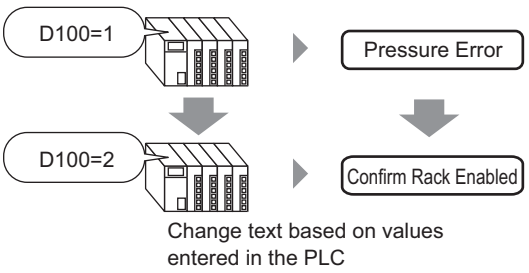
# 17 Displaying and Changing Text

This chapter describes how to display and change text in GP-Pro EX.
Please start by reading "17.1 Settings Menu" (page 17-2), and then turn to the corresponding page.

# 17.1 Settings Menu

## Changing and Displaying Messages (Text)

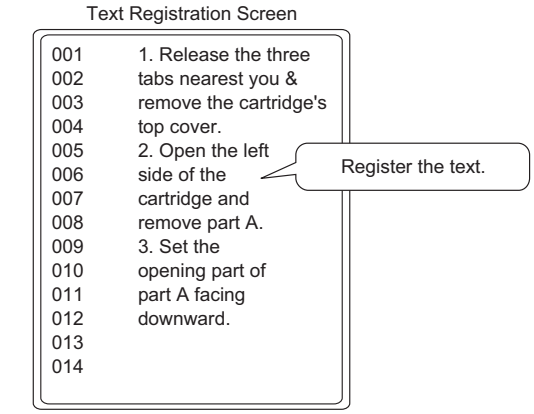


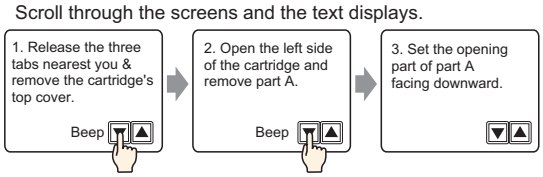

Change text based on values entered in the PLC

☞ Setup Procedure (page 17-5)
☞ Introduction (page 17-4)

## Changing the Displayed Text

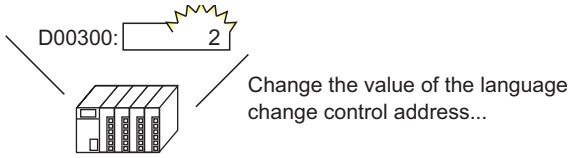
Divides registered text into several sections and displays each section on a different screen.




☞ Setup Procedure (page 17-9)
☞ Introduction (page 17-8)

## Changing a Text's Language (Multilanguage)

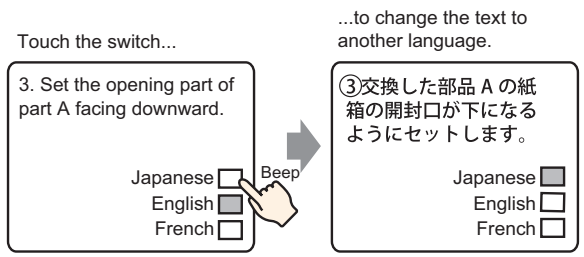




. . . and the language of the Switch label or text changes.

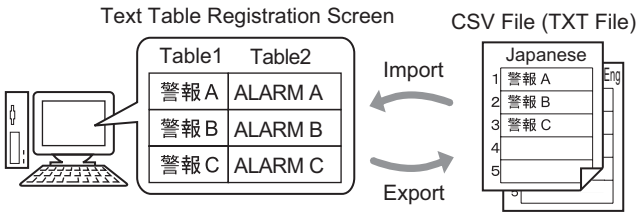
☞ Setup Procedure (page 17-16)
☞ Introduction (page 17-15)

## Changing a Text's Language (Multilanguage)



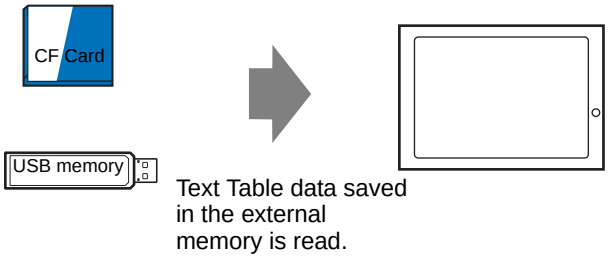

☞ Setup Procedure (page 17-25)
☞ Introduction (page 17-24)

## Importing/Exporting Registered Text Tables for Use in Different Projects



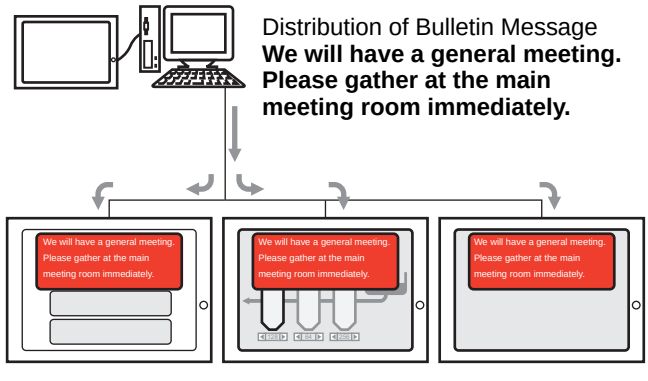

☞ Setup Procedure (page 17-32)
☞ Introduction (page 17-31)

## Changing Text Table without Data Transmission




☞ Setup Procedure (page 17-39)
☞ Introduction (page 17-38)

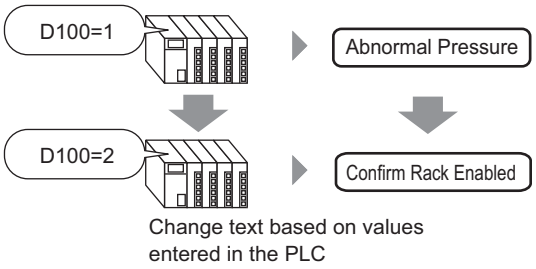
## Displaying Bulletin Message on Multiple GP Screens




☞ Setup Procedure (page 17-45)
☞ Introduction (page 17-44)

# 17.2 Changing and Displaying Messages (Text)

## 17.2.1 Introduction

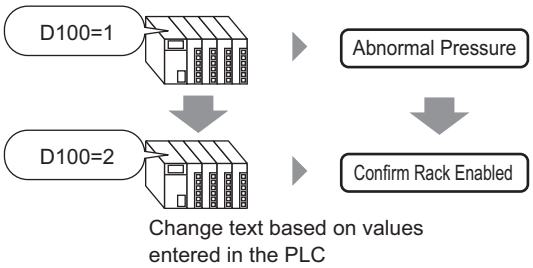



You can change messages according to the bit address ON/OFF state or based on changes in the word address value (0 to 15).

## 17.2.2 Setup Procedure

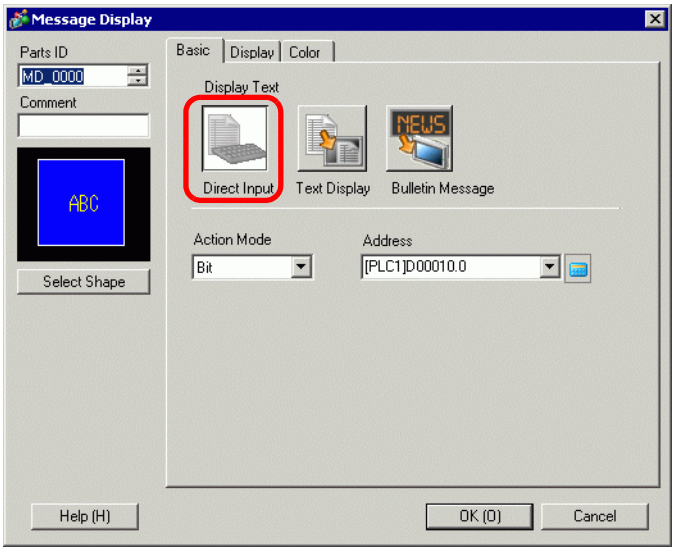
**NOTE**

- Please refer to the Settings Guide for details.
  ☞"17.9.1 Message Display Settings Guide ■ Direct Input" (page 17-48)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
  ☞"8.6.1 Editing Parts" (page 8-44)




1 From the [Parts (P)] menu, select [Message Display (M)] or click . Place the Part on the screen.

2 Double-click the new Message Display. The following dialog box appears.



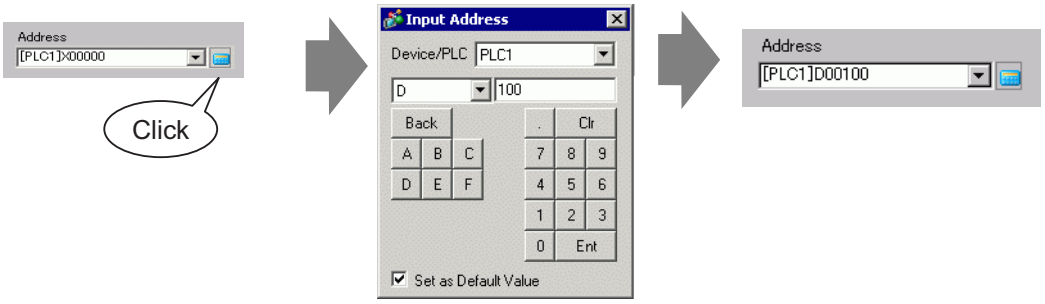

3 Select the Data Display shape from [Select Shape].

4 In the [Mode] drop-down list, select the method for changing messages. (For example, Word)

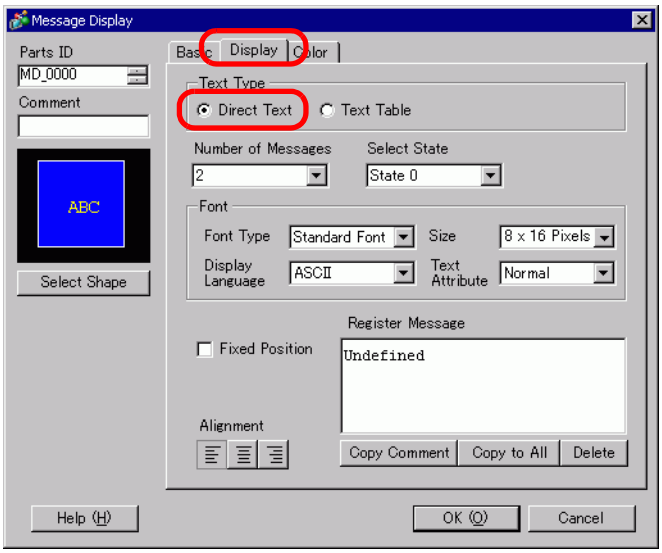
5 In [Address], set the address (D100) to trigger the message display.

Click the icon to display an address input keypad.

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




6 Click the [Display] tab. In the [Text Type] section, select [Direct Text].



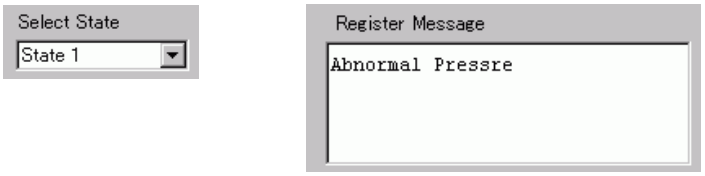

7 In the [Number of Messages] drop-down list, set the number of messages to display. (For example, 4)

8 Set the message Font Type, Size, and Display Language.

9 In the [Align] section, set the text position. (For example, Center)

10 Set the message for each state
In the [Select State] drop-down list, select [State 0] and type the message in the [Register Message] box. (If this box is left blank, the message displays nothing.)


11 In the [Select State] drop-down list, select [State 1] and type "Abnormal Pressure" in the [Register Message] box. (When State 1 is stored in [Address], "Abnormal Pressure" displays.)




12 In the [Select State] drop-down list, select [State 2] and type "Confirm Rack Enabled" in the [Register Message] box. (When State 2 is stored in [Address], "Confirm Rack Enabled" displays.)

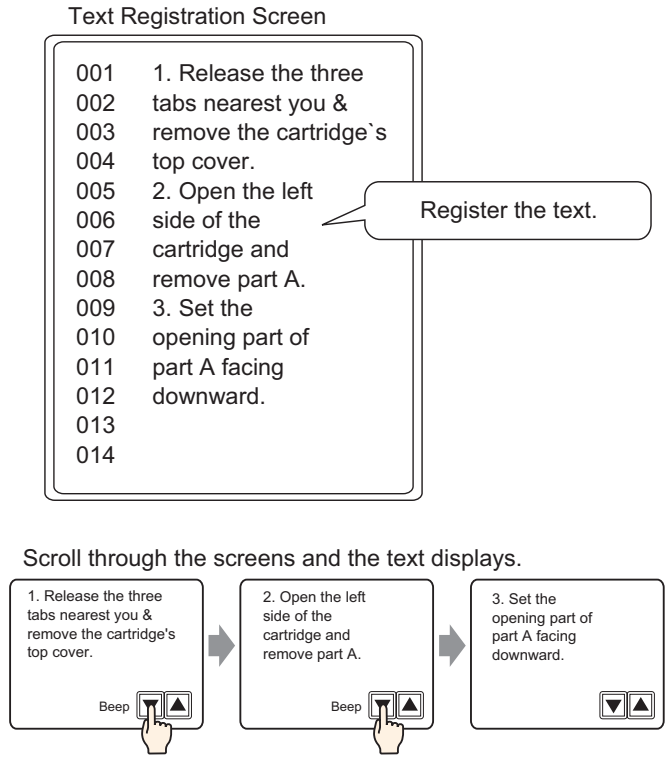

13 As needed, set the Text Color and Plate Color for each state on the [Color] tab, and click [OK (O)].

**NOTE**

- If you select a message that has not been defined, the Message Display shows nothing. For example, if the number of message states is 16 and only states 0 to 3 have messages defined, states 4 to 16 display only the empty message frame.
- You can type up to 100 single-byte characters for each message. Any characters over 100 are not displayed in the message.

# 17.3 Changing the Displayed Text

## 17.3.1 Introduction



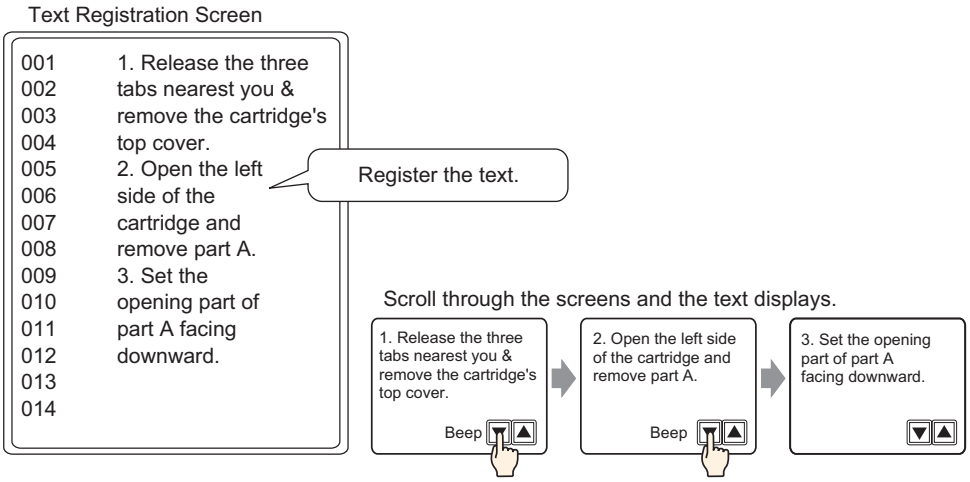

Displays registered messages on the screen.
You can display messages that are too large for a single screen by using a series of screens.

### 17.3.2 Setup Procedure

**NOTE**

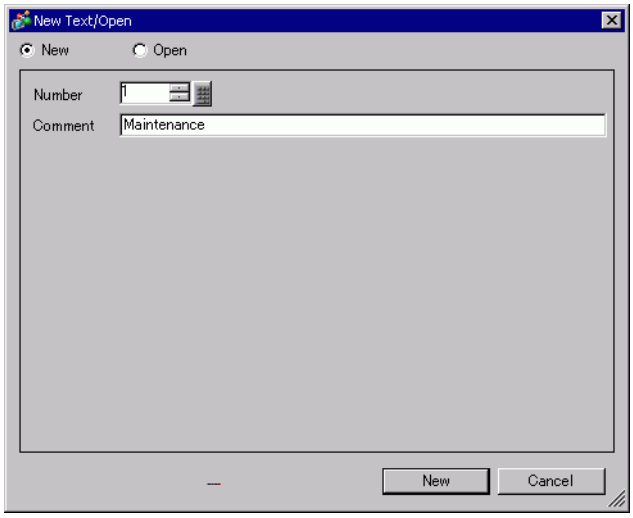
- Please refer to the Settings Guide for details.
  ☞"17.9.1 Message Display Settings Guide ■ Text Display" (page 17-53)
  ☞"17.9.2 Common (Text Registration) Settings Guide" (page 17-61)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
  ☞"8.6.1 Editing Parts" (page 8-44)

Displays registered text on the screen.

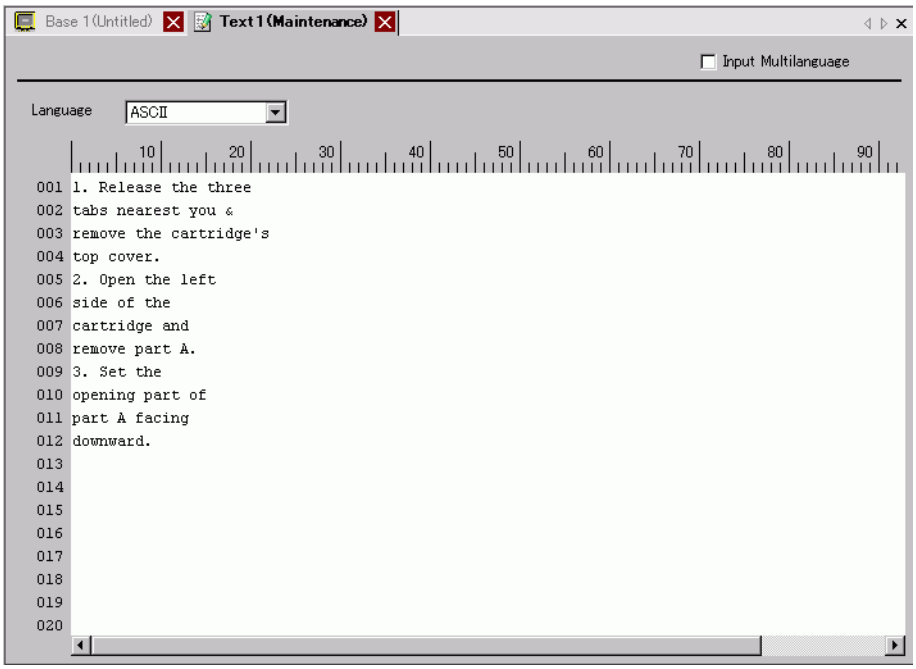



1 From the [Common Settings (R)] menu, select [Text Registration (T)] or click . The [New Text/Open] dialog box appears.

2 Set the text number and comment, then click [New]. The text input screen appears.
For example, Number = "1", Comment = "Maintenance"



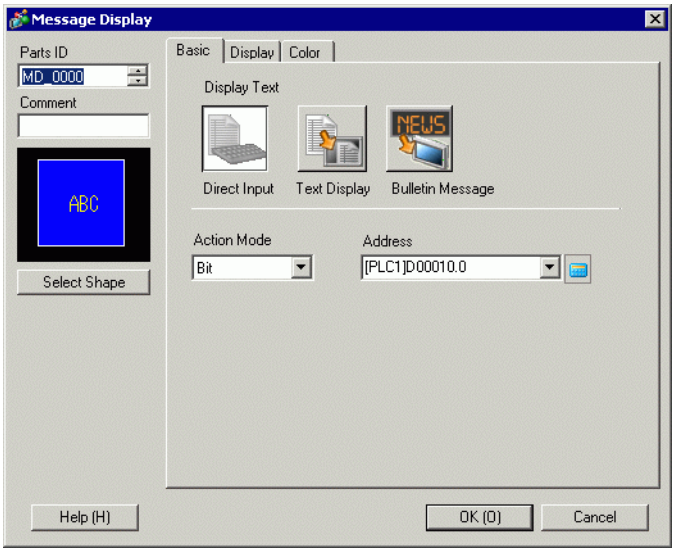
3 The text input screen appears. Enter the text for the message.



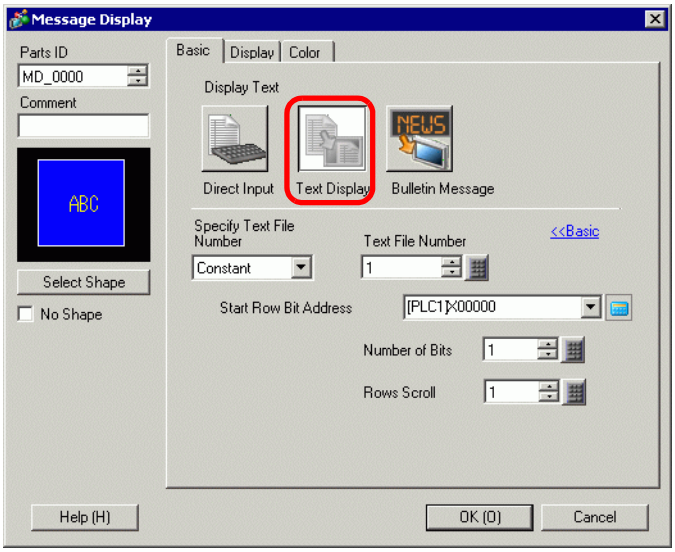

Click  at the top right of the screen to close the input screen.

4 Next, configure the Message Display settings. Open the drawing screen. On the [Parts (P)] menu, select [Message Display (M)] or click  to open and display the screen on which you want to display the Text.

5 Double-click the new Message Display. The following dialog box appears.



6 Select [Text Display], and change the dialog box to [Extended] view.

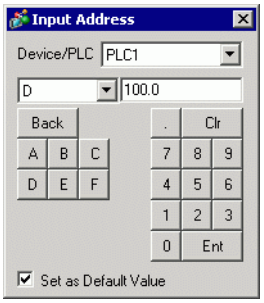



7 In the [Specify Text File Number], select the method of specifying text to display. Set the [Text File Number].

8 In [Start Row Bit Address], set the start address (D100 00 bit) which will trigger the message display.

Click  to display an address input keypad.

Select device "D", input "100.0" as the address, and press the Enter key.





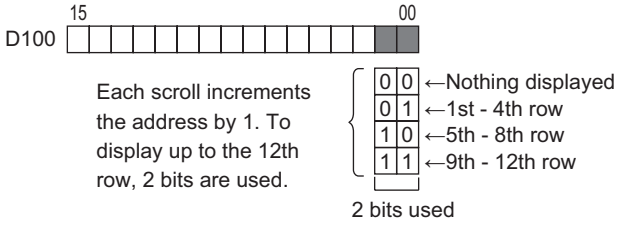
**NOTE**

- Set a bit address or a word address to specify bits. If you set a bit address, [Number of Bits] of sequential addresses are assigned to set the display start row. If you set a word address, [Number of Bits] of sequential bits in the word (16 bits) are used.

9 In the [Number of Bits] field, set the number of bits to use for designating the start row display. (For example, 2)

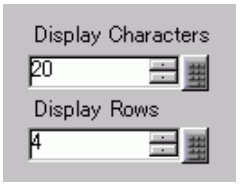

**NOTE**

- The number of bits to use depends on [Rows Scroll]. When scrolling four rows at a time, you need to scroll three times at the maximum to display 12 rows. 2 bits are required to store "3".




10 In the [Rows Scroll] field, set the number of text rows to scroll each time. (For example, 4)

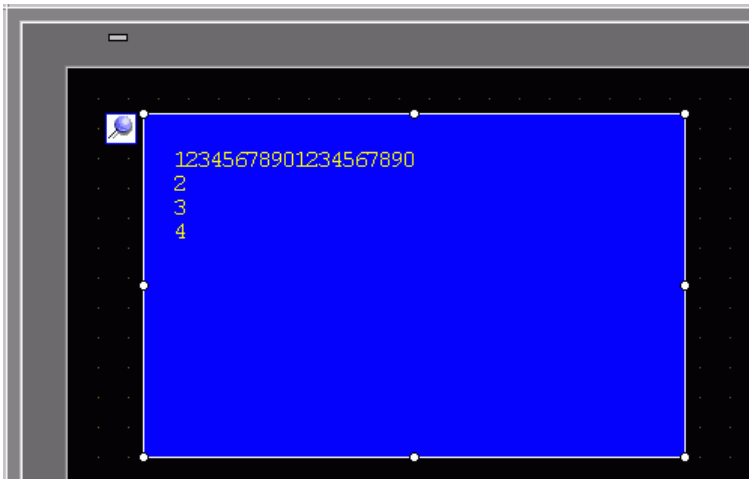

11 Click the [Display] tab. Set the [Display Characters] and [Display Rows].




**NOTE**

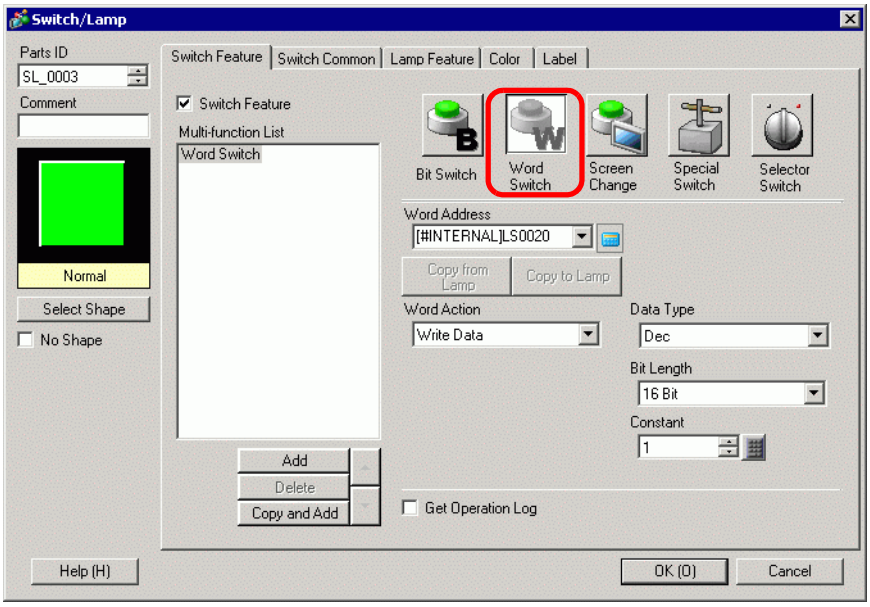
- Set "1" to [Display Characters] to display one single-byte character. Set "2" for one double-byte character.

12 As needed, set the Message Display color and text color on the [Color] tab, and click [OK]. The Message Display settings are complete.




13 Set a Switch to scroll through messages. From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Word Switch (W)] or click . Place the switch on the screen.

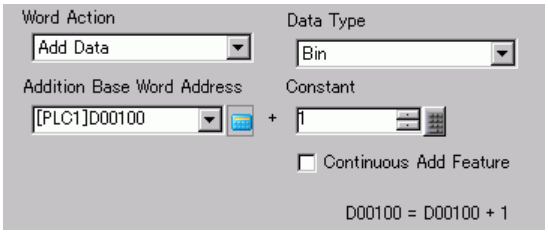
14 Double-click the placed Switch part. The following dialog box appears.




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

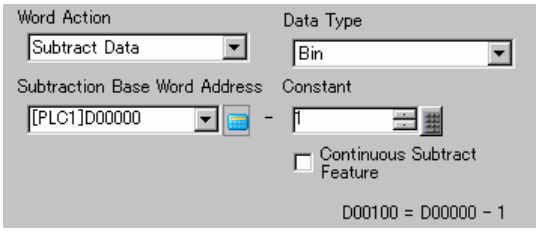
16 In the [Word Address] field, set the address (D100) where you want to write data when you touch the switch.

17 In the [Word Action] drop-down list, select [Add Data]. Set an address value in [Addition Base Word Address].




18 As needed, set the Switch color and label on the [Color] tab and [Label] tab, and click [OK]. A Switch to scroll to next text has been created.


19 Create a Switch to scroll to previous text as well. Place a Word Switch and select [Subtract Data] from the [Word Action] drop-down list.



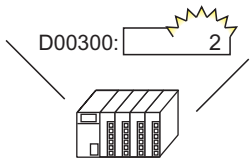

Two scroll switches have been placed.

**NOTE**

- Text can have up to 512 lines with up to 100 single-byte characters per line.
- When the data designated as the Display Start Row has no corresponding text row, the operation does not occur. The previously displayed rows remain.
- If the text data is wider than the display area, the portion that exceeds the display area is not displayed.

# 17.4 Changing a Text's Language (Multilanguage)

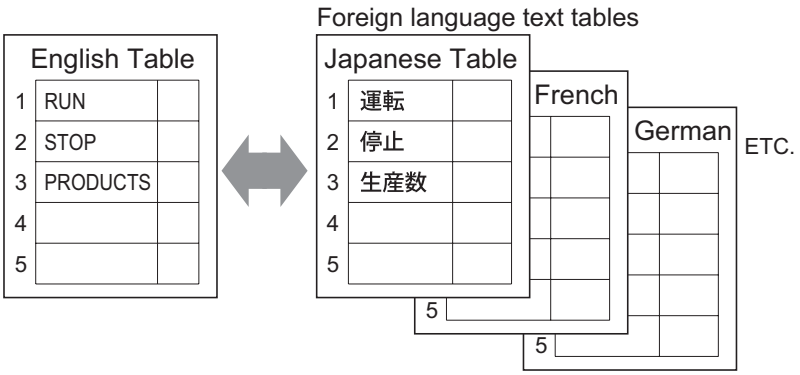
## 17.4.1 Introduction




Change the value of the language change control address...


And the language of all text using text tables (Draw's text, Switch's label, etc.) changes.

Create a Text Table with text in multiple languages. You can then change languages in text objects even while the system is running. (No translation function is available.)



## 17.4.2 Setup Procedure

**NOTE**

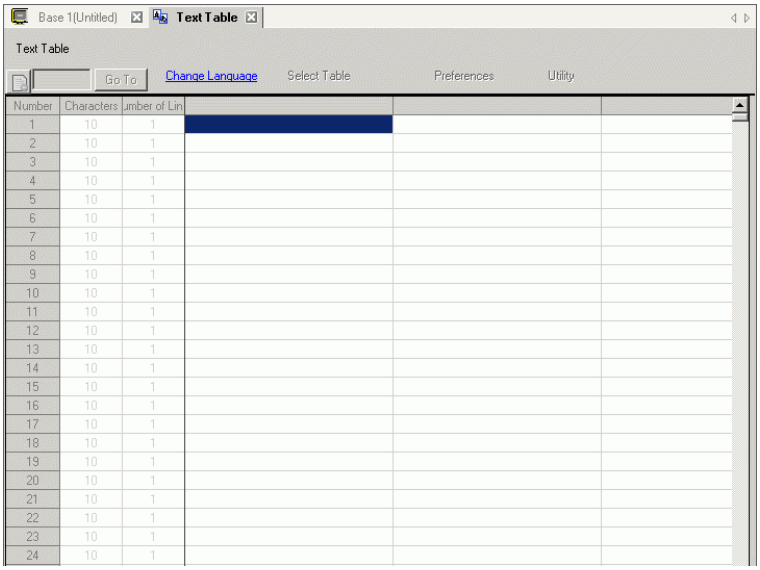
- Please refer to the Settings Guide for details.
  ☞"17.9.3 Text Table Settings Guide" (page 17-62)
  ☞"17.9.4 Switch/Lamp - Label (Enable Text Table) Settings Guide" (page 17-68)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
  ☞"8.6.1 Editing Parts" (page 8-44)

Configure settings to change languages for a Switch label while the system is running.

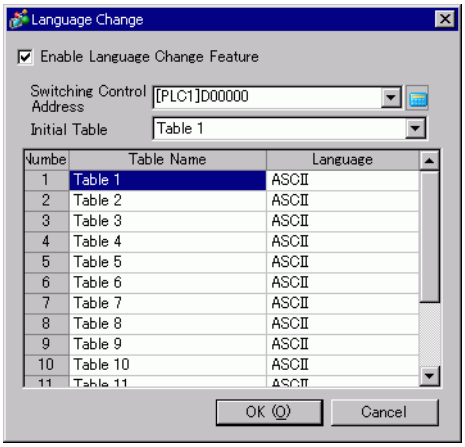

Change the value of the language change control address...

And the language of a Switch' s label changes.

1 Register words and phrases to use on the screen in the Text Table.
From the [Common Settings (R)] menu, select [Text Table (S)] or click . In the following window, select



2 Click [Language Change] The following dialog box appears. Select the [Enable Language Change Feature] check box.



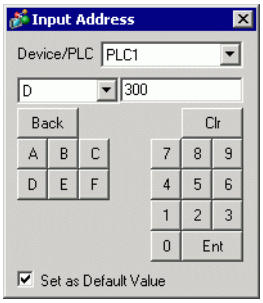

**NOTE**

- If you clear the [Enable Language Change Feature] check box, the Text Table data that has been specified is deleted.

3 In the [Switching Control Address] field, set the address (for example, D300) that will store the Table Number to display.

Click to display an address input keypad.

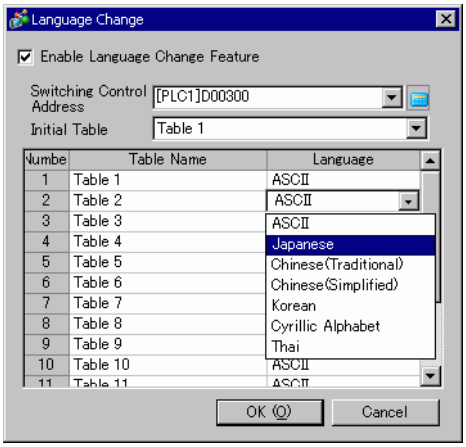
Select device "D", input "300" as the address, and press the Enter key.



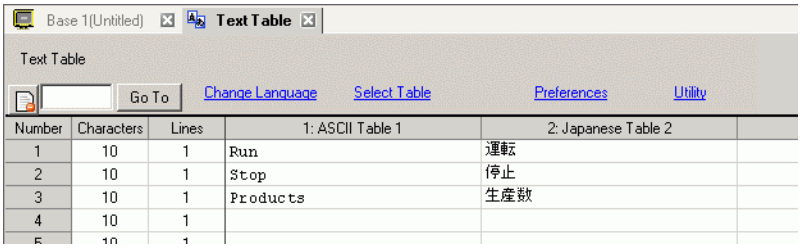


4 In the [Initial Table] drop-down list, set the table to display when the specified [Switching Control Address] is set to "0".

5 Select each Table's display language and click [OK].
For example, Table1= Japanese, Table2= ASCII




6 In the Text Table, set the [Characters] and [Number of Lines] and input words or simple messages in each table.
For example, Number of Characters = 10, Number of Rows = 1



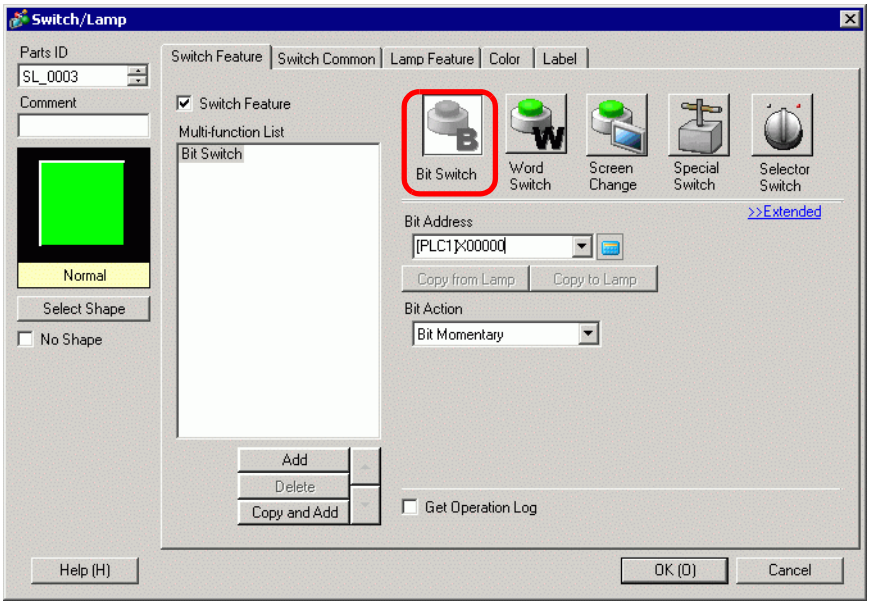

After entering your data, click on the [Text Table] tab to close the [Text Table].
Text table registration is completed.

**NOTE**

- Input text can be stored even if it exceeds the [Number of Characters] or [Number of Lines], so long as in the [Preferences] dialog box [Text Table] page, the [Number of Characters/Lines] is set to the [Adjust Automatically] option. Also, you can use Alt+Enter to start a new line.

7 Use the text table as a Switch's label to be used on the screen. Open the screen.
From the [Parts (P)] menu, point to [Switch Lamp (C)] option and select [Bit Switch (B)] or click . Place the bit switch on the screen.

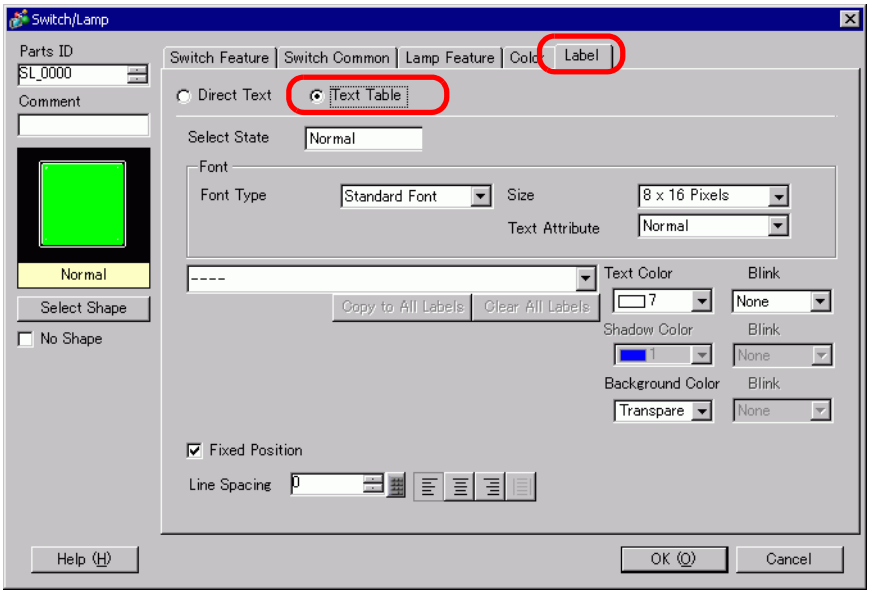
8 Double-click the placed Switch part. The following dialog box appears.




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

10 Specify the [Bit Address] and select [Bit Set] in [Bit Action].

11 Click the [Label] tab, then select [Text Table].



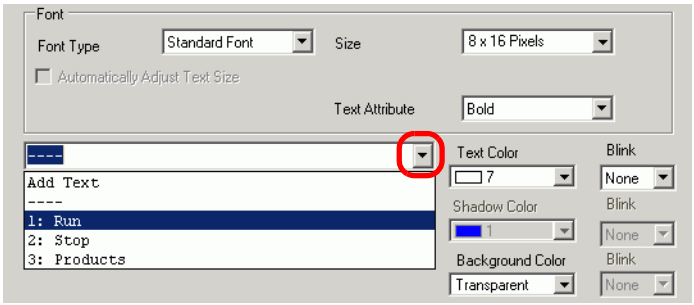

12 Set the Label font type, size, text color, etc.

**NOTE**

- When using [Stroke Font], you can select [Automatically Adjust Text Size] to adjust the font size of text from the Text Table so it fits in the part.

☞ 17.9.1 Message Display Settings Guide ■ Direct Input ◆ Display (Text Table) 17-50

13 When the text appears in the drop-down menu, select the text for the Label. For example, "Run"




**NOTE**

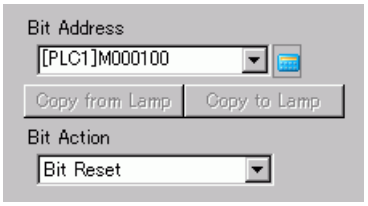
- To add new words which are not registered in Text Table, select [Add Text].

14 Set the label text display position and click [OK].

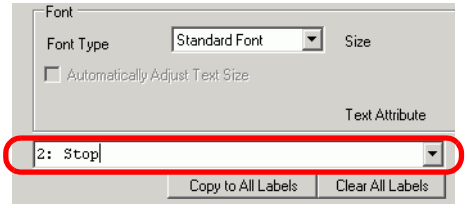

The "Run" Switch has been created.

15 Create the same kind of "Stop" Switch.

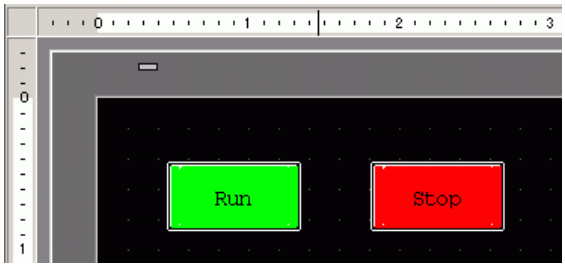
[Switch Feature] Tab



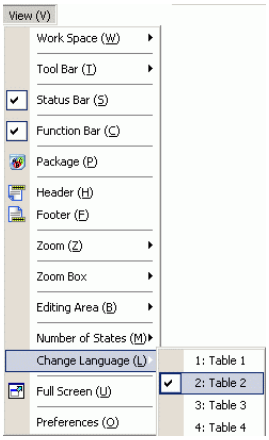

[Label] Tab



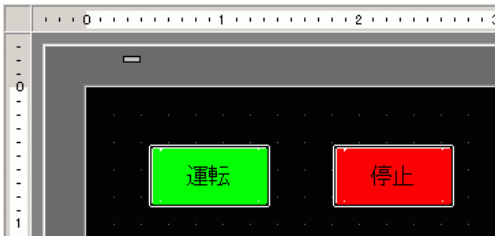

Two switches have been created.



To check the display state when Text Tables are changed from the [View (V)] menu, point to [Change Language (L)] and select [Table 2].




Display State for Table 2




**NOTE**

- You can use text registered in Text Table for a Message Display, Draw text, Alarm Part item name, Alarm Message, etc. as well as a Switch label.
  ☞17.9.1 Message Display Settings Guide ■ Direct Input ◆ Display (Text Table) 17-50
  ☞"17.9.5 Drawing Text (Using the Text Table) Settings Guide" (page 17-70)
  ☞"17.9.6 Alarm Part - Item/Extended (Text Table) Settings Guide" (page 17-72)
  ☞"17.9.7 Alarm (Enable Text Table) Settings Guide" (page 17-73)
- If you change languages, all the text using Text Table is changed. If text in multiple languages is registered, the language of the displayed text is also changed.
- You can automatically register text from Message Displays, Switches, Lamps, or Alarms to the Text Table.

## ◆ Convert Text Table

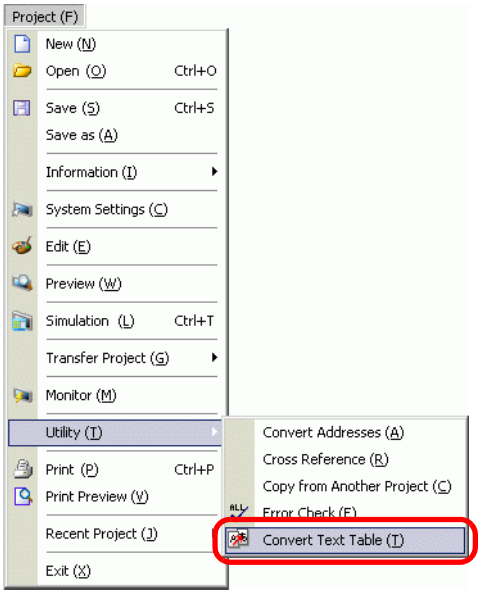
**NOTE**

- Please refer to the Settings Guide for details.

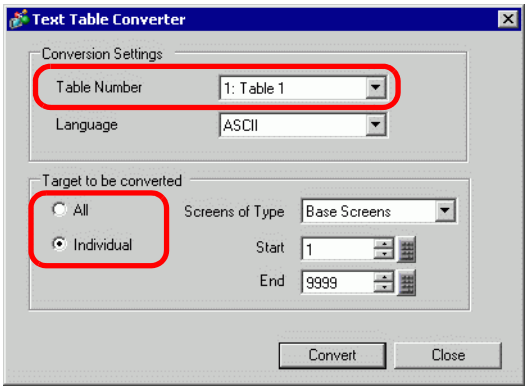
☞ "5.17.4 [Utility] Settings Guide ■ Convert Text Table" (page 5-125)

Register the text on screens to the Text Table.

1 On the [Project (F)] menu, point to [Utility (T)], and click [Convert Text Table (T)].

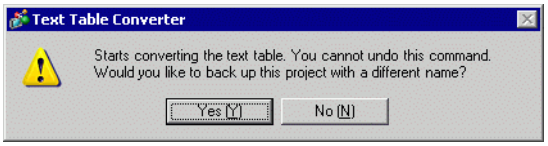



2 In the [Text Table Converter] dialog box, select which Table to add the converted text strings. (For example, [Table Number]1= Table 1, [Target to be converted] = Individual)

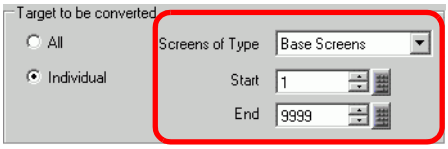



**NOTE**

- When the edited project is not saved, the following message appears before proceeding to the Text Table Converter dialog box.



3 Use the Screens of Type, Start and End fields to select which screens to convert. (For example, [Screens of Type] = Base Screens, [Start] = 1, [End] = 1




**NOTE**

- When [Target to be converted] is set to [Individual], you can define which Screens of Type to convert.

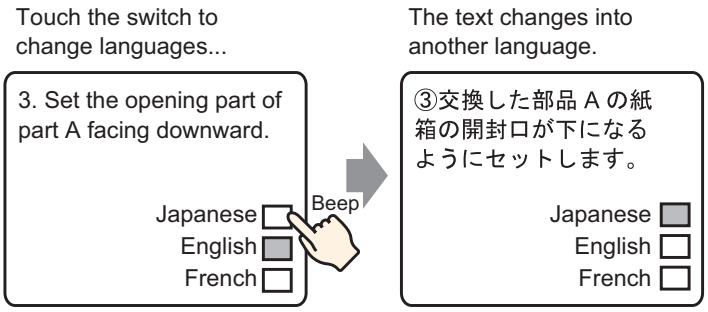
4 Click [Convert] to collect all the text strings to the defined Text Table.
When conversion is complete, [Close] returns you to the screen editor.

**NOTE**

- If a text string already exists in the Text Table, it does not get added again.

# 17.5 Changing a Text's Language (Multilanguage)

## 17.5.1 Introduction

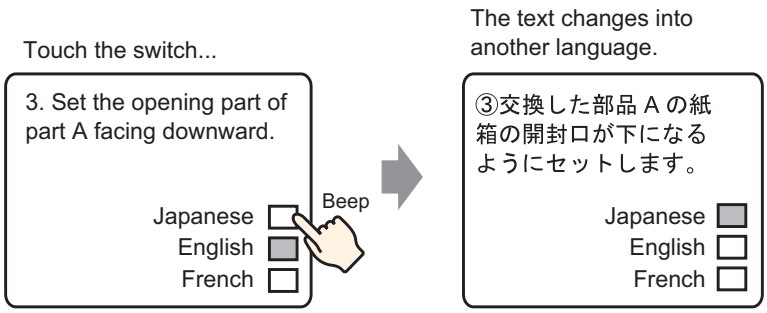



Create a preset text with words and phrases in another language for the text you want to change. You can then change languages of the text even while the system is running. (No translation function is available.) If you change languages, all the text using Text Table, as well as the text, is changed.

## 17.5.2 Setup Procedure

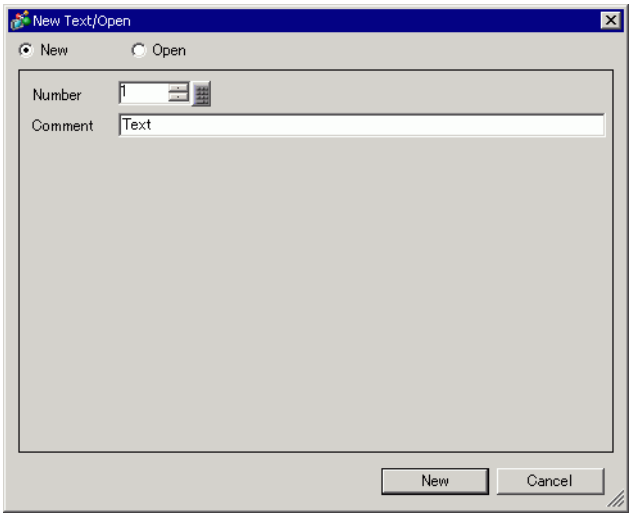
**NOTE**

- Please refer to the Settings Guide for details.
  ☞"17.9.2 Common (Text Registration) Settings Guide" (page 17-61)
  ☞"17.9.1 Message Display Settings Guide ■ Text Display" (page 17-53)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
  ☞"8.6.1 Editing Parts" (page 8-44)

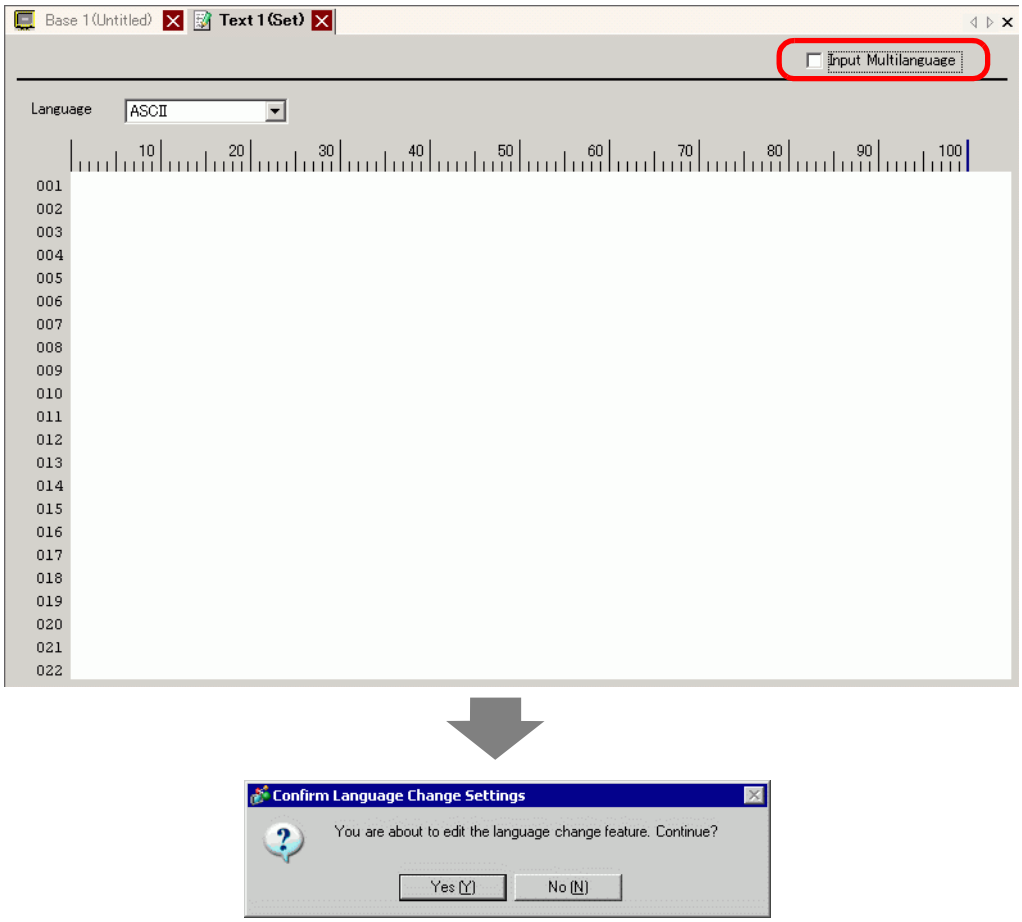



1 Saves used multilanguage text. From the [Common Settings (R)] menu, select [Text Registration (T)] or click  . The [New Text/Open] dialog box appears.

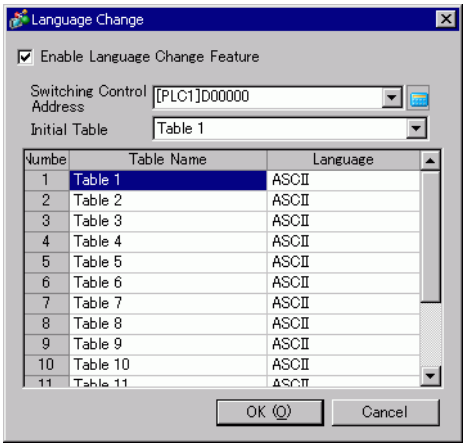
2 Set the text number and comment, then click [New]. The text input screen appears. For example, Number = "1", Comment = "Set"



3 Select the [Input Multilanguage] check box. The following message appears. Click [Yes (Y)].




4 The [Language Change] dialog box appears. Select the [Enable Language Change Feature] check box.

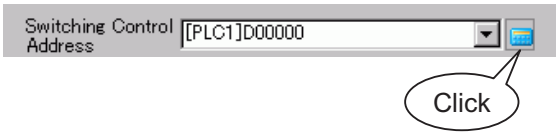



**NOTE**

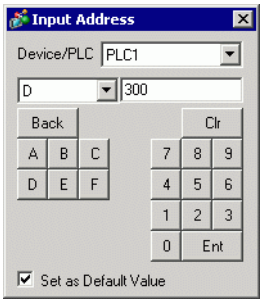
- If you clear the [Enable Language Change Feature] check box, the Text Table data is deleted.

5 In the [Switching Control Address] field, set the address (D300) to store the Table Number to display.

Click the icon to display an address input keypad.



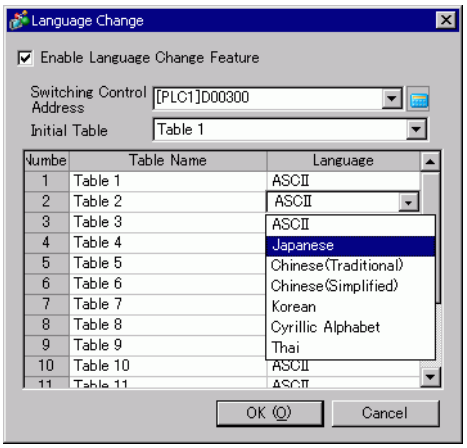

Select device "D", input "300" as the address, and press the Enter key.



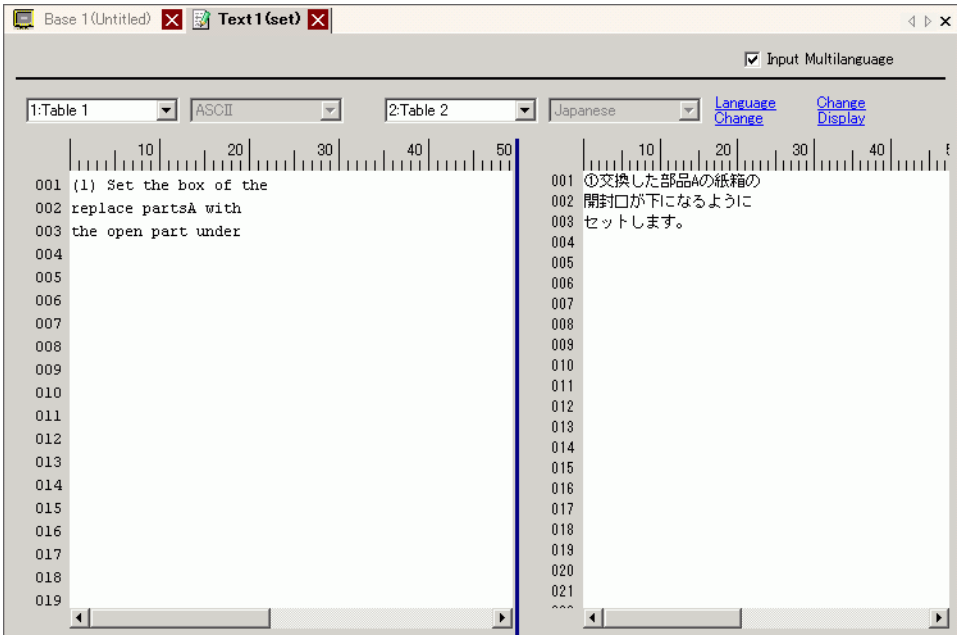


6 In the [Initial Table] drop-down list, set the table to display when the [Switching Control Address] is set to "0".


7 Select each Table's display language and click [OK].
For example, Table1= Japanese, Table2= ASCII



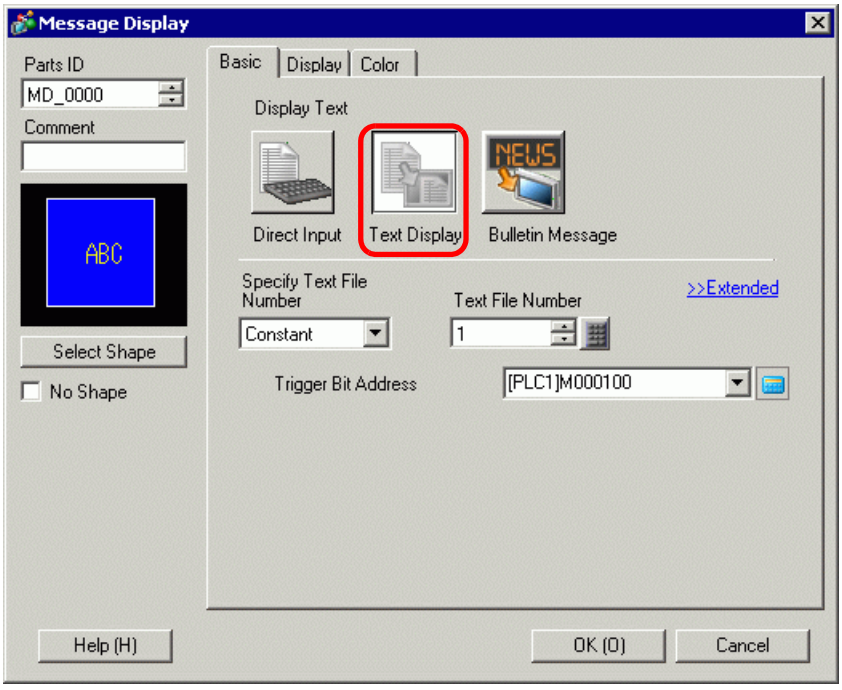
8 Enter the text to display for each table.




After entering your data, click on the [Text Table] tab to close the text.
Text table registration is complete.

9 Next, configure the Message Display settings. Open the drawing screen. From the [Parts (P)] menu, select [Message Display (M)] or click . Place the Part on the screen.

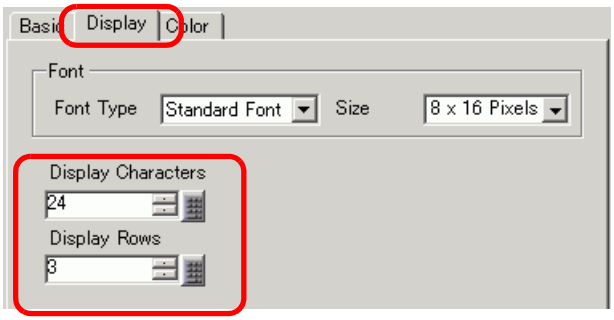
10 Double-click the new Message Display. The following dialog box appears. Click the [Text Display] icon.



11 In the [Specify Text File Number] drop-down box, select the method of specifying text to display. Set the [Text File Number].

12 In [Trigger Bit Address], set the address (M100) which will trigger the text display.


13 Click the [Display] tab. Set the [Display Characters] and [Display Rows].



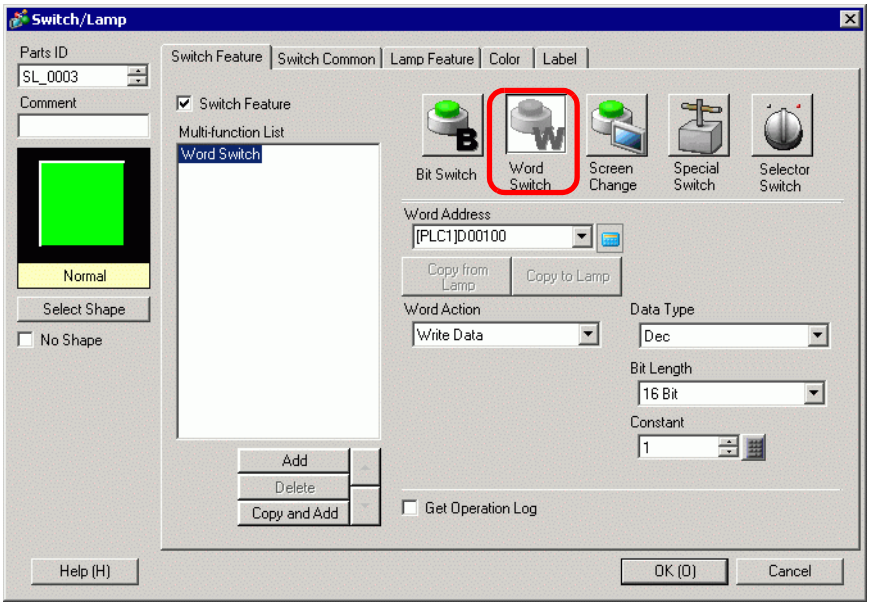

**NOTE**

- Set "1" to [Display Characters] to display one single-byte character. Set "2" for one double-byte character.

14 As needed, set the Message Display color and text color on the [Color] tab, and click [OK]. The Message Display settings are complete.

15 Create a switch to change languages. From the [Parts (P)] menu, point to [Switch Lamp (C)] and select [Word Switch (W)] or click  and draw on the screen.

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

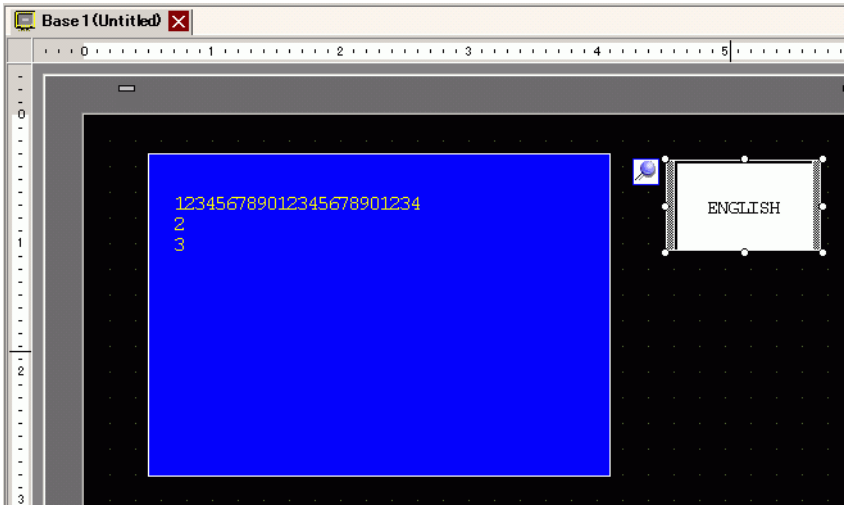



17 In [Select Shape], select the Switch shape.

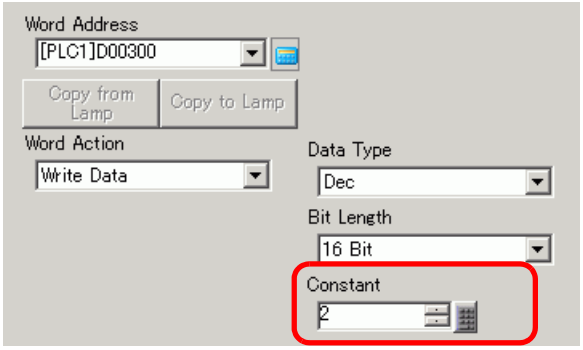
18 In the [Word Address] field, set the same address (D300) as the set [Switching Control Address].

19 In the [Word Action] drop-down list, select [Write Data]. Set [Constant] to 1.

20 Specify the color and label for the switch on the [Color] tab and [Label] tab as required, and click [OK]. The switch for changing to English text (Table 1) has been created.




21 Create the same kind of Switch to change to Japanese text (Table 2). The settings for the Switch are as follows.



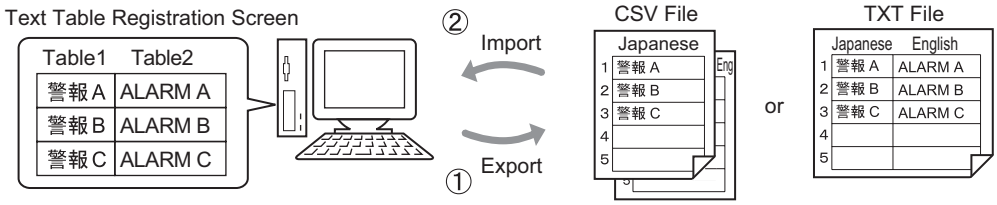

**NOTE**

- If you change tables (languages), all the text using Text Table, as well as the text, is changed.

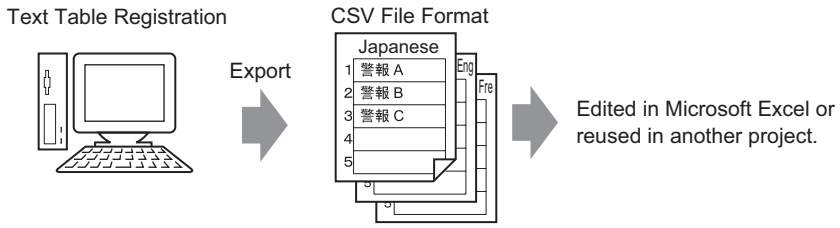
# 17.6 Importing/Exporting Registered Text Tables for Use in Different Projects

## 17.6.1 Introduction

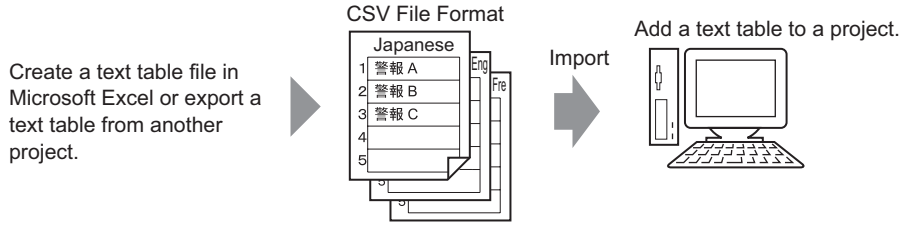
### ■ Saving/reusing registered Text Tables in CSV or TXT File Format




You can export Text Tables from a project and save them as CSV or TXT files. The saved Text Table files (∗.csv or ∗.txt) can then be edited in Microsoft Excel or another software.
☞"17.6.2 Setup Procedure ■ Export" (page 17-32)




You can also use the Text Tables (see (1)) in another project by importing the CSV or TXT file.
By creating the Text Table file (∗.csv or ∗.txt) in Microsoft Excel in advance, you can use the file in the project by importing the file. Users who do not have access to GP-Pro EX can still edit text data for translation into other languages in the project.
☞"17.6.2 Setup Procedure ■ Import" (page 17-34)




**NOTE**

- To export/import multiple languages at the same time, save them in a TXT file.

## 17.6.2 Setup Procedure

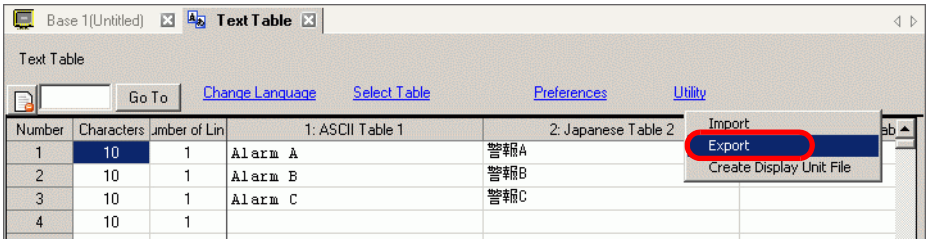
**NOTE**

- Please refer to the Settings Guide for details.
☞"17.9.3 Text Table Settings Guide" (page 17-62)

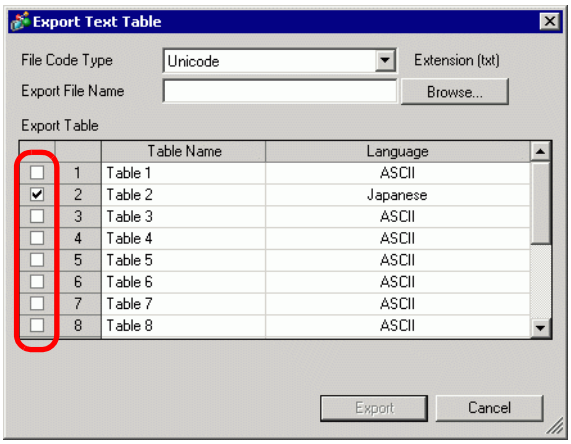
### ■ Export

Exports the Text Tables to the CSV file format.

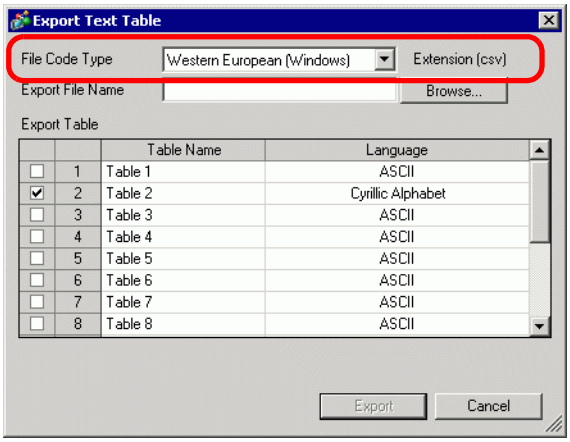

1 From the [Common Settings (R)] menu, select [Text Table (S)] or click  to open the Text Table screen. Select [Export] from [Utility].




2 Select the check box to the left of the table name to export the table. Clear the check boxes next to tables you do not want to export.



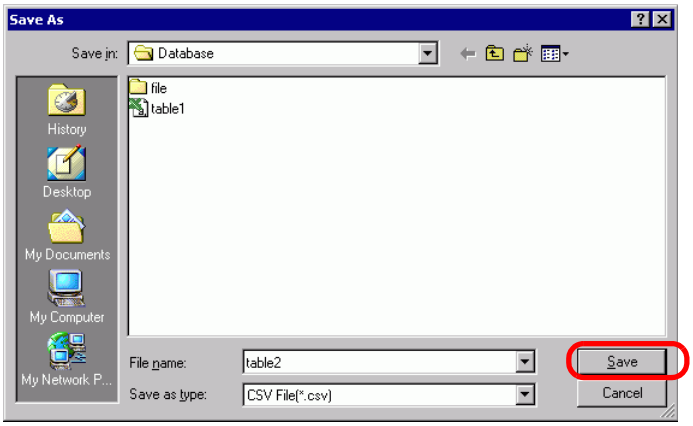
3 Select the code type of the files to export.




**NOTE**

- To export multiple languages at the same time, select [Unicode]. When [Unicode] is selected, a file is exported in the text file format (*.txt). Click [Browse].

4 The [Save As] dialog box appears. Select a location and type a file name, then click [Save].



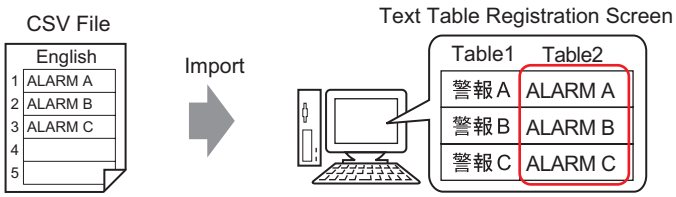

5 Click [Export] to export the tables. When the process is finished, the following dialog box appears. Click [OK] to complete the export.


**NOTE**

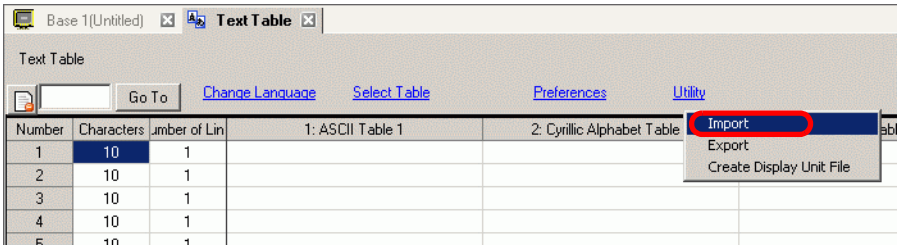
- If there are any problems carrying out the export, the entire export process will be canceled.

## ■ Import

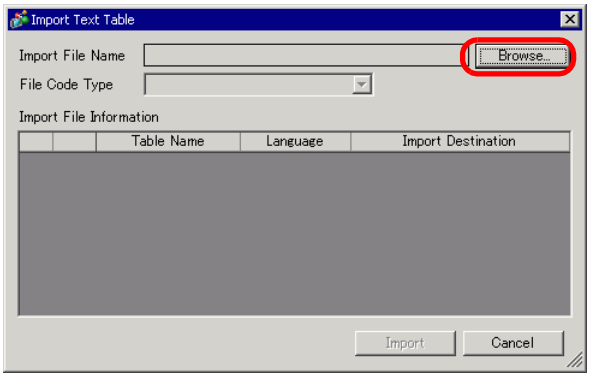
Imports Text Table files (*.csv) to a project.



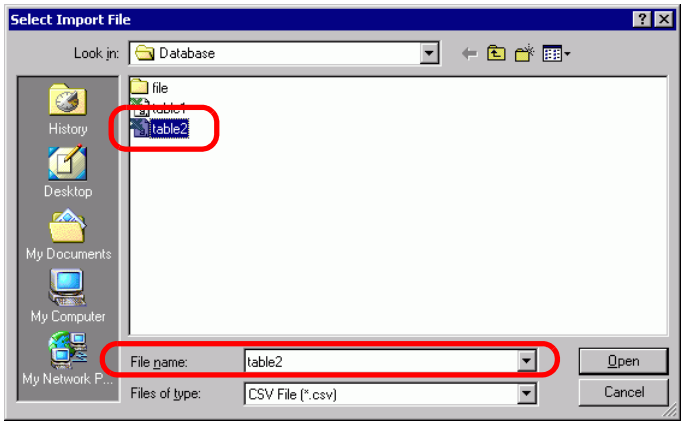

1 From the [Common Settings (R)] menu, select [Text Table (S)] or click . In the following window, select [Import] from [Utility].



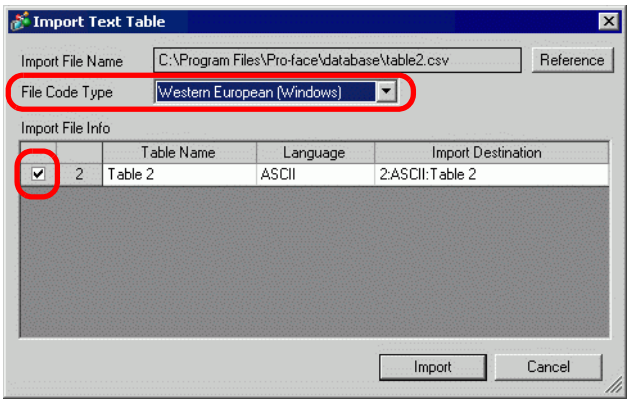

2 The [Import Text Table] dialog box appears. Click [Browse].




3 Select "CSV File (*.csv)" in [Files of type], select a file to import, and click [Open].



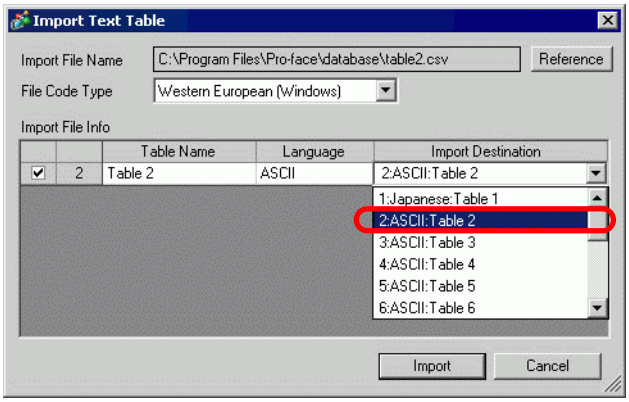
4 In the [File Code Type] drop-down list, select an option according to the language in the Text Table to import. Select the check box to the left of the table name to import the table. Clear the check boxes next to tables you do not want to import.




**NOTE**

- If you select a Text Table file in TXT format (*.txt), the [File Code Type] is fixed as [Unicode]. To import multiple languages at the same time, select [Unicode].

5 Select a destination table. The Text Table is imported to the designated table by overwriting it.




6 Click [Import]. The following dialog box appears. Click [OK] to complete the import.


**NOTE**

- If there are any problems carrying out the import, the entire import process will be canceled and the Text Tables in the project are not affected.
- You can input text with up to 1,200 characters in a Text Table. Any excess/ remaining characters or rows are not be imported.

### 17.6.3 Text Table File Format

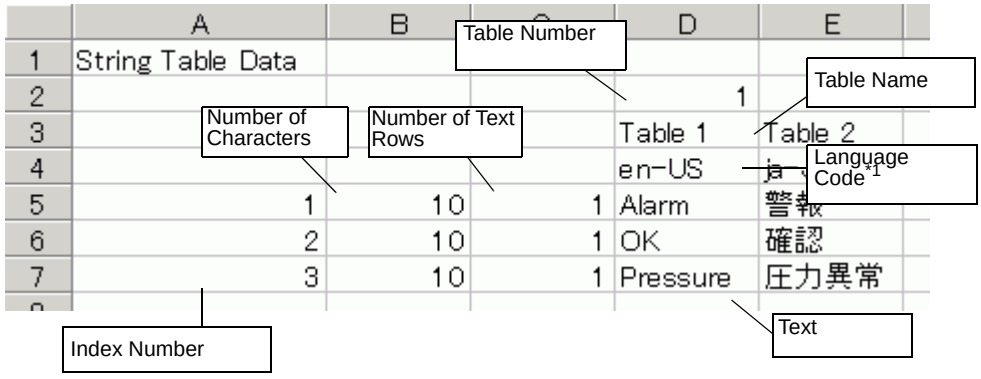
Exported Text Tables' file (*.txt or *.csv) format displays as follows.
Text Table Registration Screen


| Number | Characters | Lines | 1: ASCII Table 1 | 2: Japanese Table 2 |
|---|---|---|---|---|
| 1 | 10 | 1 | Alarm | 警報 |
| 2 | 10 | 1 | OK | 確認 |
| 3 | 10 | 1 | Pressure | 圧力異常 |
| 4 | 10 | 1 | | |
| 5 | 10 | 1 | | |

CSV file format

String Table Data . . . . . .....Header (Necessary for import)
String Table Data . . . . . .....Header (Necessary for import)
,"","","1","2" . . . . . .....Each table's Table Number
,"","","Table 1","Table 2" . . . . . .....Each table's Table Name
,"","","ja-JP","en-US" . . . . . .....Each table's Language Code [*1]
1,"10","1","Alarm" . . . . . .....The number of characters in Number 1, Number of Rows, Each table's text
2,"10","1","OK" . . . . . .....The number of characters in Number 2, Number of Rows, Each table's text
3,"10","1","Pressure" . . . . . .....The number of characters in Number 3, Number of Rows, Each table's text

When the above CSV file is represented in Excel, it looks as follows.




| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | String Table Data | | | | |
| 2 | | | | 1 | |
| 3 | | | | Table 1 | Table 2 |
| 4 | | | | en-US | ja |
| 5 | 1 | 10 | 1 | Alarm | 警報 |
| 6 | 2 | 10 | 1 | OK | 確認 |
| 7 | 3 | 10 | 1 | Pressure | 圧力異常 |

**NOTE**

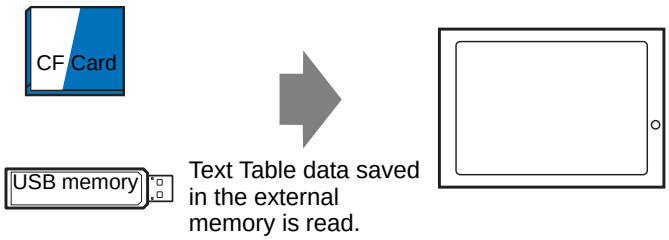
- When using the [Adjust Automatically] option, all the characters can be exported even if they exceed the Number of Characters or Number of Lines.
- Changing the file format causes incorrect updates.

1 Text Table files (*.txt or *.csv) displays each table's language with the following language codes.

| Language | Japanese | ASCII | Chinese (Traditional) | Chinese (Simplified) | Korean | Cyrillic | Thai |
|---|---|---|---|---|---|---|---|
| Language Code | ja-JP | en-US | zh-TW | zh-CN | ko-KR | ru-ru | th-TH |

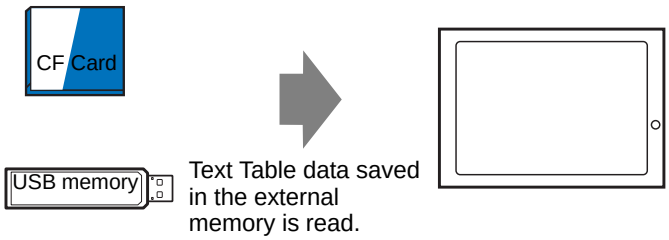
# 17.7 Changing Text Table without Data Transmission

## 17.7.1 Introduction




You can save the Text Table data in the external memory in advance and rewrite the Text Table data in the display unit during startup or from the offline menu.
Even in an environment where GP-Pro EX cannot be used, text of the alarm message and labels can be changed.

## 17.7.2 Setup Procedure

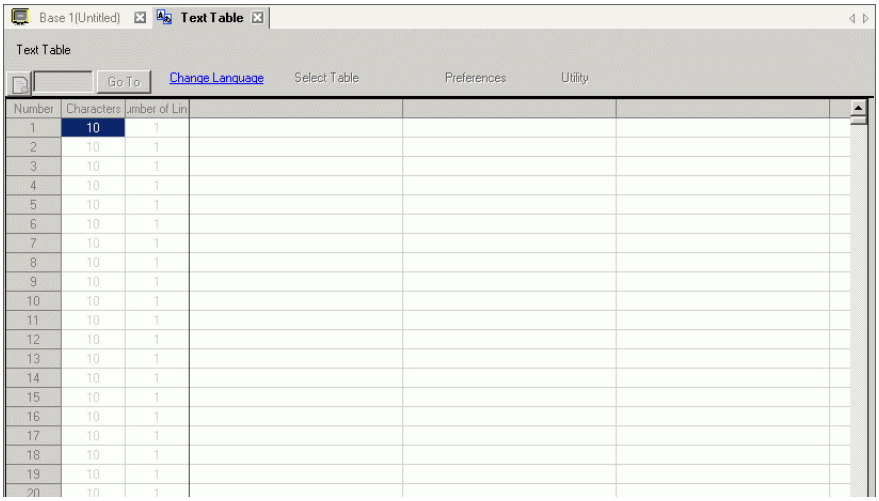



**NOTE**

- In order to use this feature, from [Display Unit] in [System Settings], go to [Extended Settings] - [Load Text Table] and select the [Enable Load Text Table] check box.
- Please refer to the Settings Guide for details.

☞"17.9.3 Text Table Settings Guide" (page 17-62)

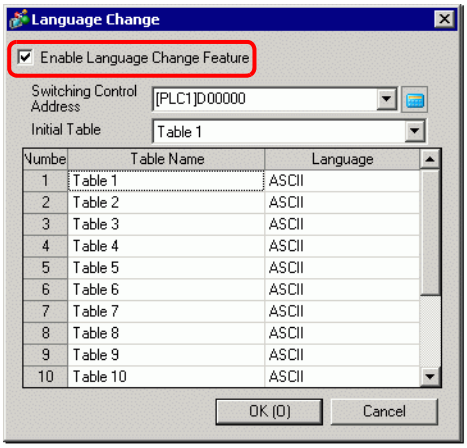
1 From the [Common Settings (R)] menu, select [Text Table (S)] or click . The following window opens.




**NOTE**

- When you edit and use a registered Text Table, open the data you want to edit.
-

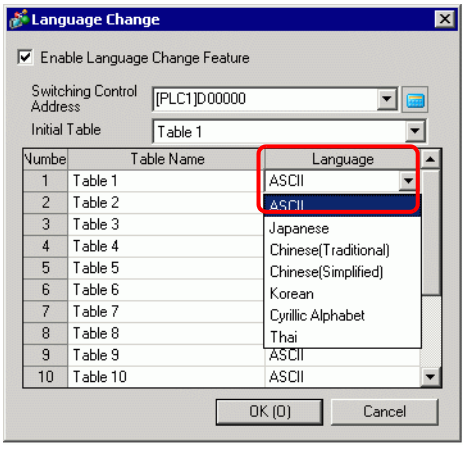
2 Click [Language Change] The following dialog box appears. Select the [Enable Language Change Feature] check box.




**NOTE**

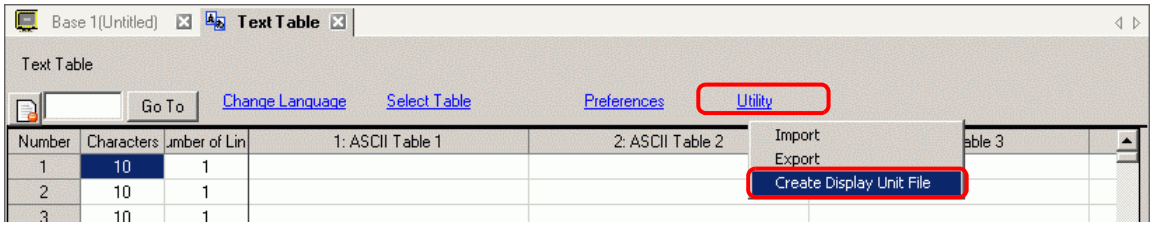
- If you clear the [Enable Language Change Feature] check box, the Text Table data that has been specified is deleted.

3 Select each Table's display language and click [OK].

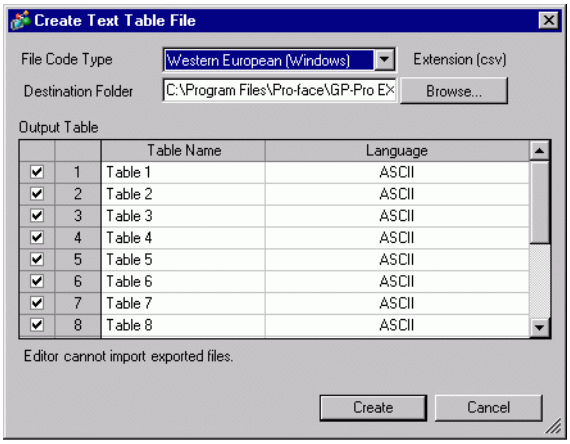



4 In the Text Table, set the [Characters] and [Number of Lines] and input words or simple messages in each table.

5 When you completed the entry to Text Table, select [Create Display Unit File] from [Utility].



6 Select [File Code Type]. The [Destination Folder] allows you to select the folder to save the created file.




7 Make sure that the table you want to output is selected in [Output Table].
When you click the [Create] button, the Text Table file is created in the destination folder specified in [Destination Folder].

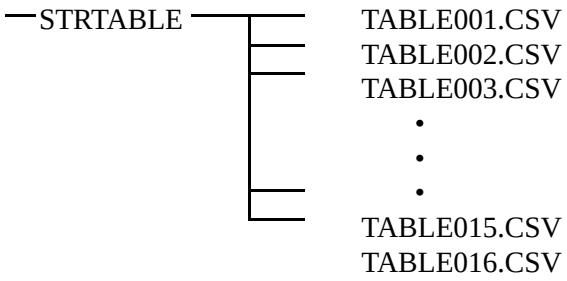
**NOTE**

- If you want to configure the Text Table data to be read at every startup time, from [Display Unit] in [System Settings], go to [Extended Settings] - [Load Text Table] and select [Read File at Startup]. With this setting, it may take some time to start up the display unit.
  For details on the settings, refer to the following.
  ☞ "5.17.6 [System Settings] Setting Guide ◆ Extended Settings" (page 5-177)
- In order for data to be read at any timing, touch the start button of offline manual reading on the display unit.
  For details on offline screen operation, refer to Maintenance/ Troubleshooting.

## 17.7.3 Folder Structure and File Format for Display Unit File

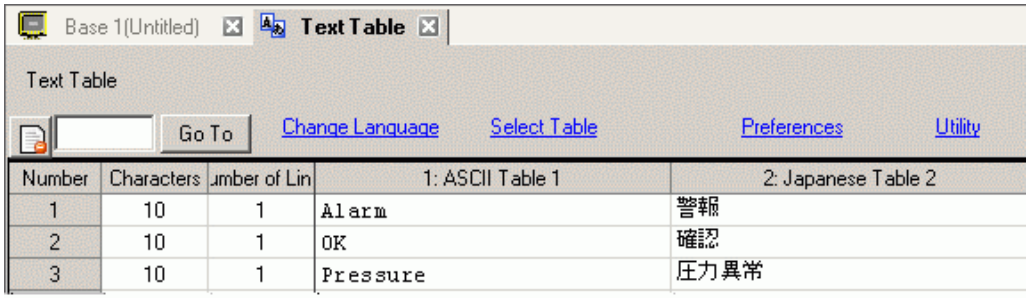
### ■ Folder Structure

The file output as an external file is saved with the following structure.
For each table, files are output as different files with the following names.



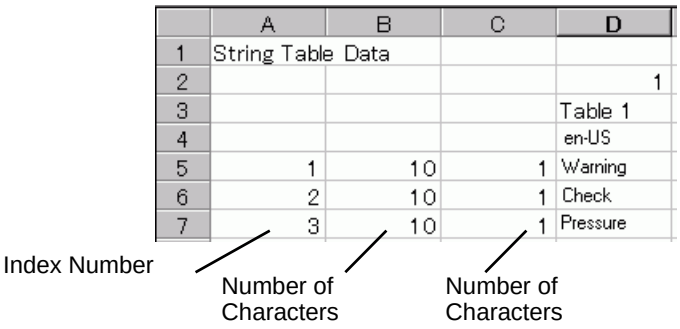

### ■ File Format

The format of the file output as an external file (∗.CSV) is as follows.
Files are output separately for each table.




Output

String Table Data . . . . . .....Header (Necessary for output)
"1" . . . . . .....Table Number
"Table 1" . . . . . .....Each table's Table Name
"ja-JP" . . . . . .....Each table's Language Code *1
1,"10","1"," ", "Alarm" . . . . . .....The number of characters in Number 1, Number of Rows, Each table's text
2,"10","1"," ","OK" . . . . . .....The number of characters in Number 2, Number of Rows, Each table's text
3,"10","1"," ","Pressure" . . . . . .....The number of characters in Number 3, Number of Rows, Each table's text



**NOTE**

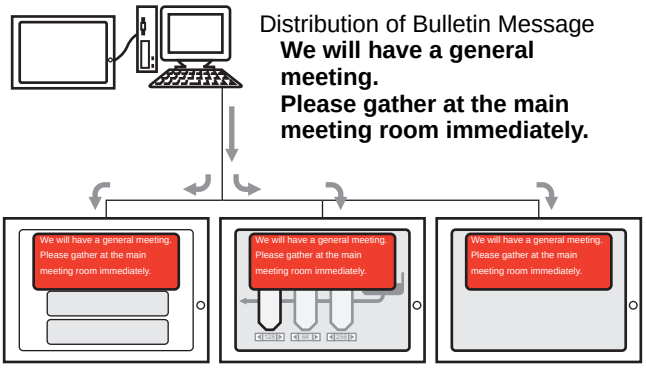
- Changing the file format causes incorrect updates.

1 Text Table files (∗.txt or ∗.csv) displays each table's language with the following language codes.

| Language | Japanese | ASCII | Chinese (Traditional) | Chinese (Simplified) | Korean | Cyrillic | Thai |
|---|---|---|---|---|---|---|---|
| Language Code | ja-JP | en-US | zh-TW | zh-CN | ko-KR | ru-ru | th-TH |

# 17.8 Displaying Bulletin Message on Multiple GP Screens

## 17.8.1 Introduction




The Bulletin Message sent from the upper level can be displayed on the screens of multiple GPs. If a Bulletin Message Display is placed on the window screen, the Bulletin Message is displayed over any display on the GP screen so it is possible to view, for example, emergency message immediately.

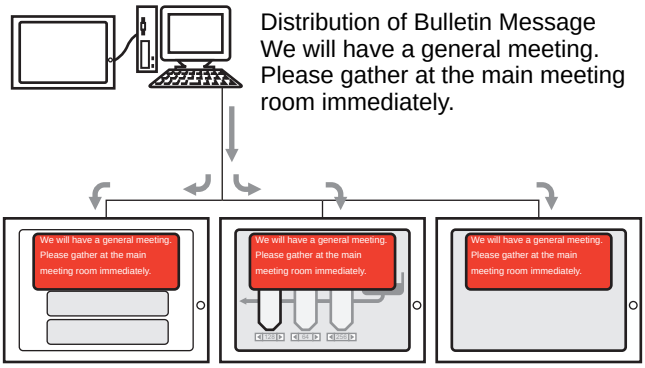
IMPORTANT

- For GP-3300 series, this feature is supported by Rev.4 or later models only. This feature is not supported by LT series.

## 17.8.2 Setup Procedure

**NOTE**

- Please refer to the Settings Guide for details.
  ☞"17.9.1 Message Display Settings Guide ■ Bulletin Message" (page 17-60)
  ☞"5.17.6 [System Settings] Setting Guide ◆ Mode" (page 5-152)
- For details of the part placement method and the address, shape, color, and label setting method, refer to the "Part Editing Procedure".
  ☞"8.6.1 Editing Parts" (page 8-44)

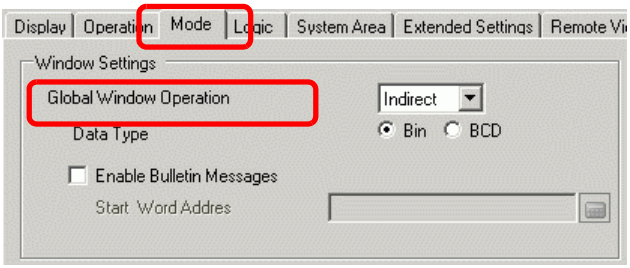



1 In the [System Settings], select [Display Unit].


**NOTE**

- If the [System Settings] tab is not displayed in the workspace, on the [View (V)] menu, point to [Workspace (W)], and then click [System Settings (S)].

2 When you click the [Mode] tab, the following screen is displayed. Select [Indirect] in [Global Window Operation].

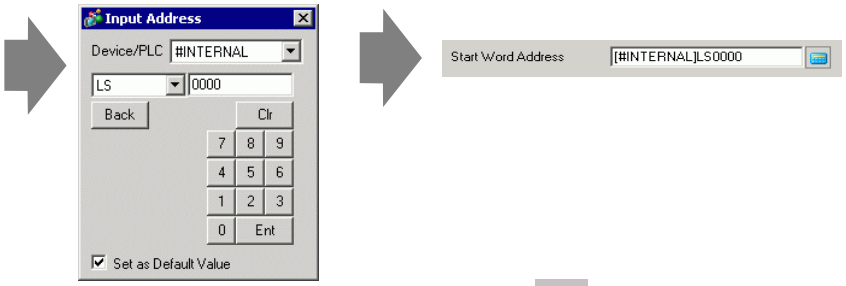



3 Select [Data Type] and select [Enable Bulletin Messages] check box.

4 Specify the start word address of the internal address in [Start Word Address].

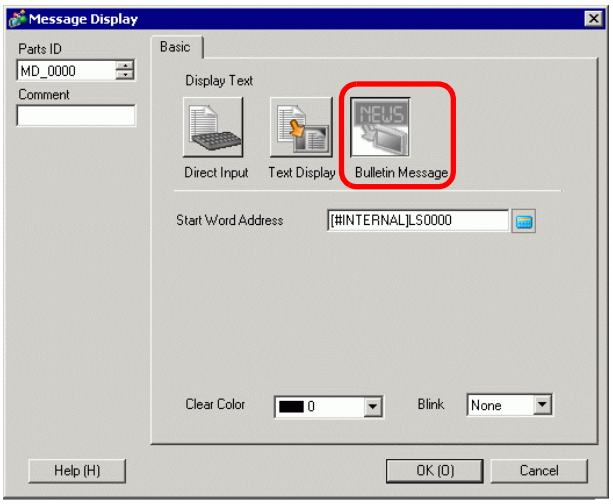
Select the device "LS", input "100" in the address, and press the "Ent" key.

Click to display an address input keypad.




5 From the [Parts (P)] menu, select [Message Display (M)] or click . Place the Part on the screen.

6 Double-click the new Message Display. The following dialog box appears. Click [Bulletin Message].



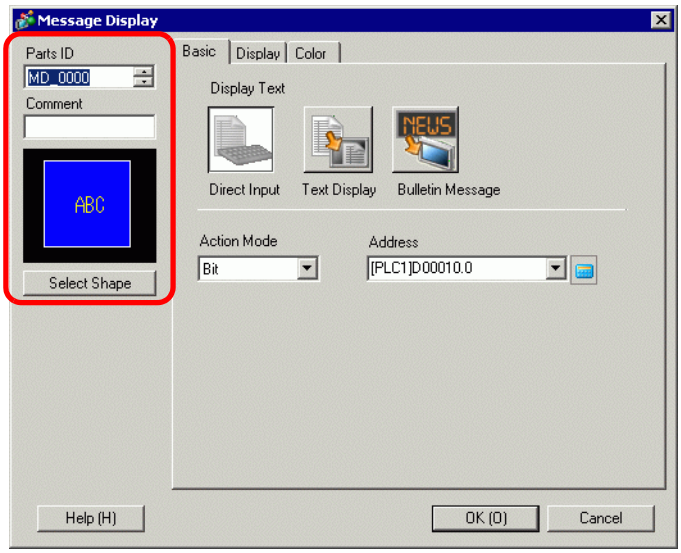

7 Select the Data Display shape from [Select Shape].

8 In [Start Word Address], set the address (LS100) to trigger the message display.

9 As needed, set the background [Clear Color] and [Blink] for the background of the display area, and click [OK].

# 17.9 Settings Guide

## 17.9.1 Message Display Settings Guide



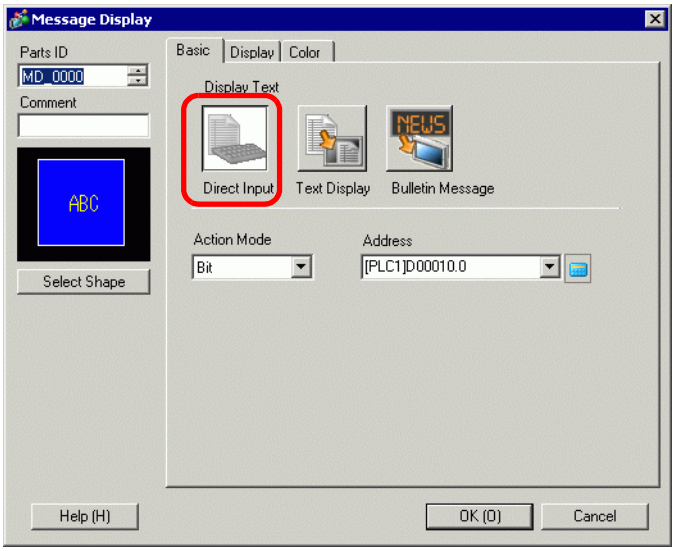

| Setting | Description |
|---|---|
| Part ID | Parts are automatically assigned an ID number.<br>Text Display Part ID: MD_**** (4 digits)<br>The letter portion is fixed. You can change the number portion within the range of 0000-9999. |
| Comment | The comment for each Part can be up to 20 characters. |
| Part Shape | Displays the shape and status of the Part selected in [Select Shape]. |
| Select Shape | Open the Select Shape dialog box to choose the Part shape. |
| Message Display Type | Select the Text Display part type.<br>• Direct Input<br>The displayed message changes according to the bit address ON/OFF state or the word address value.<br>☞" ■ Direct Input" (page 17-48)<br>• Text Display<br>Text registered to a text screen is changed and displayed.<br>☞" ■ Text Display" (page 17-53) |
| No Shape | When [Text Display] is selected, select whether or not the part will be transparent with no shape. |

**NOTE**

- When Visible//Invisible is changed due to Visibility Animation, the operation of Message Display may differ. For more details on Visibility Animation, refer to the following:
☞"20.3 Showing and Hiding Objects" (page 20-8)

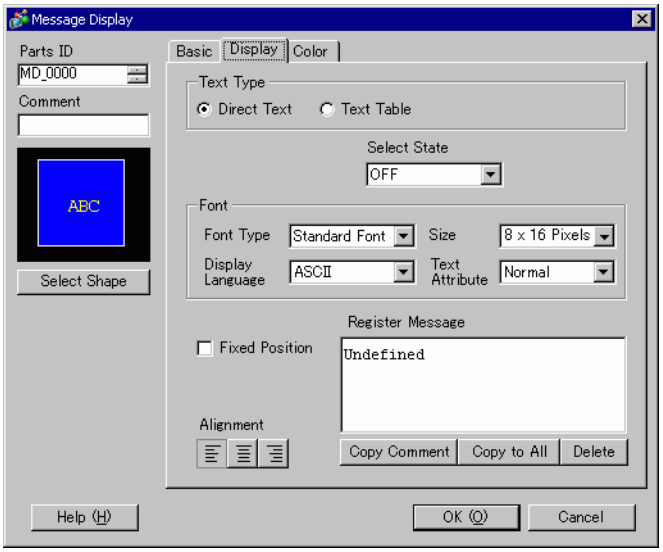
## ■ Direct Input

### ◆ Basic




| Setting | Description |
|---|---|
| Action Mode | Select the method for changing Messages.<br>• Bit<br>The Message changes in response to the bit address turning ON/OFF.<br>• Word<br>The Message changes in response to which bits are displayed in the Word Address. Bits (starting from Bit 00) from the Word Address are automatically allocated, depending on the [Number of Messages] (2, 4, 8, 16) setting on the [Display] tab.<br>When the Number of Messages is 2, only the 00 bit is used.<br>The remaining bits can be used for another purpose.<br>Number of Messages / Number of Bits Used: 2 / 1; 4 / 2; 8 / 3; 16 / 4<br>03 02 01 00<br>When the Number of Messages is 16, bits 00-03 are used. |
| Address | Select the address which will trigger the Message display. |

### ◆ Display (Direct Text)

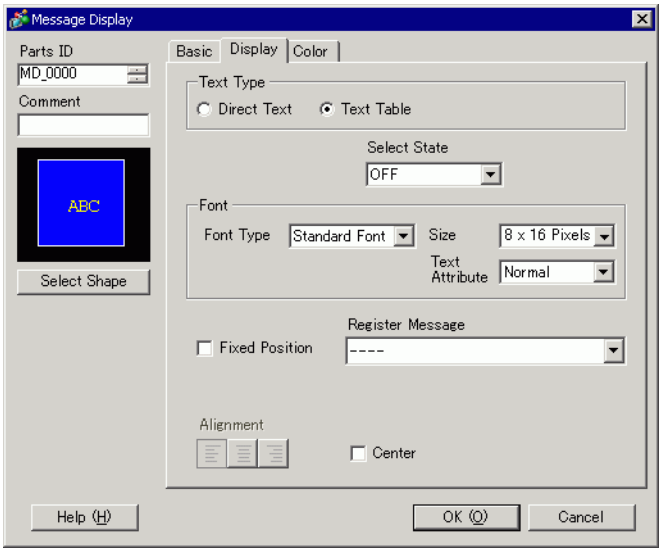


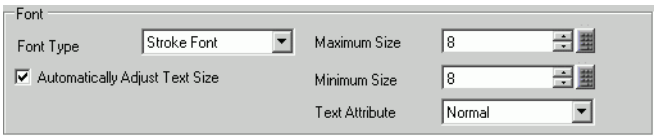

| Setting | Description |
|---|---|
| Direct Text | For each state, defines message strings entered directly in the [Register Message] box. |
| Number of Messages | Select the number of Messages to display from 2, 4, 8, or 16. This option is available when the [Mode] field on the [Basic] tab is set to [Word]. |
| Select State | Type a message for each selected state. When the [Mode] field on the [Basic] tab is set to [Bit], ON/OFF will display. When the [Mode] field on the [Basic] tab is set to [Word], the state indication buttons (State 0 to State 15) appear according to the Number of Messages set. |
| Font | Set a font for the text. |
| Font Type | Choose a font type for the text from [Standard Font] or [Stroke Font]. |
| Size | Choose a font size for the text.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 pixels, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127 |
| Display Language | Select the display language: [ASCII], [Japanese], [Chinese (Simplified)], [Chinese (Traditional)], [Korean], [Cyrillic], or [Thai]. |
| Text Attributes | Select the text attributes.<br>Standard Font: Choose from [Standard], [Bold], [Shadow]<br>(When using the [6 x 10] font size, select either [Standard] or [Shadow].)<br>Stroke Font: Choose from [Standard], [Bold], [Outline] |
| Align | Select the alignment of the text. Continued |

Continued

| Setting | Description |
|---|---|
| Register Message | Type the text to be displayed. The comment can be up to 100 single-byte characters x 4 rows. |
| Copy Comment | Copies the text in the [Comment] field to the Message field selected in [Select State]. |
| Copy to All | Copies all the text in the Register Message field selected in [Select State] to all states. |
| Delete | Deletes the message. |

### ◆ Display (Text Table)

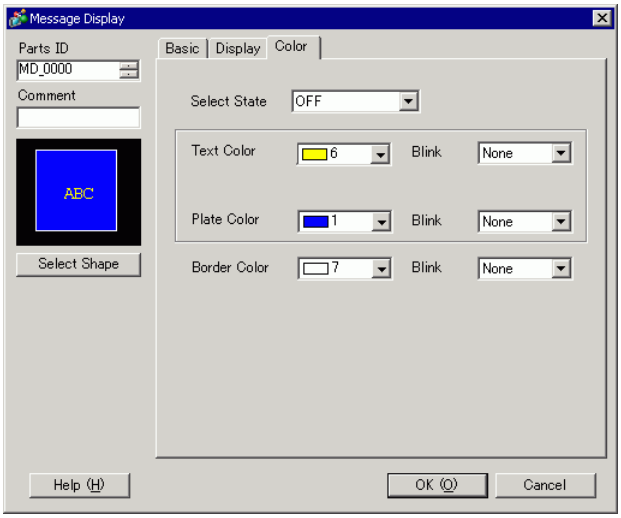



| Setting | Description |
|---|---|
| Text Table | Displays Text registered as a Text Table. |
| Select State | Type a message for each selected state. When the [Mode] field on the [Basic] tab is set to [Bit], ON/OFF will display. When the [Mode] field on the [Basic] tab is set to [Word], the state indication buttons (State 0 to State 15) appear according to the Number of Messages set. |
| Font | Set a font for the text. |
| Font Type | Choose a font type for the text from [Standard Font] or [Stroke Font]. |
| Automatically Adjust Text Size | If you select [Stroke Font], the [Automatically Adjust Text Size] option appears. By selecting this option, the font size adjusts automatically to fit the text in the part.   ☞ "17.9.8 Placing Text When Using Text Tables ◆ Automatically Adjust Text Size" (page 17-76) |

Continued

| Setting | | Description |
|---|---|---|
| Font | Size | Choose a font size for the text.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 pixels, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127<br>When using [Automatically Adjust Text Size], define the [Maximum Size] and [Minimum Size] of fonts. The text font size is adjusted within this range. |
| | Text Attributes | Select the text attributes.<br>Standard Font: Choose from [Standard], [Bold], [Shadow]<br>(When using the [6x10] font size, select either [Standard] or [Shadow].)<br>Stroke Font: Choose from [Standard], [Bold], [Outline] |
| Register Message | | Select the text string from registered strings in the Text Table.<br>**NOTE**<br>• If you select [Add Text], you can type new text in the Text Table. |
| Fixed Position | | You can fix the display position of the Text. If you set the text to a fixed position, the Text Display area is fixed in the center of the Message Display. |
| Center | | Displays the text in the center of the Text Display Area.<br>☞ "17.9.8 Placing Text When Using Text Tables ■ Message Display" (page 17-76) |

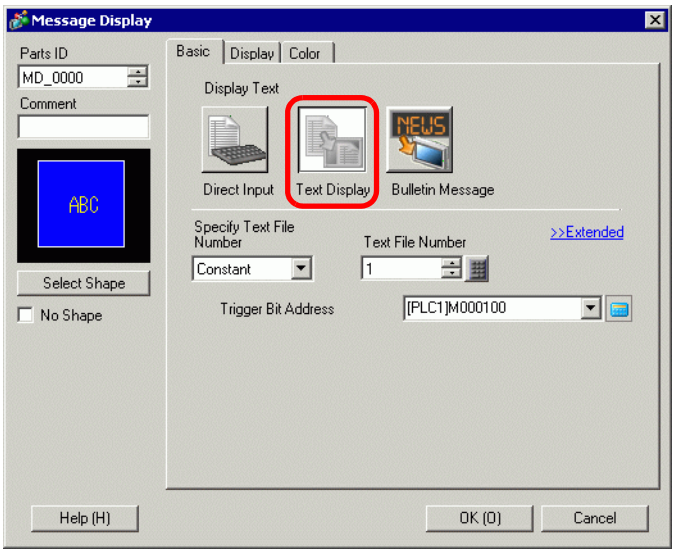
### ◆ Color

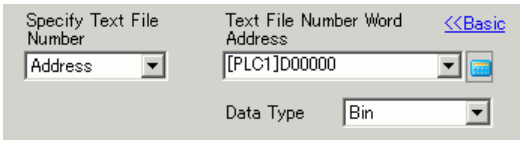



| Setting | Description |
|---|---|
| Select State | Select a color for each selected state. When the [Mode] field on the [Basic] tab is set to [Bit], ON/OFF will display. When the [Mode] field on the [Basic] tab is set to [Word], the state indication buttons (State 0 to State 15) appear according to the Number of Messages set. |
| Text Color | Select a color for the displayed text. |
| Shadow Color | Choose a shadow color for the text to display. [Display] tab's [Text Attribute] = [Shadow] is the only time you can use this feature. |
| Plate Color | Select the Message Display color (background color for the displayed text). |
| Border Color | Select the Message Display border color. |
| Blink | Select the blink and blink speed. [Font Color], [Shadow Color], [Plate Color], and [Border Color] can all be set up with different blink settings.<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |

## ■ Text Display

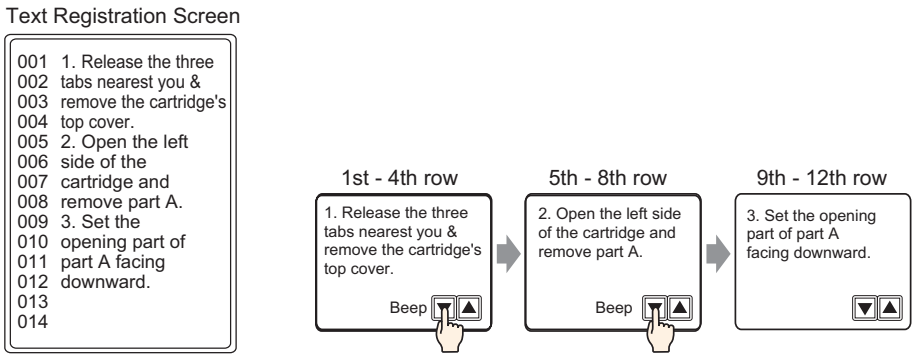
### ◆ Basic Settings/Basic




| Setting | | | Description |
|---|---|---|---|
| Specify Text Number | | | Choose how the Text Number will be specified.<br>• Constant<br>Specify a set constant in [Text Number]<br>• Address<br>Select an address that will store the Text Number. |
| | Constant | | Shows/hides the fixed text by turning the bit ON/OFF. |
| | | Text Number | Set a number for the text from 1 to 8,999. |
| | | Bit Address | Set a bit address to display the text. Displays the text selected in [Text Number] if you turn ON this bit and hides the text if you turn it OFF. |
| | Address | | Displays desired text on the Message Display.<br>  |
| | | Text Number Word Address | Set the address where the text number to display is stored. The text with the number stored in this address displays. |
| | | Data Type | Select the data type of the text number to be stored in [Address]. |

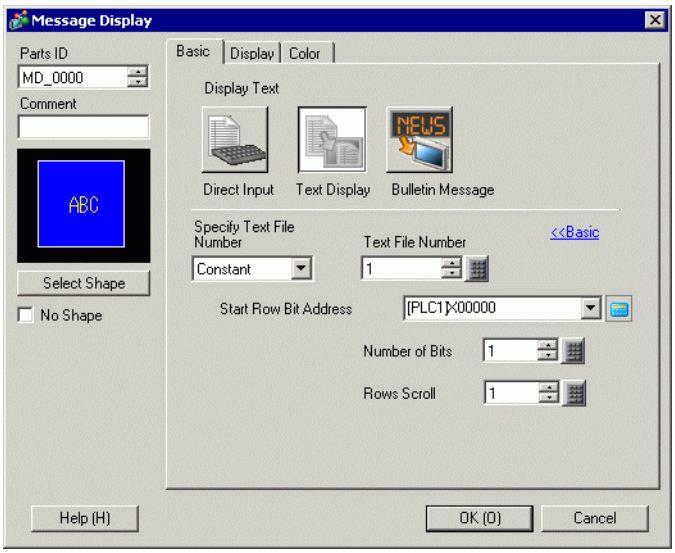
### ◆ Basic/Extended

If you click [Extended] on the [Basic] tab, you can configure settings to display registered text from the specified row.



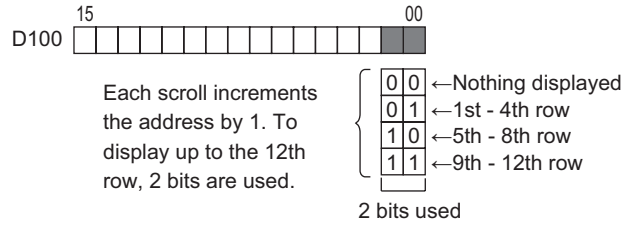
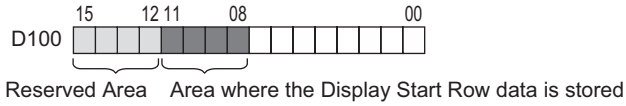
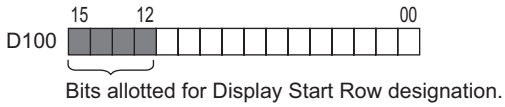

When [Specify Text Number] is [Constant]

Displays fixed text starting from various rows.

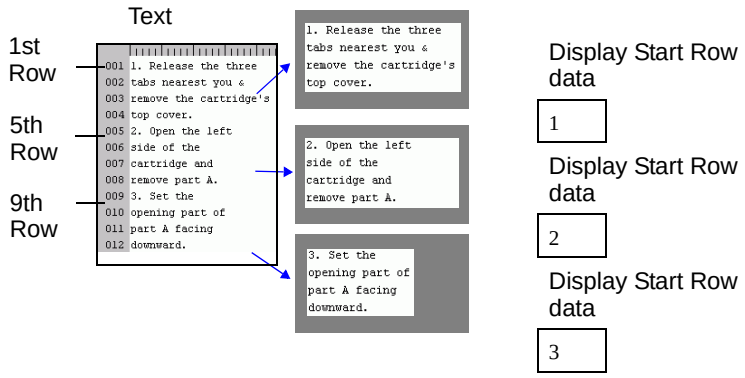



| Setting | Description |
|---|---|
| Text Number | Set a number for the text from 1 to 8,999. |
| Start Row Bit Address | Set the start bit address to store the text display's start row specification data. You can set a bit address or a word address to specify bits.<br>The display start row is determined by the data stored in the range of the start row to the bit specified in [Number of Bits] and the [Rows Scroll]. |

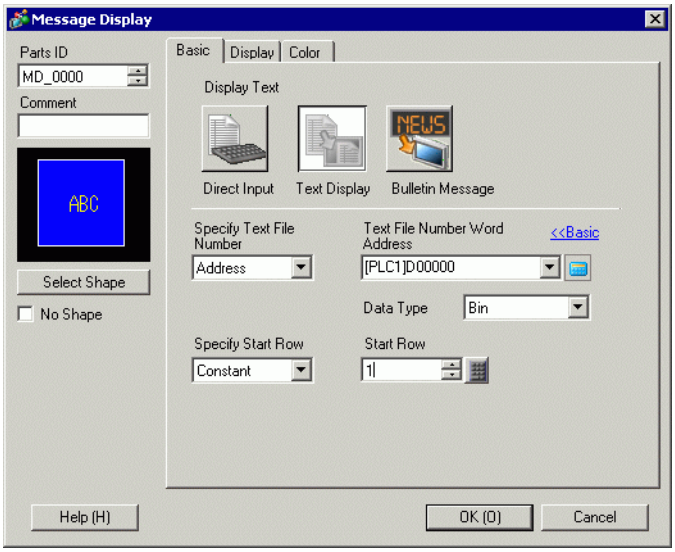
Continued

| Setting | Description |
|---|---|
| Number of Bits | Sets how many bits, from the [Start Row Bit Address], are used for Display Start Row Specification. Select a value from 1 to 16. The number of bits to use will differ depending on the specified [Rows Scroll].<br>For example, 12 rows of text, Scroll will move by 4 rows each time: using 2 bits<br>  <br>Because the number of bits used is set from the Display Start Row Specification data, the empty portion of the Reserved Area can be used for other purposes.<br>For example, Start Row Bit Address: D100 bit 08, Number of Bits: 4<br>  <br>**NOTE**<br>• When setting the [Number of Bits], please ensure that the allocated bits are in one word. Even if the number of bits is set to span across two words, only the address specified in [Start Row Bit Address] will be allocated as the Display Start Row.<br>For example, Start Row Bit Address: D100 12 bit, Number of Bits:10<br>  |

Continued

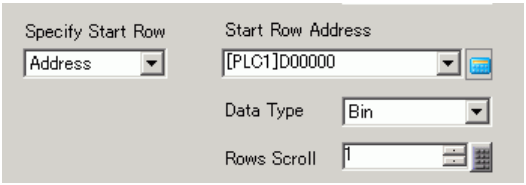
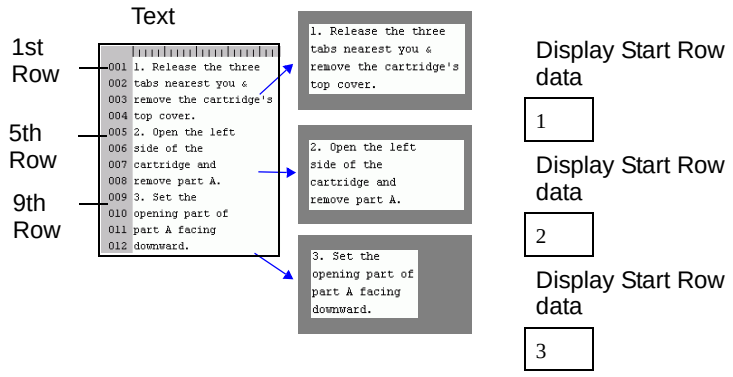
| Setting | Description |
|---|---|
| Rows Scroll | Set the number of rows the display scrolls when the Start Row data changes.Use a number from 1 to 256.<br>Display Start Row = Rows Scroll (Display Start Row data -1) +1<br>For example, [Display Rows] = 4, [Rows Scroll] = 4<br>Display Start Row data = 1 Display Start Row = 1<br>Display Start Row data = 2 Display Start Row = 5<br>Display Start Row data = 3 Display Start Row = 9<br>  <br>If the Display Start Row is "0", the text does not display, and the Message Display's Display Area is shown with a transparent color. |

When [Specify Text Number] is [Address]

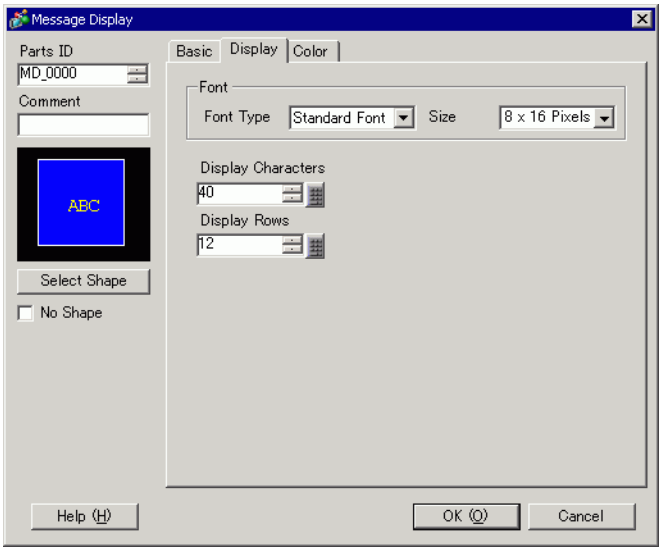



| Setting | Description |
|---|---|
| Text Number Word Address | Set the address where the text number to display is stored. The text with the number stored in this address displays. |
| Data Type | Select the data type of the text number to be stored in [Address]. |

Continued

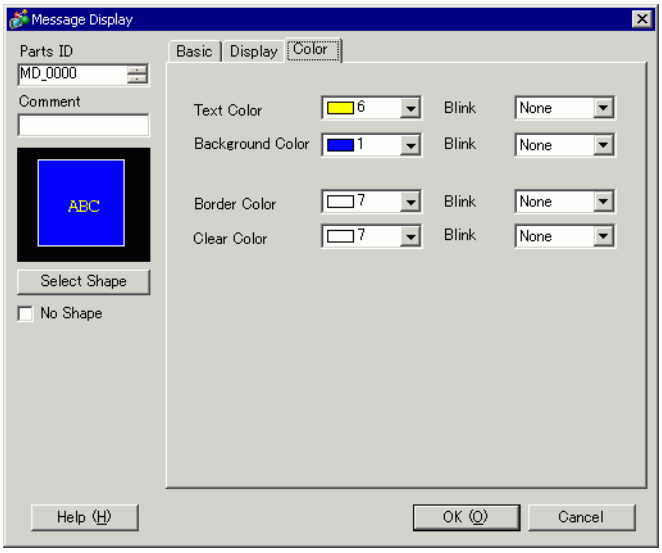
| Setting | Description |
|---|---|
| Specify Start Row | Choose how the text's Start Row is specified.<br>• Constant<br>Specify a set constant as the Display Start Row.<br>• Address<br>Specify the address where the display start row is stored. |
| Constant | Desired text displays starting from fixed lines. |
| Start Row | Set a number for the text's Display Start Row from 1 to 512.<br>When the start row does not exist, the operation is ignored. The previously displayed rows remain. |
| Address | Displays desired text starting from various rows.<br>  |
| Start Rung Address | Set the address of the word address that stores the text's Display Start Row. The Display Start Row is decided by the data stored in this field and by the [Rows Scroll].<br>When the start row does not exist, the operation is ignored. The previously displayed rows remain. The display is cleared when the Display Start Row is set to "0". |
| Data Type | Choose the format for the text's Display Start Row. |
| Scroll Columns | Set the number of rows the display scrolls when the Start Row data changes.Use a number from 1 to 256.<br>Display Start Row = Rows Scroll (Display Start Row data -1) +1<br><br>For example,<br>[Display] tab [Display Rows] = 4, [Rows Scroll] = 4<br>Display Start Row data = 1 Display Start Row = 1<br>Display Start Row data = 2 Display Start Row = 5<br>Display Start Row data = 3 Display Start Row = 9<br>  <br><br>If the Display Start Row data is "0", the text does not display, and the Message Display's Display Area is shown with a transparent color. |

### ◆ Display




| Setting | Description |
|---|---|
| Font Type | Choose from [Standard Font] or [Stroke Font]. |
| Size | Choose a font size for the text.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 pixels, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127 |
| Display Characters | Set the number of single-byte characters to be displayed on each line from 1 to 100. |
| Display Rows | Set the number of lines of text to be displayed from 1 to 50. |

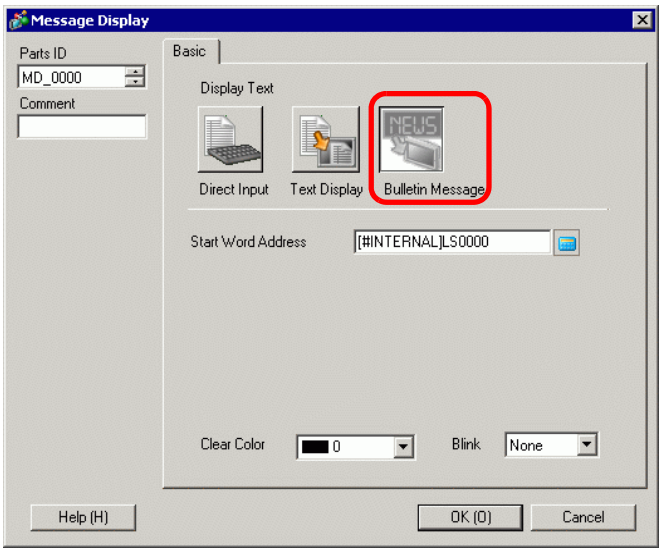
### ◆ Color




| Setting | Description |
|---|---|
| Text Color | Select a color for the displayed text. |
| Background Color | Select the Message Display color (background color for the displayed text). |
| Border Color | Select the Message Display border color. |
| Clear Color | Select a color for the Display Area for after the Message has been cleared (when the text of the corresponding number does not exist). |
| Blink | Select the blink and blink speed. For the [Font Color], [Background Color], [Border Color], and [Clear Color] can be set up with different blink settings.<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |

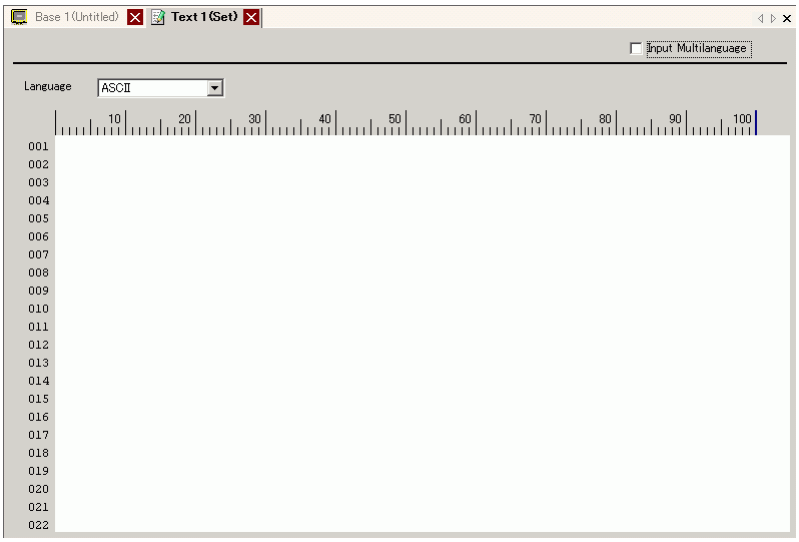
## ■ Bulletin Message

### ◆ Basic



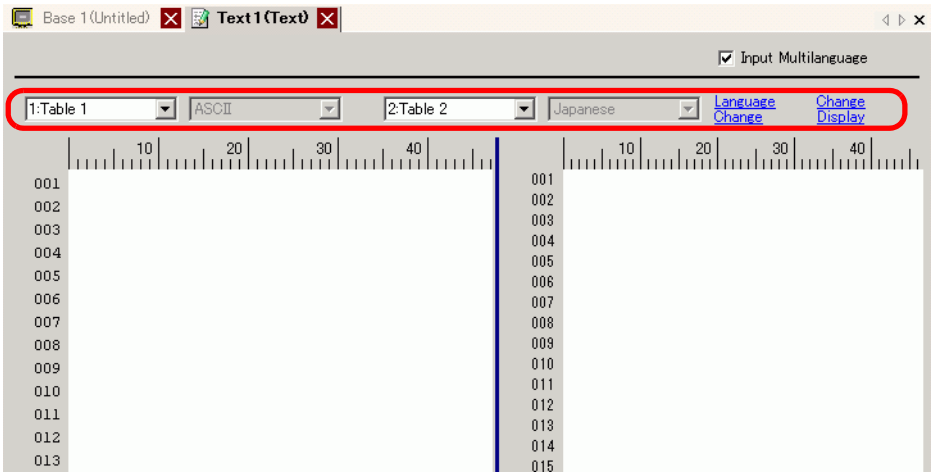

| Setting | Description |
|---|---|
| Start Word Address | Select the start internal address (LS area, USER area or memory link system area) which will trigger the message display. |
| Clear Color | Select a color of the display area used when a message is cleared. |
| Blink | Select the Part blink and blink speed.<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |

## 17.9.2 Common (Text Registration) Settings Guide



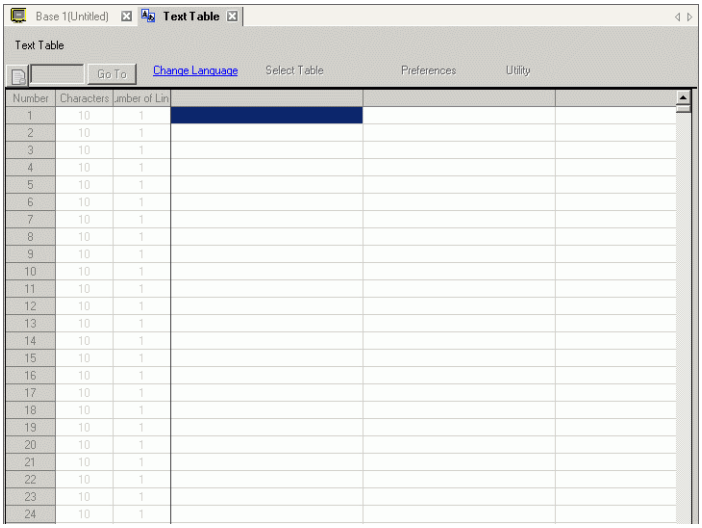

| Setting | Description |
|---|---|
| Input Multilanguage | Select this check box to use Multilanguage input. |
| Language | Choose the language for the text: [ASCII], [Japanese], [Chinese (Traditional)], [Chinese (Simplified)], [Korean], [Cyrillic], or [Thai]. |
| Text Input Border | You can enter text with up to 100 single-byte characters per row x 512 rows. |

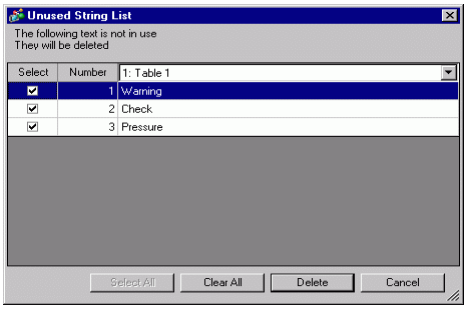
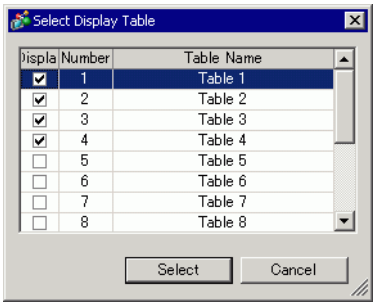
### ■ Text (Input Multilanguage) Settings Guide



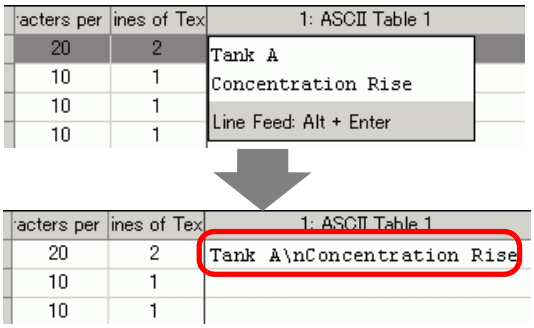

| Setting | Description |
|---|---|
| Language Change Settings | The [Language Change Settings] dialog box appears. Set a language for each table.<br>☞ " ■ [Language Change] Dialog Box" (page 17-64) |
| Change Display Unit | Changes the setting to display only one table or display two overlapping tables. |
| Select Table | Select the table to register text from [1:Table 1] to [16:Table 16]. |

## 17.9.3 Text Table Settings Guide



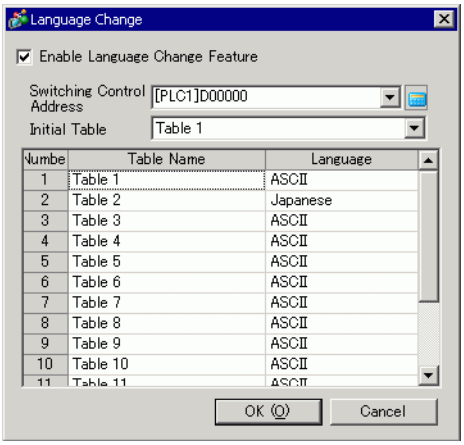

| Setting | Description |
|---|---|
| Unused Text List | Click the  icon to display the [Unused Text List] dialog box. You can select and delete unused text collectively or separately.   |
| Jump | Go to a specific row number. |
| Language Change Settings | Displays the [Language Change] dialog box. ☞" ■ [Language Change] Dialog Box" (page 17-64) |
| Select Table to Show | Set the tables to display on the Text Table setting screen. Select the check boxes next to the necessary tables to register the Text Table.   |
| Import | Import Text Tables in either CSV or TXT file formats. ☞" ■ [Import Text Table] Dialog Box" (page 17-66) |

Continued

| Setting | Description |
|---|---|
| Export | Export Text Tables in either CSV or TXT file formats.<br>☞ " ■ [Export Text Table] Dialog Box" (page 17-65) |
| Preferences | Select how to handle inputs in the Text Table. On the [View (V)] menu click [Preferences(O)].Open the [Text Table] editor.<br>• Use Defined Limits<br>You cannot enter more than the character limit defined in the [Text Table] [Number of Characters] field. You cannot insert new lines by typing [Alt]+[Enter].<br>• Adjust Automatically<br>All text inputs are accepted, even if you exceed the [Text Table] [Number of Characters] or [Number of Lines] fields. You can also insert new lines by typing [Alt]+[Enter]. |
| Utility<br>Create Display Unit File | Files are exported to different folders for each Text Table, and saved in the specified folders. |
| Text Table | Register text. You can register up to 10,000. |
| Number | Displays the Text Table's index number (row number). |
| Number of Characters | Set the number of characters to display on each row from 1 to 100 single-byte characters. The total number of characters ([Number of Characters] x [Number of Text Rows]) cannot exceed 1200 single-byte characters.<br>**NOTE**<br>• Each row's [Number of Characters] and [Number of Text Rows] are available in all tables. |
| Number of Text Rows | Set the Number of Text Rows from 1 to 40. The total number of characters ([Number of Characters] x [Number of Text Rows]) cannot exceed 1200 single-byte characters.<br>**NOTE**<br>• Each row's [Number of Characters] and [Number of Text Rows] are available in all tables.<br>• If text spans across multiple rows, Alt + Enter will line feed. "\n" indicates a line feed.<br>  <br>• Even if such an index number is specified on an Alarm Message, only the first line displays. |
| Input Text Field | Enter text to display for each table set in [Language Change]. |

## ■ [Language Change] Dialog Box

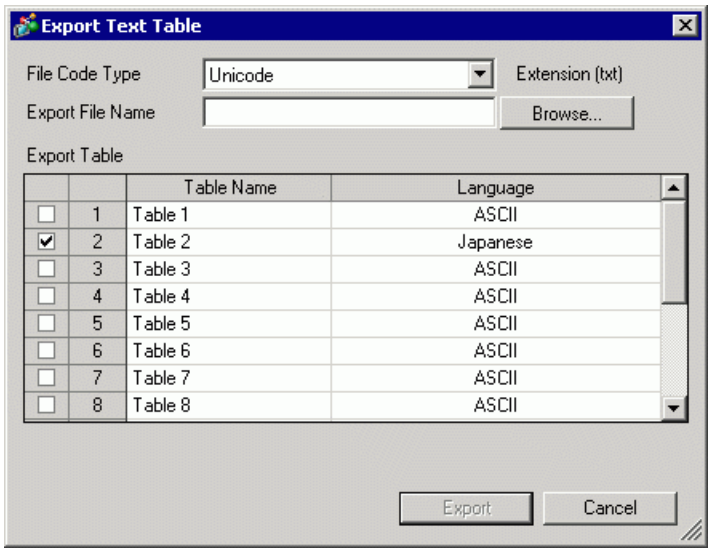
Set the Text Table language and the address to control the language change feature.




| Setting | Description |
|---|---|
| Language Change Feature Enable | Select the check box to use the Language Change feature. |
| Switching Control Address | Select the address where the Table Number is stored.<br>**NOTE**<br>• When you specify a table number for which nothing is set, only a blank Text Display Area is shown. |
| Initial Table | Defines the table to display when the value in the [Switching Control Address] is zero. |
| Table Name | Set a table name of up to 30 characters for each table. |
| Language | Choose the language for each table. |

## ■ [Export Text Table] Dialog Box

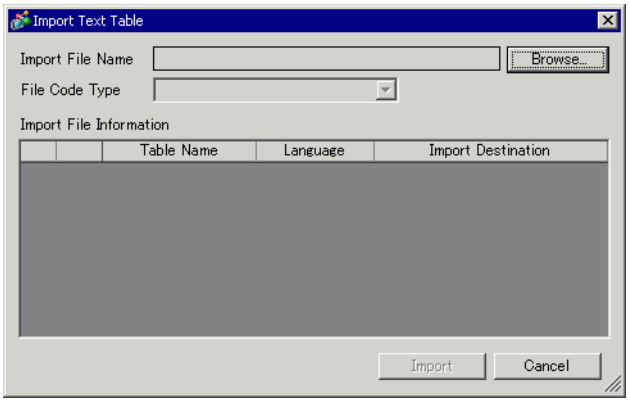
Saves registered Text Table data in TXT file format or CSV file format.

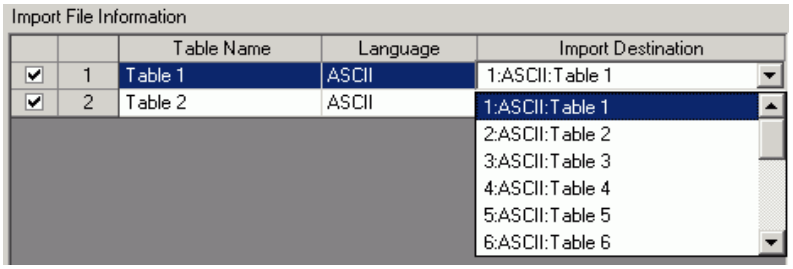



| Setting | Description |
|---|---|
| File Code Type | Select the code type of the file to export: [Unicode], [ASCII (Windows)], [Japanese (Shift- JIS)], [Chinese Traditional (Big5)], [Chinese Simplified (GB2312)], [Korean], [Cyrillic (Windows)], or [Thai (Windows)].<br>**NOTE**<br>• To export multiple languages at the same time, select [Unicode]. If you select other code types, text is not properly output to the files.<br>• If [Unicode] is selected, the file extension is "txt". If other code types are selected, the extension is "csv". |
| Export File Name | Type a file name. Or click [Browse] to browse to a folder location. |
| Export Table | Select the check boxes next to the Text Tables you want to export. Clear the check boxes next to Text Tables that you do not want to export. |

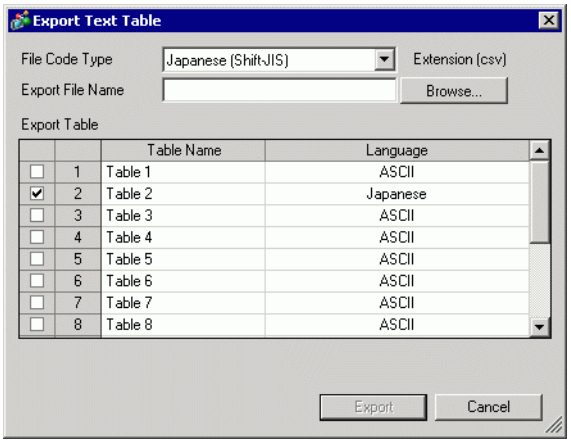
## ■ [Import Text Table] Dialog Box

Imports Text Table files (*.txt or *.csv) to a project.




| Setting | Description |
|---|---|
| Import File Name | Click [Browse] and select a file to import. |
| File Code Type | If the Text Table file to import is a CSV format file (*.csv), select the appropriate code type: [Unicode], [ASCII (Windows)], [Japanese (Shift JIS)], [Chinese Traditional (Big5)], [Chinese Simplified (GB2312)], [Korean], [Cyrillic (Windows)], or [Thai (Windows)].<br>For import files that are the text format (*.txt), the only option is [Unicode].<br>**NOTE**<br>• To import multiple languages at the same time, select [Unicode]. |
| Import File Information | The [Table Name] and [Language] of the file to import are displayed. Select the check box to the left of the table name to import the table. Clear the check boxes next to tables you do not want to import. The imported Text Tables overwrite any existing tables in the project file.<br>  |

## ■ [Create Display Unit File] Dialog Box

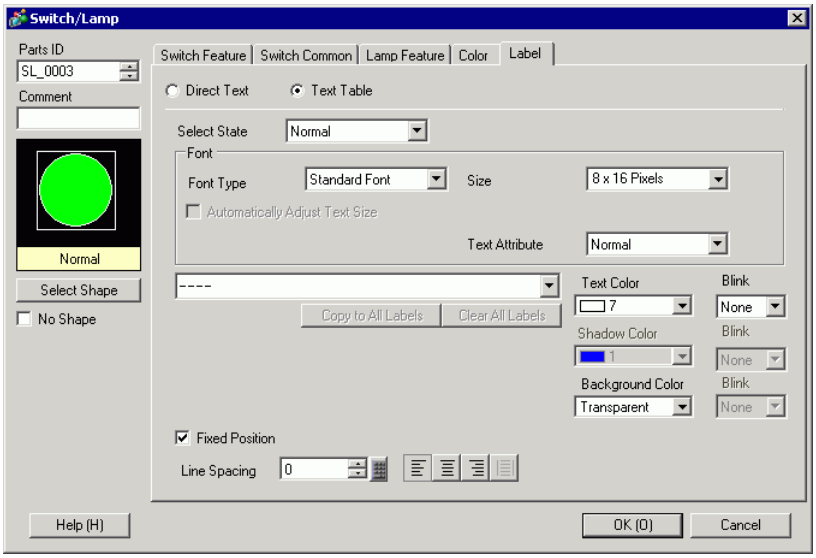


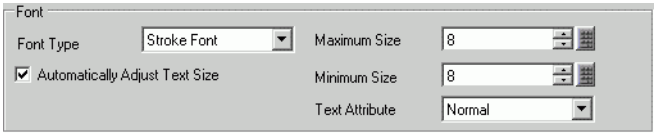

| Setting | Description |
|---|---|
| File Code Type | Select the code type of the file to create: [Unicode], [ASCII (Windows)], [Japanese (Shift- JIS)], [Chinese Traditional (Big5)], [Chinese Simplified (GB2312)], [Korean], [Cyrillic (Windows)], or [Thai (Windows)]. |
| Destination Folder Name | Specify the name of the folder to save the created file. |

**NOTE**

- The created file cannot be imported.

## 17.9.4 Switch/Lamp - Label (Enable Text Table) Settings Guide

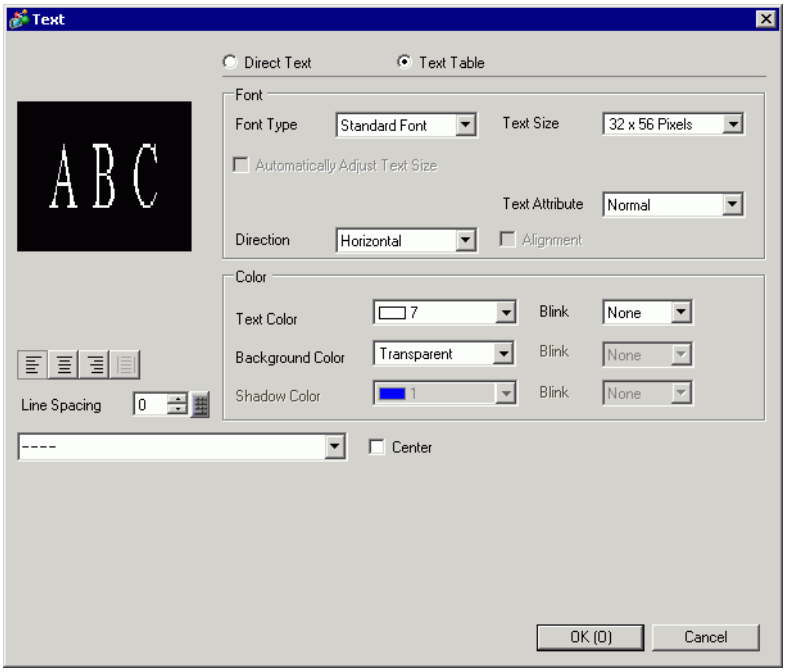


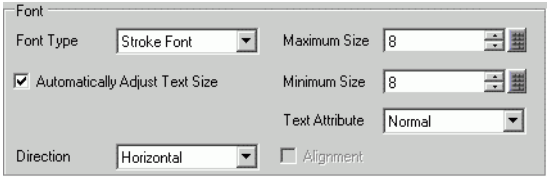

| Setting | Description |
|---|---|
| Text Table | Displays Text registered as a Label. |
| Select State | Select the Lamp state. If the Lamp Feature is not used, only [Normal] can be selected.<br>If the Lamp Feature is used, you can set the label corresponding to the lamp state.<br>**NOTE**<br>• To set a label that is interlocked or in delay, set the [Switch Common] tab's Extended Settings to [Show Interlocked Condition] or [Show In-Delay Status]. This will add the [Select State] choice. |
| Font | Set a font for the Label text. |
| Font Type | Choose a font type for the text from [Standard Font] or [Stroke Font]. |
| Automatically Adjust Text Size | If you select [Stroke Font], the [Automatically Adjust Text Size] option appears. By selecting this option, the font size adjusts automatically to fit the text in the part.<br>  <br> |
| Size | Choose a font size for the text.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 dots, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127. When using [Automatically Adjust Text Size], define the [Maximum Size] and [Minimum Size] of fonts. The text font size is adjusted within this range. |

Continued

| Setting | | Description |
|---|---|---|
| Font | Text Attributes | Select the text attributes.<br>Standard Font: Choose from [Standard], [Bold], [Shadow]<br>(When using the [6 x 10] fixed font size, the options are [Standard] or [Shadow].)<br>Stroke Font: Choose from [Standard], [Bold], [Outline] |
| Text | | Select text used as the Label from the registered Text Tables.<br>If you select [Add Text], the dialog box appears and you can add new text in the Text Table. |
| Text Color | | Select a text color for the Label. |
| Shadow Color | | Select a shadow color for the label text.<br>**NOTE**<br>• This can only be set when [Shadow] is set in [Text Attribute]. |
| Background Color | | Set the background color for the text. |
| Blink | | Select the blink and blink speed. [Font Color], [Shadow Color], and [Background Color] can all be set up with different blink settings.<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |
| Fixed Position | | When clicked, the Label is positioned in the center of the Part.<br>☞"17.9.8 Placing Text When Using Text Tables ■ Switch Lamp Label" (page 17-74) |
| Line Spacing | | Set a value from 0 to 255. |
| Align | | Select the alignment of the text. |

## 17.9.5 Drawing Text (Using the Text Table) Settings Guide

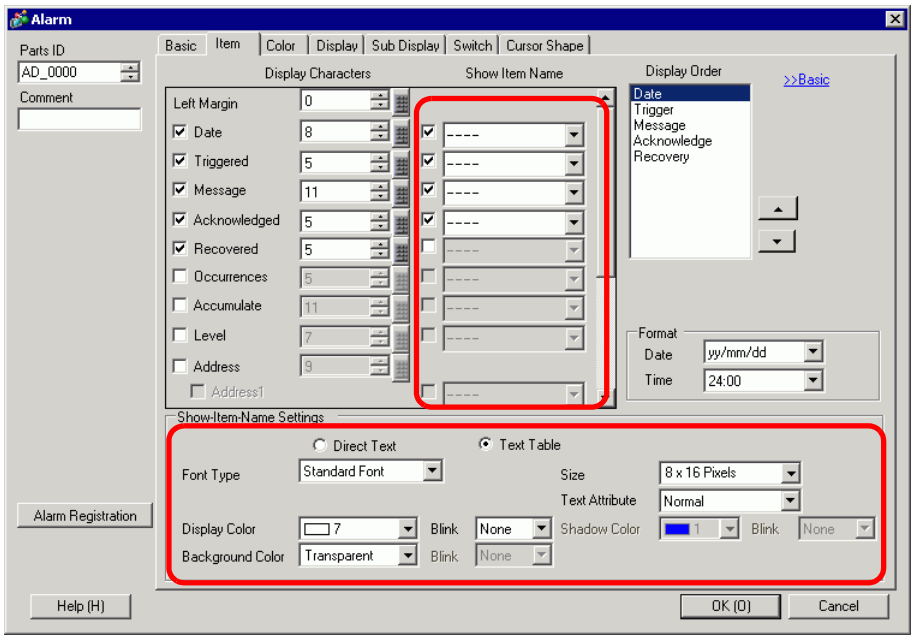



| Setting | Setting |
|---|---|
| Text Table | Displays Text registered as a Text Table. |
| Font | Set a font for the text. |
| Font Type | Choose a font type for the text. |
| Automatically Adjust Text Size | If you select [Stroke Font], the [Automatically Adjust Text Size] option appears. By selecting this option, the font size adjusts automatically to fit the text in the part.<br>  <br>**NOTE**<br>• This property is unavailable when the [Direction] is [Vertical]. |
| Text Size | Choose a font size for the text.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 dots, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127. When using [Automatically Adjust Text Size], define the [Maximum Size] and [Minimum Size] of fonts. The text font size is adjusted within this range. |

Continued

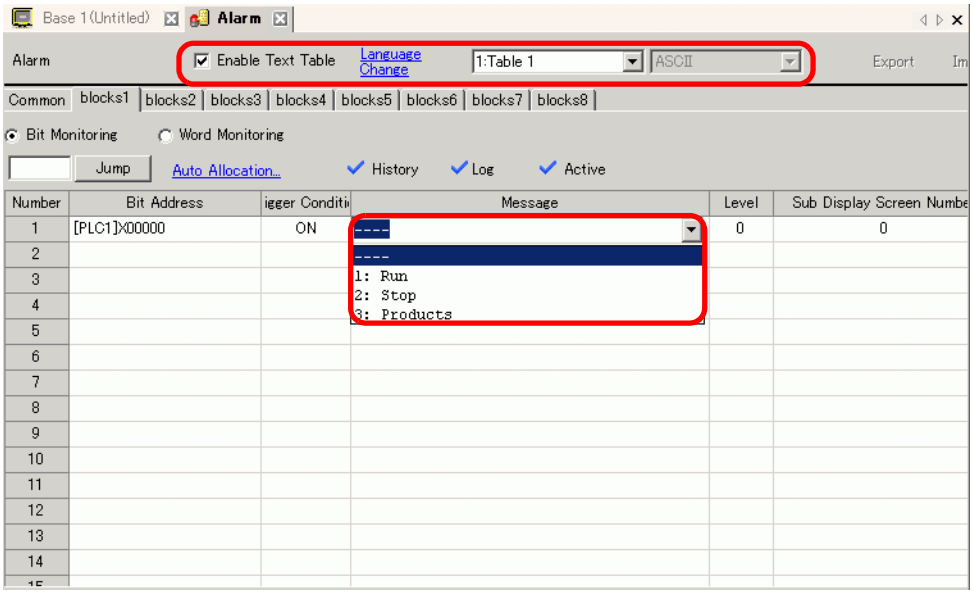
| Setting | | Setting |
|---|---|---|
| Font | Text Attributes | Select the text attributes.<br>Standard Font: Choose from [Standard], [Bold], [Shadow]<br>(When using the [6 x 10] font size, select either [Standard] or [Shadow].)<br>Stroke Font: Choose from [Standard], [Bold], [Outline] |
| | Direction | Select from [Horizontal] or [Vertical]. |
| | Centering | When [Vertical] is selected in [Direction], align the center of the text. |
| Color | | Configure the color settings for the text. |
| | Text Color | Select the text's color. |
| | Background Color | Set the background color for the text. |
| | Shadow Color | This can only be set when [Shadow] is set in [Text Attribute]. |
| Blink | | Select the blink and blink speed. For the [Font Color], [Background Color], and [Shadow Color] can all be set up with different blink settings.<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |
| Align | | When [Horizontal] is selected in [Direction], select the alignment of the text. |
| Line Spacing | | Set a value from 0 to 255. |
| Text | | Select text to display from the registered Text Tables.<br>If you select [Add Text], the dialog box appears and you can add new text in the Text Table. |
| Center | | When [Horizontal] is selected in [Direction], set whether to display the text in the center of the text display area.<br>☞"17.9.8 Placing Text When Using Text Tables ■ Text" (page 17-75) |

## 17.9.6 Alarm Part - Item/Extended (Text Table) Settings Guide




| Setting | | Description |
|---|---|---|
| Show Item Name | | Select the check box next to [Show Item Name] to display the text on the Alarm Part.<br>When [Text Table] is selected in [Show-Item-Name Settings], select text to use as an Item Name from the registered Text Tables. If you select [Add Text], the dialog box appears and you can add new text in the Text Table. |
| Show-Item-Name Settings | | Configure settings for Item Name display. |
| | Font Type | Choose a font type for the Item Name. |
| | Size | Set a font size for the Item Name.<br>Standard Font: Specify horizontal and vertical font dimensions in increments of 8 pixels, from [8 x 8] to [64 x 128], or select fixed font sizes of [6 x 10], [8 x 13], or [13 x 23]. When using fixed sizes, you can display only single-byte alphanumeric characters.<br>Stroke Font: 6 to 127 |
| | Text Attributes | Select the text attributes.<br>Standard Font: Choose from [Standard], [Bold], [Shadow].<br>(When using the [6 x 10] font size, select either [Standard] or [Shadow].)<br>Stroke Font: Choose from [Standard], [Bold], [Outline] |
| | Display Color | Select the Item Name's text color. |
| | Blink | Select the blink and blink speed. You can choose blink settings for [Display Color].<br>**NOTE**<br>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color Settings].<br>☞"8.5.1 Setting Colors ■ List of Compatible Colors" (page 8-36) |

## 17.9.7 Alarm (Enable Text Table) Settings Guide




| Setting | Description |
|---|---|
| Enable Text Table | Select this check box to use the text registered in Text Tables as an Alarm Message. If this option is set, you can change languages of the Alarm Messages to display while the system is active.<br>**NOTE**<br>• If Alarm Messages are set and then you select this check box, the messages are deleted.<br>• The [Language] and [Enable Text Table] settings are available to all Alarms (Alarm History's each block, Banner, and Show Summary). Direct Inputted messages and messages added on a Text Table cannot be displayed at the same time. |
| Language Change Settings | Displays the [Language Change] dialog box.<br>☞ " ■ [Language Change] Dialog Box" (page 17-64) |
| Text Table | Select the Text Table to use. |
| Message | Select the text to use as a message from the text registered in the table selected in [Text Table].<br>**NOTE**<br>• When multiple lines of text are selected, only the first line displays. |

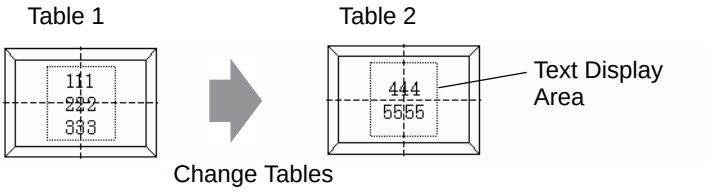
## 17.9.8 Placing Text When Using Text Tables

### ■ Switch Lamp Label

#### ◆ Text Display Area

The size of a Part's text display area changes according to the size specified in the Text Table ([Number of Characters] x [Number of Text Rows]). Even when the number of characters in the Text Table is smaller than the set [Number of Characters] x [Number of Text Rows], the text display area remains the same size. Text always displays in the center of the text display area.

For example, Number of Characters = 6, Number of Text Rows = 3

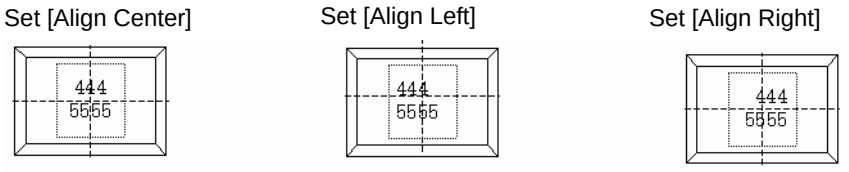



**NOTE**

- When using [Stroke Font], select the Automatically Adjust Text Size check box to automatically adjust the font size so it fits inside the part.

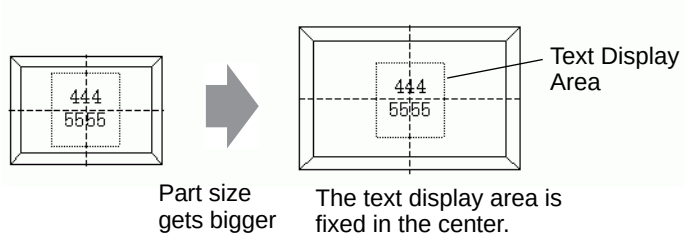
#### ◆ Align ([Align Left], [Align Center], [Align Right])

When multiple rows are set to the Text Table, the row with the largest number of characters (in the following example, the second row, "5555") is fixed and the other rows can be aligned to it with [Align Left], [Align Center], or [Align Right].

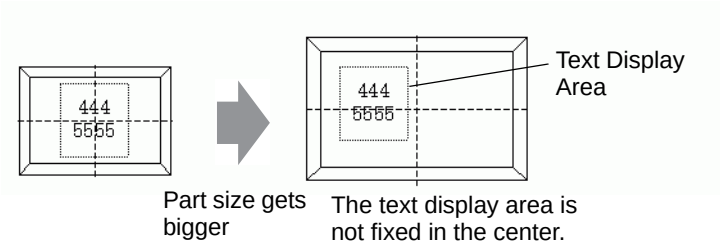



#### ◆ Fixed Position

When [Fixed Position] is set:
The text display area is always fixed in the center of a Part.



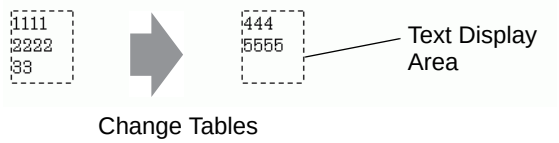
When [Fixed Position] is not set:
You can move the text display area to the desired position on a Part.




## ■ Text

### ◆ Text Display Area

The size of a Draw [Text]'s text display area changes according to the size specified in the Text Table ([Number of Characters] x [Number of Text Rows]). Even when the number of characters in the Text Table is smaller than the set [Number of Characters] x [Number of Text Rows], the text display area remains the same size.
For example, Number of Characters = 6, Number of Text Rows = 3



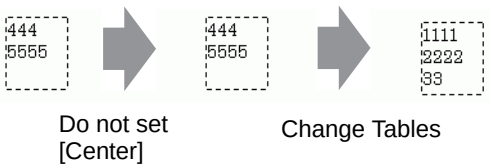

**NOTE**

- When using [Stroke Font], select the Automatically Adjust Text Size check box to automatically adjust the font size so it fits inside the part.

### ◆ Center

Centers the text in the Text Display Area.
If you specify the second row text in table 1, or the third row text in table 2, the text displays in the center of the display area.
When [Center] is set:

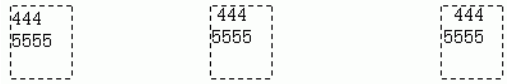

When [Center] is not set:



### ◆ Align ([Align Left], [Align Center], [Align Right])

When multiple rows are set to the Text Table, the row with the largest number of characters (in the following example, the second row, "5555") is fixed and the other rows can be aligned to it with [Align Left], [Align Center], or [Align Right].

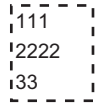
Set [Align Left] Set [Align Center] Set [Align Right]



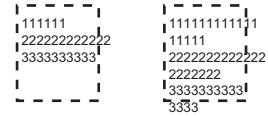

### ◆ Automatically Adjust Text Size

When using [Stroke Font] and you select the [Automatically Adjust Text Size] check box, the text size is automatically adjusted to fit. However, if minimized text does not fit in the frame, any text that exceeds the frame size does not display.

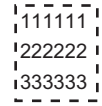
When all text fits in the frame




When minimized characters do not fit in the frame




With [Stroke Font], when you select the [Automatically Adjust Text Size] check box, the text size is maximized as defined.



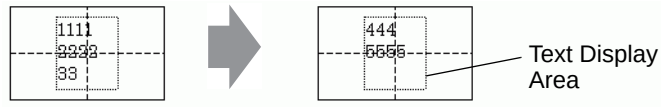

**NOTE**

- Automatically Adjust Text Size is not available for vertical text.

## ■ Message Display

### ◆ Text Display Area

The size of a Message Display's text display area changes according to the size specified in the Text Table ([Number of Characters] x [Number of Text Rows]). Even when the number of characters in the Text Table is smaller than the set [Number of Characters] x [Number of Text Rows], the text display area remains the same size.
For example, Number of Characters = 6, Number of Text Rows = 3




Change Tables

**NOTE**

- When using [Stroke Font], select the Automatically Adjust Text Size check box to automatically adjust the font size so it fits inside the part.

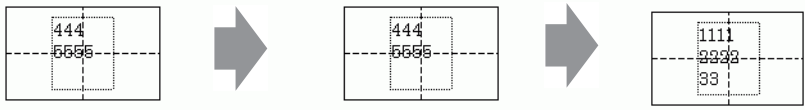
### ◆ Center

Displays the text in the center of the Text Display Area.
If you specify the second row text in table 1, or the third row text in table 2, the text displays in the center of the display area.
When [Center] is set:


Set [Center]

Change Tables

When [Center] is not set:




Do not set [Center]

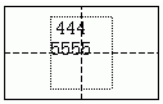
Change Tables

### ◆ Align ([Align Left], [Align Center], [Align Right])

When multiple rows are set to the Text Table, the row with the largest number of characters (in the following example, the second row, "5555") is fixed and the other rows can be aligned to it with [Align Left], [Align Center], or [Align Right].

Set [Align Left]


Set [Align Center]

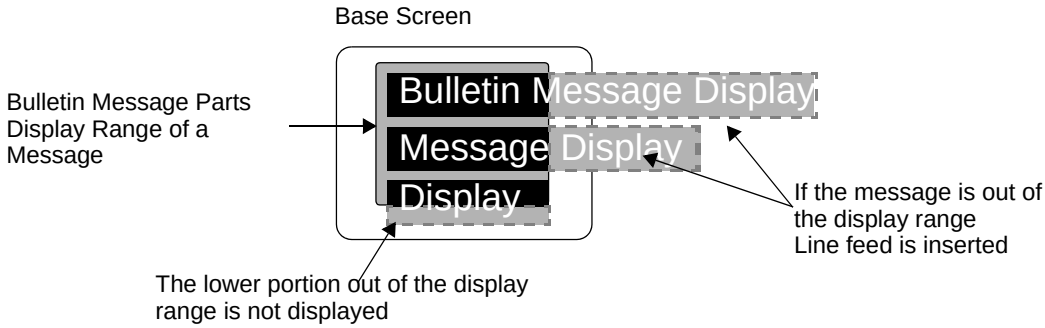



Set [Align Right]

## 17.9.9 Bulletin Message Parts

### ■ Display Range of a Message

- When the display range of the message exceeds one row, line feed is automatically inserted according to the display range and the character width.
- The number of characters that can be displayed differs depending on the font size.
- If the lower portion of the text exceeds the display range, such a portion is not displayed.




### ■ Format of Specified Address

In accordance with the following format, values are used with the specified internal address.

| Address | Setting | |
|---|---|---|
| Specified Address+0 | Display Trigger | |
| Specified Address+1 | Window Number | Reserved address that is not used for Bulletin Message Parts |
| Specified Address+2 | X coordinate of the window display position | |
| Specified Address+3 | Y coordinate of the window display position | |
| Specified Address+4 | Language | |
| Specified Address+5 | Font | |
| Specified Address+6 | Text Size | |
| Specified Address+7 | Number of Characters | |
| Specified Address+8 | Text Color | |
| Specified Address+9 | Text Background Color | |
| Specified Address+10 | Blink | |
| Specified Address+11 | Text | |
| : | : | |
| Specified Address+n | Text | |
| Specified Address+n+1 | Number of Characters | |
| Specified Address+n+2 | Text Color | |

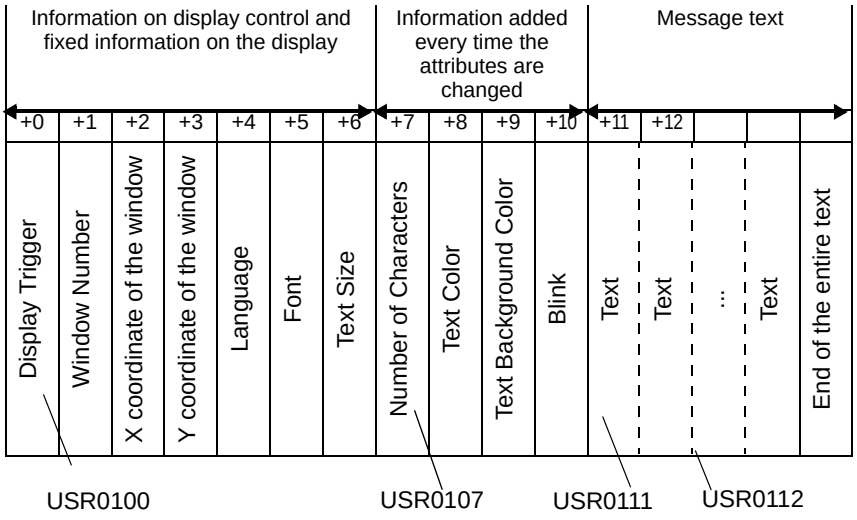
Continued

| Address | Setting |
|---|---|
| Specified Address+n+3 | Background Color |
| Specified Address+n+4 | Blink |
| Specified Address+n+5 | Text |
| : | : |
| Specified Address+x | Text |
| Specified Address+x+1 | End of the text (Number of characters) |

Settings are stored according to the device size of the specified internal address.

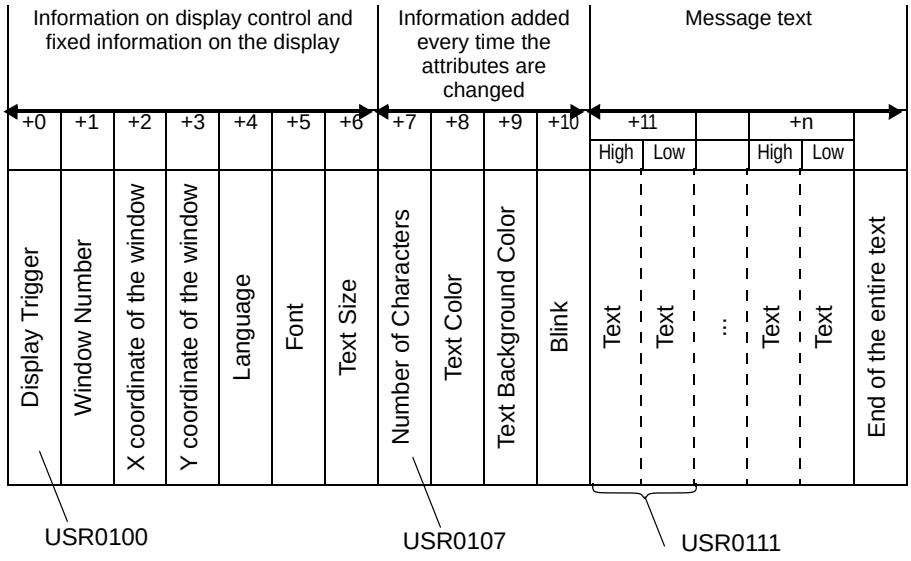
- When 16 bit device is specified
  Data is used in units of words according to the device size.

  For example, specified address is USR0100



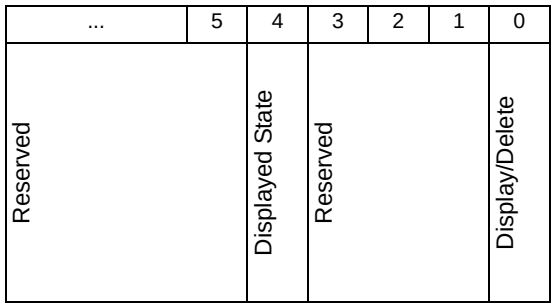

- When 32 bit device is specified
  Data is used in Double Word units according to the device size.
  However, the Text setting is used in units of words.

For example, specified address is LS0100




### ◆ Specified Address+0: Display Trigger

Set to display/delete the message.




- Same bit is used regardless of the size of the specified device (16 bit/32 bit device).

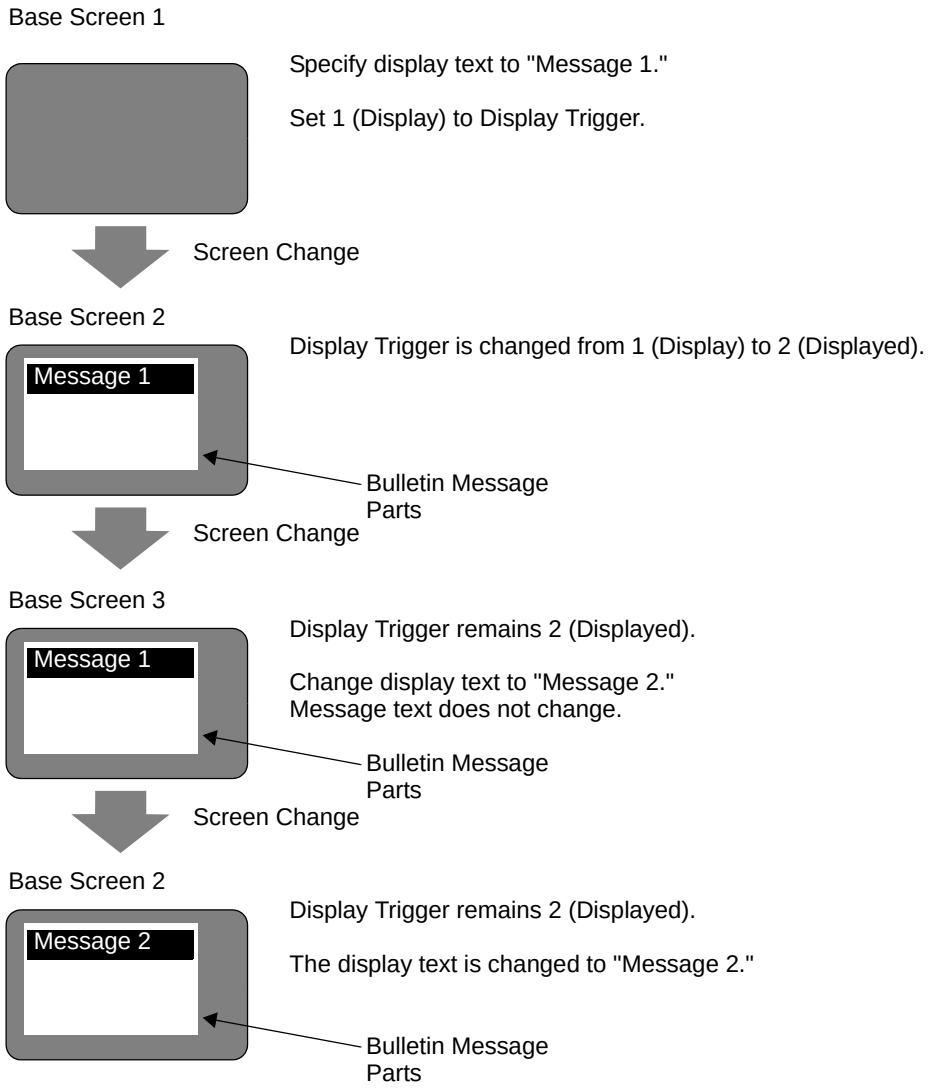
| State | Display/Delete Bit: Bit 0 | Displayed State Bit: Bit 4 |
|---|---|---|
| Delete | OFF | OFF |
| | OFF | ON |
| Display | ON | OFF |
| Displayed | ON | ON |

The action in each state is as follows.

- Delete
  The message is deleted when the bit is turned OFF (Deleted State), and the Displayed State Bit is updated to OFF.
- Display
  The message is displayed according to the value of the address after Language (Specified Address+4).
  The Display Completion bit will be updated to ON.

- Displayed
  The state in which the message display is completed. To update the message, follow either one of the following procedures.
  - [Display] (Turn OFF the Displayed State bit)
  - [Delete], and then [Display]
- Display when Screen Changed
  When the specified address of the Bulletin Message Parts to which the screen will be changed is in [Display] or [Displayed] state, the text will be displayed within the message display range after the screen is changed.

  For example, same specified address is applied to all the Bulletin Message Parts set on the screen



### ◆ Specified Address+1: Window Number

### ◆ Specified Address+2: X coordinate of the window display position

### ◆ Specified Address+3: Y coordinate of the window display position

Reserved addresses that are not used for Bulletin Message Parts
These addresses are used for window screen display if the internal address specified when [Indirect] is selected in the [Global Window Operation] setting is the same as the specified address of the Bulletin Message Parts.

NOTE ☞ "5.17.6 [System Settings] Setting Guide ◆ Mode" (page 5-152)

### ◆ Specified Address+4: Language

Select a language for the text to display.

| Language | Language Code |
|---|---|
| Europe | 0x0000 |
| Korea | 0x0001 |
| Taiwan | 0x0002 |
| China | 0x0003 |
| Japan | 0x0004 |
| Cyrillic (Stroke Font only) | 0x0005 |
| Thai (Stroke Font only) | 0x0006 |

- Message will not be displayed when a language code other than the above is set.

### ◆ Specified Address+5: Font

Set text font for the message to display.

| Font | Value |
|---|---|
| Standard Font | 0 |
| Stroke Font | 1 |

- Standard font (stroke font for Cyrillic and Thai) will be applied when a value other than the above is set for the font.

### ◆ Specified Address+6: Text Size

Set the size of the text for the message to display.
The text sizes are as follows.

| Text Size | Value |
|---|---|
| 8x16 | 0x0810 |
| 8x32 | 0x0820 |
| 8x64 | 0x0840 |
| 16x16 | 0x1010 |
| 16x32 | 0x1020 |
| 16x64 | 0x1040 |
| 32x16 | 0x2010 |
| 32x32 | 0x2020 |
| 32x64 | 0x2040 |

- Only vertical size is applied for Stroke Font.
- When a value other than the supported text size values is set, an error message indicating a font reading error will be displayed.

### ◆ Specified Address+7: Number of Characters

Set the number of characters on which Text Color (Specified Address+8), Text Background Color (Specified Address+9) and Blink (Specified Address+10) are applied. Superposed characters such as Thai and Cyrillic, which are displayed as one character using two character codes, should be calculated as one character with 2 bytes.

- Number of Characters (Specified Address+7), Text Color (Specified Address+8), Text Background Color (Specified Address+9) and Blink (Specified Address+10) must be set collectively as one setting.
- When the number of characters differs from Number of Characters (Specified Address+7), text will not be displayed properly. For example, different text from the set text may be displayed.
- When the total number of characters exceeds 160, only 160 characters will be displayed.

For example, displaying the following message on the base screen.

| | ... | Text Size | Number of Characters | Text Color | Text Background Color | Blink | Text | Text | Number of Characters | Text Color | Text Background Color | Blink | Text | End of the entire text |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Setting Value | | | 2 | | | | | | 1 | | | | | 0 |

2 characters

1 character

### ◆ Specified Address+8: Text Color

### ◆ Specified Address+9: Text Background Color

Set the display color for text.
Text color can be changed for each character.

- Number of Characters (Specified Address+7), Text Color (Specified Address+8), Text Background Color (Specified Address+9) and Blink (Specified Address+10) must be set collectively as one setting.
- Set to the head of the text you want to change.
- When a value other than the setting value is set, the lower bit 11 is used to display.

The following 64 colors are supported.

| Number | RGB | Number | RGB | Number | RGB | Number | RGB |
|---|---|---|---|---|---|---|---|
| 0 | (0.0.0) | 1 | (0.0.255) | 2 | (0.255.0) | 3 | (0.255.255) |
| 4 | (255.0.0) | 5 | (255.0.255) | 6 | (255.255.0) | 7 | (255.255.255) |
| 8 | (0.0.64) | 9 | (0.0.160) | 10 | (0.64.0) | 11 | (0.64.64) |
| 12 | (0.64.160) | 13 | (0.64.255) | 14 | (0.160.0) | 15 | (0.160.64) |
| 16 | (0.160.160) | 17 | (0.160.255) | 18 | (0.255.64) | 19 | (0.255.160) |
| 20 | (64.0.0) | 21 | (64.0.64) | 22 | (64.0.160) | 23 | (64.0.255) |
| 24 | (64.64.0) | 25 | (64.64.64) | 26 | (64.64.160) | 27 | (64.64.255) |
| 28 | (64.160.0) | 29 | (64.160.64) | 30 | (64.160.160) | 31 | (64.160.255) |
| 32 | (64.255.0) | 33 | (64.255.64) | 34 | (64.255.160) | 35 | (64.255.255) |
| 36 | (160.0.0) | 37 | (160.0.64) | 38 | (160.0.160) | 39 | (160.0.255) |
| 40 | (160.64.0) | 41 | (160.64.64) | 42 | (160.64.160) | 43 | (160.64.255) |
| 44 | (160.160.0) | 45 | (160.160.64) | 46 | (160.160.160) | 47 | (160.160.255) |
| 48 | (160.255.0) | 49 | (160.255.64) | 50 | (160.255.160) | 51 | (160.255.255) |
| 52 | (255.0.64) | 53 | (255.0.160) | 54 | (255.64.0) | 55 | (255.64.64) |
| 56 | (255.64.160) | 57 | (255.64.255) | 58 | (255.160.0) | 59 | (255.160.64) |
| 60 | (255.160.160) | 61 | (255.160.255) | 62 | (255.255.64) | 63 | (255.255.160) |

**NOTE**

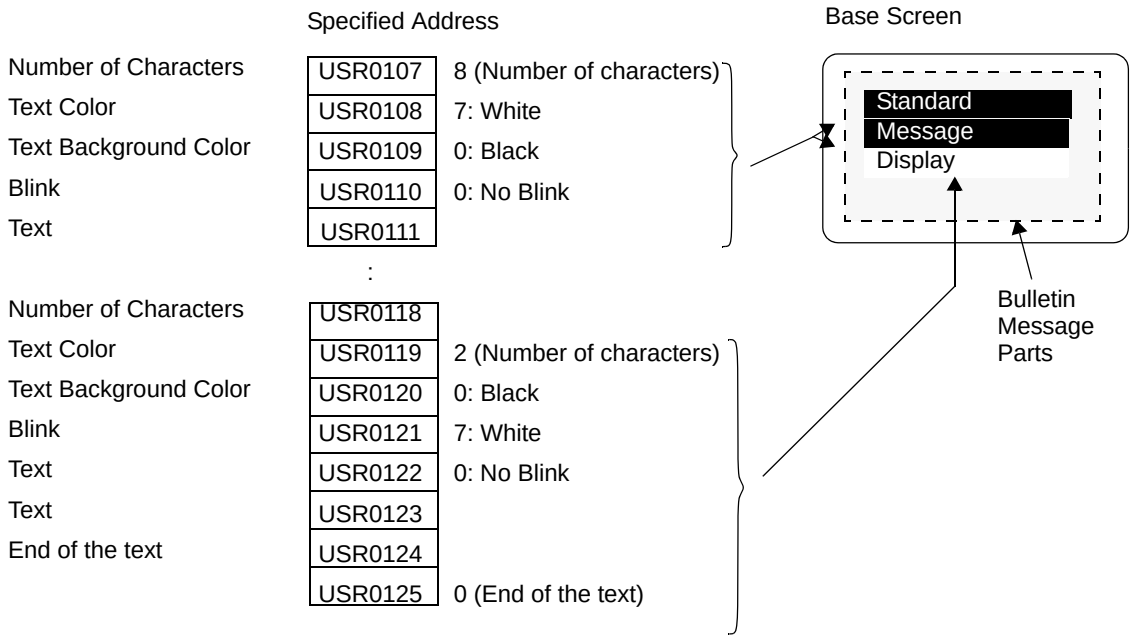
- Color code is the same as in the settings in GP-Pro EX.

For example, Bulletin Message Parts are set on the base screen and the specified address is USR0100

Display text is "Standard Message Display".

Text color and background color for "Standard Message" are white and black, respectively.

Text color and background color for "Display" are black and white, respectively.




### ◆ Specified Address+10: Blink

Set the text to blink or not to blink.

| Blink | Value |
|---|---|
| No Blink | 0 |
| Medium Speed Blink | 1 |
| Low Speed Blink | 2 |
| High Speed Blink | 3 |

- Number of Characters (Specified Address+7), Text Color (Specified Address+8), Text Background Color (Specified Address+9) and Blink (Specified Address+10) must be set collectively as one setting.
- When a value other than the values to blink is set, no blink will be specified.

### ◆ Specified Address+11: Text

Set text to display in the display range.
Text to be stored in the address is UNICODE.
When line feed is set for the display text, line feed will be inserted.
The maximum number of characters that can be displayed is 160 characters (including line feed).

NOTE

- When data is set to the internal address, Text Data Mode should be considered. For more details, please refer to the following.

☞" ■ Storing Data according to Text Data Mode" (page 17-87)

### ◆ Specified Address+n+x+1: End of the text (Number of characters)

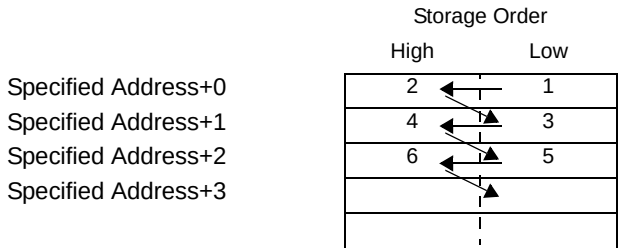
The end of the text to be displayed as Bulletin Message is specified.
This should be fixed to 0 (0x00).

## ■ Storing Data according to Text Data Mode

When data is set to the internal address, Text Data Mode should be considered.
The method for storing setting items to the internal address in order to display Bulletin Message differs depending on the device used and Text Data Mode.

### ◆ USER Area

Regardless of the storage order setting of Text Data Mode, the storage order is fixed to L/H (little endian).




* Addition in the Specified Address is based on Words.

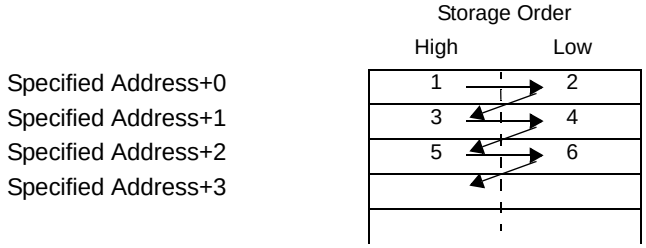
For example, when USR0100 is specified for the internal address and three characters with text data of 0x1234, 0xABCD and 0x5678 are stored (Display Trigger: 0, Text Color: 7, Text Background Color: 0, Blink: 1).

| | High | Low | Setting Item |
|---|---|---|---|
| USR0100 | 0x00 | 0x00 | Display Trigger |
| | | | |
| USR0107 | 0x00 | 0x03 | Number of Characters |
| USR0108 | 0x00 | 0x07 | Text Color |
| USR0109 | 0x00 | 0x00 | Text Background Color |
| USR0110 | 0x00 | 0x01 | Blink |
| USR0111 | 0x34 | 0x12 | Text |
| USR0112 | 0xCD | 0xAB | Text |
| USR0113 | 0x78 | 0x56 | Text |
| USR0114 | 0x00 | 0x00 | End of the text |
| USR0115 | | | |
| | | | |

### ◆ 16 Bit LS Area and Memory Link System Area

Depends on the settings in Text Data Mode.

- HL order (Text Data Mode: 1, 3, 5, 8)

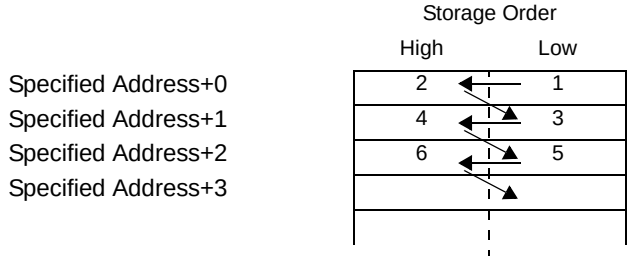



* Addition in the Specified Address is based on Words.

For example, when LS0100 is specified for the internal address and three characters with text data of 0x1234, 0xABCD and 0x5678 are stored (Display Trigger: 0, Text Color: 7, Text Background Color: 0, Blink: 1).

| | High | Low | Setting Item |
|---|---|---|---|
| LS0100 | 0x00 | 0x00 | Display Trigger |
| | | | |
| LS0107 | 0x00 | 0x03 | Number of Characters |
| LS0108 | 0x00 | 0x07 | Text Color |
| LS0109 | 0x00 | 0x00 | Text Background Color |
| LS0110 | 0x00 | 0x01 | Blink |
| LS0111 | 0x34 | 0x12 | Text |
| LS0112 | 0xCD | 0xAB | Text |
| LS0113 | 0x78 | 0x56 | Text |
| LS0114 | 0x00 | 0x00 | End of the text |
| LS0115 | | | |
| | | | |

- LH Order (Text Data Mode: 2, 4, 6, 7)




* Addition in the Specified Address is based on Words.

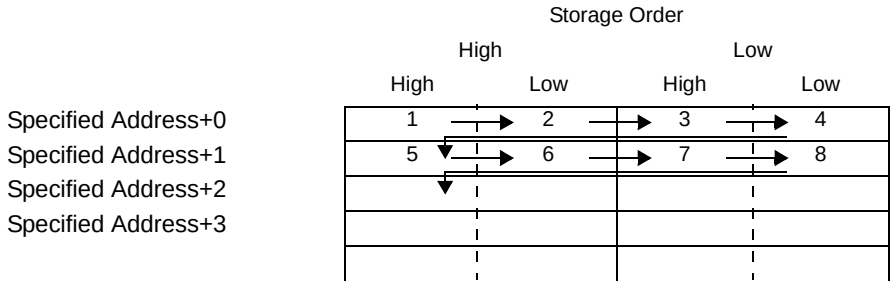
For example, when LS0100 is specified for the internal address and three characters with text data of 0x1234, 0xABCD and 0x5678 are stored (Display Trigger: 0, Text Color: 7, Text Background Color: 0, Blink: 1).

| | High | Low | Setting Item |
|---|---|---|---|
| LS0100 | 0x00 | 0x00 | Display Trigger |
| | | : | |
| LS0107 | 0x03 | 0x00 | Number of Characters |
| LS0108 | 0x07 | 0x00 | Text Color |
| LS0109 | 0x00 | 0x00 | Text Background Color |
| LS0110 | 0x01 | 0x00 | Blink |
| LS0111 | 0x12 | 0x34 | Text |
| LS0112 | 0xAB | 0xCD | Text |
| LS0113 | 0x56 | 0x78 | Text |
| LS0114 | 0x00 | 0x00 | End of the text |
| LS0115 | | | |
| | | | |

### ◆ 32 Bit LS Area and Memory Link System Area

Depends on the settings in Text Data Mode.

- HL order (Text Data Mode: 1, 2, 3, 7)

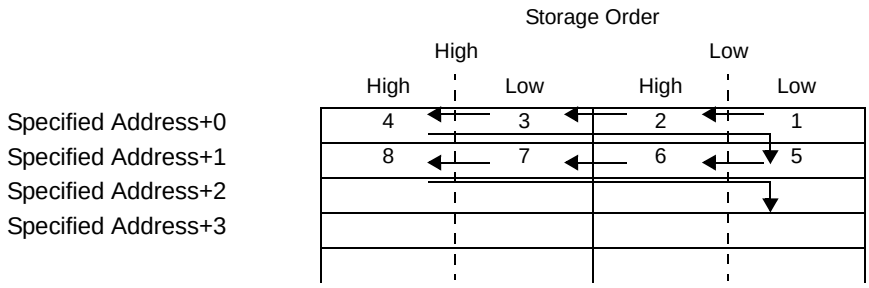



* Addition in the Specified Address is based on Double Word units.

For example, when LS0100 is specified for the internal address and three characters with text data of 0x1234, 0x5678 and 0x9ABC are stored.
(Display Trigger: 0, Text Color: 7, Text Background Color: 0, Blink: 1)

| | High | | Low | | Setting Item |
|---|---|---|---|---|---|
| | High | Low | High | Low | |
| LS0100 | 0x00 | 0x00 | 0x00 | 0x00 | Display Trigger |
| | | | | | |
| LS0107 | 0x03 | 0x00 | 0x00 | 0x00 | Number of Characters |
| LS0108 | 0x07 | 0x00 | 0x00 | 0x00 | Text Color |
| LS0109 | 0x00 | 0x00 | 0x00 | 0x00 | Text Background Color |
| LS0110 | 0x01 | 0x00 | 0x00 | 0x00 | Blink |
| LS0111 | 0x12 | 0x34 | 0x56 | 0x78 | Text |
| LS0112 | 0x9A | 0xBC | Unused | Unused | Text |
| LS0113 | 0x00 | 0x00 | 0x00 | 0x00 | End of the text |
| LS0114 | | | | | |
| LS0115 | | | | | |
| | | | | | |

- LH order (Text Data Mode: 4, 5, 6, 8)




* Addition in the Specified Address is based on Double Word units.

For example, when LS0100 is specified for the internal address and three characters with text data of 0x1234, 0x5678 and 0x9ABC are stored
(Display Trigger: 0, Text Color: 7, Text Background Color: 0, Blink: 1)

| | High | | Low | | Setting Item |
|---|---|---|---|---|---|
| | High | Low | High | Low | |
| LS0100 | 0x00 | 0x00 | 0x00 | 0x00 | Display Trigger |
| | | | ⋮ | | |
| LS0107 | 0x00 | 0x00 | 0x00 | 0x03 | Number of Characters |
| LS0108 | 0x00 | 0x00 | 0x00 | 0x07 | Text Color |
| LS0109 | 0x00 | 0x00 | 0x00 | 0x00 | Text Background Color |
| LS0110 | 0x00 | 0x00 | 0x00 | 0x01 | Blink |
| LS0111 | 0x78 | 0x56 | 0x34 | 0x12 | Text |
| LS0112 | Unused | Unused | 0xBC | 0x9A | Text |
| LS0113 | 0x00 | 0x00 | 0x00 | 0x00 | End of the text |
| LS0114 | | | | | |
| LS0115 | | | | | |
| | | | | | |

## ■ Range of Internal Address Used

- Considering one character is 2 bytes, up to 160 characters (320 bytes) can be used.
- Superposed characters such as Thai and Cyrillic, which are displayed as one character using two character codes, use 2 bytes for one character.
- 1 word is 2 bytes.
- The minimum number of characters that can be used in a 16-bit device is 12 words. (Number of Characters [Specified Address+7] is 0; No characters to be displayed)

| Information on display control and fixed information on the display | + | Information added every time the attributes are changed | + | End of the entire text |
|---|---|---|---|---|
| 7 Words | | 4 Words | | 1 Words |

- The minimum number of characters that can be used in a 32-bit device is 24 words. (Number of Characters [Specified Address+7] is 0; No characters to be displayed)

| Information on display control and fixed information on the display | + | Information added every time the attributes are changed | + | End of the entire text |
|---|---|---|---|---|
| 14 Words | | 8 Words | | 2 Words |

- The maximum number of words that can be used in a 16-bit device is 808 words when an attribute such as Text Color is changed for each of the maximum number of characters (160 characters) that can be displayed.

| Information on display control and fixed information on the display | + ( | Information added every time the attributes are changed | + | Maximum number of characters 160 characters ) |
|---|---|---|---|---|
| 7 Words | | 4 Words | | |

| + ( | Text | x | Maximum number of characters 160 characters ) | + | End of the entire text |
|---|---|---|---|---|---|
| | 1 Words | | | | 1 Words |

- The maximum number of words that can be used in a 32-bit device is 1,456 words when an attribute such as Text Color is changed for each of the maximum number of characters (160 characters) that can be displayed.

| Information on display control and fixed information on the display | + ( | Information added every time the attributes are changed | Maximum number of characters 160 characters ) |
|---|---|---|---|
| 14 Words | | 8 Words | |

| + ( | Text | x | Maximum number of characters 160 characters ) | + | End of the entire text |
|---|---|---|---|---|---|
| | 1 Words | | | | 2 Words |

# 17.10 Restrictions

## 17.10.1 Restrictions on Message Display

### ■ Direct Input

- If a message is unregistered, the Message Display appears empty. For example, when the number of messages is 16 and only 0 to 3 have a registered message, states 4 to 15 appear as display only the Message Display frame.

### ■ Text Display

- When the data designated as [Display Start Row] has no corresponding row, no operation occurs. The previously displayed rows remain.
- If a message input exceeds the [Display Characters], the overflowing portion does not display.Please ensure that messages remain within the [Display Characters].

### ■ Bulletin Message

- Addresses that can specify LS area, USER area or memory link system area can be used for the internal address.
- Display of Bulletin Message using the Window Screen of Global Window Operation is performed according to the display priority of window screens.
  Therefore, while a Special Window that has higher priority such as Security Password Input Screen is displayed, the Window Screen of Global Window Operation that is a User Window cannot be displayed, so a Bulletin Message cannot be displayed either.
  Display of a Bulletin Message using the Window Screen of Global Window Operation has higher priority than the display of the other User Windows.

NOTE

- Refer to the following for details on the window type and priority of User Windows and Special Windows.

☞"12.8 Restrictions for Windows" (page 12-29)

- The device monitor and Global Window screen cannot be displayed at the same time.
  If a Bulletin Message is displayed on all of the screens, the device monitor display operation is as follows.
  1. When you attempt to display the Global Window Screen while displaying the device monitor, the device monitor display is closed and the Global Window Screen is displayed.
  2. When you attempt to display the device monitor screen while displaying a Global Window, the Global Window is closed and the device monitor is displayed.
  3. In the case of 2 above, when the device monitor is closed, Global Window Screen is displayed again.
  4. In the case of 2 above, when the Global Window Screen is closed, the Global Window Screen and device monitor display disappear.

  ☞"5.17.6 [System Settings] Setting Guide ◆ Mode" (page 5-152)
- Text that is out of the display range of Bulletin Message cannot be displayed.
- If the text has over 160 characters, only the first 160 characters can be displayed, regardless of the display range of the Bulletin Message.

- If the specified number of characters exceeds the address range of the internal address, the message is not displayed properly.
  Even when the number of characters to be displayed is within 160 characters, if the number of characters that exceeds the internal address range is specified, a reading error occurs and the specified number of characters cannot be displayed.
- If the lower portion of the text exceeds the display range, such a portion is not displayed.
- If the Number of Characters (Specified Address+7) specified in the address of the Bulletin Message Parts is invalid, the message is not displayed properly.
- When storing data to the specified address, check the settings of Text Data Mode (High/Low).
  If the settings are different from Text Data Mode, the message is not displayed properly.
  " ■ Storing Data according to Text Data Mode" (page 17-87)
- Language, Font and Text Size cannot be changed for each character.
- In order to set Text Color, Text Background Color and Blink for each character, storage area for the attribute of the target character is necessary for each setting.
- The following features are not supported by Bulletin Message Parts.
  1. Display angle for the vertical model (Angle: fixed to 0 degree)
  2. Line spacing setting
  3. Aligning the displayed text to the left/right/center
  4. Vertical text (Direction: fixed to horizontal)

## 17.10.2 Language Change (Multilanguage) Restrictions

- If you change languages, all the text using the Text Table changes.The text registered in the Text Table can be used for the following features.
  - Text
  - Switch Lamp Part Label
  - Alarm Part Item Name
  - Messages to register in a Message Display [Direct Input]
  - Alarm Messages to register in the Common [Alarm]
- If Multilanguage display is specified for the text, changing the language also changes the text in messages [Text Display] and [Text Alarm] parts.
- You cannot change the text in the Data Display [Text Display]. Nor can you use changing language to change item names and text that display on a Sampling Data Display or Special Data Display.
- Multiple text tables cannot display at the same time.
- Changing languages acts the same as changing screens. Screens that display before changing languages may not display after the change.
- If you register characters unsupported by the defined language, the text will not display properly. In the text table, enter text available in the corresponding language. When text does not display properly, the displayed text depends on the language settings and text string. In addition, even when using the same string, the text display may be different depending on the feature or part, or the text display may be different between the GP-Pro EX editor and the display unit.

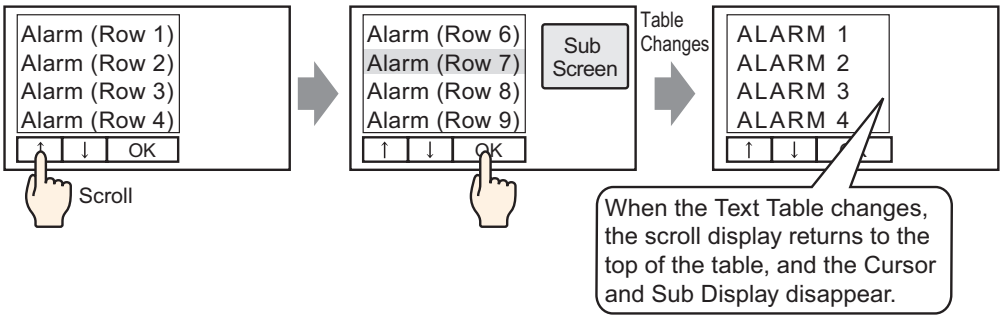
### ■ Changing Alarm Language

- When you set [Enable Text Table] in [Alarm], the existing messages are deleted.
- When registering Alarm Messages, Direct Input text and Text registered in a Text Table are set to all Alarms (Banner, Alarm History, Summary). Direct Input text and Text registered on a Text Table cannot display at the same time.
- For text registered on a Text Table with two or more lines, only the first line will be displayed/printed.

#### ◆ Alarm History and Summary

- When setting an Alarm History Switch on the Alarm Part's [Switch] tab, you cannot use a Text Table for the label. If you want to change languages for an Alarm History Switch, use a Switch Lamp part's Special Switch.
  ☞"10.15.4 Special Switch" (page 10-70)
- When you change a text table, the screen displays the initial state (the display state immediately after a screen change). Accordingly, any scroll movement or displayed Sub Screens is canceled when the text table changes.

For example,




- Do not change the String Table (Language) while saving an Alarm History on a CF Card or USB storage device. If you do so, the file may not be displayed properly in a third-party software product, such as a spreadsheet.
- Also, the text in a different language will be output in the CSV File. Do not change the text table language while printing an Alarm History. If the text table language is changed the printout may contain gaps.
- When saving in CSV or when printing an Alarm History, "Date", "Trigger", item names are displayed in Japanese if the language of the Alarm Message (Text Table) is in Japanese. They are displayed in English if the Alarm Message is in another language (ASCII, Korean, Chinese (Traditional), Chinese (Simplified), and Cyrillic, Thai).

### ◆ Banner

- If the text table language is changed while an alarm message is scrolling, the language changes at the start of the next message.

## 17.10.3 Restrictions on Display Unit File Creation

- In order to use this feature, from [Display Unit] in [System Settings], go to [Extended Settings] - [Load Text Table] and select the [Enable Load Text Table] check box.
- When it is configured for the external files to be read during startup, it may take some time to start up the display unit.
- Files with a table number that is not set for the project file being transferred to the display unit cannot be read.
  Index numbers that are not specified cannot be read either.
- Settings of the project file being transferred to the display unit are applied on the number of characters for Text Table. If the number of characters of the external file is greater, the exceeded characters cannot be read.
- Files other than CSV files cannot be read.
- When the data type of the external file and the language setting of the Text Table being transferred to the display unit are different, the Text Table is rewritten but may not be displayed property.

### 17.10.4 Restrictions on Text Table Converter

- While converting the text table, if there is text that matches already registered text during the search, only the initially registered text remains valid.
- The Text Table supports up to 10000 indexes. If Text Table conversion produces more than 10000 indexes, an error message appears, and only text up to that point is stored.
- You cannot register image fonts in the text table. As a result, you cannot convert text using image font strings.