Chapter 8   Printing design module

■Introduction

The printing design module can complete the automatic splicing, regular splicing, horizontal (vertical) splicing and other operations of the printing pattern (cloth sample scanning pattern) of the user's design sample, so as to obtain a reversible printing pattern pattern. Provides rich color separation processing functions: with channel color separation (RGB color separation and CMYK color separation), spot color separation (intelligent automatic color separation and manual color separation) processing methods; the smallest printing color separation can be obtained through interactive operation Number and fine color separation version, which saves cost without losing the effect of printing pattern; the completed color separation version can be made into film. Provides a variety of color separation screen functions: sand point screening with random positions and random gray values, regular shapes (circle, square, line, chain, ellipse, etc.) and user-defined template screening; arbitrary Angle, screen line number parameter settings; single grid, double grid, super grid screen accuracy; point grayscale and grid grayscale screen mode.

Select the printing color separation design module in the drop-down list box of the operation module, most of the commands

in the command panel are the same as those of the Fashion design

module (Figure 8-1).

Figure 8-1　　Printing design module

Printing command

By operating the printing command, you can splicing and

reconnecting the head to obtain a complete recyclable pattern,

performing channel and spot color separation for the pattern, and

screening the color separation pattern.

Click printing command, the sub-command icon area is

displayed as follows (Figure 8-2):

Figure 8-2 Printing subcommand icon area

§8-1 Printing Design

Click the print design command icon to enter the print design work

area (Figure 8-4).Make the icon area as follows (Figure 8-3):
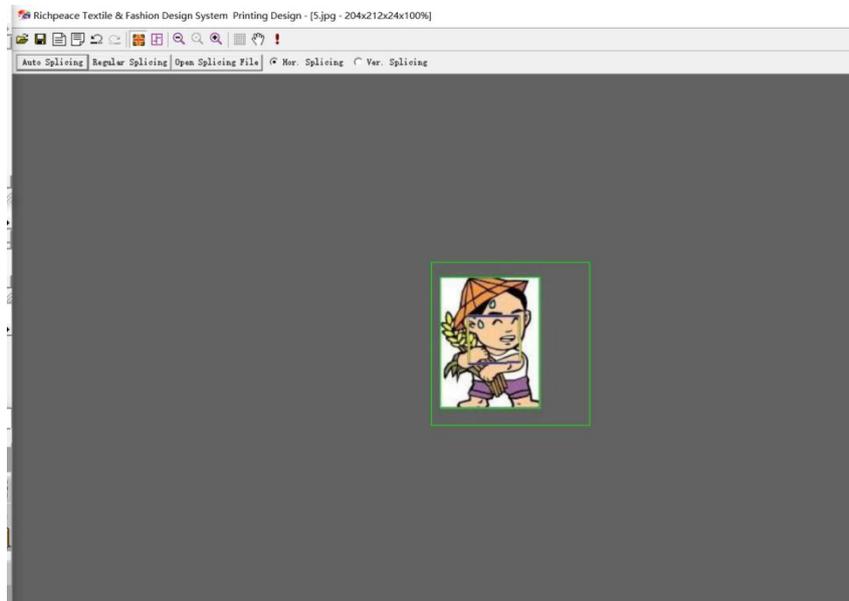
Figure 8-3 Printing Design Subcommand Icon Area

Figure 8-4 Printing Design Workspace

◇Introduction to panel buttons

■ Exit: Exit the print design.

■ Open Image: Open the image file in the format supported by the system to the print design workspace.

■ Save image: Save the image in the print design workspace to the hard disk in an image format supported by the system.

■ Import Image: From Richpeace Design workspace, transfer the marquee image to the Print Design workspace.

■ output Image: output the print design workspace image to the Richpeace design workspace selection box.

■ Splice: Toggles the Splice image state and the loop back image state.

■   loop back:Toggles the Splice image state and the loop back image state.

■ Zoom Out: Reduce the image display magnification of the print design workspace (minimum 1x).

■ Default: Set the default image display magnification in the print design workspace (default 4 times).

■ Zoom in: Enlarge the image display factor of the print design workspace (up to 51 times).

■ Grid:The grid displays the image of the print design workspace (minimum 4x display)

■ Move: Movethe image showing the print design workspace.

■ Run: Run the horizontal (vertical) stitching image operation or rewind the head image operation.

■ Undo: Undo the operation in the print design.

■ Redo: Redo the operations in the print design.

■ Status bar: (Figure 8-3)

1) The first column is the current operation name.

2) The last column is the current mouse coordinate value, and the origin is the upper left corner of the displayed image.

3) When it is in the state of reconnection, the second column displays the image of flower reversal

※Note: In the title bar of the print design work area, if the image has a file name, its file name and size will be displayed; if there is no file name, only its image size will be displayed.◇Printing design operation instructions

■ Open image operation

Click t open file command to pop up the open file dialog box (Figure 8-5), open the system supported image format files to the print design workspace.
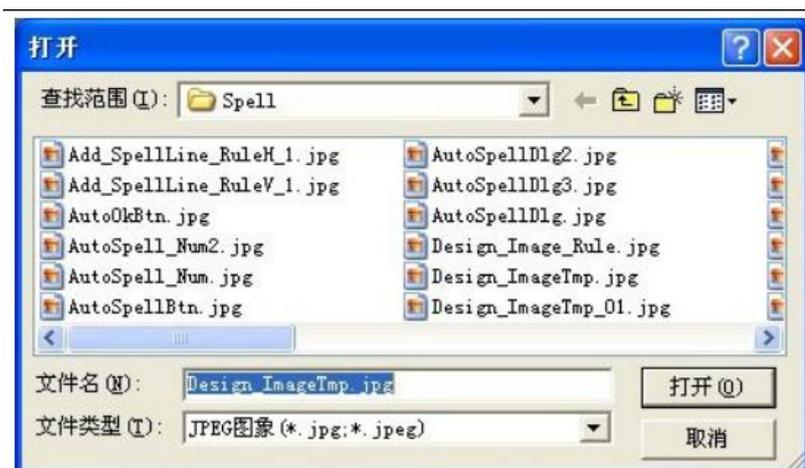

Figure 8-5   Open image dialog

■Save image operation

Click   save file command, a save dialog box will pop up

(Figure 8-6), and the printing design will be The pattern of the area

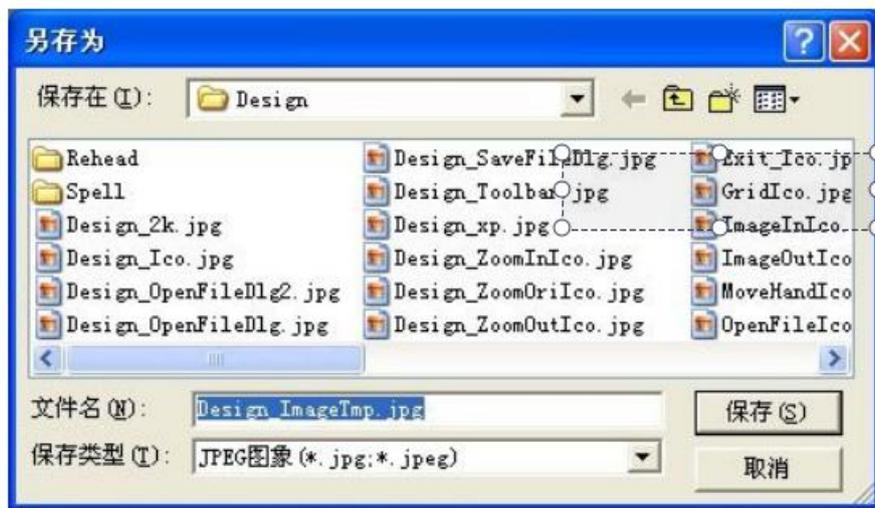is saved to the hard disk in a format supported by the system.

Figure 8-6 save image dialog

■splice image operation   (F5)

In the splice image state, the splicing toolbar is displayed in the

printing workspace (Figure 8-7).

Figure 8-7 Splicing Toolbar

Figure 8-7 The splicing operations include automatic splicing,

regular splicing, horizontal splicing and vertical splicing.

1. Auto Splicing Auto Splicing

Click the Auto Splicing button in the splicing toolbar, and the automatic splicing parameter setting dialog box will pop up (Figure 8-8).

Figure 8-8   Auto Splicing dialog

Auto Splicing operation parameters (Figure 8-8), active Splicing file path, number of widths and number of heights. The source splicing file path is to specify the path of the automatic splicing file and the starting splicing file name, and the number of widths or heights specifies the number of splicing files in the horizontal or vertical direction during automatic splicing.

Example 1. Using the automatic splice tool, copy the files AutoSpell_01.jpg,

AutoSpell_02.jpg, AutoSpell_03.jpg, AutoSpell_04.jpg Full print pattern.

1). The parameter settings shown in Figure 8-8, AutoSpell_01.jpg. (Figure 8-9(1)).

2). Determine the automatic splicing operation.

3). Find the file AutoSpell_02.jpg in the path C:\Richpeace\, AutoSpell_03.jpg, AutoSpell_04.jpg. (Figure 8-9(2), Figure 8-9(3), Figure 8-9(4)).

4) . Automatic splicing is completed. (Figure 8-9e)

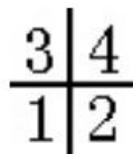Figure 8-9(1)   Figure 8-9(2)   Figure 8-9(3)   Figure 8-9(4)

Figure 8-9e   Figure 8-9f

※Notice:

1. The source stitching file path must include: complete path name, file name and its extension.

2. The file name format must end with: '_' + number + extension.

3. The number of digits in the next number must not be less than

the number of digits in the current number.

A. If the current number is: 001, the next number is 002; 01, 1, 0001 are all wrong numbers

Character.

B. If the current number is: 9 or 09, the next number will be 10.

C. If the current number is: 009, the next number is 010; 10 and 0010 are both wrong numbers.

D. Numbers can only be numbers between 0 and 9. Other characters are wrong numbers.

4. The direction of automatic stitching is from bottom to top and from left to right. (eg example 1)

2.regular splicing. Regular Splicing

Click the regular splicing button in the Splicing toolbar to pop up the egular splicing Parameter Setting dialog box.
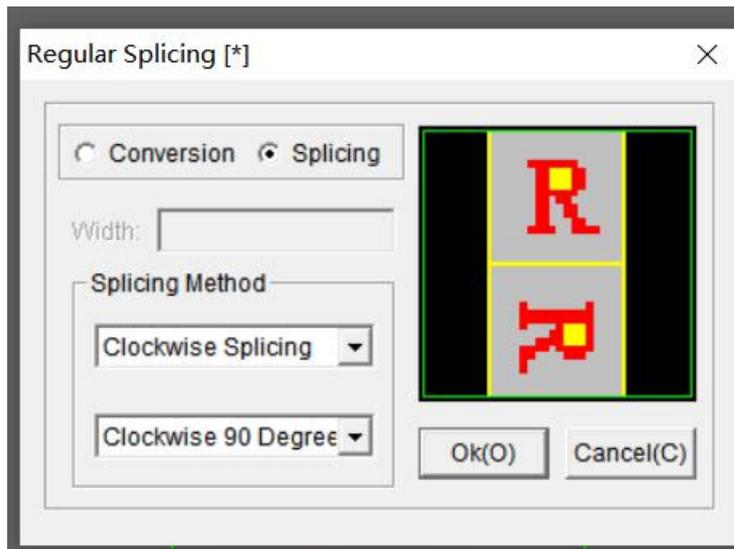
(Figure 8-10)

Figure 8-10   regular splicing Dialog Box

  regular splicing dialog box description:

1). Conversion (conversion width) method and splicing method.

2). Splicing method.

a. Rotate the splice clockwise (clockwise 90 degrees up and down,

clockwise 90 degrees around, clockwise

180 degrees up and down, 180 degrees clockwise).

b. Rotate the splice counterclockwise (90 degrees counterclockwise

up and down, 90 degrees counterclockwise, counterclockwise

180 degrees clockwise up and down, 180 degrees

counterclockwise).

c. Mirror stitching (up and down, up and down, left and right,

quarter (upper left -> lower right), four

One-quarter (bottom right -> top left), one quarter (bottom left ->

top right), one quarter (top right)

-> lower left)).

d. Clockwise full spell (clockwise first quadrant full spell, clockwise second quadrant full spell, clockwise full spell

The third quadrant of the needle is fully spelled, and the fourth quadrant is fully spelled clockwise).

e. Counterclockwise full spell (counterclockwise first quadrant full spell, counterclockwise second quadrant full spell, counterclockwise full spell

The third quadrant of the needle is fully spelled, and the fourth quadrant is fully spelled counterclockwise).

3). Preview display.

4). When doing stitching, if the length and width of the image are required to be equal, a "*" will appear on the title bar to mention shown in Figure 8-10A. If the length and width of the images are not equal, click "OK", the system will display the following

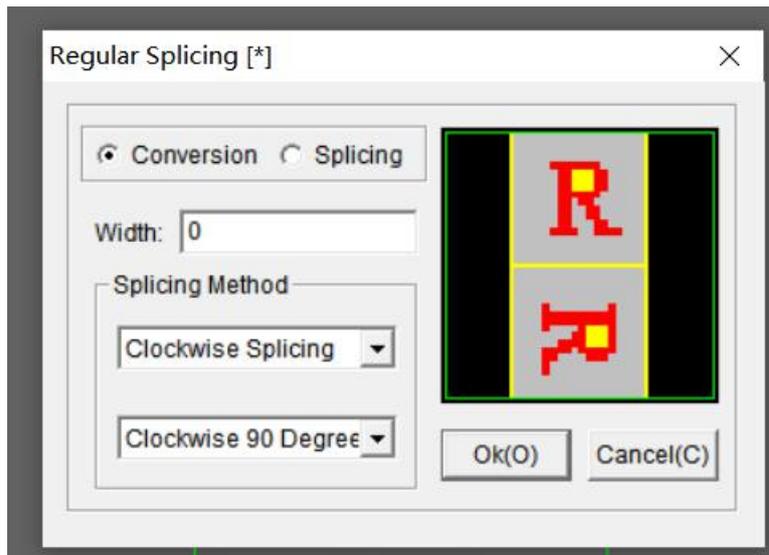The following prompt "image length and width are not equal!", as shown in Figure 8-10B.
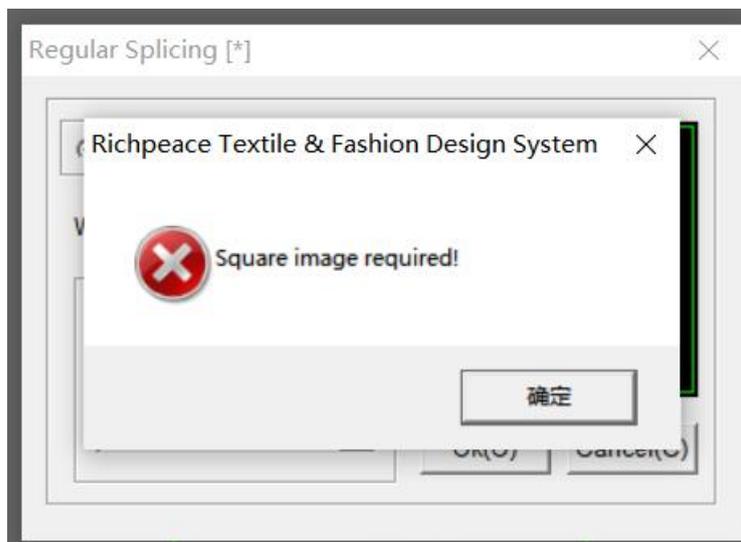
Figure 8-10A

Figure 8-10B

5). Convert width: Adjust the width when splicing. Figure 8-10-1

Setting, set the figure (Figure

8-10-2) like the figure after the operation (Fig. 8-10-3).
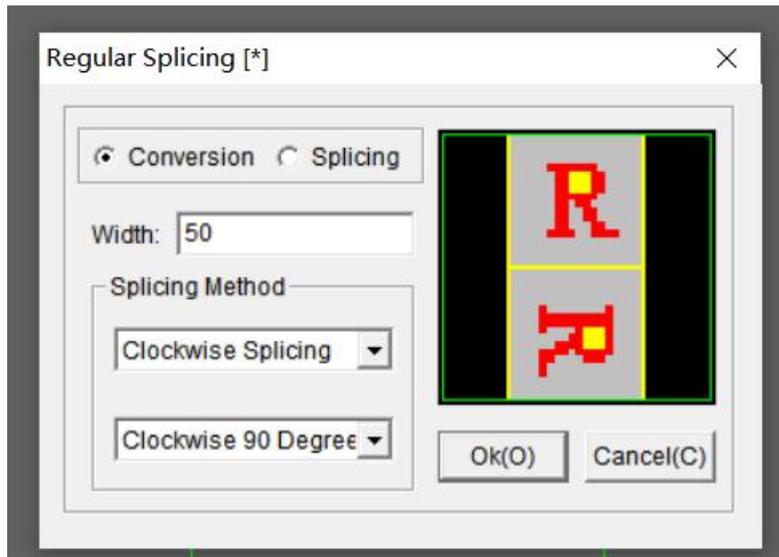
Figure 8-10-1

Figure8-10-2   Figure 8-10-3

6). The conversion width can only be used for the splicing method: clockwise splicing, counterclockwise splicing.

Example 2. Using the mirror   splicing   method, regular splicing of the printed pattern (Figure 8-11a).

1). Select the splicing method in the regular splicing dialog box (Figure 8-10).

2). In the regular splicing dialog box (Figure 8-10), select the left and right mirror splicing method.

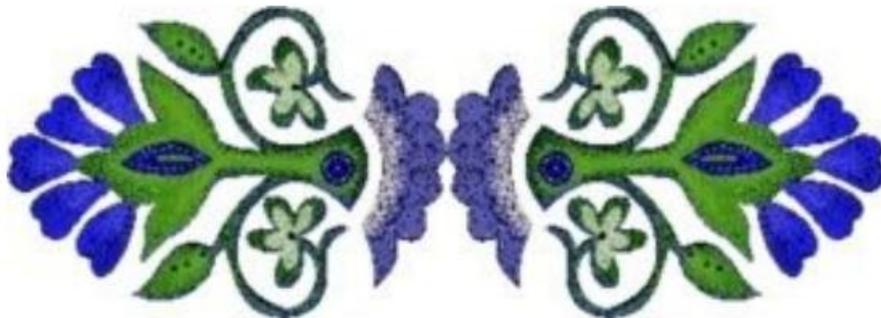3). Make sure the regular splicing is complete (Figure 8-11b).

Figure 8-11a

Figure 8-11b

3．horizontal splicing ⦿ Hor. Splicing

Example 3. Two input images are obtained by scanning and inputting the sample (cloth sample). (Figure 8-12a, Figure 8-12b).

Use horizontal splicing to remove its identical parts.

1). First open the left image in the printing work area (Fig. 8-12a).

2). Then click the button to open the image on the right (Figure 8-12b).

3). Through the enlarged grid display of the image, find more than two pairs of common points and connect them into a line. (Figure 8-12c)

4). Finally, click the ![] Run button to complete the horizontal image stitching operation (Figure 8-12d).

Figure 8-12a   Figure 8-12b

4.vertical splicing ⊂ Ver. Splicing

Example 4. Two input images are obtained by scanning and inputting the sample (cloth sample). (Figure 8-13a, Figure 8-13b).

　 Use vertical splicing to remove its identical parts.

1). First open the upper image in the printing work area (Figure 8-13a).

2). Then click the button to open the image below (Figure 8-13b).

3). Through the magnified grid display of the image, find more than two pairs of common points and connect them into a line. (8-13c)

4). Finally, click the Run button to complete the vertical image splicing operation (Figure 8-13d).
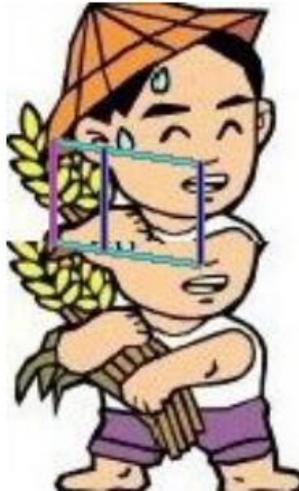
Figure 8-13a

Figure 8-13b

Figure 8-13c

Figure 8-13d

5. Splice line editing (splice lines are used for horizontal and vertical splicing)

1). Add splice lines. A. Mouse click on the first common point.

B. Move the mouse to the second common point and click again to complete a pair of common points select.

C. In multiple-pair common-point selection, when two pairs have been selected, when selecting the next pair,

Repeating A and B operations on the selected common points will make alignment adjustments.

2). Delete the splice line (dot).

A. Move the mouse over the stitching line (point) to be deleted, the line (point) will be displayed as red, the cursor will also change.

B. Click the right mouse button and press the Ctrl key to delete the selected splice line (point).

C. When you delete a spelling point, all lines connected to that point are also deleted.

3). Modify the splice line (point).

A. Move the mouse over the stitching line (point) to be deleted, this line (point) It will be displayed in red and the cursor will change.

B. Click OK to modify the splice line (point).

C. Move the cursor to the position to be modified, and the stitching line (dot) will follow the cursor's Move and move.

D. Move and move.

E. Click OK again to finish modifying the splice line　(point).

F. To cancel the modification of the splice line　(point), just click the right mouse button.

G. When modifying the splice line , and the mouse is moved outside the image, the splice line will be limited remove image

4). Add description for splicing line.

① Horizontal splicing line.

A. Add a common point line based on the horizontal direction.

B. The vertical order of the common points of each pair of splicing lines should be consistent. The total number of splicing lines Line1, Line2, Line3 in Figure 8-13-1

The order of the same points A, B, C is from top to bottom, then the order of common points A', B', C' is also from top to bottom.

C. The horizontal order of the common points of each pair of splicing lines should be consistent. The common points A to A' in the splice line Line1 in Figure 8-13-1 are

From left to right, the direction of the common points B to B' and C to C' in the splicing lines Line2 and Line3 is also from left to right.

② Add vertical splicing line.

A. Add a common point line based on the vertical direction.

B. The horizontal arrangement order of the common points of each pair of splicing lines should be consistent. V

As shown in Figure 8-13-2, the total of the splicing lines Line1, Line2, Line3

The order of the same points A, B, C, is from left to right, then the order of common points A', B', C' is also from left to right.

C. The vertical order of the common points of each pair of splicing lines should be consistent. The common points A to A' in the splicing line in Figure 8-13-2 are

From top to bottom, the direction of the common points B to B' and C to C' in the splicing lines Line2 and Line3 is also from top to bottom.
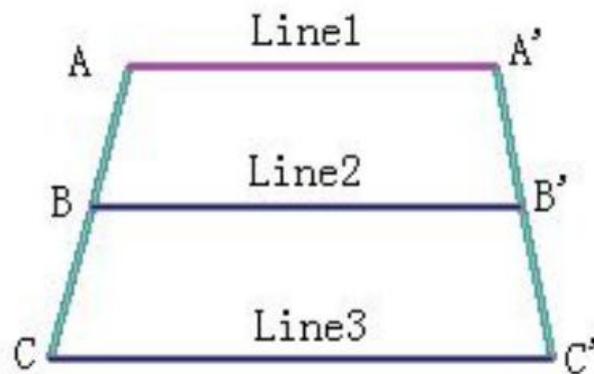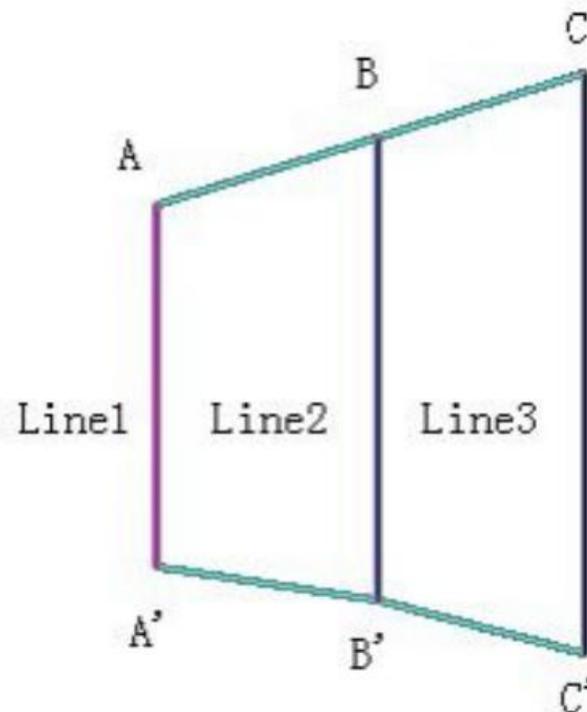

Figure 8-13-1

Figure 8-13-2

5) The color of the line connecting a pair of common points

is ■ (0, 0, 180); the color between two pairs of common points

The color of the connection line is ▮ (0,255,255); the

color of the active splice line is: ■ (255,0,0)

■ ⊞ Loop back image operation

In the loop back image state, the loop back toolbar is displayed in
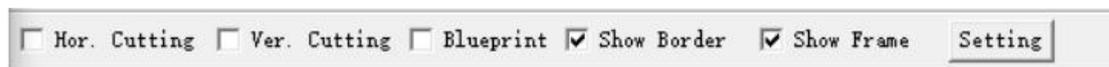
the printing work area (Figure 8-14).

| ☐ Hor. Cutting | ☐ Ver. Cutting | ☐ Blueprint | ☑ Show Border | ☑ Show Frame | Setting |

Figure 8-14   loop back toolbar

Before doing the image loop back, let's first understand what the

flower back is and how the flower back is arranged.

(1).pattern: Design a certain proportion of unit patterns, which can

be displayed in a complete cycle.

(2). The regularity of flower arrangement is generally divided into

two types: flat connection and jumper connection. Jumpers are

divided into horizontal jumpers and vertical jumpers. For example:

1/1 flat connection, 1/2 horizontal jumper, 1/2 vertical jumper, etc.

(3). The so-called loop back is to extract a complete flower back that

can be looped from an image.

loop back toolbar:

1) Horizontal cutting and vertical cutting are only used for butt

joints. Horizontal cutting means from the horizontal direction when

butting The cropped image, vertical cutting means the cropped

image from the vertical direction when splicing.

2) Blueprint: Blueprint Displays the pattern back image.\

3) Show border : Displays the back border of the pattern image.

4) Show frame : Displays a periodic pattern image frame .

5) Set the loop back mode. Click the popup (Figure 8-15) dialog.
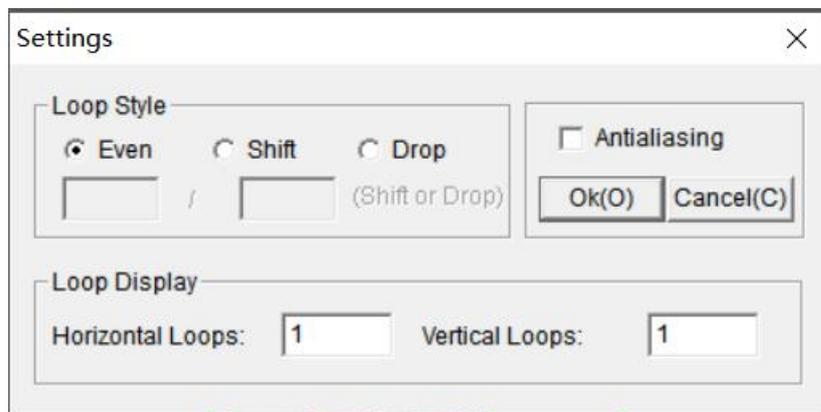
8-15 Setting Dialog Box

a) loop back mode. When the input X and Y are equal, it is a parallel

connection; when the input X is greater than Y, it is a horizontal

jumper; when the input Y is greater than X, it is a vertical jumper;

when the numerator is greater than the denominator, click "OK" ",

the system displays the following prompt "The numerator must be

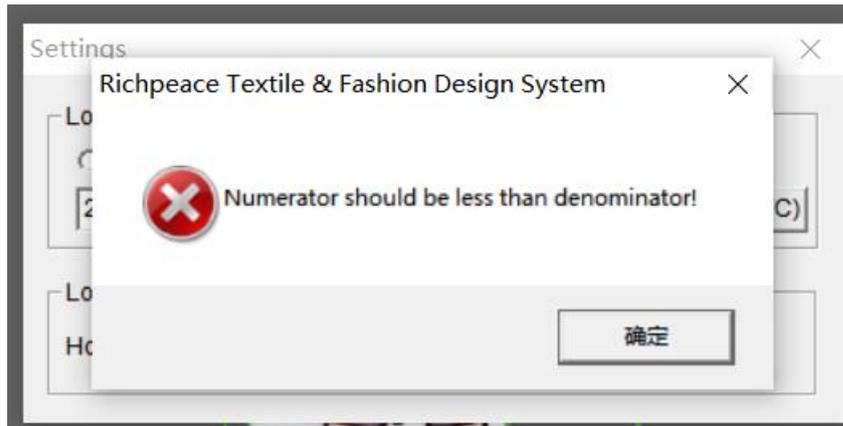less than the denominator!" (Fig.8-15A) (X, Y cannot be zero)

Figure 8-15A Molecular superboundary prompt

b) Blueprint Set: Set the number of cycles in horizontal and vertical directions during continuous drying.

c) Anti-aliasing display: It can eliminate the obvious jaggedness in the image, make the pixels of the image even and blur and produce a smooth transition effect. The effect of anti-aliasing is shown in Figure 8-15B.

Figure 8-15B Anti-aliasing effect

1 Even:

  Even（1/1）：The connection between each unit pattern, whether in the radial or latitudinal direction, is based on

The appearance of a straight line and a horizontal continuous cycle

(Blueprint)
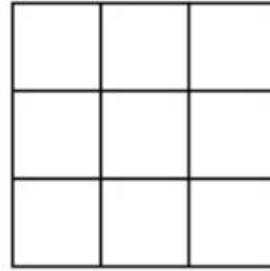
Figure 8-16-1 1/1 Even pattern   Figure 8-16-2 Blueprint effect

Example 5. Open the image in the print design workspace (Fig. 8-16a), and extract a pattern in the image to make it possible to do 1/1 even loop back.

Fig. 8-16a

1). Open in the printing workspace (Fig. 8-16a).

2). Open the loop back setting dialog box and set the loop back mode to 1/1 even (Figure 8-15).

3). Use the mouse to find the maximum period common point in Figure 8-16a, and connect it (Figure 8-16b).

4). Run the loop back operation to complete the even loop back operation. (Figure 8-16c)

5). Display the effect in Blueprint (Figure 8-16d).

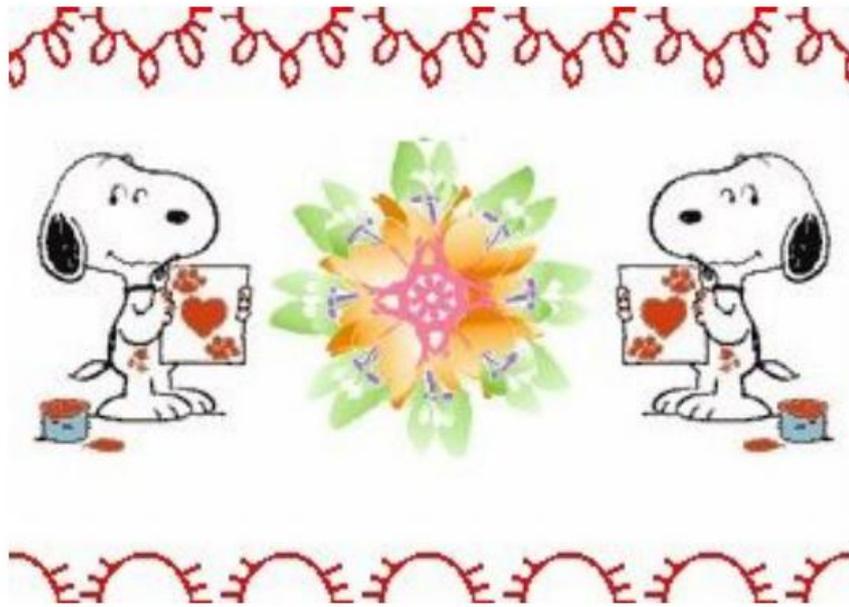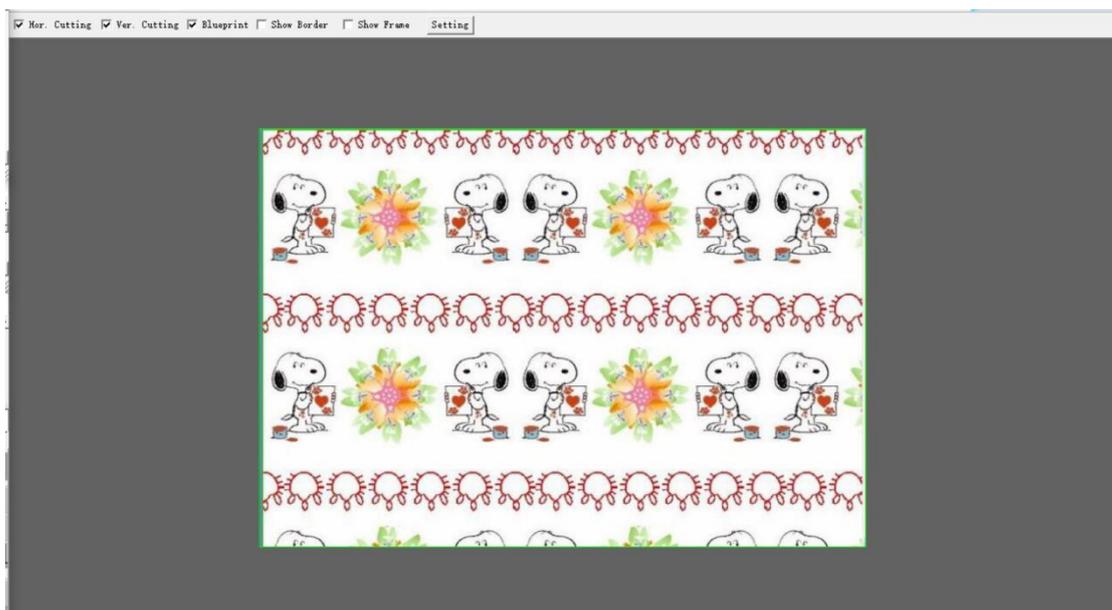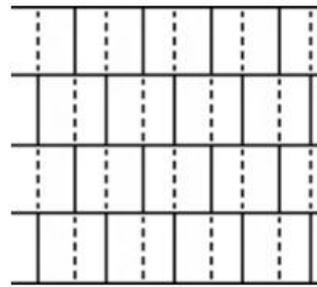Figure 8-16b Common point connection diagram
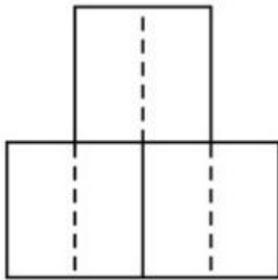
Figure 8-16c even loop back pattern

Figure 8-16d Display the effect in Blueprint

2.shift loop back

shift loop back　（1/2）：

8-17-1 1/2 shift loop back Figure   8-17-2 Display the effect in Blueprint

Example 6. Open the image in the print design work area (Fig. 8-17a), and extract a pattern in the image, so that it can do a 1/2 horizontal shift loop back.

Figure 8-17a

1). Open it in the printing work area (Figure 8-17a).

2). Open the loop back setting dialog box and set the return mode to 1/2 shift loop back (Figure 8-17b).

3). Use the mouse to find the common point of the maximum period in the horizontal direction in Figure 8-17a, and connect it

(Figure 8-17a).8-17c).

4) .Run the loop back operation to complete the even loop back horizontal direction operation. (Figure 8-17d)

5). Use the mouse to find the maximum period common point in the horizontal direction in Figure 8-17d, and connect it (Figure 8-17d).8-17e).

6). Run the loop back operation to complete the even loop back vertical operation. (Figure 8-17f)

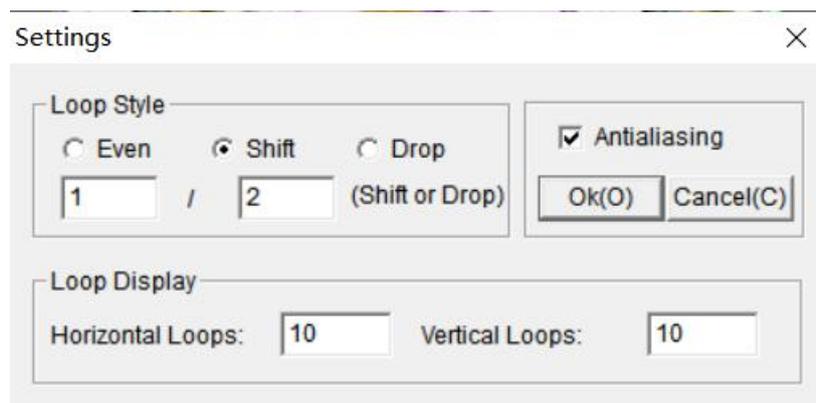7). Display the effect in Blueprint (Figure 8-17g).

Figure 8-17b set to 1/2 shift loop back

8-17c 1/2 shift loop back —Horizontal connection

Figure 8-17d 1/2 shift loop back—complete the horizontal loop back

Figure 8-17e 1/2 shift loop back—vertical connection

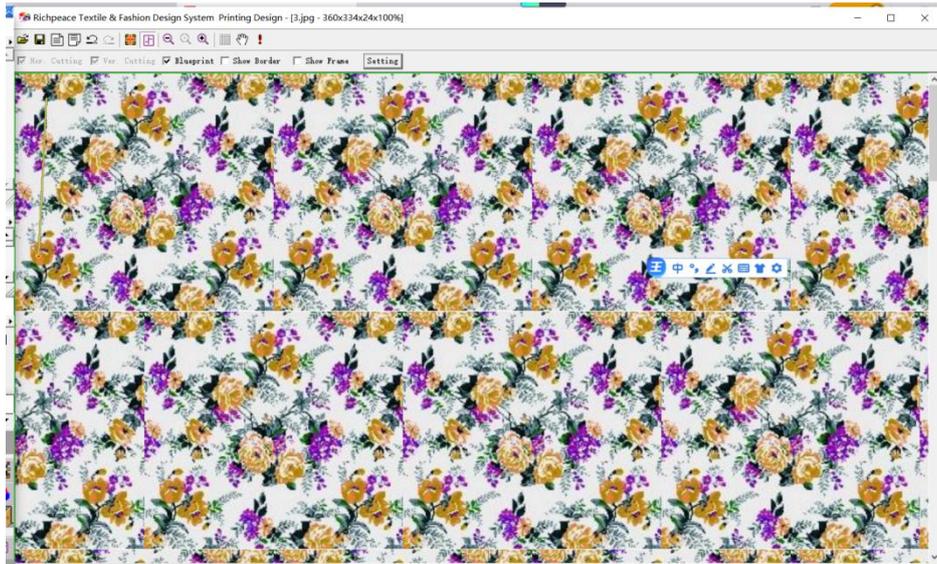Figure 8-17f 1/2 shift loop back—complete vertical loop back

Figure 8-17g 1/2 shift loop back—Blueprint

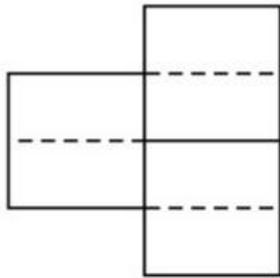3，Drop loop back

Drop loop back（1/2）:
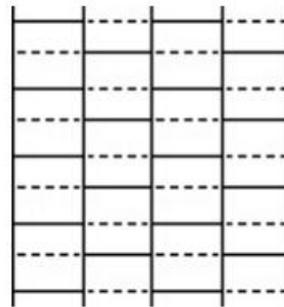

Figure 8-18-1 1/2 drop　　　　　Figure 8-18-2　　Blueprint

Example 7. Open Figure 8-18a in the print design workspace and extract a pattern in the image to make a 1/2 Drop loop back.

Figure 8-18a

1) .Open Figure 8-18a in the print design workspace

2) Open the loopback setting dialog box and set the loopback mode

to 1/2 drap loop back (Figure 8-18b).

3) Use the mouse to find the common point of the maximum period

in the vertical direction in Figure 8-17a, and connect it

(figure8-18c).

4) Run the loop back operation to complete the vertical loopback

operation. (Figure 8-18d).

5)   Use the mouse to find the maximum period common point in

the horizontal direction in Figure 8-17d, and connect it (Figure

8-18e).

6)   Run the loopback operation to complete the horizontal direction

operation of the butt loopback (Figure 8-18f).

7) Display the effect in Blueprint (Figure 8-18g).

※Notice:

1). The small red dots in the wiring diagram indicate that all loopback operations of the lines are based on the cycle where the small red dots are located.

2). In the blueprint image display state, the moving tool has no cycle limit, that is, it can be edited, modified and deleted arbitrarily if it exceeds the cycle.
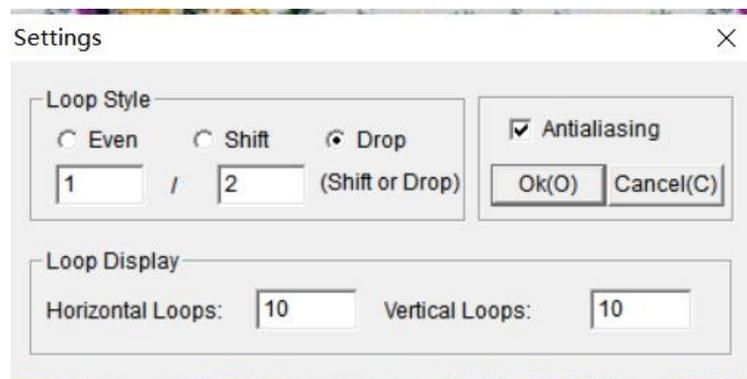

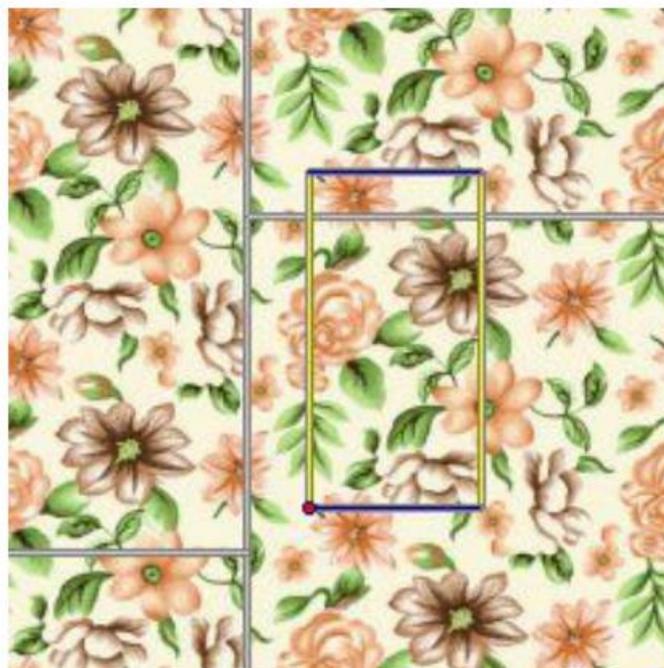Figure 8-18b set to 1/2   Drop loopback

Figure 8-18c   1/2 Drop loopback—connection in vertical direction

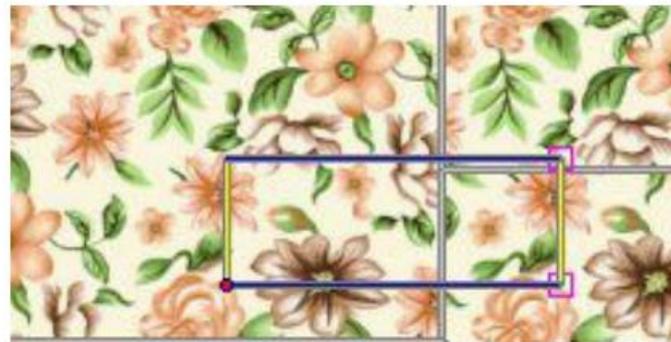Figure 8-18d   1/2 Drop loopback—Complete vertical loopback

Figure 8-18e   1/2 Drap loop back—horizontal connection

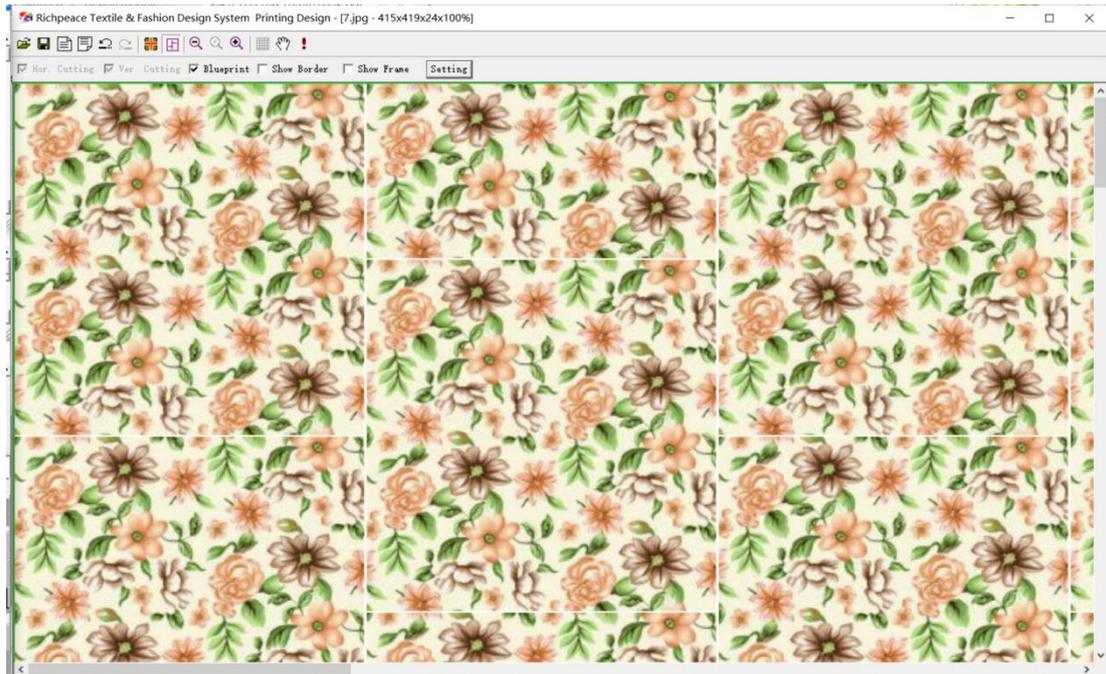Figure8-18f 1/2 Drap loop back—finishes the horizontal direction

Figure 8-18g 1/2 drop loopback - blueprint

4. Loopback line operation

  1). Add return lines (dots).

A. Mouse click on the first common point.

B. Move the mouse to the second common point and click again to complete a pair of common points selection.

C. In the selection of multiple pairs of common points, when two pairs have been selected, when the next pair is selected, the selected common points will be adjusted by repeating the operations of A and B.

2). Delete the Loop back line (dot).

A. Move your mouse over the Loop back line (point) you want to delete, this line (point) will show is red and the cursor will also

change.

B. Click the right mouse button while pressing Ctrl to delete the

selected Loop back line (point).

3). Modify the loopback line (point).

A. Move the mouse over the loopback line (dot) you want to delete,

this line (dot) will show is red and the cursor will also change.

B. Click OK to modify the loopback line (point).

C. Move the cursor to the position to be modified, at this time the

loopback line (point) will follow the cursor move and move.

D. Click OK again to finish modifying the stitching line (point).

E. To cancel the modification of the loopback line (point), click the

right mouse button.

  F. When the loopback line is modified, and the mouse is moved

outside the image, it will limit the return ,The head line moves out

of the image.

G. When modifying a moving line (point), it will be limited to its

period.

4) The color of the line connecting a pair of common points is

(0,0,180); the color between two pairs of common points

The color of the connection line is (255, 255, 0); the color of the

active splice line is: (255, 0, 0).

■Undo redo operations,

1. Undo (shortcut Z).

If you make a mistake, you can undo it with the undo command.

1). Types of undo operations:

A. Open an image file or import an image.

B. Automatic stitching operation.

C. Regular stitching operation.

D. Add stitching line, delete stitching line (point), modify stitching

line (point).

E. Horizontal (vertical) stitching operation.

F. Add Loopback Lines, Delete Loopbac Lines (dots), Modify Loopbac

Lines (dots).

G. even Loopbac operation. H. shift (drop) loopback operation.

I. Open the splice file

2). The splicing operation and the undoing of the Loopback

operation.

  A. When the splicing operation is undone to the Loopback

operation, the workspace state automatically switches from the

splicing state to the Loopback state.

  B. When undoing from a Loopback operation to a splicing

operation, the workspace state is automatically changed from

Loopback state switches to splice state.

2. Redo (shortcut A).

1). Type of redo operation (same as undo operation).

2). The redo of the splicing operation and the loop back operation (same as the undo operation).

3. If several operations are undone, and an undoable operation is redone, all subsequent states are eliminated, but redo can be used to revert the last change.

4. There is no limit to the number of times you can undo and redo a print design.

5. The undo redo of the operation of the decal design is separate from the undo redo of the decal separation.

※Note: When exiting the printing design module, the current operation state is automatically saved, and the next time you enter the printing design, the state of the last exit is restored.

§8-2 Printing Dichroic

Click Printing Dichroic to enter the Printing Dichroi window, its subcommand icon area (Figure 8-19), and the Printing Dichroi sub-workspace (Figure 8-20):
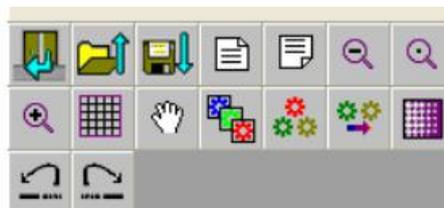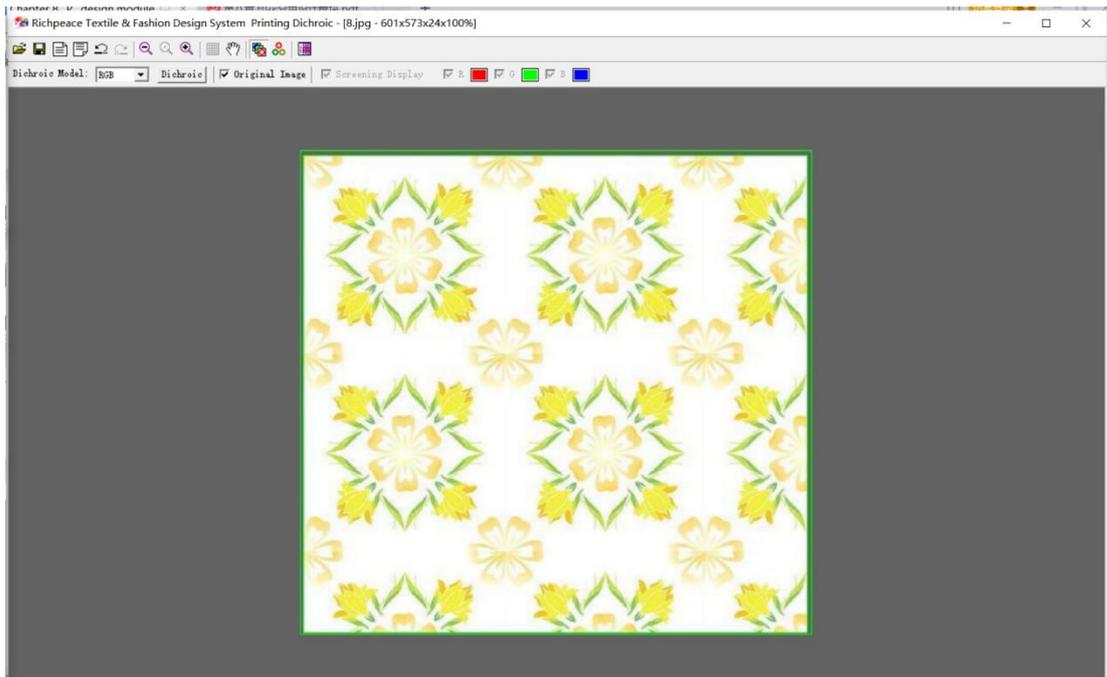

Figure 8-19

Figure 8-20 Printing Dichroi sub-workspace

◇Introduction to panel buttons

■ Exit: Exit the Printing Dichroic

■ Open file: open the image format file supported by the system to the Printing Dichroic separation work area.

■ Save file: save the image format file supported by the system to the hard disk of the pattern displayed in the Printing Dichroic work area.

■ Import Image: From Richpeace Design workspace, transfer the marquee image to the Printing workspace.

■ Export Image: Recall the print workspace image to Richpeace Design workspace selection box.

■ zoom out : zoom out the image display magnification of the printing work area (minimum 10%).

■ Default: Sets the image display magnification of the default print workspace (default is 4 times).

■ Zoom in: Enlarge the image display magnification of the small print work area (up to 51 times).

■ Grid: The grid displays an image of the print design workspace.

※Note: When displaying a screened image or when the magnification is less than 4 times, it cannot be displayed in a grid image.

■　Move: Move the image to display the print work area.

■ Channel Dichroic: Toggles channel Dichroic state and special color Dichroic state.

■ special color Dichroic: Toggles channel Dichroic state and special　color Dichroic state.

■ Auto color: For the color separation map auto color.

■　Image Screening: Opens the Image Screening Parameters dialog box.

■ Undo: Undo the operation in Stamp Dichroic.

■ Redo: Redo operations in Stamp Dichroic.

※Note: In the title bar of the printing Dichroic workspace, if the image has a file name, its file name and size will be displayed; if there is no file name, only its image size will be displayed.

◇Printing Dichroic operating instructions

■ Open file operating:

Click open file command to pop up the open file dialog box (Figure 8-5), open the system supported   image format files to the Printing Dichroic Workspace.

■ Save file operating:

Click Save File command to pop up the Open File dialog box (Figure 8-6), and save the pattern displayed in the Printing Dichroic work area to the hard disk in a format supported by the system.

■ Channel Dichroic operating :

In the Channel Dichroic state, the color separation toolbar in the Dichroic model is displayed (Figure 8-21)

Figure 8-21

1. RGB Channel Dichroic

Example 8. RGB Channel Dichroic the image in the Printing Dichroic workspace.

1). Open the image or import the image in the Printing Dichroic workspace (as shown in Figure 8-20).

2). The RGB Channel Dichroic operation is completed by opening the image or importing the image in the printing color separation work area.

3). The RGB three-channel graph can be displayed in any combination, and the method can be selected (as shown in Figure 8-21).

4). The RGB three-Channel diagram in the Printing Dichroic workspace (Figure 8-22R, Figure 8-22G,Figure 8-22B).
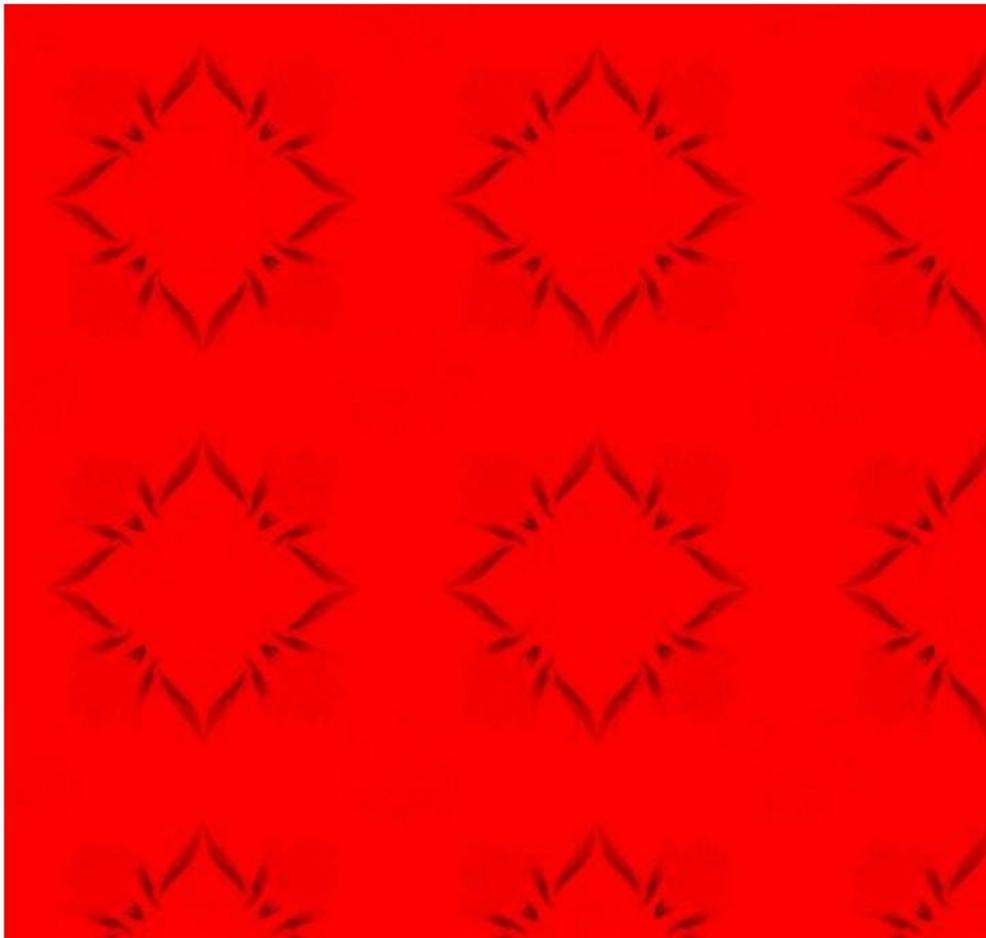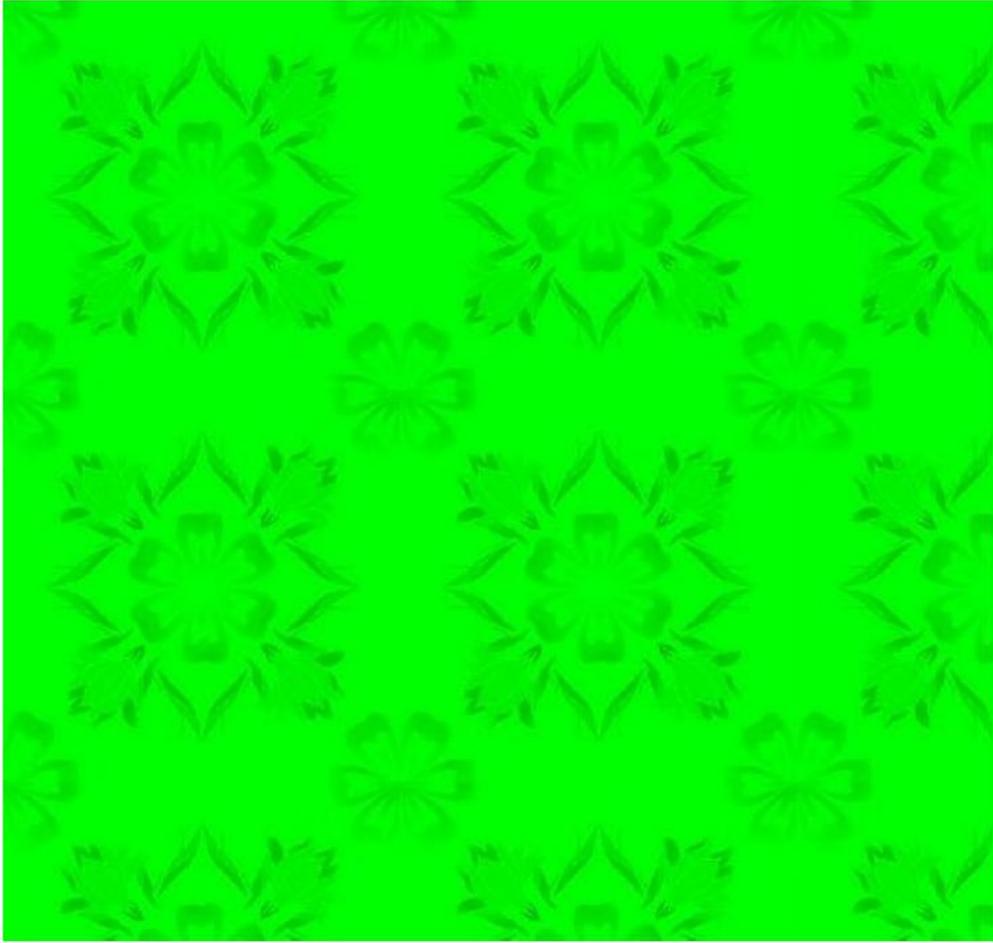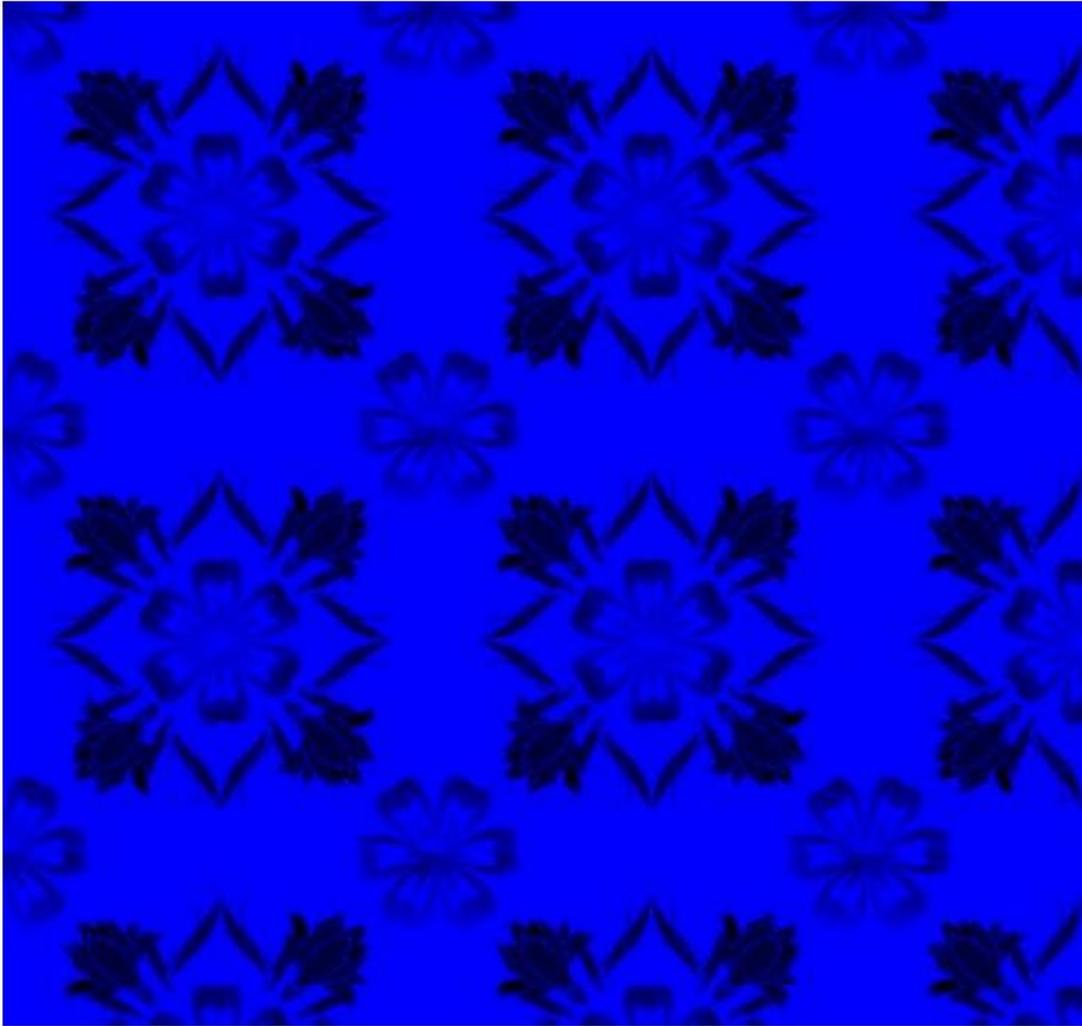

Figure 8-22R

Figure 8-22G

Figure 8-22B

2. CMYK Channel Dichroic

Example 9. Dichroic the image with CMYK channels in the Printing Dichroic workspace.

1). Open the image in the Printing Dichroic workspace or import the image as in example 8.

2). The CMYK channel Dichroic operation is completed by opening the image or importing the image in the Printing Dichroic workspace;In the channel Dichroic mode in the printing toolbar,

selecting CMYK color separation (when there is an image in the work area) can also complete the CMYK color separation of the image (Note: RGB can also be used).

3). The CMYK four-channel image can be displayed in any combination, and the method can be selected (Figure 8-23a).

4). The CMYK four-channel map in the Printing Dichroic workspace (Figure 8-23C, Figure 8-23M, Figure 8-23Y, Figure 8-23K).
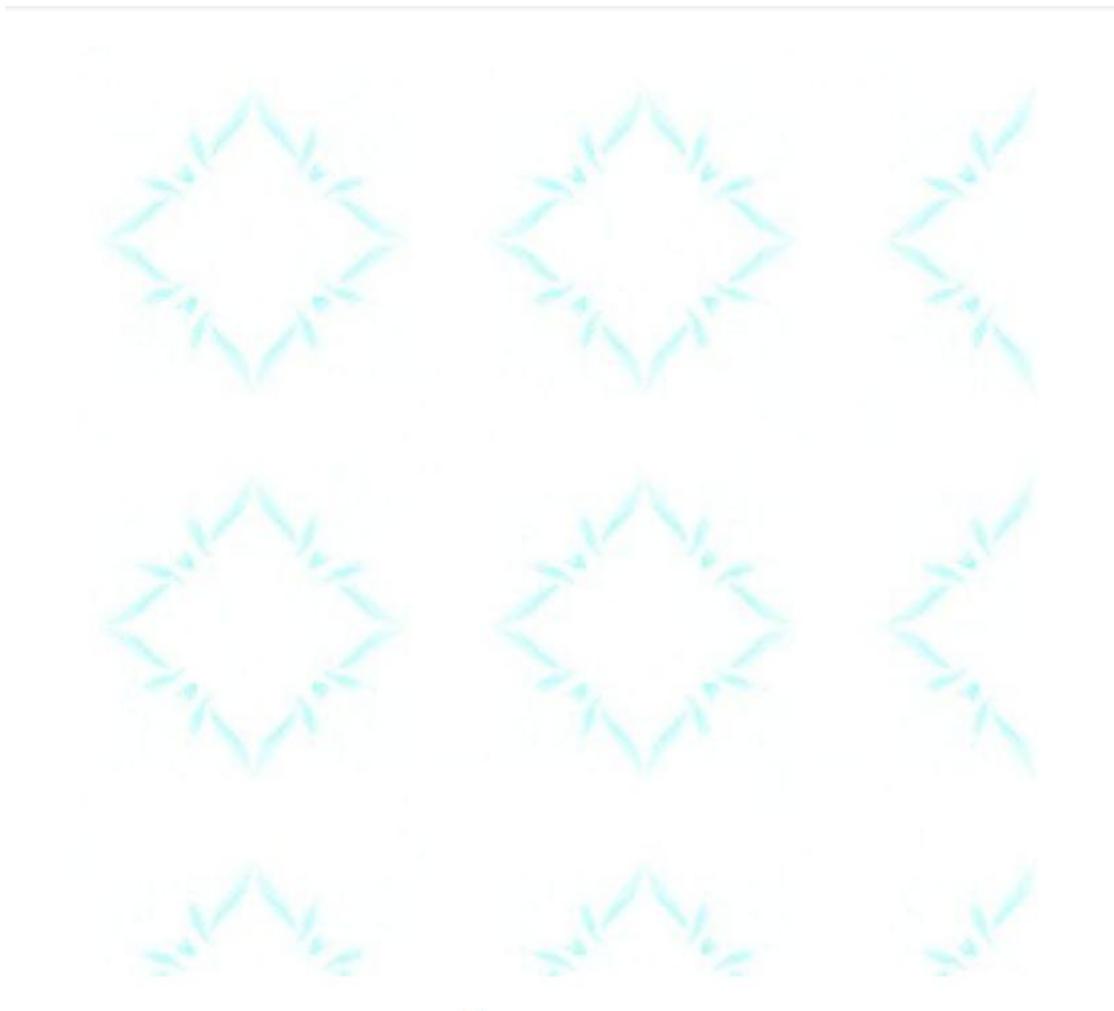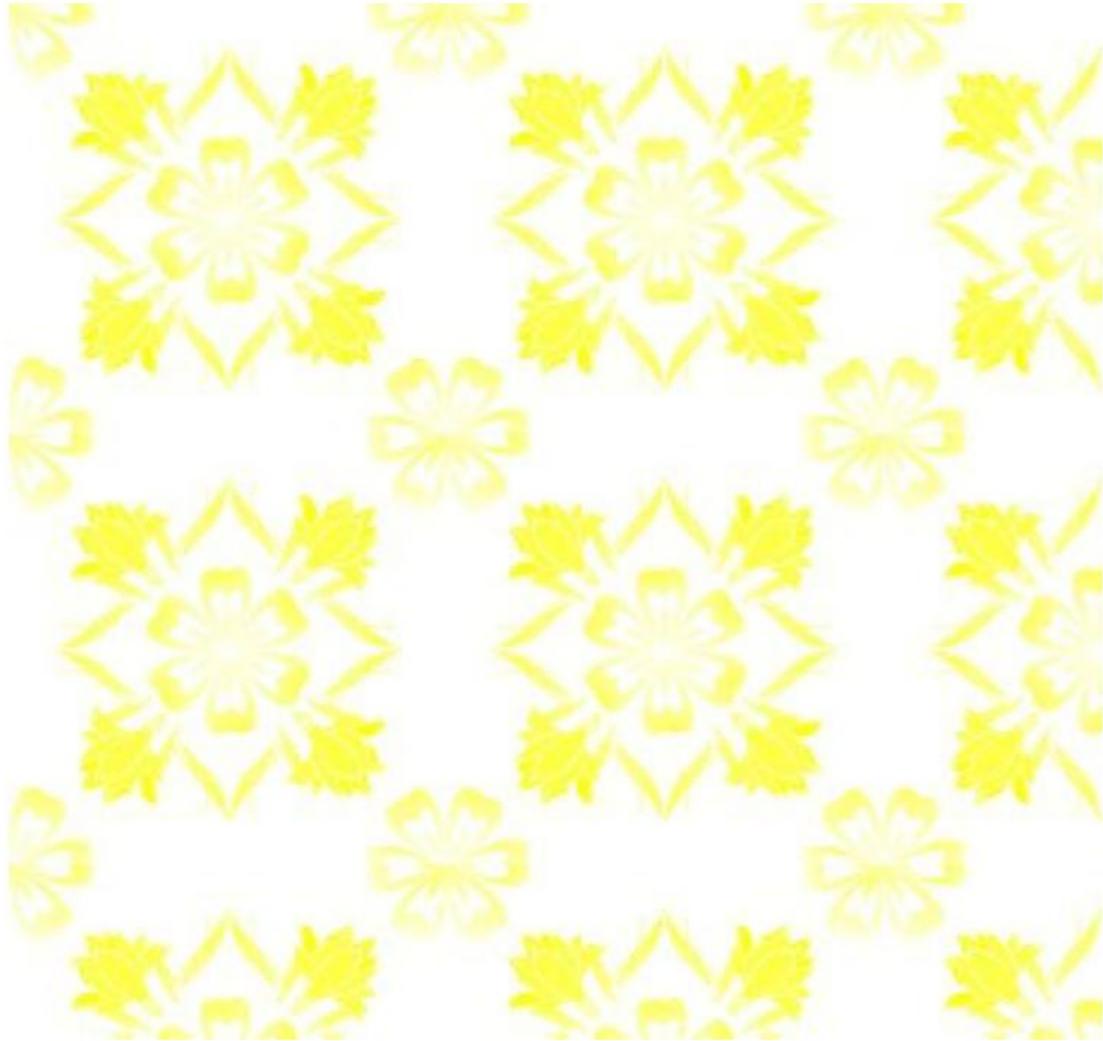

Figure 8-23a

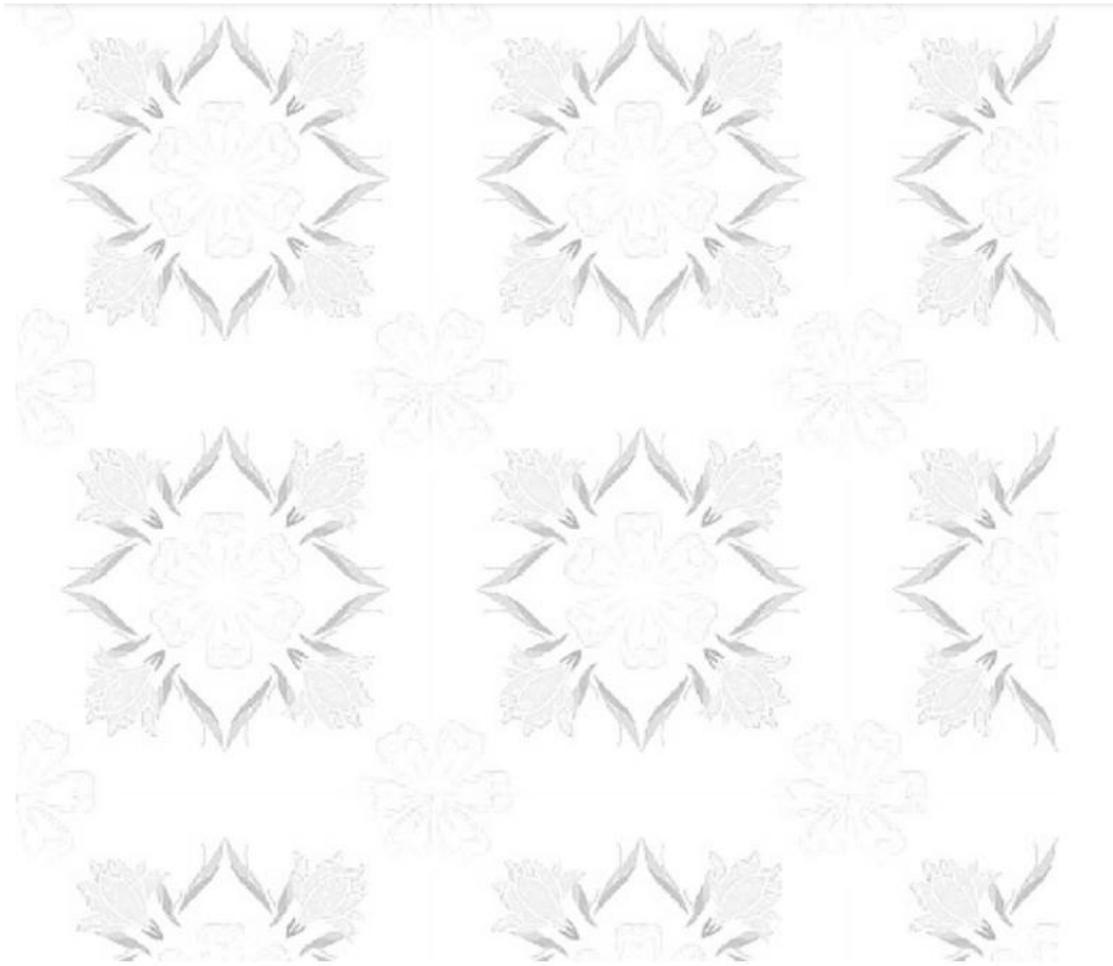Figure 8-23C

Figure 8-23M

Figure 8-23Y

Figure 8-23K

■ special color Dichroic operating :

In the special color Dichroic state, the main special color Dichroic

toolbar is displayed in the printing work area (Figure 8-24). The

maximum number of colors is 16; there can only be one gray color

in the separation.

Figure 8-24

In the toolbar, the color Dichroic color is displayed in the color

Dichroic by aauto color or manual color ; display the original image

is to switch between displaying the colorDichroic image and the original image; set it as a current color Dichroic color editing dialog box selection (Figure 8-25).
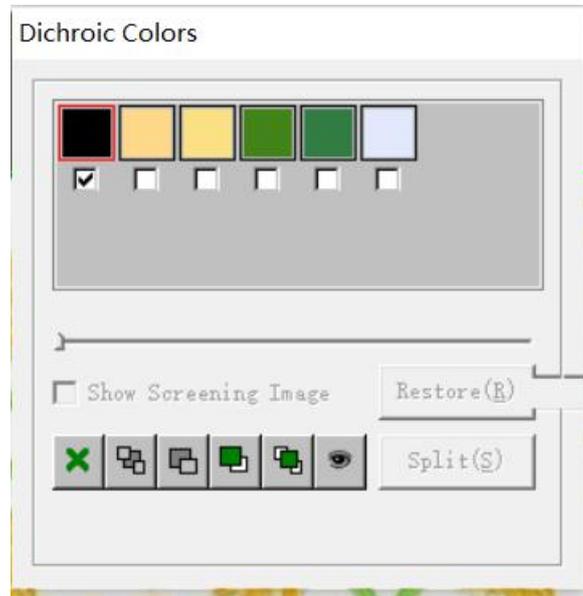

Figure 8-25 Dichroic Color Setting Dialog Box

1. Dichroic Color Settings dialog box (Figure 8-25)

　1) Display the currently assigned color in the preview box.

　2) The check box below the color box indicates whether the color is displayed or not.

3) Tolerance: Indicates the tolerance value of the currently selected color. 4) The check box Display Screen Image is used to switch the screen image and color separation diagram display when there is an image screen. (For the screening, please refer to §8-3 Printing Color Separation Screening)

5）Hide display colors.

a) When the button is displayed, it is in the display color state, indicating that the current active color is visible, that is It means that the color participates in the color separation operation.

b) When the button is displayed, it is in the hidden color state, indicating that the active color is invisible when the button is displayed.

That is to say, the color does not participate in the color separation operation, and it is also displayed in the icon of the color a small icon

6) Move to the head (Home): Move the current active color to the front.

7) PangeUp: Move the current active color up by one.

8) PangeDown: the next active color.

9) Move to the end (End): Move the current active color to the back.

10) Delete: delete the current active color

11) Restore: restore: restore the modification of the current color tolerance, or restore the color display, hidden toggle of the hidden state. Note: The tolerance, display and hide of each color are independent and do not affect each other.

12) Split(S) split: perform the split operation with the color

selection of the current image. (The current image has no split

count

data, the split button is available, otherwise it is unavailable).

13)　There is a Tool Tip in the color icon to display its RGB value

(Figure 8-25).

14)　Use the mouse to drag and swap the positions of the two

colors.

15)　　15) Double-click the color box to modify the RGB value of the

color. 16) If the color has screen data, the color box will be displayed

with a diagonal grid (Figure 8-25).

17) When applying the modification tolerance, the current state will

be undoable. 18) When canceling the modified tolerance, restore

the state parameters before modifying the tolerance.

※Notice:

1.　In special color Dichroic operating, when the color tolerance is

modified, the image will be re-separated with the current split color.

If it is in operation, other operations cannot be used.

2.　Delete color, add color as above.

2.　Auto Auto color split.

Auto color split After entering the number of colors n (n<=15) in the

toolbar, at most n+1 colors can be separated, and adding 1 defaults

to black. After modifying the number of auto colors plit, click to

execute the automatic color separation operation (F2).

Example 10. Open the image in the Print Separation workspace and

use Auto color split to split it into 5 colormaps.

1). Auto color split The number of colors is set to 5.

2). Open the image or import the image into the workspace (Figure

8-26).

3). Open the image or import the image into the work area and

divide the image into 6 colors (figure8-26).

4). Open the Split Color dialog box and display the Split color in
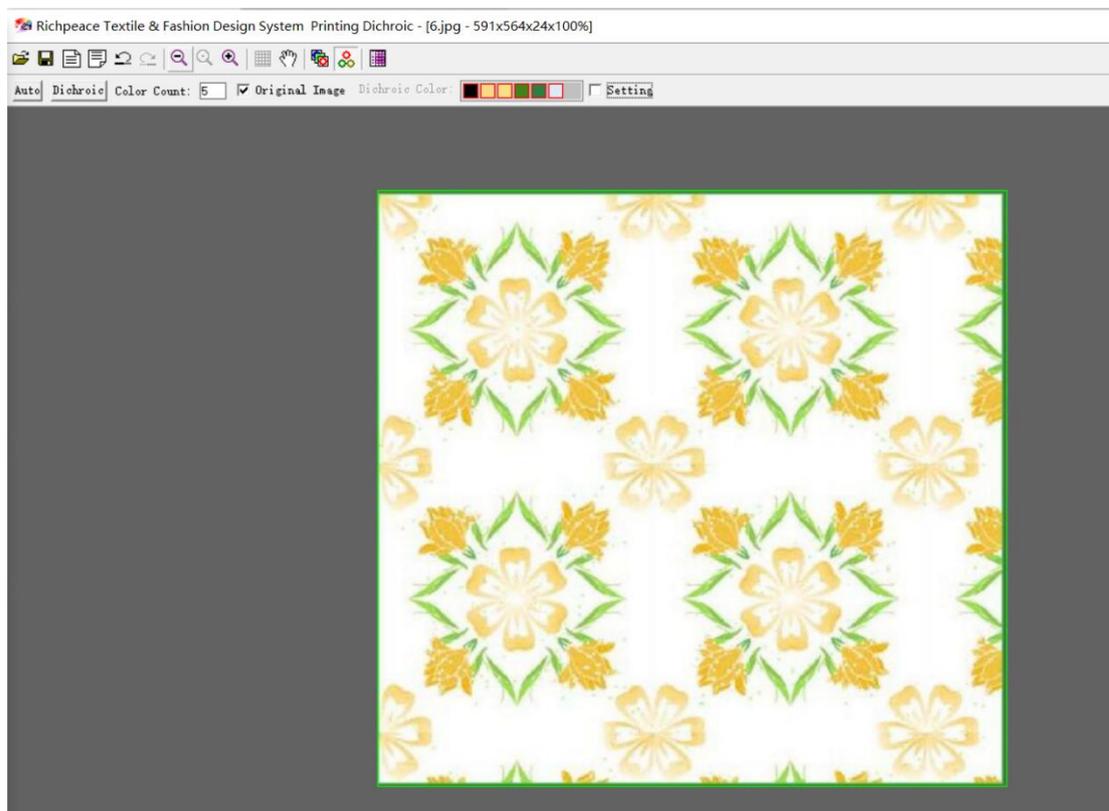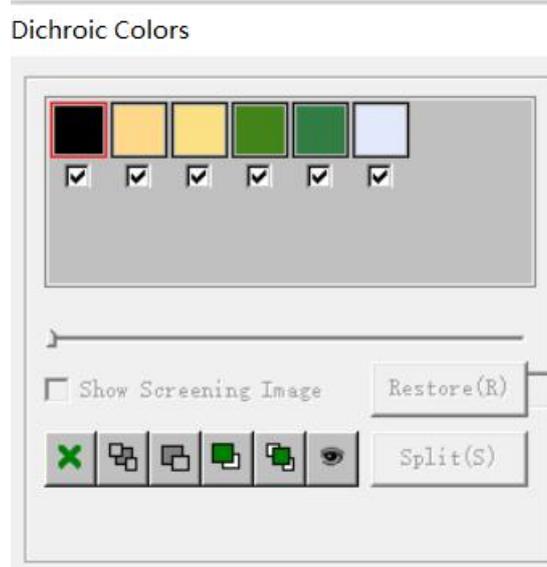
combination (Figure 8-27)

figure8-26

Figure 8-27

3. Manual split

The printing color dichroic toolbar is displayed (Figure 8-28).

Figure 8-28

There are two ways to manually color split , one is to pick the color in the original image, the other is to select the color in the color panel.

1). Pick a color in the original image. (Only used when the original image is displayed)

There are three ways to pick up: 1x1, 3x3, 5x5.

The operation steps are as follows

a) Select manual color selection in the color separation toolbar (Figure 8-28).

b) Select the picking method in the color separation toolbar, such as 1x1 picking method (Figure 8-28).

c) In the color separation toolbar, select Display original image.

d) Move the cursor to the place where you want to select the color in the original image, and click the mouse to complete the manual selection of the original image color.

e) When the Image Screening dialog box is open, the manual color picking operation cannot be completed.

2). Color panel color selection.

Just click on the color you want to select in the color panel to complete the color palette selection.3). When adding a color, if the color is already in the separation, it will not be added.

■Switching state: RGB channel Dichroic, CMYK channel Dichroic and special Dichroic can be switched between each other and the Dichroic and screening data can be saved.

◇ Auto color

Auto color matching is to perform color matching operations on each layer based on the color separation layers of the image. Select the Auto color matching command to open the Auto color matching dialog box (Figure 8-29).
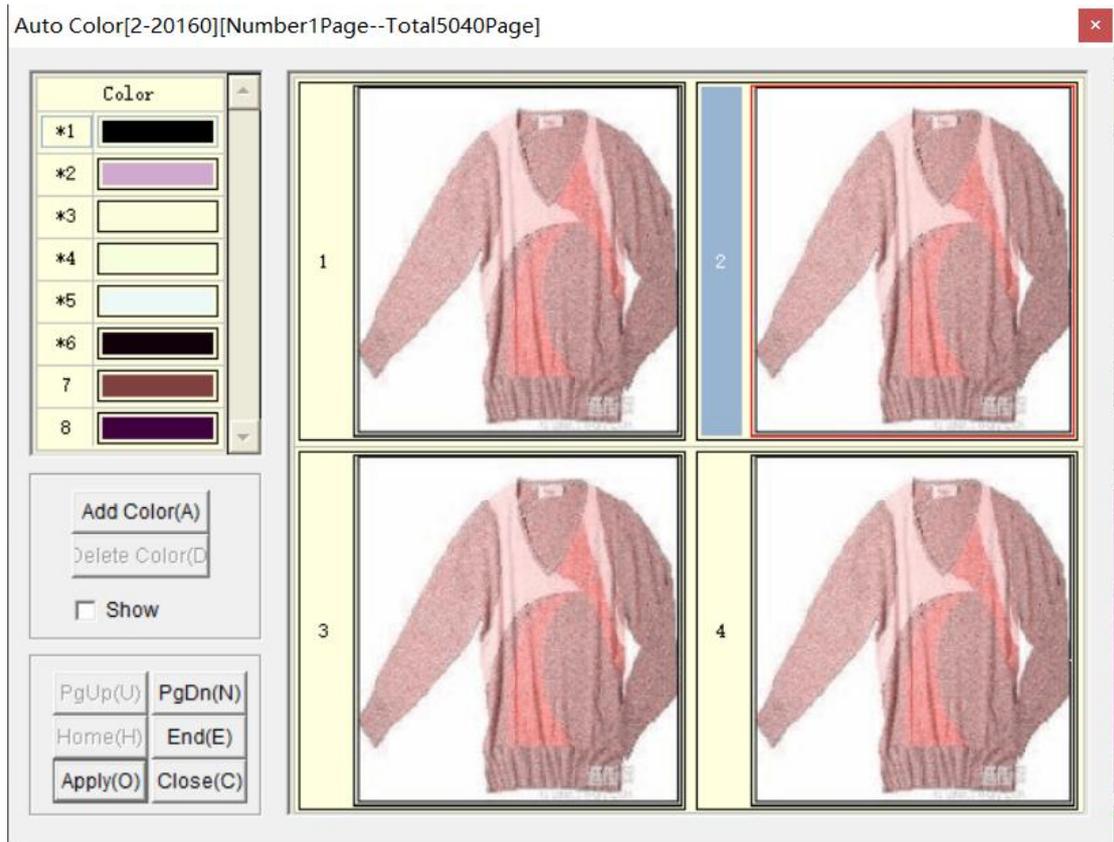
Figure 8-29   Auto color matching dialog box
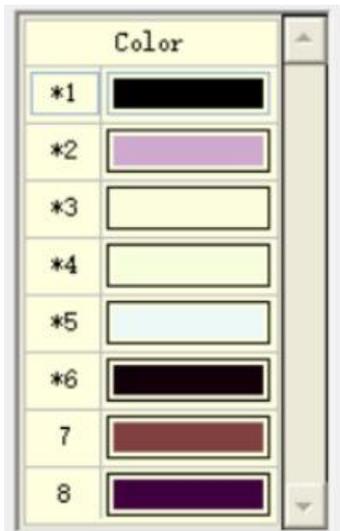
1. The color list : Figure 8-30.

Figure 8-30.

A) Add "*" before the number to indicate: the color of the color separation layer, and the color cannot be modified.

B) No "*" is added to the number: the user can add color by definition, and the color can be modified and deleted.

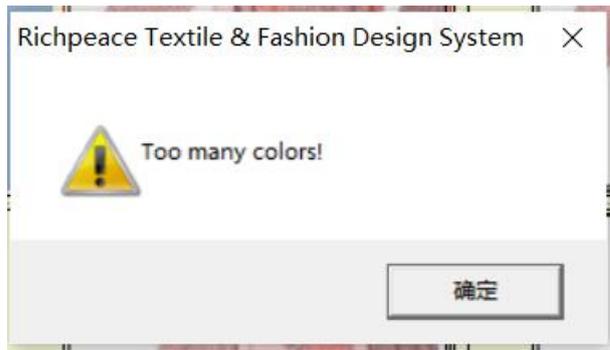C) Add color: Click on the color in the color panel. （1）Manual color separation status: prompt (Figure 8-31).

Figure 8-31　　Add color prompt dialog

①Click "Yes": to add color matching operation.

②Click "No": add color separation operation.

（2）Auto color: add color matching operation directly.

E)　Right-click the color block:

（1）Switch to show/hide the color to participate in the color matching operation.

（2）Display the display when it is hidden: .

F)　Double-click the color block to pop up a dialog box (Figure 8-32) to modify the color:

Figure 8-32   Modify Color Matching Color Dialog Box

2. Add color [Add Color(A)] : .

3. Delete color [Delete Color(D] : .

4. show [□ Show] :

（1）Choose color matching color: Display the color matching color used by each layer in the color scheme (Figure 8-33A).

(2) Do not select color matching: display the effect of applying color matching in the color scheme (Figure 8-33B).
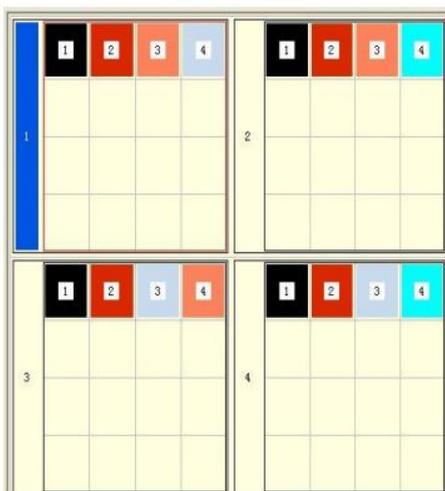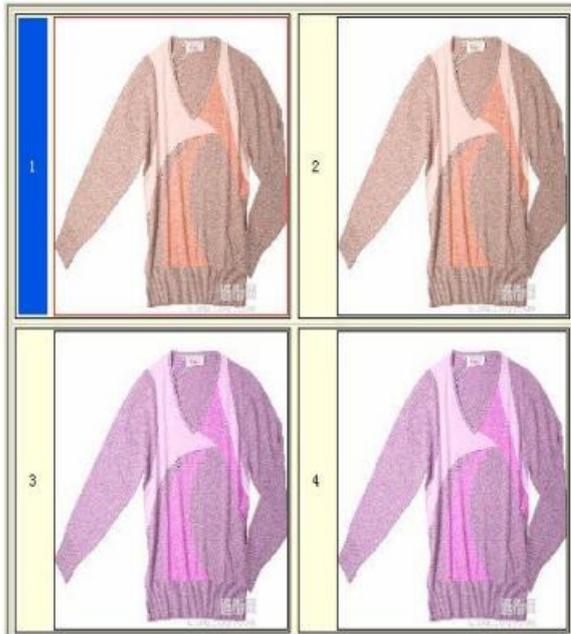
Figure 8-33A

Figure 8-33B

5 . [PgUp(U)] PangeUp: The previous page shows the color scheme.

6. [PgDn(N)] PangeDown: The next page shows the color scheme.

7. [Home(H)] Home :The homepage shows the color scheme.

8. [End(E)] End: The bottom page shows the color scheme.

9. [Apply(O)] Apply :The apply displays the current color scheme.

10. [Close(C)] Close : Close the Color Scheme dialog.

11. Double-click the currently selected color scheme to apply the color scheme directly and close the Color Scheme dialog.

12. The color effect of applying color matching is consistent with the state of color separation color setting; as shown in the layer application combination display switch.

※Note: When exiting the printing color dichroic module, the

current operation state is automatically saved, and the next time

you enter the printing design, the state of the last exit is restored.

§8-3 ▦ Image Screening

Click the ▦ command to pop up the Screening dialog box (Figure
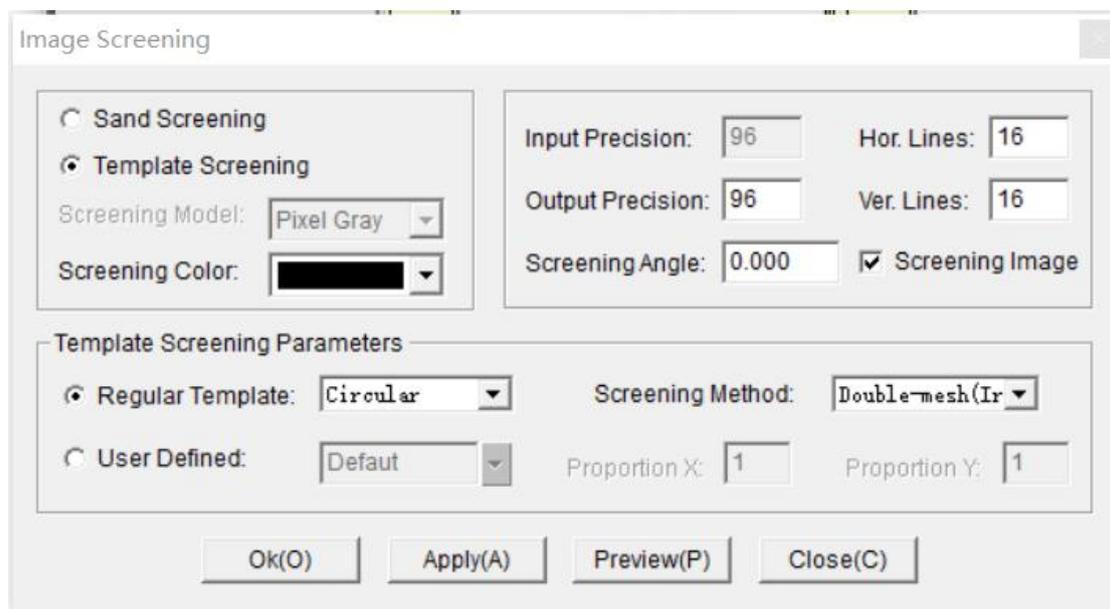
8-34).

Figure 8-34   Image Screening dialog box

Image screening is divided into stand screening and template

screening.

1. Sand screening.

Sand Screening: Screen the image with dots at random positions

and random gray values.

The operation steps are as follows: (separate the color of the

opened image)

a). In the Image Screening dialog box that appears, select Sand

Screening.

　　b). Select the color to be screened in Screen Color.

　　c). Select Preview Screen Image.

　　d). Set the output precision.

　　e). Click the Apply button to perform the sand screening operation.

2. Template screening.

Template screening is divided into rule template screening and custom template screening.

(1) Generation of custom templates.

In the printing color separation design panel (Figure 8-2), select the command to open the custom screen template and save it Dialog (Figure-8-35)
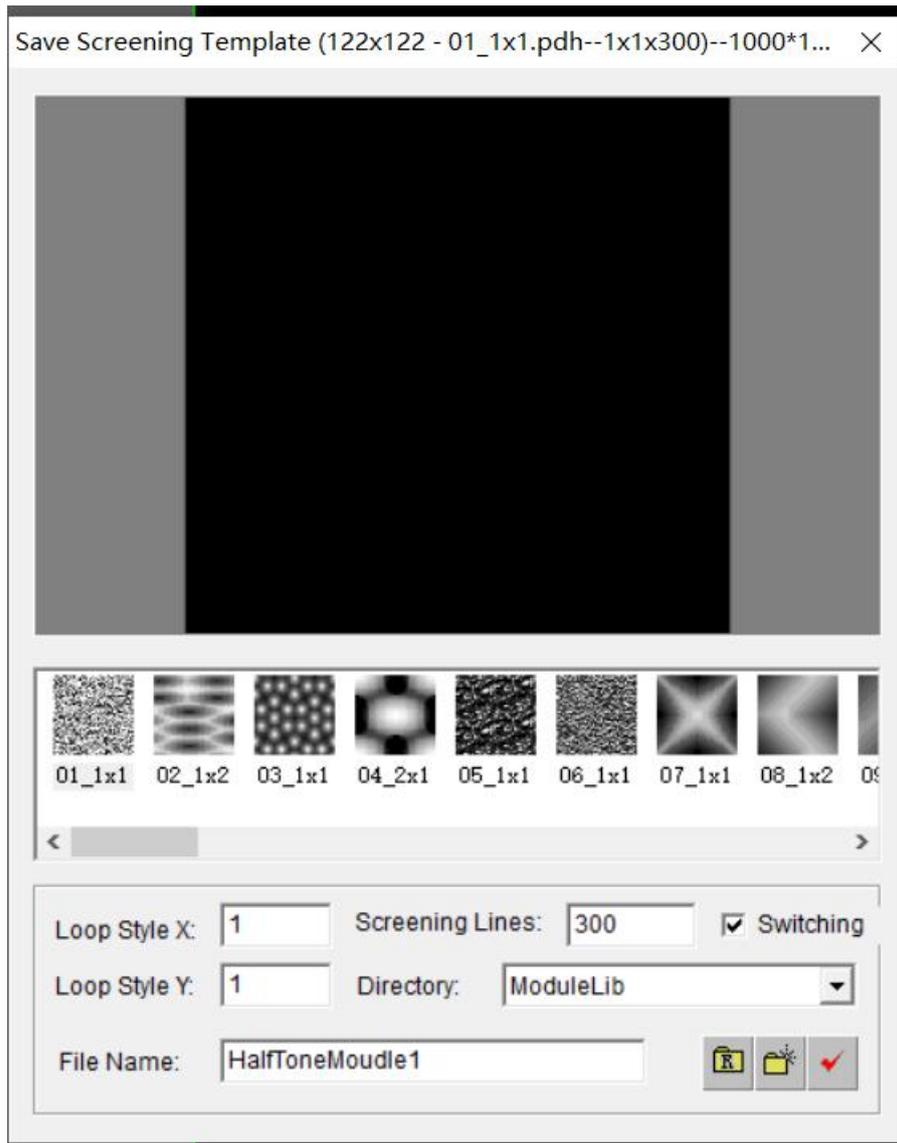
Figure-8-35

Steps:

a). Select the image to be saved as a template in the current workspace and open the save dialog, convert it to grayscale and display it in the preview box.

b). Set the X-direction and Y-direction rewind mode of the template, set the number of screen lines, select the save directory, and enter the save file name.

c). Click the ✔ button to save the custom template.

※Description of Save Custom Template dialog box: (Figure 8-35)

A. At the top is the preview window for saving the template.

B. Below the preview window is the thumbnail preview of the

template in the current directory.

C. Toggle the check boxes to convert the preview save template

and the current directory selection template.

D. 🗃 Rename the folder, click to open the dialog box (Figure 8-36).
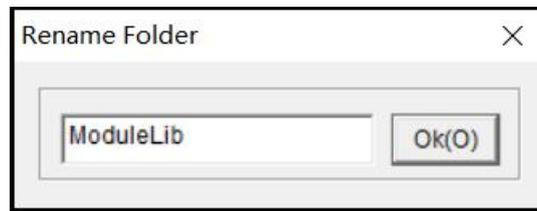

Figure 8-36

E. To create a new folder, click to open the Enter Folder Name

dialog box (Figure 8-37).

Figure 8-37

F. Right-click the small icon in the preview template, and select

Rename the small screen template from the pop-up menu.

and delete command (Figure 8-38).

Figure 8-38

G. The title bar displays the selected template parameter map in the current directory (Figure 8-35).

(2) Open the custom template from the hard disk to the outside work area.

In the printing color dichroic design panel (Figure 8-2), select the

command to open the Custom Screen Template Open dialog box (Figure-8-39). (its panel button functions the same as saving a custom template)
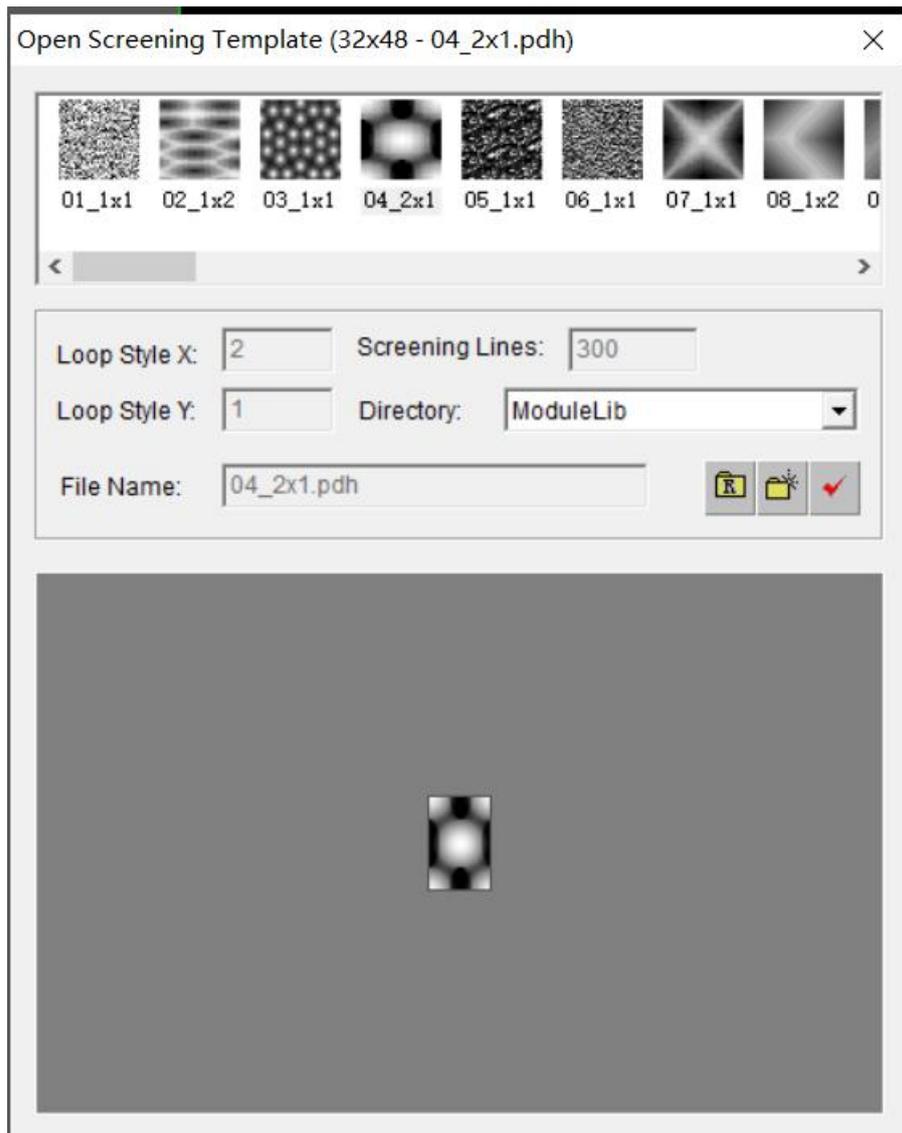
Figure 8-39 Open Custom Template dialog box

(3) Regular Template Screening　⊙ Regular Template:

① The parameters of the) Regular Template are: (Figure 8-34)

A. Screening template: point screening template, grayscale

screening template (except double grid screening).

B. Screening Color: Select the color displayed in the divided colors

for the screening operation.

C. Input precision: If the image has precision, use the image

precision, otherwise the precision read into the system is used as

the input precision.

D. Output Precision: Set the image output precision. E. Screen angle:

Set the screen angle (0~360 degrees).

F. Number of horizontal lines: The number of lines screened in the

horizontal direction (<2000).

g. Number of vertical lines: The number of lines screened in the

vertical direction (<2000).

H. Preview (original image): Toggle display of color screen image

and color separation image. i. Rule templates: round, oval, chain,

line, mud point, round 2, square,

Chain Type 2 Eight rule templates (Figure 8-34). J. Screening method:

single grid, double grid, hyper grid (small), hyper grid (medium),

hyper grid (large)

② The operation steps of the rule template:

K. Set all parameters according to the desired effect.

L. Click the Apply button to preview the screen effect.

③ Several screen shapes.

Figure 8-40a Round Figure 8-40b Chain Figure 8-40c With round

Figure 8-40d Square

④ The size of the screen type is determined.

length = output precision / number of horizontal lines

width = output resolution / vertical lines

(4) User Defined Template Screening

⊙ User Defined:

① Select the User Defined template file, click the button to pop up

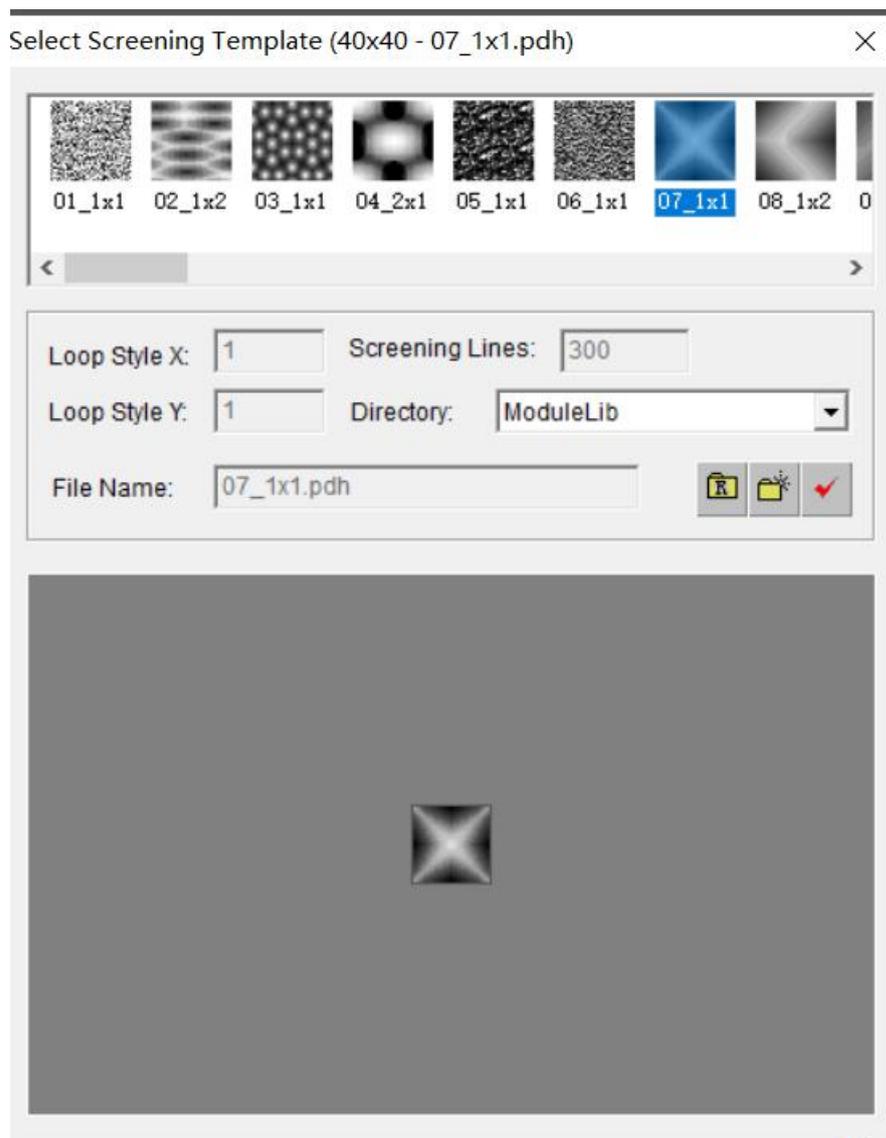the Select Screening Template dialog box (Figure 8-41)

Figure 8-41   Select Screening Template dialog box

A. The function of the button of the Select Screening Template

dialog box is the same as the button of the Save User-Defined

Template dialog box.

function the same.

　　b. To use the template for screening, click the button to

complete the template selection.

　　② Set the template X scale and Y scale (both are 1 by default).

　　③ Click the Apply button to complete the custom template

screening.

Figure 8-42 Comparison of image effects with different screen lines

※Note:

1. When a screening operation is applied, a screening progress

dialog box appears.

2. If a screening operation is currently in progress, no other

operations will be available.

§8-4 Undo and redo operation in Printing Dichroic'

Undo the action.

(1) Types of undo operations:

A. Open file images or import images.

b. Screening operation for Dichroic colors.

c. Add color, delete color, modify color, show/hide color for

special color Dichroic.

D. Auto color Dichroic operation for special color Dichroic.

(2) When the undo operation is to open the file image or import the

image, the three states of RGB channel color Dichroic, CMYK

channel color Dichroic and special color Dichroic are canceled at the

same time.

2. Redo the operation.

(1) Type of redo operation (same as undo operation).

(2) When the redo operation is to open the file image or import

the image, the three states of RGB channel Dichroic, CMYK channel

Dichroic and special color Dichroic are redone at the same time.

3. If several operations are undone, and an undoable operation is

redone, all subsequent states are eliminated, but redo can be used

to revert the last change.

4. There is no limit to the number of undo-redos for Printing

Dichroic.

§8-5 Shortcut keys .

A. F5 : Run the splicing operation or loop back operation.

B. + : magnifies the display magnification of the image.

C. - : Reduce the image display magnification.

D. M : Switch the hand movement state.

E. G : Toggle grid state.

F. A : Operation redo.

G. Z : The operation is undone.

H. S : Open the image file.

I. O : Save the image file.

J. F2: special colorDichroic   ---auto color Dichroic operation.