User Manual

RIP PRO
UV EDITION

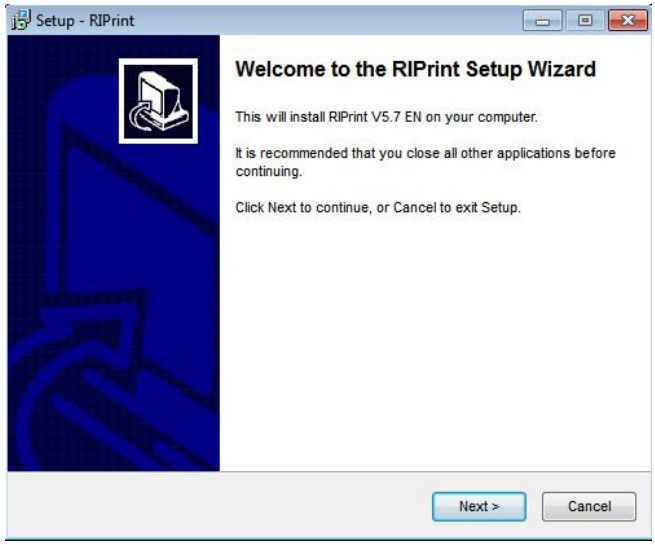
Foreword

RIPrint is software developed for addition, type setting and output of images. The software is mainly used to process digital images before they are output (Raster Image Processor, RIP). RIP customizes a professional output process for large inkjet printers, photo

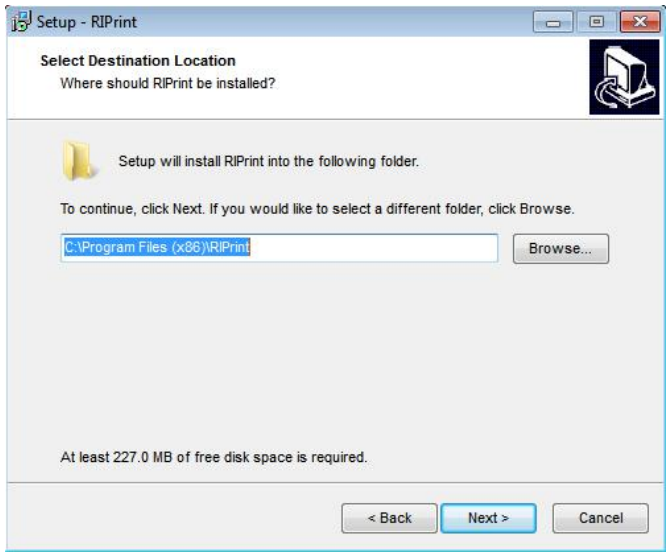
machines and laser image setters. Use RIP for production of professional digital images, your work will become easier, and the effects of images will be better.

Chapter 1 Software Installation

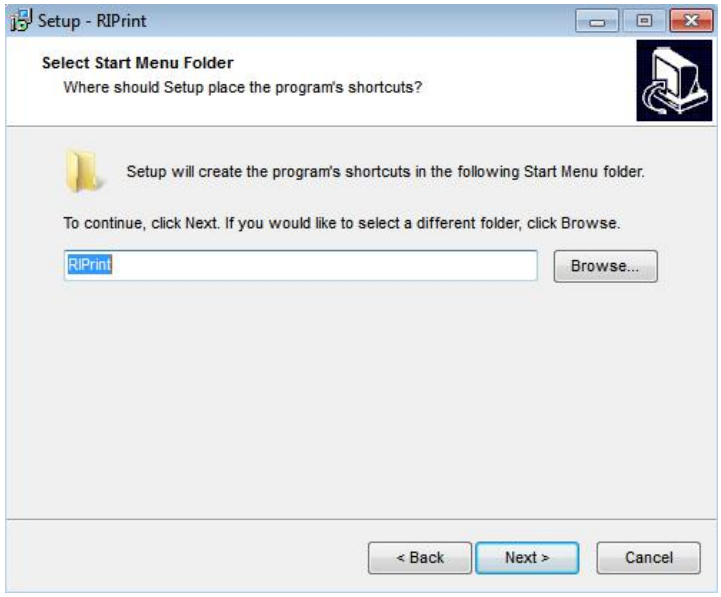
1.Decompress the software package to a folder with the same name, run the .exe file. Click “Next step”.



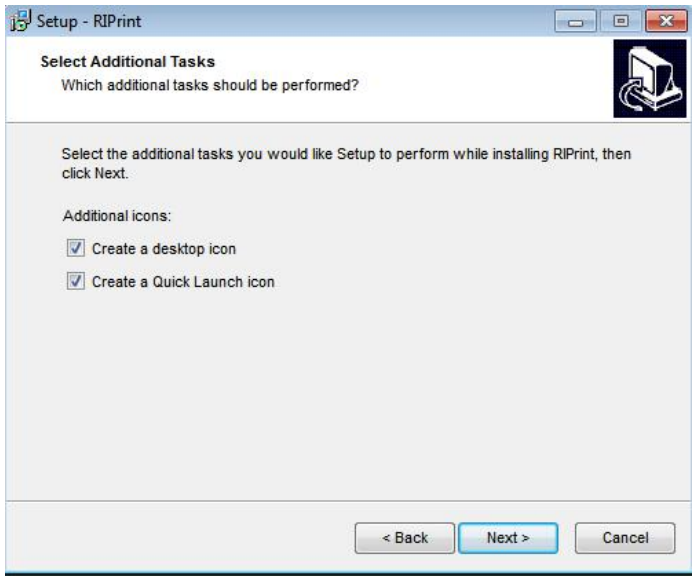
2.Select the path to install the software from the “Browse” (The software installation requires a disc space of about 200MB). After completion, click “Next step”.



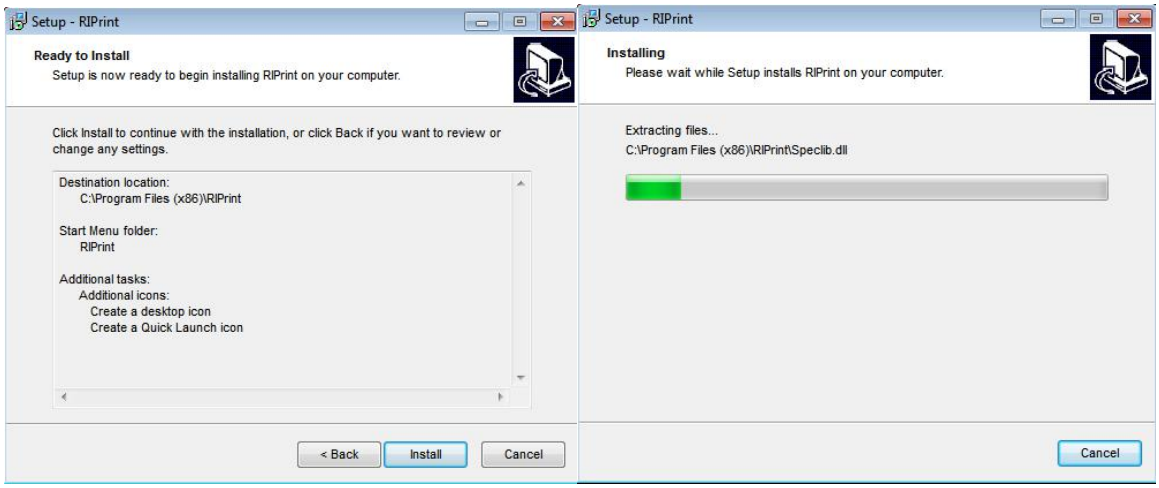
3.Select the folder to put the shortcut of software installation from the “Browse”. It’s suggested to select the default folder and directly click “Next step”.



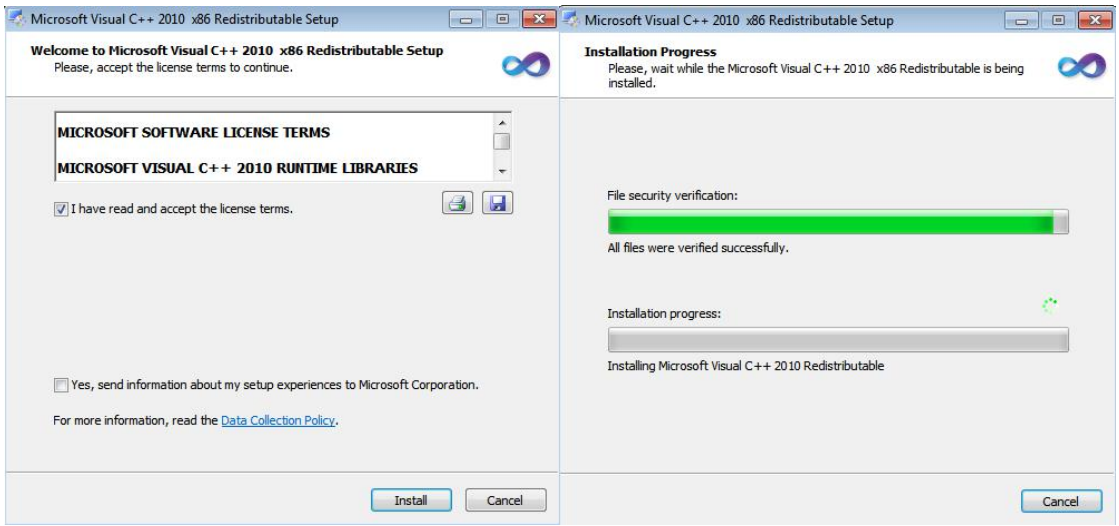
4. Select whether to create a desktop shortcut icon and start the photo quickly or not. It’s suggested not to change it, but directly click “Next step”.

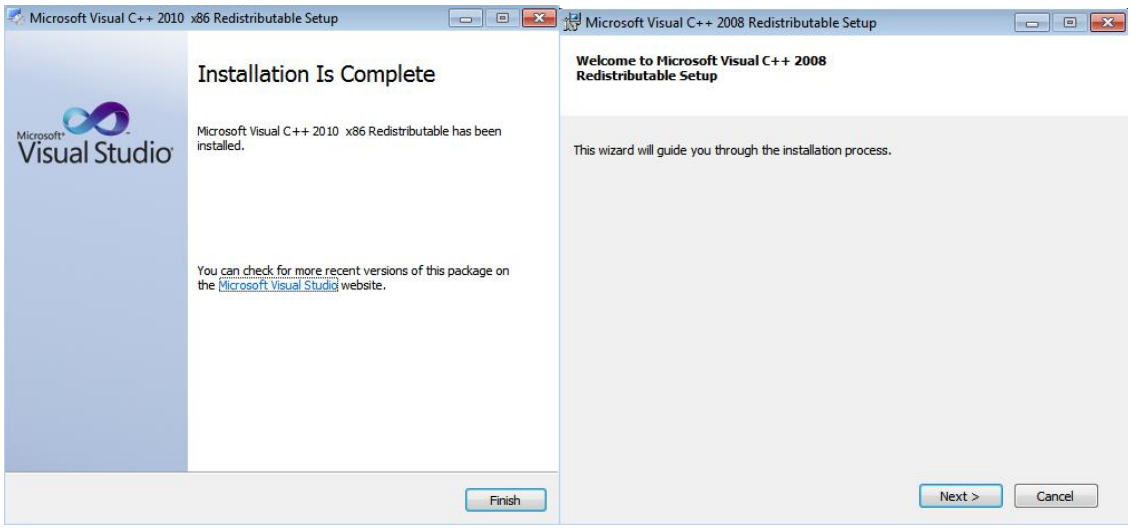


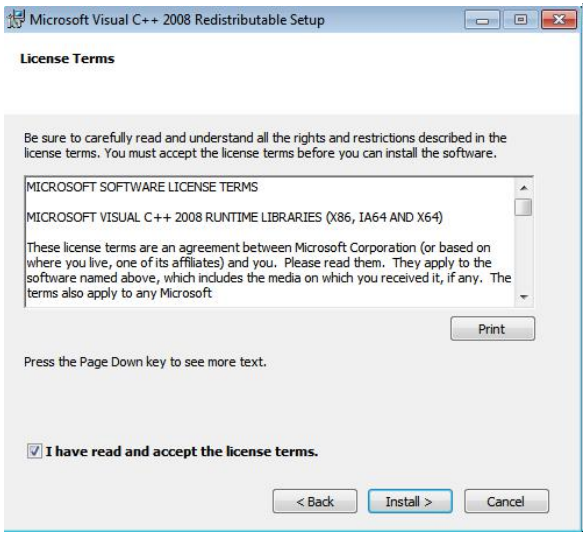
5.Click “Install”.

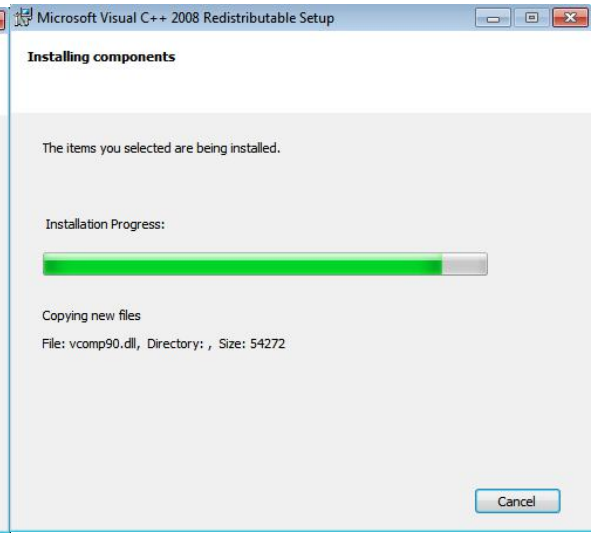


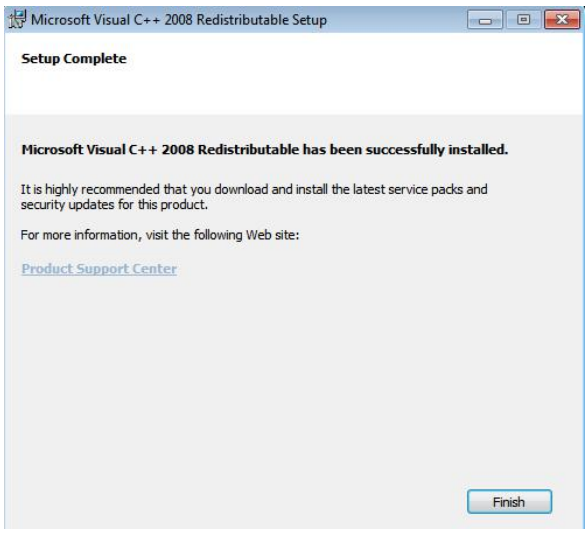
6.RIP needs to operate under a C++ environment, so you need to install this environment. Select “I have read and accepted the license terms” and then click “Install”.



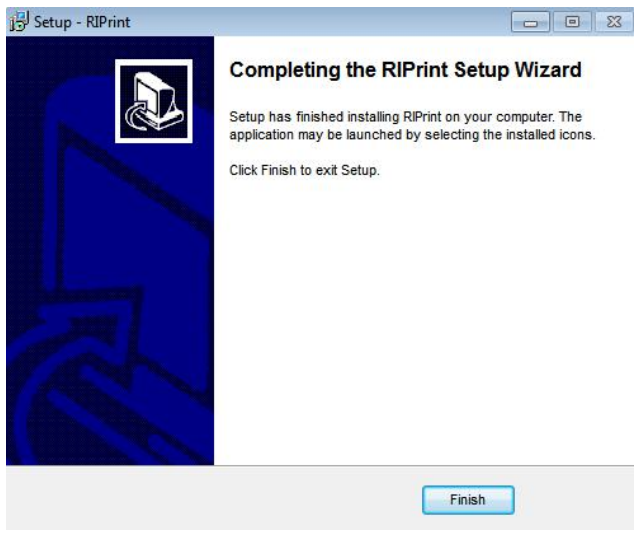








7.Click “Finish” after the completion of installation is shown on the progress bar, and then click “Complete”.



Notes:

The contents shown on the installation interface of RIPrint software of different editions may vary slightly, but the installation steps are mostly identical.

If you do not manage to install the software at the first time, you are suggested to uninstall the previously installed software and try to install it for a second time.

When using software, use the resolution recommended by the operating system. Other resolutions are not recommended.

Chapter 2 Introduction

You may quickly learn how to use the software from the following contents and apply it into your work at once. After accumulating certain experience, you may carefully check the operation introduced in the next chapters, where you can find a detailed guide to operation.

2.1 Start

There are two ways to start the software. You may select any one of them according to your specific need.

1.Double click the RIPrint icon on the desktop.

2.Open the “Start” menu, select the item “Programs”, enter the item of RIPrint, and click RIPrint.

Notes:

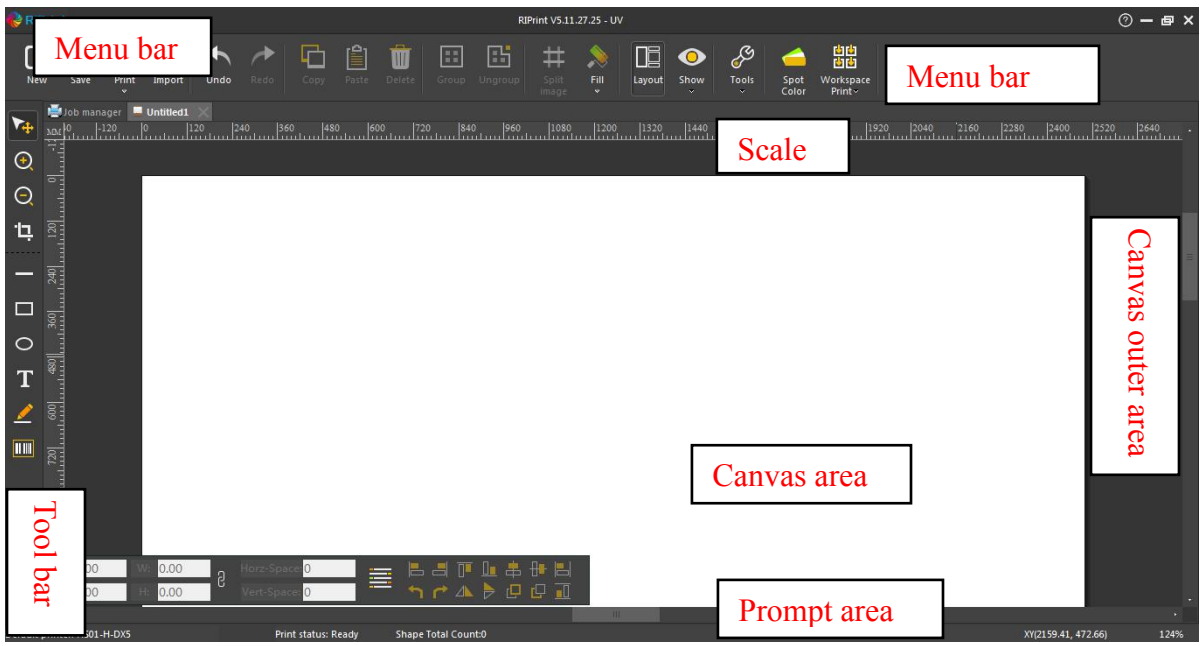
If you buy an official RIPrint software, then before you start the software, please insert the softdog attached with the software into your computer.

Since the software occupies a large memory while it is printing, you are suggested to close some software not used for now before you start the software.

If you did not select creating a desktop shortcut icon at the time of installation, then you have to start in in the second way.

2.2 Interface

The interface of the software consists of six functional areas, which are respectively the menu bar, the tool bar, the scale area, the canvas area, the area beyond canvas and the prompt area. Please check their positions in the following picture.



The functions of these areas are different. Now their uses will be introduced below.

1.Menu bar: The menu consists of the menu items of all functions of the software, such as new canvas, import images, print. You can finish various operations of the software through the menu.

2.Tool bar: The tool bar consists of tools for drawing of vector diagrams. You can draw diagrams like rectangle and oval with the tool bar.

3.Scale: To show the actual size and position of the canvas and images, RIPrint software sets scales (including a horizontal scale and a vertical scale). You can judge the size of canvas and images and the position of an image on the canvas according to the reading on

the scale, so you can finish the type setting. There are six kinds of readings of the scale, i.e., inch, mm, cm, m, pica, dot. You can set a corresponding unit according to your need (select the unit of the scale from the units displayed in the menu).

4.Canvas area: After you create a canvas project, the software will display a rectangular box with black edges in the interface. The rectangular box is called a canvas. The area within the rectangular box is called canvas area. You can imagine the box into a real canvas. In the subsequent operation, we need to operate within the canvas area (like importing an image, moving an image).

5.Areas beyond canvas: In the interface of the software, the areas beyond the canvas is called “beyond the canvas”. and these areas are not covered by the scope of operation. If you put an image in the areas beyond canvas, the software will remind you at the time of printing.

6.Prompt area: The area will provide you with various real-time information of the software, like the uses of menu and buttons of tool bar, the default printer, print status, number and names of images on the canvas, the position of the cursor, reading of the scale. All such information will help you finish different operations while the software is running.

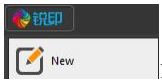
Notes:

For the introduction of each function of menu bar, tool bar and prompt area, please refer to the introduction of corresponding functions.

While the software is running, you may right click the mouse to pop up the menu and finish various operations.

2.3 New Canvas

What is a “canvas project”? A “canvas project” is a description file that records a printing task. For example, when you want to print a banner advertisement 1.2 m x 2 m for a client, first of all you need to start the software and create a new canvas project.

After you finish the setting of printer and canvas, click the “New” button 

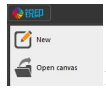
in the menu (or the “New” button 

on the menu of the interface or the shortcut keys “Ctrl+N”). The program will create a canvas project with the designated size. After the canvas project is created, you can see the scale in the interface of the software

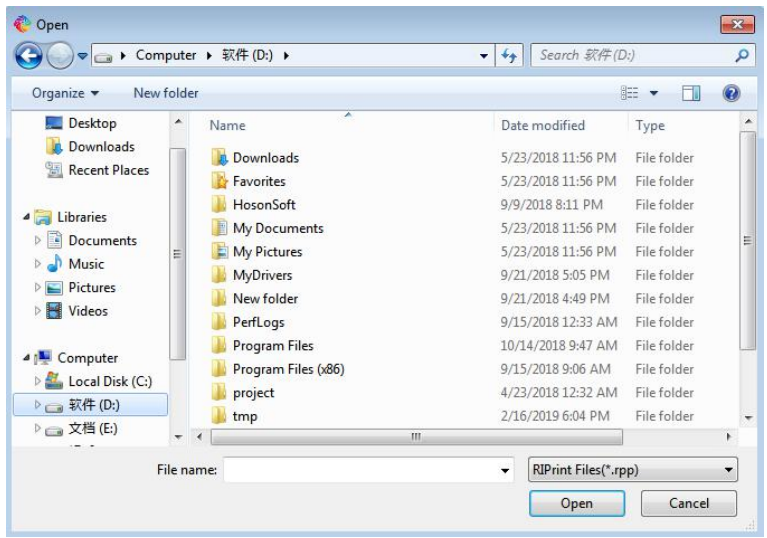
(like 

) and a rectangle with black edges, that rectangle is the canvas you have created. All subsequent operations will be finished in the canvas area.

2.4 Open

Click the “Open” button 

in the menu bar of the software, the program will prop up the following dialogue box.

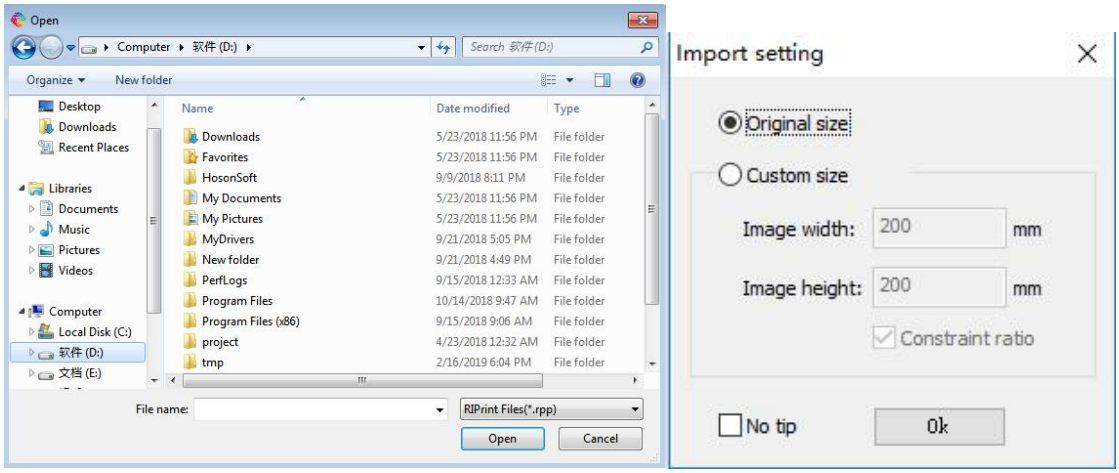


Select the canvas file to be opened (the suffix of the canvas file is “.rpp”. Click “Open”, the program will automatically load the saved state of a canvas, including its size, unit, display scale, display mode, quantity of images, status of images.

2.5 Add Images

After the canvas is created, we can put the image to print on the canvas. This operation is called “Import Image” in the software. You can click the “Import” button 

in the menu bar of the software (or the shortcut keys “Ctrl+O”) to select the image to add. The program will pop up the following dialogue box.



Select the image to add. The interface will ask whether you would select its original size or a customized size of the image. In the case of a customized size, the image can be imported after its width-length ratio is fixed, or you set the ratio by yourself. After the setting, the image will be put onto the canvas. If you do not need such an alert of setting, you can hide it (by clicking the “Display” from the menu bar of the software, do not tick the item). After you hide it, it will no more appear in the prompt box.

(Display mode of a thumbnail)

(Display mode of the frame)

Two display modes are available in the software. You will see different display effects under different settings. The default display of images is a thumbnail. On the same canvas, several images can be put. You can add more images by repeating the step.

Notes:

If you need to print several same images on the canvas, you can use the “Copy-Paste” or “Copy-Paste for Times” functions of the software, which is much more convenient for

adding the same image repeatedly.

When the width or length of the image goes beyond the scope of the canvas, the software will ask whether you want to continue to cut and print since the image is beyond the canvas and the excessive part will be cut automatically. At this time, you can select to “continue to print” or properly adjust the “output size” of the image or choose “image segmentation”.

2.6 Adjustment

Since the screen of a computer is limited in size, when we create a large canvas, you may not see the entire canvas. At this time, you need to adjust the display scale of the canvas on the screen. How to adjust will be described as follows.

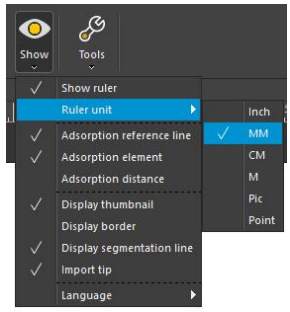
Adjust the display scale of the canvas：

1.Click the icon  in the tool bar, click the left of the mouse to increase the display scale of the canvas. Click the icon  in the tool bar, keep pressing the key Shift while click the left of the mouse to decrease the display scale of the canvas.

2.Keep pressing the key Ctrl and slide the mouse wheel, slide upward to increase the display scale of the canvas, and slide downward to decrease the scale.

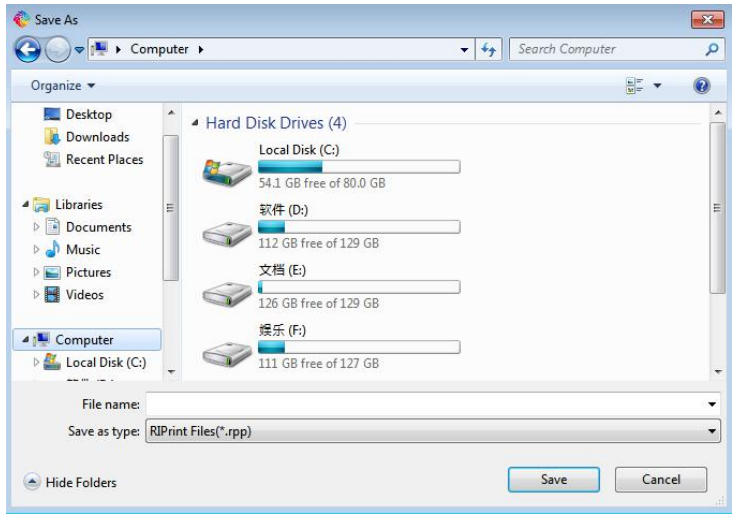
Adjust the unit of the scale：

Choose the unit from the “Display” item of the menu bar on the interface. The following menu will pop up.



2.7 Save

After you edit a canvas file, you can save the file for later use. Click the “Save” button on the menu bar (or the “Save” button in the menu bar of the interface or shortcut keys “Ctrl+S”). The program will pop up the following dialogue box.



You can select the saving path and file name of the canvas project, and then click the Save button. The program will save all related information of the current print task into the designated file (the file name is the name you enter, with a suffix of .rpp). Later, you can use the "Open" function to load a canvas file into the RIP software. The software interface will restore it to the status when you saved the canvas file. You can continue to edit it or directly output it.

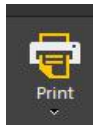
Note:

If you have changed a canvas project, when you close the canvas or exit the program, the program prompts you to save the current canvas changes. It is recommended that you save the canvas changes so that the program can save the parameters of the print task to the canvas project file, such as print parameters, canvas size, number of images, location etc. The advantage is that when you need to print the same image again, you only need to open the saved canvas file, the program automatically loads the relevant parameters from the source canvas project to significantly save your time and improve efficiency.

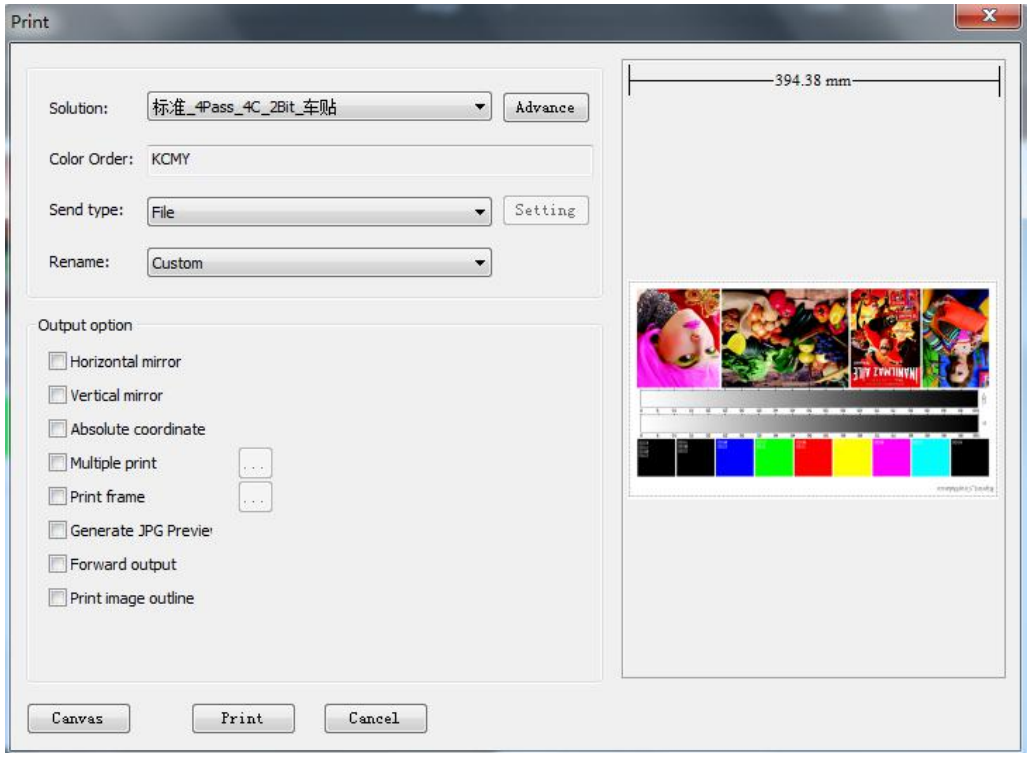
The Save As option of canvas project file is similar to the Save option above. In the same print task, if you have saved the canvas project file once, the Save As dialog box will not pop up again. The program will directly save the canvas project using the same file name you saved last time. However, you can click the "Save As" option to change the canvas file name and location.

2.8 Print

After you complete a canvas (after the type-setting), you can print it. The method: Click

the “Print” button 

in the menu bar (or shortcut keys Ctrl+P). At this time, the following printing confirmation interface will appear on the screen. Set the corresponding parameters (like printing scheme, printing mode, multiple copies) and then click the Print button. In the Printer Manager you may check the progress of printing. When the progress bar reaches 100%, it indicates that printing is completed.



The sending mode can be selected as “file” or “network”. If “file” port is selected, a PRN file will be generated first, which will then be opened by Printer Manager and printed. If “network” port is selected, the image is printed while it is being processed. No PRN file will be generated. Printer Manager only needs to remain open at the backstage. And parameters are set. It saves time and space, but has a high requirement on the configuration of the computer.

Notes:

Before printing, the software will check whether some image has gone beyond the boundary of canvas. If yes, the interface will remind you of it.

If the print output is in a format of file, the saving location and name of the file need to be entered by yourself.

The time taken for printing depends on the size of image to print. The larger the image is, the longer it will take.

2.9 Exit

The method to exit from the software is the same as that of general software. You can click the “Close” button at the top right corner of the software window to close it, or open the task manager and end the task in the application process to close it.

Notes:

If you are editing a canvas project before closing the software, the software will ask you whether to save the canvas project when you close the software. If yes, click the “Yes” button. The software will pop up a dialogue box. Please enter a file name easy to remember and then click the Confirm button. If not, click the “No” button. However, you are suggested to save it, as it may be useful to your future work.

2.10 Basic Operations

An example will be used to show the operations of the software. Suppose now you will print an image, the image’s size is 2.4x2.0 m. The image file has been processed with Photoshop (or other image processing software) and saved in a directory in the disc, with a file name of a.tif.

1.Now first we should insert the softdog attached with the software into the computer, and then start the RIPrint software.

2.Open the “Printer Manager” in the menu bar of the software (or shortcut keys Ctrl+Shift+P). Complete corresponding printer settings at the printer setting interface.

3.Open “Canvas Setting” in the menu bar of the software (or shortcut keys Ctrl+Shift+M), complete corresponding canvas settings at the canvas setting interface.

4.Click the “New” button in the menu bar of the software (or shortcut keys Ctrl+N) to create a new canvas project.

5.After creating a blank canvas, you can add the image a.tif to print on the canvas. After adding, you can see the image on the canvas.

6.After the image is added, you can set its output size. If there are more than an image to print on the canvas, you need to finish type-setting of the images.

7.After type-setting is done, you can print the images. Click the “Print” button in the menu and begin to print them. The time taken for printing depends on the size of the image. The printing progress will be shown. You can also terminate the printing at any moment.

8.After printing is finished, you can exit from the software, or create another canvas and go on with another printing task.

Thus far, the general usage of the software has been introduced. As your use experience grows, you will find many techniques by yourself. You may also browse the introduction of the later chapters to use all functions of the software.

Notes:

Related parameters in the setting of printer and canvas will be saved automatically by the software. If the parameter setting remains unchanged in your next use, you can omit the steps 3 and 4.

Before printing, you can click the color management module in the menu bar to adjust the color parameters of printing so that the printing effect better meets your needs.

When printing is started, the software will occupy a lot of memory. If the memory of your computer is low, the printing time will be lengthened slightly.

2.11 Tips

This software provides some convenient functions. By using these tips, it will make your operation very convenient.

Drawing of a straight line: Click the “Draw Straight Line” in the tool bar, keep pressing the key Ctrl key, you can draw a horizontal or vertical straight line.

Use of reference line:

1. Put the cursor within the scale area, keep pressing the left key of the mouse and drag the mouse to pull out a reference line;

2.Put the cursor on the reference line, keep pressing the Ctrl key, the cursor will become a two-way arrow, and you can drag the reference line;

3.Drag the reference line back to the scale area, the reference will vanish in the canvas.

Use of automatic alignment: When there are two or more images in a canvas, as some image is dragged, an alignment line will appear automatically, which can assist the user to

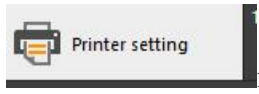
finish the type-setting of the page.

How to zoom in and zoom out: Keep pressing the Ctrl key, slide the mouse wheel to zoom in or zoom out the canvas.

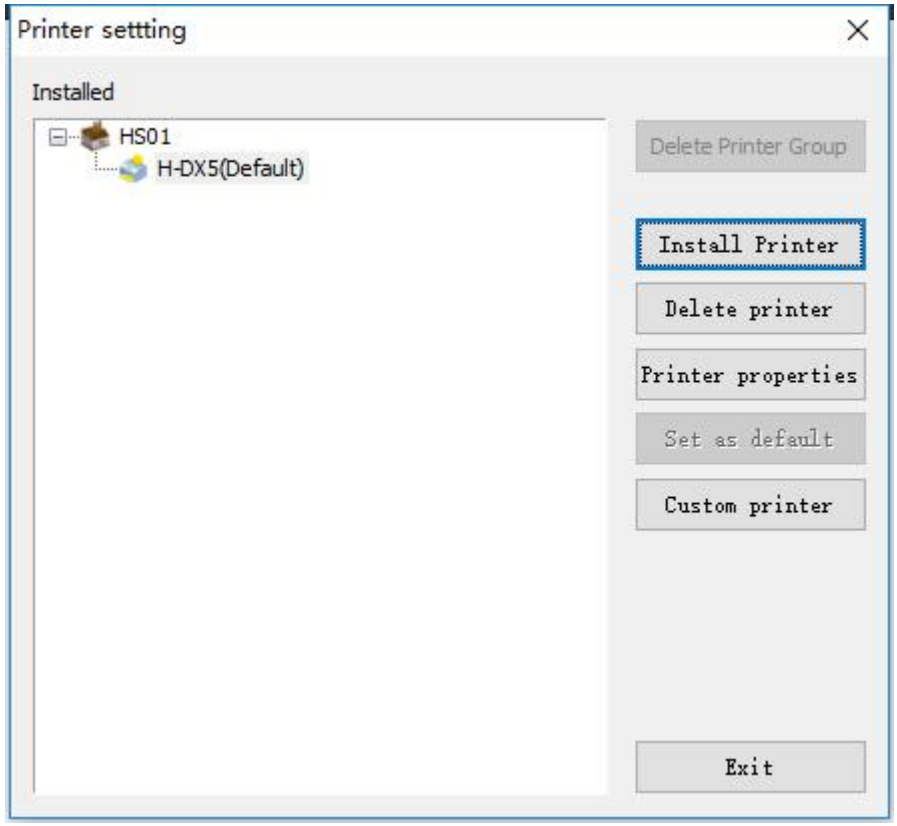
How to select all images: Press shortcut keys Ctrl+A to select all images in the canvas. Output size: To change the output size of some image in the canvas, you can select the image, click the right of the mouse and select the output size, set the output size you want. You can restrict the width-height ratio or customize the ratio.

Chapter 3 Driver Setting

3.1 Printer Setting

Click the “Printer Manager” button 

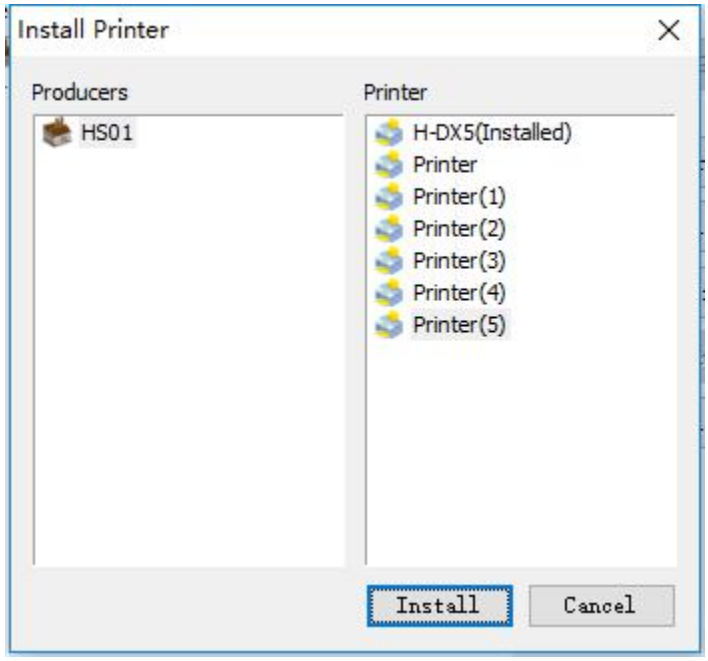
in the menu button (or shortcut keys Ctrl+Shift+P). The program will pop up a dialogue box as follows.



Under the default conditions, a default printer has existed in the list of printers. This is a printer drive program attached to the program, which supports the file output port.

Printer installation:

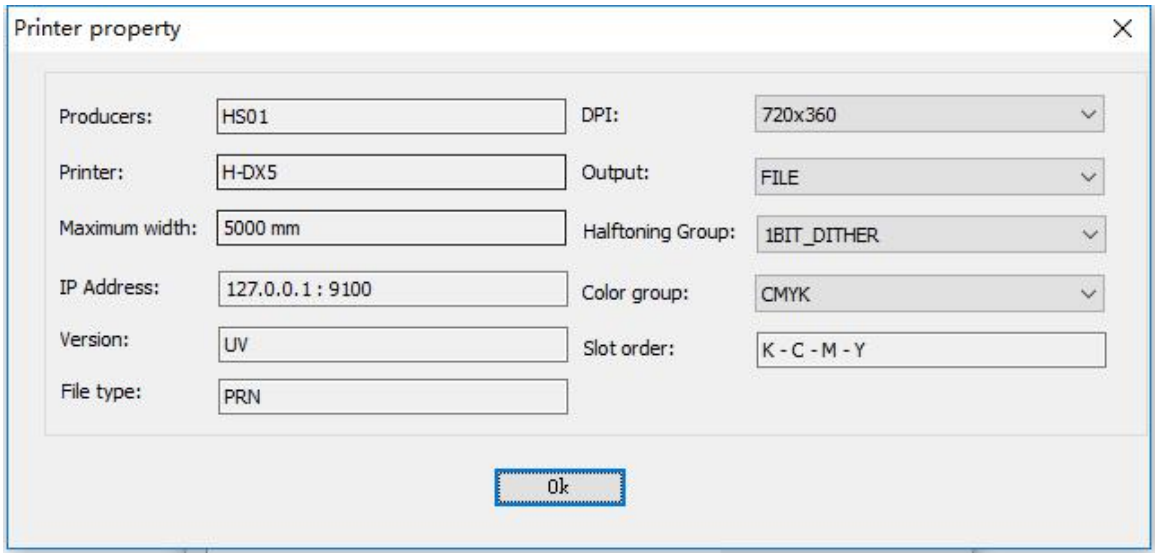
If you cannot find the printer you need in the list of printers, you can add the printer by yourself. Click the “Printer Installation” button, the program will pop up a dialogue box as follows.



Under normal condition, if you have purchased RIPrint software, the software supplier should have written the necessary drive program for you. You should be able to find the printer you need in the list of printers of corresponding producer. Select it, click the “Install” button, and the newly added printer will appear in the list of installed printers.

Setting the attributes of printer:

Select the printer to set, click the “Attributes” button. The program will pop up a dialogue box as follows.



Here, you can check the working parameters of the printer such as output resolution, combination of colors, output mode. After checking, click the “Confirm” button and exit.

Delete printer:

While you are using, if you want to delete a printer you won’t use from the list of installed printers, you simply choose the printer you won’t use and then click “Delete”. After this operation, all information of the printer will be deleted. So be cautious with this operation.

Set as default printer:

After setting the parameters of printer, you need to set the printer selected by you as a default printer. Select the printer, click the button “Set as Default”. The lower label of the printer will show that it is a default printer.

So far you have finished the printer setting.

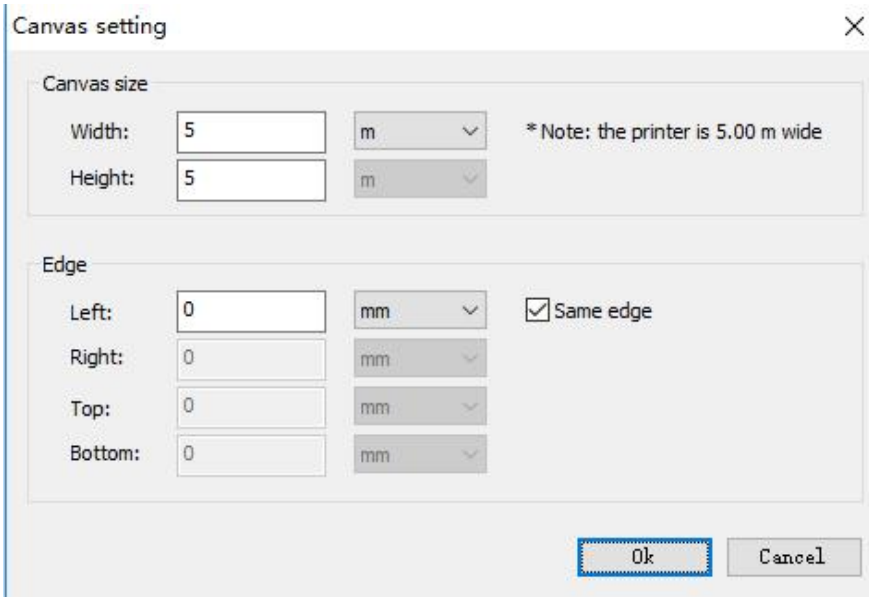
Notes:

If you drive has changed any setting of the printer, then you need to install the printer once again and set it as the default printer. So you can use it for normal printing.

3.2 Canvas Setting

Create a new canvas. The program will give the default width and height of the canvas. However, usually we need to adjust the width of the canvas according to the width of paper of the printer to save paper. Click the “Canvas Setting” 

in the menu bar of the software (or shortcut keys Ctrl+Shift+M), the program will pop up a dialogue box as follows.



Here you can set related meters such as size of canvas and edges of canvas. Enter the canvas size you will set into the dialogue box of width and height, but the width of canvas cannot surpass the width of printer. Behind the setting box shows the maximum width of the printer set in the drive. When you set the edges of canvas, if the four edges are set as an equal distance, you can select the equal distance. Then you only need to set any space value, as the other three will be set as the same value automatically. When you set related size, you can select the measurement unit you are used to. The software offers length units such as inch, mm, cm, m, pica and dot. After the setting, click “Confirm” button and exit.

Chapter 4 Main Interface

4.1Menu of RIP

4.2Main Menu of Interface

4.3Toolbar

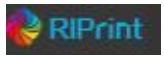
4.4Printer Manager

4.5Prompt Bar

4.6Right Click Menu

4.7Help Menu

4.1 Menu of RIP

When you click “RIP” 

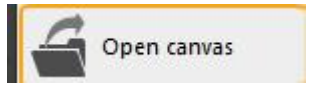
in the menu bar, the menu will comprise the following orders.

New:

The“New”button 

(or shortcut keys Ctrl+N) is used to create a new canvas. The order corresponds to the “New” button on the main menu of the interface, which can create a new canvas project.

Open:

The“Open”button 

is used to open an existing canvas project (*.rpp). If you want to open a saved canvas, you need to create a new blank canvas and then open the canvas. If you want to open several canvas projects, you can create a new one in succession and open the new canvases one by one.

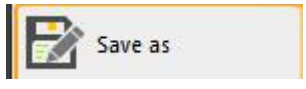
Save:

The“Save”button 

(or shortcut keys Ctrl+S) is used to save the current canvas in the current name and directory. When you save a project for the first time, the software will show a dialogue box. The system’ s default directory will be the file output directory set, with a default format .rpp. You can name the canvas project. The order corresponds to the“Save”button 

in the main menu of interface, which can save a canvas project. If you want to change the current project name or path before saving it, please select the order “Save as”.

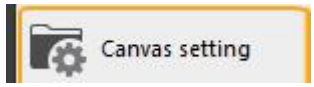
Save as:

The“Save as”button 

(or shortcut keys Ctrl + Shift + S) is used to save the current canvas project as a new file. The software will pop up a dialogue box to ask you to rename the file or change the saving directory. After saving, the system will

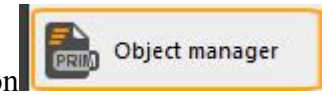
change the current file name and directory. If you want to save the current name and directory, please use the order “Save”.

Canvas Setting:

The“Canvas Setting”button 

(or shortcut keys Ctrl + Shift + M) is used to set the current canvas. You can set the size of canvas (width and height) and edge space. You can confirm the width of canvas according to the width of paper you use for printing. If you want to set the edge space of printing, you can set left, right, top and bottom respectively. If you want to set them with an equal space, you can select the equal space. So you only need to set any space value, as the other three will be set as the same value automatically.

Image Management:

The“Image Management”button 

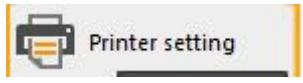
(or shortcut keys Ctrl + Shift + I) is used to operate the images in the current canvas. You can check basic information of all images in the canvas, such as names, types, directory of the images, size of images when imported into the canvas, combination of colors. You can also operate an image selected by you, like open the directory: open the saving path of the image you select; output information: You can save basic information of all images in the canvas as Excel file; replacement: You can replace the selected image; moving: You can save the selected image.

Colors Management:

The“Colors Management”button 

(or shortcut keys Ctrl + Shift + C) is used to enter the curve of colors management and set the curve parameters. For details, please refer to the chapter of colors management.

Printer Management:

The“Printer Management” button 

(or shortcut keys Ctrl + Shift + P) is used to manage the drive setting of printer, set related parameters of printer and operate the printer. Like printer installation, printer deletion, checking attributes of printer, setting printer as a default one, customized installation of printer, delete existing manufacturer.

Notes:

For the specific operation details of each order, please click the link and see the text.

4.2 Main Menu of Interface

The main menu of interface lies at the top of the canvas and can be seen instantly when you open the software. The main menu comprises the following orders.

New:

The“New” button 

(or shortcut keys Ctrl + N) is used to create a new canvas. The order corresponds to the “New” button 

in the menu of the software, which is used to create a new canvas project.

Save:

The “Save” button 

(or shortcut keys Ctrl + S) is used to save the current canvas in its current name and directory. When you save a project for the first time, the software will show a dialogue box. The system’s default directory will be the file output directory set, with a default format .rpp. You can name the canvas project. The order corresponds to the “Save” button 

in the menu of the software, which can save a canvas project. If you want to change the current project name or path before saving it, please select the order “Save as” 

.

Print:

The “Print” button 

(or shortcut keys Ctrl + P) is used to enter the confirmation interface of printing.

Print Area:

The “Print Area” button 

is used to customize a small sample and print it. For the customization of a small sample, please refer to the operation description in the later text.

Import:

The “Import” button 

(or shortcut keys Ctrl + O) is used to import an image to the canvas. The order corresponds to the “Import Image” button in the right click menu of the mouse, which can import an image.

Cancel:

The “Cancel” button 

(or shortcut keys Ctrl + Z) is used to cancel the latest edition. The software supports cancellation at multiple levels. Repeat the order to cancel an order previously performed at a time. The order corresponds to the “Cancel” button  in the right click menu of the mouse, which can cancel an operation.

Redo:

The “Redo” button 

(or shortcut keys Ctrl + Y) is used to redo the action that is canceled previously. If an order has been canceled and a new operation has been performed, the Redo order will not allow any action that was canceled previously. The order corresponds to the “Redo” button in the right click menu of the mouse.

Copy:

The “Copy” button 

(or shortcut keys Ctrl + C) is used to copy a selected image in the current canvas project. The order corresponds to the “Copy” button  in the right click menu of the mouse, which can copy an image.

Paste:

The “Paste” button 

(or shortcut keys Ctrl + V) is used to paste a copied image onto the current canvas. The order corresponds to the “Paste” button  in the right click menu of the mouse, which can finish the paste operation.

Delete:

The “Delete” button 

(shortcut keys Ctrl + D) is used to delete a selected image from the canvas.

Combine:

The “Combine” button 

(shortcut keys Ctrl + G) is used to combine two or more images selected into an image. The order corresponds to the “Combine” button  in the right click menu of the mouse, which can combine images.

Dissolve:

The “Dissolve” button 

(or shortcut keys Ctrl + U) is used to dissolve a combined image into individual images before they are combined. The order corresponds to the “Dissolve” button  in the right click menu of the mouse, which can dissolve images.

Image Segmentation:

The “Image Segmentation” button 

(or shortcut keys Alt + S) is used to divide an image into several images you want.

Fill:

The “Fill” button 

is used to fill vector rectangle or oval with the colors you want.

Type-setting:

The “Type-setting” button 

(or shortcut keys Alt + L) is used for type-setting. The type-setting tool buttons include left alignment, right alignment, upper alignment, lower alignment, central horizontally, central vertically, equal width, equal height, move up one level, move down one level, horizontal mirror, vertical mirror, rotate leftward by 90° , rotate rightward by 90° , horizontal interval, and vertical interval.

Display:

The “Display” button 

is used to set what content will be displayed and what content will not be displayed on the page, such as the scale, the unit of the scale, the reference line, images, distance, thumbnail, frames, cutting line, whether the import of images will be prompted, and selection of languages.

Notes:

For the specific operation details of each order, please click the link and see the text.

4.3 Tool Menu

Selection:

The “Selection” button  is used to shift the tool menus. When you complete the use of some tool in the tool menu, and want to use another tool, you can use this button to shift to the tool you need.

Zoom:

The “Zoom” button  is used to adjust the display scale of the current canvas.

Click the button  in the tool bar and click the left of the mouse to increase the display scale of the canvas.

Click the button  in the tool bar, keep pressing the Shift key while click the left key of the mouse to decrease the display scale of the canvas.

Image Cutting:

The “Image Cutting” button  is used to cut an image in the canvas.

Draw Straight Line:

The “Draw Straight Line” button  is used to draw a straight line. Click the button  in the tool bar, keep pressing the Ctrl key, while dragging the mouse to draw a straight line.

Draw Rectangle:

The “Draw Rectangle” button  is used to draw a rectangle. Click the button  in the tool bar, put the cursor in the canvas and drag the mouse to draw a rectangle.

Draw Oval:

The “Draw Oval” button  is used to draw an oval. Click the button  in the tool bar, put the cursor in the canvas and drag the mouse to draw an oval.

Draw Text:

The “Draw Text” button  is used to draw a text in the canvas. Click the button  in the tool bar, put the cursor in the canvas and drag the mouse to draw a text.

Add Footnote:

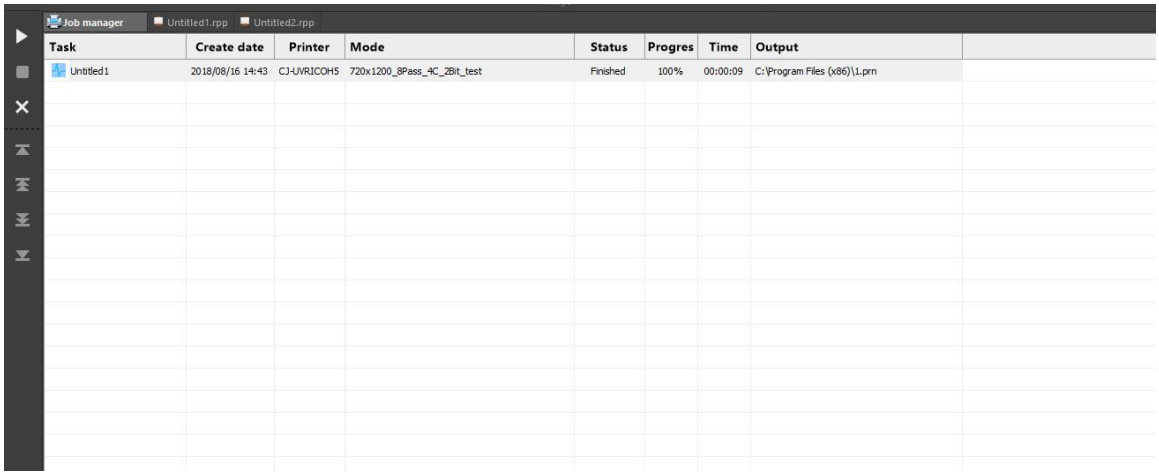
The “Add Footnote” button is used to add a footnote to the image in the canvas. For this operation, please refer to the description of “Add Footnote” in the later text.

Draw barcode:

Draw Barcode  is used to draw a bar code in the canvas. Click  on the toolbar, mouseover the canvas and drag the mouse to draw the barcode, double-click the barcode, and select the barcode type and variable rule you want to use in the barcode property interface. Bar codes are generally used together with station printing. Please refer to the station printing description to be discussed later.

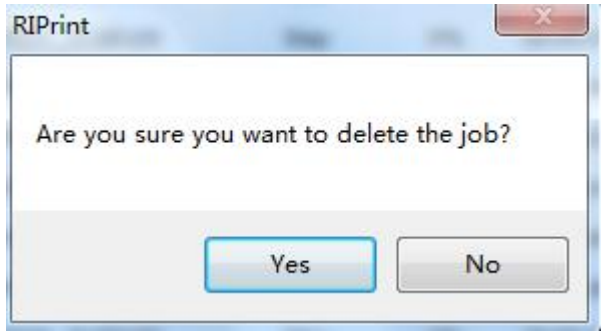
4.4 Printer Manager

When you have started printing, the software will go to the interface of printer manager. Of course, you can also set it as not going to the interface. The interface of printer manager is shown as below.



Every time, a printing task will be created in the printer manager. The user can check the status, progress and time of each printing task at the printer manager. The user can operate the task with the items on the left side such as “Start”, “Stop”, “Delete Task”, “Up”, “Down”, “Top” and “Bottom”.

To delete a printing task, select the task, click the button “Delete”  on the left. The program will pop up a dialogue box for confirmation as below.



If you click “yes”, the program will delete the task. And the task will no longer be shown in the list of printer manager. If you click “no”, the printing task will continue to be shown in the list of printer manager.

4.5 Prompt Bar

The prompt area of the software and suspended information with the buttons of interface can provide a guide to some basic functions of the software. The prompt area can display the name of default printer, status of printer, name of images in the canvas, and real-time position of the cursor. Put the cursor on a tool button, the function of the button will

suspend, which can make it easy for you to use it.

Check default printer:

At the bottom of main interface of the software shows the name of default printer in the current system.

Status of printer:

At the bottom of the main interface of the software shows the status of printer. If the default printer is idle, it shows that it is ready. If the default printer is printing, it shows that it is printing and also shows the progress of printing.

Name of image:

Select an image in the canvas. At the bottom area of the main interface of the software, the name of image will be shown.

Position of cursor:

Move the position of the cursor in the canvas. At the bottom area of the main interface of the software, the real-time position of the cursor in the canvas will be shown.

Notes:

For the specific operation details of each order, please click the link and see the text.

4.6 Right Click Menu

Click the right of the mouse at the blank area of a canvas to show the right click menu. The right click menu consists of the following orders.

Import image:

The “Import Image” button (or shortcut keys Ctrl + O) is used to import an image to the canvas.

Cancel:

This order is used to cancel the latest edition. The software supports cancellation at multiple levels. Repeat the order to cancel an order previously performed at a time. (Shortcut keys Ctrl + Z).

Redo:

This order is used to redo the action that is canceled previously. If an order has been canceled and a new operation has been performed, the Redo order will not allow any action that was canceled previously. (Shortcut keys Ctrl + Y).

Copy:

The button“Copy”(or shortcut keys Ctrl + C) is used to copy a selected image in the current canvas project.

Paste:

The button “Paste” (or shortcut keys Ctrl + V) is used to paste a copied image into the current canvas.

Paste for Times:

The button “Paste for Times” is used to paste several copied images in the current canvas and distribute them as set.

Delete Footnotes:

The button “Delete Footnotes” is used to delete a footnote of an image. The precondition of this operation is that the image has been added with a footnote.

Combine:

The button “Combine” (or shortcut keys Ctrl + G) is used to combine two or more images selected into an image.

Dissolve:

The button “Dissolve” (or shortcut keys Ctrl + U) is used to dissolve a combined image into individual images before they are combined.

Output Size:

The button “Output Size” can be used to set the horizontal width and vertical height of a selected image.

Color Replacement:

The button “Color Replacement’ is used to set the color of an image in the canvas as transparent or the desired color.

Attributes of Image:

The button “Attributes of Image” is used to check basic information of a selected image in the canvas, such as file information, output information, and status information.

Edit Text:

The button “Edit Text” is used to edit the contents of a created text again.

Canvas Information:

The button “Canvas Information” is used to check basic information of the current canvas, such as attributes of canvas, statistics of image, other statistics.

Add into Gallery:

The button “Add into Gallery” is used to add an image in the canvas into a new gallery.

Notes:

For the specific operation details of each order, please click the link and see the text.

4.7 Help Menu

Click the “About” button in the menu bar of Edit to show the file menu. The Help menu comprises the following orders.

Help File:

The button “Help File” (or shortcut key F1) is used to open the Help file of the software.

Hosonsoft Online:

The button “Hosonsoft Online” is used to visit the homepage of Hosonsoft Company, acquire more help information and follow the news of the soft.

Contact Us:

The button “Contact Us” is used to send an email to our technical support, reflect your use and problems and requirements. We will give you a reply immediately as we receive an email from you.

About RIP:

The button “About RIP” is used to show the edition information and authority information of the software you are using.

Notes:

For the specific operation details of each order, please click the link and see the text.

Chapter 5 Basic Functions

5.1 Cancel and Redo

5.2 Select Image

5.3 Delete Image

5.4 Copy, Paste, Paste for Times

5.5 Combine and Dissolve

5.6 Image Segmentation

5.7 Output Size

5.8 Customize Sample

5.9 Color Filling

5.10 Image Type-setting

5.11 Add Footnote

5.12 Check Information of Image and Canvas

5.13 Clear Cache

5.14 Error compensation

5.15 Color correction setting

5.16 Vector setting

5.17 Special color setting

5.18 Station printing

5.1Cancel and Redo

The software will back up each effective action. If you make an operation error or want to return to the previous state of canvas, you may click the button “Cancel” 

in the menu bar (or “Cancel” item from the right click menu of the mouse, or shortcut keys Ctrl+Z). At this moment, the canvas will shift to the previous status of the current operation. You can repeat this operation in succession until the canvas is restored to the status you want.

If you want to restore it to the next status after you cancel some action of the canvas, you may click the button “Redo” 

in the menu bar (or “Redo” item from the right click menu of the mouse or shortcut keys Ctrl+Y). At this moment, the canvas will shift to the next status of the current operation. You can repeat this operation in succession until the canvas returns to the status you want.

Notes:

The steps of Cancel and Redo are not limitless. So please pay attention to this point while you are editing the canvas.

5.2 Select Image

Select a single image:

Click the left key of the mouse on an image to select it.

Select several or all images:

You may directly click the right key of the mouse in the blank area around images to select, keep pressing the left key and drag the mouse. You will see a dotted rectangle box, release the left key of the mouse, so the images that rest in the dotted box will be selected. You may also keep pressing Ctrl key, and click the left key of the mouse to select the images one by one. Or you may use the shortcut keys Ctrl+A on the canvas interface to select all images on the canvas.

Remove image:

Click the left key of the mouse in an area without images on the canvas, all images on the canvas will be non-selected.

5.3 Delete Image

Delete a single image:

If you want to delete some image on the canvas, click the left key of the mouse on the image to select it and then click the button “Delete” 

in the menu bar (or click the Delete on the keyboard after the image is selected) to delete a single image in the canvas.

Delete several or all images:

If you want to delete several images on the canvas, first select these images, and then click the button “Delete” 

in the menu bar (or click the Delete on the keyboard after the image is selected) to delete several images.

5.4 Copy, Paste, Paste for Times

Copy:

Select the image to copy, click the button “Copy” 

in the menu bar (or the “Copy” item from the right click menu of the mouse or shortcut keys Ctrl+C) to copy the image.

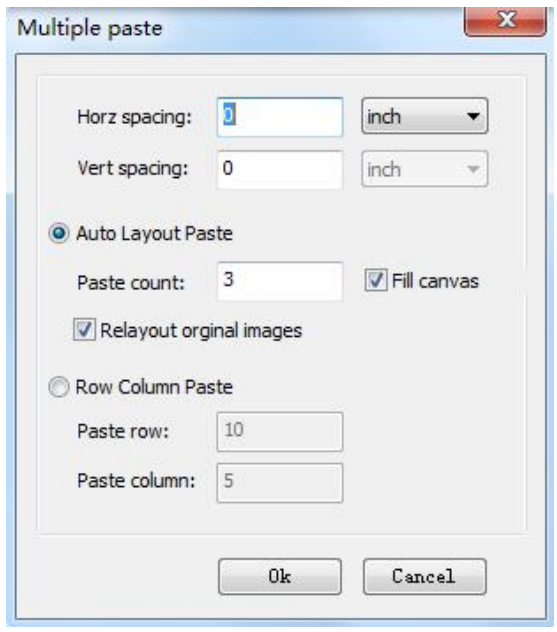
Paste:

After you copy an image, you can paste it onto the canvas at any time. Click the button “Paste” 

in the menu bar (or the “Paste” item in the right click menu of the mouse or shortcut keys Ctrl+V) to paste the image.

Paste for Times:

After you copy an image, if you want to paste several copies of the same image on the canvas, you may paste it for times. Click the “Paste for Times” item from the right click menu of the mouse, the program will pop up the following dialogue box.



You need to set the following values here.

1.Designate the quantity of images to paste. If you select Cover the Whole Canvas, the program will paste images onto the canvas until there is no space.

2.Designate the horizontal and vertical intervals for pasting images onto the canvas.

You may select a familiar length unit. The software provides you with measurement units such as inch, mm, cm, m, pica and dot.

3.Designate the line and row of paste. If you set paste by line and row, the program will paste it onto the set line and row on the canvas.

After setting the parameters, click the “Confirm” button. The program will start to paste images according to the way you have designated.

5.5 Combine and Dissolve

Combine Images:

Select two or more images to combine, click the button “Combine” 

in the menu bar (or the item “Combine” from the right click menu of the mouse or shortcut keys Ctrl + G) to combine images.

Dissolve Images:

Select the combined image, click the button “Dissolve” 

in the menu bar (or the item “Dissolve” from the right click menu of the mouse or shortcut keys Ctrl + U) to dissolve the image.

Notes:

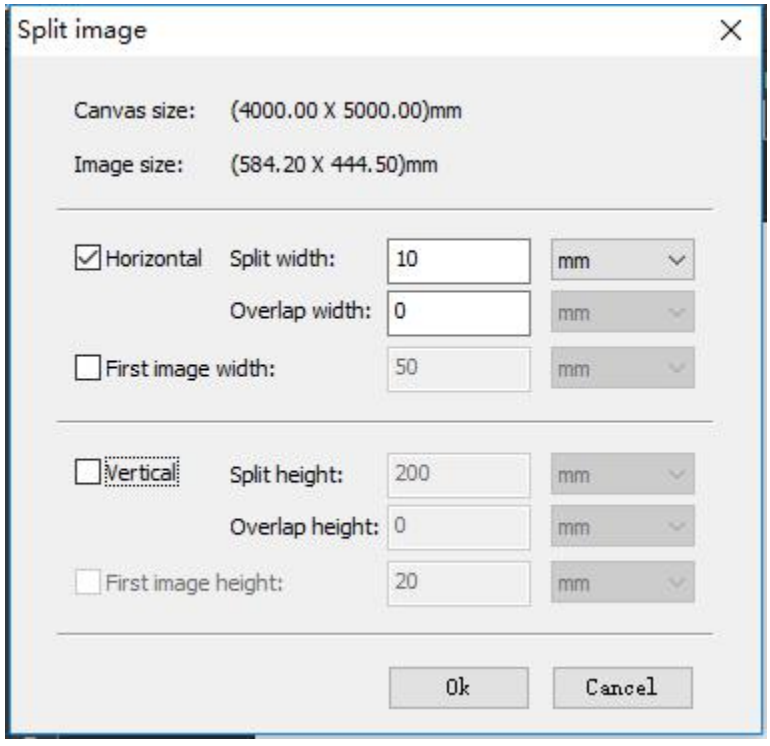
A single image cannot be combined or dissolved.

5.6 Image Segmentation

When the output size of an image goes beyond the canvas, you may rotate the image. If after rotation, part of the image still goes beyond the canvas, then you should finish printing through image segmentation.

Select the image to segment, click the button “Image Segmentation” 

in the menu bar (or shortcut keys Alt + S), the program will pop up the following dialogue box.



The default width of horizontal segmentation is the difference between the width of the current canvas and the horizontal margin of the canvas (default 2 cm), the default overlaid width is 2 cm. You may designate the width of first horizontal segmentation alone.

The default height of vertical segmentation is the difference between the height of current canvas and vertical margin of canvas (default 2 cm), the default overlaid height is 2 cm. You may designate the height of first vertical segmentation alone.

Of course you may modify the parameters according to your intention. At the top of the setting box shows the width and height of current canvas and the image to segment. You may set by referring to its value. In setting the parameters, you can select a familiar length unit like inch, mm, cm, m, pica and dot.

After the setting, click the Confirm button to finish image segmentation.

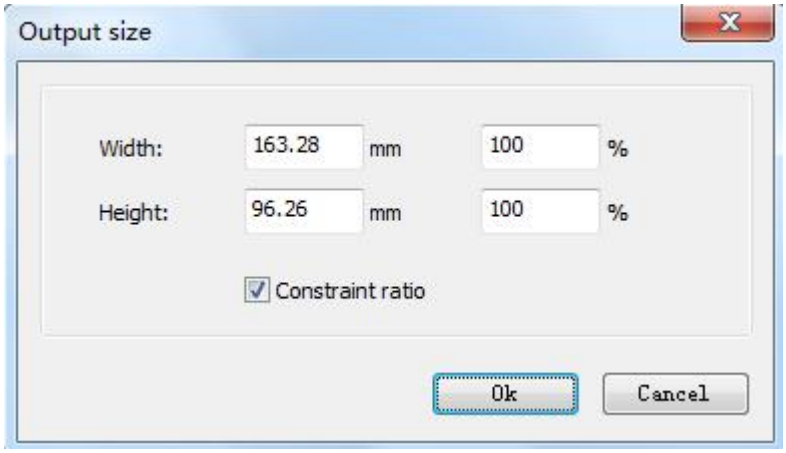
Notes:

The software does not support segmentation of combined images.

5.7 Output Size

If you want to precisely locate the output position and size of an image, you need to complete the following setting.

Select an image, click the right key of the mouse, select the Output Size. The program will pop up the following dialogue box.



In setting the Output Size of image, if the limited width-height ratio is not selected, you need to enter the horizontal width and vertical height respectively. If the limited width-height ratio is selected, you only need to enter horizontal width or vertical height, so the software will fill the other item automatically. The output width and height of the image will be consistent with the original width and height of image input.

In addition, you may also adjust the rough output size of image with the mouse.

Select an image, move the cursor of the mouse to some tag block of the image (the eight small black blocks around the image are tag blocks of the image). At this moment, the cursor will turn into a drag icon (, , ,). Keep pressing the left key of the mouse and drag it, you can change the output size of the image as you wish. If the drag icon is or , the program will change the width and height of the controlled image with an equal proportion.

Notes:

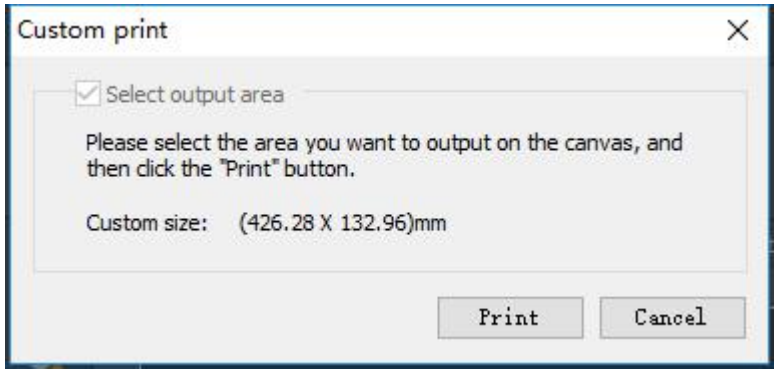
To modify the output size of an image is effective only when an image is selected.

5.8 Customize Sample

Sometimes you may wish to check the output effect of the canvas before it is output officially, then you need to customize a small sample for the current canvas. Click the Print

Area button 

in the menu bar of the software, the program will pop up the following dialogue box.

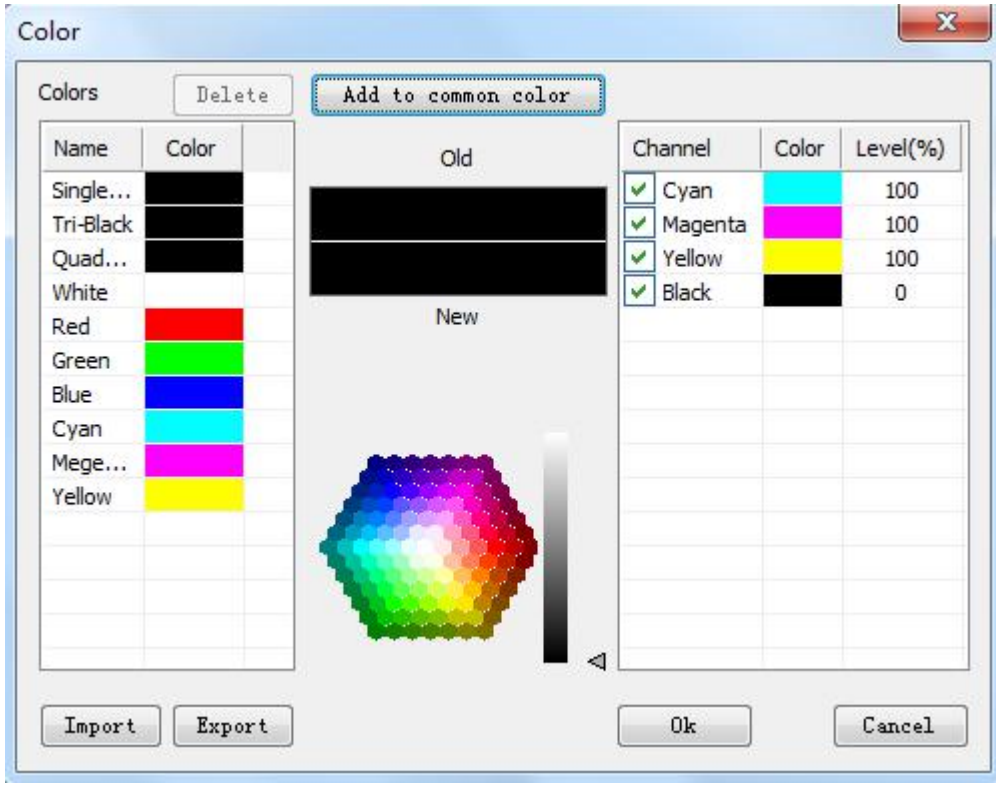


After clicking Print Area, a red rectangular box will appear in the canvas. The image within the rectangle is the sample to output. Before output, you can adjust the position and size of the rectangular box with your mouse. After the adjustment, click the “Print” button in the dialogue box of the sample to directly output it.

5.9 Filling

Sometimes you have drawn a rectangle or oval with the tool of the toolbar. You want to fill it with color, then you can use the function of color filling. Select the rectangle or oval, click the Fill button 

in the menu bar of the software. You may use the colors from the default list of common colors, or select the color you want from the color bank. After the operation, the rectangle or oval will be filled with the color you want. The color bank interface is as follows.



5.10 Image Type-setting

You may need to type-set the images on the canvas so as to output them in a most economical way. This software supports the following type-setting functions.

Left Alignment:

"Left Alignment" is used to align the left boundary of the selected image with that of the activated image. Select two or more images, click the "Left Alignment" button in the toolbar of type-setting to finish left alignment of selected images.

Right Alignment:

"Right Alignment" is used to align the right boundary of the selected image with that of the activated image. Select two or more images, click the "Right Alignment" button in the toolbar of type-setting to finish right alignment of selected images.

Top Alignment:

"Top Alignment" is used to align the top boundary of the selected image with that of the activated image. Select two or more images, click the "Top Alignment" button in the toolbar of type-setting to finish top alignment of selected images.

Bottom Alignment:

"Bottom Alignment" is used to align the bottom boundary of the selected image with that of the activated image. Select two or more images, click the "Bottom Alignment" button  in the toolbar of type-setting to finish bottom alignment of selected images.

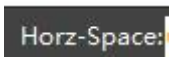
Central Horizontally:

"Central Horizontally" is used to position the selected image at the horizontal center of the canvas. Select two or more images, click the button "Central Horizontally"  in the toolbar of type-setting to finish the operation.

Central Vertically:

"Vertical Horizontally" is used to position the selected image at the vertical center of the canvas. Select two or more images, click the button "Central Vertically"  in the toolbar of type-setting to finish the operation.

Horizontal Interval

"Horizontal Interval" is used to arrange selected images from let to right by the designated horizontal interval. Select two or more images, click the "Horizontal Interval" button 

in the toolbar of type-setting to arrange selected images by the designated horizontal interval.

Vertical Interval:

"Vertical Interval" is used to arrange selected images from up to down by the designated vertical interval. Select two or more images, click the "Vertical Interval" button 

in the toolbar of type-setting to arrange selected images by the designated vertical interval.

Equal Width:

"Equal Width" is used to equalize the width of selected images with that of activated image. Select two or more images, click the "Equal Width" button  in the toolbar of type-setting to finish the operation.

Equal Height:

"Equal Height" is used to equalize the height of selected images with that of activated image. Select two or more images, click the "Equal Height" button  in the toolbar of type-setting to finish the operation.

Move up One Level:

"Move up One Level" is used to move the selected overlaid image up one level. Select the image to move up one level, click the "Move up One Level" button  in the toolbar of type-setting to finish the operation.

Move down One Level:

"Move down One Level" is used to move the selected overlaid image down one level. Select the image to move down one level, click the "Move down One Level" button  in the toolbar of type-setting to finish the operation.

Vertical Mirror:

"Vertical Mirror" is used for vertical mirroring of the selected image. Select the image to mirror, click the "Vertical Mirror" button  in the toolbar of type-setting to finish the operation.

Horizontal Mirror:

"Horizontal Mirror" is used for horizontal mirroring of the selected image. Select the image to mirror, click the "Horizontal Mirror" button  in the toolbar of type-setting to finish the operation.

Rotate Right by 90°:

"Rotate Right by 90°" is used to rotate the selected image rightward by 90°. Select the image to rotate, click the "Rotate Right by 90°" button in the toolbar of type-setting to finish the operation.

Rotate Left by 90°:

"Rotate Left by 90°" is used to rotate the selected image leftward by 90°. Select the image to rotate, click the "Rotate Left by 90°" button in the toolbar of type-setting.

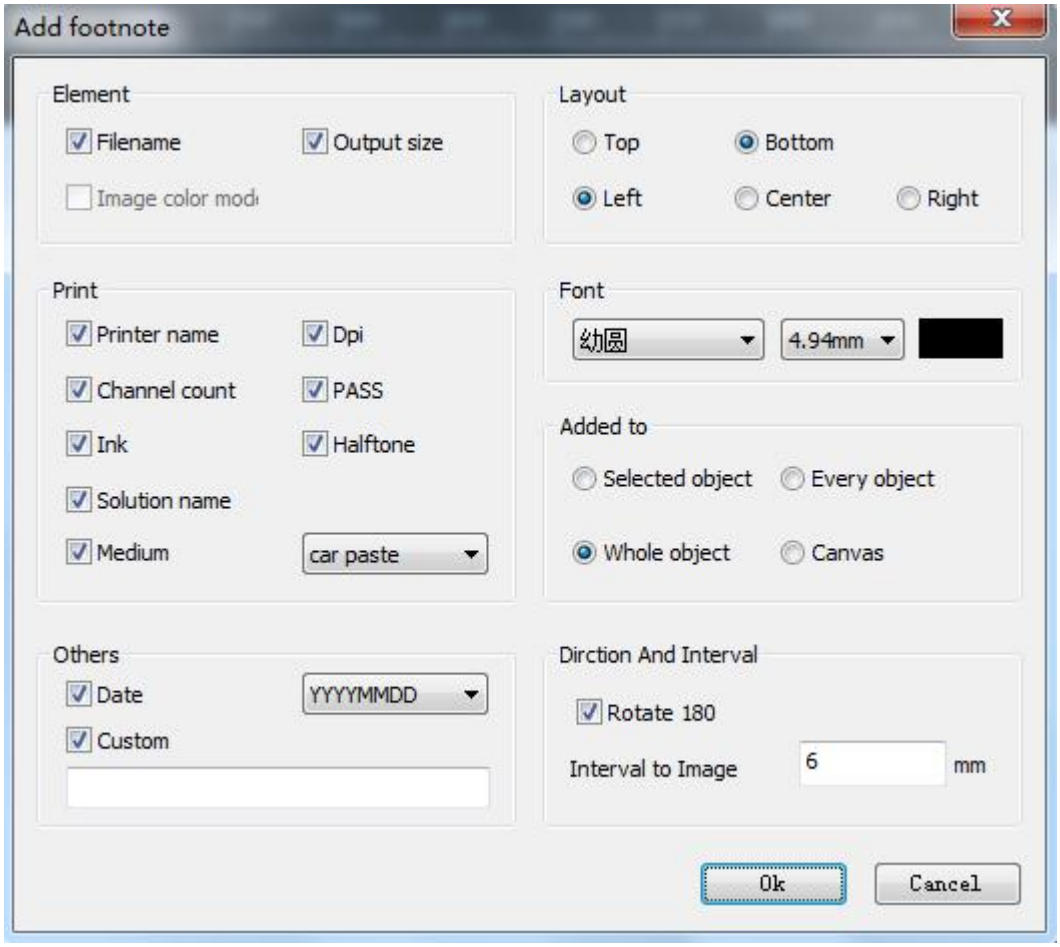
Notes:

Except for "Vertical Mirror", "Horizontal Mirror", "Rotate Right by 90°" and "Rotate Left by 90°", two or more images must be selected before other type-setting operations.

5.11 Add Footnote

When you need to add the image in the canvas with a footnote, you may click the "Add

Footnote" button  in the toolbar, the program will pop up the following dialogue box.

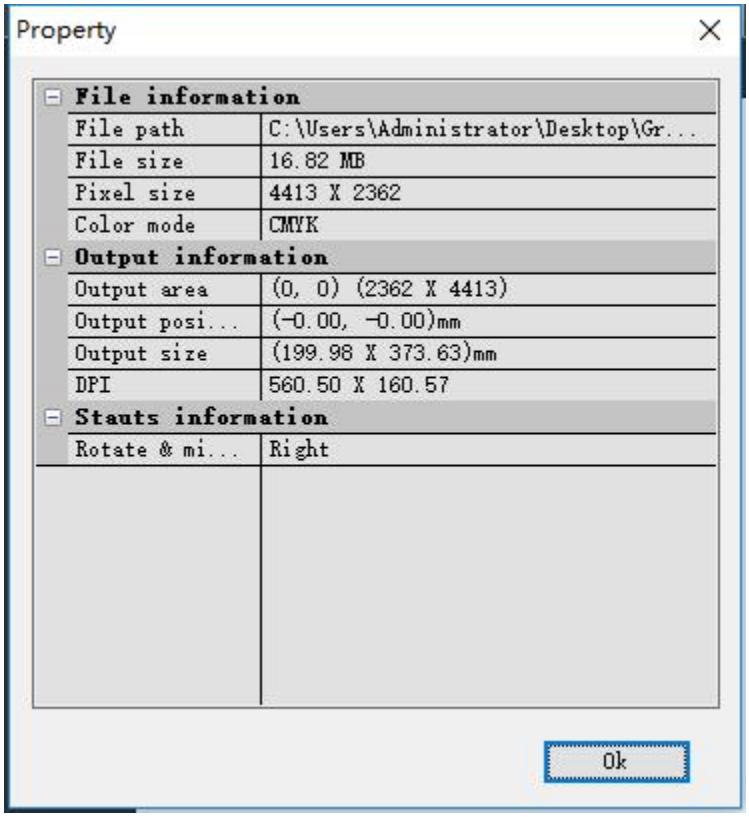


After setting the footnote to add in the footnote interface, click "Confirm" button, the footnote will be added. You can see the footnote in the image printed.

5.12 Check Image and Canvas Information

Check Image Information:

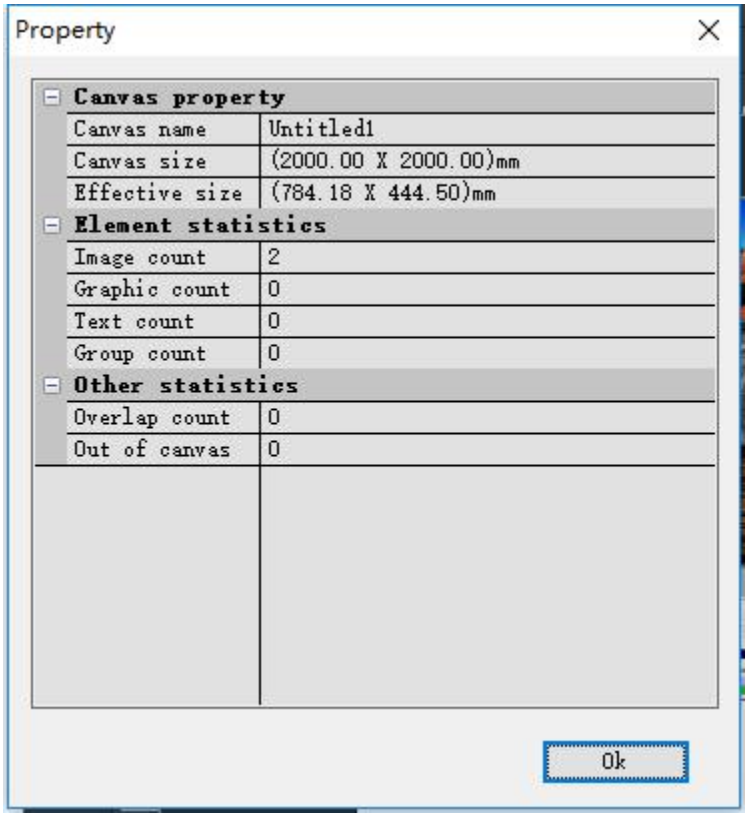
Select the image to view, click the right key of the mouse, select "Attributes of Image". The program will pop up the information box as below.



In this information box, you can see the detailed information of the current image.

Check Canvas Information:

Click the right key of the mouse at any area of the canvas, select “Canvas Information”. The program will pop up the following information box.



In this information box, you can see the detailed information of the canvas.

5.13 Clear Cache

Sometimes you may feel that the software has slowed down after a long operation, it may be because many cache files have been generated in the use.

You can click the button 

and select the item “Clear Cache” 

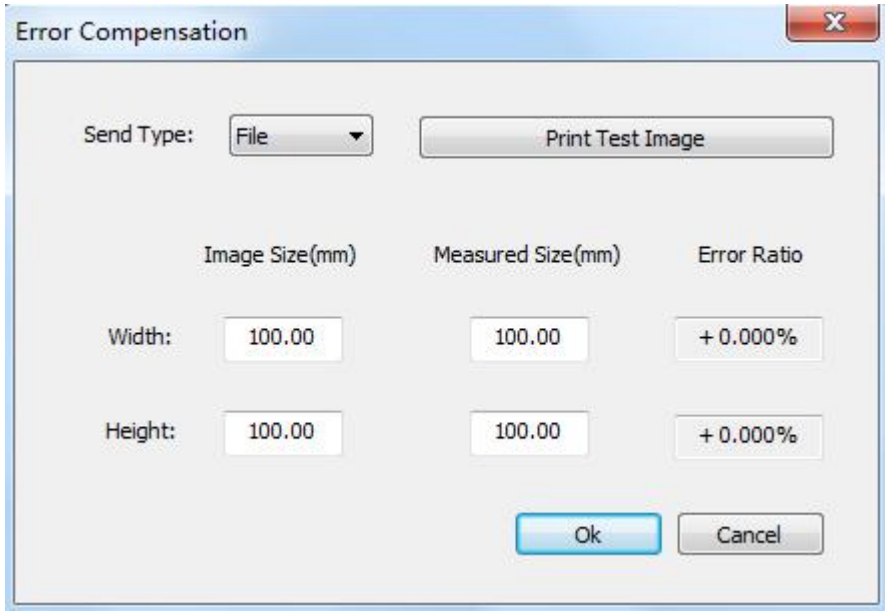
to clear temporary files saved in the folders of Log, Pdf, Thumb, tmp.

5.14 Error compensation

When there is a deviation between the actual image size printed by the machine and the theoretical size, you will use the size error compensation function. Click 

on the RIPrint menu bar to select 

, the following interface appears:



There are two ways to use this function: use the default test image and select test image.

There are two ways to use this feature:

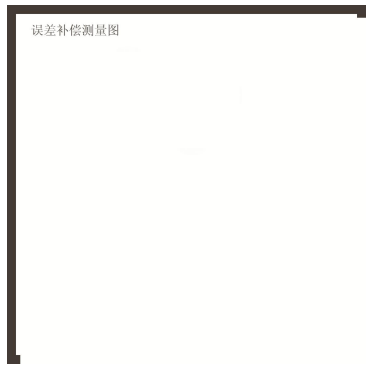
1.Use the default test image

2. Select test image

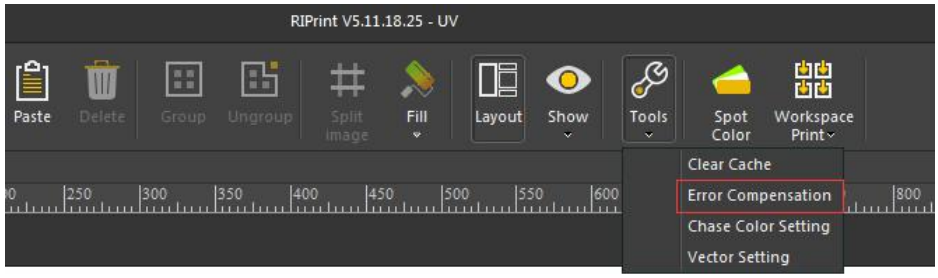
Users can use any of the schemes, which are described below.

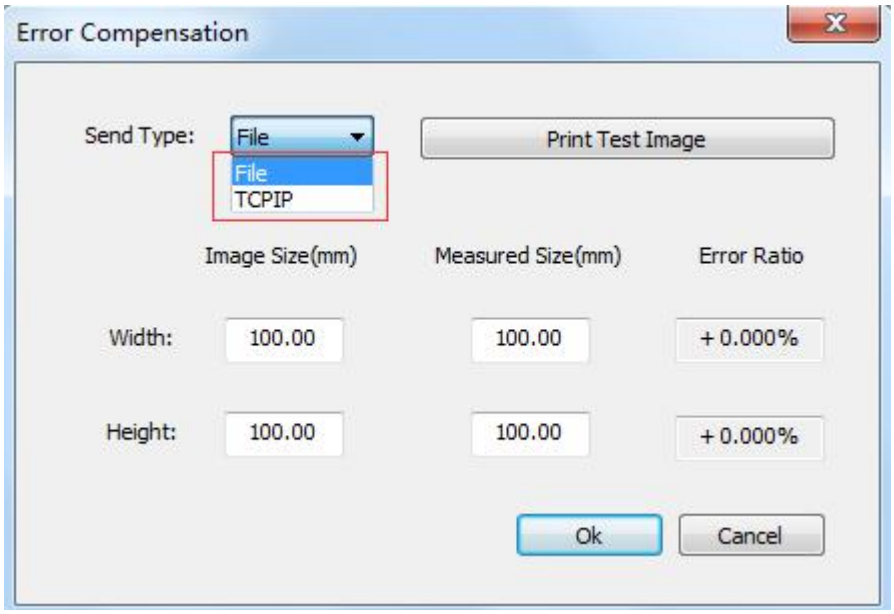
5.14.1 Use the default test image

The default test image is a rectangular image with a right-angled border, which is convenient for users to measure the actual size. The steps to use are as follows:

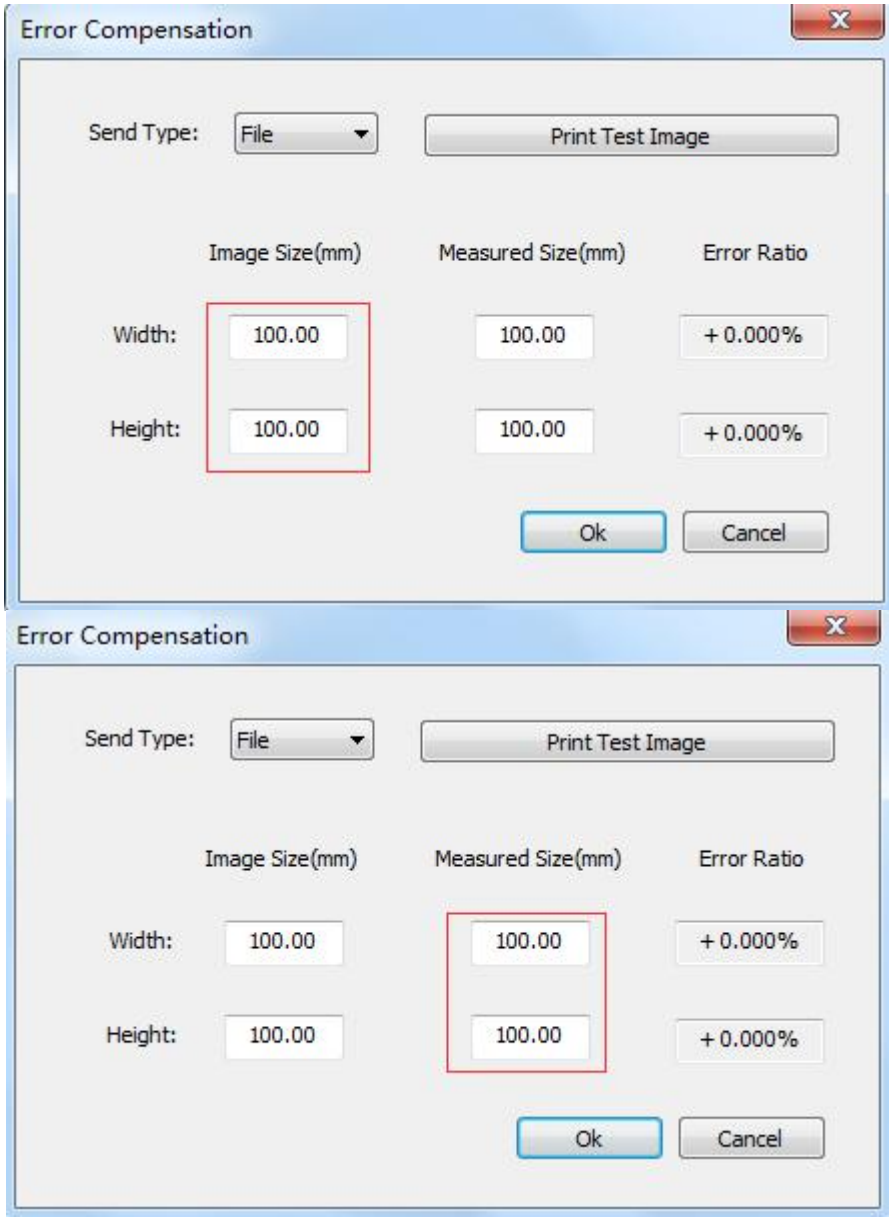


(1)Open the error compensation setting dialog box, select the way to print the test image. If you select the file, the corresponding print file will be generated, and then the print will be loaded by the print control software. If you select the network, you need to connect the print control software to print while loading.





(2)Set the size of the test image to be printed and the ideal size.



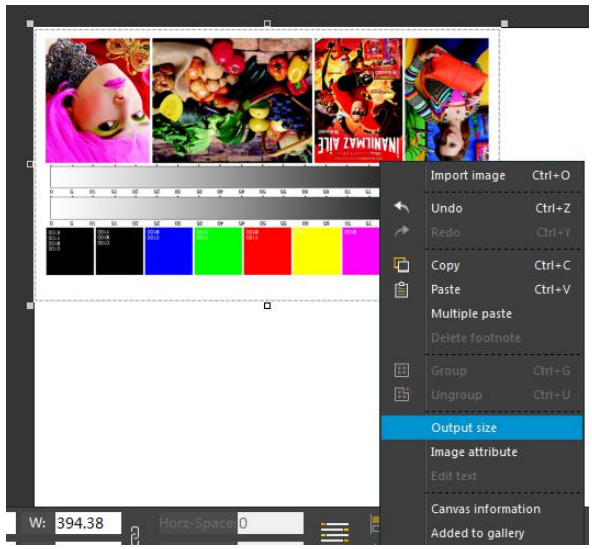
(3)Measure the actual printed image size, input it to the position indicating the print measurement size, click OK, and the setting is done.

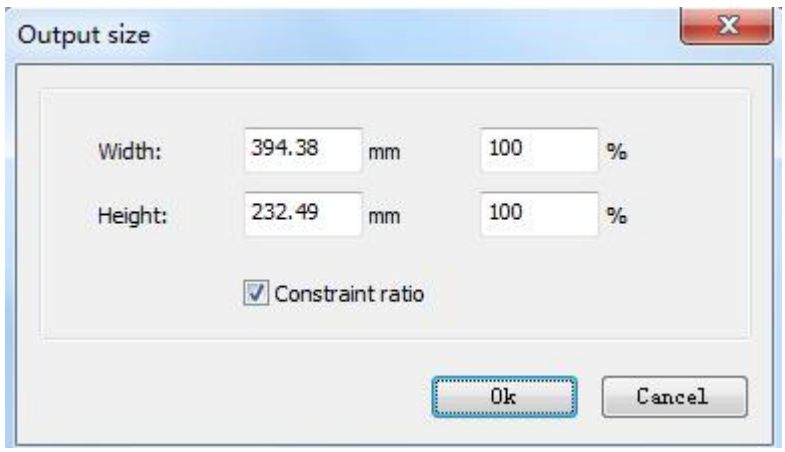
5.14.2 Select test image

This method supports the user to select the test image independently. The steps to use are as follows:

(1)Import the appropriate test image into the canvas. The image needs to have a clear border to make it easier to measure the actual size.

(2)Set the test image size, select the image and click the right mouse button to set the output size of the image.





(3)Measure the actual printed image size, input it to the position indicating by the print measurement size, click OK, and the setting is done.

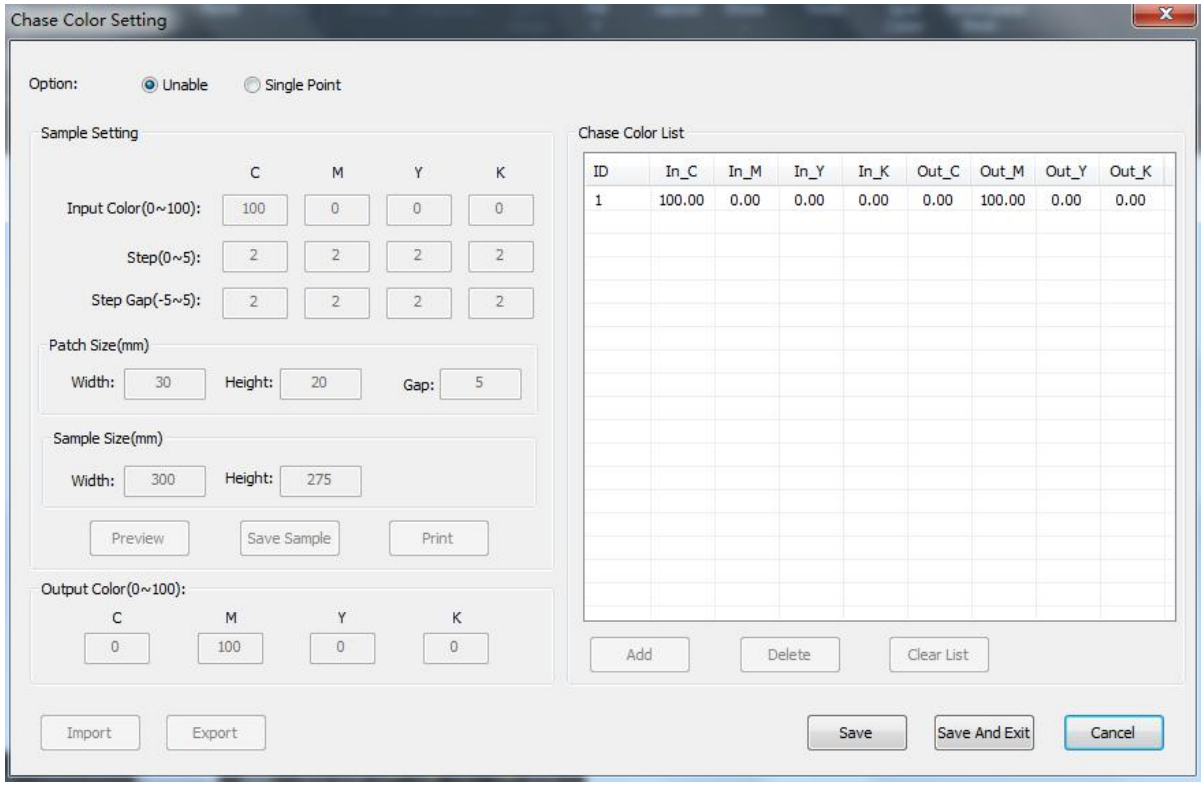
After the above operations are completed, the software can be used as usual.

5.15 Color correction setting

Click 

on the RIPrint menu bar to select 

and the following interface appears:



5.15.1 Color correction setting interface introduction

Color correction options:

When we need to use the color correction function, first select the single color correction option in the color correction setting options.

Sample settings:

Color reference: The default value of the option is C:50 M:50 Y:50 K:50, which can be adjusted from 0 to 100 as needed, supporting decimal input.

Steps (0~5): This option determines how many color blocks are generated for color matching and color correction. It can be adjusted from 0 to 100 as needed, only supporting integer input.

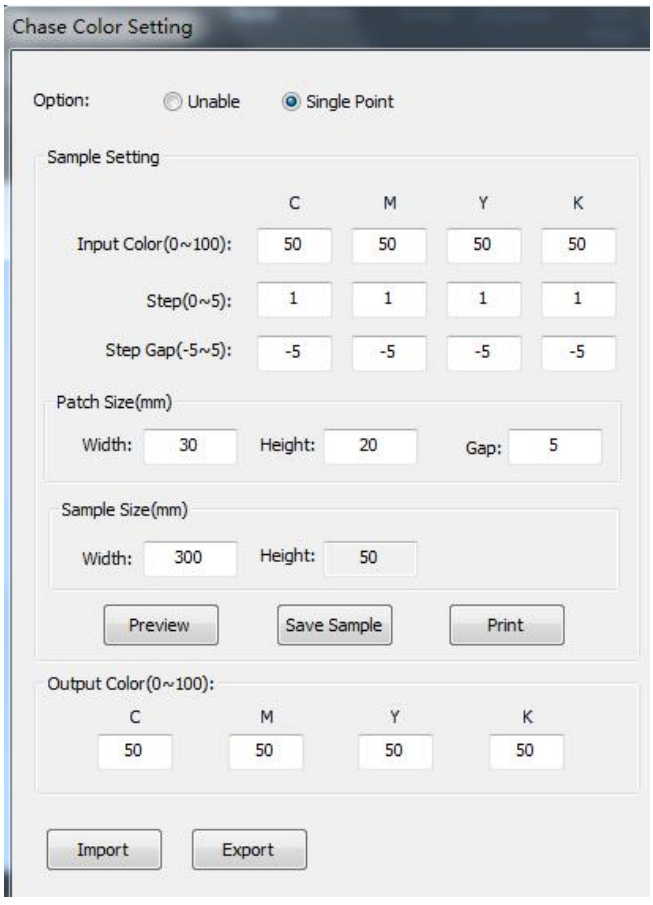
Step interval (-5~5): This option determines that the generated color block difference can be added or subtracted according to the value specified in (-5~5). It can be adjusted from -5 to 5

as needed, only supporting integer input.

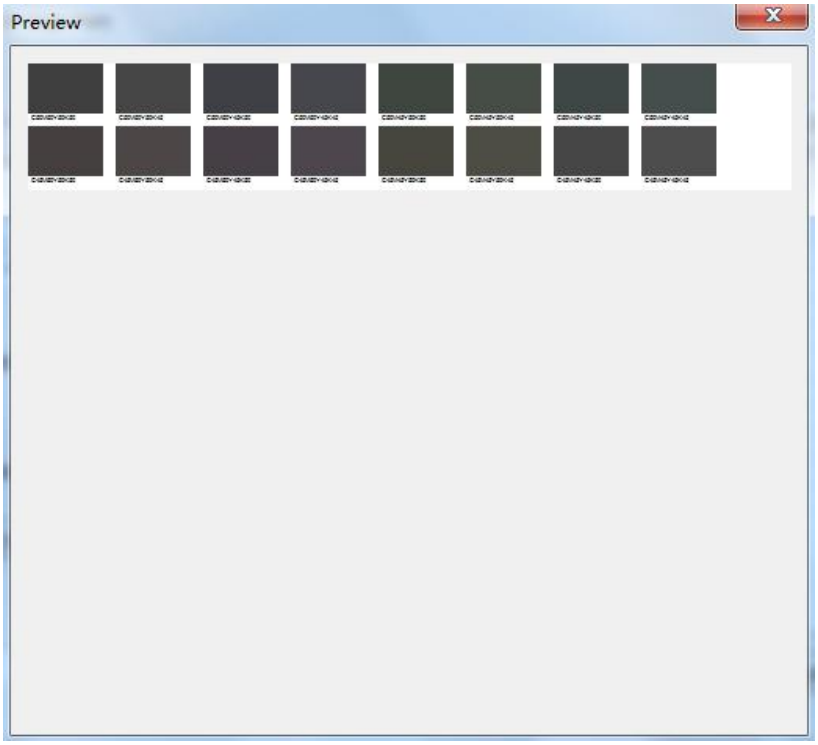
Color Block Size Setting: Set the length, width, and interval of the generated color block in this option. The interval is the horizontal interval between the two color blocks, and the vertical interval is a fixed value. The default values for the color block size are 30 mm for width, 20 mm for height, and 5 mm for interval. The width and height can be adjusted from 1 to 100 as needed, supporting decimal input. The interval can be adjusted from 0 to 20 as needed, supporting fractional input.

Sample Size Setting: This option sets the dimensions of the generated samples, of which the width is adjustable, while the height is adjusted as the width changes by automatically calculating and displayed. The height of the sample cannot be manually adjusted.

After the interface parameters are changed, you need to click the "save parameter" or "save and exit" button on the interface.

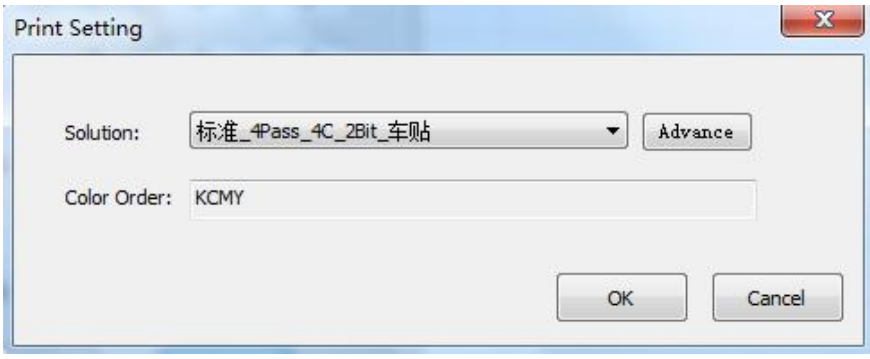


Sample Preview: The preview effect of the actual output of the sample generated by setting the parameters as shown in the figure above is shown below:



Save the sample: The generated sample is the same as the preview sample. The sample is in tif file format.

Print the sample: Selectthe corresponding curve and whether to open the icc to print the sample in the way ofsharp printing or file printing.



Export: After saving the data of the color correction setting interface, click the “Export” button, and the interface data is successfully exported.

Import: The exported color correction data is imported into the software.

Save parameters: Click it to save the parameter settings of this time. After re-opening the color correction function, the default values are the previously saved parameters.

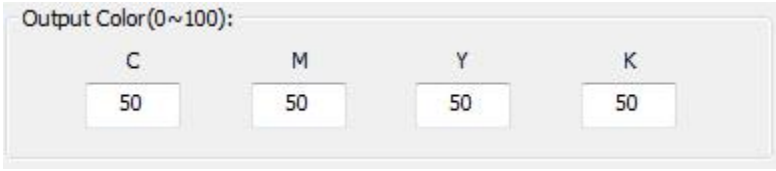
Save and exit: Click it to save the parameter settings of this time. The next time you restart the color correction function, the default values are the previously saved parameters and exit

the interface.

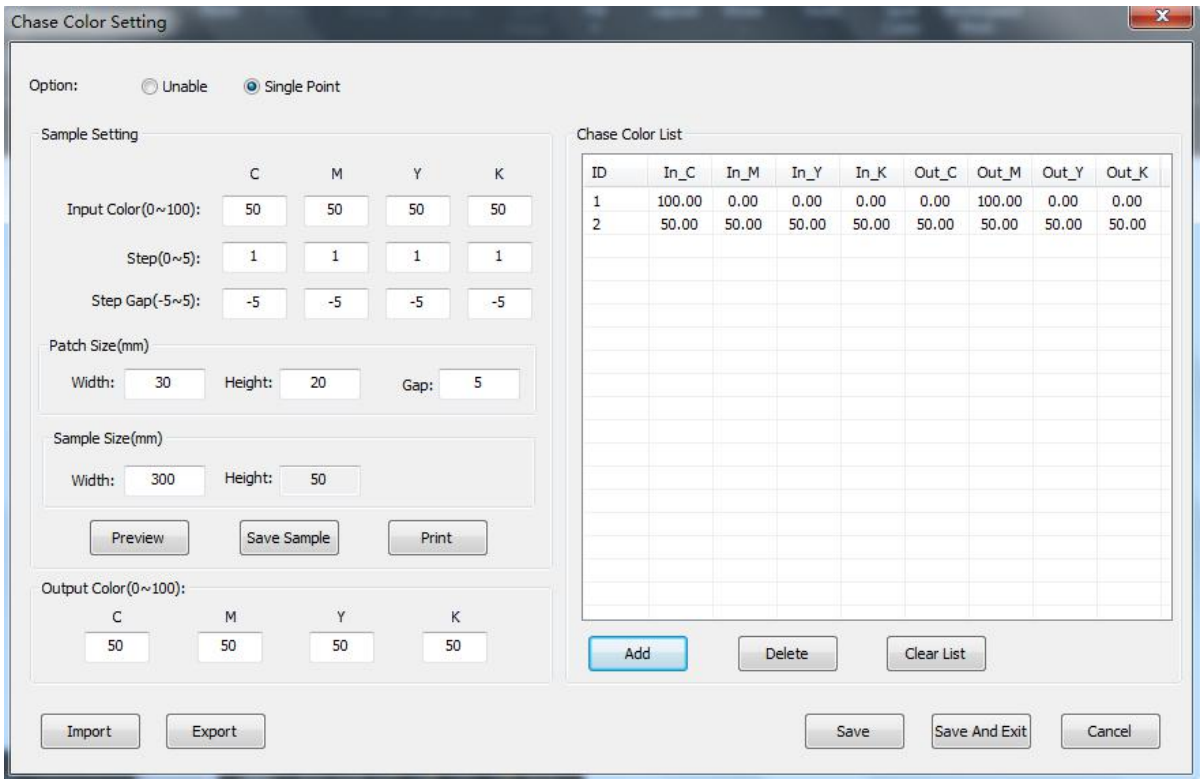
5.15.2 Examples

Color output value settings:

The color output value setting (0~100) can be adjusted from 0 to 100 as needed, and supports decimal input.



According to the previous settings, print the sample and select the closest color block to see the CMYK value below the image. Fill in the corresponding value in the output box above. After setting, click the Add button on the right. This value will replace the original value to achieve the purpose of color correction.



Notes:

1. The color correction setting is only for single point color chasing, and it is necessary to repeat the above operations with multiple color chasing.

2. The color correction setting will be effective regardless of the selection of any curve in the open state. It should be enabled according to the actual demand during selection. If not,

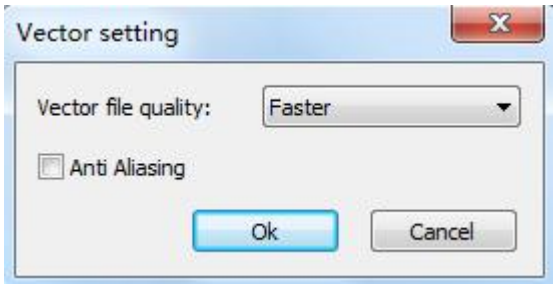
please select the "no color correction" option to turn off the color correction setting option.

5.16 Vector setting

Click 

on the RIPrint menu bar to select 

and the following interface appears:

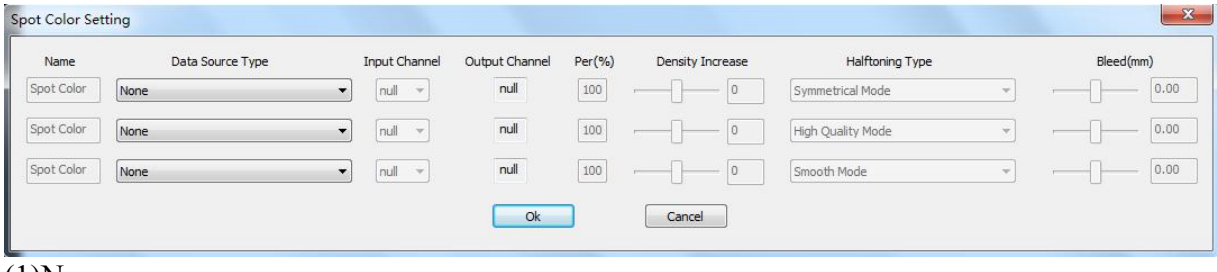


This function can set the precision of the output image, and provides three options, e.g. "faster", "normal", and "better". The resolution of the vector file is different when printing according to the set type of "vector file quality". Where "faster" is 1/4 of the smaller value of the horizontal resolution and the vertical resolution in the curve scheme; "normal" is 1/2 of the smaller value of the horizontal resolution and the vertical resolution in the curve scheme; "Better" is the smaller value of the horizontal resolution and the vertical resolution in the curve scheme.

When the “Anti-aliasing” option is checked, the sawtooth will be eliminated when the vector file is parsed; otherwise, if it is not checked, it will not be eliminated.

5.17 Special color setting

5.17.1 Data generation method



(1)None

The white ink channel data is not turned on.

(2)Image background color (same concentration)

The concentration of any one of CMYK channels of the current pixel is non-zero, the white ink channel gives a certain concentration value, and the given concentration is the value set by "concentration (%)".

(3)Image background color (image density)

The largest density value in the CMYK channel of the current pixel is used as the density value of the white ink channel.

(4)Image background color (anti-image density)

If the concentration of each color channel of a pixel is all zero, the white ink channel concentration is zero. If the original color channel concentration has a non-zero value, the minimum value is selected from the non-zero value as the concentration value of the white ink channel.

(5)Blank background

When the concentration of all CMYK channels of the current pixel is zero, the white ink channel gives a certain concentration value, and the given concentration is the value set by "concentration (%)".

(6)Special Colors

This method requires the original color image data to contain the specified (how to specify as described in the next section in detail) special color data channel, the special color concentration of each pixel is the white ink concentration.

(7)Special color + image background color (same concentration)

The special color channel concentration described in Section (6) is preferentially selected as the white ink channel concentration, and the density value generated by the "image background color (same concentration)" described in Section (2) is taken for the pixel with concentration of zero.

(8) Special color + image background color (image density)

The special color channel concentration described in Section (6) is preferentially selected as the white ink channel density, and the density value generated by the "image background color (image density)" described in Section (3) is taken for the pixel having a concentration of zero.

(9) Special color + image background (anti-image density)

The special color channel concentration described in Section (6) is preferentially selected as the white ink channel density, and the density value generated by the "image

background color (reverse image density)" described in (4) is taken for the pixel with concentration of zero.

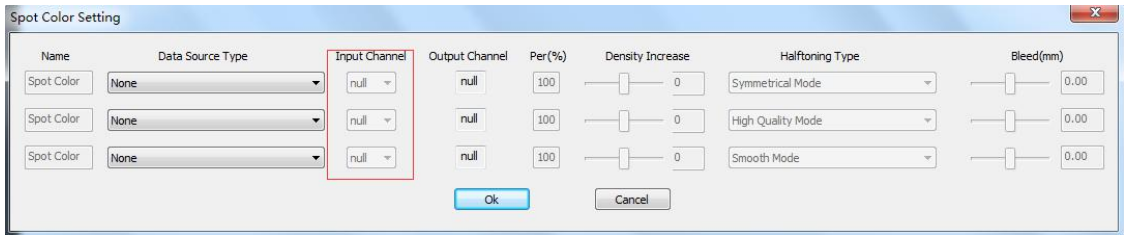
(10)Special color + blank background

The special color channel concentration described in Section (6) is preferentially selected as the white ink channel density, and the density value generated by the "image background color (blank background color)" described in (5) is taken for the pixel with concentration of zero.

(11)All

All pixels of the white ink channel are given a certain concentration value, which is selected in the software, that is, the fixed concentration is the value set by "concentration (%)".

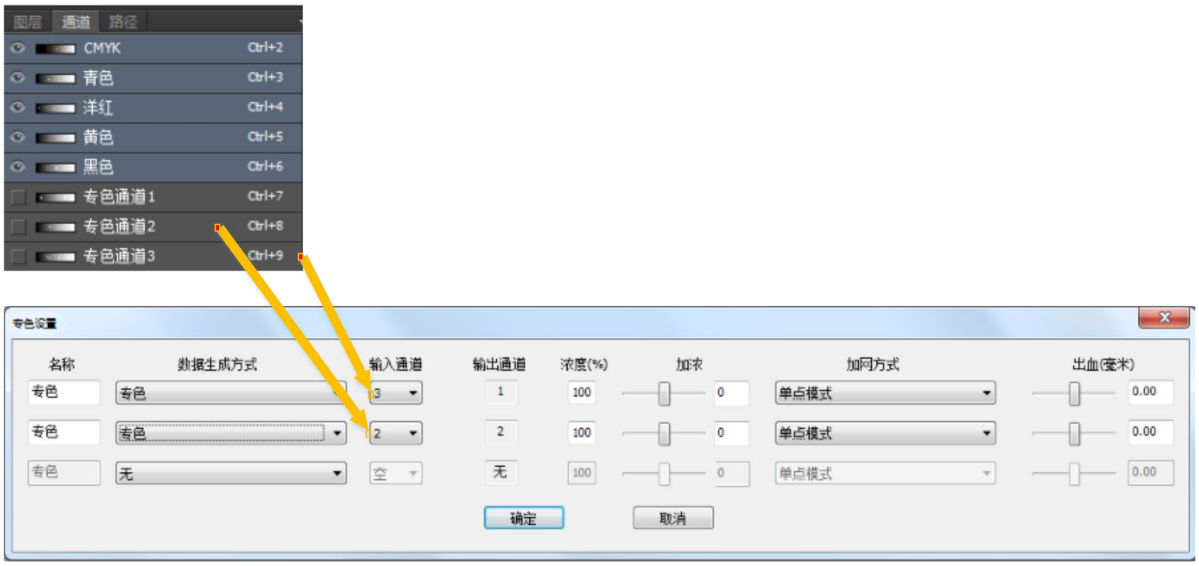
5.17.2 Input channel



When the data generation method option includes “special color”, you can use this option to set the data source of the special color channel. The input channel can be selected from 1-4, corresponding to the data channel number after the color channel in the original color image data.

(1)Example 1

Import CMKY+ special color 1+ special color 2+ special color 3 tif image, the printing scheme is 4 colors of KCMY; the special color opens two channels, and the input channels are set to 3, 2 respectively, then the first special color channel data is from special color 3, the second special color channel data is from special color 2, as shown in the figure:

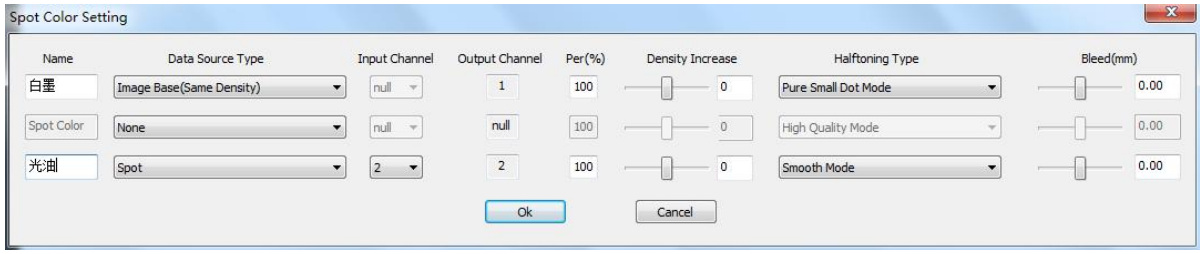


(2)Example 2

Import tif map of RGB+ special color 1+ special color 2, the printing scheme is 6 colors of KCMYLcLm; the special color opens two channels, and the input channels are set to 2, 4 respectively, then the first special color channel data source is special color 2, and the second special color channel data source is non-existent data, as shown in the figure::

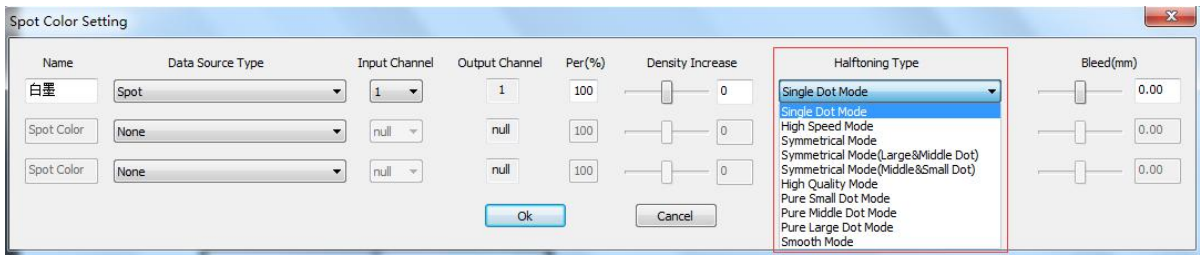
5.17.3 Output channel

The output channel value refers to the channel index after the color ink channel in the output file (such as the PRN file). When the data generation method is not "None", the channel is enabled, and the output channel values are arranged in order from beginning to the end.



If the color sequence of the printing scheme is KCMY, the special color setting is set as shown above, and the two channels are turned on. At this time, the output color sequence is KCMY + white ink + varnish, and the print confirmation interface displays corresponding prompts, as shown in the figure:

5.17.4 Screening method



(1)Single point mode

The actual screening method is 1BIT_DITHER.

Features: This mode must be selected when using a 1bit nozzle.

(2)High speed mode

The actual screening method is 2BIT_EXPRESS.

Features: Suitable for 2Bit nozzles, with fast speed, inferior accuracy, and drawing resistance.

(3)Even mode

The actual screening method is 2BIT_KMPCS_MIX.

Features: Suitable for 2Bit nozzles, with moderate accuracy and speed, and drawing

resistance.

(4) Even mode (large midpoint)

The actual screening method is 2BIT_KMPCS_MIX_LM

Features: Applicable to 2Bit, and only supports large and medium-point output nozzles, with moderate accuracy and speed, and drawing resistance.

(5) Even mode (medium and small point)

The actual screening method is 2BIT_KMPCS_MIX_MS.

Features: Applicable to 2Bit, and only supports medium and small-point output nozzles, with moderate accuracy and speed, and drawing resistance.

(6)High-precision mode

The actual screening method is 2BIT_KMPCS _UV.

Features: Suitable for 2 Bit nozzles with high precision and slow speed.

(7)Pure small point mode

The actual screening method is 2BIT_SMALLDOT.

Features: Suitable for 2Bit nozzles, only for small point output, with high precision, fine image, and very light ink.

(8)Pure medium point mode

The actual screening method is 2BIT_ MIDDLEDOT.

Features: Suitable for 2Bit nozzles, only for medium point output, with high precision, and lighter ink.

(9)Pure large point mode

The actual screening method is 2BIT_ LARGEDOT.

Features: Suitable for 2Bit nozzles, only for large point output, the light color part has low precision.

(10)Delicate mode

The actual screening method is 2BIT_LMPCS.

Features: Suitable for 2Bit nozzles, using three-stage point, and the printing effect is more delicate.

5.17.5 Introduction to the characteristics of outlets

(1)The single point mode must be selected when using a 1-bit nozzle.

(2)High-speed mode is suitable for 2Bit nozzles. It has fast speed and poor accuracy, and it has the effect of preventing drawing.

(3)The Even mode is suitable for 2Bit nozzles. It has moderate speed and accuracy, and it has the effect of preventing drawing.

(4)Even mode (large and medium point) is suitable for 2Bit, and only supports the nozzle with large midpoint output. It has moderate speed and accuracy, and it has the effect of preventing drawing.

(5)Even mode (small and medium point) is suitable for 2Bit, and only supports the nozzle with small and medium point output. It has moderate speed and accuracy, and it has the effect of preventing drawing.

(6)High-precision mode is suitable for 2Bit nozzles with high precision and slow speed.

(7)Pure small point mode is suitable for 2Bit nozzles, only for small point output, with high precision, fine image, and very light ink.

(8)Pure medium point mode is suitable for 2Bit nozzles, only for medium point output, with high precision, and lighter ink.

(9)The pure large dot mode is suitable for 2Bit nozzles, only for large point output, and the light color part has low precision.

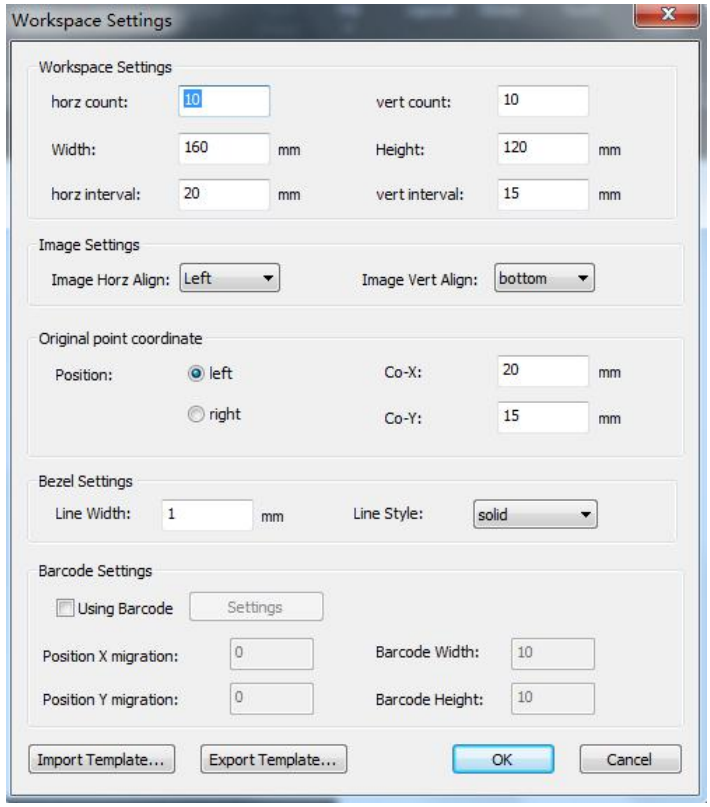
5.18 Station printing

Station printing supports saving station templates and importing station print templates.

Click 

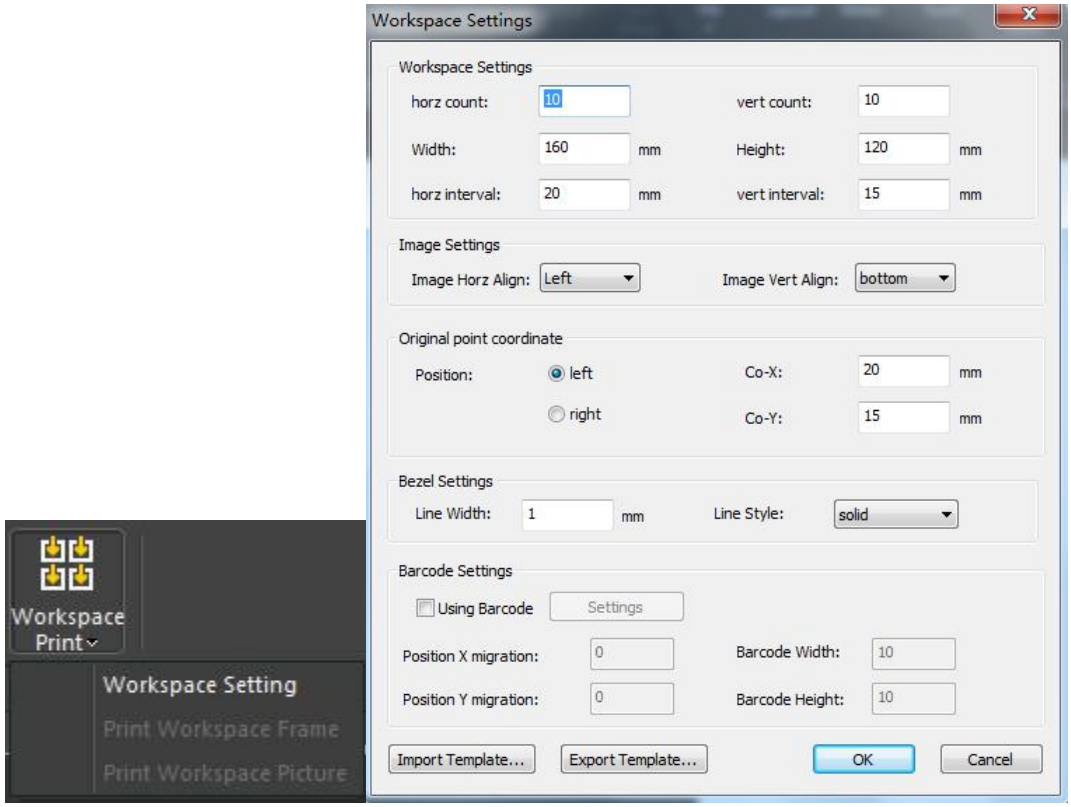
on the RIPrint menu bar to select 

, the following interface appears:



5.18.1Create station and update station

Click on the home screen of the RIPrint: menu bar [Station Printing] -> [Station Setting], open the setting interface. After editing, click OK to create or update the station print canvas (tpp):



5.18.2 Introduction to Station Properties

The setting interface for station printing is as shown in the figure above

(1) Horizontal/Vertical Quantity: The number of horizontal and vertical quantities determines how many stations are to be arranged, and the number is filled according to actual needs and actual print size (firstly, the canvas size is larger than the size of the work station).

(2) Station width/height: width and height determine the length and width required to print the image

Horizontal/Vertical Spacing: The horizontal and vertical spacing determines the horizontal and vertical distance between each station.

(3) Origin coordinates: The left and the right options of the origin coordinate function represent the horizontal and vertical coordinates of the coordinate x and the coordinate y corresponding to the starting point position when arranging from the left side of the canvas and from the right side of the canvas, respectively.

(4) Line width/border line style: The line width determines the width of the required aligning frame line of station printing, and the border line style is displayed and printed by the corresponding solid line, dashed line and dotted line.

(5) Template: The export (import) template function is to save (load) the setting options of the station printing, so that the same data saved before can be quickly recalled when the software is restarted or the same printing is needed later.

(6) Barcode setting

After selecting [Start Barcode], you can set barcode related properties: barcode type, variable management, variable setting. After the barcode is activated, as long as there is a image in the station, a barcode will be created according to the setting.

Remarks: The so-called "variable" refers to the rules bound to the barcode, which stipulates how the barcode changes, for example, binding one serial number variable to one QRCODE (two-dimensional code) to print 100 copies, assuming the serial number is custom edited from 001 to 100, the QR code pattern will change, and the result of the scan code is 001 to 100.

1) Currently supports 15 barcodes, namely Code128A, Code128B, Code128C, Ean8, Ean13, Ean128, Code39, Code93, UPC_A, UPC_E, ITF14, Codabar, QRCode, DataMatrix, PDF417

1.No limits on the length of Code128A; Code128A code supports following characters: 0~9, A~Z, control characters (the actual code is 0-95 supporting ascii code)

2.No limits on the length of Code128B code; Code128B code supports following characters: 0~9, A~Z, a~z, characters (the actual code is 0-126 supporting ascii code)

3.No limits on the length of Code128C code; Code128C code supports following characters: 0~9

4.Ean8 code length: 7+1, 7-bit valid data plus 1 parity bit; Ean8 code supports following characters: 0~9

5.Ean13 code length: 12+1, 12-bit valid data plus 1 parity bit; Ean13 code supports following characters: 0~9

6.No limits on the length of Ean128 code; Ean128 code supports following characters: all ASCII code

7.No limits on the length of Code39 code unlimited length; Code39 code supports following characters: 0~9, A~Z, ., /, -, +, $, %, space (7 characters)

8.No limits on the length of Code93 code; Code93 code supports following characters: all ASCII code

9.UPC_A code length: 11+1, 11-bit valid data plus 1 parity bit; UPC_A code supports

following characters: 0~9

10.UPC_E code length: 7+1, 7-bit valid data plus 1 parity bit; UPC_E code supports following characters: 0~9

11.ITF14 code length: 13+1, 13-bit valid data plus 1 parity bit; ITF14 code supports following characters: 0~9

12.No limits on the length of Codabar code; Codabar code supports following characters characters: 0~9, A~D, ., /, -, +, $, : (6 characters)

13.QRCode supports following characters: numbers, letters, characters, Chinese characters

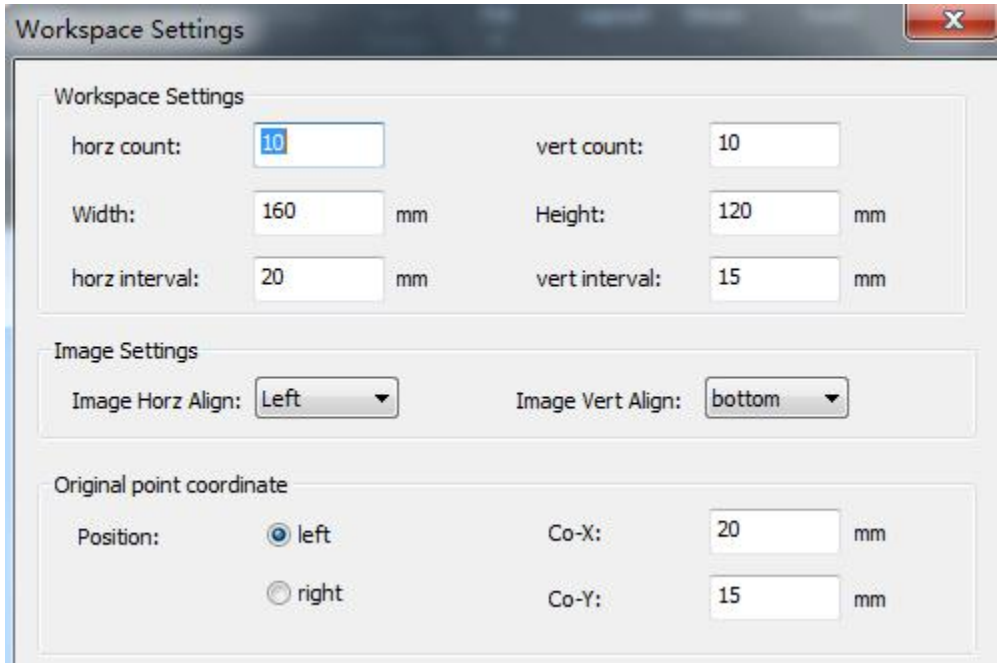
14.DataMatrix supports following characters: numbers, letters, characters

15.PDF417 supports following characters: numbers, letters, characters, Chinese characters

2）There are currently three variable rules supported, which are serial number, calendar, and text.

5.18.3 Station loading image

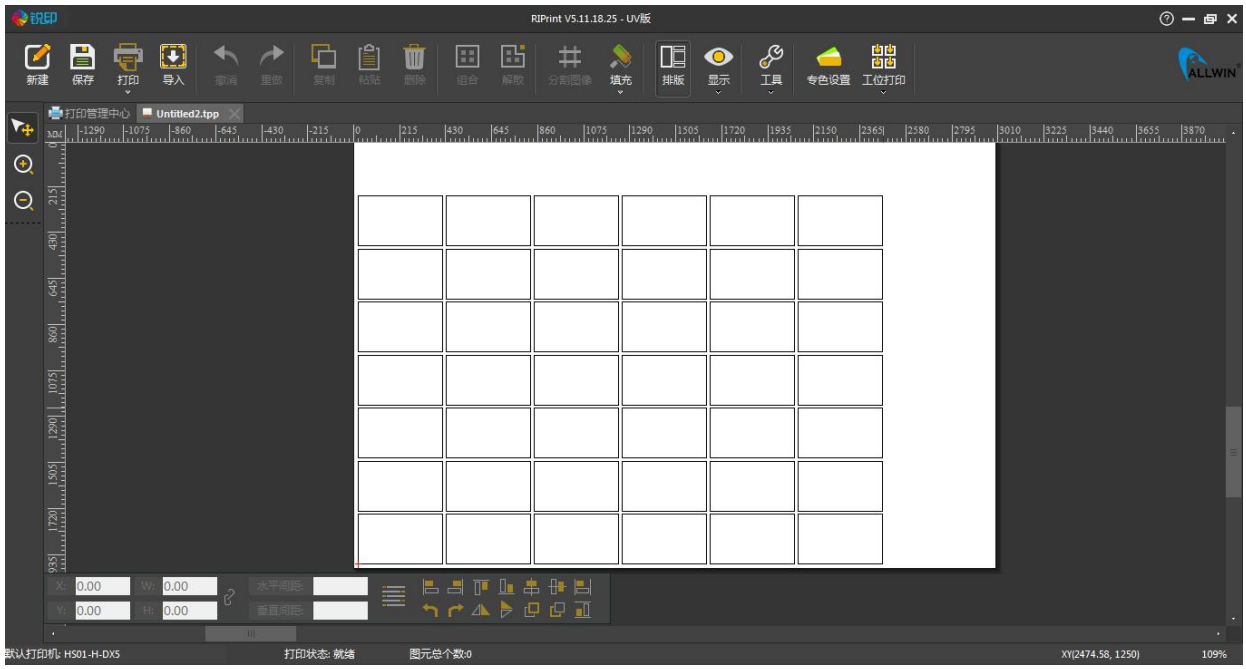
(1)Station setting: Click OK after entering the station setting to display the station box that is arranged in the canvas according to the value we set:



Let's take this setting as an example to do the following operations.

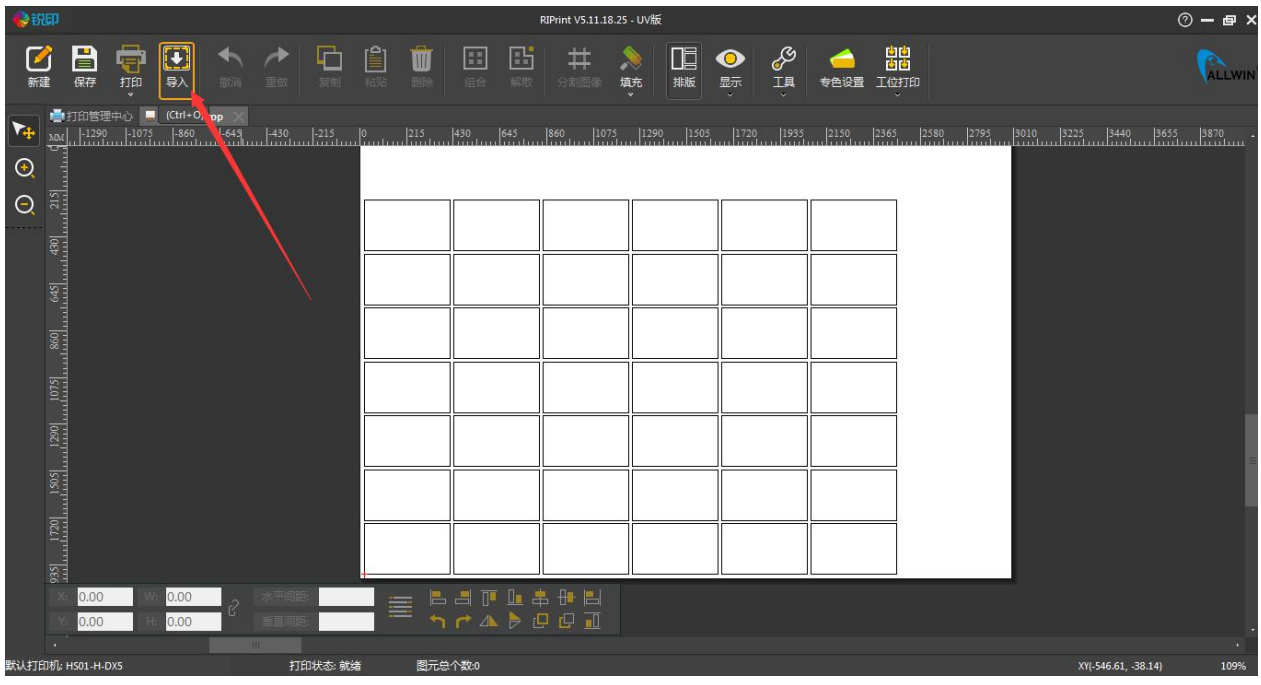
(2)After the [Station Settings] interface is set, click [OK] to create or update the station

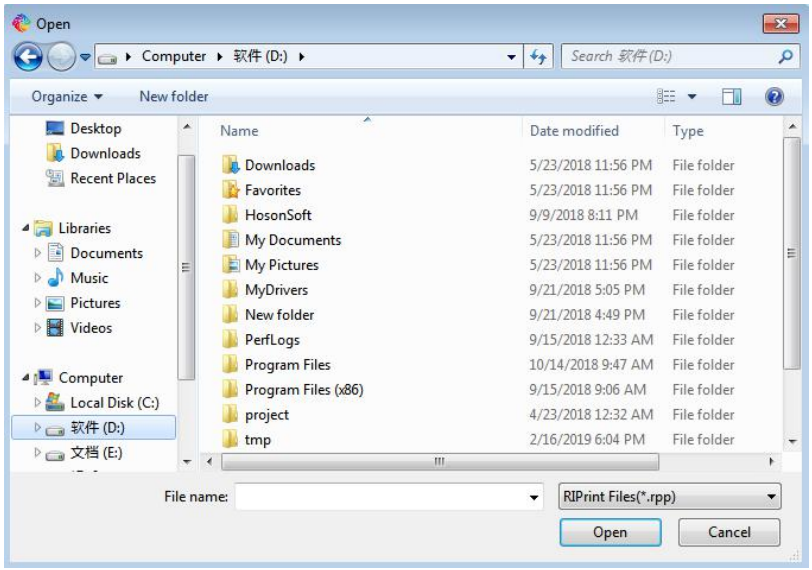
printing canvas (tpp), as shown in the figure below:

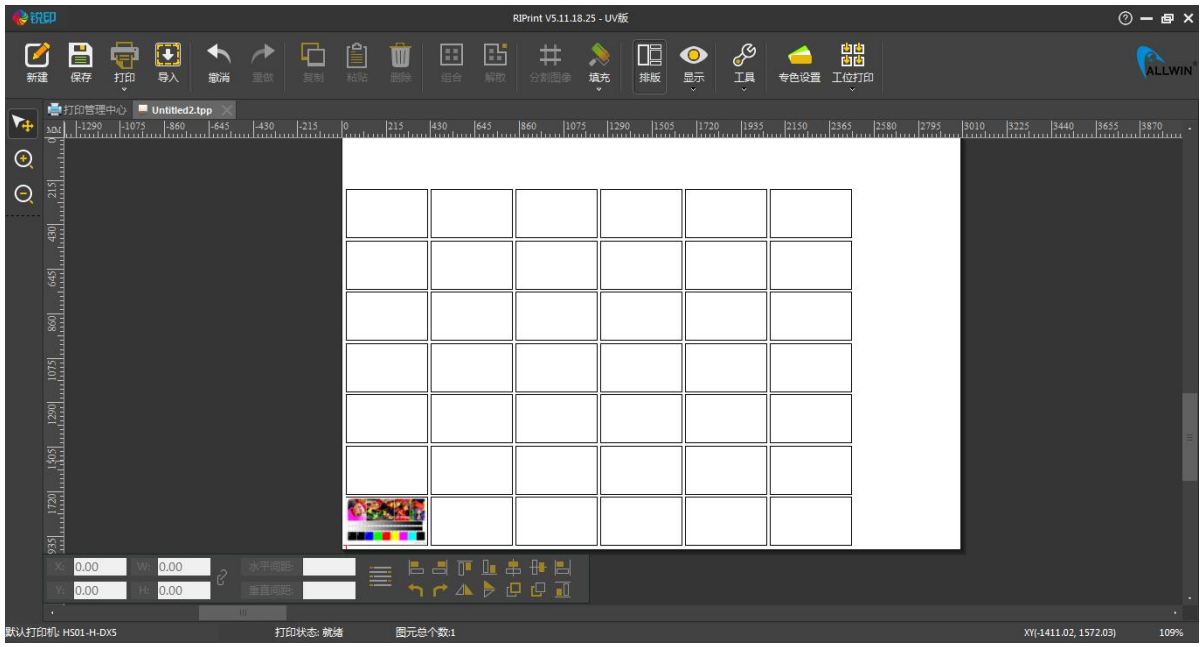


(3)This step we need to load the image and arrange it to the actual desired image.

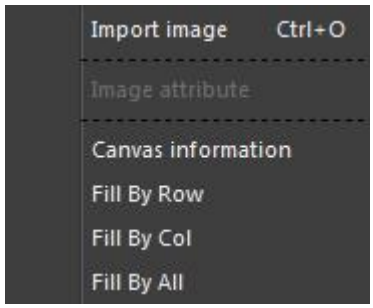
1)Select the import option in the menu bar to load the image to be arranged, as shown in the figure below:



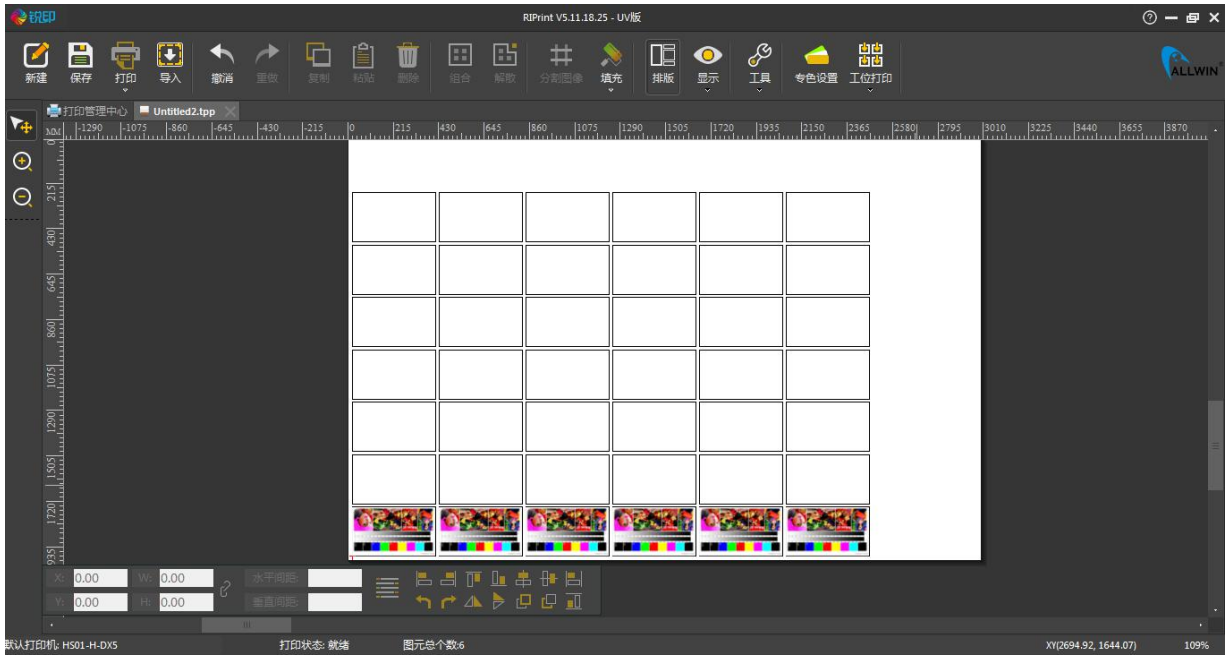




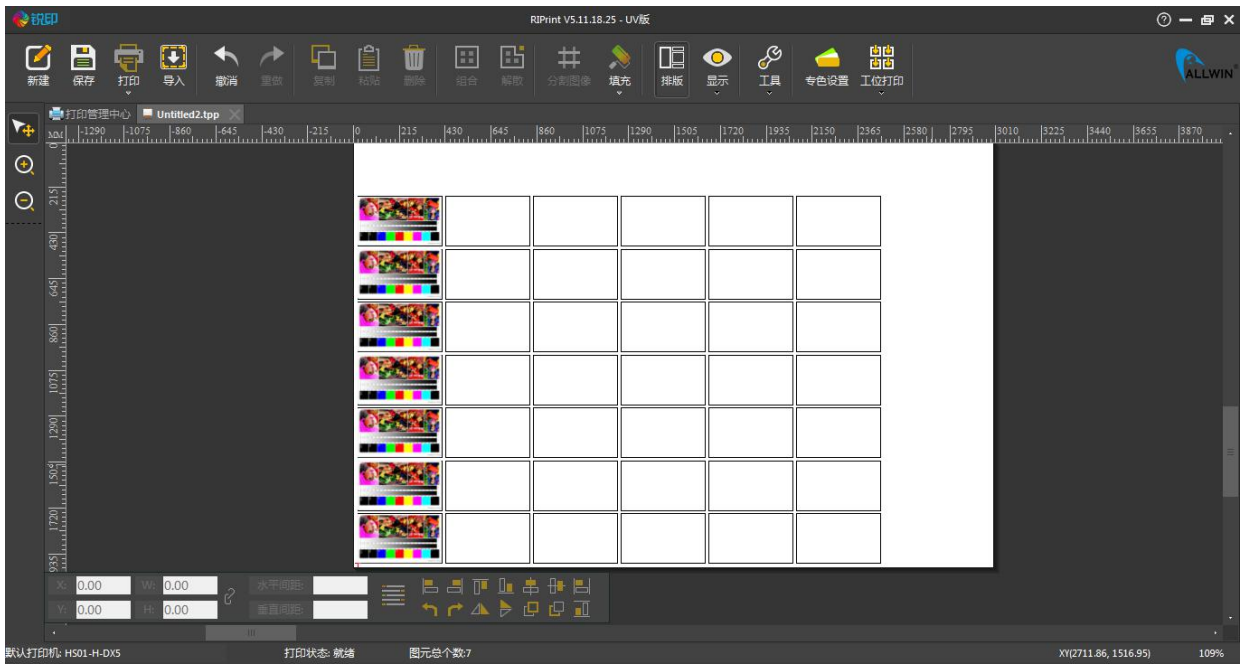
2)After loading the image, we can right click on the selected image and there will be three shortcut setting.options.



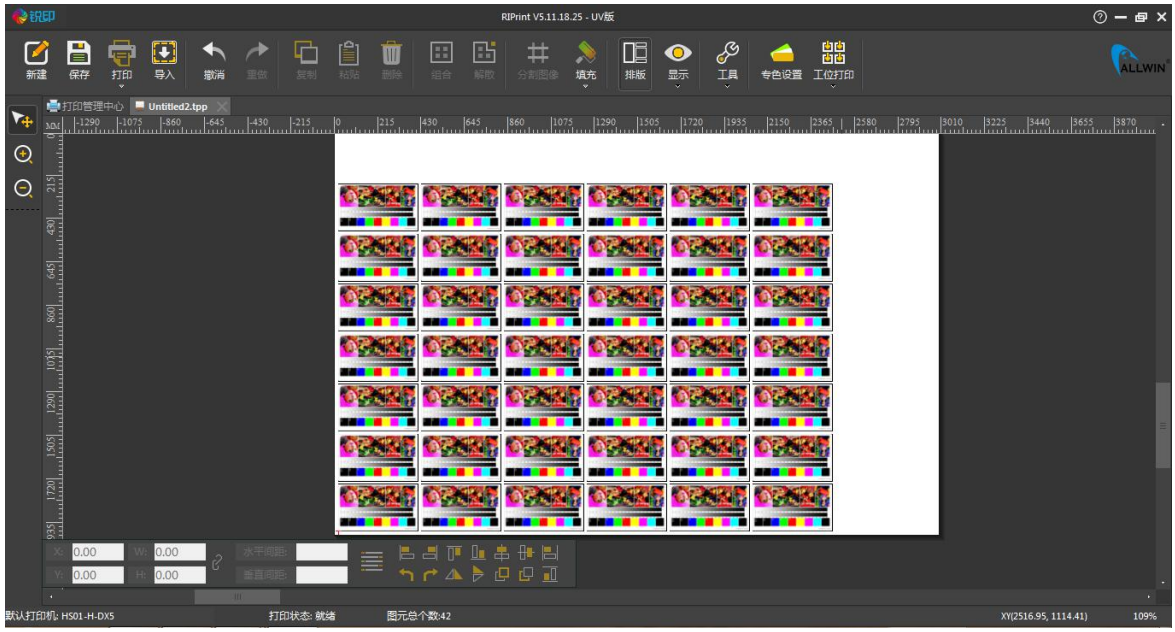
The line copy corresponds to the horizontal arrangement of the selected image according to the current station setting. The effect is as follows:



The column copy corresponds to the vertical arrangement of the selected images. The effect is as shown in the figure:

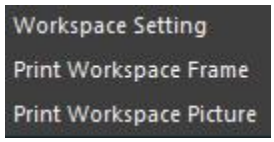


After selecting the fill station option, all current stations will be filled. The actual effect is as shown below:



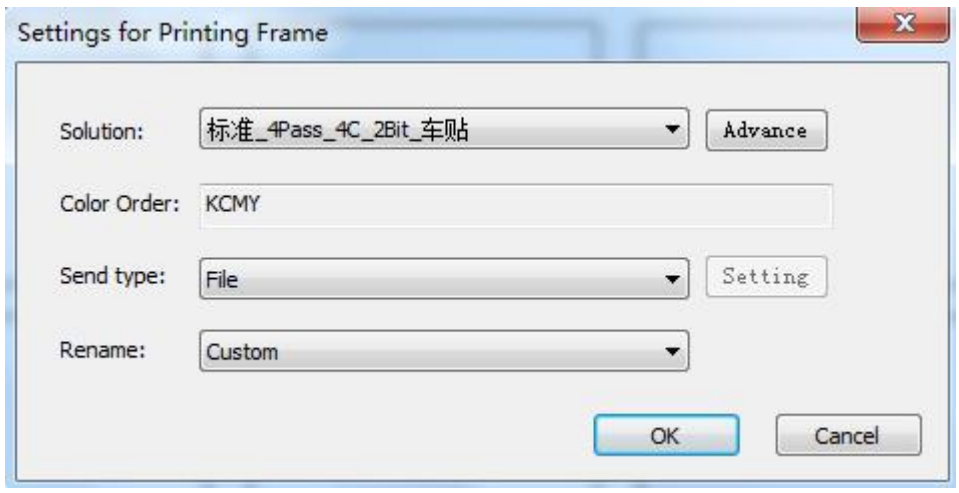
5.18.5 Printing

After selecting the station printing, the traditional print button is disabled. In this case, we need to print with the other two options in the station printing options.



(1)Print the bottom plate (for station printing, only printing the station rather than internal image)

After selecting this option, the following interface pops up:



Here we can choose to print the bottom plate, which is the curve used in the aligning frame. In the advanced settings, we can change the default color sequence of the curve as

needed, which generally is the default value and we can see whether icc needs to be enabled. The transmission method is divided into file and network, depending on the actual use.

(2) Print image (the image is printed according to the station setting, without printing the station frame), and select the desired curve and the transmission method to print.

Chapter 6 Print Setting

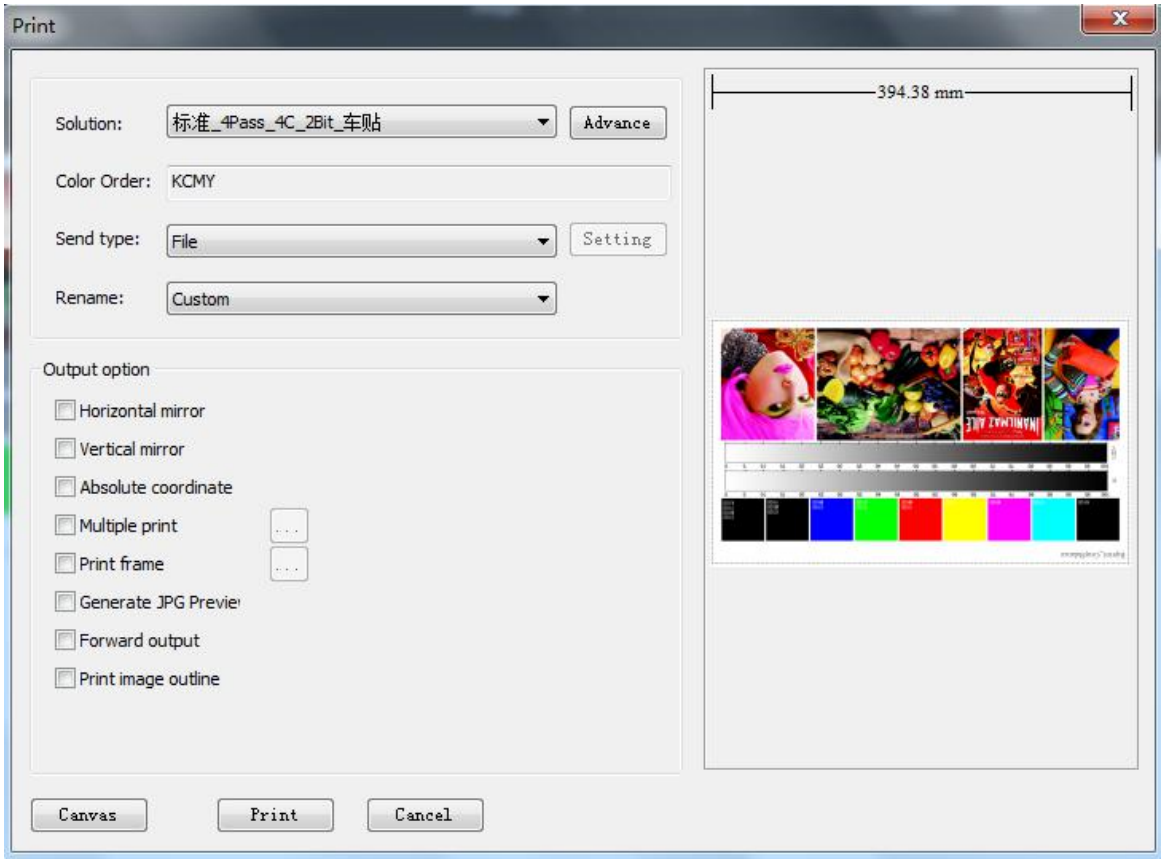
6.1 Basic Setting

6.2 Senior Setting

6.1 Basic Setting

Click the “Print” button 

in the menu bar of the software (or shortcut keys Ctrl+P), the program will pop up a confirmation dialogue box as follows.

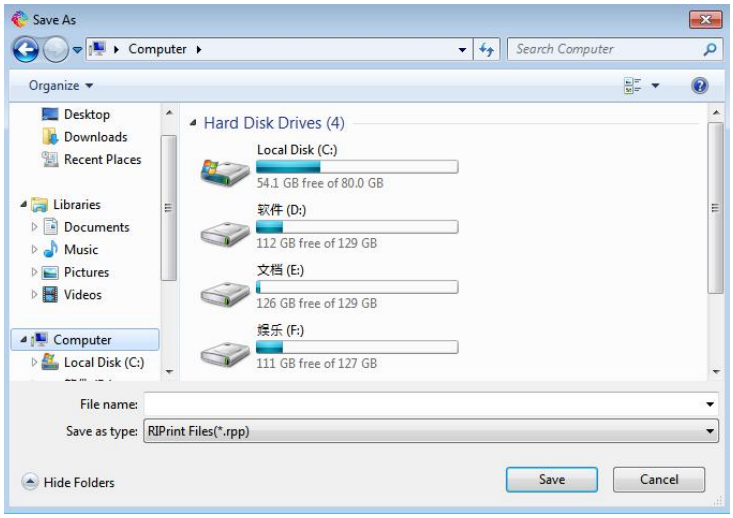


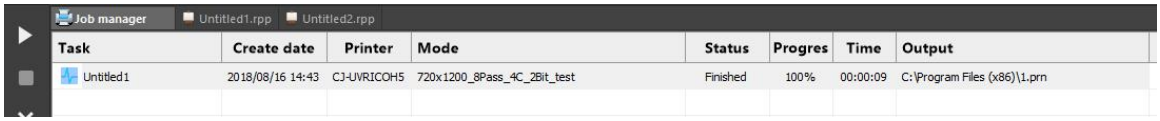
Here you may set related parameters of printing:

1.Print Scheme: Select a print scheme you need from all new print schemes.

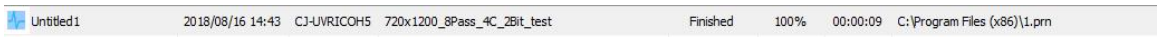
2.Send Mode: As to send mode, you may select printing to the file port (output mode: FILE) or printing to the network port (output mode: TCP/IP). If the former is selected, PRN file is generated first and then opened by Printer Manager for printing. If the latter is selected, the image is printed while it is processed. No PRN file will be generated. Printer Manager only needs to stay open and set the parameters.

Select printing to the file port, click the “Print” button in the confirmation interface of printing as follows.

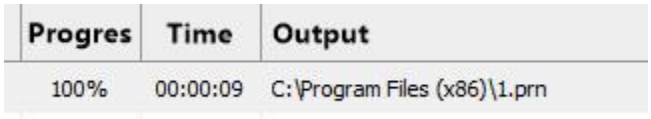




Select printing to the network port, click the “Print” button in the confirmation interface of printing. The progress is indicated as below.



Here, the meanings of parameter progress, timing and output mode need to be explained.



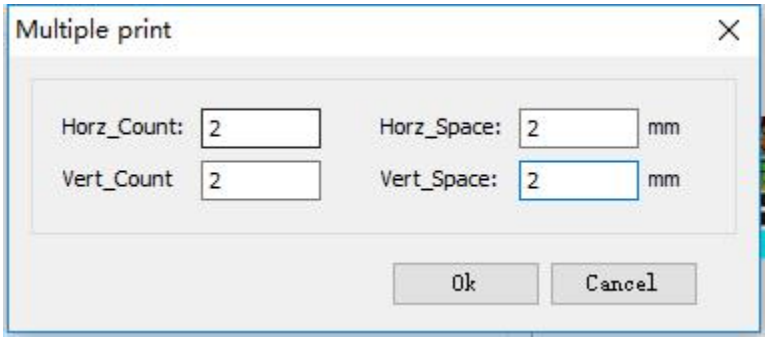
22% means the proportion of RIP quantity. 00:00:04 means that it takes 4 seconds to finish 22%. The output mode shows the saved path and name of file. In addition, when it is printed to the network port, the user can pause printing by clicking “Pause” button. If the user wants to continue to print, click “Start” button to continue. If you want to terminate printing in the midway, you can click “Stop”. After the program stops printing, you can make other operations.

3.Horizontal Mirror: Select whether the current image needs horizontal mirroring.

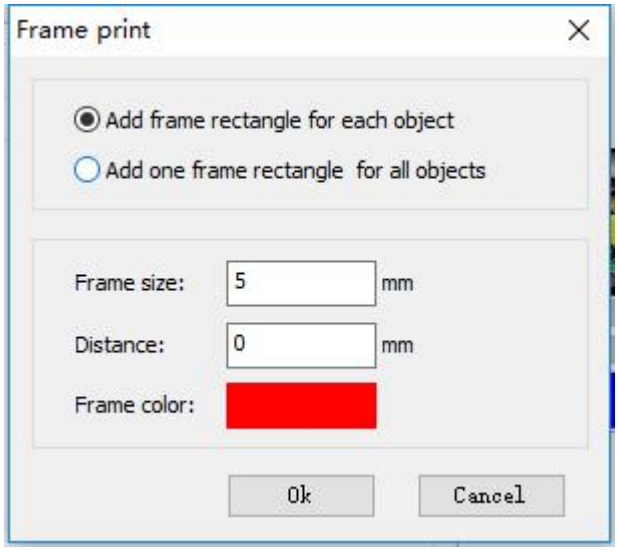
4.Vertical Mirror: Select whether the current image needs vertical mirroring.

5.Absolute Coordinate Output: Select the printing mode of absolute coordinate output, i.e., to print the entire canvas.

6.Multiple Copies Print: Select Multiple Copies Print, you can set related information. The following dialogue box will pop up.



7.Frame Print: Select Frame Print, you can set related information of it. You can set printing a frame for each image. You can also set printing a frame for all images as a whole. The dialogue box is as follows.



8.Generate JPG preview file: Check the Generate JPG preview file to save a JPG preview file with the same name in the same path while exporting prn in local file mode.

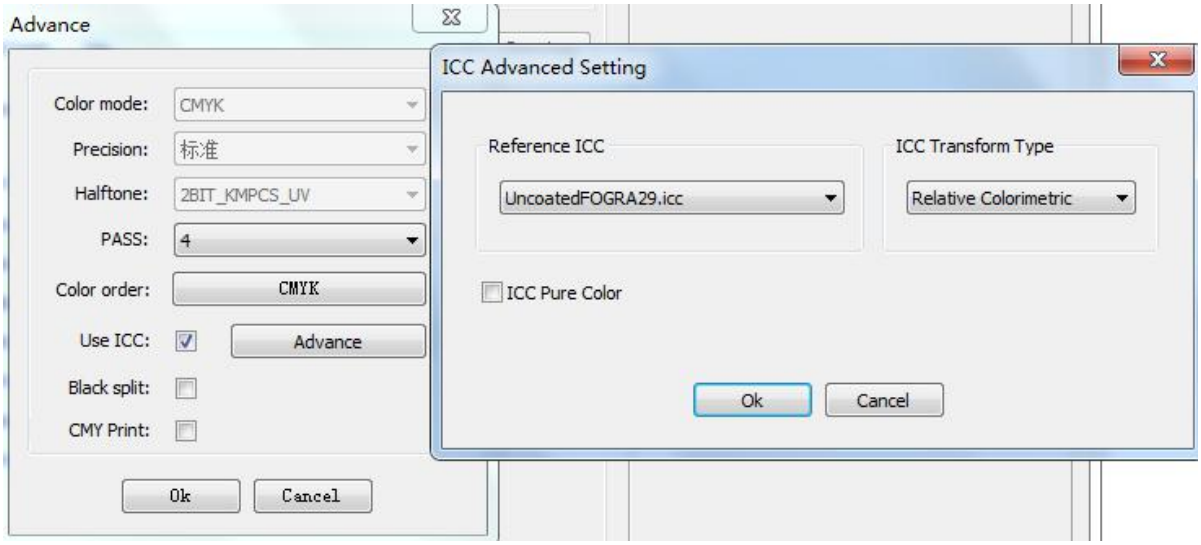
9.Forward Output: Checking the forward output will cause the elements in the canvas to be rotated 180 degrees to be printed on the machine.

10.Print image contour: Check the print image contour to print the edge information of the non-white area of the image and the outermost contour.

11.Canvas Setting: For canvas setting, please refer to the operation description of the above text.

6.2 Senior Setting

Senior Setting is the supplement to Basic Setting, which is very frequent and helpful in the actual use. Click the “Senior” button in the confirmation interface of printing. The following dialogue box will pop up.



1.PASS number: Select the PASS number you need to print

2.Open ICC: If your print scheme curve includes ICC information and you need to open ICC to print the images, then you need to tick here to open ICC.

3.Turn on the pure color function of ICC: With the open pure color function of ICC, the pure color block will not be doped with other colors of ICC.

4.Black Dissolving: If you want to open Black Dissolving to print images, then you need to tick the item.

5.CMY printing: If you want to use the three nozzles to save the K nozzle to print images, then you need to check CMY printing here.

6.Output Color Sequence: Click the Output Color Sequence, you will see the surprise of the software. At the interface, you can change the color sequence of the slot, i.e., you may not be able to change the color sequence of the printer’s nozzle. But the software provides another

solution. That is, you can change the color sequence of slot for the print scheme to ensure that you will get satisfactory images. You may decide whether to set corresponding channel for thickening treatment according to the condition of ink you use. You may also adjust the luminance of image printing, contrast, brightness to ensure that you get satisfactory images.

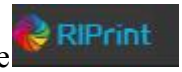
After the above setting, click the button “Print”, the images to print will be printed according to your setting.

Notes:

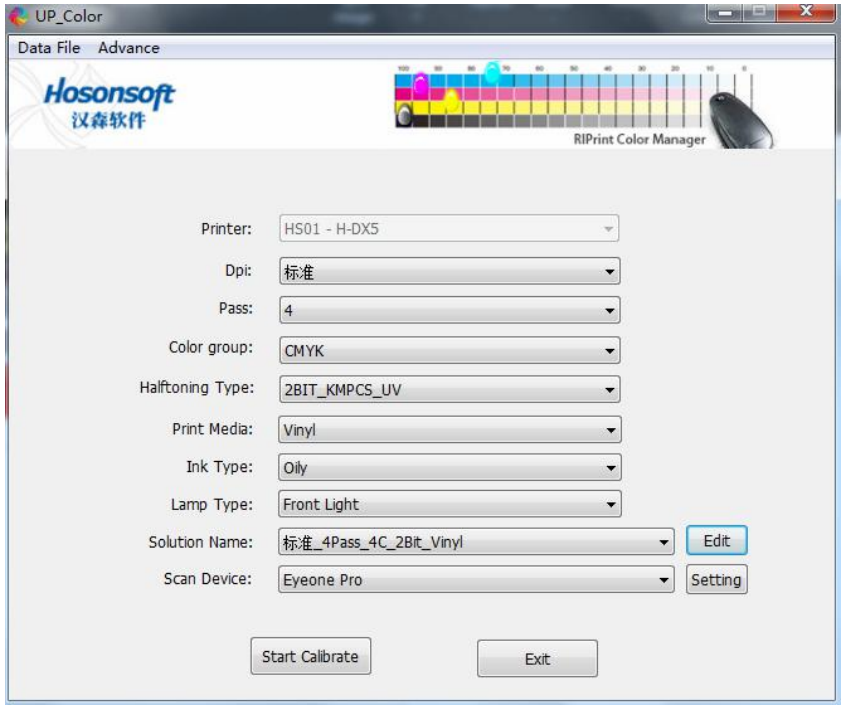
After setting the color sequence of the slot in the printing, it doesn’t mean that another print scheme will also adopt the same color sequence. You still need to set the color sequence for a new print scheme. To avoid mistake, it’s suggested to enter the senior setting and re-confirm whether the color sequence of the slot is the one you have set when you are printing.

Chapter 7 Colors Management

7.1 Enter Colors Management

Select the item “Colors Management” in the menu bar of the software 

to enter the interface.

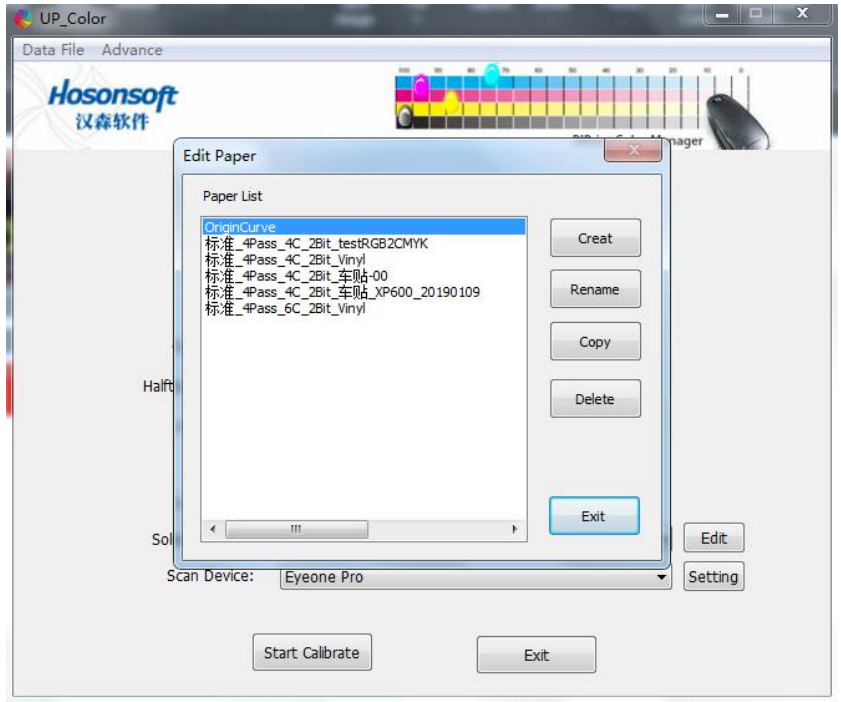


Notes:

Before entering Colors Management, please confirm whether your computer has been inserted with the right softdog.

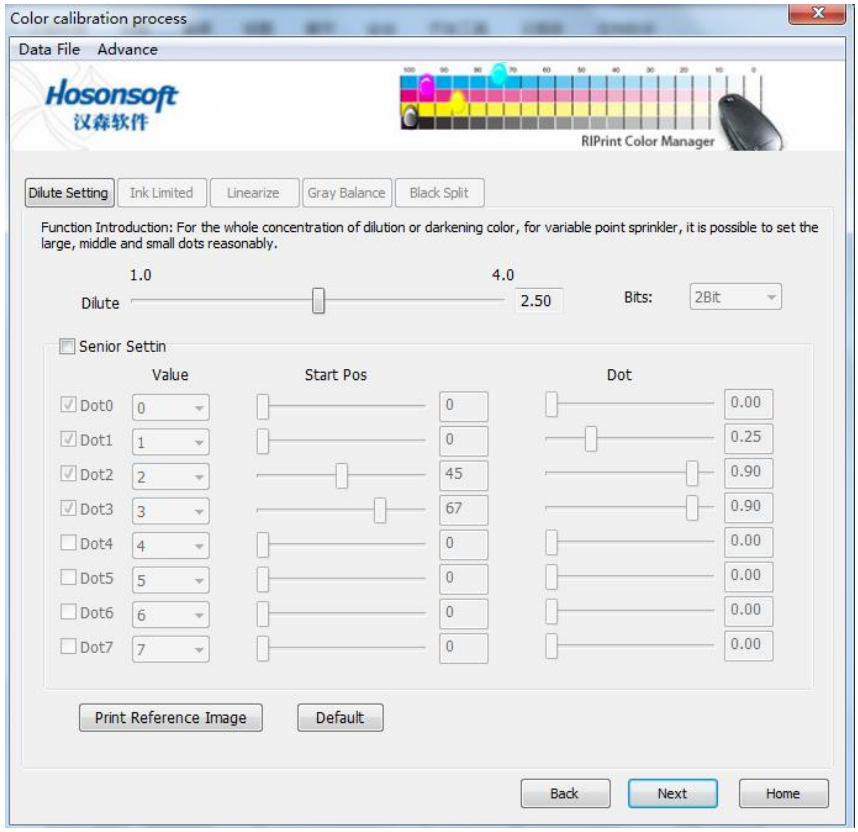
7.2 New Curve Scheme

To set “Precision Mode”, “PASS”, “Combination of Colors”, “Screening Mode” and “Color Correction Device”, click the button “Edit” to pop up the following interface. Click the “New” button, enter the name of a print scheme in the frame (naming rule: curve identification (like HS), color (like 4color), precision (like 180x540), Pass (like 4pass), and then click “Confirm”. In the list of paper is the created curve corresponding to the current printer. After a new curve is created, click “Exit” button to return to the main interface of Colors Management.



7.3 Screening Point Setting

Click “Start Color Correction” button to enter the screen point setting. “Screening Point Dilution” is used to dilute or thicken the overall concentration of colors, which is used when the overall ink is too thick or too light. The default value of the sliding block is 2.5 (default as dilution value). The bigger the dilution value of screening point is than 2.5, it indicates that the more it has diluted. Otherwise, the less it has diluted. Senior Setting only applies to a Variable Point Nozzle, which generally need not be adjusted. It’s suggested to use default parameters. It is used when there is very obvious jump and cannot be corrected. You can use “Print Reference Diagram” to confirm whether the screening point parameters are reasonable. After confirming the parameters, click “Next Step” to enter the ink setting.



Notes on Use of Screening Point (take 2Bit as an example):

Enter the screening point setting as shown in Figure 1 below.

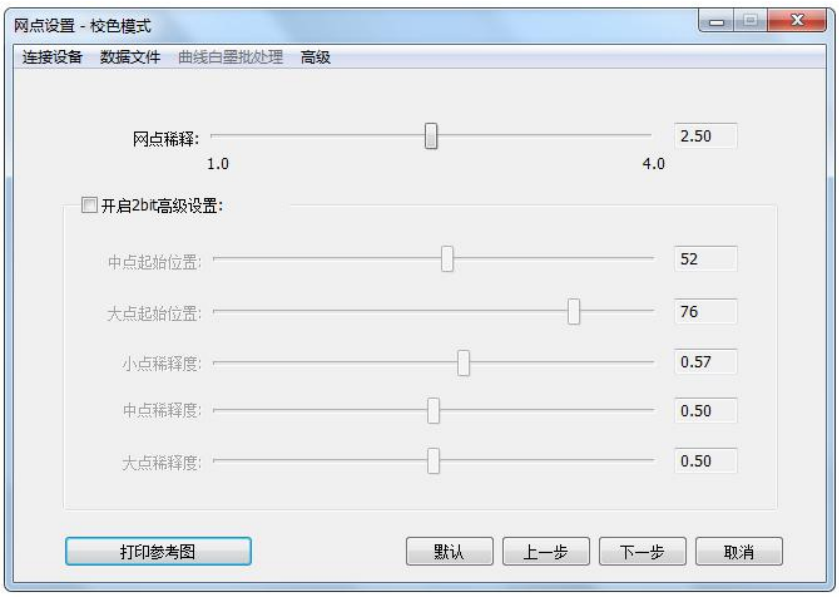


Figure 1 Screening Point Setting

The screening point dilution value refers to the dilution degree of the screening point concentration changing from 0% to 100%, which will be illustrated through the gray linear gradient diagram shown below.

Figure 2 Gray linear gradient diagram

Figure 3 The dilution value of screening point is 1.0

Figure 3 shows the conditions when the screening point dilution value is 1.0, of which the horizontal coordinate means the width change along the image, and the vertical coordinate means the changes of concentration. Blue line means the actual change of image concentration, and the red line means the trend of standard linear change. When the dilution value increases to 2.5 and 4.0, the dilution degree shown in the concentration change curve will grow accordingly, respectively as shown in Figure 4 and Figure 5.

Figure 4 The dilution value of screening point is 2.5

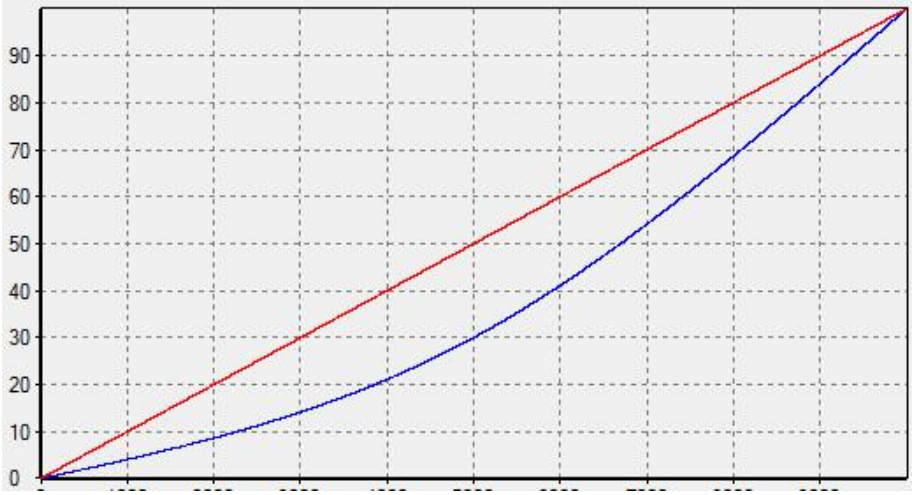


Figure 5 The dilution value of screening point is 4.0

In adjusting the dilution value of screening point, the parameters at the bottom of Figure 1 interface will change accordingly. After the adjustment, if 2bit parameter still fails to meet the requirements, you can tick to open senior setting item of 2bit and mildly adjust the small, medium and large points of 2bit screening points.

1.The start position of medium point means the position where medium point begins to appear, with an adjustment range of 0-100. If the value is 50, it means that medium point begins to appear at the concentration of 50%. No medium point will appear in the positions when the concentration is less than 50%;

2.The start position of large point, which is similar to the start position of medium point. It's noteworthy that the start position of large point should be higher than that of medium point. Otherwise, an abnormal jump of concentration will occur as a whole;

3.Dilution degree of small point means the dilution degree in the concentration change of small point, with an adjustment range of 0.0-1.0. The higher the value is, the higher the dilution degree is;

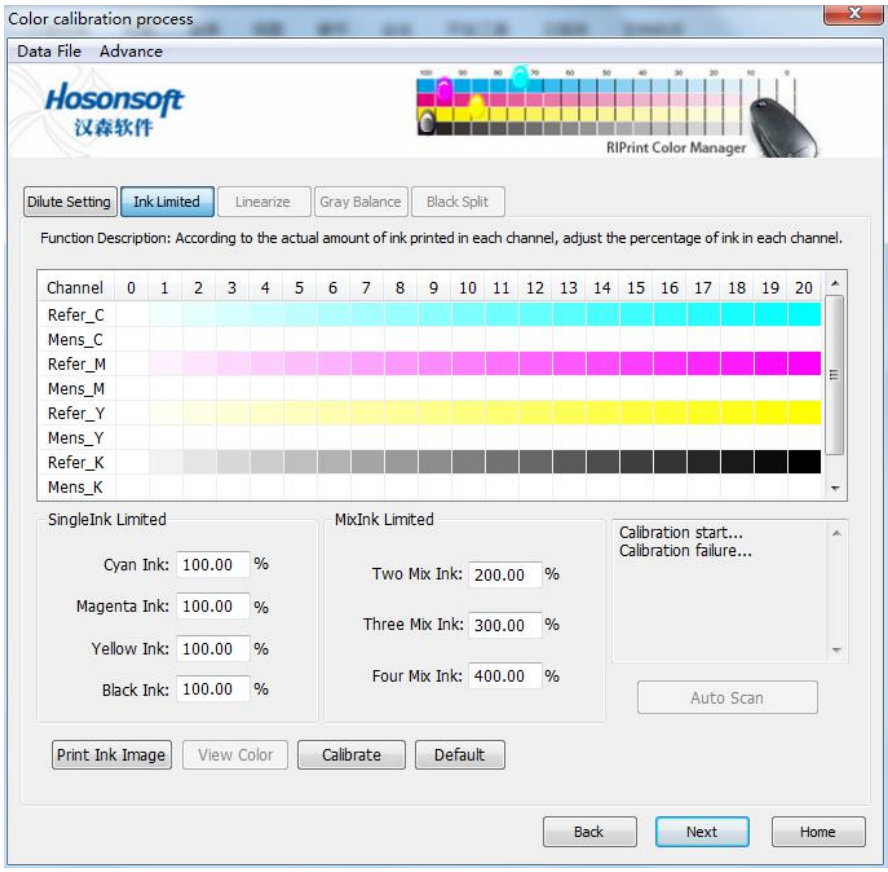
4.Dilution degree of medium point, similar to dilution degree of small point, refers to the dilution degree of concentration changes of medium points;

5.Dilution degree of large point, similar to the dilution degree of small point, refers to the dilution degree during the concentration change of large points.

Senior Setting of 2bits only applies to a Variable Point Nozzle, which generally need not be adjusted. It's suggested to use default parameters. After the parameter setting, you can use "Print Reference Diagram" to confirm whether the parameters are reasonable.

7.4 Ink Setting

Click the “Print Ink Diagram” button to print the ink test diagram. Adjust the ink percentage of the channel respectively according to the actual ink volume of each channel shown in the test diagram. If the ink of some channel is too thick, the ink of the channel needs to be intercepted. The specific value of interception should be set according to the concentration of each color block of the channel shown in the ink test diagram. In setting the value of ink interception, if a single channel needs to intercept ink, you need to print the color block diagram again after the ink is intercepted in the single channel. And then set the ink volume to intercept of multiple-color ink according to the actual conditions of the printing. After the setting, click “Next Step” to enter the linear calibration.



Notes on Ink Interception:

1.Generally, the concentration of green, yellow and black should be guaranteed to be enough (the difference of ink interception of different colors can be judged by observing R\G\B\CMY). After intercepting single color, it will affect the 2color, 3color and 4color

channels, so after a single color is intercepted, you need to print an ink test diagram to see the ink volume of other channels.

2.Generally 2color channel need not intercept ink.

3.3color channel will intercept ink according to 4color channel. To ensure that the colors are richer, try to reduce the interception. But ensure that a certain transition of colors is achieved from 3color channel to 4color channel. It's suggested to get the value of 3color channel by the value of 4color channel minus 40.

4.The 4color channel is the key to control the ink deposit. To ensure richer colors, try to reduce the interception while ensuring that there is no ink deposit.

5.The single-color ink volume can be adjusted as needed. 2color ink generally needs not be intercepted. 3color ink should intercepted less, and 4color should be intercepted as needed to ensure that there is no accumulation or deposit of ink.

6.The ink interception mainly depends on the ink volume of single color and 4color and the color cast of 3color mixed ink.

Interception Experience Value of Color Curve

1.If the printed image is black, properly reduce the ink output below single black 50%, and the CMY 3color 50% can also be reduced properly.

2.If the figure image printed is yellowish, properly reduce the yellow ink volume by below 40%.

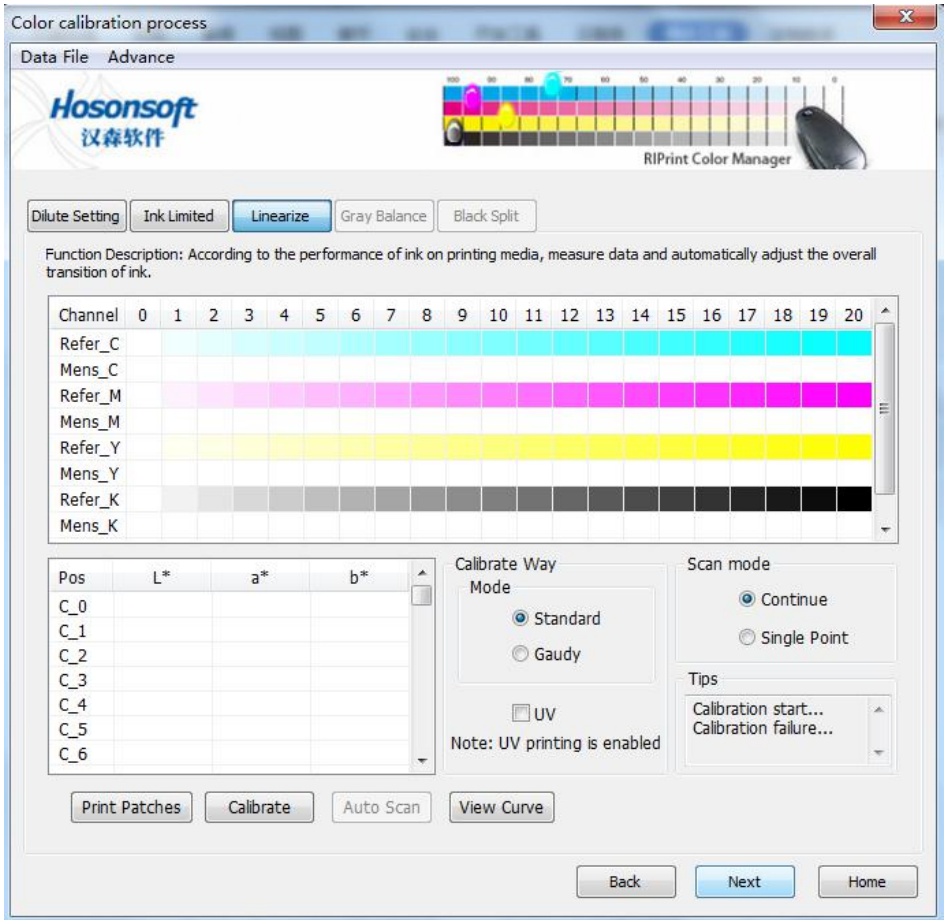
3.If the image printed is grayish as a whole, properly increase the black ink output by above 60%.

4.If the image printed is not saturated enough, properly increase the CMY 3color ink output by above 60%.

5.Do not adjust too many points at a time or make a significant adjustment if you are not certain.

7.5 Linear Calibration

Print a calibration diagram. After the image gets dry, cut the calibration diagram. If the instrument calibration fails, click the button "Calibration Device". After it's calibrated by the device, scan the color blocks.



Pay attention to the following issues to finish a complete linear calibration.

1.Click the “Print Calibration Diagram” and print a calibration diagram on the machine. Cut it after it is a bit dry. Scan and measure after it is completely dry.

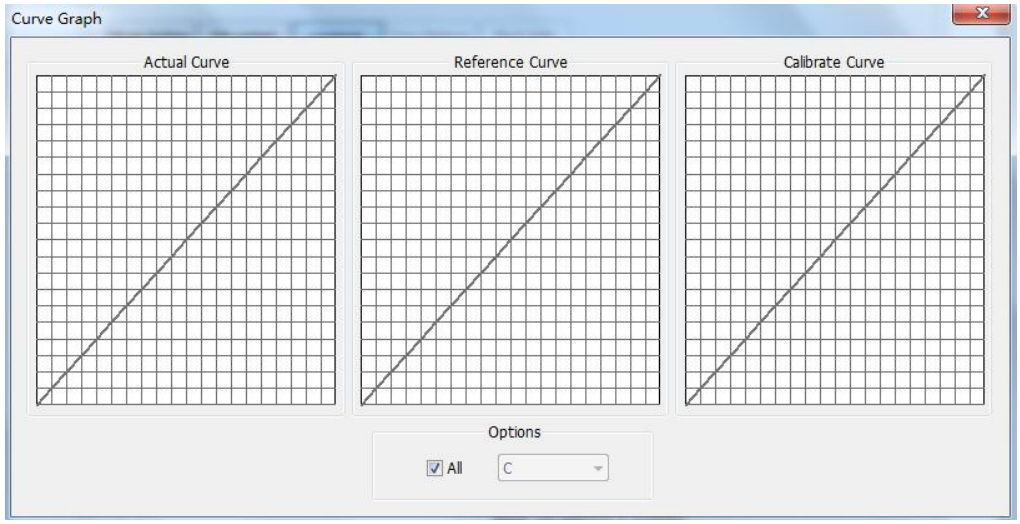
2.Before this, connect with eye-one, the program will automatically start “Calibration Device”. If it is connected to eye-on at this step, please click the “Calibration Device”.

3.Scan by referring to the color block diagram on the guide, and the scanning sequence should be green, pink, yellow and black, from light to dark. The program will record corresponding results.

4.After scanning the four color blocks, check the curve. If the “actual curve” is relatively smooth, go to next step. Otherwise, re-scan the color blocks that are not smooth, or adjust manually to make them smooth in the curve adjustment.

5.In the scanning, try to scan the relatively even areas in the color blocks. If the scanning is wrong, re-select and re-scan. Like (The green is scanned wrong, you can select the green block and re-scan it).

6.Click the button “Check Curve”. There will be three line charts.

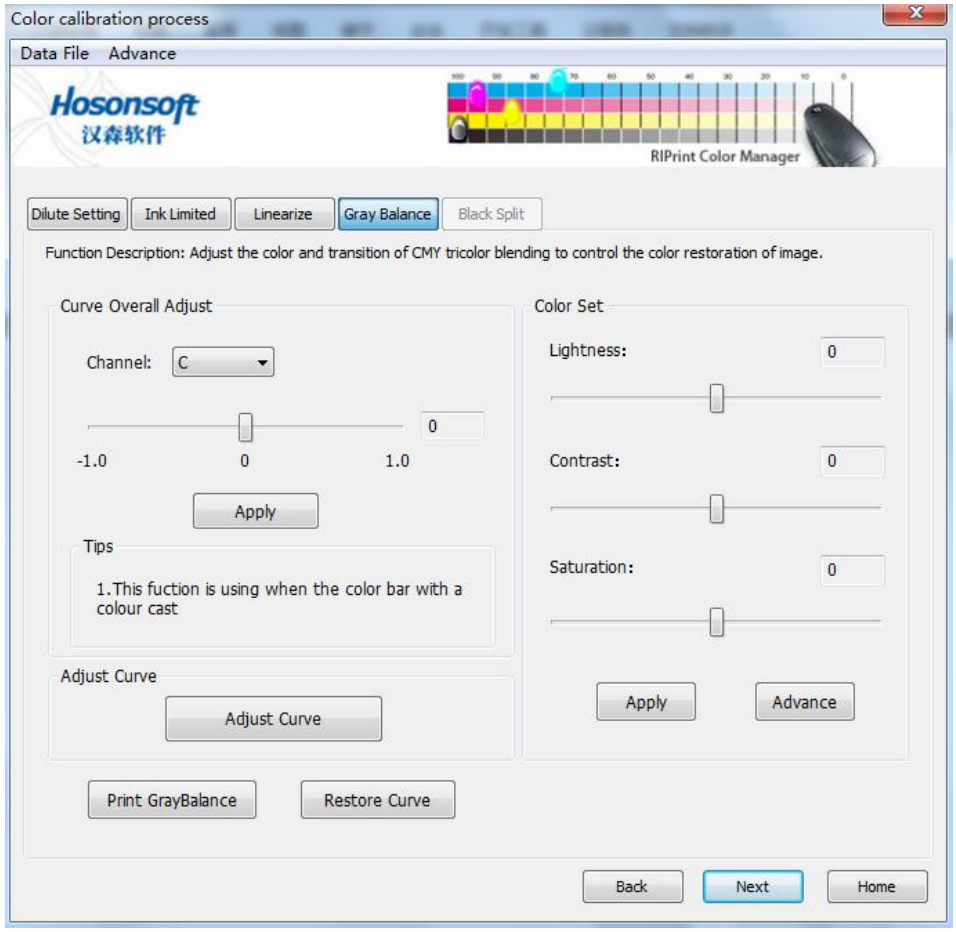


Remarks: The first chart: The curve before calibration; the second chart: The reference curve chart is generally a straight line; the third chart: The curve chart after calibration to the first chart.

After all color blocks are scanned successfully, click “Next Step” to enter gray balance adjustment.

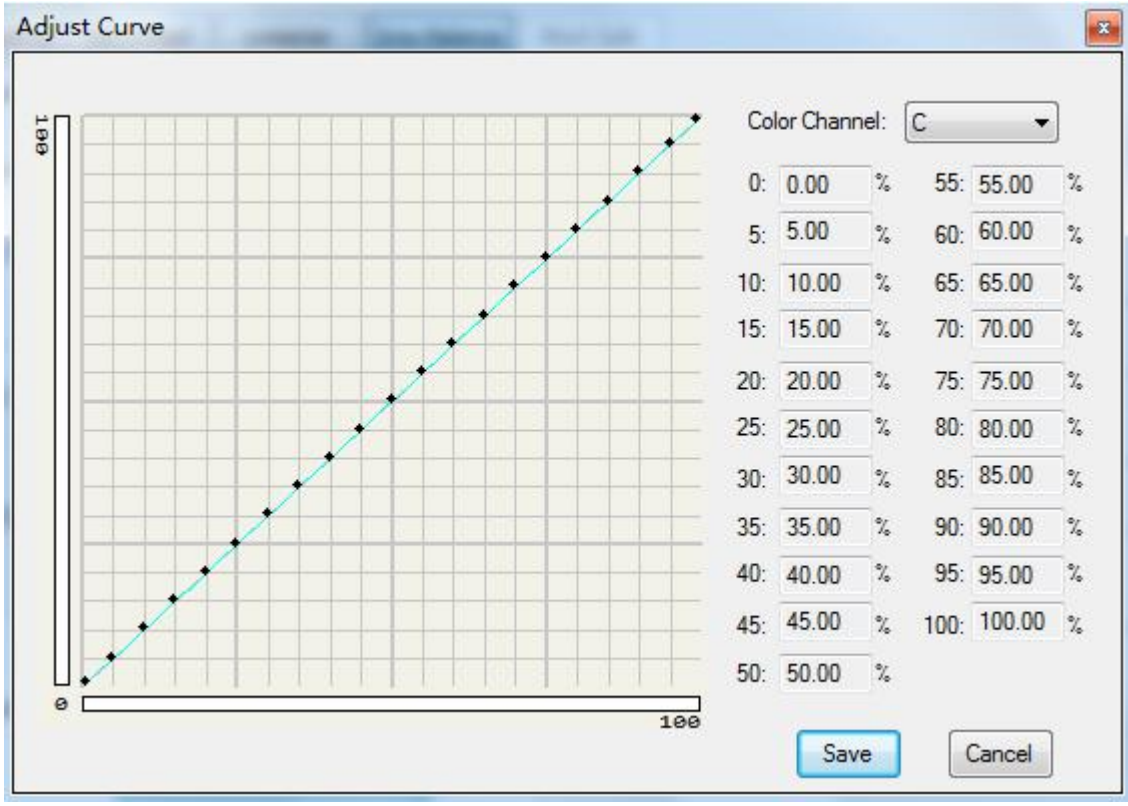
7.6 Gray Balance Adjustment

You can set the overall adjustment of curve or fine adjustment of curve, or adjust the colors. After the setting, click “Next Step” to enter black dissolving.



Overall adjustment of curve:

The sliding block for overall adjustment is used along with corresponding channel. The sliding block is used to adjust the selected channel. The “Overall adjustment of curve” only darkens/lightens the dark color part (CMYK), which is used when the dark ink is too thick/too light. The default value of sliding block is 0.00. The bigger the adjustment value of sliding block is than 0.00, it indicates that the concentration is higher in corresponding channel. Otherwise, it indicates that the concentration is lower.



Attentions and suggestions for fine adjustment of curve:

1.It's not suggested to make a significant adjustment. The specific adjustment should be confirmed based on the transition of print and the effect of image printed.

2.Pay attention to the overall smoothness of the curve.

3.The neutral gray transition is free of any distinctive color cast (to make the visual effect of image better, it's suggested that the light part below 30% should be slightly red, while the part above 70% should be slightly green).

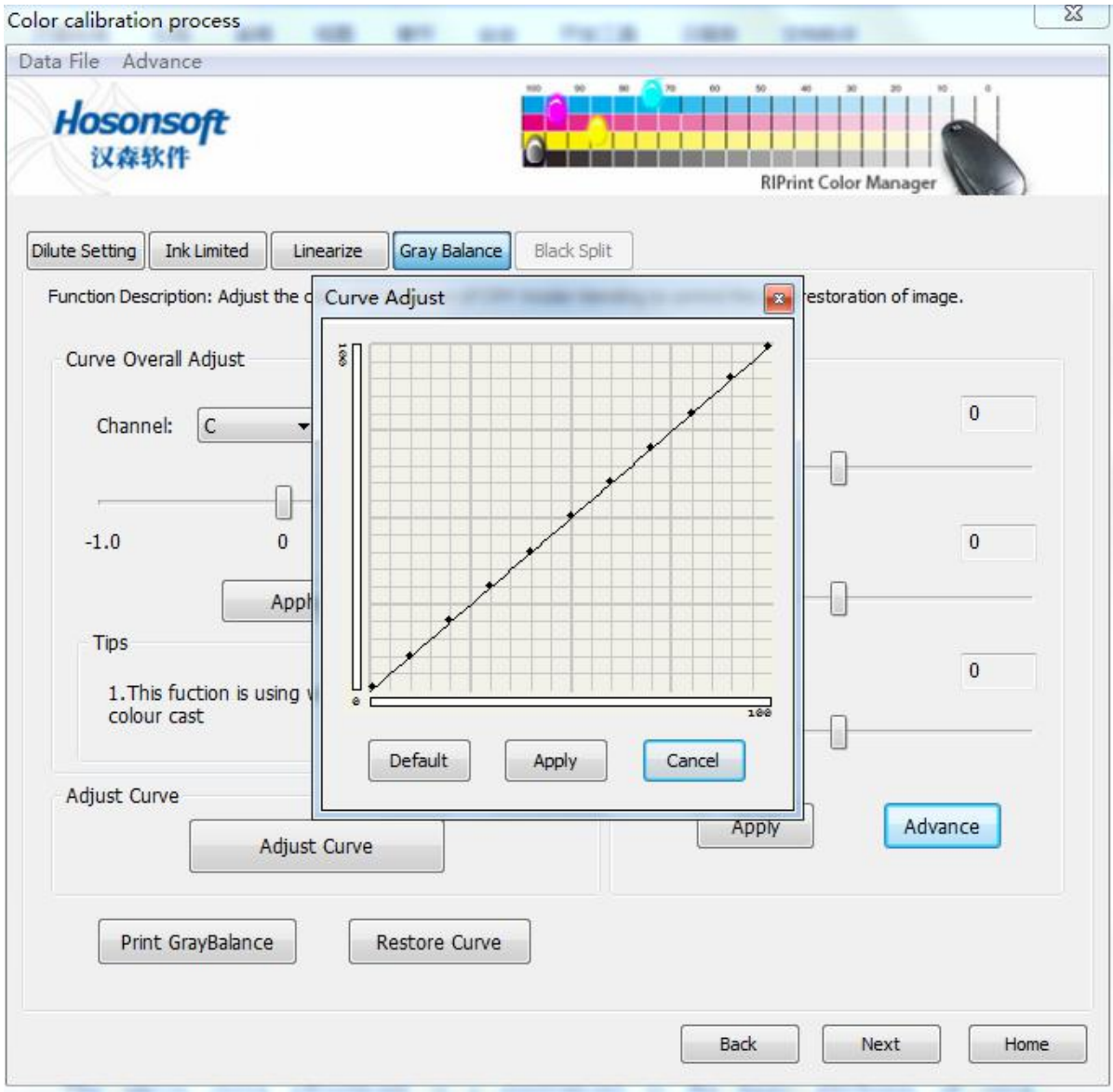
4.To ensure that the transition is even, the curve should also be smooth. A single point cannot be adjusted too much. If it's necessary, adjust the points nearby in the same direction to keep the curve smooth.

5.According to the supplement of three colors. For example, if it is slightly red at 30, you can pull the point of 30 in the M curve downward, or pull the point of 30 in the C and Y curves upward. This should be adjusted according to the condition of ink. If the Pass and precision are low, the printed image will be light. At this time, the latter method should be used.

Parameters setting of color adjustment

In the interface of color adjustment, you can pull the sliding blocks of luminance,

contrast and brightness to adjust the overall luminance, contrast and brightness. After confirming the parameters, click “Apply”. The effects can be confirmed by “Print Test Diagram” until the parameters enable you to get satisfactory images.

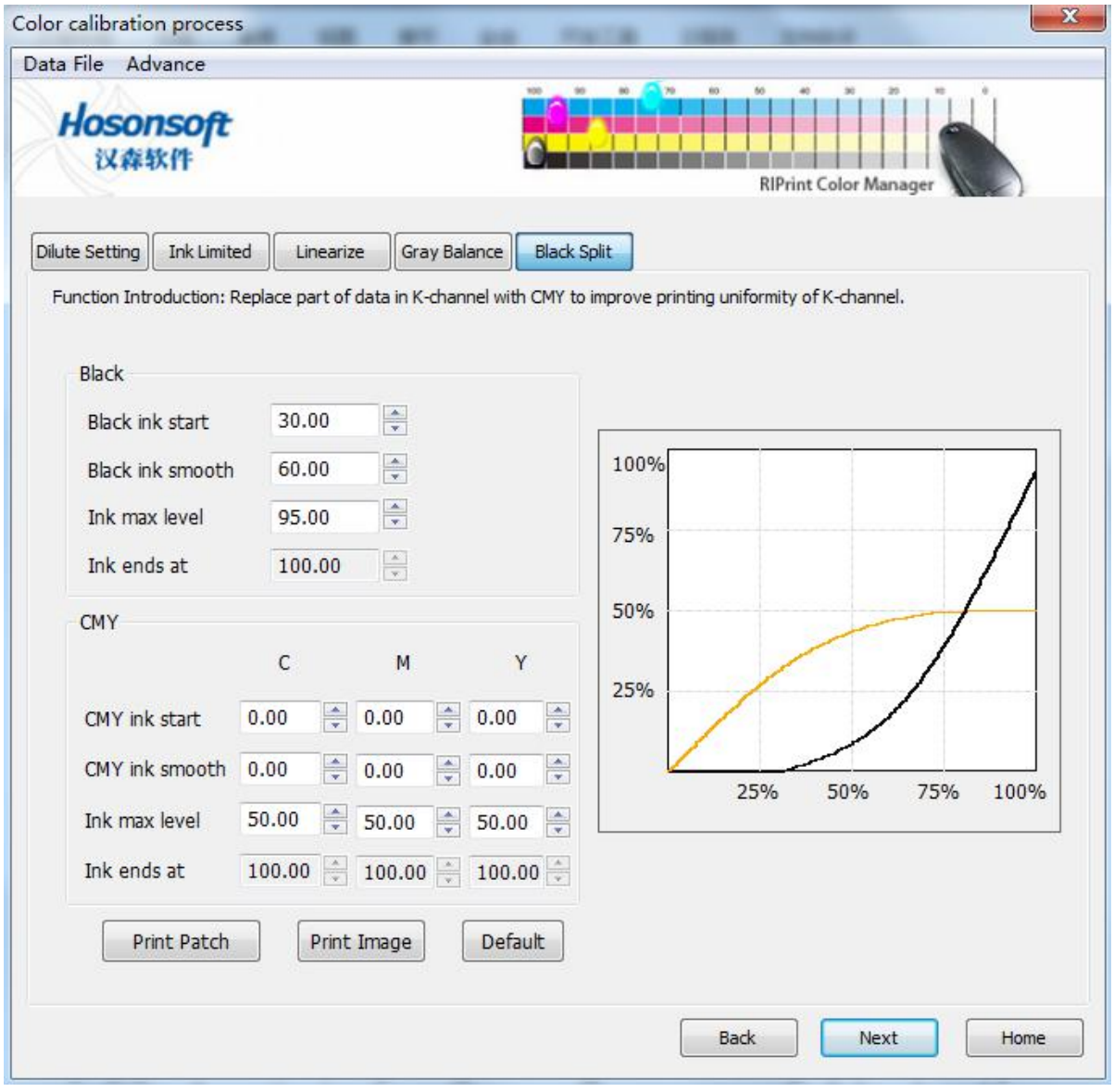


Senior curve adjustment of colors:

The senior curve adjustment is a supplement to the basic attributes of color adjustment. The curve is partial adjustment. If the overall adjustment of luminance, contrast and brightness cannot meet your requirements, and need partial adjustment, you can use the senior adjustment and adjust by pulling partial point. The effect is positive if the single point of curve is pulled upward and the effect is negative if pulled downward. If you are not familiar with the curve, please be cautious in using the function.

7.7 Black Dissolving

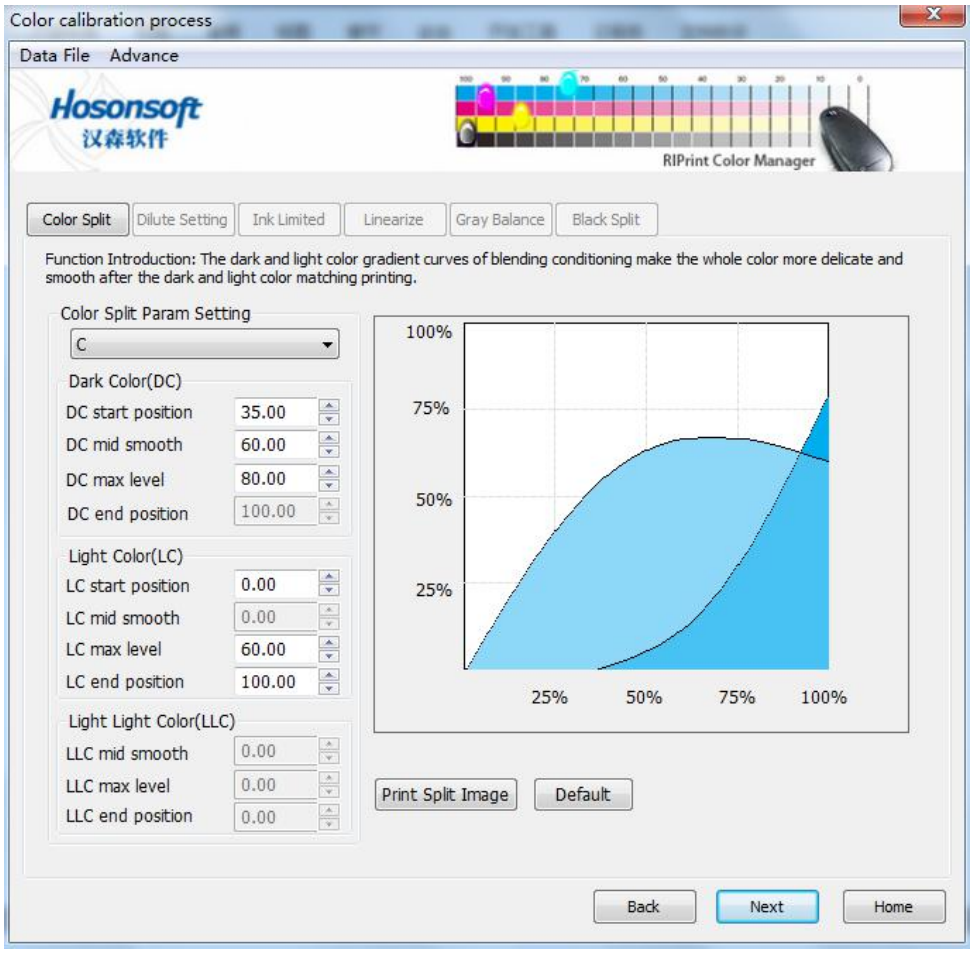
Set the contrast of single K and CMY. After setting corresponding parameters, use “Print Color Block Diagram” to judge the effect of black dissolving. After confirming the setting of black dissolving, click “Complete”. In the printing scheme in the main interface of colors management, you can see the curve scheme for colors management.



7.8 Color Management of 6color or 8color Curve

The colors management of 6color or 8color curve is basically the same as that of 4color. Their difference: After clicking “Start Color Correction” in the main interface, the light color

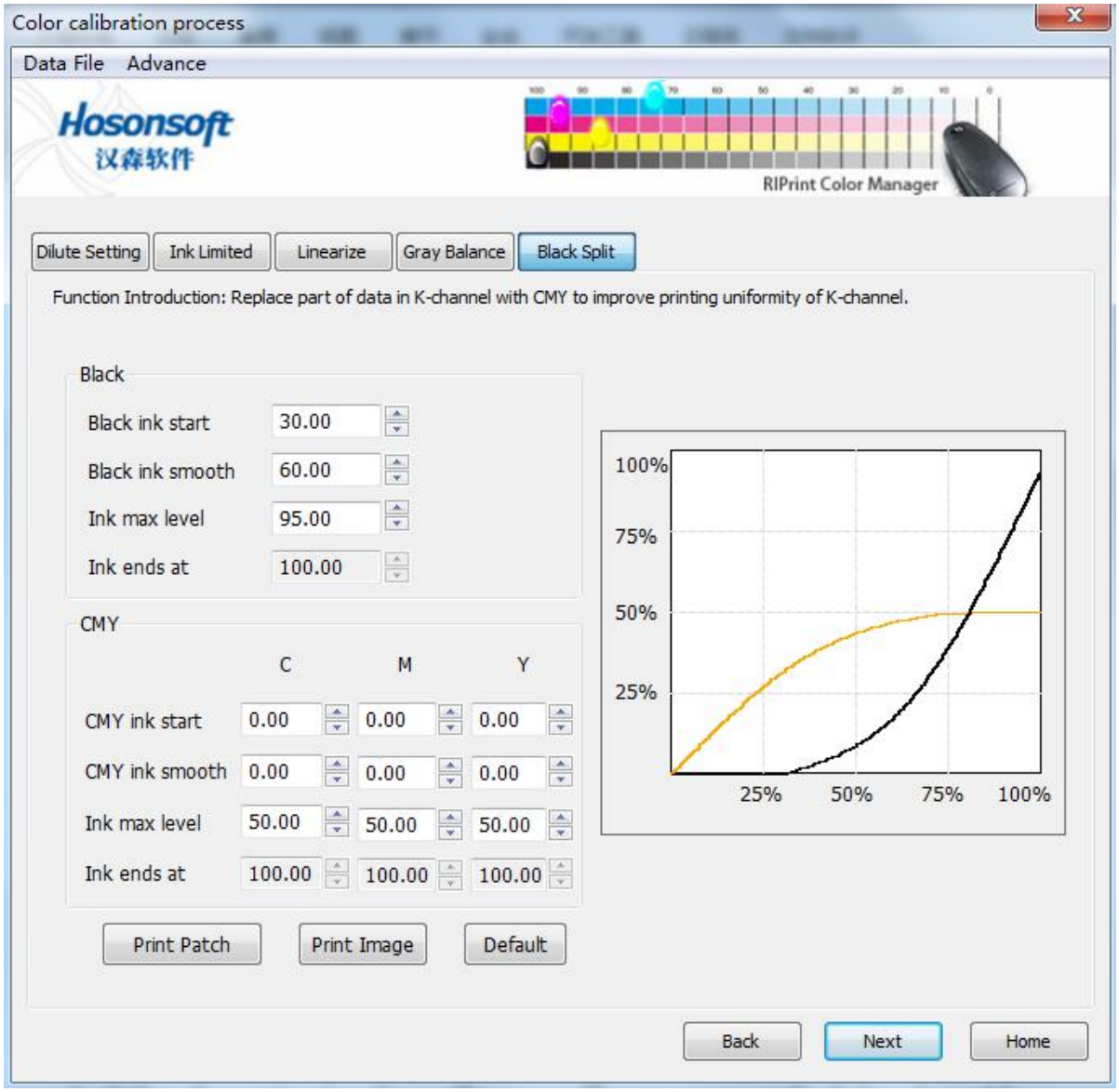
setting interface will pop up. Here you can set the light colors. After the setting, click the "Next Step" to enter the setting interface of screening point. The subsequent steps are identical with the colors management in 4color curve.



7.9 ICC Production and Use

Print ICC Color Block Diagram:

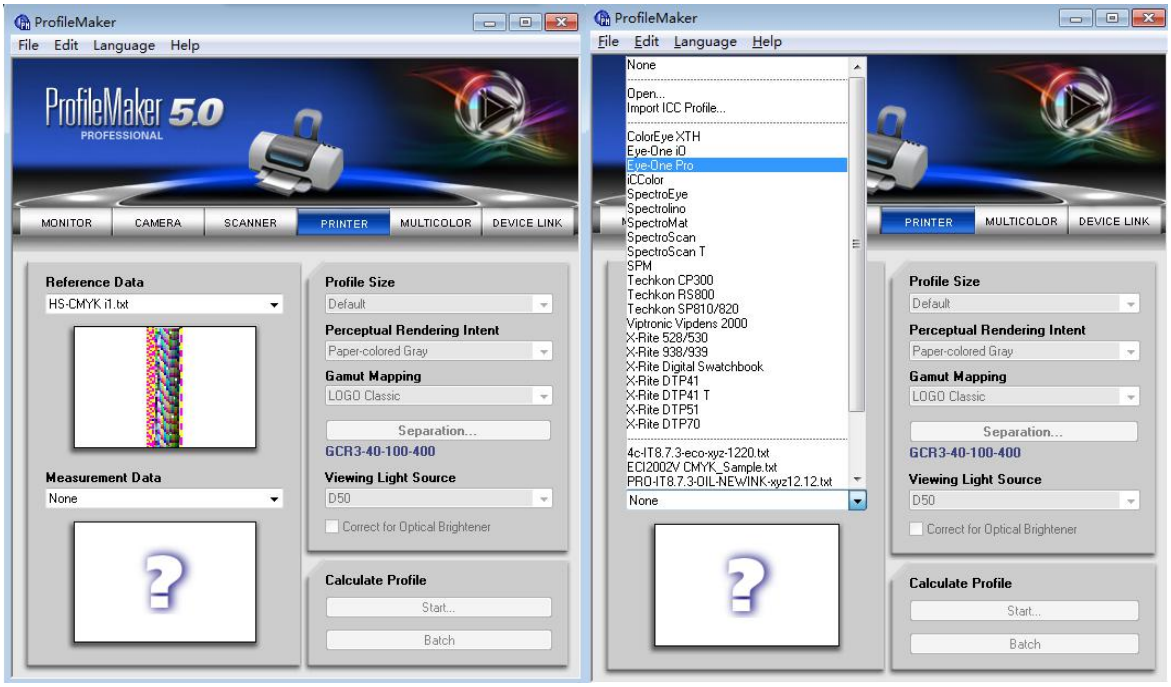
Click "Print Color Block Diagram" in the interface of black dissolving in colors management, the software will automatically output a PRN file of ICC color block diagram. And then it can be directly printed on the printer (If the output mode is network printing, it will be printed directly).



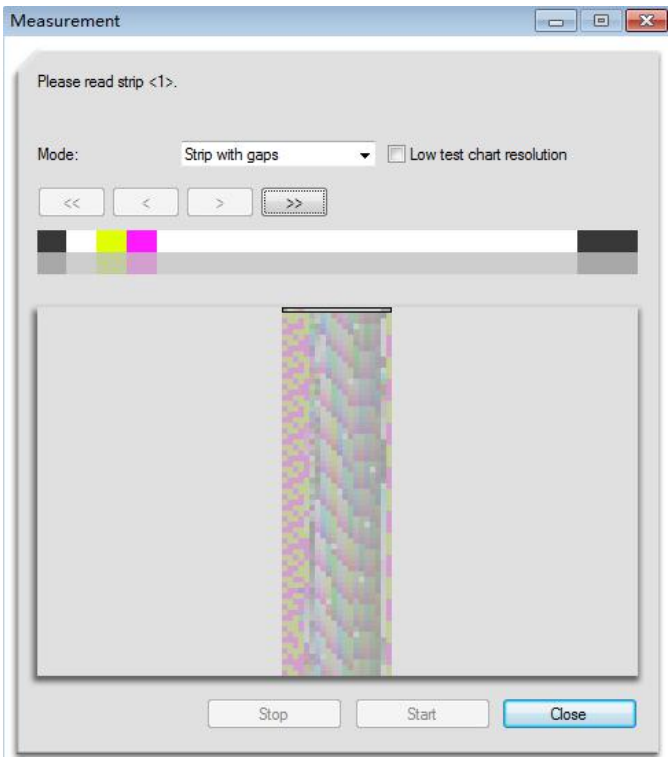
Use ProfileMaker to generate ICC file:

1.Open ProfileMaker software, and then select the item Printer.

2.Select the file HS-CMYK i1.txt from Reference Data. The file is put in the folder of “ICC Profile” under the installation directory of the software. Select Eye-One Pro. From Measurement Data (please make sure that eye-one has been connected).

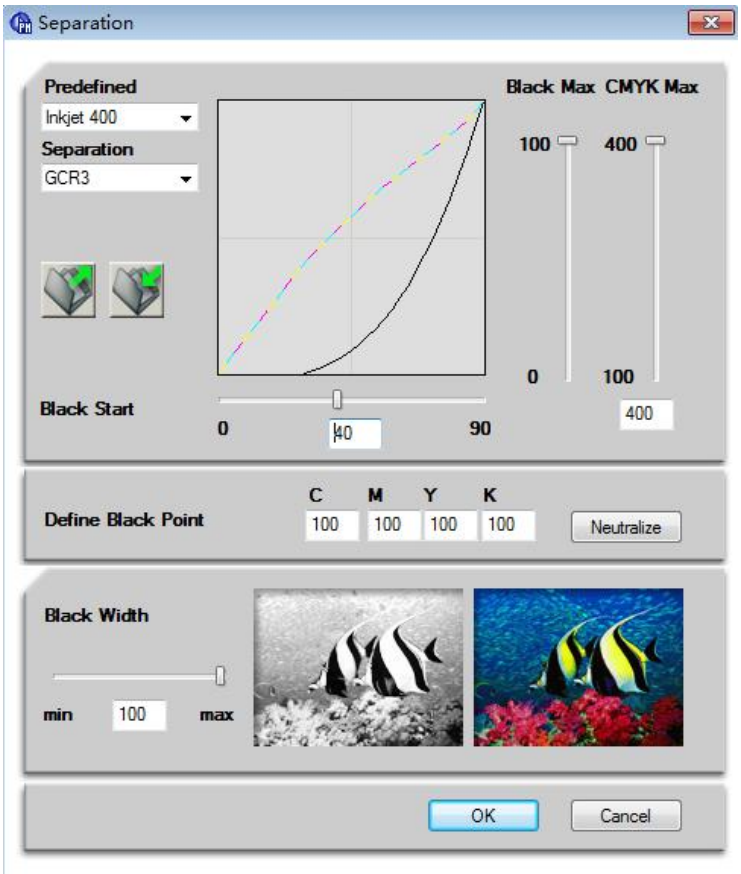


3.After selecting eye-one from Measurement Data, the following interface will pop up. Scan the color block with eye-one. Start with sequence 1, from left to right, or from right to left, until it scans 67. Click Close to end the scanning.



4.After the scanning is over, select D65 from Viewing Light Source. And then click

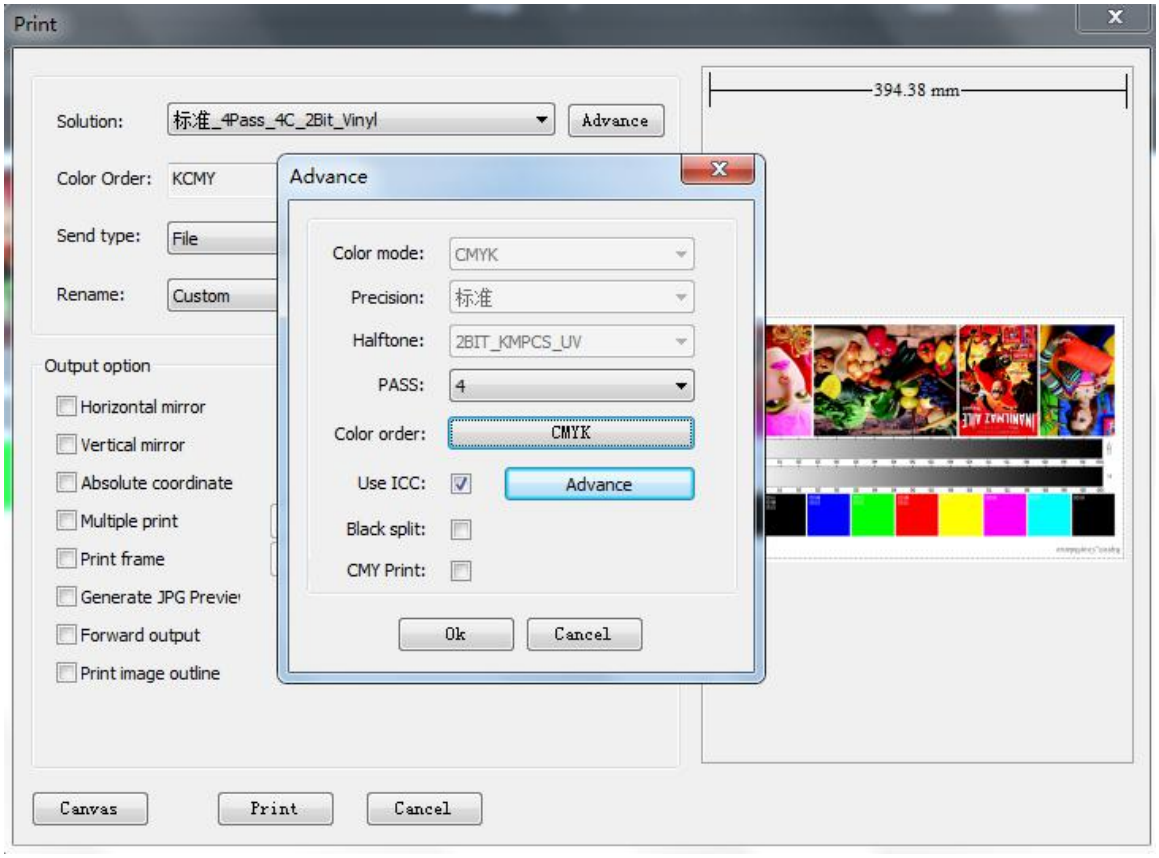
Separation button to set CMYK, which is generally set as CMYK Max and Black Start.



5.After the setting, Click OK to save and return to the main interface. Click Start... in the main interface to generate ICC file and save it to the curve folder of corresponding printer in the software (… \RIPrint\Printer). Attention, the naming of ICC remains consistent with CUV curve.

How to use ICC:

Select the curve scheme in the print output window of the software, click “Senior”. Tick the “Open ICC” item in the dialogue box that pops up to start ICC output.



Chapter 8 Appendix