

# CITIZEN

## Layout SDK

Layout Editor / Layout File Manager

Users Guide

for Version 1.4.1

**CITIZEN SYSTEMS JAPAN CO., LTD.**

## Revision history

Date	Description
2009.06.01	1.0.0.0 release
2009.11.19	1.0.1.0 release - Changed to hide the printing dialog in Layout Print Engine.
2013.11.22	1.1.0.0 release - Added support OS: Windows 7, Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2008R2, Windows Server 2012 - Supports the creation of 64-bit user applications. - Supports multi-threaded user applications for printing. - Added support barcode: MaxiCode, Data Matrix, GS1 Composite, GS1 Databar (RSS), iQR - Support for dot-by-dot print of the image. And, Changed the property name from [FixedAspect] to [SizeMode]. - Added speed up method for the first printing: PreparePrint(), HidePreview() - Support for snapping the inserted parts on the hid grid. (Layout Editor) - Added the vs90_piaredist.exe to the installer. The vs90_piaredist.exe ( Microsoft Primary Interoperability Assemblies 2005 ) is "Distributable Code" by Microsoft. - Fixed some bugs.
2014.09.08	1.2.0.0 release - Supported the mobile terminal (Android). - Added the printer font mode for the mobile terminal in Layout Editor. - Added the CLFX layout file export function for the mobile terminal in Layout Editor. - Added the Layout Print Engine for Android using the CLFX layout file.
2016.08.16	1.3.0.0 release - Added support OS: Windows 10 - Changed to .Net Framework 4.0 based. - Supported "Straight Line" and "Rectangle" on the layout for the mobile terminal. - Changed the layout file format name from "CLFX" to "XML" for the mobile terminal. - Added the XML layout file import function for mobile terminal in Layout Editor. - Change the designation from "Layout Print Engine" to "Layout SDK". (Library name is no change) - Fixed some bugs.

2017.09.29	<p>1.4.0.0 release</p> <ul style="list-style-type: none"><li>- Supported printing via Windows POS Print SDK.</li><li>- No update of each Layout SDK for Android, iOS, JavaScript.</li><li>- Added constraints to the Operating Environment.</li><li>- Updated the System Outline.</li><li>- Added constraints to Frame properties.</li><li>- Added constraints to Image properties.</li></ul>
2020.07.15	<p>1.4.1.0 release</p> <ul style="list-style-type: none"><li>- Fixed a bug that Layout Editor could not be executed in the language environment where the decimal point delimiter is a comma.</li><li>- Updated "Relationship between Layout Editor version and Layout SDK version" in "Notes". (P.14)</li><li>- Added "Printer sharing between Layout Editor and Layout SDK app" to "Notes". (P.15)</li><li>- Added notation for CLF / XML layout file to all part properties. (P.38~)</li><li>- Updated the model name of the constraint of Frame properties. (P.38)</li><li>- Added the properties table to Export. (P.46)</li><li>- Added the existing constraints to Text part properties. (P.50)</li><li>- Added the existing constraints to Image part properties. (P.52)</li><li>- Added the existing constraints to Barcode part properties. (P.55)</li><li>- Updated screenshots.</li></ul>

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# 1

## Preparation

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## 1.1 Operating Environment

To enjoy all the benefits of Layout SDK, the host system needs to satisfy the following requirements; Please be sure to check before installation.

■ Windows PC ( Development environment / Execution environment )

CPU	:	Pentium 1.0 GHz or higher with the OS requirement satisfied
Memory	:	1GB or more with the OS requirement satisfied
HDD	:	Free space of 10MB or more for installation
Monitor	:	Resolution of 1024x768 or above and High Color (16bit) or above
OS	:	Windows XP, Windows 7 (32bit, 64bit), Windows 8 (32bit, 64bit), Windows 8.1 (32bit, 64bit), Windows 10 (32bit, 64bit), Windows Server 2008, Windows Server 2008R2, Windows Server 2012
Software	:	.NET Framework 4.0 CITIZEN Printer Driver *1

\*1: "CITIZEN Text Only Printer" driver is not supported.



## 1.2 System Outline

Layout SDK is a basic set of all platforms, and it consists of Layout Editor, Layout File Manager, Windows Layout SDK.

Output can be transmitted only to a Citizen Systems printer. Layout SDK are also resourceful in preparing/designing labels and receipts.

The outline of each tool is provided as follows;

### ■ Layout Editor

Prepares the print layout.

The display window consists of tools necessary for layout editing process.

### ■ Layout File Manager

Manages the prepared layout files.

Displays the list of files, thumbnails or comments within the layout.

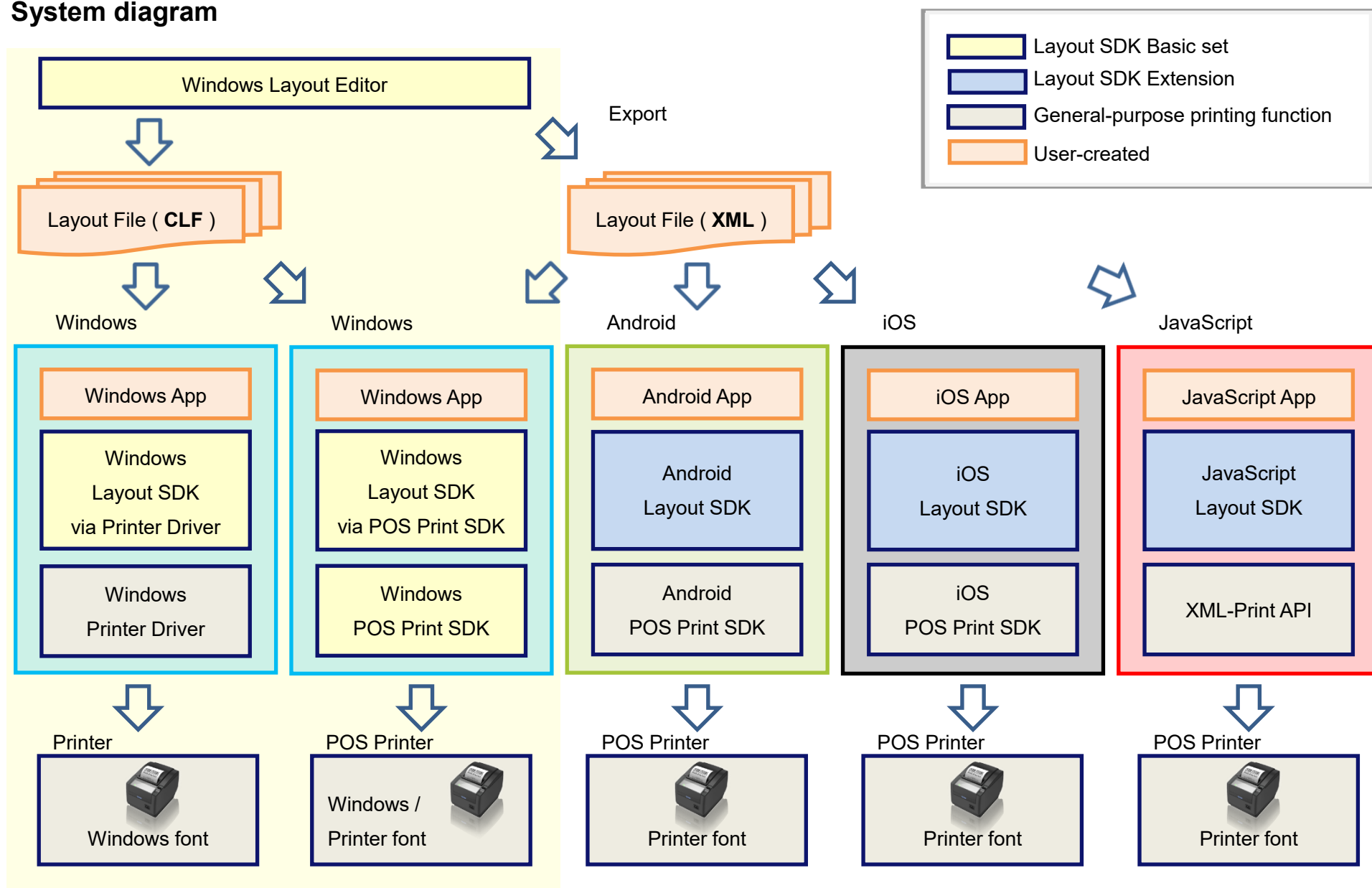
### ■ Windows Layout SDK

Executes printing by setting up the printing data with VB-like interface for the selected layout.

This engine is supposed to be called by applications in upper layer.

For more information, please refer to the "Windows Layout SDK via Printer Driver Programming Manual" and "Windows Layout SDK via POS Print SDK Programming Manual".

## System diagram



**- Notes -**

## ■ The difference due to the operation environment - General

	Windows via Printer Driver	Windows via POS Print SDK	Android	iOS	JavaScript
Layout Editor	○ <sup>*1</sup>		× <sup>*2</sup>		
Layout File Manager	○ <sup>*1</sup>		× <sup>*2</sup>		
Layout SDK	○ <sup>*1, *3</sup>	○ <sup>*1, *4</sup>	○ <sup>*5</sup>	○ <sup>*6</sup>	○ <sup>*7</sup>
Interface	・Wired / Wireless LAN ・USB ・Bluetooth <sup>*8</sup> ・COM <sup>*8</sup> ・LPT		・Wired / Wireless LAN ・Bluetooth <sup>*8</sup> ・USB	・Wired / Wireless LAN ・Bluetooth <sup>*8</sup>	・Wired / Wireless LAN
Printer	Supported by the CITIZEN printer driver.	Supported by "Windows POS Print SDK" <sup>*9</sup>	Supported by "Android POS Print SDK" <sup>*10</sup>	Supported by "iOS POS Print SDK" <sup>*11</sup>	Supported by "CITIZEN XML-Print Service" <sup>*12</sup>

\*1: It is Layout SDK basic set.

\*2: Please use the tool for Windows.

\*3: For more information, please refer to the "Windows Layout SDK via Printer Driver Programming Manual".

\*4: For more information, please refer to the "Windows Layout SDK via POS Print SDK Programming Manual".

\*5: For more information, please refer to the "Android Layout SDK Programming Manual".

\*6: For more information, please refer to the "iOS Layout SDK programming manual".

\*7: For more information, please refer to the "JavaScript Layout SDK programming manual".

\*8: on the specifications of **interface**, there is a case where the data transfer rate is insufficient. Please take sufficient verification.

\*9: For more information, please refer to the "Windows POS Print SDK Programming Manual".

\*10: For more information, please refer to the "Android POS Print SDK Programming Manual".

\*11: For more information, please refer to the "iOS POS Print SDK Programming Manual".

\*12: For more information, please refer to the "CITIZEN XML-Print Service Programming Manual".

■ The difference due to the operation environment - Printing

	Windows via Printer Driver	Windows via POS Print SDK	Android	iOS	JavaScript
Layout File format	CLF	CLF / XML	XML		
Limit of layout	No limit	Some restrictions (see Appendix)	Some restrictions (see Appendix)		
Layout printing reproducibility	High	Some restrictions	Some restrictions		
Print preview of under execution environment	Yes	No			
Print Languages	Depends on PC	CLF: Depends on PC XML: Depends on Printer	Depends on printer		
Print data	Graphics-based	CLF: Graphics-based XML: Command-based	Command-based		
Printer function ·Cutter ·Buzzer ·Drawer ·NV logo	Yes *1	Yes *2, *3	Yes *2		
Print completion detection	No	Yes *4	Yes*5	Yes *6	Yes*7

\*1 : Available by setting the Windows printer driver.

\*2 : Available by setting the export of the Layout Editor.

\*3 : Set the PrintOprion class and use it. The PrintOprion class overrides \*2 export settings.

\*4 : This library is using the print completion detection function of Windows POS Print SDK.

\*5 : This library is using the print completion detection function of Android POS Print SDK.

\*6 : This library is using the print completion detection function of iOS POS Print SDK.

\*7 : This library is using the print completion detection function of CITIZEN XML-Print API.

■ The difference due to the layout file format - Layout parts limitation

Layout parts	CLF format	XML format
Characters	No	Some limitations
Image	No	Some limitations
Barcord	No	Supported : QR Code, EAN-13, EAN-8, UPC-A, UPC-E, Codabar, ITF, Code 39, Code 93, Code 128, GS1-128, PDF417 Unsupported : MaxiCode, Data Matrix, GS1 Composite, GS1 Databar, iQR
Numbering, Numbering barcode	No	Unsupported
Figures ( Straight Line, Rectangle )	No	Some limitations
Figures ( Circle, Polygon, Arc, Polyline, Free Line, Bezier Curve )	No	Unsupported

■ Layout Editor Version vs Layout SDK Version

	Layout SDK Version				
Layout Editor Version	Windows via Printer Driver	Windows via POS Print SDK	Android	iOS	JavaScript
v1.0.x.0	v1.0.0.0 or later	—	—	—	—
v1.1.0.0	v1.0.0.0 or later	—	—	—	—
v1.2.0.0	v1.0.0.0 or later	—	v1.2.0.0 or later	—	—
v1.3.0.0	v1.3.0.0 or later	—	v1.3.0.0	v1.3.0.0	v1.3.0.0
v1.4.0.0	v1.3.0.0 or later	v1.4.0.0	v1.3.0.0	v1.3.0.0	v1.3.0.0
v1.4.1.0	v1.3.0.0 or later	v1.4.0.0	v1.3.0.0	v1.3.0.0	v1.3.0.0

## ■ Printer sharing between Layout Editor and Layout SDK app

	Layout SDK App				
Windows Driver Port	Windows via Printer Driver	Windows via POS Print SDK	Android	iOS	JavaScript
CITIZEN COM	○	○	—	—	—
LPT	○	○ <sup>*2</sup>	—	—	—
USB	○	○ <sup>*2</sup>	—	—	—
CITIZEN TCP/IP Port	○	○ <sup>*3</sup>	○ <sup>*3</sup>	○ <sup>*3</sup>	○ <sup>*3</sup>
Bluetooth	— <sup>*1</sup>	○	○ <sup>*4</sup>	○ <sup>*5</sup>	—

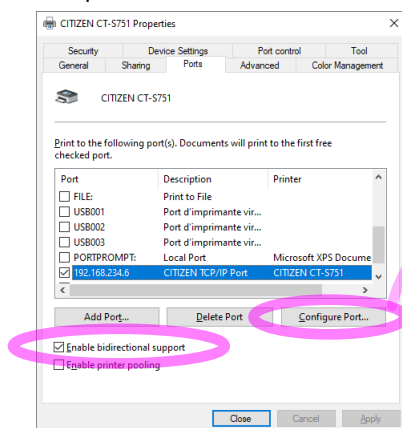
\*1 : Use the Bluetooth printer via CITIZEN COM assigned to the serial port.

\*2 : Install the Windows driver without the status acquisition function, or uncheck "Enable bidirectional support" in the port settings of the Windows driver.

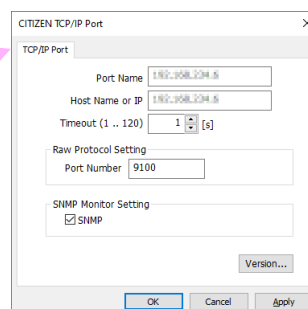
\*3 : If you do not need the status acquisition function, install the Windows driver without the status acquisition function, or uncheck "Enable bidirectional support" in the port settings of the Windows driver.

If you need the status acquisition function, install Windows driver version 3.4.0.0 or later, and set both "Enable bidirectional support" in the port setting of the Windows driver and "SNMP" in the port setting of CITIZEN TCP / IP port. Please check.

### - Printer Properties



### - Configure Port



\*4 : Since the Windows PC occupies the connection with the Bluetooth printer, please turn off the Bluetooth of the Windows PC while connecting to the printer from the Android app.

\*5 : Since Windows PCs and iOS devices occupy the connection with the Bluetooth printer, turn off Bluetooth on the unused side.

\*\* You must restart your computer for the Windows driver changes to take effect.

## 1.3 Installation

Procedure for installing Layout SDK ( Layout Editor, Layout File Manager, Windows Layout SDK ) on the PC:

Please check if the operating environment requirements are satisfied and terminate all other programs on the PC before installation.

1. Double-click [**LayoutSDK\_Setup\_en**].
2. Click the [**Next**] button.
3. Read the License Agreement and check “**I accept the terms of the license agreement.**”
4. Click the [**Next**] button.
5. Select “**Developers**” and click the [**Next**] button.
6. Installation will begin.
7. Upon completion of installation click the [**Finish**] button to exit setup.



## 1.4 Uninstallation

Procedures for uninstalling Layout SDK from the PC:

Please terminate all other programs on the PC before uninstalling.

1. Open the Control Panel.
2. Open "**Uninstall Program**"
3. Double-click "**CITIZEN Layout SDK**"
4. "**User Account Control**" dialog box will be displayed. Click the [**Continue**] button.
5. A confirmation message will be displayed. Click the [**Yes**] button.
6. Uninstallation will begin.
7. Uninstallation will be completed. Click the [**Finish**] button.

- Note -

The PC may request for rebooting of Windows after completion of uninstallation.  
Follow the message and reboot the system.

# 2

## Layout Editor

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## 2.1 Starting up and Exiting the Layout Editor

### ■ Procedure for starting up the Layout Editor:

#### - In Windows 8 or Windows 8.1

1. Tap “**Layout Editor**” tile on the Start screen.
2. Layout Editor will start up.

#### - In other Windows

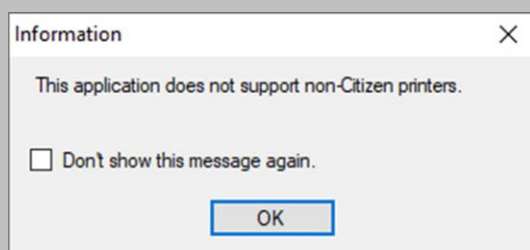
1. Click the [**Start**] button displayed at the bottom left of the Desktop.
2. Click “**All Programs**”
3. Click “**CITIZEN**”
4. Click “**Layout SDK**”
5. Click “**Layout Editor**”
6. Layout Editor will start up.

#### - Note -

If you want to print using printer fonts,  
Please export the XML format layout file and use it.  
( See: 2.4.8      Export ).

#### - Note -

The “Information” dialog box will be displayed at Layout Editor start up.



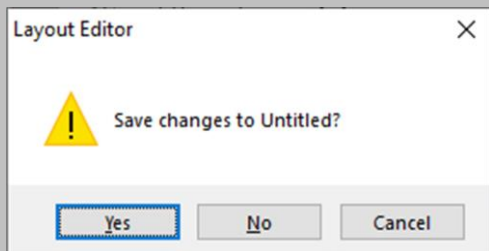
If you prefer not to receive this message in the future, please check the "Don't show this message again" option and click the [OK] button.

## ■ Procedure for exiting Layout Editor

1. Click **"File"** - **"Exit"** on the Menu Bar.

- Note -

If any changes have been made to the displayed file, a saving confirmation dialog will be displayed.



[Yes] button: Exits the program after saving the file.

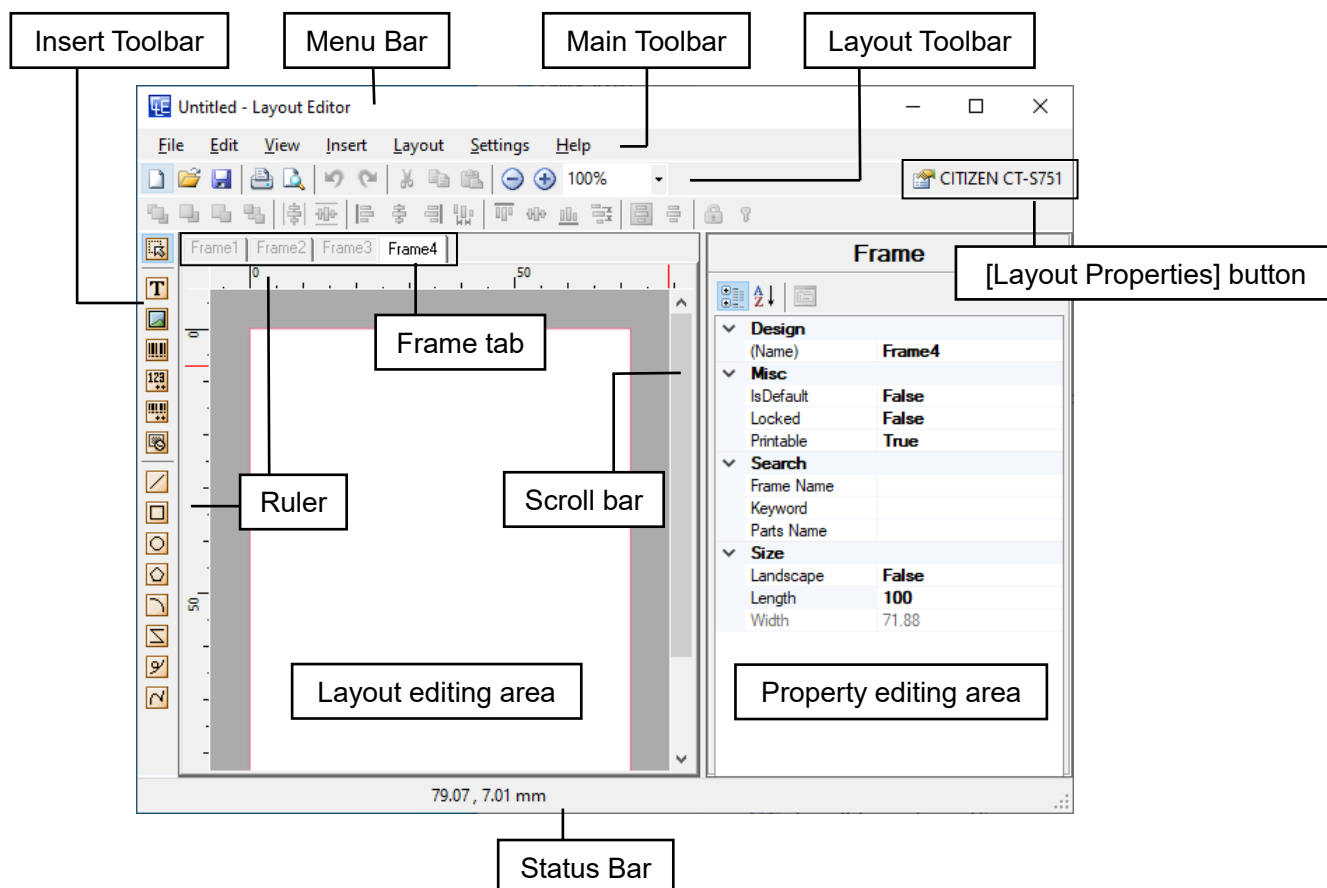
[No] button: Exits the program without saving the file.

[Cancel] button: File editing will be continued.

2. Exit the Layout Editor.

## 2.2 Layout Editor Overview

This section describes the terms and functions of the Layout Editor display screen.













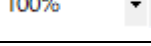
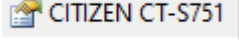


### Functions

Name	Function
Menu Bar	Provides access to various functions.
Main Toolbar	Displays the default tools for Windows applications.
Layout Toolbar	Displays the tools that are most often used in layout editing. (See 2.7 Changing the Layout).
Insert Toolbar	Displays the tools for field insertion. (See 2.5 Inserting Parts and 2.6 Inserting Figures).
Layout editing area	Executes field input and layout editing.
Properties editing area	Displays or changes the properties of the selected field. (See 2.5 Inserting Parts and 2.6 Inserting Figures).
Frame tab	Displays the prepared frame. (See 2.4.2 Frame Operation Procedures).
Status Bar	Displays the status.

The Main Toolbar shows the most commonly used tools in the application

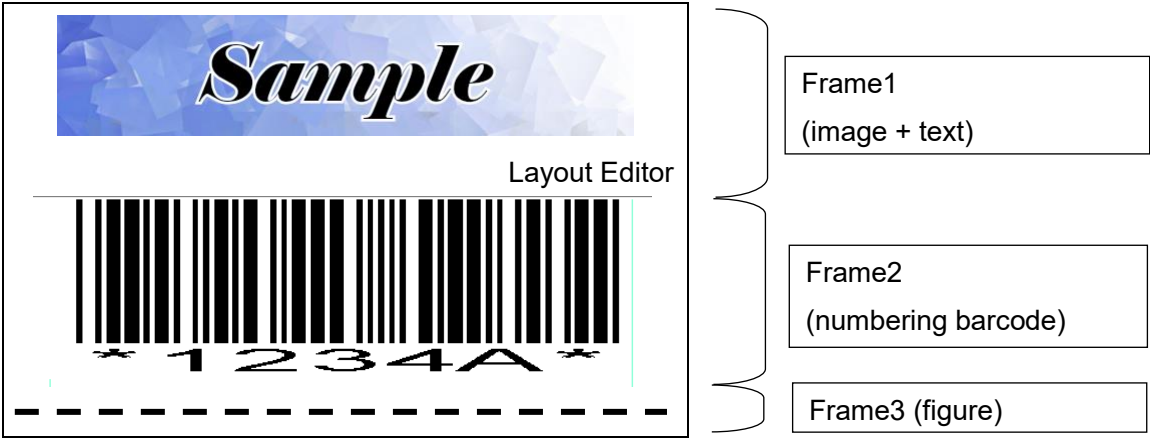
#### Names and functions of Main Toolbar buttons

Button	Name	Function
	New	Prepares a new document.
	Open	Opens a saved file.
	Save	Saves the file that is being edited.
	Print	Prints the file that is being edited.
	Print Preview	Displays the print preview for the file that is being edited.
	Undo	Invalidates the previous operation.
	Redo	Redoes the invalidated operation.
	Cut	Cuts the selected part and copies it onto the clipboard.
	Copy	Copies the selected part onto the clipboard.
	Paste	Pastes the part on the clipboard.
	Zoom Out	Reduces the zoom magnification by 25%.
	Zoom In	Increases the zoom magnification by 25%.
	Zoom Menu	Selects the zoom magnification.
	[Layout Properties] button	Displays the layout properties window. (Displays the name of printer that is set up.)

## 2.3 Using the Layout Editor

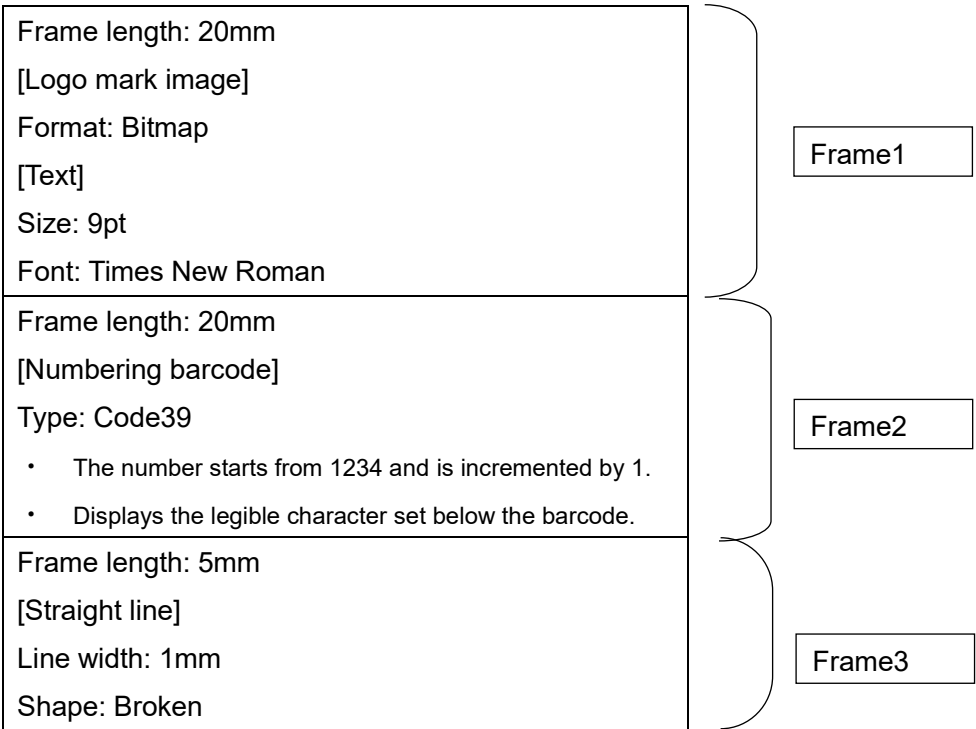
This section describes the basic operation procedures for Layout Editor by preparing a sample layout.

### ■ Sample layout

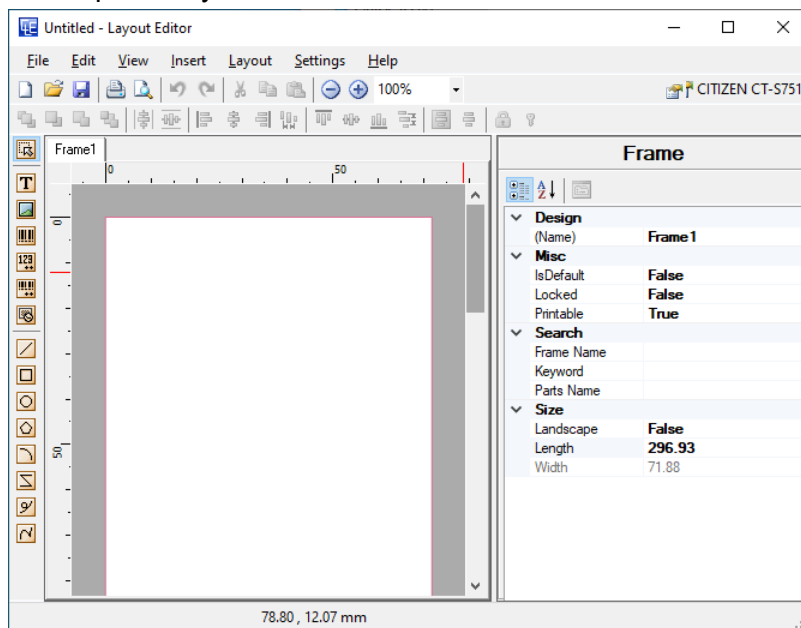


### ■ Layout specifications

Paper size: 80 x 297mm



## ■ Start up the Layout Editor.



### 1. Start up the Layout Editor.

(See 2.1 Starting up and Exiting Layout Editor).

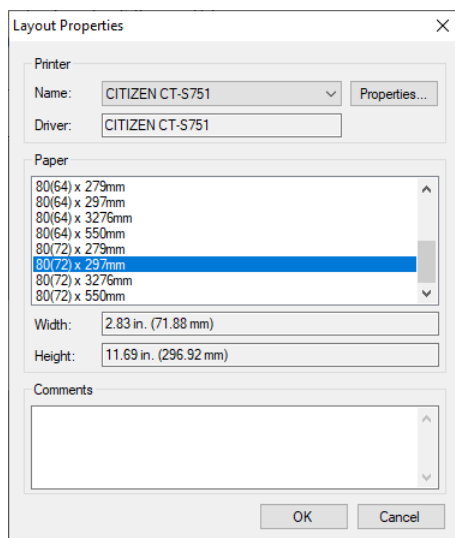
#### - Note -

The initial zoom setting on the screen is 100%.

Set up the zoom magnification from the Zoom menu on the Main Toolbar if necessary.

(See 2.8.2 Display settings).

## ■ Set up the layout properties.



1. Select "File" - "Layout Properties" on the Menu Bar or click the [Layout Properties] button on the Main Toolbar.
2. Only the Citizen printers that are installed will be displayed on the list. Select the printer to be

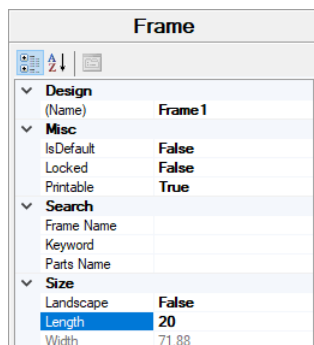


used from the list.

3. Select the paper. Here, select “80(72)× 297mm” (select to suit your printer).
4. Click the [OK] button.


(See 2.4.1 Setting up the Layout Properties).

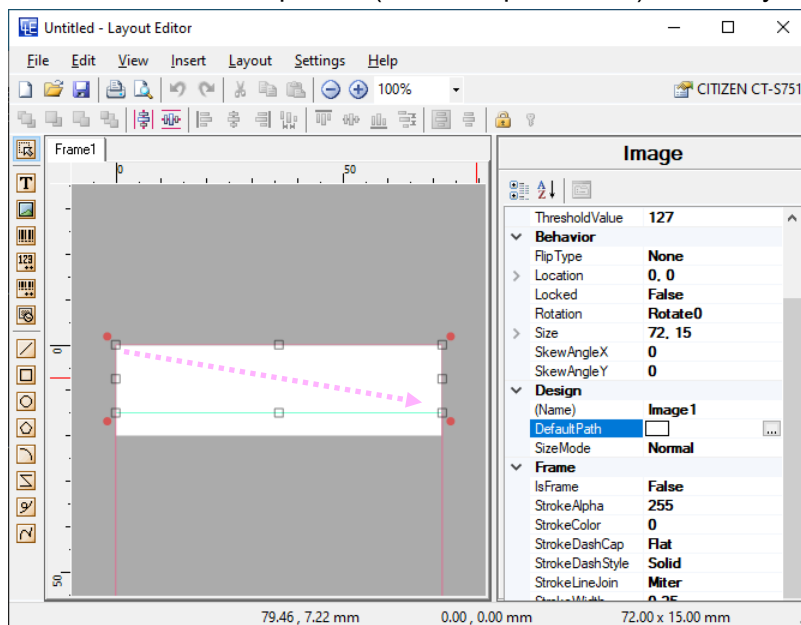
#### ■ Set up the size of Frame1.



1. Input “20” for [Length] in properties editing area.
2. Click inside the Layout editing area.

#### ■ Specify the image assignment area.

1. Click the  [Image] button on Insert Toolbar.
2. Move the mouse pointer (cross-shaped cursor) to the Layout editing area.



3. Highlight the area for the image to be assigned by dragging the cursor in the right and downward direction.

- Note -

Inserting can be canceled by pressing the [ESC] key during the procedure.

Prepare the assignment area within the print area. The print area is indicated as the red line on the Layout editing area.

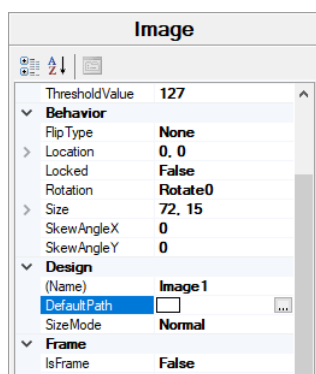
(See 3.5 Display Settings).


- The image assignment area will be displayed.

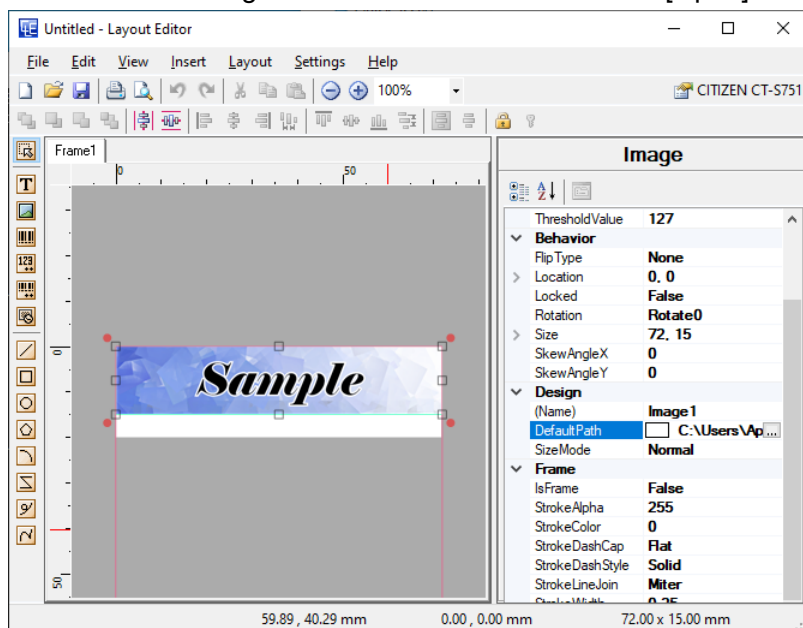
- Note-

To delete the inserted assignment area, click the image to be deleted and press the [Delete] key.

- Set up the image properties.




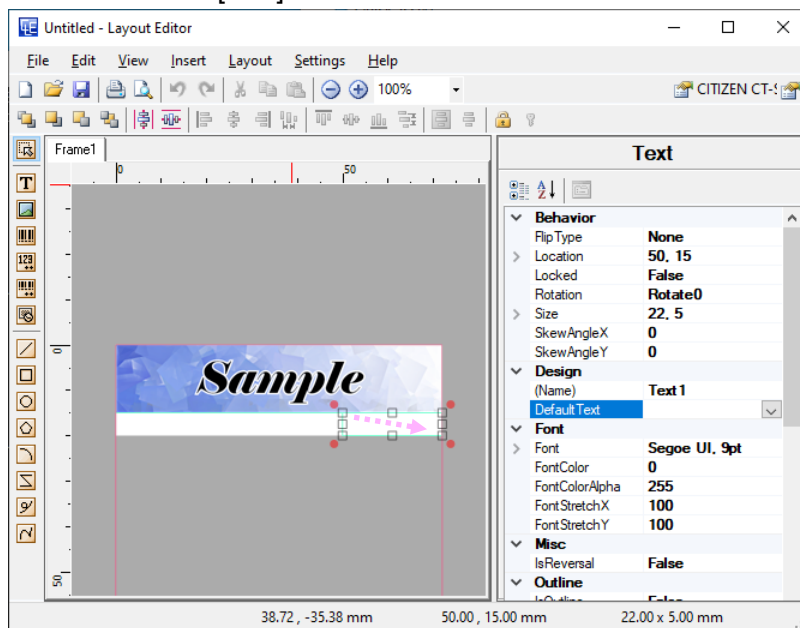
- Select the [DefaultPath] input field and click the  button.
- An "Open" dialog box will be displayed.
- Select the image file to be inserted and click the [Open] button.



- The image file will be inserted within the assignment area.
- Click the blank section in the Layout editing area and cancel the selection of the image part.

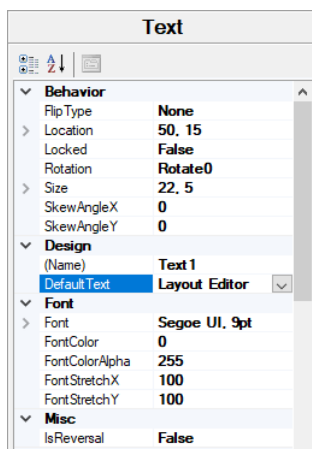
■ Input the text.


1. Click the  [Text] button on Insert Toolbar.

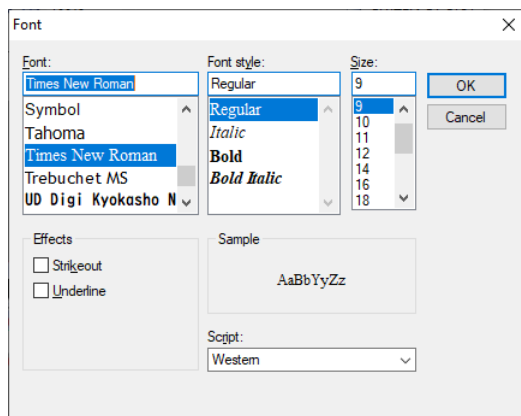


2. Specify the assignment area.

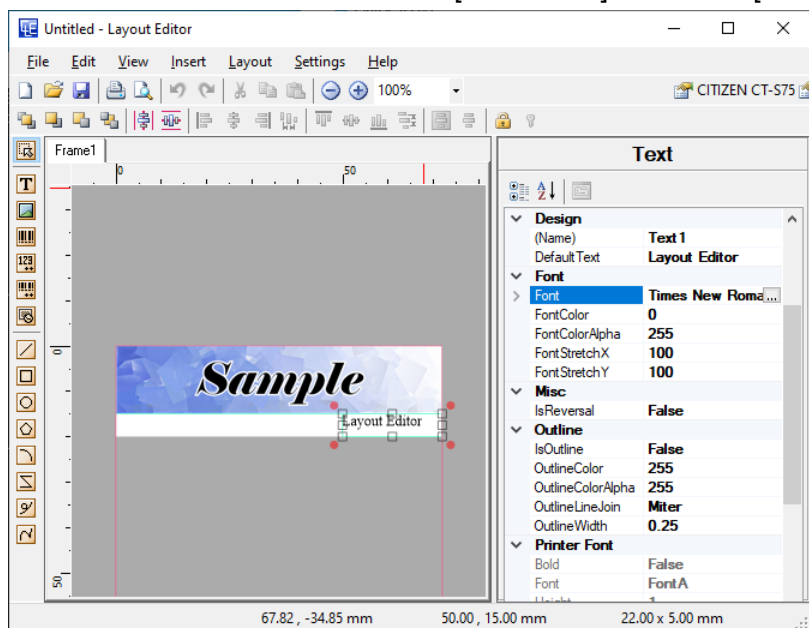
(See 2.3 Using Layout Editor ■ Specify the image assignment area).



3. Input "Layout Editor" in [DefaultText].
4. Click the [Font] input field and click the  button.



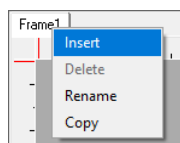
5. The “Font” dialog box will be displayed.
6. Select “Times New Roman” for [Font Name] and “9” for [Size], and then click the [OK] button.



7. Text will be inserted.

#### ■ Insert Frame2.

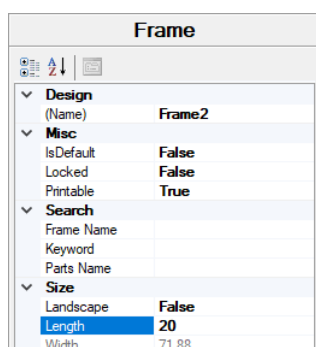
1. Right-click on “Frame1” of the frame tab.



2. Click “Insert” from the menu.



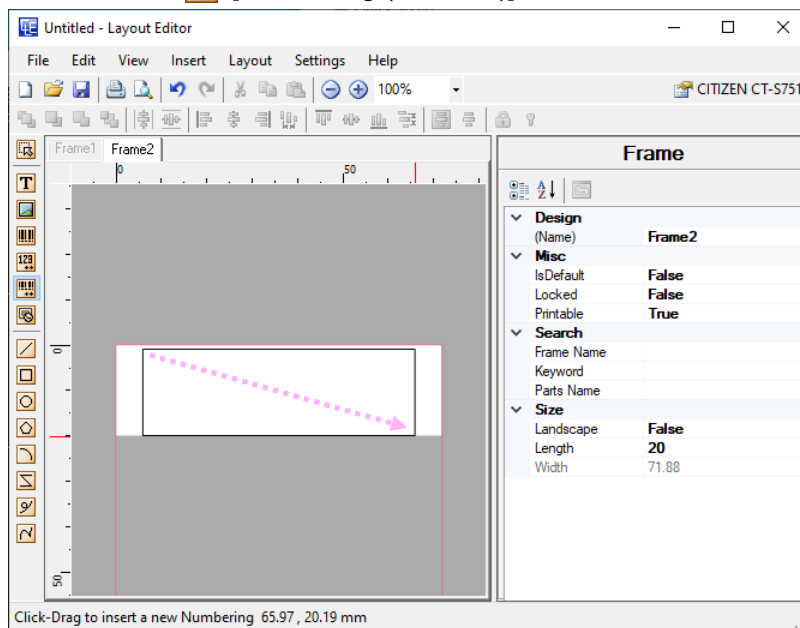
3. “Frame2” will be added.



4. Set up the length of Frame2 to “20”  
(See 2.3 Using Layout Editor ■ Specify the size of Frame1).
5. Click the space within the Layout editing area.

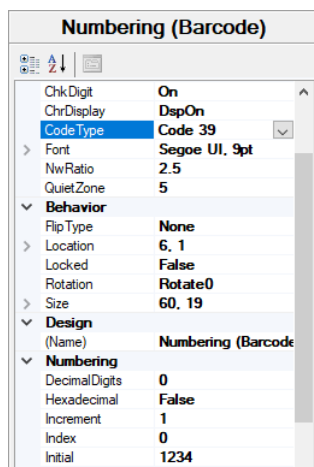
■ Insert the numbering barcode.

1. Click the  [Numbering (Barcode)] button on Insert Toolbar.

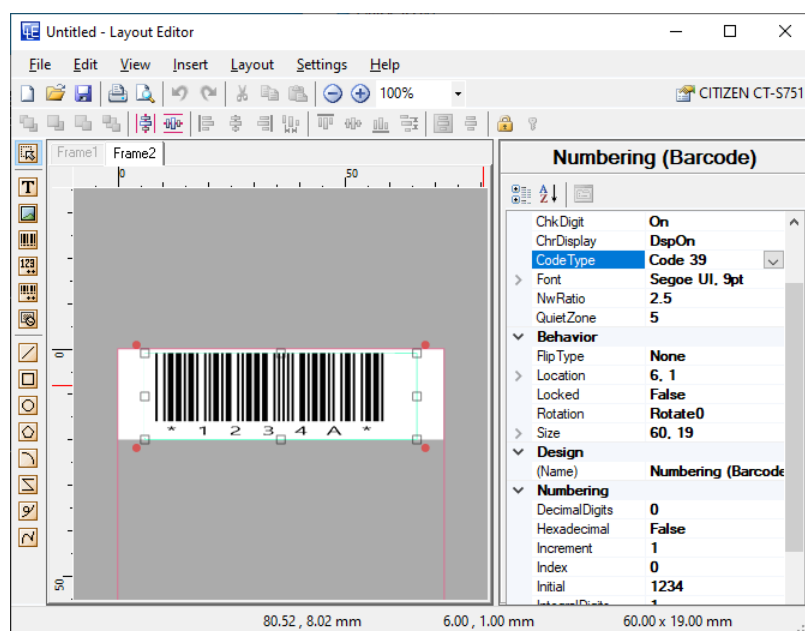


2. Specify the assignment area.

(See 2.3 Using Layout Editor ■ Specify the image assignment area).

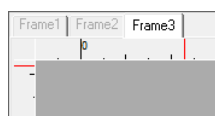


3. Input "1" as the increment value in [Increment].
4. Input the initial value "1234" in [Initial].
5. Select "Code39" from the pull-down menu of [CodeType].
6. Select "DspOn" for human readable interpretation line from the pull-down menu of [ChrDisplay].



7. The numbering barcode will be inserted.

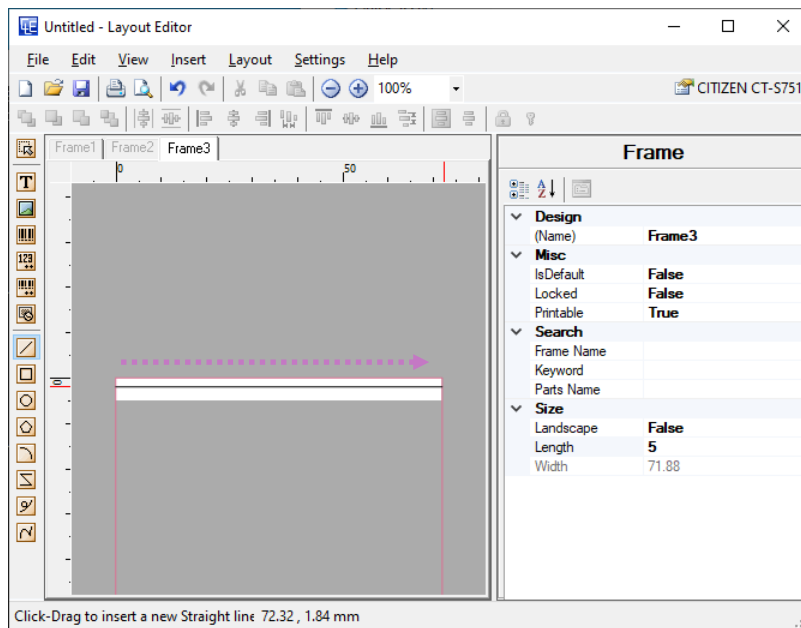
#### ■ Add Frame3.



1. Right-click on "Frame2" of the frame tab and click "Insert"  
(See 2.3 Using Layout Editor ■ Insert Frame2).
2. Set up the length of Frame3 to "5"  
(See 2.3 Using Layout Editor ■ Specify the size of Frame1).
3. Click the space within the Layout editing area.

#### ■ Insert a broken line.

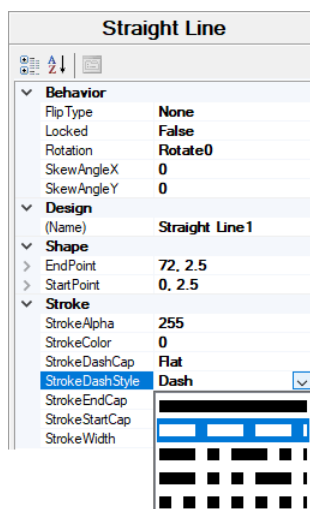
1. Click the  [Straight Line] button on Insert Toolbar.



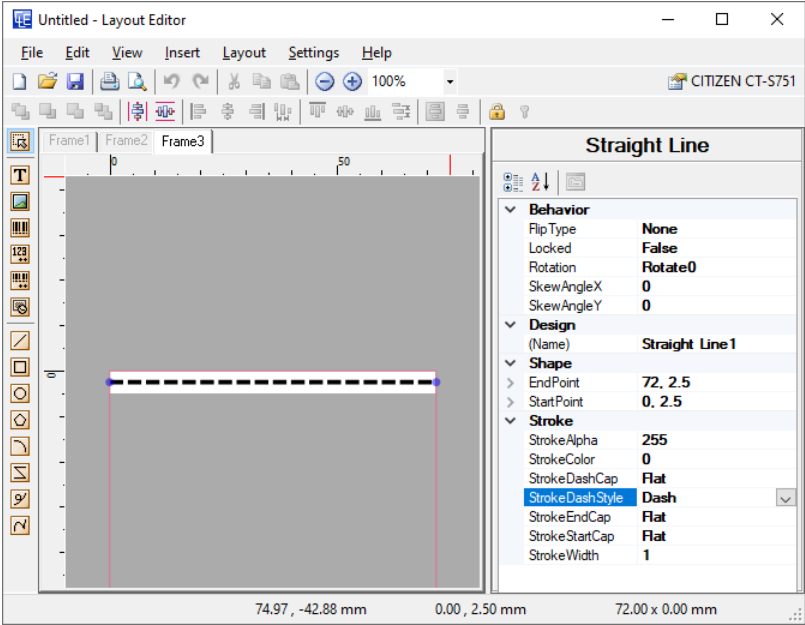
- Click the beginning point of the broken line and drag to the ending point while pressing the [Shift] key.

- Note -

A horizontal straight line can be inserted by dragging while pressing the [Shift] key.



- Select "Dash" from the pull down menu [Stroke Dash Style] for altering the style.
- Enter "1" for line width under [Stroke Width].

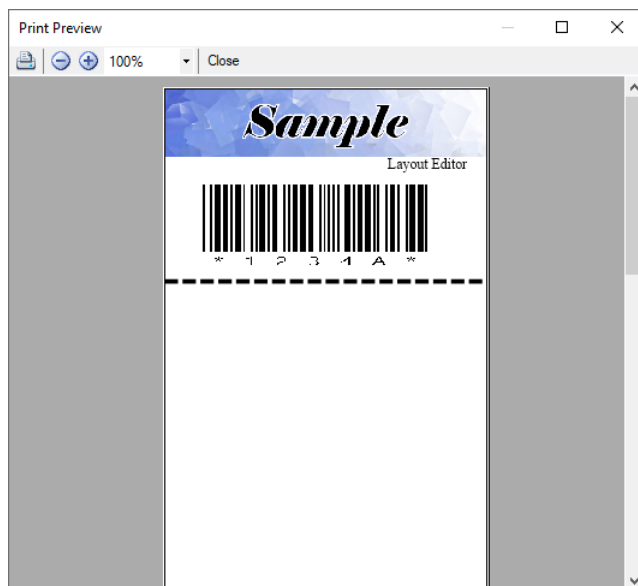


5. A broken line will be inserted.



■ Check the print image.

1. Click the  [Print Preview] button on Main Toolbar.



2. "Print Preview" dialog box will be displayed.
3. To check the entire or more details, select desired zoom magnification under zoom menu on "Print Preview" dialog box.
4. Click the "Close" button and close the "Print Preview" dialog box.

Correct the layout in each frame based on the preview results.

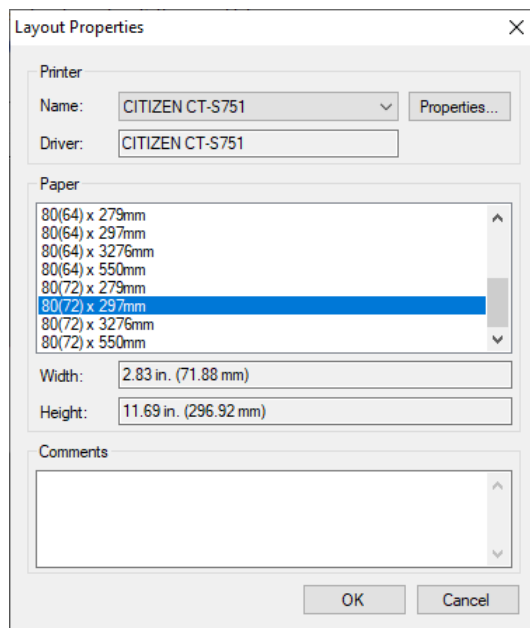
(See 2.4.3 Basic Parts Operations).

## 2.4 Common Operations for the Layout Editor

### 2.4.1 Setting up the Layout Properties

Procedures for selecting paper size and printer set up:

1. Click “File” - “Layout Properties” of the Menu Bar or click the [Layout Properties] button on Main Toolbar.



2. The “Layout Properties” dialog box will be displayed.
3. Select the printer to output from the pull-down menu under [Name].
4. Select the paper size to be used from the pre-defined list of paper sizes.
5. Click the [OK] button.

**- Note -**

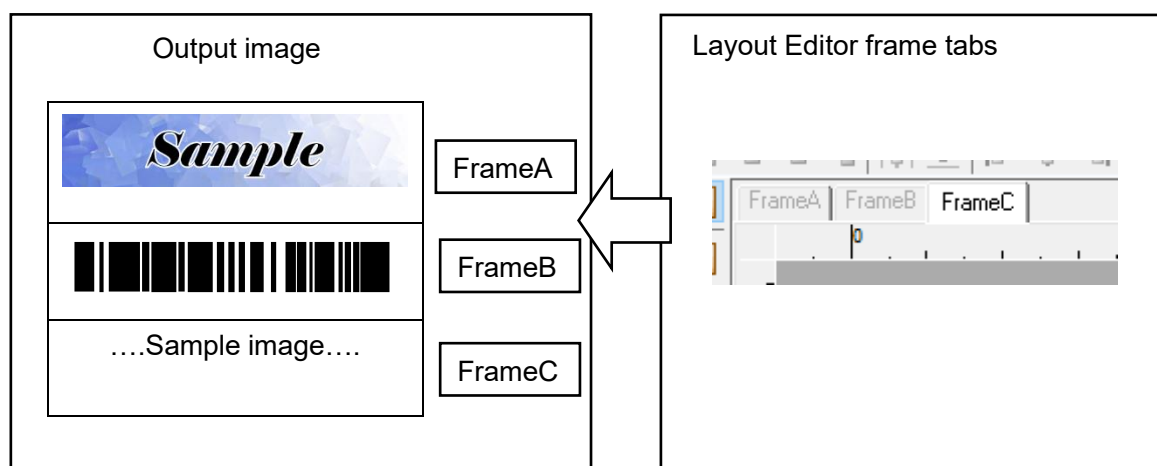
The “Layout Properties” dialog box is displayed first when a new file is created. The changes made to the default settings on the first dialog box will be saved. To change the settings during layout, the dialog box can be displayed according to the pre-defined steps.

## 2.4.2 Frame Operation Procedures

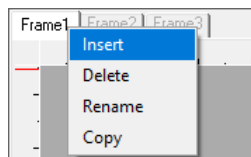
Layout editor can prepare layouts by dividing the input into frames along the vertical direction of the paper. This section describes the relationship between the output image and the frame along with frame operation procedures.

### ■ Relationship between output image and frame

When multiple frames are prepared with Layout Editor, the frames displayed in “Frame Tab” are assembled from left to right to generate the output image.

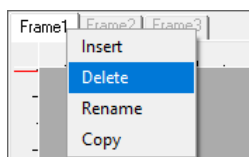


### ■ Adding a frame

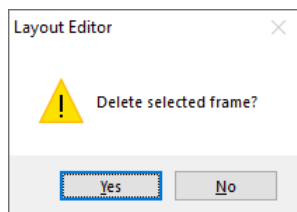


1. Right-click on the name of the frame on the frame tab.
2. Menu will be displayed. Click “Insert”
3. A new frame will be inserted on the right of the existing frame.

### ■ Deleting a frame



1. Right-click on the frame to be deleted.
2. Menu will be displayed. Click “Delete”

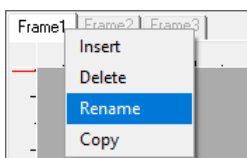


3. A confirmation message for deletion will be displayed. Click the [Yes] button.

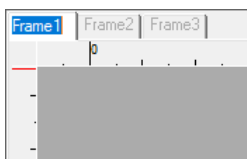
**- Note -**

When a frame is deleted, all parts laid out in the frame will also be deleted.

■ Changing the name of a frame



1. Right-click on the frame to change the name.
2. Menu will be displayed. Click "Rename"

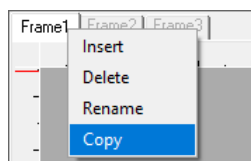


3. The name of the frame will be highlighted. Input the new frame name.
4. Press the [Enter] key to confirm.

**- Note -**

It is also possible to change the frame name from [(Name)] in the Frame Properties editing area.

## ■ Copying a frame

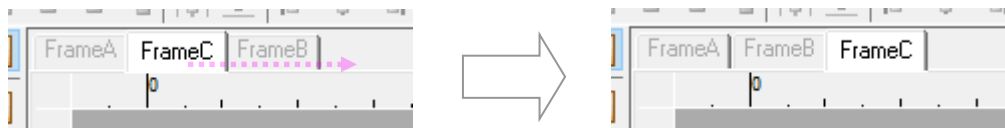


1. Right-click on the frame to be copied.
2. Menu will be displayed. Click “Copy”
3. The copied frame will be inserted on the right of the original frame.

### - Note -

Frame copying will copy all parts laid out on the original frame as well as the frame attributes.

## ■ Moving a frame



1. Drag the name of the frame to be moved to the desired position.

## ■ Frame properties

Layout Editor enables properties to be set up for each frame.

Click the blank section in the Layout editing area to display the frame properties.

Property name	CLF	XML	Description
Size			
Landscape	●	●	Set horizontal frame layout.
Length	●	△ <sup>*1</sup>	Set frame height.
Width	●	●	Frame width, Not editable.
Others			
IsDefault	●	—	Set current frame as base frame.
Locked	●	●	Set frame lock.
Printable	●	●	Set printing permission to frame.
Design			
(Name)	●	●	Set name to frame.
Search			Use frame name, keyword and part name simultaneously to search and print coupons.
Frame Name	●	●	Click [FrameName] to select frames.
Keyword	●	●	Set search keyword.
Parts Name	●	●	Click [PartsName] to select parts.

<sup>\*1</sup>: Please observe the following conditions if you want to use XML format.

- Specify the Length of the frame height in units of **1.00 mm**.
- The maximum value of the frame Length property is as follows.

Model name (Printer)	Length maximum
CT-D101, CT-D150, CT-D151, CT-E301, CT-E351, CT-E601, CT-E651, CT-S251, CT-S310II, CT-S601, CT-S601II, CT-S651, CT-S651II, CT-S751, CT-S801, CT-S801II, CT-S851, CT-S851II, CT-S2000, CT-S4000, CT-S4500,	207 mm ( 1656 dot )
CT-S281, CMP-20, CMP-20II, CMP-30, CMP-30II	117 mm ( 936 dot )

## 2.4.3 Basic Parts Operations







This section describes the basic operation procedures for moving, rotating etc. of the inserted parts.

### ■ Parts operations and pointer shape

The available operations vary depending on the type of parts or the location pointed to by the mouse pointer.


The mouse pointer shape will also change depending on the operations available.

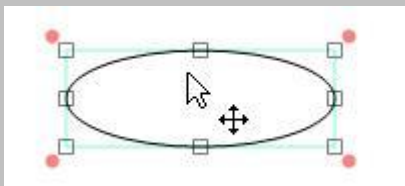
Parts operations and pointer shape

Shape	Operation	Pointer position (Marker shape)
	The part can be selected or moved.	Inside the part frame
	Moves the configuration point for the part.	Part configuration point (●)
	Scales up/down the part frame (part) simultaneously in vertical and horizontal directions.	Four corners of the part frame (□)
	Scales up/down the part frame (part).	Center of the four sides of the part frame (□)
	Rotates the part.	Four corners of the part frame (●)
	Changes the ratio of a rounded rectangle corner. (See 2.6.2 Inserting a Rectangle).	Left top of a rectangle (●)

### ■ Select an inserted part.

To edit the inserted part:

1. Click the  [Select Objects] button on Insert Toolbar.
2. Click the part to be edited or click inside the part frame to select it. To select multiple parts, click the parts while pressing the [Shift] key.

**- Note -**

When a part is selected, □ markers are displayed around the part as shown in the figure.

Press the [A] key while pressing the [Ctrl] key to select all inserted parts.

To cancel selection, click in the blank space or press the [ESC] key.

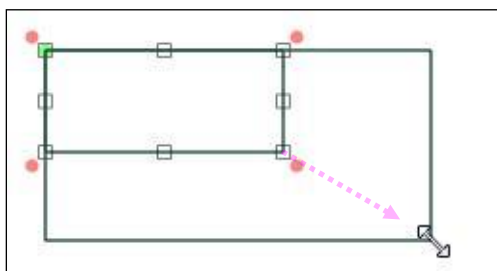
■ Scale up/down a part.



The size of an inserted part is changed or the size of a text frame is changed to an appropriate size.

There are 2 ways to change the size of an inserted part.

<Dragging the marker to change>



1. Click the part to be changed and drag □ (the marker) on the outer frame. Dragging any of the markers on four corners can change the size simultaneously in vertical and horizontal directions.

**- Note -**

It is possible to scale up/down while maintaining the aspect ratio by pressing the [Shift] key while dragging a corner marker.

<Inputting the part size>

Size	53.19, 7
Height	7
Width	53.19

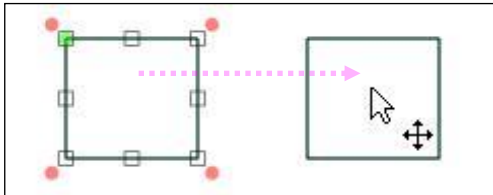
1. Select the part to be changed.
2. Input the size of the outer frame (width, height) in [Size] in the Properties editing area.



## ■ Move an inserted part.

There are 2 ways to move an inserted part.

### <Dragging to the desired position>



1. Click inside the part to be moved and drag it to the desired position.

### <Moving by specifying the position>

Location	45.92, 2.72
X	45.92
Y	2.72

1. Select the part to be moved.
2. Input the top left corner coordinates (left position, top position) of the outer frame for the part under [Location] of the Properties editing area.

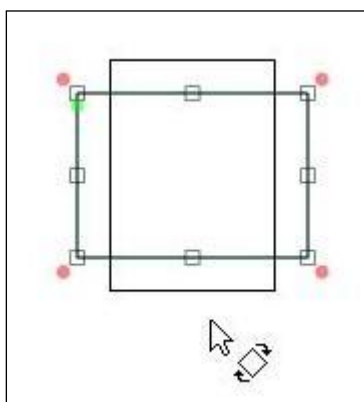
## ■ Rotate an inserted part.

An inserted part is rotated.

The rotation angle can be 0, 90, 180 or 270 degrees.

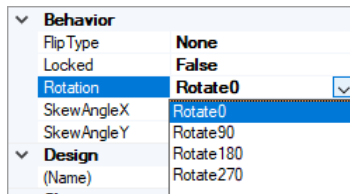
There are 2 ways to rotate a part.

### <Dragging to rotate>



1. Select the part.
2. Click on any of the red circles displayed around the corners and drag them according to the desired angle.

<Inputting the rotation angle>



1. Select the part.
2. Select the rotation angle from the pull-down menu of [Rotation] in the Properties editing area.

## 2.4.4 Save As

A prepared file is saved with a name.

1. Click **"File"** — **"Save As"** on the Menu Bar.
2. **"Save As"** dialog box will be displayed.
3. Specify the folder to save the file.
4. Input the name under **"File Name"**
5. Click the **[Save]** button.

- Note -

The files prepared by Layout Editor will be saved with ".CLF" extensions.  
"CLF" file can be used from the application on Windows PC.

## 2.4.5 Save

To save the edited file:

**"Save As"** dialog box will be displayed if the file has never been saved.

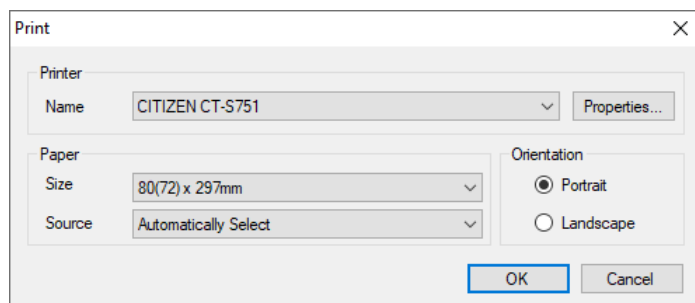
(See 2.4.4 Save As)

1. Click the  **[Save]** button on Main Toolbar.

## 2.4.6 Print

To print a particular file:


1. Click the  [**Print**] button on Main Toolbar.



2. “**Print**” dialog box will be displayed. The settings specified in layout properties will be displayed in the dialog box.  
(See 2.4.1 Setting up the Layout Properties).
3. Change them if necessary.
4. Click the [**OK**] button.

## 2.4.7 Print Preview

The print preview for a prepared file is displayed.

1. Click the  [**Print Preview**] button on Main Toolbar.
2. “**Print Preview**” dialog box will be displayed.  
(See 2.1 Using Layout Editor ■ Check the print image).
3. To check details, change the zoom magnification from the pull-down menu of the Zoom Menu.
4. Click the [**Close**] button.

## 2.4.8 Export

To export the edited file as an XML format layout file:

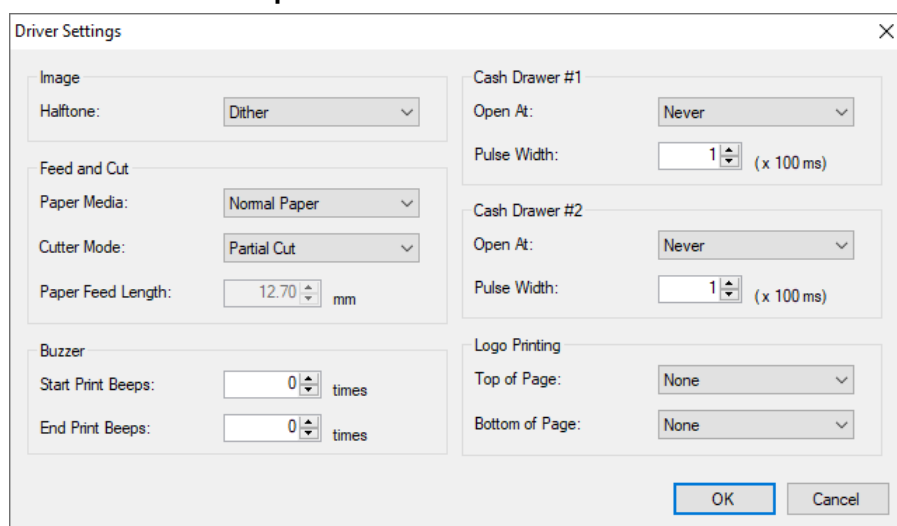
**- Note -**

Export is disabled at default. If you want to use Export, please click "**Printer font**" in preferences and put a check on it.

**- Note -**

XML format by Export does not include all of the layout information. If the re-editing of the layout is required, please save in CLF format always.

1. Click "**File**" — "**Export**" on the Menu Bar.



2. "**Driver Settings**" dialog box will be displayed.
3. Change them if necessary.  
(Features are similar to the Windows driver, functions will work when using the XML layout file).
4. Click the [OK] button.
5. "**Export Layout for Mobile**" dialog box will be displayed.
6. Specify the folder to save the file.
7. Input the name under "**File Name**".
8. Click the [Save] button.

**- Note -**

The layout is saved with the extension "**XML**".  
"**XML**" file can be used from the app.

## ■ Export properties

Property name	CLF	XML	Description
Image			
Halftone	—	△ <sup>*1</sup>	Set the image binarization process of the POS Print SDK. Valid only when the image part: [Monochrome] is set to "None". (Threshold, Dither)
Feed and Cut			
Paper Media	—	●	Set the paper type. (Normal Paper, Label / BM paper)
Cutter Mode	—	●	Set the paper cutting operation after layout printing. (No Cut, Partial Cut, Full Cut)
Paper Feed Length	—	●	Set the amount of paper feed after printing. Valid only when the above Cutter Mode is set to "No Cut". (0.00-50.80 mm)
Buzzer			
Start Print Beeps	—	●	Set the number of times the printer built-in buzzer sounds before layout printing. (0-9 times)
End Print Beeps	—	●	Set the number of times the printer built-in buzzer sounds after layout printing. (0-9 times)
Cash Drawer #1			
Open At	—	△ <sup>*2</sup>	Set when to open the cache drawer # 1. (Never, Print Start, Print End)
Pulse Width	—	●	Set the pulse width of the signal that opens the cache drawer # 1. (1-8 x 100 ms)
Cash Drawer #2			
Open At	—	△ <sup>*2</sup>	Set when to open the cache drawer # 2. (Never, Print Start, Print End)
Pulse Width	—	●	Set the pulse width of the signal that opens the cache drawer # 2. (1-8 x 100 ms)
Logo Printing			
Top of Page	—	●	Set the printer-registered logo (image) to be printed before layout printing. (None, 1-20)
Bottom of Page	—	●	Set the printer-registered logo (image) to be printed after layout printing. (None, 1-20)

<sup>\*1</sup>: **Dither** is not supported by the JavaScript POS Print SDK. It will function as "**Threshold**".

If you want other binarization, set the Monochrome property of the image part.

<sup>\*2</sup>: **Print End** is not supported by the JavaScript POS Print SDK. It will function as "**Print Start**".

## 2.4.9 Import

To import a layout file in XML format:

- Note -

Import is disabled at default. If you want to use Export, please click "**Printer font**" in preferences and put a check on it.

1. Click "**File**" — "**Import**" on the Menu Bar.
2. "**Import Layout for Mobile**" dialog box will be displayed.
3. Select the file to import
4. Click the [OK] button.
5. "**Layout Properties**" dialog box will be displayed.
6. Select the printer and paper.
7. Click the [OK] button.


## 2.5 Inserting Parts

### 2.5.1 Inserting Characters


Text parts are inserted.

- Note -

In the XML layout file to use the printer fonts, the print results might be different from the display.

1. Click the  [Text] button on Insert Toolbar
2. Specify the area to insert the text part.  
(See 2.3 Using Layout Editor).
3. Input the character series to be displayed in [Default Text] of the Properties editing area.
4. Change the attributes in the Properties editing area if necessary.

<Changing the font>

1. Click the [Font] input field in the Properties editing area.
2. Click the  button.
3. "Font" dialog box will be displayed.
4. Select the font name, style and size from the lists.
5. Click the [OK] button.



## ■ Text properties

Name	CLF	XML	Description
Misc			
IsReversal	●	—	Set text flip. (No: False, Yes: True)
Text frame			
CharacterSpacing	●	—	Set text.
LineAlignment	●	—	Set row alignment. (Top, Middle, Bottom)
LineSpacing	●	—	Set line spacing.
TextAlignment	●	△ <sup>*1</sup>	Set text alignment. (Left, Center, Right, Justify <sup>*2</sup> )
TextDirection	●	—	Set text orientation. (Horizontal, Vertical)
TextWrapping	●	—	Set text auto return. (Yes: Wrap, No: NoWrap)
Design			
(Name)	●	●	Set name to part.
DefaultText	●	●	Input the text to be displayed.
Font			
Font	●	—	Set text font (Typeface/Size/Style).
FontColor	●	—	Set text color.
FontColorAlpha	●	—	Set text opacity (0: transparent - 255: solid).
FontStretchX	●	—	Set text horizontal scale.
FontStretchY	●	—	Set text vertical scale.
Printer Font			
Bold	—	●	Set the emphasized characters. (No: False, Yes: True)
Font	—	●	Set printer font (FontA/FontB <sup>*3</sup> /FontC).
Height	—	●	Set magnification of characters height (1-8 times).
Reverse	—	●	Set the black/white inverted printing. (No: False, Yes: True)
Underline	—	●	Set underline. (No: False, Yes: True)
Width	—	●	Set magnification of characters width (1-8 times).
Behavior			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	●	Set part position (X, Y).
Locked	●	●	Set part lock. (No: False, Yes: True)
Rotation	●	●	Set part rotate angle (0/90/180/270).

Size	●	●	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.
Outline			
IsOutline	●	—	Set outline. (No: False, Yes: True)
OutlineColor	●	—	Set outline color.
OutlineColorAlpha	●	—	Set outline opacity (0: transparent - 255: solid).
OutlineLineJoin	●	—	Set outline combine shape.
OutlineWidth	●	—	Set outline width.

\*1: TextAlignment property is not supported by the JavaScript POS Print SDK. It will function as "**Left**".

If you do not want to print left-aligned, insert space characters at the beginning of the string to adjust.

\*2: **Justify** setting of TextAlignment property is not supported by the XML printing. It will function as "**Left**".

\*3: **FontB** setting of Font property is valid for single-byte characters and functions as "**FontC**" for multi-byte characters (Kanji, Chinese, Hangul).

## 2.5.2 Inserting an Image

An image part is inserted.

Select an image to be inserted from the desired folder.



- Note -

Image formats that can be used : BMP, GIF, JPG, JPEG, PNG, ICO, EMF, WMF

Recommended image formats : Monochrome (1bpp) PNG

- Note -

In the XML layout file to use the printer fonts, the print results might be different from the display.

1. Click the  [Image] button on Insert Toolbar.
2. Specify the image part assignment area.  
(See 2.3 Using Layout Editor).
3. Click the [DefaultPath] input field in the Properties editing area.
4. Click the  button.
5. "Open" dialog box will be displayed. Select the image file to be inserted.
6. Click the [Open] button.
7. Change the attributes in the Properties editing area if necessary.

## ■ Image properties

Name	CLF	XML	Description
Design			
(Name)	●	●	Set name to part.
DefaultPath	●	●	Set image file.
SizeMode	●	△ <sup>*1</sup>	Set how the image is displayed. (Dot by dot: Normal, Fit to part: StretchImage (FixedAspect = False), Fit to part with fixed aspect ratio: Zoom (FixedAspect = True))
Adjustment			
Brightness	●	●	Set brightness (-100 – 100).
Contrast	●	●	Set contrast (-100 – 100).
GammaCorrection	●	●	Set gamma correction (0.01 – 5.00).
Monochrome	●	●	Set monochrome. (None <sup>*2</sup> , Threshold, Dither1, Dither2, ErrorDiffusion1, ErrorDiffusion2)
ThresholdValue	●	●	Set threshold for monochrome.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	●	Set part position (X, Y).
Locked	●	●	Set part lock. (No: False, Yes: True)
Rotation	●	●	Set part rotate angle (0/90/180/270).
Size	● <sup>*3</sup>	● <sup>*3</sup>	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.
Frame			
IsFrame	●	—	Set frame line. (No: False, Yes: True)
StrokeAlpha	●	—	Set frame line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set frame line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set frame line style.
StrokeLineJoin	●	—	Set frame line combine shape.
StrokeWidth	●	—	Set frame line width.

<sup>\*1</sup>: **StretchImage** setting of SizeMode property is not supported in XML format. It will function as "**Normal**".

<sup>\*2</sup>: When **None** is set in Monochrome property, the image binarization process is performed by the Windows printer driver or each POS Print SDK, so the result will be different.

<sup>\*3</sup>: Please observe the following conditions if you want to print with non-Windows printer driver.


- Specify **Size** (height) in units of **1.00 mm**.

## 2.5.3 Inserting a Barcode

A barcode part is inserted.

**- Note -**

In the XML layout file to use the printer fonts, the print results might be different from the display.

1. Click the  [Barcode] button on Insert Toolbar.
2. Specify the assignment area for the barcode part.  
(See 2.3 Using Layout Editor).
3. Input the code to be generated in [DefaultCode] under the Properties editing area.
4. Select the type of barcode to be generated from the pull-down menu of [CodeType] under the Properties editing area.
5. Change the attributes from the Properties editing area if necessary.

■ Barcode properties

Name	CLF	XML	Description
Design			
(Name)	●	●	Set name to part.
DefaultCode	●	●	Set barcode data.
Barcode			
CellAdjust	●	—	Set correction level by dot for 2D cell size and barcode bar width.
CellPitch	●	●	Set cell pitch for 2D, bar pitch for 1D barcode.
CodeType	●	$\Delta^{*1}$	Set symbology. (QR Code, EAN-13, EAN-8, UPC-A, UPC-E, Codabar, ITF, Code 39, Code 93, Code 128, GS1-128, MaxiCode, PDF417, Data Matrix, GS1 Composite, GS1 Databar, iQR)
FontName	●	—	Set font for human readable interpretation.
QuietZone	●	●	Set margin for barcode.
EccLevel	●	$\Delta^{*2}$	Set error correction for QR Code. (L (7%), M (15%), Q (25%), H (30%), S (50%))
ModelNo	●	—	Set model version for QR Code. (Model 1, Model 2, Micro QR, Model 2 (GS1 format))
Version	●	—	Set barcode version, "0" to auto.
BarHeight	●	●	Set barcode height.

ChrDisplay	●	△*3	Set display for human readable interpretation. (No: DspOff, Yes: DspOn, Indication with 3 mm fixing: DspOn3mm, Indication with user-defined fonts: DspOnUser)
OptEANUPC	●	—	Set add-on for EAN-8/13, UPC-A/E. (No: StandardE, Yes: AddOn)
ChkDigit	●	—	Set check digit. (Yes: On, No: Off)
NwRatio	●	—	Set ratio of wide and narrow bar space.
OptITF	●	—	Set bearer bar for ITF. (No: StandardI, Yes: BearerBar)
OptCODE128	●	—	Set codeset for CODE128, GS1-128 (EAN-128). (A: SetA, B: SetB, C: SetC, Automatic: SetAuto)
PDF417Column	●	●	Set number of column. (Automatic: 0 or Standard/Truncated: 1 – 30, MicroPDF417: 1 – 4)
PDF417Ecc	●	●	Set correction level for PDF417. (Auto, PDF0, PDF1, PDF2, PDF3, PDF4, PDF5, PDF6, PDF7, PDF8 and MicroPDF417: Auto only)
PDF417Model	●	—	Set model version for PDF417. (Standard, Truncated, MicroPDF417)
PDF417Row	●	●	Set number of row. (Automatic: 0 or Standard/Truncated: 3 – 90, MicroPDF417: 4 – 44)
PDF417XYratio	●	●	Set row height by ratio.
AtMark	●	—	Set @ sequence interpretation. (ON, OFF)
CompositeModel	●	—	Set code type for GS1 Composite. (GS1DatabarOmniCCA, GS1DatabarOmniCCB, GS1DatabarTrncCCA, GS1DatabarTrncCCB, GS1DatabarStkCCA, GS1DatabarStkCCB, GS1DatabarStkOmniCCA, GS1DatabarStkOmniCCB, GS1DatabarLmtCCA, GS1DatabarLmtCCB, GS1DatabarExpCCA, GS1DatabarExpCCB, GS1DatabarExpStkCCA, GS1DatabarExpStkCCB, EAN13CCA, EAN13CCB, EAN8CCA, EAN8CCB, UPCACCA, UPACCB, UPCECCA, UPCECCB, EAN128CCA, EAN128CCB, EAN128CCC)
DmxModel	●	—	Set model for Data Matrix. (Square, Rectangular, Sqr_GS1, Rect_GS1)

Dsp2dStr	●	—	Set human readable on two-dimensional barcode in <ChrDisplay> = "DspOnUser". (ON, OFF)
EscapeStr	●	—	Set view by using the escape sequence characters that can not be displayed. (ON, OFF)
iQRCompress	●	—	Set data compression for iQR. (ON, OFF)
iQRModel	●	—	Set model for iQR. (Square, Rectangular, Sqr_GS1, Rect_GS1)
MaxiCodeMode	●	—	Set mode for MaxiCode. (Mode2, Mode3, Mode4, Mode5)
RssExpColum	●	—	Set even number of Column (2 – 20, Only even) for GS1 Databar (RSS) Expanded Stacked.
RssHeight	●	—	Set bar height.
RssModel	●	—	Set model for GS1 Databar (RSS). (GS1DatabarOmni, GS1DatabarTrnc, GS1DatabarStk, GS1DatabarStkOmni, GS1DatabarLmt, GS1DatabarExp, GS1DatabarExpStk)
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	●	Set part position (X, Y).
Locked	●	●	Set part lock. (No: False, Yes: True)
Rotation	●	●	Set part rotate angle (0/90/180/270).
Size	●	●	Set part size (width, height).

\*1: CodeType properties **MaxiCode**, **Data Matrix**, **GS1 Composite**, **GS1 Databar**, and **iQR** setting are not supported in XML format.

\*2: **S (50%)** setting of EccLevel property is not supported in XML format.

\*3: **DspOn3mm** and **DspOnUser** setting of ChrDisplay property are not supported in XML format. It will function as "**DspOn**".

- Note -


The displayed details will vary depending on the type of barcode to be inserted.

## 2.5.4 Inserting Numbering


Numbering parts are inserted.

- Note -

Numbering parts are not supported Export.

1. Click the  [Numbering] button on Insert Toolbar.
2. Specify the assignment area for the numbering part.  
(See 2.3 Using Layout Editor).
3. Input the increment value in [Increment] under the Properties editing area.
4. Input the initial value in [Initial] under the Properties editing area.
5. Change the attributes in the Properties editing area if necessary.

<Changing the font>

1. Click the [Font] input field of the Properties editing area.
2. Click the  button.
3. "Font" dialog box will be displayed.
4. Select the font name, style and size from the lists.
5. Click the [OK] button.



## ■ Numbering properties

Name	CLF	XML	Description
Others			
IsReversal	●	—	Set text flip. (Yes: True, No: False)
Text frame			
CharacterSpacing	●	—	Set text tracking.
LineAlignment	●	—	Set row alignment. (Top, Middle, Bottom)
LineSpacing	●	—	Set line spacing.
TextAlignment	●	—	Set text alignment. (Left, Center, Right, Justify)
TextDirection	●	—	Set text orientation. (Horizontal, Vertical)
TextWrapping	●	—	Set text auto return. (Yes: Wrap, No: NoWrap)
Design			
(Name)	●	—	Set name to part.
Numbering			
DecimalDigits	●	—	Set the limit for number of digits after the decimal point.
Hexadecimal	●	—	Set hexadecimal notation. (No: True, Yes: False)
Increment	●	—	Set increment/decrement.
Index	●	—	Set index of numbering.
Initial	●	—	Set init value.
IntegralDigits	●	—	Set the number of digit to be displayed.
PrefixText	●	—	Set prefix character for Numbering.
SuffixText	●	—	Set suffix character for Numbering.
ThousandsSeparator	●	—	Set 1000 separator (,). (Yes: True, No: False)
ZeroFill	●	—	Set zero-fill when fewer than the minimum number of digit. (Yes: True, No: False)
Font			
Font	●	—	Set text font (Typeface/Size/Style).
FontColor	●	—	Set text color.
FontColorAlpha	●	—	Set text opacity (0: transparent – 255: solid).
FontStretchX	●	—	Set text horizontal scale.
FontStretchY	●	—	Set text vertical scale.


Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.
Outline			
IsOutline	●	—	Set outline. (No: False, Yes: True)
OutlineColor	●	—	Set outline color.
OutlineColorAlpha	●	—	Set outline opacity (0: transparent – 255: solid).
OutlineLineJoin	●	—	Set outline combine shape.
OutlineWidth	●	—	Set outline width.

## 2.5.5 Inserting Numbering (Barcode)

Numbering (barcode) parts are inserted.

- Note -

Numbering (barcode) parts are not supported Export.

1. Click the  [Numbering (Barcode)] button on Layout Toolbar.
2. Specify the assignment area for the numbering (barcode) part.  
(See 2.3 Using Layout Editor).
3. Input the increment value in [Increment] under the Properties editing area.
4. Input the initial value in [Initial] under the Properties editing area.
5. Select the type of barcode to be generated from the pull-down menu of [CodeType] under the Properties editing area.
6. Change the attributes in the Properties editing area if necessary.  
(See 2.5.3 Inserting a Barcode/2.5.4 Inserting Numbering).

### ■ Numbering (Barcode) properties

Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Numbering			
DecimalDigits	●	—	Set the limit for number of digits after the decimal point.
Hexadecimal	●	—	Set hexadecimal notation. (No: True, Yes: False)
Increment	●	—	Set increment/decrement.
Index	●	—	Set index of numbering.
Initial	●	—	Set init value.
IntegralDigits	●	—	Set number of digit for integer.
PrefixText	●	—	Set prefix character for Numbering.
SuffixText	●	—	Set suffix character for Numbering.
ThousandsSeparator	●	—	Set 1000 separator (,). (Yes: True, No: False)
ZeroFill	●	—	Set zero-fill when fewer than the minimum number of digit. (Yes: True, No: False)
Barcode			
CellAdjust	●	—	Set correction level by dot for 2D cell size and barcode bar width.

CellPitch	●	—	Set cell pitch for 2D, bar pitch for 1D barcode.
CodeType	●	—	Set symbology. (QR Code, EAN-13, EAN-8, UPC-A, UPC-E, Codabar, ITF, Code 39, Code 93, Code 128, GS1-128, MaxiCode, PDF417, Data Matrix, GS1 Composite, GS1 Databar, iQR)
FontName	●	—	Set the font for human readable interpretation.
QuietZone	●	—	Set margin for barcode.
EccLevel	●	—	Set error correction for QR Code. (L (7%), M (15%), Q (25%), H (30%), S (50%))
ModelNo	●	—	Set model version for QR Code. (Model 1, Model 2, Micro QR, Model 2 (GS1 format))
Version	●	—	Set barcode version, "0" to auto.
BarHeight	●	—	Set barcode height.
ChrDisplay	●	—	Set for human readable interpretation. (No: DspOff, Yes: DspOn, Indication with 3 mm fixing: DspOn3mm, Indication with user-defined fonts: DspOnUser)
OptEANUPC	●	—	Set add-on for EAN-8/13, UPC-A/E. (No: StandardE, Yes: AddOn)
ChkDigit	●	—	Set check digit. (Yes: On, No: Off)
NwRatio	●	—	Set ratio of wide and narrow bar space.
OptITF	●	—	Set bearer bar for ITF. (No: StandardI, Yes: BearerBar)
OptCODE128	●	—	Set codeset for CODE128, GS1-128 (EAN-128). (A: SetA, B: SetB, C: SetC, Automatic: SetAuto)
PDF417Column	●	—	Set number of column. (Automatic: 0 or Standard/Truncated: 1 – 30, MicroPDF417: 1 – 4)
PDF417Ecc	●	—	Set correction level for PDF417. (Auto, PDF0, PDF1, PDF2, PDF3, PDF4, PDF5, PDF6, PDF7, PDF8 and MicroPDF417: Auto only)
PDF417Model	●	—	Set model version for PDF417. (Standard, Truncated, MicroPDF417)
PDF417Row	●	—	Set number of row. (Automatic: 0 or Standard/Truncated: 3 – 90, MicroPDF417: 4 – 44)
PDF417XYratio	●	—	Set row height by ratio.
AtMark	●	—	Set @ sequence interpretation. (ON, OFF)


CompositeModel	●	—	Set code type for GS1 Composite. (GS1DatabarOmniCCA, GS1DatabarOmniCCB, GS1DatabarTrncCCA, GS1DatabarTrncCCB, GS1DatabarStkCCA, GS1DatabarStkCCB, GS1DatabarStkOmniCCA, GS1DatabarStkOmniCCB, GS1DatabarLmtCCA, GS1DatabarLmtCCB, GS1DatabarExpCCA, GS1DatabarExpCCB, GS1DatabarExpStkCCA, GS1DatabarExpStkCCB, EAN13CCA, EAN13CCB, EAN8CCA, EAN8CCB, UPCACCA, UPCACCB, UPCECCA, UPCECCB, EAN128CCA, EAN128CCB, EAN128CCC)
DmxModel	●	—	Set model for Data Matrix. (Square, Rectangular, Sqr_GS1, Rect_GS1)
Dsp2dStr	●	—	Set human readable on two-dimensional barcode in <ChrDisplay> = "DspOnUser". (ON, OFF)
EscapeStr	●	—	Set view by using the escape sequence characters that can not be displayed. (ON, OFF)
iQRCompress	●	—	Set data compression for iQR. (ON, OFF)
iQRModel	●	—	Set model for iQR. (Square, Rectangular, Sqr_GS1, Rect_GS1)
MaxiCodeMode	●	—	Set mode for MaxiCode. (Mode2, Mode3, Mode4, Mode5)
RssExpColumn	●	—	Set even number of Column (2 – 20, Only even) for GS1 Databar (RSS) Expanded Stacked.
RssHeight	●	—	Set bar height.
RssModel	●	—	Set model for GS1 Databar (RSS). (GS1DatabarOmni, GS1DatabarTrnc, GS1DatabarStk, GS1DatabarStkOmni, GS1DatabarLmt, GS1DatabarExp, GS1DatabarExpStk)
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).

## 2.5.6 Inserting Date and Time

Date and time parts are inserted.

- Note -

Date and time parts are not supported Export.

1. Click the  [Date & Time] button on Layout Toolbar.
2. Specify the assignment area for the date and time part.  
(See 2.3 Using Layout Editor).
3. Input the date in [Date] under the Properties editing area.


- Note -

The calendar will be displayed by clicking the pull-down menu of [Date].

It is also possible to input the date by clicking on a desired date in the calendar.

4. Input the time in [Time].
5. Change the attributes in the Properties editing area if necessary.

### <Changing the font>

1. Click the [Font] input field in the Properties editing area.
2. Click the  button.
3. "Font" dialog box will be displayed.
4. Select the font name, style and size from the lists.
5. Click the [OK] button.

## ■ Date & time properties

Name	CLF	XML	Description
Others			
IsReversal	●	—	Set text flip. (Yes: True, No: False)
Text frame			
CharacterSpacing	●	—	Set text tracking.
LineAlignment	●	—	Set row alignment. (Top, Middle, Bottom)
LineSpacing	●	—	Set the line spacing.
TextAlignment	●	—	Set text alignment. (Left, Center, Right, Justify)
TextDirection	●	—	Set text orientation. (Horizontal, Vertical)
TextWrapping	●	—	Set text auto return. (Yes: Wrap, No: NoWrap)
Design			
(Name)	●	—	Set name to part.
Font			
Font	●	—	Set text font (Typeface/Size/Style).
FontColor	●	—	Set text color.
FontColorAlpha	●	—	Set text opacity (0: transparent – 255: solid).
FontStretchX	●	—	Set text horizontal scale.
FontStretchY	●	—	Set text vertical scale.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.
Date			
Date	●	—	Set date.
DateTimeSpecified	●	—	Set date format. (Fixed: Fixed, Current (at time of printing): Now, Offset: Offset)
Format	●	—	Set time format.

FormatCulture	●	—	Set culture to modify date format list.
OffsetDays	●	—	Set date offset by day(s).
OffsetMonths	●	—	Set date offset by month(s).
OffsetYears	●	—	Set date offset by year(s).
Time	●	—	Set time.
Outline			
IsOutline	●	—	Set outline. (No: False, Yes: True)
OutlineColor	●	—	Set outline color.
OutlineColorAlpha	●	—	Set outline opacity (0: transparent – 255: solid).
OutlineLineJoin	●	—	Set the corner outline format.
OutlineWidth	●	—	Set outline width.

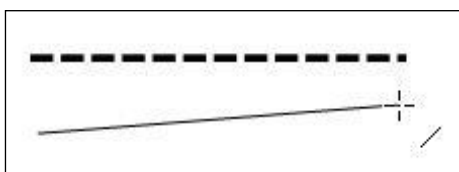




## 2.6 Inserting Figures

### 2.6.1 Inserting a Straight Line

- Note -

In the XML layout file to use the printer fonts, the print results might be different from the display.



1. Click the  [Straight Line] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click the starting point for the straight line and drag to the ending point.  
(See 2.3 Using Layout Editor).

- Note -

It is possible to draw the straight line horizontally or vertically from the starting point by dragging while pressing the [Shift] key.

4. Change the attributes in the Properties editing area if necessary.

### ■ Straight line properties

Name	CLF	XML	Description
Design			
(Name)	●	●	Set name to part.
Shape			
EndPoint	●	△ <sup>*1</sup>	Set line end point.
StartPoint	●	△ <sup>*1</sup>	Set line start point.
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	●	Set line style.
StrokeEndCap	●	—	Set line end style.
StrokeStartCap	●	—	Set line start style.
StrokeWidth	●	△ <sup>*1</sup>	Set line width.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Locked	●	●	Set part lock. (No: False, Yes: True)
Rotation	●	●	Set part rotate angle (0/90/180/270).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

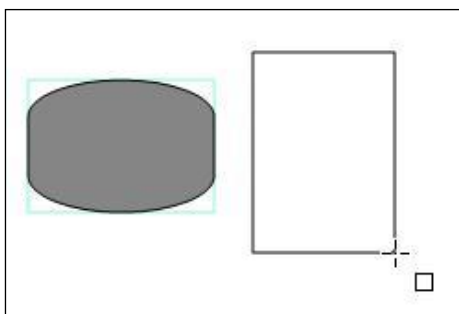
\*1: Please observe the following conditions if you want to use XML format.



- The straight line, please specified to be **horizontal or vertical**.
- Specify the length of the straight line in units of **1.00 mm**.
- In upside down printing, specify **StrokeWidth** more than **0.25 mm**.
- In non-upside down printing, specify **StrokeWidth** more than **0.13 mm**.

## 2.6.2 Inserting a Rectangle

### - Note -

In the XML layout file to use the printer fonts, the print results might be different from the display.



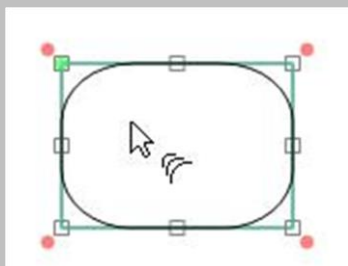
1. Click the  [Rectangle] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click at the desired position to assign the rectangle and drag the mouse in the right and downward direction.


(See 2.3 Using Layout Editor).

### - Note -

It is possible to insert a square by dragging while pressing the [Shift] key.

In addition, it is possible to scale up/down the rectangle while maintaining the aspect ratio by dragging the mouse while pressing the [Shift] key when changing its size.



The corners can be rounded by dragging the green  marker displayed on top left of the rectangle. The position of the green marker changes when the ratio for rounded corner is set up.

The rounded corner ration can also be changed from [RadiusX][RadiusY] in the Properties editing area.

4. Change the attributes from the Properties editing area if necessary.

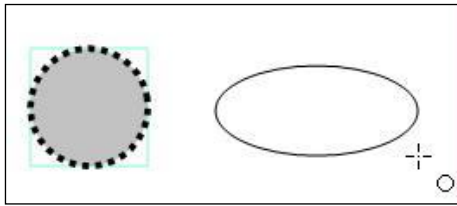
### ■ Rectangle properties



Name	CLF	XML	Description
Design			
(Name)	●	●	Set name to part.
Shape			
RadiusX	●	—	Set horizontal ratio for rounded rectangle corner.
RadiusY	●	—	Set vertical ratio for rounded rectangle corner.
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	●	Set line style.
StrokeLineJoin	●	—	Set line combine style.
StrokeWidth	●	△ <sup>*1</sup>	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid).
FillColor	●	—	Set fill color.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	●	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	●	Set part rotate angle (0/90/180/270).
Size	●	△ <sup>*1</sup>	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

<sup>\*1</sup>: Please observe the following conditions if you want to use XML format.

- Specify **Size** (width, height) in units of **1.00 mm**.
- In upside down printing, specify **StrokeWidth** more than **0.25 mm**.
- In non-upside down printing, specify **StrokeWidth** more than **0.13 mm**.

### 2.6.3 Inserting a Circle or Oval



1. Click the  [Circle] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click at the desired position to assign the rectangle and drag the mouse in the right and downward direction.  
(See 2.3 Using Layout Editor).

**- Note -**

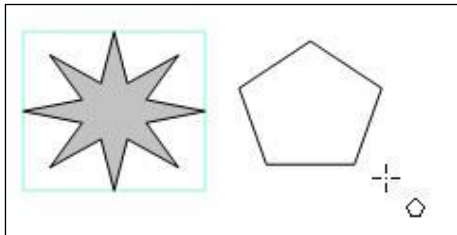
It is possible to insert a perfect circle by dragging while pressing the [Shift] key.  
It is also possible to scale up/down the circle/oval while maintaining the aspect ratio by dragging the mouse while pressing the [Shift] key when changing its size.



4. Change the attributes from the Properties editing area if necessary.

■ Circle/oval properties

Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid).
FillColor	●	—	Set fill color.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

## 2.6.4 Inserting a Polygon

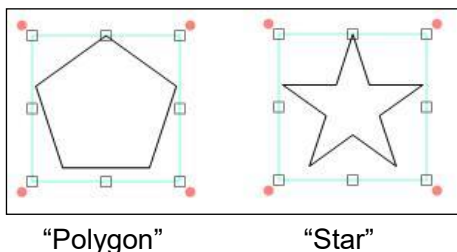


1. Click the  [Polygon] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click at the desired position to assign the rectangle and drag the mouse in the right and downward direction.

### - Note -

It is possible to insert a regular polygon by dragging while pressing the [Shift] key.  
It is also possible to scale up/down the polygon while maintaining the aspect ratio by dragging the mouse while pressing the [Shift] key when changing its size.

4. Input the number of corners in [Corner] under the Properties editing area.



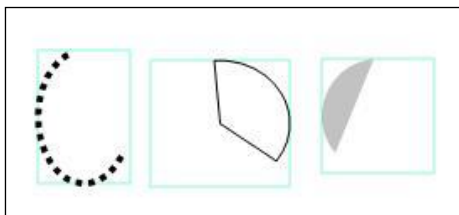
5. To insert a star shape, select "Star" from the pull-down menu of [Shape] under the Properties editing area.
6. Change the attributes from the Properties editing area if necessary.



### ■ Polygon properties

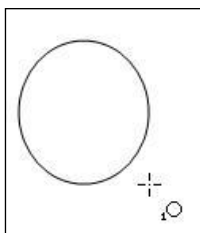
Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Shape			
Corner	●	—	Set number of corner (3 – 60) for polygon.
Ratio	●	—	Set polygon ratio (0 – 100). (Valid only when [Shape] is set to “Star”)
Shape	●	—	Set polygon shape. (Polygon: Polygon, Star: Star)
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeLineJoin	●	—	Set the figure edge format style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid).
FillColor	●	—	Set fill color.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.



## 2.6.5 Inserting an Arc, Pie or Chord



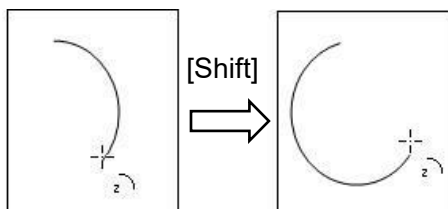
1. Click the  [Arc] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.



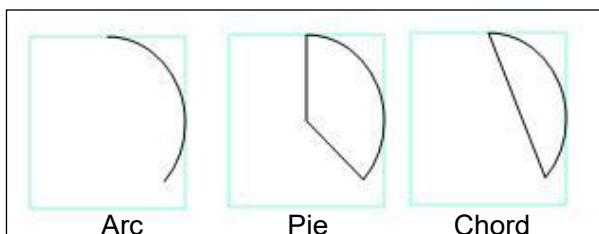
3. Drag from a desired point to make the reference circle.

### - Note -

It is possible to make a perfect reference circle by dragging the mouse while pressing the [Shift] key.



4. Specify the arc section to be used. Click the starting point on the displayed dotted circle and drag to the ending point. It is possible to switch the arc section to be used by pressing the [Shift] key while dragging.

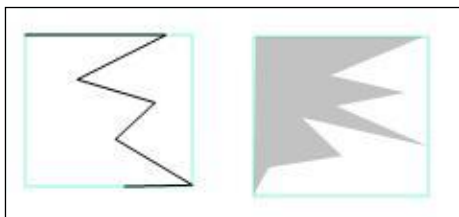




5. Select the shape from the pull-down menu of [Shape] under the Properties editing area.
6. Change the attributes from the Properties editing area if necessary.

## ■ Arc properties

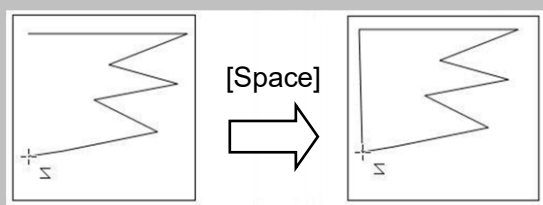
Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Shape			
EndAngle	●	—	Set end angle for arc, clockwise from x axis.
IsClockwise	●	—	Set clockwise/counterclockwise for arc. (Clockwise: True, Counterclockwise: False)
Shape	●	—	Set arc shape. (Arc: Arc, Pie: Pie, Chord: Chord)
StartAngle	●	—	Set start angle for arc, clockwise from x axis.
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeLineJoin	●	—	Set the figure edge format style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid).
FillColor	●	—	Set fill color.
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

## 2.6.6 Inserting a Polyline



1. Click the  [Polyline] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click the starting point.
4. Click the component points in order.

- Note -



It is possible to set the next component point vertical/horizontal by pressing the [Shift] key while moving the mouse.

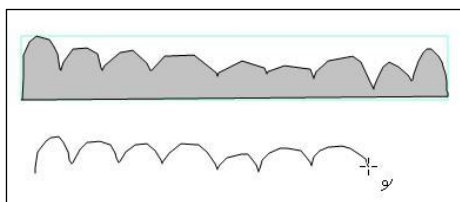
It is also possible to switch the starting point and ending point (whether it is closed or not) by pressing the [Space] key while drawing a polyline, as well as changing from the pull-down menu of [Closed] in the Properties editing area after inserting the figure.



5. Double-click at the ending point.
6. Change the attributes from the Properties editing area if necessary.

### ■ Polyline properties

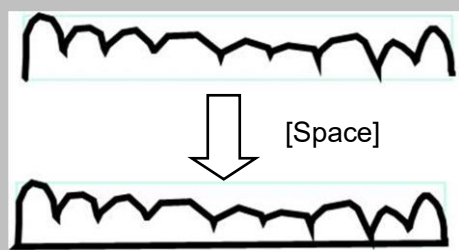
Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Shape			
Closed	●	—	Set closed line. (Yes: True/No: False)
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeEndCap	●	—	Set line end style.
StrokeLineJoin	●	—	Set the figure edge format style.
StrokeStartCap	●	—	Set line start style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid). (Valid only when Shape: [Closed] is set to “True”)
FillColor	●	—	Set fill color. (Valid only when Shape: [Closed] is set to “True”)
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

## 2.6.7 Inserting a Free Line

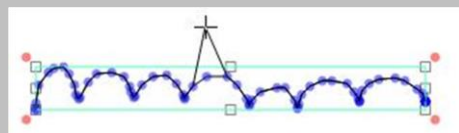


1. Click the  [Free Line] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click at the starting point, and make the mouse track curve to be dragged. The point where the mouse button is released is the ending point.

- Note -



It is possible to switch the starting point and ending point (whether it is closed or not) by pressing the [Space] key while drawing a polyline, as well as changing from the pull-down menu of [Closed] in the Properties editing area.



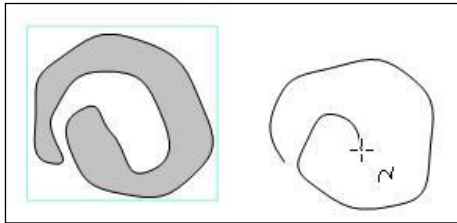
The component points of the free line will be indicated after the figure has been inserted. It is possible to adjust the curve by dragging the component points with the pointer.



4. Change the attributes from the Properties editing area if necessary.

### ■ Free Line properties

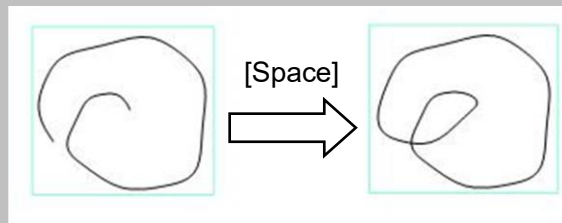
Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Shape			
Closed	●	—	Set closed line. (Yes: True/No: False)
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeEndCap	●	—	Set line end style.
StrokeLineJoin	●	—	Set line combine style.
StrokeStartCap	●	—	Set line start style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid). (Valid only when Shape: [Closed] is set to “True”)
FillColor	●	—	Set fill color. (Valid only when Shape: [Closed] is set to “True”)
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.

## 2.6.8 Inserting a Bezier Curve



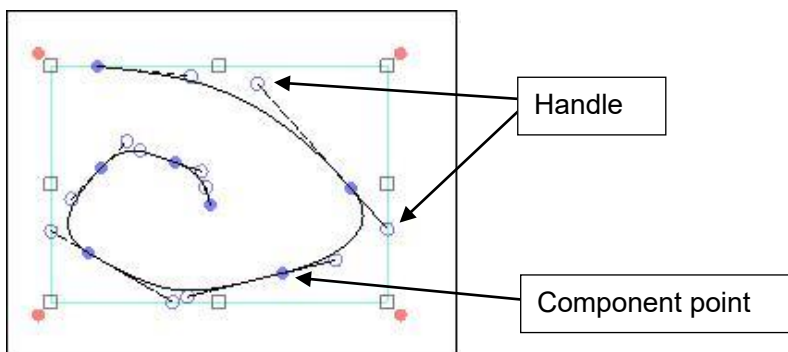
1. Click the  [Bezier] button on Insert Toolbar.
2. Move the mouse pointer  to the Layout editing area.
3. Click the starting point.
4. Click the component points in order.

- Note -



It is possible to switch the starting point and ending point (whether it is closed or not) by pressing the [Space] key while drawing a polyline, as well as changing from the pull-down menu of [Closed] in the Properties editing area.

5. Double-click at the ending point.



6. The Bezier curve and the handle will be indicated. The curve can be adjusted by dragging the handle.
7. Change the attributes from the Properties editing area if necessary.

### ■ Bezier curve properties

Name	CLF	XML	Description
Design			
(Name)	●	—	Set name to part.
Shape			
Closed	●	—	Set closed line. (Yes: True/No: False)
Line			
StrokeAlpha	●	—	Set line color opacity (0: transparent – 255: solid).
StrokeColor	●	—	Set line color.
StrokeDashCap	●	—	Set dashed line end style.
StrokeDashStyle	●	—	Set line style.
StrokeEndCap	●	—	Set line end style.
StrokeLineJoin	●	—	Set the figure edge format style.
StrokeStartCap	●	—	Set line start style.
StrokeWidth	●	—	Set line width.
Fill			
FillAlpha	●	—	Set fill color opacity (0: transparent – 255: solid). (Valid only when Shape: [Closed] is set to “True”)
FillColor	●	—	Set fill color. (Valid only when Shape: [Closed] is set to “True”)
Operation			
FlipType	●	—	Set part flip. (None, Horizontal, Vertical, Both)
Location	●	—	Set part position (X, Y).
Locked	●	—	Set part lock. (No: False, Yes: True)
Rotation	●	—	Set part rotate angle (0/90/180/270).
Size	●	—	Set part size (width, height).
SkewAngleX	●	—	Set part horizontal slant angle.
SkewAngleY	●	—	Set part vertical slant angle.





## 2.7 Changing the Layout

### 2.7.1 Assigning vertical and horizontal coordinates for the part

The selected part is assigned at the center of the paper.

1. Select a part.
2. Click the Center button on Layout Toolbar.

Center buttons and operations









Button	Operation
	Assign the selected part in the center horizontally.
	Assign the selected part in center vertically.

### 2.7.2 Aligning the Parts

Multiple inserted parts are aligned.

1. Select the parts to be aligned.  
(See 2.4.3 Basic Parts Operations).
2. Click the Align button on Layout Toolbar.

Align buttons and operations

Button	Operation
	Aligns all the selected parts by matching the left sides of their outer frames.
	Aligns all the selected parts by matching the centers of their outer frames.
	Aligns all the selected parts by matching the right sides of their outer frames.
	Aligns all the selected parts so that the outer frames of the parts are equally spaced horizontally within the outer frame of the selected parts.
	Aligns all the selected parts by matching the top sides of their outer frames.
	Aligns all the selected parts so that the outer frames of the parts are equally spaced vertically within the outer frame of the selected parts.
	Aligns all the selected parts by matching the bottom sides of their outer frames.
	Aligns all the selected parts so that the outer frames of the parts are equally spaced vertically within the outer frame of the selected parts.





### 2.7.3 Changing the Order

Inserted parts are assigned to the front as they are added.

Use the function of Order, a Layout tool to change the order of the parts.


1. Select the part to be changed.
2. Click the Order button on Layout Toolbar.

Order buttons and operations

Button	Operation
	Brings the selected part to the Front.
	Brings the selected part Forward.
	Sends the selected part Backward.
	Sends the selected part to the Back.

## 2.7.4 Setting up Groups

It is possible to copy multiple parts at once or move them together without breaking the alignment by grouping the parts.



1. Select 2 or more parts to be grouped.  
(See 2.4.3 Basic Parts Operations).
2. Click the  [Group] button on Layout Toolbar.

- Note -


To edit grouped parts, cancel grouping using the  [Ungroup] button.

## 2.7.5 Locking

Parts can be locked to prevent changing the position or attributes by mistake.

1. Select the part to be locked.
2. Click the  [Lock] button on Layout Toolbar.
3. The color of the  mark will change for the locked parts, and all operations will be disabled.

- Note -

To edit a locked part, cancel the lock using the  [Unlock] button.

Each individual part can be locked through [Locked] function under the Properties editing area.

## 2.8 Preferences

### 2.8.1 Preferences

Preferences such as the units used in layout and grids can be set up.

**- Note -**

With Layout Editor, scale unit can be selected from mm and inch.

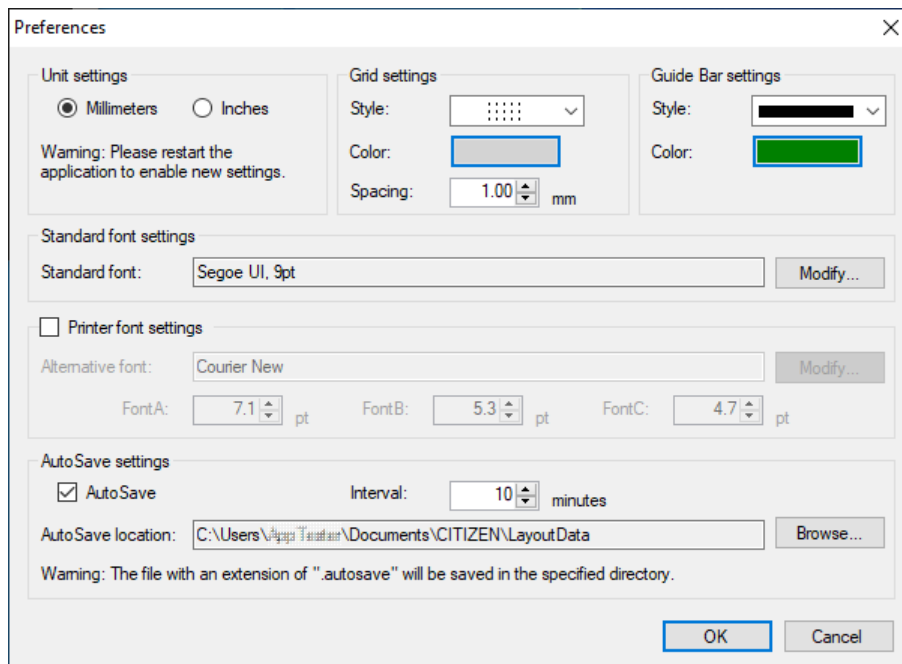
While it is possible to change the unit during layout preparation, it may cause conversion errors as the unit is changed.

It is recommended to begin the layout after setting up the scale unit beforehand.

**- Note -**

Layout Editor can export the XML layout file for printing using printer font. If you want to use Export, click "**Printer font**" and put a check on it.

1. Click "Settings" — "Preferences" on the Menu Bar.



2. "Preferences" dialog box will be displayed.
3. Set up the desired items.
4. Click the [OK] button on the "Preferences" dialog box.
5. Restart Layout Editor when editing unit has been changed.  
(See 2.1 Starting up and Exiting Layout Editor).

## &lt;Setting up the editing unit&gt;

1. Select "Millimeters" or "Inches" as the editing unit.

## &lt;Setting up the grid style&gt;

1. Select the style from the pull-down menu.



2. "Color Setting" dialog box will be displayed when the button is clicked.
3. Click the color to set up from the basic colors and click the [OK] button.

**- Note -**

It is also possible to create the color of your choice by selecting the [Define Custom Colors] button.

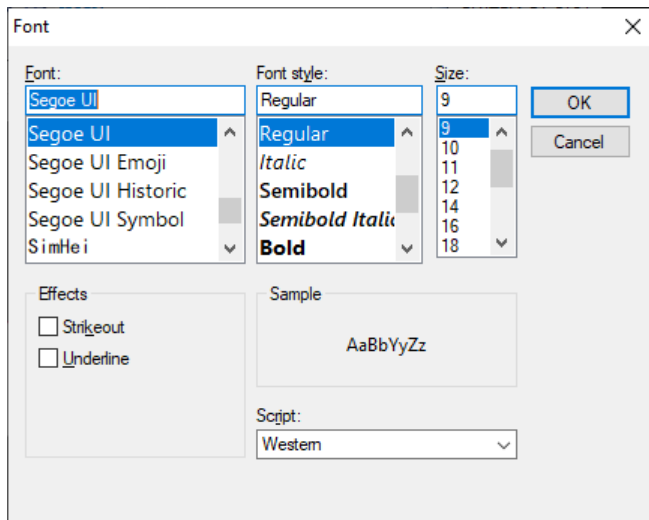
4. Input the grid interval.  
(See 2.8.2 Display Settings).

## &lt;Setting up the Guide Bar&gt;

1. Select the style from the pull-down menu.
2. Click the button to display the "Color Setting" dialog box.
3. Click the color to set up from the basic colors and click the [OK] button.  
(See 2.8.2 Display Settings).

## &lt;Setting up the Standard Font&gt;

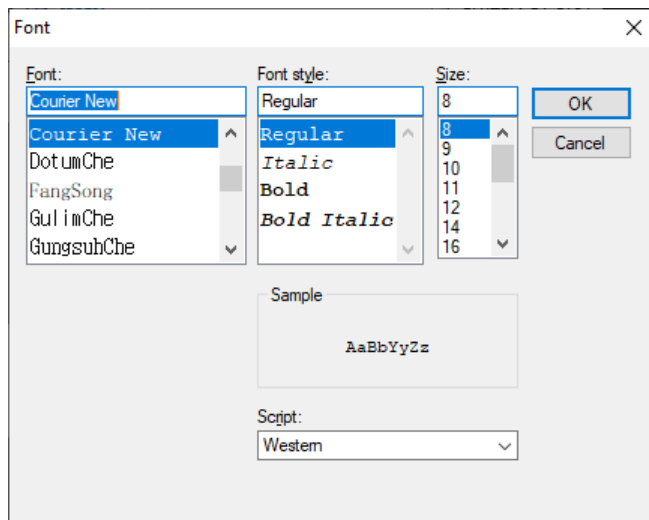
1. Click the [Modify...] button for standard font.



2. "Font" dialog box will be displayed.
3. Select the font name, style and size.
4. Click the [OK] button.

## &lt;Setting up the Printer Font&gt;

1. Click the [Printer font settings] and put a check on it.  
Export function will be enabled in the file menu.  
(See 2.8.4 Export).
2. Click the [Modify...] button for printer font.



3. "Font" dialog box will be displayed.
4. Select the font name, style and size.
5. Click the [OK] button.
6. "Preferences" dialog box will be displayed.
7. Sets the size of each FontA, FontB, FontC.  
If you select "Courier New", size is recommended 7.1pt, 5.3pt, 4.7pt respectively.

## &lt;Setting up AutoSave&gt;

1. Click "AutoSave" and put a check on it.
2. Input the saving interval.
3. Click [Browse...] button to display the "Browse folder" dialog box.
4. Set up the folder to save files and click the [OK] button.

- Note -

Files saved automatically are saved as files with extension "autosave".

To disable AutoSave, de-select the option for "AutoSave".

## 2.8.2 Display Settings

Toolbars and grid displayed on the screen can be set up.

### ■ Displaying the toolbars

1. Click “View” — “Toolbar” on the Menu Bar.
2. Click the toolbar to be displayed. There is a check mark for toolbars that are currently displayed.

### ■ Displaying the Status Bar

1. Click “View” — “Status Bar” on the Menu Bar. There is a check mark if it is currently displayed.

### ■ Setting up the Ruler

1. Click “View” — “Ruler” on the Menu Bar. There is a check mark if it is currently displayed.

### ■ Setting up the Grid

#### <Displaying the Grid>

1. Click “View” — “Grid” — “Visible” on the Menu Bar. There is a check mark if it is currently displayed.

#### <Snapping the inserted parts on the Grid>

1. Click “View” — “Grid” — “Snap” on the Menu Bars. There is a check mark if it is currently selected.

### ■ Setting up the Guide Bar

#### <Adding a Guide Bar>

1. Click “View” — “Guide Bar” — “Add Horizontal” or “Add Vertical” on the Menu Bar.

#### - Note -

If the Ruler is displayed in the Layout editing area, it is possible to add a Guide Bar by clicking and dragging the horizontal or vertical Ruler.

To move a Guide Bar, click and drag the displayed Guide Bar to the desired position.

#### <Switching display/nondisplay of Guide Bars>

1. Click “View” — “Guide Bar” — “Visible” on the Menu Bar. There is a check mark if it is currently displayed.

#### <Snapping the inserted parts on the Guide Bar>

1. Click “View” — “Guide Bar” — “Snap” on the Menu Bar. There is a check mark if it is currently



selected.

#### <Deleting a Guide Bar>

1. Click “View” — “Guide Bar” — “Clear All” on the Menu Bar.



##### - Note -

To delete only the desired Guide Bar among the Guide Bars displayed, click the Guide Bar to be deleted in the Layout editing area and drag it to the horizontal or vertical Ruler.

### ■ Setting up Zoom

1. Click the pull-down menu of the Zoom Menu on the Main Toolbar and select the zoom magnification.

##### - Note -

It is also possible to change the zoom magnification by clicking the   buttons.



button: Zooms in by 25% from the current zoom each time.



button: Zooms out by 25% from the current zoom each time.

### ■ Displaying the Print Area

1. Click “View” — “Print Area” on the Menu Bar. There is a check mark if it is currently displayed.

# 3

## Layout File Manager

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## 3.1 Starting up and Exiting Layout File Manager

### ■ Starting up Layout File Manager

#### - In Windows 8 or Windows 8.1

1. Tap “**Layout File Manager**” tile on the Start screen.
2. Layout File Manager will start up.

#### - In other Windows

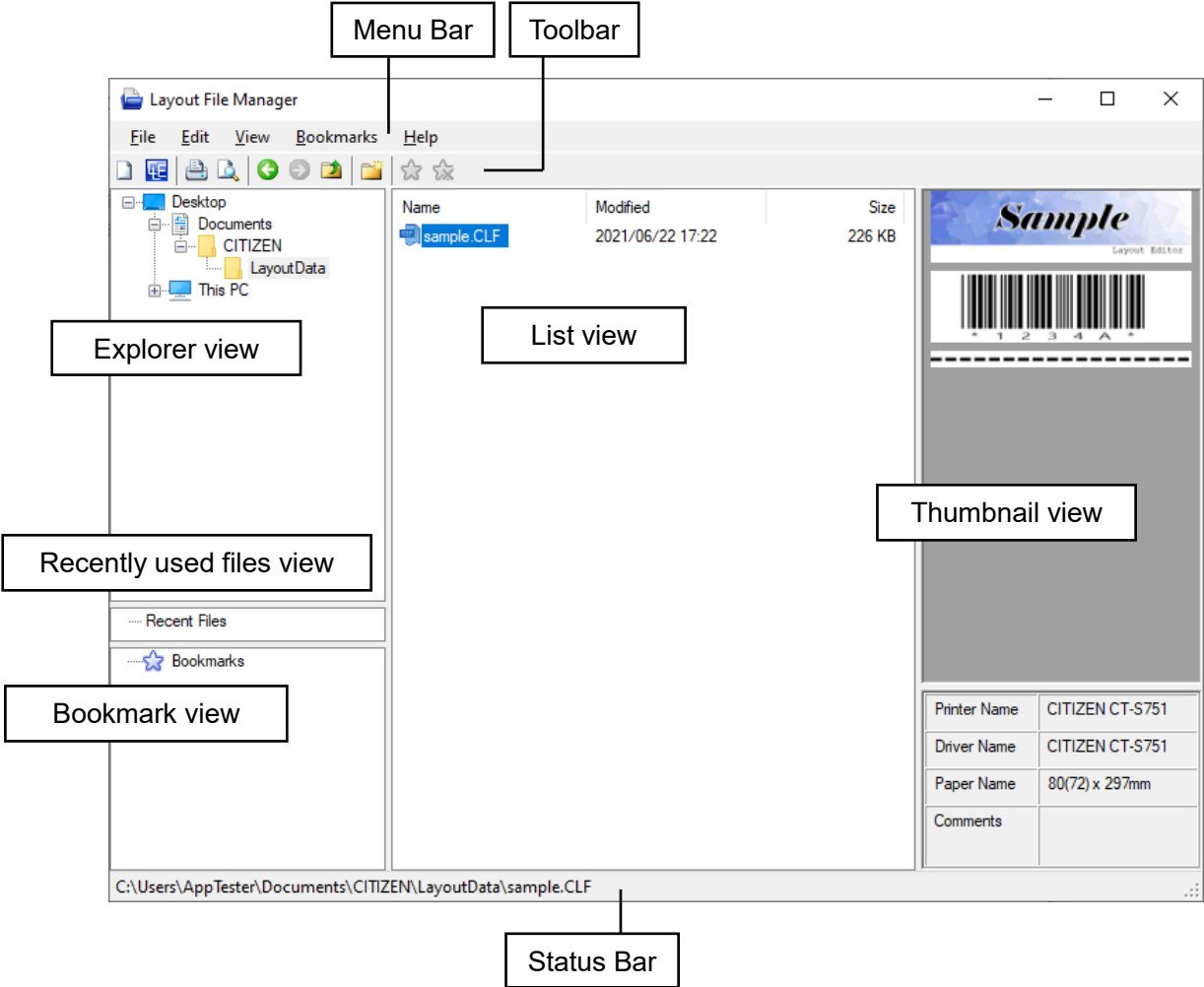
1. Click the [**Start**] button displayed at the bottom left portion of the screen.
2. Click “**All Programs**”
3. Click “**CITIZEN**”
4. Click “**Layout SDK**”
5. Click “**Layout File Manager**”
6. Layout File Manager will start up.

### ■ Exiting Layout File Manager

1. Click “**File**” — “**Exit**” on the Menu Bar.

### 3.2 Layout File Manager Overview











This section describes the names and functions of the parts of Layout File Manager screen.



## Part functions

Name	Function
Menu Bar	Executes various functions.
Toolbar	Displays the frequently used functions.
Explorer view	Displays the Explorer.
Recently used files view	Displays up to 10 files that have been used by Layout Editor.
Bookmark view	Displays the folder that is registered in bookmark.
List view	Displays the folders and files in the folder specified in Explorer view or Bookmark view. The file that has been recently used will be displayed when Recently used files view is selected.
Thumbnail view	Displays the thumbnail for a CLF-format file and its layout properties.
Status bar	Displays the status.

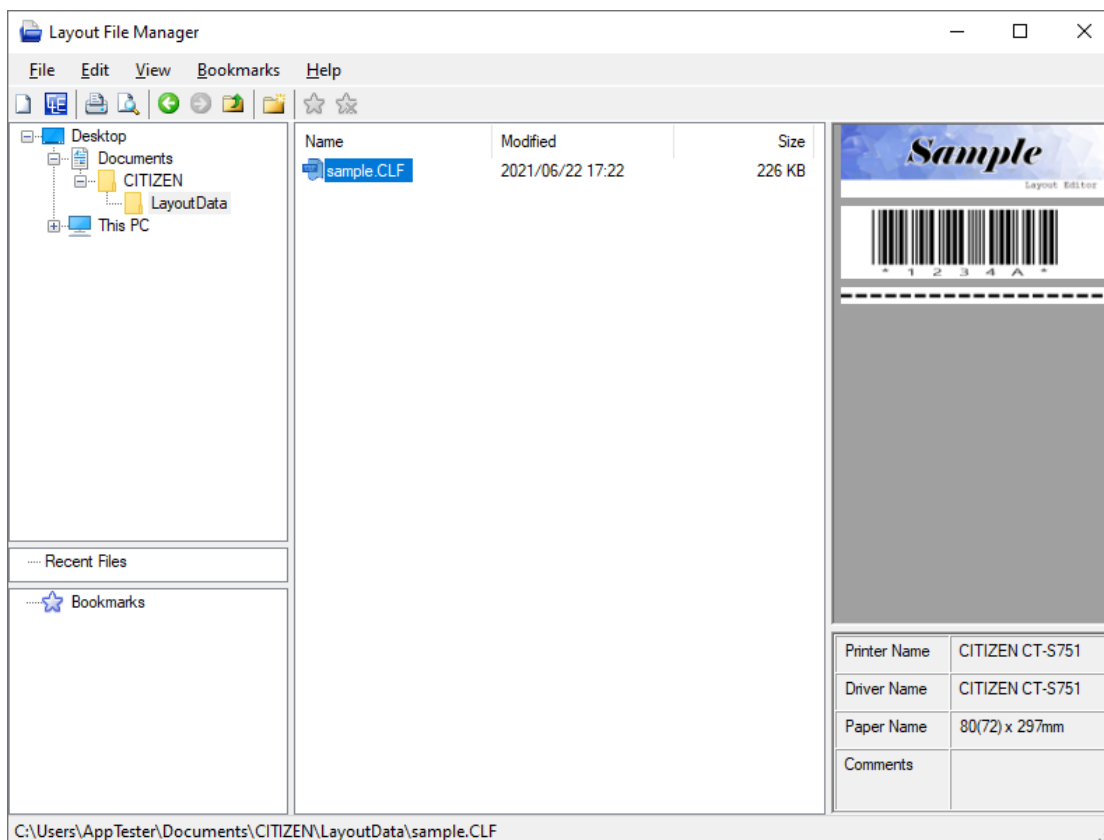
## Names and functions of &amp;Main Toolbar buttons

Button	Name	Function
	New	Starts up Layout Editor to create a new CLF file.
	Open	Opens the selected file with Layout Editor.
	Print	Prints the selected file.
	Print Preview	Displays the print preview for the selected file.
	Undo	Undoes the folder selection by one step.
	Redo	Redoes the folder selection that has been undone.
	Up One Level	Moves the folder up by one layer from the selected folder.
	Make New Folder	Creates a new folder directly below the selected folder.
	Add Bookmark	Adds the selected folder in the bookmark.
	Remove Bookmark	Removes the selected folder from the bookmark.

## 3.3 File Operations

### 3.3.1 Selecting a Folder

This section describes the procedures for selecting folders on the Explorer view.



Explorer view displays folders with Desktop as the default location.

When a folder displayed in Explorer view is selected, the folders stored in the selected folder and the files created by Layout Editor will be displayed on List view.


If there is a folder(s) in the layer underneath the displayed folder, [+] mark will be displayed beside the folder icon.

Click [+] to expand the tree and display the lower folders.

Click [-] to fold the lower folders that are displayed.

### 3.3.2 Creating a New File

A new CLF file is created.


1. Click the  [New] button on the Toolbar.
2. Layout Editor will start up.
3. Create the layout.  
(See 2. Layout Editor).
4. Save the file.  
(See 2.4.4 Save As).

- Note -

The location for saving displayed on “Save As” dialog box will be the folder selected in step 1.

### 3.3.3 Opening a File

Layout Editor is started directly from Layout File Manager to open a CLF file.

1. Specify the folder the file is saved from Explorer view or Bookmark view.
2. Click the CLF file displayed on List view.
3. Click the  [Open] button on the Toolbar.
4. Layout Editor will start up and the file will be opened.  
(See 2.1 Starting up and Exiting Layout Editor).

- Note -

It is also possible to open a file by the following methods;

1. Double-clicking the file on List view, or
2. Right-clicking the file on List view and selecting “Open.”

### 3.3.4 Rename

The name of a folder or file can be changed.

1. Select the folder or file on Explorer view or List view.
2. Click on the folder or file that requires a name change.
3. Delete the existing name and input the new name.

- Note -

It is impossible to change or delete the extension “.CLF” at the end of a file name.


It is also possible to change the name by the following methods;

With a folder or file selected,

1. Right-click and select “Rename,” or
2. Press the [F2] button.


### 3.3.5 Print

A layout file can be printed.

1. Select the file to print from List view.
2. Click the  [Print] button on the Toolbar.
3. “Print” dialog box will be displayed.  
(See 2.4.6 Print).

### 3.3.6 Print Preview

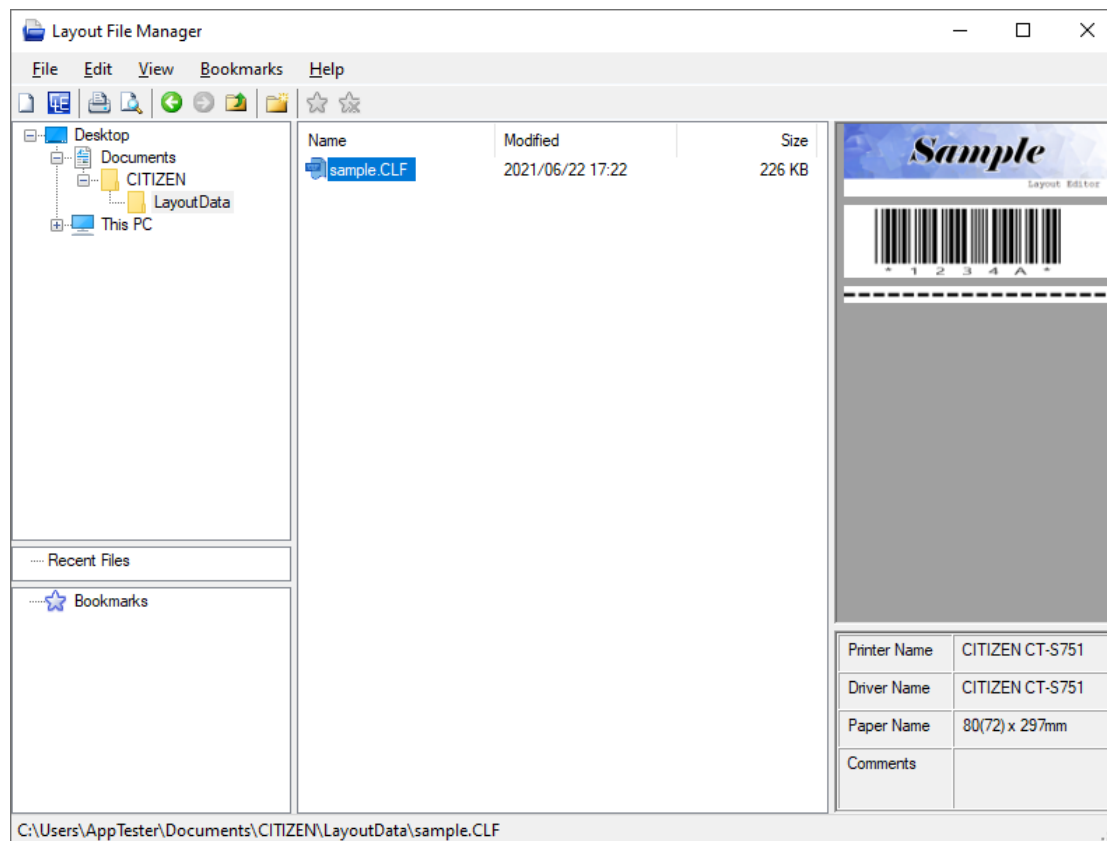
The print preview for a layout file can be displayed.


1. Select the file to preview from List view.
2. Click the  [Print Preview] button on Toolbar.
3. “Print Preview” dialog box will be displayed.  
(See 2.4.7 Print Preview).



### 3.3.7 Creating a New Folder

A new folder is created in the folder specified in Explorer view or Bookmark view.



1. Select the upper folder to create a new folder in Explorer view or Bookmark view (in the above case, a folder will be created in My Documents).
2. Click the  [Make New Folder] button on Toolbar.
3. Input the folder name and press the [Enter] key.

### 3.3.8 Moving

There are 3 ways to move a file.

<Using the “Move to Folder” function>

1. Click the file to be moved from List view.
2. Click “Edit” — “Move to Folder” on the Menu Bar.
3. “Browse For Folder” dialog box will be displayed.
4. Select the folder to move the file to and click the [OK] button.

<Dragging the file>

1. Click [+] on Explorer view and expand the tree to display the folder to move the file to.
2. Select the source folder from Explorer view or Bookmark view and display the file to be moved on List view.
3. Click and drag the file on List view to the destination folder on Explorer view.

<Cutting and pasting>

1. Click the file to be moved from List view.
2. Click “Edit” — “Cut” on the Menu Bar.
3. Click the destination folder on Explorer view or Bookmark view.
4. Click “Edit” — “Paste” on the Menu Bar.

- Note -

It is possible to move a folder using similar procedures.

The source file will be deleted when it is pasted.

Nothing will happen to the source file if it is only cut.

Cut and Paste can also be selected from the menu displayed by right-clicking the file.

### 3.3.9 Copy

There are 2 ways to copy a file.

<Using the “Copy to Folder” function>

1. Click the source file to be copied on List view.
2. Click “Edit” — “Copy to Folder” on the Menu Bar.
3. “Browse For Folder” dialog box will be displayed.
4. Select the destination folder and click the [OK] button.

## &lt;Copying and pasting&gt;

1. Click the copy source file on List view.
2. Click “Edit” — “Copy” on the Menu Bar.
3. Select the destination folder on Explorer view or Bookmark view.
4. Click “Edit” — “Paste” on the Menu Bar.

**- Note -**

It is possible to copy a folder using similar procedures.

Copy and Paste can also be selected from the menu displayed by right-clicking the file.

### 3.3.10 Delete

A file or folder can be deleted.

1. Right-click the file or folder to be deleted on List view or Explorer view.
2. Click “Delete” from the menu.


**- Note -**

It is also possible to delete a folder from “File” — “Delete” on the Menu Bar.


## 3.4 Bookmark

It is possible to keep a frequently used folder constantly displayed on Bookmark view by registering the folder as a bookmark.

### ■ Add Bookmark

1. Click the folder to be registered as a bookmark on Explorer view.
2. Click the  [Add Bookmark] button on the Toolbar.
3. The folder will be registered at the bottom of the Bookmark view.

### ■ Remove Bookmark

1. Click the folder to be removed from bookmark on Bookmark view.
2. Click the  [Remove Bookmark] button on the Toolbar.

- Note -

The folder itself will not be deleted even if it is removed from bookmark.

## 3.5 Display Setting

Display/nondisplay of Toolbar and Status Bar can be set up.

### ■ Setting up the Toolbar

1. Click “View” — “Toolbar” on the Menu Bar.
2. There is a check mark if it is currently displayed.

### ■ Setting up the Status Bar

1. Click “View” — “Status Bar” on the Menu Bar.
2. There is a check mark if it is currently displayed.

# Layout SDK

Layout Editor / Layout File Manager

Users Guide

for Version 1.4.1