Smart Design®

User Manual

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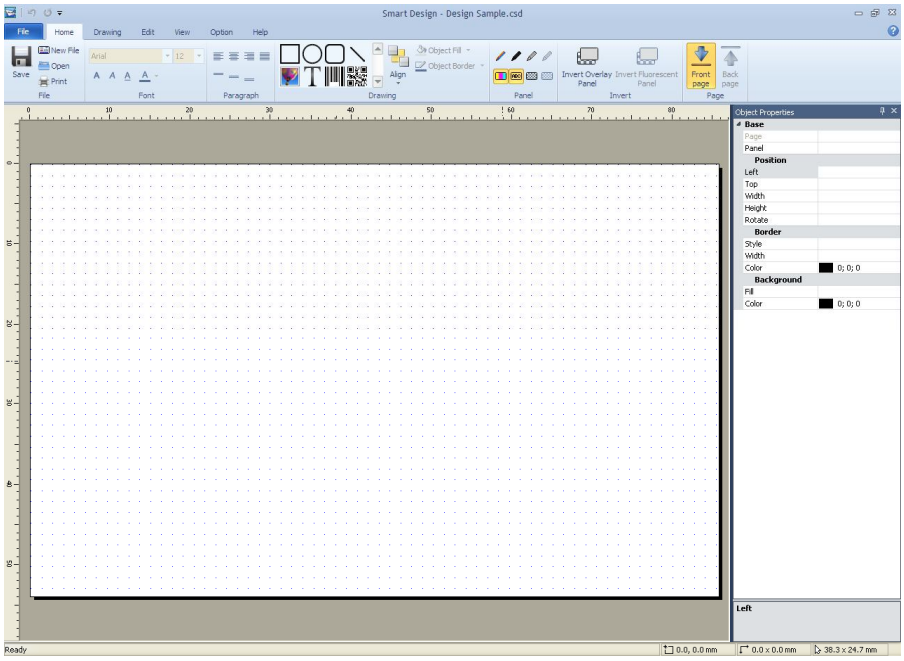
1 Introduction

1.1 What is Smart Design®?

This Smart Design allows you to design and print the images, photos, texts and barcodes on the plastic cards (ISO CR-80) or encode on the magnetic stripe.

When you run Smart Design, you can see a blank screen. This is the 54mm x 86mm card size, the same as ISO CR-80.



<Figure 1> The first screen of Smart Design

1.2 System Requirements

This Smart Design is provided with Smart ID Card Printer. This can be used only with Smart ID Card Printer supplied by IDP Corp., Ltd. To operate this program, IDP Card Printer driver should be installed.

For the stable operation, Windows 2000/XP/VISTA and 7, Pentium 1GHz with 256MB of RAM or higher, 100 MB free hard disk space or higher systems are recommended.

1.3 Copyright

2 Program start

2.1 Execute Program

2.1.1 From Window's "Start" menu

Click **Start** menu > All Programs > Smart > SmartDesign

2.1.2 From the shortcut icon created on Desktop background

2.2 Open the card design file

2.2.1 Using "Open" command in Home tab

Click **Open** in **Home** tab and open the design file(*.csd).

2.2.2 Using "Open" command in File tab

Click **File** tab, click **Open** and

open the design file(*.csd).

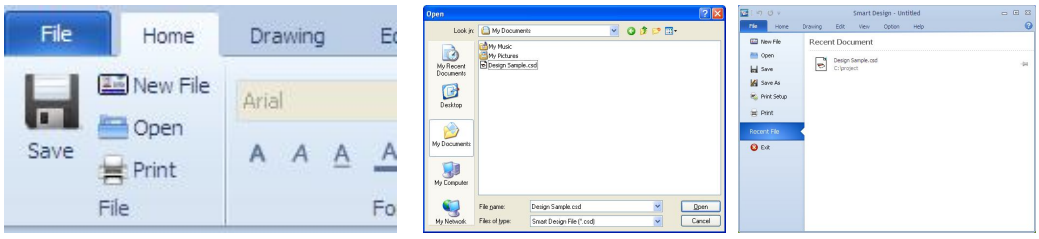
2.2.3 Using "Shortcut key"

Press **Ctrl+O** to open.

2.2.4 Using "Recent File"

Click **File** tab, click **recent File**.

You can open the design file from the list.



(a) Using icon in Ribbon Bar (b) File open dialog (c) Using Recent File

<Figure 2> File Open

2.3 Save the card design file

2.3.1 Using “Save” command in Home tab

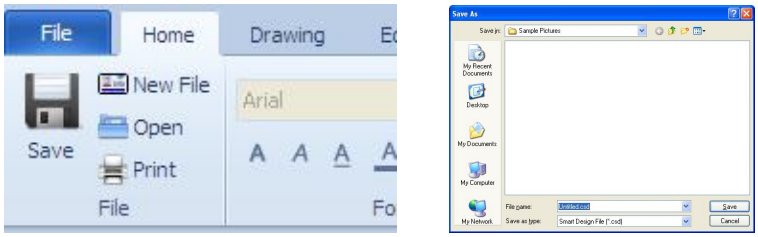
Click **Save** in **Home** tab

2.3.2 Using “Save” command in File tab

Click **File** tab and click **Save**

2.3.3 Using “Shortcut key”

Press **Ctrl+S** to save.



(a) Using Save icon in Ribbon Bar (b) File Save Dialog

<Figure 3> File Save

2.4 Quit Smart Design

Click **File** tab, click **Exit** or click the “Exit” icon on right top of the program.

3 Screen Components

When you run Smart Design, you can see the program as below.

3.1 Ribbon bar

Ribbon bar consists of 7 tabs.

3.1.1 Home tab

3.1.1.1 Save

 Save the design file. File format is .csd.

3.1.1.2 New

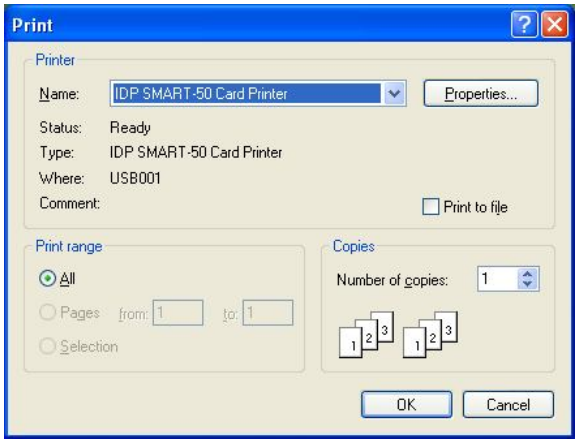
 Make a new card design.

3.1.1.3 Open

 Open the design file.

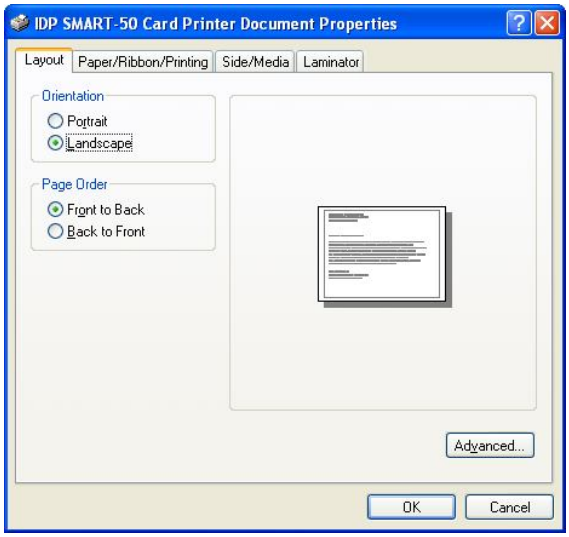
3.1.1.4 Print

 Print the design file.



<Figure 4> Printer Select Dialog

Be cautious that it can be printed with only “IDP SMART-50 Card Printer”, so select a correct printer name. If you click the properties, the detail setting dialog box will be displayed.



<Figure 5> SMART-50 Printer Document Properties

Even though the layout direction’s setting is wrong, it is adjusted automatically to the designed direction. Click **OK** to save and exit from the detail setting dialog box. Click **OK** to print.

3.1.1.5 Font & Barcode list

Select the font type or the barcode type. You can see all possible font types in Windows or all barcode lists supported in this program.

3.1.1.6 Font Size

Set the font size of text object or barcode object.

3.1.1.7 Bold


Make a bold font. It is activated when the text object is selected. Click the icon or press “Ctrl” key with “B” key to make font bold.

3.1.1.8 Italic


Make an italic font. It is activated when the text object is selected. To make an italic effect, click the icon or press “Ctrl” with “I” key.

3.1.1.9 Underline


Underline a font. It is activated when the text object is selected. To make an underline effect, click the icon or press “Ctrl” with “U” key.

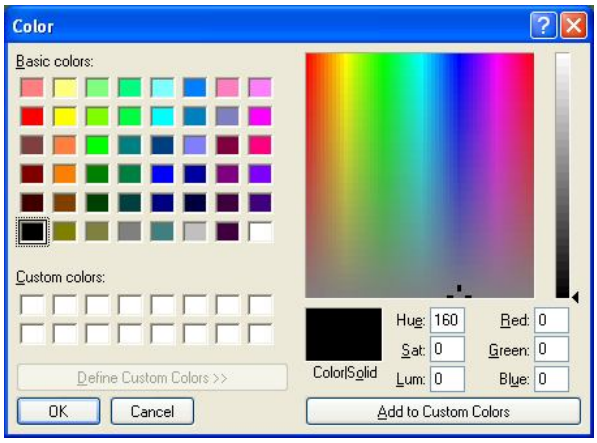
3.1.1.10 Font Color


Set the font color of the text object or the barcode color of the barcode object.

If click the left side of icon, the color is applied. If press the right downside arrow, you can see the color table as below. You can select the desired color to apply to the text object or barcode object.

<Figure 6> Color Picker Popup

To apply other color which is not shown in color table, click “Other color”.



<Figure 7> Select Other Color

Select the specific color you want and click “OK” to apply. The icon’s color will be changed.

3.1.1.11 Align Left

Text is aligned on the left side.

3.1.1.12 Align Center

Text is aligned on the center.

3.1.1.13 Align Right

Text is aligned on the right side.

3.1.1.14 Justify

Text is aligned on the same distance between the characters.

3.1.1.15 Align Top

Text is aligned on the top side.

3.1.1.16 Align Middle

Text is aligned on the middle.

3.1.1.17 Align Bottom

 Text is aligned on the bottom side.

3.1.1.18 Rectangle

 Draw a rectangle. If you select this icon, the cursor will be changed to + shape. The object is set as color panel.

3.1.1.19 Rounded Rectangle

 Draw a rounded rectangle. If you select this icon, the cursor will be changed to + shape. The object is set as color panel.

3.1.1.20 Ellipse

 Draw an oval. If you select this icon, the cursor will be changed to + shape. The object is set as color panel.

3.1.1.21 Line

 Draw a straight line. If you select this icon, the cursor will be changed to + shape. The object is set as color panel.

3.1.1.22 Text

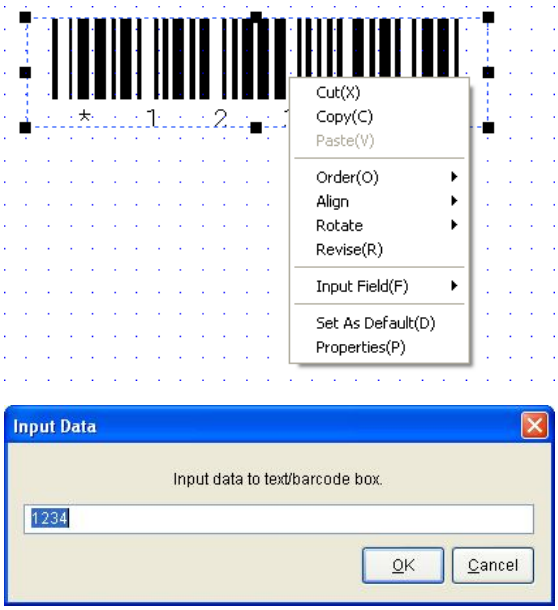
 Make a text box. Input text when text input dialog box is open. The object is set as black panel.

3.1.1.23 Image

 Insert an image. Select the image when the image selecting dialog box is open. The object is set as color panel.

3.1.1.24 1D Barcode

 Make a barcode. Input data when data input dialog box is open. The object is set as black panel. You can change the data using “Revise” as below after click the right button of the mouse.



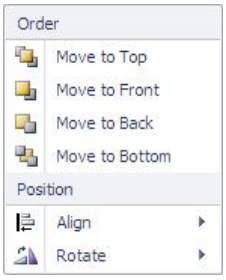
<Figure 8> Revise Data

3.1.1.25 2D Barcode

Make a 2D barcode. The method of data input is same as barcode.

3.1.1.26 Align

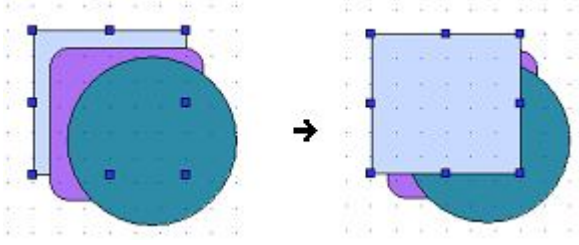
Click the Align button, popup menu is displayed as below.



<Figure 9> Align Popup Menu

3.1.1.27 Align - Move to Top

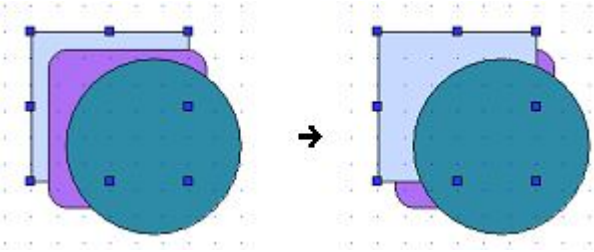
Move the selected object to top.



<Figure 10> Move the selected object to top

3.1.1.28 Align - Move to Front

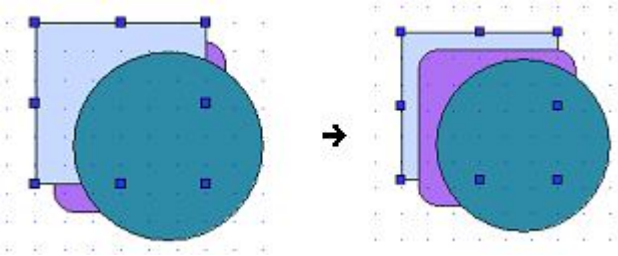

Move the selected object to one step up.



<Figure 11> Move the selected object to one step up

3.1.1.29 Align - Move to Back

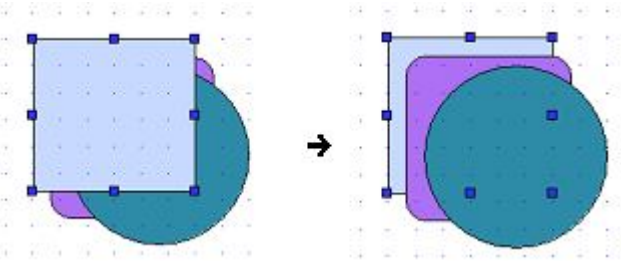

Move the selected object to one step down.



<Figure 12> Move the selected object to one step down

3.1.1.30 Align - Move to Bottom


Move the selected object to bottom.



<Figure 13> Move the selected object to bottom

3.1.1.31 Align – Align - Left Align


Align the selected objects to the left of standard object.

3.1.1.32 Align – Align - Right Align


Align the selected objects to the right of standard object.

3.1.1.33 Align – Align - Top Align

 Align the selected objects to the top of standard object.

3.1.1.34 Align – Align - Bottom Align

 Align the selected objects to the bottom of standard object.

3.1.1.35 Align – Align - Align Same Width

 Align the distance of the selected objects in horizontally same distance.

3.1.1.36 Align – Align - Align Same Height

 Align the distance of the selected objects in vertically same distance.

3.1.1.37 Align – Align - Horizontal Center Align

 Move the selected objects to the horizontal center.

3.1.1.38 Align – Align - Vertical Center Align

 Move the selected objects to the vertical center.

3.1.1.39 Align – Rotate - 90° Clockwise Rotate

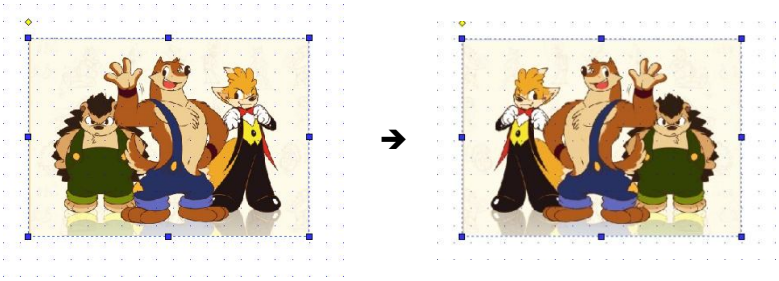
 Rotate the selected objects 90 degree clockwise.

3.1.1.40 Align – Rotate - 90° Counterclockwise Rotate

 Rotate the selected objects 90 degree counterclockwise

3.1.1.41 Align – Rotate - Flip Horizontally

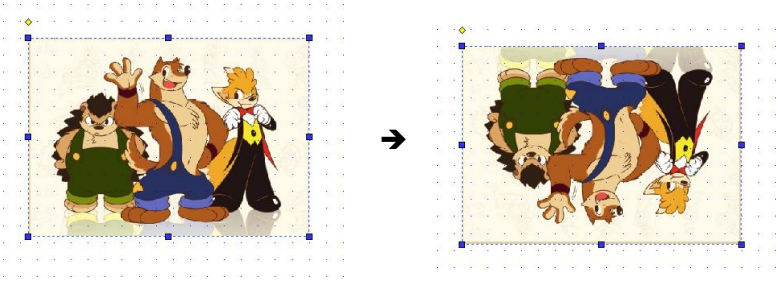
 Reverse the selected objects right and left.



<Figure 14> Image Object – Flip Horizontally

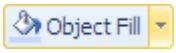
3.1.1.42 Align – Rotate - Flip Vertically

Reverse the selected objects upside down.



<Figure 15> Image Object – Flip Vertically

3.1.1.43 Object Fill



Set the background color of the selected object.

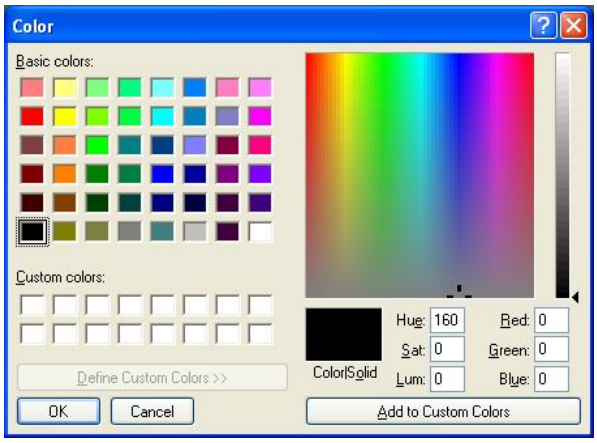
Click the left part of the button to apply the selected color.

If click the right downside arrow, you can see the color table as below.

<Figure 16> Color Popup for Object Fill

You can make background color transparent, click **Not Fill**.

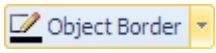
If there is no desired color, click **Other Color…** for the specific color.



<Figure 17> Select Other Color

Click **OK** to apply it to background color after select the color.

3.1.1.44 Object Border



Set the outline color of the selected object.

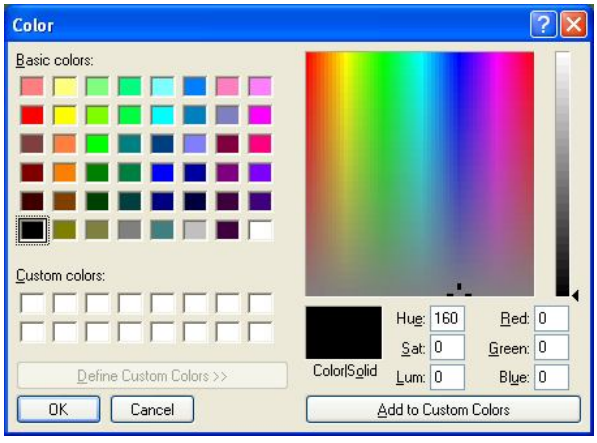
Click the left part of the button to apply the selected color.

If you click the downside arrow of the icon, the color table will be displayed.

<Figure 18> Color Popup for Object Border

You can make outline color transparent, click **Not Fill.**

If there is no desired color, click **Other Color…** for the specific color.

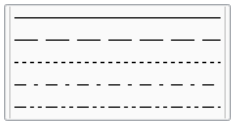


<Figure 19> Select Other Color

Click OK to apply it to background color after select the color.

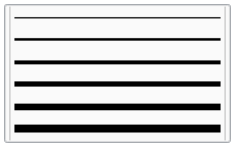
Line Style changes the outline type of the object.

If you move the cursor on the menu, the outline type list will be displayed. Select the outline type.



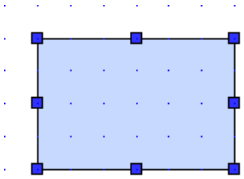
Line Width changes the outline thickness of the object.

If you move the cursor on the menu, the outline thickness list will be displayed. Select the outline thickness.



3.1.1.45 Set as Color Panel

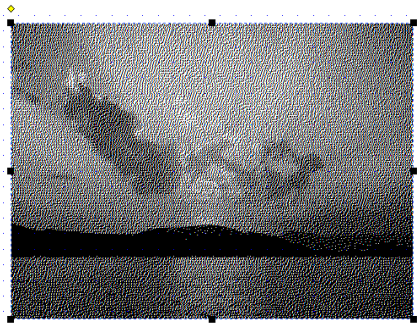
Set as color panel for the selected object. If the installed ribbon is not color ribbon, this icon will not be activated. When the object is set as color panel, the blue color is applied to the object.



<Figure 20> Set as Color Panel

3.1.1.46 Set as Black Panel

Set as black panel for the selected object. Text and barcode are set as black panel at default. The background, outline and font will be changed to gray color. For the image object, the dithering effect will be applied. If the object is set as black panel, the square of outline will be black color.



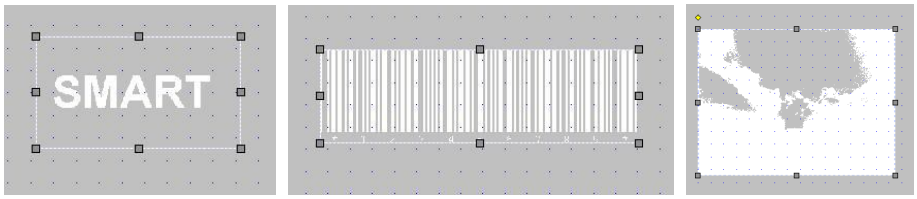
<Figure 21> Set as Black Panel

3.1.1.47 Set as Overlay Panel

If you click this icon after select the object, overlay will not be applied to that object.

The Image, text and barcode are not overlaid if this icon is clicked.

When the object is set as overlay panel, the square of outline will be changed to gray color.



<Figure 22> Overlay Panel Editing

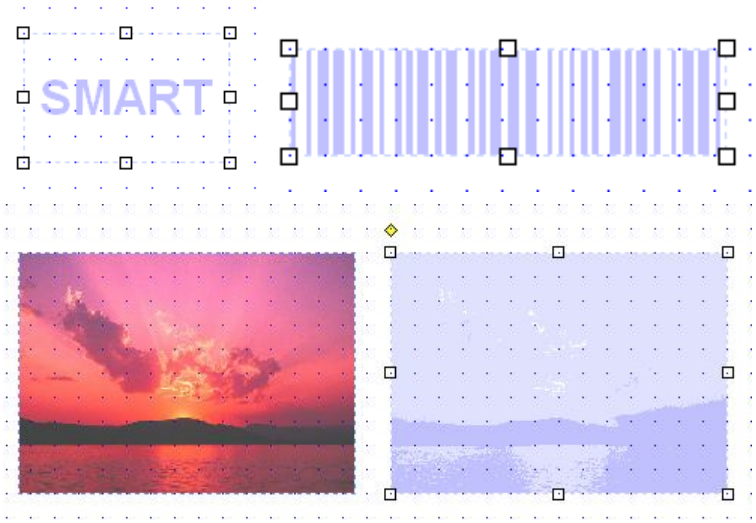
3.1.1.48 Set as Rewritable Panel

If you click this icon after selecting the object, rewrite function will be applied to that object. How to use re-writable panel is same as overlay panel. Re-writable panel will appear if the printer is re-writable printer instead of overlay panel. If it is not re-writable printer, it is not appeared. The dark area represents that is to be erased on a card. The bright area represents that is not to be erased on a card. If the whole parts of panel are dark, the front panel of a card will be erased, then re-written.

3.1.1.49 Set as Fluorescent Panel

If you click this icon after select the object, fluorescent will be applied to that object.

The Image, text and barcode are fluoresced if this icon is clicked.



<Figure 23> Flunrescent Panel Editing

3.1.1.50 Display Color Panel

 You can see all objects which are set as color panel.

3.1.1.51 Display Black Panel

You can see all objects which are set as black panel.

3.1.1.52 Display Overlay Panel

 All overlay panels can be seen. The overlaid area will be displayed darker than not overlaid area.

3.1.1.53 Display Rewritable Panel

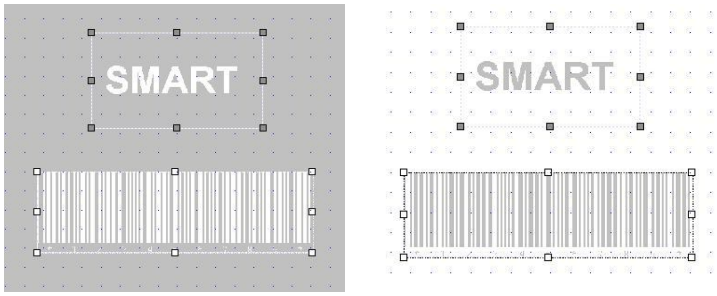
 The object display on the screen is chosen by re-writable panel. If select the re-writable object display that represents part will be erased by dark. This icon will appear instead of overlay panel icon if the printer is re-writable printer.

3.1.1.54 Display Fluorescent Panel

 All fluorescent panels can be seen. The fluoresced area will be displayed more blue printed than not fluoresced area.

3.1.1.55 Invert Overlay Panel

 Basically, overlay is supplied to all surface of card. In case of the text, drawing and image object, the contents will not be overlaid. If you want to reverse this, click this icon. Refer to the below example.



<Figure 24> Overlay Panel Reverse

3.1.1.56 Invert Fluorescent Panel

 Basically, re-writable panel is set up to clear the front of card. In case of the text,

drawing and image object, the contents will not clear in the card. If you want to clear some part and printing, select “Invert re-writable panel” and select the given object in area. If select “Invert re-writable”, it will set up to do not clear whole part of card. It will clear marked text, drawing and image object. This case will apply equally to Fluorescent panel.

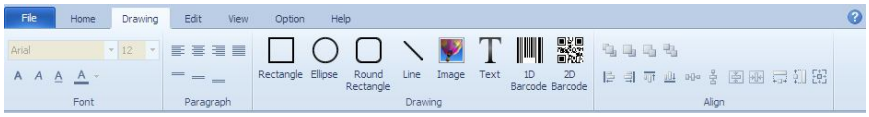
3.1.1.57 Front Page

 This Smart card printer can print the front side and back side. It can be set by the printer setup. The icon will be activated when the related side is under designing.

3.1.1.58 Back Page

 You can design the back side of the card using this icon. It will be activated when the printing setup is both-side printing.

3.1.2 Drawing Tap



3.1.2.1 Font & Barcode list

Please refer to Chapter 2.1.1.5.

3.1.2.2 Font Size

Please refer to Chapter 2.1.1.6

3.1.2.3 Bold

Please refer to Chapter 2.1.1.7

3.1.2.4 Italic

Please refer to Chapter 2.1.1.8

3.1.2.5 Underline

Please refer to Chapter 2.1.1.9

3.1.2.6 Font Color

Please refer to Chapter 2.1.1.10

3.1.2.7 Align Left

 Text is aligned on the left side.

3.1.2.8 Align Center

 Text is aligned on the center.

3.1.2.9 Align Right

 Text is aligned on the right side.

3.1.2.10 Justify

 Text is aligned on the same distance between the characters.

3.1.2.11 Align Top

Text is aligned on the top side.

3.1.2.12 Align Middle

Text is aligned on the middle.

3.1.2.13 Align Bottom

 Text is aligned on the bottom side.

3.1.2.14 Rectangle

Please refer to Chapter 2.1.1.18

3.1.2.15 Rounded Rectangle

Please refer to Chapter 2.1.1.19

3.1.2.16 Ellipse

Please refer to Chapter 2.1.1.20

3.1.2.17 Line

Please refer to Chapter 2.1.1.21

3.1.2.18 Text

Please refer to Chapter 2.1.1.22

3.1.2.19 Image

Please refer to Chapter 2.1.1.23

3.1.2.20 1D Barcode

Please refer to Chapter 2.1.1.24

3.1.2.21 2D Barcode

Please refer to Chapter 2.1.1.25.

3.1.2.22 Move to Top

Please refer to Chapter 2.1.1.27

3.1.2.23 Move to Front

Please refer to Chapter 2.1.1.28

3.1.2.24 Move to Back

Please refer to Chapter 2.1.1.29

3.1.2.25 Move to Bottom

Please refer to Chapter 2.1.1.30

3.1.2.26 Left Align

Please refer to Chapter 2.1.1.31

3.1.2.27 Right Align

Please refer to Chapter 2.1.1.32

3.1.2.28 Top Align

Please refer to Chapter 2.1.1.33

3.1.2.29 Bottom Align

Please refer to Chapter 2.1.1.34

3.1.2.30 Align Same Width

Please refer to Chapter 2.1.1.35

3.1.2.31 Align Same Height

Please refer to Chapter 2.1.1.36

3.1.2.32 Vertical Center Align

Please refer to Chapter 2.1.1.38

3.1.2.33 Horizontal Center Align

Please refer to Chapter 2.1.1.37

3.1.2.34 Same Width Adjustment

 Change the width of the selected objects same as the standard object.

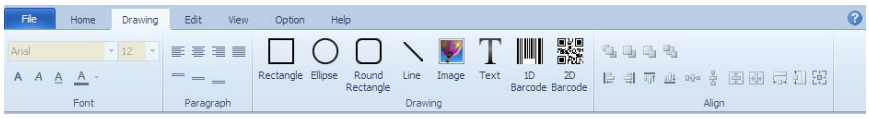
3.1.2.35 Same Height Adjustment

 Change the height of the selected objects same as the standard object.

3.1.2.36 Adjust Same Size

 Change the size of selected objects same as the standard object.

3.1.3 Edit tab



3.1.3.1 Undo

 Reverse the last command.

3.1.3.2 Redo

 Reverse the action of the “Undo” .

3.1.3.3 Paste

 Paste the cut or copied object.

3.1.3.4 Cut

 Remove the selection from the design and place it in the clipboard.

3.1.3.5 Copy

 Copy the selected object in the clipboard.

3.1.3.6 Select all

 Select all objects in active design.

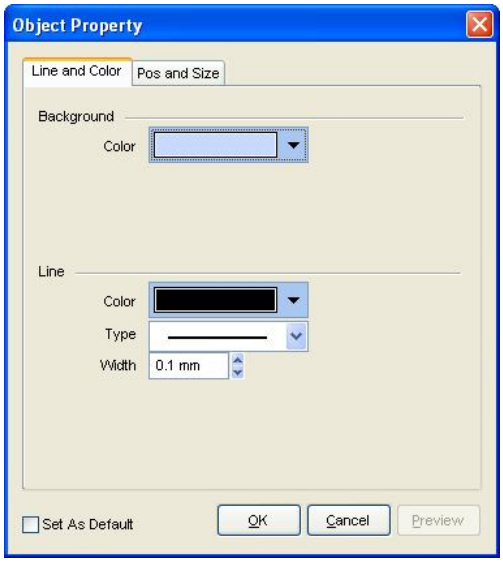
3.1.3.7 Delete

 Delete selected object.

3.1.3.8 Object Properties

 Double-click on the selected object or press Alt+Enter key. A window will appear. The contents of the object properties depend on the kind of selected object.

To apply background color, line color, line type and line thickness to the new object created from now on, click the “Set the properties to the new object” .

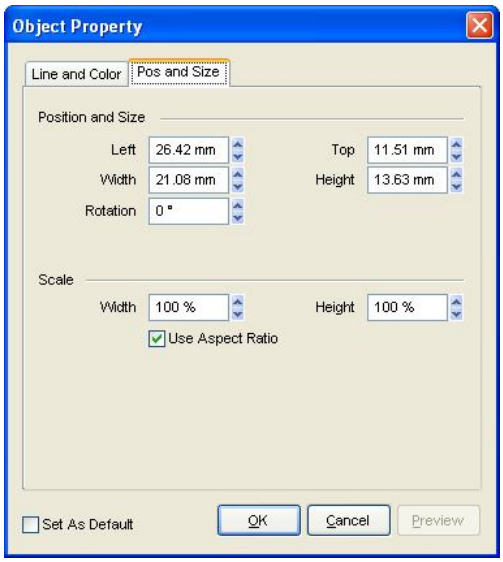


<Figure 25> Set as basic

In “Position and Size”, “Horizontal” and “Vertical” mean the distance from the left-top to the object. “Width” and “Height” mean the width and height of the object.

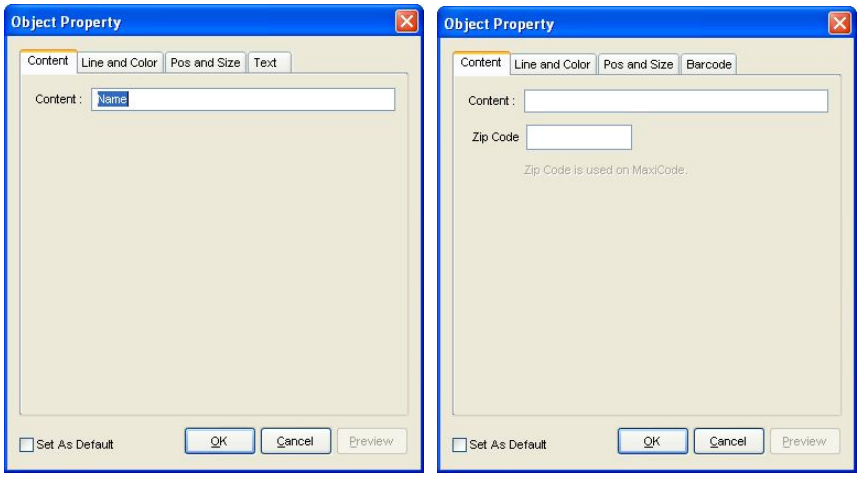
In “Ratio”, “Width” and “Height” are 100% at first because this property lets current object ratio 100% and can change ratio.

Checking “Fix the Ratio of Width and Height” keeps the same ratio. If you change the width, Smart Design would change the height automatically with same rate.



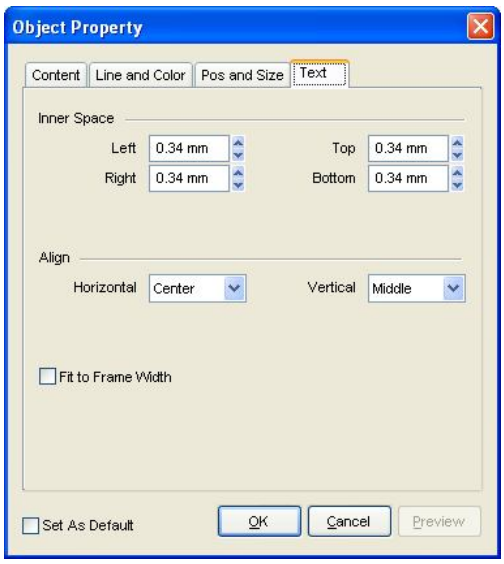
<Figure 26> Object Properties - Size

In “Content Tab”, the text or barcode can be changed directly.

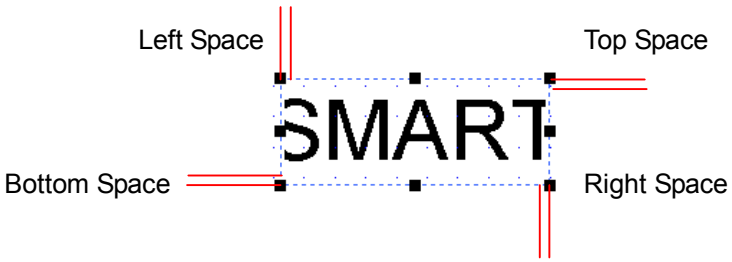


<Figure 27> Object Properties - Content

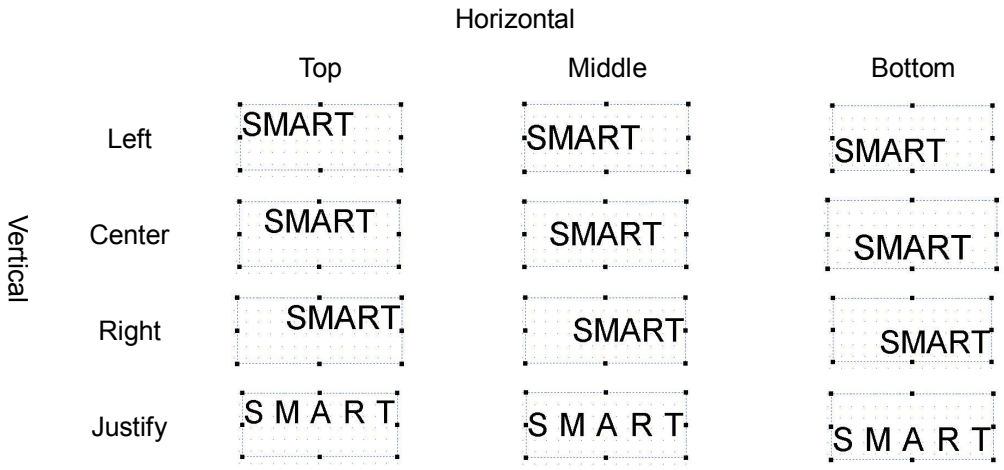
“Text Tab” appears when all selected objects are text ones. In “Inside Space”, you can control the size of spaces between the text and edge line of the text objects.



<Figure 28> Object Properties - Text



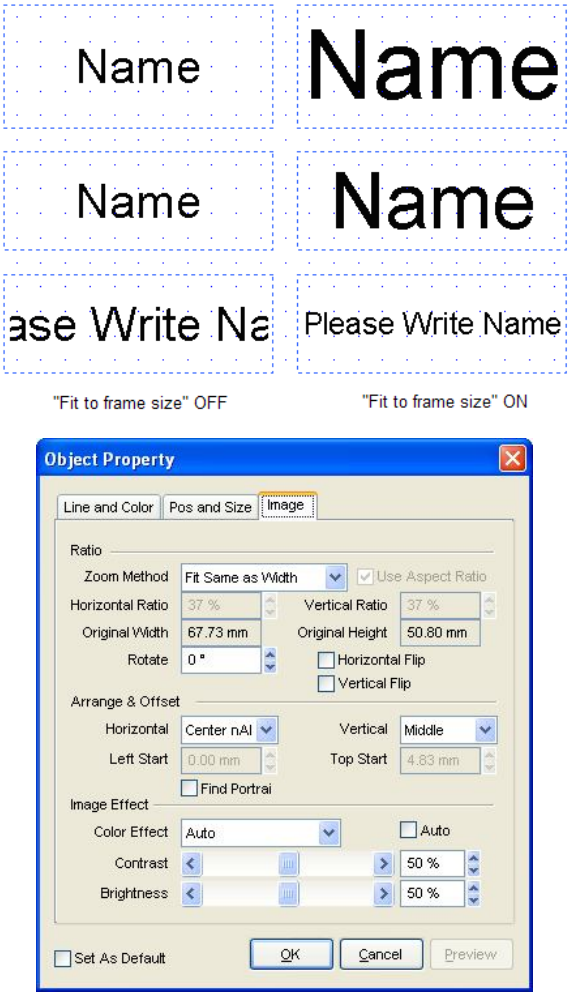
You can set the standard of text position in the frame with “Alignment” function. The ways of alignment are following.



<Figure 29> Each case of Align in Text Object

“Fit to frame size”

if the text is long enough to over the frame, “ Fit to frame size “ automatically change the text size and font to fit to do not cut it off. If the text is shorter to fit the frame, it will automatically increase the size of text.



<Figure 30> Image Object Properties

In “Image Tab”, we can control the value of the image properties. “Enlargement Method” in “Ratio” sets the rule of enlargement or decrease image in the frame.

A. Fit same as width

The width of image becomes the same as the width of frame maintaining current ratio of width and height of the original image.

B. Fit same as height

The height of image becomes the same as the height of frame maintaining current ratio of width and height of the original image.

C. Fit size same as box size

The width and height of image become the same as the width and height of frame. The ratio of the width and height of the original image is ignored.

D. User Setting

You can set the ratio of the width and height of the image without consideration of the ratio of image and frame.

In user setting, “Horizontal Ratio”, “Vertical Ratio” are in active. You can change each value. If “Use aspect ratio” is checked, width and height will be changed at the same rate.

“Original Width” and “Original Height” represent the size of the original image. They will be used for references to change ratio.

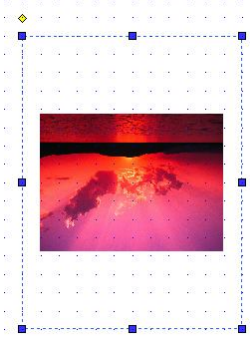
You can rotate the image with “Rotate”. The unit for rotation is 90 degrees.

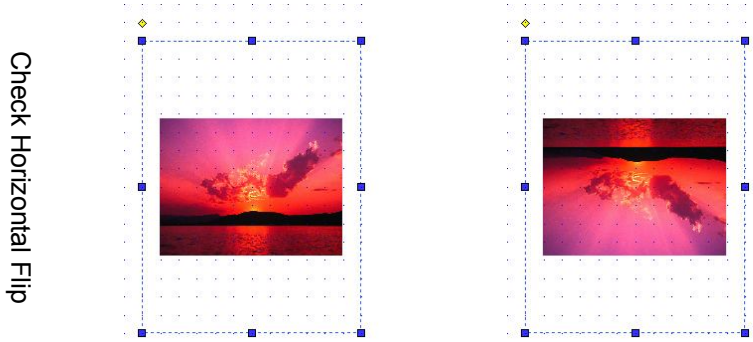
“Horizontal Flip” reverses the image right and left, and “Vertical Flip” turns image upside down.

Cancel Vertical Flip

Check Vertical Flip

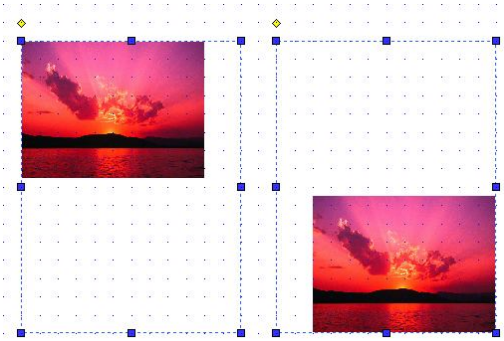
Cancel Horizontal Flip





<Figure 31> Image Object - Flip

In “Alignment and Offset”, “Horizontal Alignment” and “Vertical Alignment” set the place of the image in the frame.

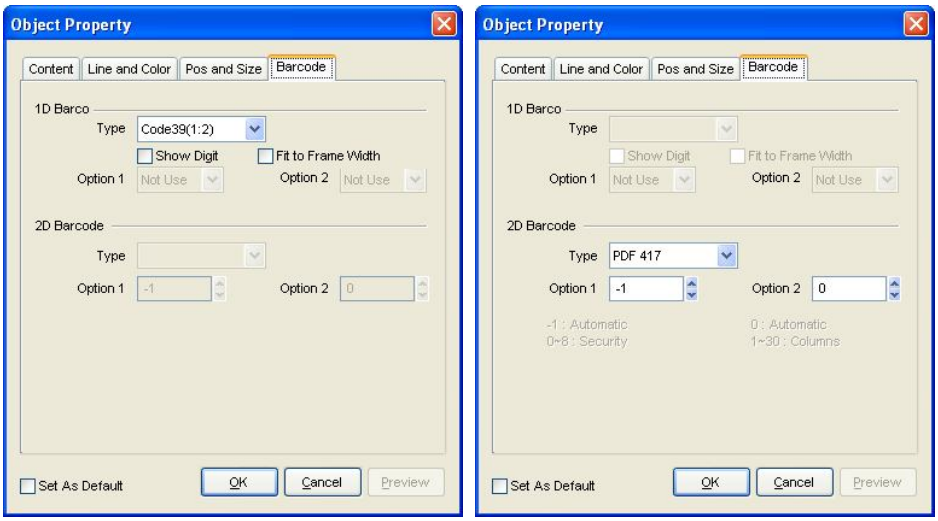


<Figure 32> Image Object - Align

“Image Effect” sets color, contrast and brightness of image
“Color” sets the color of image. “Auto” keeps the original color of image. “Gray” removes colors in the original image, and changes it gray tone.

“Contrast” controls the contrast light and shade. 50% is the same status as original image. The rate is available from 0 to 100 percent. You can change the value with scroll bar or direct entry.

“Brightness” controls the degree of brightness. 50% is the same status as original image. The rate is available from 0 to 100 percent. You can change the value with scroll bar or direct entry.



<Figure 33> Barcode Object Properties

In “Barcode Tab” you can change the properties of barcode objects.

“Type” shows the type of the barcode.

Checking “Show Digit” shows the number at the bottom of the barcode.

<Figure 34> Barcode Object – Show Digit

If “Fit to Frame size” is checked, it will automatically change the barcode size to fit to frame size.

3.1.3.9 Contrast Up

 Contrast up to the selected image object.

3.1.3.10 Sharply Contrast Up

 Sharply Contrast up to the selected image object.

3.1.3.11 Contrast Down

 Contrast down to the selected image object.

3.1.3.12 Sharply Contrast Down

 Sharply Contrast down to the selected image object.

3.1.3.13 Brightness Up

 Brightness up to the selected image object.

3.1.3.14 Sharply Brightness Up

 Sharply Brightness up to the selected image object.

3.1.3.15 Brightness Down

 Brightness down to the selected image object.

3.1.3.16 Sharply Brightness Down

 Sharply Brightness down to the selected image object.

3.1.3.17 Zoom In

 Zoom in the image.

3.1.3.18 Sharply Zoom In

 Sharply zoom in the image.

3.1.3.19 Zoom Out

 Zoom out the image.

3.1.3.20 Sharply Zoom Out

 Sharply zoom out the image.

3.1.3.21 Move Left

 Move the image to the left direction.

3.1.3.22 Sharply Move Left

 Sharply move the image to the left direction.

3.1.3.23 Move Right

 Move the image to the right direction.

3.1.3.24 Sharply Move Right

 Sharply move the image to the right direction.

3.1.3.25 Move Up

 Move the image to the upper direction.

3.1.3.26 Sharply Move Up

 Sharply move the image to the upper direction.

3.1.3.27 Move Down

 Move the image to the down direction.

3.1.3.28 Sharply Move Down

 Sharply move the image to the down direction.

3.1.3.29 Set as Color Panel

Please refer to Chapter 2.1.1.45

3.1.3.30 Set as Black Panel

Please refer to Chapter 2.1.1.46

3.1.3.31 Set as Overlay Panel

Please refer to Chapter 2.1.1.47

3.1.3.32 Set as Rewritable Panel

Please refer to Chapter 2.1.1.48

3.1.3.33 Set as Fluorescent Panel

Please refer to Chapter 2.1.1.49

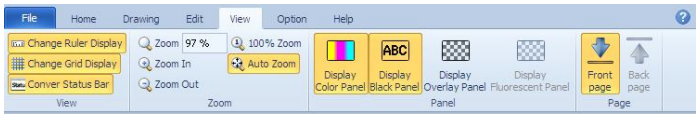
3.1.3.34 Invert Overlay Panel

Please refer to Chapter 2.1.1.55

3.1.3.35 Invert Fluorescent Panel

Please refer to Chapter 2.1.1.56

3.1.4 View Tap



3.1.4.1 Change Ruler Display

 Select whether the display of Ruler or not.

3.1.4.2 Change Grid Display

 Select whether the display of Grid dot is shown or not.

3.1.4.3 Convert Status Bar

 Select whether the status bar is shown or not. Status bar shows the information of position of mouse cursor and explanation of ribbon bar.

 : Consider all the selected objects as one. Display the starting point in unit of millimeter.

 : Consider all the selected objects as one. Display the width and height in unit of millimeter.

 : Display the current point of mouse cursor in unit of millimeter.

3.1.4.4 Zoom

 Show the card size you input.

3.1.4.5 Zoom In

 Zoom in the card layout.

3.1.4.6 Zoom Out

 Zoom out the card layout.

3.1.4.7 100% Zoom

 Show the original size design.

3.1.4.8 Auto Zoom

 Fit the size of design panel to the window. As the window size changes, the rate of “Zoon In/Out” will be changed automatically.

3.1.4.9 Display Color Panel

 You can see all objects which are set as color panel.

3.1.4.10 Display Black Panel

You can see all objects which are set as black panel.

3.1.4.11 Display Overlay Panel

 All overlay panels can be seen. The overlaid area will be displayed darker than not overlaid area.

3.1.4.12 Display Rewritable Panel

 The object display on the screen is chosen by re-writable panel. If select the re-writable object display that represents part will be erased by dark. This icon will appear instead of overlay panel icon if the printer is re-writable printer.

3.1.4.13 Display Fluorescent Panel

 All fluorescent panels can be seen. The fluoresced area will be displayed more blue printed than not fluoresced area.

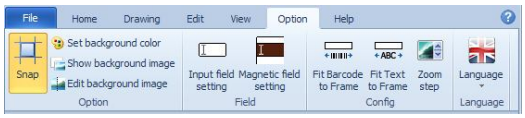
3.1.4.14 Front Page

 Please refer to Chapter 2.1.1.57

3.1.4.15 Back Page

Please refer to Chapter 2.1.1.58

3.1.5 Option Tab



3.1.5.1 Snap

Make cursor move at regular interval.

3.1.5.2 Set background color

Select the default color for background. Different colors are available for the front and back sides.

3.1.5.3 Show background image

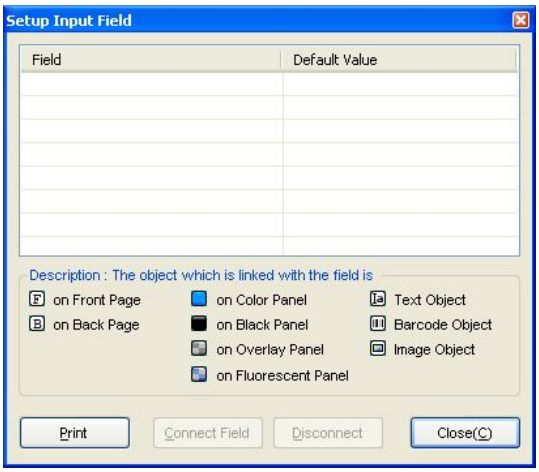
Click to print or not background image.

3.1.5.4 Edit background image

Edit the background image. To change from background image editing mode to normal editing mode, click “Edit Background Image” again, or click outside of background image. Only one image for one side is available and it could be printed.

3.1.5.5 Input field setting

This function is used for mass issuing like membership cards, student ID cards and national ID cards, etc. If you click this button, “Setup Input Field” window is displayed.

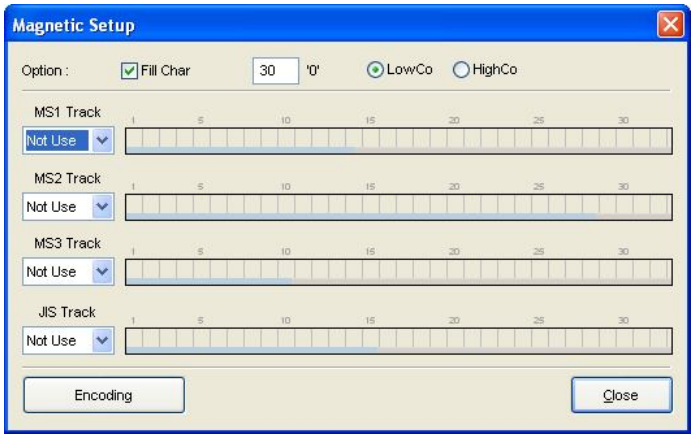


<Figure 35> Setup Input Field

For further information, please refer to Chapter 4.2.

3.1.5.6 Magnetic field setting

Set the field to encode Magnetic Stripe. If you click this button, “Magnetic Setup” window is displayed.



<Figure 36> Setup Magnetic Fields

For further information, please refer to Chapter 3.1.

3.1.5.7 Fit Barcode to Frame

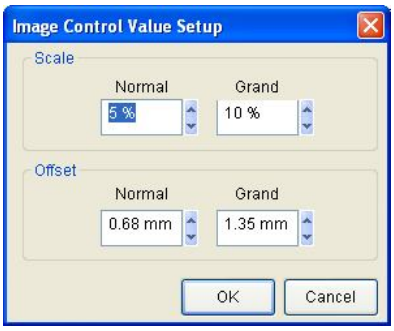
If you click this button, it will automatically change the barcode size to fit to frame size.

3.1.5.8 Fit Text to Frame

If you click this button, it will automatically change the text size to fit to frame size.

3.1.5.9 Zoom step

 Set the change ratio for the image zoom up / down or image movement.

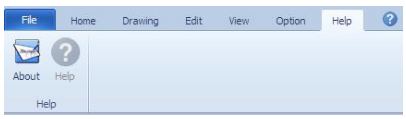


<Figure 37> Setup Image Control Value

3.1.5.10 Language

 Change language to use.

3.1.6 Help Tab



3.1.6.1 About

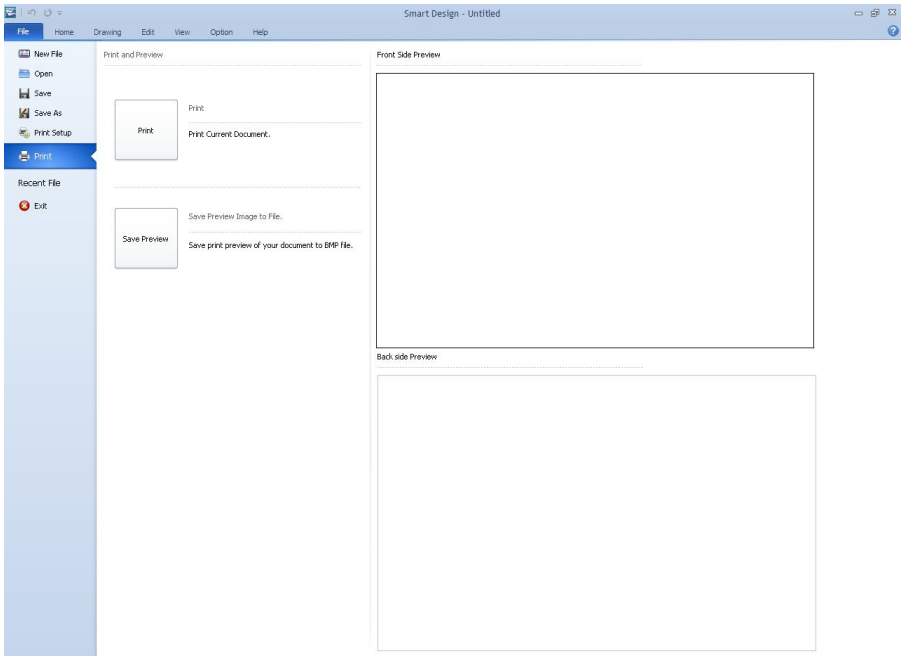
 Introduce program version, information etc.

<Figure 38> About Smart Design

3.1.6.2 Help

 This Smart Design user manual will be open.

3.1.2 File Tab



3.1.7.1 New File

 Start a new design.

3.1.7.2 Open

 Open or find a file.

3.1.7.3 Save

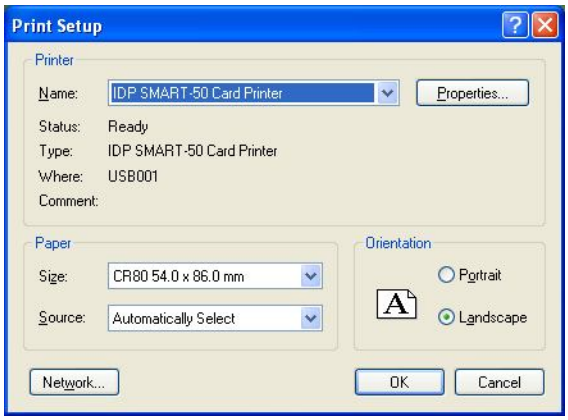
 Save the active file.

3.1.7.4 Save As

 Save the active file with new name.

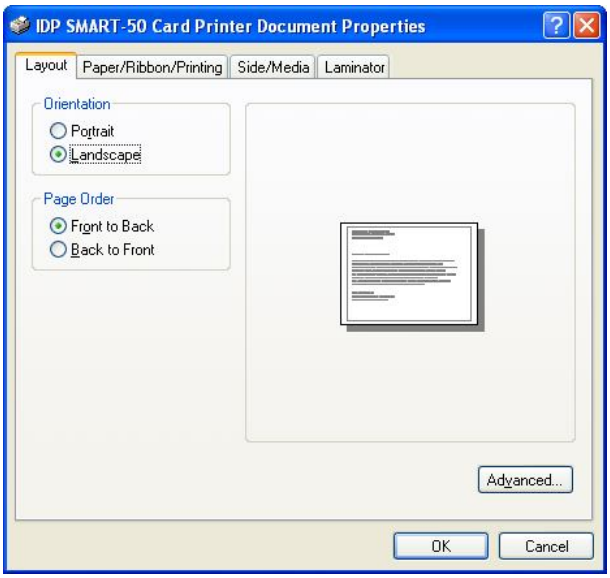
3.1.7.5 Print Setup

 Set up the properties for printing such as printing direction, ribbon option, etc.

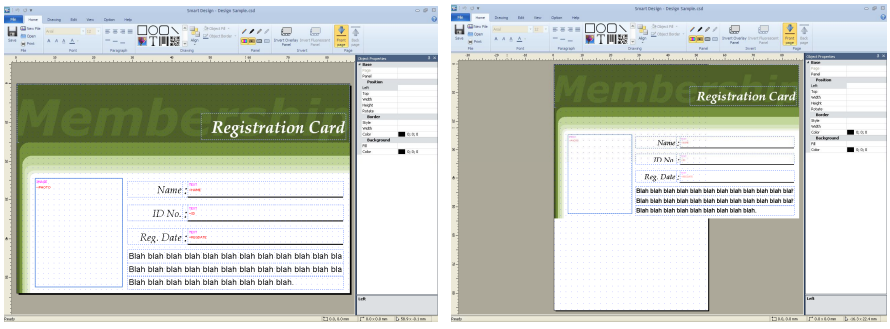


<Figure 39> Print Setting

You can change the printing direction to horizontal or vertical.



<Figure 40> Printing Layout Change

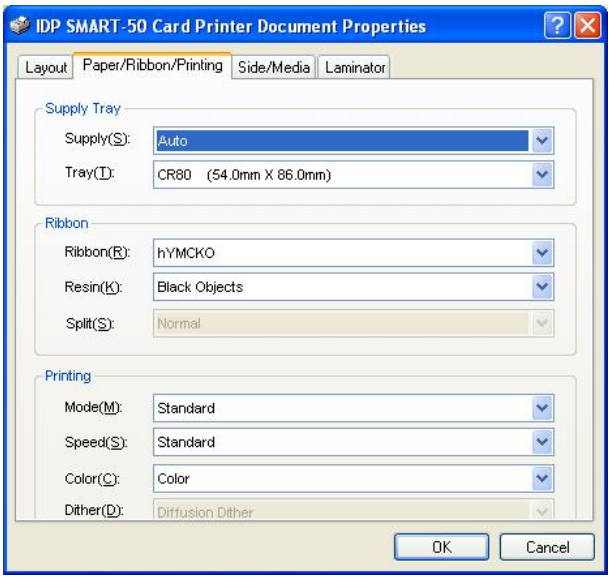


<Figure 41> Printing Direction Setting

Caution: It may place the active design out of the printing area if you change direction.

Click “Properties” to change the printer driver option.

Click “Advanced” for detail setting of printer. We don’t recommend to use this menu because it may cause some printing errors. “Horizontal” and “Vertical” mean printing direction. They carry out the same function of the “Direction” in “Printer Option” commented just above.



<Figure 42> Paper/Ribbon/Quality Setting

"Paper Tray" is the option for blank cards. "Paper" sets up the way to supply blank cards. Default value is "Auto." Smart Card Printer supports only CR-80 size cards.

"Ribbon" sets up the kind of ribbon film in printer.

YMC.K.O	- Ribbons with YMC. K. and O films will be printed on the front side only.
YMC.K.O.K	- Ribbons with YMC, K, and O films will be printed on the front side while K will be printed on the back side.
Half YMC.K.O	- Ribbons with half panel YMC, and full panel K,O films will be printed on the front side only.
K.O	- Ribbons with resin black K, and O films will be printed on the front side only.
K(mono)	- Ribbons with black K films will be printed on the front side only.
B.O	- Ribbons with dye black B, and O films will be printed on the front side only.
B	- Ribbons with dye black B films will be printed on the front side only.
B.YMC.K.O	- The Ribbon consists of adjustable dye Black (B), Color (YMC), resin Black (K), Overlay (O) film. It is for one side color printer ribbon.
YMC.K.F.O	- The Ribbon consists of Color (YMC), Black (K), Fluorescent (F), and Overlay (O) films. It is for one side color printer ribbon
Rewritable	- The printer is rewritable printer. It does not use ribbon.

If you set up this case, It will infect to design front and back, color black, overlay and

fluorescent panel set up.

“Resin” sets up the way to extract black from the data transmitted to printer.

Black Objects	- Black Circle, lines, polygons and black shape can be extracted and they will be printed by black ribbon
Black Texts	- Black text can be extracted and they will be printed by black ribbon
Black Dots	- Black dot can be extracted and they will be printed by black ribbon
Not Use	- No black extraction.

“Split” option decides to separate part of panel to the next page.

Normal	- No Split.
Split for Backside	- You can set the both sides (Front:YMCO, Back:K) to save color ribbon(YMCKO, HYMCKO, BYMCKO). It is only activated while printing both sides option is set.

“Mode” option set printing mode.

Standard.	- Default print mode. Print all area.
Partial	- Partial print mode. It is printed partially for the print area only. Printing speed can

be faster than standard mode.

“Speed” option set printing speed and quality.

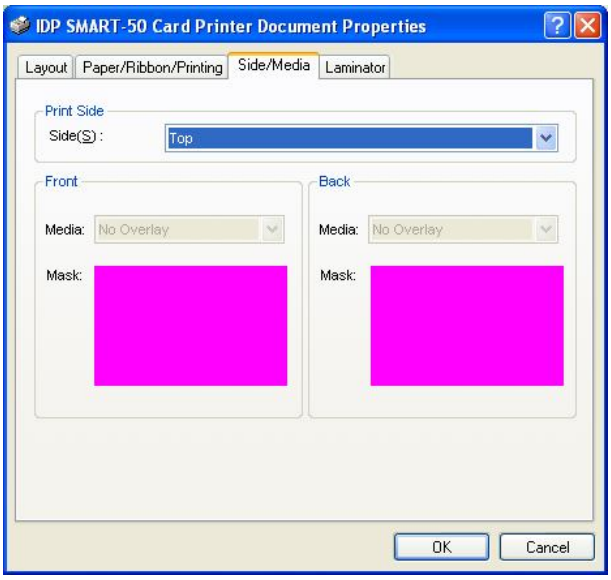
Standard	- Default print mode and best quality setting option of printing.
High	- Fast print mode. This option can be used with only K and KO ribbon. Printing quality might be lower than Standard.

“Color” option set up to output color.

Color.	- It can print color and black & white data. (“Color” option is available only with color ribbon.).
Black & White	- It can change color data to black & white data. Dither option set up color data to Black & White.

“Dither” option set up dither method.

There are 3 possible selections, Threshold, Random, and Diffusion Dither. It is performed with K and KO ribbon only. (Please select “Diffusion Dither” for high quality.)



<Figure 43> Printing Side Setting

"Side" option set up to print backside.

Front - Print only front side. If the ribbon installed is YMCKOK, the final K is skipped.

Both(Front + Back) - Print both sides. If the ribbon installed is YMCKO, both sides will be printed with color. If the ribbon installed is YMCKOK, front side will be printed with color and back side will be printed with black (K panel).

"Media" shows the kinds of card used in printing. The card type what you have chosen will fix the printing area.

Standard - Normal white card. Print the whole card area.

Smart Card - Smart card. Print except smart chip area.

Smart Card[right only] - Smart card. Print the right area from the smart chip.

ISO MS(Magnetic Stripe) - Magnetic stripe card. Print except ISO standard magnetic stripe area.

JIS MS(Magnetic Stripe) - Magnetic stripe card. Print except JIS standard magnetic stripe area.

Smart Card + ISO MS - Complex card of smart and magnetic stripe card. Print except smart chip and ISO standard magnetic stripe area.

Smart Card + JIS MS - Complex card of smart and JIS magnetic stripe card. Print except smart chip and JIS standard magnetic stripe area.

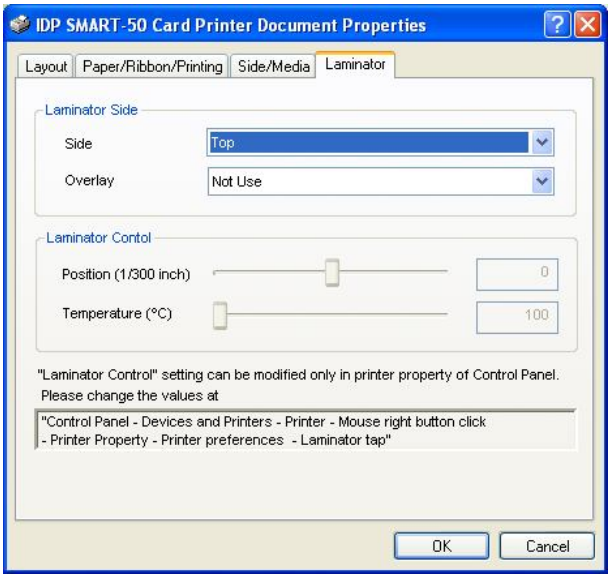
No Overlay - It will be printed except overlay.

User Defined Card - User defines the printing area.

“Edge” has following options.

Not Use - Don’t print the edge of card. Printing area becomes slightly smaller.

Use - Print to the edge of card.



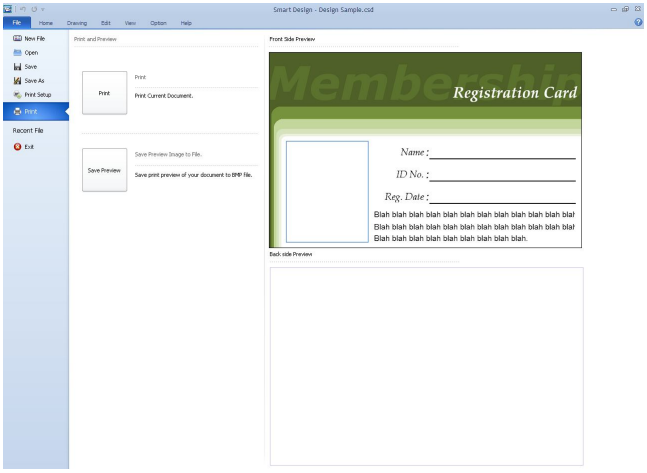
<Figure 44> Laminating Side Setting

If the printer with laminator is connected, “Laminator” tab is displayed.

3.1.7.6 Print

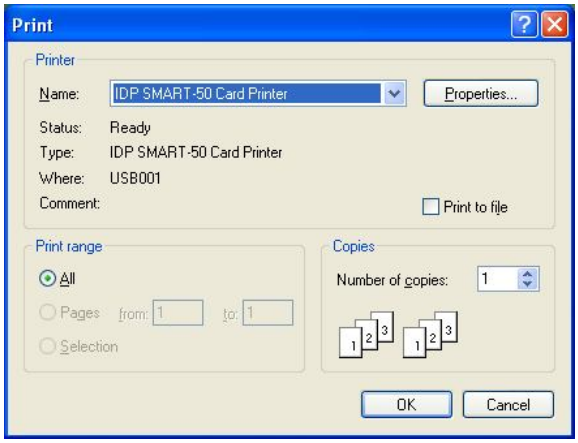
 Print the active design file or save Preview of design file to BMP file.

Click Print in File tab, the screen is changed as below.



<Figure 45> Print Preview

Print the active design. Click Print button, “Print” window is displayed.



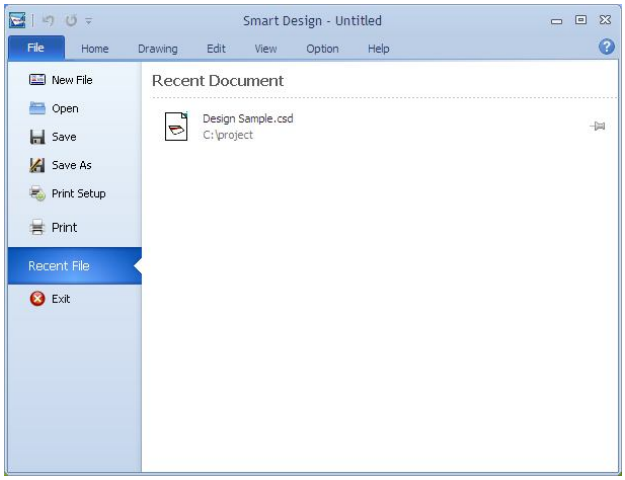
<Figure 46> Print – Select Printer

If you make some changes with “Properties”, they are affected only this time. If print direction is changed in “Properties”, Smart Design will change the design screen at the same time to prevent print error.

If you click Save Preview button, the preview image on the right section is saved as BMP file.

3.1.7.7 Recent file

Show the list of design files latest worked. As you click one of them, it would be opened.



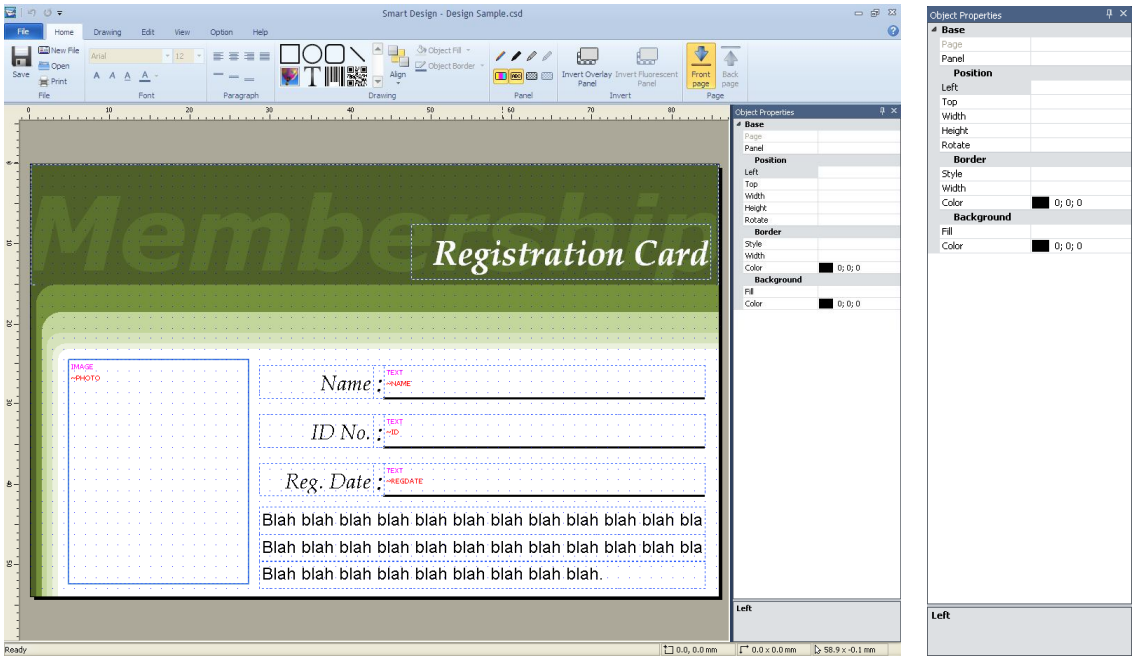
<Figure 47> Recent File

3.1.7.8 Exit

 Exit Smart Design.

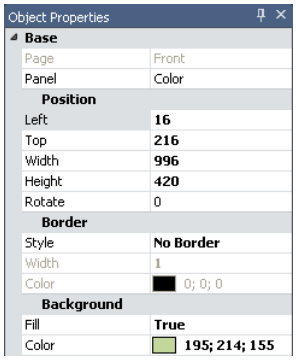
3.2 Properties Grid

Properties Grid is “Object Properties” window on the right side of main window. You can see and modify the properties of selected object.



<Figure 48> Properties Grid

3.2.1 Base Category



<Figure 49> Properties Grid – Base Category

It shows the information of position and color of object in Base Category. If several objects are selected and properties are different, the value is not displayed. If the value is modified in Properties Grid, selected objects are applied.

3.2.1.1 Page

It shows the page where selected object is. Read only.

3.2.1.2 Panel

It shows the panel which selected object is printed on.

3.2.1.3 Left

It means the distance from the left side of background to the object.

3.2.1.4 Top

It means the distance from the top side of background to the object.

3.2.1.5 Width

It means the width of the object.

3.2.1.6 Height

It means the Height of the object.

3.2.1.7 Rotate

It shows the value of angle of the object. Unit is 90 degrees. You can select the value among 0, 90, 180, 270 degrees.

3.2.1.8 Border – Style

It shows the line style selected.

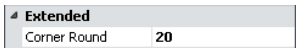
3.2.1.9 Border – Width

It shows the line width selected. If Style is “no border”, you can’t change the value.

3.2.1.10 Border – Color

It shows the line color selected. If Style is “no border”, you can’t change the value.

3.2.2 Extended Category – Rounded Rectangle



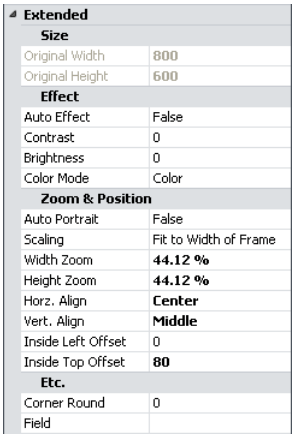
<Figure 50> Properties Grid – Extended Category – Round Rectangle Object

If the selected object is rounded rectangle, it shows the properties of rounded rectangle.

3.2.2.1 Corner Round

It shows the value of edge in Rounded Rectangle. Unit is % and range is 1~100. If the value if 0, object shape is rectangle. If the value is 100, the short part of width or height is rounded without line.

3.2.3 Extended Category – Image



<Figure 51> Properties Grid – Extended Category – Image Object

If the selected object is image, it shows the properties of image.

3.2.3.1 Original Width

It shows the width size of the original image. Read only.

3.2.3.2 Original Height

It shows the height size of the original image. Read only.

3.2.3.3 Auto Effect

It shows whether Auto Effect is applied or not. Auto Effect is the function to adjust the brightness and contrast in a picture automatically. If the value is true, brightness and contrast is adjusted properly. Default is false.

3.2.3.4 Contrast

It shows the value of Contrast. Range is -100 ~ 100. Default is 0. If the value is increased, image color changes primary color. If the value is decreased, image color changes gray color. If Auto Effect is True, this value is not applied. If you change this value when Auto Effect is True, the value is applied and Auto Effect changes False.

3.2.3.5 Brightness

It shows the value of Brightness. Range is -255 ~ 255. Default is 0. If the value is increased, image color changes white. If the value is decreased, image color changes black. If Auto Effect is True, this value is not applied. If you change this value when Auto Effect is True, the value is applied and Auto Effect changes False.

3.2.3.6 Color Mode

It shows the mode of color. You can select Color and Grayscale. Default is Color. If Auto Effect is True, this value is not applied. If you change this value when Auto Effect is True, the value is applied and Auto Effect changes False.

3.2.3.7 Auto Portrait

Auto Portrait is the function to find the face in the Image automatically.

If the value is true, the image is focused on the face and adjusted the size and position properly. Default is false.

3.2.3.8 Scaling

It shows the mode of zoom. If you set Auto Portrait, this value is changed to “User Set”. Default is “Fit to Width of Frame”. Please refer to Chapter 2.1.4.8 A.

3.2.3.9 Width Zoom

It shows the ratio of width of the image.

3.2.3.10 Height Zoom

It shows the ratio of height of the image.

3.2.3.11 Horz. Align

It shows the mode of Horizontal alignment. If this value is “Left”, image shows from the left side in the frame. If this value is “Right”, image shows from the right side in the frame. If this value is “Center”, image shows on the center in the frame. The value of “Inside Left Offset” depends on this value. Default is Center.

3.2.3.12 Vert. Align

It shows the mode of Vertical alignment. If this value is “Top”, image shows from the top side in the frame. If this value is “Bottom”, image shows from the bottom in the frame. If this value is “Middle”, image shows on the middle in the frame. The value of “Inside Top Offset” depends on this value. Default is Middle.

3.2.3.13 Inside Left Offset

It means the left offset value of start position of image in the frame.

3.2.3.14 Inside Top Offset

It means the top offset value of start position of image in the frame.

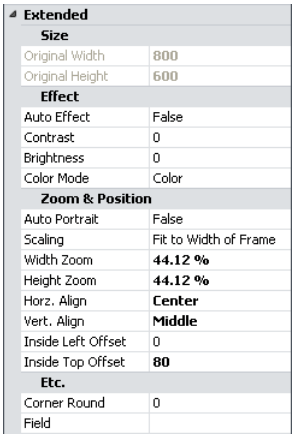
3.2.3.15 Corner Round

It shows the value of edge in image. Unit is % and range is 1~100. If the value if 0, object shape is rectangle. If the value is 100, the short part of width or height is rounded without line.

3.2.3.16 Field

It shows the field connected to image. If field is already connected to other text or barcode when the field is changed, you can't connect that field.

3.2.4 Extended Category – Text



<Figure 52> Properties Grid – Extended Category – Text Object

If the selected object is text, it shows the properties of text.

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3.2.4.1 Inner Left Space

It shows the value of inner left space of text in the frame.

For further information, please refer to 2.1.4.8

3.2.4.2 Inner Top Space

It shows the value of inner top space of text in the frame.

For further information, please refer to 2.1.4.8

3.2.4.3 Inner Right Space

It shows the value of inner right space of text in the frame.

For further information, please refer to 2.1.4.8

3.2.4.4 Inner Bottom Space

It shows the value of inner bottom space of text in the frame.

For further information, please refer to 2.1.4.8

3.2.4.5 Horz. Align

It shows the mode of Horizontal alignment. If this value is "Left", text shows from the left side in the frame. If this value is "Right", text shows from the right side in the frame. If this value is "Center", text shows on the center in the frame. If this value is "Justify", text shows on the same distance between the characters. Default is Center.

3.2.4.6 Vert. Align

It shows the mode of Vertical alignment. If this value is “Top”, text shows from the top side in the frame. If this value is “Bottom”, text shows from the bottom in the frame. If this value is “Middle”, text shows on the middle in the frame. Default is Middle.

3.2.4.7 Auto Size

It shows whether Auto Size is applied or not. If this value is True, text size will automatically change the size to fit to frame size.

3.2.4.8 Font

It shows the font type, style and size of text.

3.2.4.9 Color

It shows the font color of text.

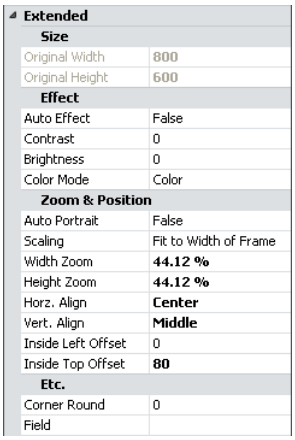
3.2.4.10 Text

It shows the content of text.

3.2.4.11 Field

It shows the field connected to text. If field is already connected to other image when the field is changed, you can’t connect that field.

3.2.5 Extended Category – Barcode



<Figure 53> Properties Grid – Extended Category – Barcode Object

If the selected object is barcode, it shows the properties of barcode.

3.2.5.1 Type

It shows the type of barcode. If the barcode is 1D type, you can’t change 2D barcode type. If the barcode is 2D type, you can’t change 1D barcode type.

3.2.5.2 Size

It shows the size of barcode.

3.2.5.3 Color

It shows the color of barcode.

3.2.5.4 Parameter 1

It shows the value of “option 1” if the barcode type is 2D. It is inactivated if the barcode type is 1D. This means of value depends on 2D barcode type.

3.2.5.5 Parameter 2

It shows the value of “option 2” if the barcode type is 2D. It is inactivated if the barcode type is 1D. This means of value depends on 2D barcode type.

3.2.5.6 Show Digit

It shows whether text of barcode is shown or not. It is inactivated if the barcode type is 2D. If the value is changed to “Show”, text is displayed on the bottom of barcode.

3.2.5.7 Auto Size

It shows whether Auto Size is applied or not. If this value is True, barcode size will automatically change the size to fit to frame size.

3.2.5.8 Start Code

It shows the “Start Code” if the barcode type is Codabar. It is inactivated if the barcode type is not Codabar.

3.2.5.9 Stop Code

It shows the “Stop Code” if the barcode type is Codabar. It is inactivated if the barcode type is not Codabar.

3.2.5.10 Data

It shows the data of barcode.

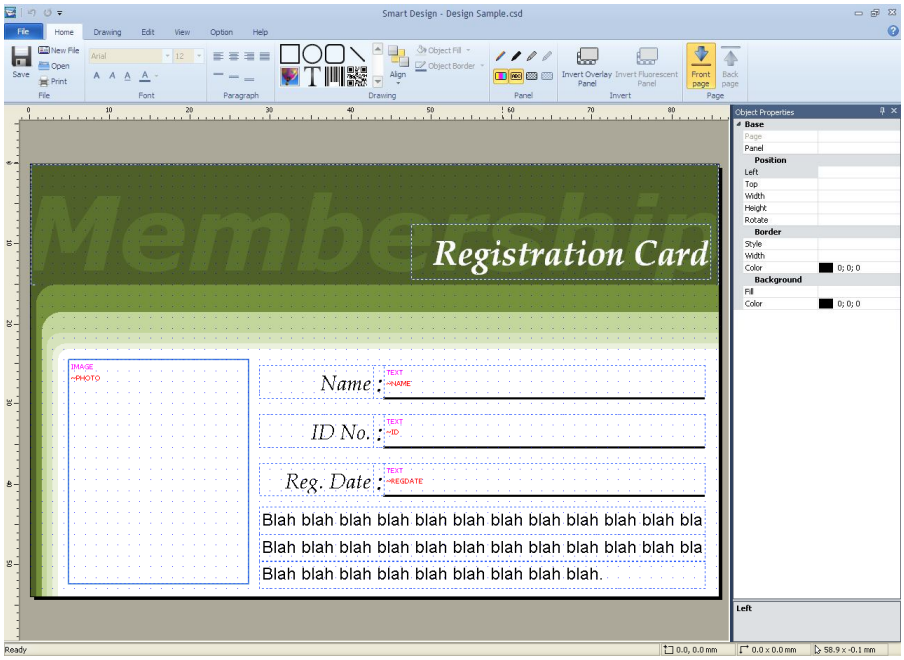
3.2.5.11 Zip Code

It shows the zip code if the barcode type is Maxicode. Max size is 15 characters.

3.2.5.12 Field

It shows the field connected to barcode. If field is already connected to other image when the field is changed, you can’t connect that field.

3.3 Drawing Area and Etc.



<Figure 54> Drawing Area

3.3.1 Drawing Area

3.3.1.1 Selection Mode

1. Object selection

1) Direct selection

Move the cursor to the object and click when cursor is changed to .

2) All selection

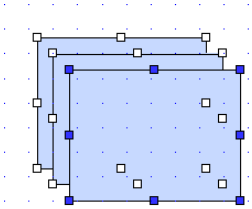
Drag the cursor with pressing the left button of the mouse from one point to the other point. All the objects in this area will be selected.

3) Using “Mouse and Shift key”

Click any object what you want to select with pressing Shift key

※ Standard object

If you select more than one object, the colored dot outline as below will be the standard object for the movement, size adjustment and etc.



<Figure 55> Standard Object

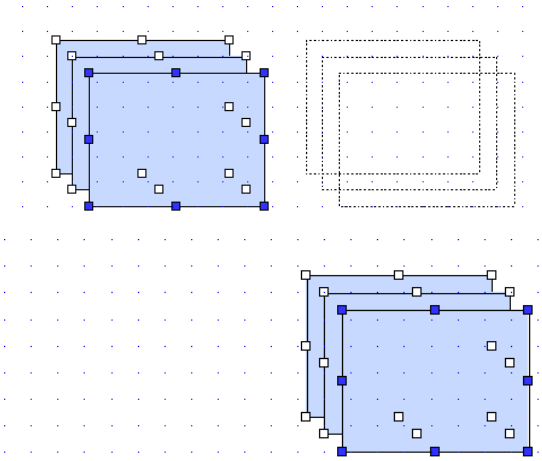
2. Movement of selected object

   1) Using “Mouse”

      Put cursor on the object which you want to move and press left mouse button and drag.

   2) Using “ Mouse and arrow key”

      Select object and press the arrow key



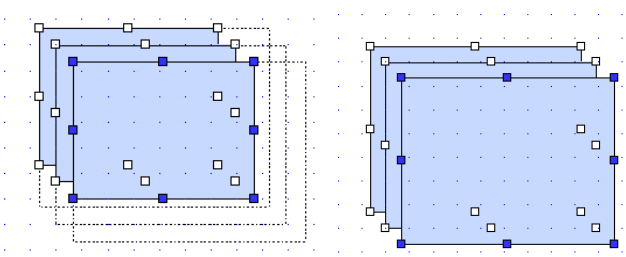
<Figure 56> Move Objects

3. Size adjustment of the selected object

   1) To change the object size, select the related object. ➔ When put the cursor near the edge of the object, the cursor changes to ⤢ ⤡ ↔ ↕ . ➔ Press the left mouse button and drag the mouse. You can adjust the object size.

   2) If you adjust with “Mouse and Shift key”, the width and length will be changed at the same ratio.

   3) With “Ctrl” key, object is changed focusing to the center.



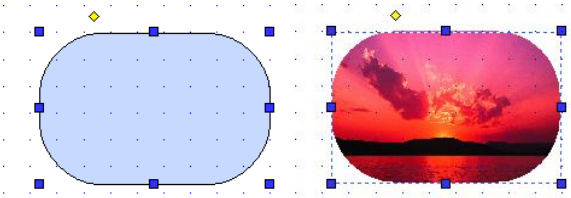
<Figure 57> Resize Objects

4. Copy the selected object using ”Mouse and Keyboard”

   To copy the object, drag it with pressing “Ctrl” key.

5. To make round shape

   In case the selected objects are rectangle, rounded rectangle or image object, there will be displayed the yellow diamond mark. This is control point. Put cursor on diamond, click left mouse button and move it left and right side. The round shape will be changed.



<Figure 58> Change Corner Rounding

3.3.1.2 Drawing Mode

When you select Drawing tool, Mode is changed.

Cursor is changed to ┼ .

3.3.2 Ruler

It shows the position of selected object and cursor.

You can show and hide “Change Ruler Display” button in View tab.

3.3.3 Status bar

It shows the explanation of ribbon bar in the position of cursor and coordinates of cursor.

: Consider all the selected objects as one. Display the starting point in unit of millimeter.

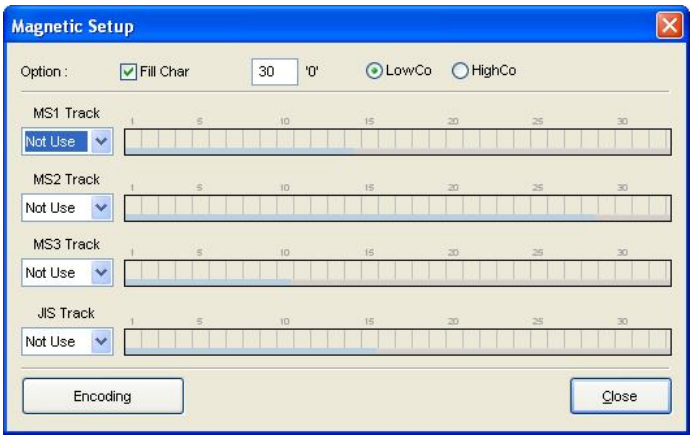
: Consider all the selected objects as one. Display the width and height in unit of millimeter.

: Display the current point of mouse cursor in unit of millimeter.

4 Professional Function

4.1 Encode in Magnetic stripe

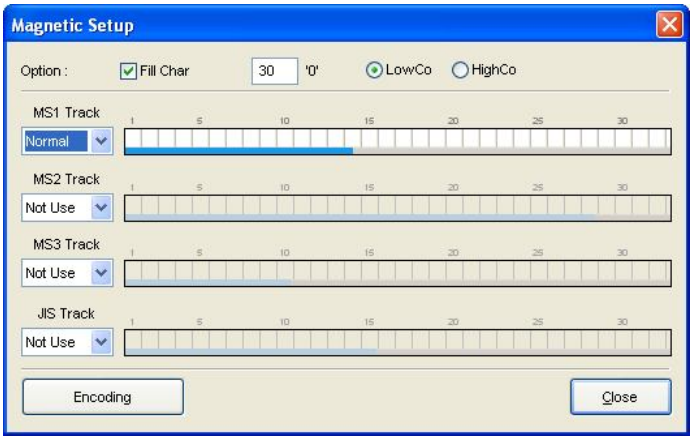
Enter information in magnetic track.



<Figure 59> Magnetic stripe Setting

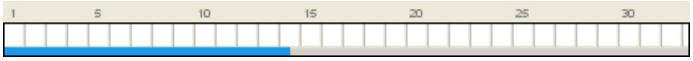
Select one option among “Normal”, “Reverse”, “Bit mode”.

In “Normal” mode, the data is recorded in magnetic stripe along with the card movement direction. It’s usual recording method. In “Reverse” mode, Magnetic stripe is on the front of card so that the data is recorded in reverse. In “Bit Mode”, magnetic encoding data would be recorded with bit format. To encode in Bit mode, the user can write specific data and it does not follow the standard of magnetic writing. Therefore, when the card encoded in Bit mode is read by reader, errors can be occurred.



<Figure 60> Magnetic Setting - Normal

Select “Normal” in “MS1” track to use magnetic track No.1.

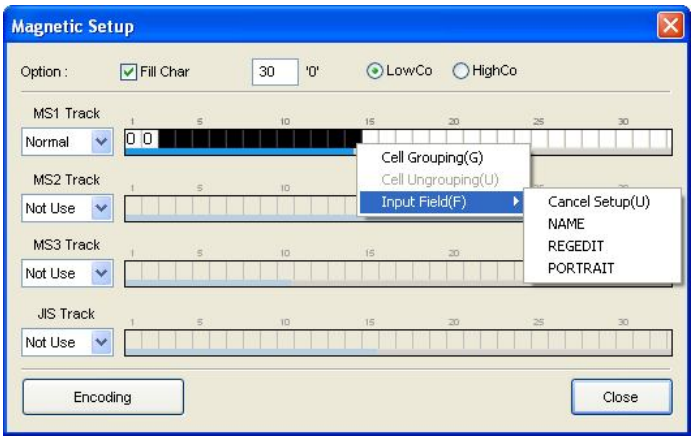


<Figure 61> Input Area of Magnetic Track

The white cells are the spaces for entering data. The blue bar at the bottom is scroll bar.

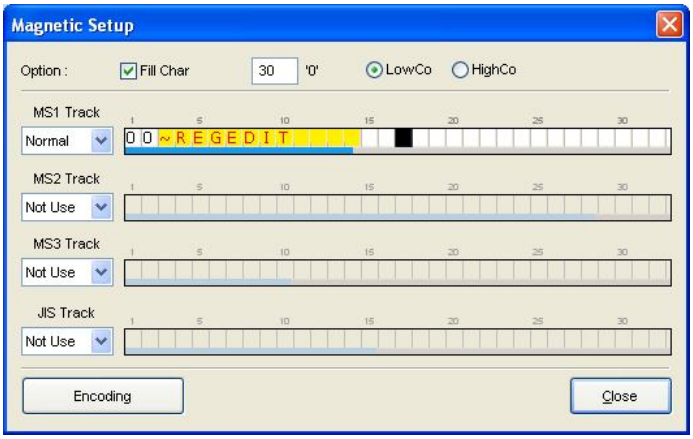
Black cell in the entering space is the active one. With keyboard, characters are entered in the cell. To link between magnetic track and field, select areas to enter value of the field by mouse drag and then

click right button for pop-up menu.



<Figure 62> Magnetic Setting – Cell Group

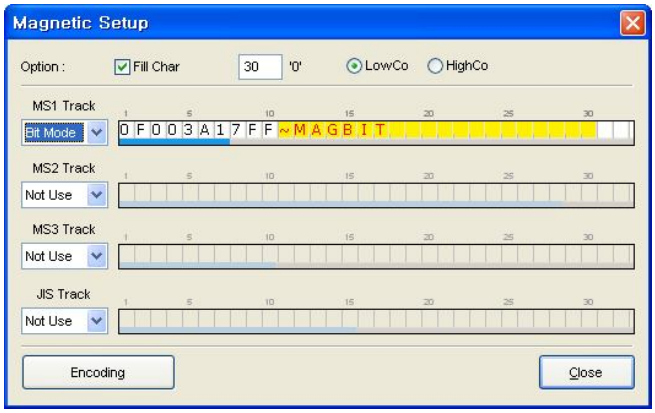
There is the list of current fields in the sub-menu of “Input Field”. The selected cells are defined the area of selected field as you select one of the fields.



<Figure 63> Magnetic Setting - Input

To cancel the link, click right button for pop up menu, and click “Cancel Setup” or select cell and click “Delete” key.

To encode in Bit mode, set the track as Bit mode. If the track is set to Bit mode, the track information of previous normal status is back-up and input field is changed to Bit mode field. In Bit mode, the user can input data as Hex-Decimal String and the field can be connected to “Input Field” and the data in Input field should be written as Hex-Decimal string, as well.



<Figure 64> Magnetic Setting – Cell Group

This can be also applied to the other magnetic tracks.

4.2 Continuous issuing (Mass issuing)

4.2.1 Usage

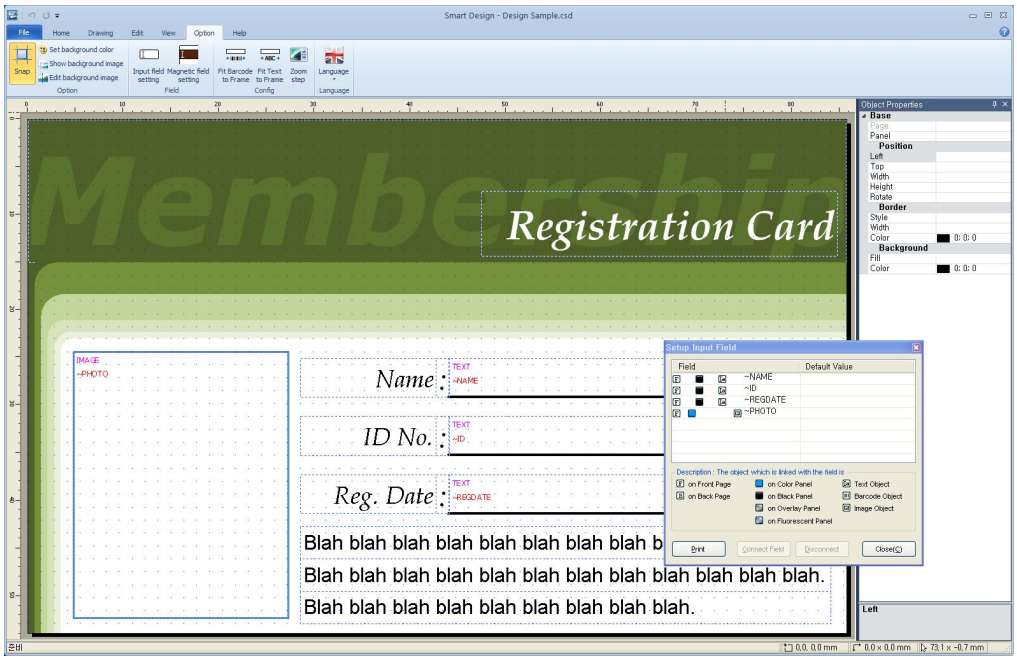
This function is used for mass issuing like membership cards, student ID cards and national ID cards, etc.

① Design basic cards form with Smart Design → ② Change name, picture, number, etc. → ③ Check each cards information is correct → ④ Start to mass printing

* You can import from or export to the Microsoft Excel, Microsoft Access and ODBC by using Smart DB. Please refer to the Smart DB User Manual.

4.2.2 Field creation, add, delete

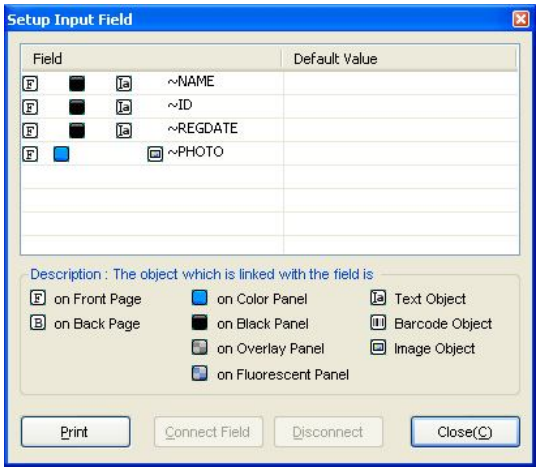
At first, design the card what you want to print with Smart Design.



<Figure 65> Document for Mass Issuing

Click : Ribbon bar → Option tab → “Input field Setting”

Input field management window appears.



<Figure 66> Input Field Setting

To set input field name, open input field at first and enter the field name. Field name is capital letters always. After creating field name, double click the next column. In default Value column, enter subject, then click “Close” button. You have set basic field name.

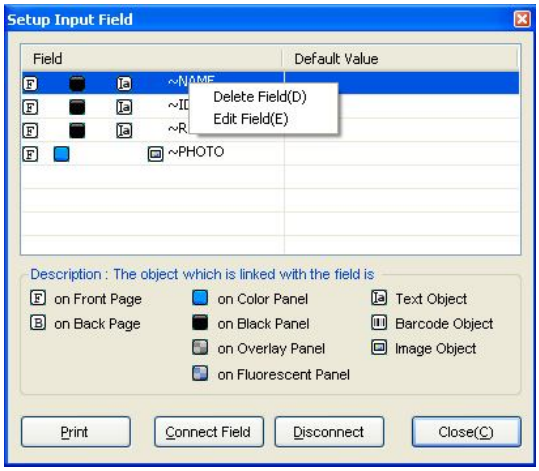
After field is created, field and object should be linked. All objects such as text, image, barcode and magnetic track are available to link with field. Select a field in the field list and an object on the screen. Click “Connect field” to make connection between the field and the object. Then, the default value of the field is applied to the object.

Fields linked with text object and barcode object cannot be linked to image object. Because there should be image file name in the image objects. For the same reason, fields linked with image objects cannot be linked with text or barcode objects.

When image object is linked to field, “File Search” button is created in the default value column. Double click to enter the whole file path or click “Search” button to select image file.

Click “Disconnect” to disconnect link between field and objects.

To delete or edit field, select the field and click right button. Two options will be shown.



<Figure 67> Delete or Revise Input Field

Click “Delete Field” to remove all link information about the selected field.
Click “Edit Field” to change the value of the field. You can make activate a cell just double click to the cell what you want to change.

Click “Print” to print directly from this menu.