

Chapter 5

Set Value Input Screen

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5. 1

Set Value Input Screen

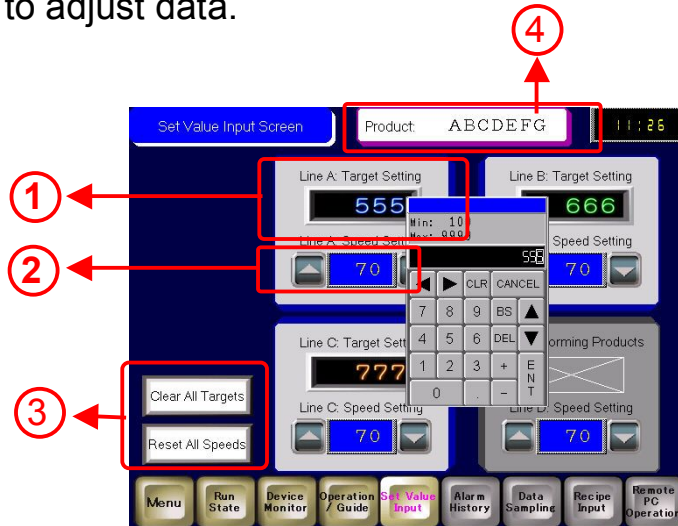


Set Value Input Screen

Instruction

The set value input screen is a screen to enter several kinds of set values of the machine.

This chapter explains about data displays to enter values or text data in using a popup keyboard or numeric keypad on the touch panel and switches to adjust data.



- 1) Enter data directly using a numeric keypad.
(→ See page 5-5.)



- 2) Adjust data by touching switches.
(→ See page 5-13.)



- 3) Clear the target values and speeds of all lines by touching switches.
(→ See page 5-21.)



- 4) Enter text data directly using a numeric keypad.
(→ See page 5-27.)



5. 2

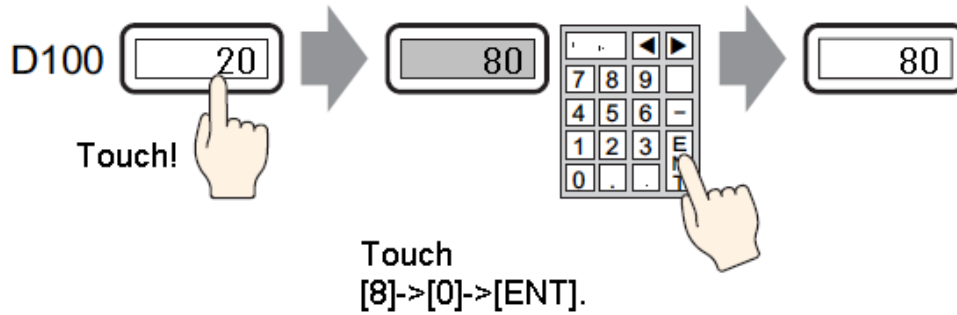
Numeric Value Input



Instruction

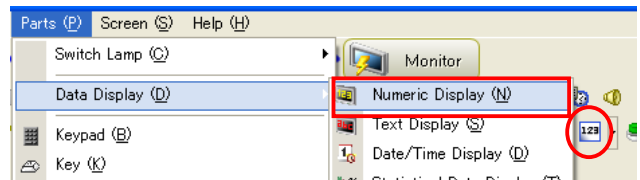
Enter Numeric Value

To enter numeric data from a popup keyboard, use the “Data Display: Numeric Display” feature.

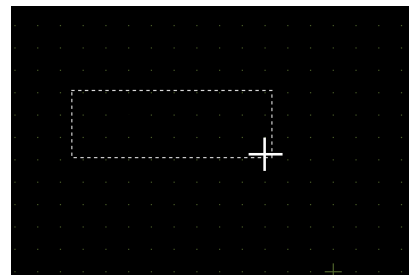


• Procedures of Placement/Setup

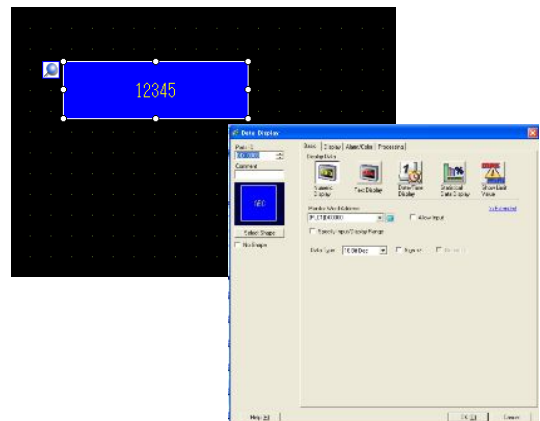
- 1) On the [Parts] menu, select [Data Display] → [Numeric Display]. Or click the [Data Display] icon.



- 2) Drag the range to place the data display.



- 3) Double-click the data display and make settings.



Let's practice on the next page!



Let's Enter Target Value

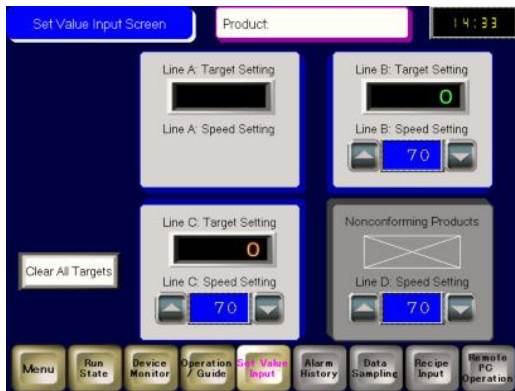
Let's enter a production target value of each line from a popup keyboard!

[Setup Procedure]

1. Open the base screen "5".
2. Select, place, and set the Data Display: Numeric Display.

Open the base screen "5".

<Practice Screen>



<Completed Screen>

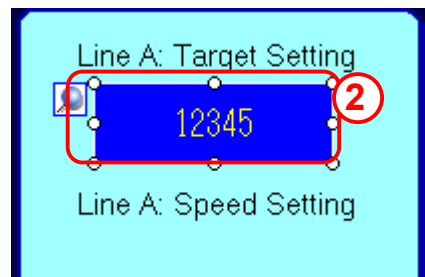


(1) Select/Place Data Display

- 1) Click the [Data Display] icon on the tool bar.

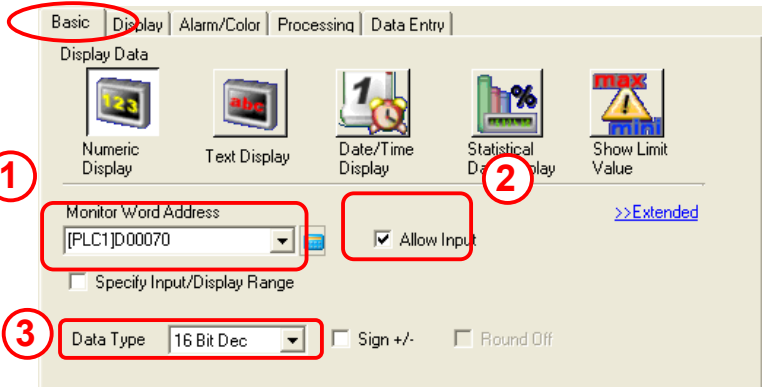


- 2) Drag the range to place the data display.



(2) Basic Settings

- 1) For [Monitor Word Address], set a word address to store data in. Here, set it to "USR02070".
- 2) Checking [Allow Input] allows you to enter numeric data from a numeric keypad. Here, check [Allow Input].
- 3) Set [Data Type] to "16 Bit Dec".



(3) Display Settings

- 1) For the [Font Setting], set the font of numerical values to be displayed.

Standard Font

Displays values at the same size horizontally and vertically like 8 x 16 dots, 16 x 16 dots.

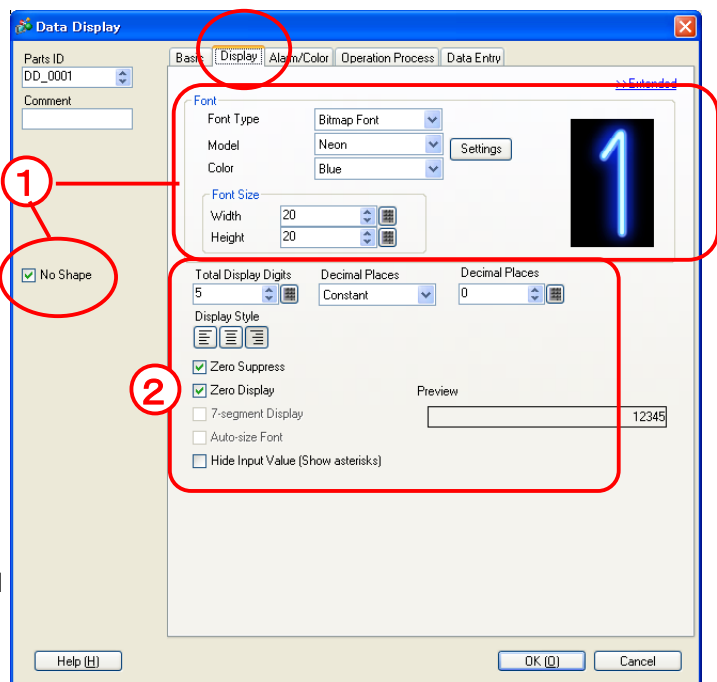
Stroke Font

Displays values at the free size in the range of 6 to 127 dots.

Bitmap Font

Neon-style or LED-style vivid display is possible.

Here, set [Bitmap Font] for [Font Type], [Neon] for [Model], [Blue] for [Color], [20] of Width and [20] of Height for [Font Size]. And check [No Shape].

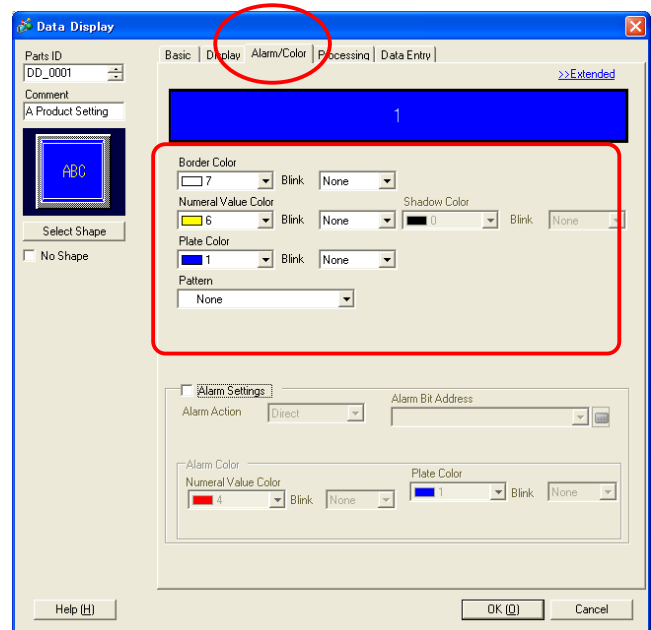


- 2) Set [Total Display Digits] to "5", [Decimal Places] to "Constant", [Decimal Places] to "0". Check [Zero Suppress], [Zero Display] etc if you need.

(5) Alarm/Color Settings

- Border Color:** Select a border color of the data display.
- Numeral Value Color:** Select a value color of the data display.
- Shadow Color:** Set a shadow color behind the value on the data display.
- Plate Color:** Select a plate color of the data display.
- Pattern:** Select a plate pattern of the data display.
- Pattern Color:** Select a secondary color of the data display.
- Blink:** Set a blink speed or none.

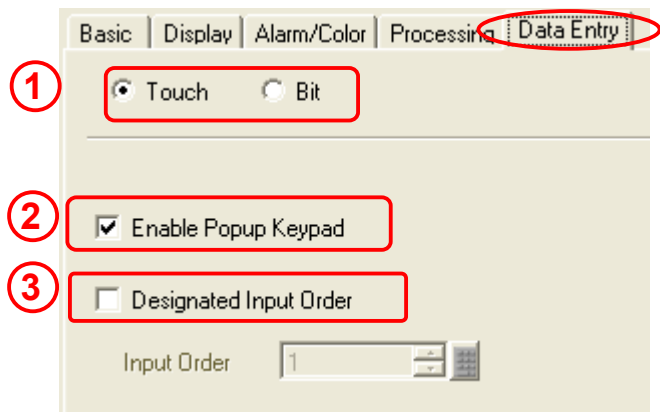
Set desired colors.



(6) Data Entry

- 1) Select the way to change the data display into the entry mode.
 - Touch:** By touching the data display directly, you can enter a value in it.
 - Bit:** When a specified trigger bit address turns on, you can enter a value in the data display.

Here, select [Touch].



- 2) Select whether the numeric keypad appears automatically or not when the data display is in the entry mode. Here, check [Enable Popup Keypad].
- 3) Set the order to enter data to multiple data displays consecutively.
- 4) Click [OK] to finish the settings.





Customize Numeric Value Input

(1) Limit Input Range

Alarm Settings: The value can be displayed in a different color when it is out of the specified range. When [Allow Input] is checked, data out of the range will not be entered.

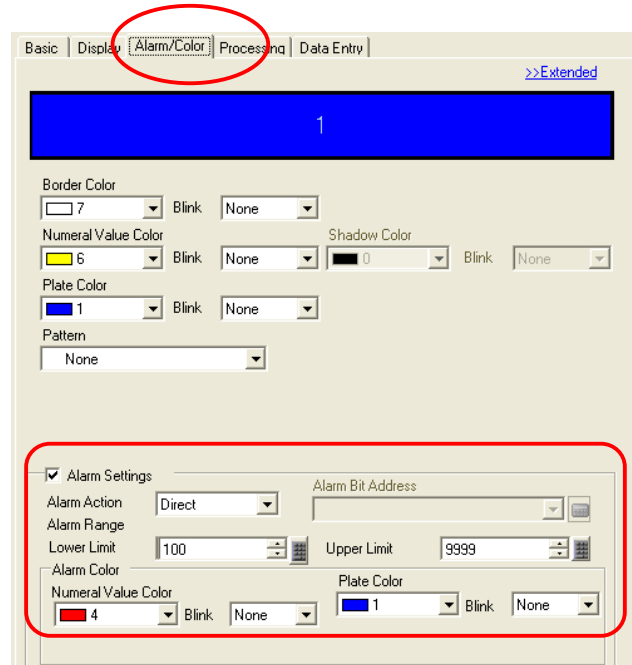
Alarm Action: Select an alarm action from “Direct”, “Address”, and “Change Color”.

Direct: Set the upper and lower limits with a constant directly.

Address: Specify addresses to set the upper and lower limits.

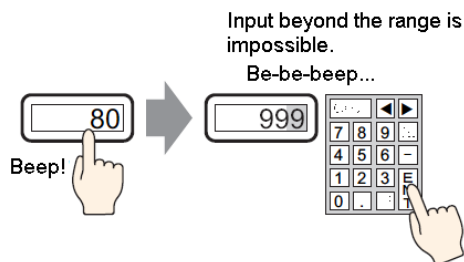
Change Color: When the Alarm Bit Address turns on, an alarm will be displayed in a different color.

Alarm Color: Set an alarm color.

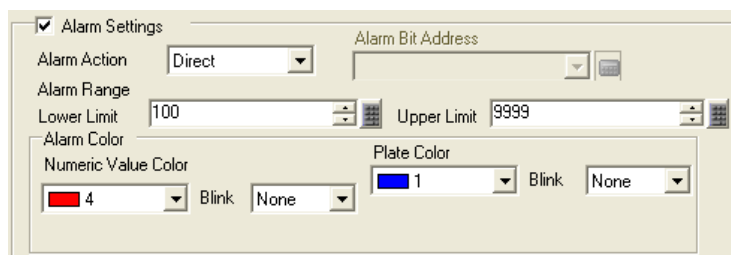


e.g.) Set the range of data that you can enter between 0 and 100.

- 1) Check [Alarm Settings].
- 2) Set “Direct” from [Alarm Action].
- 3) Set [Lower Limit] to “0” and [Upper Limit] to “100” for [Alarm Range].



- 1) Set [Numeral Value Color] in [Alarm Color] as you like.

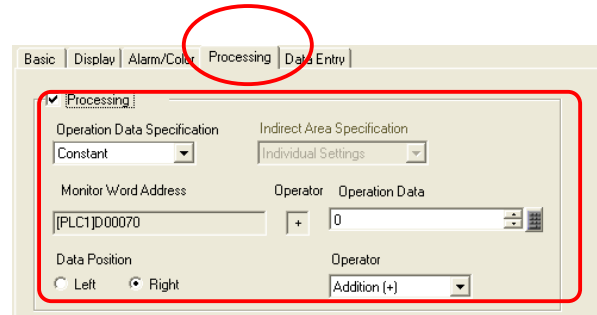


When using Bitmap Font, the alarm color setting of the numeric value color is disabled.

Changes of the plate color can be seen only when [Transparent] is selected.

(2) Enter Operation Result

Processing: Performs an arithmetic operation on the data stored in the Monitor Word Address and displays the result. The entered data are treated as data after operation.



Operation Data Specification: Select the method to set the data to operate.

Constant: Set a constant value as data to operate.

Address: Set an address which stores data to operate.

Indirect Area Specification: When selecting “Address” for [Operation Data Specification], specify the specification method from either “Individual Settings” or “Area After Display Address”.

Individual Settings: Select an individual word address for the operation data.

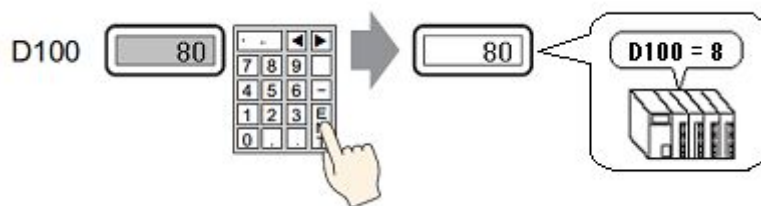
Area After Display Address: Stores operation data in the next following address after [Monitor Word Address].

Operation Data: Enter operation data directly when “Constant” is selected for [Operation Data Specification]. Specify an address to store operation data in when “Address” is selected.

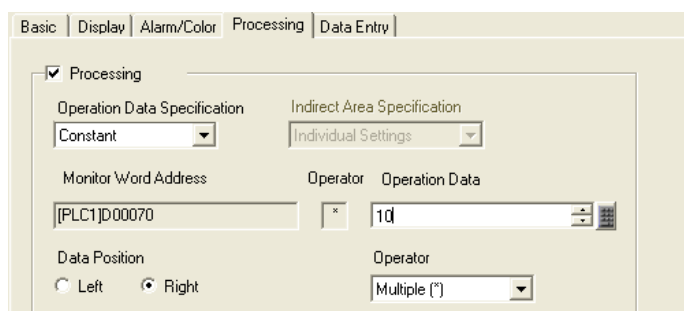
Data Position: Set the position to display operation data.

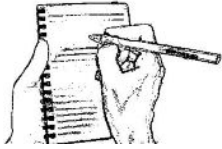
Operator: Select an operator from “Addition (+)”, “Subtraction (-)”, “Multiple (*)”, “Division (/)”, “Logical AND (&)”, “Logical OR (|)”, and “Exclusive (^)”.

e.g.) Divide data entered on the screen by 10 and store it in the device/PLC.
(Multiply stored data by 10 and display it.)



- 1) Check [Processing].
- 2) Set “Constant” for [Operation Data Specification].
- 3) Select “Multiple (*)” for [Operator].
- 4) Specify “10” in [Operation Data].





MEMO

5. 3

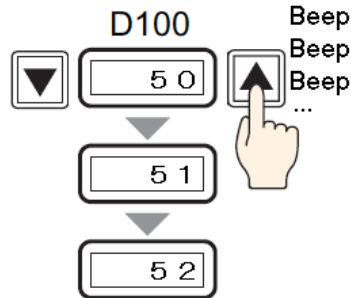
**Numeric Value
Addition/Subtraction**




Instruction

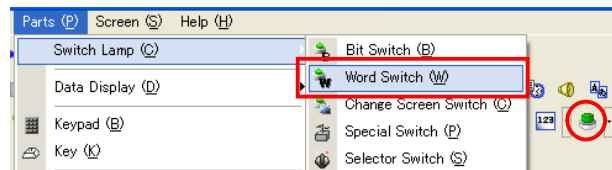
Add/Subtract Numeric Value

To add or subtract set value data, use the “Switch: Word Switch”. It allows you to adjust data by adding or subtracting data from a reference value.

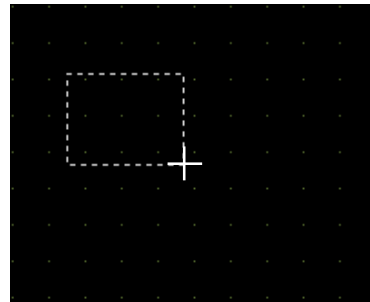


• Procedures of Placement/Setup

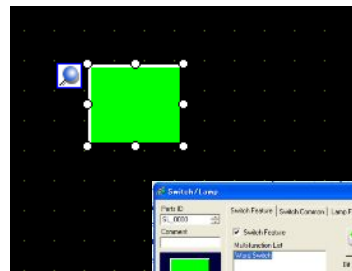
- 1) On the [Parts] menu, select [Switch Lamp] → [Word Switch]. Or click the [Switch]  icon.



- 2) Drag the range to place the switch.



- 3) Double-click the switch and make settings.



Let's practice on the next page!



Let's Add/Subtract Speed Data

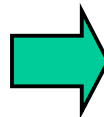
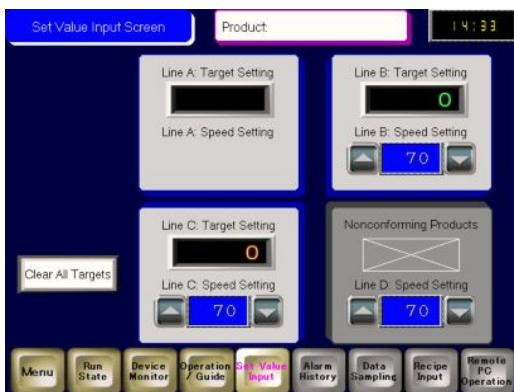
Let's create a word switch to adjust feeding speed of a line!

[Setup Procedure]

1. Open the base screen "5".
2. Select, place, and set the Data Display: Numeric Display.
3. Select, place, and set the Switch Lamp: Word Switch.

Open the base screen "5".

<Practice Screen>



<Completed Screen>

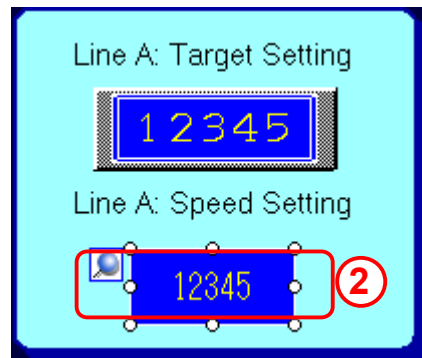


(1) Select/Place Data Display

- 1) Click the [Data Display] icon on the tool bar.

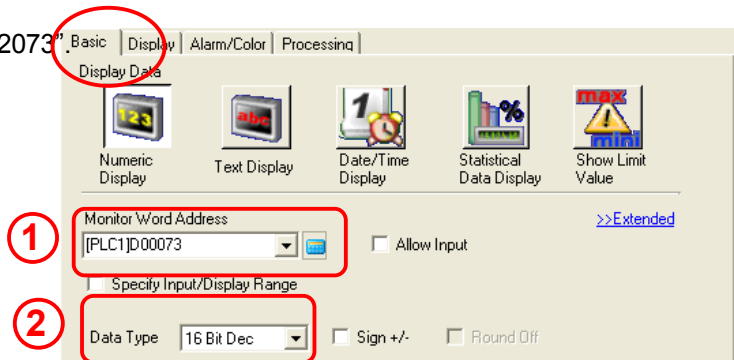


- 2) Drag the range to place the data display.



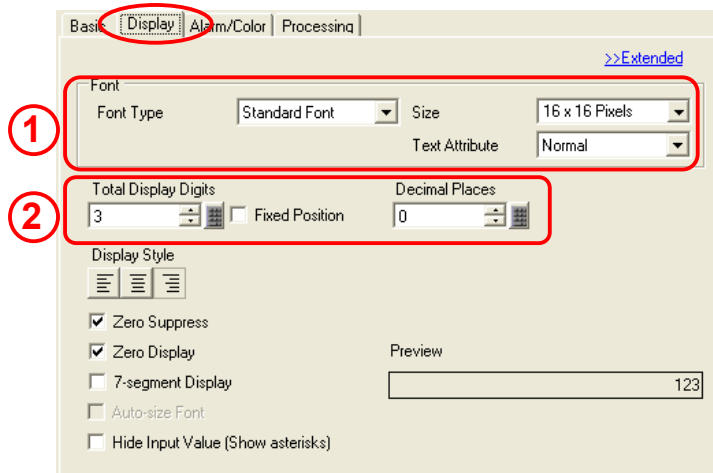
(2) Basic Settings

- 1) Set [Monitor Word Address] to “USR02073”
- 2) Select “16 Bit Dec” for [Data Type].



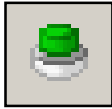
(3) Display Settings

- 1) Set a font as below.
 Font Type: Standard Font
 Size: 16 x 16 Pixels
 Text Attribute: Normal
- 2) Set [Total Display Digits] to “3” and [Decimal Places] to “0”.
- 3) Click [OK] to finish the settings.

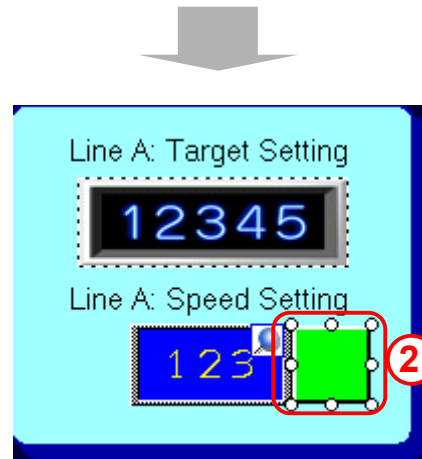


(5) Select/Place Switch for Subtraction

- 1) Click the [Switch] icon on the tool bar.

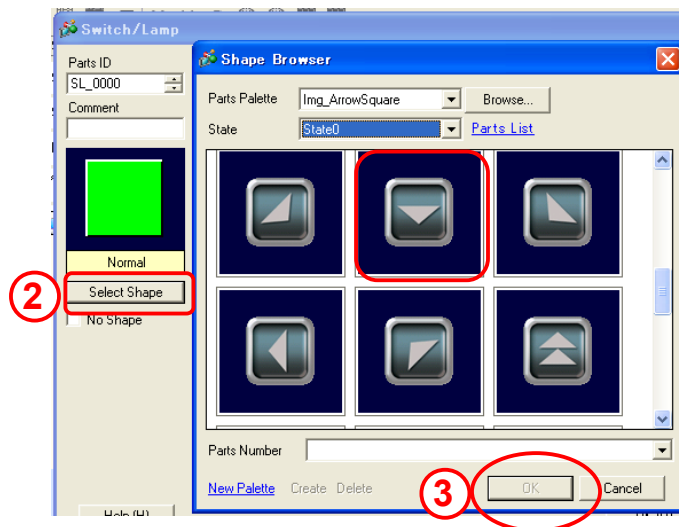


- 2) Drag the range to place the switch.



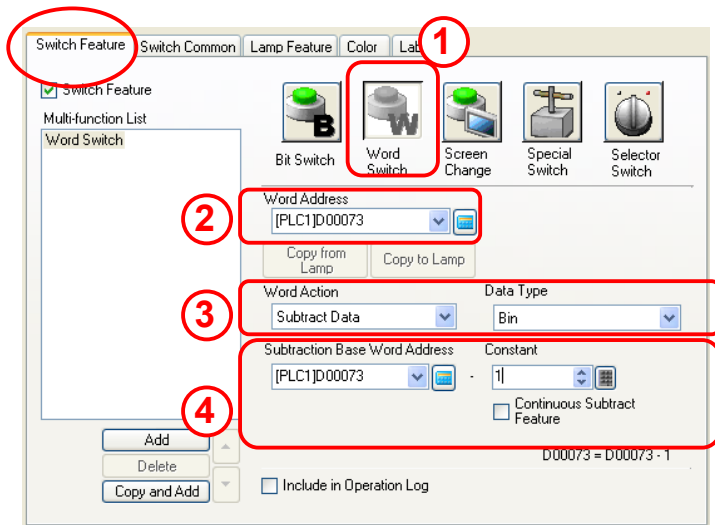
(6) Select Shape

- 1) Double-click the placed switch.
- 2) Click [Select Shape] and select a shape of the switch.
- 3) After selecting a shape, click [OK].



(7) Switch Feature

- 1) Select [Word Switch].
- 2) Set [Word Address] to enter data in. Here, set it to "USR02073".
- 3) Set [Word Action].



Write Data:

Writes a value set as [Constant].

Add Data/Subtract Data:

Adds/subtracts the constant value to/from [Addition/Subtraction Base Word Address] and writes the result to the [Word Address].

Digit Addition/Digit Subtraction: Specifies the digit position and adds/subtracts data.

Operation:

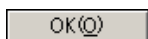
Operates data stored in [Operation Base Word Address] by the constant and writes the result to the [Word Address].

Here, set "Subtract Data" for [Word Action] and "Bin" for [Data Type].

- 4) Set [Subtraction Base Word Address] to "USR02073" and [Constant] to "1". Check [Continuous Subtract Feature].

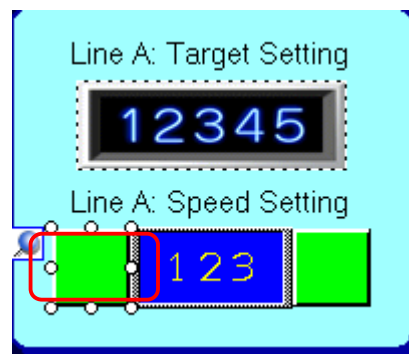
* [Continuous Subtract Feature] enables you to subtract data continuously while touching the switch.

- 5) Click [OK] to finish the settings.



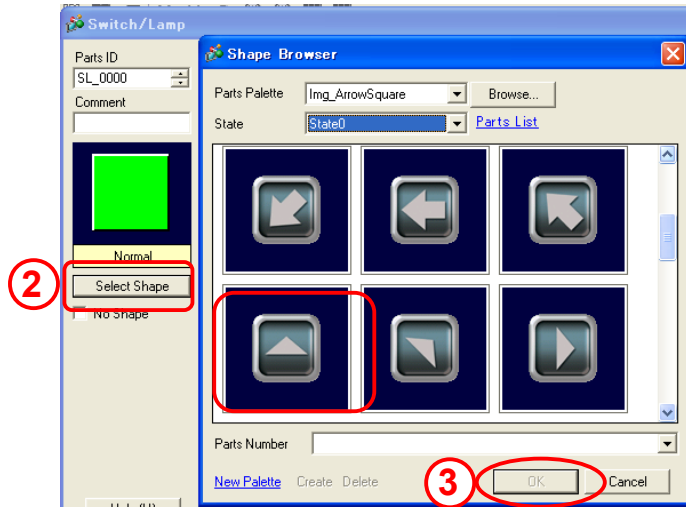
(8) Select/Place Switch for Addition

Click the [Switch] icon on the tool bar and place it on the screen.

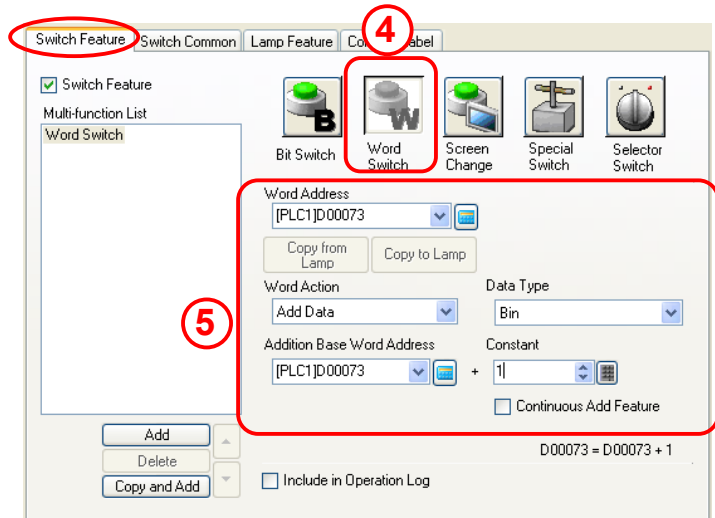


(9) Select Shape and Switch Feature

- 1) Double-click the placed switch.
- 2) Click [Select Shape] and select a shape of the switch.
- 3) After selecting a shape, click [OK].



- 4) Select [Word Switch].
- 5) Make settings as below.
 Word Address: USR02073
 Word Action: Add Data
 Data Type: Bin
 Addition Base Word Address: USR02073
 Constant: 1
 Continuous Add Feature: Checked
- 6) After selecting a shape, click [OK].





Instruction

Customize numeric value display

(1) When the numeric value switches to the alarm value, its color changes.

Alarm Settings: Changes the color and displays it when the value goes beyond the setup range.

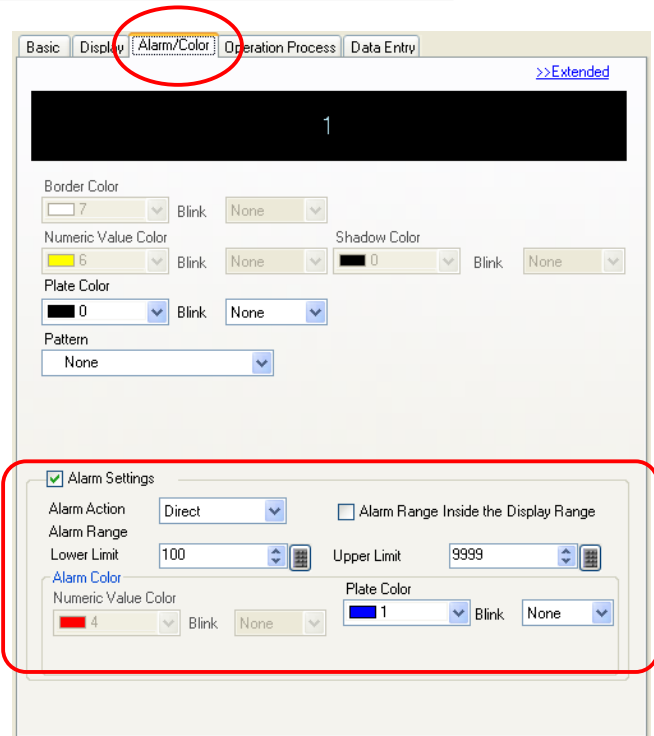
Alarm Action: Select from Direct/Address/Change Color.

[Direct]: The Upper Limit value and the Lower Limit value of Alarm are the fixed values. For Alarm Range, set the upper limit value and the lower limit value directly.

[Address]: The Upper Limit value and the Lower Limit value of Alarm are the variable value. For Alarm Range, designate the address to which the upper limit value and the lower limit value are set and set the data of the upper limit and the lower limit to the designated address.

[Change Color]: If the alarm bit address is ON, the color changes to the alarm color and it displays.

Alarm Color: Sets the color for the time of alarm.

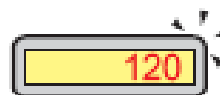


Ex) The color changes and displays when the displayed data becomes 101 or more

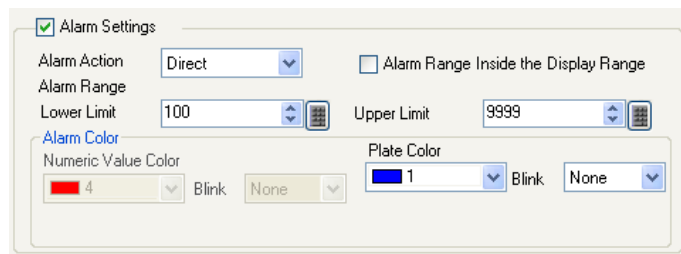
Usual Color



Alarm Color



1. Check [Alarm Settings].
2. Select [Direct] for [Alarm Action]
3. Set [0] for [Lower Limit] and [100] for [Upper Limit] of [Alarm Range].
4. Set [Red:4] for [Numeric Value Color] and [Yellow:6] for [Plate Color] of [Alarm Color].



5.4

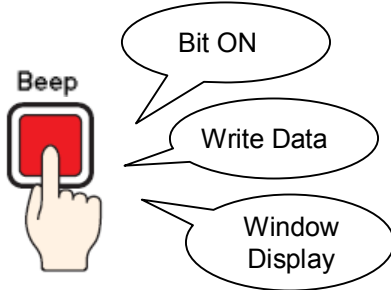
Multi-function Switch



Instruction


Multi-function Switch

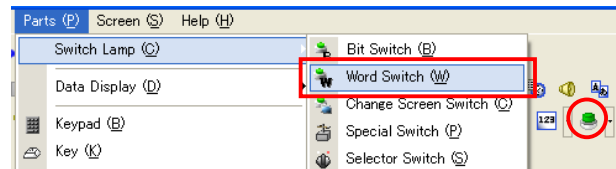
The feature allows you to have several switch operations on one switch.



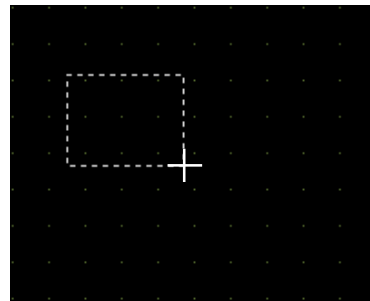
For example, you can create a multi-function switch that turns a bit address on and off, writes data to a word address, change screens and calls a window at the same time.

• Procedures of Placement/Setup

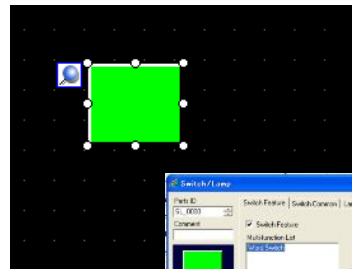
- 1) On the [Parts] menu, select [Switch Lamp] → [Word Switch].
Or click the [Switch]  icon.



- 2) Drag the range to place the switch.



- 3) Double-click the switch and make settings.



Let's practice on the next page!

✓ Practice **Let's Set Multiple Features to Single Switch**

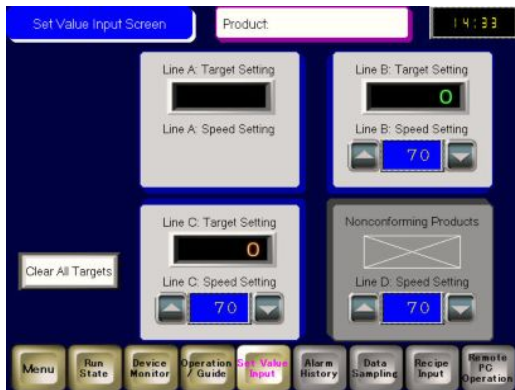
Let's clear target values of all lines at one time!

[Setup Procedure]

1. Open the base screen "5".
2. Set and place a switch/lamp.

Open the base screen "5".

<Practice Screen>



<Completed Screen>



(1) Select/Place Switch

- 1) Click the [Switch] icon on the tool bar.

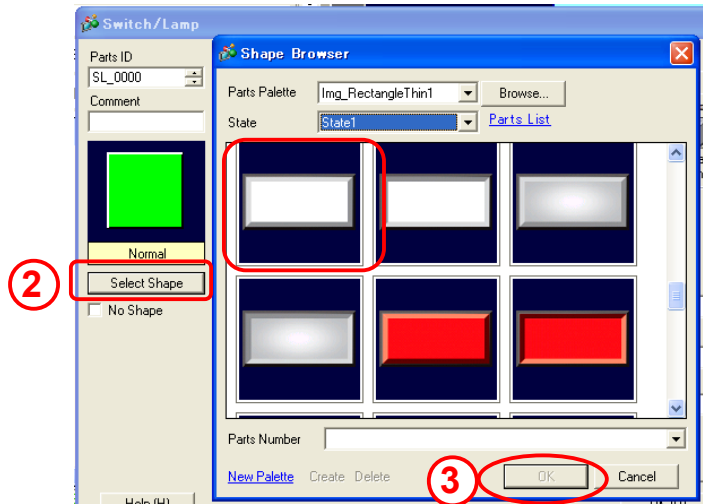


- 2) Drag the range to place the switch.



(2) Select Shape

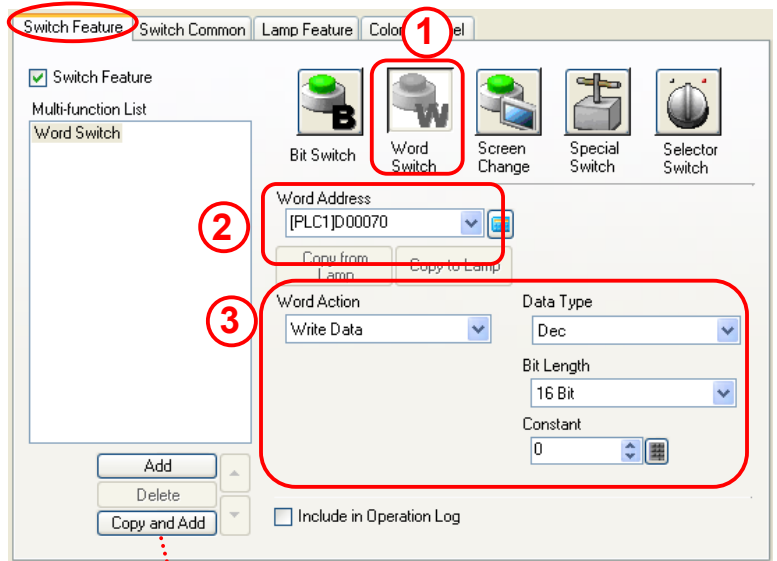
- 1) Click the placed switch.
- 2) Click [Select Shape] and select a shape of the switch.
- 3) After selecting a shape, click [OK].



(3) Switch Feature <1>

- 1) On the [Switch Feature] tab, select [Word Switch].
- 2) Set [Word Address] to enter data in. Here, set it to "USR02070".
- 3) Set the action of the switch. Here, set as below.

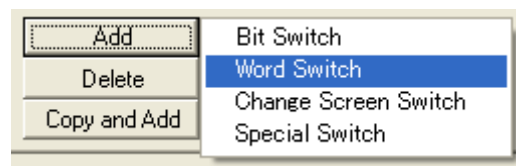
Word Action:	Write Data
Data Type:	Dec
Bit Length:	16 Bit
Constant:	0



(4) Add Switch Feature

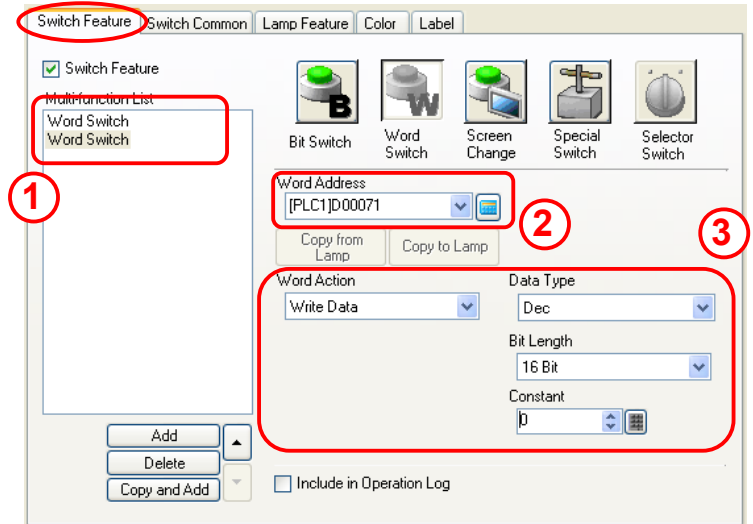
Click [Add] under the Multi-function List window.
Select a switch feature to add.

Here, select [Word Switch].



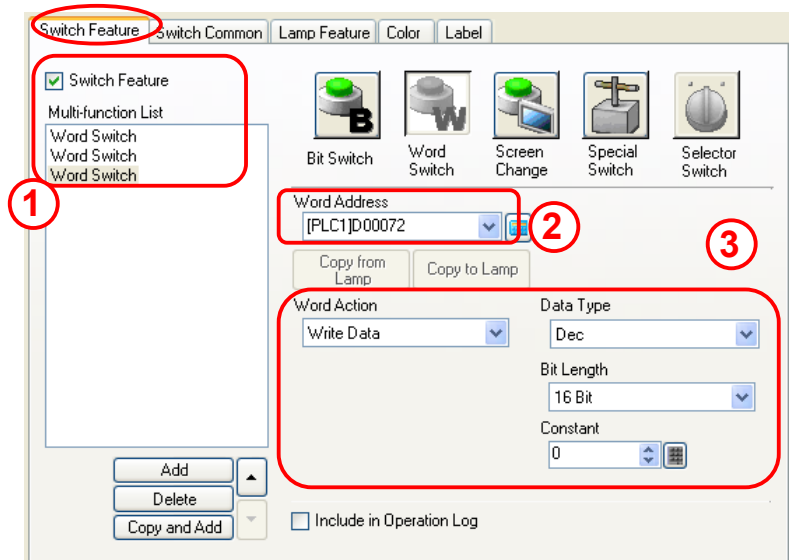
(5) Switch Feature <2>

- 1) Confirm that another [Word Switch] has been added in the Multi-function List.
- 2) Set [Word Address] to enter data in. Here, set it to "USR02071".
- 3) Set the action of the switch. Here, set as below.
 Word Action: Write Data
 Data Type: Dec
 Bit Length: 16 Bit
 Constant: 0



(6) Switch Feature <3>

- 1) Add another [Word Switch] in the same way.
- 2) Set [Word Address] to enter data in. Here, set it to "USR02072".
- 3) Set the action of the switch. Here, set as below.
 Word Action: Write Data
 Data Type: Dec
 Bit Length: 16 Bit
 Constant: 0



★ One Point

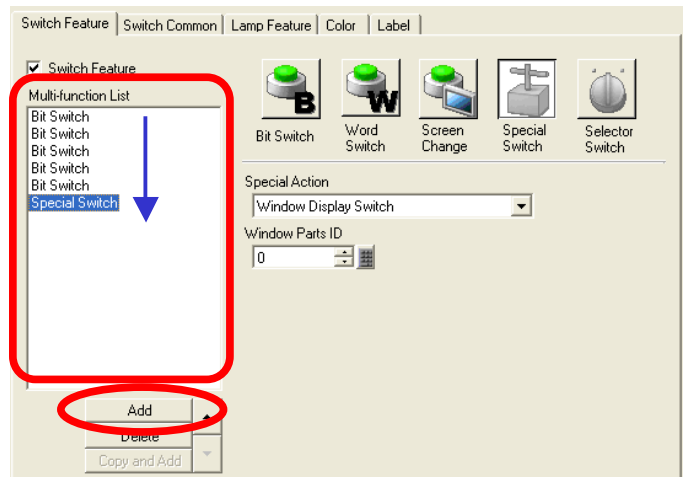
Multi-function List

Up to 16 switch features can be set in the multi-function list.

These features are executed in descending order in the list.

Note

- [Change Screen Switch] and [Special Switch] cannot be set in the same list. Either one can be set in the list.
- [Change Screen Switch] is always listed in the bottom of the list.



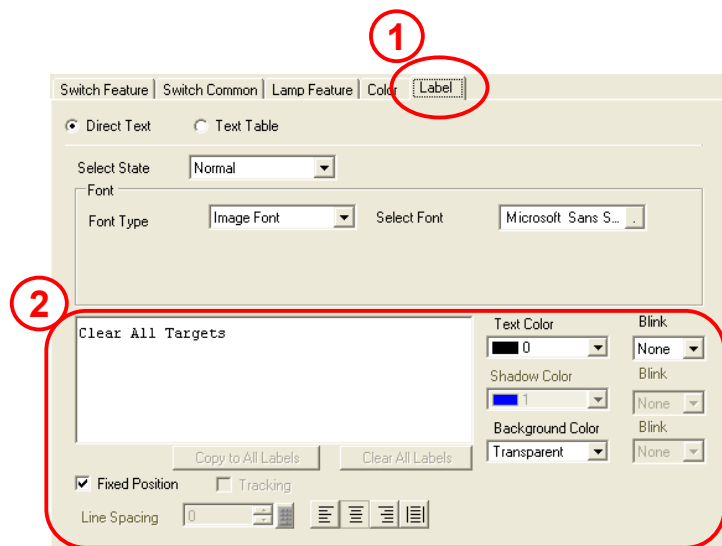
(7) Label

1) On the [Label] tab, select [Direct Text].

2) Enter "Clear All Targets".

Set the font and colors as you like.

3) Click [OK] to finish the settings.



5. 5

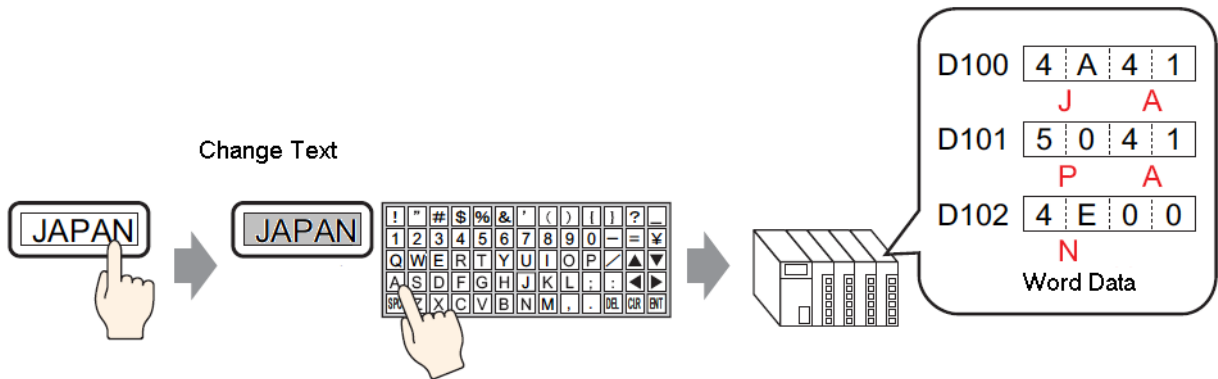
Text Data Input



Instruction

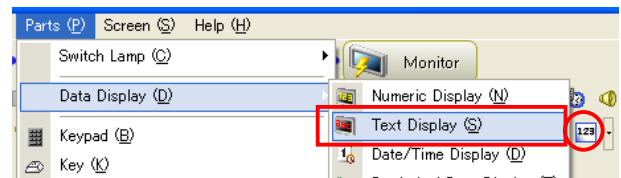
Enter Text Data

To enter text data from a popup keyboard, use the “Data Display: Text Display (Allow Input)” feature.

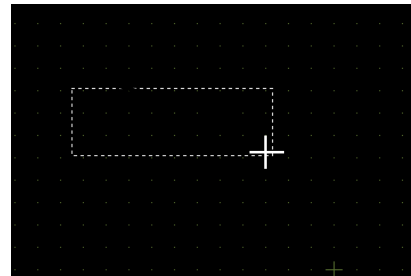


• Procedures of Placement/Setup

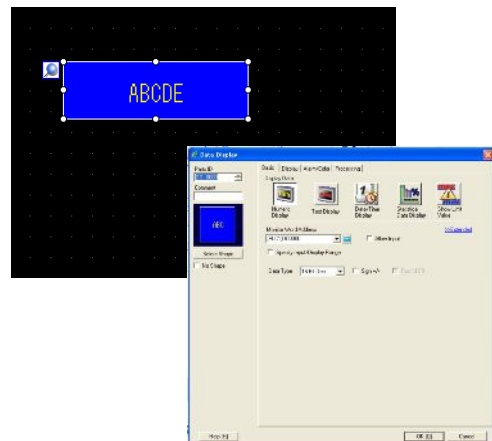
- 1) On the [Parts] menu, select [Data Display] → [Text Display].
Or click the [Data Display] icon.



- 2) Drag the range to place the data display.



- 3) Double-click the data display and make settings.



Let's practice on the next page!



Let's Enter Product Name

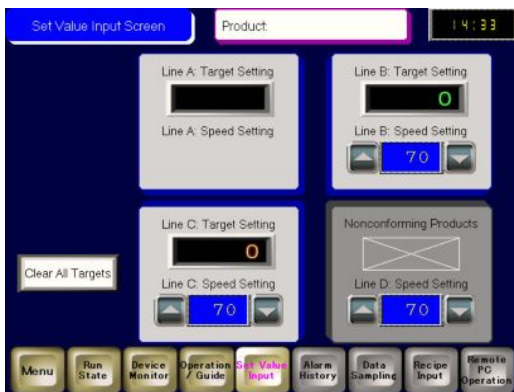
Let's enter a product name from a popup keyboard!

[Setup Procedure]

1. Open the base screen "5".
2. Select, place, and set the Data Display: Text Display.

Open the base screen "5".

<Practice Screen>



<Completed Screen>



(1) Select/Place Data Display

- 1) Click the [Data Display] icon on the tool bar.

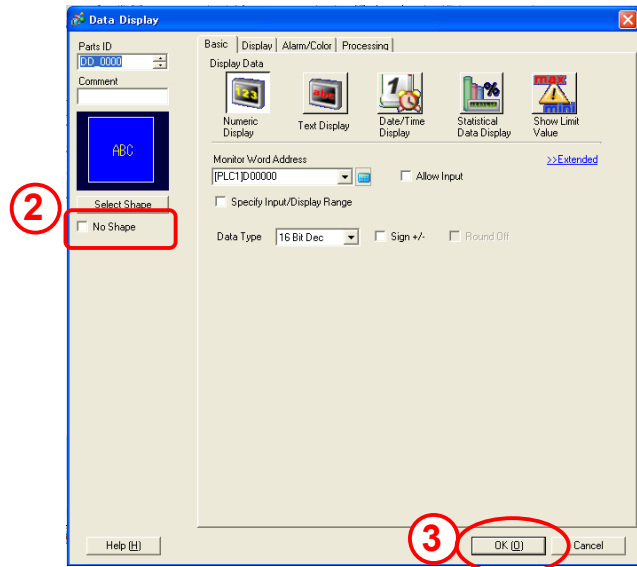


- 2) Drag the range to place the data display.



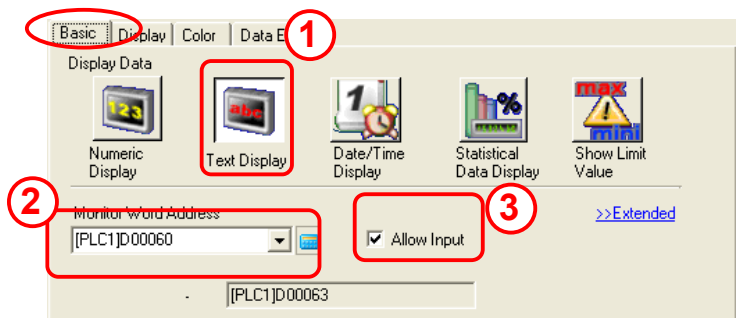
(2) Select Shape

- 1) Double-click the placed data display.
- 2) Check [No Shape].
- 3) Click [OK].



(3) Basic Settings

- 1) Select [Text Display].
- 2) For [Monitor Word Address], set a word address to enter text data in. Here, set it to "USR02060".
- 3) Check [Allow Input].

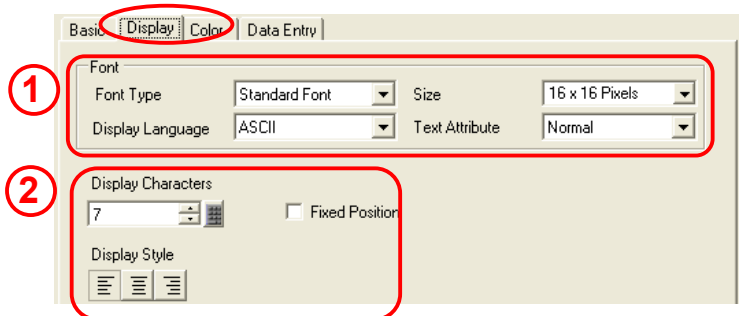


(4) Display Settings

- 1) In the [Font] field, set a font of the texts to display. Here, set as below.

Font Type:	Standard Font
Size:	16 x 16 Pixels
Display Language:	ASCII
Text Attribute:	Normal
- 2) Set as below.

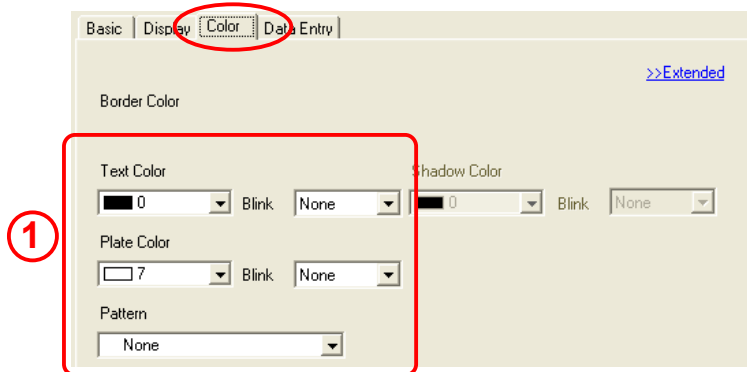
Display Characters:	7
Fixed Position:	Checked
Display Style:	Left Align



* If you check [Fixed Position], the display position will be fixed in the center.

(5) Color Settings

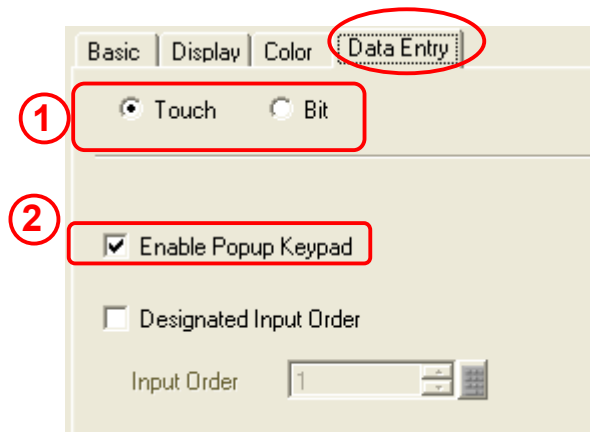
- 1) Text Color: Black: 0
- Plate Color: White: 7
- Blink: None
- Pattern: None



(6) Data Entry

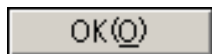
- 1) Select the way to change the data display into the entry mode.
 - Touch:** By touching the data display directly, you can enter a value in it.
 - Bit:** When a specified trigger bit address turns on, you can enter a value in the data display.

Here, select [Touch].



- 2) Select whether the numeric keypad appears automatically or not when the data display is in the entry mode. Here, check [Enable Popup Keypad].

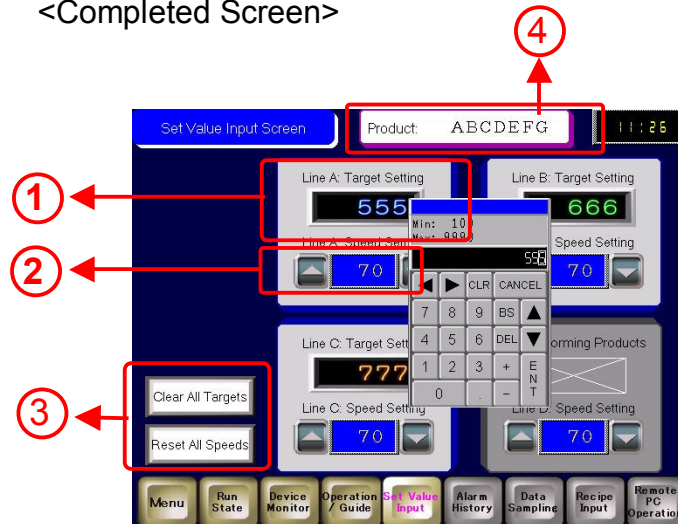
- 3) Click [OK] to finish the settings.





Let's Transfer Data to GP and Check Performance

<Completed Screen>



- 1) Touch the data displays and change the target values from the popup keyboard.
- 2) Change the speed values with addition and subtraction switches.
- 3) Clear the target values of all lines.
- 4) Touch the data display and enter a product name from a popup keyboard.