

Getting Started with GP-Pro EX



Contents are subject to change without notice for product improvement.

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Development Division
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Preface

Thank you for choosing the GP Screen Editor Software, “GP-Pro EX”.

Please read this manual carefully in order to use this software properly, and be sure to keep this manual handy for future reference.

NOTES

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Trademark Rights

All company or product names used in this manual are the trade names, trademarks (including registered trademarks), or service marks of their respective companies. This product omits individual descriptions of each of these rights.

Trademark / Trade Name	Right Holder
Microsoft, Windows, Windows 98, Windows Me, Windows 2000, Windows XP, Windows Explorer, Microsoft Excel	Microsoft Corporation, USA
Intel, Pentium	Intel Corporation, USA
Pro-face	Digital Electronics Corporation (in Japan and other countries)
Ethernet	Western Digital Electric Corporation, USA

The following terms differ from the formal trade names and trademarks.

Term used in this manual	Formal Trade Name or Trademark
Windows 98	Microsoft® Windows® 98 Operating System
Windows Me	Microsoft® Windows® Me Operating System
Windows 2000	Microsoft® Windows® 2000 Operating System
Windows XP	Microsoft® Windows® XP Operating System

Structure of the Manual

This manual is the first of two manuals for this product and explains how to use the “GP-Pro EX” software. Please refer to both of the manuals named below when using this product.

Reference Manual	Describes GP-Pro EX’s operation procedures and details on all features. Provided as HTML and PDF data.
Device/PLC Connection Manual	Describes the methods for connecting the GP to supported devices/PLCs from other manufacturers. Provided as HTML and PDF data.
Hardware Manual	Describes the main unit of GP. Provided as HTML and PDF data.

Click the Windows [Start] button, select [All Programs] - [Pro-face] - [GP-Pro EX V1], and click [Manual (Help)], or start EX and click [Help(H)] to select.

In addition to these manuals, data files containing supplemental information on updated functions are also provided.







To read these additional data files, click on the [Start] button in your Windows OS main screen and select the [All Programs]→[Pro-face]→[GP-Pro EX V1] menu. Then, click on the [Read Me] selection.

Manual Symbols and Terminology

■ Safety Symbols and Terms




This manual uses the following symbols and terms to identify important information related to the correct and safe operation of GP-Pro EX.

The symbols and the descriptions are as follows.

Symbol	Description
 DANGER	Indicates a hazardous situation that could result in serious injury or death.
 WARNING	Indicates a potentially hazardous situation that could result in serious injury or death.
 CAUTION	Indicates a potentially hazardous situation that could result in minor injury or equipment damage.
	Indicates instructions or procedures that must NOT be performed to ensure correct product use.
	Indicates instructions or procedures that MUST be performed to ensure correct product use.
	Indicates a potentially damaging action or dangerous situation that could result in abnormal equipment operation or data loss.

■ General Information Symbols and Terms


This manual uses the following symbols and terms for general information.

Symbol	Description
	Useful ideas to know.
	Provides hints on correct product use, or supplementary information.
*	Indicates an item with an explanatory footnote.
	Indicates an item's related information.
1, 2	Indicates an operation procedure. Operate according to the numbers.



Precautions

This manual describes safety symbols and terms for the correct and safe operation of GP-Pro EX. Read carefully this manual and the related manual to understand the correct operation and features of GP-Pro EX.



DANGER

-  Touch panel switches should NOT be used to make a switch that could result in human injury or equipment damage. Trouble with the GP main unit, units, and cables which keeps the output ON or OFF could result in a serious accident. An output signal that could result in a serious accident must be equipped with a monitoring circuit such as a limiter. Also, the system must be designed for important actions to be conducted from a device other than the GP main unit, to prevent an accident due to false output or malfunction.

WARNING

-  Touch panel switches should NOT be used for a device's Emergency Stop Switch. Minister of Health, Labor and Welfare speaking, all industrial machinery/systems must be equipped with a mechanical, manually operated emergency stop switch. Also, for other kinds of systems, similar mechanical switches must be provided to ensure safe operation of those systems.
-  The GP-Pro EX install disk is a CD-ROM. Never play the CD-ROM on an audio CD player. Unexpected volume can cause hearing problems or speaker damage.

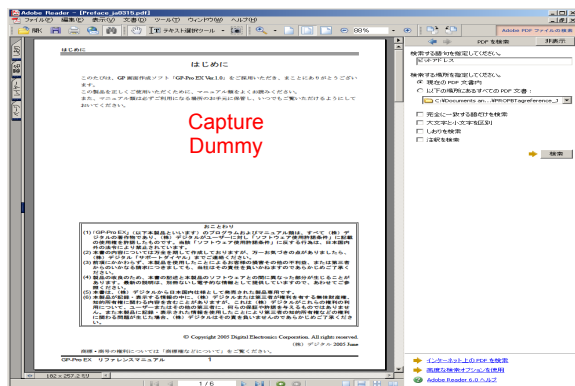
CAUTION

-  Do not turn off your personal computer's power switch during the execution of a program. It might destroy the project files.
-  Do not change the contents of this product's project files using the Text Editor software. It might destroy the project files.

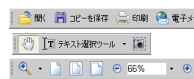
How to Use Adobe® Reader® 6.0

How to Use Adobe® Reader® 6.0

This manual is provided in PDF format. This section explains only frequently used features.

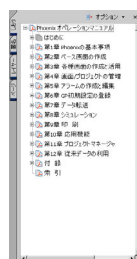


Tool Bar



Indicates buttons to call the file feature, basic feature, zoom feature, etc.

Bookmark



Displays each index title of a chapter, clause, and section. Corresponds to the manual's table of contents.

Navigation Control

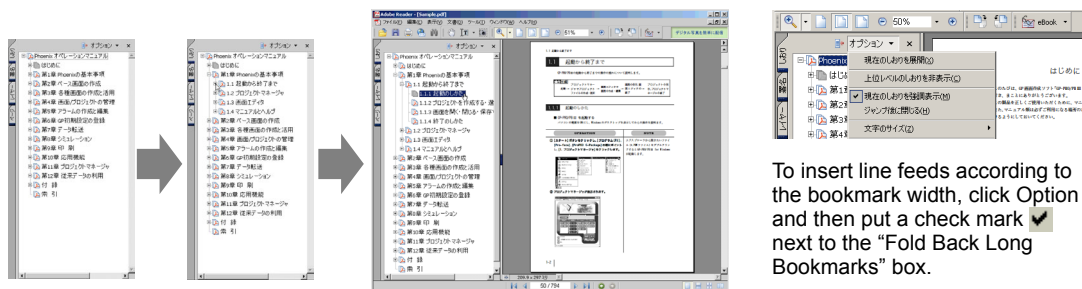


Indicates buttons to turn the pages or change the page display method.

■ Viewing the Table of Contents

The bookmark has the same information as the table of contents. Click **+** to display the same details as the table of contents.

Click a title displayed on the bookmark to display the corresponding page.



To insert line feeds according to the bookmark width, click Option and then put a check mark ☒ next to the "Fold Back Long Bookmarks" box.

■ Turning the Pages

Turn the pages or change the page display method with the Navigation Control.




	Returns to the last displayed page.
<input type="text" value="4 / 1580"/>	Input the page number to open and press the [Enter] key and the inputted page will be displayed.
	Displays the first page or the last page.
	Displays one page before or after the current page.

1 Preparation for Developmental Environment

This chapter explains about the necessary operating environment and package contents in the development environment of GP-Pro EX. The installation method for GP-Pro EX and a list of supported GP units can be viewed.

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1.1 Operating Environment for GP-Pro EX

	Required Specifications		Remarks
PC	Models on which Windows® runs normally Pentium® III 800MHz or more		Pentium®4 1.3GHz or above is recommended. Runs on PC/AT compatible machines.
Resolution	SVGA800 × 600 or above is recommended more than 256-color display.		
Hard Disk Space	Minimum400 MB		Enough free space to install GP-Pro EX
Memory	512 MB or more		1 GB or more is recommended
OS	Windows®2000 (Service Pack 3 or later)/XP (Home Edition/Professional Edition)		
Others	Internet Explorer Ver. 6.0 or later .NET Framework Ver.1.1 (Service Pack1 or later) Acrobat® Reader® Ver. 6.0 or later		.NET Framework Ver.1.1 (Service Pack1 or later) is automatically installed on a PC without them.
Language	Software Menu	Language supported by GP	To input languages other than English and Japanese, each language's FEP and font are required.  For more information, please refer to Reference Manual [editing in foreign language]
	English and Japanese	English, Japanese, Korean, Chinese, and Taiwanese	
Each Language's FEP	Windows®2000 (Service Pack 3 or later)/XP (Home Edition/Professional Edition) supported FEP		
USB Port (For transfer with a USB cable)	USB Transfer Cable Digital Electronics Corporation's (sold separately)		Read the "USB Transfer Cable Manual" before you use the cable.
LAN Port (For transfer on Ethernet)	LAN cable available commercially HUB		
CF-Card (For data transmission to a CF-card)	Digital Electronics Corporation's CF-Card (sold separately)		No guarantee for the use of store-bought CF-Card. In order to read and write CF-Card with PC, CF card reader or PCMCIA conversion card is necessary.
Disk Drive	Windows®2000 (Service Pack3 以上)/XP (Home Edition/Professional Edition) CD-ROM drive necessary A CD-ROM drive is required.		Used in installation
Mouse	Windows®2000 (Service Pack 3 or later)/XP (Home Edition/Professional Edition) supported mouse devices		Be sure to use a mouse.
Printer	Windows®2000 (Service Pack 3 or later)/XP (Home Edition/Professional Edition) supported printers		

NOTE

- You have to connect to the Internet for the online update feature and the online user registration. (Not available for trial version)



For more detail, please refer to [Performance setting][Updating software] of Reference Manual

1.2 Installing the Application

1.2.1 Installation Procedure

- 1 Exit all programs except the installer before the installation. Exit resident programs (such as virus detection software), as well as normal applications.
Install the software through a user account with administrator privileges.

- 2 Insert the install CD into the CD-ROM drive and the GP-Pro EX installer will automatically be displayed.

If the CD does not automatically start, click the [Start] menu - [Run...] command. Input "x:\ProExSetup.exe" and click [OK]. (Input the CD-ROM drive name for x.)

(Trial version downloaded from WEB compresses the file. Display the folder and start "exe" file.)

- 3 Installer is displayed.

Click [GP-Pro EX].



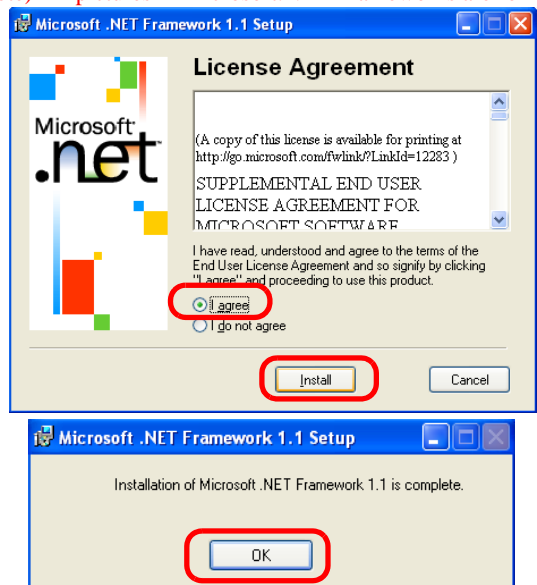
- 4 Microsoft.NET Frameworks 2.0 is installed.

(When Microsoft.NET Frameworks 2.0 is installed, start with [6,Installation of GP-Pro EX].)

Click [I agree].
Click [Install].

Click [OK].

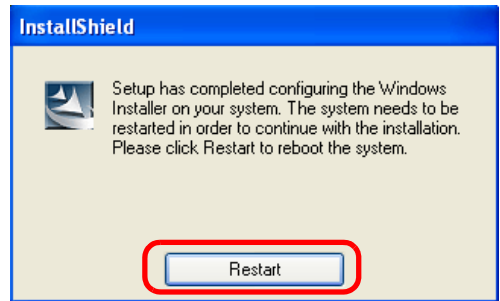
Note) All pictures in Microsoft.NET Frameworks are for Ver.1.1.



5 Restart PC.

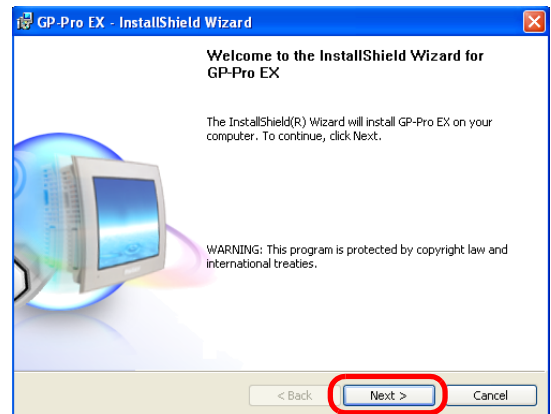
Click [Restart] to restart PC.

(Please not that all programs but installer are not exited, they will be exited too.)



6 Installation of GP-Pro EX

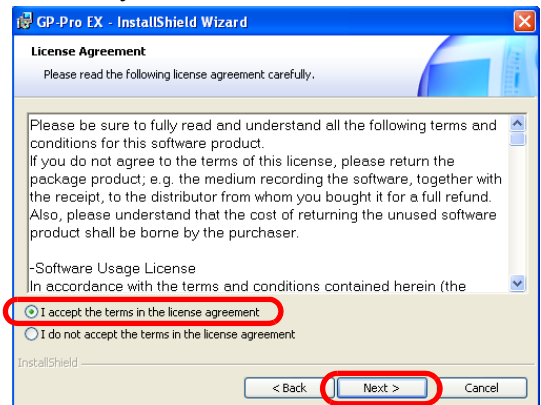
Click [Next].



7 When the license agreement is displayed, read it carefully.

Click [I accept the terms in the license agreement.] if you accept them.
click [Next].

(Click [I do not accept the terms in the license agreement.] and then click [Next] if you do not accept them. If you do not accept them, the installation process is cancelled.)

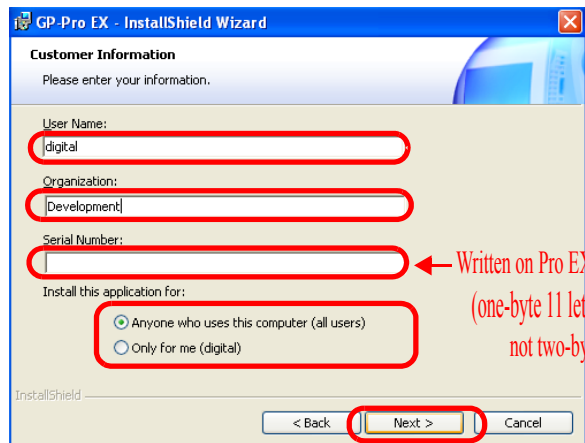


8 Input a User Name.

Input [User Name],
input [Organization],
and input [Serial Number],
and indicate [user of the applica-
tion],

Click [Next].

(No need to enter the serial number for
trial version.)



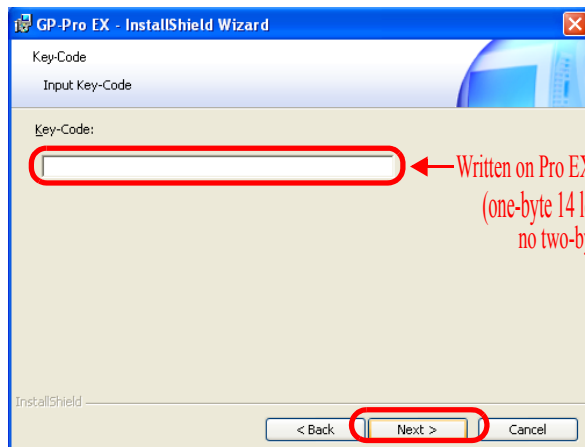
The screenshot shows the 'Customer Information' window of the GP-Pro EX - InstallShield Wizard. It contains four text input fields: 'User Name' (with 'digital' entered), 'Organization' (with 'Development' entered), 'Serial Number' (empty), and 'Install this application for:' with two radio buttons: 'Anyone who uses this computer (all users)' (selected) and 'Only for me (digital)'. The 'Next >' button is highlighted with a red circle. A red arrow points to the 'Serial Number' field with the text: 'Written on Pro EX package (one-byte 11 letters, not two-byte letters)'.

9 Enter Key-Code

Enter [Key-Code] and

Click [Next].

(No need to enter key code for trial ver-
sion.)

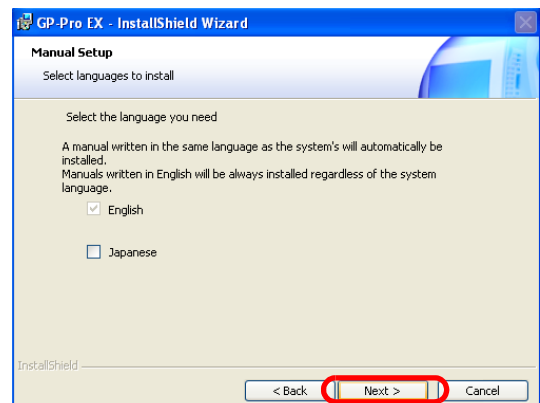


The screenshot shows the 'Key-Code' window of the GP-Pro EX - InstallShield Wizard. It contains a single text input field for 'Key-Code' (empty). The 'Next >' button is highlighted with a red circle. A red arrow points to the 'Key-Code' field with the text: 'Written on Pro EX package (one-byte 14 letters, no two-byte letters)'.

10 Specify the language for the GP-Pro EX manual.

Click [Next].

(For the trial version downloaded from WEB, manual
file is also needed to download.)



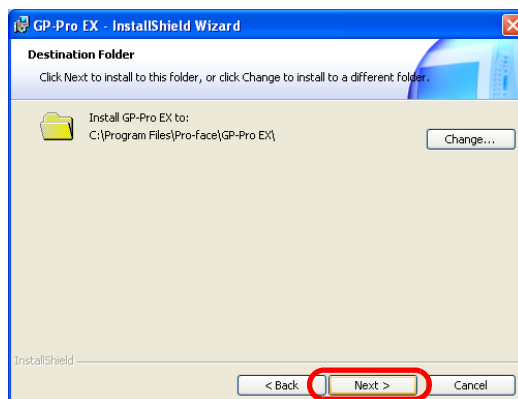
The screenshot shows the 'Manual Setup' window of the GP-Pro EX - InstallShield Wizard. It contains a section titled 'Select languages to install' with a note: 'A manual written in the same language as the system's will automatically be installed. Manuals written in English will be always installed regardless of the system language.' There are two checkboxes: 'English' (checked) and 'Japanese' (unchecked). The 'Next >' button is highlighted with a red circle.

11 Specify an install-to folder.

No change of the folder to install this time.

Click [Next].

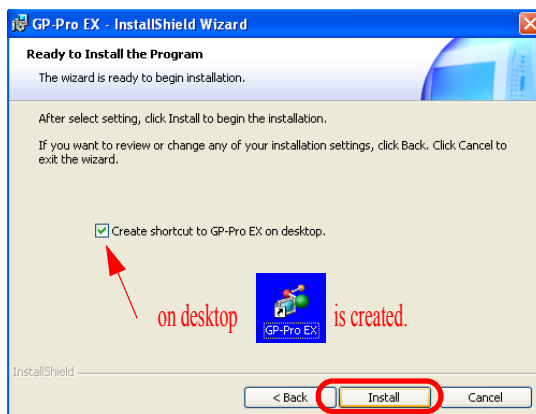
(When changing folder to install, click [Change] to indicate.)



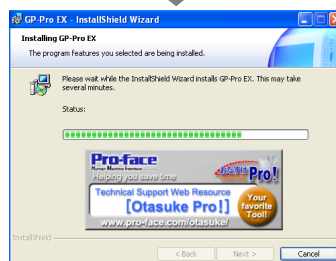
12 Start GP-Pro EX installation

Select [Create shortcut to GP-Pro EX on desktop],

Click [Install].



Installing



13 After installing the application, start the installation of the Transfer Tool.

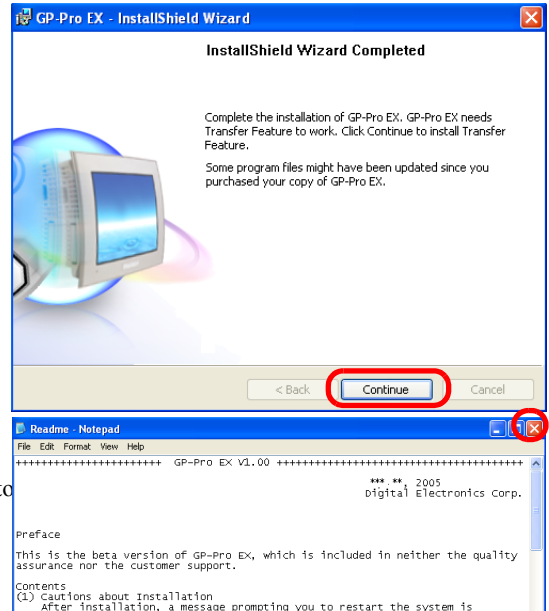
Click [Continue].

(Trial version cannot transfer to the target machine (GP3000 series). When installation is completed, check window appears. Then click [OK].)

Open Readmee file to check.

Click upper right to close.

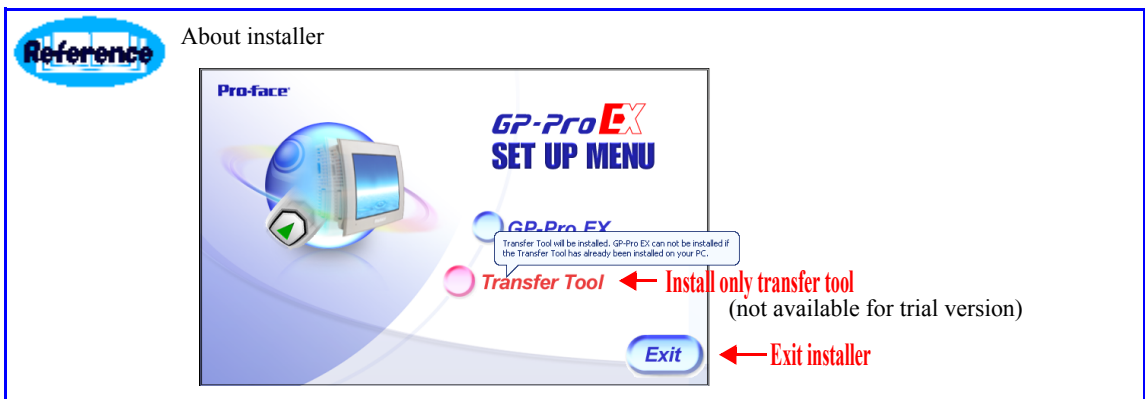
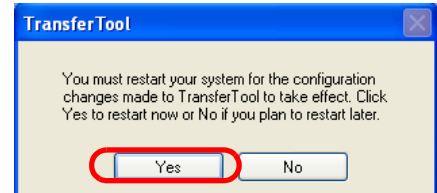
(Click [start] of Windows, and [All programs] → [Pro-face] → [GP-Pro EX V2.1] → [Read Me] to display.)



14 Restart the PC to complete the installation of GP-Pro EX.

Click [Yes], and restart PC.

(Please not that all programs but installer are not exited, they all will be exited. Click [No] to restart later. It will not displayed in the trial version.)



1.2.2 Uninstall Procedure

- 1 Click the [Start] menu's [All Programs] → [Pro-face] → [GP-Pro EX V2.1] and you will find the [Uninstall] menu. You can delete the program files by executing this.

NOTE • You cannot delete the files created after the installation (project files or the files in a package files) with this method.

1.3 Supported Model List

GP-Pro EX Ver. 1.0 supported models are as follows. This manual uses the following series names or trade names.

Series Name		Trade Name/Model Type	Model
GP3000	GP-3300	AGP-3300L	AGP3300-L1-D24
		AGP-3300S	AGP3300-S1-D24
		AGP-3300T	AGP3300-T1-D24
		AGP-3301L	AGP3301-L1-D24
		AGP-3301S	AGP3301-S1-D24
		AGP-3302B	AGP3302-B1-D24
	GP-3400	AGP-3400S	AGP3400-S1-D24
		AGP-3400T	AGP3400-T1-D24
		AGP-3450T	AGP3450-T1-D24
	GP-3500	AGP-3500L	AGP3500-L1-D24
		AGP-3500S	AGP3500-S1-D24
			AGP3500-S1-AF
		AGP-3500T	AGP3500-T1-D24
			AGP3500-T1-AF
		AGP-3550T	AGP3550-T1-AF
	GP-3600	AGP-3600T	AGP3600-T1-D24
			AGP3600-T1-AF
		AGP-3650T	AGP3650-T1-AF
	GP-3700	AGP-3750T	AGP3750-T1-AF

NOTE


for more detail, please refer to “Supported Models” in Reference Manual

2 | Creation of Screen

This chapter explains about “from Start to Eiting, Check, Saving and Finish” in GP-Pro EX, to create the sample screens. Please follow the procedure indicated.

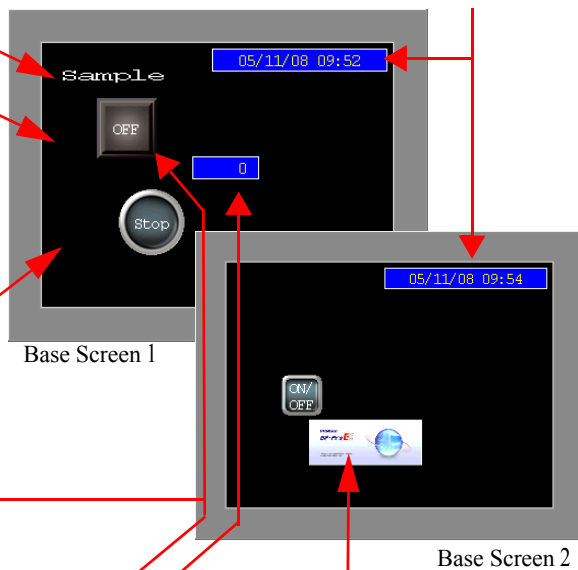
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2.1 Outline of Sample Screen

From starting GP-Pro EX to creating screen, saving and finishing, this procedure guides how to make the sample screen. For the useful knowledge, [Reference](#) explains. For more detailed setting, please refer to the manual.

< Sample Screen >

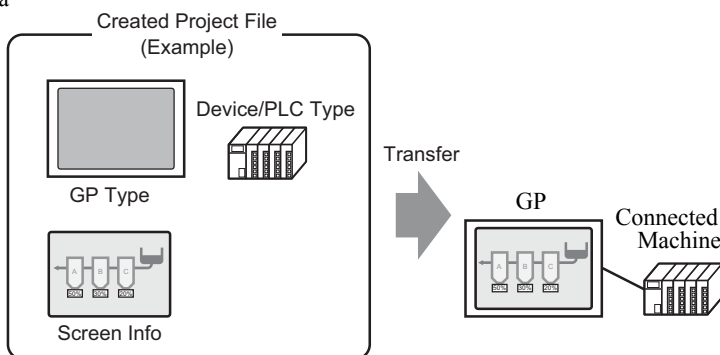
1. Text(Sample)
 - Direct Text
 - Character Size: 16 x 16 dot
2. Switch with one press for ON, another for OFF bit inversion
 - Bit Address:[PLC1]X00001
 - Bit Action:Bit Invert
 - Select Shape:Part palette[Img_RectangleThin1]
 - Part No.[ThinSqr_Wh_0002_UpDk]
 - Coordinate:Top Left X and Y 50
 - Width and Height 55
3. Lamp with ON and OFF according to the above switch.
 - Select Shape:Part palette[Img_ArrowCircle]
 - Part No.[NormalCir_0001_Dk]
 - Bit Address:[PLC1]X00001
 - Label:Text Table
 - OFF → Stop ON → Start
4. Changes switch lamp
 - Lamp Feature
 - Bit Address:[PLC1]X00001
 - Select Shape:Part palette[Img_RectangleThin1]
 - Part No.[ThinSqr_Rd_0001_DnBr]
 - Label:Text Table
 - OFF → OFF ON → ON
5. ON during pressing
 - Bit Switch
 - Bit Action:Bit Momentary
 - Bit Address:[PLC1]X00020
7. Data entered with keyboard
 - Input Permit
 - Enable Popup Keypad
6. Clock in header
 - Create Base Screen 2, and display Date/Time Display in header
8. Create Window Screen 1 for Window Display (with switch)
 - Register image file into Window Screen 1
 - Activate Switch
 - Window No.:1
 - Window Interchange
 - Set the Show Window switch



Reference

Project Files

A file created by GP-Pro EX is called a Project File. A project file (*.prx) is a bunch of data concerning the created screens, etc. If you transfer a created project file to the GP, you can communicate with a device and operate the display.

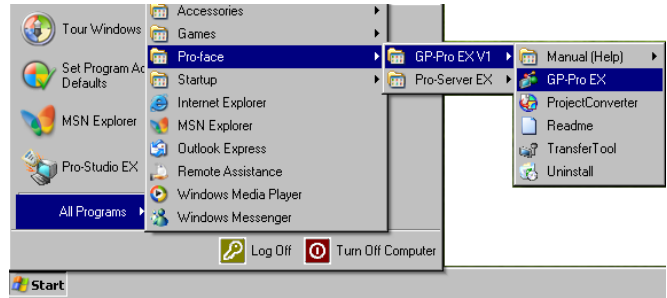


2.2 Starting / File Opening

1 Starting GP-Pro EX

Click the [Start] button, select [All Programs] - [Pro-face] - [GP-Pro EX V1], and click [GP-Pro EX].

Double-click  on the desktop top.



GP-Pro EX starts up and the following screen is displayed



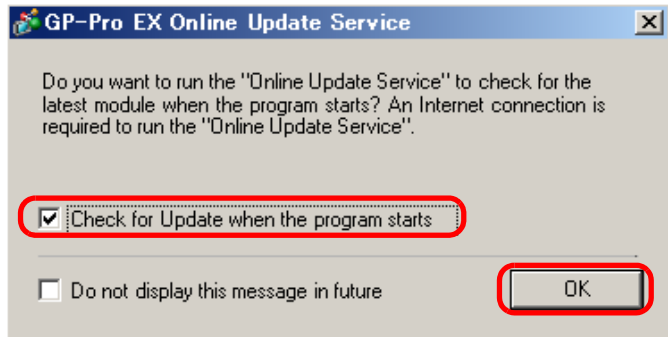
2 Settubg Online Update

Select [Check for Update when the program starts], Click [OK].

Or click [View(V)]-[Option Settings(O)], and select [General]

Select [Do not display this message in future] and OK, this message will not be displayed from the next time.

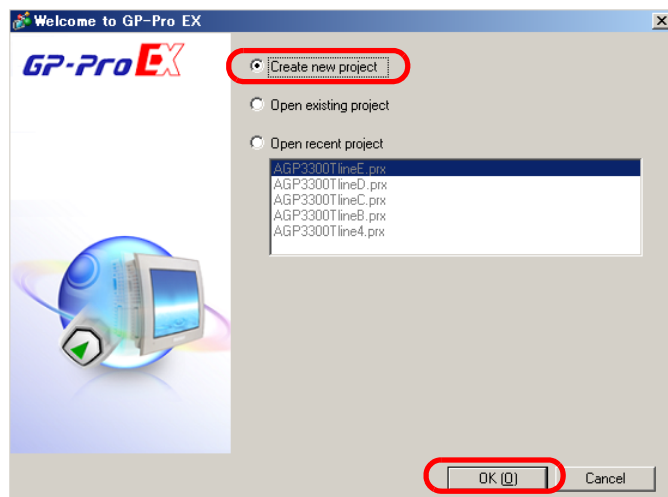
(online update featureonline update feature is not available for the trial version.)



3 Opening File

Select [Create new project],

Click [OK(O)].



- 4 Select the device model for which the screen is created.

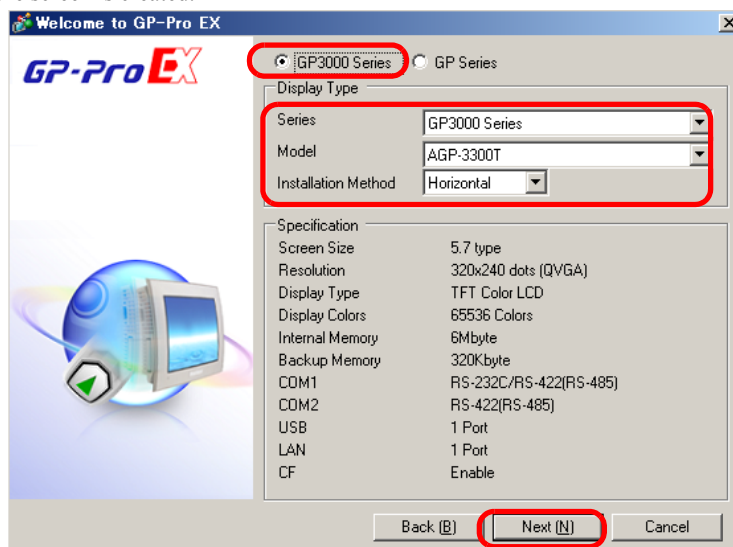
GP3000 Series

GP3000 Series

AGP-3300T

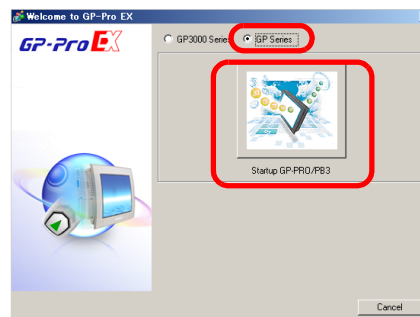
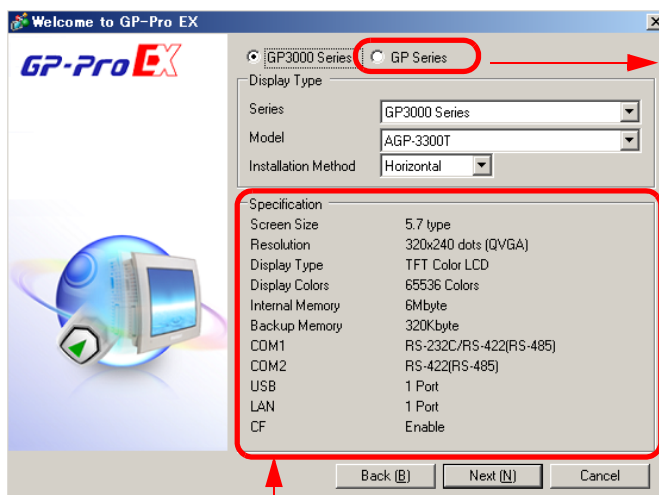
Horizontal

Click [Next (N)]



Reference

The [New Project File] dialog box



If you select [GP series], you can exit GP-Pro EX and start up GP-Pro/PB III. However, it GP-Pro/PB III will not start up if it is not installed..

If GP-Pro/PB III is exited, GP-Pro EX will not restart.

Specifications of selected GP model number is shown in [Specification].

NOTE

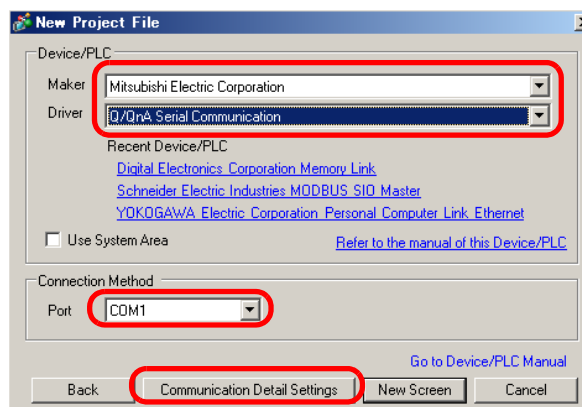
For more detail, please refer to Reference Manual[Supported Model List][New Settings Guide][System Settings Window Setting Guide].

- 5 Select the device to be connected with iddisplay.

Mitsubishi Electric Corporation
Q/QnA Serial Communication

COM1

Click [communication Detail Settings]



Reference

Devices recently used are shown.
Selection by click.

System data area in GP is allocated to connected machine.

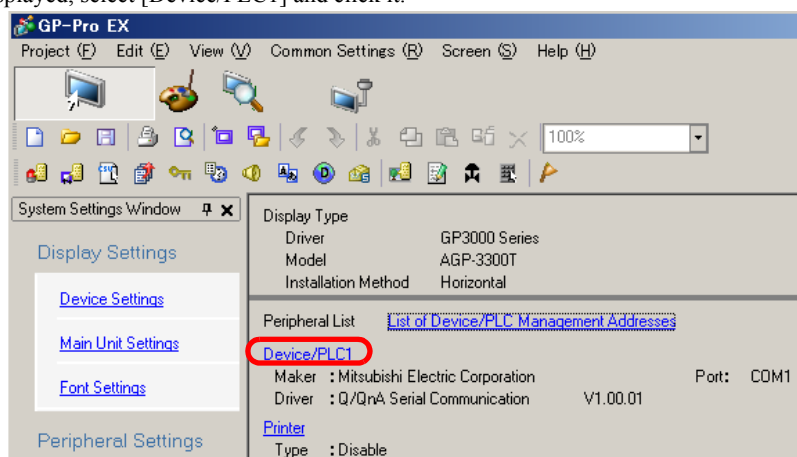
Manual opens by click.

Manual opens by click.

Click to open screen editing without setting driver to connect.

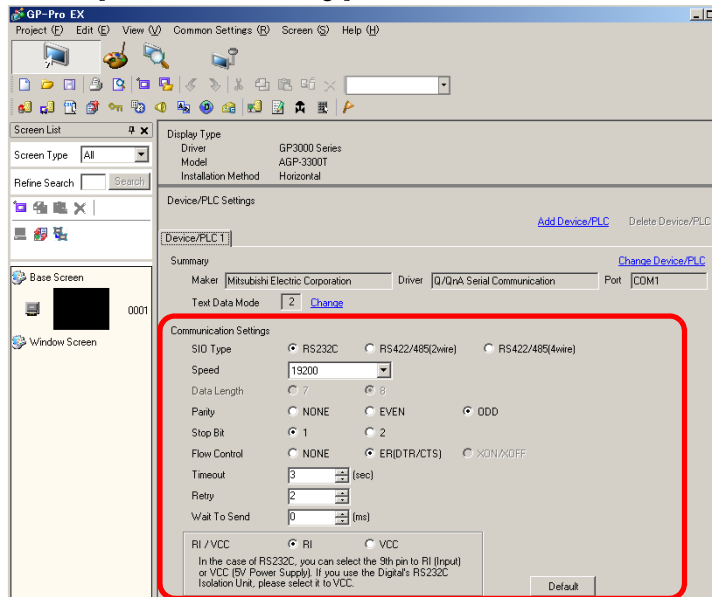
- 6 When [Peripheral List] is displayed, select [Device/PLC1] and click it.

Click [Device/PLC1].



7 When [Device/PLC Setting] is displayed, set the [Communication Settings]

Setting is not done this time, however, please select appropriate categories in actual operation.




NOTE

- Detailed communication setting depends on the machine to connect.

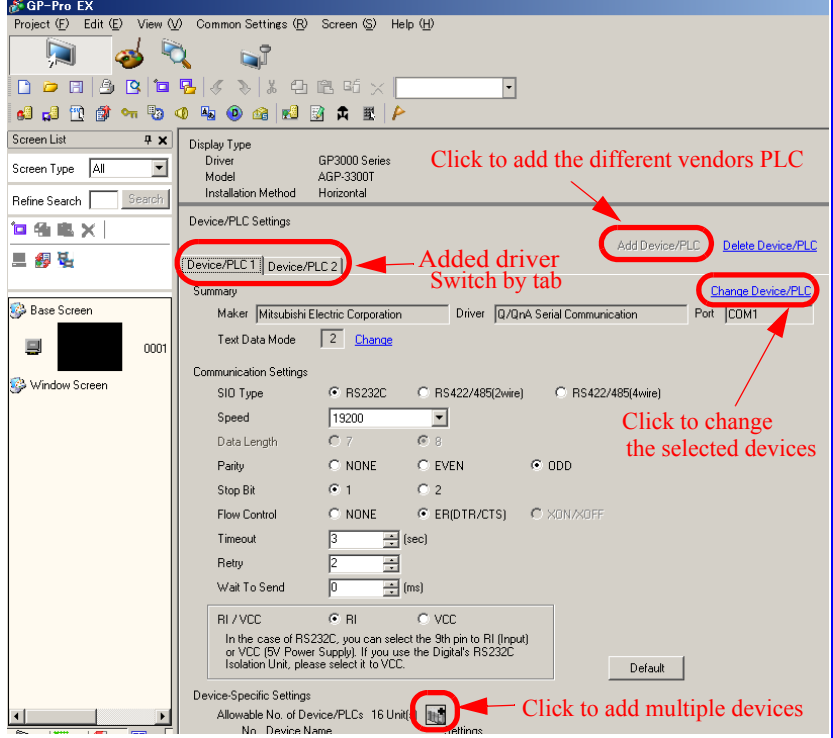


For more detail, please refer to [Device/PLC Connection Manual], Reference Manual[New Settings Guide][System Settings Window Setting Guide][Communication with Multiple Device/PLCs].



Reference

Setting is not done this time. Multiple devices are set to connect.



Click to add the different vendors PLC

Added driver Switch by tab

Click to change the selected devices

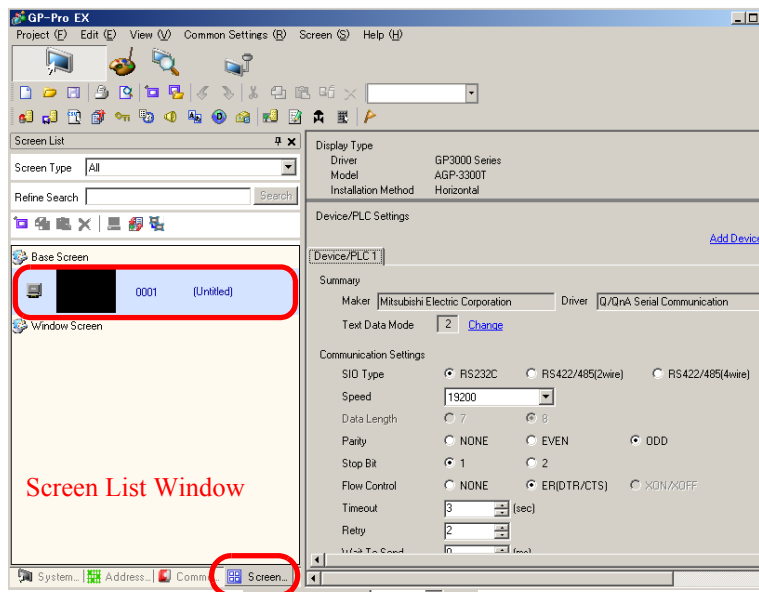
Click to add multiple devices

- The number of kinds of connectable driver is maximum 4 for large size and 2 for mid size.
- Maximum 16 devices are connected, though the number depends on machine model.
- Address is automatically changed along with the change of devices connected, however, please check the setting.

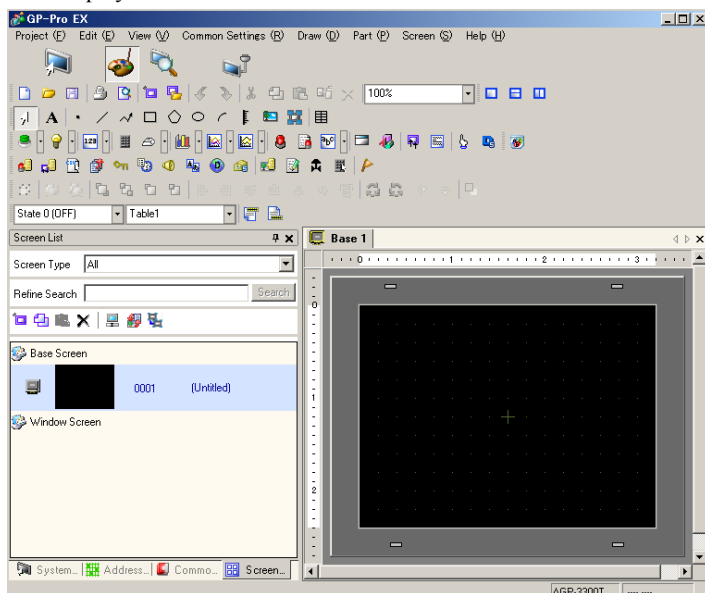
8 Opening [Base Screen]

Click [Screen List Window], and double-click [Base Screen]0001.

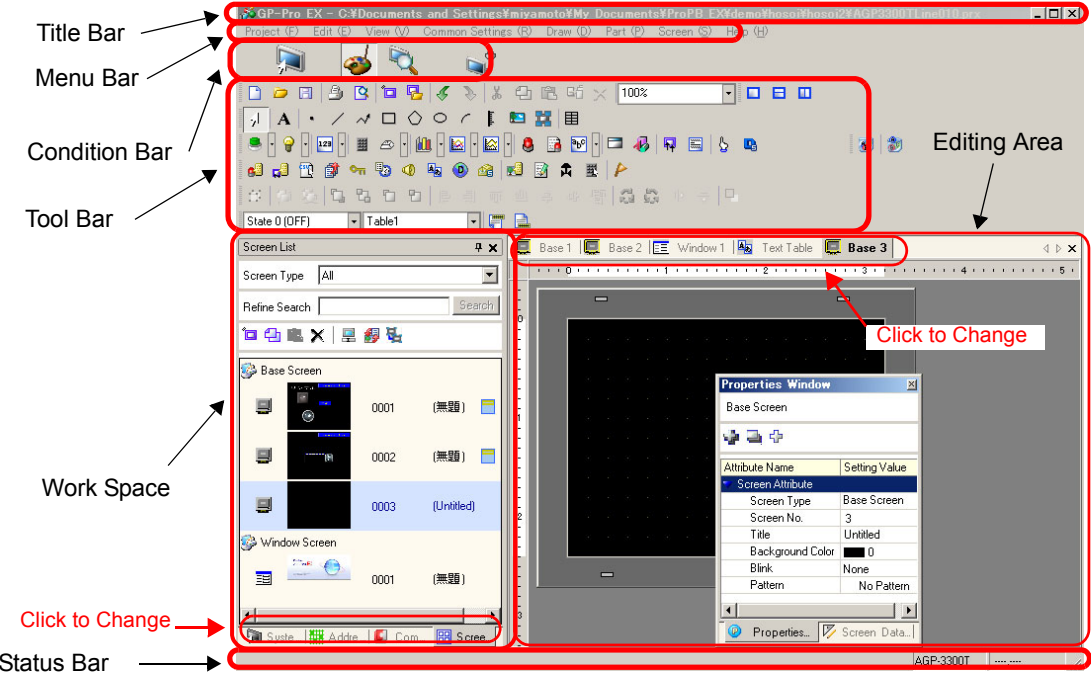
(When [Screen List Window] is not on the display, select [View(V)] menu-[Work Space(W)]-[Screen List Window(G)] to display.)



9 [Base Screen]0001 is displayed.



10 Name of the parts and details of the main window



Setting	Description
Title Bar	Displays the project name and screen title in GP-Pro EX.
Menu Bar	Displays the menu to operate GP-Pro EX. Select from these to display a pull-down menu.
Condition Bar	Select the operation state from [System Settings], [Edit], [Preview], or [Transfer Project] to switch to the operation screen.
Tool Bar	The [Tool Bar] in [View (V)] menu can be switched between Show and Hide. Dragging is also available. Parts, image, and editing can be performed by clicking the icons.
Work Space	The [Work Space] in [View (V)] menu can be switched between Show and Hide. Dragging is also available. Click [Screen List],[Common Setting Window] tab to switch Window.
Editing Area	This is an area in which to edit a screen. All of the editing area may not be displayed depending on a Window's size. In this case, scroll the screen to switch the display range. Mainly displays a Base Screen, Window Screen, or a registration and list of each feature opened by clicking the [Work Space]-[Common Setting Window]. Click Base or Window n tab to switch Window.
Status Bar	Displays the main unit condition or coordinate of mouse pointer on the work space.

NOTE



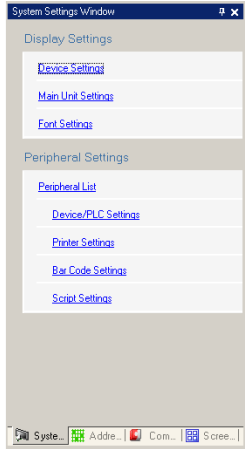
For more detail, please refer to Reference Manual[Main Window's Part Name].

Reference

Work Space is used by setting tabs in the following windows.
[Work Space(W)] in [View (V)] menu selects Show or Hide.

1. System Setting Window

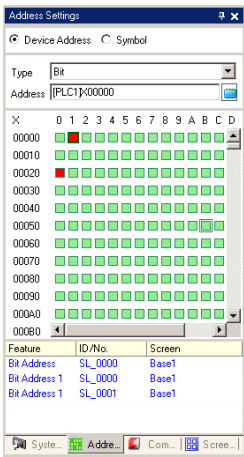
This Window is used to configure system settings for a project file. Setting screen appears in the editing area by clicking models or device connected.



2. Address Setting Window

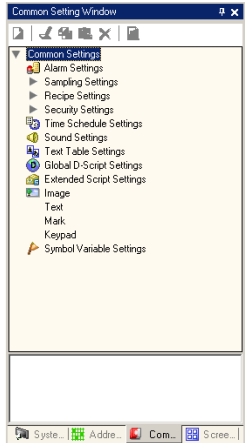
Displays a list of the symbols in use or a map of the device/PLC address. Checking and editing address setting are available.

Drag & Drop for easy address setting.
Red color for already used address.
Oblect list of selected address is displayed. Double click to display the allocated screen.



3. Common Setting Window

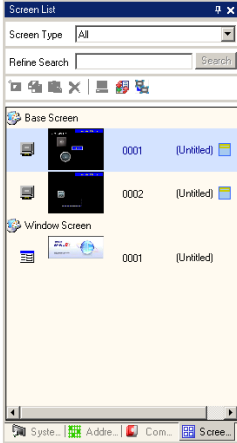
Setting Calls features common to a project file. Saves alarm setting, text table, and script.



4. Screen List Window

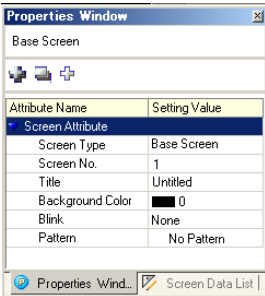
Displays a list of created Base Screens or Window Screen.

Thumbnail for easy screen image and searching.
Double click to display the screen.
Display for header and footer setting, and hierarchical display to call screen.



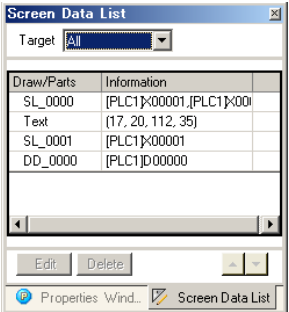
5. Properties Window

Displays the selected part or screen's attributes to confirm or edit the attributes. Modifies coordinate and colors. Coordinates or colors can be rewritten. Setting change is easy because of realtime attribute change.



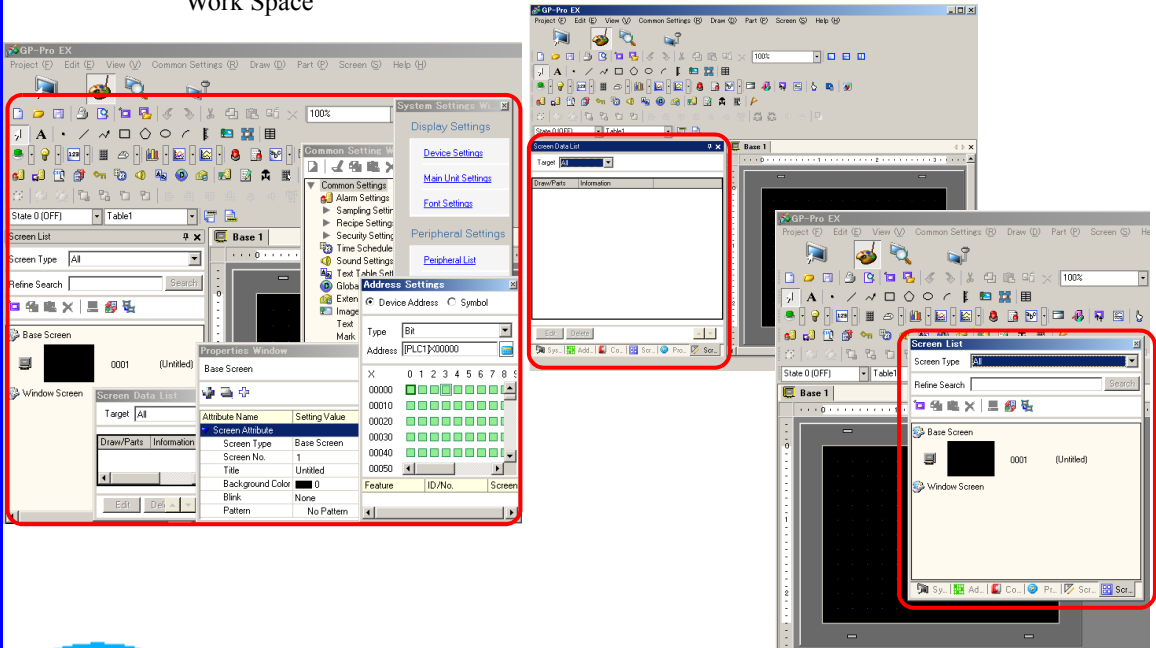
6. Screen Data List Window

Displays a list of the Parts and Draw placed on the screen by editing screen and keypads. Double-click for modification.



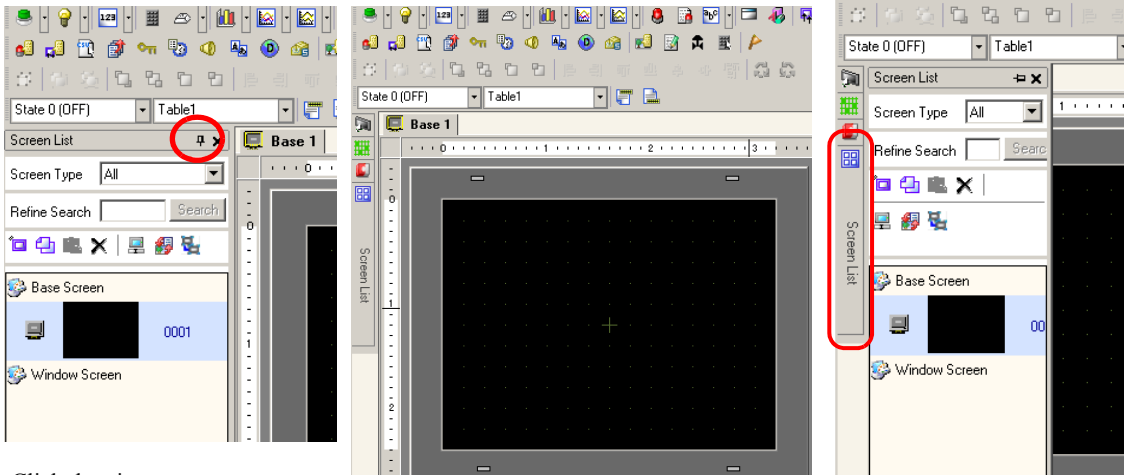
Reference

For Work Space windows,
Drag and double-click of Window to move it to the desired place.
All window are connectable to
Work Space



Reference

Click the pin for simpler screen. (auto-hide function)



Click the pin...

Simple and clear!

Slide in with cursor!
Click the pin again to revert!

Reference

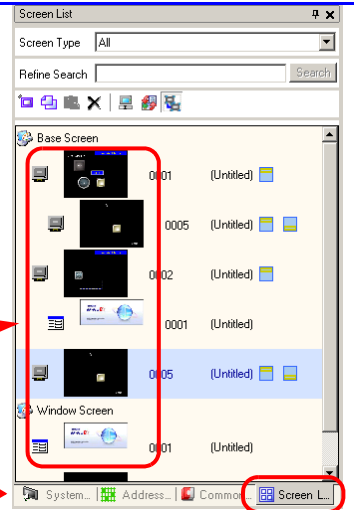
Thumbnail for Screen List Window to be easy to look up!


When Screen List Window is not displayed, select [View(V)]menu-[Work Space(W)]-[Screen List Window(G)].

Base Screen or Window Screen can be checked in thumbnail, which is easy to image and look up. Screen is opened by double click.

Thumbnail

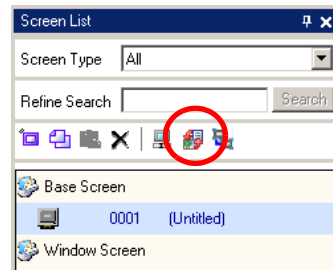
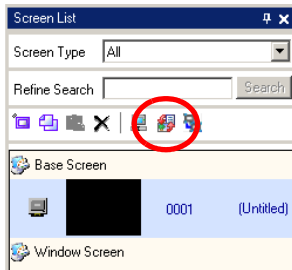
Screen List Window

**Reference**

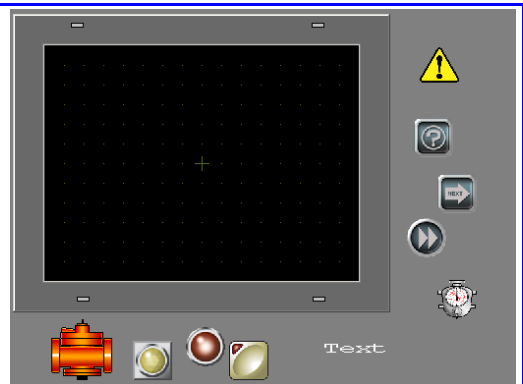
Click [Screen List Window] - the  icon, display mode of [Screen List Window] changes from [Reduced Screen] to [Text Display].

< Reduced >

<Text Display>

**Reference**

Display area can be used also for screen editing area



Reference

Grid setting for easier editing environment.

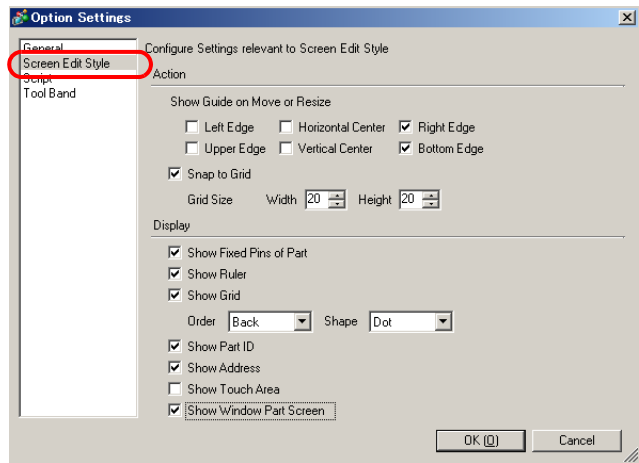
Click [View(V)]menu - [Option Setting(O)]
Click [Screen Edit Style]

[Show Guide on Move or Resize]
Guide line is displayed according to the indicated point.

Check [Snap to Grid] to place the object with intersection.

Check [Show Grid] to display grid.

Check [Display Part ID, Address] to display them in object on the screen.



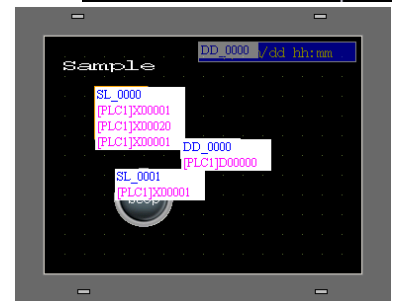
<Guide for re-sizing>

In this example, guideline is displayed at the bottom of the circle and square for Right Edge, Bottom Edge.

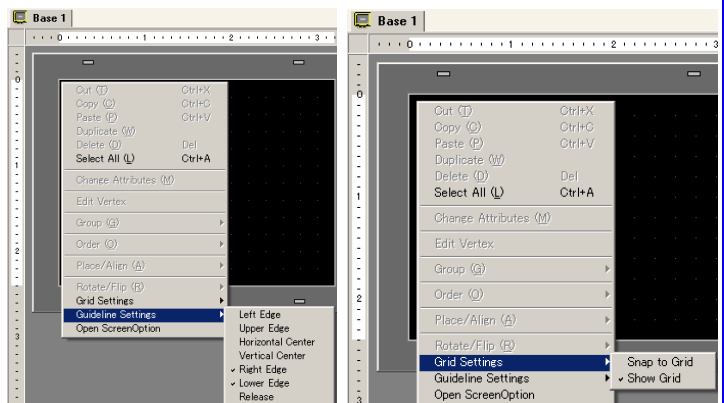


<Displays parts ID and address for the objects in the screen>

In this example, because Parts ID, Address, Window Part Screen are set to display, they appear in object part on the screen.



Click on the screen to switch the setting of grid and guideline.



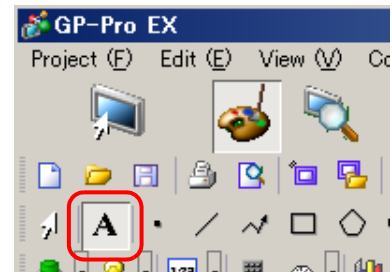
2.3 Drawing Text

- 1 Draw text on the drawing screen.


Click the  icon

or select the [Draw(D)] menu - [Text(S)] command.

(When there is no icon, select [View(V)]menu-[Tool Bar(T)]-[Drew(D)].)

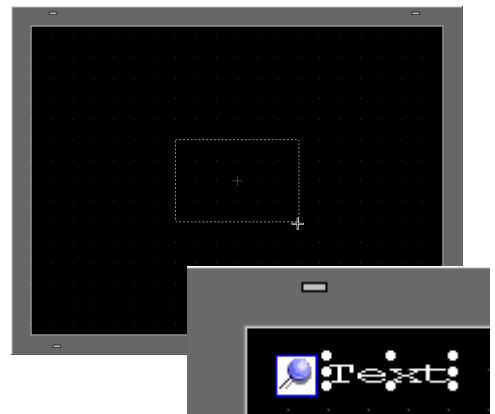


- 2 Place text on the drawing screen.

If you move the cursor to the drawing area, it becomes .

When you drag this part, a text size border will be displayed. Adjust its size and place it (by dragging or clicking).

Right-click to define the boarder.



Reference

When it is not fixed by click, the next character can be placed.



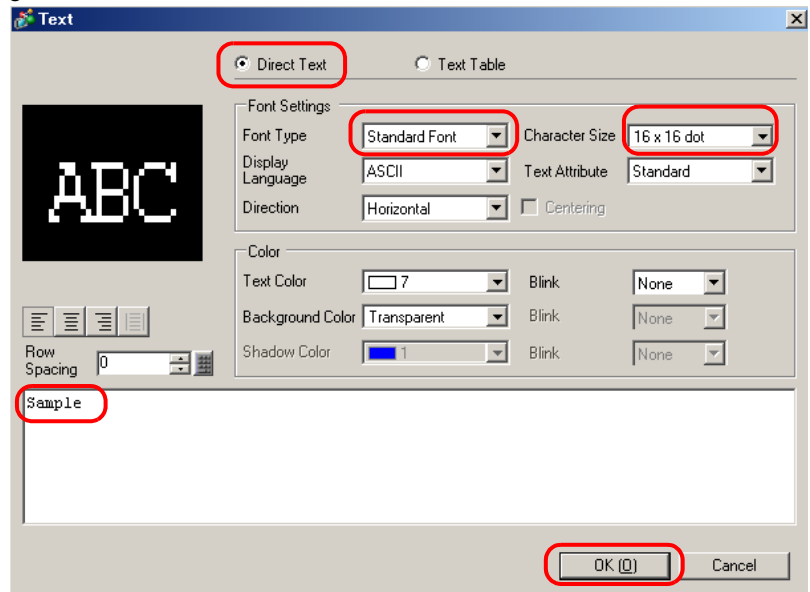
3 Text will set in the Text Dialog Box.

Double-click the placed text.

Direct text
Standard Font
16x16 dot
(Referred below)

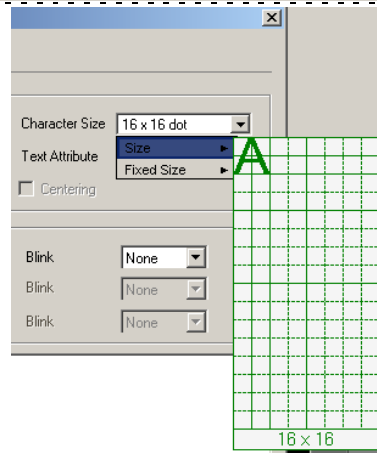
Sample
(Delete text and enter)

Click [OK(O)]



< Setting Font Size >

Click font size
Click size
Drag the mouse to the right window until 16x16 size. Then click it.



4 “SAMPLE”, which is entered in the text frame is placed

Click to selective state as the figure in the right, and drag to move.
Drag and drop it on the upper left of the screen.



NOTE

For more detail, please refer to Reference Manual[Drawing Text].

Reference

There are three kinds of font; Standard, Stroke and Image.

Features of Stroke Font and Features of Standard Font

Please use these fonts as standard.

[Stroke Font]

[European]

stroke font

[Japanese]

ストロークフォント

[Chinese]

unicode 标准

1. Stroke Font (free size / displayed beautifully)
Within 6 to 127 dots, the text is enlarged freely and beautifully.
Half width is the standard.
Bold / outline characters available.
2. Standard Font (small but beautiful)
Beautiful and quick display in [8x16 dots], [16x16 dots], and [32x32 dots] of original size.
Scaling is selective factor.
Bold / shaded characters available.

Features of Image Font

Please use them in Windows Font.

[Image Font]

[Helvetica/Italic]

Image Font

[Century Gothic]

Image Font

[Comic Sans MS]

Image Font

1. Image Font
Windows font turns to bitmap font.
Beautiful character in all size.
Bold / Italic characters available.
Image Font uses user screen area (for screen editing). Check [Project(F)] menu-[Properties(I)]-[Project Information]-[Send Data]-[Send Size], not to use too many image font.

NOTE

- Image Font is available only when indicating [Direct Text] in Parts-Label/Text.



For more detail, please refer to Reference Manual 「Stroke Font, Standard Font」
「Image Font, and about available user screen area please refer to [Supported Model List].

2.4 Editing Switch/Lamp and Text Table

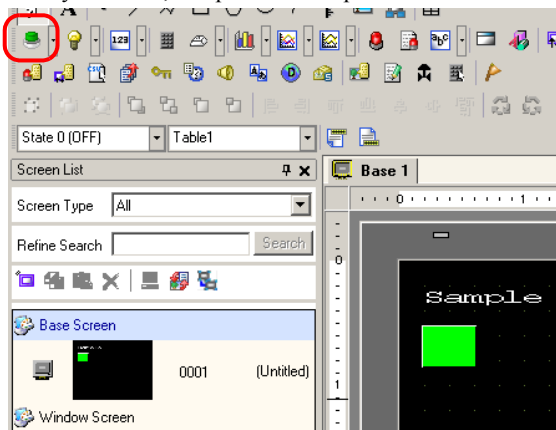
- 1 Create inversion switch which turn on by one press and off by the other, and place the lamp.

Click  icon or

Select [Parts (P)] menu - [Switch Lamp(C)] - [Bit Switch(B)],

and place the screen.

(The way to place is the same as that of text.)

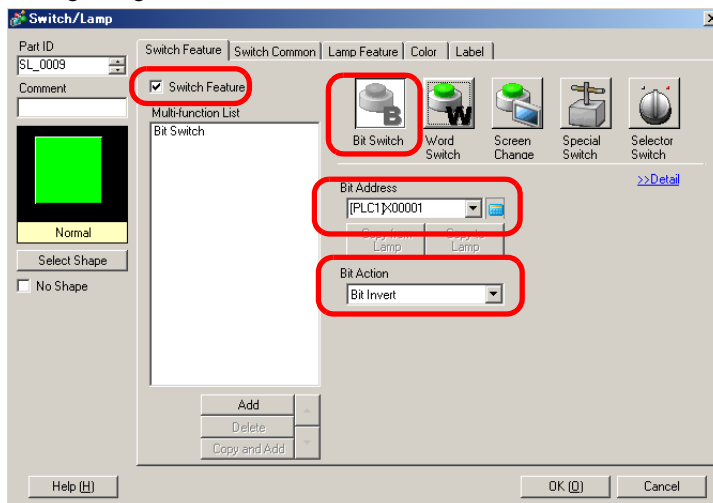


- 2 Select the shape of switch placed from setting dialog box.

Double-click the switch placed.

Switch Function
Bit Switch
[PLC1] X00001
(Please see below.)
Bit Invert

Click OK.

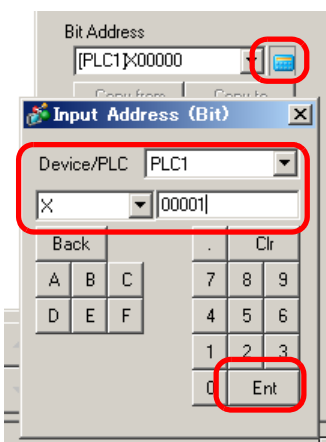


<How to enter address>

Set the bit address to operate in [Bit Address] by touch.

Keyboard for address input appears when the icon is clicked.

Select [PLC1], input "x" and "00001" in address, and then press "Ent".

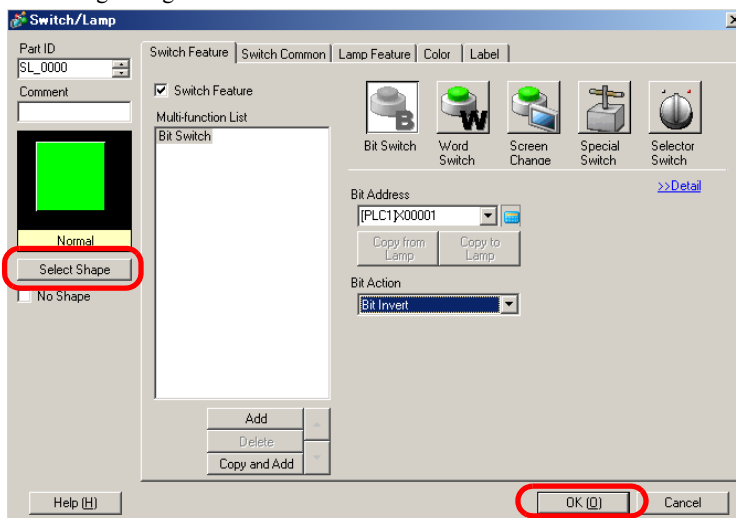


3 Select the shape of switch placed from setting dialog box.

Click the [Select Shape].

「Img_RectangleThin1」
「ThinSqr_Wh_0002_UpDk」
(Please see below.)

Click [OK (O)].

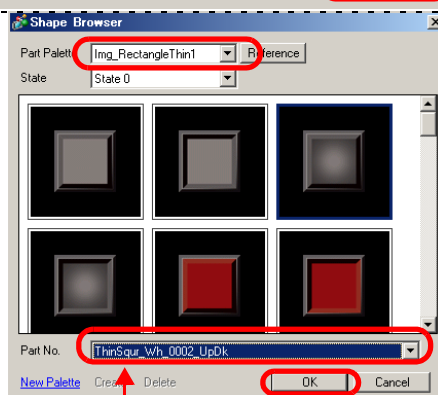


<How to select the shape>

Click [Parts Palette] and select “Img_RectangleThin1”.

Click [Parts Number] “ThinSqr_Wh_0002_UpDk” from the images below.

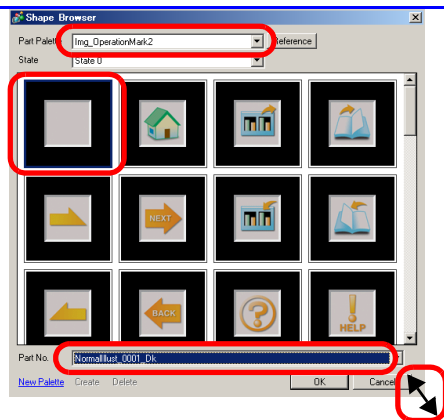
Click [OK].



If it is hidden, please see below.

Reference

1. [Parts Palette] is switched to select from various images.
2. Click [Parts No.] to select by the file name, or click directly the image to select parts.
3. When it comes to Window frame, the cursor turns \leftrightarrow which changes the Windows size.



NOTE

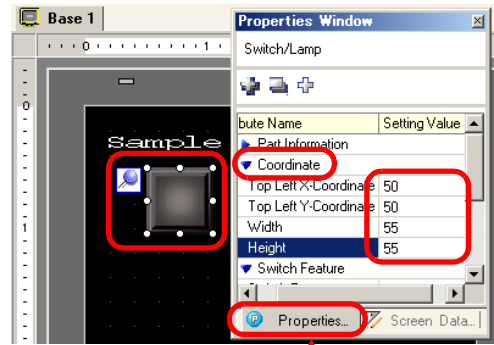
For more detail, please refer to Reference Manual [Parts Editing Procedure], [Setting guide for switch and lamp].

4 Change the position and size of switch and allocate.

Click switch to make it selective status and click Properties Window.

(When Properties Window is not displayed, select [View(V)]menu-[Work Space(W)]-[Properties Window(P)].)

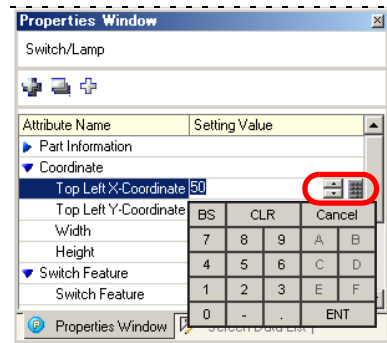
Double click Coordinate,
and click Top Left X-Coordinate and enter 50,
then press Enter,
Click Top Left Y-Coordinate and enter 50, then
press Enter,
Click Width and enter 55, then press Enter,
Click Height and enter 55, then press Enter. (See below.)



Properties Window

<How to Enter>

Click Keypad icon and enter set value. Then
click ENTKey or arrow keys,
or enter directly the set value and press Enter.



Reference

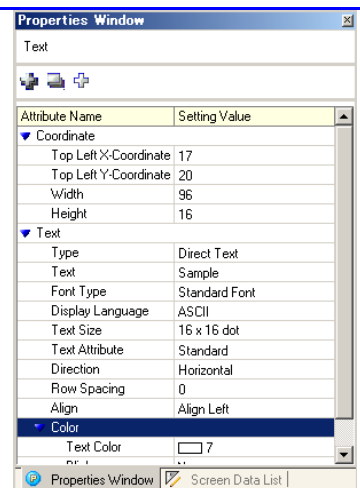
Setting in the Property Window is available.

Instead of double-clicking the object, setting is possible in the property window.

Realtime change of attribute makes easy check and correction.

Coordinate and size are checked and fixed so that the fine adjustment is easy.

Multiple objects chosen can be simmered to the common setting.



Reference

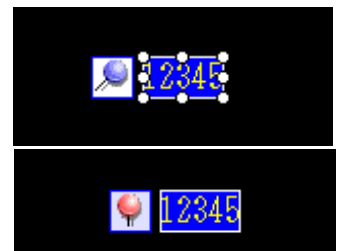
Fixing pin is used to fix the object.

The blue pin shows if the data display is clicked.

Another click of blue pin changes it to pink.

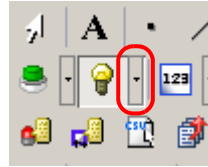
This status is useful when you do not want to change the place and setting.

To release this setting, double-click to show the pink pin, and click again to change it blue.

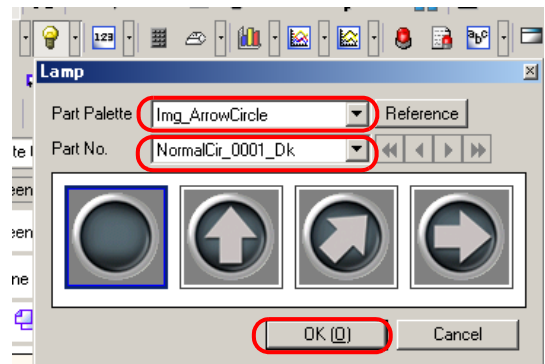


5 Complete switch setting and Place the lamp.

Click ▼ beside .

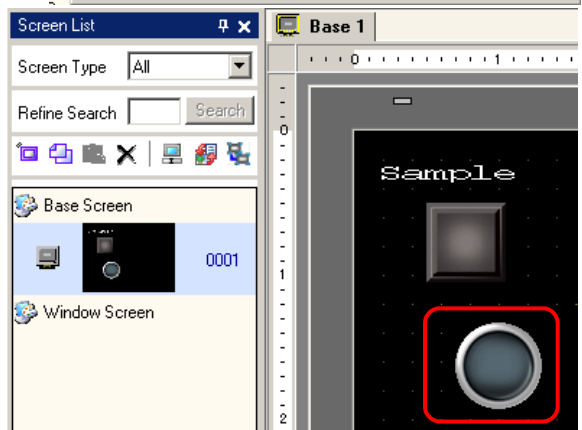


Click [Part Palette] and select [Img_ArrowCircle].
Click [Part No.] and select [Normal-Cir_0001_Dk].



Click [OK(O)],

and allocate on the screen.

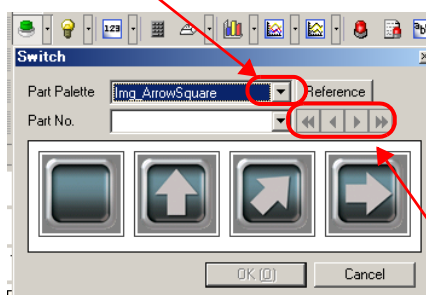


Reference

Picture selection and view checking is available before placement.

Switch Part Palette to make various images available.

Click ▼ ...

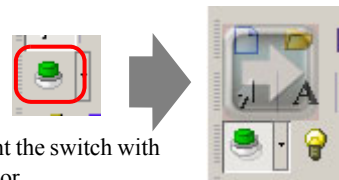


Choose a picture and place it!

Images are turned back and forth.

Point the switch with cursor...

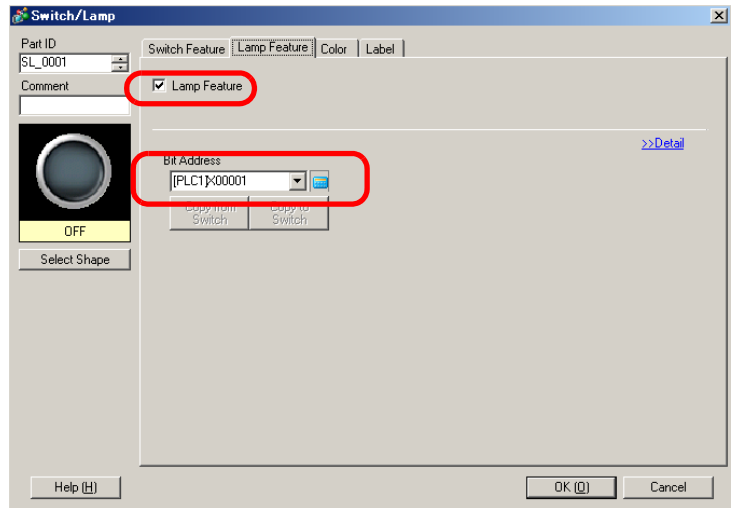
Glooming picture!



6 Select address placed in the setting dialog

Double-click the lamp allocated.

Lamp function
Bit address
[PLC1]X00001

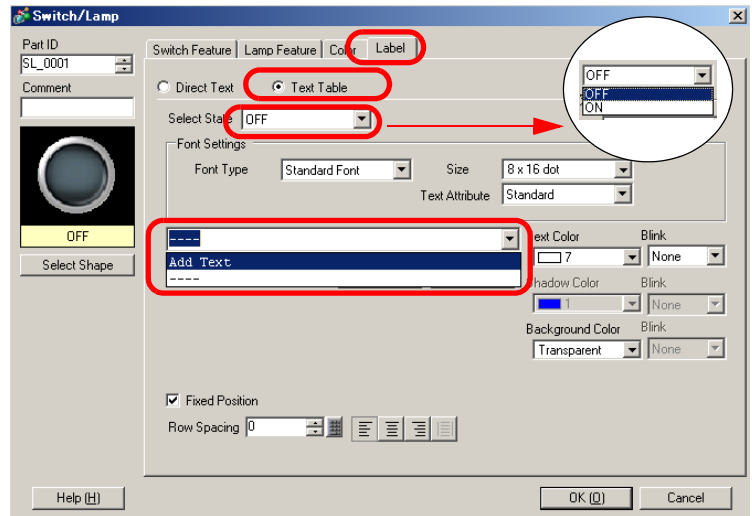


7 Indicate the plate on the lamp.

Click [Label] tab.

Text Table
OFF

Select the text adding and enter "stop" (Please see below for details.)



< How to add the text >

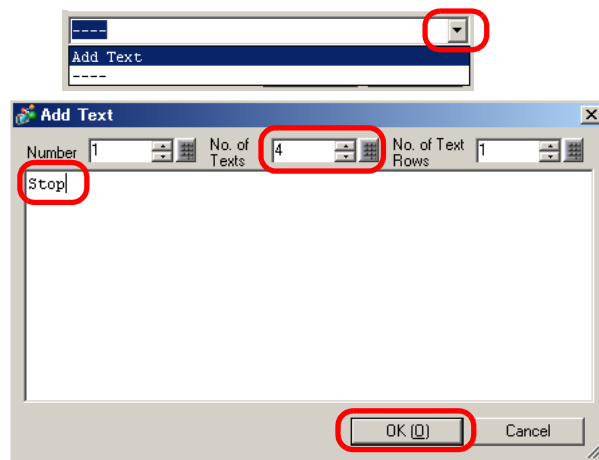
Click the down-arrow icon.

Select the [Add text].

No. of Texts 4

Enter "Stop".

Click [OK(0)].



8 Set ON status setting.

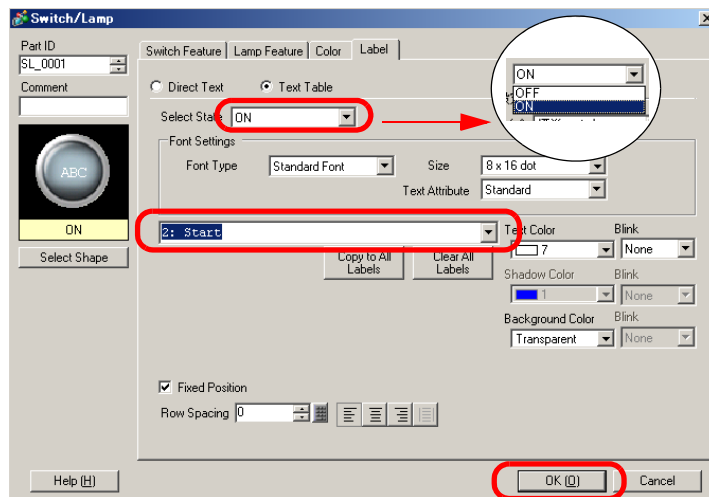
(Same setting as OFF.)

Click Select Shape, and select ON.

Select Add Text, and enter No. of Texts 5 and Start.

Click [OK(0)].

Click [OK(0)].



Adjust the size of Switch like Lamp, and place it.

**NOTE**

For more detail, please refer to Reference Manual[Procedure for Editing a Part][Lamp].

Reference

Text table...

If the text and word in foreign language are saved in the Text Table beforehand, test can be changed during system operating. (No translation function is available.)

If text is selected from the text table in setting plate, plate, message, text, alarm parts, and alarm text can be changed during operation.

English Table		
1	RUN	
2	STOP	
3	PRODUCTS	
4		
5		



Foreign language text tables

Japanese Table		
1	運転	
2	停止	
3	生産数	
4		
5		

French		
1		
2		
3		
4		
5		

German		
1		
2		
3		
4		
5		

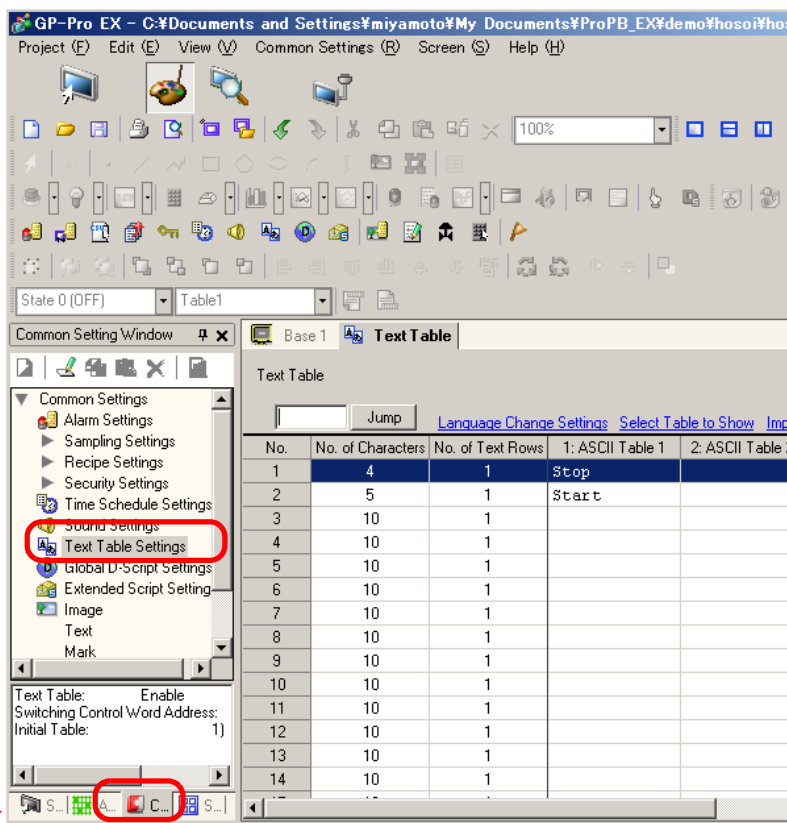
ETC.

9 Save the text in Text Table for the later use

Click the Common Setting Window, and double-click [Text Table Settings],

or click the icon,

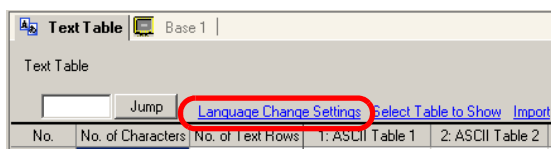
or select [Common Settings(R)] menu - [Text Table Settings (S)].



Common setting window →

10 Set 0 in [Switch Control Address] to show Japanese.

Click [Language Change Settings]

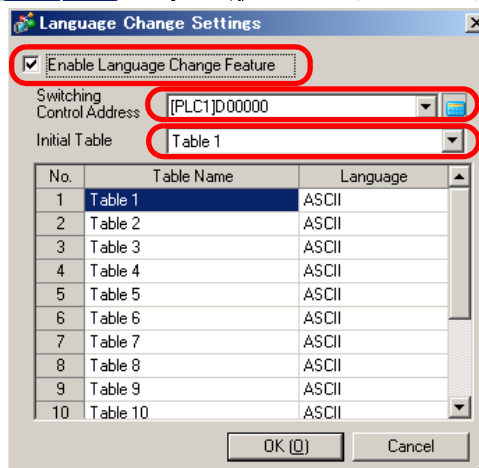


Check [Enable Language Change Feature]

(Language changes according to the table number saved for this word address.)

Table 1

(Set the Table 1 to show when 0 is in [Switch Control Address].)

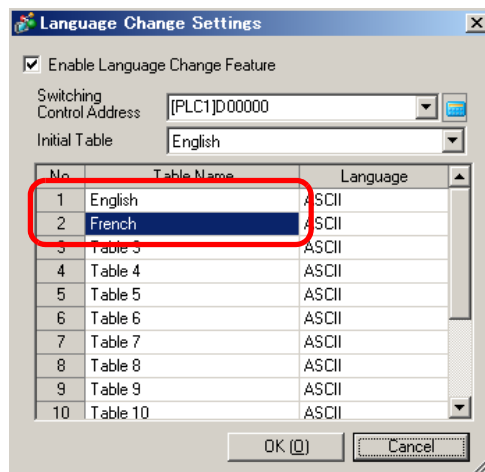
**NOTE**

- Remove the check in [Enable Language Change Feature] to delete all setting in Text Table.

11 Change Table Name.

Double-click Table 1, and enter English.

Double-click Table 2, and enter French.

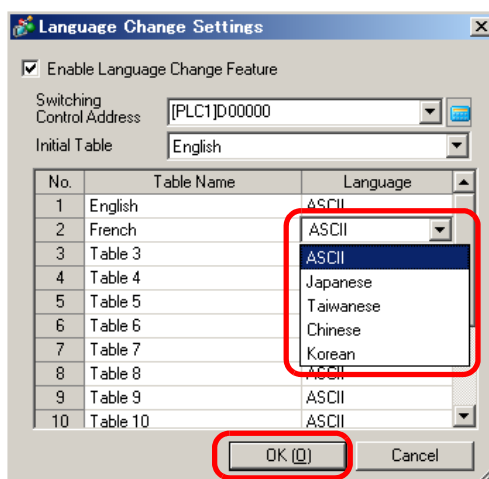


12 Select the language to be used in each table

Click the language , and select Ascii down arrow.

(Click Language, and show down arrow for various languages selection.)

Click [OK(0)].

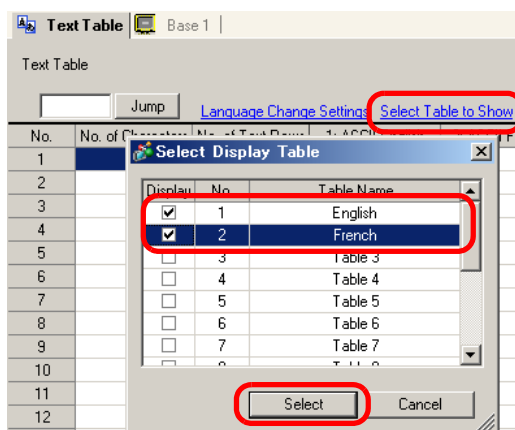


13 Indicate the table to show

Click [Select Table to Show].

Click and select the Table Name[English]and[French], changed before.

Click [Select].



- 14 Enter the text to be shown. Because Start and Stop are already saved when creating lamp, other texts are added here.

Double click to enter.

No. of Texts 5 Stop Arrêt
 5 Start Début
 5 OFF FERMÉ
 3 ON SUR

(Enter with Half width letters)
 Please not that the change of
 No. of characters is needed.

No.	No. of Characters	No. of Text Rows	1: ASCII English	2: ASCII French
1	5	1	Stop	Arrêt
2	5	1	Start	Début
3	5	1	OFF	FERMÉ
4	3	1	ON	SUR
5	10	1		
6	10	1		

Reference

- Copy and paste of text created with EXCEL.
- Import and export of text and CSV file.

	A	B
1	Stop	Arrêt
2	Start	Début
3	OFF	FERMÉ
4	ON	SUR

Copy and paste

No.	No. of Characters	No. of Text Rows	1: ASCII English	2: ASCII French
1	5	1	Stop	Arrêt
2	5	1	Start	Début
3	5	1	OFF	FERMÉ
4	3	1	ON	SUR

- 15 Exit “Text Table”

Click ×

No.	No. of Characters	No. of Text Rows	1: ASCII English	2: ASCII French
1	5	1	Stop	Arrêt
2	5	1	Start	Début

NOTE

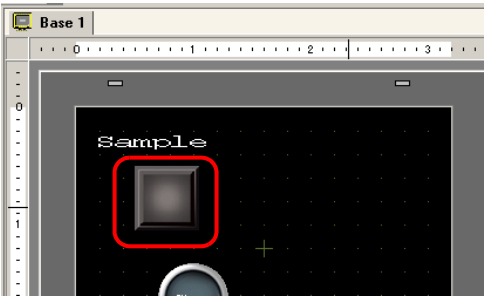
- Every language is available on the Japanese OS (while global IME setting is necessary).
- When the text becomes more than two lines, line break should be done by Alt+Enter, indicated with “\n”.



For more detail, please refer to Reference Manual[Parts Editing Procedure][Changing Languages (Multilanguage)] [Setting Guide for Text Table] [Setting Guide for Switch / Lamp - Plate (Text table)] [Screen Editing in foreign language]..

16 Switch is changed to switch lamp.

Double-click the switch for additional setting to the switch placed before.



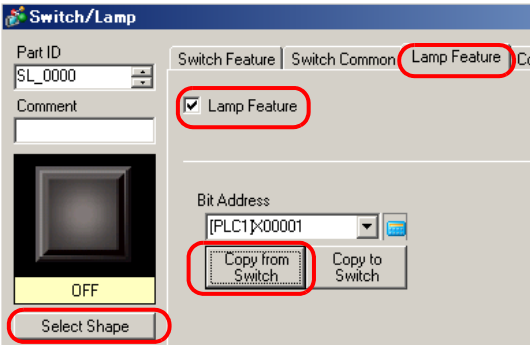
17 Set the lamp

Click the [Lamp Feature] tab

Check [Lamp Feature]

Click [Copy from Switch], and enter [PLC1]X00001
(When clicking [Copy from Switch], the same address indicated in [Switch Functions] is set)

Click [Select Shape] (Please see below.)



< Shape >

Image previously set is shown by [State 0] (OFF).

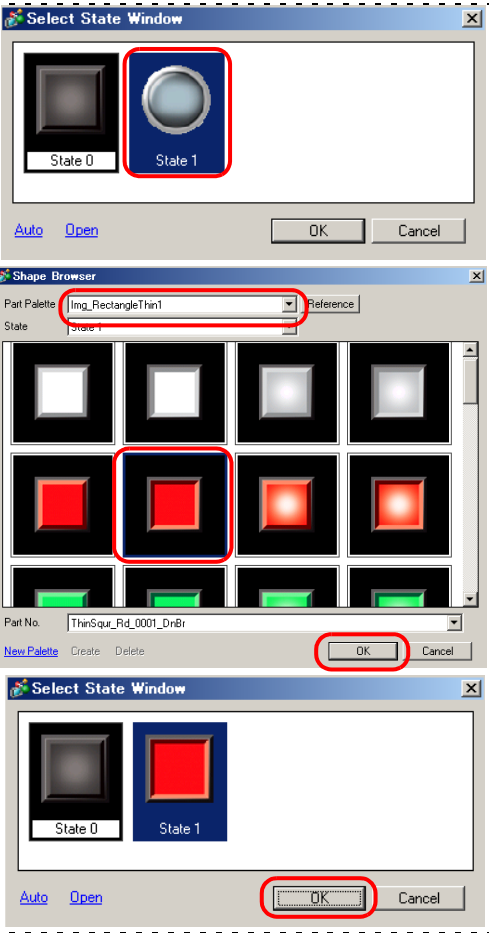
Select [State 1] (ON) and double click, or click [Open].

Select [Part Palette] "Img_RectangleThin1"
Select [Part No.] "ThinSqr_Rd_0001_DnBr"

Click [OK].

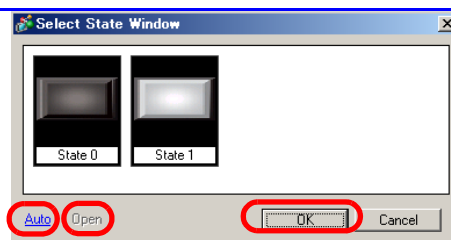
Change in [State 1] (ON) is completed.

Click [OK].



Reference

For the free change of images for [State 0] (OFF) and [State 1] (ON), double click or click open and change the setting.
Click Auto for the default images.
Click OK when setting is done.



18 Indicate the display for Switch Lamp.

Click [Label] tab.

Text table

OFF

Select OFF

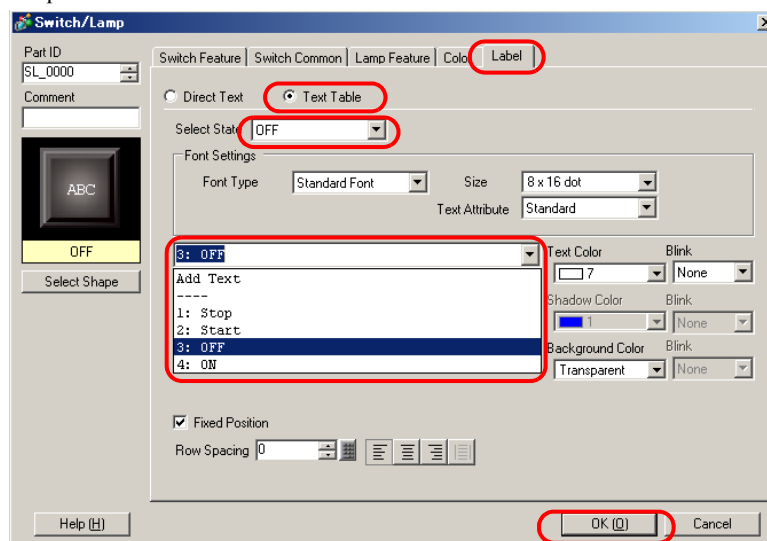
(Please see below.)

ON

Select ON

(Please see below.)

Click [OK(O)].



< Text Table Input >

(OFF Setting)

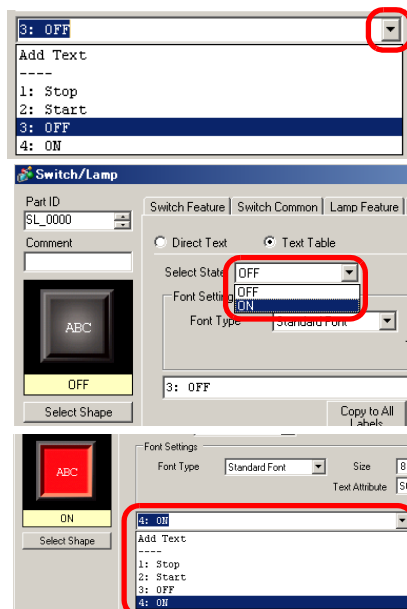
Click "Select State" and select OFF.

Click the down-arrow icon, and select OFF.

(ON Setting)

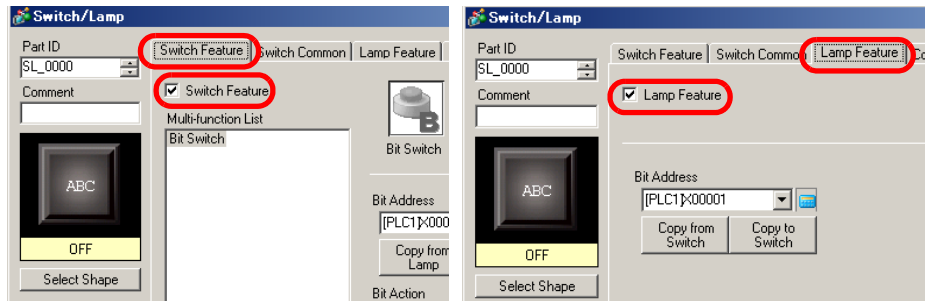
Click "Select State" and select ON.

Click the down-arrow icon, and select ON.



Reference

Switch, lamp, and switch-lamp are changed by checking the check box.



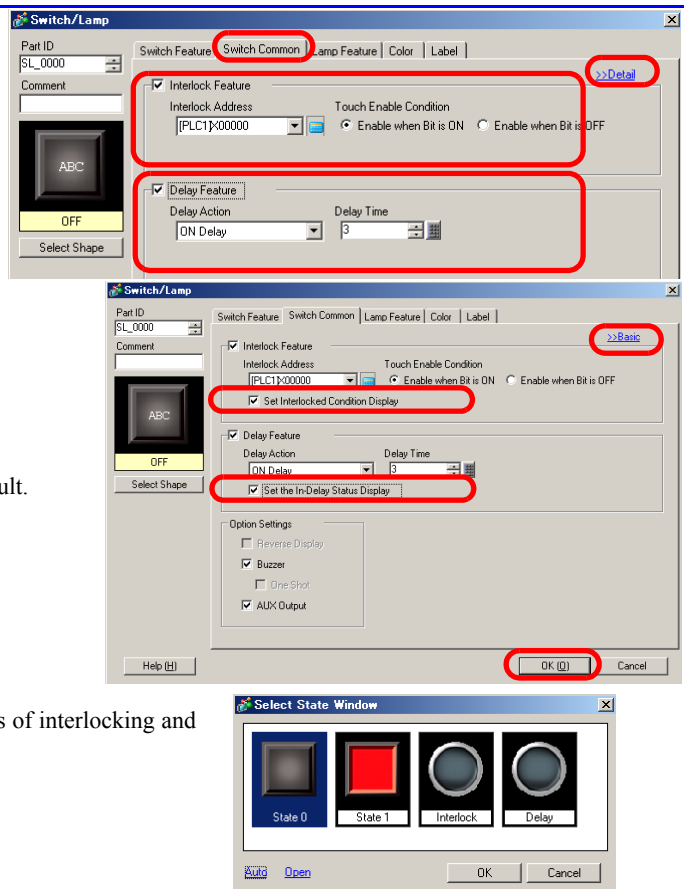
Reference

Interlock against wrong operation and ON/OFF delay function (double pressing operation setting) are in common switch setting.

When clicking detail...
screen changes to the detail setting.
Click OK when the setting is done.

Click Basic...
and the set value will be back to default.

When checking status view...
not just ON/OFF but also the pictures of interlocking and delay becomes possible.

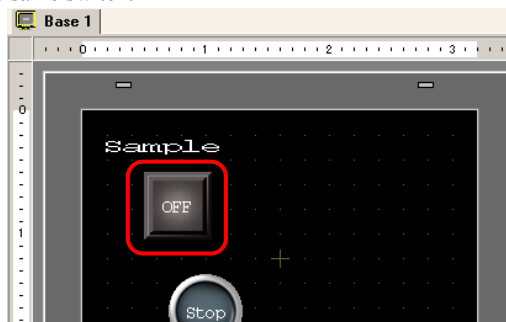


NOTE

For more detail, please refer to Reference Manual[Setting guide for switch and lamp][Parts Editing Procedure].

- 19 Create switch which keeps on during only pressing with the same switch.

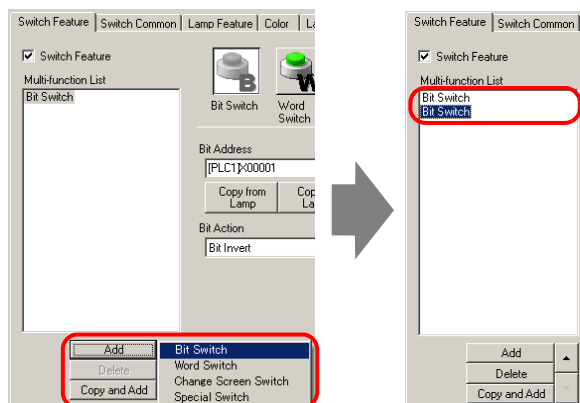
Double-click the switch for additional setting to the switch placed before.



- 20 Add switch function when setting dialog is open.

Click [Add], and select [Bit Switch].

(Bit switch setting screen appears and bit switch is added to [Switch Function List].)



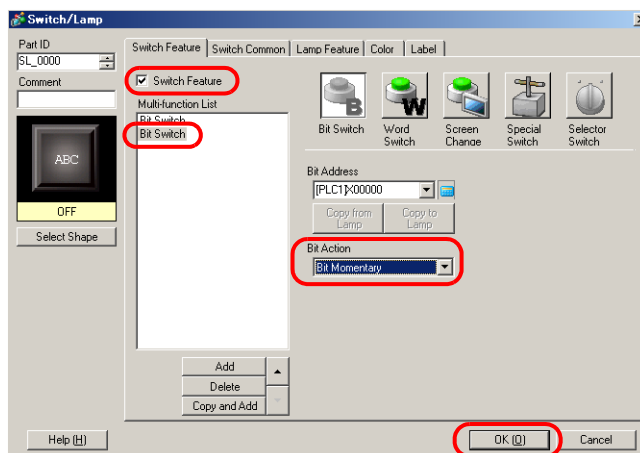
- 21 Decide bit switch setting.

Switch Feature
Bit Switch

(Bit address is not set here but in the next section.)

Bit Momentary

Click [OK(O)].

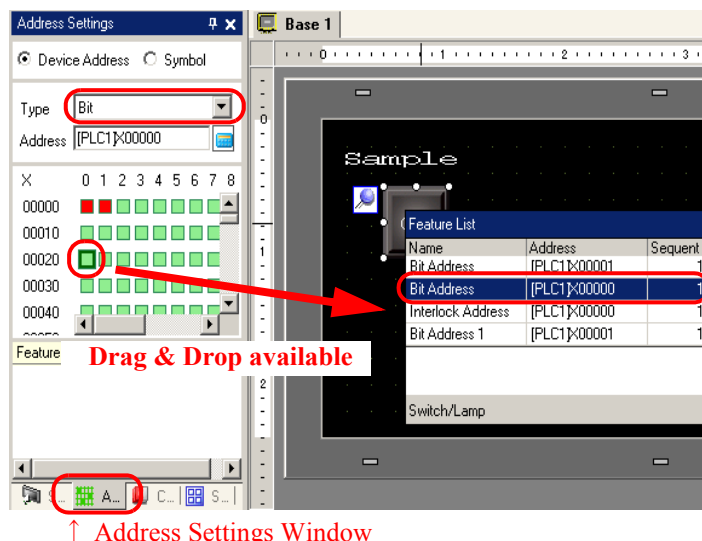


22 Indicate bit address.

Click [Address Settings Window].

Select [Bit] .

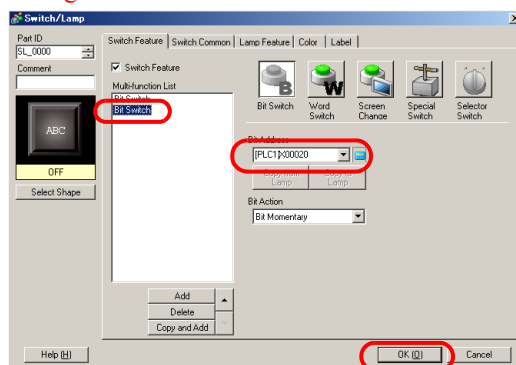
Drag 0 in X00020 onto switch, and drop it on the second line of the bit address. (Drop to[PLC1]X00000 which was not set before.)



Let's check the setting.

Double-click the switch,
and click the bit switch in the sec-
ond line.

Address of Bit Momentary is supposed to be [PLC1] X00020. If so, click [OK(0)].



Reference

Check the entered information with the method below.


<How to indicate the address>

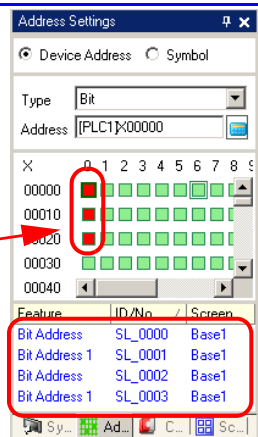
Click either [Peripheral Address] or [Symbl] to display the object.

Click [Type] to indicate [Bit] or [Word] of address to be displayed.

Direct indication for the address shown is available in [Address].

Address is indicated in red if it is used.

Click the red part, the object list of that address is shown. Double-click the part to be changed, the screen of the object will open.  Then the address map will open the screen when the object is placed.

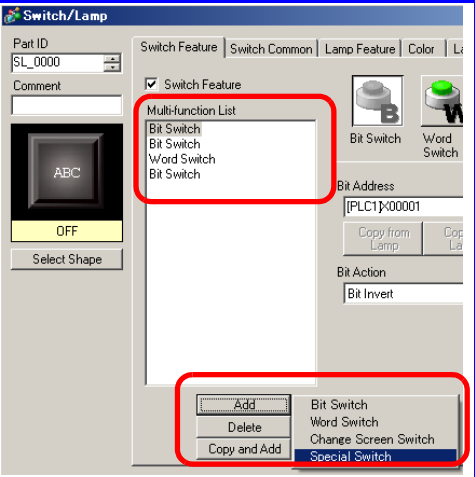


NOTE

For more detail, please refer to Reference Manual[Confirming the List of Addresses being Used in a Project File][Work Space].

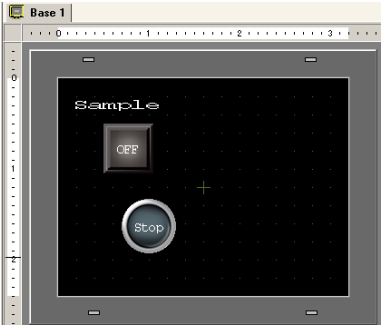
Reference

One switch can perform several tasks.



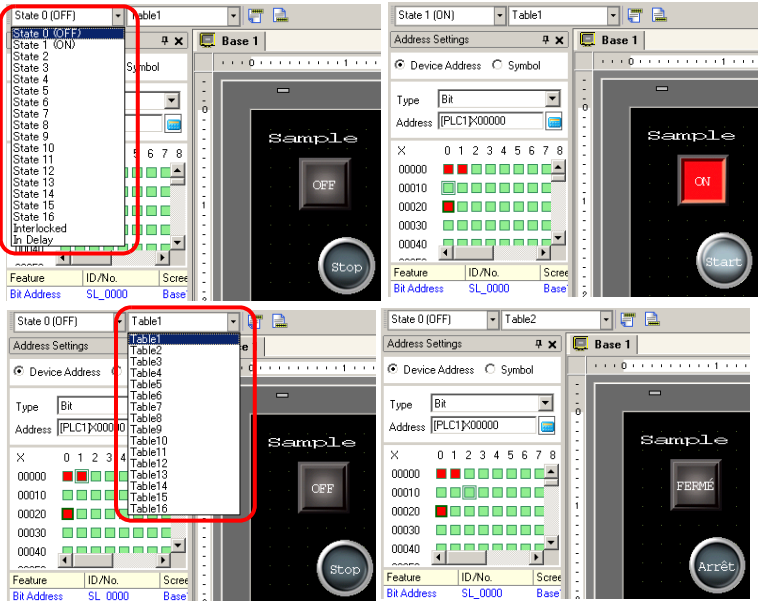
NOTE For more detail, please refer to Reference Manual[Switch][Parts Editing Procedure].

23 This screen has been created.



24 Check the status in ON/OFF and language change.

Click "status"; when selecting OFF, the status is OFF, and ON for status ON.




When Table 1 is clicked, English is displayed, while French for Table 2.

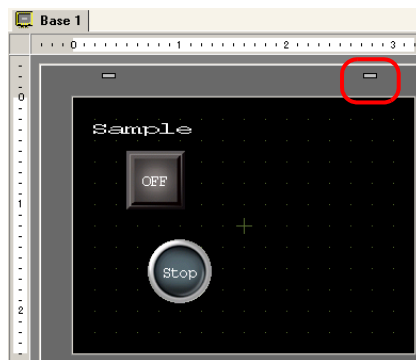
2.5 Drawing Header and Footer, and Clock

- 1 Display clock in header, and use it in another screen..




Click the [Header]  icon on the upper side of drawing area,

Click the icon ,

or select the [View (V)] menu - [Header (H)] command.



NOTE

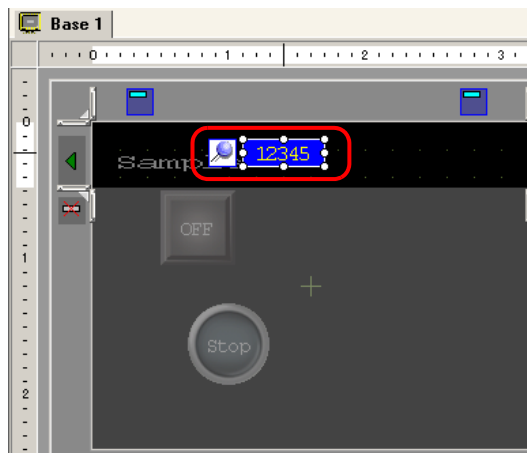
- Select the [View (V)] menu - [Footer (F)] command or click the [Edit Footer]  at the bottom of the drawing screen to display the footer screen editing area.
- As well as [Footer], Click [Edit Footer]  at the bottom of editing screen, or click icon , or select [View (V)]menu - [Footer (F)] to open the Footer editing screen.

- 2 Create clock in the header screen editing area.

Click the  icon,

or select [Date/Time(D)] command from [Parts (P)] menu - [Data Display(D)]

and place it to the drawing area.



NOTE

- Click the  icon to delete the header area created.
- Click [Next Header]  button to create another header.

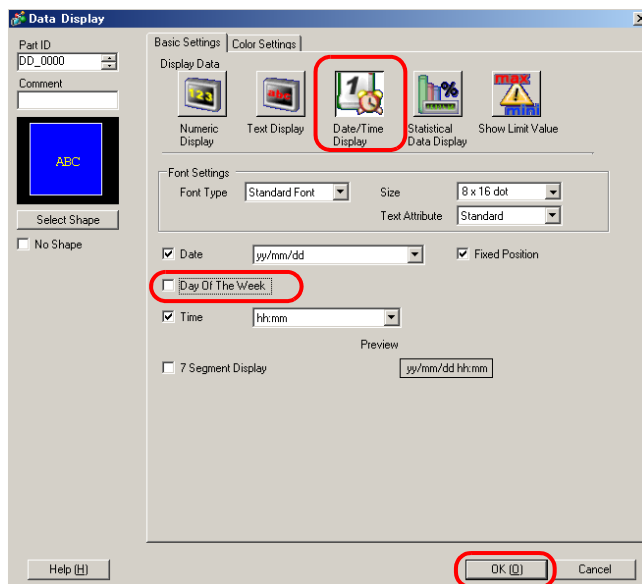
3 Clock setting

Double-click the [data display] placed.

Date / Time Display

Take off the check in week.

Click [OK (O)].



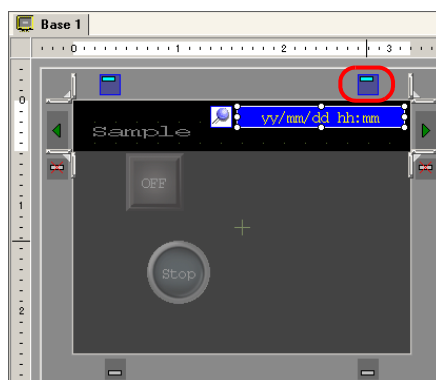
NOTE • Only on set of Date/Time is set for each screen. Please refer to the setting guide for details.

☞ For more detail, please refer to Reference Manual[Date/Time].

4 Finish Editing Header


If it is beyond the editing area, drag the clock to move it.

Click the header editing finish button.



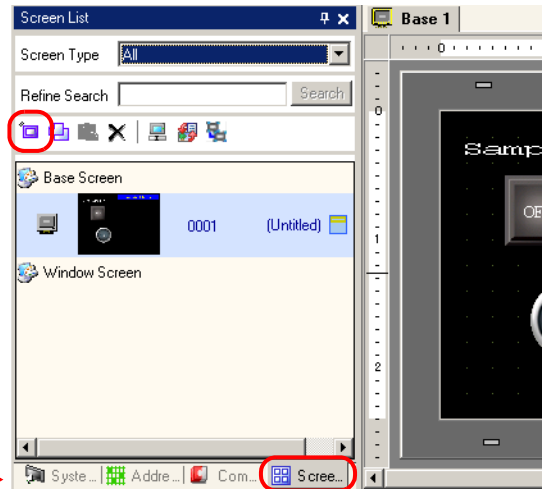
5 Create base screen 2 , and set the header.

Click [Screen List Window].

Click the icon 

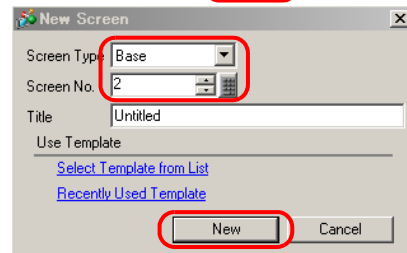
or [Screen (S)] menu - [New Screen(N)].

Screen List Window →





Base
2

Click [New].

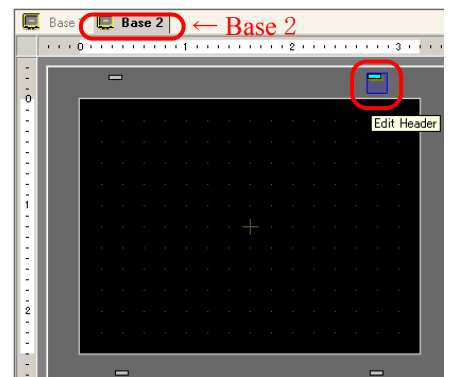


6 Display Base 2

Click the [Edit Header]  in the upper editing area.

Click icon ,

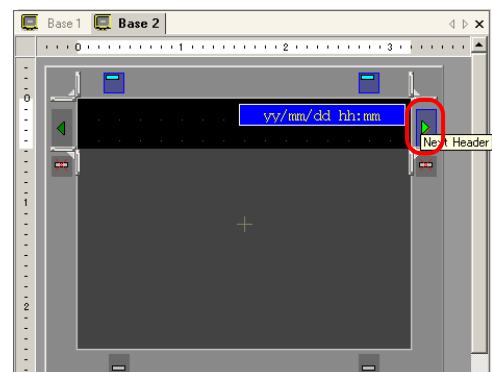
or select [View (V)] menu - [Header (H)].



7 Display header editing area.

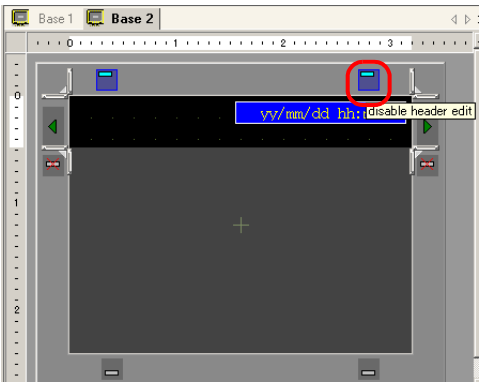
Click the [Next Header]  button,

and display the clock created.



8 Exit the header screen.

When the header is displayed, Click the [disable header edit] button in the editing area.



- NOTE**
- To release a header, click [Edit Header] button in the screen to be edited. Click to show the empty header. Click the [disable header edit] button to finish editing.
 - When changing GP with high resolution to low resolution, the header and footer that exceed the screen by that change will not be displayed. It is necessary to adjust the size of header or footer after changing GP type.
- ☞ For more detail, please refer to Reference Manual[Putting a Header/Footer on the Screen].

Reference

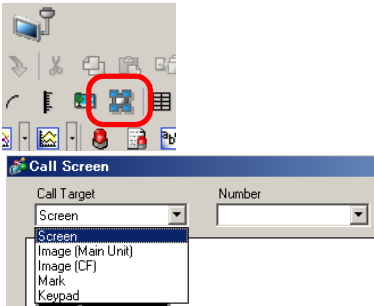
Calling and editing screen, package, and template is available other than Header/footer.

1. Call Screen

Call Base Screen or Images in project to use in Base Screen.

Click the icon
or set [Draw(D)] menu - [Call Screen(O)].

Mark or Keypad also can be called on screen.



- | | |
|-------------|--|
| Base Screen | : displays the base screen already created.
[Screen list Window] tab is created in the Base Screen. |
| Image | : displays the image data saved in [Image]
Saved in [Common setting Window], Save Image, Add |
| Image (CF) | : Display image data of CF card saved in [Image]
Saved in [Common setting Window], Save Image, Add |
| Mark | : Display mark saved in [Mark]
Saved in [Common setting Window], Save Mark, Add |
| Keypad | : Display keyboard saved in [Keypad]
Saved in [Common setting Window], Save, Add |

NOTE

☞ For more detail, please refer to Reference Manual[Using a Screen for Various Purposes].

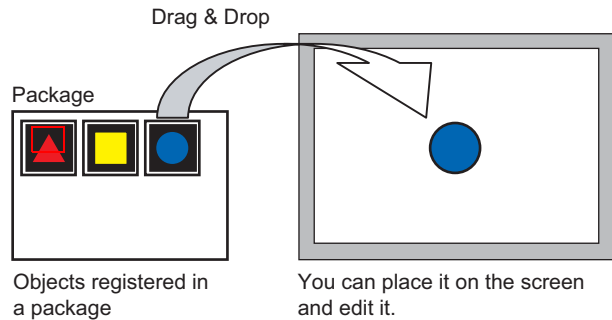
Reference

2. Package

Already prepared keyboard, object that you made, and multiple on\bjects are called to use.

Drag & drop the figures saved in package onto the screen.

(Those are independent of project so that they are used in another project.)



NOTE

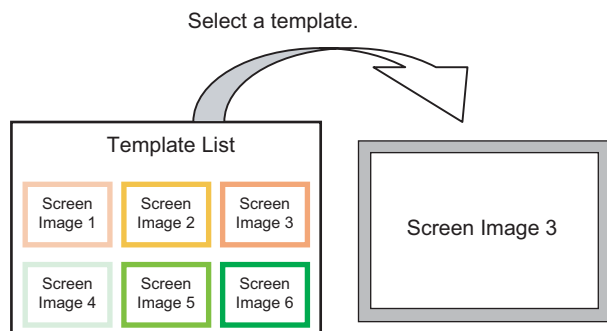
For more detail, please refer to Reference Manual[Editing the Same Picture on Another Screen].

3. Template

Register by screen, and call it. (The package is saved by object while template is by screen.)

Once the screen is created, it is saved and used as the template.

Because the template does not depend on the project file, it is useful for creating a new project.



NOTE

For more detail, please refer to Reference Manual[Selecting a Screen from Templates].

Reference

About Screen List Window

(View from [View(V)]menu-[work Space(W)]-[Screen List Window(G)])

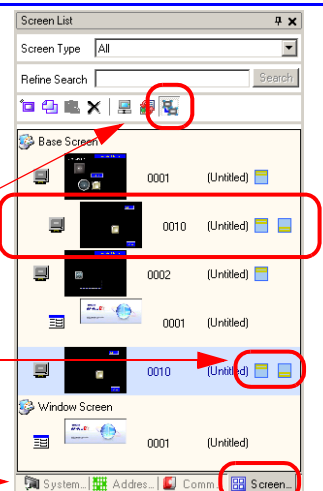
When calling Screen (see above), it is checked in hierarchical display.

Display showing if there is a Header/footer.

Hierarchical Display

Header/Footer

Screen List Window



Reference

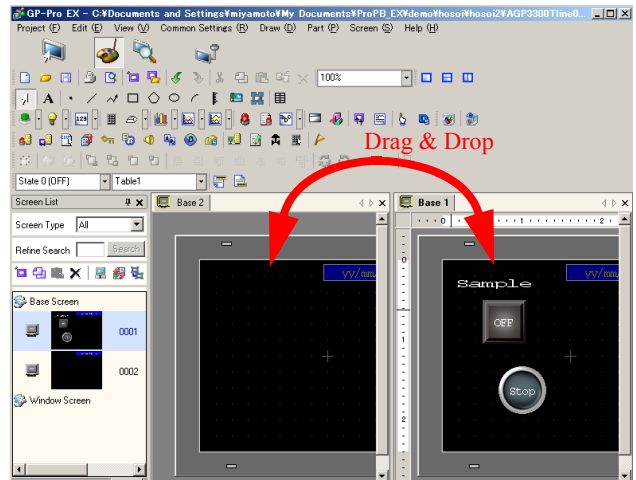
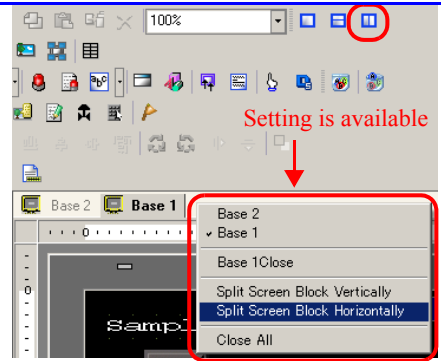
Split the screen to enable drag & drop the object in another screen.

Click the  icon .

or click the editing area like the picture in the right to separate the screen.

(Select [Tile Vertically(W)] from [View(V)]menu- [Screen Block(B)]

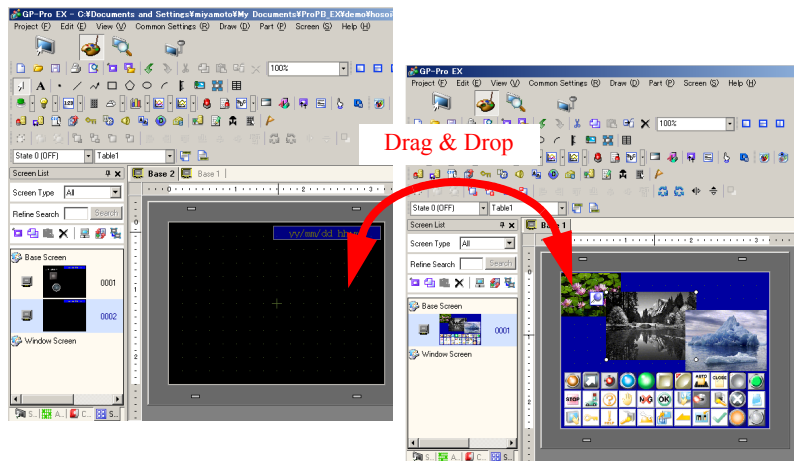
(Tile Horizontally is also available.)



Reference

Multiple display is useful to drag and drop the object in the different project.
GP-Pro EX can be started severally.

Two of GP-Pro EX are possible to start up. It is useful to drag & drop the object from one project to another.



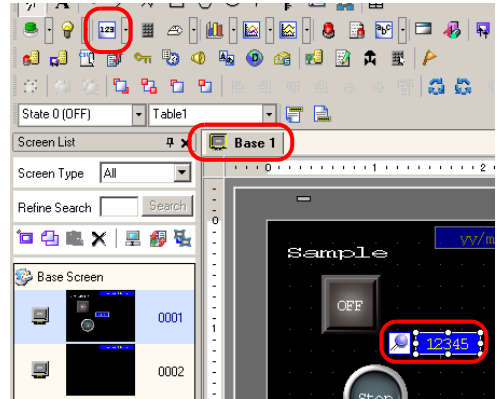
2.6 Editing Data Display and Pop-up Keyboard

1 Data entry to data display with pop-up keyboard

Click [Base 1] in the upper screen because it is placed in the base screen 1 or double click [Screen List Window] Base Screen 0001.

Click the  icon,

or select [Parts (P)] menu - [Data Display(D)] - [Numeric Display(N)], and place it on the screen.



2 Set the data display.

Double-click the [Data Display parts] placed.

Check [Input Permit].



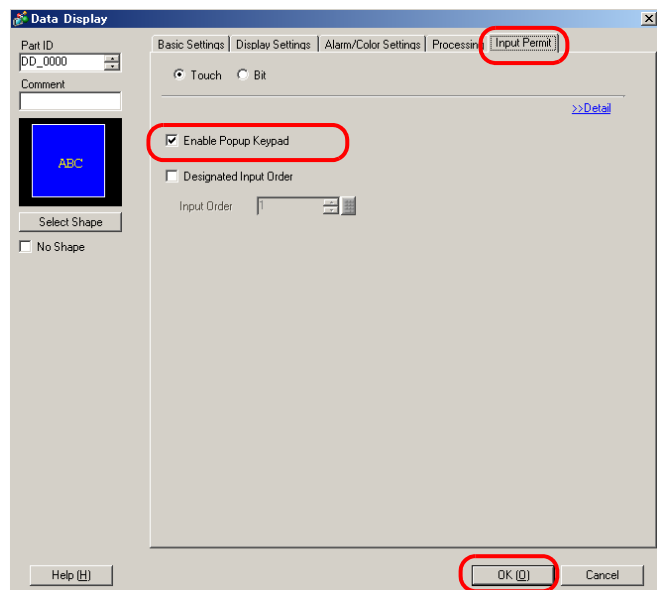
3 Click the input tab.

Click [Input Permit]

Check [Enable Popup keypad].

Click [OK(O)].

Drag to move it to the appropriate position and adjust the size.





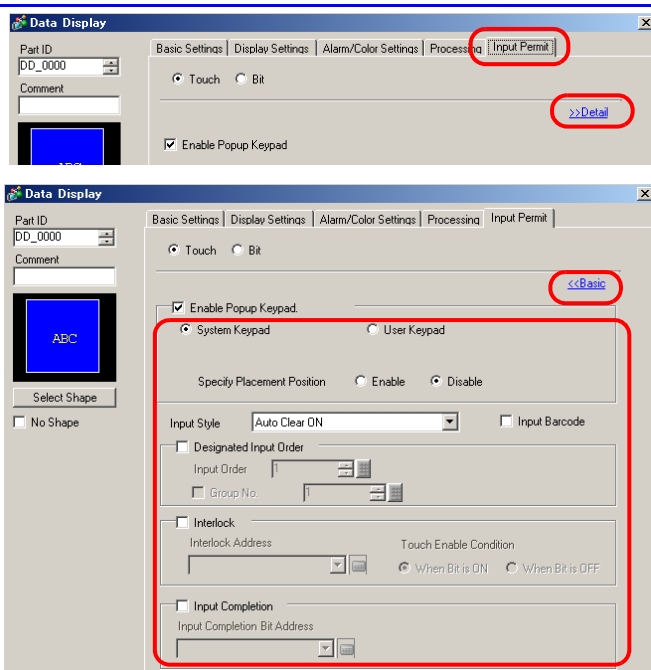
Click Detail of Input Permit Tab...

Detail setting screen appears.

Setting users keyboard is also available. Click OK when setting is done.

Click Basic...

The value set in detail setting becomes default value.



NOTE



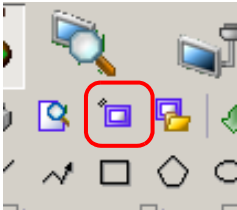
For more detail, please refer to Reference Manual[Data Display and Input][Displaying a popup keypad].

2.7 Editing Window and Image File

1 Paste the image file on the window screen for window setting.

Click the  icon

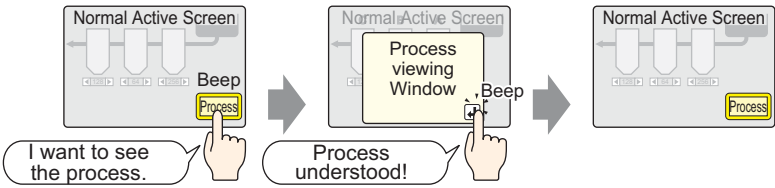
or select [Screen (S)] menu - [New Screen (N)].



Reference

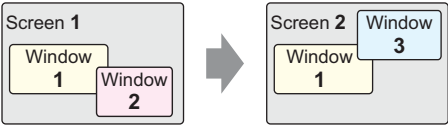
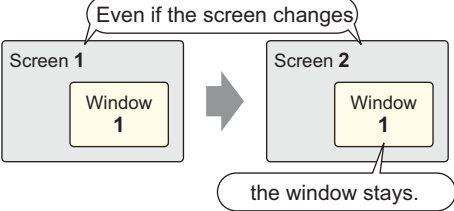
Window...

What is Window?



Screen which is usually not necessary to show is saved and called as window, and deleted. This is useful for temporal reference or measurement for errors.

There are two kinds of method to display the created window.

Display Method	
<p>Display as local window</p> 	<p>☞ Reference Manual Please see [Display window].</p>
<p>Display window in each screen</p> <p>Display as global window</p> 	<p>☞ Reference Manual Please see [Display the same window in all screen].</p>
Display the common window for all screen	

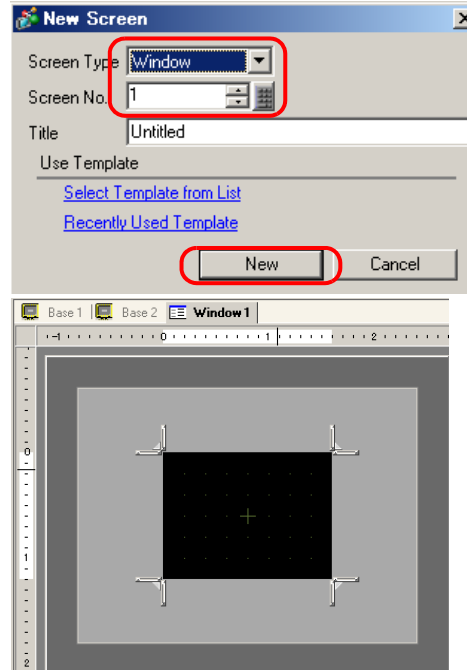
- 2 Displays the [Edit New Screen] dialog box.

Window
1

(Screen number can be changed while the same number cannot be set redundantly.

Click [New].

Window is displayed.



- 3 Paste the image file (BMP and JPG) in window

Click the  icon

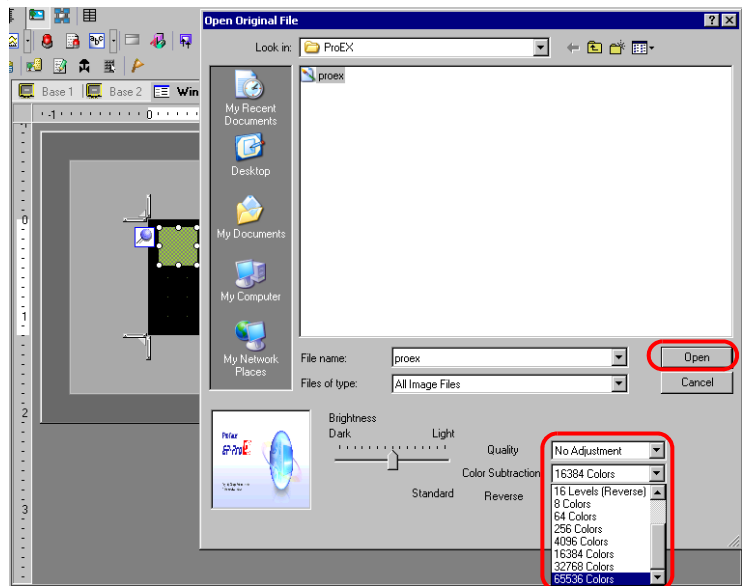
or click [Image Allocation(I)] in [Drawing(D)] menu.

Place it on the window by moving cursor.

Indicate the image file you have.

65536 colors

Click [Open(O)].



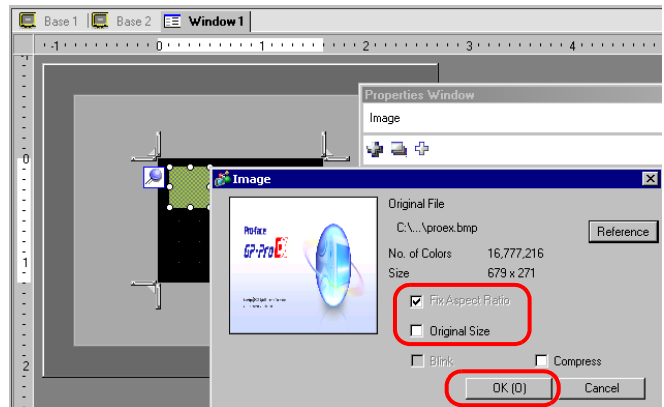
NOTE • Window size should be changed within the size of base screen.

4 Set the size of image to be paset and blink.

Release the check in [Original Size].

Fix Aspect Ratio.

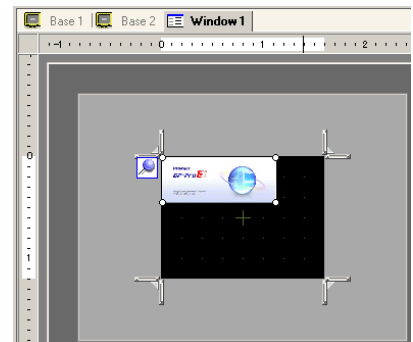
Click [OK(O)].




- NOTE**
- Image will be placed at the same size as the original one when [Original Size] is selected. Image size cannot be changed once it is allocated.
 - The image in the original size with fixed aspect ratio will be allocated when [Aspect Ratio] is selected.

5 Adjust the size of the indicated image placed.

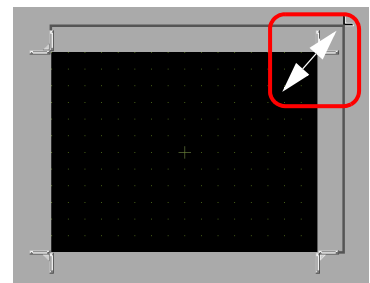
Click the pasted image to adjust its size appropriately and place it.




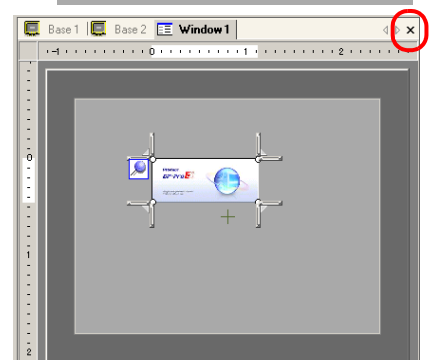
When it comes to the corner of window,

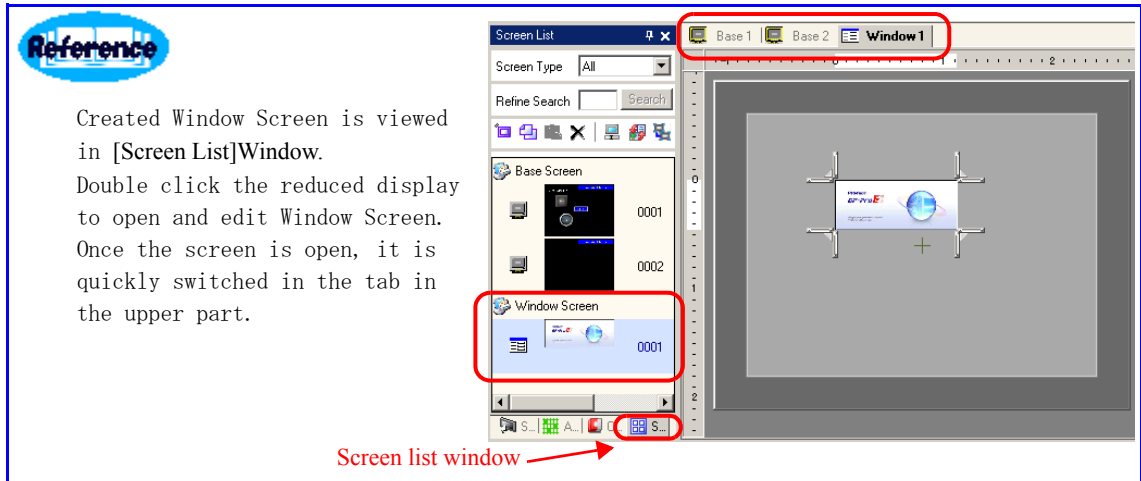
Cursor and arrow become .

dragging it to change the screen size.
Adjust the Window size and place it.



Click the  icon or select [Screen (S)] menu - [Close Window (C)] to close the window.





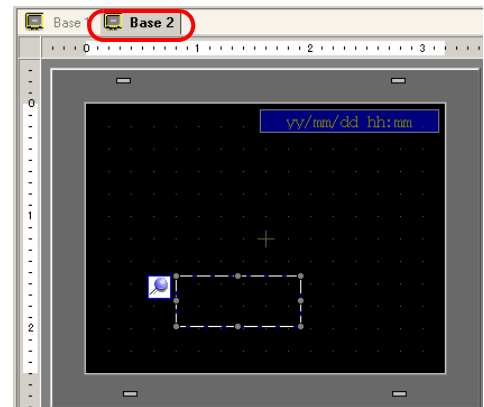
6 Allocate to the base screen 2

Click base screen 2.

Click the  icon

or select [Parts (P)] menu- [Window(W)].

Move the cursor where to move and click.



7 Set the Window parts

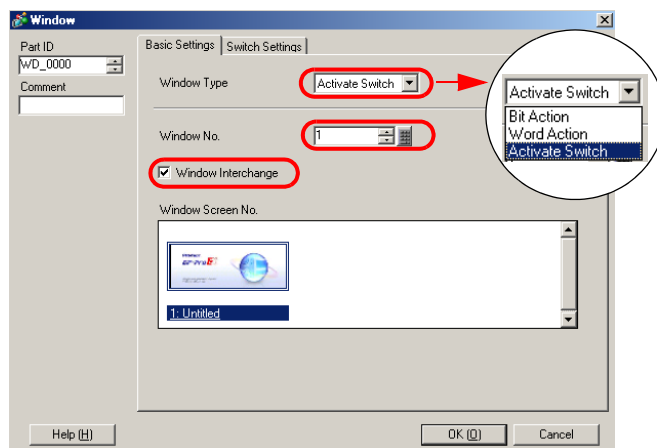
Double-click [Window parts].

Activate Switch

1 (Please see below.)

Window Interchange

(Please see below.)

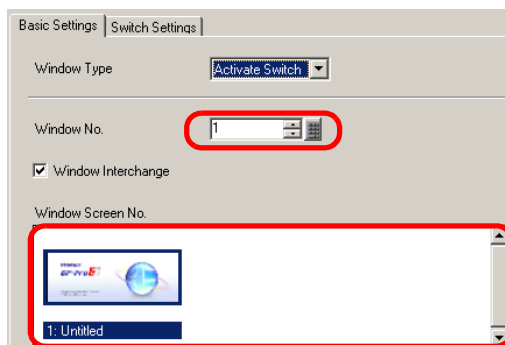


< How to enter Window Number >

Set "1" in [Window Number],
or click the reduced screen from
[Window Screen List].

< Window Interchange >

When more than 2 Windows are
displayed, the order of overlap-
ping windows are switched by
touch. The window behind
comes front when touched.



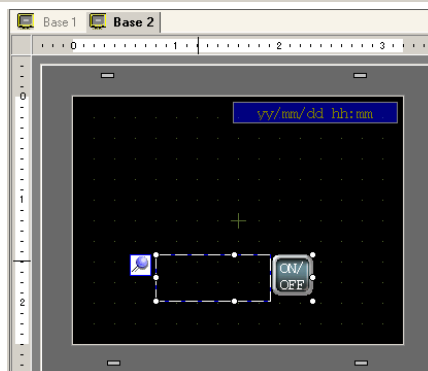
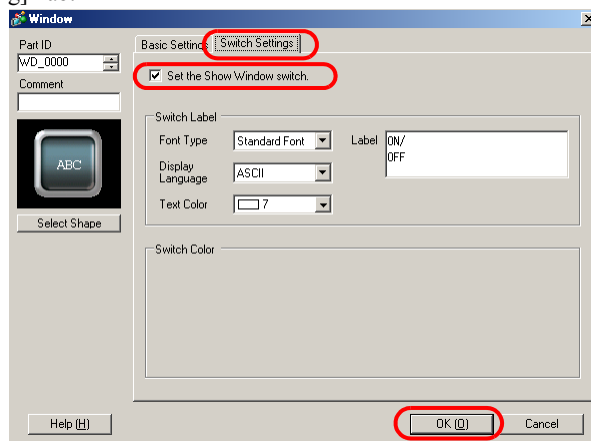
8 Set the switch to display window in [Switch Setting] Tab.

Click [Switch Settings]

Check [Set the Show Window switch].

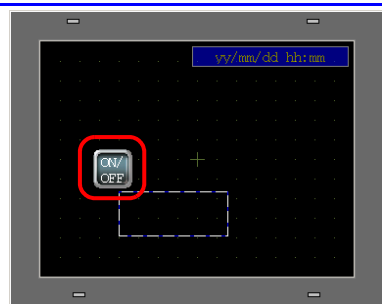
Click [OK(O)].

Window with switch is allocated.



Reference

Select on ly switch to move wherever in the screen.



NOTE

- Other than display of Window with switch, display can be operated by setting on or off the address indicated from the peripheral devices (like PLC).

☞ For more detail, please refer to Reference Manual[Window][Pasting an Image].

2.8 Checking Set Value

1 Check the errors in the setting

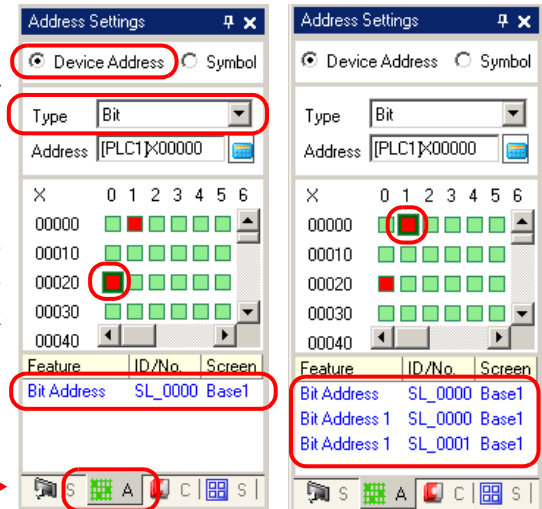
Click [Address Setting Window] tab,
(When it is not displayed, select [View(V)]menu-[Work Space(W)], [Address Setting Window(A)].)

Device Address

Bit

Click X00020 (red square) to open the object list for this address, and see it used in SL_0000. Then click X00001 (red square) to check the object using this address.

Address Setting Window →



2 List the address in the setting of project file

Click [Address Setting Window] tab,

Click X00001.

Double click [ID/No. SL_0001]

to open the screen where the object placed.

Then the address map will open the screen when the object is placed.

Click [Screen Data List Window] to view the list of Parts and Draw allocated in the open screen.

(When it does not appear, select [View(V)]menu-[Work Space(W)]-[Screen Data List Window(L)].)

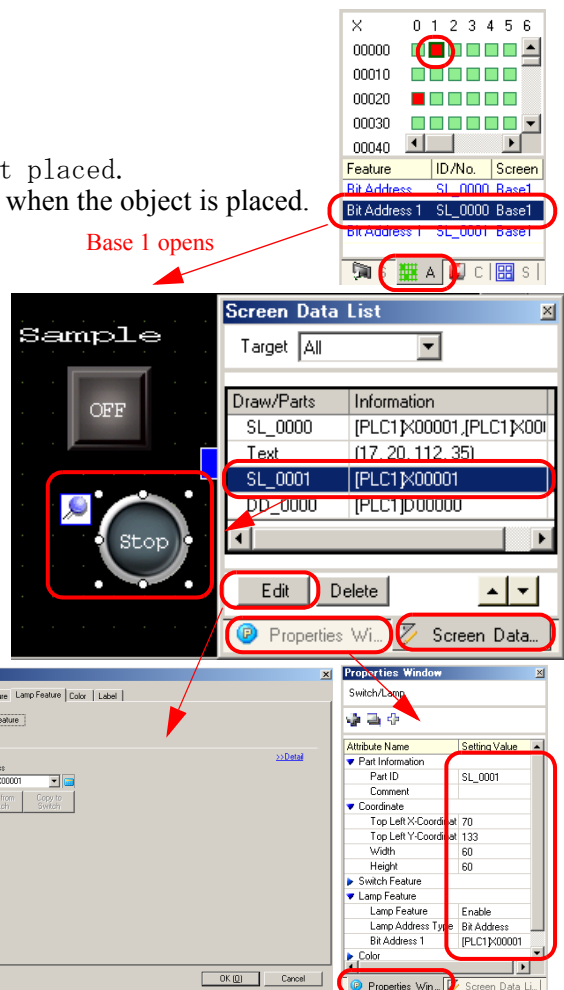
Click [SL_0001]

to make the object selective status and to check the place to put.

Double click [SL_0001] or click [Edit] to change object setting.

Click Properties Window to change set value of items to correct.

Base 1 opens



Reference

Other than those above, there are another checking methods.

1. Cross Reference

Select [Project (F)] menu - [Utility (T)], and select [Cross Reference (R)].

< How to extract >

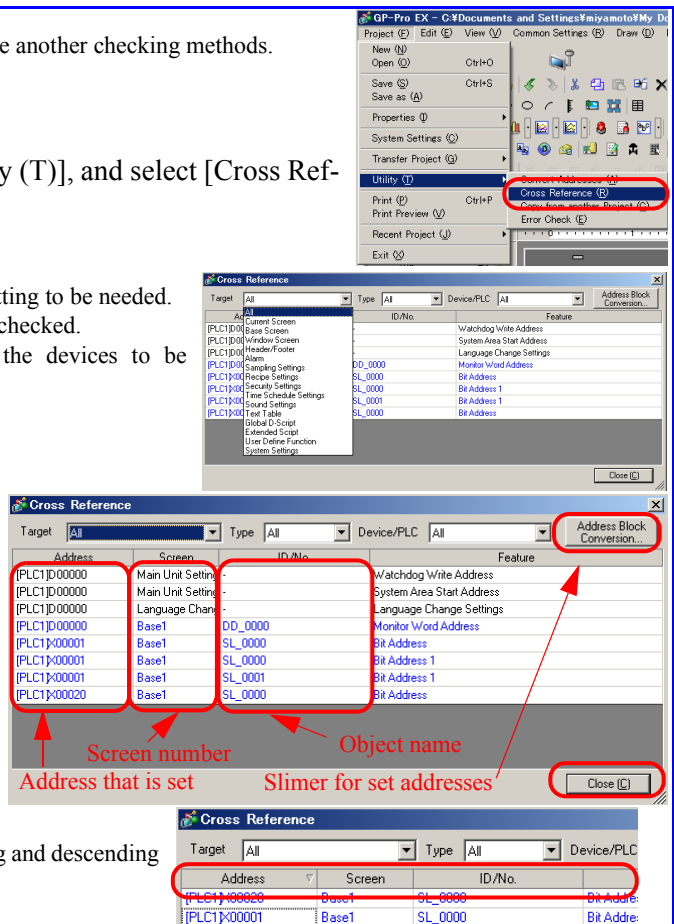
Click [Object] to extract the screen or setting to be needed.

Click [Type] to extract the address to be checked.

Click [Peripheral Devices] to extract the devices to be checked.

Click [Close (C)] if the setting is checked to be correct.

Double-click the part to be corrected, then the screen where the object is displayed. Double-click the object or select [Screen Data List] or [Properties Window] to change setting.



Click each cell to show arrow. Ascending and descending are switched by every click of arrow.

NOTE • When cross reference is set [All] for [Objects], it takes long to collect the all address information from all screen.

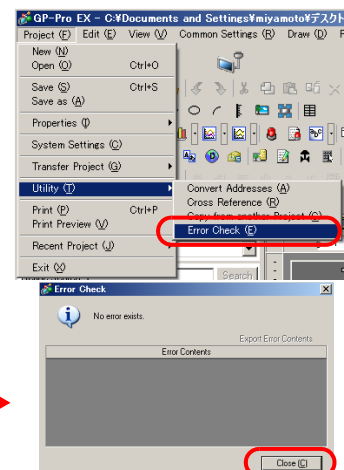
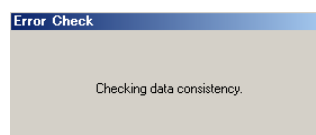
☞ For more detail, please refer to Reference Manual[Confirming the List of Addresses being Used in a Project File][Utility Settings Guide][Batch conversion of address in the project file].

3 Check Error

Click [Project(F)]menu-[Utility(T)]-[Error Check(E)].

Error Check starts and result is listed.

When error is found, check it and click [Close(C)] to correct.



2.9 Saving / Preview / Finishing

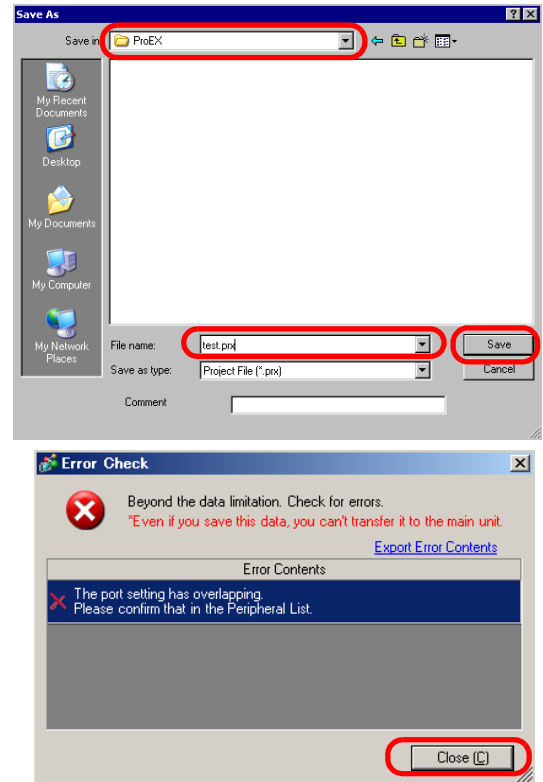
1 Save the created screen

Click  icon

or click [Project(F)]menu-[Save As(A)].

Set [Save in] and [File name] and click [Save].

When error is found, [Error Check] dialog box appears. After checkin error, click [Close(C)] to edit correctly and save it again.



NOTE • File name must be less than 255 in half width.

When the file is not indicated, it is installed in default file, ¥Program Files¥Pro-face¥GP-Pro EX¥Database.

☞ For more detail, please refer to Reference Manual[Starting/Creating/Saving/Finishing].

2 Preview

Enter psuedo data to check the image to be ideal.

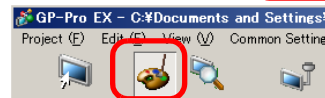
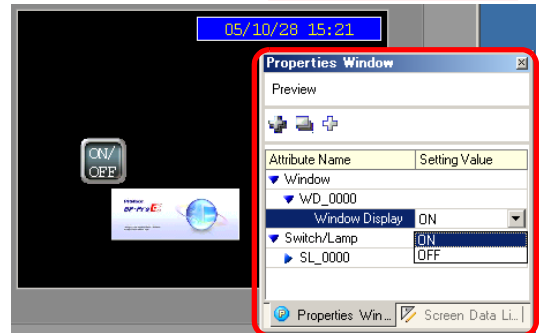
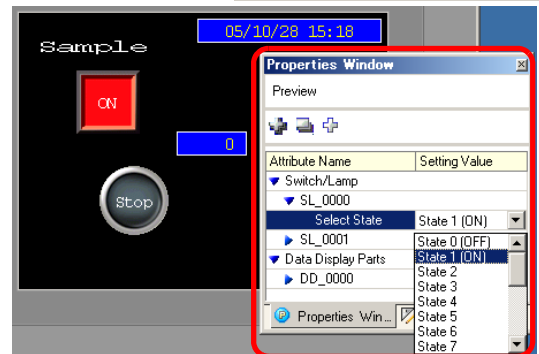
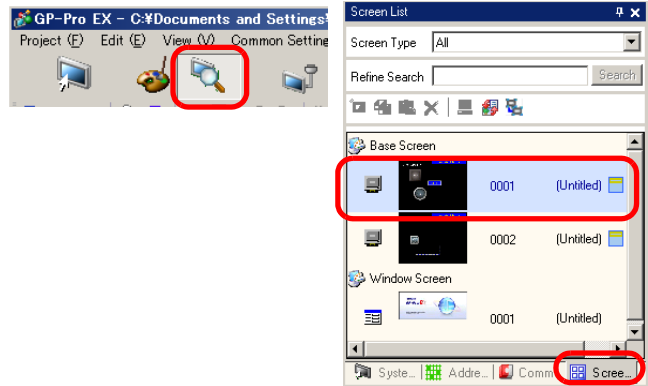
Click the right Preview Icon

Click [Screen List] and double click [Base Screen 0001].


Click the [property window].
Double click [Switch/Lamp SL_0000], and click [Select State] to switch the status and to check the state in running.
Please try for another Parts and Parts in Base Screen 0002.

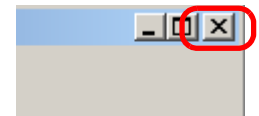
Because each object can be checked, it is useful for document creating by capturing images.

Click Edit to exit Preview.



3 Finish

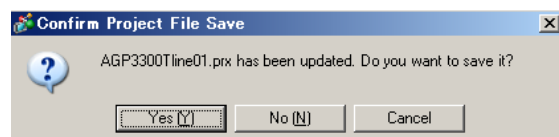
Click the  icon in the upper right of screen or select [Project (F)] menu - [Exit Application (X)].



Reference

If the project file is changed but not saved, application will show [Save the project file] dialog box when finishing.

If [Yes(Y)] is clicked, project file is saved and application is exited, while if [No(N)], project finishes in the latest saving.
Click [Cancel] to go back to the condition before.



2.10 Useful Key Operation for Screen Editing

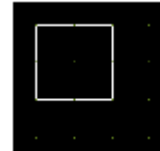
Reference

Various keys are introduced for screen editing.

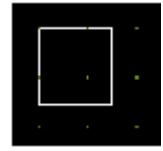
< Useful keys for screen editing >



When it is not set to follow Grid in [View(V)]-[Option Settings]-[Screen Edit Style], picture is drawn along Grid during pushed, while it does not follow when it is set.



Follow Grid



Not follow



For square, a square is drawn; circle for regular circle, straight line for 0 degree or right angle. It is also useful for sector and circular arc, scale, letter string, and parts (except for some a pieces).



Drawing mode expandable from the center. Size is defined by indicating the center of circle and square. It is also useful for sector and circular arc, scale, letter string, and parts (except for some a pieces).



+



Used together with the keysa above.

e.g.) A quadrangle extended frome the center is drawn along grid.



+



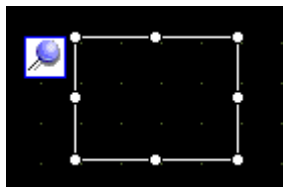
Used together with the keysa above.

e.g.) A square extended frome the center is drawn along grid.

< Useful keys for move and copy >



Like drawing, it is set to follow grid or not.



Selective status of object

Click object to selective status. Drag it and press Alt key while moving.



From the original point, it moves vertically or horizontally. As above, object are used dragging when it is in selective status.



Object is copied. As above, object are used dragging when it is in selective status.



Arrow key moves the image by one dot.

As above, object are moved by one dot with arrow kyes when it is in selective status.



+



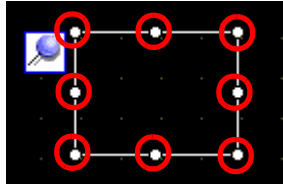
Used together with the keysa above. As above, object are used dragging when it is in selective status.

e.g.) Copy the dragged object and move it vertically or horizontally.

< Useful keys for scaling >



Like drawing, it is set to follow grid or not.



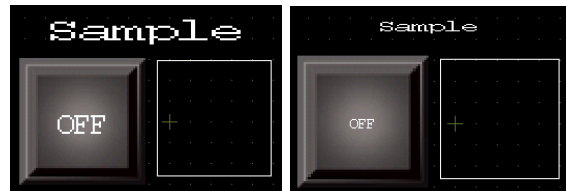
Click the object to make it selective status. Point the cursor (red part) to change ← or →. Drag it with scaling and press ALT key.



Scale at the same magnification.
As above, object are used dragging when it is in selective status.



While multiple object including letter string character are selected.
As above, object are used dragging when it is in selective status, the character size is not changed.

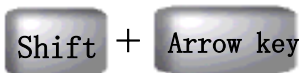


Normal

Ctrl used



Scale the mouse cursor position by dot.
As above, object is selective status and mouse cursor points the part to be scaled.

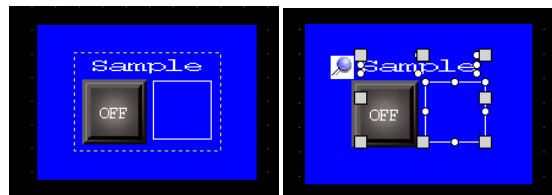


Scale by dot with upper let fixed.
As above, object is selective status, and up and down arrow keys with Shift key pressed scale the image by dot with the upper left fixed.

< Useful keys for object selecting >



When making it selective status by dragging with mouse, only object within the selected area is chosen.
e.g.) If you try to drag the object on the blue square, painted square is chosen. However, with it, only object within the selected area.



Object other than blue square is selective



Click objects to be selected in order to select the multiple object. Usually dragging with mouse select several objects, however, those in the distance are easy to selected with this key.



Click to select a object hidden by another. This is useful for two or more hidden objects by repeating click. The selecting order is the order in which the object is placed.