6 Font

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

Please start by reading "6.1 Font Types" (page 6-2) and then go to the corresponding page.

6.1	Font Types	6-2
6.2	Defining Stroke Font and Standard Font	6-3
6.3	Image Font	6-14
6.5	[Font] Settings Guide	6-21
6.6	Restrictions	6-22

6.1 Font Types

Defining Stroke Font and Standard Font						
These fonts are used normally. The stroke font can be freely enlarged without the text appearing pixelated. The standard font displays even small sized characters well. For example, text in stroke font						
"Japanese" ストロークフォント	Setup Procedure (page 6-11)					
"English" stroke font	Introduction (page 6-3)					
"Chinese (Simplified)"						
unicode 标 准						
Image Font						
This font is used to draw with a Windows font and can appear pixelated when enlarged.						
"Arial/ Italic イメージフォント	Setup Procedure (page 6-15)					
"Arial" Image Font	Introduction (page 6-14)					
"Helvetica/Bold" Image Font						
Bitmap Font						
You can select the text for the Data Display's numeric values and symbols from a variety of models (bitmap images).						
"Numeric Display" (Setting Example)						
0 1 2 3 Times	Setup Procedure (page 6-19) Introduction (page 6-18)					
[Statistical Data Display] (Setting Example)						

6.2 Defining Stroke Font and Standard Font

6.2.1 Introduction

These fonts are used normally.

The stroke font can be freely enlarged without the text appearing pixelated. The standard font displays even small sized characters well.

For example, text in stroke font



Text Features

Stroke Font

· Can be freely enlarged and displays well.

This font can be freely enlarged within the range of 6 to 127 pixels and displays well. The standard size is a single-byte character. Double-byte characters are fixed with the same size horizontally and vertically.

However, with a vector font feature, small-sized text cannot display well.



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 x 16 pixels", "16 x 16 pixels", or "32 x 32 pixels". However, the scaling factor of enlargement/ reduction should be selected.

• Can be used for bold/shadows.

NOTE	

When you select the [Draw Using Standard Font] check box in [System Settings], [Display Unit], [Extended Settings], [Compatibility], the Gothic font is used, even if the character size for standard font is 32 x 32 or more.
 * Extended Settings" (page 5-179)

Font Types

Each display language corresponds to the following fonts.

Font Type	Display Language	Font Name					
Stroke Font	Japanese	Japanese Stroke Font					
	ASCII	Roman Character Stroke Font					
	Chinese (Simplified)	Chinese (Simplified) Stroke Font					
	Chinese (Traditional)	Chinese (Traditional) Stroke Font					
	Korean	Korean Stroke Font					
	Cyrillic ^{*1}	Cyrillic Stroke Font					
	Thai	Thai Stroke Font					
Standard Font	Japanese	Japanese Standard Font					
	ASCII	Standard Font for languages supported by ASCII character set					
	Chinese (Simplified)	Chinese (Simplified) Standard Font					
	Chinese (Traditional)	Chinese (Traditional) Standard Font					
	Korean	Korean Standard Font					

*1 Cyrillic letters are mainly used in Russian, Ukrainian, Bulgarian, Byelorussian, Serbian, Macedonian, Kazakh, Kirgiz, and Mongolian languages.

Add/Delete Font

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

To use fonts other than Japanese Standard Font, ASCII Standard Font, and English Stroke Font, add and delete fonts.

To add/delete fonts, select [Font Settings] from the [System Settings] menu.

System Settings 🛛 📮 🗙	Display Unit						
Display	Series GP3000 Series						
Display	Orientation Landscape						
Display Unit	Font						
Logic Programs	Font Used in Project	Font Size					
Video/Movie	Japanese Standard Font	Font Area					
Font	English Standard Font	3959 / 4096KB					
Peripheral Settings	 Chinese(Traditional) Standard Font Chinese(Simplified) Standard Font 	321 / 8192KB					
Peripheral List	Korean Standard Font	Bitman Font					
Device/PLC	Japanese Stroke Font Chinese(Traditional) Stroke Font						
Printer	Chinese(Simplified) Stroke Font	1 Compress					
Input Equipment		In Use: O Bytes					
Script	*The selected font will be transferred to the display unit.						
I/O Driver							
FTP Server	Offine Menu: English (Japanese support						
Modem	Unine Meria. Englishvaapanese support						
Image Unit							
🕅 s 📕 A 📫 C 🔍 S 🗳 C 🖼 S I							

For example, to add Chinese (Simplified) Stroke Font, in the [Font Used in Project] area, select the [Chinese (Simplified) Stroke Font] check box. The Chinese (Simplified) Stroke Font occupies 427 KB of the 4 MB Font Area.

• Add only fonts used in the project. Selecting unnecessary fonts could mean fonts overflow the Font Area. For example, on the GP-3500T, if fonts exceed the Font Area capacity of 8 MB,^{*1} fonts then also use the User Screen Area, reducing the capacity of user applications.

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

"1.3 List of Supported Features by Model" (page 1-8)

• 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 (4 MB) and can be used without considering the font size.

• On GP-32** Series or ST Series, English Standard Font and English Stroke Font are must always be installed but the Japanese Standard Font can be deleted.

Compatible Character Codes

To display characters in the Data Display (Text Display) on the device/PLC, use the following character codes, depending on the display language set for the data display.

Data Display Part's Display Language	Corresponding Text Code	Remarks
Japanese	Shift JIS Code	
ASCII	Code Page 850 Code Page 1250 Code Page 1252 Code Page 1254 Code Page 1257	 MPORTANT The ASCII Standard Font only corresponds to Code Page 850. Before using the English Stroke Font, be sure to refer to the following text list. The List of characters exclusive to ASCII Stroke Font" (page 6-7)
Chinese (Simplified)	GB 2312	
Chinese (Traditional)	BIG5	
Korean	KS C 5601	
Cyrillic	Code Page 1251	
Thai	Code Page 874	

■ List of characters exclusive to ASCII Stroke Font

If you are using Stroke Fonts for languages supported by the ASCII character set, only the black letters in the following list can be displayed in the Data Display (Text Display). Under the black letter, the Code Page 850's hexadecimal character code number is displayed.







■ List of characters exclusive to Cyrillic Stroke Font

The following characters are supported as Cyrillic.

The Character Code is displayed under each letter. The first code is Native code and the second is Unicode.

	ļ	"	#	\$	%	&		()	*	+	,	_		/
0x20	0x21	0x22	0x23	0x24	0x25	0x26	0x27	0x28	0x29	0x2A	0x2B	0x2C	0x2D	0x2E	0x2F
0x0020	0x0021	0x0022	0x0023	0x0024	0x0025	0x0026	0x0027	0x0028	0x0029	0x002A	0x002B	0x002C	0x002D	0x002E	0x002F
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0x30	0x31	0x32	0x33	0x34	0x35	0x36	0x37	0x38	0x39	0x3A	0x3B	0x3C	0x3D	0x3E	0x3F
0x0030	0x0031	0x0032	0x0033	0x0034	0x0035	0x0036	0x0037	0x0038	0x0039	0x003A	0x003B	0x003C	0x003D	0x003E	0x003F
@	Α	В	С	D	E	F	G	Η	Ι	J	K	L	Μ	N	0
0x40	0x41	0x42	0x43	0x44	0x45	0x46	0x47	0x48	0x49	0x4A	0x4B	0x4C	0x4D	0x4E	0x4F
0x0040	0x0041	0x0042	0x0043	0x0044	0x0045	0x0046	0x0047	0x0048	0x0049	0x004A	0x004B	0x004C	0x004D	0x004E	0x004F
P	Q	R	S	T	U	V	W	X	Y	Z		¥		0.55	
0x50	0x51	0x52	0x53	0x54	0x55	0x56	0x57	0x58	0x59	0x5A	0x5B	0x5C	0x5D	0x5E	0x5F
0x0050	0x0051	0x0052	0x0055	0x0054	0x0055	0x0056	0x0057	0x0058	0x0059	0x005A	0x0056	0x0050	0x005D	UXUUSE	0x005F
0.00	a	b	C	d	e	†	g	h	I	J	k		m	n	0
0000	0x01	0x02	0x03	0x04	0x05	0000	0x07	80XU 0v0068	0×0069	0x0A	0x0B	0x00			
n	a	r	S	t	11	V	W	X	V	7	{		}	~	0,0001
0x70	0x71	0x72	0x73	0x74	0x75	0x76	0x77	0x78	y 0x79	0x7A	0x7B	0x7C		0x7E	0x7F
0x0070	0x0071	0x0072	0x0073	0x0074	0x0075	0x0076	0x0077	0x0078	0x0079	0x007A	0x007B	0x007C	0x007D	0x007E	0x007F
Ъ	ŕ	,	ŕ	,,	•••	†	‡		‰	Jb	<	Њ	Ŕ	ĥ	Ų
0x80	0x81	0x82	0x83	0x84	0x85	0x86	0x87	0x88	0x89	0x8A	0x8B	0x8C	0x8D	0x8E	0x8F
0x0402	0x0403	0x201A	0x0453	0x201E	0x2026	0x2020	0x2021	0x20AC	0x2030	0x0409	0x2039	0x040A	0x040C	0x040B	0x040F
ħ	6	,		"	•	-			тм	Jb	>	њ	ќ	ħ	Ų
0x90	0x91	0x92	0x93	0x94	0x95	0x96	0x97	0x98	0x99	0x9A	0x9B	0x9C	0x9D	0x9E	0x9F
0x0452	0x2018	0x2019	0x201C	0x201D	0x2022	0x2013	0x2014		0x2122	0x0459	0x203A	0x045A	0x045C	0x045B	0x045F
	У	ў	J	a	Γ		§	E	C	3	«	7	®		
0xA0	0xA1	0xA2	0xA3	0xA4	0xA5	0xA6	0xA7	0xA8	0xA9	0xAA	0xAB	0xAC	0xAD	0xAE	0xAF
0XUUAU	0X040E	0X045E	0x0408	0x00A4	0x0490	UXUUA6	0X00A7	0x0401	UXUUA9	0x0404	UXUUAB	UXUUAC	UXUUAD	UXUUAE	0x0407
	<u>±</u>		I I	L L	μ	1	•	е	N0.	3	>>>	Ĵ	S	S	Ϊ
0xB0	0xB1	0xB2	0xB3	0xB4	0xB5	0xB6	0xB7	0xB8	0xB9	0xBA	0xBB	0xBC	0xBD	0xBE	0xBF
0x00B0	0x00B1	0x0406	0x0456	0x0491	0x00B5	0x00B6	0x00B7	0x0451	0x2116	0x0454	0x00BB	0x0458	0x0405	0x0455	0x0457
Α	Б	В	Γ	Д	E	Ж	З	И	Й	К	Л	M	H	0	Π
0xC0	0xC1	0xC2	0xC3	0xC4	0xC5	0xC6	0xC7	0xC8	0xC9	0xCA	0xCB	0xCC	0xCD	0xCE	0xCF
0x0410	0x0411	0x0412	0x0413	0x0414	0x0415	0x0416	0x0417	0x0418	0x0419	0x041A	0x041B	0x041C	0x041D	0x041E	0x041F
Р	C		У	Φ	X	Ц	Ч	Ш	Щ	Ь	Ы	Ь	Э	Ю	Я
0xD0	0xD1	0xD2	0xD3	0xD4	0xD5	0xD6	0xD7	0xD8	0xD9	0xDA	0xDB	0xDC	0xDD	0xDE	0xDF
0x0420	0x0421	0x0422	0x0423	0x0424	0x0425	UXU420	UXU427	0x0428	0x0429	UXU4ZA	0X042D	0x0420	0x042D	UXU42E	UXU42F
a	0	B	Γ	Д	e	Ж	3	Ν	Ν	К	Л	M	H	0	
UXEU		UXE2	UXE3	UXE4	UXE5		UXE/	0xE8	0xE9						
0,0430	0,0431		0.0433	JX0434	0.0430		0.0437				0X043D		0,043D	0.043E	0x043F
р		T	V	m	X		Ч			Ъ	Ы	Ь	⊢Э	Ю	Я

■ List of characters exclusive to Thai Stroke Font

The following characters are supported as Thai.

The Character Code is displayed under each letter. The first code is Native code and the second is Unicode.

IMPORTANT • The red characters cannot display on a Data Display Part (Text Display).

$\begin{array}{c c c c c c c c c c c c c c c c c c c $				#	S	%	&		()	*	+	_	-		
0x0020 0x0021 0x0022 0x0022 0x0023 0x0024 0x0024 0x0024 0x0025 0x0025 0x0025 0x0025 0x0021 0x0021 0x0021 0x0022 0x0021 0x002	0x20	0x21	0x22	0x23	0x24	0x25	0x26	0x27	0x28	0x29	0x2A	0x2B	, 0x2C	0x2D	0x2E	0x2F
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	0×0020	0x0021	0x0022	0×0023	0×0024	0×0025	0x0026	0x0027	0x0028	0x0029	0x002A	0x002B	0x002C	0x002D	0x002E	0×002F
0x30 0x31 0x32 0x33 0x34 0x33 0x34 0x33 0x34 0x34 0x34 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x44 <th0x45< th=""> 0x44 0x44 <t< th=""><th>0</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>:</th><th>;</th><th><</th><th>=</th><th>></th><th>?</th></t<></th0x45<>	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0x00030 0x0033 0x0033 0x0034 0x0035 0x0033 0x043 0x043 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x44 0x043 0x0043 0x0053 0x0053 <td>0x30</td> <td>0x31</td> <td>0x32</td> <td>0x33</td> <td>0x34</td> <td>0x35</td> <td>0x36</td> <td>0x37</td> <td>0x38</td> <td>0x39</td> <td>0x3A</td> <td>0x3B</td> <td>0x3C</td> <td>0x3D</td> <td>0x3E</td> <td>0x3F</td>	0x30	0x31	0x32	0x33	0x34	0x35	0x36	0x37	0x38	0x39	0x3A	0x3B	0x3C	0x3D	0x3E	0x3F
値 A B C D E F G H I J K L M N O 0x400 0x41 0x42 0x43 0x44 0x45 0x46 0x47 0x48 0x49 0x044 0x048 0x044 0x048 0x044 0x048 0x044 0x048 0x044 0x048 0x044 0x048 0x044	0x0030	0x0031	0x0032	0×0033	0x0034	0x0035	0x0036	0x0037	0x0038	0x0039	0x003A	0×003B	0x003C	0x003D	0x003E	0x003F
0x40 0x41 0x42 0x43 0x44 0x48 0x47 0x48 0x44 <	@	A	В	C	D	E	F	G	Η	Ι	J	K	L	M	N	0
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P Q R S I U V W X Y Z L ¥ J	0x0040	0x0041	0x0042	0x0043	0x0044	0x0045	0x0040	0x0047	0x0046	0x0049	0x004A	0x004B	0x0040	0x004D	0x004E	0x004r
0x301 0x32 0x33 0x033	P	Q	R	S	0	U	V	W	X	Y	Z		¥		0	
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○x60 ○x62 ○x63 ○x64 ○x65 ○x66 ○x67 ○x68 ○x77 ○x78 ○x77 ○x78 ○x77 ○x78 ○x078 ○x078 ○x078 ○x078 ○x078 ○x078 ○x077 ○x078 ○x077 ○x078 ○x077 ○x078 ○x077 ○x078 ○x077 ○x07	1	a	h	C	d	e	f	ø	h	i	i	k		m	n	0
0x000 0x002 0x002 0x003 <	0×60	0x61	0x62	0x63	0x64	0x65	0x66	0x67	0x68	0x69	0x6A	0x6B	0x6C	0x6D	0x6F	0x6F
p q r s t u v w x y z { l l c 0x70 0x71 0x72 0x73 0x74 0x75 0x76 0x77 0x78 0x79 0x7A 0x7B 0x7C 0x7C 0x7D 0x7E 0x7F 0x7F 0x78 0x79 0x7A 0x7B 0x7C 0x7D 0x7E 0x7F 0x7F 0x7B 0x7C 0x7D 0x7E 0x7F 0x7F 0x077 0x0079 0x0079 0x0076 0x0070 0x0070 0x0070 0x0070 0x0070 0x0070 0x0070 0x0070 0x0076 0x0022 0x2012 0x2013 </td <td>0×0060</td> <td>0x0061</td> <td>0x0062</td> <td>0x0063</td> <td>0x0064</td> <td>0x0065</td> <td>0x0066</td> <td>0x0067</td> <td>0x0068</td> <td>0x0069</td> <td>0x006A</td> <td>0x006B</td> <td>0x006C</td> <td>0x006D</td> <td>0x006E</td> <td>0x006F</td>	0×0060	0x0061	0x0062	0x0063	0x0064	0x0065	0x0066	0x0067	0x0068	0x0069	0x006A	0x006B	0x006C	0x006D	0x006E	0x006F
P Q f S L U V W X Y L I J 0x70 0x71 0x72 0x73 0x74 0x75 0x76 0x77 0x78 0x79 0x7A 0x7B 0x7C 0x7D 0x7D 0x77 0x78 0x79 0x7A 0x7B 0x7C 0x7D 0x7E 0x7F 0x077 0x0078 0x0079 0x0070 0x0071 0x0071 0x0071 0x0071 0x0071 0x00	n	~	ĸ	•	+				V		-	ſ		1	~	
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0x80 0x81 0x82 0x83 0x84 0x85 0x86 0x87 0x88 0x89 0x8A 0x8B 0x8C 0x8D 0x8E 0x9E <	0x0070	0x0071	020072	0x0073	0,0074	0x0075	0x0070	0x0077	0x0078	0x0075	0,007A	0x007D	0x0070	02007D	0x007L	0x0071
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0x90 0x91 0x92 0x93 0x94 0x95 0x96 0x97 0x98 0x99 0x9A 0x9B 0x9C 0x9D 0x9E 0x9F 0x2018 0x2019 0x2010 0x2010 0x2010 0x2010 0x2012 0x2013 0x2014 0x2014 0x9E 0x		é	,		77	•	_	—								
0x2018 0x2019 0x2010 0x2010 0x2010 0x2010 0x2011 0x0011 0x00111	0x90	0x91	0x92	0x93	0x94	0x95	0x96	0x97	0x98	0x99	0x9A	0x9B	0x9C	0x9D	0x9E	0x9F
れ 乳 』		0x2018	0x2019	0x201C	0x201D	0x2022	0x2013	0x2014								
0xA0 0xA1 0xA2 0xA3 0xA4 0xA5 0xA6 0xA7 0xA8 0xA9 0xAA 0xAB 0xAC 0xAC 0xAE 0xAF 0x00A0 0x0E01 0x0E02 0x0E03 0x0E04 0x0E05 0x0E06 0x0E07 0x0E08 0x0E09 0x0E0A 0x0E0A 0x0E00 0x		ก	ข	ฃ	ନ	ମ	ฆ	্থ	จ	ฉ	ช	ช	ณ	ល្	ฎ	ฏ
1 1	0xA0	0xA1	0xA2	0xA3	0xA4	0xA5	0xA6	0xA7	0xA8	0xA9		0xAB	0xAC	0xAD	0xAE	0xAF
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		0xF1	0xF2	0xF3	0xF4	0xF5	0xF6	0xF7		0xF9			0xFC	0xFD	0xFE	0xFF

6.2.2 Setup Procedure

NOTE	• Japanese Standard Font, English Standard Font, and English Stroke Font are
	fixed. You do not have to add or delete these fonts as in steps 1-4 below.
	Please start with the text setup.
	• On GP-32** Series or ST Series, English Standard Font and English Stroke
	Font must always be installed but the Japanese Standard Font can be deleted.
	Please refer to the Settings Guide for details.
	"8.13.1 Text Settings Guide" (page 8-92)
	• For more information about text, please refer to "8.3 Writing Text" (page 8-23).

These fonts are used normally.

The stroke font can be freely enlarged without the text appearing pixelated. The standard font displays even small sized characters well.

• For example, text in stroke font



1 In GP-Pro EX, in the [System Settings] window click [Font] to display the [Font] workspace.



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 From [Font Used in Project], select the [Chinese (Simplified) Stroke Font] check box to add the font.

3 The following message appears when you select the check box.



Click [Yes] when you want to use the User Screen Area when fonts cannot fit into the [Font Area], or, as in step 4, when you will adjust the font area. This will confirm the User Screen Area is also used for fonts.



If you click [No], adding the font is canceled.

- 4 Clear check boxes for fonts you will not use. This allows more free space in the Font Area.
- 5 For example, add text in Simplified Chinese to a screen. This example assumes you have enabled the Chinese (Simplified) font in your operating system. Place text in the drawing area then double-click to open the [Text] dialog box. In [Font Type], select [Stroke Font]. In [Display Language], select [Chinese (Simplified)]. In the text box, enter the text using pin yin. Then click [OK] to close the dialog box.

	(Setting Example)
₩ 2 定输入画面	★ Text ▼ Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Fort Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke Fort Image: Stoke For

NOTE

• When you select the [Stroke Font] in [Font Type] or change the [Display Language], the following dialog box may appear. This confirms to add the font type since a switch has been set before adding the font to the system.



To add the font, click [Yes (Y)].

If you click [No (N)], adding the font is canceled. The entered text cannot be properly displayed on the GP.

6.3 Image Font

6.3.1 Introduction

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



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

Text Features

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

For: "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.

Taking a lot of memory by using larger character sizes or more characters may cause restrictions to create a screen.

From the [Project (F)] menu, point to [Information (I)], [Project Information (I)], [Send Data], and then click [Send Size] to verify you are not using too many Image Fonts.

NOTE

• The User Screen Area's capacity depends on the GP model.

6.3.2 Setup Procedure

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NOTE
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• Please refer to the Settings Guide for details. ** "8.13.1 Text Settings Guide" (page 8-92)

Use the "Image Font". You can use bold and italics as well as the standard style. "Arial/Italic"



1 From the [Draw (D)] menu, select [Text (S)] or click A from the toolbar. Click on the base screen and drag to the desired size.

	-					
			_			
						tr ,

2 Right-click to release the draw mode. Double-click the new text. The following dialog box appears.

💕 Text				×
	Direct Text Font	⊖ Text Table		
ABC	Font Type Display Language Direction	Standard Font	Text Size Text Attribute Alignment	16 × 56 Pixel - Normal -
토 프 프 Line Spacing 미 프 #	Color Text Color Background Color Shadow Color	Transparent	 ■ Blink Non ■ Blink Non ■ Blink Non 	e V e V
Text				
			OK (Q)	Cancel

3 In [Font Type], select [Image Font].

💰 Text				×
	 Direct Text 	C Text Table		
	-Font			
	Font Type	Image Font 💌		
ABC	Select Font	Microsoft San•••		
	Compress	1	🗖 Alignment	
	-Color			
	Text Color	7	Blink None 💌	
	Background Color	Transparent 🗨	Blink None 💌	
Line Spacing				
Text	. <u> </u>			-
			OK (<u>O</u>) Cancel	

- 4 Click the [Select Font] button to display the setting dialog box.
- 5 Set the [Font], [Font Style], and [Size] and click [OK]. For example, Arial, Italic, and 14.

Arial	Italic	14	OK
/) Arial	Begular	14	OK
O Arial Black	Italic	16	Cancel
O Arial Narrow	Bold	18	
O Bold Italic Art	Bold Italic	20	
Ø Bookman Old Style		24	
🕖 Bookshelf Symbol 7 📋		26 💌	
	Sample		
	0-01	V. 7-	
	AaBi	ory∠z	
	Script		
	Western	-	
	1		

• If you use vertical text, select a font for vertical text (beginning with @. For example, "@MS Gothic") for the font.

depending on characters.



6 Select the [Compress] check box. The font file size is compressed to about half the size,

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

- 7 Select the colors you want and input text within the Input Text border.
- 8 Click [OK] and the setting are completed.



6.4 Bitmap Font

6.4.1 Introduction

You can select the text for the Data Display's numeric values and symbols from a variety of models (bitmap images).



IMPORTANT	The Bitmap Font is compatible with the Data Display's Numeric Display/
	Statistical Data Display/Show Limit Value.
	 The following section lists models compatible with Bitmap Font.
	"1.3 List of Supported Features by Model" (page 1-8)

Text Features

• Data Display characters can be expressed in distinctive styles. Using previously prepared bitmap images, the shape and color of each character can be expressed uniquely.

6.4.2 Setup Procedure

NOTE

• Please refer to the Settings Guide for details on setting the Data Display's "Numeric Display".

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

"Numeric Display"

(Setting Example)

- 1 On the [Parts (P)] menu, select [Data Display (D)] and then click [Numeric Display (N)], or click the **123** icon, and place it on the screen.
- **2** Double-click the placed Data Display. The following dialog box appears.

Data Display	x
Parts ID DD_0000 = Comment ABO Select Shape No Shape	Basic Display Alarm/Color Operation Process Text Display Date/Time Statistical Display Date/Time Data Display Show Limit Input Display Monitor Word Address PLC1]D00000 Monitor Word Address PLC1]D0000 Monitor Word Address PLC1]D0000 Monitor Word Address PLC1]D0000 Monitor Word Address PLC1]D0000 Monitor Word Address Monitor Word Address Mon
Help (H)	OK (0) Cancel

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

4 In [Font Type] under [Font Settings] in the [Display Settings] tab, select [Bitmap Font].

💕 Data Display		×
Parts ID	Basi Display Aarm/Color Depration Process	
DD_0000 🛨	2	>Extended
Comment	Font Font Type Bitmap Font	
	Model 7seg Type1 Settings	
	Font Size Width 20 📑	
🔽 No Shape	Total Display Digits Decimal Places Decimal Places 5 ☆ ∰ Constant ▼ 0 ☆ ∰ Display Style 章 董 董	
	Zero Suppress	
	✓ Zero Display ✓ Preview ✓	12245
	Auto-size Font	12343
	☐ Hide Input Value (Show asterisks)	
Help (<u>H</u>)	OK (<u>D</u>)	Cancel

5 Select the [Model] for the bitmap font and the [Color] for the model.

(For example, [Meter] model and [Blue] color).

The selected model and color can be previewed. By clicking the [Settings] button, you can preview all characters of the selected model, such as numeric values and symbols.

6 In [Font Size], enter the bitmap font's width (1 to 200) and height (1 to 400). To make the font background transparent, select the [Transparent] check box.

• Depending on the model, you may not be able to use the transparent setting. NOTE

7 Set the [Basic Settings] tab as necessary and click [OK].When performing "Numeric Display" and "Input" in the Data Display, enable [Allow Input] in the [Basic Settings] tab and set up the [Allow Input] tab as well.

• If a Data Display using bitmap font is in the input state, numeric values and characters in the cursor position will not reverse and the cursor border will blink. (Only for Data Displays not using a popup keypad)

6.5 [Font] Settings Guide

In [System Settings], [Font], you can perform system setup and verification for fonts.



	Setting	Description
Font		Configure font settings.
		Select the fonts used in project files.
	Font Used in Project	 NOTE Japanese Standard Font, English Standard Font, and English Stroke Font are fixed. On -32**Series or the ST Series, [English Standard Font] and [English Stroke Font] must always be installed but the [Japanese Standard Font] can be deleted.
Font Size		Displays the memory size of the font.(Excluding the Image Font)
	Font Area	 Displays the memory size of the font area (maximum 4096 KB). When the font size exceeds the font area, it uses the user screen area. NOTE GP-32** Series cannot use the Font Area. When using a font other than [Japanese Standard Font], [English Standard Font] or [English Stroke Font], it uses the user screen area.
	User Screen Area	If the memory size of the font being used exceeds the font area (4096 KB), the part exceeding the font area is moved to the [User Screen Area] and the excessive memory size is displayed. The User Screen Area's capacity depends on the GP model.
Bit	map Font Settings	Set up items related to the bitmap font size.
	Compress	Specifies whether or not Bitmap font data is compressed.
	In Use	Displays the total memory size of the bitmap font being used in the project.

6.6 Restrictions

6.6.1 Restrictions for Standard Font and Stroke Font

- When [ASCII] is selected for the [Standard Font] under [Display Language], select a text size from the three fixed sizes: [6 x 10 pixels], [8 x 13 pixels], or [13 x 23 pixels].
- When the [Character Size] is [6 x 10 pixels] 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 or add the text for the part. Text on a table without ASCII language settings cannot be properly displayed on the GP.
- If you change the font type to [Standard Font] after the text has been entered as a [Stroke Font], the text may not be displayed on the GP.
- GP-32** Series and ST3000 Series cannot use the Font Area. Any font, other than [Japanese Standard Font], [English Standard Font] and [English Stroke Font], occupy the User Screen Area.
- If using several types of fonts, the user screen area is used for the font area excess. Therefore, the screen data capacity is decreased.
- When Standard Font is selected, special characters specific to languages that are not supported by Standard Font cannot be displayed properly. Also, when the fixed size (6 x 10, 8 x 13, 13 x 23) is selected, characters other than the single-byte characters cannot be displayed properly.
- You can enter text in [Comments], etc. using Unicode while pressing the [Alt] key, but you may not be able to enter Thai characters for the following settings using this method.
 - Enter [Comments] when changing the keypad attributes
 - Enter [Comments] when creating new a VM/DVI Unit Window and changing the keypad attributes
 - Enter text for the [Display/CSV Save] Tab and the [Printing] tab in the sampling settings
 - Input message for Alarm settings
 - Input [Comments] when changing the [ID] of a D-Script
 - Built-in Functions of the D Script
 - Enter in [Find Comments] and [Search for Characters] in the Search Window
 - Enter rung comments in the logic screen

6.6.2 Restrictions for Image Font

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

6.6.3 Restrictions for Bitmap Font

• [Bitmap Font] is compatible with the Data Display's Numeric Display/Statistical Data Display/Show Limit Value.