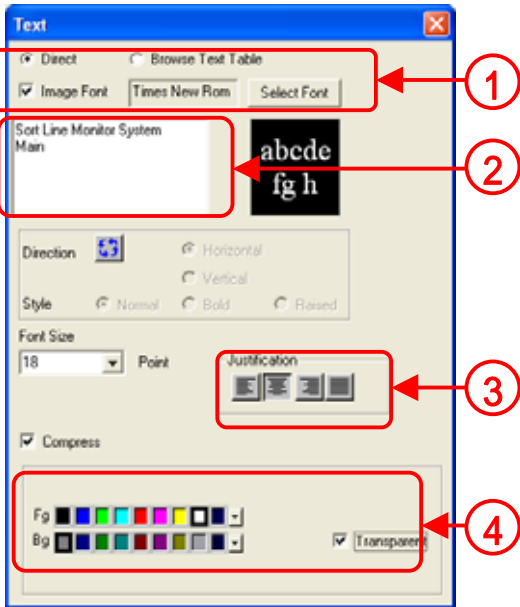


Enter [Sort Line Monitor System Main].

Select the second from left, [Centered] for [Justification].

Select the desired color for [Fg] and check [Transparent].

Place the text in the previously placed square.



1.3

Change Screen

Here, the way to change screens displayed on GP will be described.

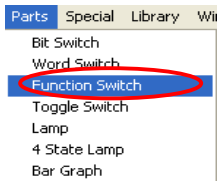


How to change screens (Special Switch Settings)

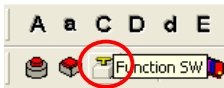
- When you place a switch on the screen and change screens, using a function switch enables you to change screens by designating the desired screen number for change directly and placing the switch only.

(1) How to select a function switch

Select [Function Switch] from [Parts] of the menu bar.



Or click the [Function Switch] icon.



• Menu Bar

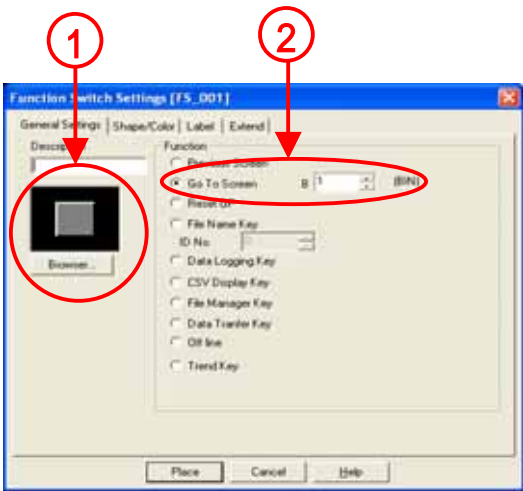
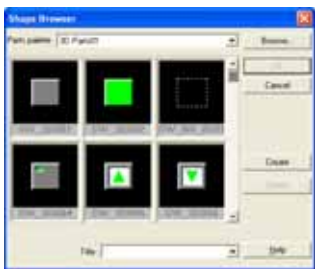


• Tag Tool Bar



2) General Settings

The picture of the currently selected switch is displayed.
Click [Browser], and pictures will be selected.

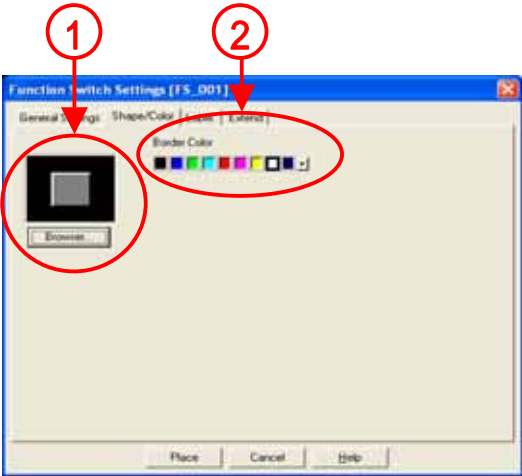


Check [Go To Screen] and set the desired screen number directly.

(3) General Settings

The picture of the currently selected switch is displayed.
Click [Browser], and pictures of the switch will be selected.

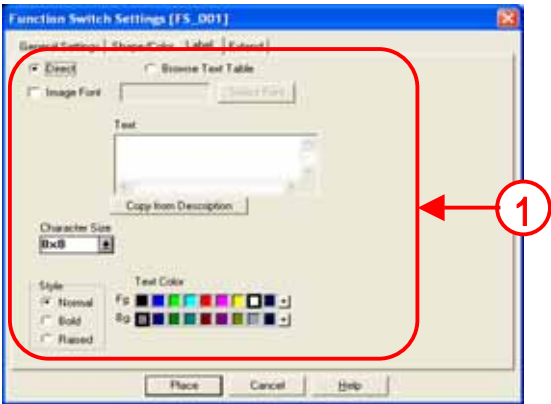
Set a color of the switch.



(4) Label Settings

Enter Text to place on the switch.

*For details, refer to P.1-9



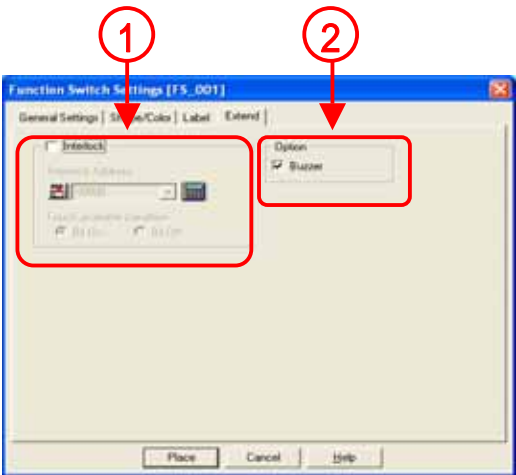
(5) Extend Settings

Interlock: Only when the bit address set in Interlock Address becomes the same as Touch Available Condition, the switch operation is enabled.

[Touch Available Condition:Bit ON]:Only when Interlock address is ON, a switch operation is enabled.

[Touch Available Condition:Bit OFF]:Only when Interlock address is OFF, a switch operation is enabled.

With Buzzer checked, when you touch the switch, the buzzer sounds.





Let's place a Change Screen Switch.

With Function Switch, let's place a Change Screen Switch.

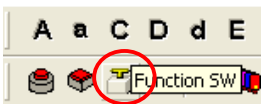
The way to draw a Change Screen Switch placed on the sample screen will be explained. It will be explained in the order below.
General Settings->Label Setting->Extend Setting->Place

(1) Flow of placing [Change Screen Switch]

1. Open the base screen, [B1].
2. Set a Function Switch and place it.

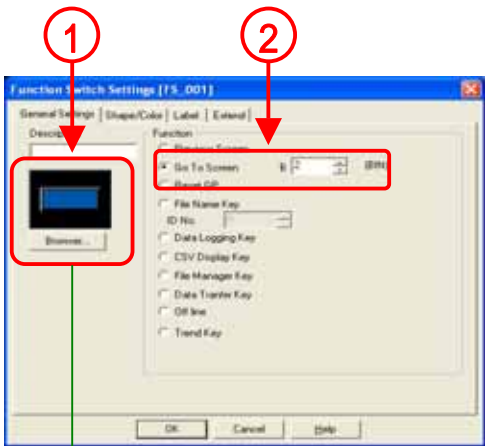
(2) Open Function Switch Settings

Click the [Function Switch] icon from the Parts Tool Bar.

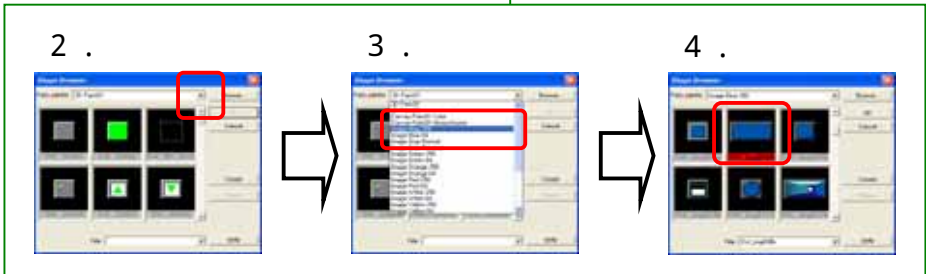


(3) General Settings

1. Click [Browser].
2. Click Parts Palette.
3. Select [IMG_BLUE256.BPD].
4. Click [SW_img008b] and click [OK].



Check [Go To Screen] and set [2] for the screen number.



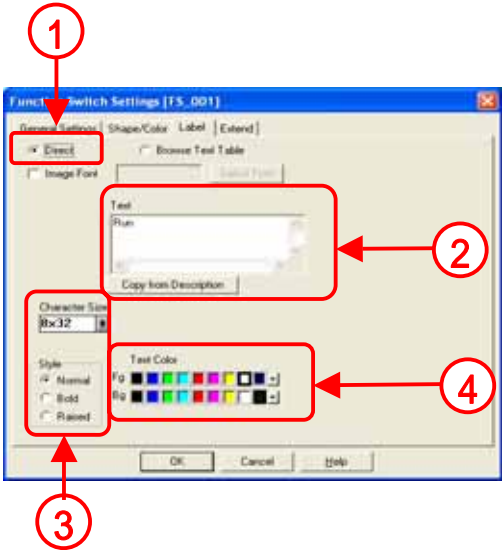
(3) Label Setting

Check [Direct] .

Input [Run] on Label.

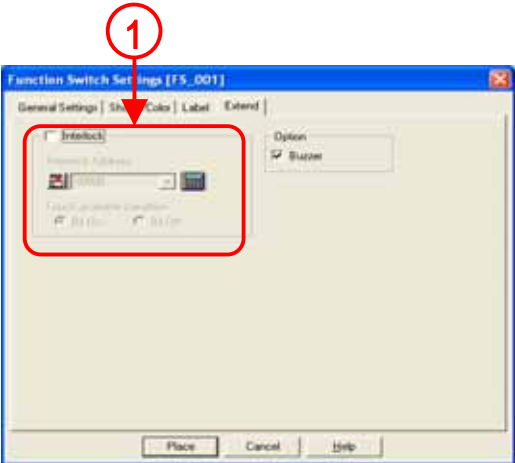
Set [8x32] for [Character Size], [Normal] for [Style].

Set [White] for [Fg] of Text Color.



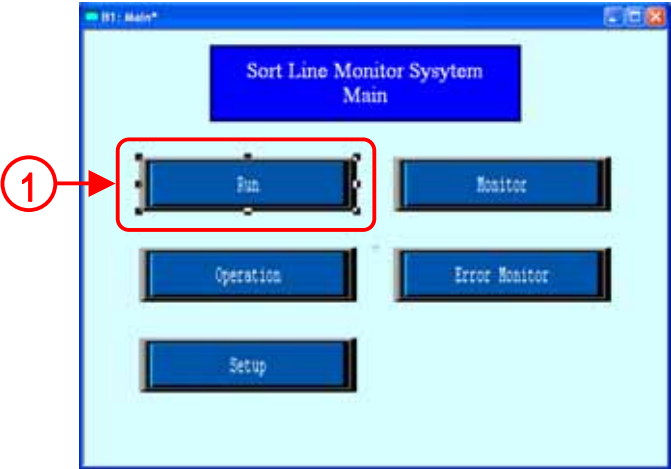
(4) Extend Setting

Confirm that [Interlock] is not checked.



(5) Place a Function Switch

After setting all, click Place and place the function switch on the screen.



(5) Check the operation of the function switch

- Transfer the screen data to the display.

Touch the Change Screen Switch to Run, and the display screen will be changed to the Run screen.

