16 Keypad Input
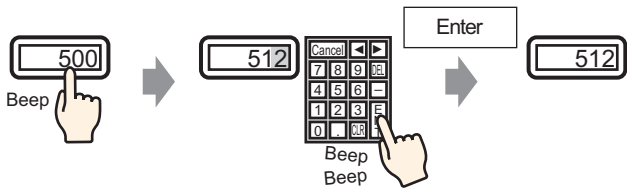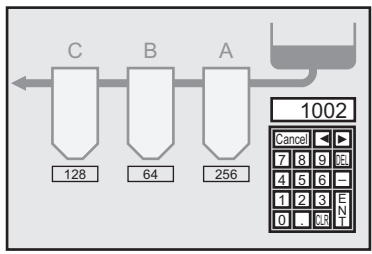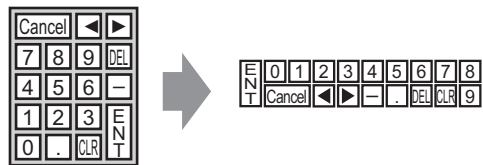
This chapter explains the "Keypad" in GP-Pro EX and the basic setup. Please start by reading "16.1 Settings Menu" (page 16-2) and then turn to the corresponding page.

16.1 Settings Menu

Popup Keypad Display

Displays a keypad on the screen only when necessary (when inputting data).

Touch a field and...   A popup keypad appears.

Enter

) Setup Procedure (page 16-4)
) Introduction (page 16-3)

Constant Keypad Display

Places a keypad directly on the screen. A permanent keypad will appear.

) Setup Procedure (page 16-8)
) Introduction (page 16-7)

Customizing the Keypad Layout

Allows the user to rearrange the keypad buttons.

) Setup Procedure (page 16-11)
) Introduction (page 16-10)

16.2　Popup Keypad Display

16.2.1　Introduction

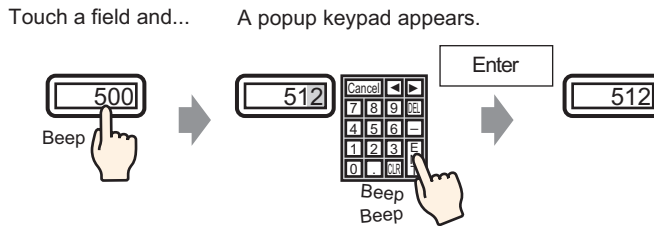The keypad appears on the screen only when necessary.
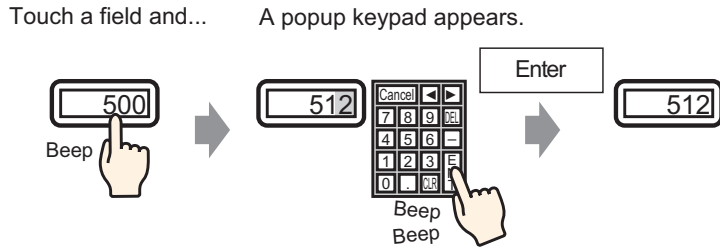
16.2.2 Setup Procedure

NOTE	• Please refer to the settings guide for details.
	☞ "14.11 Data Display Settings Guide" (page 14-42)
	• For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
	☞ "9.6.1 Editing Parts" (page 9-38)

Displays a keypad on the screen only when necessary (when inputting data).

Touch a field and...   A popup keypad appears.

```
                        ┌──────────┐
                        │   Enter  │
┌─────────┐     ┌─────────┐┌────────┐     ┌─────────┐
│     500 │  ▶  │     512 ││Cancel◀▶│  ▶  │     512 │
└─────────┘     └─────────┘│7 8 9 BS│     └─────────┘
  Beep 👆                   │4 5 6 −│
                           │1 2 3 E│
                           │0 . CR │
                           └────────┘
                              Beep 👆
                              Beep
```

1 From the [Parts (P)] menu, point to [Data Display (D)] and select [Numeric Display (N)], or click the 123 icon, and place it on the screen.

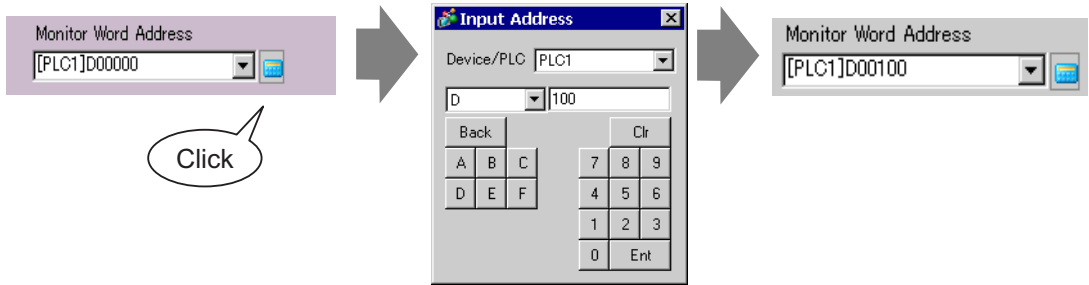2 Double-click the placed Data Display. The following dialog box appears.
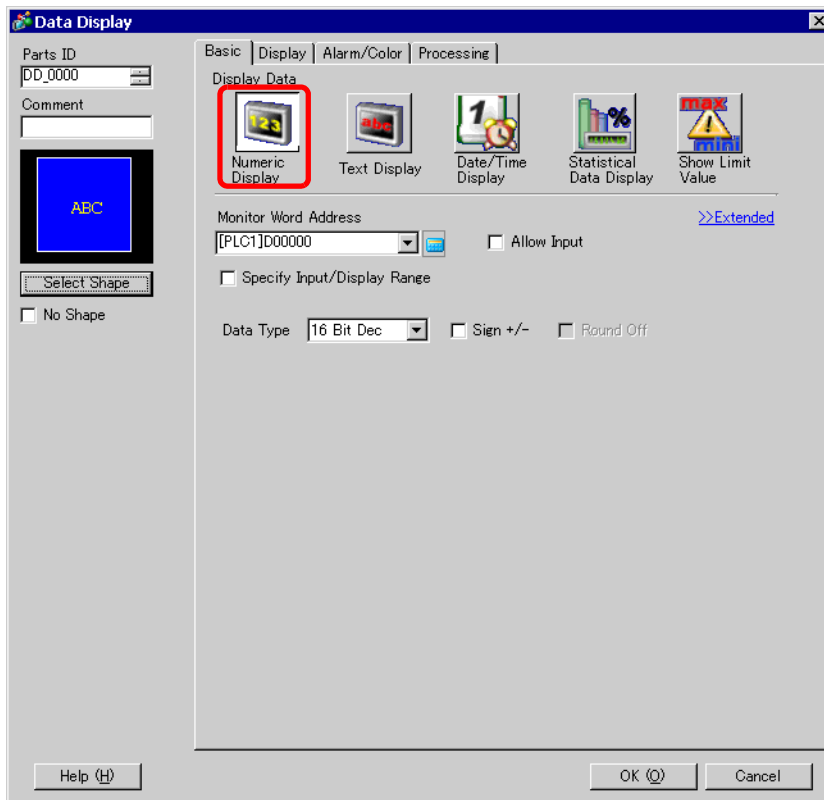
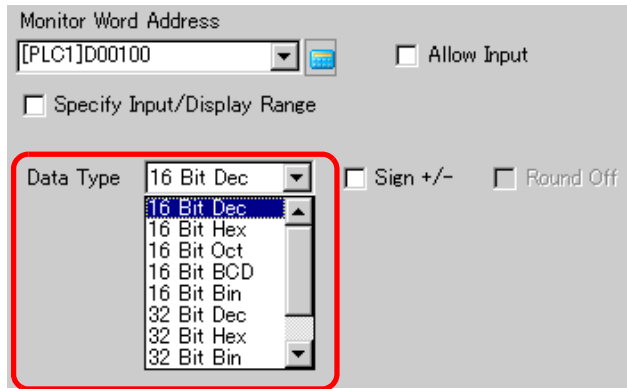3 Select the Data Display shape from [Select Shape].

4 In [Monitor Word Address], set the address (D100) which will store the inputted value.
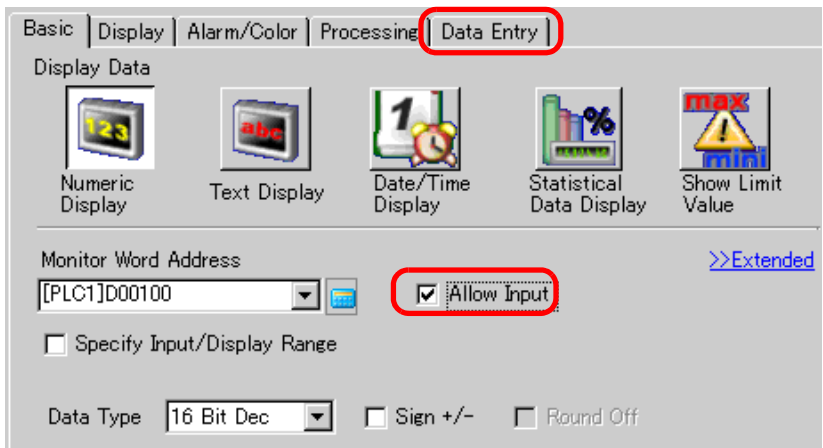
Click the icon to display an address input keypad.

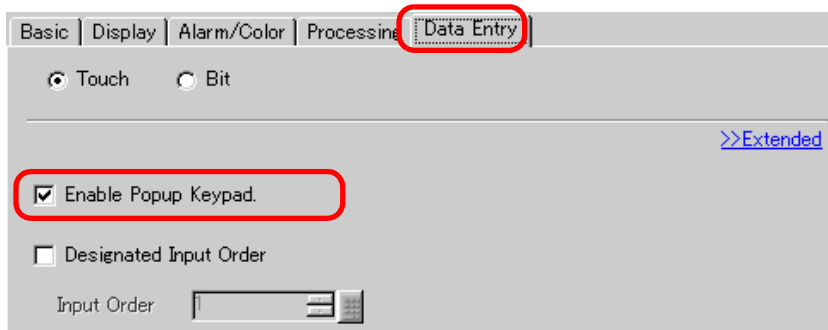Select device "D", input "100" as the address, and press the Enter key.

Monitor Word Address
[PLC1]D00000

Click

Input Address

Device/PLC PLC1

D　100

Back　　　　　Clr

A　B　C　　　7　8　9
D　E　F　　　4　5　6
　　　　　　　1　2　3
　　　　　　　0　　Ent

Monitor Word Address
[PLC1]D00100

5 Set the type of data to display (for example "16 Bit Dec") in [Data Type].

Monitor Word Address
[PLC1]D00100　　　　　　☐ Allow Input

☐ Specify Input/Display Range

Data Type　16 Bit Dec　　☐ Sign +/-　☐ Round Off

16 Bit Dec
16 Bit Hex
16 Bit Oct
16 Bit BCD
16 Bit Bin
32 Bit Dec
32 Bit Hex
32 Bit Bin

6 Select the [Allow Input] check box. Once you select the [Allow Input] check box, the [Data Entry] tab appears and you can input numeric data.

Basic | Display | Alarm/Color | Processing | Data Entry |

Display Data

Numeric Display　　Text Display　　Date/Time Display　　Statistical Data Display　　Show Limit Value

Monitor Word Address　　　　　　　　　　>>Extended
[PLC1]D00100　　　　☑ Allow Input

☐ Specify Input/Display Range

Data Type　16 Bit Dec　　☐ Sign +/-　☐ Round Off

7 Click the [Data Entry] tab and the following will appear. Select the [Enable Popup Keypad] check box.
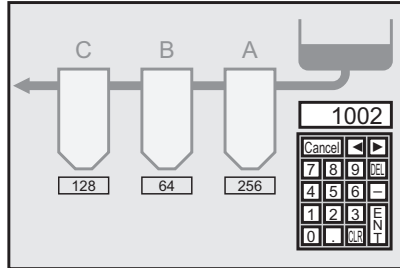

8 As needed, set the Data Display color and text on the [Alarm/Color] tab and [Display] tab, and click [OK].

16.3 Constant Keypad Display

16.3.1 Introduction

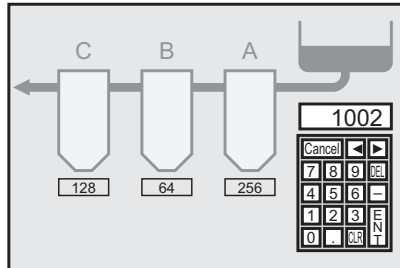Places a keypad directly on the screen. A permanent keypad will appear.
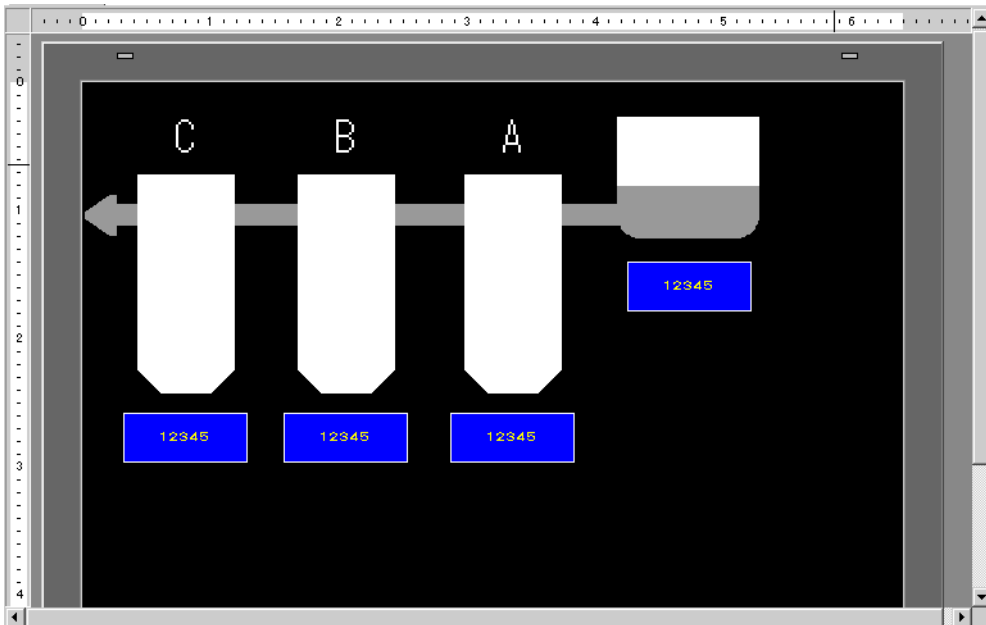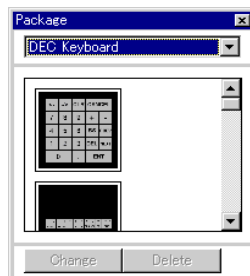
16.3.2 Setup Procedure

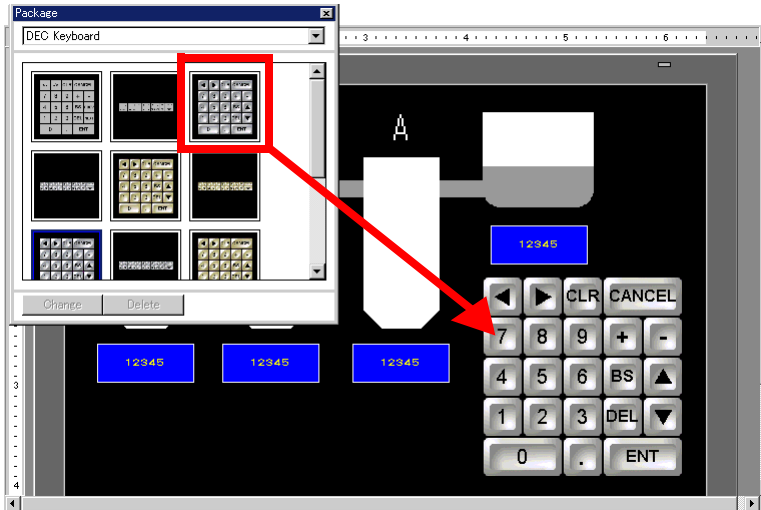Places a keypad directly on the screen. A permanent keypad will appear.

1 Open a drawing screen where you want to place a keypad.

2 From the [Parts (P)] menu, select [Keypad (B)] or click ▦ to display the [Package].
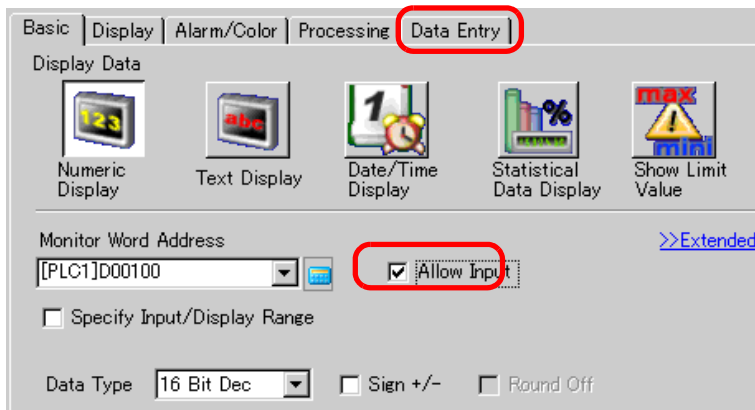
3 Select a keypad to use and place it on the drawing screen. (For example, DEC Keyboard)


The steps to display a permanent keypad on the screen are complete.

4 Set the Data Display Parts to display the data you entered with this keypad. Double-click a data display part to open the [Settings] dialog box.

5 Select the [Allow Input] check box. The [Data Entry] tab will appear.

6 Open the [Data Entry] tab and clear the [Enable Popup Keypad] check box. Now you have the Data Display Parts to display data you directly entered with the keypad.
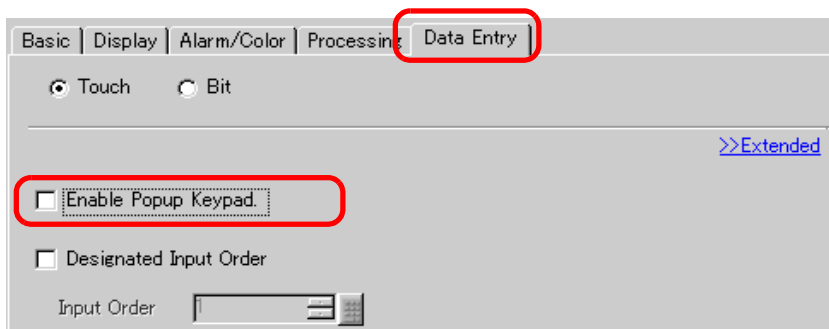
16.4 Customizing the Keypad Layout

16.4.1 Introduction

You can rearrange the existing keypads and create an original keypad. The newly created keypad can be placed permanently on the screen or displayed as popup.
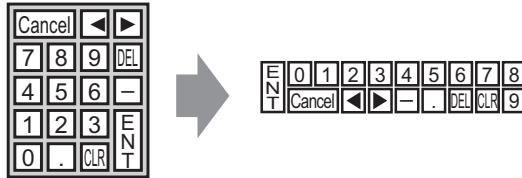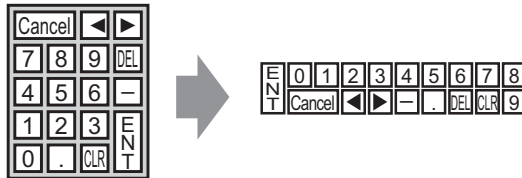
16.4.2   Setup Procedure

■ Displaying the Customized Keypad Permanently on the Screen
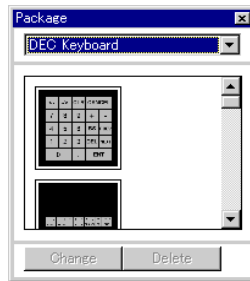
NOTE	• Please refer to the settings guide for details.
	☞ "16.5.4 Packages Settings Guide" (page 16-36)

Display the customized keypad permanently on the screen.

1 From the [Parts (P)] menu, select [Keypad (B)] or click 🎹 to display the following [Package].

2 Select a keypad to customize and place it on the drawing screen. (For example, DEC Keyboard)
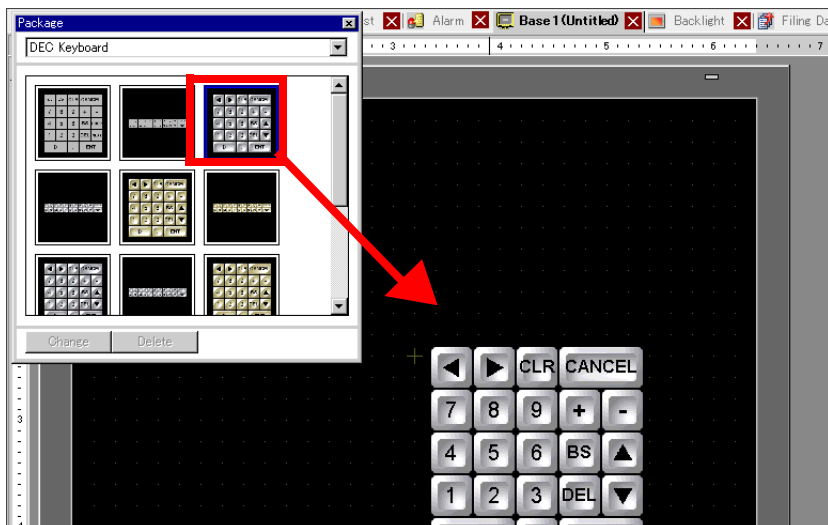
3 Select the placed keypad, right-click, and select [Ungroup (U)] from [Group (G)]. Now you can rearrange the keys.
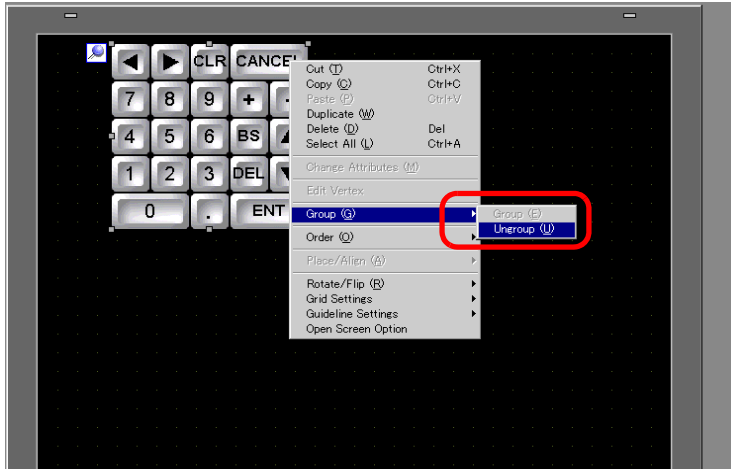
4 Rearrange the ungrouped keys.

5 Select all the customized keypads, right-click, and select [Group (E)] from [Group (G)]. The keypad customization is complete.
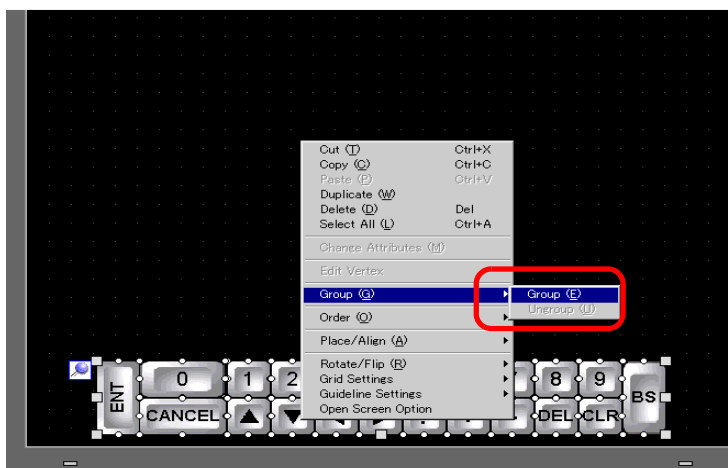
6 Register the customized keypad in [Package]. Then you can refer to the Package when you use the customized keypad on another drawing screen. Select the [View (V)] menu - [Package (P)] command or click , and the following [Package List] dialog box appears.
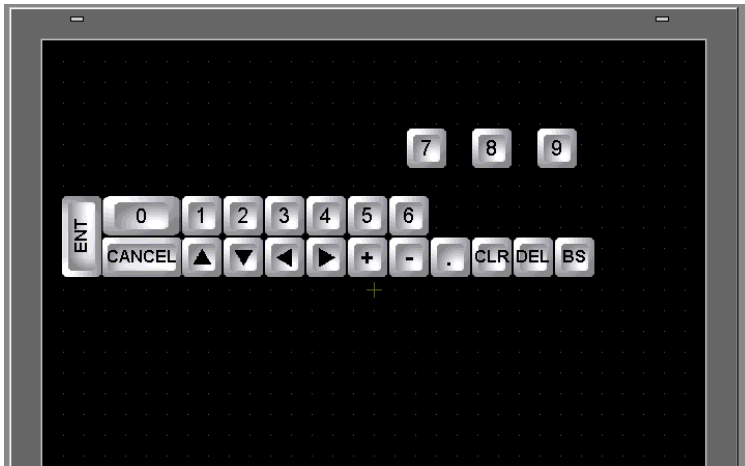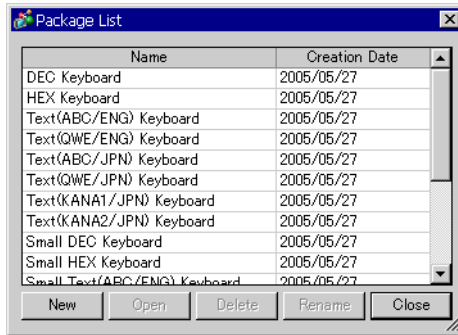

7 Click [New]. The [New Package] dialog box appears. Set a package name. (For example, Keypad)
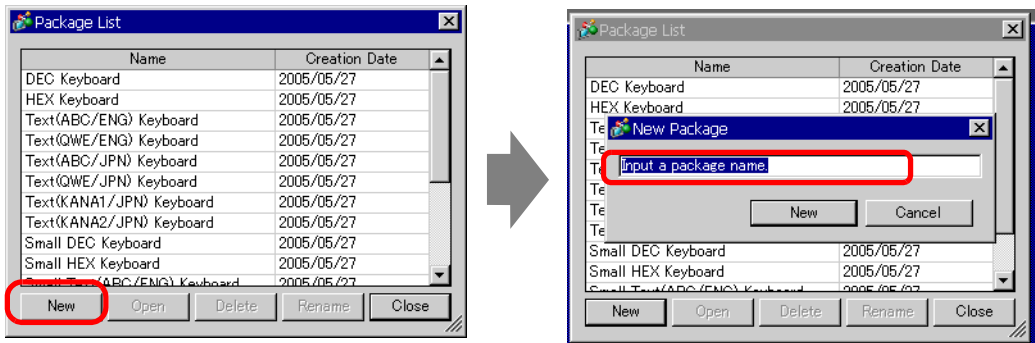
8 Click [OK] on the [New Package] dialog box to return to the [Package List] dialog box, where the new package displays.
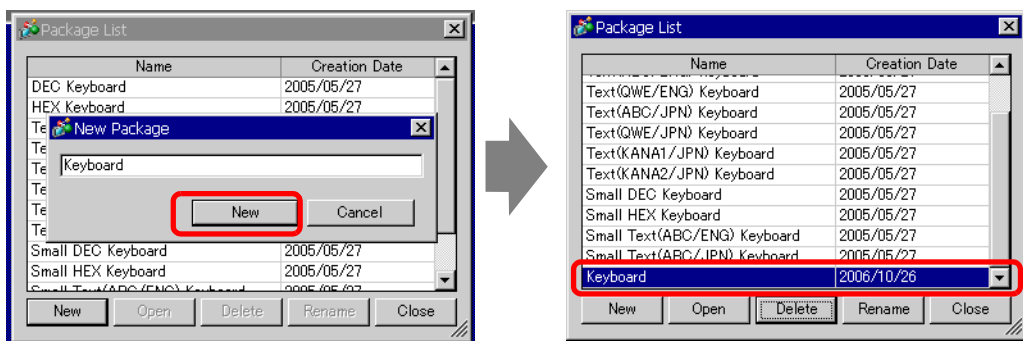
9 On the [Package List] dialog box with a new package name selected, click [Open]. The following dialog box appears.
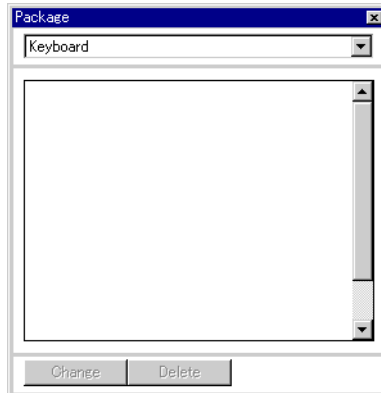
10 Drag the customized keypad to the [Package] dialog box.
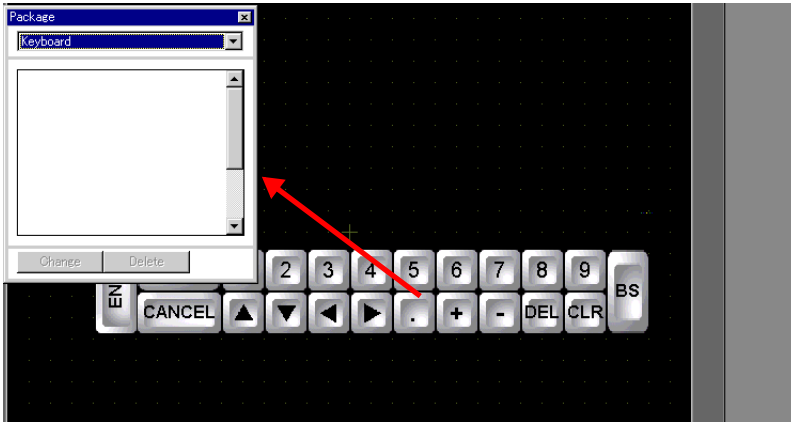
11 The customized keypad has been registered in the [Package].
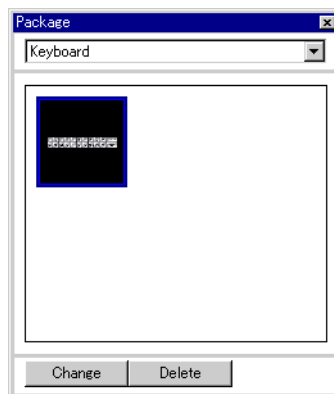
| NOTE | • A combined 200 drawings, parts, and keypads can be registered in one [Package]. |

■ **Displaying the Customized Keypad as Popup**

NOTE	• Please refer to the settings guide for details.

☞ "16.5.2 Common (Keypad Registration) Settings Guide" (page 16-23)

☞ "16.5.4 Packages Settings Guide" (page 16-36)

☞ "14.11 Data Display Settings Guide" (page 14-42)

• For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".

☞ "9.6.1 Editing Parts" (page 9-38)

1 From the [Common Settings (R)] menu, select [Keypad Registration (K)]. The [New Keypad/Open] dialog box appears.
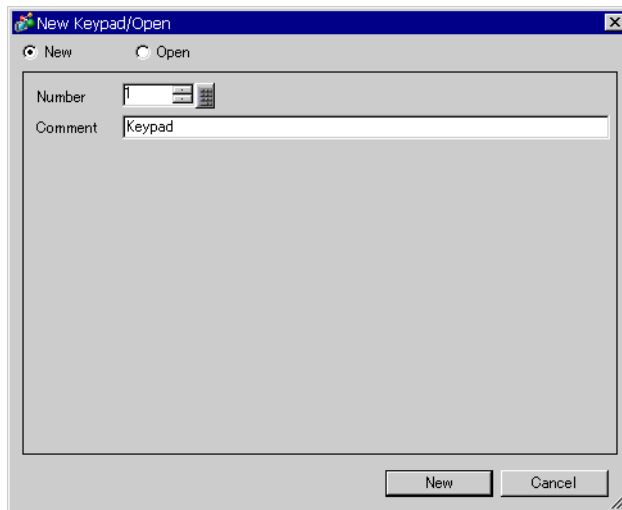
2 Set the [Number] and [Comment] and then click [OK]. (For example, [Number] 1, [Comment] test)
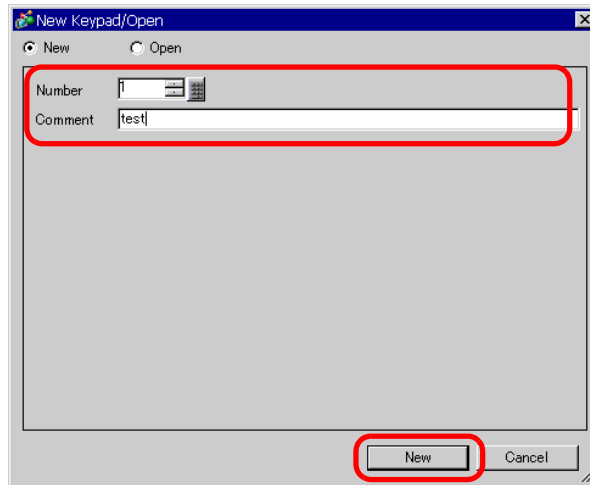
3 The screen to create the [Clear Area] is appears.
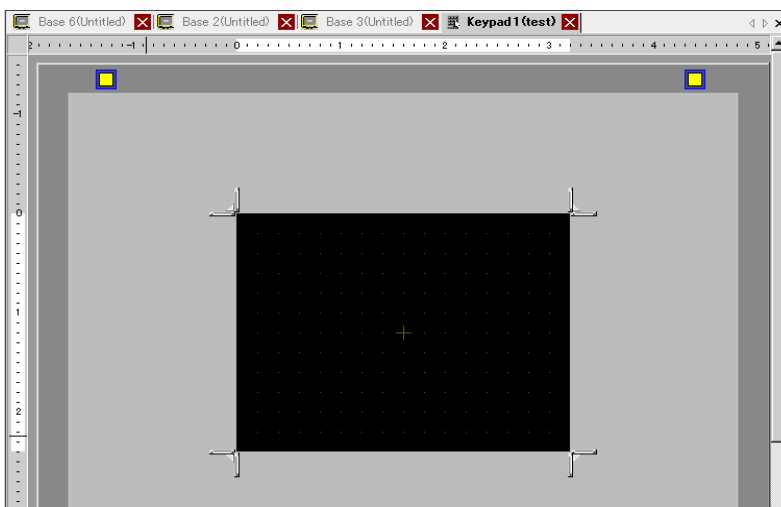
4 From the [View (V)] menu, select [Package (P)] or click . The [Package List] dialog box appears displaying a list of registered packages.

Name	Creation Date
DEC Keyboard	2005/05/27
HEX Keyboard	2005/05/27
Text(ABC/ENG) Keyboard	2005/05/27
Text(QWE/ENG) Keyboard	2005/05/27
Text(ABC/JPN) Keyboard	2005/05/27
Text(QWE/JPN) Keyboard	2005/05/27
Text(KANA1/JPN) Keyboard	2005/05/27
Text(KANA2/JPN) Keyboard	2005/05/27
Small DEC Keyboard	2005/05/27
Small HEX Keyboard	2005/05/27
Small Text(ABC/ENG) Keyboard	2005/05/27
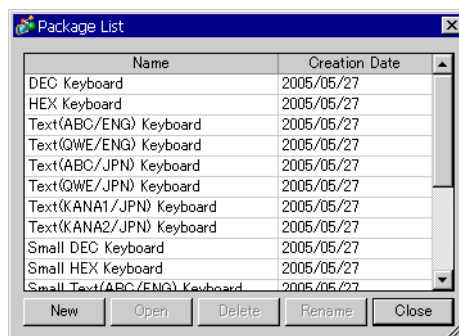
NOTE
• Register keypads in [Package] in advance.
) " ■ Displaying the Customized Keypad Permanently on the Screen" (page 16-11)

5 Select the package name (for example, Keypad) that is registered with the keypad you want to use, click [Open], and the [Package] dialog box appears.
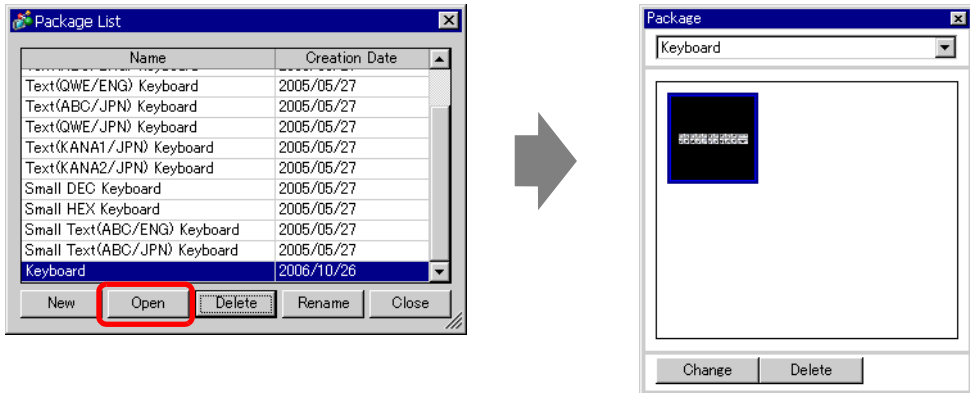
6 Select a keypad to use and place it on the [Clear Area].
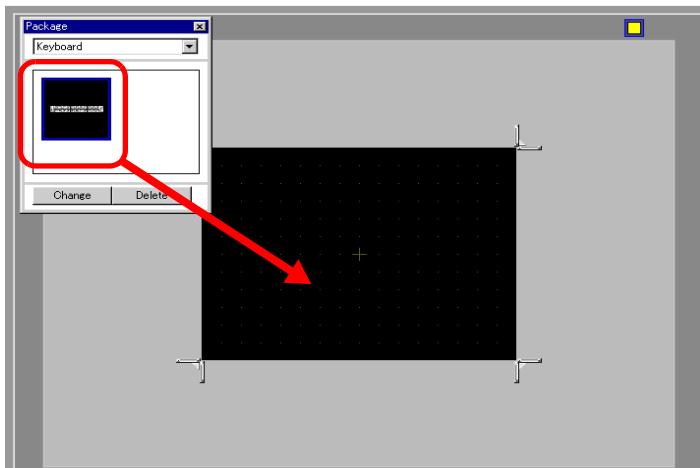
7 Create the [Clear Area]. Drag the [Resize Boundary] ⌐⌐ ⌐⌐ in the four corners of the [Clear Area] setting screen to change the size. The [Resize Bound] button you drag with the mouse cursor determines the direction in which the clear area size changes.
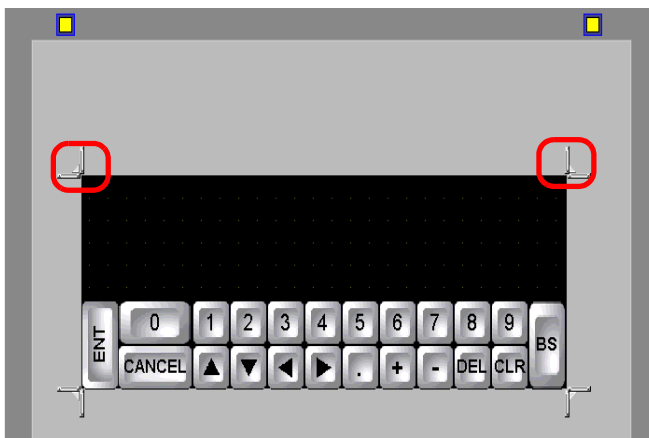
NOTE

• [Clear Area] is the area that overwrites and hides the previously displayed keypad.
  ☞ " ■ Clear Area" (page 16-26)

8 Click the [Base 1] tab to move to the base screen.

9 Configure settings to call the customized keypad with a Data Display Part. From the [Parts (P)] menu, point to [Data Display (D)] and select [Numeric Display (N)], or click the 123 icon, and place it on the screen.

10 Double-click the placed Data Display. The following dialog box appears.
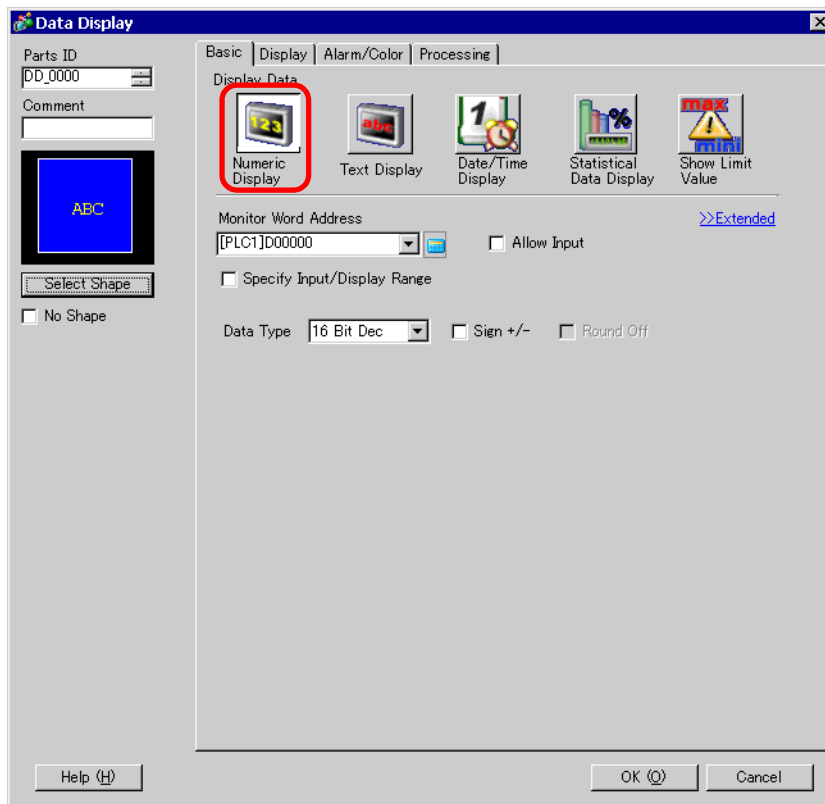
11 Select the Data Display shape from [Select Shape].

12 In [Monitor Word Address], set the address (D100) which will store the inputted value.

Click the icon to display an address input keypad.

Select device "D", input "100" as the address, and press the Enter key.
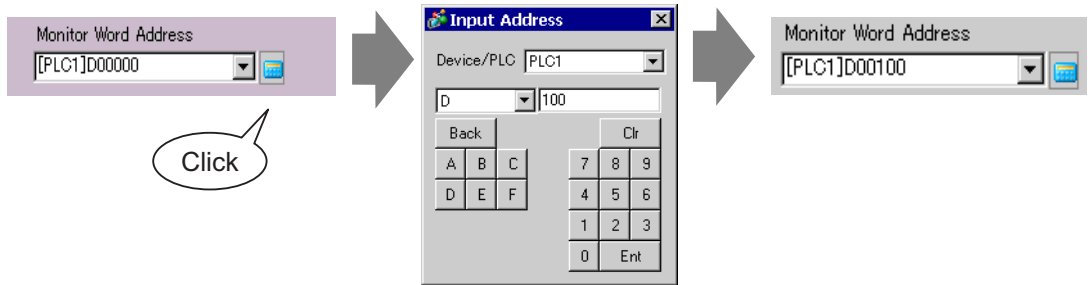
13 Set the type of data to display (for example "16 Bit Dec") in [Data Type].
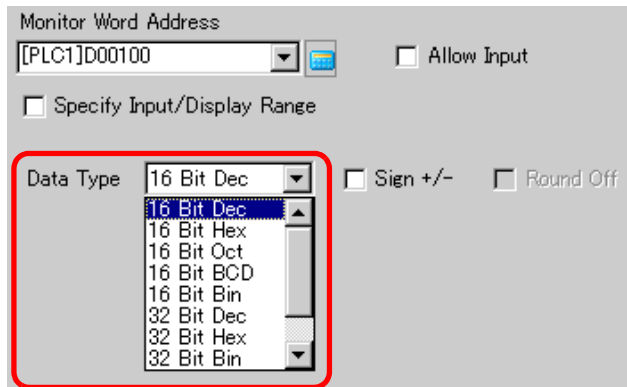
14 Select the [Allow Input] check box. Once you select the [Allow Input] check box, the [Data Entry] tab appears and you can input numeric data.
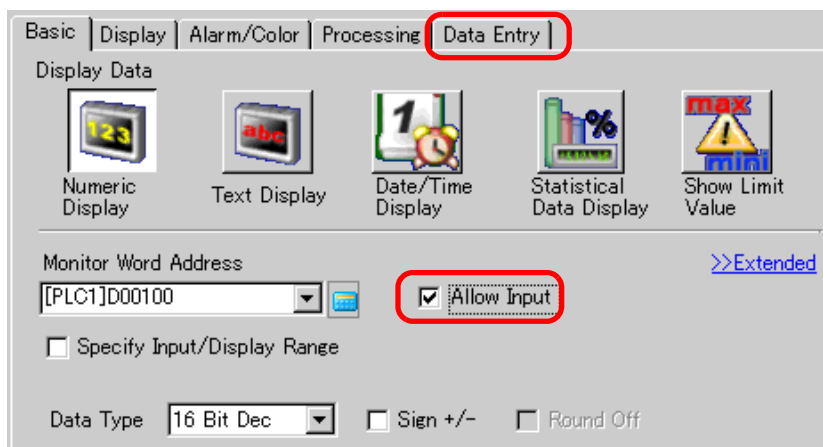
15 Click the [Data Entry] tab and the following will appear. Select the [Enable Popup Keypad] check box.
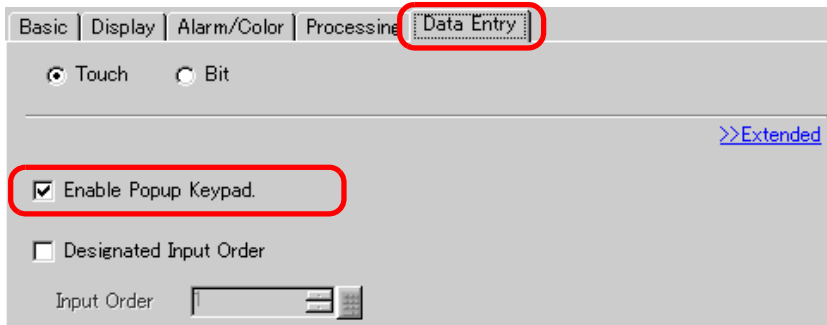
16 Click [Extended].
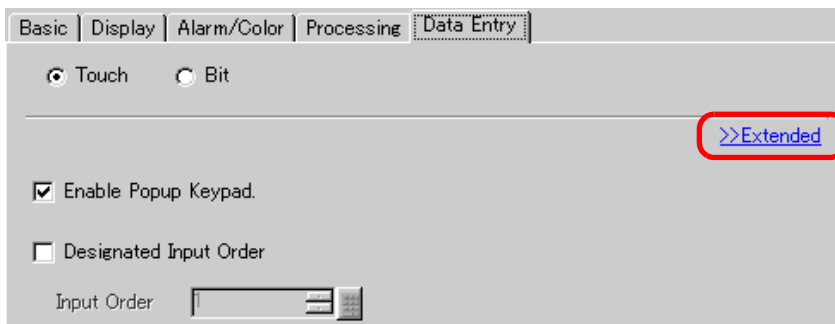
17 In the [Extended] screen, select the [User Keypad] check box and set the [Keypad] screen number (for example, 1) with the keypad setting to the [Keypad].
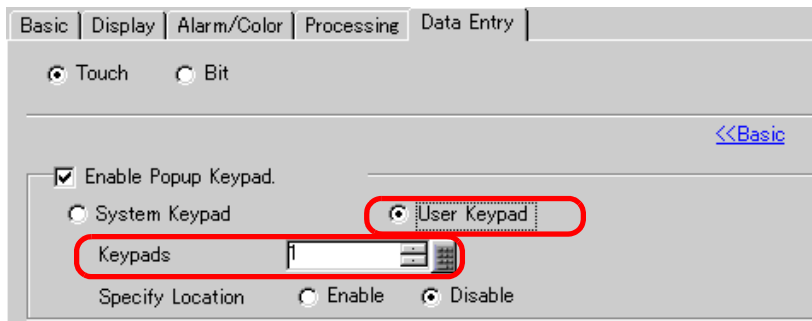
18 As needed, set the Data Display color and text on the [Alarm/Color] tab and [Display] tab, and click [OK].

16.5 Setup Guide

16.5.1 Keypad Settings Guide

■ System Keypad

If you permit input to a Data Display Part, a keypad for numeric input or for text input will be selected automatically and displayed in a popup window.

[Data Type]	Dec	Hex	Text
Keypad Specifications			**NOTE** • The displayed keypad depends on the GP model size.
0 to 9	Numeric key (0 to F for Hex) Inputs the displayed numeric values.		
A to Z Other Symbols	-	-	Text key Inputs the displayed characters and symbols.
DEL	Delete key Erases the numeric value, character, or symbol in the cursor position.		
BS	Back Space key Erases the numeric value or symbol to the left of the cursor position.	-	Back Space key Erases the numeric value or symbol to the left of the cursor position.
CLR	Clear key Clears the setting value being displayed. If you touch the [CLR] key, "0" will be displayed in the area (For text, it will disappear). If you touch the [ENT] key in this state, the data "0" will be written to the device/PLC data storage address (For text, the space code will be written).		
E N T	Enter key Determines the setting value being displayed and writes it to the device/PLC data storage address.		
◀ ▶	Cursor Motion key Moves the cursor to the right and left on a Data Display Part.		

Continued

[Data Type]	Dec	Hex	Text
▲ ▼	Area Migration key If multiple data display parts are placed, the system leaves the previous or next Data Display Part in the waiting-for-input state without inputting the setting value. You can skip to the Data Display Part that you want to input. * When the [Data Display Part] [Allow Input] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Allow Input Bit Address] needs to be the same address.		
+ -	Plus/Minus key This key can be used only when the Data Display Part's [Data Type] is [Dec] and the [Sign +/ -] is selected.	-	Minus key Inputs the "−" as a symbol.
.	Decimal Point key This key becomes an input switching key between the integer part and the fractional part when the Data Display Part's [Data Type] is [Dec] or [BCD].	-	Decimal Point key Inputs the "." as a symbol.
CANCEL	Cancel key Cancels the input. When you use the Data Display Part popup keypad, the popup keypad closes without determining the input.		-
ESC	-	-	Escape key Cancels the input. When you use the Data Display Part popup keypad, the popup keypad closes without determining the input.
SPACE	-		Space key Inputs a space.

■ User Keypad

If you permit input to a Data Display Part, a keypad selected from the keypads registered in [Package] or freely created keypad displays in a popup window. These keypads can be directly placed on the screen.

☞ "16.5.4 Packages Settings Guide" (page 16-36)

16.5.2 Common (Keypad Registration) Settings Guide

■ Creating Keypads

Open the screen to register a keypad.
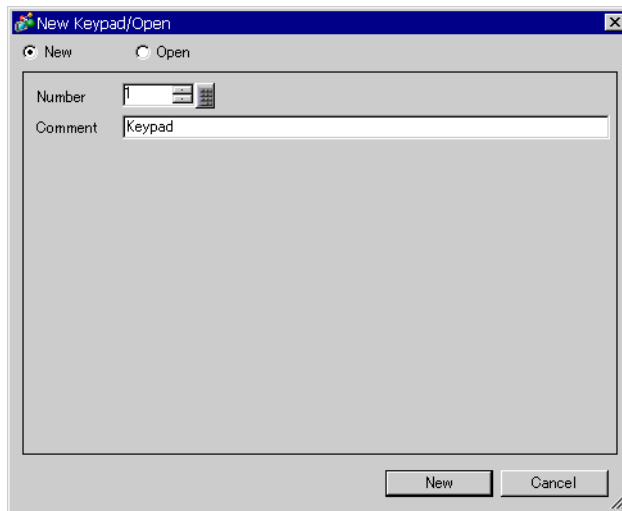
Setting	Description
New	Create a new [Keypad Registration] screen.
Open	Opens a previously created keypad screen.
Number	Set a number for the [Keypad Registration] screen from 1 to 8999.
Comment	Set a comment for the [Keypad Registration] screen within 30 characters.

■ Opening Keypads
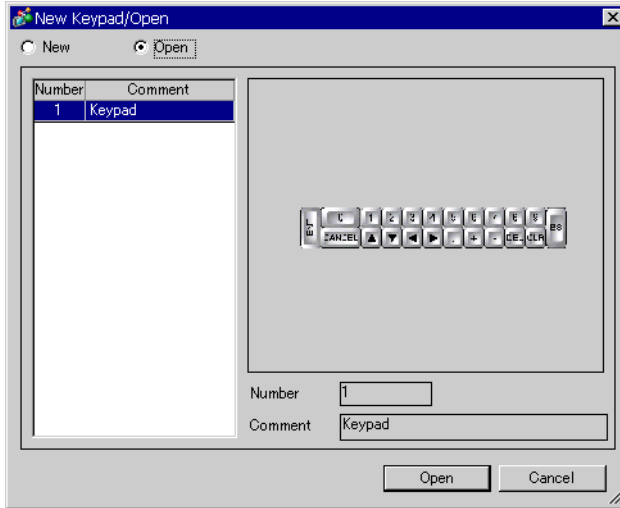
Setting		Description
New		Create a new [Keypad Registration] screen.
Open		Opens a previously created [Keypad Registration] screen.
Keypad List		Displays a list of the [Keypad Registration] screens in a project file.
	Number	Displays the number of each [Keypad Registration] screen.
	Comment	Displays the comment of each [Keypad Registration] screen.
Keypad Preview		Previews the keypad on the [Keypad Registration] screen selected from the [Keypad List].
	Number	Displays the number of the [Keypad Registration] screen selected from the [Keypad List].
	Comment	Displays the comment of the [Keypad Registration] screen selected from the [Keypad List].
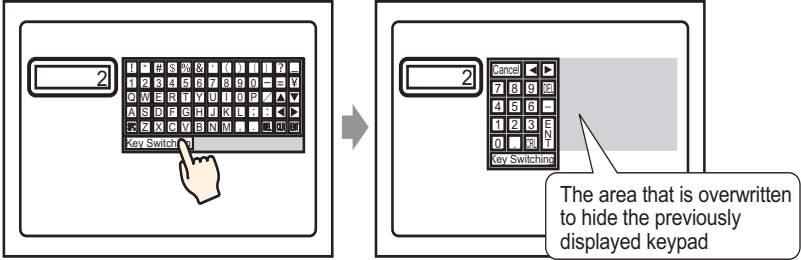
■ **Keypad Registration**
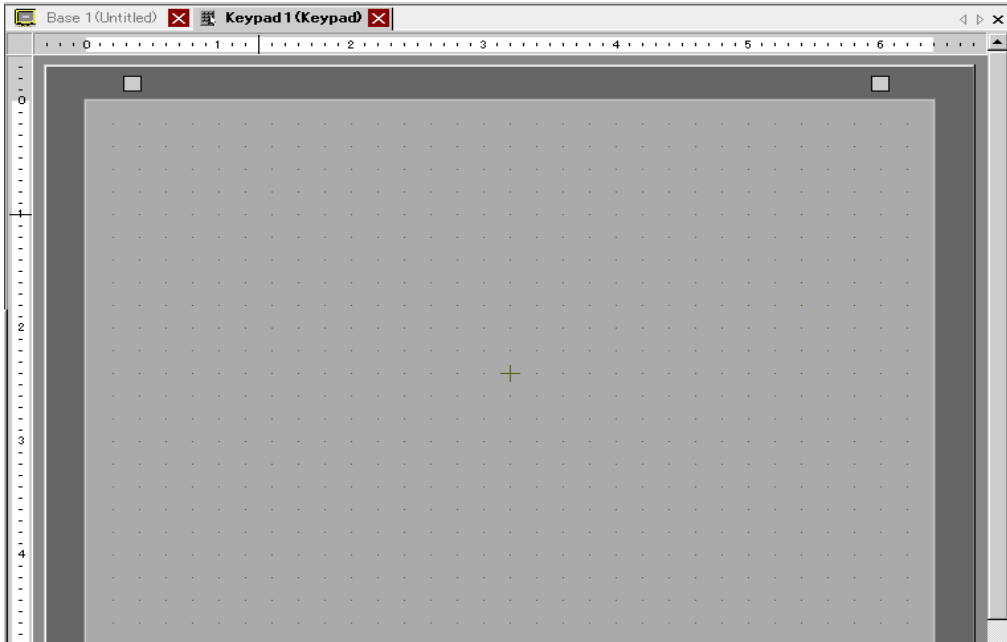
Setting	Description
Set Clear Area Button ☐	This button is used to set the [Clear Area].
Editing Area	This is an area in which to edit a keypad.

■ **Clear Area**
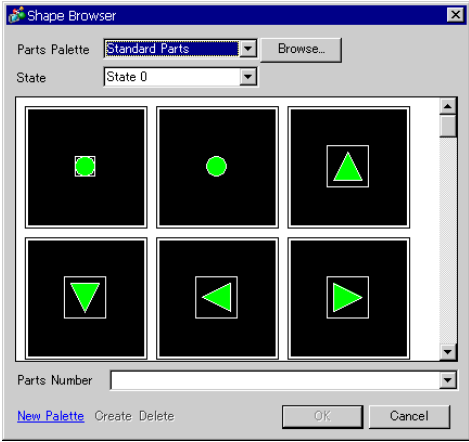
Setting	Description
Release Clear Area Button 🟨	Releases the [Clear Area] display and returns to a [Keypad] screen.
Clear Area	A clear area is an area that is overwritten to hide the previously displayed keypad when a large keypad is switched to a small one.
Resize Bound	Changes the size of a [Clear Area]. The [Resize Bound] button you drag with the mouse cursor determines the direction in which the clear area size can be changed.

16.5.3 Key Part Settings Guide
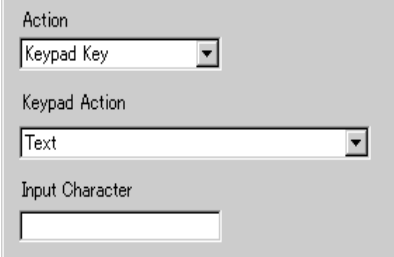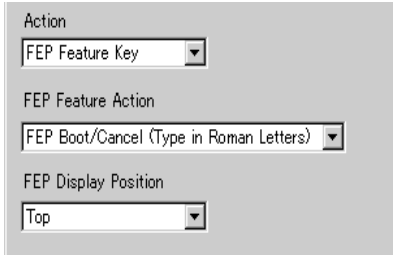
Set the key for each keypad.
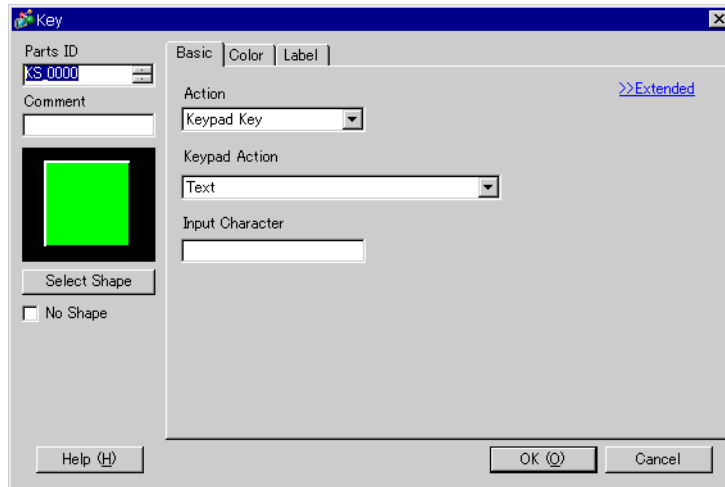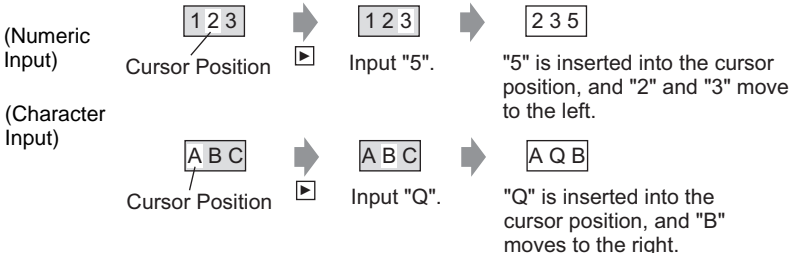
Setting	Description
Part ID	Placed parts are automatically assigned an ID number. Key Part ID: KS_**** (4 digits) The letter portion is fixed. The number portion can be modified from 0000 to 9999.
Comment	The comment for each part can be up to 20 characters long.
Part Shape	Displays the shape that you chose for the Part with [Select Shape].
Select Shape	Open the Select Shape dialog box to choose the Part shape.
No Shape	Select whether or not the Part will be transparent with no shape.

■ **Basic Settings/Basic**
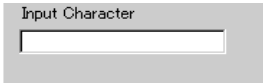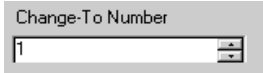
Setting	Description
Action	Select the Key Part type. • Keypad Key Set a keypad input key. • FEP Feature Key You can use the Kana/Kanji conversion method when inputting Japanese on the GP. This feature is called Japanese FEP Feature. Sets an input key for the Japanese FEP Feature keypad. **NOTE** • This feature can be used only when the Data Display Part [Text Display] is selected and [Japanese] is selected for the [Display Language] under [Font] on the [Display] tab.

Continued

Setting		Description
	Keypad Action	Select the action of a keypad key from [Text], [ENT], [BS], [CLR], [DEL], [↑], [↓], [←], [→], [Change Keypad], and [Cancel (For Popup Window)]. Keypad Action Text ▼
Action	[ENT], [BS], [CLR], [DEL], [↑], [↓], [←], [→], [Cancel (For Popup Window)]	• ENT Determines the data being inputted. • BS Erases the character to the left of the cursor position. • CLR Clears all the data being inputted. • DEL Erases the character in the cursor position. • ↑, ↓ If multiple data display parts are placed, the system leaves the previous or next Data Display Part in the waiting-for-input state without inputting the setting value. You can skip to the Data Display Part that you want to input. * When the [Data Display Part] [Allow Input] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Allow Input Bit Address] also needs to be ON. For example, For [↑] action K1 \[1 2 3\] K1 \[1 2 3\] K2 \[6 \] ▲ K2 \[4 5 6\] **NOTE** • When inputting characters to be converted with the FEP feature, this key moves the cursor to the top or last of the characters. When pages of convert-to characters are displayed, it switches the display to the previous or the next page. • →, ← Moves the cursor to the right or left during input. For example, For [→]'s action (Numeric Input) \[1 2 3\] ▶ \[1 2 3\] ▶ \[2 3 5\] Cursor Position ▶ Input "5". "5" is inserted into the cursor position, and "2" and "3" move to the left. (Character Input) \[A B C\] ▶ \[A B C\] ▶ \[A Q B\] Cursor Position ▶ Input "Q". "Q" is inserted into the cursor position, and "B" moves to the right. • Cancel (For Popup Window) Closes a popup keyboard and erases all the inputted characters.
	Text	Set a key to input text.

Continued

Setting				Description
Action			Input Character	Set the text to input on a Key Part. Set one character. Input Character
	Keypad Action	Change Keypad		Set a key to change keypad screens. **NOTE** • If a keypad is placed directly on the base screen, you cannot set [Change Keypad].
			Change-To Number	Set the change-to keypad screen number from 1 to 8999. Change-To Number 1
	FEP Feature Action			Select the FEP feature key action from [FEP Boot/Cancel (Type in Roman Letters)], [FEP Boot/Cancel (Type in Hiragana)], [Kana Conversion], [Input Mode Change], or [Cancel (For FEP Feature)].

		FEP Boot/ Cancel (Type in Roman Letters), FEP Boot/ Cancel (Type in Hiragana)		• FEP Boot/Cancel (Type in Roman Letters)
				  Boots/cancels the FEP (Type in Roman letters) each time you touch the keypad.
				• FEP Boot/Cancel (Type in Hiragana)
				  Boots/cancels the FEP (Type in Hiragana) each time you touch the keypad.

			FEP Display Position	Select the display position of the Japanese FEP Window from [Top] or [Bottom]. When [Top] is selected 変換文字入力 ローマ字＊ When [Bottom] is selected 変換文字入力 ローマ字＊ **NOTE** • This can be set only when the [FEP Feature Action] is [FEP Boot/Cancel (Type in Roman Letters)] or [FEP Boot/Cancel (Type in Hiragana)].

Continued

Setting	Description
Kana Conversion, Input Mode Change, Cancel	• Kana Conversion Changes the character type in the order of Double-byte Katakana→ Single-byte Katakana→Hiragana each time you touch the keypad after the FEP is started. • Input Mode Change Select the input mode from Roman Letters or Hiragana. Performs the toggle switch action between [Roman Letters] and [Hiragana] each time you touch the Input Mode Change key for FEP Feature. Combine this key with the [Change Keypad] key. **NOTE** • When you place the [Change Keypad] key on the [Input Mode Change] key, place them in the order of the [Input Mode Change] key → [Change Keypad] key. If you place them in the reversed order, keypads are changed first and input modes will not be changed. • Cancel Cancels the input of characters to be converted and the display of candidates for conversion.

■ Basic Settings/Details
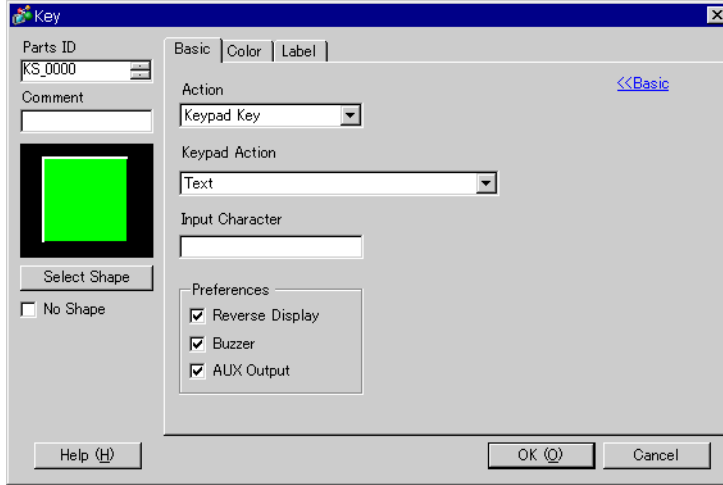
Setting		Description
Continuous Action Feature		Set whether or not to use the feature to repeat the action while pressing a key (Repeat Feature). **NOTE** • This feature can be set only when the [Action] is [Keypad Key] and the [Keypad Action] is [BS], [DEL], [$\uparrow$], [$\downarrow$], [$\leftarrow$] or [$\rightarrow$].
Preferences		Set the options for pressing the key.
	Reverse Display	If selected, while the Key is pressed, the Touch Area display is reversed.
	Buzzer	If selected, when the Key is pressed, the buzzer will sound.
	AUX Output	If selected, the buzzer will sound in an auxiliary output, such as a speaker.
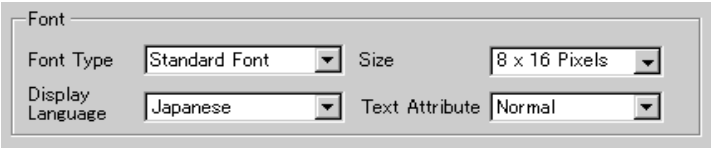
■ **Color**
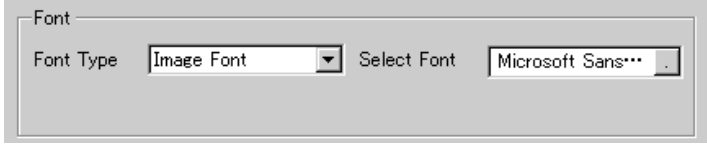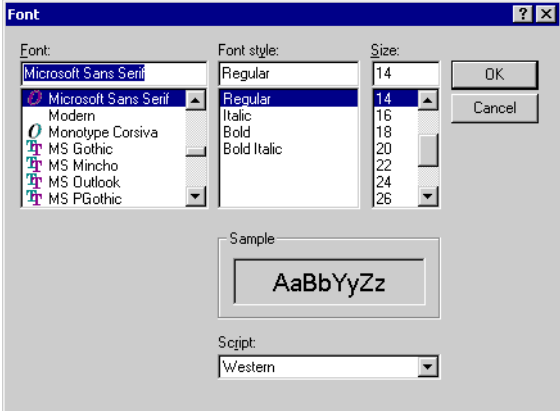
Setting	Description
Display Color	Set a background color for the Key Part.
Pattern	Set a pattern for the Key Part.
Pattern Color	Set a pattern color for the Key Part. **NOTE** • You can only select [Transparent] for the [Pattern Color] when a [Pattern] is set.
Border Color	Set a border color for the Key Part.
Blink	Select whether or not the Part will blink, and the blink speed. You can choose different blink settings for the [Display Color], [Pattern Color], and [Border Color]. **NOTE** • There are cases where you can and can not set Blink depending on the Main Unit and System Settings [Color]. ☞ "9.5.1 Setting Colors ■ List of Available Colors" (page 9-34)

■ **Label**

Setting		Description
Direct Text/Text Table		Select the Label text type. • 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.) "15.7.3 Text Table Settings Guide" (page 15-51)
Font		Set the font for the Key label.
	Font Type	Choose the font type from [Standard Font], [Stroke Font], or [Image Font].
	Standard Font/ Stroke Font	• Standard Font This bitmap font displays quickly, because it is composed of dots. • Stroke Font This vector font maintains its shape when enlarged, because it's framework is described with lines.
	Character Size	Choose a font size for the Key. Standard Font: (8 to 64) x (8 to 128) Standard Font (Fixed Size): [6 x 10], [8 x 3], [13 x 3] Stroke Font: 6 to 127
	Display Language	Select a text language from [Japanese], [ASCII], [Chinese (Traditional)], [Chinese (Simplified)], [Korean], [Cyrillic], or [Thai].
	Text Attribute	Select the text attributes. Standard Font: Choose from [Standard], [Bold], [Shadow] Standard Font (Fixed Size): Choose from [Standard], [Shadow] Stroke Font: Choose from [Standard], [Bold], [Outline]

Continued

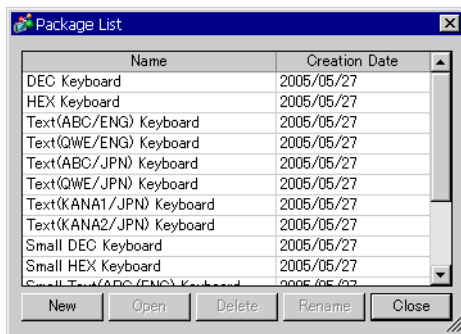| Setting			Description
Font	Image Font		Displays a Windows font as bitmap data. This can be selected when the Text Type is [Direct Text].
	Select Font		The [Font] dialog box appears. Select the font, style, and size.
Text [Input Box]			If [Direct Text] is selected, input the text.
Text Color			Select a color for the text to display.
Shadow Color			When the [Font Type] is [Standard Font] and the [Text Attribute] is [Shadow], set a color for the shadow.
Background Color			Select a background color for the text to display.
Blink			Select whether or not the Part will blink, and the blink speed. You can set different blink settings for [Text Color], [Shadow Color], and [Background Color]. **NOTE** • There are cases where you can and can not set Blink depending on the Main Unit and System Settings [Color]. ☞ "9.5.1 Setting Colors ■ List of Available Colors" (page 9-34)
Fixed Position			When clicked, the Label is positioned in the center of the Key Part.
Row Spacing			Set a value from 0 to 255. This is only applicable when the text is multiple lines to [Text]. This option cannot be used when the [Font Type] is set to [Image Font].
Align			Align the inputted text. If the text is two lines or more, you can select [Align Left], [Align Right], or [Align Center]. When the [Font Type] is [Image Font], you can also select [Align on Both Sides].
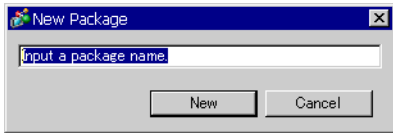
16.5.4 Packages Settings Guide

The Package List of keypads previously registered in GP-Pro EX displays. Also, you can register freely created original keypads, parts, drawings, etc. A combined 200 drawings, parts, and keypads can be registered in one [Package]. Drawings and parts registered in multiple groups are treated as one unit.

Setting	Description
Name	Displays the names of all the packages registered in a project file.
Creation Date	Displays the dates when the packages were registered.
Keypad	Displays a list of Keypads registered in the packages.

Continued

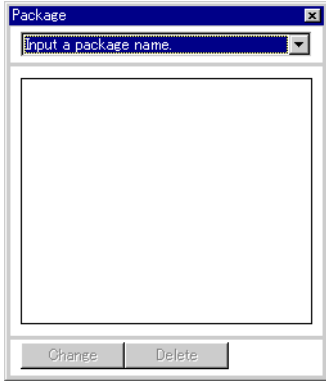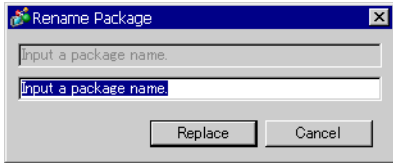| Setting		Description
Keypad	DEC Keyboard	Displays seven types each of vertical and horizontal hexadecimal numeric keypads.
	HEX Keyboard	Displays seven types each of vertical and horizontal hexadecimal numeric keypads.
	Text(ABC/ENG) Keyboard	Displays seven types of full, horizontal, alphabetic keypads. (Keys are arranged in alphabetical order).
	Text(QWE/ENG) Keyboard	Displays seven types of horizontal alphabetical full keypads (The keys are arranged in the same order as a normal keyboard (QWE order)).
	Text(ABC/JPN) Keyboard	Displays seven types of horizontal full keypads for the Japanese FEP feature (Type in Roman Letters) (The keys are arranged in the alphabetical order).
	Text(QWE/JPN) Keyboard	Displays seven types of horizontal full keypads for the Japanese FEP feature (Type in Roman Letters) (The keys are arranged in the same order as a normal keyboard (QWE order)).
	Text(KANA1/ JPN) Keyboard	Displays seven types of horizontal full keypads for the Japanese FEP feature (Type in Hiragana).
	Text(KANA2/ JPN) Keyboard	Displays seven types of horizontal full keypads for the Japanese FEP feature (Type in Hiragana).
	Small DEC Keyboard	Displays two types each of small-sized vertical and horizontal decimal numeric keypads.
	Small HEX Keyboard	Displays two types each of small-sized vertical and horizontal hexadecimal numeric keypads.
	Small Text(ABC/ ENG)Keyboard	Displays six types of small-sized alphabetical full keypads.
	Small Text(ABC/ JPN)Keyboard	Displays six types of small-sized Japanese full keypads, etc.
New		Displays the [New Package] dialog box. Set a name of a new part, drawing, keypad, etc. to register in the package within 64 characters.

Continued

| Setting	Description
Open	Displays the [Package] dialog box. Register parts, drawings, keypads, etc. by dragging them from a drawing screen. You can place the parts, drawings, keypads, etc. previously registered in [Package] on a drawing screen by dragging them. *(image of Package dialog box)*
Delete	Deletes the parts, drawings, keypads, etc. previously registered in [Package].
Rename	Displays the [Rename Package] dialog box. Renames the parts, drawings, keypads, etc. previously registered in [Package]. Set a new name within 64 characters. *(image of Rename Package dialog box)*
Close	Closes the [Package List] dialog box.

16.6   Restrictions

16.6.1   Restrictions for Popup Keypad

- If data display parts that permit input with [Touch] and ones that do with [Bit] ON are both placed, you cannot permit input with [Touch] when there is a data display part with [Bit] ON.
- When a popup keypad placed with [Specify Location] exceeds the GP display screen area, the popup keypad appears in the bottom right corner of the placed data part.
- The popup keypad displays when the [Specify Location] is set to [Disable]
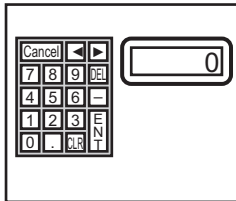
Normally a popup keypad appears to the right of the data display part, starting at the top right corner of the data display part.
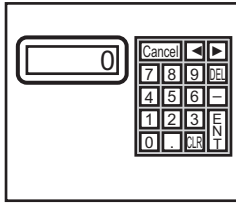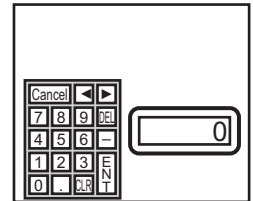
If there is not enough space to display a keypad at the bottom of the screen, the keypad appears with its vertical position adjusted.
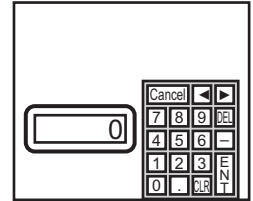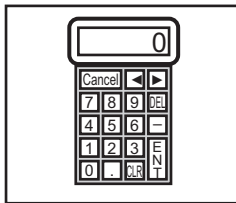
If there is not enough space to display a keypad at the right of the screen, the keypad appears to the left of the data display part, starting at the top left corner of the data display part.

If there is not enough space to display a keypad at the right or bottom of the screen, the keypad appears to the left of the data display part with its vertical position adjusted.

If there is not enough space to display a keypad at the right, left or top of the screen, the keypad appears under the data display part.
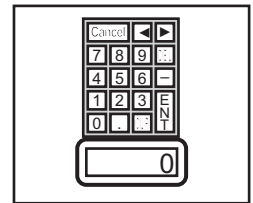
If there is not enough space to display a keypad at the right, left or bottom of the screen, the keypad appears on the top of the data display part.

If there is insufficient space to display the keypad in all directions, the keypad will be displayed at the bottom right of the screen. In this case, the keypad may be displayed over the setting value display and the input value cannot be seen.
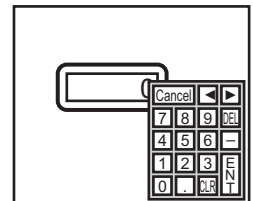
- Even if you rotate a Data Display part, the popup keypad will not always display in exactly the same way.
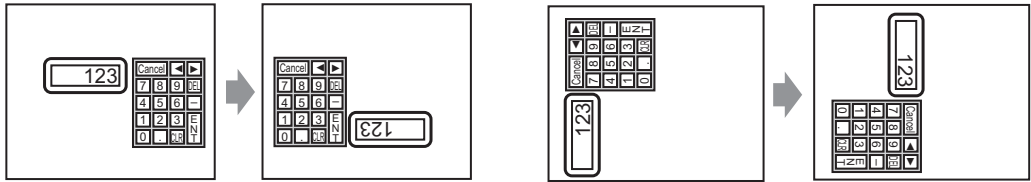
- A [Detailed Error Window] or a local window is used to display a popup keypad. It can not be displayed if the maximum number of windows are already displayed. Close another window to display the popup keypad.

) "18.8 Restrictions for Windows ■ Displaying Multiple Windows on a Single Screen" (page 18-30)
- To use a keypad with a data display part, the keypad and data display must be in the same window. The keypad cannot be set as a popup.
- If another window overrides the popup keypad, you can switch to the keypad display by touch.
- When the display is in interlock mode, the popup keypad cannot be displayed by touch.
- If the display entered interlock mode during data input, the popup keypad remains displayed and allows input. However, when you touch the data display part next time, the popup keypad will be in interlock mode and will not be displayed. To erase the popup keypad without inputting, press Cancel. You cannot erase the popup keypad by touching the data display part.
- You cannot set a display color, display position, font, or text size for the inputting display when you input numeric values or text and the alarm value display.

16.6.2   Restrictions for Keypad Direct Placement

- If a keypad is placed directly on the base screen, you cannot set [Change Keypad].

## 16.6.3   Restrictions for Keypad Customization

- All you can place on a keypad registration screen is [Key Part] and [Draw] (Dot, Line/ Polyline, Circle/Oval, Rectangle, Arc/Pie, Polygon, Scale, Table, and Text). All you can call to a keypad registration screen with [Call Screen] is a Base Screen, Image, and Mark.

16.6.4   Restrictions for Clear Area

• If pictures and text are hidden by switching to a larger keypad display, they will remain hidden and cannot display again by switching to a smaller keypad. Do not place pictures, text and other parts in the area where a keypad will appear on the Base Screen.


The displayed pictures disappear.
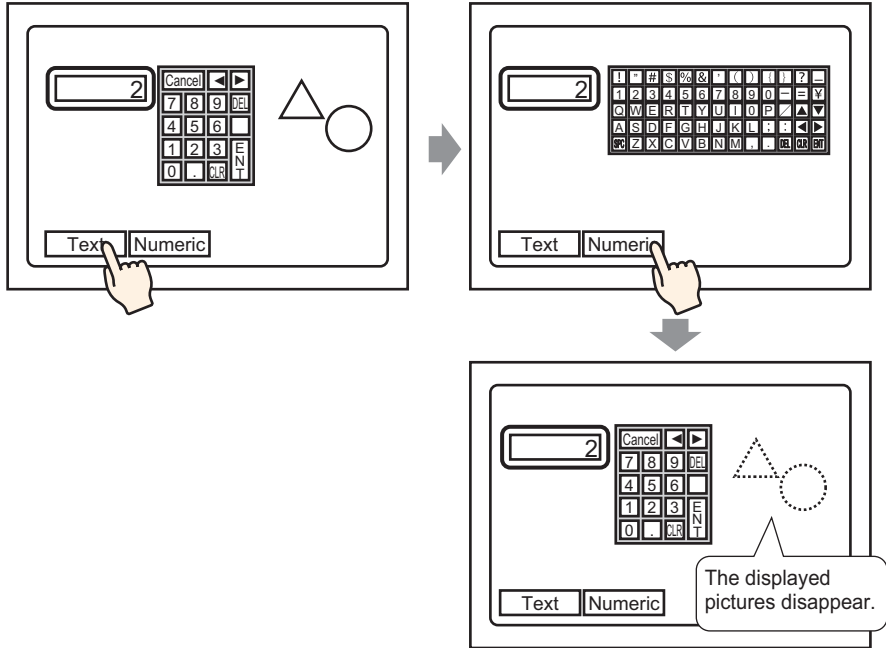
• If the GP models are changed in [System Settings], the Clear Area and the Parts placed on the Base will appear with the same sizes and positions as before.

Only the part within the red frame is displayed.
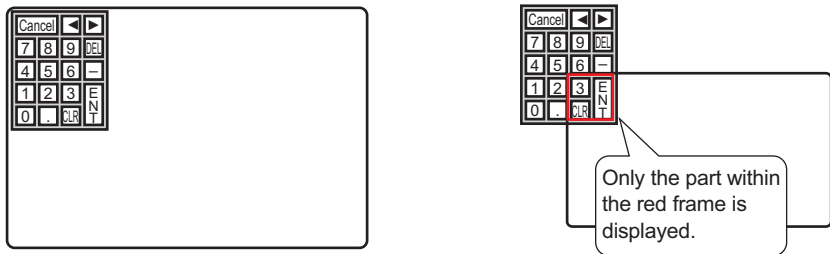
16.6.5 Restrictions for Japanese FEP

■ Actions and Display

- To perform the Kanji conversion, you must touch the [FEP] key before inputting text. If you input text without touching the [FEP] key, you cannot convert it into Kanji.
- If you touch the [FEP] key with the Data Display Part [Allow Input] check box cleared, you cannot convert text into Kanji.
- The Japanese FEP inputs and displays characters to be converted in the System Menu Window.
- The Japanese FEP Feature acts only when the [Font]'s [Display Language] is [Japanese] on the Data Display Part's [Display] tab.
- The Japanese FEP window appears at the same position on the GP with the vertical setting as well.

Horizontal setting   Vertical setting
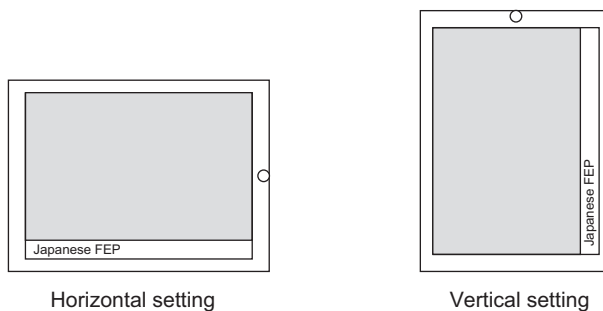
- If you release the Allow Input for a Data Display Part while the FEP feature is active, the FEP feature also exits. Changing screens also exits the FEP feature.
- The System Menu Window display position can be selected from the top or the bottom.
- This feature includes a "Learning" function that displays previously used words in the conversion candidates. This Learning function uses the Backup SRAM. The maximum size for the Backup SRAM is about 1 KB (approx. 100 words). If it gets full, the Learning function deletes candidates beginning with the lowest frequency.