

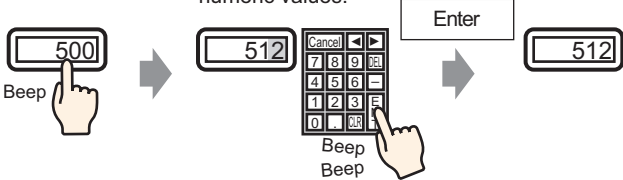
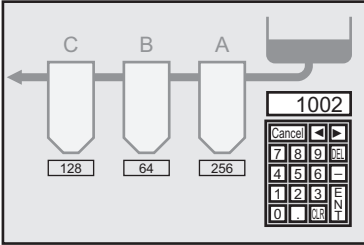
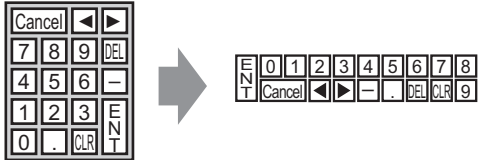
16 | Keypad Input

This chapter explains about “Keypad” in GP-Pro EX, and the basic ways of creating and managing it.

Please start by reading “16.1 Settings Menu” (page 16-2) and then turn to the corresponding page.

16.1	Settings Menu	16-2
16.2	Popup Keypad Display	16-3
16.3	Always Displaying a Keypad on the Screen.....	16-7
16.4	Customizing the Keypad to Make it Easy to Use	16-10
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16.6	Restrictions	16-39

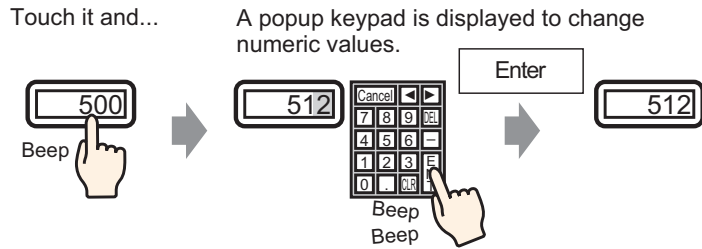
16.1 Settings Menu

Popup Keypad Display	
<p>Displays a keypad on the screen only when necessary (when inputting data).</p> <p>Touch it and... A popup keypad is displayed to change numeric values.</p> 	<ul style="list-style-type: none"> ☞ Setup Procedure (page 16-4) ☞ Details (page 16-3)
Always Displaying a Keypad on the Screen	
<p>Places a keypad directly on the screen. A permanent keypad will be displayed.</p> 	<ul style="list-style-type: none"> ☞ Setup Procedure (page 16-8) ☞ Details (page 16-7)
Customizing the Keypad to Make it Easy to Use	
<p>Allows the user to create unique keypads freely by rearranging the existing keypad.</p> 	<ul style="list-style-type: none"> ☞ Setup Procedure (page 16-11) ☞ Details (page 16-10)

16.2 Popup Keypad Display

16.2.1 Details

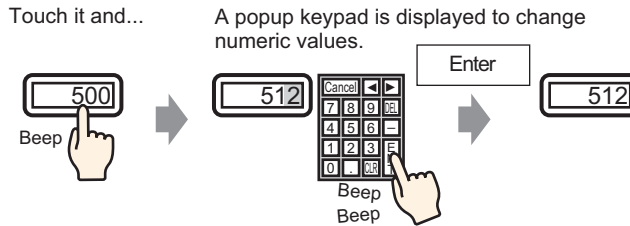
Only when necessary display the keypad on the screen




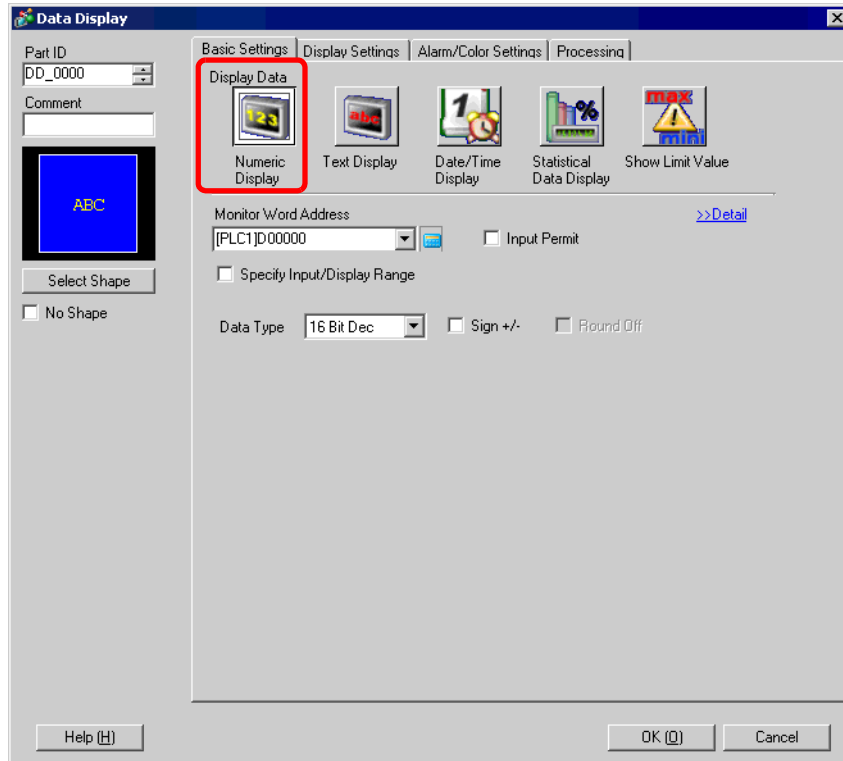
16.2.2 Setup Procedure

- NOTE**
- Please refer to the settings guide for details.
 - ☞ “14.11 Data Display Settings Guide” (page 14-43)
 - 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 9-37)

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



- 1 Select the [Part (P)] menu - [Data Display (D)] option - [Numeric Display (N)] command, or click the  icon, and place it on the screen.
- 2 Double-click the placed Data Display and the settings dialog box opens.

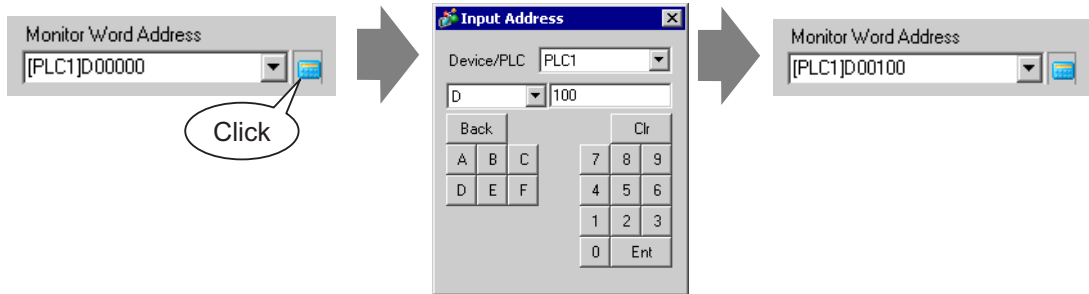


3 Select the Data Display shape from [Select Shape].

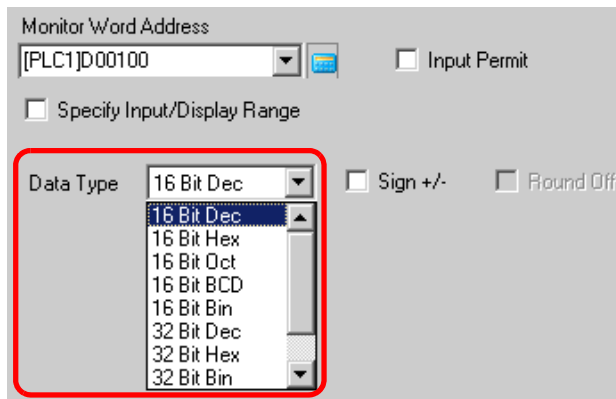
4 In [Monitor Word Address], set the address (D100) which will store the inputted value.

Click the icon to display an address input keypad.

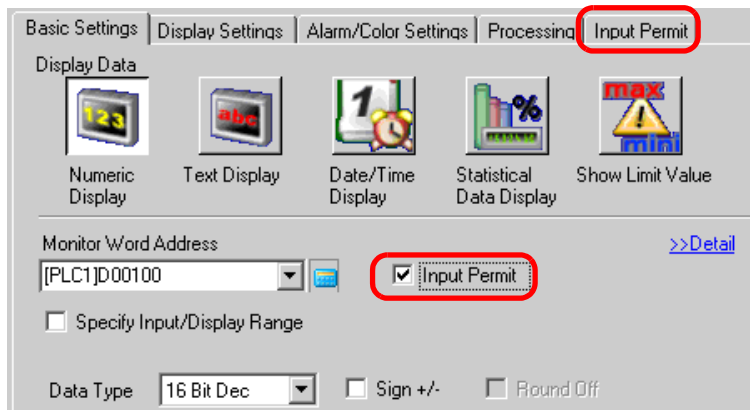
Select device "D", input "100" as the address, and press the "Ent" key.



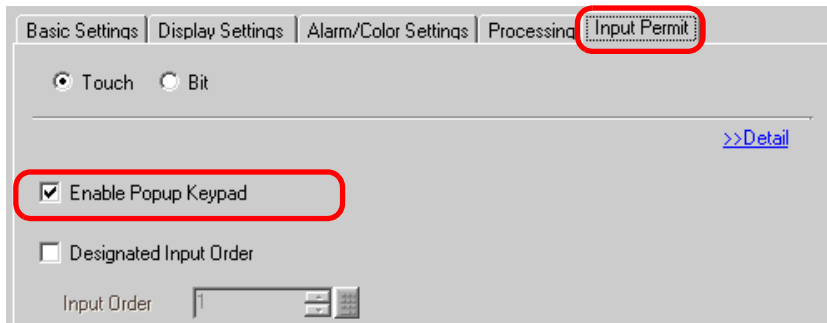
5 Set the type of data that will be displayed (e.g. "16 Bit Dec") in [Data Type].



6 Put a check mark next to [Input Permit]. Once you check the [Input Permit] box, the [Input Permit] tab will display and you can input numeric data.



- 7 Click the [Input Permit] tab and the following screen will be displayed. Confirm that [Enable Popup Keypad] is checked.

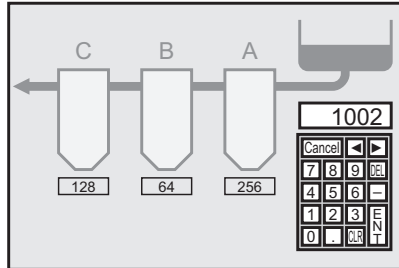


- 8 As needed, set the Data Display's color and text on the [Alarm/Color Settings] tab and [Display Settings] tab, and click [OK].

16.3 Always Displaying a Keypad on the Screen

16.3.1 Details

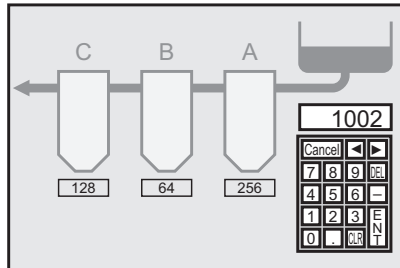
Places a keypad directly on the screen. A permanent keypad will be displayed.



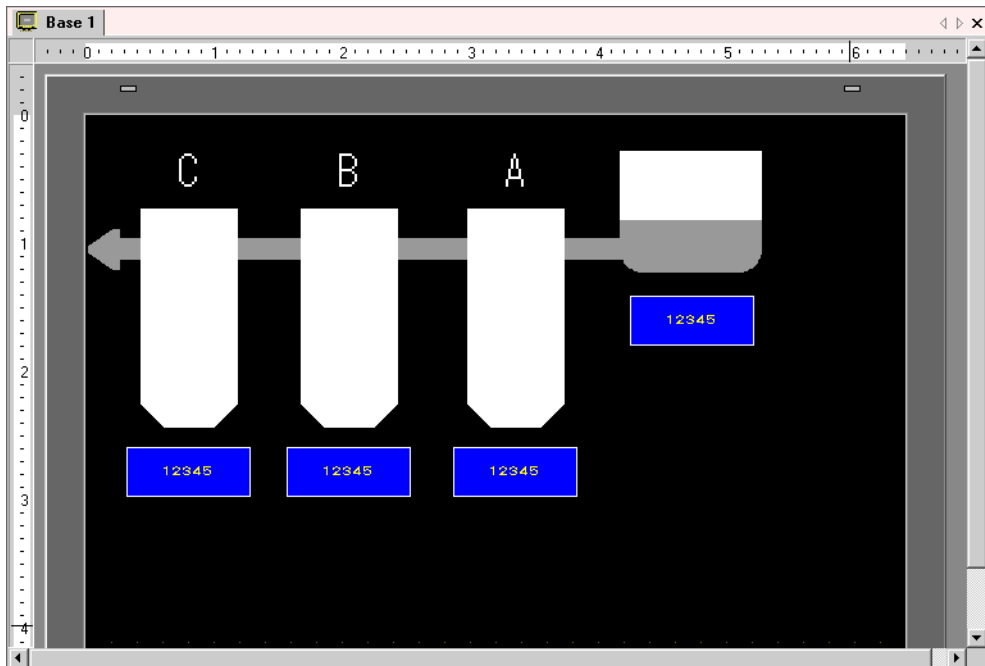
16.3.2 Setup Procedure


- NOTE** • Please refer to the settings guide for details.
 ☞ “16.5.4 Packages Setup Guide” (page 16-37)

Places a keypad directly on the screen. A permanent keypad will be displayed.



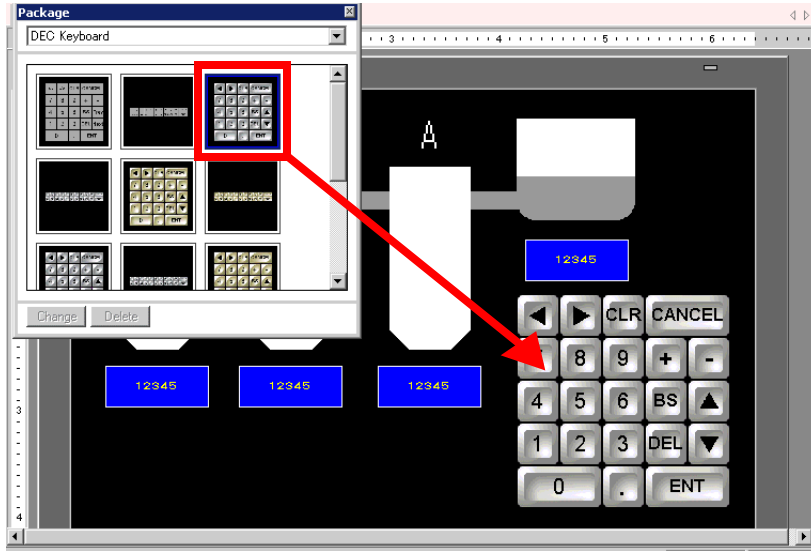
1 Open a drawing screen wher want to place a keypad.



2 Select the [Keypad (B)] in the [Part (P)] menu or click  , display the [Package].



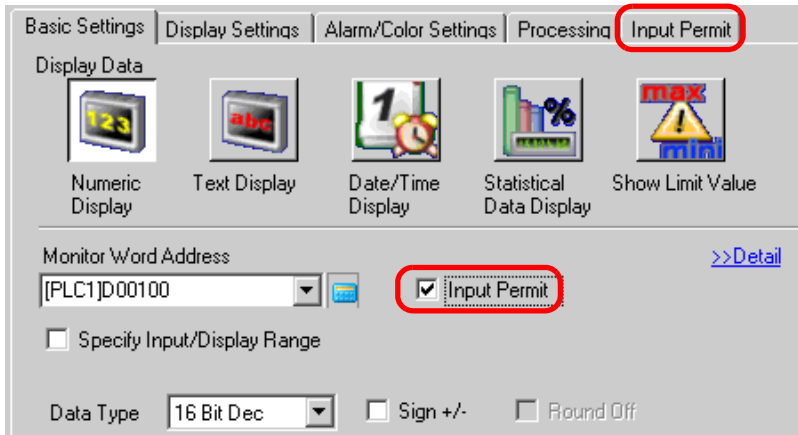
3 Select a keypad to use and place it on the drawing screen. (e.g.: DEC Keyboard)



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

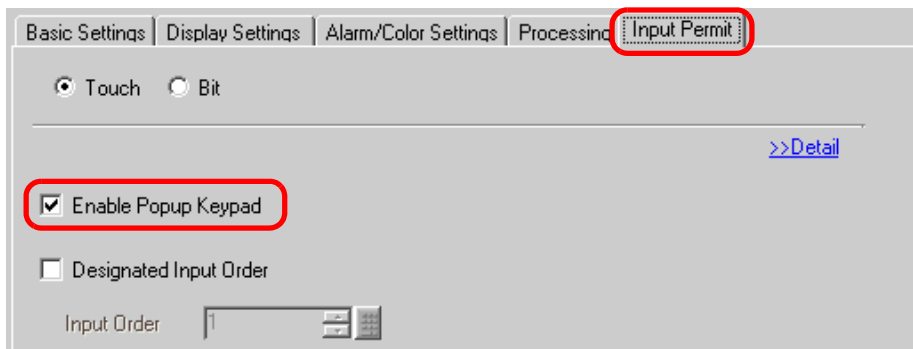
4 Set the Data Display Parts to display the data you entered with this keypad. Double-click a data display part to open the [Settings] dialog box.

5 When you check the [Input Permit], the [Input Permit] tab will appear.



6 Open the [Input Permit] and uncheck the [Enable Popup Keypad].

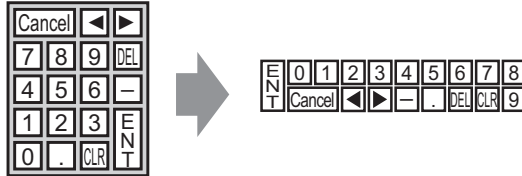
Now you have the Data Display Parts to display data you directly entered with the keypad.



16.4 Customizing the Keypad to Make it Easy to Use

16.4.1 Details

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

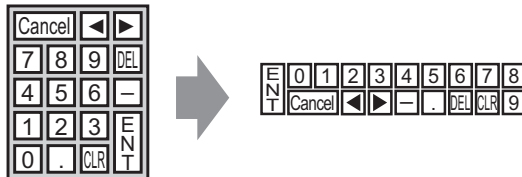



16.4.2 Setup Procedure

■ Displaying the Customized Keypad Permanently on the Screen

- NOTE** • Please refer to the settings guide for details.
 ☞ “16.5.4 Packages Setup Guide” (page 16-37)

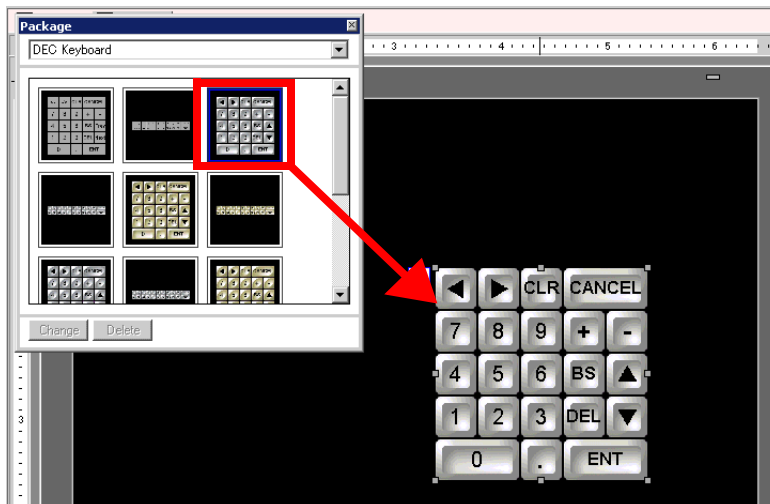
Display the customized keypad permanently on the screen.



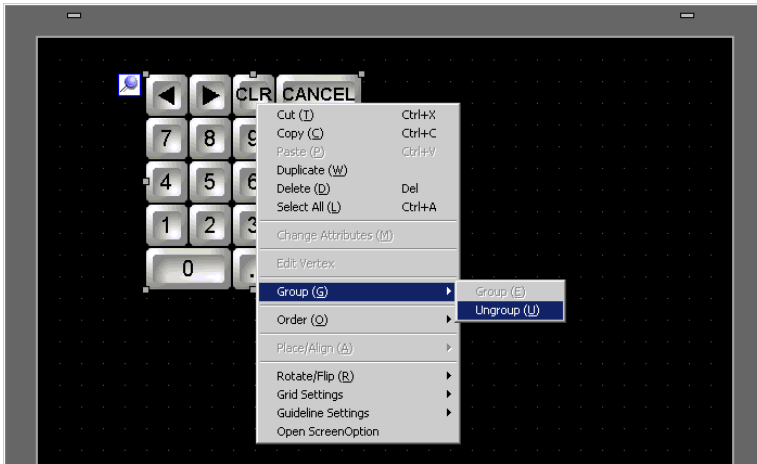
- 1 Select the [Part (P)] menu - [Keypad (B)] command or click  to display the following [Package].



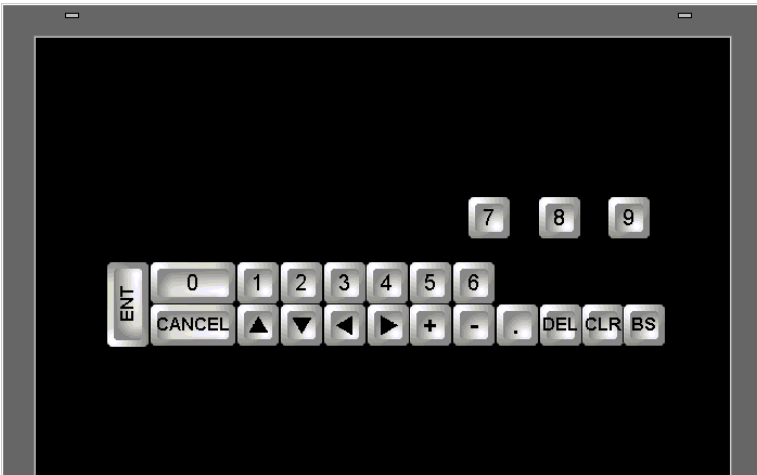
- 2 Select a keypad to customize and place it on the drawing screen. (e.g.: DEC Keyboard)



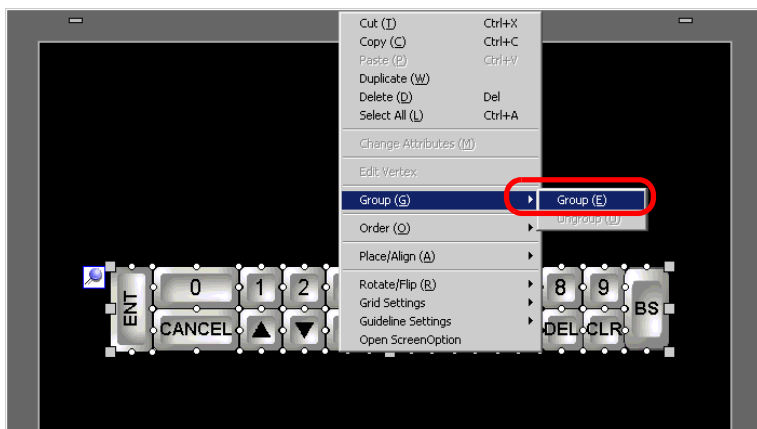
- 3 Select the placed keypad, right-click the keypad, and select [Ungroup (U)] from [Group (G)]. By selecting [Ungroup], you can set each key.




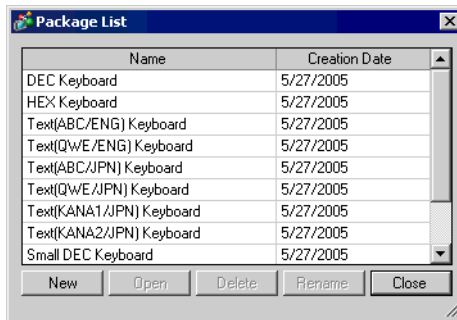
- 4 Rearrange the ungrouped keys.



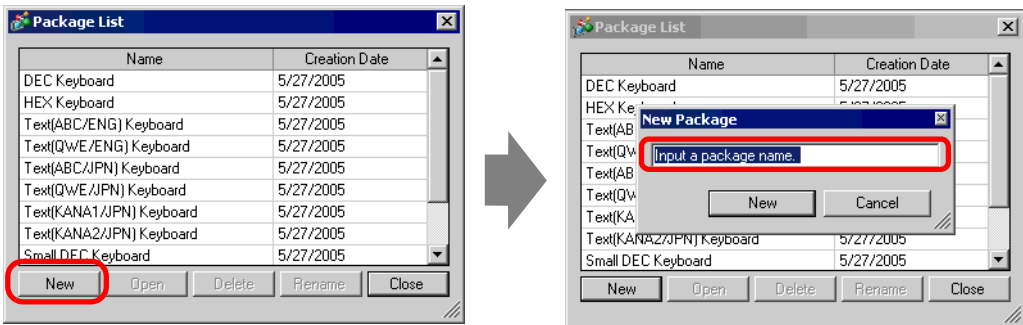
- 5 Select all the customized keypads, right-click the keypads, and select [Group (E)] from [Group (G)]. The keypad customization is complete.



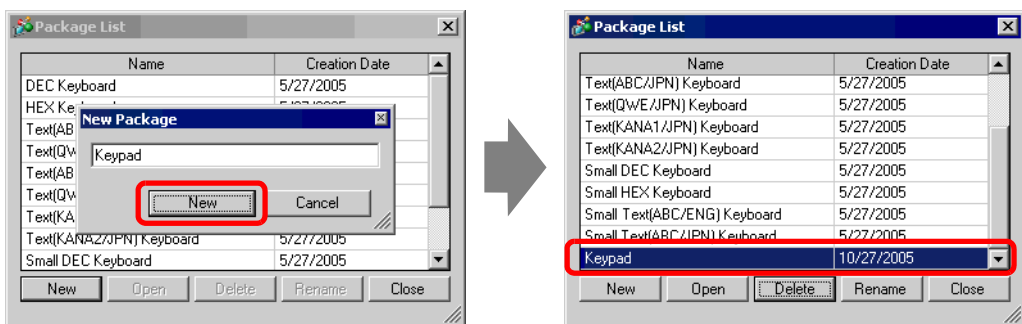
6 Register the customized keypad in [Package]. Then you can refer to the Package when you use the customized keypad on another drawing screen. Select the [View (V)] menu - [Package (P)] command or click , and the following [Package List] dialog box will be displayed.



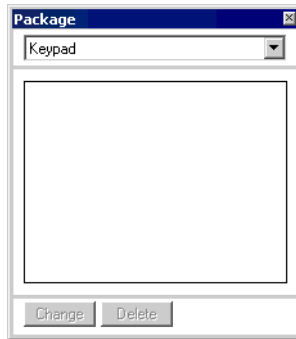
7 Click [New] to display the [New Package] dialog box. Set a package name. (e.g.: Keypad)



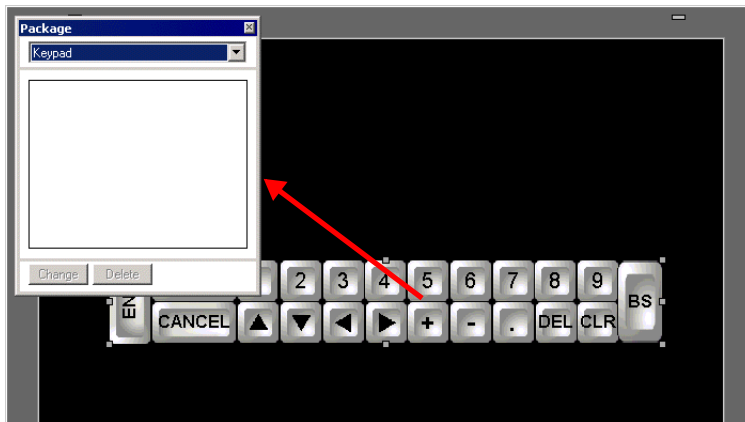
8 Click [New] on the [New Package] dialog box to return to the [Package List] dialog box, where the new package is displayed.



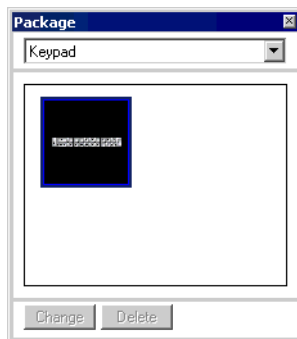
- 9 Click [Open] on the [Package List] dialog box with a new package name selected, and the following dialog box is displayed.



- 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].

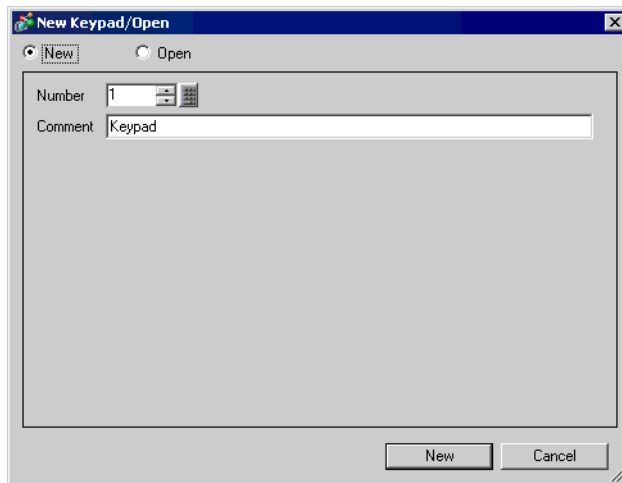
■ Displaying the Customized Keypad as a Popup

NOTE

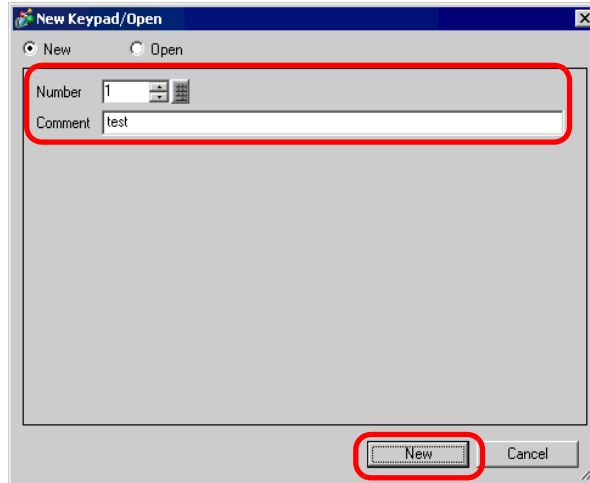
- Please refer to the settings guide for details.
 - ☞ “16.5.2 Setup Guide for the Common Settings (Keypad Registration)” (page 16-23)
 - ☞ “16.5.4 Packages Setup Guide” (page 16-37)
 - ☞ “14.11 Data Display Settings Guide” (page 14-43)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the “Part Editing Procedure”.
 - ☞ “9.6.1 Editing Parts” (page 9-37)



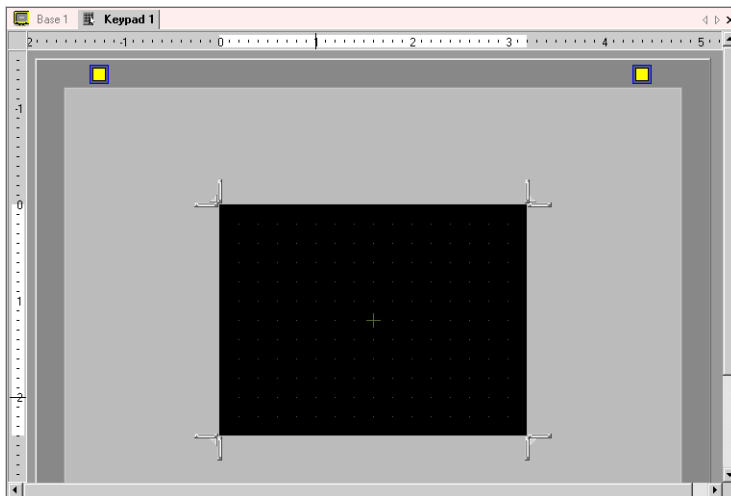
- 1 Select the [Common Settings (R)] menu - [Keypad Registration (K)] command to display the [New Keypad/Open] dialog box.




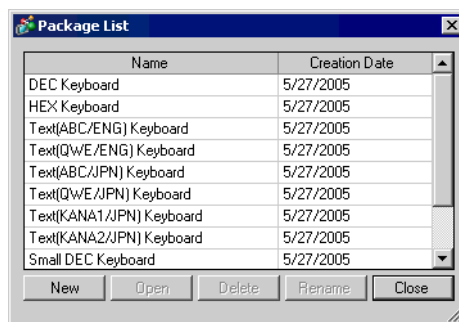
2 Set the [Number] and [Comment] and then click [New]. (e.g.: [Number] 1, [Comment] test)




3 The screen to create the keypad's [Clear Area] is displayed.

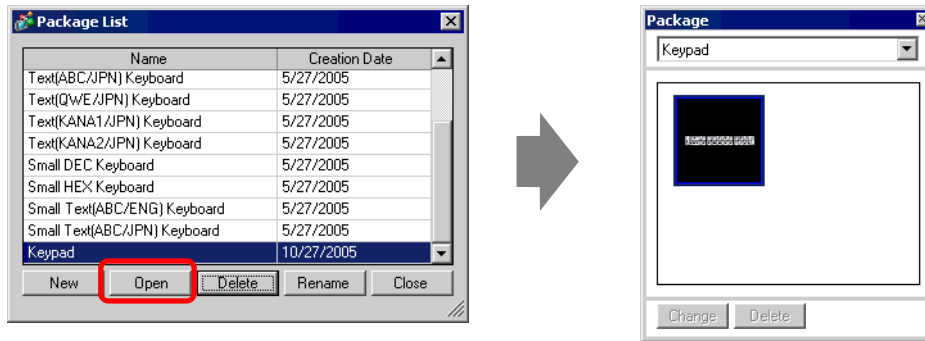


4 Select the [View (V)] menu - [Package (P)] command or click  to display the following [Package List] dialog box, where shows a list of registered packages is displayed.

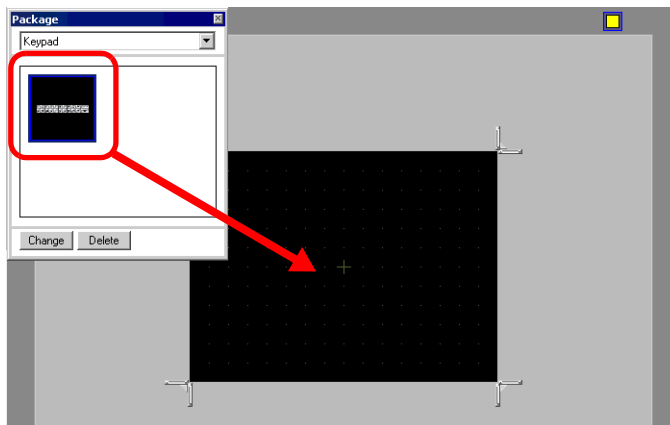


NOTE • Register keypads in [Package] in advance.
 “ ■ Displaying the Customized Keypad Permanently on the Screen” (page 16-11)

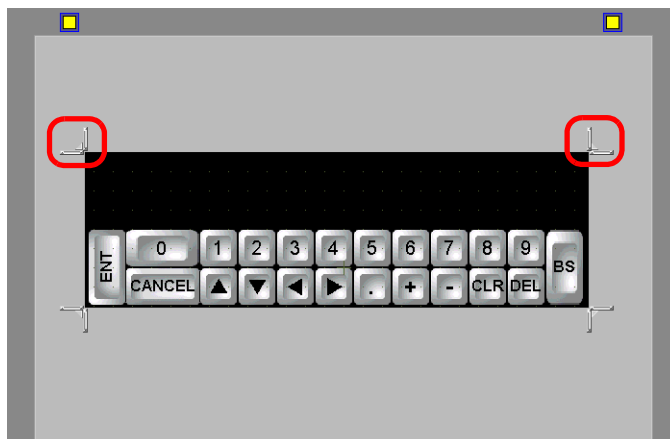
5 Select the package name (e.g.: Keypad) that is registered with the keypad you want to use, click [Open], and the [Package] dialog box will appear.



6 Select a keypad to use and place it on the [Clear Area].



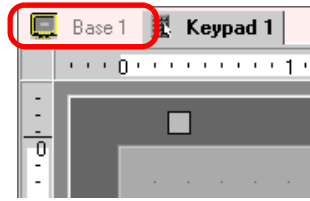
7 Create the keypad's [Clear Area]. Drag a [Resize Bound] in the four corners of the [Clear Area] setting screen to change the size. Which [Resize Bound] you drag with the mouse cursor determines the direction in which the clear area size changes.




NOTE • [Clear Area] is the area that overwrites and hides the previously displayed keypad.

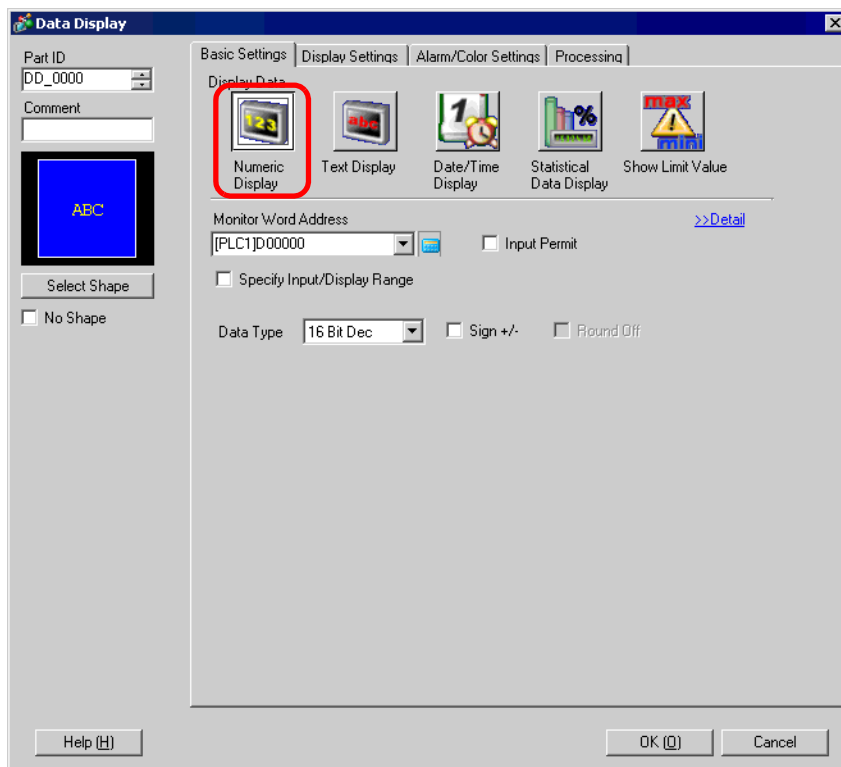
☞ “ ■ Clear Area” (page 16-26)

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. Select the [Part (P)] menu - [Data Display (D)] option - [Numeric Display (N)] command, or click the  icon, and place it on the screen.

10 Double-click the placed Data Display and the settings dialog box opens.

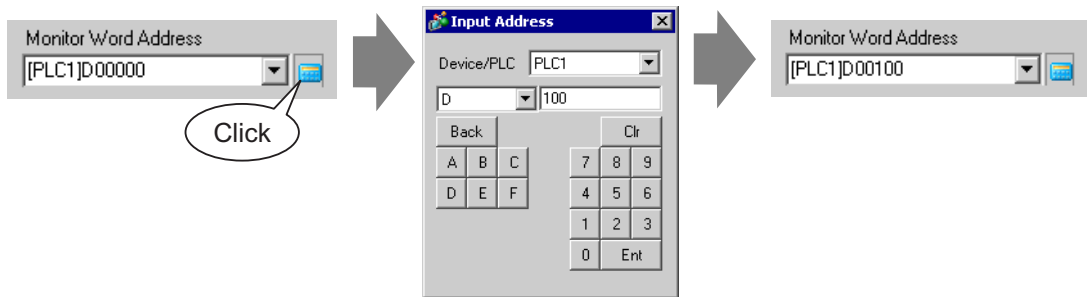


11 Select the Data Display shape from [Select Shape].

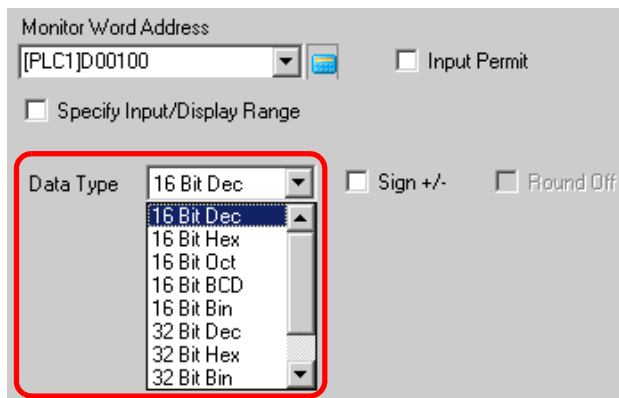
12 In [Monitor Word Address], set the address (D100) which will store the inputted value.

Click the icon to display an address input keypad.

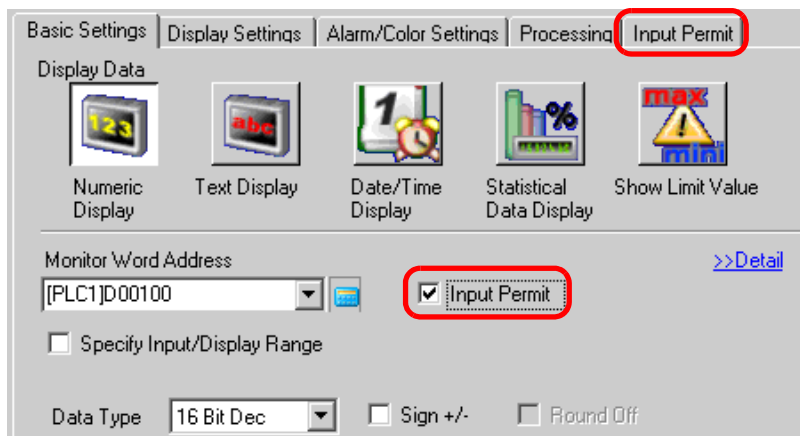
Select device "D", input "100" as the address, and press the "Ent" key.



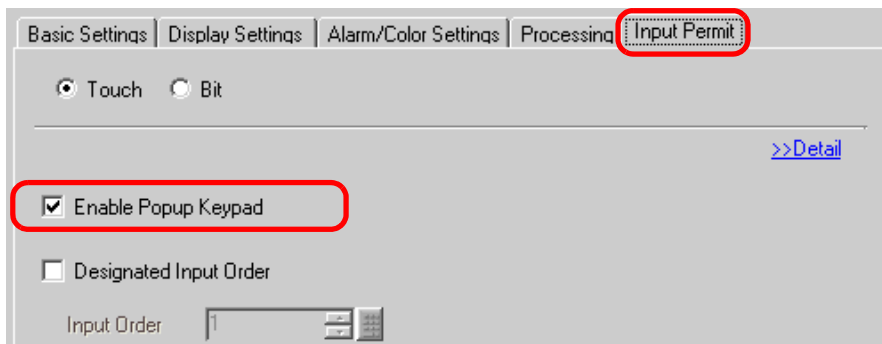
13 Set the type of data that will be displayed (e.g. "16 Bit Dec") in [Data Type].



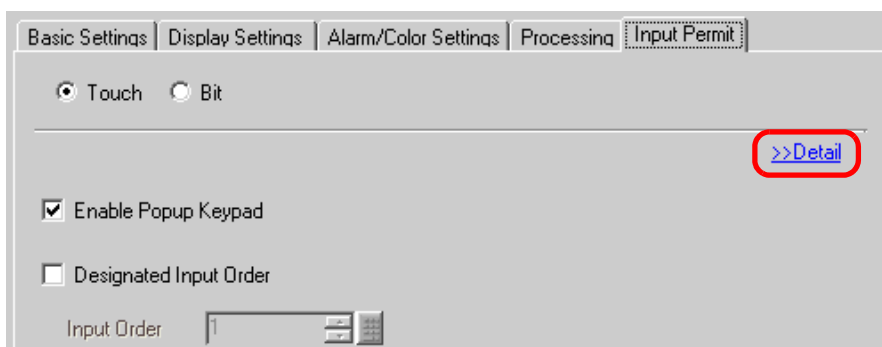
14 Put a check mark next to [Input Permit]. Once you check the [Input Permit] box, the [Input Permit] tab will display and you can input numeric data.



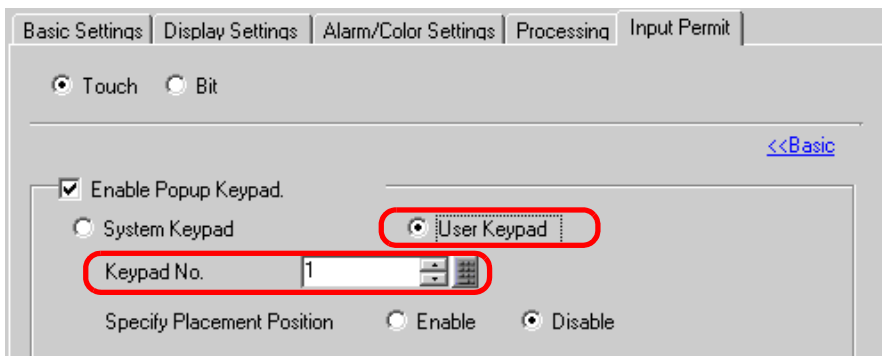
15 Click the [Input Permit] tab and the following screen will be displayed. Confirm that [Enable Popup Keypad] is checked.



16 Click [Detail].



17 When the [Detail] screen is displayed, put a check mark next to the [User Keypad] box and set the [Keypad] screen number (e.g.: 1) with the keypad setting to the [Keypad No.].






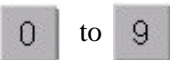

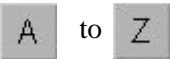






18 As needed, set the Data Display's color and text on the [Alarm/Color Settings] tab and [Display Settings] tab, and click [OK].

16.5 Settings Guide






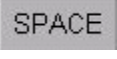
16.5.1 Keypad Settings Guide

■ 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 • A text input keypad to be displayed depends on the GP's model size.
 to 	Numeric key(0 to F for Hex) Inputs the numeric values being displayed.		
 to  Other Symbols	—	—	Text key Inputs the characters and symbols being displayed.
	Delete key Erases the numeric value, character or symbol in the cursor position.		
	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.
	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’s data storage address (For text, the space code will be written).		
	Enter key Determines the setting value being displayed and writes it to the device/PLC’s 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
	<p>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]'s [Input Permit] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Input Permit Bit Address] needs to be the same address.</p>		
	<p>Plus/Minus key This key can be used only when the Data Display Part's [Data Type] is [Dec] and the [Sign +/-] is selected.</p>	_____	<p>Minus key Inputs the “-” as a symbol.</p>
	<p>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].</p>	_____	<p>Decimal Point key Inputs the “.” as a symbol.</p>
	<p>Cancel key Cancels the input. When you use the Data Display Part's popup keypad, the popup keypad closes without determining the input.</p>		_____
	_____	_____	<p>Escape key Cancels the input. When you use the Data Display Part's popup keypad, the popup keypad closes without determining the input.</p>
	_____		<p>Space key Inputs a space.</p>

■ User Keypad

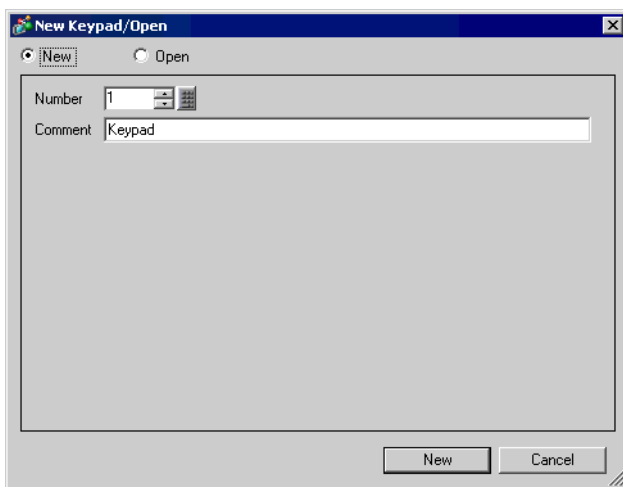
If you permit input to a Data Display Part, a keypad selected from the keypads registered in [Package] or freely created keypad will be displayed in a popup window. These keypads can be directly placed on the screen.

 “16.5.4 Packages Setup Guide” (page 16-37)

16.5.2 Setup Guide for the Common Settings (Keypad Registration)

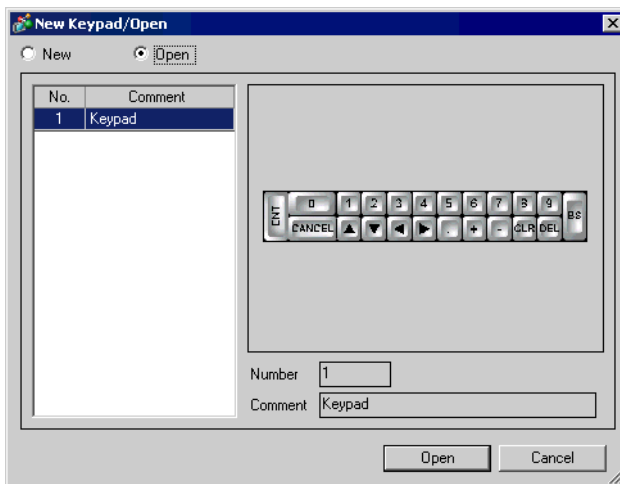
■ New

Open the screen to register a keypad.



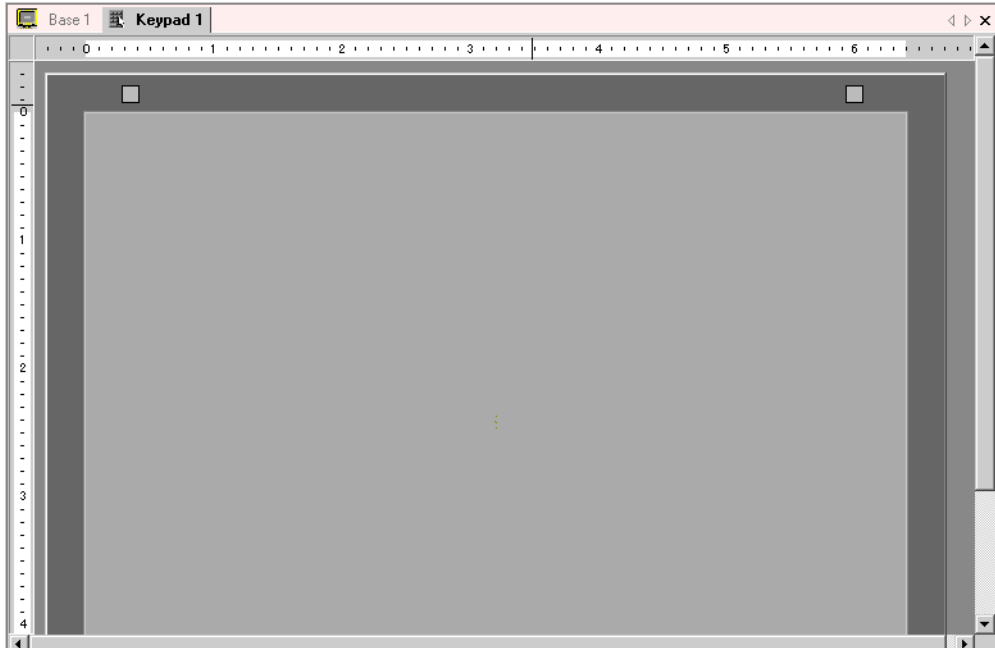
Setting	Description
New	Create a new [Keypad Registration] screen.
Open	Opens a previously created keypad screen.
Number	Set a number for the [Keypad Registration] screen from 1 to 8,999.
Comment	Set a comment for the [Keypad Registration] screen within 30 characters.

■ Open



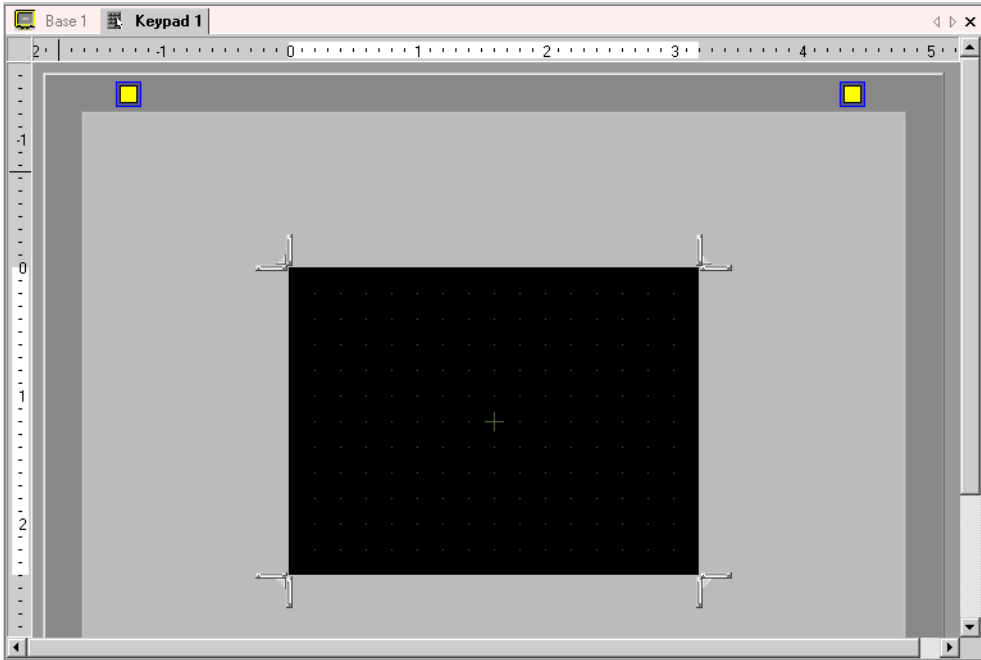
Setting	Description
New	Create a new [Keypad Registration] screen.
Open	Opens a previously created [Keypad Registration] screen.
Keypad List	Displays a list of the [Keypad Registration] screens in a project file.
Number	Displays the number of each [Keypad Registration] screen.
Comment	Displays the comment 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].


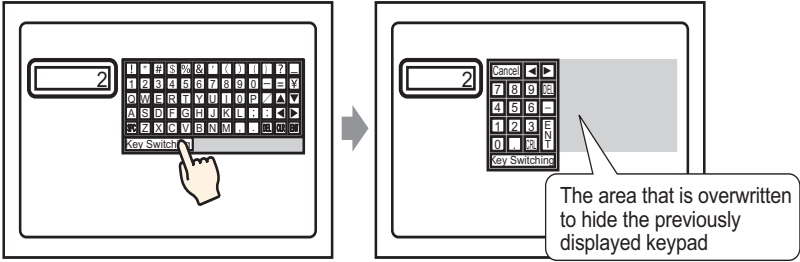

■ Keypad Registration



Setting	Description
Set Clear Area Button <input type="checkbox"/>	This button is used to set the [Clear Area].
Editing Area	This is an area in which to edit a keypad.

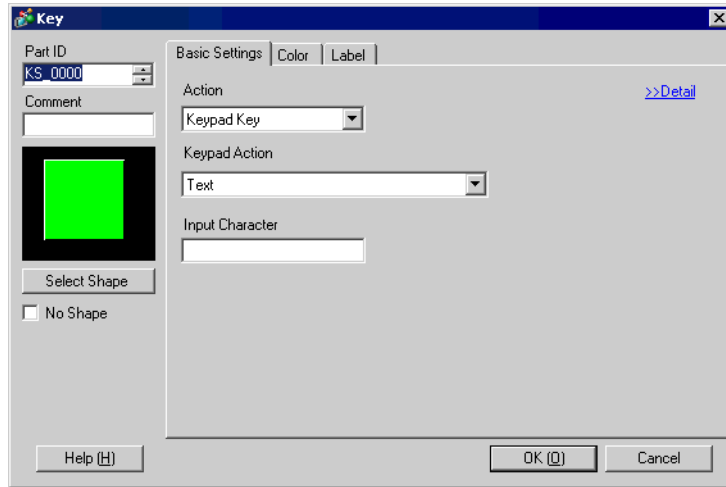
■ Clear Area

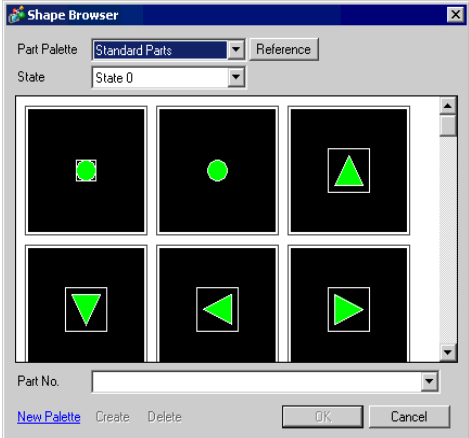


Setting	Description
Release Clear Area Button 	Releases the [Clear Area] display and returns to a [Keypad] screen.
Clear Area	<p>A clear area is an area that is overwritten to hide the previously displayed keypad when a large keypad is switched to a small one.</p>  <p>The area that is overwritten to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

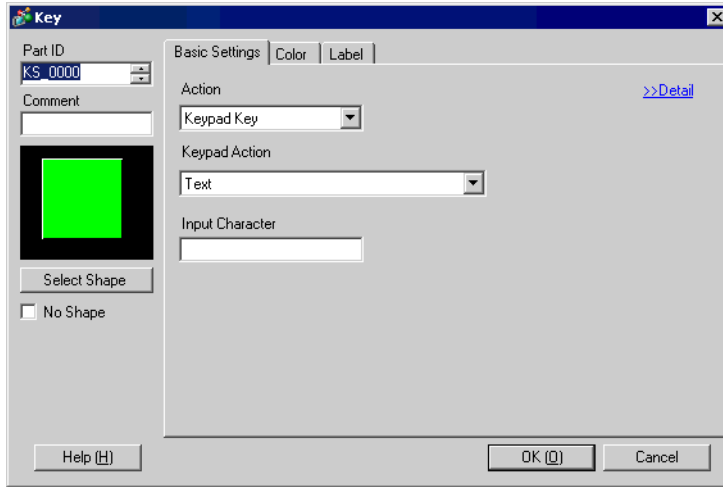
16.5.3 Setup Guide for Key Parts

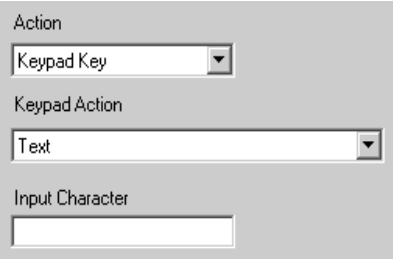
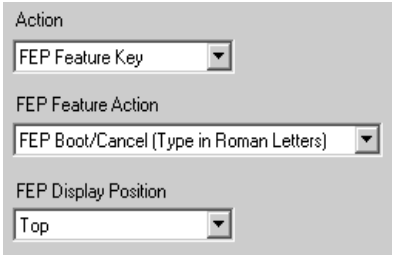
Set the key for each keypad.



Setting	Description
Part ID	Placed parts are automatically assigned an ID number. Key Part's 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's shape. 
No Shape	Select whether or not the Part will be transparent with no shape.

■ Basic Settings/Basic

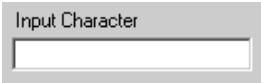
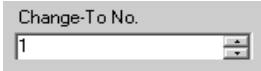




Setting	Description
Action	<p>Select the Key Part's type.</p> <ul style="list-style-type: none"> • Keypad Key Set a keypad input key.  <ul style="list-style-type: none"> • FEP Feature Key You can use the kana/kanji conversion method when inputting Japanese on the GP. This feature is called Japanese FEP Feature. Sets an input key for the Japanese FEP Feature keypad.  <p>NOTE</p> <ul style="list-style-type: none"> • This feature can be used only when the Data Display Part's [Text Display] is selected and [Japanese] is selected for the [Display Language] under [Font Settings] on the [Display Settings] tab.

Continued

	<table border="1"> <thead> <tr> <th data-bbox="436 123 1269 1752">Setting</th> <th data-bbox="436 123 1269 1752">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="436 173 1269 386"> Keypad Action </td> <td data-bbox="436 173 1269 386"> Select the action of a keypad key from [Text], [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Change Keypad], and [Cancel (For Popup Window)]. <div data-bbox="658 289 1035 376" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> Keypad Action <input type="text" value="Text"/> </div> </td> </tr> <tr> <td data-bbox="436 386 1269 1752"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-bottom: 10px;">Action</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Cancel (For Popup Window)] </div> </div> </td> <td data-bbox="436 386 1269 1752"> <ul style="list-style-type: none"> • 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. • UP, DOWN 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. <p>* When the [Data Display Part]'s [Input Permit] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Input Permit Bit Address] also needs to be ON.</p> <p>e.g.) For [UP]'s action</p> <div style="text-align: center; margin: 10px 0;"> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; font-weight: bold;">NOTE</div> <ul style="list-style-type: none"> • When inputting characters to be converted with the FEP feature, this key moves the cursor to the top or last of the characters. When some pages of convert-to characters are displayed, it switches the display to the previous or the next page. • Right, Left Moves the cursor to the right or left during input. e.g.) For [Right]'s action <div style="margin: 10px 0;"> <p>(Numeric Input)</p> </div> <div style="margin: 10px 0;"> <p>(Character Input)</p> </div> <ul style="list-style-type: none"> • Cancel (For Popup Window) Closes a popup keyboard and erases all the inputted characters. </td> </tr> </tbody> </table>	Setting	Description	Keypad Action	Select the action of a keypad key from [Text], [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Change Keypad], and [Cancel (For Popup Window)]. <div data-bbox="658 289 1035 376" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> Keypad Action <input type="text" value="Text"/> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-bottom: 10px;">Action</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Cancel (For Popup Window)] </div> </div>	<ul style="list-style-type: none"> • 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. • UP, DOWN 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. <p>* When the [Data Display Part]'s [Input Permit] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Input Permit Bit Address] also needs to be ON.</p> <p>e.g.) For [UP]'s action</p> <div style="text-align: center; margin: 10px 0;"> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; font-weight: bold;">NOTE</div> <ul style="list-style-type: none"> • When inputting characters to be converted with the FEP feature, this key moves the cursor to the top or last of the characters. When some pages of convert-to characters are displayed, it switches the display to the previous or the next page. • Right, Left Moves the cursor to the right or left during input. e.g.) For [Right]'s action <div style="margin: 10px 0;"> <p>(Numeric Input)</p> </div> <div style="margin: 10px 0;"> <p>(Character Input)</p> </div> <ul style="list-style-type: none"> • Cancel (For Popup Window) Closes a popup keyboard and erases all the inputted characters.
Setting	Description						
Keypad Action	Select the action of a keypad key from [Text], [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Change Keypad], and [Cancel (For Popup Window)]. <div data-bbox="658 289 1035 376" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> Keypad Action <input type="text" value="Text"/> </div>						
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-bottom: 10px;">Action</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> [ENT], [BS], [CLR], [DEL], [UP], [DOWN], [Left], [Right], [Cancel (For Popup Window)] </div> </div>	<ul style="list-style-type: none"> • 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. • UP, DOWN 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. <p>* When the [Data Display Part]'s [Input Permit] is [Touch], you have to set [Designated Input Order]. When it is [Bit], the [Input Permit Bit Address] also needs to be ON.</p> <p>e.g.) For [UP]'s action</p> <div style="text-align: center; margin: 10px 0;"> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; font-weight: bold;">NOTE</div> <ul style="list-style-type: none"> • When inputting characters to be converted with the FEP feature, this key moves the cursor to the top or last of the characters. When some pages of convert-to characters are displayed, it switches the display to the previous or the next page. • Right, Left Moves the cursor to the right or left during input. e.g.) For [Right]'s action <div style="margin: 10px 0;"> <p>(Numeric Input)</p> </div> <div style="margin: 10px 0;"> <p>(Character Input)</p> </div> <ul style="list-style-type: none"> • Cancel (For Popup Window) Closes a popup keyboard and erases all the inputted characters. 						

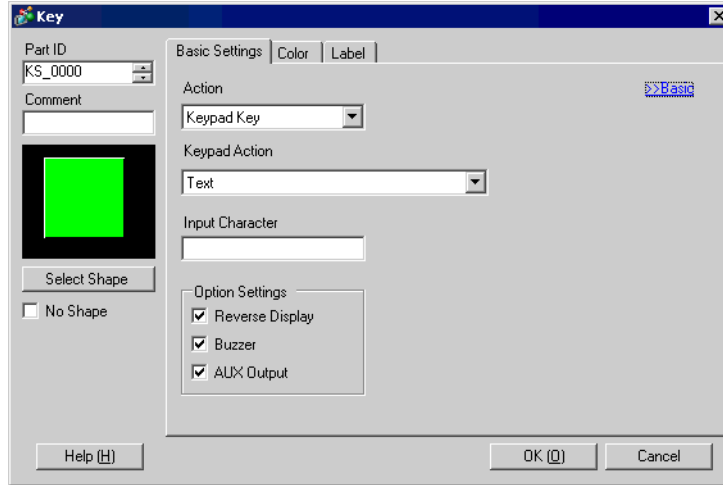
Continued

Setting		Description	
Action	Keypad Action	Text	Set a key to input text.
		Input Character	Set the text to input on a Key Part. Set one character. 
		Change Keypad	Set a key to change keypad screens. NOTE <ul style="list-style-type: none"> If a keypad is placed directly on the base screen, you cannot set [Change Keypad].
		Change-To No.	Set the change-to keypad screen number from 1 to 8,999. 
	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)	<ul style="list-style-type: none"> 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  When [Bottom] is selected  NOTE <ul style="list-style-type: none"> 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

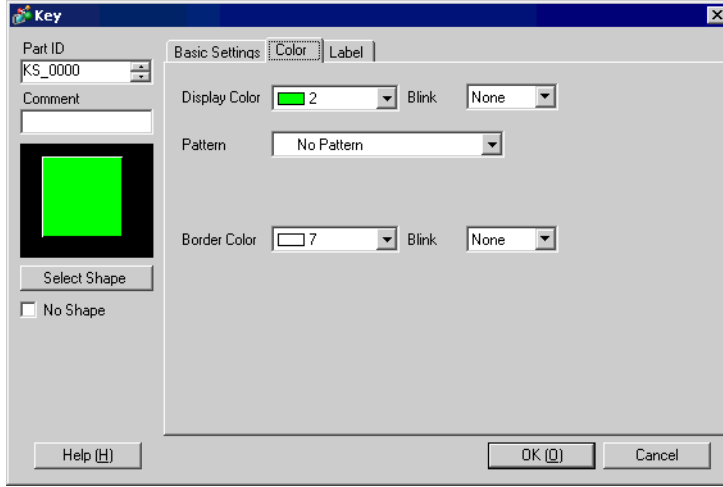
Setting		Description
Action	FEP Feature Action	<ul style="list-style-type: none"> • Kana Conversion Changes the character type in the order of Two-byte Katakana→ Single-byte Katakana→ Hiragana each time you touch the keypad after the FEP is booted. • Input Mode Change Select the input mode from Roman Letters or Hiragana. Performs the toggle switch action [Roman Lettters] [Hiragana] each time you touch the Input Mode Change key for FEP Feature. Combine this key with the [Change Keypad] key. <p>NOTE</p> <ul style="list-style-type: none"> • 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/Detail



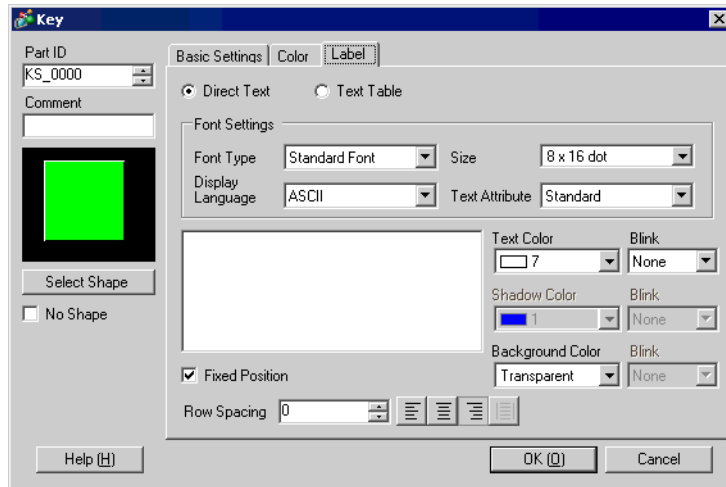
Setting	Description
Continuous Action Feature	<p>Set whether or not to use the feature to repeat the action while pressing a key (Repeat Feature).</p> <p>NOTE</p> <ul style="list-style-type: none"> This feature can be set only when the [Action] is [Keypad Key] and the [Keypad Action] is [BS], [DEL], [UP], [DOWN], [Left], or [Right].
Option Settings	Set the options for pressing the Key.
Reverse Display	If selected, while the Key is pressed, the Touch Area's 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.

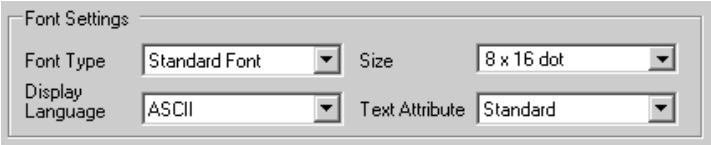
■ Color



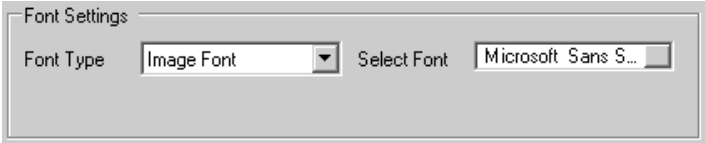
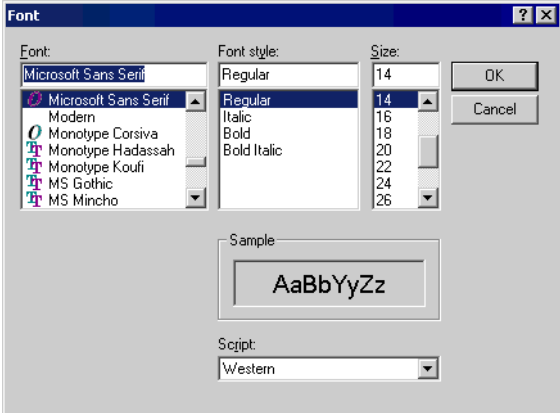

Setting	Description
Display Color	Set a background color for the Key Part.
Pattern	Set a pattern for the Key Part.
Pattern Color	Set a pattern color for the Key Part. NOTE <ul style="list-style-type: none"> You can only select [Transparent] for the [Pattern Color] when a [Pattern] is set.
Border Color	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 <ul style="list-style-type: none"> There are cases where you can and can not set Blink depending on the Main Unit and System Settings' [Color Settings].  "9.5.1 Setting Colors ■ List of Available Colors" (page 9-34)

■ Label



Setting	Description
Direct Text/Text Table	<p>Select the Label's text type.</p> <ul style="list-style-type: none"> • Direct Text Input the text into the text window, and it is placed directly as fixed text. • Text Table Use text from a previously saved Text Table. <p>☞ "15.7.3 Text Table Settings Guide" (page 15-49)</p>
Font Settings	Set the font for the Key's label.
Font Type	Choose the font type from [Standard Font], [Stroke Font], or [Image Font].
Standard Font/ Stroke Font	<ul style="list-style-type: none"> • Standard Font This font can display quickly, being a bit map font, which is described with dots. • Stroke Font This font maintains its shape when enlarged, being a vector font, whose framework is described with lines. 
Size	<p>Choose a font size for the Key.</p> <p>Standard Font: (8 to 64) × (8 to 128) Standard Font (Fixed Size): [6×10], [8×13], [13×23] Stroke Font: 6 to 127</p>
Display Language	Select a text language from [Japanese], [Western], [Chinese (Traditional)], [Chinese (Simplified)], [Korean], [Cyrillic], or [Thai].

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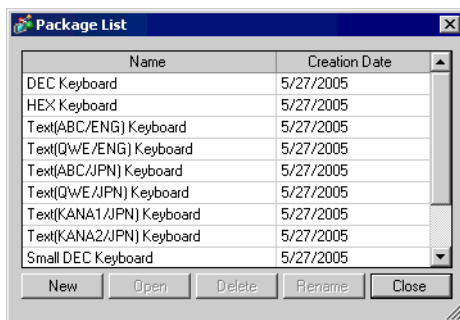
Setting		Description
Font Settings	Text Attribute	Select the font's text attributes. Standard Font: Choose from [Standard], [Bold], [Shadow] Standard Font (Fixed Size): Choose from [Standard], [Shadow] Stroke Font: Choose from [Standard], [Bold], [Outline]
	Font Type	Displays a Windows font as a bit map 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 <ul style="list-style-type: none"> There are cases where you can and can not set Blink depending on the Main Unit and System Settings' [Color Settings].  "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].	

Continued

Setting	Description
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].

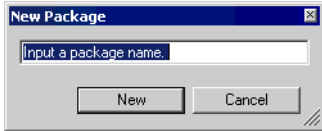
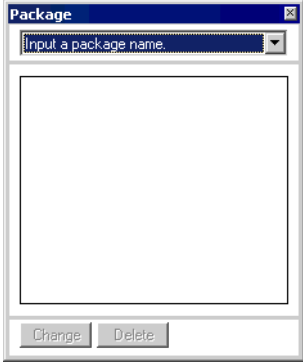
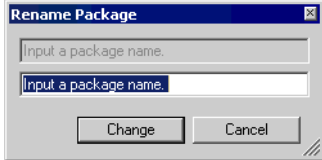
16.5.4 Packages Setup Guide

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.
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 horizontal alphabetical full keypads (The keys are arranged in the 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.

Continued

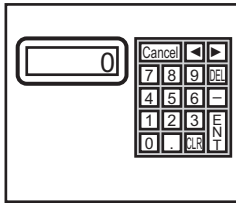
Setting		Description
	Small HEX Keyboard	Displays two types each of small-sized vertical and horizontal hexadecimal numeric keypads.
	Small Text (ABC/ENG) Keyboard	Displays six types of small-sized alphabetical full keypads.
	Small Text (ABC/JPN) Keyboard	Displays six types of small-sized Japanese full keypads, etc.
New		<p>Displays the [New Package] dialog box. Set a name of a new part, drawing, keypad, etc. to register in the package within 64 characters.</p> 
Open		<p>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.</p> 
Delete		Deletes the parts, drawings, keypads, etc. previously registered in [Package].
Rename		<p>Displays the [Rename Package] dialog box. Renames the parts, drawings, keypads, etc. previously registered in [Package]. Set a new name within 64 characters.</p> 
Close		Closes the [Package List] dialog box.

16.6 Restrictions

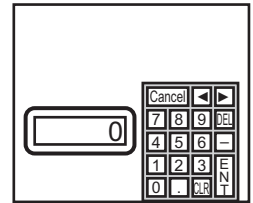
16.6.1 Restrictions for Popup Keypad

- 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 Placement Position] exceeds the GP's display screen area, the popup keypad is displayed in the bottom right corner of the placed data part.
- Popup keypad displays when the [Specify Placement Position] is set to [Disable]

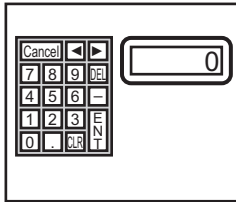
Normally a popup keypad is displayed to the right of the data display part, starting at the top right corner of the data display part.



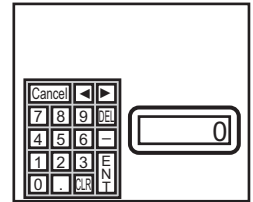
If there is not enough space to display a keypad at the bottom of the screen, the keypad is displayed with its vertical position adjusted.



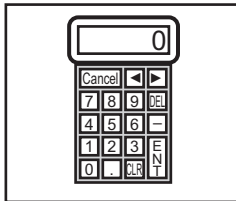
If there is not enough space to display a keypad at the right of the screen, the keypad is displayed to the left of the data display part, starting at the top left corner of the data display part.



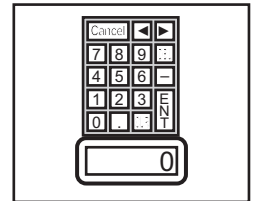
If there is not enough space to display a keypad at the right or bottom of the screen, the keypad is displayed to the left of the data display part with its vertical position adjusted.



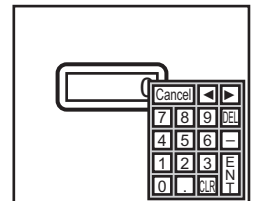
If there is not enough space to display a keypad at the right, left or top of the screen, the keypad is displayed under the data display part.



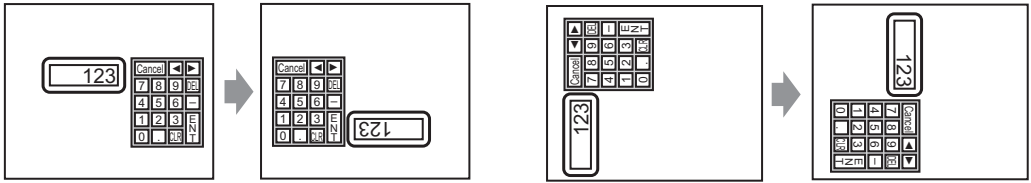
If there is not enough space to display a keypad at the right, left or bottom of the screen, the keypad is displayed on the top of the data display part.



If there is no open space to display the Keypad on the screen, it will appear in the bottom right of the screen. There are some cases where you cannot confirm the input value because the popup keypad overlaps the setting value display.



- 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)
- You cannot input from a popup keypad in a data part placed on a Window screen. To input data into a Data Display part in a Window, place the keypad directly.
- 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

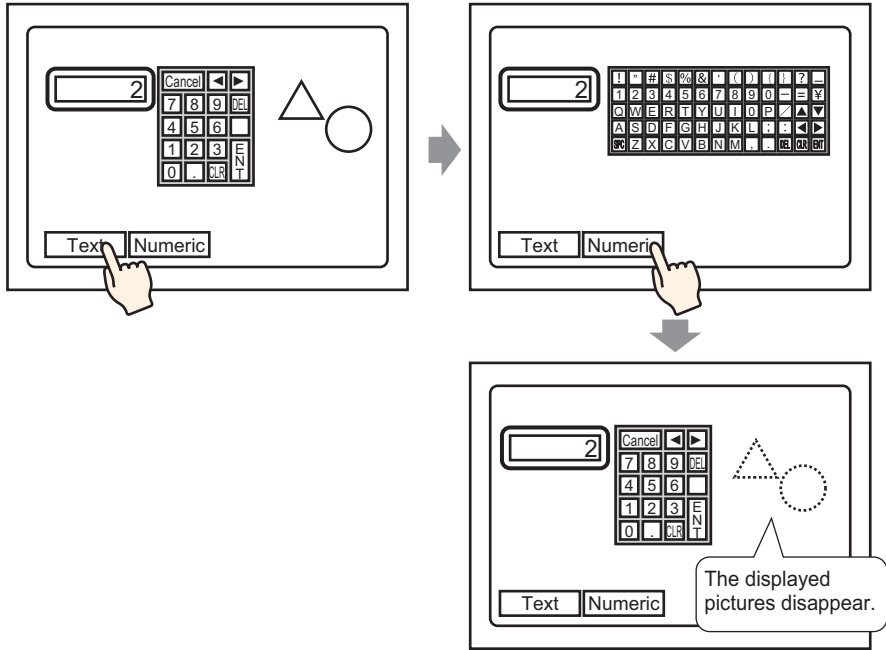
- If a keypad is placed directly on the base screen, you cannot set [Change Keypad].

16.6.3 Restrictions for Keypad Customization

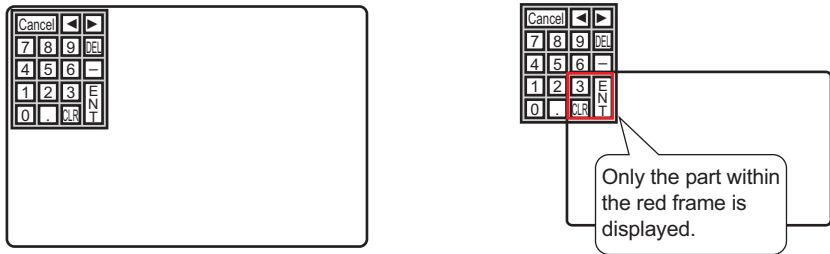
- All you can place on a keypad registration screen is [Key Part] and [Draw] (Dot, Line/ Polyline, Circle/Oval, Rectangle, Arc/Pie, Polygon, Scale, Table, and Text). All you can call to a keypad registration screen with [Call Screen] is a Base Screen, Image, and Mark.

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 can not be redisplayed by switching to a smaller keypad display. Do not place pictures, text and other parts in the area where a keypad is displayed on the Base Screen.



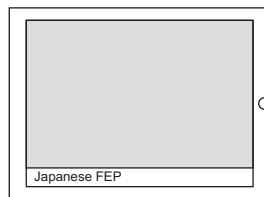
- If the GP models are changed in [System Settings], the Clear Area and the Parts placed on the Base Screen will be displayed with the same sizes and positions as before.



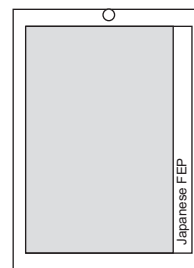
16.6.5 Restrictions for Japanese FEP Feature

■ 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's [Input Permit] unchecked, 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 Settings]'s [Display Language] is [Japanese] on the Data Display Part's [Display Settings] tab.
- The Japanese FEP window is displayed at the same position on the GP with the vertical setting as well.



Horizontal setting



Vertical setting

- If you release the Input Permit 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's display position can be selected from the top or the bottom.
- This feature includes "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 1KB (approx. 100 words). If it gets full, the Learning function delete candidates from the lowest frequency.