











4 | Font

This chapter explains basic features of GP-Pro EX's "Font" and basic ways of placing text with each font.

Please start by reading "4.1 Font Type" (page 4-2) and then turn to the corresponding page.

4.1	Font Type	4-2
4.2	Stroke Font, Standard Font	4-3
4.3	Image Font	4-12
4.4	Restrictions	4-16

4.1 Font Type

Stroke Font, Standard Font	
<p>These fonts are used normally. The stroke font can be freely enlarged. The standard font displays even small sized characters well. (e.g.) Text in stroke font</p> <p>“Japanese” </p> <p>“English” </p> <p>“Chinese” </p>	<p> Setup Procedure (page 4-9)</p> <p> Details (page 4-3)</p>
Image Font	
<p>This font is used to draw in Windows fonts.</p> <p>“Arial/Italic” </p> <p>“Arial Black” </p> <p>“Helvetica/Bold” </p>	<p> Setup Procedure (page 4-13)</p> <p> Details (page 4-12)</p>

4.2 Stroke Font, Standard Font

4.2.1 Details

These fonts are used normally.

The stroke font can be freely enlarged. The standard font displays even small sized characters well.

(e.g.) Text in stroke font

“Japanese”

ストロークフォント

“English”

stroke font

“Chinese”

unicode 标准

■ Text Feature

◆ Stroke Font

- Can be freely enlarged and displays well.

This font can be freely enlarged within the range of 6 to 127 dots and displays well.

The standard size is a single-byte character. Two-byte characters are fixed with the same size horizontally and vertically.

However, with a vector font feature, small sized text cannot be displayed well.

Single-byte Character



6 - 127 dots

Two-byte Character



12 - 254 dots

- Can be used for bold/outlines.

◆ Standard Font

- Small sized text can also be displayed well.

Small sized text also displays well if placed in full scale (original size), such as “8 × 16 dots”, “16 × 16 dots”, or “32 × 32 dots”. However, the scaling factor of enlargement/reduction should be selected.

- Can be used for bold/shadows.

■ Font Type

Each display language corresponds to the following fonts.

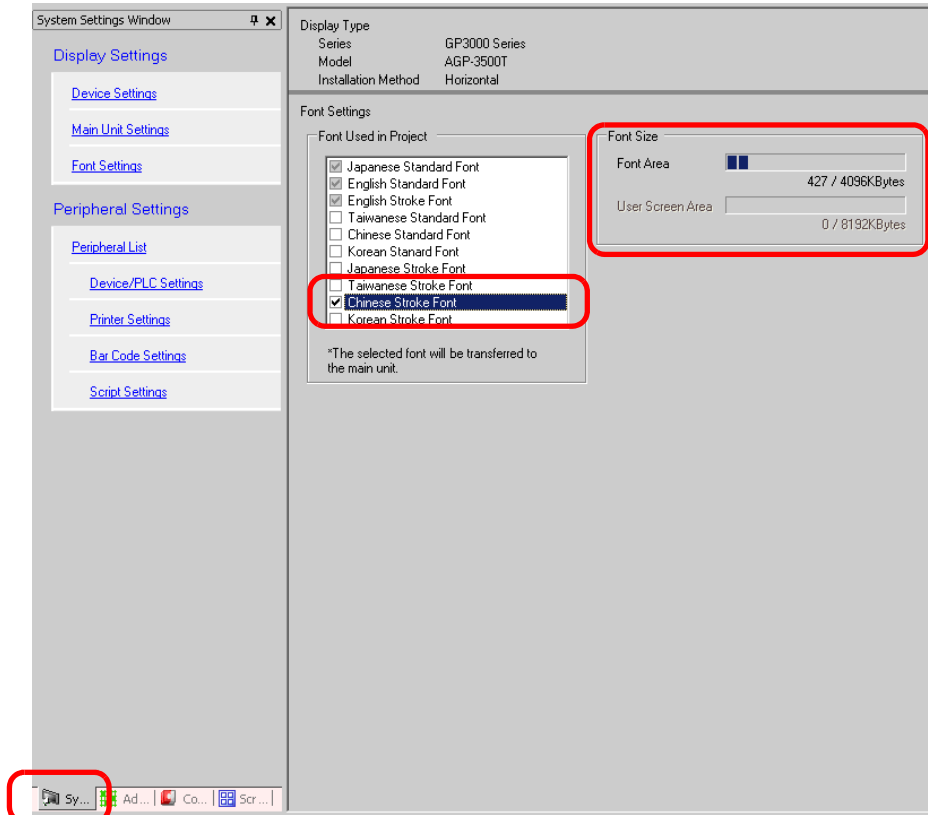
Font Type	Display Language	Font Name
Stroke Font	ASCII	English Stroke Font
	Japanese	Japanese Stroke Font
	Taiwanese	Taiwanese Stroke Font
	Chinese	Chinese Stroke Font
	Korean	Korean Stroke Font
Standard Font	ASCII	English Standard Font
	Japanese	Japanese Standard Font
	Taiwanese	Taiwanese Standard Font
	Chinese	Chinese Standard Font
	Korean	Korean Standard Font

■ Adding/Deleting Fonts

Stroke font and standard font use the Font Area (4Mbytes).

To use fonts other than “Japanese Standard Font”, “English Standard Font”, and “English Stroke Font”, add/delete fonts.

To add/delete fonts, select the [System Settings Window] menu - [Font Settings] command.



(e.g.) If you add the Chinese Stroke Font, put a check mark next only in the “Chinese Stroke Font” box under the [Font Used in Project] and you can see that the “Chinese Stroke Font” uses 427Kbytes from the 4Mbytes of [Font Area].

IMPORTANT

- Add only the fonts to be used. If you select unnecessary fonts, the font size exceeds the Font Area’s capacity (4Mbytes), the User Screen Area (e.g.: “8Mbytes for AGP-3500T”^{*1}) will also be used, and the capacity for creating screens will be restricted.

*1 The User Screen Area’s capacity depends on the GP model.

☞ “1.3 List of Supported Features by Model” (page 1-4)

NOTE

- “Japanese Standard Font”, “English Standard Font”, and “English Stroke Font” are fixed. These fonts are automatically transferred to the GP with little load on the Font Area (4Mbytes) and can be used without considering the font size.

■ Corresponding Text Code

To display text on the Data Display Part (Text Display) by operating from the device (PLC), use the following text code according to the display language set for the Data Display Part.

Data Display Part's Display Language	Corresponding Text Code	Remarks
ASCII	Code Page850 Code Page1250 Code Page1252 Code Page1254 Code Page1257	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">IMPORTANT</div> <ul style="list-style-type: none"> • The English Standard Font only corresponds to Code Page850. • Before using the English Stroke Font, be sure to refer to the following text list. <p>☞ “ ■ English Stroke Font Dedicated Text List” (page 4-7)</p>
Japanese	Shift JIS Code	—
Taiwanese	BIG5	—
Chinese	GB 2312	—
Korean	KS C 5601	—

■ English Stroke Font Dedicated Text List

The English Stroke Font displays only the black characters on the following list on the Data Display Part (Text Display). Under the black characters, the text code numbers for Code Page850 are given in hexadecimal.

IMPORTANT

- The red characters cannot be displayed on a Data Display Part (Text Display).

				20 ^{*1}	!	"	#	\$	%	&	'	(
)	*	+	,	-	.	/	0	1	2	3	4	
29	2a	2b	2c	2d	2e	2f	30	31	32	33	34	
5	6	7	8	9	:	;	<	=	>	?	@	
35	36	37	38	39	3a	3b	3c	3d	3e	3f	40	
A	B	C	D	E	F	G	H	I	J	K	L	
41	42	43	44	45	46	47	48	49	4a	4b	4c	
M	N	O	P	Q	R	S	T	U	V	W	X	
4d	4e	4f	50	51	52	53	54	55	56	57	58	
Y	Z	[\]	^	_	`	a	b	c	d	
59	5a	5b	5c	5d	5e	5f	60	61	62	63	64	
e	f	g	h	i	j	k	l	m	n	o	p	
65	66	67	68	69	6a	6b	6c	6d	6e	6f	70	
q	r	s	t	u	v	w	x	y	z	{		
71	72	73	74	75	76	77	78	79	7a	7b	7c	
}	~	Ä	Å	Ç	É	Ñ	Ö	Ü	á	à	â	
7d	7e	8e	8f	80	90	a5	99	9a	a0	85	83	
ä	ã	å	ç	é	è	ê	ë	í	ì	î	ï	
84	c6	86	87	82	8a	88	89	a1	8d	8c	88	
ñ	ó	ò	ô	ö	õ	ú	ù	û	ü	†	°	
a4	a2	95	93	94	e4	a3	97	96	81		f8	
¢	£	§	•	¶	ß	®	©	™	'	“	Æ	
bd	9c	f5		f4	e1	a9	b8		ef	f9	92	
ø	±	¥	µ	α	ο	æ	ø	¿	¡	¬	ƒ	
9d	f1	be	e6	a6	a7	91	96	98	ad	aa	9f	
<<	>>	…	À	Ã	Õ	€	œ	—	—	“	”	
9e	9f		b7	c7	e5							

*1 "0020" displays a single-byte space.

Continued

/	/	÷	ÿ	ÿ	/	ø	<	>	‡	.	/
		f6	98			cf				fa	
//	%	Â	Ê	Á	Ë	È	Í	Î	Ï	Ì	Ó
		b6	d2	b5	d3	d4	d6	d7	d8	de	e0
Ô	Ò	Ú	Û	Ù	ı	^	~	-	˘	.	◦
e2	e3	e9	ea	eb	d5						
	”	˘	Ł	ł	Š	š	Ž	ž	ı	Đ	
5										dd	d1
f7											
ø	Ý	ý	Ɔ	Ɔ	-	x	1	2	3	1½	1¼
d0	ed	ec	e8	e7	f0	9e	fb	fd	fc	ab	ac
¾		€	Ž	ž	Ž	ž	Š	š	Ş	ş	
f3											
Ț	ț	Ț	ț		Ǿ	Ǿ	Ł	ł	Ł	ł	Ą
ą	Ǻ	ǻ	Ǽ	ǽ	Ɔ	Ɔ	Ć	ć	Č	č	Ǿ
ö	Ů	ů	Û	ů	Ń	ń	Ň	ň	Ŕ	ŕ	Ř
ř	đ	Ǿ	ǿ	Ǿ	ǿ	Ŕ	ŕ	È	è	Ē	ē
Ŋ	ŋ	Ō	ō	Ū	ū	Ū	ū	Ɔ	Ɔ	Ī	ī
Ł	ł	Ā	ā	Į	į	—	İ		◦	■	İ
ĩ	κ	Ŋ	ŋ	Ɔ	Ɔ	ee	Ū	ū	—		!!
										f2	
←	↑	→	↓	↔	↕	↕	.	L	—		└
									C4	b3	da
└	L	J	└	└	T	T	+			└	└
6f	c0	d9	c3	64	c2	c1	c5	cd	ba	c9	bb
└	└	└	└	└	└	└	└	└	└	└	└
c8	bc	cc	b9	cb	ca	ce	df	dc	db	b0	b1
▒	■	▲	▶	▼	◀	○	◻	◻	☺	☺	☼
b2	fe										
♀	♂	♠	♣	♥	♦	♪	♪				

4.2.2 Setup Procedure

NOTE

- For “Japanese Standard Font”, “English Standard Font”, and “English Stroke Font”, you do not have to add/delete fonts (the following steps 1 - 4). Start by setting the text.
- Please refer to the settings guide for details.
☞ “9.12 Setting Guide” (page 9-75)
- For more information about text, please refer to “9.3 Drawing Text” (page 9-22) .

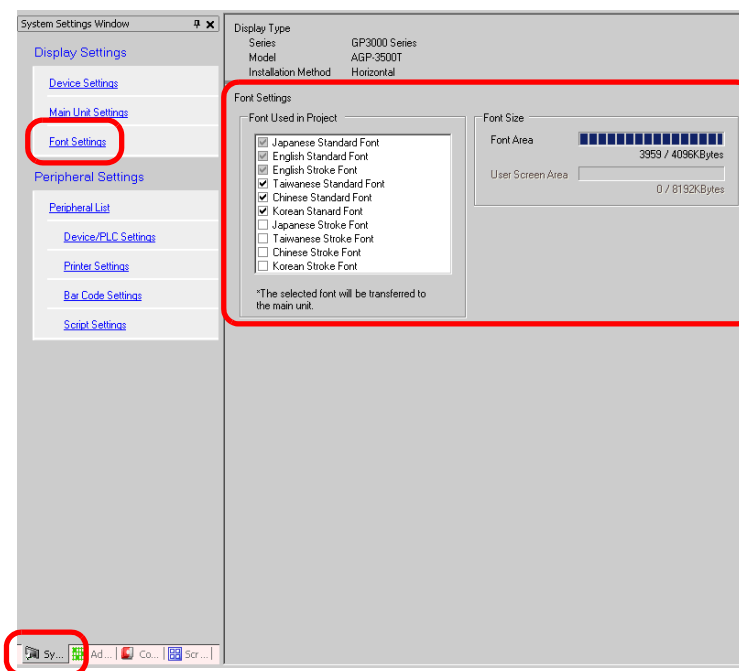
These are normally used fonts.

The stroke font can be freely enlarged. The standard font displays even small sized characters well.

(e.g.) Text in stroke font

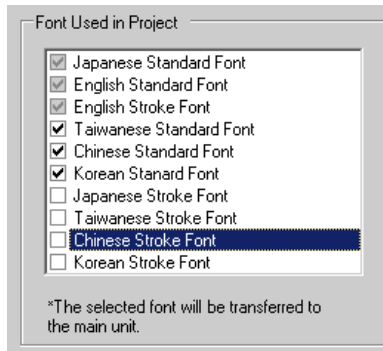
“Chinese” 设定输入画面

- 1 Select GP-Pro EX’s [System Settings Window] menu - [Font Settings] command and then the [Font Settings] screen is displayed.

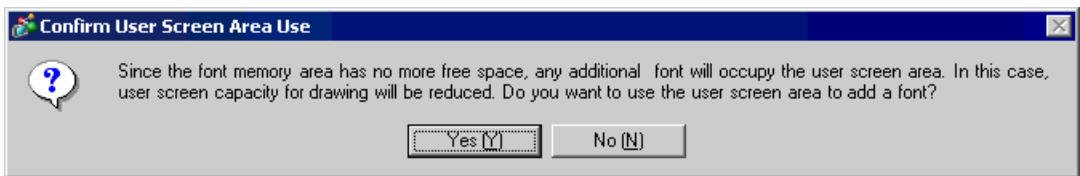

NOTE

- If the [System Settings Window] tab is not displayed in the Work Space, select the [View (V)] menu - [Work Space (W)] option - [System Settings Window (S)] command.

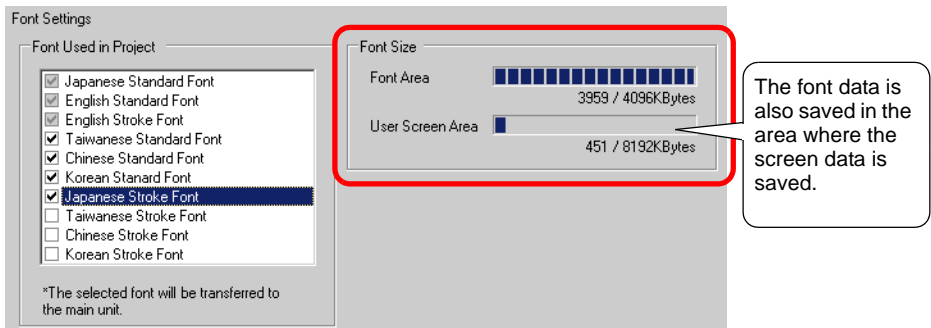
2 Put a check mark next to the [Chinese Stroke Font] box under the [Font Used in Project] to add the font.



3 When you place a check mark, the following message is displayed.

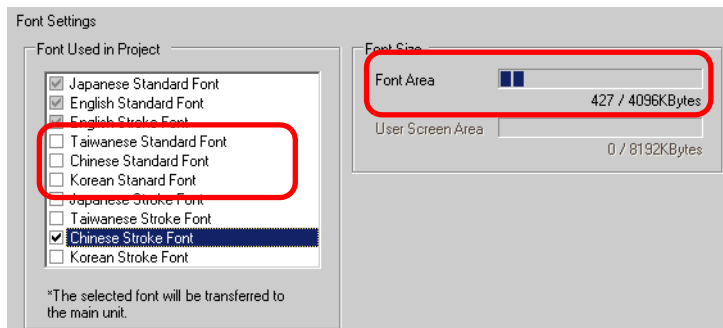


Click [Yes] to save the font data that the [Font Area] cannot store in the [User Screen Area] or to adjust the Font Area later as in the step 4. If you click [Yes], you can confirm that the User Screen Area is also used.

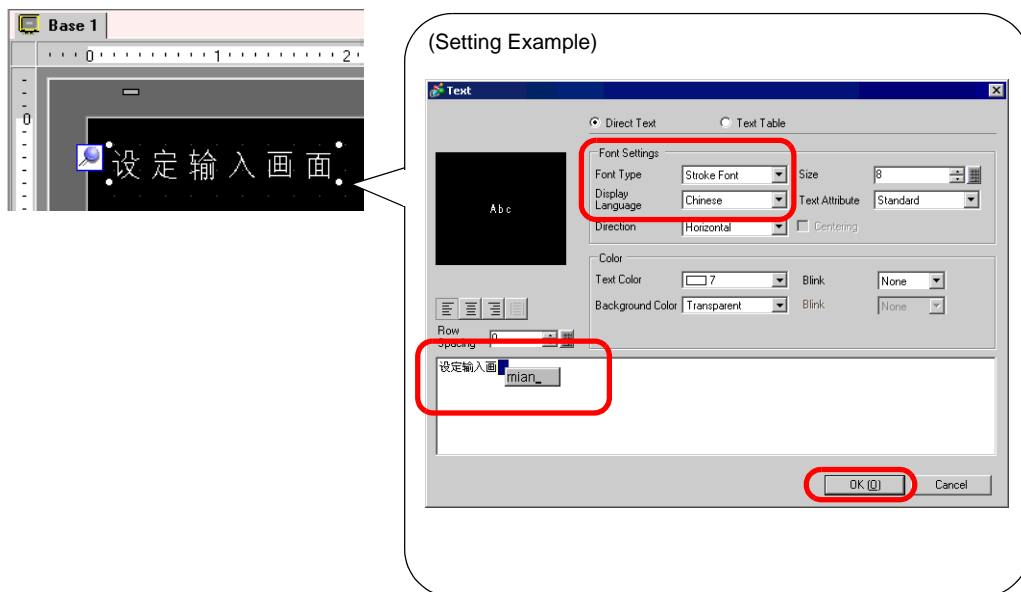


Click [No] to cancel adding the font.

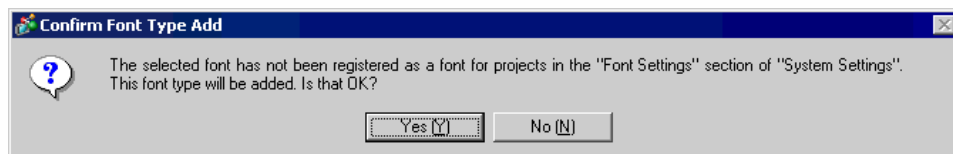
4 Clear the check box for the fonts you are not using. This allows more free space in the Font Area.



- 5 Draw text using the “Chinese Stroke Font” (e.g.). Place the text in the drawing area and double-click it. Set the [Stroke Font] in [Font Type] and [Chinese] in [Display Language], input characters in Roman letters, and click [OK] to close the [Text] dialog box.



- NOTE** • The moment you select the [Stroke Font] in [Font Type] or the moment you change the [Display Language], the following dialog box may be displayed. This is to confirm whether or not to add the font type, because a switch has been set before adding the font.



To add the font, click [Yes].

If you click [No], adding the font is cancelled. If you transfer the text in this state to the GP, the set text cannot be displayed.

4.3 Image Font

4.3.1 Details

This font is used to draw with a Windows font.
You can use bold and italics as well as the standard style.

“Arial/Italic” 

“Arial Black” 

“Helvetica/Bold” 

IMPORTANT • You can select this font only when [Direct Text] is set in the part's label/text.

■ Text Feature

- You can display characters with various Windows fonts.
Displays a Windows font as a bitmap.



e.g.: “Arial/Italic”

- Text displays well regardless of enlargement/reduction or the text size.
For example, if the placement size is enlarged by increasing the number of characters in the text, the text is displayed with the set font and text size.



- Can be used for bold/italics.
- Using too much of this font restricts the User Screen Area capacity.
The image font uses the User Screen Area.
Increasing the text size and the number of characters restricts the capacity for creating screens.
Check the [Send Size] by selecting the [Project] menu - [Properties] - [Project Information] - [Send Data] and do not use too much of the image font.

NOTE • The User Screen Area's capacity depends on the GP model.
☞ “1.3 List of Supported Features by Model” (page 1-4)


4.3.2 Setup Procedure

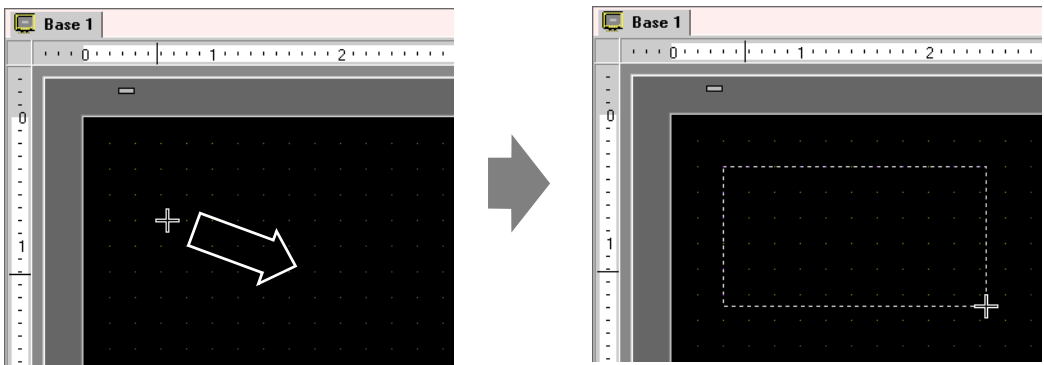
- NOTE** • Please refer to the settings guide for details.
 ☞ “9.12 Setting Guide” (page 9-75)

Use the “Image Font”. You can use bold and italics as well as the standard style.

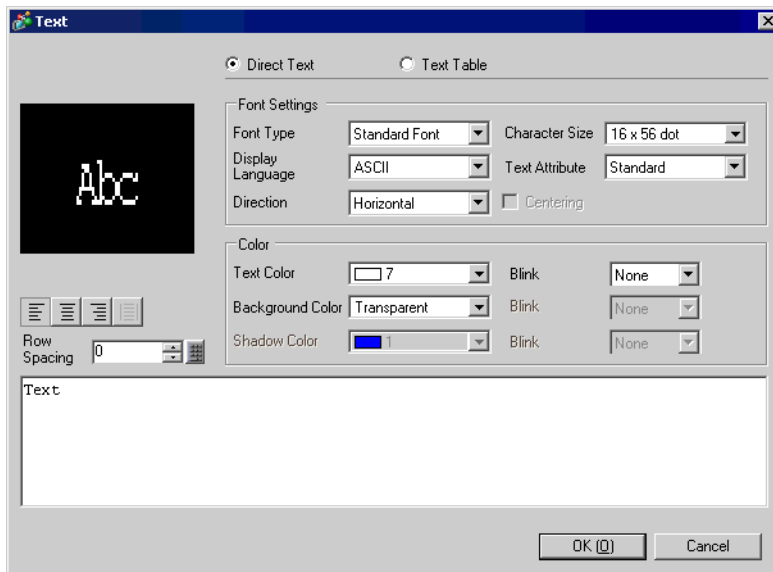
“Arial/Italic”

Image Font

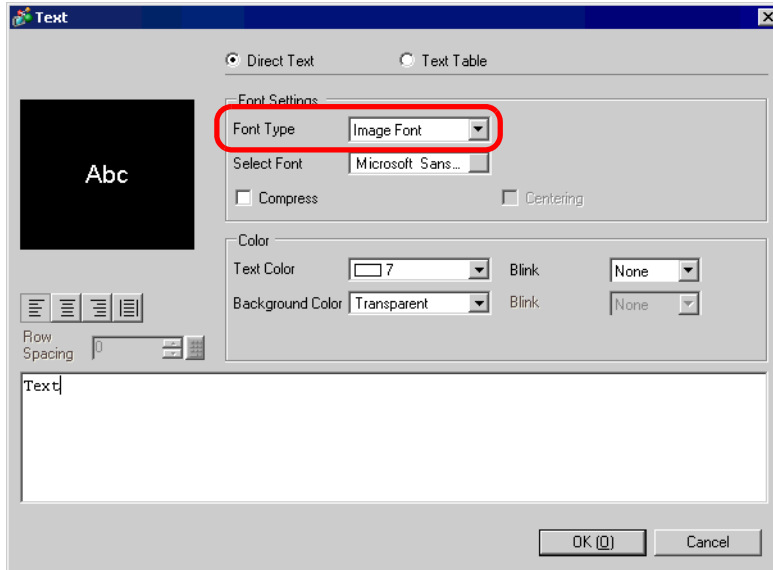
- 1 Select the [Draw] menu - [Text] command or click . Click the base screen and drag the mouse to designate the desired size.



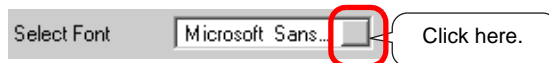
- 2 Place the text and then right-click it to release the text’s draw mode. Double-click the placed text and the setting dialog box will be displayed.



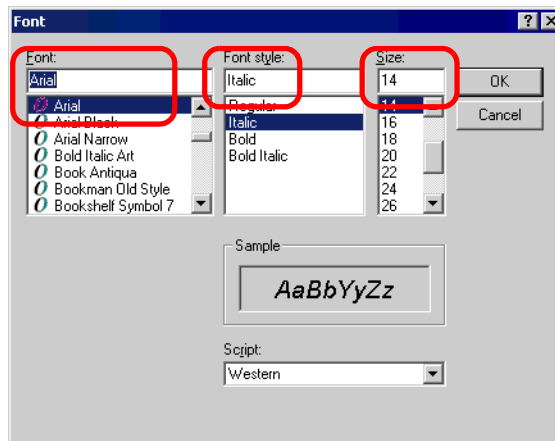
3 Select [Image Font] for the [Font Type].



4 Click the [Select Font]'s pull-down button to display the setting dialog box.

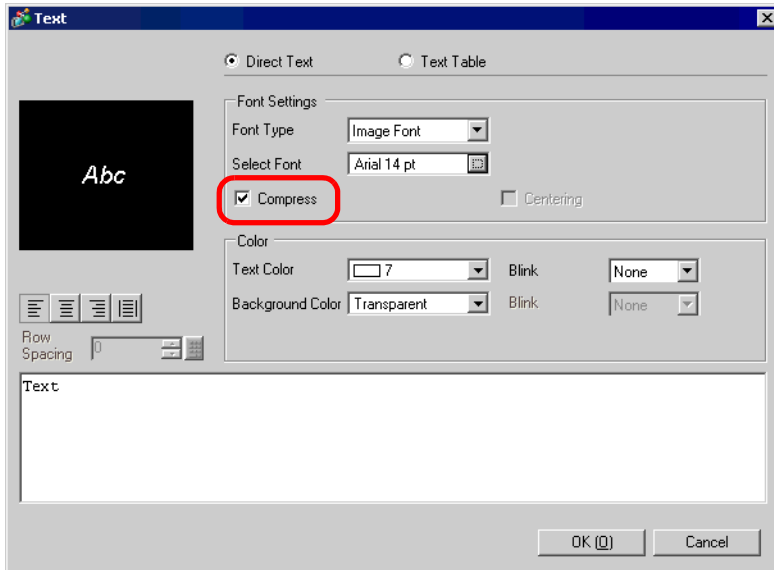


5 Select [Font] (e.g.: “Arial”), [Font Style] (e.g.: “Italic”), and [Size] (e.g.: “14”), and click [OK].



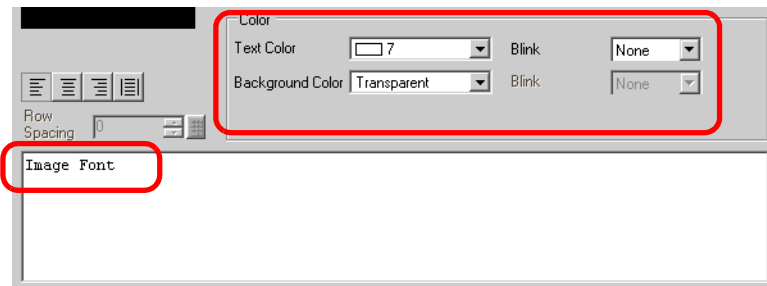
NOTE • If you use vertical text, select a font for vertical text (beginning with @ “e.g.: @MS Gothic”) for the [Font].

6 Put a check mark next to the [Compress] box. The font volume will be compressed by about 1/2, depending on characters.



NOTE • [Compress] is recommended for reducing the project file volume.

7 Select the colors you want and input text in the Input Text border.



8 Click [OK] and the setting are completed.



4.4 Restrictions

4.4.1 Restrictions for Standard Font

- When [ASCII] is selected for the [Standard Font]'s [Display Language], you can select a text size you want from the three fixed sizes [6 × 10 dot], [8 × 13 dot], and [13 × 23 dot].
- When the [Character Size] is [6 × 10 dot] fixed size, you cannot select [Bold] from the [Text Attribute].
- When you display the text registered in a text table on a part with a [Fixed Size], refer to the ASCII text table and select/add the part's text. Text on a table without ASCII language settings cannot be properly displayed.
- If you change the font type to [Standard Font] for the part label or text inputted with [Stroke Font], the text may not be displayed.
- If you compare the display on GP-Pro EX and the GP main unit, there may be slight differences in the appearance of the standard font letters. This is caused by the fact that the standard font uses a Windows font and displays it in GP-Pro EX.

4.4.2 Restrictions for Image Font

- [Image Font] is a bit map image. You cannot set the [Display Language], [Text Type], or Vertical Text (where the [Direction] is [Vertical]).