# SmaPri Designer Operation Manual

**SATO CORPORATION**

**Rev.20240605**

## Introduction

Thank you for purchasing SmaPri. SmaPri is a printing support application for label printing that works with various Android / iOS applications using format files created in the label design creation tool, a SmaPri Designer with the smartphone development tool SmaPri Driver.

This manual explains the basic operations of SmaPri Designer, object settings, tables, and data output. This manual can also be used as the explanation displayed by the help button in the product.

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The 1st chapter

# Product information

# 1-1 Required hardware and software

- Hardware - Software

The following hardware and software are required to use SmaPri Designer.

## - Execution environment

| | |
|---|---|
| Compatible OS (32-bit) | Windows 11, Windows 10 |
| Compatible OS (64-bit) * | Windows 11, Windows 10 |
| | *It runs as a 32-bit application on 64-bit OS. |

| | |
|---|---|
| CPU | Pentium compatible CPU 1GHz or faster recommended |
| Memory | 1024 MB or more recommended |
| Hard disk | 300 MB or more free space |
| Screen resolution** | XGA (1024x768) or higher |
| | **SXGA (1280x1024) or higher recommended |

*Due to USB license key restrictions, use in virtual environments or remote desktops is not supported.

## - Printer

| Class | Model |
|---|---|
| Mobile printer | PW4NX, PW208/PW208NX series, PT408e/PT412e |
| Desktop printer | SCeaTa CT4-LX, L'esprit HC4-LX, FX3-LX Plus, FX3-LX, CL4NX-J Plus series, CL6NX-J Plus series, CL4NX-J series, CL6NX-J series, EV200R series, HA200R series, L'esprit V-ex series, RT308R, ST300R series |
| International model | PW4NX, PW208NX, MB400i/MB410i, CT4-LX, CL4NX Plus, CL6NX Plus, CL4NX, CL6NX, CG208/212/408/412, TG308/TG312, DR308e |

# 1-2 About SmaPri Designer

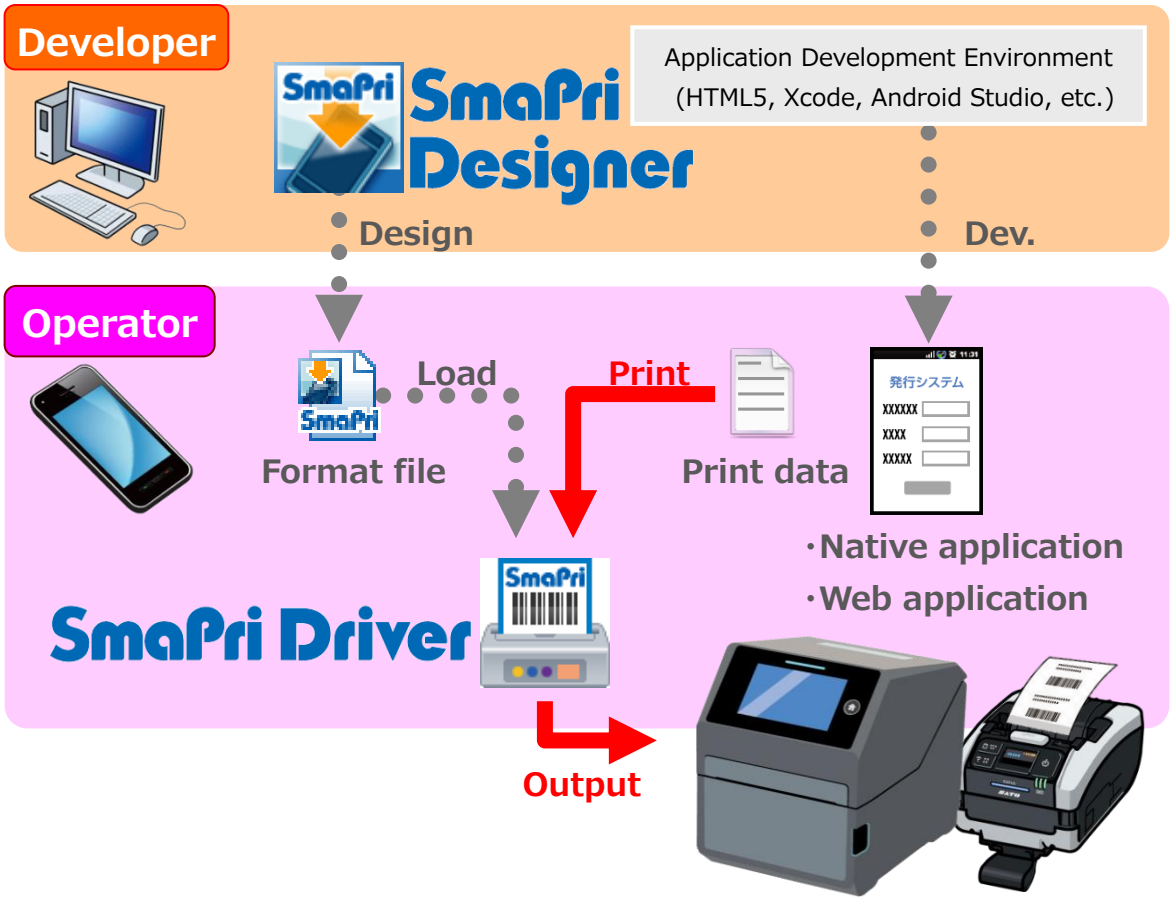
- Product overview

## - Product overview

SmaPri Designer is a label design creation application that runs on a PC.

It creates the format file (*.spfmtz) that SmaPri Driver uses when printing labels.

**SmaPri Designer and SmaPri Driver relationship diagram**



# 1-3 Install / Uninstall

- Install - tax rate setting - Uninstall

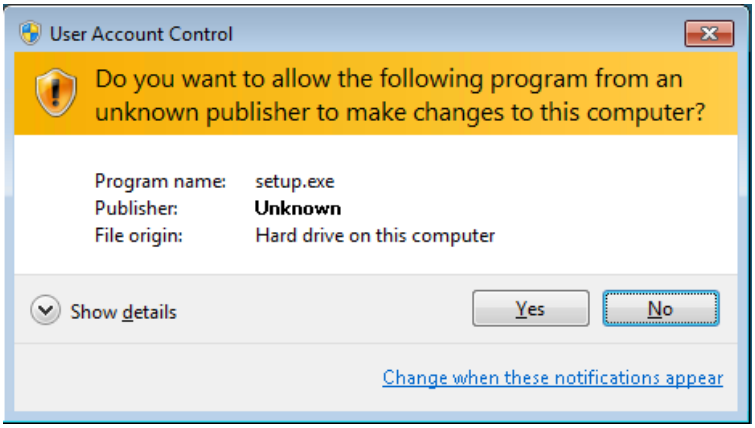
To install SmaPri Designer, log in as a user with Administrator privileges.

If an older version of the software is already installed, the new version can be installed over it.

## - Install

1) Run the SmaPri Designer setup file.

2) User Account Control (UAC) is displayed. Select either "Allow" or "Yes" according to the dialog.

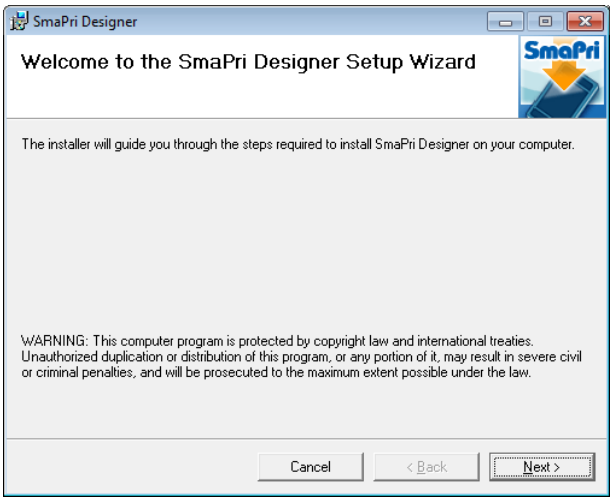



3) The installer starts and checks the execution environment.

If .NET Framework 4.5 is not installed, the Microsoft installer starts automatically.

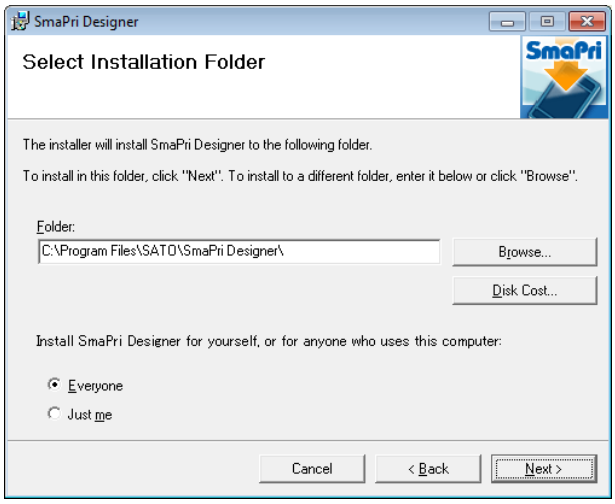
Follow the on-screen directions to install the software.

4) When the setup wizard is displayed, click "Next".

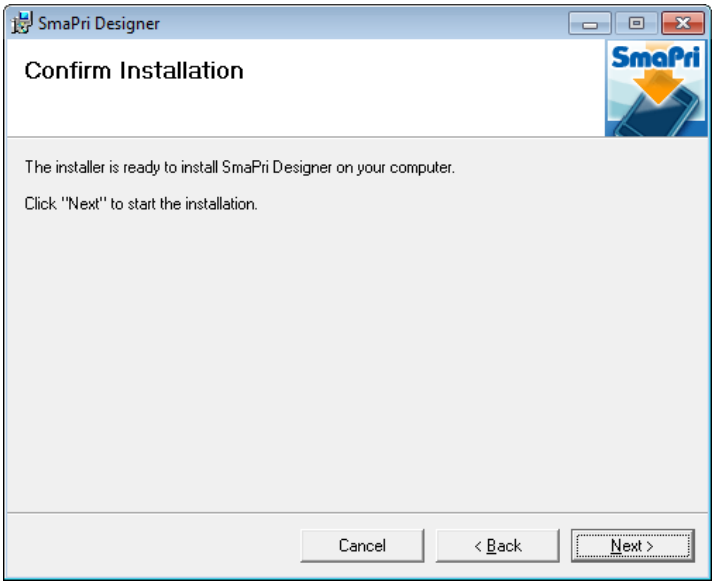


5) Please make sure to read through the license agreement as it states important terms and condition for the use of the product.

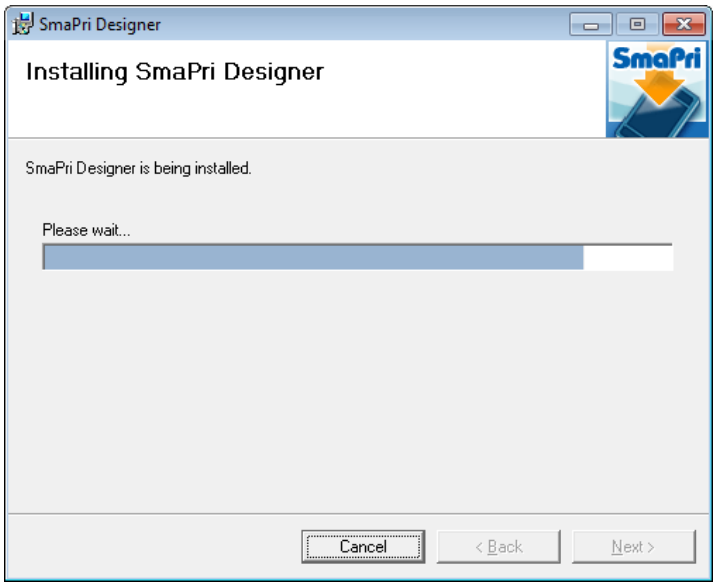
6) Click "Next". (Select "Browse", you can change the installation folder.)



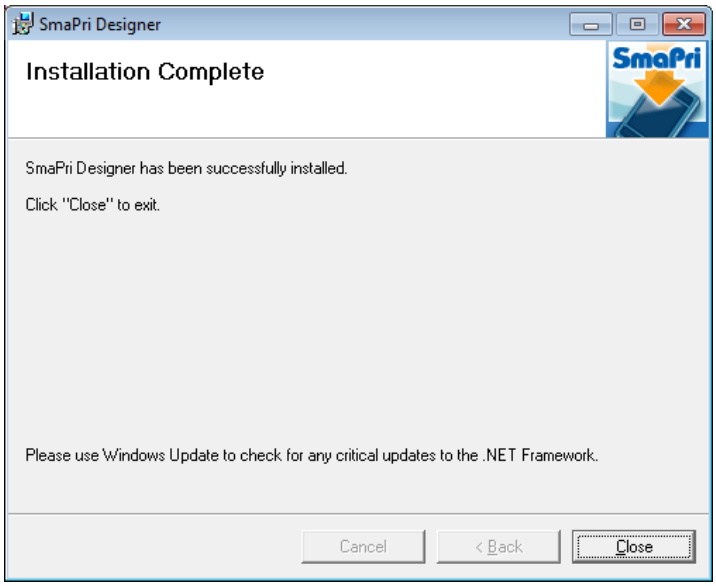

7) Click "Next".



8) The setup wizard installs the software.




9) Click "Close".




10) Connect the USB key (HASP) to a USB port.

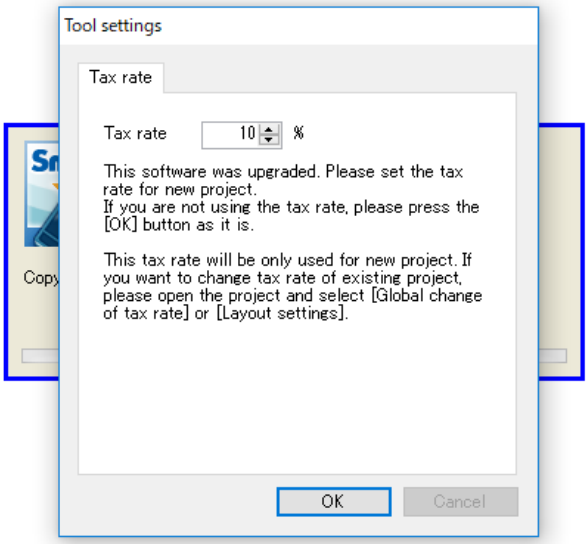
**Note: Connecting the USB key (HASP)**
If you accidentally connect the USB key (HASP) before the software finish installing, it will not be correctly recognized. If the USB key (HASP) was accidentally connected, please disconnect it and reinstall the software.

11) Installation of SmaPri Designer has completed. The program icon appears on the desktop.

## - Tax rate setting when starting for the first time.

The [Tax rate setting] screen is displayed when SmaPri Designer starts for the first time or a SmaPri Project file opens for the first time.

Change the tax rate if necessary and click [OK] to confirm.




**notes:**
The tax rate set on this screen is the value used when a new project is created.
If you need change tax rate to existing Project file, you can use the [tax rate batch change].
For details, please refer "5-12. Set the tax rate".

## - Uninstall

1) Open the [Control Panel].

2) Select [Programs and Features].

3) Select "SmaPri Designer" on the installed programs list and click the [Uninstall] or [Remove] button.

4) A confirmation message is displayed. Select [Yes] to uninstall.

# 1-4 Tool display language

- Option settings

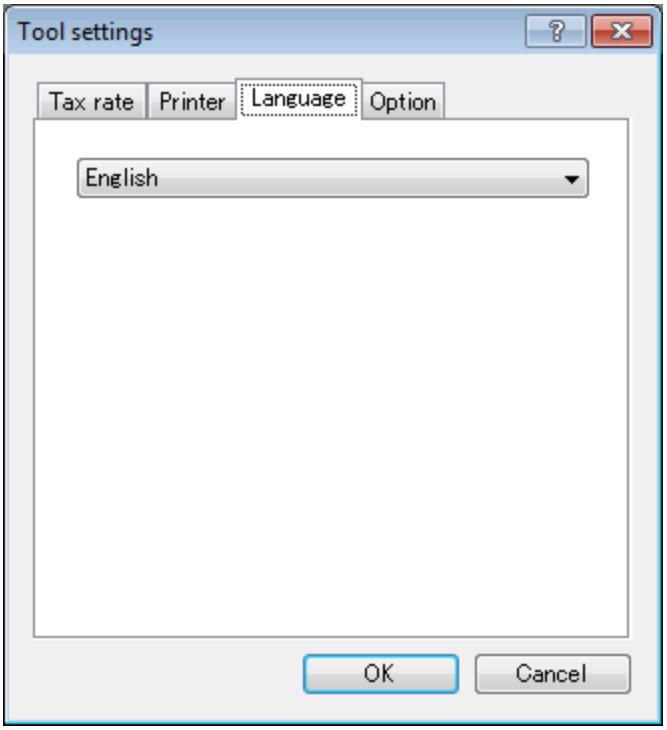
SmaPri Designer language is displayed in the following languages as it depend the installed operating system language.

Operating system language is Japanese: Displayed in Japanese
Operating system language is not Japanese: Displayed in English

## - Change the language

1. On the menu bar, select [Tool] > [Settings].

2. Select [Language] with the language tab.



The 2nd

# Basic Operation

# 2-1 Display of the buttons

- select/unselect

Many kinds of actions are performed when you click the buttons on the SmaPri Designer window.

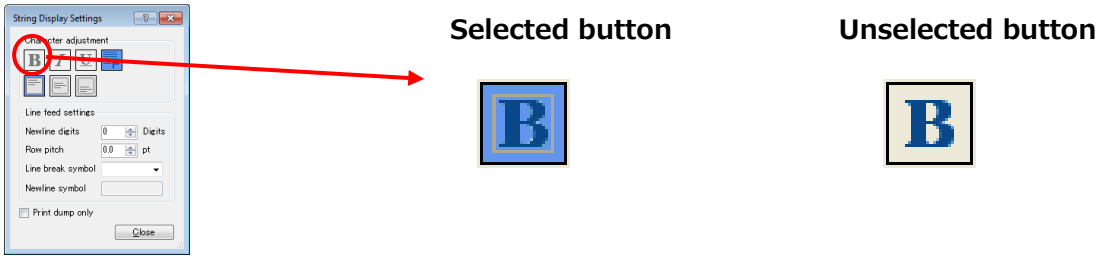
The selection state of the buttons in SmaPri Designer is shown below.

(The background color and the selection color may differ according to the settings of the operating system of the PC being used.)

## - Object bar selected state/unselected state

## - Toolbar selected state/unselected state

## - Data window selected state/unselected state



# 2-2 Mouse cursor

- select/change

The shape of the mouse cursor displayed in SmaPri Designer changes according to the operation that can be performed at that time.

* The mouse cursor shapes may differ according to the PC settings.

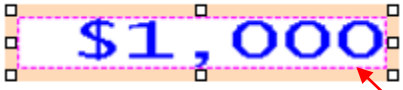
**Normal cursor** : The normal cursor.

**Cursor when pasting objects :** The state when objects are ready to be pasted.

**Selected object cursor** : Moves the position of the pasted object.

**Size modification cursor** : Changes the object size.

## - Selected objects and the selected object cursor

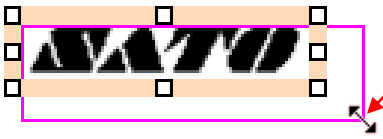



When an object is selected, a **light-pink frame** is displayed as shown in the figure to the left.

**The selected object cursor** can move the position of the object by dragging the object.

The object can also be moved by pressing the arrow keys on the keyboard while holding down the Ctrl key.

## - Selected objects and the size modification cursor



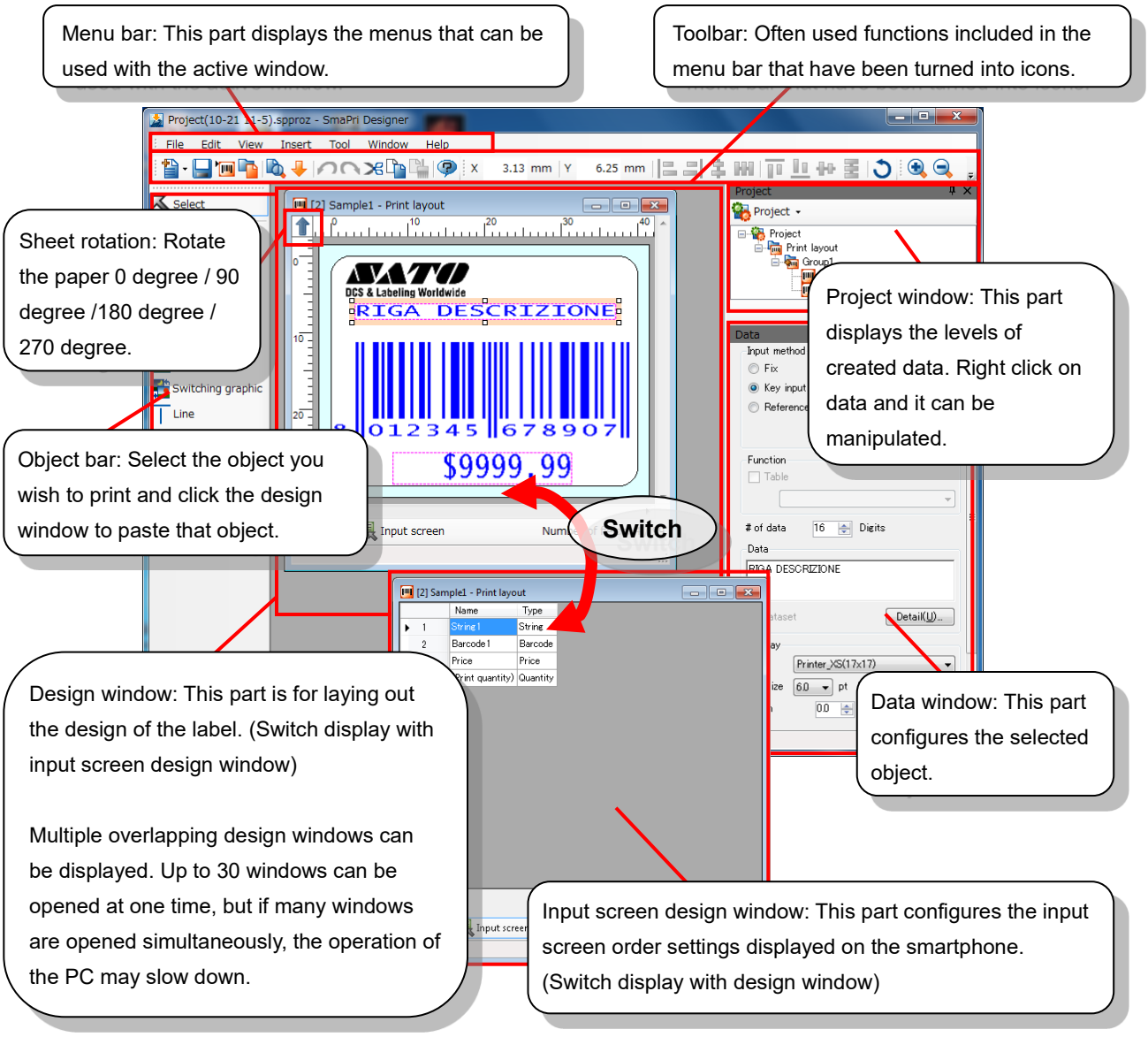
If you move the cursor to the edge of an object, the cursor changes to the **size of modification.** Drag this cursor and you can change the size of certain objects like barcodes and graphics.

# 2-3 Window configuration

- Window configuration

The SmaPri Designer window has the following window configuration.

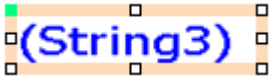
The screen configuration can be modified by showing or hiding items and by moving windows.




## Basepoint of object

The basepoint of selected object is indicated by green square and there are two patterns.

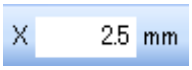
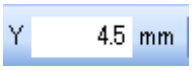
- Single object (not grouped): Upper-left corner of the object.
- Grouped objects: Vertical position and horizontal position, respectively the minimum value in the group.



# 2-4 Toolbar

- Toolbar

You can use the operations below by clicking the buttons on the toolbar.

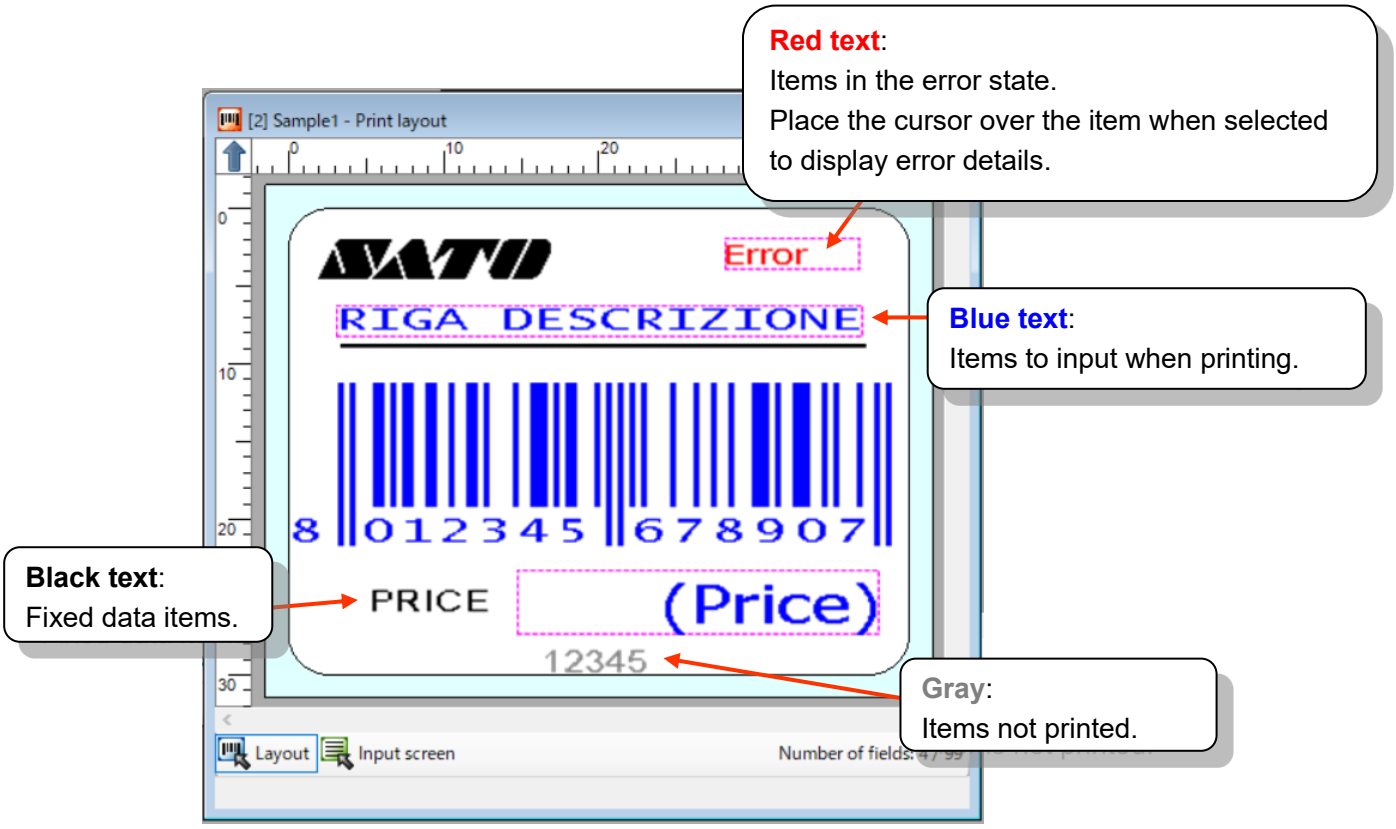
| Button | Function name | Function |
|---|---|---|
| | New | Creates a new file. |
| | Save project | Saves the project file |
| | Import sample | Accesses the sample folder and imports a file |
| | Add file | Imports a tool related file |
| | Preview test print | Print preview check and label print instruction window. |
| | Data output | Writes the created data to the specified output destination |
| | Undo | Undoes the operation (10 max) |
| | Redo | Restores the operation (when [Undo] is used, 10 max) |
| | Cut | Cuts the selection |
| | Copy | Copies the selection |
| | Paste | Pastes the selection |
| | Show help | Displays the help |
|  | Horizontal position | Specifies the horizontal position of the selected object<br>After entering a numeric value, press the Enter key to confirm |
|  | Vertical position | Specifies the vertical position of the selected object<br>After entering a numeric value, press the Enter key to confirm |
| | Align left | Aligns multiple selected objects to the left |
| | Align right | Aligns multiple selected objects to the right |
| | Align horizontal center | Horizontally aligns multiple selected objects to the center |
| | Align even horizontal | Aligns the horizontal position of multiple selected objects to be even |
| | Align top | Aligns multiple selected objects to the top |
| | Align bottom | Aligns multiple selected objects to the bottom |
| | Align vertical center | Vertically aligns multiple selected objects to the center |
| | Align even vertical | Aligns the vertical position of multiple selected objects to be even |
| | Rotate | Rotates the selected object |
| | Zoom in | Zooms in the window display |
| | Zoom out | Zooms out the window display |
| | Normal | Switches the normal display size |
| | Align with screen | Fits the display size to the screen |

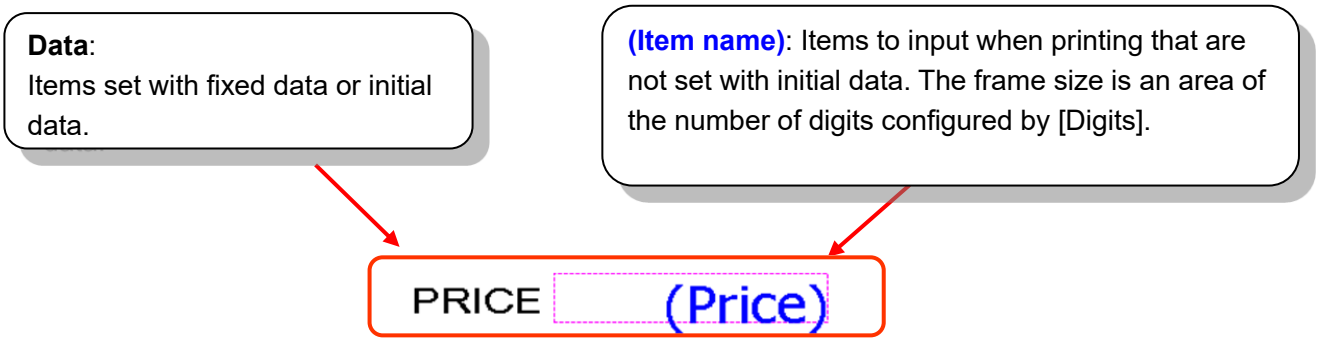
# 2-5 Design window

- Design window

On the design window, you can paste objects and change their size.

You can check the status of items by their color and how they are displayed.

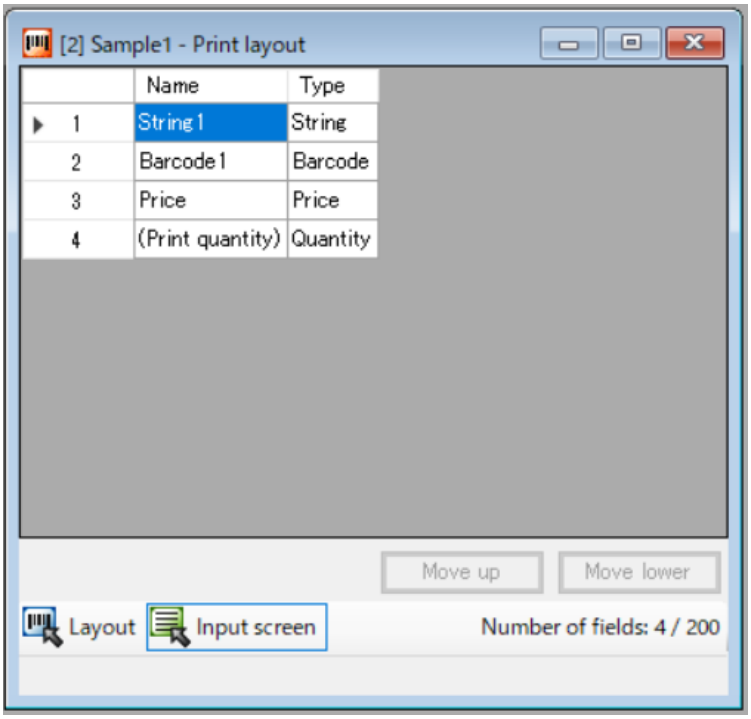


# 2-6 Input screen settings

- Input screen settings

You can change the settings for the input order when printing.

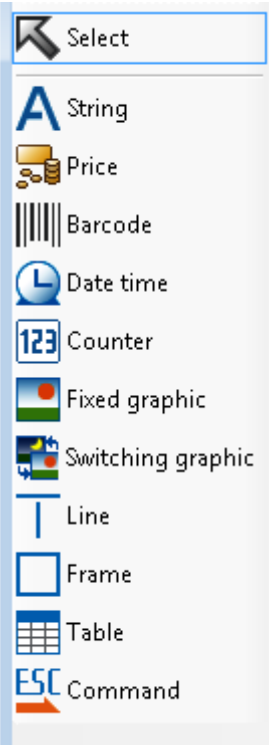



| Setting items | Contents |
|---|---|
| **Move up** | Moves one selected row up in the list. |
| **Move lower** | Moves one selected row down in the list. |
| **Setting screen** | |
| **Name** | Shows the item name of "Key input (data)" objects pasted on the layout screen. |
| **Type** | Shows the type of "Key input (data)" objects pasted on the layout screen. |

# 2-7 Object bar

- Object bar

Paste the objects listed below on the design window to create the layout.

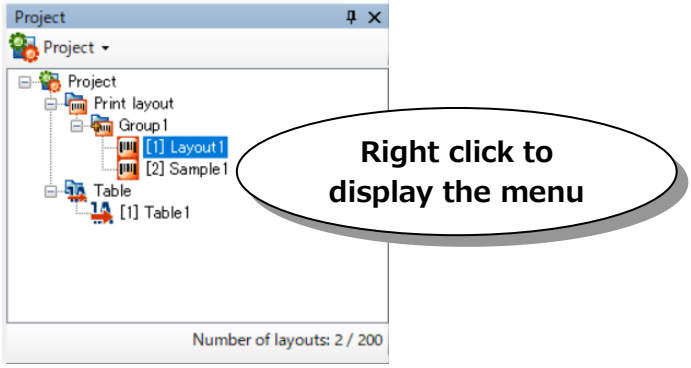



| Objects | Contents |
|---|---|
| **Select** | Selects objects on the design window. |
| **String** | Pastes a string object. |
| **Price** | Pastes a price object.<br>The tax rate and discount rate can be configured. |
| **Barcode** | Pastes a barcode object. |
| **Date time** | Pastes a date and time object. |
| **Counter** | Pastes a counter object. |
| **Fixed graphic** | Pastes a fixed graphic object. |
| **Switching graphic** | Pastes a switching graphic object. |
| **Line** | Pastes a line object. |
| **Frame** | Pastes a frame object. |
| **Table** | Pastes a table object. |
| **Command** | Pastes a command object. |

# 2-8 Project window

- Project window

The project window is the part that displays and manipulates the list of files in the project.




The types of files below can be displayed and manipulated.

| Type | Menu | Details |
|---|---|---|
| Project | New group | Creates a new print layout group |
| | New print layout | Creates a new print layout |
| | New table | Creates a new table |
| | Graphic table | Creates a new graphic table |
| | New graphic | Creates a new graphic |
| | Project settings | Project operations |
| Print layout folder | New group | Creates a new print layout group |
| | Paste *1 | Pastes a print layout group |
| Print layout group | New print layout | Creates a new print layout |
| | Cut | Cuts a print layout group |
| | Copy | Copies a print layout group |
| | Paste *1 | Pastes a cut or copied print layout |
| | Delete | Deletes a print layout group |
| Print layout | Open | Opens the print layout editing window |
| | Cut | Cuts a print layout |
| | Copy | Copies a print layout |
| | Delete | Deletes a print layout |
| | Settings | Opens the print layout settings window |
| Table folder | New table | Creates a new table |
| | New graphic table | Creates a new graphic table |
| | Paste *1 | Pastes a cut or copied table file |

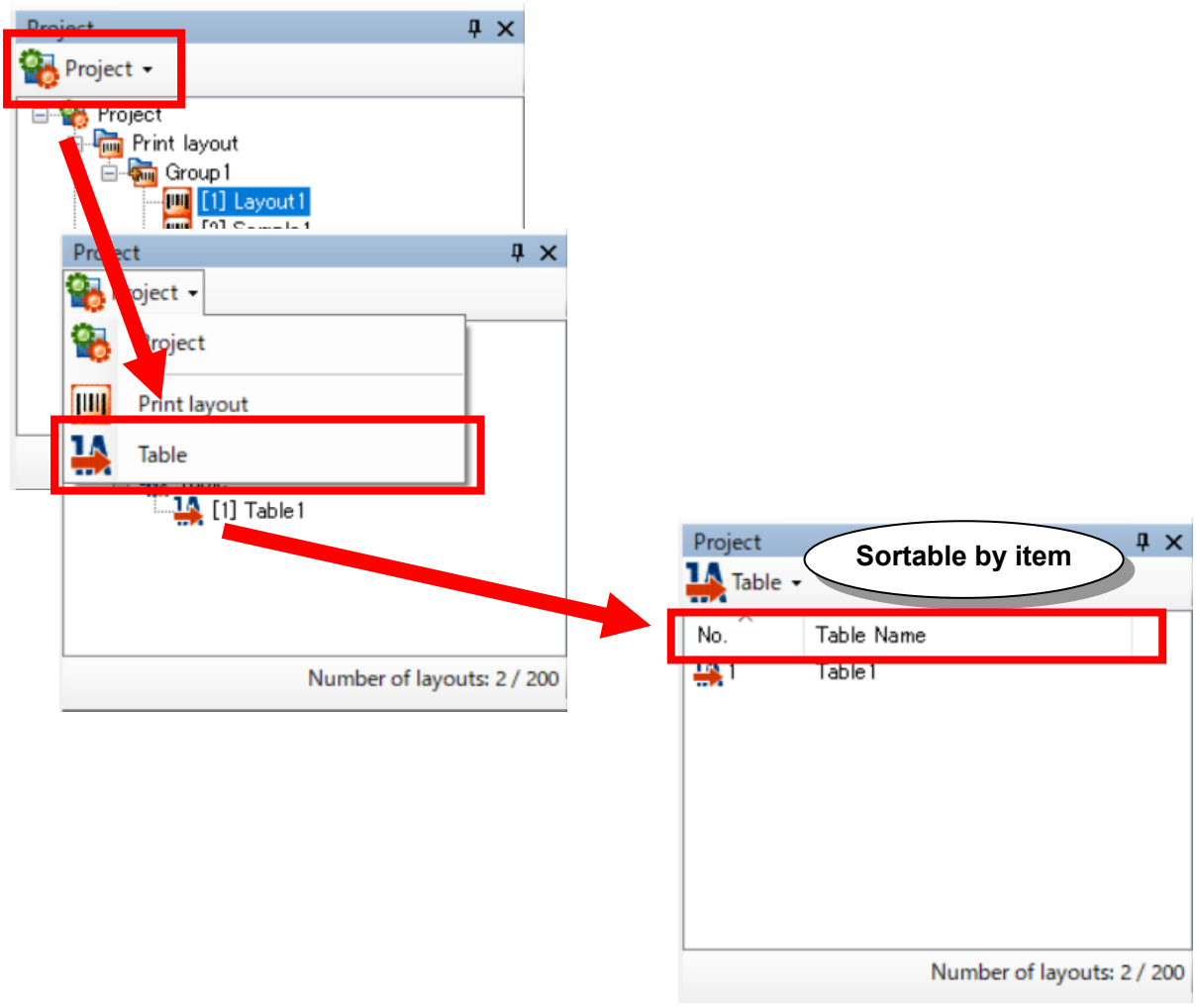
| | | |
|---|---|---|
| Table | Open | Opens the table editing window |
| | Cut | Cuts a table |
| | Copy | Copies a table |
| | Delete | Deletes a table |
| Graphic table | Open | Opens the graphic table editing window |
| | Cut | Cuts a graphic table |
| | Copy | Copies a graphic table |
| | Delete | Deletes a graphic table |

Note 1: When pasting, for example, when copying and pasting a print layout file, it can be pasted when the level directly above it is selected, in this case a print layout group.

## Switching the display

The project window can display items by type such as layout and table, in addition to the project tree view.

You can easily check free print layout numbers by displaying items by type.

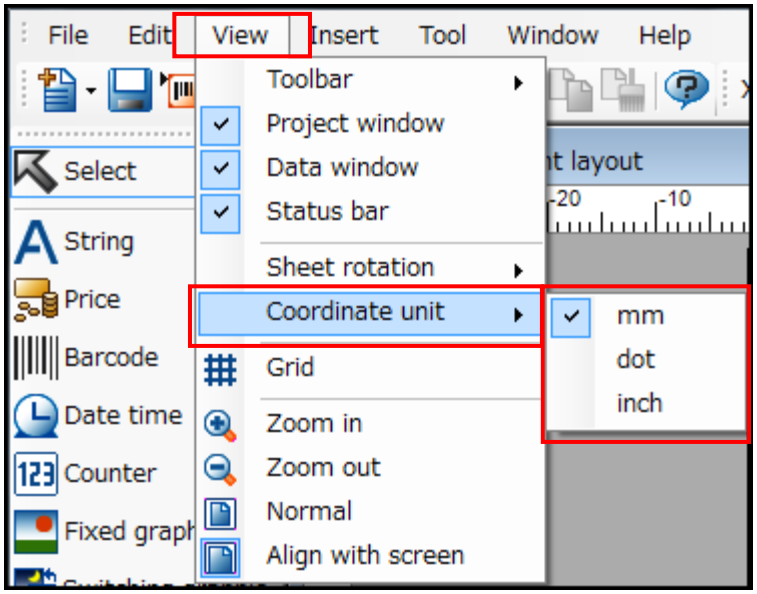


# 2-9 Coordinate unit

- Coordinate unit

Choose unit of length from mm / dot / inch.

As the selected unit is saved in the SmaPri Designer settings, the unit will be used for all files in the project.



The 3rd chapter

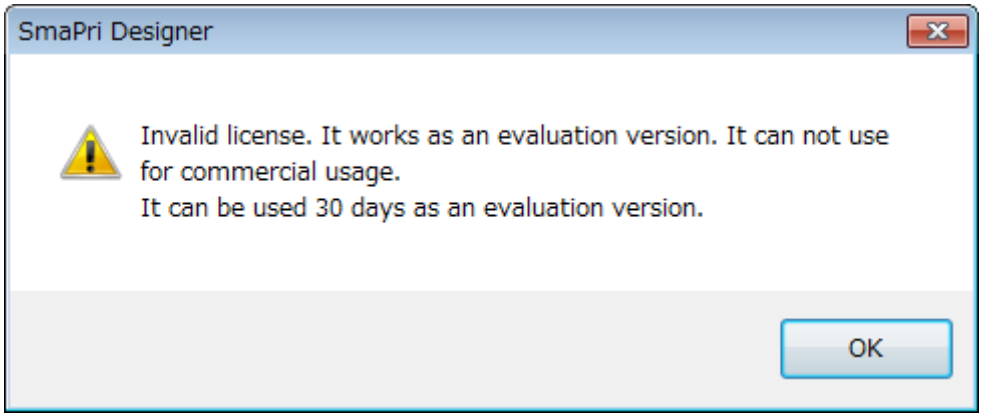
# Basic Setup

# 3-1 Startup of SmaPri Designer

- Startup

When starting SmaPri Designer from a shortcut icon and when displaying a created project file, the USB type HASP which is your license key must be plugged into the PC to be used and recognized.

If the license key is not recognized, the following message is displayed.




**Note: The license key**

When use format files (printing files) output when the license key cannot be recognized, a warning message will display when printing from SmaPri Driver.

SmaPri Designer will no longer start when the 30-day evaluation period has expired. Please purchase a license.

# 3-2 Select the project

- Project

This window is displayed when SmaPri Designer starts.

Select whether to create a new project or to specify an existing project file.

| Setting items | Contents |
|---|---|
| **New** | Creates a new file. |
| **Browse** | Browses for an existing file. |
| **Cancel** | Quits the selection window |

# 3-3 Select the printer

- Select the printer

This window displays the list of printers that are compatible with SmaPri.
Select the printer to connect to with the smartphone on the printer icon list.
After selecting the printer, click the [Next] button to go to the next window.

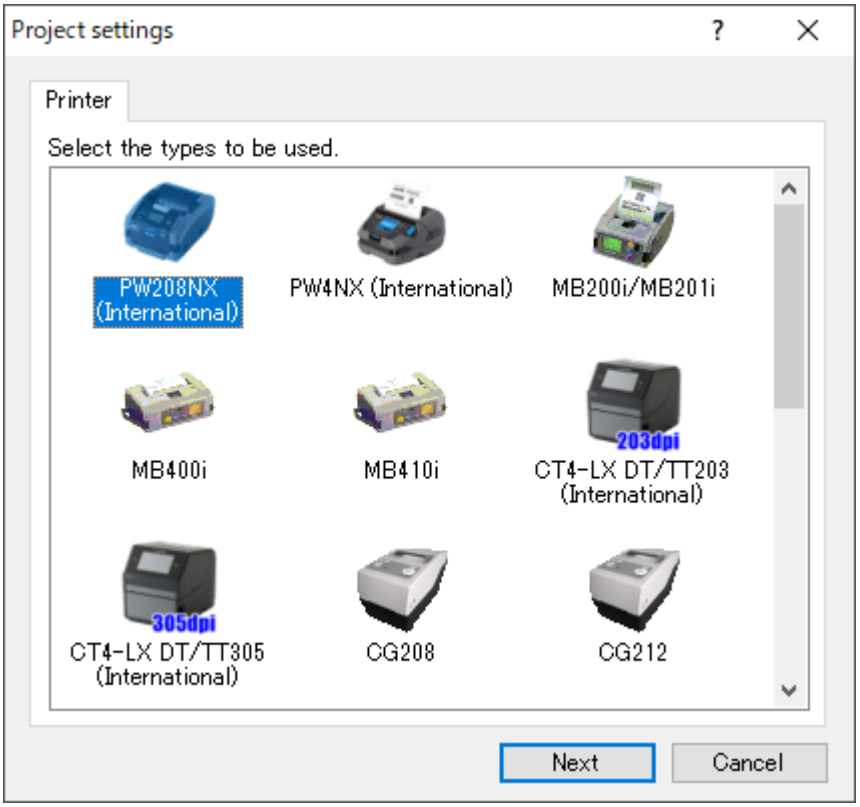
When SmaPri Designer is installed and first started, either the Japanese printer category or the international printer category is displayed according to the language of the operating system.

- Operating system language is Japanese -> Displays Japanese printers
- Operating system language is not Japanese -> Displays international printers

## - Select the printer

1) On the menu bar, select [File] > [Project settings].

2) The printer can be changed from the printer tab.



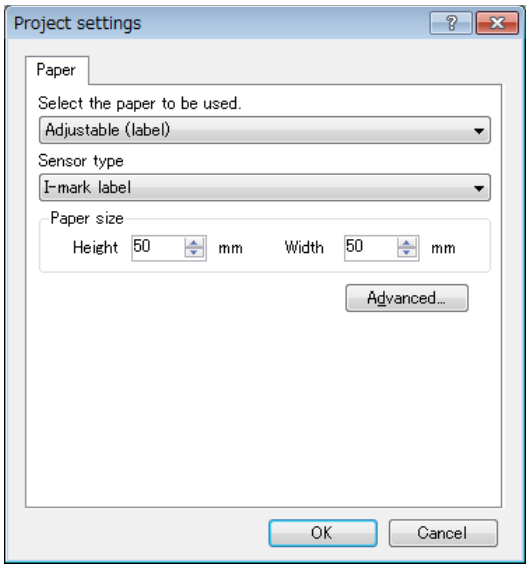

The printer selected on this window affects the maximum and minimum paper sizes, the font and barcode types, and the printer control functions, so always select the printer that will be used.

# 3-4 Paper settings

- Paper settings

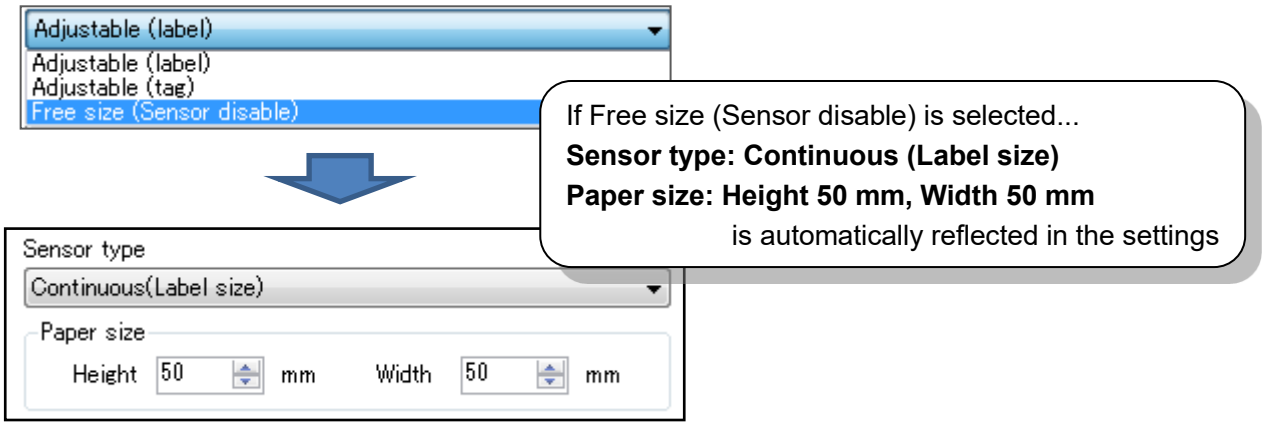
Set the type of paper to be used, the sensor type and the paper size.

Values modified on the layout default settings window become the initial values when creating subsequent new layouts.




| Setting items | Contents |
|---|---|
| **Select the paper to be used** | Selects the paper to use. |
| **Sensor type** | Selects the sensor type to use. |
| **Paper size** | Enter the paper size to use. |

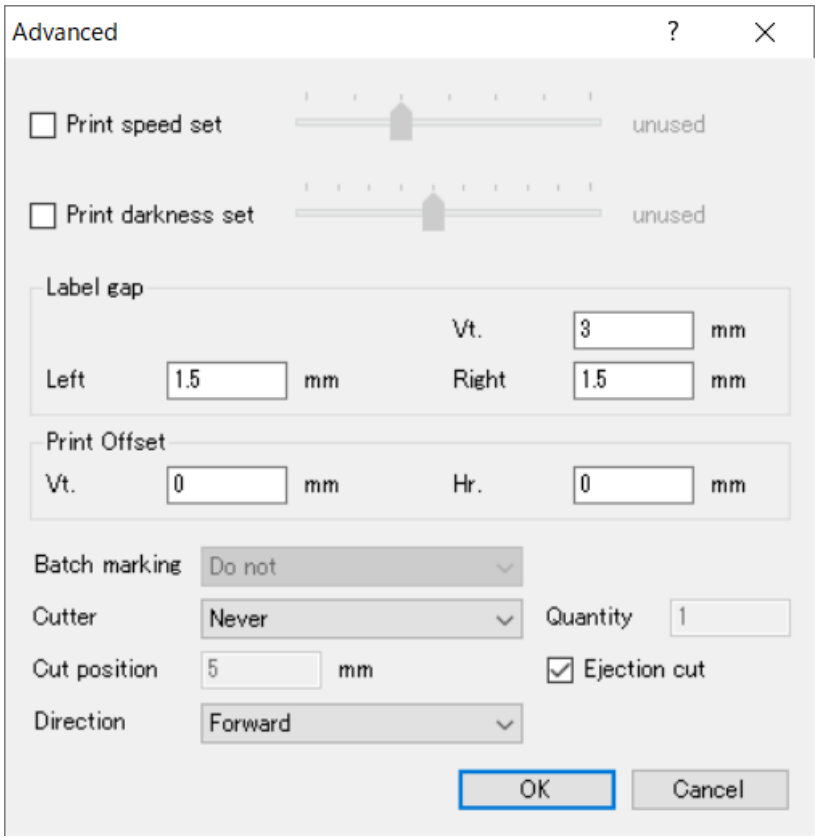
Sheets typically used with the configured printer are preregistered on the sheet selection list. If you select a sheet size other than free size, those settings are automatically reflected in sensor type and sheet size. After selecting these sheets, the sensor type and sheet size can be modified.



**- Advanced**

The advanced settings configure the details of the printer operation.

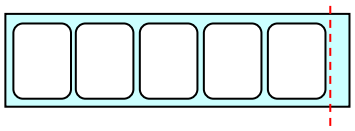
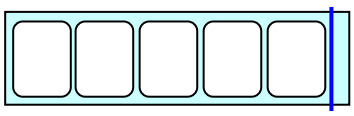
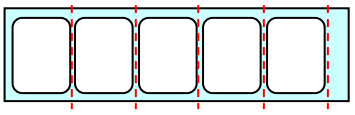
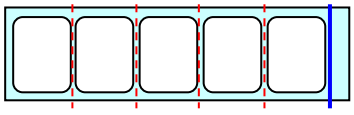
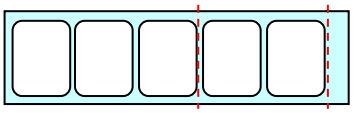
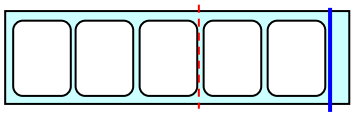
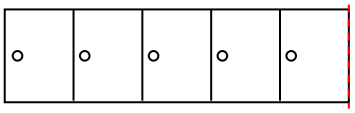
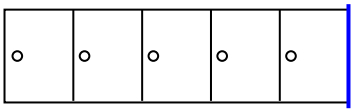
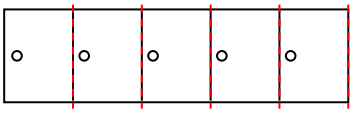
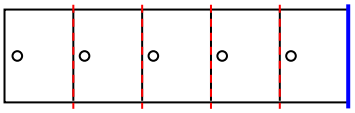
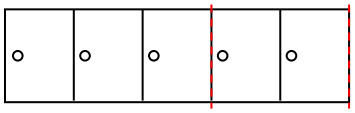
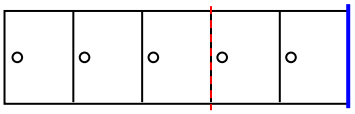
Values modified on the layout default settings window become the initial values when creating subsequent new layouts.




| Setting items | Contents |
|---|---|
| **Print speed set** | Move the slider bar by dragging it to specify the print speed for the printer. If the check box is not selected, the setting on the printer is valid. |
| **Print darkness set** | Move the slider bar by dragging it to specify the print darkness for the printer. If the check box is not selected, the setting on the printer is valid. |
| **Label gap** | Specifies the horizontal and vertical gap size for the label. |
| **linerless label** | If the check box is selected, the label gap setting is invalid. |
| **Print Offset** | Sets the overall print offset values for the layout. |
| **Batch marking** | Configures whether or not to print batch marks. |
| **Cutter** | Specifies the cutting method. |
| **Quantity** | When cutting at the specified quantity is selected, specifies the quantity to cut at. |
| **Cut position** | Specifies the cut position from the center hole. |
| **Ejection cut** | Configures whether or not to perform an ejection cut after printing finishes. |
| **Direction** | Specifies the paper ejection direction. |

## - About cutter mode

The printer will operate as displayed in the diagram below when each cutter operation settings are set.

| Label | 『Ejection cut』 Checked | 『Ejection cut』 No Check |
|---|---|---|
| **Never** |  |  |
| **Each cut** |  |  |
| **Cut the specified quantity** When printing 5 pieces wit the settings that cut the third sheet. |  |  |
| **Tag** | **『Ejection cut』 Checked** | **『Ejection cut』 No Check** |
| **Never** |  |  |
| **Each cut** |  |  |
| **Cut the specified quantity** When printing 5 pieces wit the settings that cut the third sheet. |  |  |

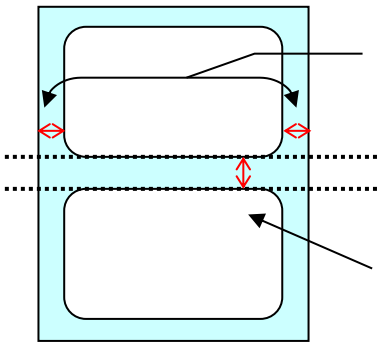
cutter

RT308R The cut position that when printer is used FEED button offline state.

ST3xxR The cut position that when printer is used ejection cut button.

## - Explanation of paper setting terms

### ・Label gap



**Left/right (horizontal)**

The distance from the edge of the label backing on the label.

**Vt. (vertical)**

The distance from the end of the previous label to the start of the next label.

*Left/right: 1.5 mm, Vt.: 3 mm are SATO's normal values.

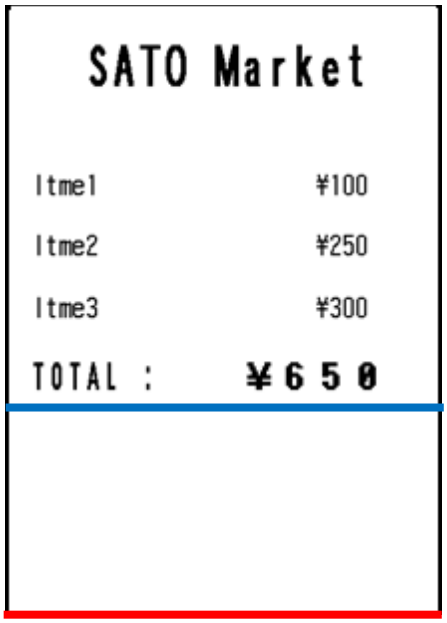
## ・Journal paper

Journal paper is like a receipt paper.

The sensor type can be selectable from “Receipt paper (Label size)”,” Receipt paper (Print end position)”,"Receipt paper(variable length)”

When “Receipt paper (Label size)” is selected, the paper size specified in the layout settings will be applied.

When “Receipt paper (Print end position)” is selected, printing will stop at the end position of print objects.

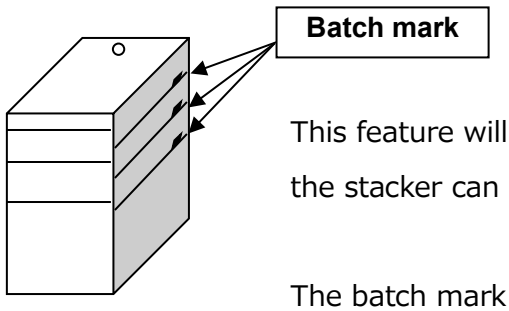



**The stop position of “Print end position”**

**The stop position of “Label size”**

“Variable length” is used to print multiple layouts in combination. When “Variable length” is used to print single layout, it is printed to layout setting size Similar to the “Label size”.

## ・Batch marking




This feature will apply ink on the side of the tag so tags stacked in the stacker can be easily sorted.

The batch mark is applied on the side of the first tag.

The space that it is possible to put batch marks on is the specified quantity and print unit.

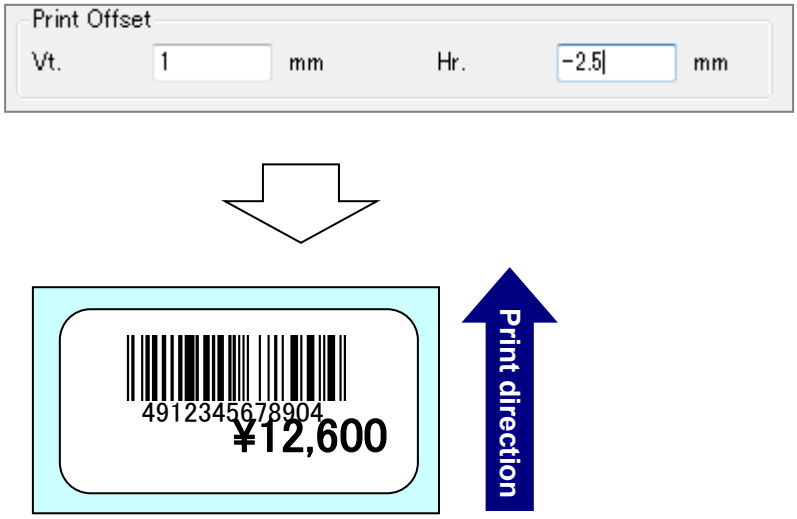
## ・Print offset

Print offset corrects the overall print position.

When the printed position of the tag deviates from the intended position, even if the paper was correctly set, you can adjust the print position by entering the offset values.

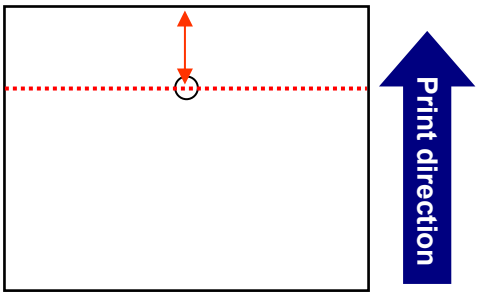
For vertical, positive values move down, negative values move up.

For horizontal, positive values move to the right, negative values move to the left.




## ・Cut position (Only when tag is selected)

The distance between the center point of the tag's center hole and the cut position.




## ・Ejection cut

A feature that feeds the printed paper inside the printer and cuts it when printing is finished.

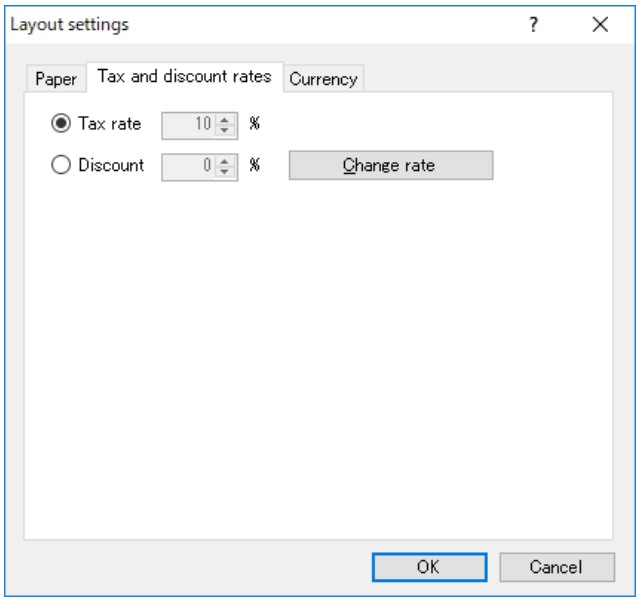
# 3-5 Tax and discount rate settings

- Tax and discount rate

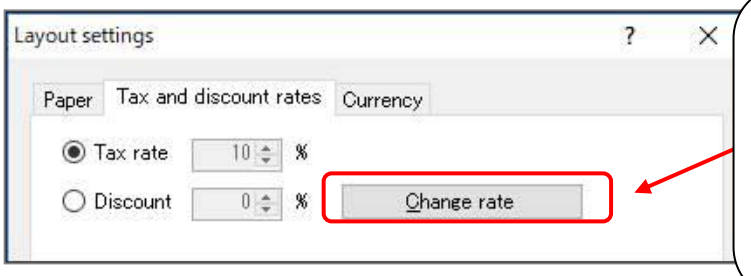
This tab sets the calculation method for price items on the layout to either a tax calculation or discount calculation.

On a single layout, either a tax calculation or discount calculation can be configured for the calculation setting.

The values set on this tab are reflected in the initial values when creating new layouts, so you can save the work of having to set these values for each layout by setting the standard values in advance.

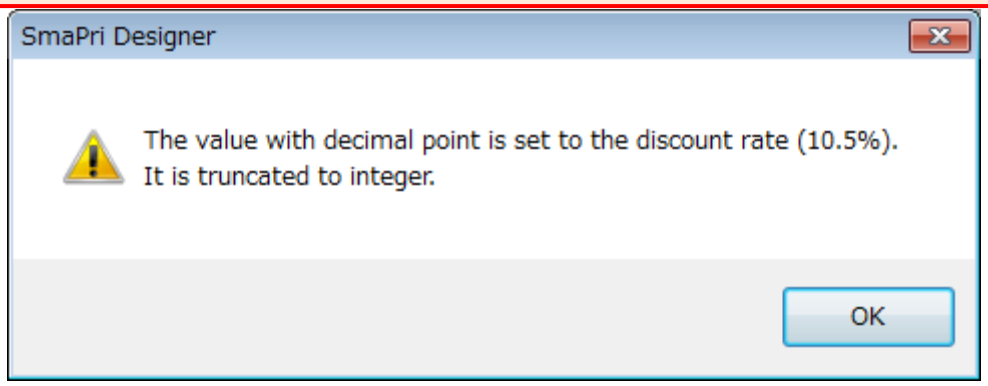



| Setting items | Contents |
|---|---|
| **Tax** | This item makes it possible to set the tax rate calculation with price items on the layout. The following values can be calculated.<br>1. With the value that was input as the unit price, the tax inclusive price and tax price value can be calculated.<br>2. With the value that was input as the tax inclusive price,<br>the unit price and tax price value can be calculated. |
| **[Change tax rate] button** | The tax rate value can be modified.<br>The tax rate value can only be set as an **integer**. |
| **Discount** | This item makes it possible to set the discount rate calculation with price items on the layout.With the value that was input as the price before discount, the price after discount and the discount amount can be calculated。 |




Different than the tax rate, the discount rate often has a set value that differs for each layout, so it is only displayed on the layout default settings window.
On the layout settings window, not just the tax rate, but the discount rate can also be changed.

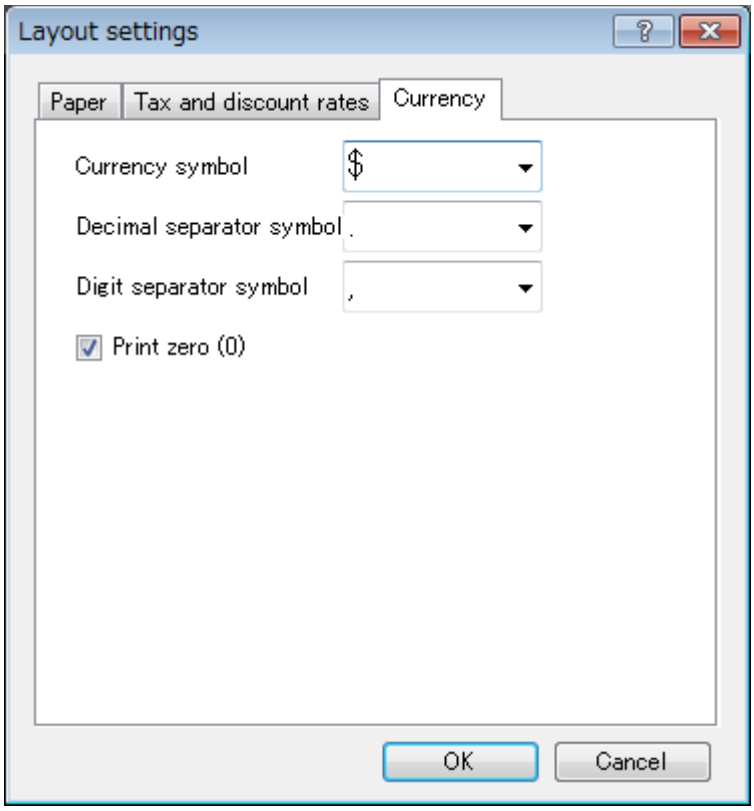
Note: Setting the right of the decimal point
If the decimal point of the value has been set in the older version, the following warning message is displayed and the decimal point is truncated to integer.



# 3-6 Currency settings

- Currency settings

This tab is to configure the displayed symbols that include the currency symbol for the price items on the layout. The initial value is the currency symbol configured on the PC.




| Setting items | Contents |
|---|---|
| **Currency symbol** | Select from the "¥", "$", and "€" symbols, or you can also enter the desired text within 5 characters. |
| **Decimal separator symbol** | Select from the "." (period) and "," (comma) symbols, or you can also enter the desired text within 3 characters. |
| **Digit separator symbol** | Select from the "." (period), "," (comma), and " " (space) symbols, or you can also enter the desired text within 3 characters. |
| **Print zero (0)** | When zero value (0) is entered as a price object, it prints with currency symbol and "0" if this check box is selected. If the check box is not selected, currency symbol and "0" will not be printed but it will become blank. |

The 4th chapter

# Data Window Explanation

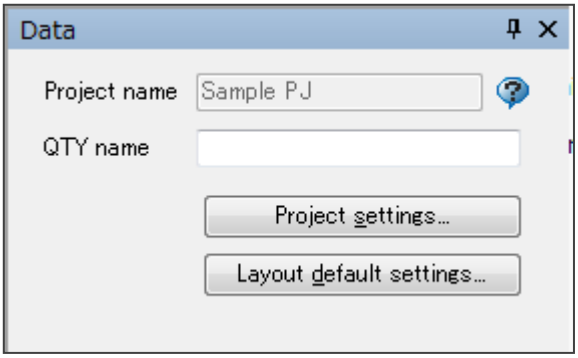
# 4-1 File properties

- Project - Group - Print layout - Table

## - Project

This window configures the project information.

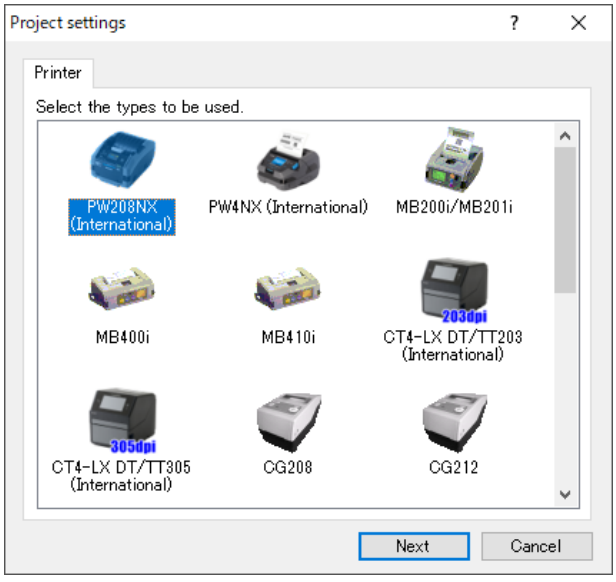
You can configure the settings for the project overall and the initial values when creating a new layout.




| Setting items | Contents |
|---|---|
| **ProjectName** | Shows the saved file name as the project name. |
| **QTY name** | Sets the field name to be used for Print Quantity.<br>When the field is left blank, it will display as "Print Quantity".<br>**Set the QTY name to 16 or fewer characters.** |
| **[Project settings] button** | This button opens the project settings dialog. |
| **[Layout default settings] button** | This button opens the layout default settings dialog. |

### ・Project settings dialog

Modifies the settings for the entire project.




#### Printer tab

Select printer type and create the data layout.

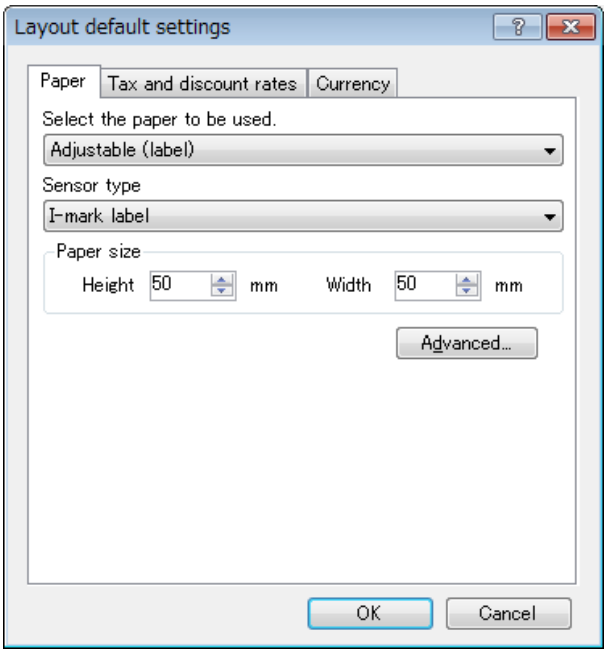
If you change the printer type, the fonts and other settings configured for the layouts may be changed.

After changing the printer type, always open the existing layouts and check their contents.

## ・ Layout default settings dialog

Sets the initial values when creating new layouts.

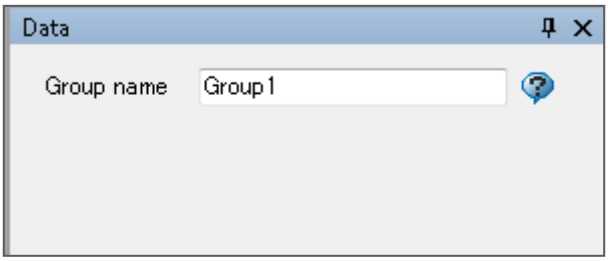
**Note: Layout settings**
To modify the settings for existing layouts, configure them individually using "Layout settings".
The settings in "Layout default settings" are not reflected in the existing layouts.




| Setting items | Contents |
|---|---|
| **[Paper] tab** | Opens the paper settings tab. |
| **[Tax and discount rates] tab** | Opens the tax and discount rate settings tab. |
| **[Currency] tab** | Opens the currency symbol, decimal place symbol and separator symbol settings tab. |

## - Group

This window configures the record data (print layout) group information.




### Group name

Set Group name.

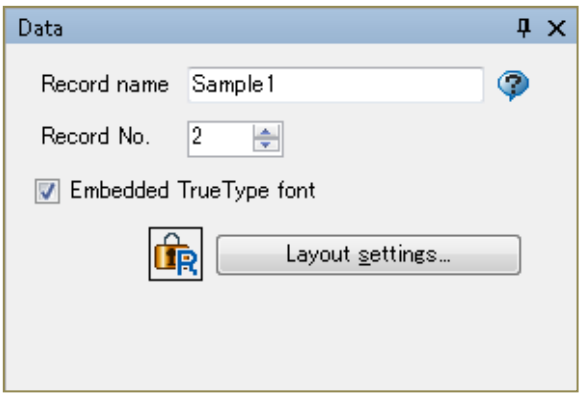
**Note: Group name**
The group name is used for management in SmaPri Designer. It is not reflected when printing.

## - Print layout

This window configures the print layout information.

The values set here are reflected in the layout currently being edited.

Print layouts can be registered **up to 200 layouts in a single project**.




| Setting items | Contents |
|---|---|
| **Record name** | Sets the name of the record data (print layout). Sets the name to 32 or fewer characters. |
| **Record No.** | Sets the number of the record data (print layout).<br>This number is used when calling the data during printing. |
| **Embedded TrueType font** | TrueType font can only be used for the string object when you set the input method as [key input]<br>This function cannot be used with reference/concatenate. |
| **[Read-only] button** | Prohibits overwriting the modified contents. |
| **[Layout settings] button** | Opens the layout settings dialog (paper information, tax and discount rate settings). |

### ・ About the TrueType font embedding function

This function enables you to use Windows fonts for the string object by including the Windows fonts selected on SmaPri Designer in the format files.

**Notes: Preview and the printed results**
Because of the differences in the Windows operating system that SmaPri Designer runs on and the Android operating system of the terminal that will print, the preview and the printed results may differ due to the specified font type and input text.Always check the printed results beforehand.

**Examples where the preview and the printed results differ**
1. When using the automatic line feed function, the position of the line feed may differ for the preview and printed results.
2. When the input character is not contained in the specified font, a substitute font may be used for printing or the character may be corrupted.
3. When a special font such as a symbol font is used, the preview and printed results may differ.

Example: When the font type is "Symbol" and "a" is input, the preview shows "α", but the printed result is "a".

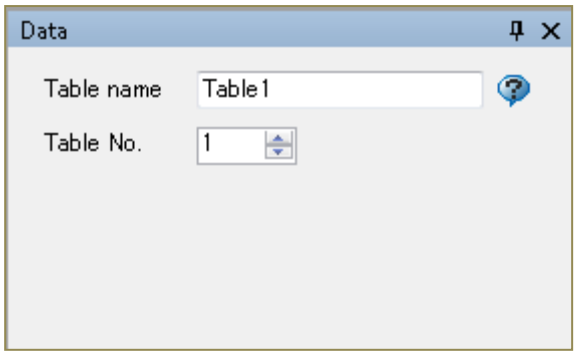
The group name is used for management in SmaPri Designer. It is not reflected when printing.

## - Table

This window configures the table information.

Tables can be registered **up to 99 tables in a single project.**

For the table, one data table allows you to register **1,000 entries** and one graphic table allows you to register **5 entries.**




### Table name

Set the table name.

### Table No.

Set the table number.

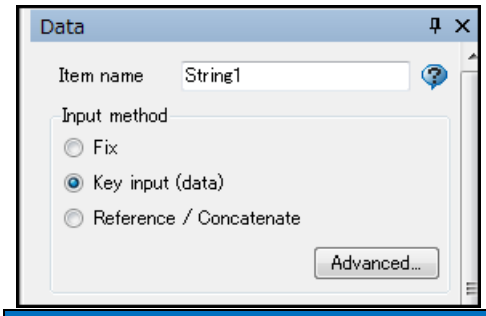
* For a graphic table, fixed as table No. 100.

# 4-2 Object properties

- String - Price - Barcode - Date time - Counter

## - String object

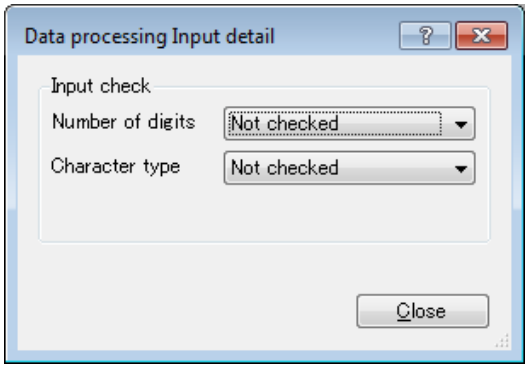
This window configures the settings for the string object.




| Setting items | |
|---|---|
| **Item name** | Sets the item used in the layout design.When the input method is [Key input (data)], this can also be displayed as the input item name.<br>When no value is set for [Data], "**(item name)**" is displayed on the design window in blue text. The item name can be set up to 16 digits. |
| **Input method** | |
| **Fix** | Uses the value set for [Data]. |
| **Key input** | Uses the value that be input when printing. The value set in [Data] is the initial value. |
| **Reference / Concatenate** | Copies an object, keys in fixed values and uses a value made of multiple object values combined. |
| **[Advanced] button** | Opens the advanced settings dialog. |

## ・Input method(When Key input (data) is selected)-Advanced settings dialog

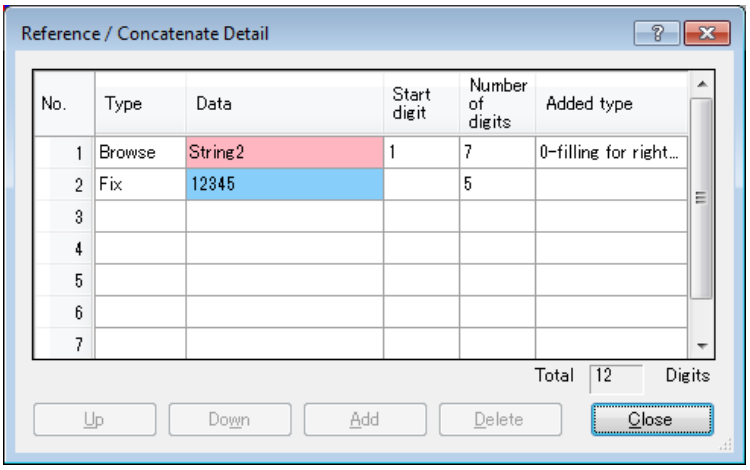
This dialog configures the check method for input data when input.




| Setting items | |
|---|---|
| **Input check** | |
| **Number of digits** | You can set one of the following: not checked, all digits require input, input required (blank prohibited), or 0 inputs prohibited. |
| **Character type** | You can set one of the following: not checked, numeric only, alphabetic symbol only, kana only, alphanumeric symbol only, kana numeric only, or kana alphabetic symbol only. |

## ・Input method(When Reference / Concatenate is selected)-Advanced settings dialog

The dialog configures the details of the data reference/concatenate settings.

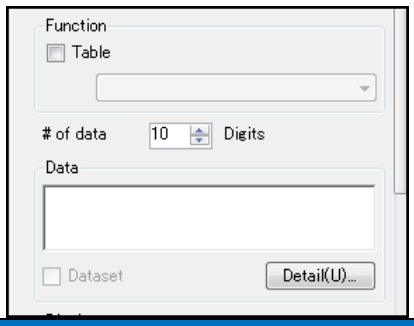



| Setting items | Contents |
|---|---|
| **Type** | Selects the type of data to concatenate.<br>**Fix:** Sets the value set in "Data".<br>**Browse:** Duplicates the value of another object. |
| **Data** | Selects (when referencing) or inputs (when fixed) the data to set. |
| **Start digit** | Specifies which number of digit of the source data to start duplicated from. |
| **Number of digits** | Specifies number of digit of the data to be duplicated from the start digit.<br>Data that is the target for duplication is always duplicated from the left justified with space filled state. |
| **Added type** | Specifies the filling method for digits when the number of digits in the referenced data is not sufficient. |

### ・Added type items

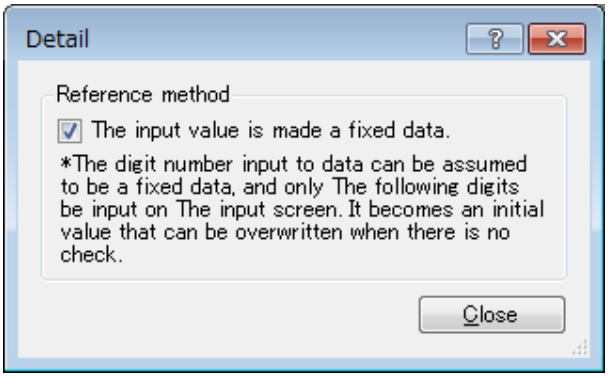
| Added type | Filling method | Example |
|---|---|---|
| **Not fill** | If the number of input digits is not sufficient, the actual data is not modified. | Number of input digits: 5 digits, input: 120<br>⇒120 |
| **Space-filling for left alignment** | If the number of input digits is not sufficient, the end of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120<br>⇒ 120ss (s equals one space character) |
| **Space-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of | Number of input digits: 5 digits, input: 120<br>⇒ss120 (s equals one space character) |

| | | |
|---|---|---|
| | space characters. | |
| **0-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of "0" characters. | Number of input digits: 5 digits, input: 120<br>⇒ 00120 |

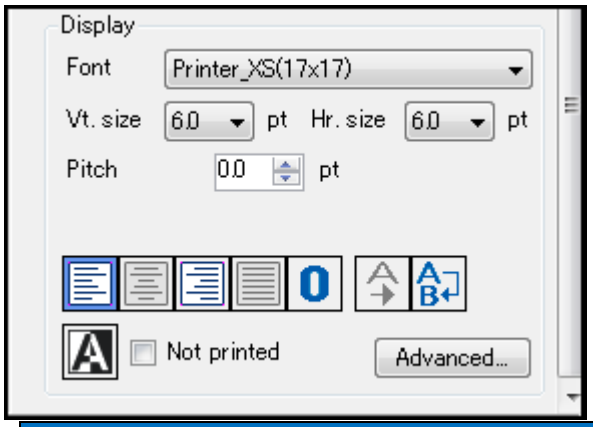



| Setting items | |
|---|---|
| **Function** | |
| **Table** | Sets the corresponding item to a conversion table.<br>Select a table in the project with the list box and specify the table number to reference. |
| **# of data** | Specifies the maximum number of digits for the [Key input (data)] data. The maximum number of data digits that can be set is 1000.<br>When using [Table], this specifies the maximum number of digits for the table reference value. |
| **Data** | |
| **Data** | Sets data to the item.<br>When the input method is [Fix], the data set here is printed without modifications.<br>For [Key input (data)], the data set here is used as the initial value for the input item when printing. (This becomes a fixed value when [The input value is made a fixed data] is selected in the detailed settings.)<br>When using [Table], the value in the table converted with the data set as the key is printed. |
| **Dataset** | * This item can not use in SmaPri Designer |
| **[Detail] button** | When Input method [Key input (data)] is selected, display the detail setting dialog. |

## ・Data-Detail settings dialog



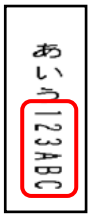

| Setting items |
|---|
| **Reference method** |
| **The input value is made a fixed data** |
| This check box uses the value that is entered for [Data] as fixed data and not as the initial value. Input is possible after the value set with [Data].As an example, If 10 digits are set for # of data and 5 digits are input in [Data], the number of digits that can be input when printing is 5 digits. |



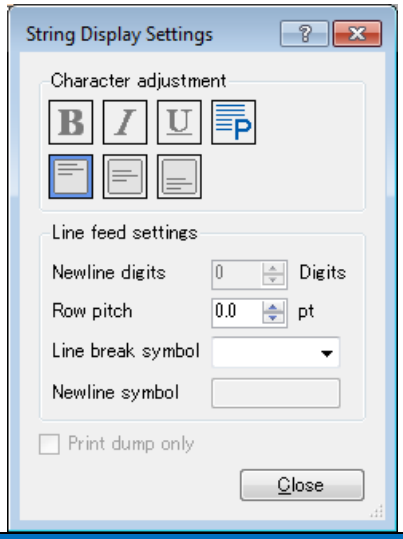

| Setting items | |
|---|---|
| **Display** | |
| **Font** | Selects the type of font.<br>Fonts that are named "Printer_XXXX" are SATO printer fonts.<br>The characters that can be used is different according to the font type. |
| **Vt. size** | Specifies the vertical size of the font in points. |
| **Hr. size** | Specifies the horizontal size of the font in points. |
| **Pitch** | Specifies the pitch in points. |
| **Justify left** | Left justifies the text when less than the specified number of digits. |
| **Center** | Center justifies the text when less than the specified number of digits. This can be specified when the font type is set to Windows font. |
| **Justify right** | Right justifies the text when less than the specified number of digits.<br>* The proportional font is the position of the right edge differs according to the content of the data. |
| **0-filling** | Zero fills the text when less than the specified number of digits.<br>The position to zero fill the text is listed next. For left justify, 0 is added to the end of the data. For right justify, 0 is added to the beginning of the data.<br>Eample: # of data: 5 digits, right justify, 0 fill, data [120] ⇒ [00120] |
| **Horizontal/vertical*** | Switches between horizontal text and vertical text. Depending on the font, vertical text cannot be specified. |
| **Line feed** | Specifies whether or not to break the line in a specified region. |
| **Reverse black and white** | Prints inverse printing. |
| **Not printed** | Select this check box to prevent the item from being printed. |
| **[Advanced] button** | Diplays the advanced setting dialog. |

* When set to vertical text, single-byte numbers, letters, and symbols in Designer are displayed on their side, which is different than their actual printed form.

* Vertical text cannot be used when a Windows font is specified and the embedded TrueType font function is used.



## ・String Display Settings-Advanced setting dialog



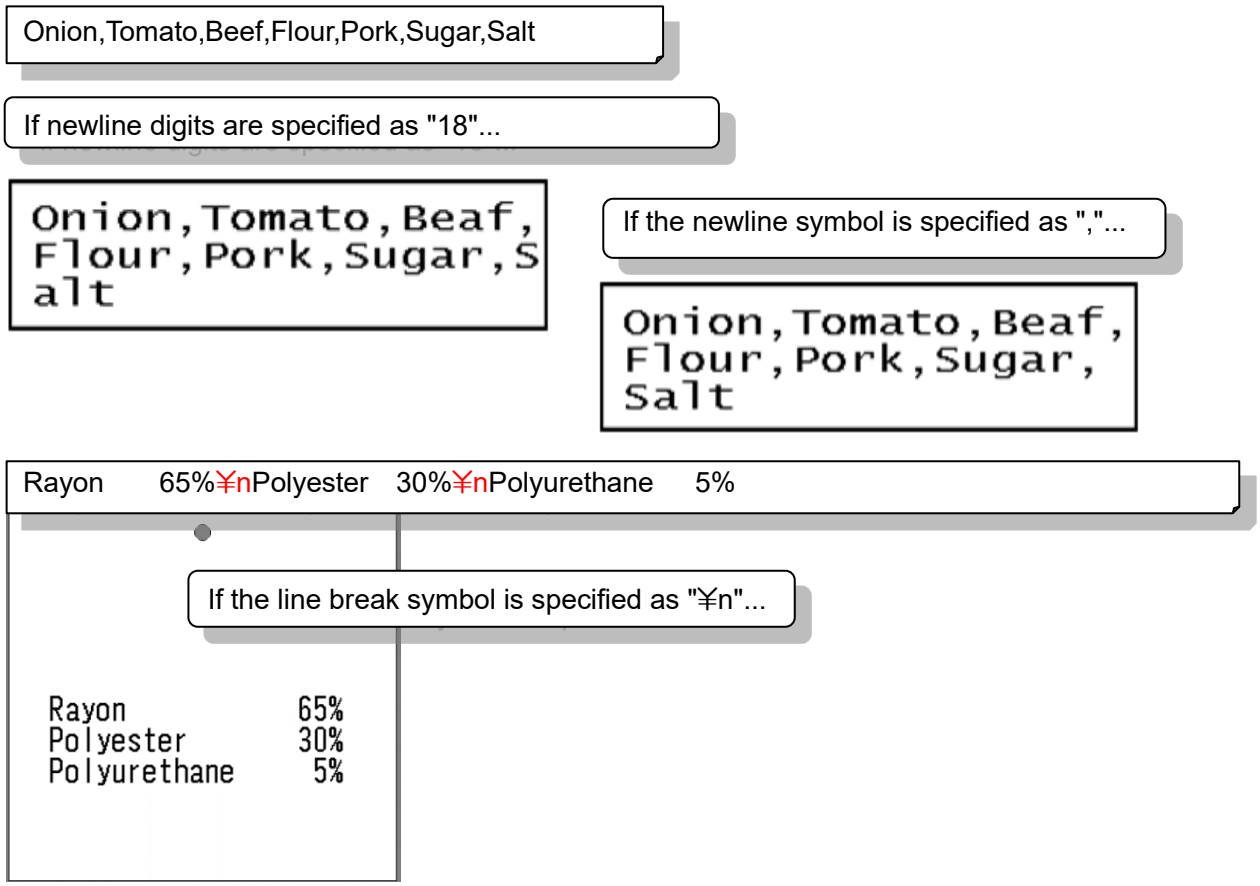

| Setting items | |
|---|---|
| **Character adjustment :**<br>These settings adjust the entire item, not single characters. The settings that can be used differ according to the printer type and character type. | |
| **Bold*** | Makes the text bold. |
| **Italic*** | Makes italic text. |
| **Underline** | Underlines the text. |
| **Proportional** | Fills the pitch by the horizontal size of each character. |
| **Justify top** | Justifies the text at the top of the designated printing region. |
| **Justify vertical center** | Justifies the text in the center of the designated printing region. |
| **Justify bottom** | Justifies the text at the bottom of the designated printing region. |
| **Line feed settings** | |
| **Newline digits*** | Specifies the number of newline digits. |
| **Row pitch** | Specifies the character pitch with reference to the previous line when breaking the line. |
| **Line break symbol** | When the specified symbol is in the data in the item, the line is forcibly broken<br>The forced line break symbol can also be specified as a combination of 2 or more characters. The specified characters are not reflected in the print data. |
| **Newline symbol** | The value set here is a guide when to break the line. When the word that is enclosed by the values stretches into the next line, even when in the range of the digits and in the region, the line is broken before hand when the previous word ends. The newline symbol can be used when enabled automatic line feed or newline digits . |



* Newline digits cannot be used when a Windows font is specified and the embedded TrueType font function is used. And, bold and italic can not be set if the font itself does not correspond.

## ・Line feed setting details

Line feeds operate according to the line feed settings method as shown below.




## ・Line break function conditions

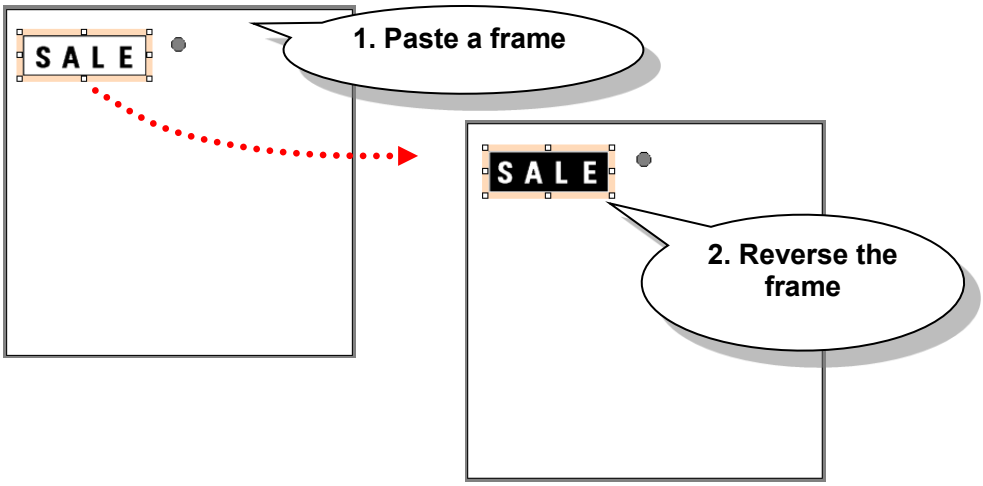
The line break settings change according to the font type and the input method.

| Font type | TrueType font embedded | Input method | Auto LF | Newline digits | Line break symbol | Newline symbol |
|---|---|---|---|---|---|---|
| Printer font | Enabled/ disabled | Fix | Enabled | Enabled | Enabled | Usable |
| | | Key input (data) | Enabled | Disabled | Enabled | Not usable |
| | | Reference / Concatenate | Enabled | Disabled | Enabled | Not usable |
| Windows font | Disabled | Fix | Enabled | Enabled | Enabled | Usable |
| | | Key input (data) | | | | |
| | | Reference / Concatenate | | | | |
| | Enabled | Fix | Enabled | Disabled | Enabled | Usable |
| | | Key input (data) | Enabled | Disabled | Enabled | Usable |
| | | Reference / Concatenate | | | | |

## ・Reverse black and white

Inverse printing is valid for the extent of the specified object.

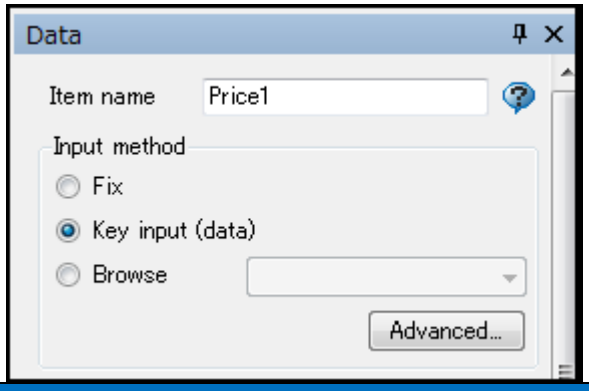
If you wish to arbitrarily specify the area to reverse black and white, paste a frame and inverse printing can be done.




Right click on the frame and select bring to most forward on the menu.

## - Price object

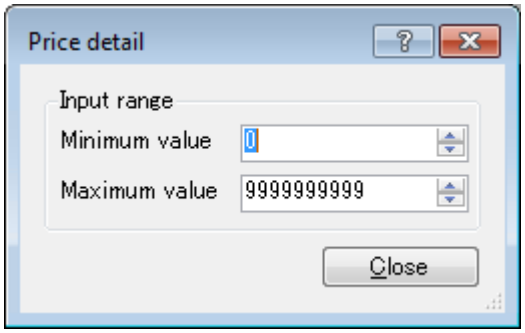
This window configures the settings for the price object.



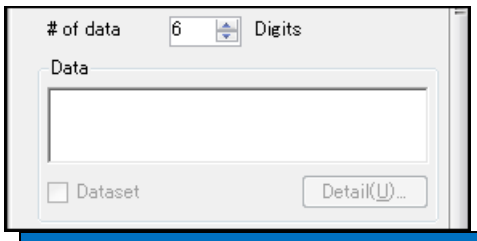

| Setting items | |
|---|---|
| **Item name** | Sets the item used in the layout design. |
| **Input method** | |
| **Fix** | Uses the value set for [Data]. |
| **Key input** | Uses the value that be input when printing. The value set in [Data] is the initial value. |
| **Browse** | References the value of another [price] item as the tax or discount calculation result.<br>Items that can be referenced are only those items with the price calculation function turned on. |
| **[Advanced] button** | Diplays the advanced setting dialog. |

### ・Price-Advanced setting dialog

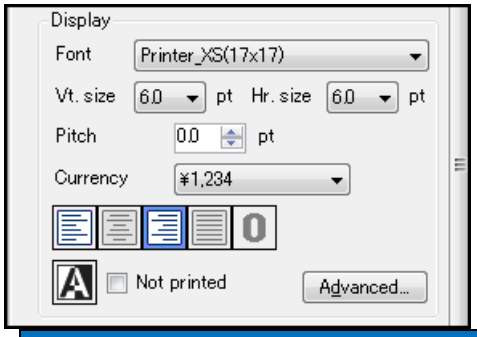
This dialog sets the input range.




| Setting items | |
|---|---|
| **Input range** | |
| **Minimum value** | Sets the minimum value for input. |
| **Maximum value** | Sets the maximum value for input. |



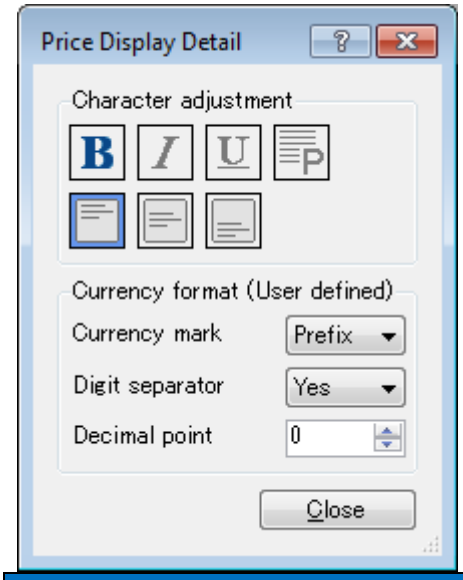

| Setting items | |
|---|---|
| **# of data** | Specifies the maximum number of digits for the [Key input (data)]. The maximum number of digits is 10. To set a value after the decimal point, the decimal point is also included in the number of digits. You do not need to consider the currency symbol or the number of digits to fill. |
| **Data** | |
| **Data** | Sets data for the item. When the input method is selected as [Fix], the data set here is printed without modifications. For [Key input (data)], the data set here is displayed as the initial value for the input item when printing. The decimal point can only be input when Decimal point is set to a value other than 0 with [Advanced] under [Display]. |
| **Dataset** | * This item can not use in SmaPri Designer |



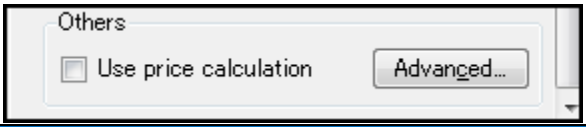

| Setting items | |
|---|---|
| **Display** | |
| **Font** | Selects the font type. "Printer_XXXX" are SATO printer fonts.<br>That can be used characters is different according to the font type. |
| **Vt. size** | Specifies the vertical size of the font in points. |
| **Hr. size** | Specifies the horizontal size of the font in points. |
| **Pitch** | Specifies the pitch in points. |
| **Currency** | Sets the currency format for the price. |
| **Justify left** | Left justifies the text when less than the specified number of digits. |
| **Justify right** | Right justifies the text when less than the specified number of digits.<br>* The right edge position of the propotional font differs according to the data. |
| **0-filling** | Not selectable |
| **Reverse black/white** | Prints inverse printing. |
| **Not printed** | Select this check box to prevent the item from being printed. |
| **[Advanced] button** | Displays the advanced setting dialog. |

## ・Price-Advanced setting dialog

This dialog configures the detailed settings for the price item.



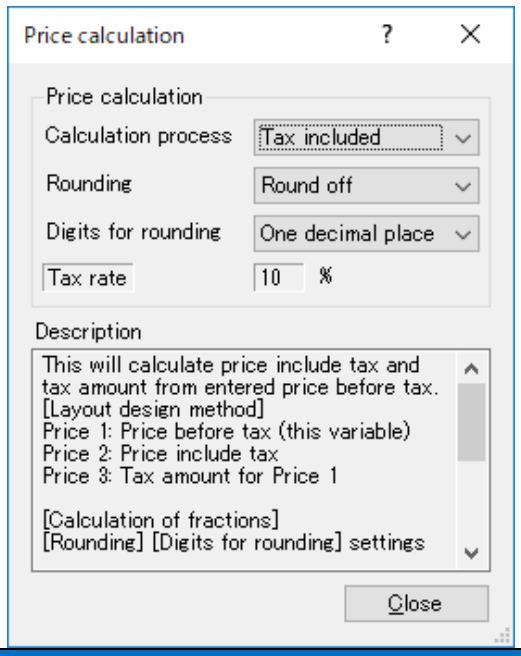

| Setting items | |
|---|---|
| **Character adjustment:**<br>These settings adjust the entire item, not single characters. The settings that can be used differ according to the printer type and character type. | |
| **Bold** | Makes the text bold. |
| **Italic** | Makes italic text. |
| **Underline** | Underlines the text. |
| **Proportional** | Fills the pitch by the horizontal size of each character. |
| **Justify top** | Justifies the text at the top of the designated printing region. |
| **Justify vertical center** | Justifies the text in the center of the designated printing region. |
| **Justify bottom** | Justifies the text at the bottom of the designated printing region. |
| **Currency format (User defined):**<br>When the currency format is changed, the selected format in the currency format list will change according [(User defined)]. | |
| **Currency mark** | Sets the position to fill in the currency symbol. |
| **Digit separator** | Sets whether or not to have a digit separator. |
| **Decimal point** | Sets the position of the decimal point. |




| Setting items | |
|---|---|
| **Others** | |
| **Use price calculation** | Tick the [Use Price Calculation] when refering to another price object. |
| **[Advanced] button** | Displays the advanced setting dialog. |

## ・Price calculation- Advanced setting dialog

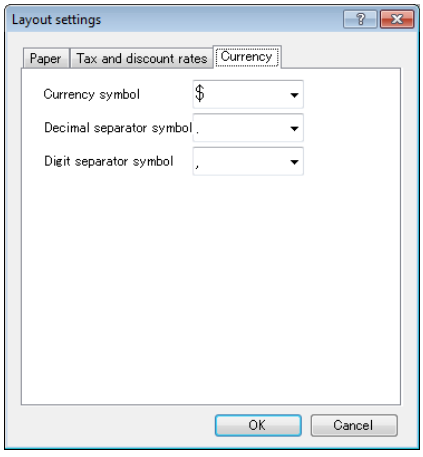
This dialog configures the price calculation function.




| Setting items | |
|---|---|
| **Price calculation** | |
| **Calculation process** | Sets the calculation process method.<br>The setting item is different according to the [Tax rate/Discount] settings in the layout settings.<br>[Tax rate] :[None],[Tax included],[Tax excluded]<br>[Discount] : [None],[Discount percent] |
| **Rounding** | Sets the rounding method when calculating the tax rate or discount rate. |
| **Digits for rounding** | Sets the number of digits when rounding. |
| **Tax rate/Discount** | Shows the tax rate or discount rate configured for the layout |

- **Price "Currency symbol", "Decimal separator symbol" and "Digit separator symbol"**

For the values of these items, the specified values are displayed on the currency tab in the layout settings. To modify those values, select the drop down currency list.



## - Barcode object

This window configures the settings for the barcode object.

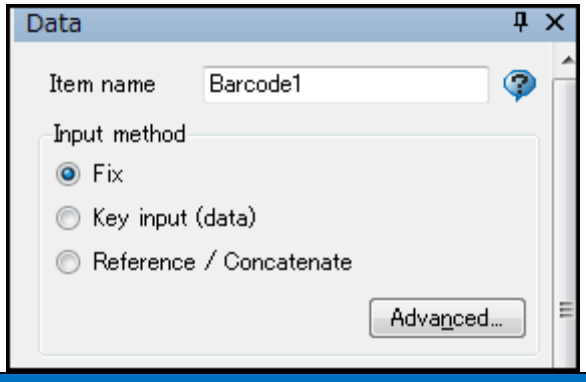
**TIPS**

- Create a barcode with variable length digits

  Please refer to 5-15. Creating a barcode with variable length digits.

- Include line feed codes in QR code

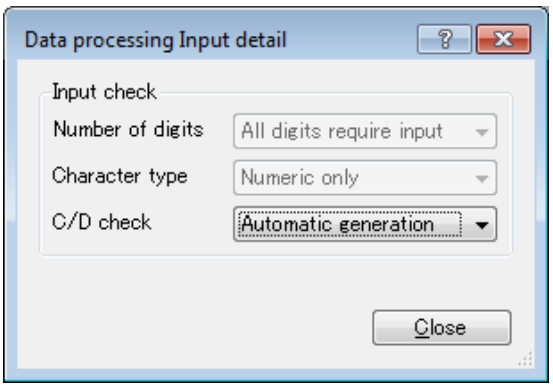
  Please refer to 5-16. Include line feed codes in QR code.




| Setting items | |
|---|---|
| **Item name** | Sets the item used in the layout design. |
| **Input method** | |
| **Fix** | Uses the value set for [Data]. |
| **Key input** | Uses the value that be input when printing. The value set in [Data] is the initial value. |
| **Reference / Concatenate** | Copies an object, keys in fixed values and uses a value made of multiple object values combined. . |
| **[Advanced] button** | Opens the advanced settings dialog. |

## ・Input method(When Key input (data) is selected)-Advanced settings dialog

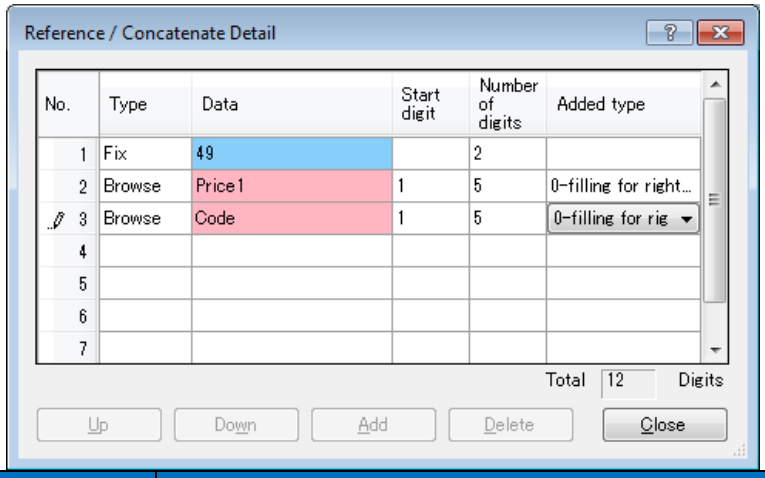
This dialog configures the input check settings.




| Setting items | |
|---|---|
| **Input check** | |
| **Number of digits** | You can set one of the following: all digits require input, input required (blank prohibited), or 0 inputs prohibited. |
| **Character type** | You can set one of the following: not checked, numeric only, alphabetic symbol only, or alphanumeric symbol only. |
| **C/D check** | You can set none, automatic generation, or check against input data.<br>* Certain types of barcodes cannot be configured with the C/D setting. |

## ・ Input method(When Reference / Concatenate is selected)-Advanced settings dialog

This dialog configures the data reference/concatenate settings.

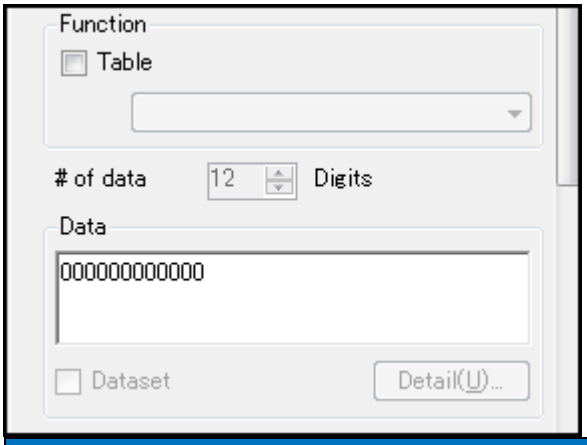



| Setting items | Contents |
|---|---|
| **Type** | Selects the type of data to concatenate.<br>**Fix:** Sets the value set in "Data".<br>**Binary (QR code only):** Sets the value set in "Data" as binary data.<br>**Browse:** Duplicates the value of another object. |
| **Data** | Selects (when referencing) or inputs (when fixed) the data to set. |
| **Start digit** | Specifies which number of digit of the source data to start duplicated from. |
| **Number of digits** | Specifies number of digit of the data to be duplicated from the start digit.<br>Data that is the target for duplication is always duplicated from the left justified with space filled state. |

| | |
|---|---|
| **Added type** | Specifies the filling method for digits when the number of digits in the referenced data is not sufficient. |

**・Added type**

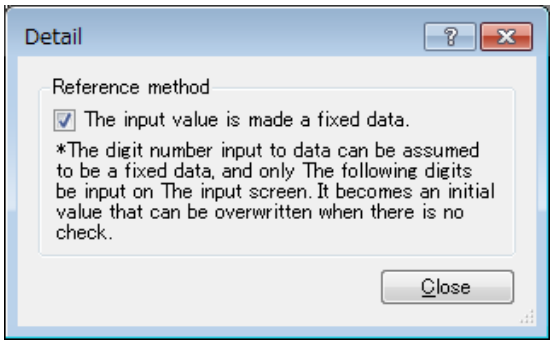
| Added type | Filling method | Example |
|---|---|---|
| **Not fill** | If the number of input digits is not sufficient, the actual data is not modified. | Number of input digits: 5 digits, input: 120 ⇒ 120 |
| **Space-filling for left alignment** | If the number of input digits is not sufficient, the end of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ 120ss (s equals one space character) |
| **Space-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ ss120 (s equals one space character) |
| **0-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of "0" characters. | Number of input digits: 5 digits, input: 120 ⇒ 00120 |



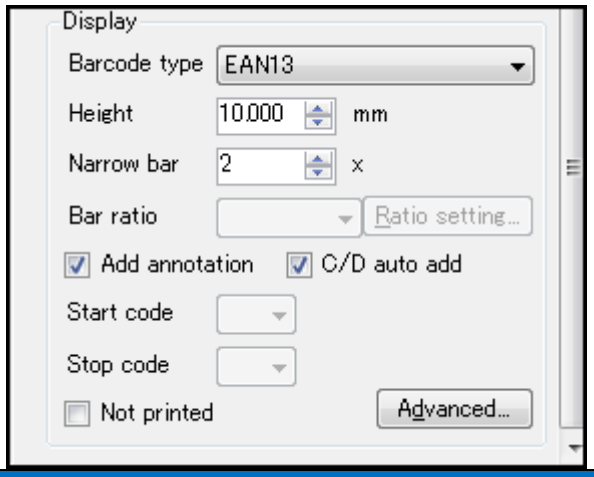

| Setting items | |
|---|---|
| **Function** | |
| **Table** | Sets the corresponding item to a conversion table.<br>Select a table in the project with the list box and specify the table number to reference. |
| **# of data** | Specifies the maximum number of digits for the [Key input (data)] data. The maximum number of data digits that can be set is 99.<br>The start/stop code and the C/D auto check digit are not included.<br>When using [Table], this specifies the maximum number of digits for the table reference value. |
| **Data** | |
| **Data** | Sets data to the item.<br>When the input method is [Fix], the data set here is printed without modifications.<br>For [Key input (data)], the data set here is used as the initial value for the input item |

| | |
|---|---|
| | when printing.<br>(This becomes a fixed value when [The input value is made a fixed data] is selected in the detailed settings.)<br>When using [Table], the value in the table converted with the data set as the key is printed. |
| **Dataset** | * This item can not use in SmaPri Designer |
| **[Detail] button** | When Input method [Key input (data)] is selected, display the detail setting dialog. |

## ・Data-Detail settings dialog




| Setting items |
|---|
| **Reference method** |
| **The input value is made a fixed data** |
| This check box uses the value that is entered for [Data] as fixed data and not as the initial value. Input is possible after the value set with [Data].As an example, If 10 digits are set for # of data and 5 digits are input in [Data], the number of digits that can be input when printing is 5 digits. |

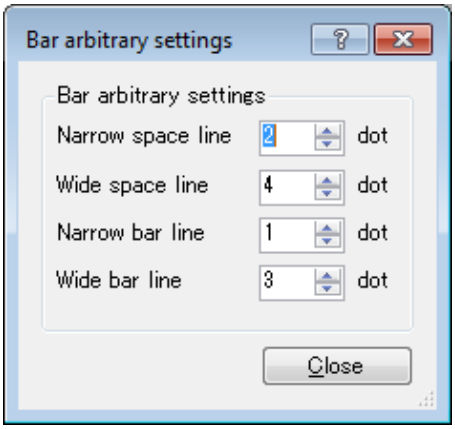



| Setting items | |
|---|---|
| **Display** | |
| **Barcode type** | Selects the type of barcode. |
| **Height** | Specifies the height of the barcode.<br>The specification method of the height of barcodes with annotations differs according to the printer type. |
| **Narrow bar** | Specifies the narrow bar width. |
| **Bar ratio** | Sets the barcode ratio.<br>Three types of barcodes can be configured with ratios: CODE39, CODABAR, and ITF. |
| **[Ratio setting] button** | Displays the [Ratio setting] dialog. |

| | |
|---|---|
| **Add annotation** | Enables adding an annotation to the barcode.<br>When an annotated barcode is selected for the barcode type, this check box cannot be selected. |
| **C/D auto add** | Enables automatically adding the check digit. |
| **Start code/Stop code** | Configures the start code and the stop code. |
| **Not printed** | Select this check box to prevent the item from being printed. |
| **[Advanced] button** | Displays the [Barcode Display Detail] dialog. |

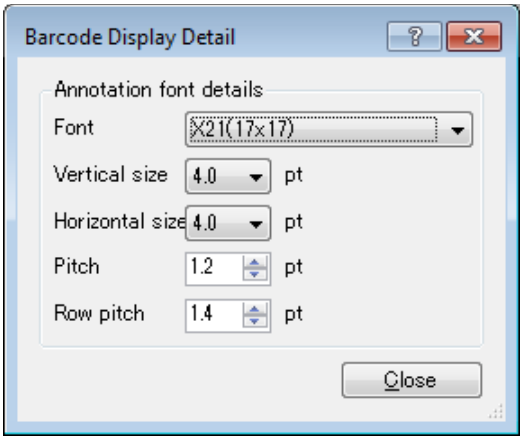
- **Bar arbitrary settings – Advanced settings dialog**

  When ratio setting is selected for barcodes that can be configured with a bar ratio, you can set the desired ratio configuration.




| Setting items | |
|---|---|
| **Bar arbitrary settings** | |
| **Narrow space line** | Specifies the narrow space width to configure for the barcode. |
| **Wide space line** | Specifies the wide space width to configure for the barcode. |
| **Narrow bar line** | Specifies the narrow bar line width to configure for the barcode. |
| **Wide bar line** | Specifies the wide bar line width to configure for the barcode. |

- **Barcode Display Detail- Advanced settings dialog**




| Setting items | |
|---|---|
| **Annotation font details** | |
| **Font** | Selects the type of character font to use for the annotation |
| **Vertical size** | Sets the vertical size for the annotation. |
| **Horizontal size** | Sets the horizontal size for the annotation. |
| **Pitch** | Sets the pitch for the annotation. |
| **Row pitch** | Sets the distance from the barcode to the annotation. |

- **Barcode and two-dimensional barcode types**

The types of barcodes and two-dimensional barcodes that can be configured with SmaPri Designer and the calculation method when the check digit is added and the start and stop codes that can be added are listed below.

CODABAR (NW-7) and CODE39 must have start and stop codes added.

When the check digit is added to CODABAR (NW-7), only numbers can be input.

| Name | Check digit calculation method | Start/stop code |
|---|---|---|
| CODABAR (NW-7) | 7 check | A,B,C,D,E,N,T a,b,c,d,e,n,t |
| CODE39 | Modulo 43 | * |
| ITF | Modulo 10, weight 3 | - |
| JAN13/EAN13 | Modulo 10, weight 3 | - |
| JAN13/EAN13 with price C/D | Modulo 10, weight 3 | - |
| JAN8/EAN8 | Modulo 10, weight 3 | - |
| UPC-A | Modulo 10, weight 3 | - |
| UPC-E | Dedicated modulo 10 | - |
| CODE128 A code | - (Modulo 103) ***1** | - |
| CODE128 B code | - (Modulo 103) ***1** | - |
| CODE128 C code | - (Modulo 103) ***1** | - |
| GS1-128 (UCC/EAN128) | - (Modulo 103) ***1** | - |
| GS1 DataBar Omni-Directional | Modulo 10, weight 3 ***2** | - |
| GS1 DataBar Stacked Omni-Directional | Modulo 10, weight 3 ***2** | - |
| QR code (model 2) | - | - |

***1:** The check digit is automatically added by the printer. You do not need to add it to the data. The check digit is not displayed in the annotation.

***2:** The check digit that can be set with GS1 DataBar Omni-Directional and GS1 DataBar Stacked Omni-Directional is the GTIN (trade item identification code) check digit. The check digit to check the symbol configuration is automatically added by the printer.

- GTIN (trade item identification code) check digit (modulo 10/weight 3)
- Check digit (modulo 79) to check if the barcode symbol configuration is correct

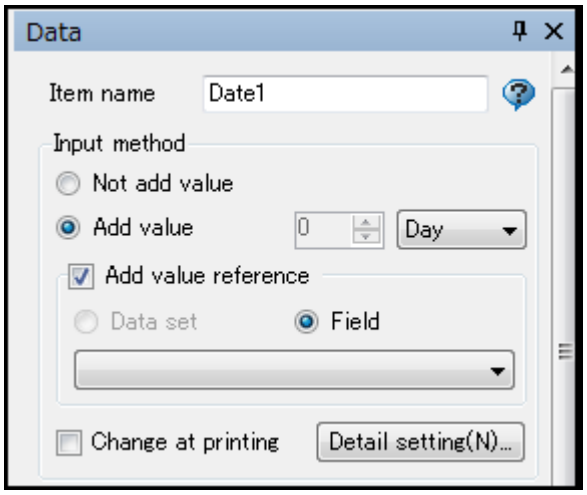
The specifications for UPC-A, UPC-E, and standard carton ID GS1-128 that can be created

with SmaPri Designer are listed below. Please be aware of the specifications when using the barcodes.

| Barcode type | Number of input digits | C/D auto add | Data processing/ input advanced settings | Barcode data and annotation |
|---|---|---|---|---|
| UPC-A | 11 digits | Always on | Not configurable | Barcode: 0 fill + 11 input digits + C/D<br>Annotation: 11 input digits + C/D |
| UPC-E | 6 digits | Always on | Not configurable | Barcode: 6 input digits + C/D<br>Annotation: 0 fill + 6 input digits + C/D |
| GS1-128 | 17 digits | Always on | Not configurable | Barcode: 00 fill + 17 input digits + C/D<br>Annotation: (00) + 17 input digits + C/D |

## - Date time object

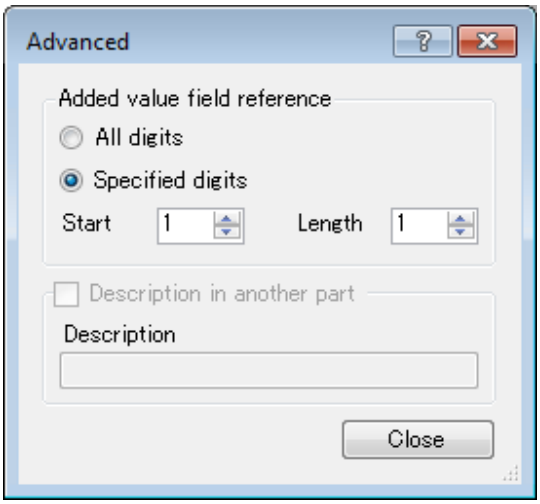
This window configures the settings for the date time object.



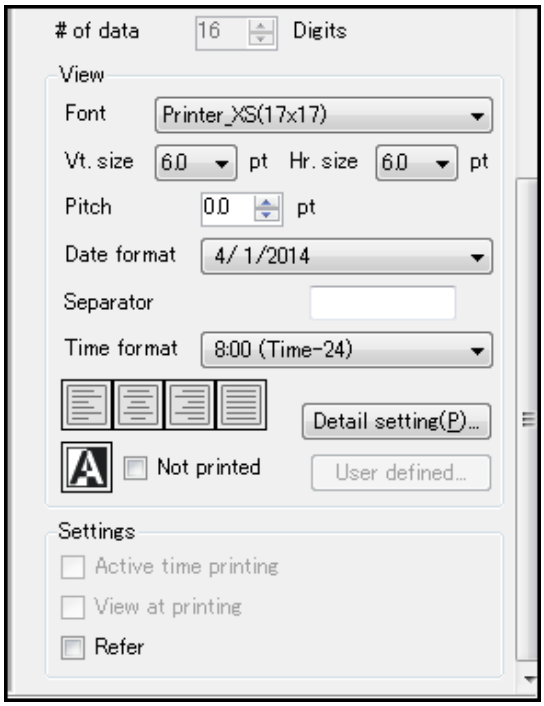

| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design. |
| **Input method** | |
| **Not add value** | Prints the date on the terminal that issues the print instruction when printing. |
| **Add value** | When printing, adds the set value to the date on the terminal that issues the print instruction and then prints. Use this for expiration dates and best-by dates. |
| **Added value** | Specifies the value to add to the date of the date time object.<br>The maximum value that can be set is 9 for years, 99 for months, and 999 for days and hours. |
| **Add unit** | Select year, month, day, hour. |
| **Add value reference** | Prints by adding a value that references information input in another field. |
| **Data set** | * This item can not use in SmaPri Designer |
| **Field** | Select a field name that you want to copy when you use [Add value reference]. |
| **Change at printing** | Select this check box when it is necessary to change the added value at printing. |
| **[Detail settings] button** | Displays the Detail setting dialog. |

## ・Add value reference -Detail setting dialog

This dialog configures the reference digits for the added value reference target field and the separate description settings.



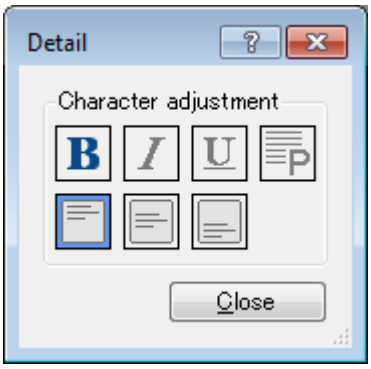

| Setting items | |
|---|---|
| **Add value reference** | |
| **All digits** | This setting allows you to specify all the digits of the added value reference target field. |
| **Specified digit** | This setting allows you to specify arbitrary digits of the added value reference target field. |
| **Separate description** | * This item can not use in SmaPri Designer |
| **Separate description** | * This item can not use in SmaPri Designer |




| Setting items | |
|---|---|
| **# of data** | This setting is automatically calculated from the number of digits for the string set by the date format, the separator, and the time format under View. |
| **View** | |
| **Font** | Selects the type of font.<br>Fonts that are named "Printer_XXXX" are SATO printer fonts.<br>The characters that can be used is different according to the font type. |
| **Vt. size** | Specifies the vertical size of the font in points. |
| **Hr. size** | Specifies the horizontal size of the font in points. |

| | |
|---|---|
| **Pitch** | Specifies the pitch in points. |
| **Date format** | Selects the date format.<br>When User defined is selected on the list, the [User defined] button is enabled. |
| **Separator** | Sets the character to separate the date view and the time view.<br>A space is set as the initial value. |
| **Time format** | Selects the time format.<br>When User defined is selected on the list, the [User defined] button is enabled. |
| **Justify left** | Left justifies the text when less than the specified number of digits. |
| **Center** | Center justifies the text when less than the specified number of digits. This can be specified when the font type is set to Windows font. |
| **Justify right** | Right justifies the text when less than the specified number of digits. |
| **Justify** | Aligns the horizontal width of the characters in the designated printing region. |
| **Reverse black and white** | Prints inverse printing. |
| **Not printed** | Select this check box to prevent the item from being printed. |
| **[Detail settings] button** | Displays the [Detail] dialog. |
| **[User defined] button** | Displays the [User defined] dialog. |
| **Settings** | |
| **Active time printing** | * This item can not use in SmaPri Designer |
| **View at printing** | * This item can not use in SmaPri Designer |
| **Refer** | Allows references from other items.<br>Please refer to the [Referencing the date time object] for details. |

## ・Detail-Detail setting dialog



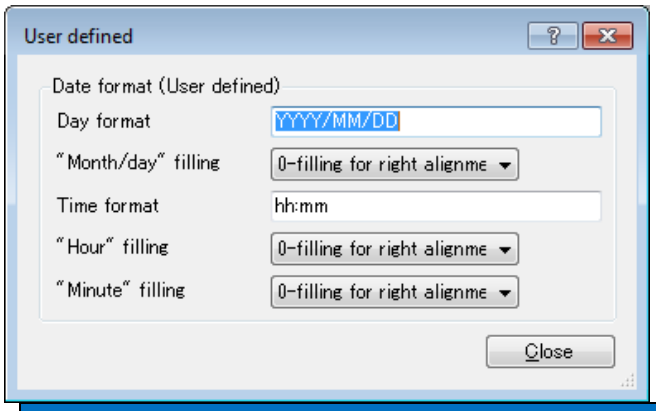

| Setting items | |
|---|---|
| **Character adjustment :**<br>These settings adjust the entire item, not single characters.<br>The settings that can be used differ according to the character type. | |
| **Bold** | Makes the text bold. |
| **Italic** | Not selectable |
| **Underline** | Not selectable |
| **Proportional** | Not selectable |
| **Justify top** | Not selectable |
| **Justify vertical center** | Not selectable |
| **Justify bottom** | Not selectable |

## ・User defined

This dialog configures the user defined date format and time format.

These settings can only be configured when "User defined" is selected for date format or time format.

The number of digits that can be set is 32 characters (double-byte 16 characters) or less including the date, hour, minute, and separator.



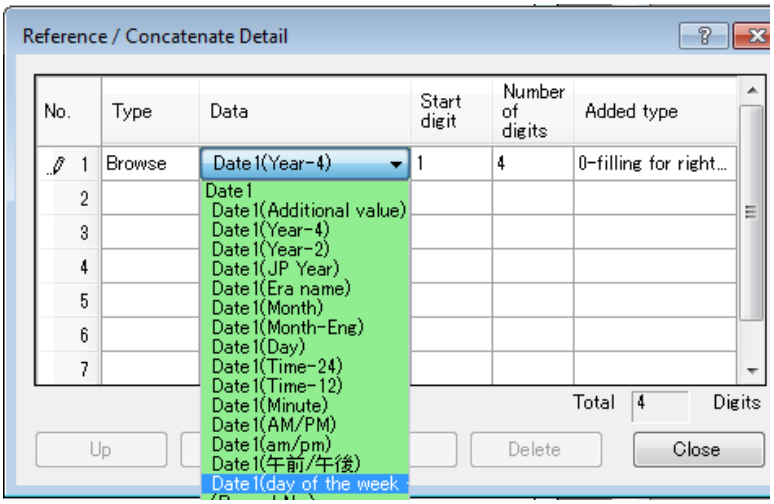

| Setting items | |
|---|---|
| **Date format(User defined)** | |
| **Day format** | Sets the date format.<br>The date format can be specified by a combination of the letters below and characters such as "/". However, a comma cannot be set.<br>**[Available format]**<br>**YY : Year (2 digit)**<br>**WW : Japanese calender (A.D. + lower 2 digits of calendar conversion value)**<br>**gggg : Era name (4 digits, acquired from user settings)**<br>**MM : Month**<br>**MMM : Month (letter notation)**<br>**DD : Day** |
| **"Month/day" filling** | Selects the filling method for a 1-digit month or day.<br>For YY, the year is 0 filled. For WW, it is displayed with spaces without filling.<br>Arbitrary designations are not possible. |
| **Time format** | The time format can be specified by a combination of the letters below and characters such as ":". However, a comma cannot be set.<br>**[Available format]**<br>**hh: Hour (24-hour time)**<br>**HH: Hour (12-hour time)**<br>**mm: Minute**<br>**TT: AM/PM**<br>**t t: am/pm**<br>**TTTT: 午前/午後（Kanji）** |
| **"Hour" filling** | Selects the filling method for a 1-digit hour. |
| **"Minute" filling** | Selects the filling method for a 1-digit minute. |

## ・Referencing the Date time object

When [Refer] is enabled from the settings options, [reference/concatenate] allows you to select a format from other objects. Use this function to display the date and time in a barcode, for example.

* The original date time object **"Day of the week" information** can be acquired as a number only when references are allowed.

0: Sunday, 1: Monday, 2: Tuesday, 3: Wednesday, 4: Thursday, 5: Friday, 6: Saturday




## ・Referencing the added value from another object

When the added value is "Add value", "Separate description" is not selected, and "Refer" is selected, the added value can be referenced from another object.

Other objects that can be referenced

・String object

・Barcode object

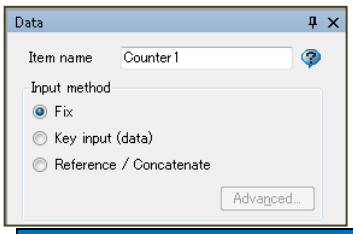
・Date time object (no self-referencing)

・Switching graphic (The added value can be referenced as the graphic entry number)

## - Counter object

This window configures the settings for the counter object. The counter can be configured to increment or decrement one at a time.

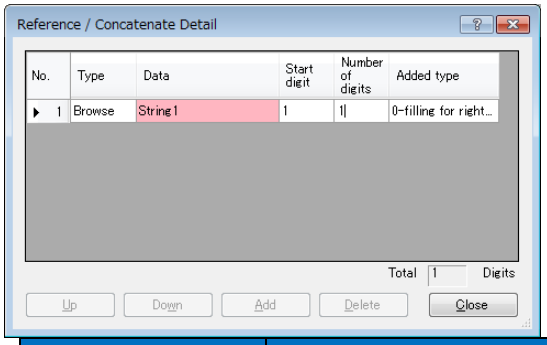
The maximum number of counters that can be configured on a single layout is 8.



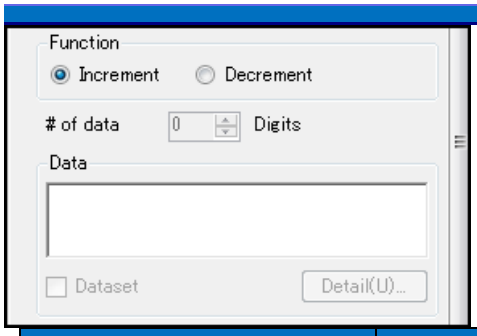

| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design. |
| **Input method** | |
| **Fix** | The value set for [Data] becomes the initial value for the counter. |
| **Key input (data)** | Sets the input method to data that can be input (modified) when printing.<br>The value set in [Data] is the counter start value, and it can also be displayed on the screen during printing. |
| **Reference / Concatenate** | References the value of a separate item as the start value of the counter. |
| **[Advanced] button** | Opens the advanced settings dialog. |

### ・Input method(Reference / Concatenate)-Advanced settings dialog

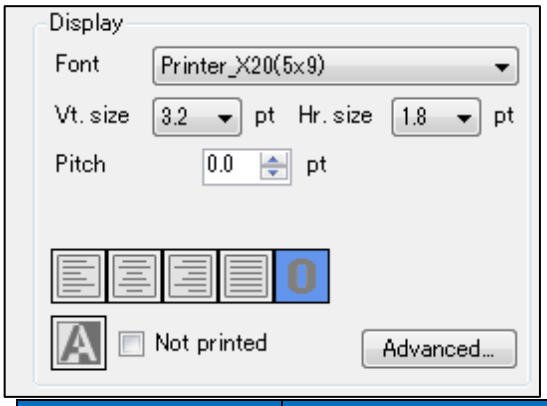
The dialog configures the details of the data reference/concatenate settings.




| Setting items | Contents |
|---|---|
| **Type** | Selects the type of data to concatenate. |
| **Data** | Selects the data to set. Enables you to browse an item only when you set the input method as [key input] on the string object and you set [Input check] as [numeric only] for the [character type] . |
| **Start digit** | Specifies which number of digits of the source data to start duplicate from. |
| **Number of digits** | Specifies number of digit of the data to be duplicated from the start digit.<br>Data that is the target for duplication is always duplicated from the left justified with space filled state. |
| **Added type** | Cannot be changed. [0-filling for right alignment] is selected. |



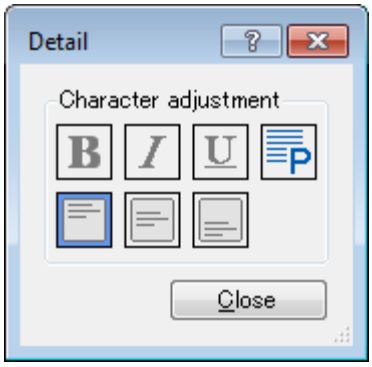

| Setting items | Contents |
|---|---|
| **Function** | |
| **Increment/Decrement** | Sets whether the counter increments or decrements. |
| **# of data** | Specifies the maximum number of digits for the [Key input (data)] data.<br>The maximum number of data digits that can be set is 8. |
| **Data** | |
| **Data** | Sets data for the item.<br>For [Fix], the data set here is the counter start value. For [Key input (data)], the data set here is displayed as the counter start value on the input screen when printing. |
| **Dataset** | * This item can not use in SmaPri Designer |




| Setting items | Contents |
|---|---|
| **Display** | |
| **Font** | Selects the type of font.<br>Fonts that are named "Printer_XXXX" are SATO printer fonts.<br>The characters that can be used is different according to the font type. |
| **Vt. size** | Specifies the vertical size of the font in points. |
| **Hr. size** | Specifies the horizontal size of the font in points. |
| **Pitch** | Specifies the pitch in points. |
| **Justify left** | Not selectable |
| **Center** | Not selectable |
| **Justify right** | Not selectable (Always Enable) |
| **Justify** | Not selectable |

| | |
|---|---|
| **0-filling** | Not selectable (Always Enable) |
| **Reverse black and white** | Not selectable |
| **Not printed** | Select this check box to prevent the item from being printed. |
| **[Advanced] button** | Opens the Detail dialog. |

## ・Detail-Detail setting dialog




| Setting items | |
|---|---|
| **Character adjustment :**<br>These settings adjust the entire item, not single characters.<br>The settings that can be used differ according to the character type. | |
| **Bold** | Not selectable |
| **Italic** | Not selectable |
| **Underline** | Underlines the text. |
| **Proportional** | Fills the pitch by the horizontal size of each character. |
| **Justify top** | Justifies the text at the top of the designated printing region. |
| **Justify vertical center** | Justifies the text in the center of the designated printing region. |
| **Justify bottom** | Justifies the text at the bottom of the designated printing region. |

## ・Counter object references from other objects

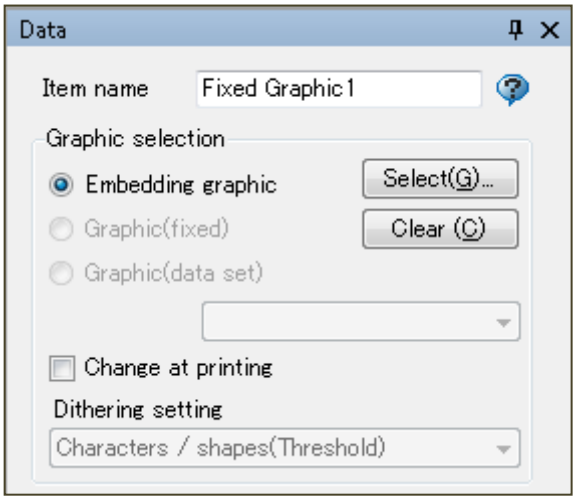
The value of a counter object can only be referenced from a string object or a barcode object.

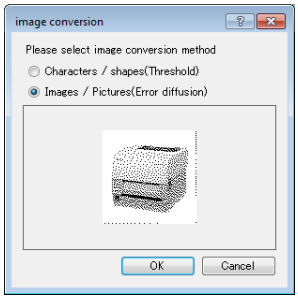
When referencing, there are conditions and limitations, so note the items below.

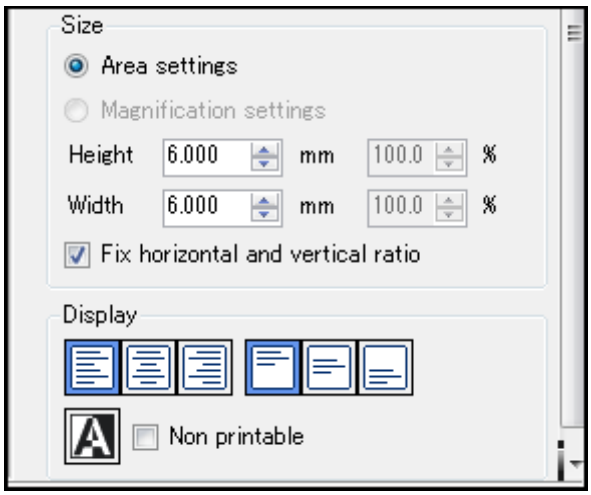
| Object type / Conditions and limitations | String object | Barcode object |
|---|---|---|
| Font type | Set to font other than Japanese kanji | Set to font other than Japanese kanji |
| Reference multiple counters on the Reference / Concatenate Detail dialog. | No | No |
| Reference an item that references a counter (secondary reference) | No | No |

## - Fixed graphic object

This window configures the settings for the fixed graphic object.



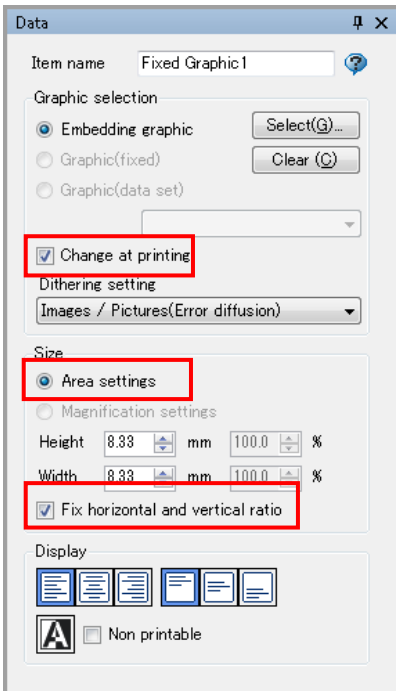

| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design. |
| **Graphic selection** | |
| **Embedded graphic** | Specify the file to embed on the layout with the [Select] button to paste it on the design window.<br>If the selected graphic is color, the graphic is imported after you select the dithering method.<br>  <br>Embedded graphics are imported into the tool. The graphic does not disappear, even if the original file is deleted. |
| **Clear** | Clears the embedded graphic and the SATO logo graphic that is the default when pasting a fixed graphic and clears the selection. |
| **Graphic(fixed)** | * Not usable with SmaPri Designer |
| **Graphic(data set)** | * Not usable with SmaPri Designer |
| **Change at printing** | Specifies and prints a graphic that is in the Issuing terminal when printing. |
| **Dithering setting** | Selects the dithering method to create the monochrome graphic when printing if the imported graphic is color.<br>[Characters / shapes (Threshold)], [Images / Pictures (Error diffusion)] |




| Setting items | |
|---|---|
| **Size** | |
| **Area settings** | The area displaying the graphic data is specified in millimeters for height and width you set. |
| **Magnification settings** | Specifies the height and the width for the graphic data size as a percentage. The original size is 100%.<br>To modify the graphic size, you can also drag the object on the design window. |
| **Fix horizontal and vertical ratio** | Displays the graphic data without changing the aspect ratio.<br>The aspect ratio is also maintained when zooming in or out after embedding the graphic. |
| **Display** | |
| **Align graphic left** | Left aligns the graphic when the image size is less than the specified area. |
| **Align graphic center** | Centers the graphic when the image size is less than the specified area. |
| **Align graphic right** | Right aligns the graphic when the image size is less than the specified area. |
| **Top align** | Top aligns the graphic when the image size is less than the specified area. |
| **Middle align** | Centers the graphic when the image size is less than the specified area. |
| **Bottom align** | Bottom aligns the graphic when the image size is less than the specified area. |
| **Reverse black and white** | Prints reversing black and white. |
| **Non printable** | Select this check box to prevent the item from being printed. |

**・Settings to embed image data imported by the terminal's camera or paint software on the label**

Configure the fixed graphics settings as shown below.
"**Change at printing** + **Area settings** + **Fix horizontal and vertical ratio**"




With the above settings, even when the number of pixels in the image data differs by terminal, and the aspect ratio of the image data differs by terminal, the area can be filled with the image data while maintaining the aspect ratio.

Example:
When you want to print the two hand-written signatures with different aspect ratios below in a **10 mm x 30 mm** specified area

1) 5 mm x 20 mm image

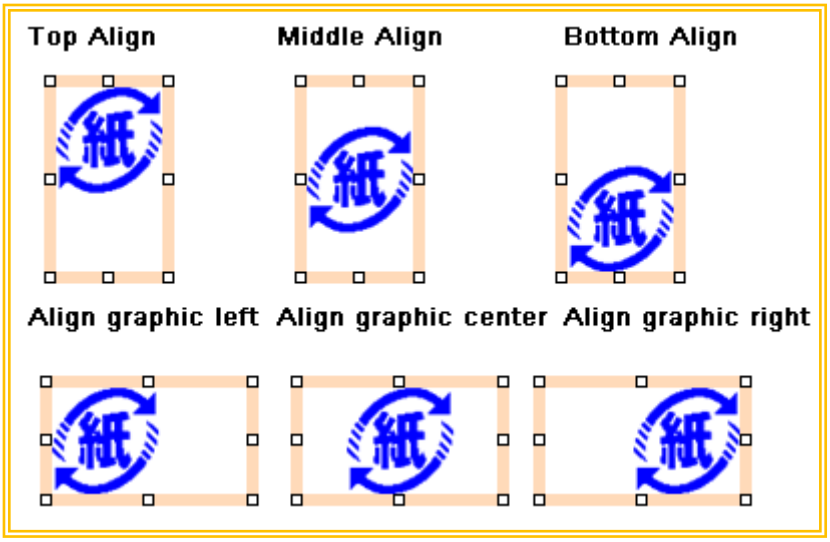
The (1) image is enlarged to a maximum of 1.5x the original size in the area.

2) 10 mm x 20 mm image

The (2) image has the same height as the specified area, so the original size.

When the aspect ratio for the graphic area and the aspect ratio for the imported image data are different, white space occurs vertically or horizontally.
This white space can be adjusted by the toggle buttons under "Display".

Example of adjusting the display when white space occurs




## How to display image data in an area with a fixed aspect ratio

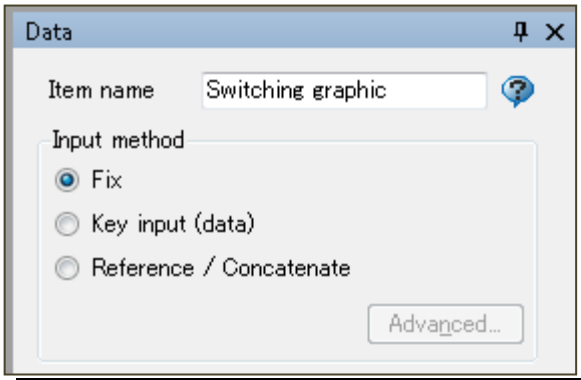
The image data has enlarged/shrunk to the maximum size that can be displayed in the specified area and displayed in the area while maintaining the aspect ratio of the original size of the imported graphic data (or graphic data that will be imported at printing).

Example: Original graphic (6mm H x 6mm W)

| Height only enlarged to 10 mm (10 mm H x 6 mm W) | Width only enlarged to 10 mm (6 mm H x 10 mm W) | Height and width enlarged to 10 mm (10 mm H x 10 mm W) |
|---|---|---|
| | | |

## - Switching graphic object

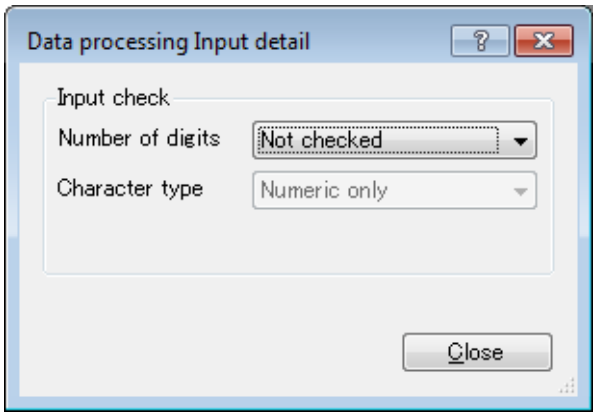
This window configures the settings for the switching graphic object.




| Setting items | |
|---|---|
| **Item name** | Sets the item used in the layout design. |
| **Input method** | |
| **Fix** | Uses the value set for [Data]. |
| **Key input** | Uses the value that be input when printing. Input the Registration number. The value set in [Data] is the initial value. |
| **Reference / Concatenate** | Copies an object, keys in fixed values and uses a value made of multiple object values combined. . |
| **[Advanced] button** | Opens the advanced settings dialog. |

### ・Input method(When Key input (data) is selected)-Advanced settings dialog

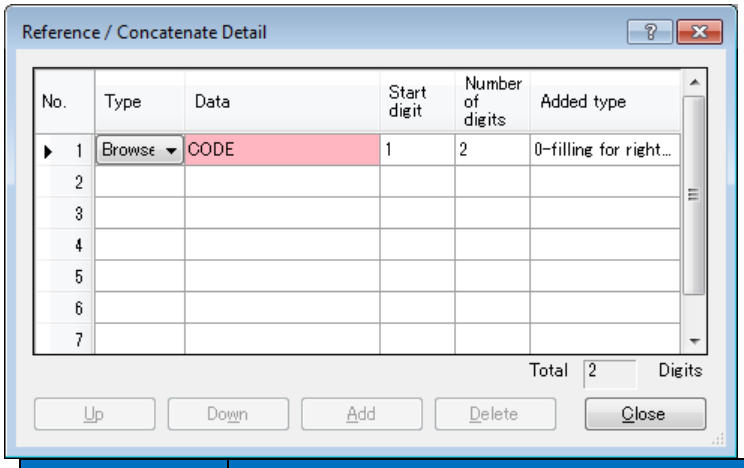
This dialog configures the check method for input data when it is input.




| Setting items | |
|---|---|
| **Input check** | |
| **Number of digits** | You can set either not checked or input required (blank prohibited). |

## ・Input method(Reference / Concatenate)-Advanced settings dialog

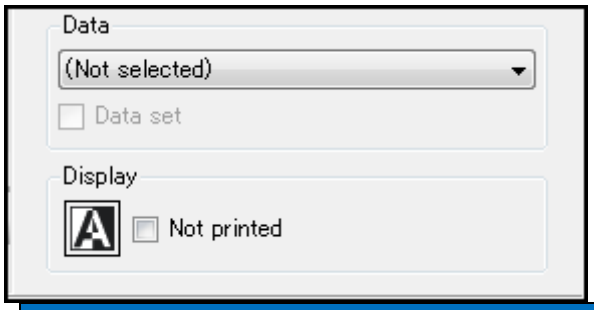
The dialog configures the details of the data reference/concatenate settings.




| Setting items | Contents |
|---|---|
| **Type** | Selects the type of data to concatenate.<br>**Fix:** Sets the value set in "Data".<br>**Browse:** Duplicates the value of another object. |
| **Data** | Selects (when referencing) or inputs (when fixed) the data to set. |
| **Start digit** | Specifies which number of digit of the source data to start duplicate from. |
| **Number of digits** | Specifies number of digit of the data to be duplicated from the start digit.<br>Data that is the target for duplication is always duplicated from the left justified with space filled state. |
| **Added type** | Specifies the filling method for digits when the number of digits in the referenced data is not sufficient. |

### ・Added type items

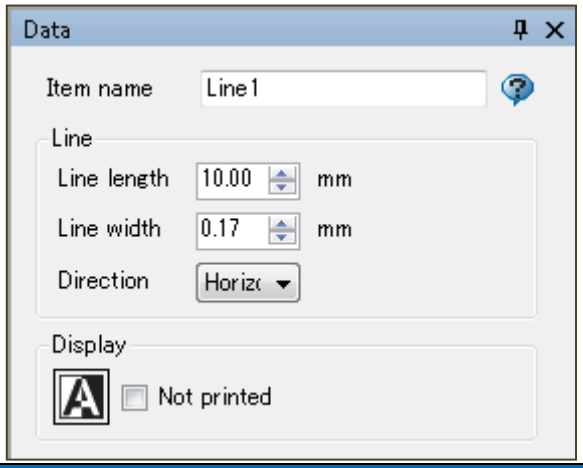
| Added type | Filling method | Example |
|---|---|---|
| **Space-filling for left alignment** | If the number of input digits is not sufficient, the end of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ 120ss (s equals one space character) |
| **Space-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ ss120 (s equals one space character) |
| **0-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of "0" characters. | Number of input digits: 5 digits, input: 120 ⇒ 00120 |




| Setting items | |
|---|---|
| **Data** | |
| **Data selection list box** | Selects the graphic table data. If "(Not selected)", the switching graphic on the layout is the SATO symbol (not printed). |
| **Dataset** | * This item can not use in SmaPri Designer |
| **Display** | |
| **Reverse black and white** | Prints inverse printing |
| **Not printed** | Select this check box to prevent the item from being printed. |

## - Line object

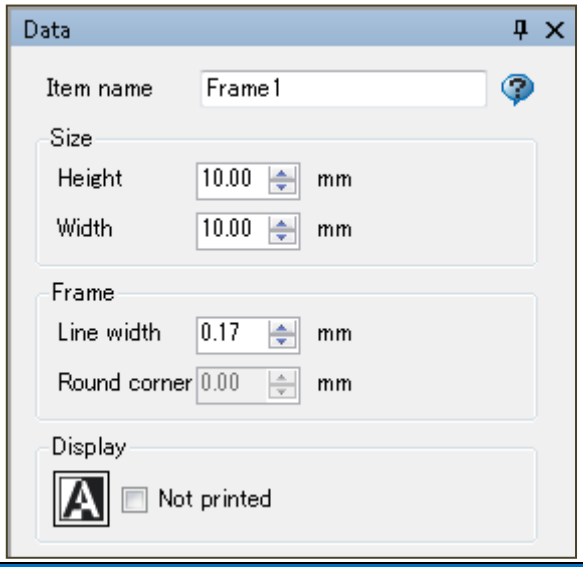
This window configures the settings for the line object.




| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design |
| **Line** | |
| **Line length** | Specifies the length of the line in millimeters. |
| **Line width** | Specifies the width of the line in millimeters. |
| **Direction** | Specifies horizontal or vertical as the line direction. |
| **Display** | |
| **Reverse black and white** | Prints reversing black and white. |
| **Not printed** | Select this check box to prevent the item from being printed. |

## - Frame object

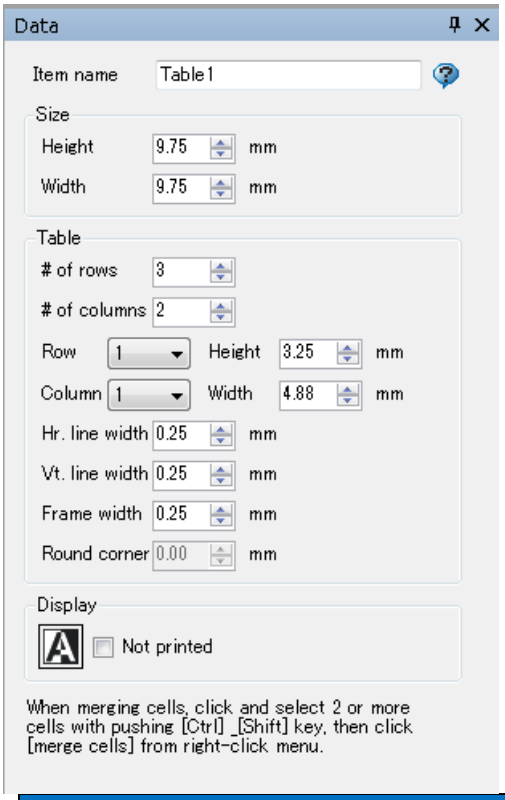
This window configures the settings for the Frame object.




| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design |
| **Size** | |
| **Height** | Specifies the height of the frame in millimeters. |
| **Width** | Specifies the width of the frame in millimeters. |
| **Frame** | |
| **Line width** | Specifies the width of the line in millimeters. |
| **Round corner** | Specifies the radius for rounding the corners of the frame line.<br>**This setting can only be set when a compatible printer type is selected.** |
| **Display** | |
| **Reverse black and white** | Prints reversing black and white. |
| **Not printed** | Select this check box to prevent the item from being printed. |

## - Table object

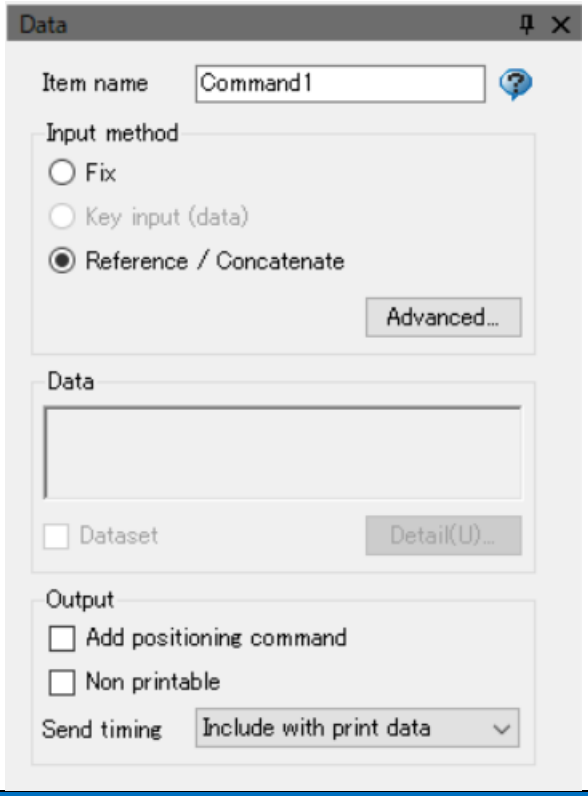
This window configures the settings for the table object.




| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design. |
| **Size** | |
| **Height** | Specifies the height of the table in millimeters. |
| **Width** | Specifies the width of the table in millimeters. |
| **Table** | |
| **# of rows** | Specifies the number of rows in the table. |
| **# of columns** | Specifies the number of columns in the table. |
| **Row** | Specifies the horizontal line specified at the position from the top edge. |
| **Column** | Specifies the vertical line specified at the position from the left edge. |
| **Height** | Specifies the position of the horizontal line specified by Row from the top edge. |
| **Width** | Specifies the position of the vertical line specified by Column from the left edge. |
| **Hr. line width** | Specifies the width of the horizontal lines in the table. |
| **Vt. line width** | Specifies the width of the vertical lines in the table. |
| **Frame width** | Specifies the width of the frame lines for the table. |
| **Round corner** | Specifies the radius for rounding the corners of the table frame.<br>**This setting can only be set when a compatible printer type is selected.** |
| **Display** | |
| **Reverse black and white** | Prints reversing black and white. |
| **Not printed** | Select this check box to prevent the item from being printed. |

## - Command object

This window configures the settings for the command object. With this object, you can directly set commands to output.

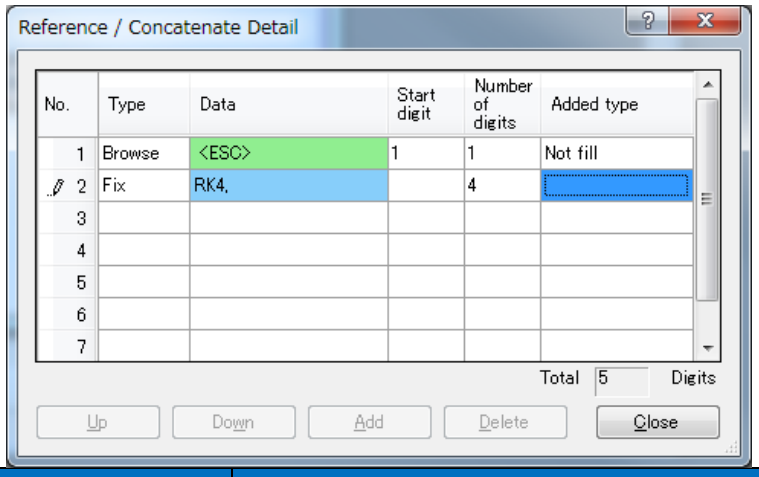



| Setting items | |
|---|---|
| **Item name** | The name of the item used in the layout design. |
| **Input method** | |
| **Fix** | Uses the value set for [Data]. |
| **Reference / Concatenate** | Copies an object, keys in fixed values and uses a value made of multiple object values combined. . |
| **[Advanced] button** | Opens the Reference / Concatenate Detail dialog. |
| **Data** | |
| **Data** | When the input method is selected as [Fix], the data set here is output as SBPL commands without modifications. You must set data that also includes the escape command <ESC>.<br>Please input the escape command <ESC> with the substitute character specified on the [Data properties] dialog. |
| **[Detail] button** | Opens the Detail dialog. |
| **Output** | |
| **Add positioning command** | For command data set by "Fix" and "Browse, you can output data by adding the command for the position where the "command object" was pasted. |
| **Non printable** | This setting prevents the set command data from being output. |
| **Send timing** | Selects the timing of sending command. Choose from “Include with print data”, “Output before print data”, “Output after print data”. |

| | |
|---|---|
| | If “Add positioning command” is checked, send timing is fixed to “Include with print data”. |

### ・Advanced settings dialog

The dialog configures the details of the data reference/concatenate settings.

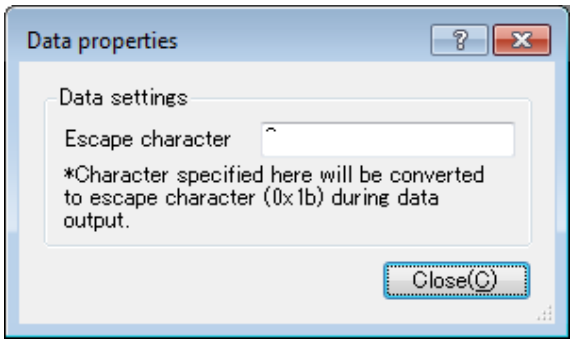



| Setting items | Contents |
|---|---|
| **Type** | Selects the type of data to concatenate.<br>**Fix:** Sets the value set in "Data".<br>**Binary:** Sets the value set in "Data" as binary data.<br>**Browse:** Duplicates the value of another object. |
| **Data** | Selects (when referencing) or inputs (when fixed) the data to set. |
| **Start digit** | Specifies number digit of the source data to start duplicating |
| **Number of digits** | Specifies up to number of digit of the data to duplicate from the start digit.<br>Note: Data that is the target for duplication is always duplicated from the left justified space filled state |
| **Added type** | Specifies the filling method for digits when the number of digits in the referenced data is not sufficient. |

## ・Added type items

| Added type | Filling method | Example |
|---|---|---|
| **Not fill** | If the number of input digits is not sufficient, the actual data is not modified. | Number of input digits: 5 digits, input: 120 ⇒ 120 |
| **Space-filling for left alignment** | If the number of input digits is not sufficient, the end of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ 120ss (s equals one space character) |
| **Space-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of space characters. | Number of input digits: 5 digits, input: 120 ⇒ ss120 (s equals one space character) |
| **0-filling for right alignment** | If the number of input digits is not sufficient, the front of the actual data is filled with the number of digits worth of "0" characters. | Number of input digits: 5 digits, input: 120 ⇒ 00120 |

## ・Detail dialog




| Setting items |
|---|
| **Data settings** |
| **Escape character** |
| Specifies the substitute character for the escape command <ESC> when setting SBPL commands in [Data].<br>The string specified here is converted to the escape character (0x1b) when data is output. |

The 5th chapter

# Special Operations

# 5-1 Table function

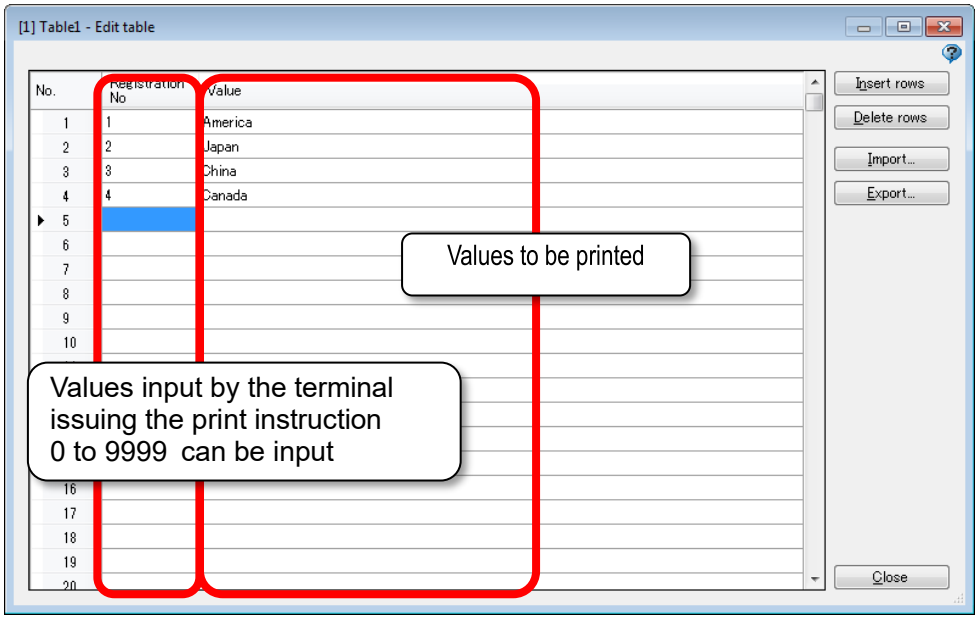
- Table – Graphic table

SmaPri Designer features a table function that converts numeric values that are input to register text data.

By inputting numeric values with a maximum of 4 digits, you can convert those values to fix Japanese kanji data and print them, and easily mistaken barcode input can also be converted from 1 to 4 digit numbers.

The table data can also be shared and used across multiple layouts.

Tables can be registered **up to 99 tables in a single project**.



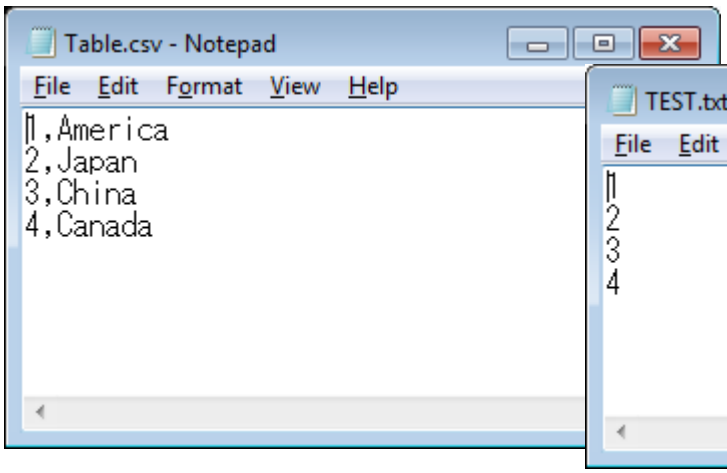

| Manual operation button | |
|---|---|
| **Insert rows** | This button can insert a new row above the selected row. |
| **Delete rows** | This button can delete the selected row. |
| **Import** | An external file can be imported as table data.<br>The file formats are CSV files, tab delimited text files, and table files (files for the project). |
| **Export** | The table data can be saved as an external file.<br>The file formats are CSV files, tab delimited text files, and table files (files for the project). |

## - CSV and tab delimited data that can be imported.

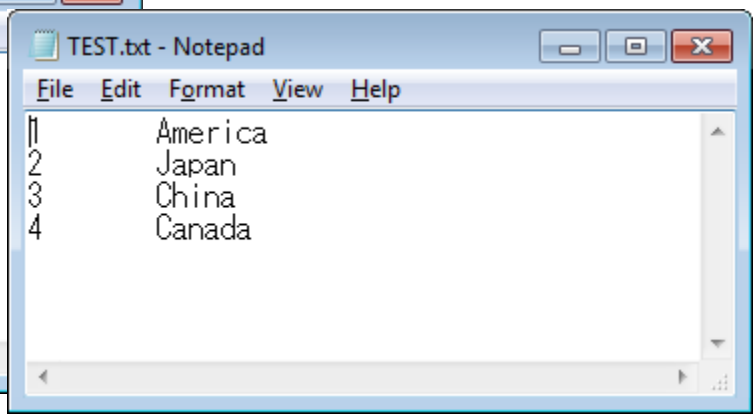
### No header data

| Registration No. | (Comma or tab) | Content | CR+LF |
|---|---|---|---|
| 0 to 9999 | Separator | Digits specified by number of digits (32 max) | Line feed code |

Comma separated data example

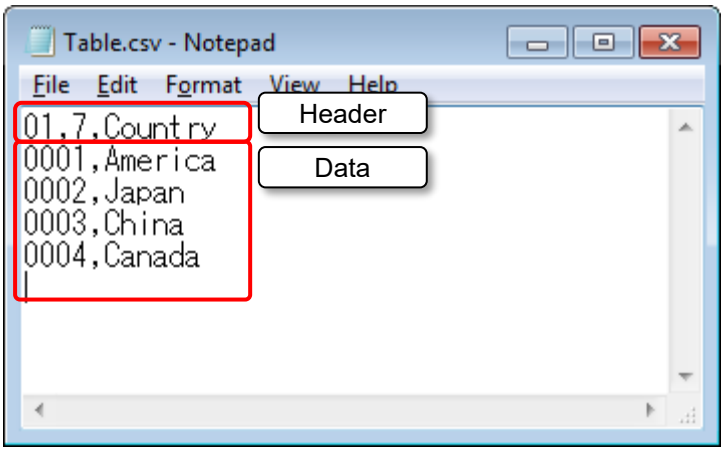



Tab delimited data example



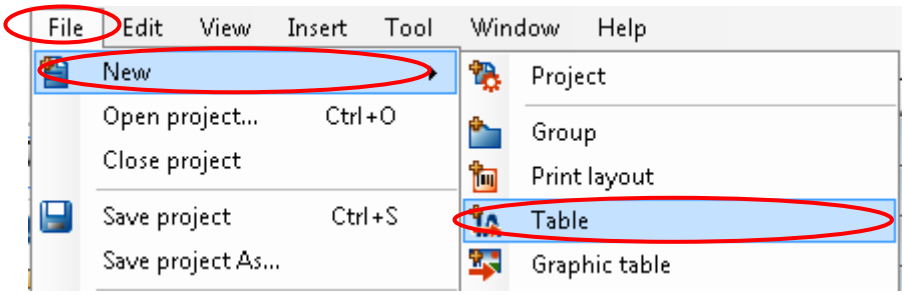

### Data with header information

| 1st row | | | | | |
|---|---|---|---|---|---|
| Table number | (Comma or tab) | Number of digits | (Comma or tab) | Table name | CR+LF |
| 01 to 99 | Separator | 01 to 16 table name number of digits | Separator | String 16 characters max | Line feed code |
| From 2nd row | | | | | |
| Registration No. | (Comma or tab) | Number of digits | (Comma or tab) | Content | CR+LF |
| 0000 to 9999 | Separator | 01 to 32 value number of digits | Separator | Digits specified by number of digits (32 max) | Line feed code |



## - Table registration steps

1) On the menu bar, select [New] > [Table].



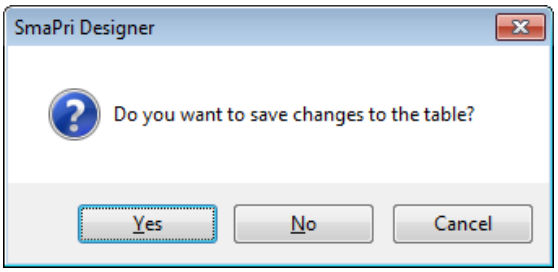

The table can also be registered on the project window with [Project folder] > [New] > [Table], or if there is already a table folder on the project window, table folder > [New]
The table can also be created with [New] on the toolbar.

2) The edit (register) table window opens.

3) Enter the value to input at printing in Registration No. and the value to print after conversion in Value.

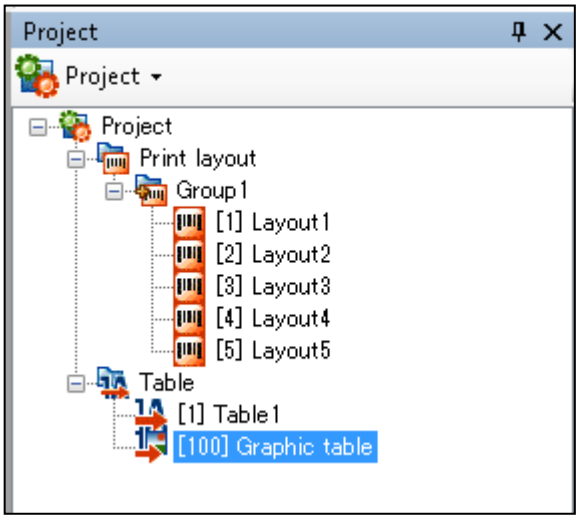
You can register a 1 to 4 digit number in Registration No. and text 1 to 32 characters long (double-byte 16 characters) for Value.

4) When finished registering entries, click the [Close] button to save the table and close the window.

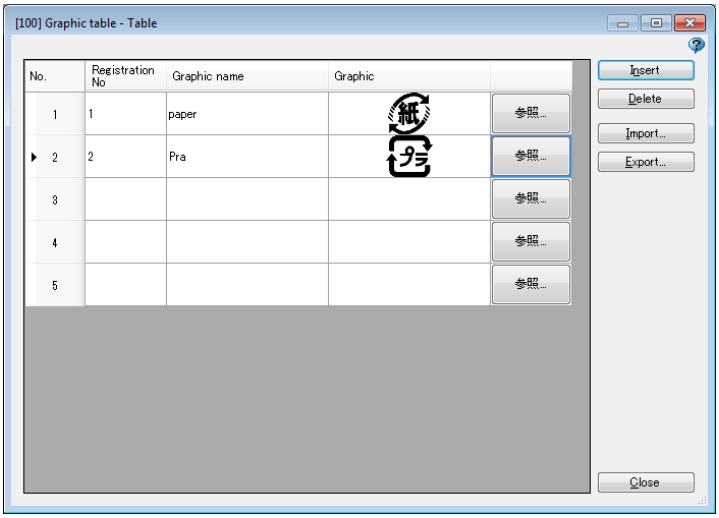


## - For a graphic table

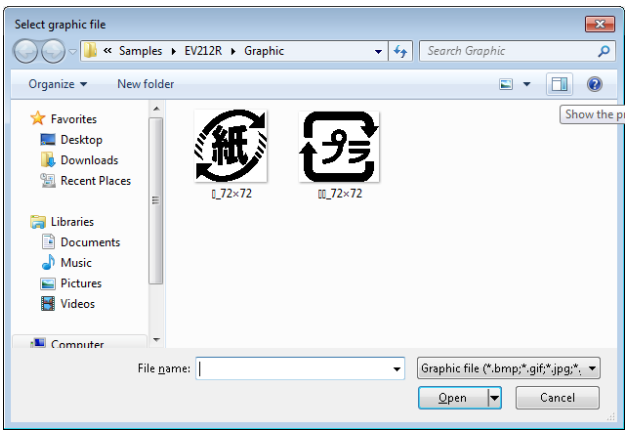
1) On the project window, double click the graphic table.



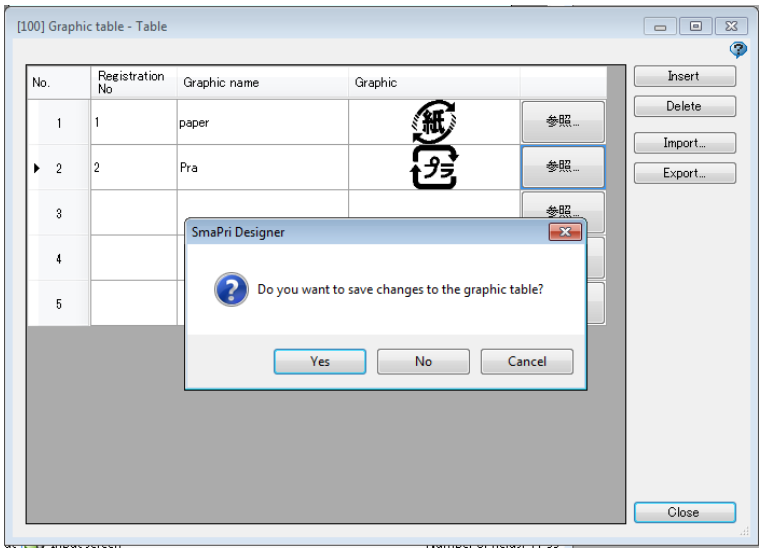

2) The edit (register) table window opens. In Registration No., enter the value to input and enter the graphic name, then click the (Browse) button.




3) Select the graphic file you want to register and click the [Open] button.

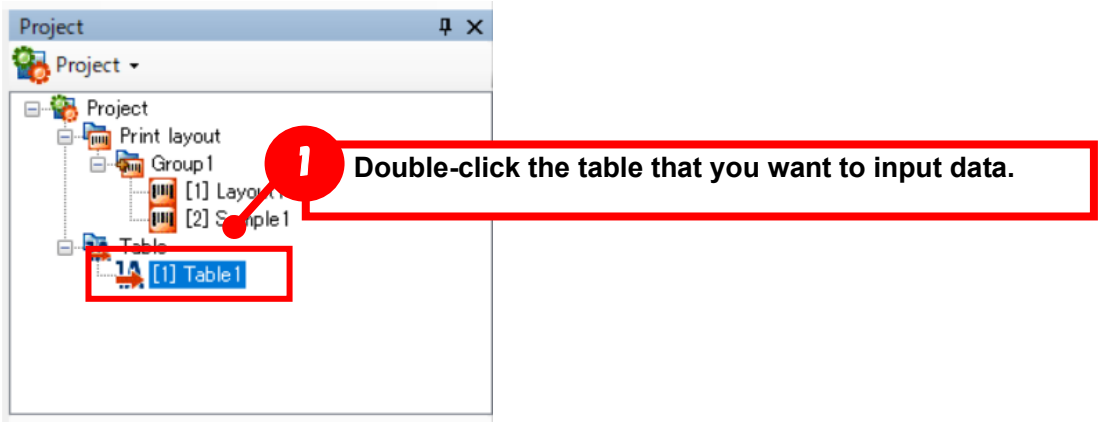


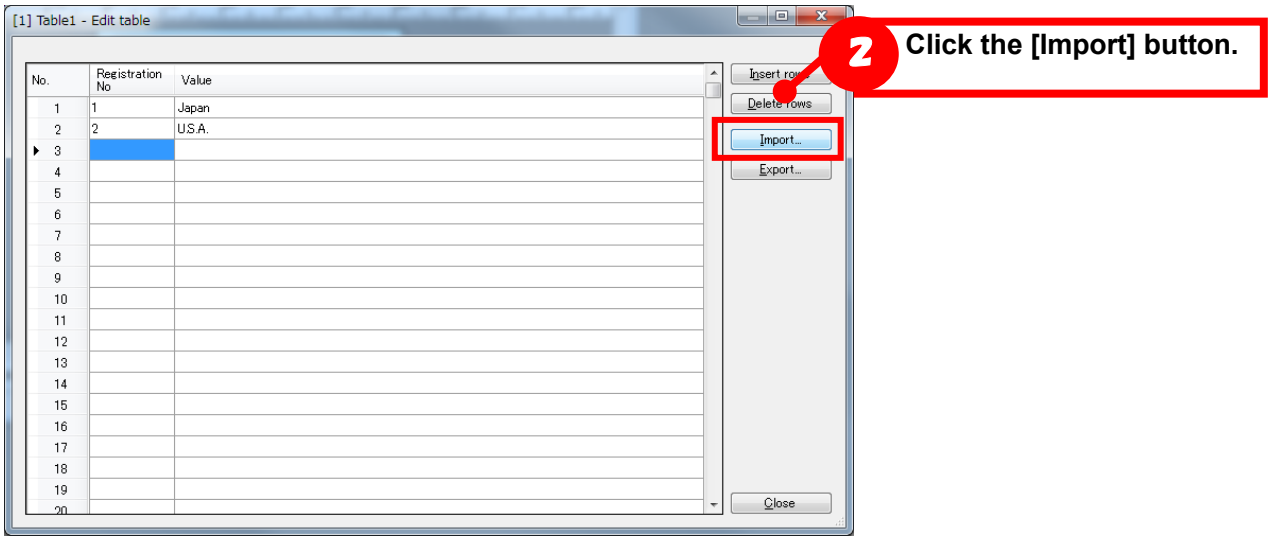
4) When finished registering entries, click the [Close] button to save the table.

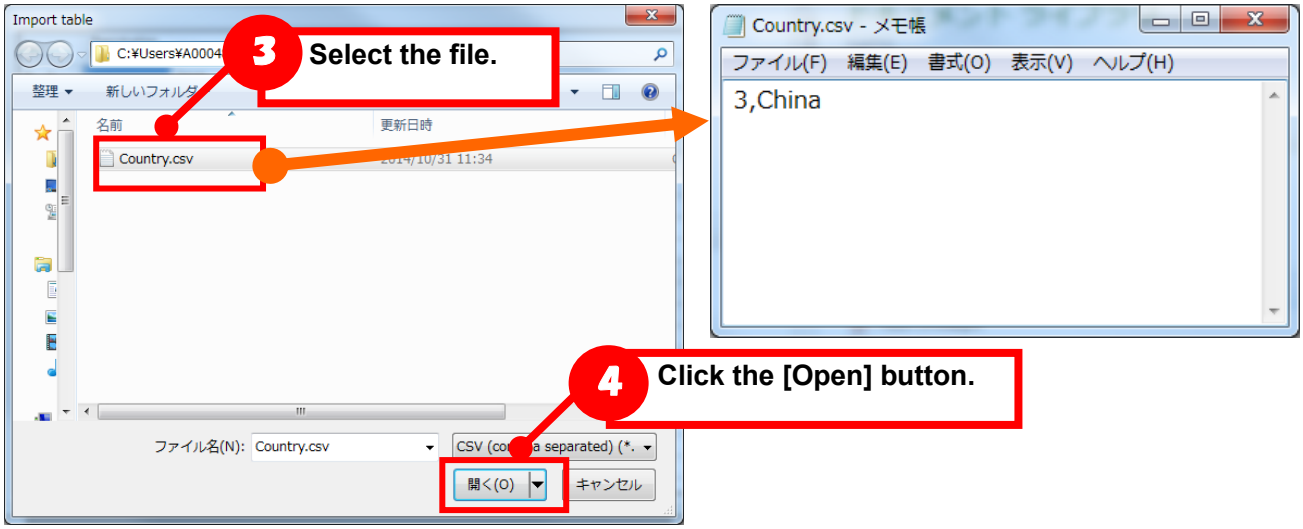


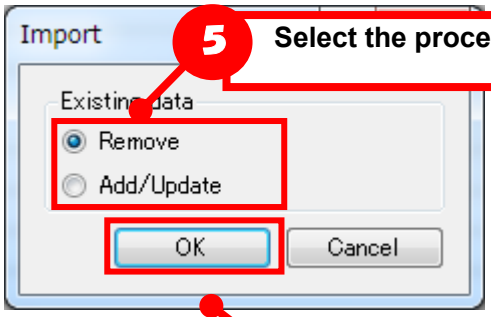
## - Table importing steps

※The graphic table is similar operation.



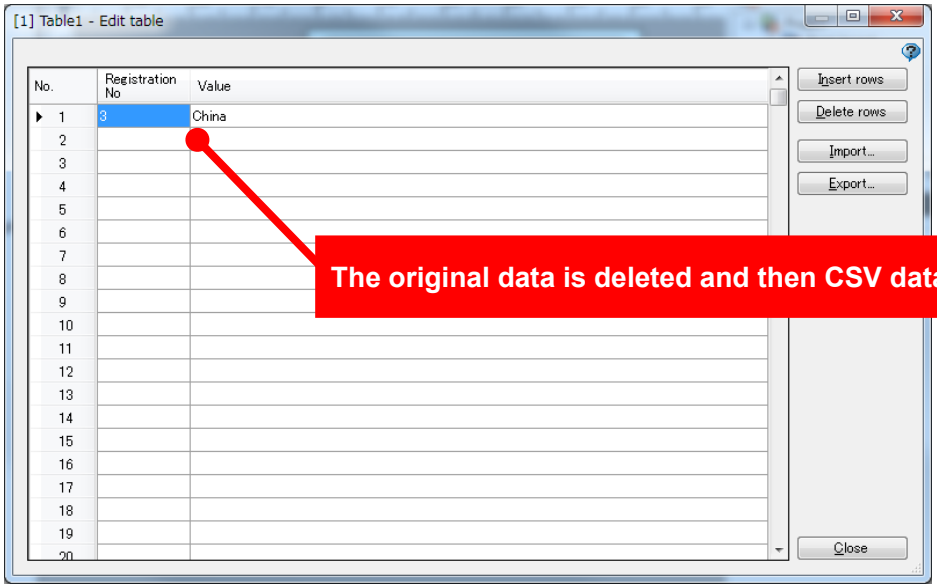



5 Select the processing method of existing data.

**[Remove]** Delete all existing data and then new data will be stored.
**[Add/Update]** Existing data will be remained, the data will be updated if the same data numbers are existed, or the data will be added if the same data numbers are not existed.

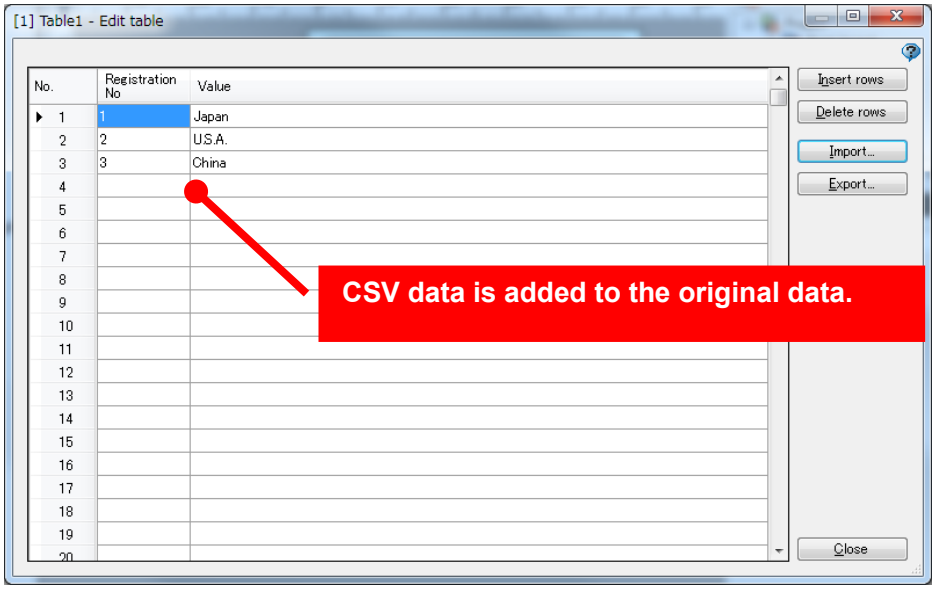
Click the [OK] button.

## [The case that select the Remove]




The original data is deleted and then CSV data will be stored.

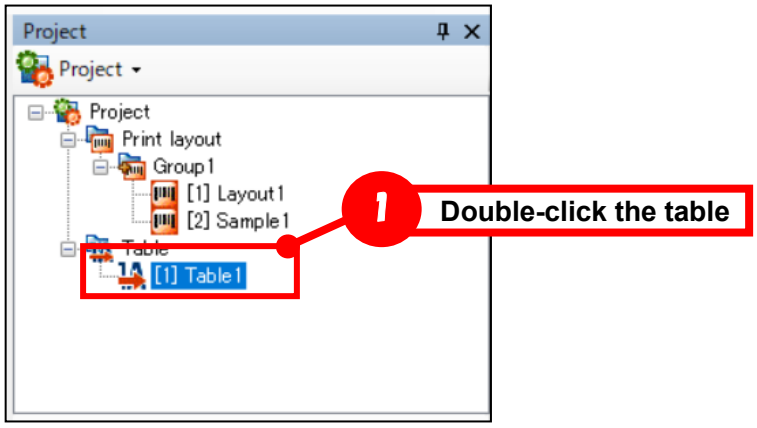
## [The case that select the Add/Update]

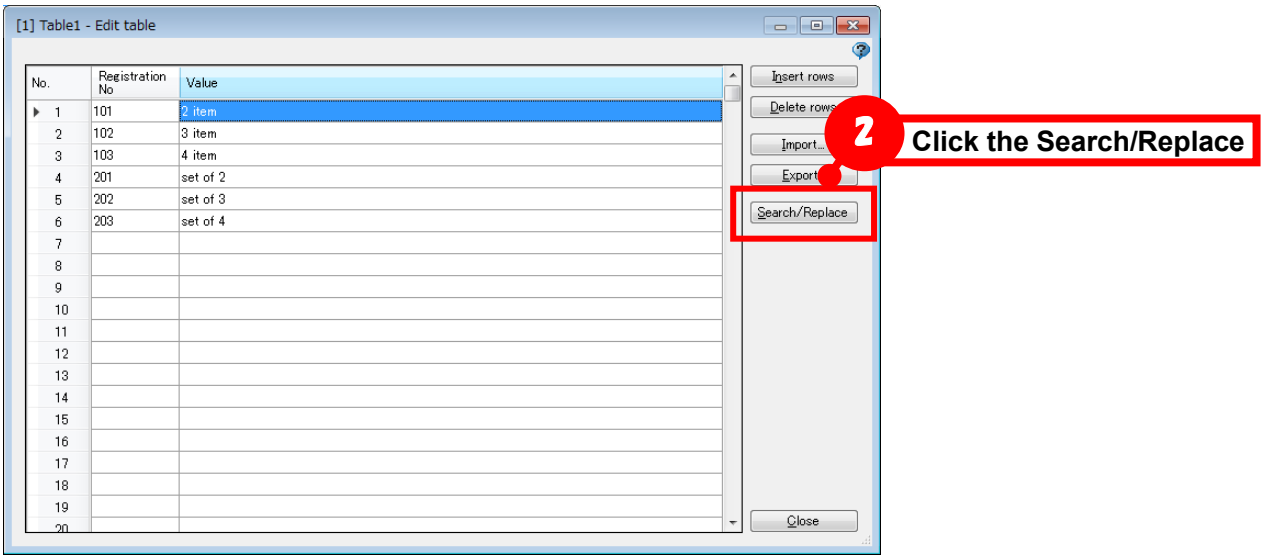



CSV data is added to the original data.

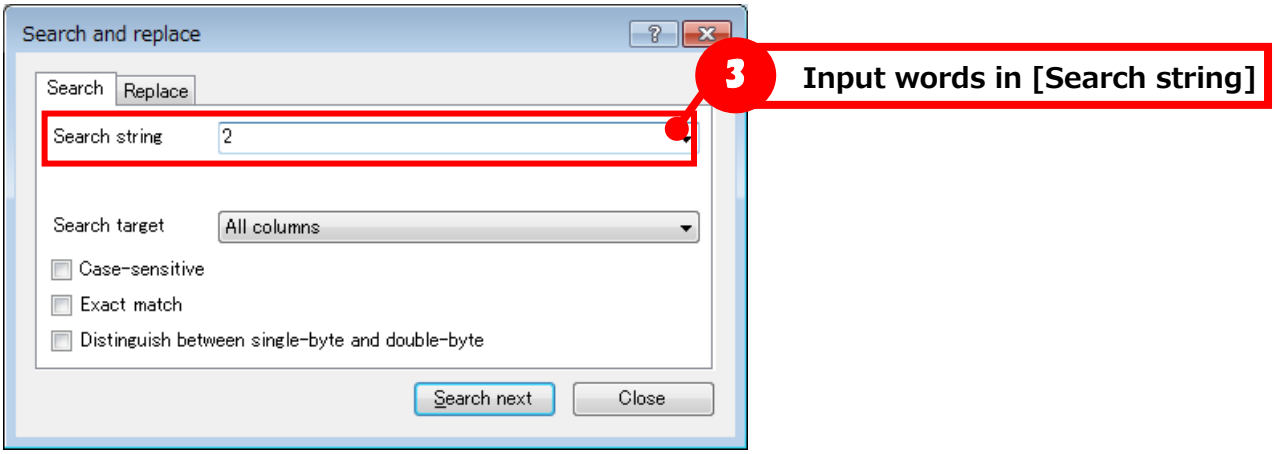
## - Table data, Search and Replace

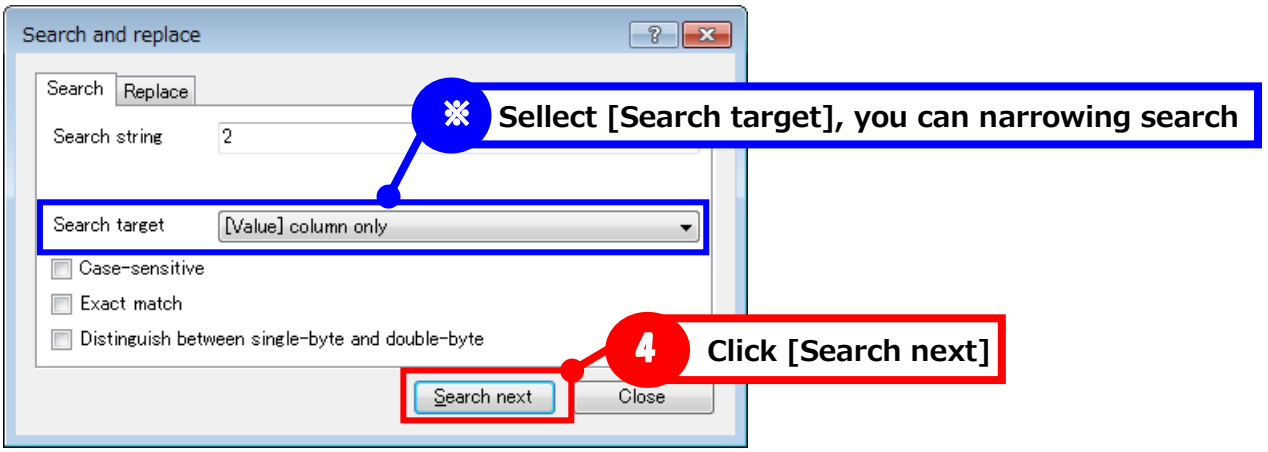
※The graphic table is similar operation.

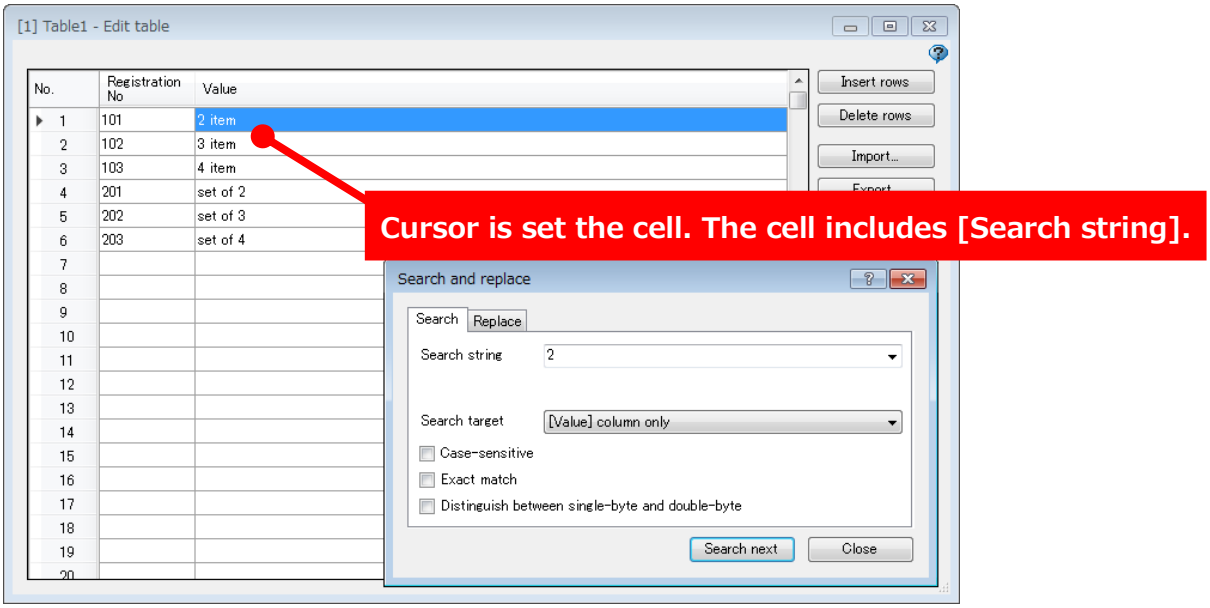


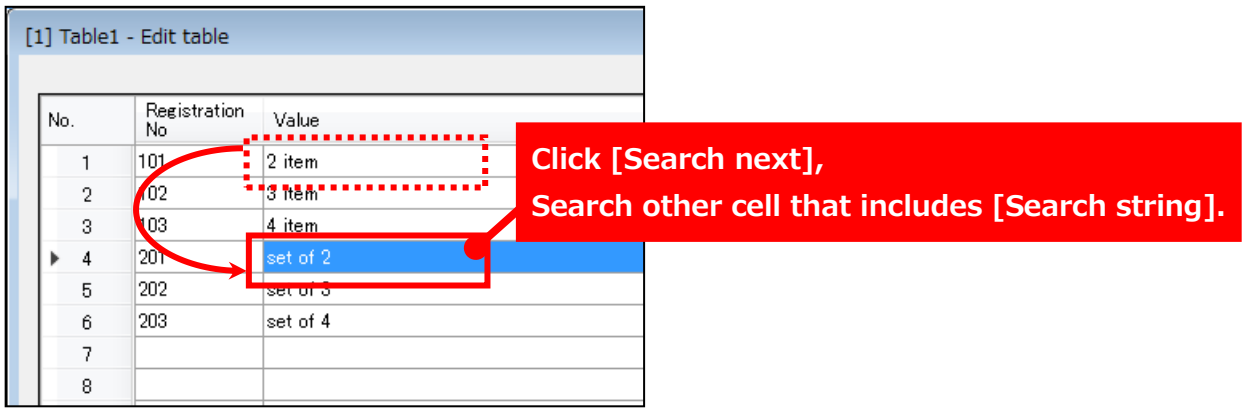




### [Search]

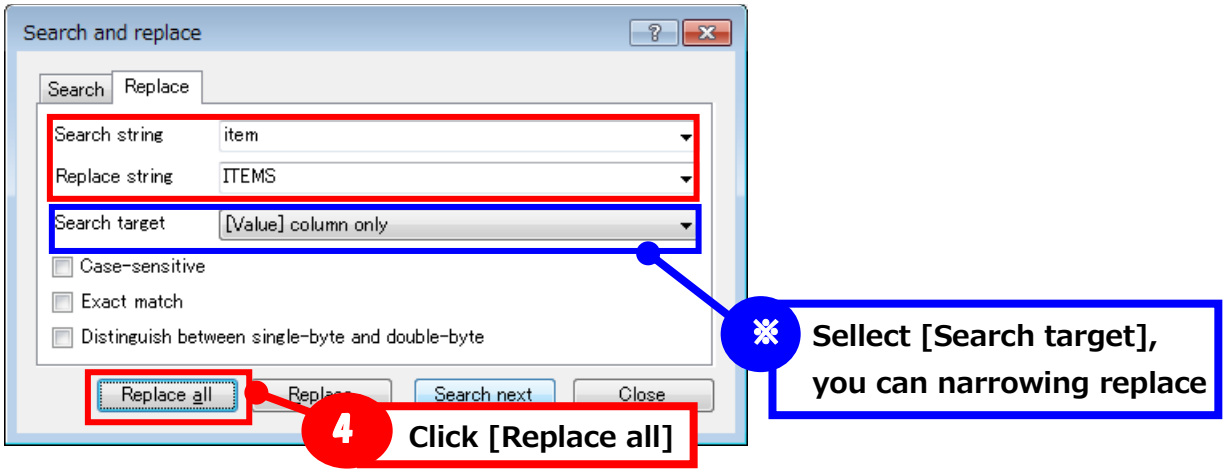


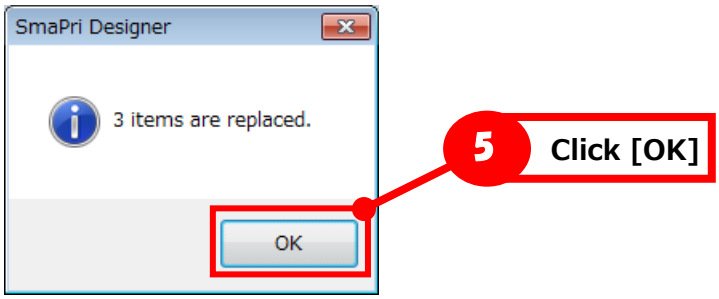

Search and replace
Search
Replace
Search string
2
※
Sellect [Search target], you can narrowing search
Search target
[Value] column only
Case-sensitive
Exact match
Distinguish between single-byte and double-byte
4
Click [Search next]
Search next
Close

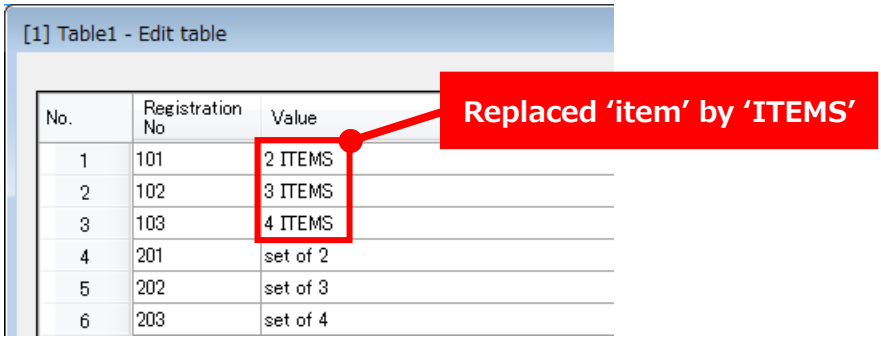

[1] Table1 - Edit table
No.
Registration No
Value
1 101 2 item
2 102 3 item
3 103 4 item
4 201 set of 2
5 202 set of 3
6 203 set of 4
Insert rows
Delete rows
Import...
Cursor is set the cell. The cell includes [Search string].
Search and replace
Search
Replace
Search string
2
Search target
[Value] column only
Case-sensitive
Exact match
Distinguish between single-byte and double-byte
Search next
Close


[1] Table1 - Edit table
No.
Registration No
Value
1 101 2 item
2 102 3 item
3 103 4 item
4 201 set of 2
5 202 set of 3
6 203 set of 4
7
8
Click [Search next],
Search other cell that includes [Search string].

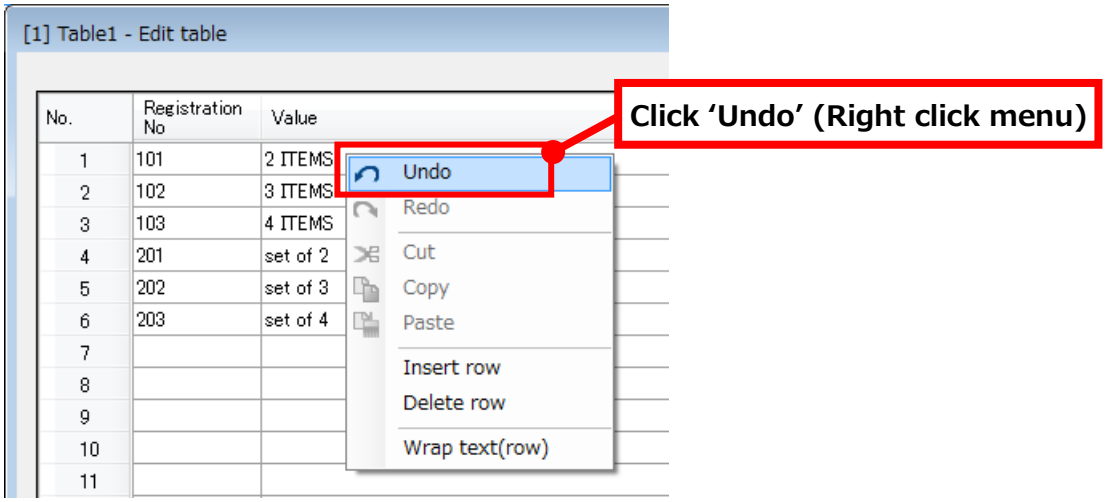
## [Replace]




### Note: Cancel the replacement



# 5-2 Preview test print function

- Preview test print

Using a created layout, this function displays the preview of the results that are input with data by the terminal that issues the print instruction, and it then allows you to check the results printed by the printer.

**Note: above the preview**
When using the embedded TrueType font function, the text, the shape of the text, and the position of line feeds may differ between the preview display and the actual printer results due to the differences between the Windows operating system and the Android operating system.

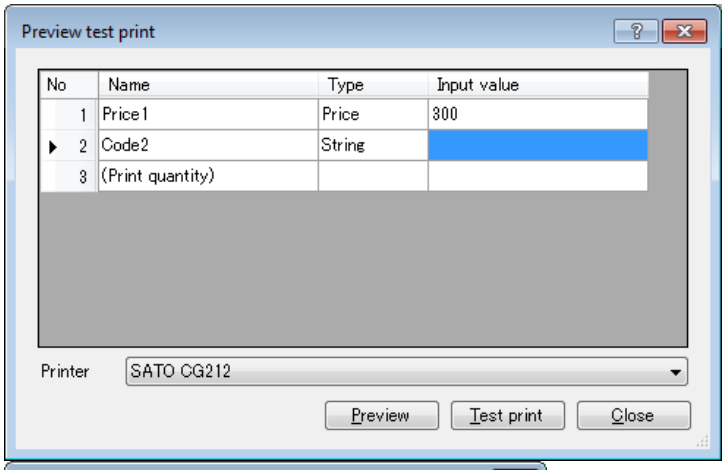
## - In the cases of other than variable-length receipt paper

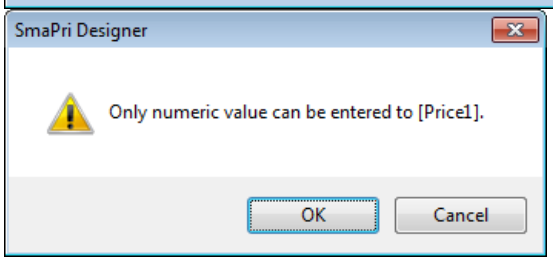
1) On the toolbar, click the [Preview test print] button.

   You can also perform the same action on the menu bar with [File] > [Preview test print].

2) The preview test print window is displayed.

3) Enter a value in the input value fields.




* An error message is displayed if an invalid value is input.

4) Click the preview button after entering the print quantity to display the preview window. On the preview window, you can check the number of pages for the quantity. However, the quantity is limited to 9.

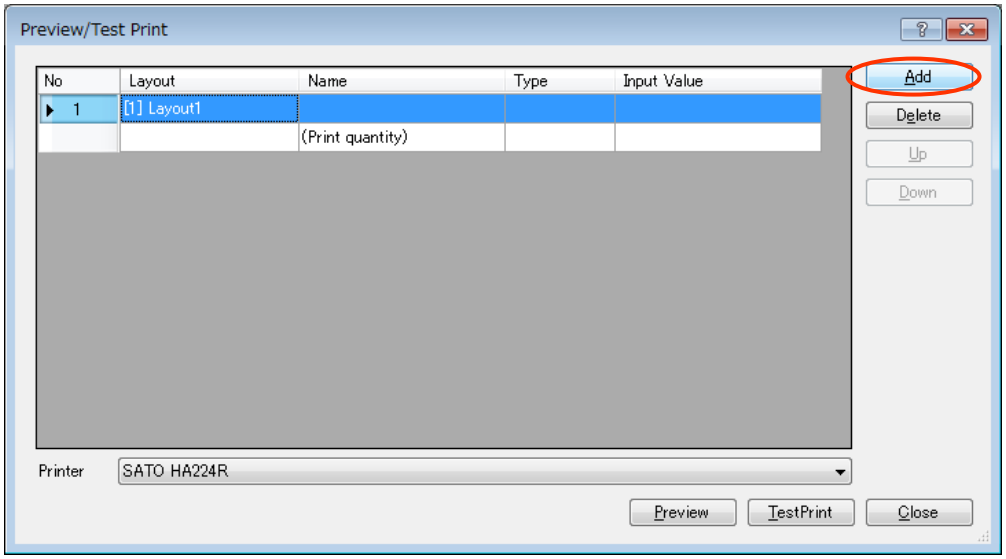
5. Select the printer on the printer list and click the test print button to print the test. The printer list shows all the SATO printer drivers installed on the PC. Select the printer type configured on the printer settings tab.
   If you select a different printer, the test may not print correctly.

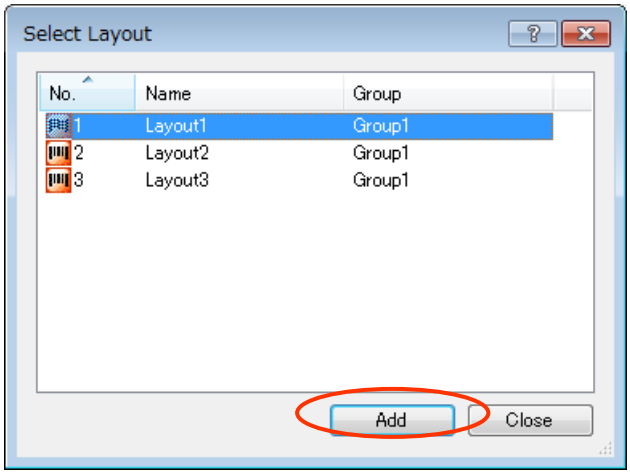
## - In the case of variable-length receipt paper

1) On the toolbar, click the [Preview test print] button.
   You can also perform the same action on the menu bar with [File] > [Preview test print].

2) The preview test print window is displayed.

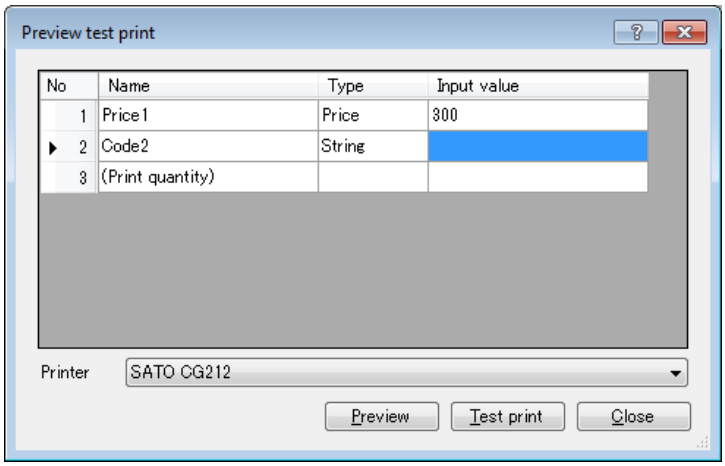
3) Add a Layout.

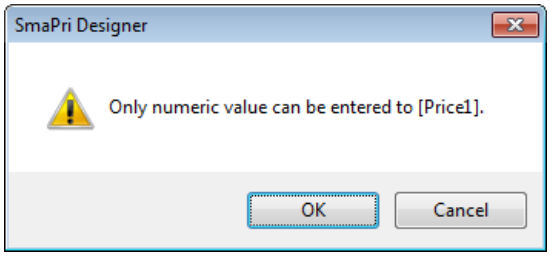



*A layout can be added continuously.

4) Enter a value in the input value fields.




* An error message will be displayed if an invalid value is entered.

5) Click the preview button after entering the print quantity to display the preview window. On the preview window, you can check the number of pages for the quantity. However, the quantity is limited to 9.

6) Select the printer on the printer list and click the test print button to print the test. The printer list shows all the SATO printer drivers installed on the PC. Select the printer type configured on the printer settings tab.
If you select a different printer, the test may not print correctly.

# 5-3 Data output

- Outputs the format files to be used by the SmaPri Driver

## - Data output steps

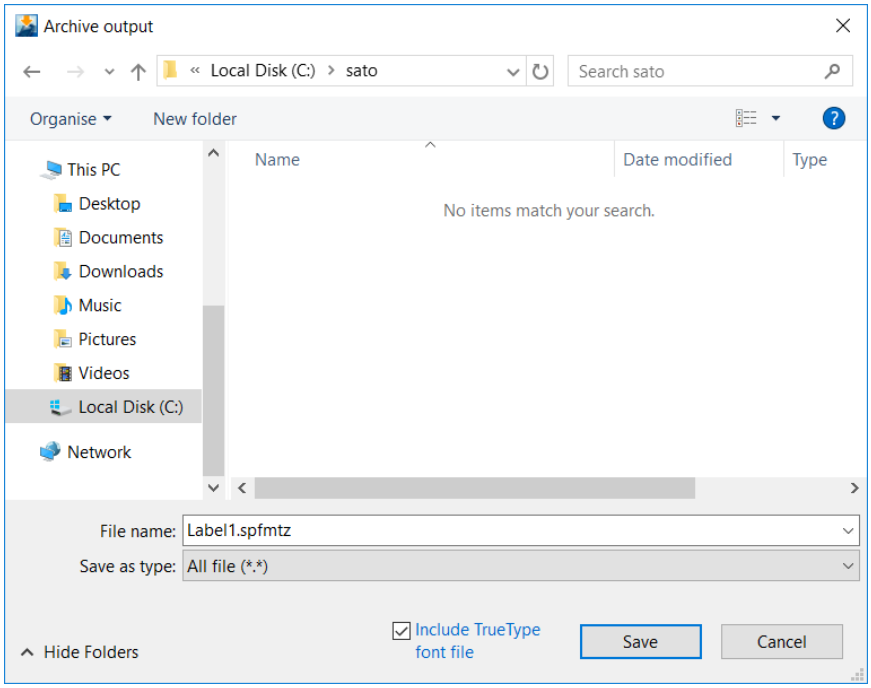
1) On the toolbar, click the [Data output] button.

   You can also perform the same action on the menu bar with [File] > [Data output].

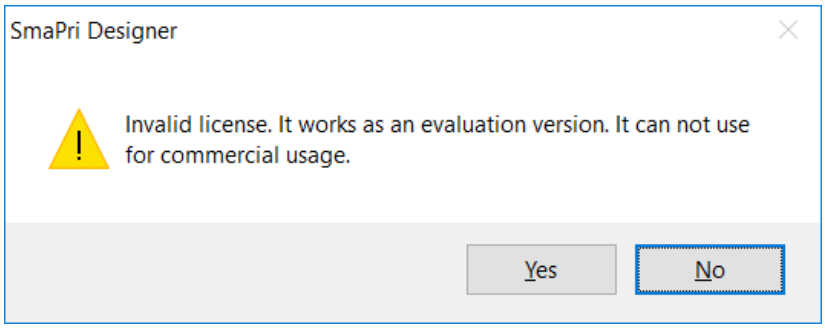
2) The archive output dialog is displayed.

3) Specify the destination for the data and click the save button.

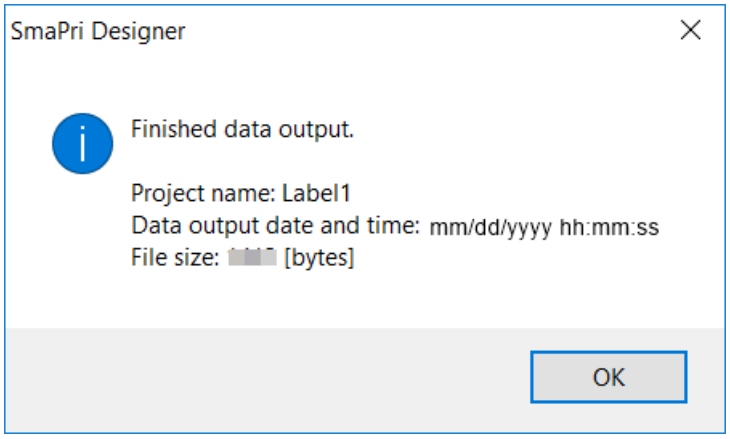
   If you are using TrueType font embedding function, you can choose whether to include TrueType font file in format file.



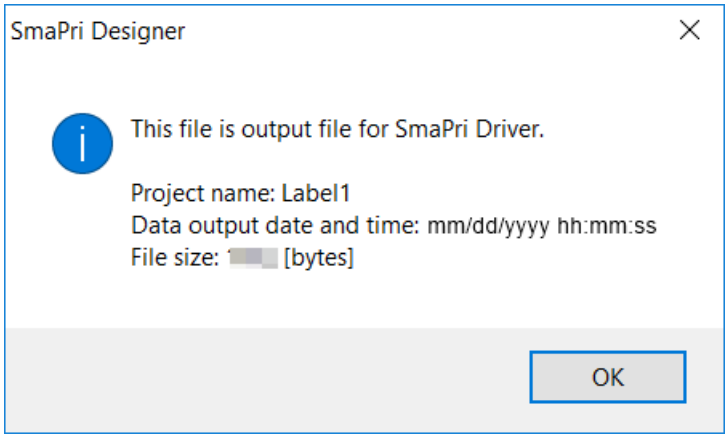

If the license key (HASP) cannot be recognized when saving, the following message is displayed.



4) When finished, Project name, data output date and time, file size are displayed. Click the [OK] button.



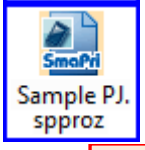

Double-click on the output format file (* .spfmtz) on Windows, the same contents (project name, data output date and time, file size) as when saved are displayed.



## - SmaPri Designer output files

The file output with the "Data output" button that has the spfmtz extension is a **SmaPri Driver file**. The SmaPri Designer project created with the "Save project" file that has the sppproz extension is a **SmaPri Designer file**.

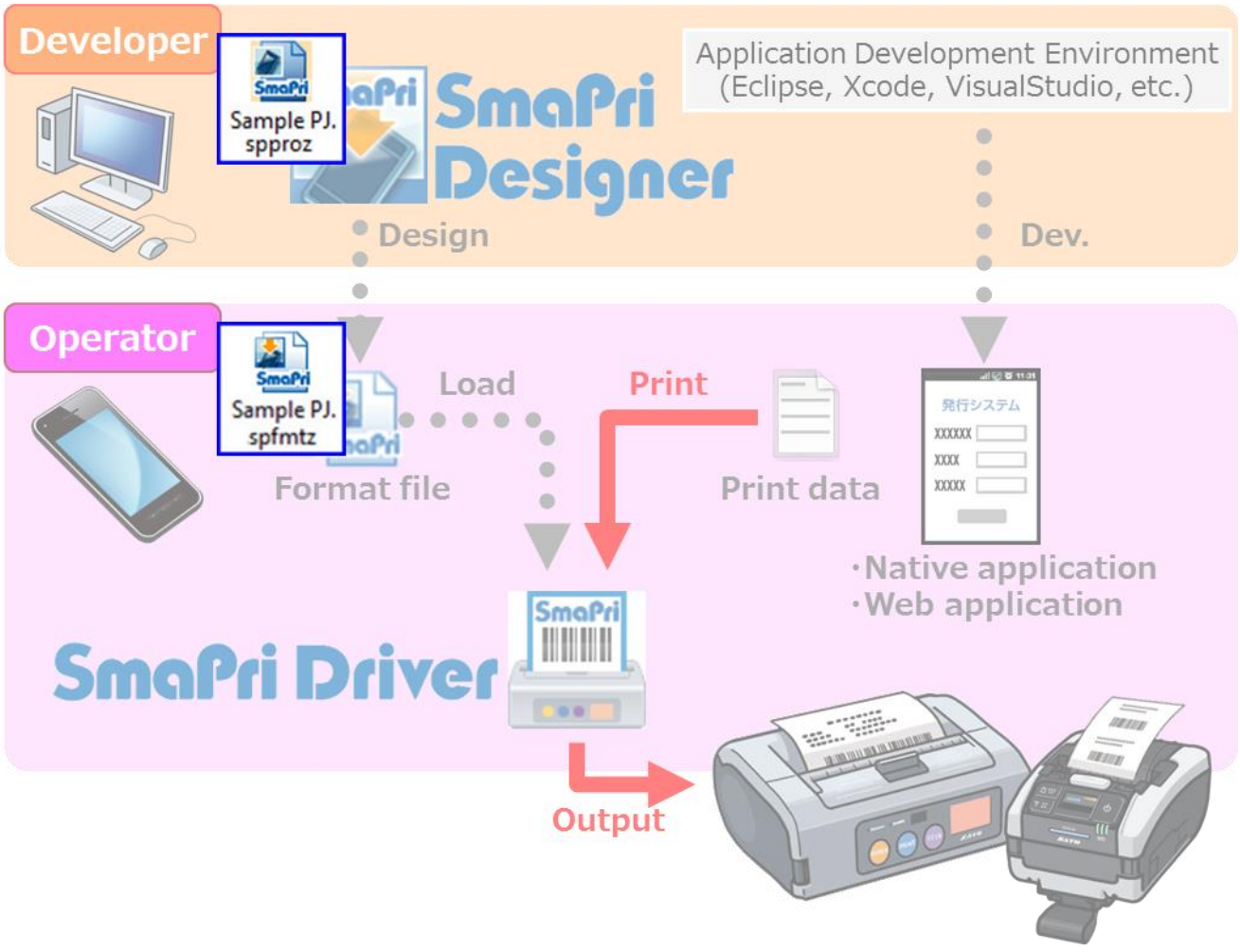
←SmaPri Driver format file icon




←SmaPri Designer project file icon

**The icons look similar, so be careful not to mistake them.**

**SmaPri Designer and SmaPri Driver relationship diagram**



# 5-4 Global change tax rate

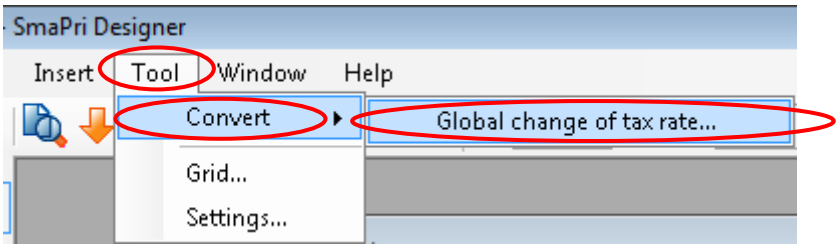
- Change the tax rate settings in the project in batch.

The tax rate for **all layouts** will be changed in batch.

You cannot undo this change, so use caution when different tax rates are set according to layout.

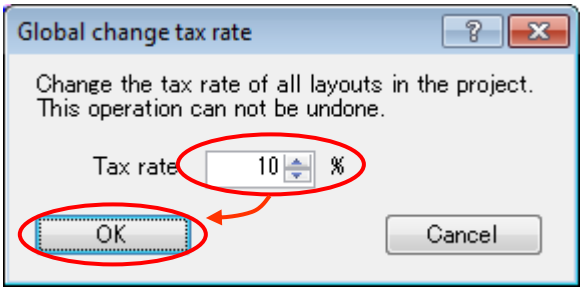
## - Global change tax rate steps

1. On the menu bar, select [Tool] > [Convert] > [Global change of tax rate].

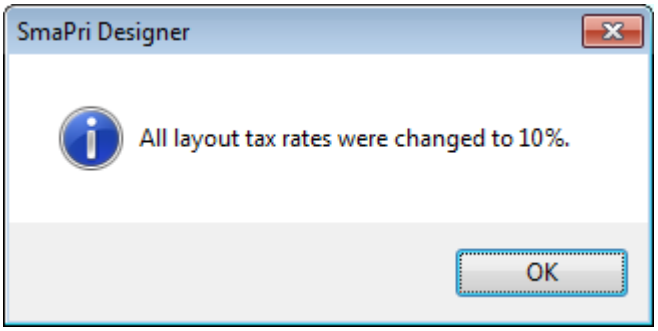



2. Enter the new tax rate and then click the [OK] button.

The tax rate can be changed as an integer value.




3. Press the [OK] button to display the message. Check the modified value and press the [OK] button.



# 5-5 Change object type

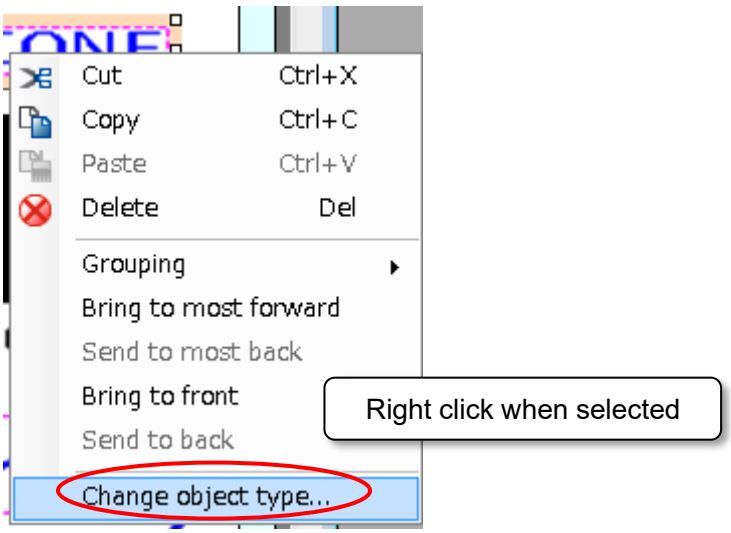
- Change the type of an object.

## - The types of objects that can be changed

"string" and "price".

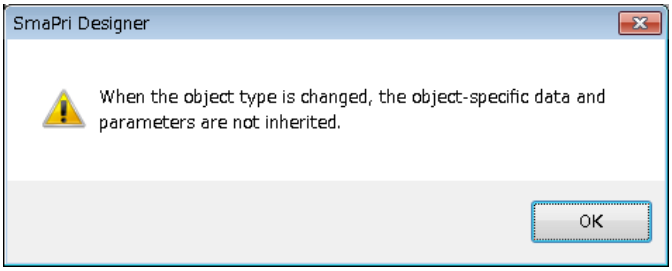
## - Change object type steps

1. Select the object you want to change and right click to display the menu.
2. On the menu, select [Change object type].

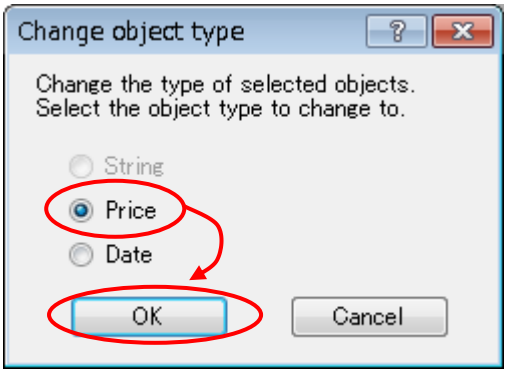



3. A warning message when changing the object type is displayed. Press the [OK] button.

   When the object is changed, a portion of price object functions such as the "¥" (yen) and "," (comma) fill function and auto calculation function are disabled.




4. Check the object type after the change and press the [OK] button.



# 5-6 Barcode wizard

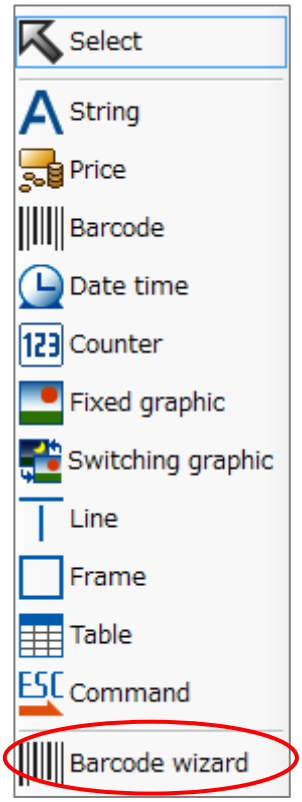
This feature to create a barcode of various combinations in wizard-type form.

## - Supported barcode symbol

- JAN13 (JAN13 price C/D)
- JAN8

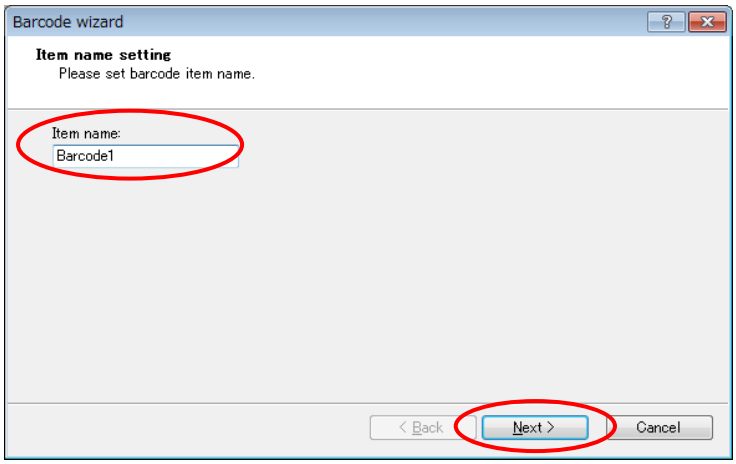
## - Barcode wizard usage steps

1) Click "Barcode wizard" button in Object bar.

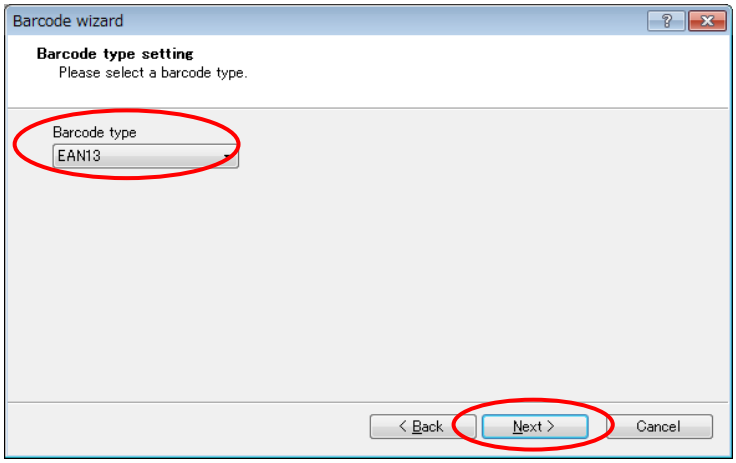



2) The cursor changes to "Cursor when pasting objects". Please click anywhere in design window.

3) Will display "Barcode wizard" dialog. Inputting object name at "Item name" box and click "Next". "Item name" can be set up to 16 characters.

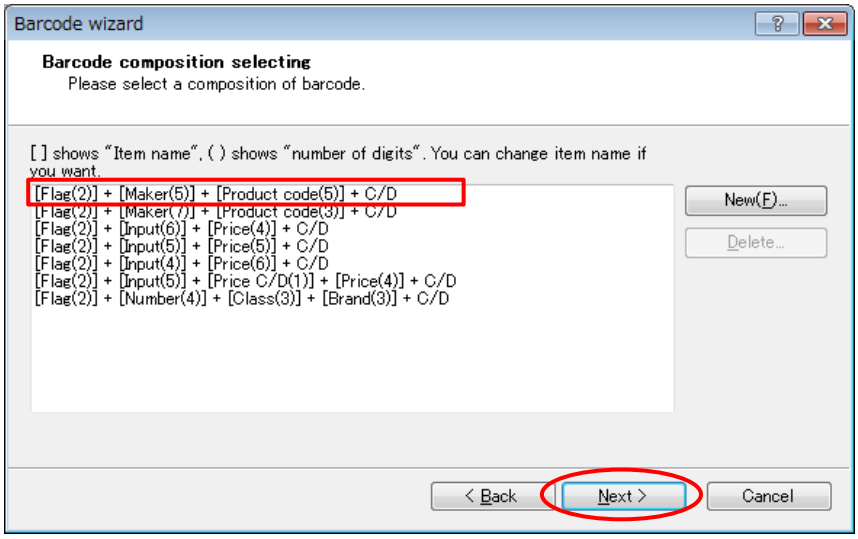



4) Select to "Barcode type" in list box. Click "Next".

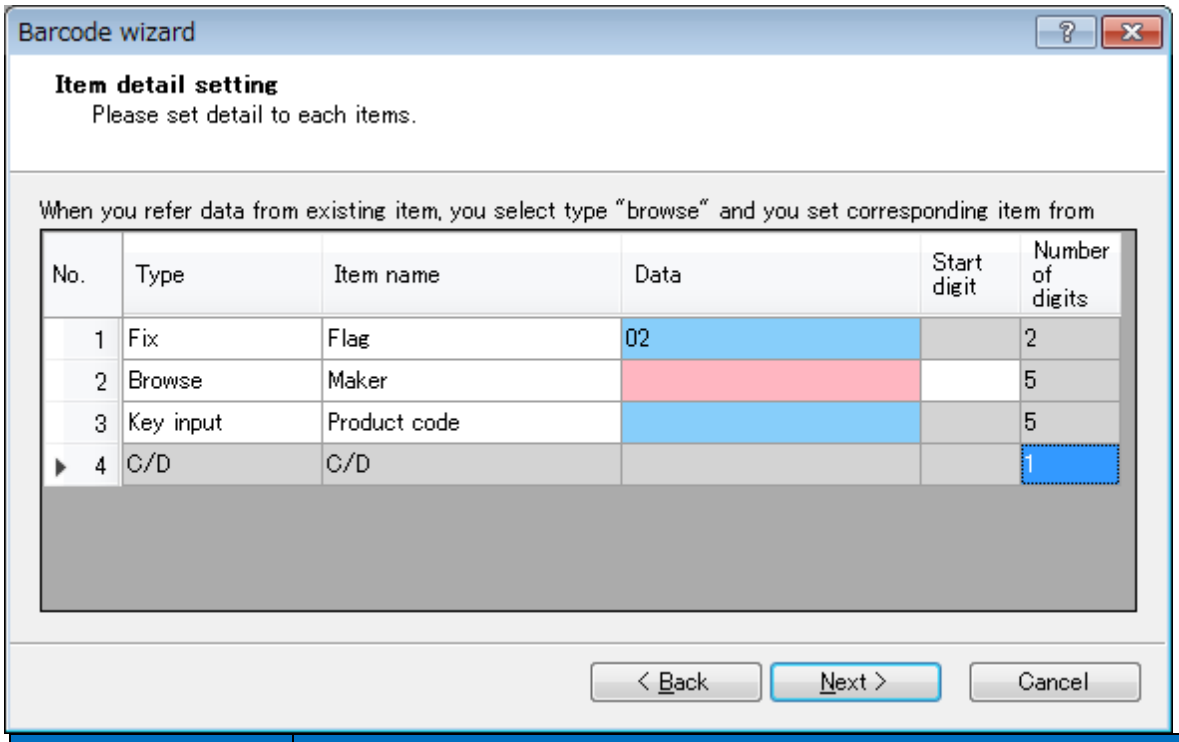



5) Select to "Barcode composition" and click "next".

If resistrer new barcode composition, please refer to "Resister new barcode composition".

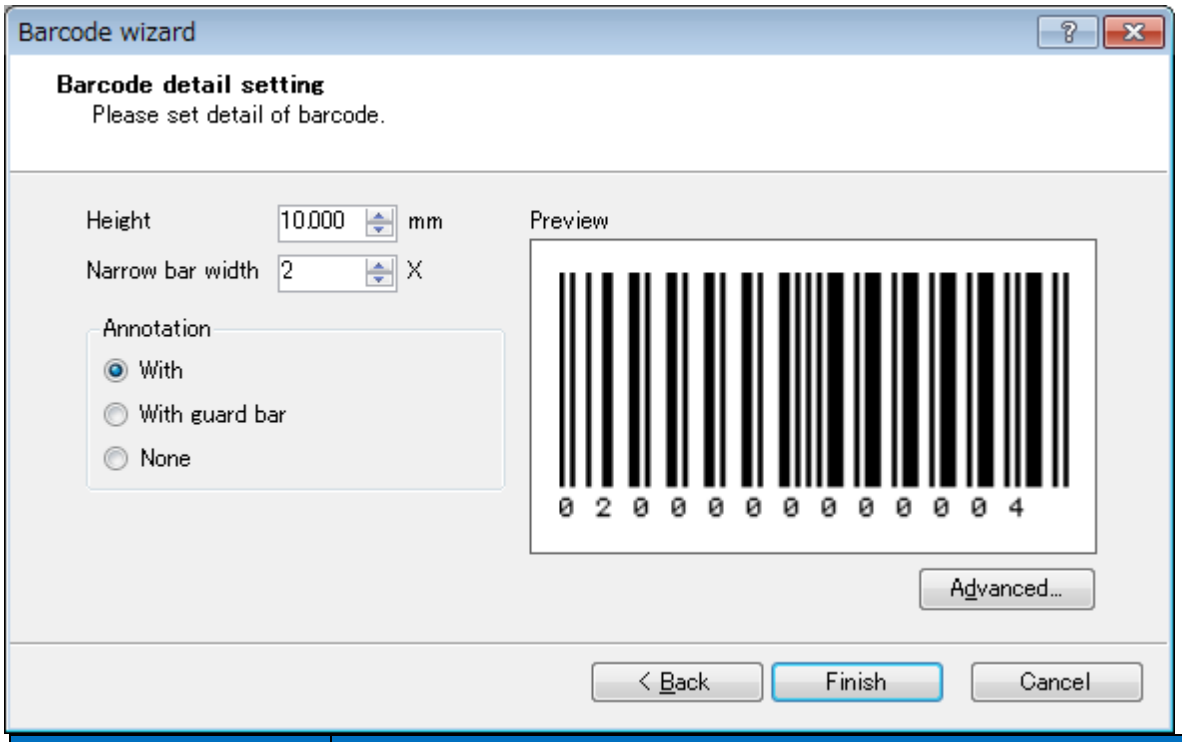


6) Set to detail and click "next".

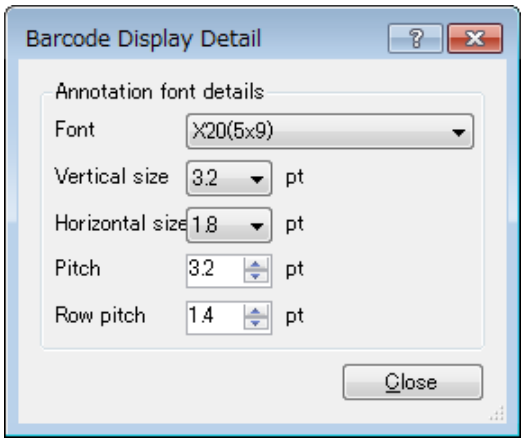



| Setting items | Contents |
|---|---|
| **Type** | Type of data. |
| **Key input** | Key input when printing. |
| **Fix** | Fixed item. |
| **Browse** | Copy from other object value. |
| **Item name** | The name of the item used in the layout design.<br>"Item name" can be set up to 16 characters. |
| **Data** | This item value is default value of "Key input", or value of "Fix". |
| **Start digit** | If selected "Browse" on Type, specifies whether to copy from what digit. |
| **Number of digits** | Digits of this item's data. |

7) Sets detail setting of barcode. After setting, click "Finish".

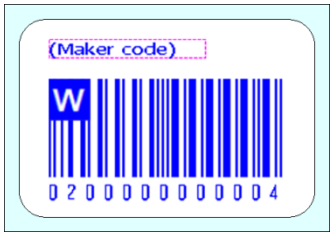



| Setting items | Contents |
|---|---|
| **Height** | Specifies the height of the barcode. |
| **Narrow bar width** | Specifies the narrow bar width. |
| **Annotation** | Specifies annotation and guard bar. |
| **Preview** | Previewing barcode image.<br>Aspect ratio is accurate, but the scale is not accurate. |
| **[Advanced] button** | Displays the [Barcode Display Detail] dialog. |




| Setting items | |
|---|---|
| **Annotation font details** | |
| **Font** | Selects the type of character font to use for the annotation |
| **Vertical size** | Sets the vertical size for the annotation. |
| **Horizontal size** | Sets the horizontal size for the annotation. |
| **Pitch** | Sets the pitch for the annotation. |
| **Row pitch** | Sets the distance from the barcode to the annotation. |

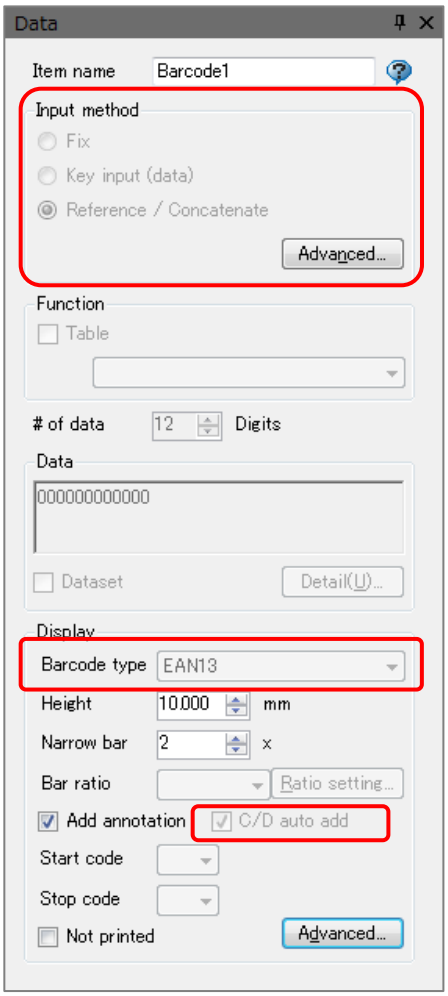
8) Barcode object will create in design window.



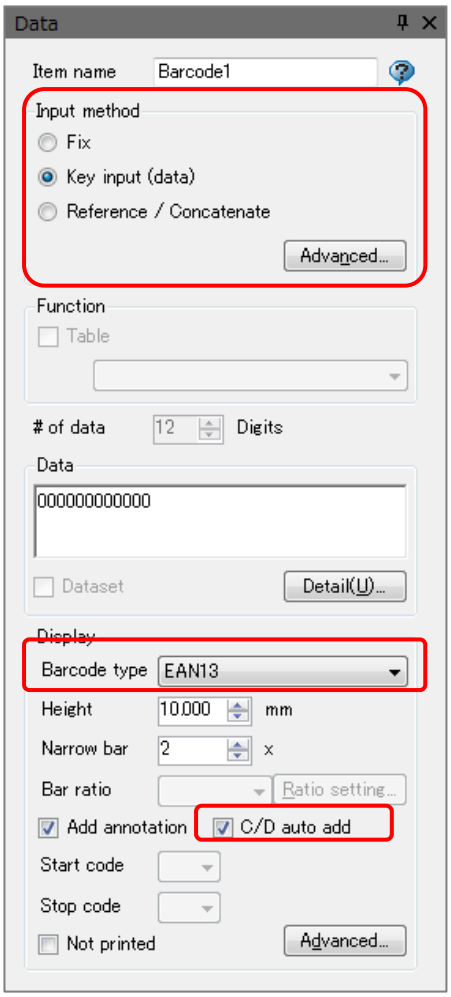
9) Barcode that was created by the wizard, it is limited to the setting item.

You can not change setting of "Input method", "Barcode type" and "C/D auto add".

**[Created by the wizard]**

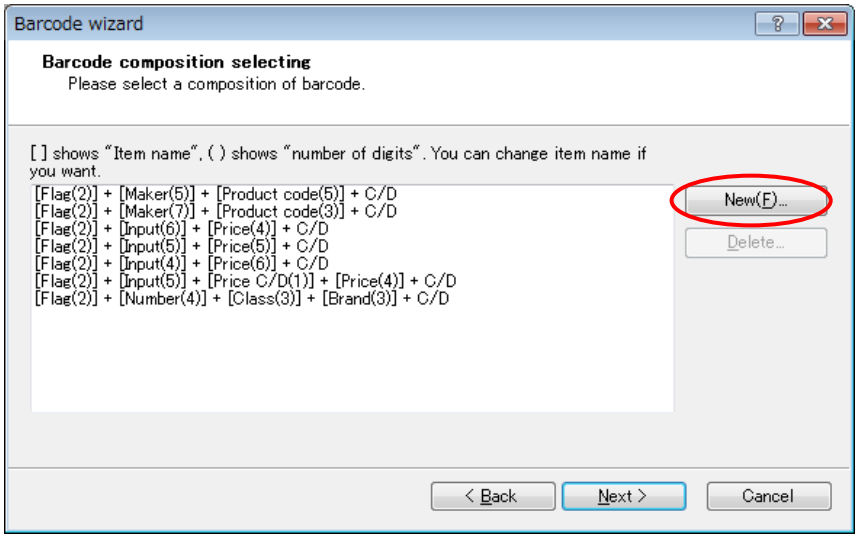



**[Normal]**

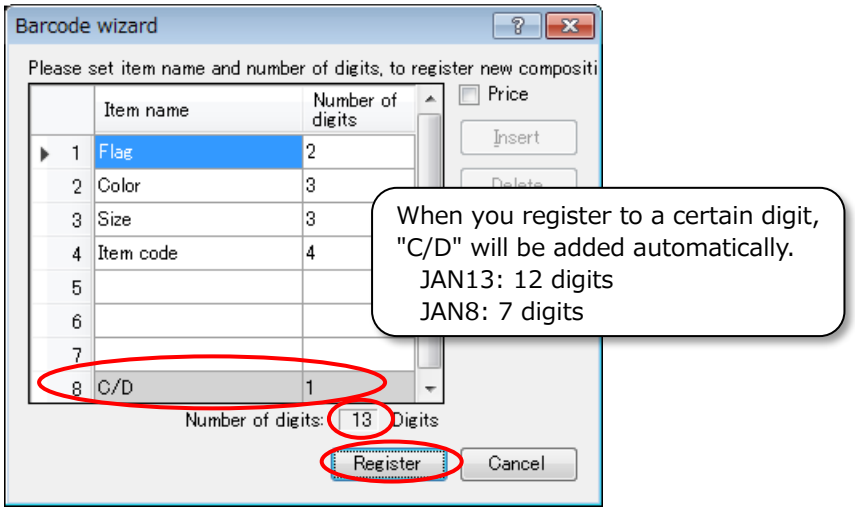


## - Resister new barcode composition

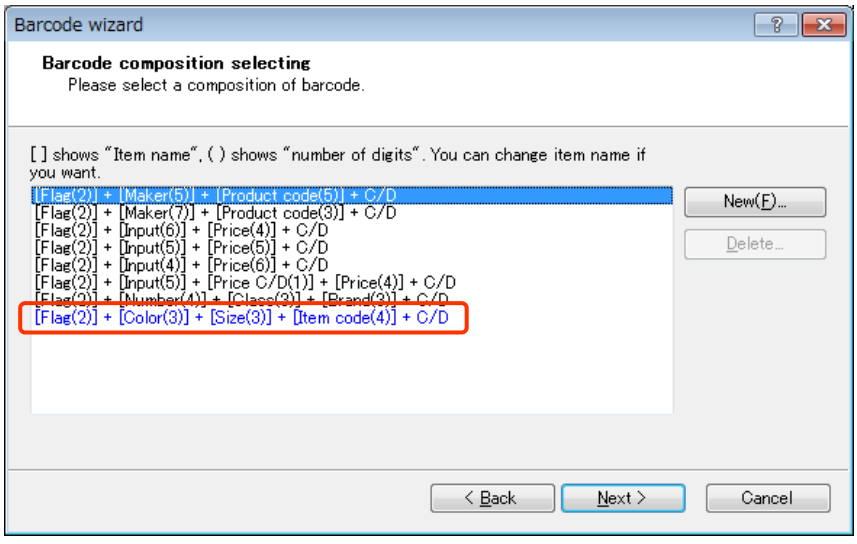
1) Click "New" button at "Barcode composition selecting" of barcode wizard.




2) Input "Item name" and "Number of digits". Click "Register", if finished input.

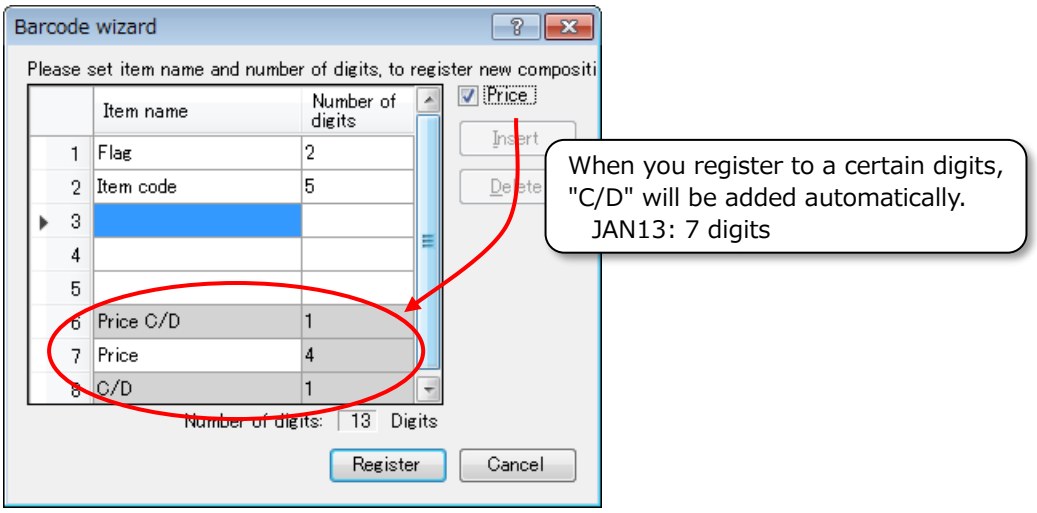



3) The new barcode composition will be added in the list in blue text and [Item name(digits)] format.



If barcode type is "JAN13", be can used price C/D by turned on "Price".

"Price C/D", "Price" and "C/D" will be added automatically.



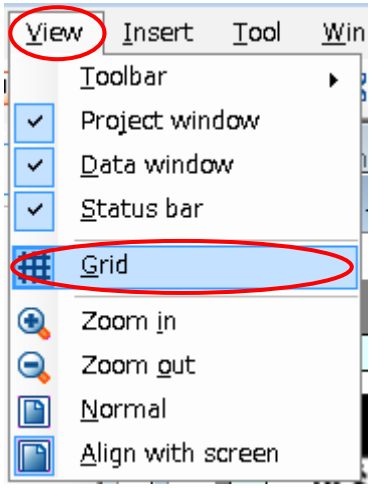
# 5-7 Grid settings

- Display a grid on the design window as a guide to help in the placement of objects.

You can show or hide the grid with the grid button the toolbar or [View] > [Grid] on the menu bar.

Toolbar grid button

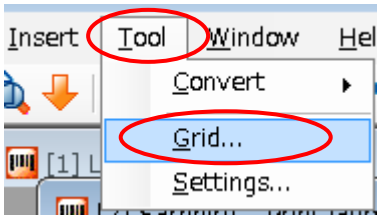
Menu [View] > [Grid]



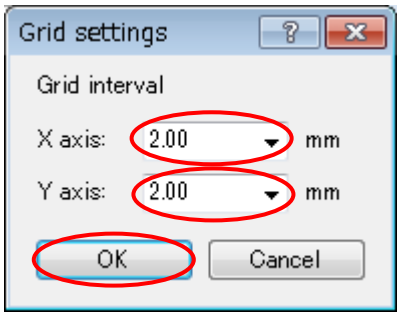

Grid is shown

## - Changing the grid interval

1) On the menu bar, click [Tool] > [Grid].



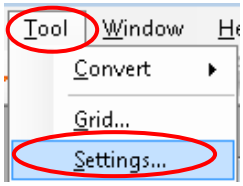

2) The grid settings dialog is displayed. Enter the grid interval and confirm it with the [OK] button. The grid can be set in 0.25 mm increments.



# 5-8 Tool settings

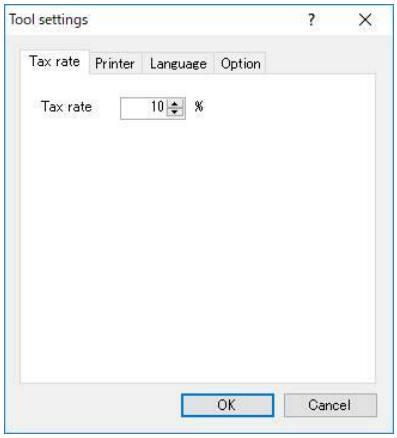
- Configures the tool settings

On the menu bar, select [Tool] > [Settings].




## - Tax rate tab

This tab configures the initial value for the tax rate when a new layout is created.



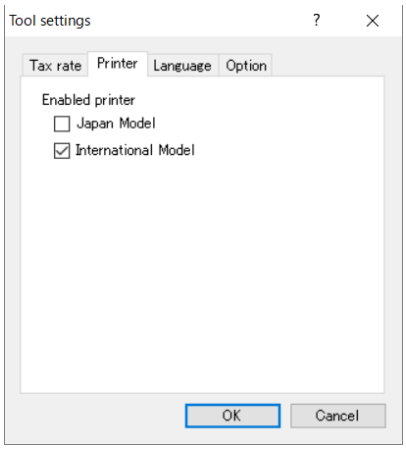

Enter the tax rate as an integer value and press the [OK] button.

The tax rate set here is applied to newly created layouts.

To modify the tax rate for existing layouts, configure them with "Layout settings".

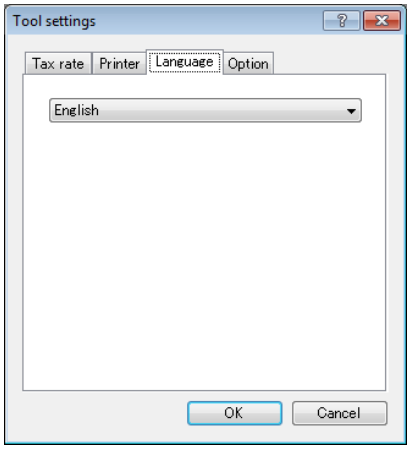
## - Printer tab

Specify the printers that are displayed on the printer selection window.



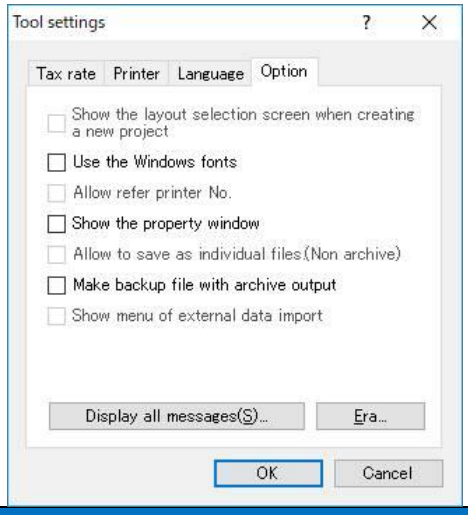
## - Language tab

Select the display language for SmaPri Designer.




## - Option tab

This tab configures settings related to tool operation.




| Setting items | Contens |
|---|---|
| **Show the layout selection screen when creating a new project** | * This item can not use in SmaPri Designer |
| **Use the Windows fonts** | Select this check box to allow the selection of Windows fonts. |
| **Allow refer printer No.** | * This item can not use in SmaPri Designer |
| **Show the property window** | Select this check box to display the object settings on the property window. |
| **Allow to save as individual files. (Non archive)** | * This item can not use in SmaPri Designer |
| **Make backup file with archive output** | When running data output, saves a backup of the SmaPri Designer project file in the archive file. |
| **Show menu of external data** | * This item can not use in SmaPri Designer |

| | |
|---|---|
| **import** | |
| **Display all messages** | Display messages again that have been dismissed by selecting the "Do not display this dialog again" check box. |
| **Era** | Display [JP Year settings] dialog. |

## - JP Year setting

Set the era name and the Japanese year, then press the [OK] button.

| Setting items | Contens |
|---|---|
| **Era name** | Sets the era name as 2 or fewer kanji characters. (Can also be blank) |
| **Christian era** | Shows the current western year from the system date of the PC. |
| **JP Year** | Enter the current Japanese year as 2 digits from 1 to 99. |
| **Offset** | Calculates and displays how many years the set Japanese year is offset from the last 2 digits of the western year. |

# 5-9 Object grouping function

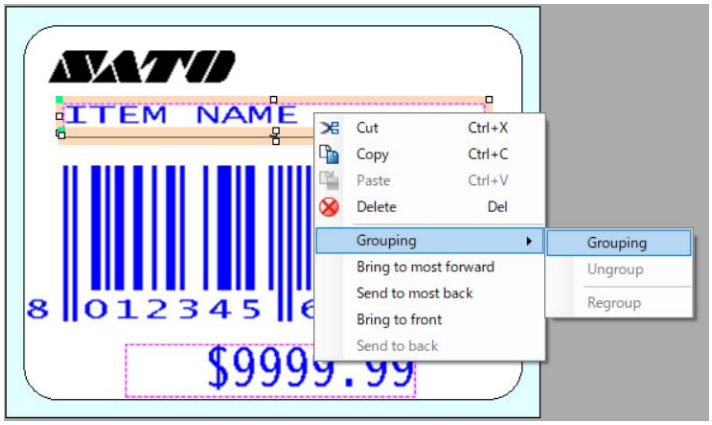
- You can select multiple objects on the layout and organize them into a single group.

This is useful for moving or rotating the grouped objects.

## - Grouping steps

1) Select the objects you want to group on the layout.

2) Right click on the selected objects and select [Grouping] > [Grouping].



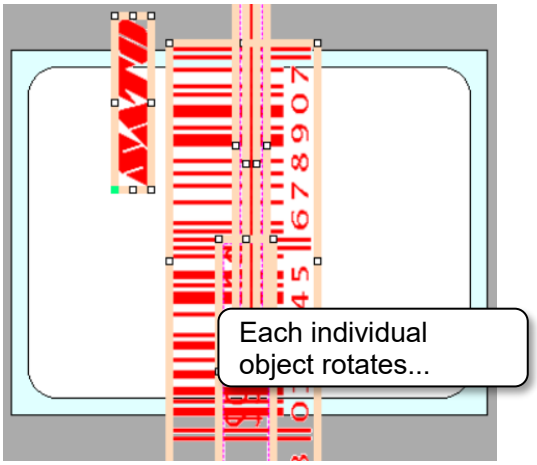

3) The selected objects are grouped.

## When objects are grouped...

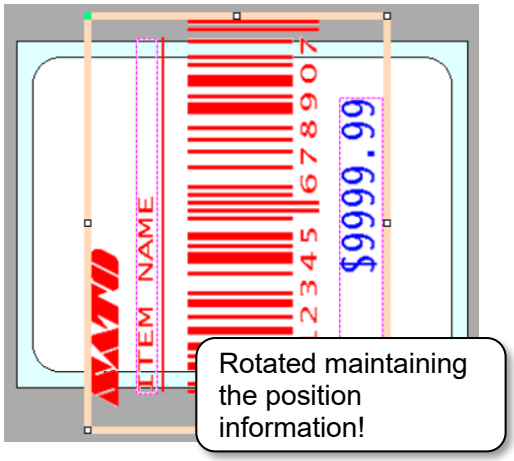
Benefit 1: Objects can be moved as a group when editing the layout (no missed selections)

Benefit 2: Objects can be rotated without disturbing their positional relationship

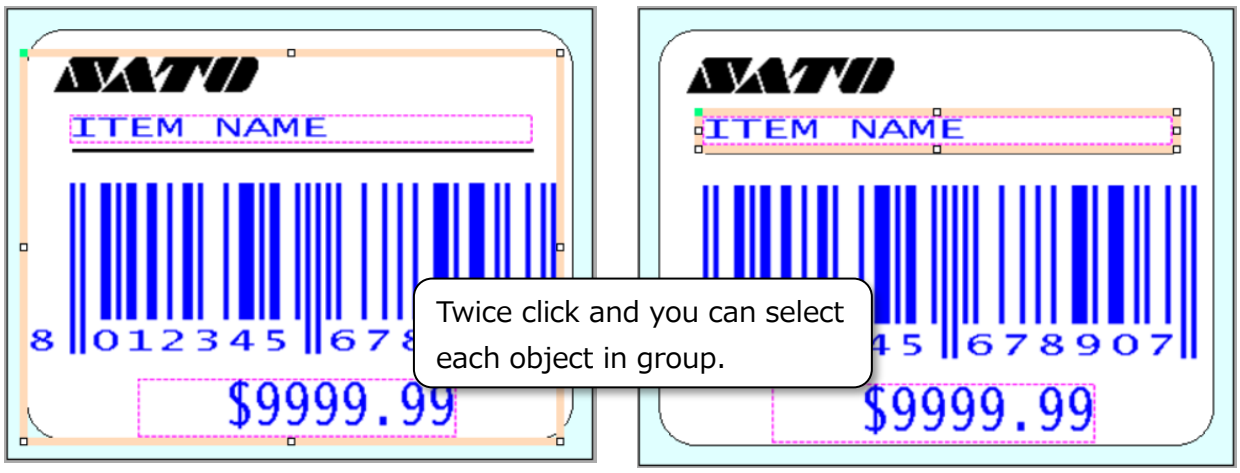
If you select all objects and rotate...




If you group and then rotate...




You can also configure each object when they are grouped



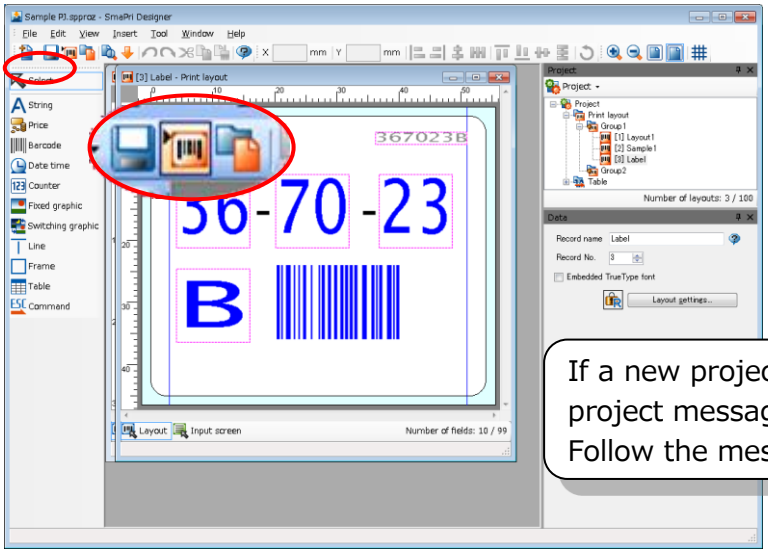
# 5-10 Importing sample data

- You can create the layouts by using these samples for each printer.

You can reduce the time required to create layouts by using these samples.

## - Sample usage steps

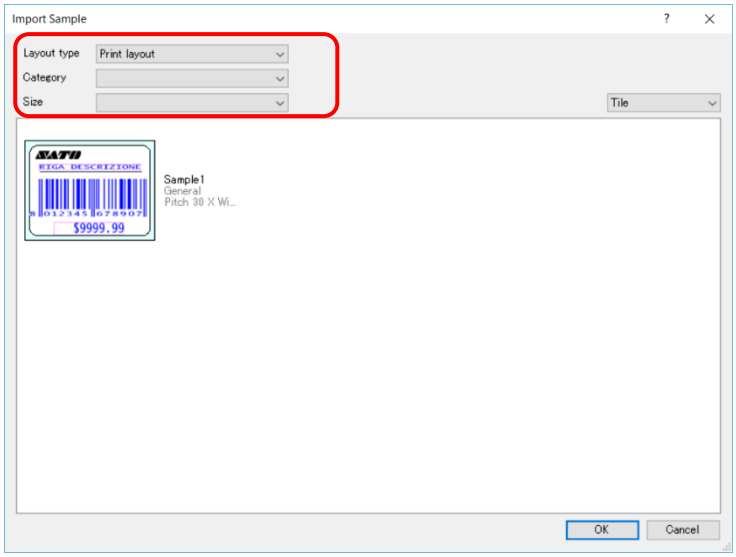
1) On the toolbar, click the [Import sample] button.



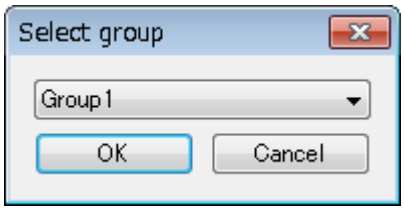

2) The sample selection window opens.

3) Directly select a sample on the displayed list or refine the sample by [Layout type], [Category], and [Size].

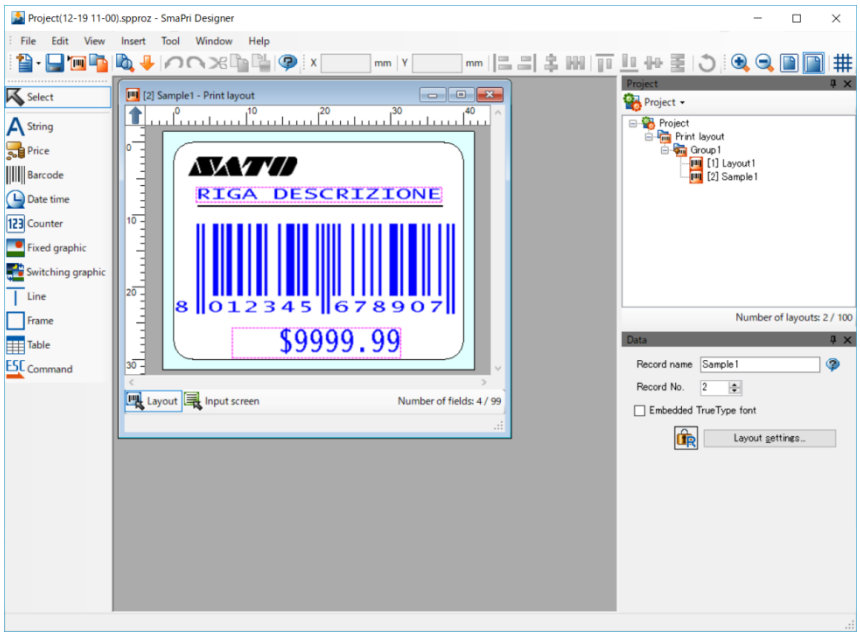
4) Select and click the layout similar to the image of the layout you want to create.



5) If there are multiple groups in the project currently being edited, select the group. After registering, you can change the group by [Cut] and [Paste] in the project window.




6) The imported file is displayed on the window.




7) Change the settings for the pasted items with the design window or data window.

# 5-11 Global change font

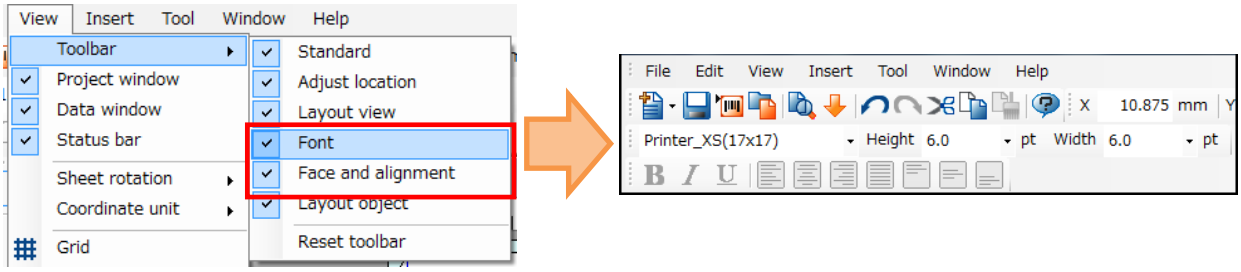
- Change the font of Multiple objects.

## - Global change font steps

1) On the menu bar, select [View] > [Toolbar] > [Font] and [Face and alignment]

   - Font : [View]>[Toolbar]>[Font] checked.

   - Face and alignment : [View]>[Toolbar]>[Face and alignment] checked.




2) Select the multiple objects that you want to change the font.

   The multiple objects can be selected by drug and drop, or Shift+Click.

When multiple objects selected are assigned to multiple fonts, the font window will be blank.

3) Multiple changes are reflected when you set [Font], [Height/Width] or [Alignment].

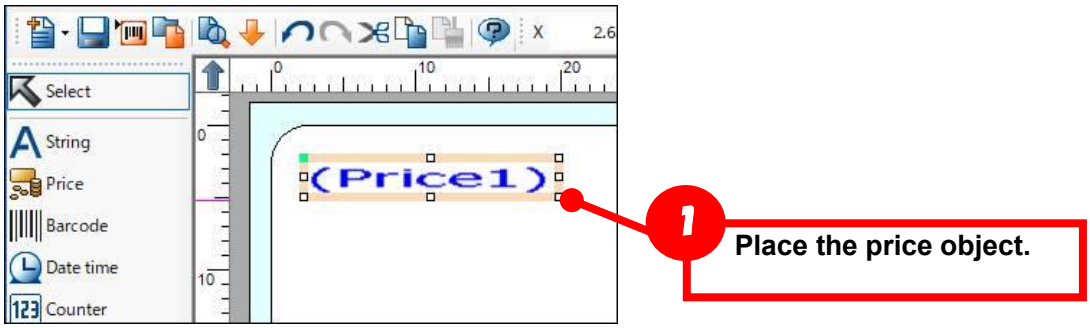
Font list shown on the Font window will be changed depending on the conditions of selected object.

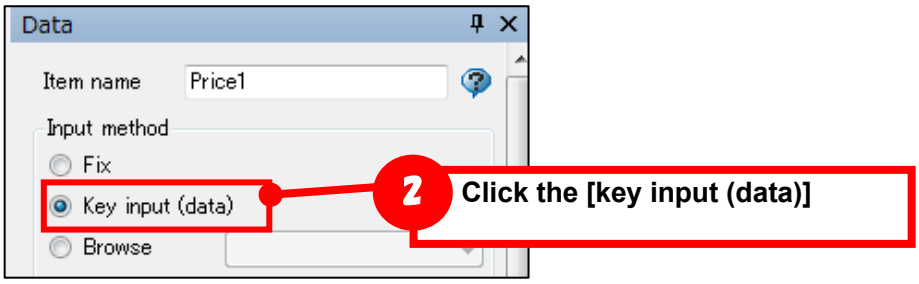
For example, in case of the object that can not be used Windows font is included, windows font can not be selected.

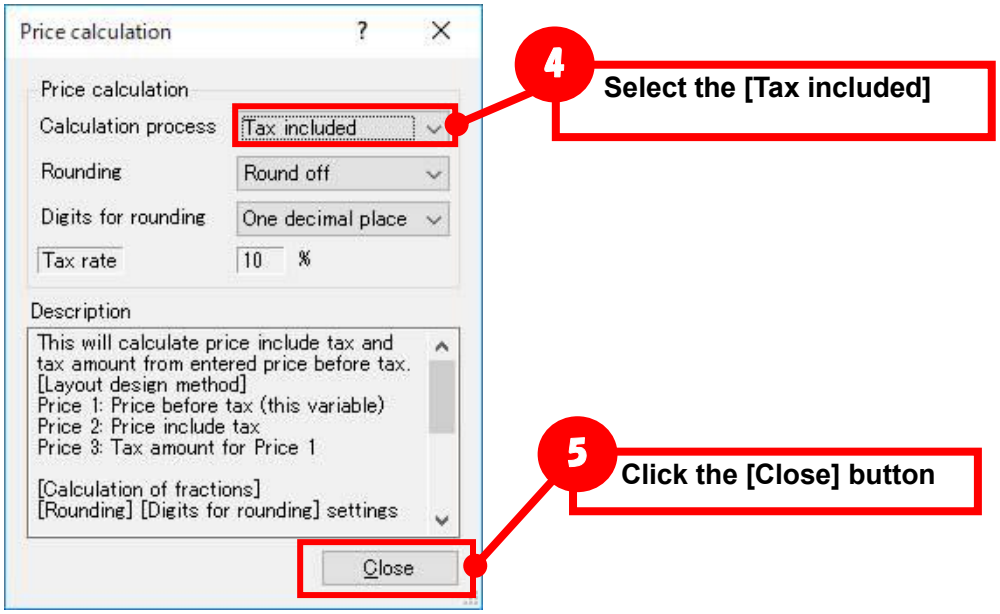
# 5-12 Create Tax-included price, Base price

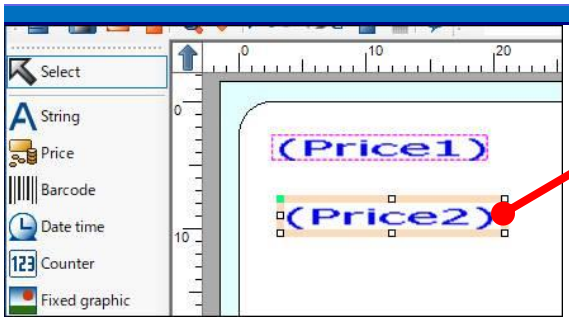
This chapter describes the creating method about tax-included price and base price.

## - Calculates the tax-included price from the base price.

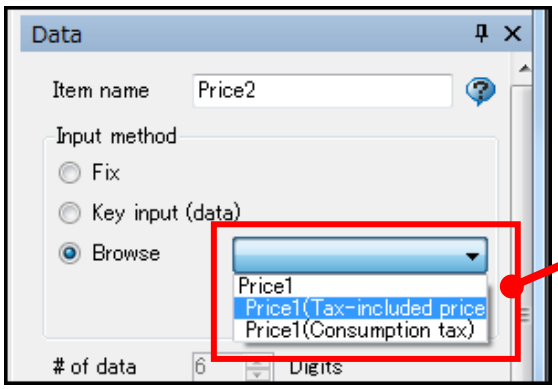


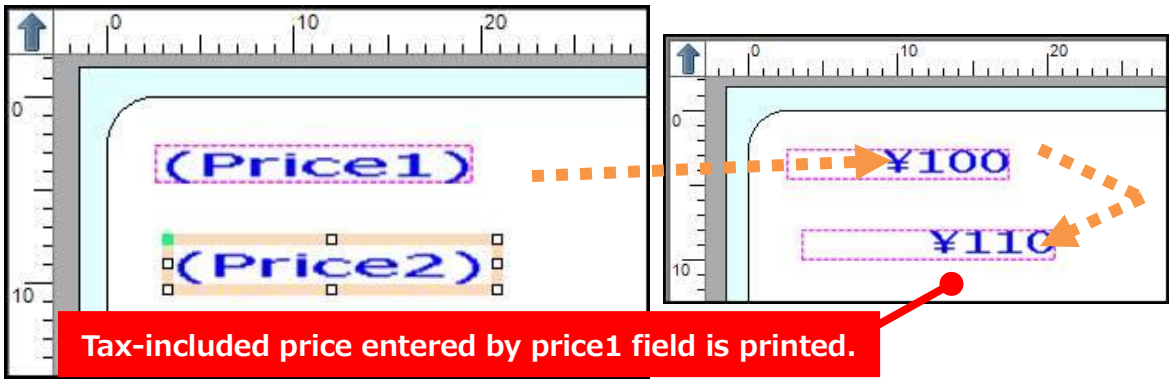




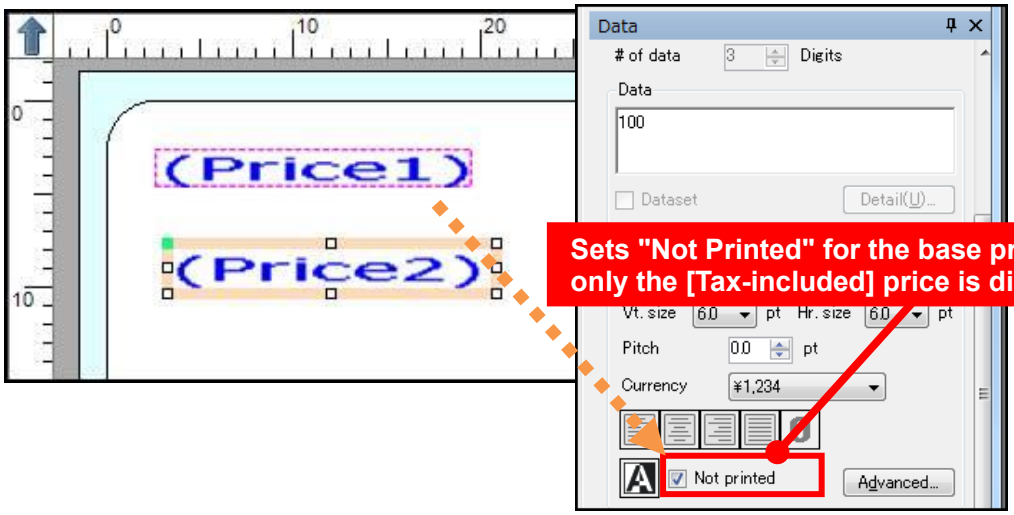

6 Place the price object.




7 Select the [Price1(Tax-included price)]

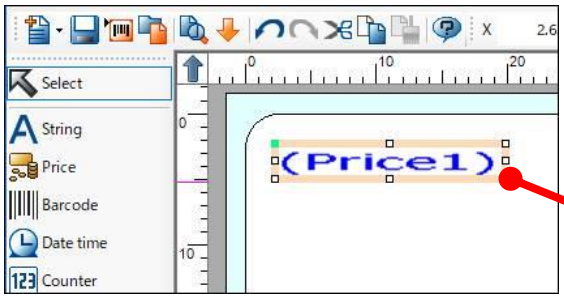



Tax-included price entered by price1 field is printed.

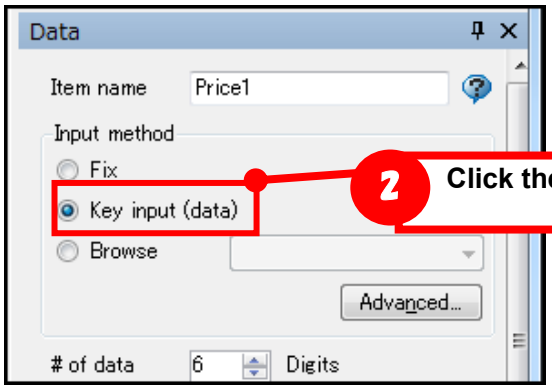



Sets "Not Printed" for the base price When only the [Tax-included] price is displayed.

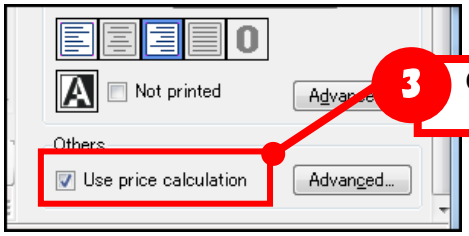
## - Calculates the base price (tax-excluded price) from the tax-included price.



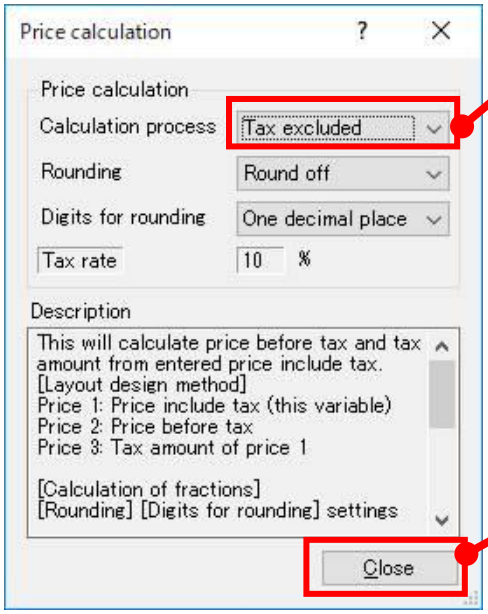

1 Place the price object.




2 Click the [key input (data)]

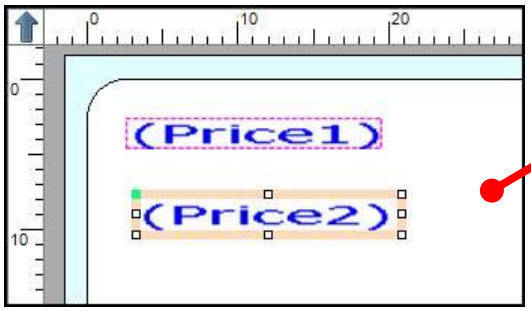



3 Check the [Use price calculation]

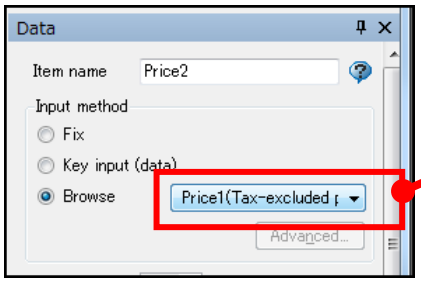



4 Select the [Tax excluded]

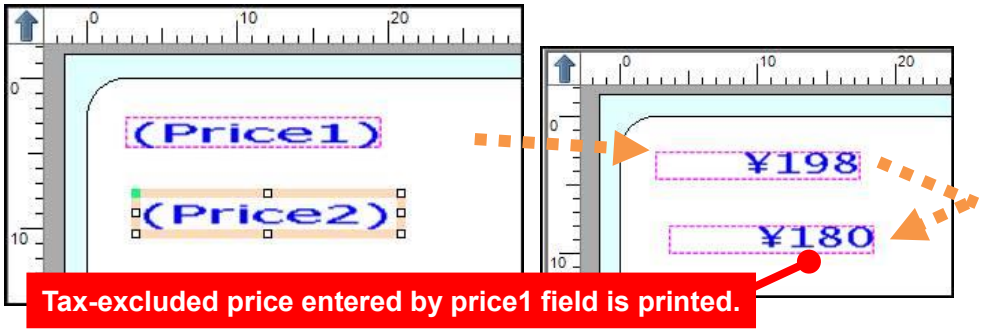
5 Click the [Close] button




6 Place the price object.




7 Select the [Pirce1(Tax-excluded price)] button




Tax-excluded price entered by price1 field is printed.

## - Change the rounding.

Set how to round off decimals. This function rounds off the calculated tax price. Note that it does not either round off the tax-included price nor base price.

Round down, round up, and round off all values below the specified digit.

Round up (first decimal place) * rounds only the value with the first decimal place.

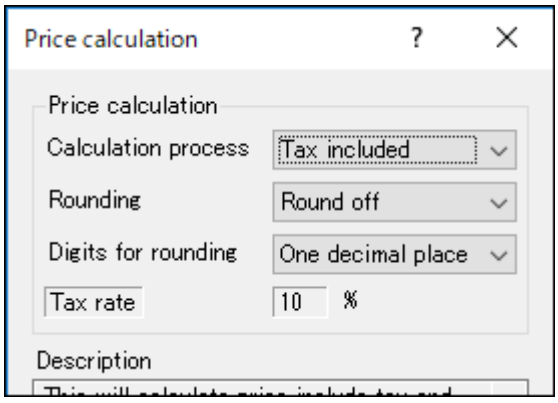
*When using “Round up (First decimal place)” function, please check the version history and use SmaPri Driver version which is compatible with function.

**Warning: if using the SmaPri Driver version not compatible with the function, it will calculate by “Round off”.**

■ In the case of main unit price 576 yen, tax rate 8%, tax included calculation

| Rounding | Consumption tax (after calculation) | Consumption tax (after rounding) | Tax included price |
|---|---|---|---|
| Round down | **46.08** | **¥46** | **¥622** |
| Round up | **46.08** | **¥47** | **¥623** |
| Round up (First decimal place) | **46.08** | **¥46** | **¥622** |
| Round off | **46.08** | **¥46** | **¥622** |

**・Tax included**




The value that will be given by one of calculation transaction, Including TAX is “Tax Included price“ and “Consumption Tax”.

If the input price value is "128" and the tax rate value is "10"(%).

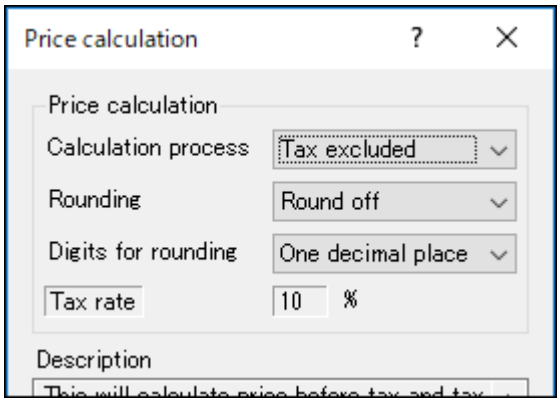
128 × 0.10 = **12.8** (Consumption tax)

If the rounding is selected “Round off” and the digits for dounding is selected “One decimal place”.

12.8 -> **13** (Consumption tax)

Results of calculation…　tax-included price is “**141**”, Consumption tax is “**13**”.

**・Tax excluded**




The value that will be given by one of calculation transaction, excluding TAX is “Tax excluded price “ and “Consumption Tax”.

If the input price value is "195" and the tax rate value is "10"(%)

195 / 1.10 = 177.272727

195 - 177.272727 = **17.727273** (Consumption tax)

If the rounding is selected “Round up”and the digits for dounding is selected “One decimal palece”

17.727273 -> **18** (Consumption tax)

Results of calculation…　tax-excluded price is “**177**”, Consumption tax is “**18**”.

**[Notes] Discrepancy of the tax-excluded price**

Decimal points are rounded off when calculating the base price and tax price from the tax-included price. Note that a discrepancy occurs between the original tax-included price and the tax-included price recalculated from the base price.

# 5-13 Tax rate setting

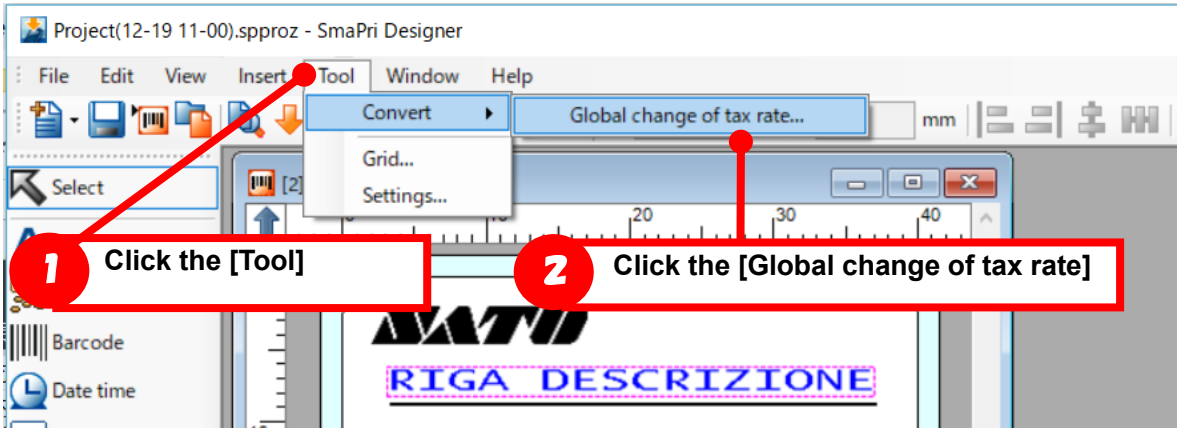
Describes the setting method.

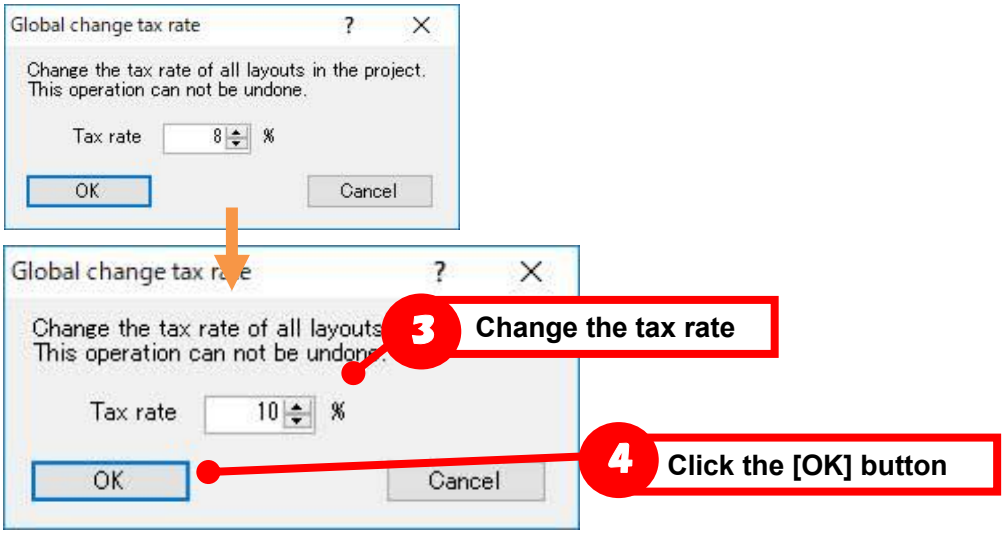
The tax rate setting is each layout has.

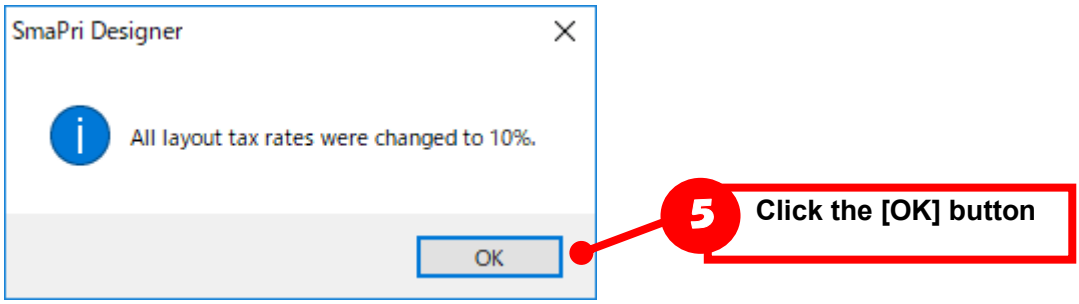
The setting method is different according to the layout type.

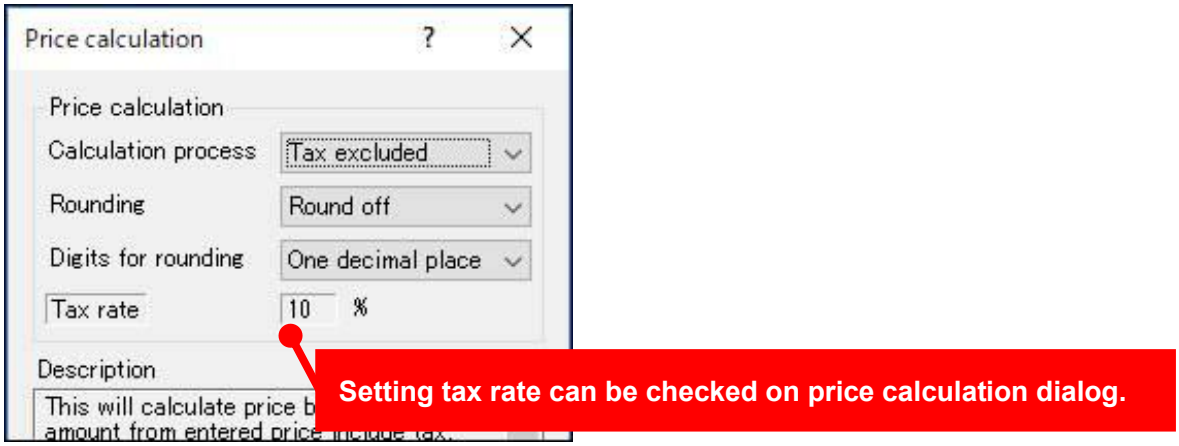
| Target | Setting contents | Setting items |
|---|---|---|
| Existing layout | Changes the tax rate for all layouts in a project. | Tool > Convert > Global change of tax rate |
| | Changes the tax rate for individual layouts in a project. | Layout settings > Tax and discount rates |
| New layout | Sets the tax rate when creating the new project. | Tool > Settings > Tax rate tax rate |
| | Sets the tax rate when creating the new layout | Layout default desettings > Tax and discount rates |

## - Changes the tax rate for all layouts in a project.



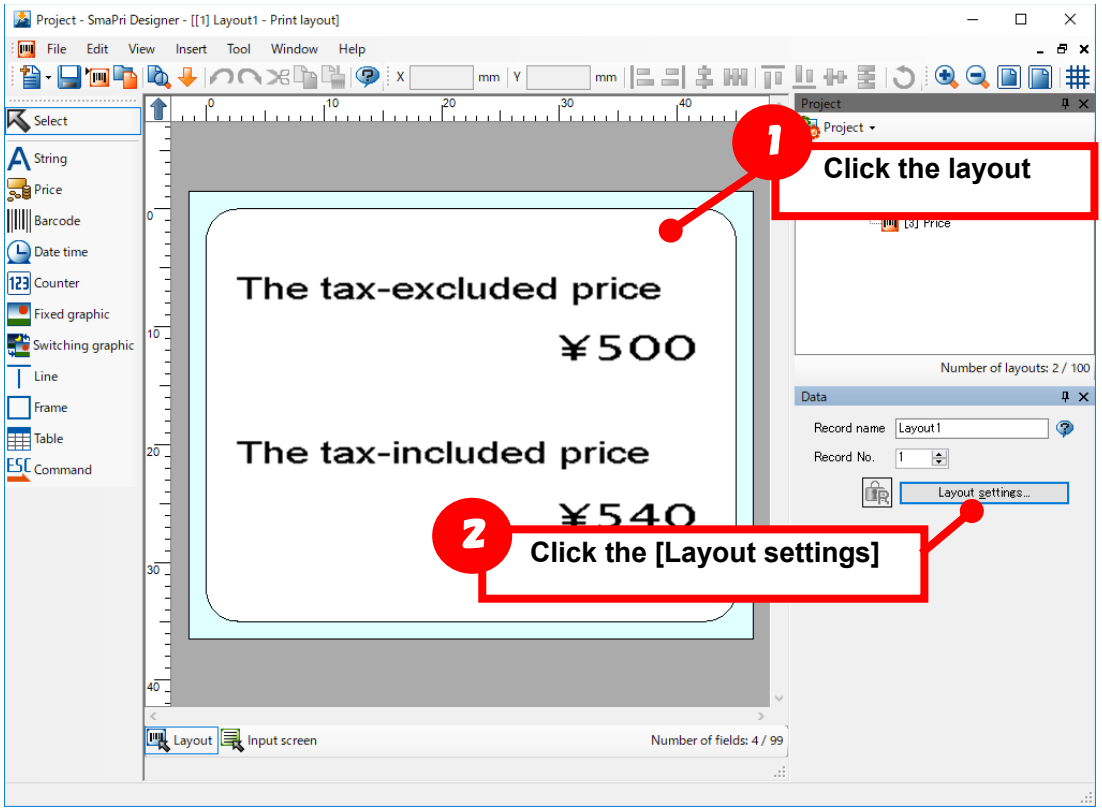



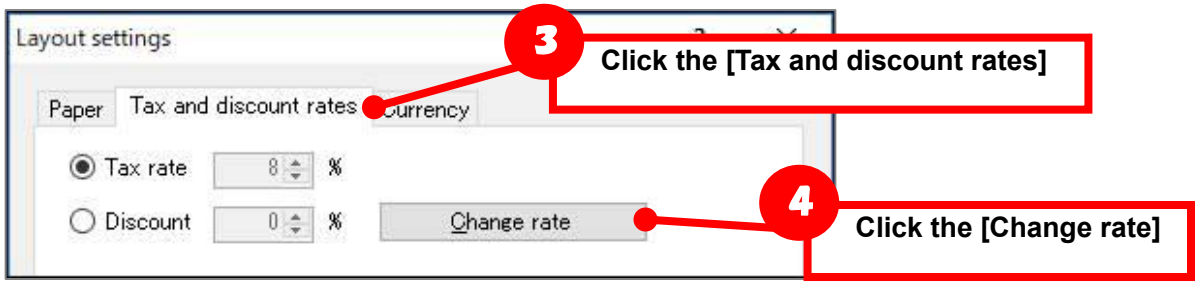

SmaPri Designer
All layout tax rates were changed to 10%.
OK
5
Click the [OK] button

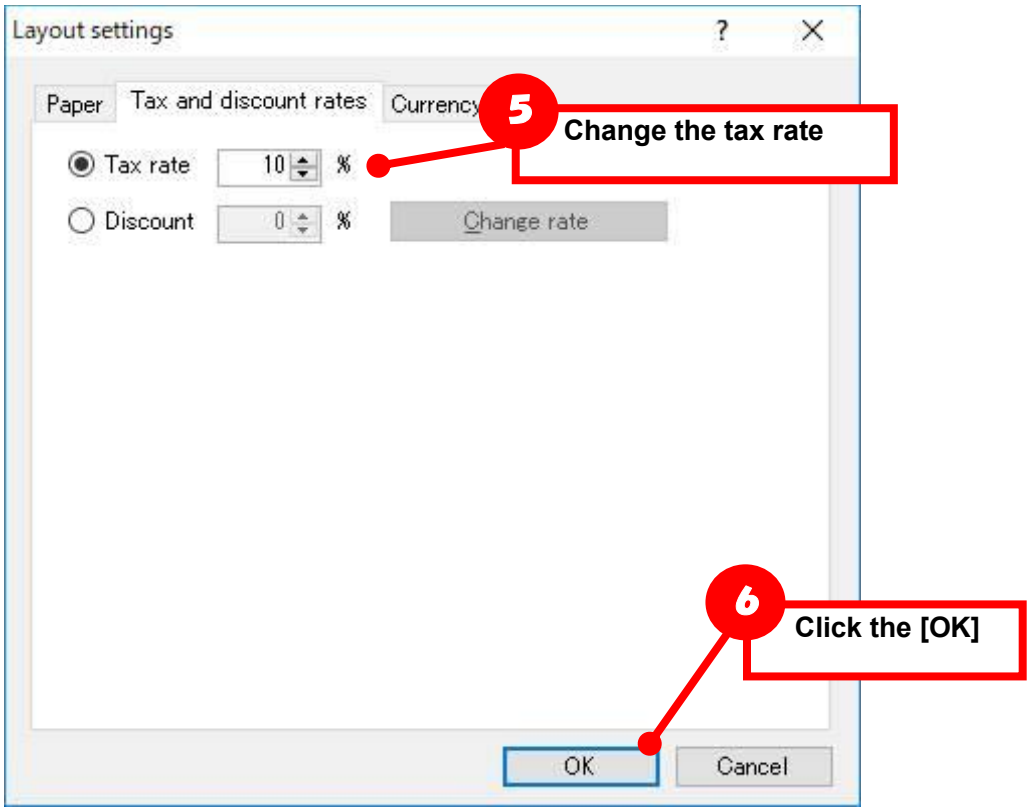

Price calculation
Price calculation
Calculation process
Tax excluded
Rounding
Round off
Digits for rounding
One decimal place
Tax rate
10
%
Description
Setting tax rate can be checked on price calculation dialog.

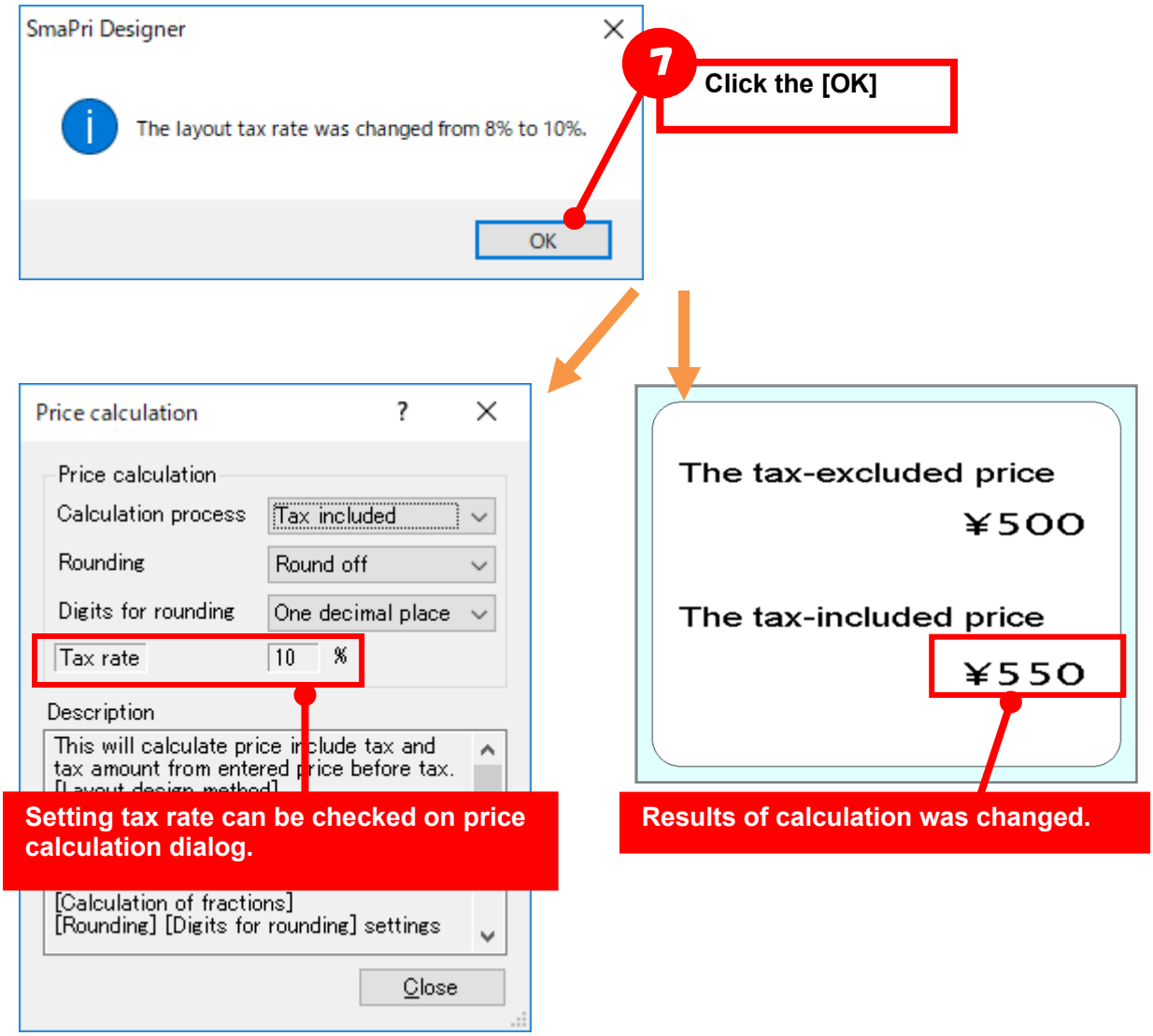
The tax-excluded price
¥500
The tax-included price
¥550
Results of calculation was changed.

## - Changes the tax rate for individual layouts in a project.

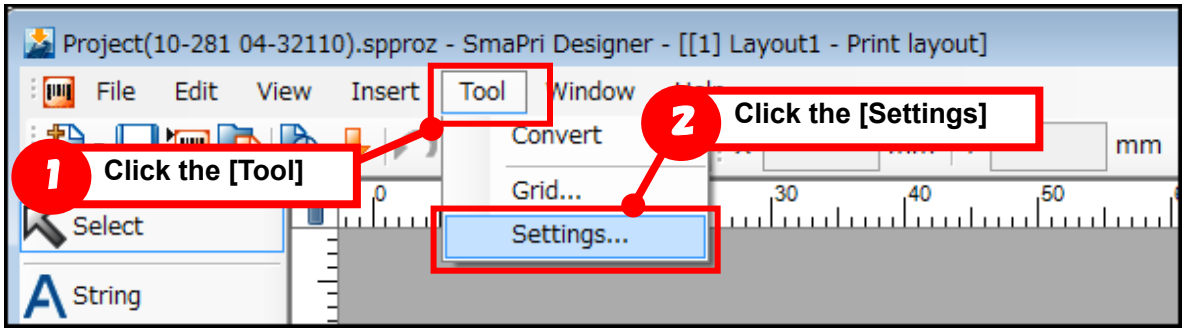


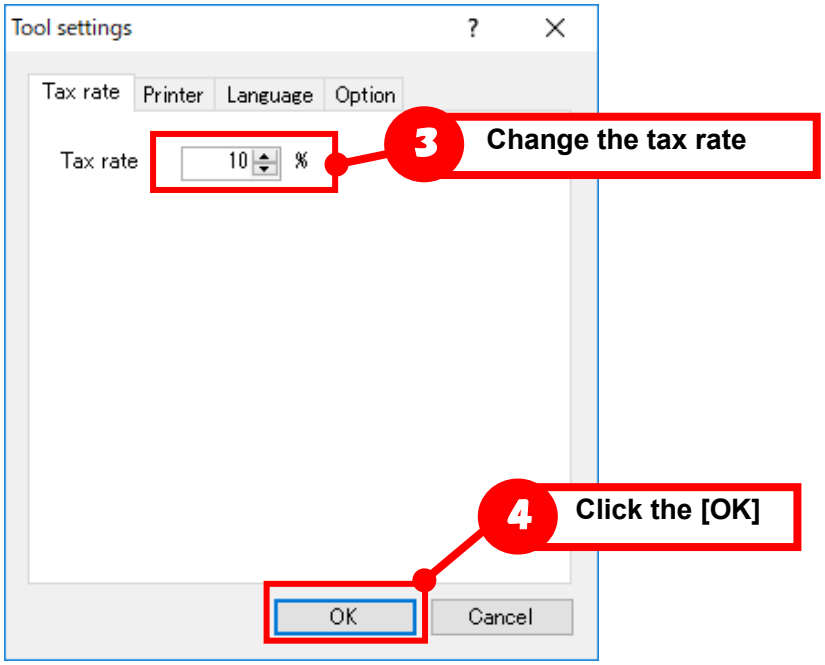



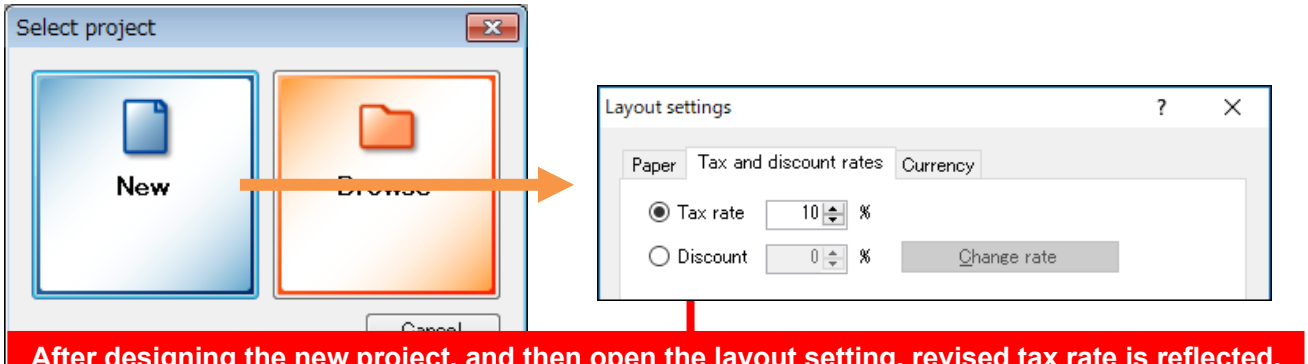




SmaPri Designer
The layout tax rate was changed from 8% to 10%.
OK
7
Click the [OK]
Price calculation
Price calculation
Calculation process
Tax included
Rounding
Round off
Digits for rounding
One decimal place
Tax rate
10
%
Description
This will calculate price include tax and tax amount from entered price before tax.
[Calculation of fractions]
[Rounding] [Digits for rounding] settings
Close
Setting tax rate can be checked on price calculation dialog.
The tax-excluded price
￥500
The tax-included price
￥550
Results of calculation was changed.

## - Sets the tax rate when creating the new project

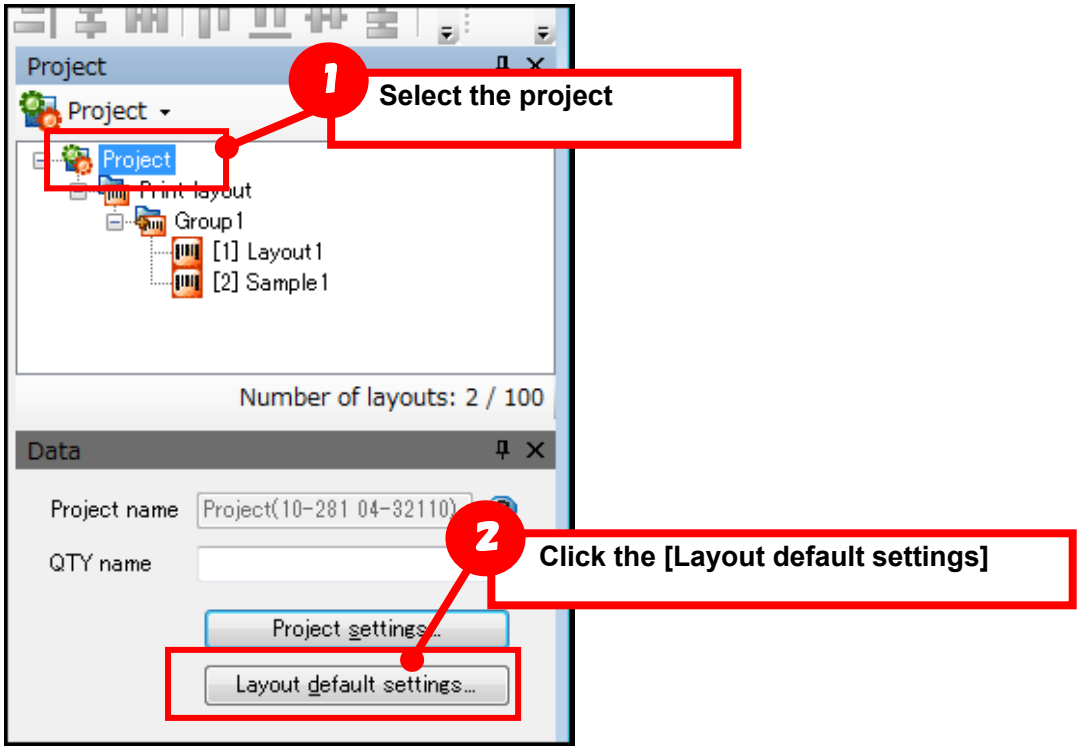


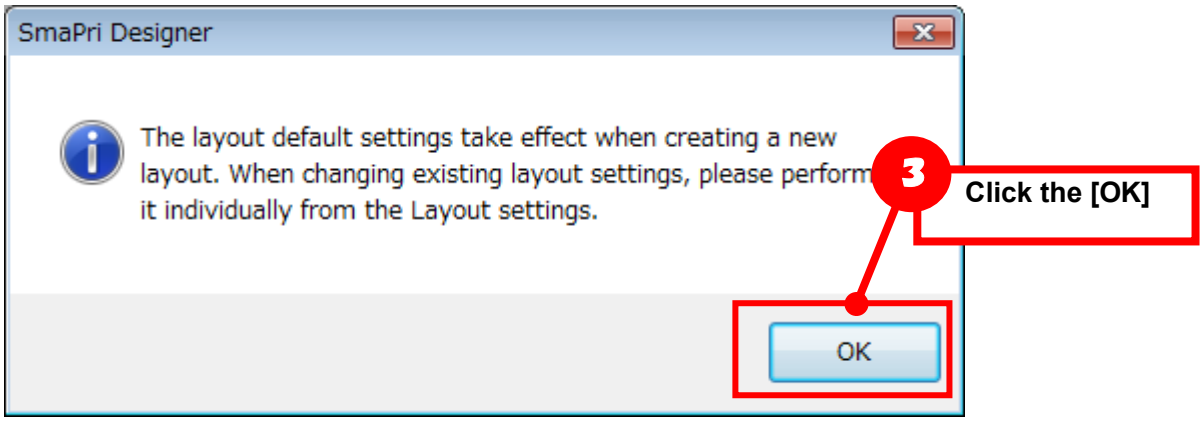



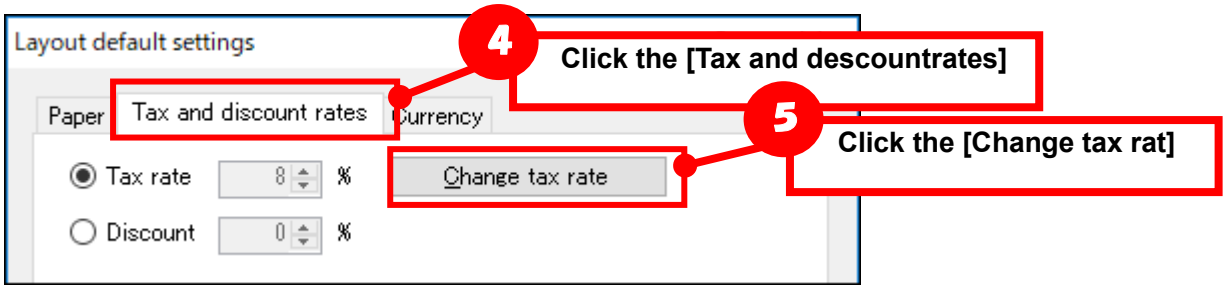


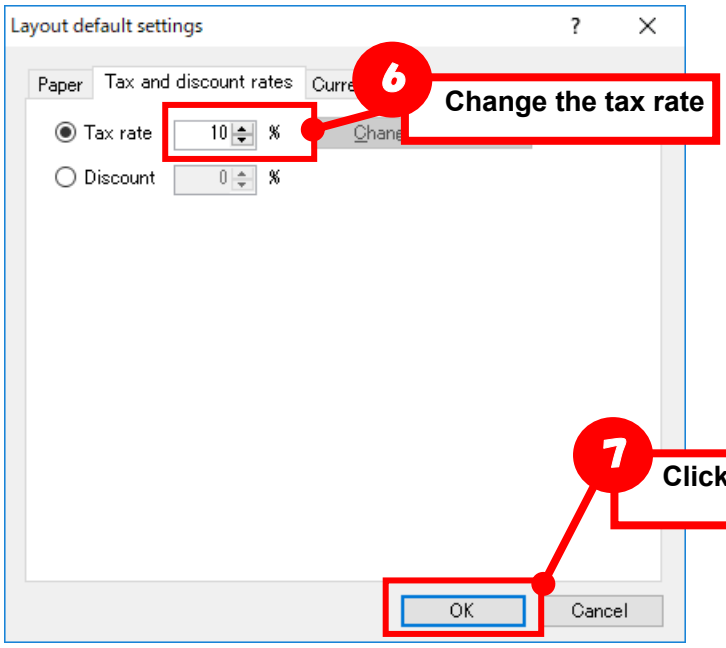

**After designing the new project, and then open the layout setting, revised tax rate is reflected. Please note that the existing tax rate of current project is not changed.**

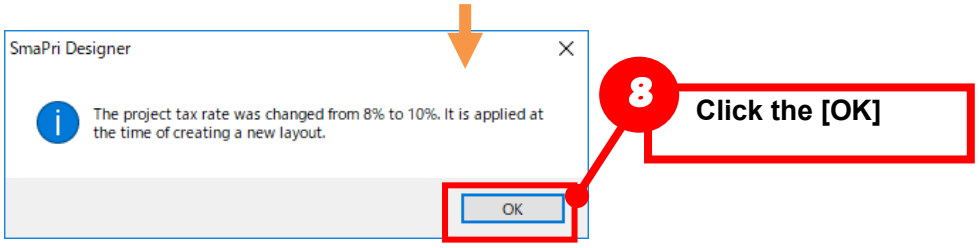
## - Sets the tax rate when creating the new layout

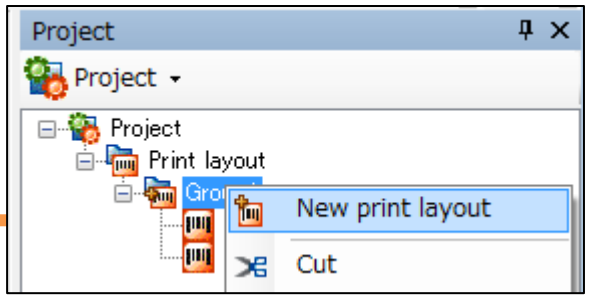


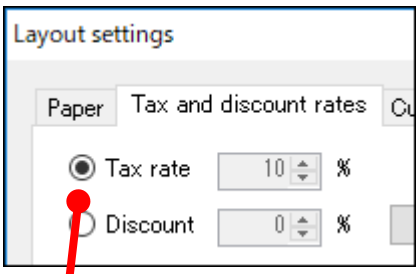






**After designing the new project, and then open the layout setting, revised tax rate is reflected. Please note that the existing tax rate of current project is not changed.**

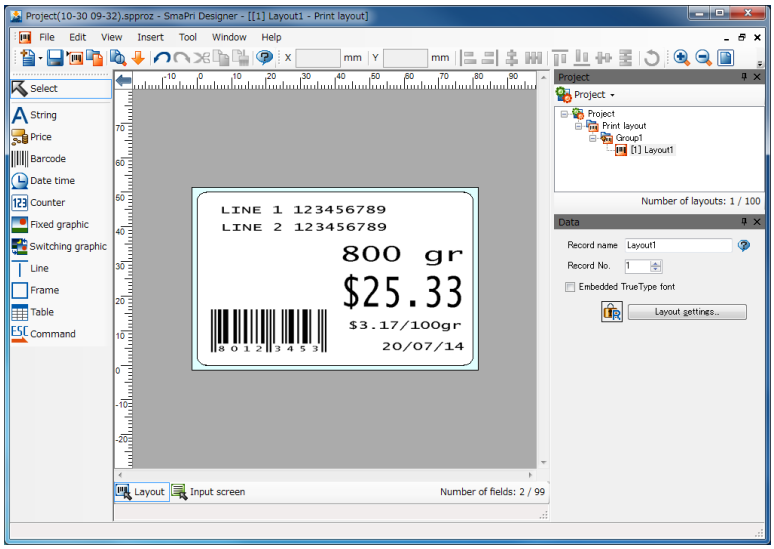
# 5-14 The paper rotation settings

This explains how to switch between and display the design screen sheet for 0, 90, 180 and 270 degrees angles / views.

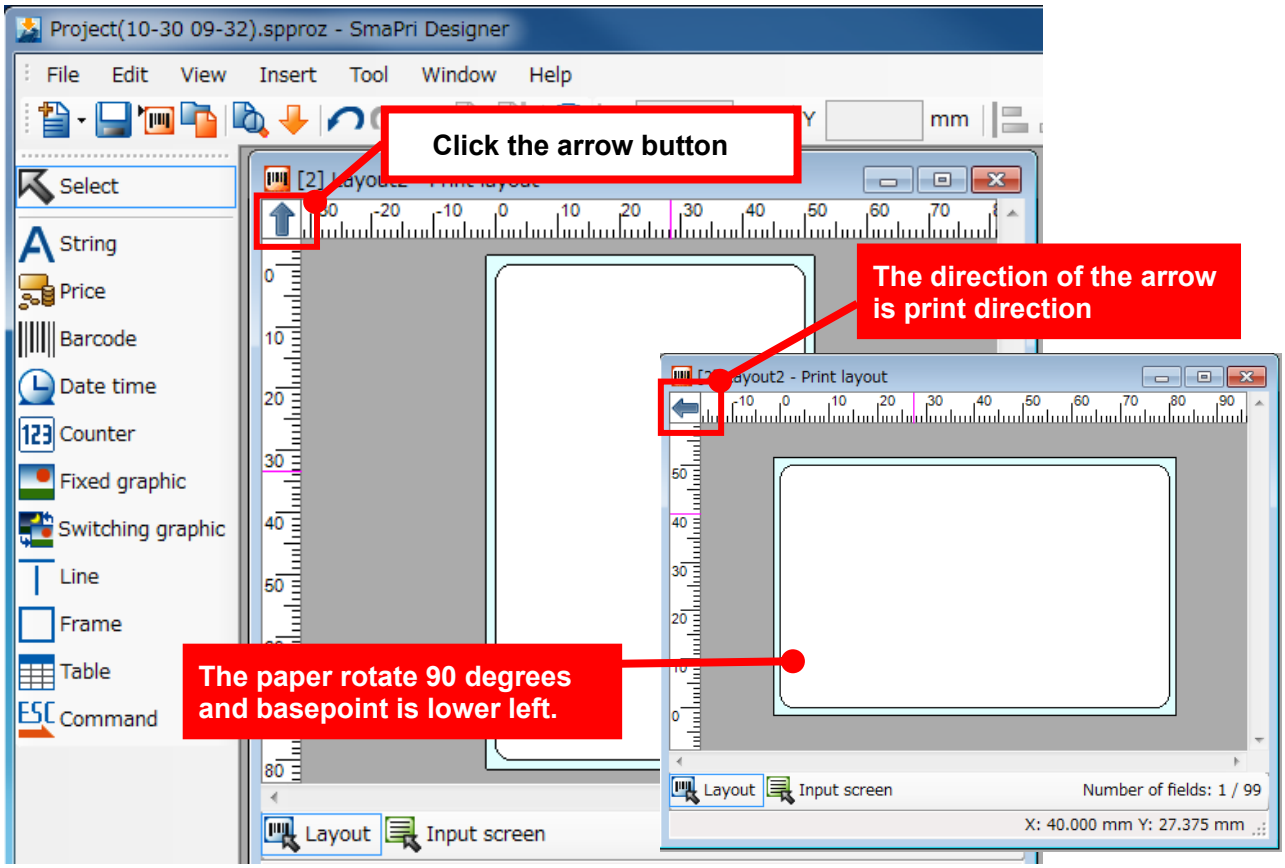
Print label

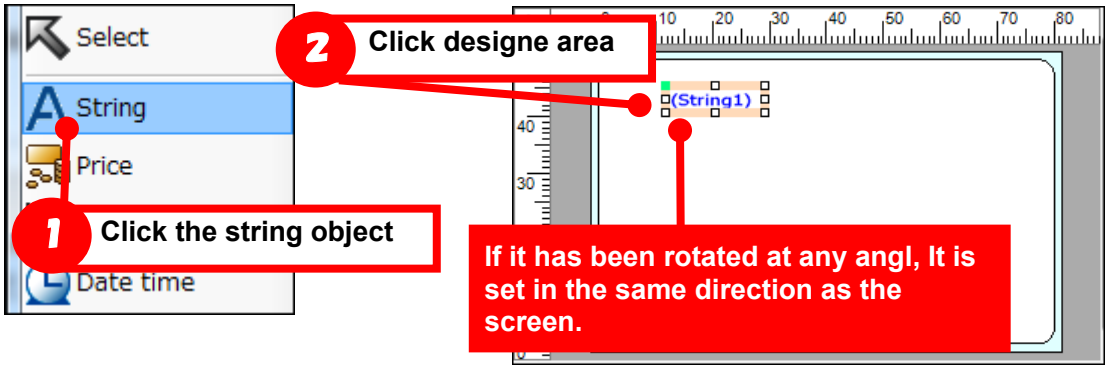
Print direction

Design window

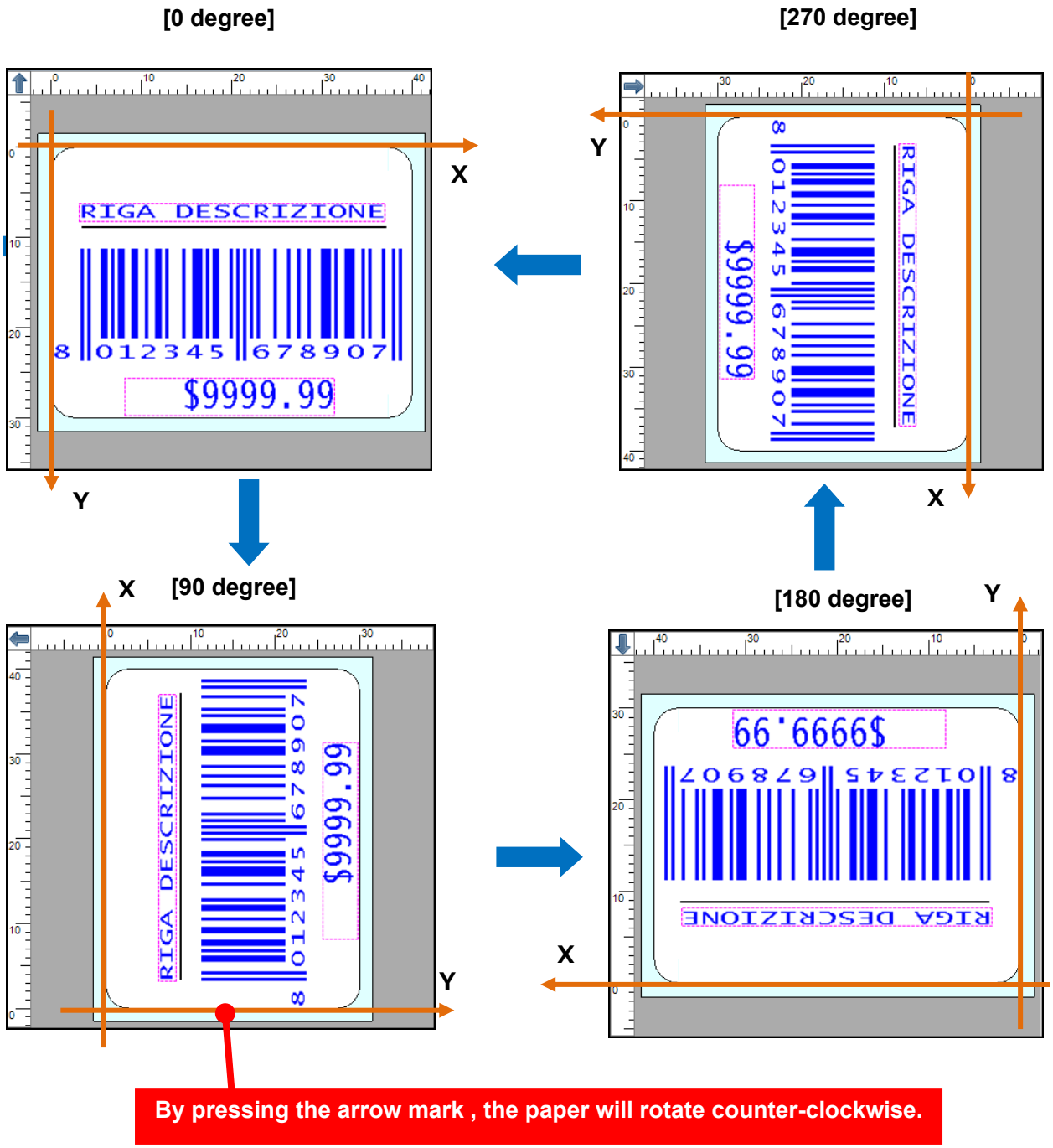



## - Rotate the paper






## - Displayed when rotating the sheet



# 5-15 Creating a barcode with variable length digits

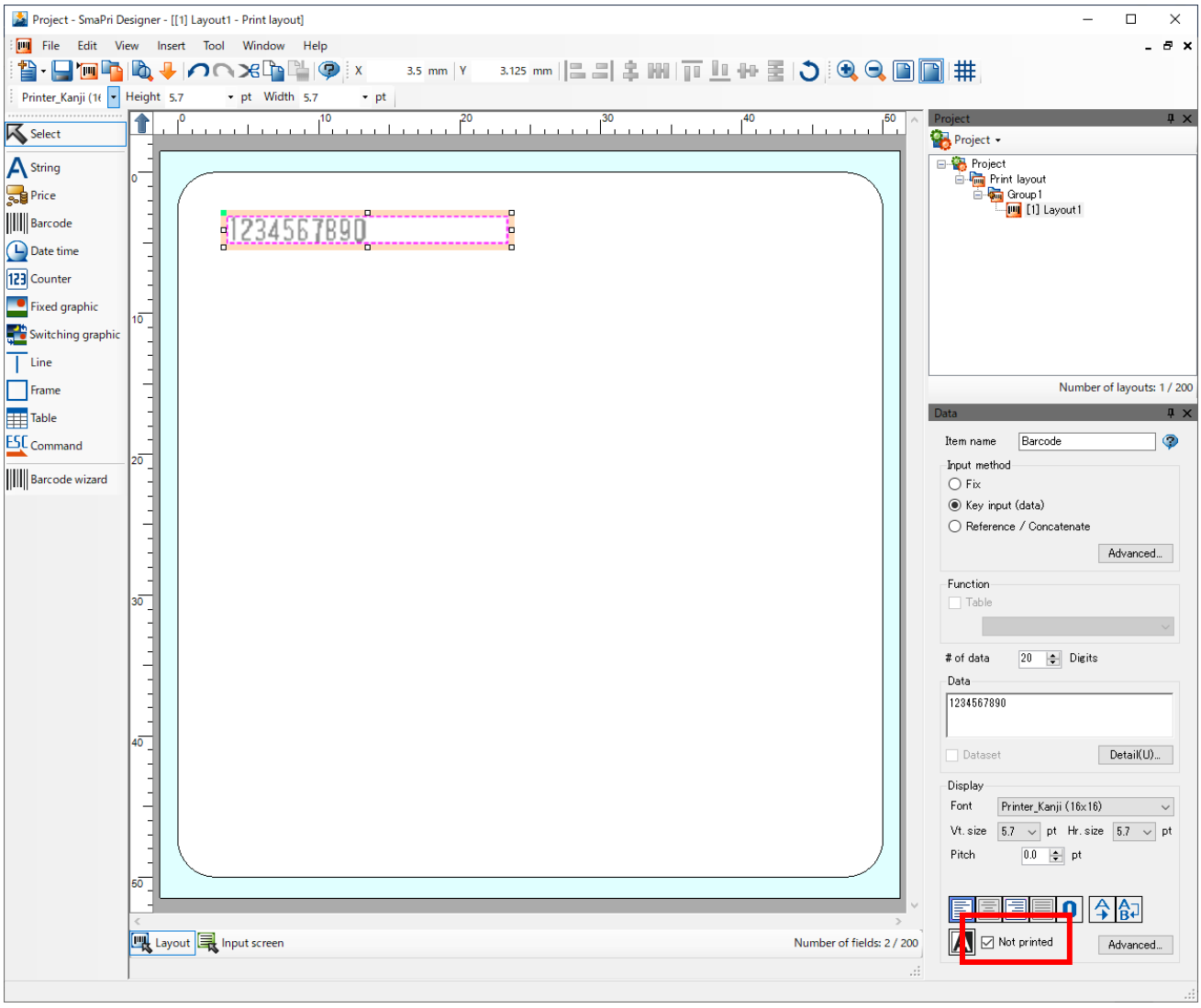
This section explains how to create a barcode with a variable number of digits.

When the input method for CODE39 or QR code is set to "Key input (data)", data less than the number of digits will be filled in with half-width spaces. By preparing a separate string for data input, setting the barcode input method to "Reference / Concatenate" and the fill type to "Not fill", you can print a barcode with the number of digits without filling in with half-width spaces.

**[Settings]**

Paste the string for entering barcode data into the layout and enable "Not print".

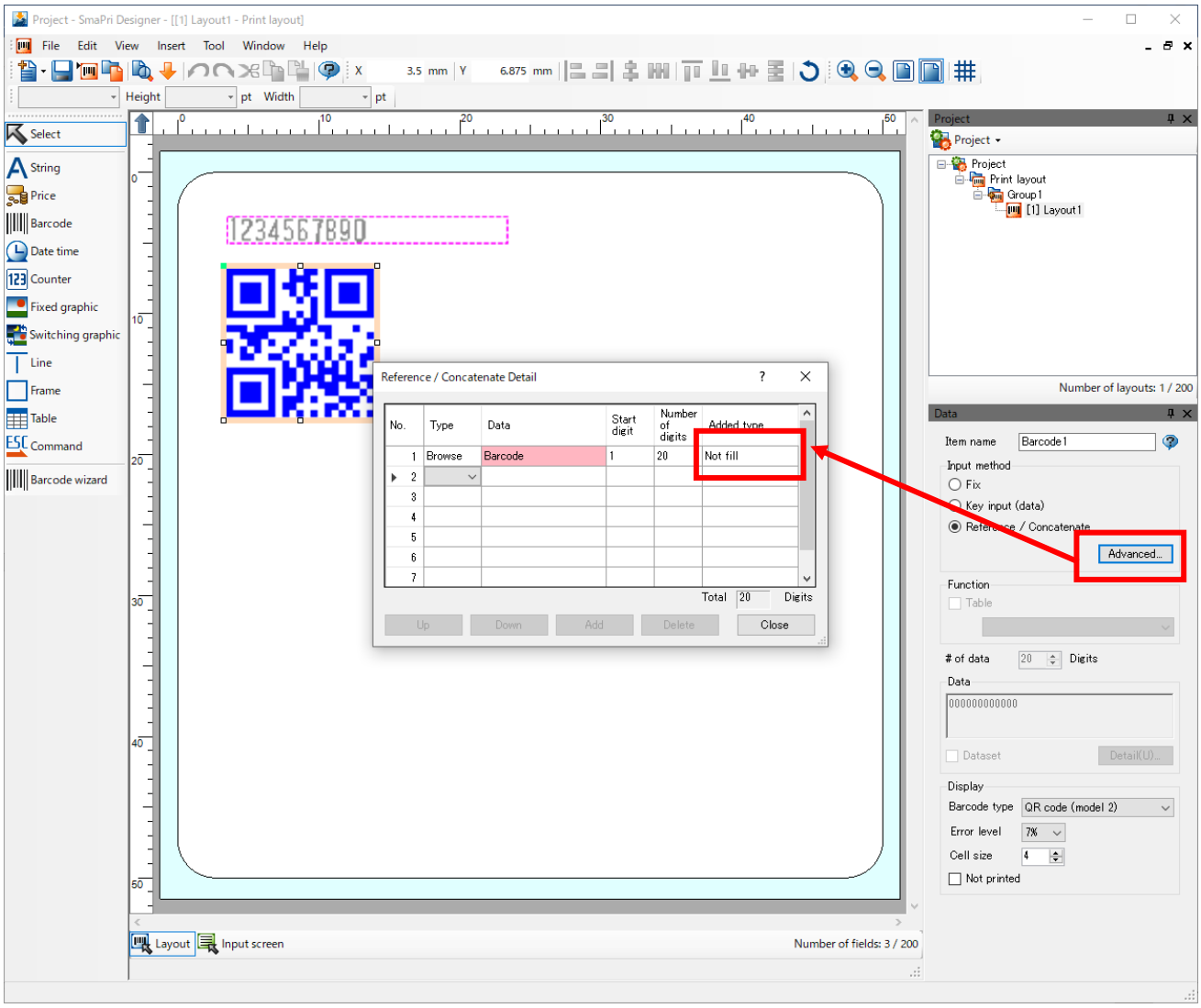
Example) Item name: Barcode, # of data: 20 Digits, Not print: Enabled



Next, paste a barcode onto the layout. Here we will use a QR code as an example.

Set the QR code input method to "Reference / Concatenate", set the input string to Data, and set the fill type to "Not fill".

Example)




This completes the setup procedure.

After creating a barcode, be sure to check that it can be read using test data.

# 5-16 Include line feed codes in QR code

This section explains how to include a line feed codes in the QR code.

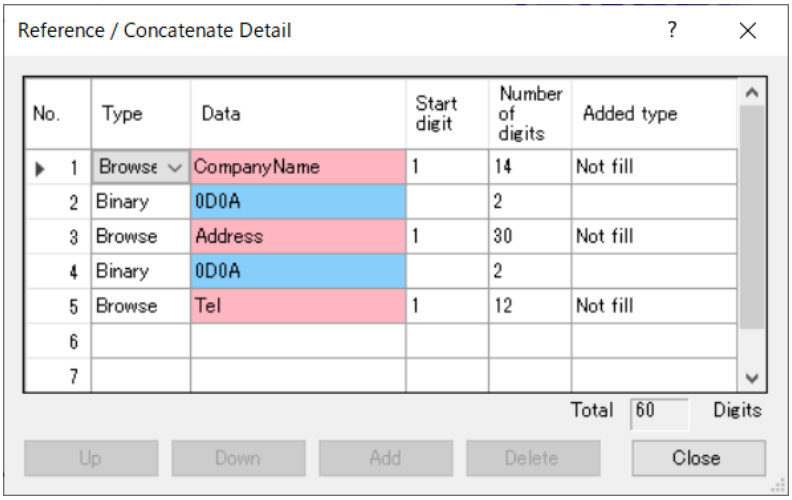
When the barcode type is QR code, control codes can be included in the input data.

This section explains how to include line break codes (CRLF) in QR code. There are two methods below. Control codes other than line break codes can also be included in the same way.

**- Use "Reference / Concatenate"**

Select "Binary" as the type of "Reference / Concatenate" and enter the control code in hexadecimal.

The following is an example of including a line feed code between input data.




**- Include line break codes in input data for format print request**

Set input data including line break codes in the format print request to SmaPri Driver.

Be sure to URL encode the input data (CRLF → %0D%0A) on the app side.

Example of format print request)

http://localhost:8080/Format/Print?__format_archive_url=http://xxxxx/test.spfmtz&__format_archive_update=update&__format_id_number=1&QRCode=SATO**%0D%0A**Tokyo**%0D%0A**0120-XXXXXX&(Print quantity)=1

# The 6th chapter

# Appendix

# 6-1 Glossary

This chapter describes the terms used in this operation manual.

## Project

The management unit for data created with SmaPri Designer. The data created by SmaPri Designer is normally saved as a project file (extension ".spproz").

Optionally, there is a method of saving files without archiving (compressing) them.

In this situation, they are organized in a folder (folder extension ".files") with the same name as the project file (extension ".spproj"). When the project is saved with this method, please use the file and folder as a set when moving the files or backing up the project.

Please note that when the name of the project file and folder that are not archived are changed, the software will no longer be able to reference the created data.

## Object

The items pasted on the label including strings, barcodes, and other items.

You can paste a maximum of 200 objects on 1 layout.

For complicated editing such as when using Reference / Concatenate, you may not be able to paste 200 objects. Lines, frames, tables, and fixed graphic items are not counted.

## Record data

The data for printing the label from the terminal issuing the print instruction.

You can register 200 entries of record data in 1 project.

## Record No.

The number for calling the label data with the terminal issues the print instruction.

You can set this number from 1 to 9999.

## Print layout

The data for specifying and printing the record No. from the terminal issuing the print instruction.

# 6-2 Error messages

Describes the error messages displayed during operation.

| Error messages | Action |
|---|---|
| There are characters included that can not be printed with this printer font. | Change the font type.<br>The characters that cannot be printed differ according to the type of font.<br>The X1, 2, and 3 fonts can print single-byte alphanumeric characters and Japanese kana. The X70 to 77 fonts can print single-byte numbers ¥ , (comma) . (decimal point). The kanji font can print double-byte and single-byte alphanumeric characters and Japanese kana. |
| The specified data is not registered in the table. | The registration number that was input is not registered in the referenced table. |
| The number of digits specified is smaller than the maximum number of digits for the table. | The number of digits configured for the item referencing a table is set smaller than the number of digits for "Value" in the target table. Change "Value" for the table to the number of characters in the range of the digits or change the number of digits. |
| An error occurred while generating an expand command. An error occurred when creating the layout item command. | An error occurred during data output.<br>Check that there are no objects displayed in red (error) on the print layout.<br>You can check the error details by placing the mouse cursor on the object displayed in red. |
| An error occurred while generating an expand command. | |

# 6-3 FAQ

This chapter contains frequently asked questions.

## - General

**1) Want to upgrade to the latest version of the software.**

- SmaPri Designer, SmaPri Driver

  Please download the latest version of the installer and the manuals on the support site.

  * You will be required to log in with the license ID and password in your support license.

  [SmaPri Support Site]

  http://dcs.sato.co.jp/SmaPri/support/index-en.asp

- Printer driver (Use to test print on SmaPri Designer.)

  Download the Printer Driver installation software from your SATO local website.

  https://www.sato-global.com/drivers/redirect.html

**2) Want to know more information for other products than SmaPri.**

- Operator Manual and Quick Guide, for each printers.

**3) Other matters, technical support**

- Regarding SmaPri

  Please refer to the "Technical FAQ" on the support site.

  * You will be required to log in with the license ID and password in your support license.

  http://dcs.sato.co.jp/SmaPri/support/index-en.asp

## - SmaPri Designer

**1) Broke or Lost the USB key (HASP).**

Please contact the dealer where the product was purchased.

**2) A message appeared stating: "It works as an evaluation version. It can not use for commercial usage".**

・Are the power settings for your PC set to power saver?

The USB key (HASP) operates by receiving power from the USB port. Power stops being supplied in power saver mode, and as a result, the USB key stops working. Please use the software with the power saver mode settings cleared. Also, when this occurs, the USB key can be recognized by the PC again by reinserting it.

・Was the software installed as specified in this manual?

If you insert the USB key (HASP) before installing the software, the USB key may no longer be recognized. Please install the software again with the USB key (HASP) unplugged from the PC.

・Has the USB key (HASP) been firmly plugged all the way into the USB port on the PC?

Firmly plug the USB key (HASP) into the USB port until you can no longer see the metal part.

・Is the USB key (HASP) light on?

If the light is off, or if the light is on but the USB key (HASP) is not recognized, please try to reinstall the device driver for the USB key (HASP).

・Connecting to the PC via Remote Desktop?

Due to restrictions on USB keys, it has been confirmed that license authentication fails when used via Remote Desktop. Please do not use Remote Desktop.