

Cotton Sock Designer Manual V2.0

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1 Introduction

Thank you for choosing our production. Before you install and use this software, ensure you have read this manual carefully, the manual will help you to master how to install and use the cotton sock designer software.

The cotton sock designer software is developed and tested by software team of Zhejiang Mind Robotization & Equipment Co., Ltd. This software is developed for assisting Sock Knitting Machine Control System, which has the function of automatic programming. It can generate a file with controlling data for sock knitting machine control system. The functions of sock designer software contains pattern design, chain edit, machine parameters setting, data transmission and so on.

2 Hardware requirement

OS: Windows XP/Vista/Win7 English system

Clock Speed: Intel Pentium 2G Hz or AMD Anthon 2G Hz above.

Memory: Above 1GB(2GB is recommended).

Disk: Above 256MB.

Display: 17 inches(resolution by 1280*800 is recommended).

Other: Has USB interface in PC.

3 Interface style

This software designed in Microsoft OS, so the windows, dialogs and other visible components in the software are similar with what we use in Microsoft OS. Pull-down menu, pop-up menu, toolbar menu, main workspace and prompt dialog make the operation convenient and easy. See figure 3.1.

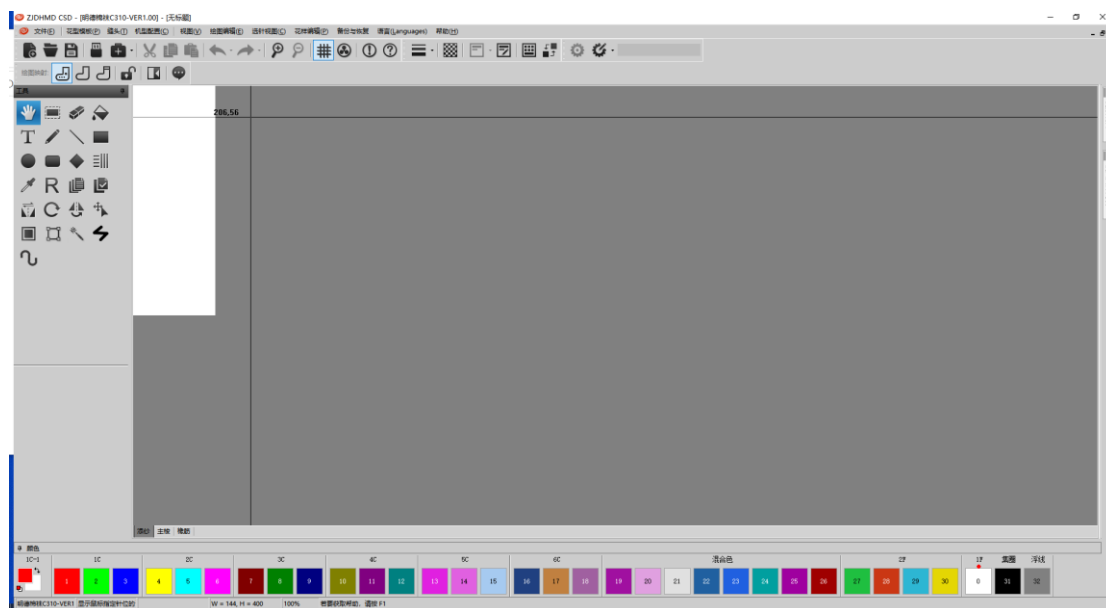


Figure 3.1 Main interface

4 Main function modules

4.1 Installation steps

When your PC is connecting with internet, input the website of “<http://www.hzmind.com>” in your browser, then you can download the software in the web. After download the RAR file, you can extract it to some folder in your PC, see figure 4.1.

Click the file “MindCottonSocks.exe” to run the software.

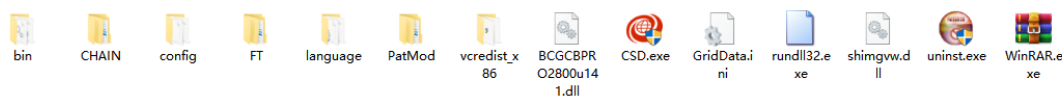


Figure 4.1 The software folder after extract the RAR file

4.2 Summary of painting designing

Click the pull-down menu and its submenu, icons of toolbar, this operation is good for pattern design. There are some units we need in painting the pattern: point, line, rectangle, oval, diamond and polygon. The software’s functions are like below: fill color, text input, color picker, rubber, repeated copy, selection copy, frame, cutout, magic wand and so on. The functions make the operations like select copy, color fill, rotate, insert or delete line/row, swap color, delete, cut, paste much more convenient.

5 Toolbar



Figure 5.1 Toobar icons

Toolbar is in the left of software, it provides the basic and common tools use in painting, which contains move, select, eraser, fill, text, pencil and so on. Following contents will show you how to use them.

5.1 Move



Not selected



Selected

Choose: Click the icon of “Move” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

5.2 Select



Not selected



Selected

Choose: Click the icon of “Select” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Choose an rectangle area in workspace, you can drag the area you selected, also you can copy it for pasting next time, see figure 5.1.

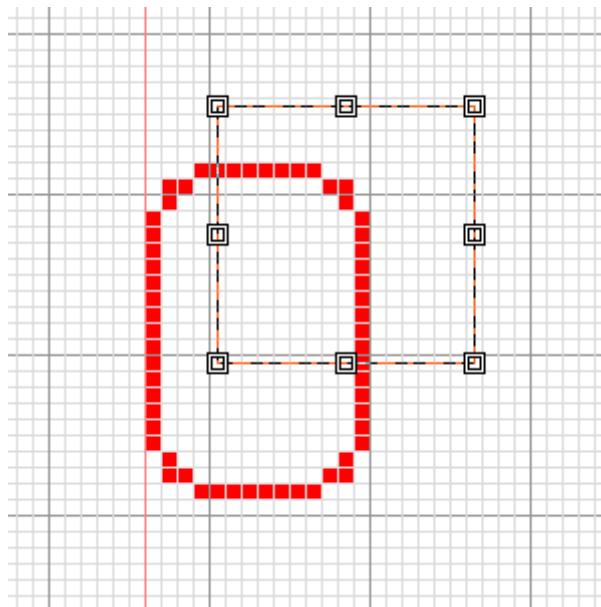


Figure 5.1 Operation of select

5.3 Eraser



Not selected



Selected

Choose: Click the icon of “Eraser” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then the area’s pattern will be erased.

Setting: You can set the size of eraser. Click the icon for setting line widths, then select an item in pull-down menu, see figure 5.2.

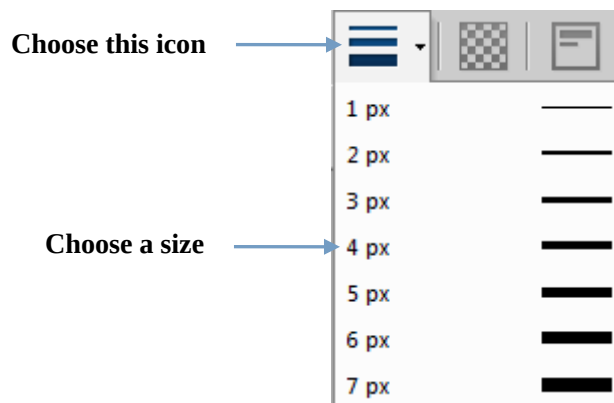


Figure 5.2 Setting of eraser size

5.4 Fill



Not selected



Selected



Three modes of fill: normal fill, clipboard contents fill and shape fill.

Choose: Click the icon of “Fill” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operations

① **Normal fill:** Choose a color in Color Bar, then you select an area in workspace, click the mouse, the area will be filled with the color you selected, see figure 5.3. If you don't select any area, the color will fill the whole area except some closed areas.

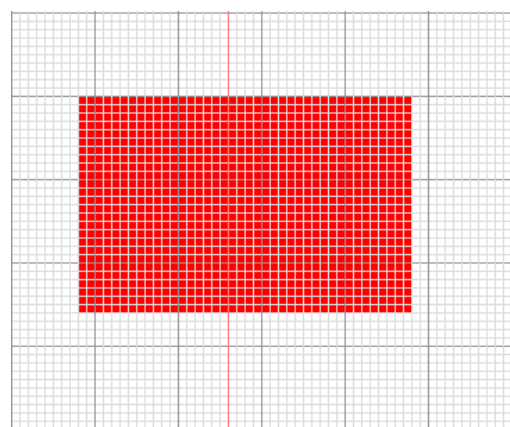
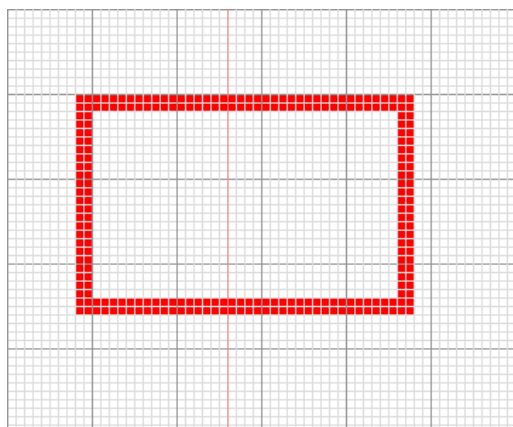


Figure 5.3 Normal fill

(Left: A rectangle. Right: The filled rectangle)

② **Clipboard contents fill:** If you have some contents in your clipboard, when you select this mode, the area will be filled with your contents in clipboard, figure 5.4 shows the clipboard's content is an angle of a rectangle. The related operations are same as normal fill's operations.

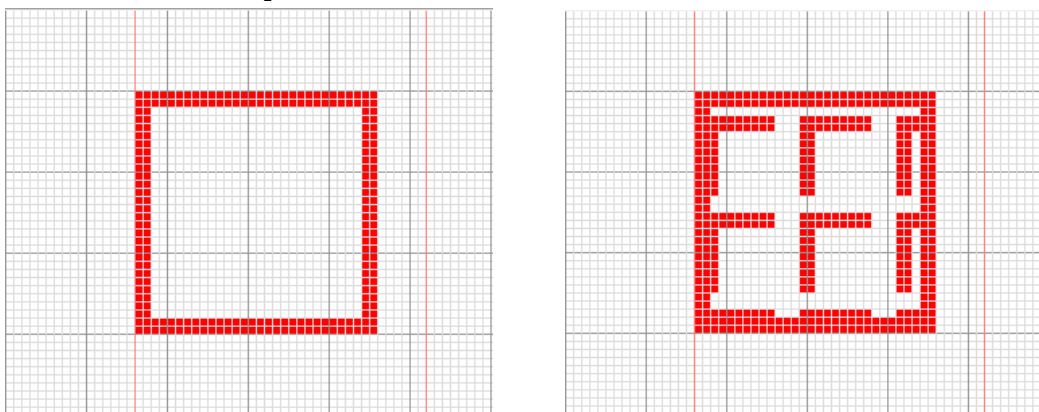


Figure 5.4 Clipboard contents fill

(Left: A rectangle. Right: The rectangle filled with clipboard's contents)

③ **Shape fill:** Choose the icon  in "Draw Settings" toolbar, select a mode, see figure 5.5. If there is no mode, you can see the contents in "6.5 Pattern Edit". In figure 5.6, the area will be filled with the shape in the mode. The related operations are same as normal fill's operations.



Figure 5.5 Choose the mode of shape

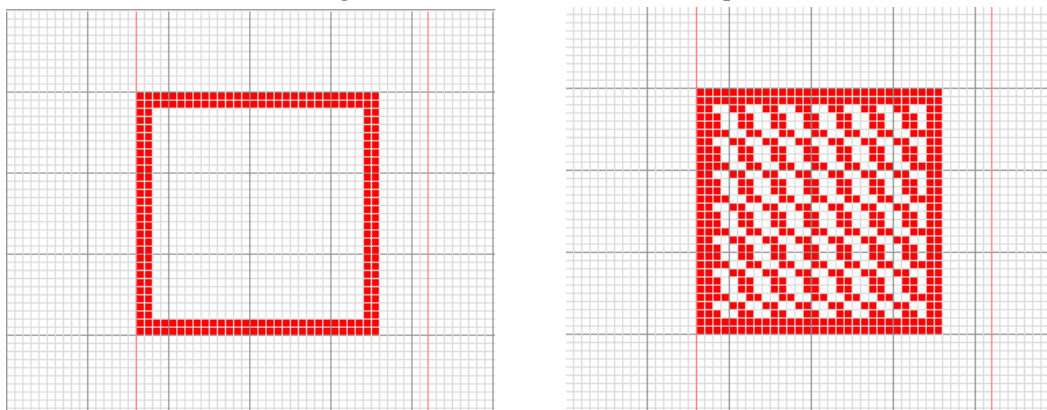


Figure 5.6 Shape fill
(Left: A rectangle. Right: The rectangle is filled with a shape)

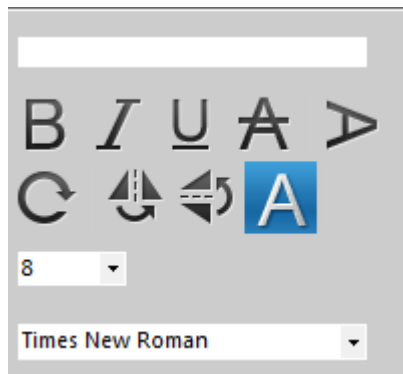
5.5 Text



Not selected



Selected



Options of text

Choose: Click the icon of “Text” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

The options



Click the text field to activate it, this is used to input the text.



Bold. Click this option to select it, again to cancel selection. When selected, the text will be be turn to bold.



Italic. Click this option to select it, again to cancel selection. When selected, the text will be be turn to italic.



Underline. Click this option to select it, again to cancel selection. When selected, there has line under the text.



Strickout. Click this option to select it, again to cancel selection. When selected, there has line through the text.



Vertical. Click this option to select it, again to cancel selection. When selected, the text displays in vertical.



Rotate random. Click this option to select it, again to cancel selection. When selected, you can adjust the text's angle through the cursor.



Flip horizontally. Click this option to select it, if you want to cancel the selection, you should click "Flip vertically" or "No flip". When selected, you can adjust the text to let it flip in a horizontal direction.



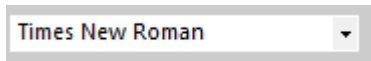
Flip vertically. Click this option to select it, if you want to cancel the selection, you should click "Flip horizontally" or "No flip". When selected, you can adjust the text to let it flip in a vertical direction.



No flip. Click this option to select it, if you want to cancel the selection, you should click "Flip horizontally" or "Flip vertically". When selected, the horizontal flip and vertical flip are all canceled.



Set the size of text. You can choose a number in pull-down menu.



Set the font of text. You can choose a font in pull-down menu.

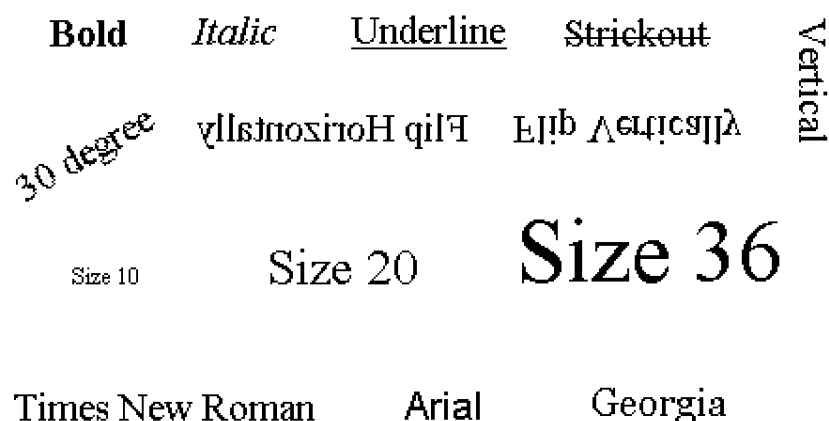


Figure 5.7 The different effects of text

Operation: Input the text in text field, choose some options with the mouse, then move the cursor to workspace, choose a position and click the left mouse button to finish it.

Setting: You can set the color of text through color bar.

5.6 Pencil



Not selected



Selected

Choose: Click the icon of “Pencil” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the pattern with pencil, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon for setting line widths, then select an item in pull-down menu. You can also set the color through color bar.

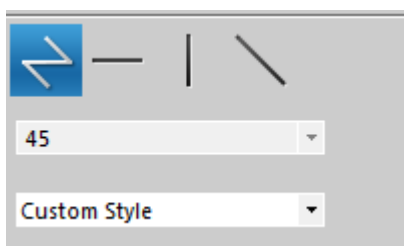
5.7 Line



Not selected



Selected



Options: From left to right in row one, there are Normal Line, Horizontal Line, Vertical Line and Angle Line. Row two is the angles you can set in “Angle Line” mode. Row three is custom style.

Choose: Click the icon of “Line” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the line you want, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon  for setting line widths, then select an item in pull-down menu. You can also set the color through color bar.

5.8 Rectangle



Not selected



Selected

Choose: Click the icon of “Rectangle” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the rectangle you want, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon  for setting line widths, then select an item in pull-down menu. You can also set the color through color bar.

5.9 Oval



Not selected



Selected

Choose: Click the icon of “Oval” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the oval you want, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon  for setting line widths,

then select an item in pull-down menu. You can also set the color through color bar.

5.10 Rounded rectangle



Not selected



Selected

Choose: Click the icon of “Rounded rectangle” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the rounded rectangle you want, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon for setting line widths, then select an item in pull-down menu. You can also set the color through color bar.

5.11 Diamond



Not selected



Selected

Choose: Click the icon of “Diamond” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to the position where you need in workspace, long-press left mouse button and drag it, then you can draw the diamond you want, when you finish it, releases left mouse button.



Setting: You can set the size of pencil. Click the icon for setting line widths, then select an item in pull-down menu. You can also set the color through color bar.

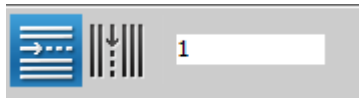
5.12 Insert/Delete



Not selected



Selected



Options: From left to right in row one, there are insert/delete line, insert/delete row, text field

Choose: Click the icon of “Insert/Delete” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation

- ① **Set the number of line or row:** Click the text field, input a number.
- ② **Insert/Delete line:** Click the icon of insert/delete line, then move the cursor to workspace, click left mouse button to insert the line, click right mouse button to delete the line.
- ③ **Insert/Delete row:** Click the icon of insert/delete row, then move the cursor to workspace, click left mouse button to insert the row, click right mouse button to delete the row.

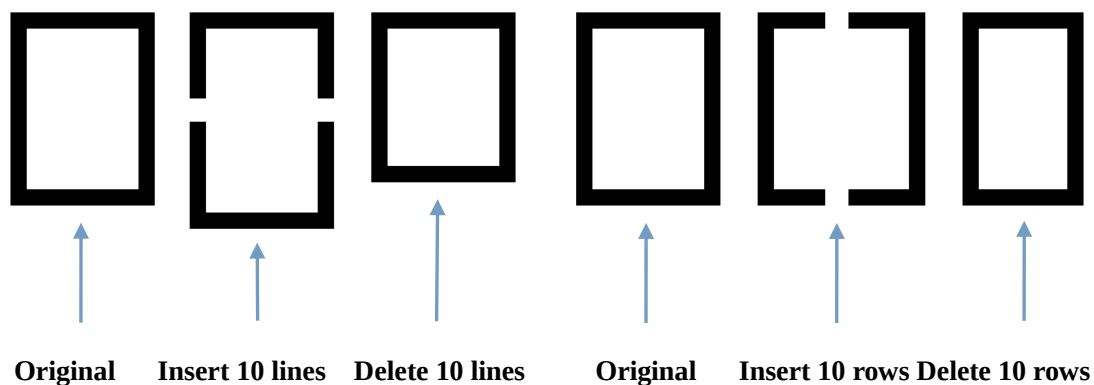


Figure 5.8 Different effects of insert/delete

5.13 Color Picker



Not selected



Selected

Choose: Click the icon of “Color Picker” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to workspace, choose a color you need, move the cursor upon the color area, then click the left mouse button to pick color. Color Picker can use with fill color.

5.14 Rubber



Not selected



Selected



Options: From left to right in row one, there are mesh shape, bars, mosaic and ratio choose.

Choose: Click the icon of “Rubber” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

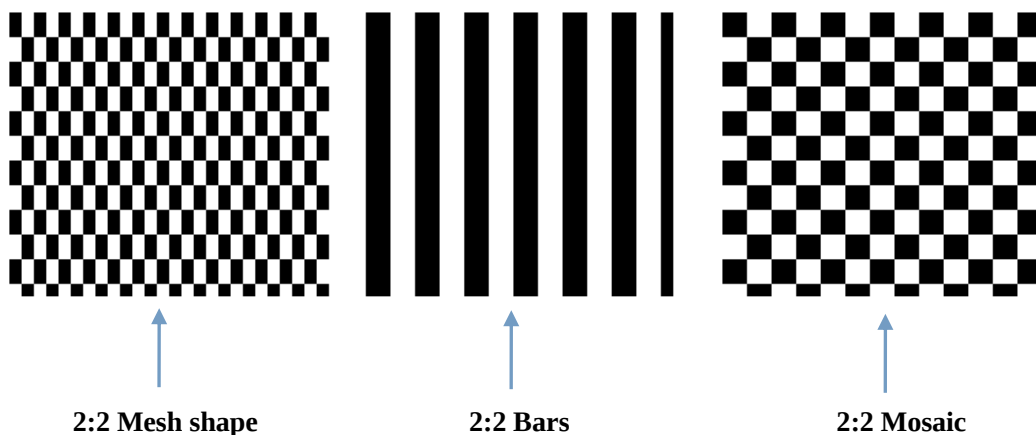


Figure 5.9 Three modes of rubber

Operation

- ① **Choose a ratio:** You can choose a ratio in pull-down menu in right.
- ② **Draw a rubber:** Move the cursor to workspace, press the left mouse button in

long-time and drag it, when you finish it, release the button.

5.15 Repeated Copy



Not selected



Selected

Choose: Click the icon of “Repeated Copy” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to workspace, press the left mouse button in long-time and drag it, when you finish it, release the button. Then the area you copy will move with the cursor, choose the position you need, click the left mouse button again to finish pasting. You can repeat this action many times. Press right mouse button to exit the pasting.

5.16 Selection Copy



Not selected



Selected



Options: Left is Linear Painting. Right is Array Painting.

Choose: Click the icon of “Selection Copy” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to workspace, press the left mouse button in long-time to select the the pattern you need, then choose “Linear Painting” or “Array Painting”. At last, move the cursor to workspace again, press the left mouse button in long-time and drag it to paint the pattern you want. Figure 5.10 shows the different effects of linear painting and array painting.

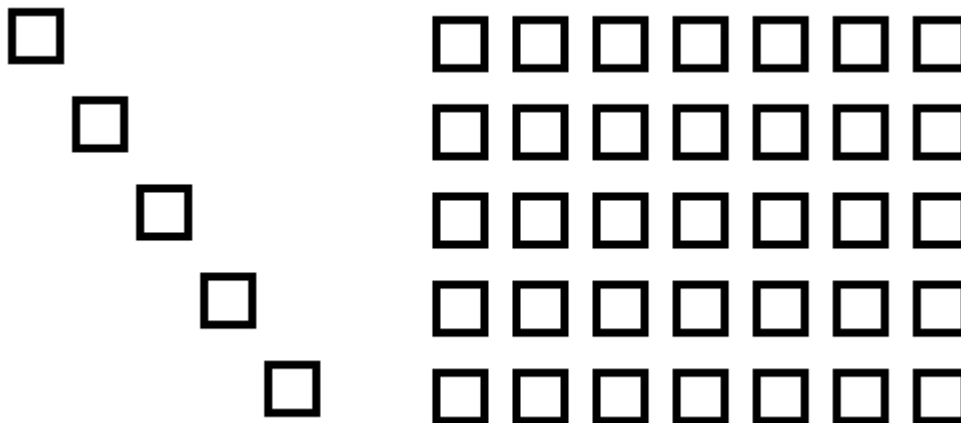


Figure 5.10 Different effects of linear painting and array painting

5.17 Mirror



Not selected



Selected



Options: Left is “L/R Mirror”, right is “Symmetrical Mirror”. In L/R Mirror mode, the left half of workspace’s pattern will be copy to the right half. In Symmetrical Mirror mode, the left half of workspace’s pattern will be flipped in horizontal, then copy to the right half.

Choose: Click the icon of “Mirror” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: When you finish painting, choose one option, the pattern will be turn to the mode you selected. Figure 5.11 shows the difference of these two modes.

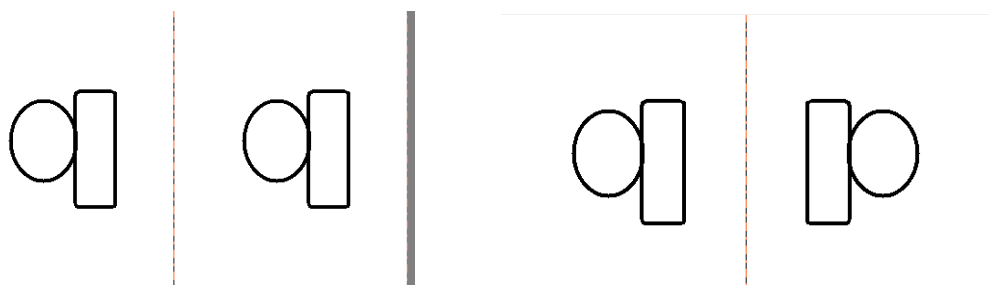


Figure 5.11 L/R Mirror and Symmetrical Mirror

5.18 Rotate



Not selected



Selected



Options: Line one is choose a rotate angle. Line two to line three, from left to right, there are Rotate random, Rotation around the center, Rotation around upper left, Rotation around upper right, Rotation around lower right, Rotation around lower left.

Options explanation

Choose a rotate angle: Choose a angle in pull-down menu.

Rotate random: Rotate the pattern a random angle through the cursor.

Rotation around the center: Rotate the pattern around the pattern's center.

Rotation around upper left: Rotate the pattern around the pattern's upper left.

Rotation around upper right: Rotate the pattern around the pattern's upper right.

Rotation around lower right: Rotate the pattern around the pattern's lower right.

Rotation around lower left: Rotate the pattern around the pattern's lower left.

Choose: Click the icon of “Rotate” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation

① Rotate in fixed angle



Click icon  in options, then the icon will turn to gray(not selected) . Choose one rotate mode, then move the cursor to workspace, select an area you need. At last, choose an fixed angle in pull-down menu to finish the rotating.

② Rotate manually



Click icon  in options, then then icon will turn to mazarine(selected) . Choose one rotate mode, then move the cursor to workspace, select an area you need. Release the left mouse button, move the cursor, the area will rotate with the cursor, click the left mouse button in the angle you want.

5.19 Flip



Not selected



Selected



Options: From left to right, there are Horizontal Flip, Vertical Flip and No Flip.

Options explanation

Horizontal Flip: Flip the pattern you select in horizontal direction.

Vertical Flip: Flip the pattern you select in vertical direction.

No Flip: Not flip the pattern you select.

Choose: Click the icon of “Flip” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Choose one flip mode you need, then move the cursor to workspace, press the left mouse button in long-time to select an area you want. After selection, release the left mouse button, the area will flip as you wish, press “Enter” to finish the operation while “Esc” to cancel it. Figure 5.12 shows the different effects of horizontal flip and vertical flip.

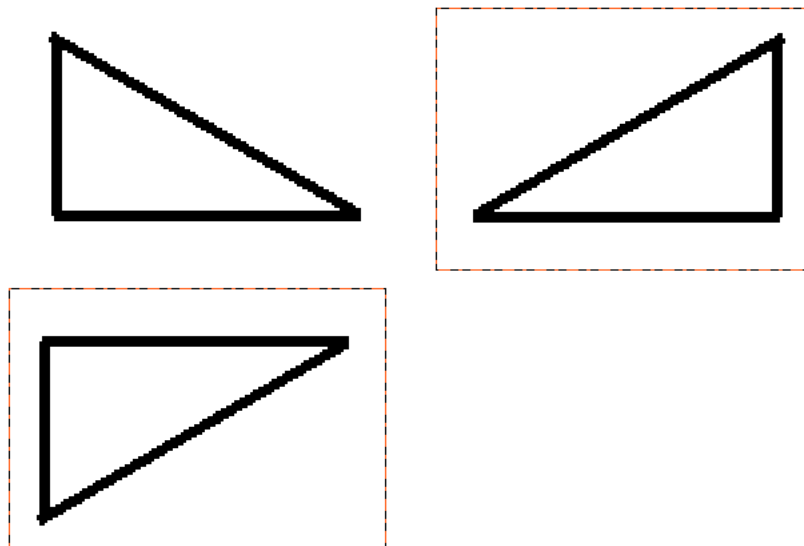


Figure 5.12 Flip effects

5.20 Roll



Not selected



Selected



Options: From left to right, there are L/R Roll, Up/Down Roll and Random Roll.

Options explanation

L/R Roll: Roll the pattern in horizontal direction.

Up/Down Roll: Roll the pattern in vertical direction.

Random Roll: Roll the pattern in random direction.

Choose: Click the icon of “Roll” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Choose one option, then move the cursor to workspace, press the left mouse button in long-time to select an area you need. Release the left mouse button, the area you selected has a frame. Move the cursor to the area, click the left mouse button again in long-time to drag it. At last, release the left mouse button at the position you want.

5.21 Frame



Not selected



Selected



Options: From left to right, there are full border, top border, bottom border, left border and right border.

Options explanation

Full Border: Draw a region’s border.

Top Border: Draw a region’s top border.

Bottom Border: Draw a region's bottom border.

Left Border: Draw a region's left border.

Right Border: Draw a region's right border.

Operation: Choose one option and choose a color in color bar, then move the cursor to workspace, click the left mouse button in a region, the operation is finished.

5.22 Cutout



Not selected



Selected

Choose: Click the icon of “Cutout” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to workspace, press the left mouse button in long-time to start cutout. The cutout need a closed area, if you don't cut a closed area, the system will close the area automatically. After cutout, drag the area you cut, move it to the position you need, double-click the left mouse button to finish it.

5.23 Magic Wand



Not selected



Selected

Choose: Click the icon of “Magic Wand” in toolbar with left mouse button, the icon vides supra. When the icon is selected, the background color will turn to mazarine.

Operation: Move the cursor to workspace, click the left mouse button in somewhere you need, then the magic wand will search the same color as you just clicked, and close the area automatically. After that, drag the closed area, move it to the position you need, double-click the left mouse button to finish it.

6 Menu Bar

The Menu Bar has a clear and hierarchical structure, it provides the user different common operations and parameter settings.

6.1 File

The shortcut key for choosing menu “File” is “Alt” + “F”. There are 14 items under menu “File”, see figure 6.1. These items are all relate to the file operations.

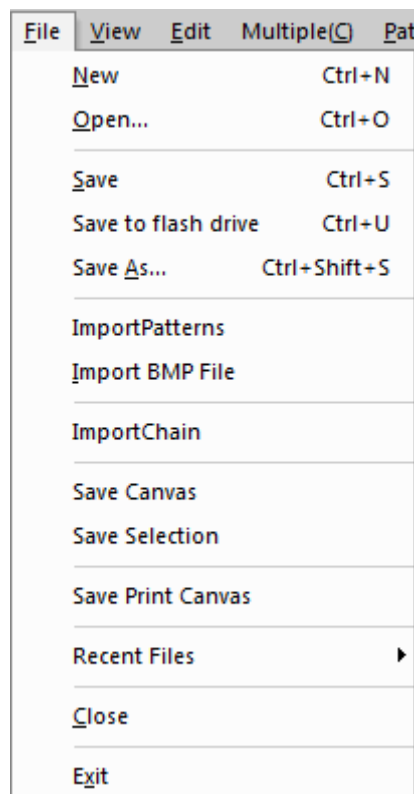


Figure 6.1 The file menu

Create a new file

When you choose “New” in menu “File”, you can create a new file, shortcut key is “Ctrl” + “N”. After you choosing it, there will be a dialog to set width and height for the new file, see figure 6.2. Default value is 144 by 400. The width range is 30 to 512, while the height range is 1 to 65535, see figure 2.2 and figure 2.3.

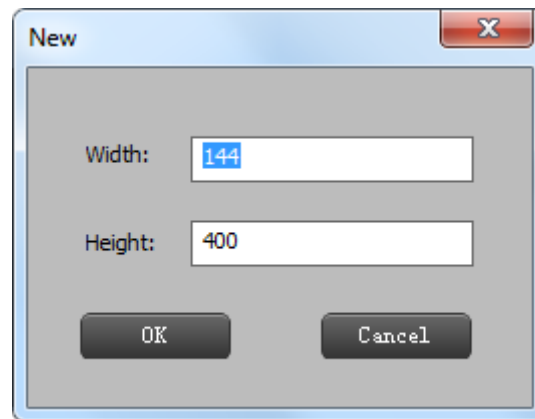


Figure 6.2 Set width and height for file

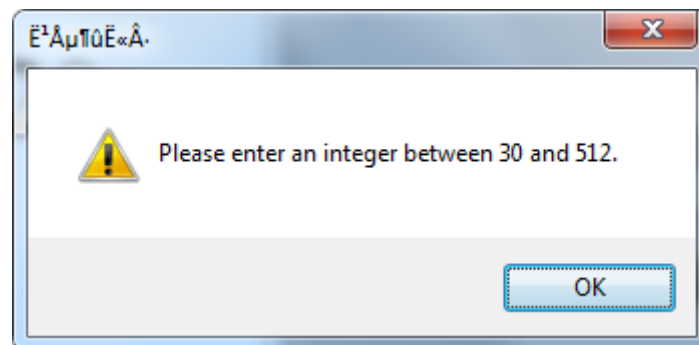


Figure 6.3 The range of width

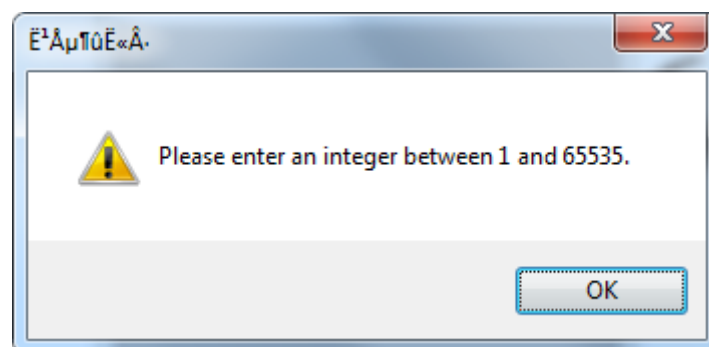


Figure 6.4 The range of height

Open a file

When you choose “Open” in menu “File”, you can open a file in your disks, shortcut key is “Ctrl” + “O”. After you choosing it, there will be a dialog to open a file, see figure 6.5.

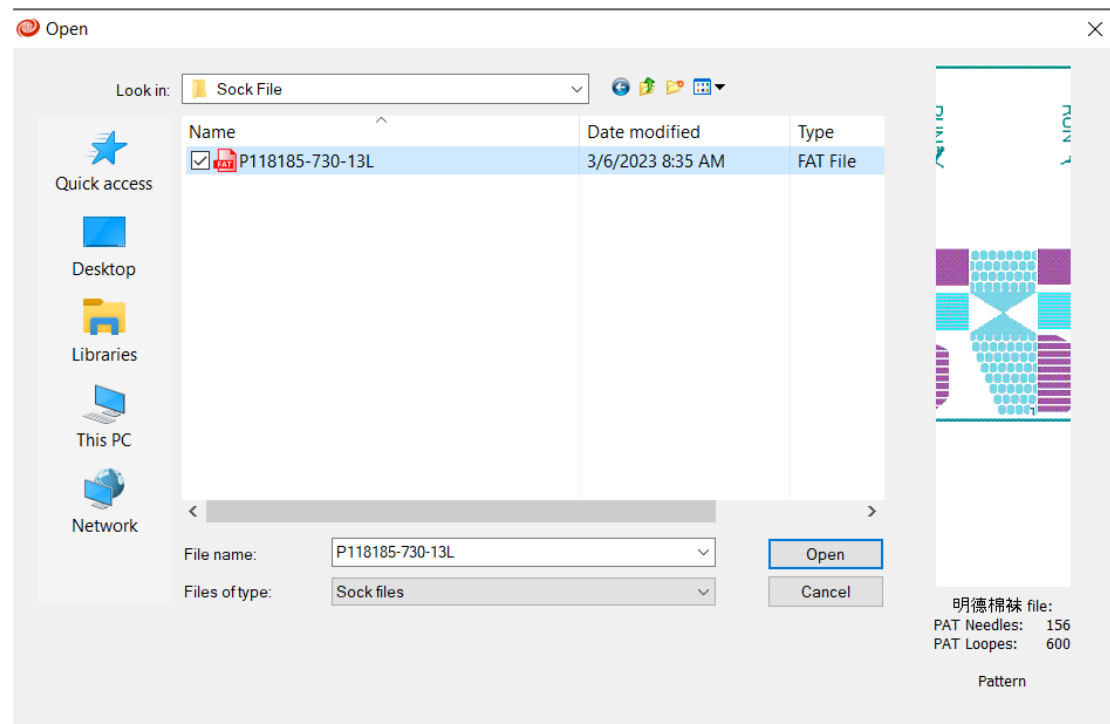


Figure 6.5 The dialog for opening a file

Save the file

When you choose “Save” in menu “File”, you can save the file after you editing the pattern file, shortcut key is “Ctrl” + “S”. After you choosing it, there will be a dialog to choose a position for saving, you can name it and choose a saving position, see figure 6.6.

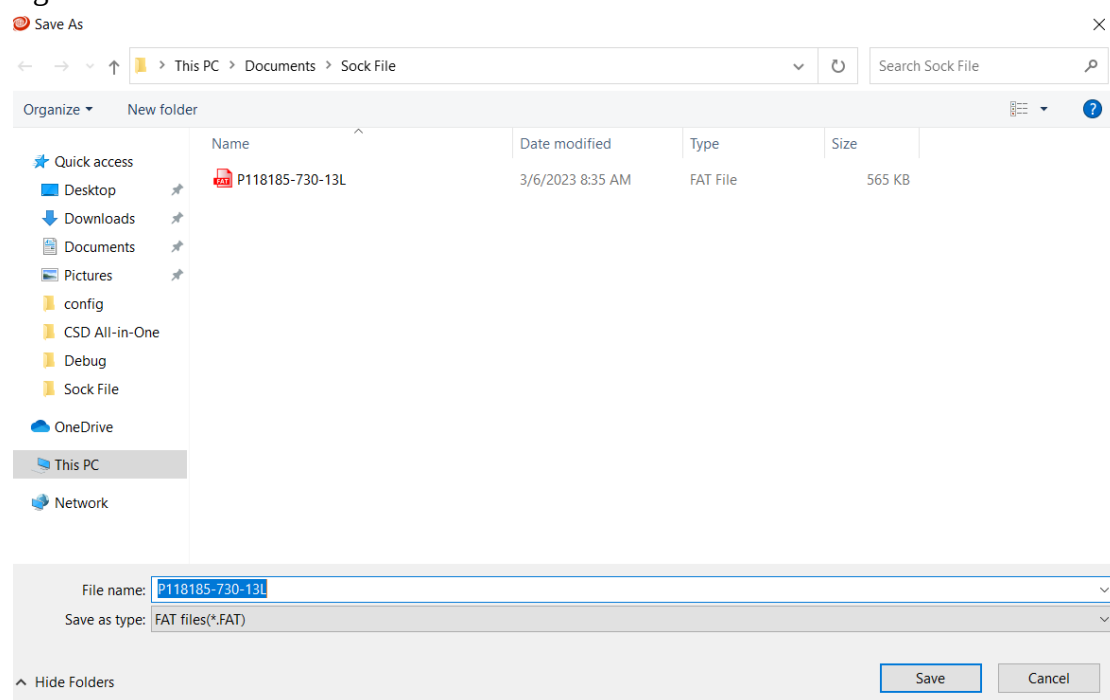


Figure 6.6 Save the file

Save file to flash drive

When you choose “Save to flash drive” in menu “File”, you can save the file to flash drive after you editing the pattern file, shortcut key is “Ctrl” + “U”. After you choosing it, the file will save to your flash drive automatically, see figure 6.7. When you are not connecting your flash drive to PC, the system will give you a warning.



Figure 6.7 Save the file to flash drive

Save file as other format

When you choose “Save as” in menu “File”, you can save the file as other format to your disk, shortcut key is “Ctrl” + “Shift” + “S”. After you choosing it, there will be a dialog to save the file. You can name the file, choose a format to save and select a position in your disk, see figure 6.8.

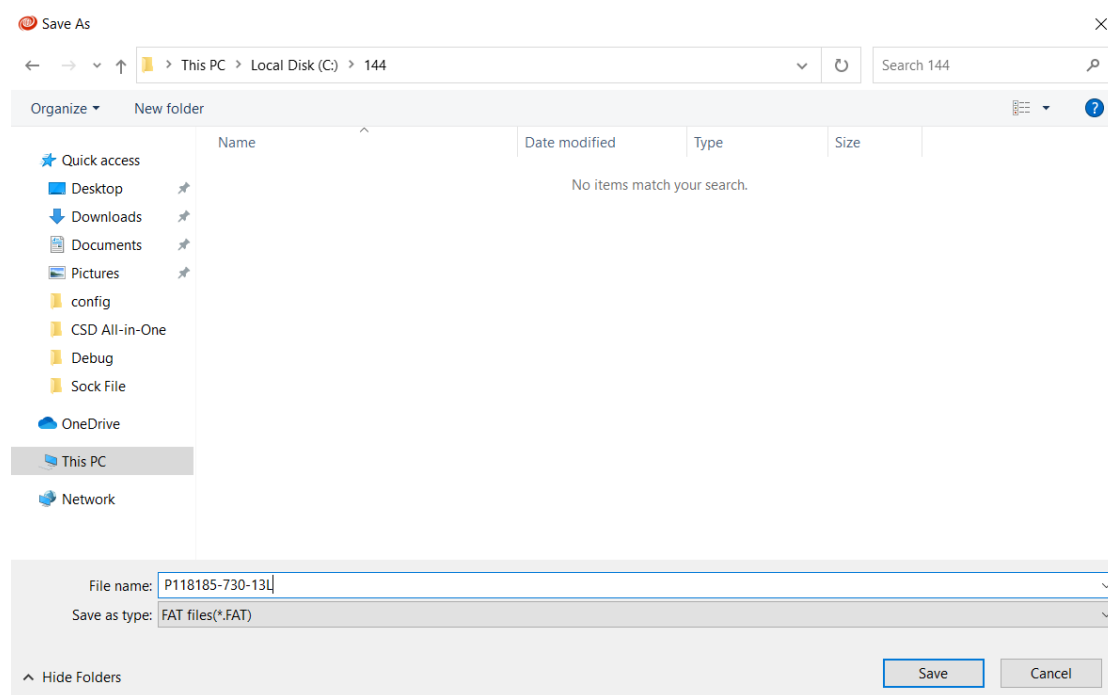


Figure 6.8 Save file as other format dialog

Import patterns

When you choose “Import patterns” in menu “File”, you can import a pattern to your file. After you choosing it, there will be a dialog to select patterns, see figure 6.9. The patterns format include “.daq” and “.dap”.

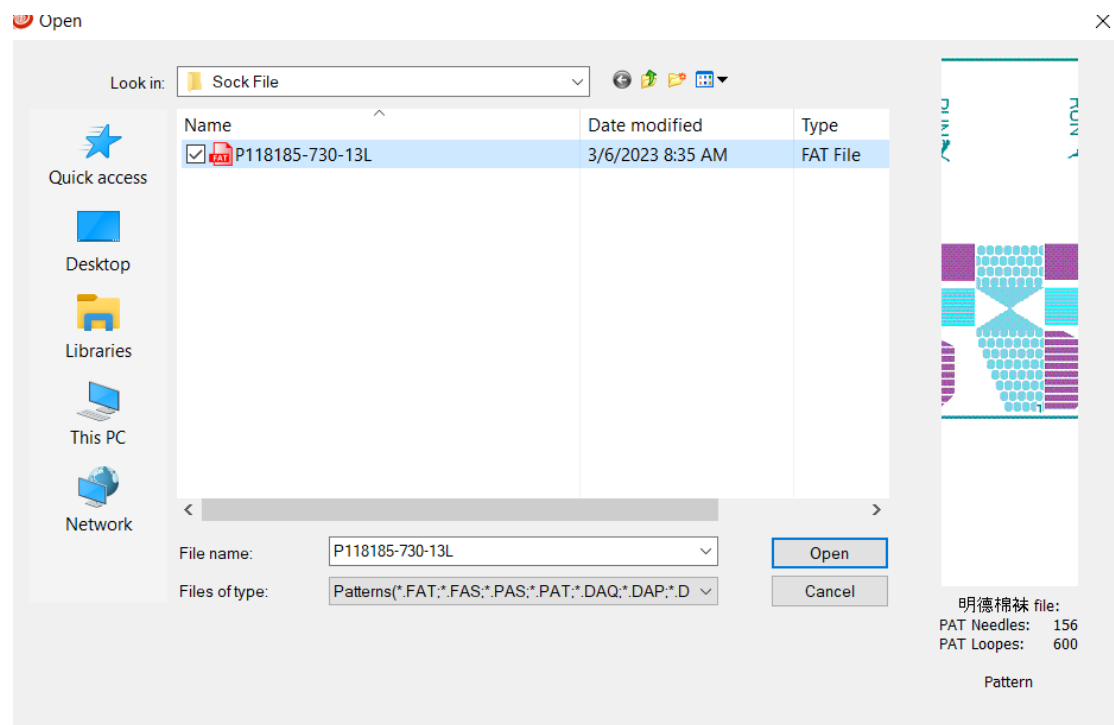


Figure 6.9 Import patterns

Import BMP file

When you choose “Import BMP File” in menu “File”, you can import a picture to your file. After you choosing it, there will be a dialog to select the picture. The pictures format include “.bmp”, “.jpg”, “.tif”, “.png”, “.gif” and so on.

The dialog for selecting picture is shown in figure 6.10, you can also set picture’ s height and width in this dialog.

After you choosing the picture, there will be a dialog to transform color, see figure 6.11. You can choose a color in the options under “Substitute”.

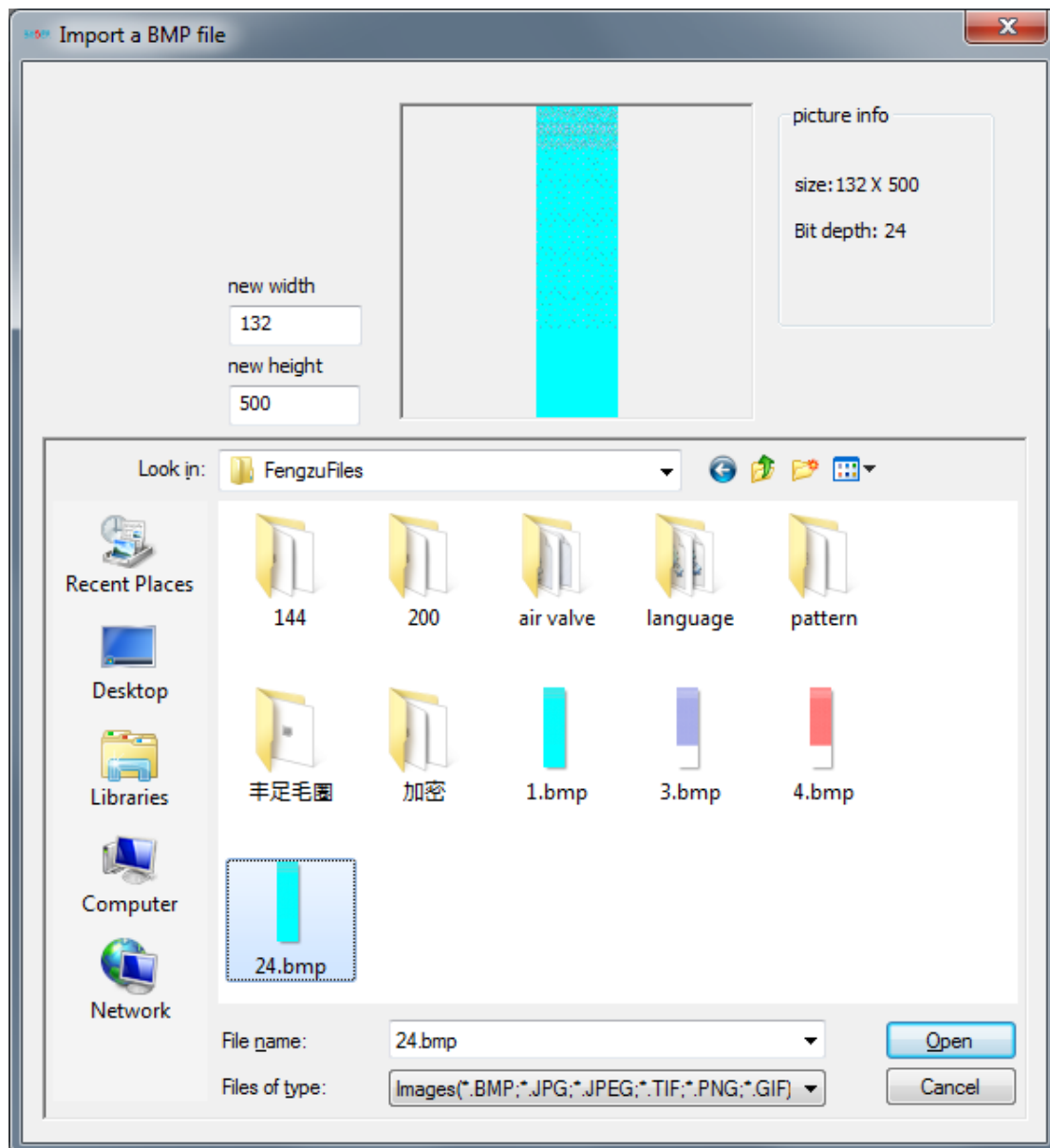


Figure 6.10 Import the picture

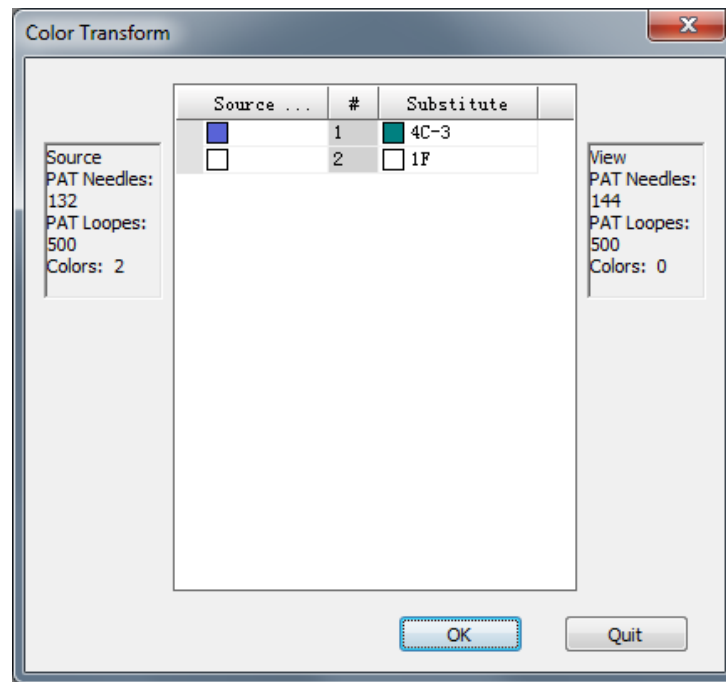


Figure 6.11 Color transform

Save Canvas

When you choose “Save Canvas” in menu “File”, you can export your file editing as a BMP file. After you choosing it, there will be a dialog to select the position, see figure 6.13.

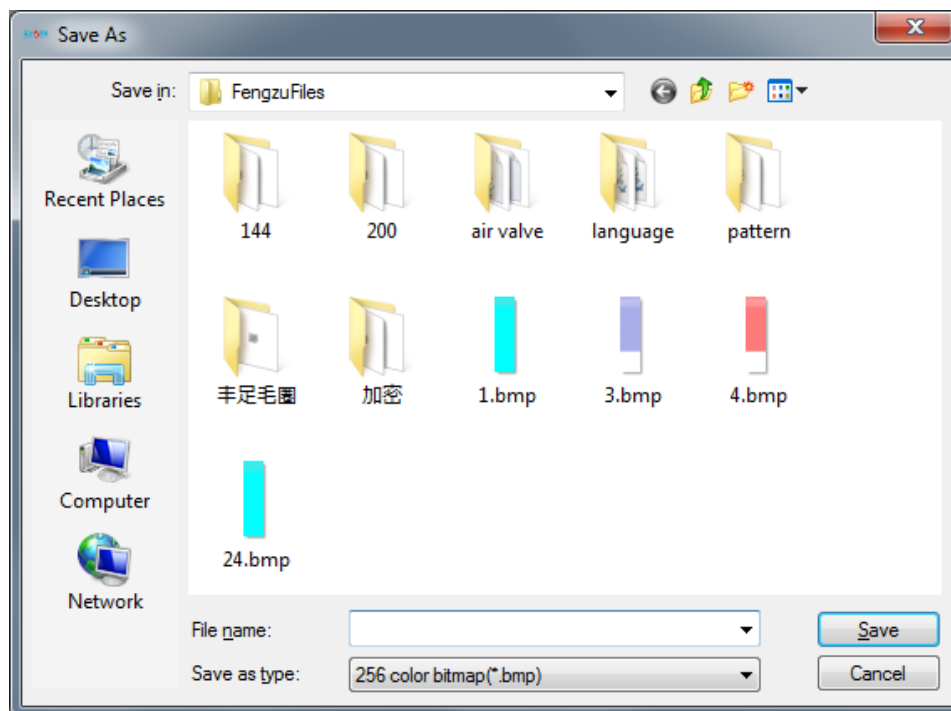


Figure 6.13 Save canvas

Save selection

When you choose “Save Selection” in menu “File”, you can save the area you selected as a BMP file. After you choosing it, there will be a dialog to select the position, see figure 6.14.

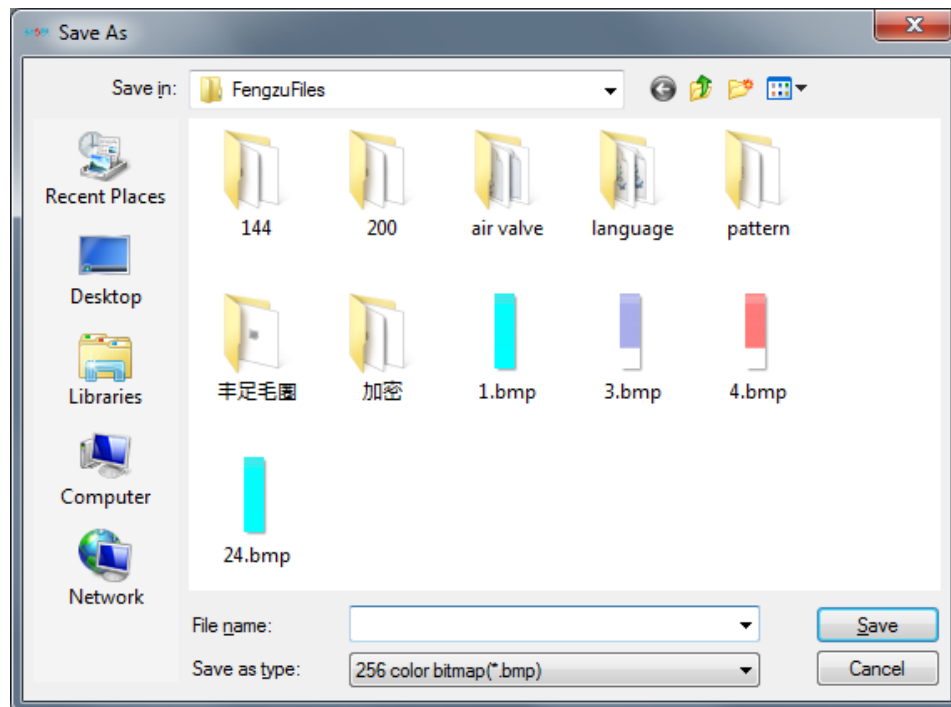


Figure 6.14 Save selection

Save Print Canvas

When you choose “Save Print Canvas” in menu “File”, you can save a canvas in you computer for printing, see figure 6.15.

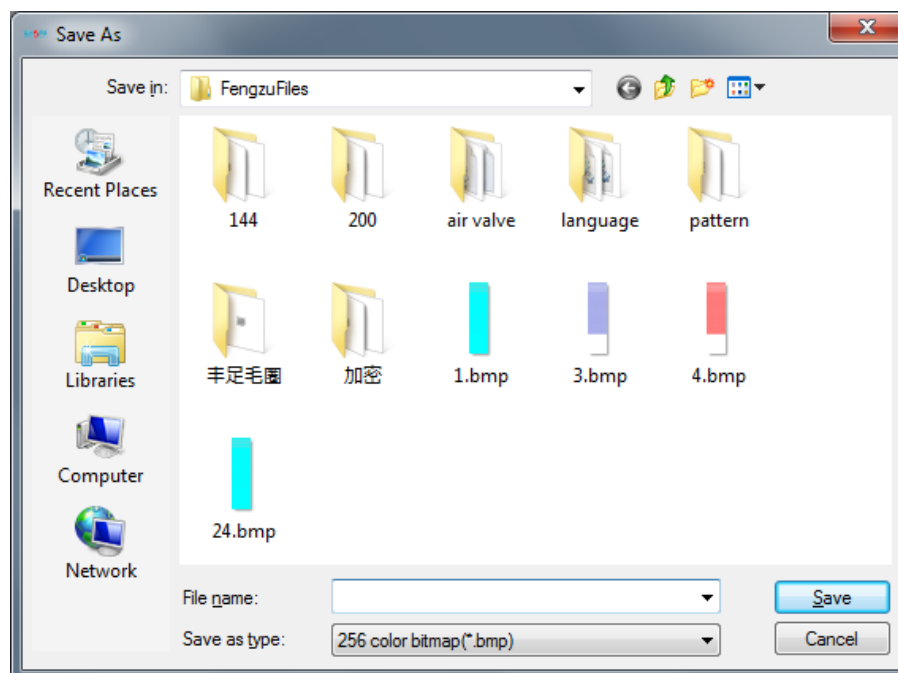


Figure 6.15 Save print canvas

Recent Files

There is a list of in “Recent Files” in “File” menu, this list is the recently opened files

list, which you recently edit. You can click to open it directly.

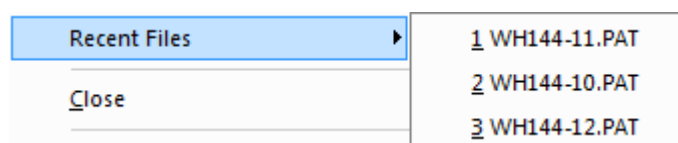


Figure 6.16 Recent files list

Close

When you choose “Close” in menu “File”, you can close the pattern you are editing, then the window will turn to gray.

Exit

When you choose “Exit” in menu “File”, the whole software will be closed.

6.2 View

The shortcut key for choosing menu “View” is “Alt” + “V”. “View” menu contains the common icons used in drawing patterns. Same kind of icons will form a tool bar. You can choose the tool bar if you want it display in the main interface. When there is a “√” in front of the words, that means the tool bar you selected will be displayed in the main interface, see figure 6.17.

Toolbar

The submenu of “Toolbar” in menu “View” is formed with three parts, which are common toolbars, detail informations and customize. You can select the items except customise item. When the items are selected, there will be a “√” in front of the items. Select again, the “√” will disappear, the items will disappear in the main interface too.

① Common toolbars

This part are formed with “Common toolbar”, “Draw Settings”, “CAT toolbar” and “Map Views”. See figure 6.17, they are the ones marked with “√” in submenu “Toolbar”. Their usages are described in section “7 Toolbar under menu”

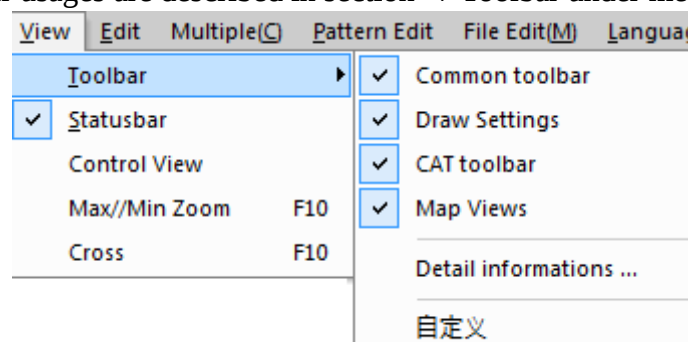


Figure 6.17 Structure of “Toolbar”

② Detail informations

When you choose “detail informations” in submenu “Toolbar”, there will be a dialog showing in the workspace, it contains the information about location, pattern, main shuttle, rubber and so on. See figure 6.18.

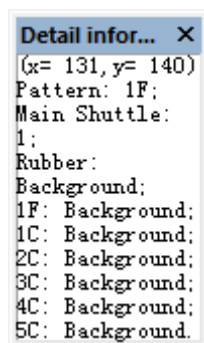


Figure 6.18 Detail informations

③ Customize

The last part in “Toolbar” is customize. The dialog is showing in figure 6.19.

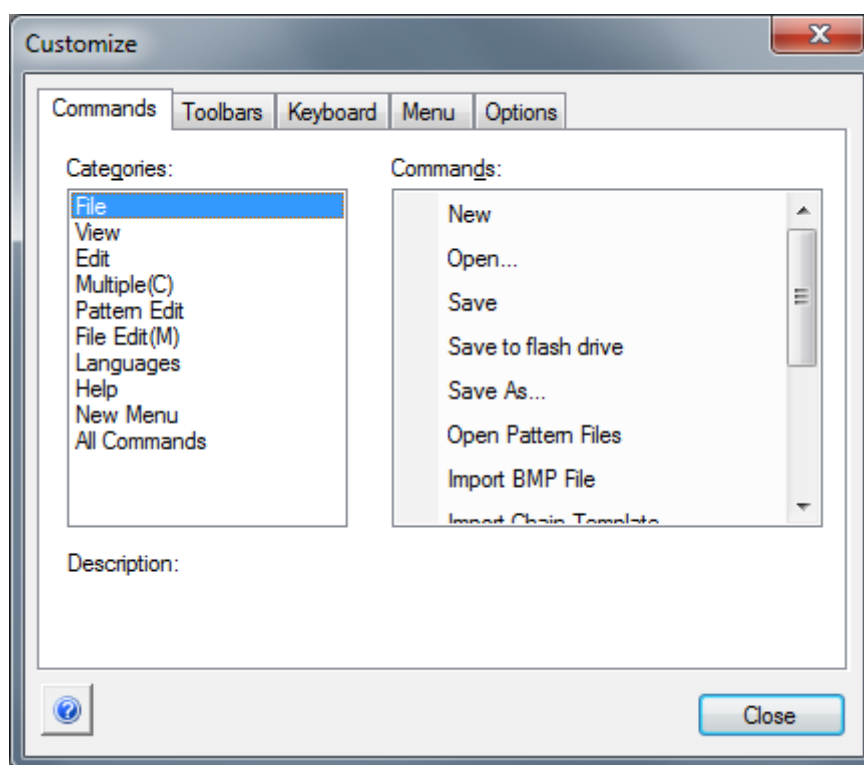


Figure 6.19 The dialog of customize

In this dialog, you can define menu bar, tool bar, shortcut key, style of menu and item setting.

Statusbar

Statusbar is the second item in menu “View”. It locates in bottom of the software, which shows the basic information about the pattern file, see figure 6.20. When you choose it, you can see a “√” in front of the word, statusbar will display in the

software.



Figure 6.20 Statusbar

Control View

Control View is the third item in menu “View”. When you choose it, you can see a “√” in front of the words, there will be a scrollbar in right side of the software. When you pull the scrollbar, it will help you see different part of the pattern file. If you don’t choose “Control View”, there is not a scrollbar in right side of the software.

Max/Min Zoom

Max/Min Zoom is the fourth item in menu “View”. When you click it, the workspace will change between maximum and minimum. You can also operate it with button “F10”.

Cross

Cross is the last item in menu “View”. When you choose it, you can see a “√” in front of the word. At that time, there are two cross lines around the cursor. If you don’t choose it, there will be no cross lines. See figure 6.21, left part show the cross lines while the other part has no cross lines.

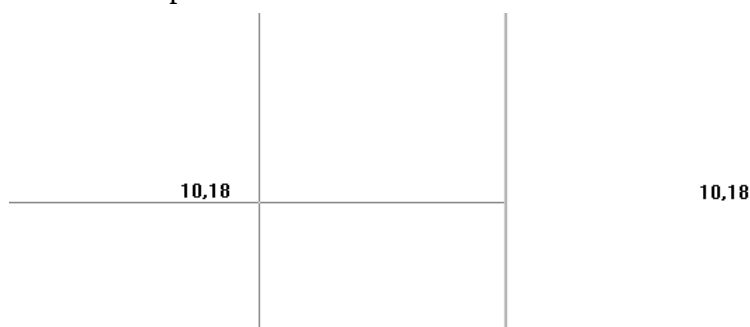


Figure 6.21 Cross lines and no cross lines

6.3 Edit

The shortcut key for choosing menu “Edit” is “Alt” + “E”. This menu provides you seven kinds of common operation about editing file, see figure 6.22.

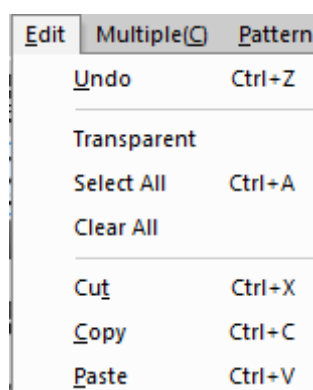


Figure 6.22 The menu of “Edit”

Table 6.1 describes functions of the items in menu “Edit”.

Table 6.1 Functions of items in menu “Edit”

No.	Submenu	Shortcut key	Functions	Remarks
1	Undo	Ctrl + Z	Cancel the current operation, return to previous operation	
2	Transparent	-	Set background picture transparent	
3	Select all	Ctrl + A	Select all parts of the pattern file be editing	
4	Clear all	-	Clear all the content of pattern file be editing	
5	Cut	Ctrl + X	Cut the content has been selected	
6	Copy	Ctrl + C	Copy the content has been selected	
7	Paste	Ctrl + V	Paste the content has been copied or cut	

6.4 Multiple

Multiple view contains a couple of common views, see figure 6.23. When you choose it, the item will display in bottom of the painting area. Choose the item to turn to this view. The items in this menu are same as “Map View” toolbar.

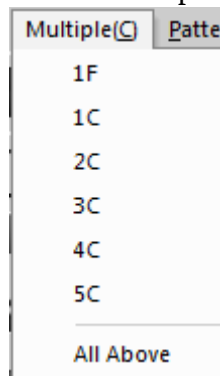


Figure 6.23 The menu of “Multiple”

Table 6.2 describes functions of the items in menu “Multiple” .

Table 6.2 Functions of items in menu “Multiple”

No.	Submenu	Shortcut key	Functions	Remarks
1	1F	-	Add 1F view to bottom of the software	
2	1C	-	Add 1C view to bottom of the software	
3	2C	-	Add 2C view to bottom of the software	

4	3C	-	Add 3C view to bottom of the software	
5	4C	-	Add 4C view to bottom of the software	
6	5C	-	Add 5C view to bottom of the software	
7	All visible	-	Add all views to bottom of the software	

6.5 Pattern Edit

The shortcut key for choosing menu “Pattern Edit” is “Alt” + “E”, you can set and edit some attributes of pattern files, and also you can set the parameters related to the attributes, see figure6.24

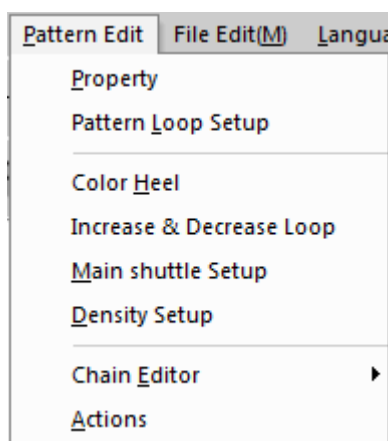


Figure 6.24 The menu of “Pattern Edit”

Property

The function of “Property” in menu “Pattern Edit” is resizing the pattern file, you can see a dialog through “Pattern Edit” – “Property”, see figure 6.25.

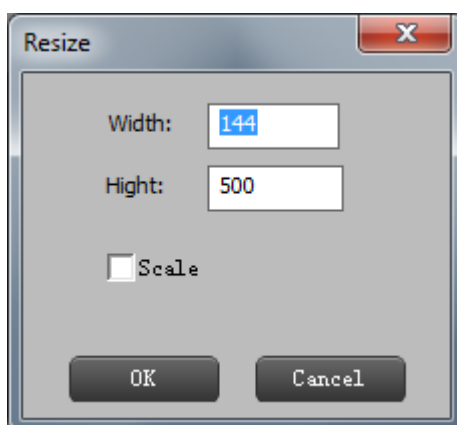


Figure 6.25 Resizing the pattern file

You can input height and width of the pattern file in this dialog. The range of height is 1 to 65535, and width is 30 to 512. You can also choose “Scale” when you adjust

size.

Pattern Loop Setup

Pattern loop setup is used to set loop's start, end and circle's value. You can see the setup dialog through "Pattern Edit" – "Pattern Loop Setup", see figure 6.26.

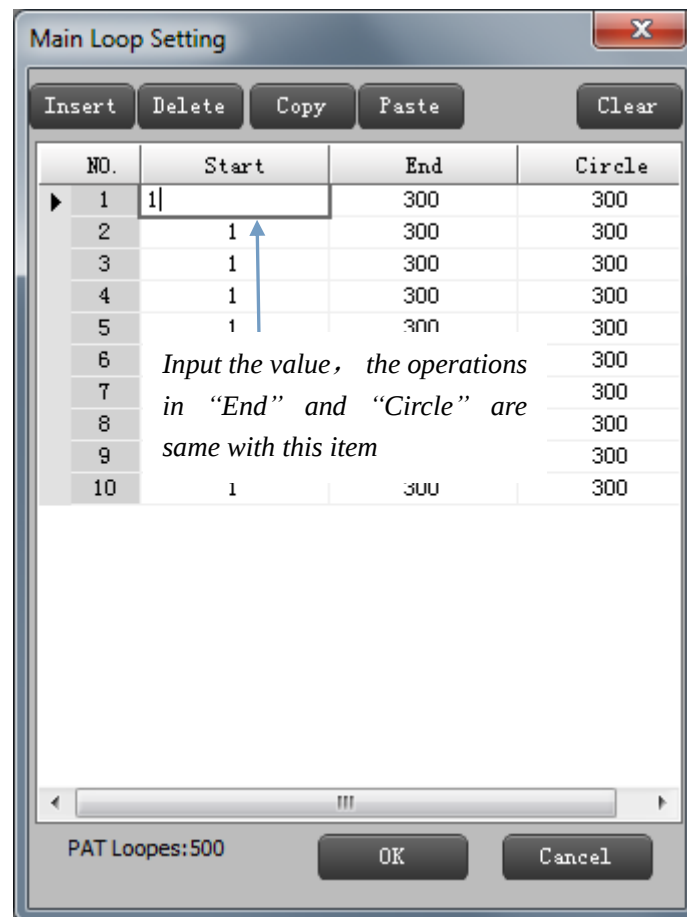


Figure 6.26 Pattern loop setup

The functions of the buttons in this dialog will be described in following content.

Insert: Insert a line of null.

Delete: Delete current line.

Copy: Copy current line's data.

Paste: Paste the data has been copied to current line.

Clear: Clear all the data in loop.

Ok: Save the data.

Cancel: Cancel the operation.

Color Heel

Color heel is used to set main-yard, in, out and rows' value. It also set the start value for each plan. You can see the setup dialog through "Pattern Edit" – "Color Heel", see figure 6.27.

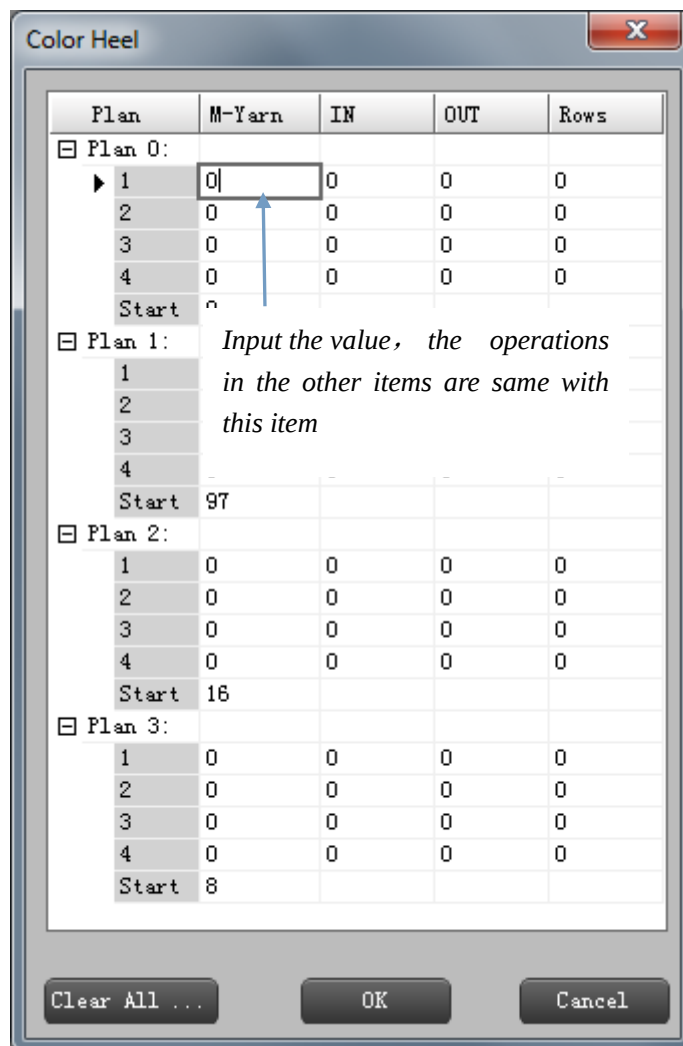


Figure 6.27 Color heel setup

Choose editable item in the dialog, input the value and click “OK” to save the result. “Clear All” is used to clear the data you set. If you want to cancel the operation, choose “Cancel”.

Increase & Decrease Loop

Increasing and decreasing loop is used to set the value of increasing and decreasing in both left and right way. You can see the setup dialog through “Pattern Edit” – “Increasing & Decreasing Loop”, see figure 6.28.

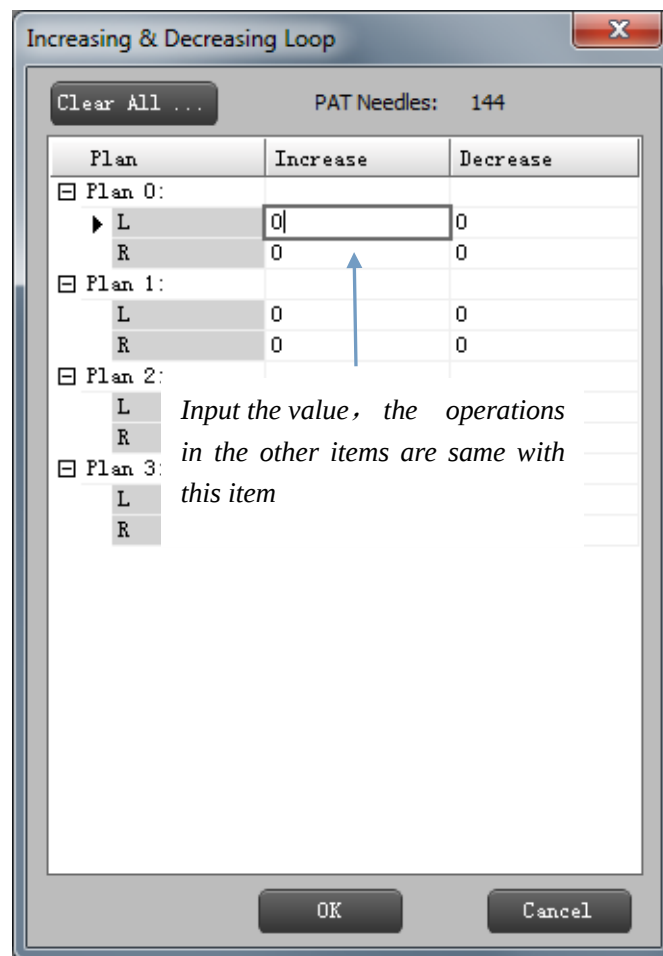


Figure 6.28 Increase & decrease loop setup

Choose editable item in the dialog, input the value and click “OK” to save the result. “Clear All” is used to clear the data you set. If you want to cancel the operation, choose “Cancel”.

Main Shuttle Setup

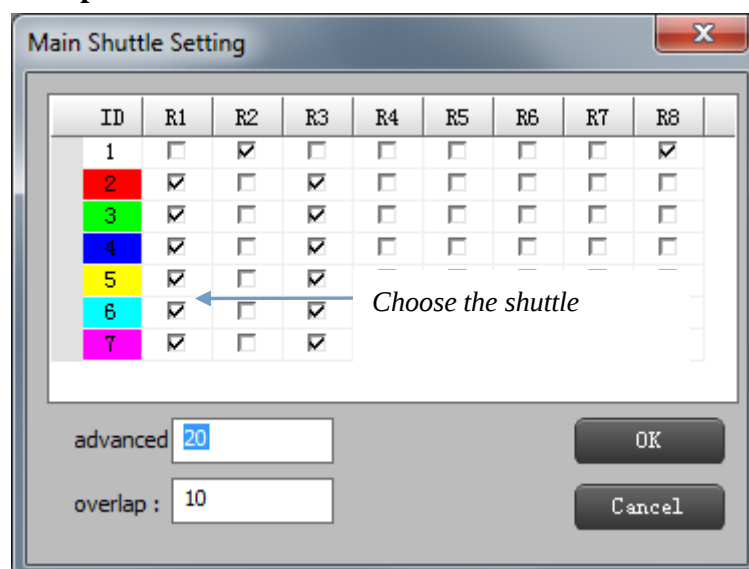


Figure 6.29 Main shuttle setup

Main shuttle setup is used to choose different shuttles with different id, set the values of “advanced” and “overlap”. You can see the setup dialog through “Pattern Edit” – “Main Shuttle Setup”, see figure 6.29.

Choose main shuttles of every line in the dialog, and set the values of “advanced” and “overlap”. Click “OK” to save the result, click “Cancel” to cancel the operation.

Density Setup

Density setup is used to set the value of parameters in CYL density and raising CAM density. You can see the setup dialog through “Pattern” – “Density Setup”, see figure 6.30.

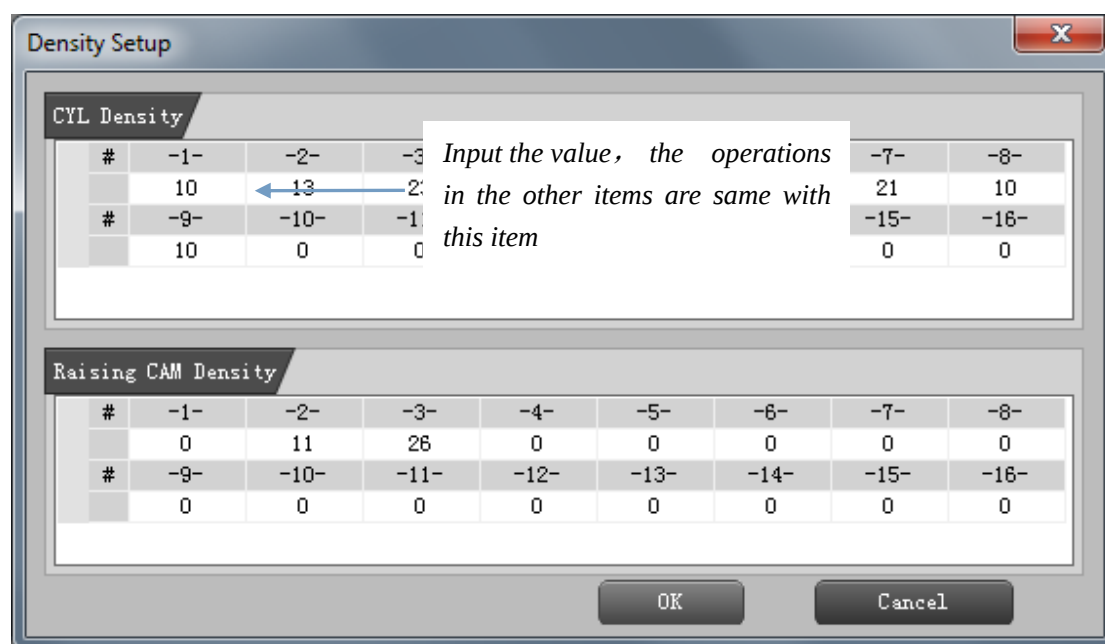


Figure 6.30 Density setup

Choose editable item in the dialog, input the value and click “OK” to save the result. If you want to cancel the operation, choose “Cancel”.

Chain Editor

Chain edit contains “Basic Edit” and “Advanced Edit”. You can see the submenu through “Pattern Edit” - “Chain Editor”, see figure 6.31.

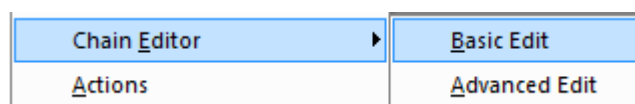


Figure 6.31 Chain Editor

① Basic Edit

The dialog for basic edit is shown in figure 6.32. If you want to set up the parameters in this dialog, you need to click button “Advanced” in the bottom of the dialog and input authorization password, see figure 6.33.

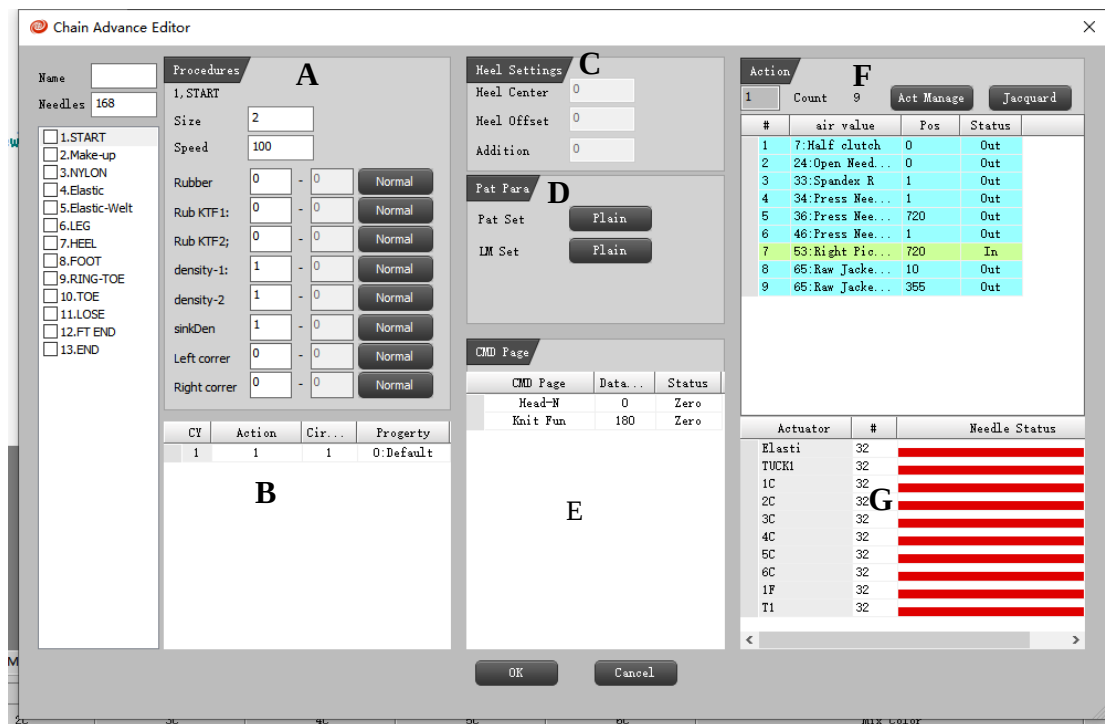


Figure 6.32 The dialog for basic edit

Action Edit

Buttons'function

OK: Save the result.

Cancel: Cancel the operations.

Edit the parameters

Step Settings: The parameters in area “A” see figure 6.32.

CY: Edit the parameters in area “B”, see figure 6.32.

Heel Settings: The parameters in area “C” see figure 6.32.

Pattern Parameters: The parameters in area “D” see figure 6.32

CMD Settings: The parameters in area “E” see figure 6.32.

Action Settings: The parameters in area “F” see figure 6.32. (In section ”Action”)

Jacquard Settings: The parameters in area “G” see figure 6.32. (In section “Action”)

Actions

Action manager dialog is used to manage actions and edit jacquards. Choose “Actions” in menu “Pattern Edit”, click button “Act manager”, see figure 6.37..

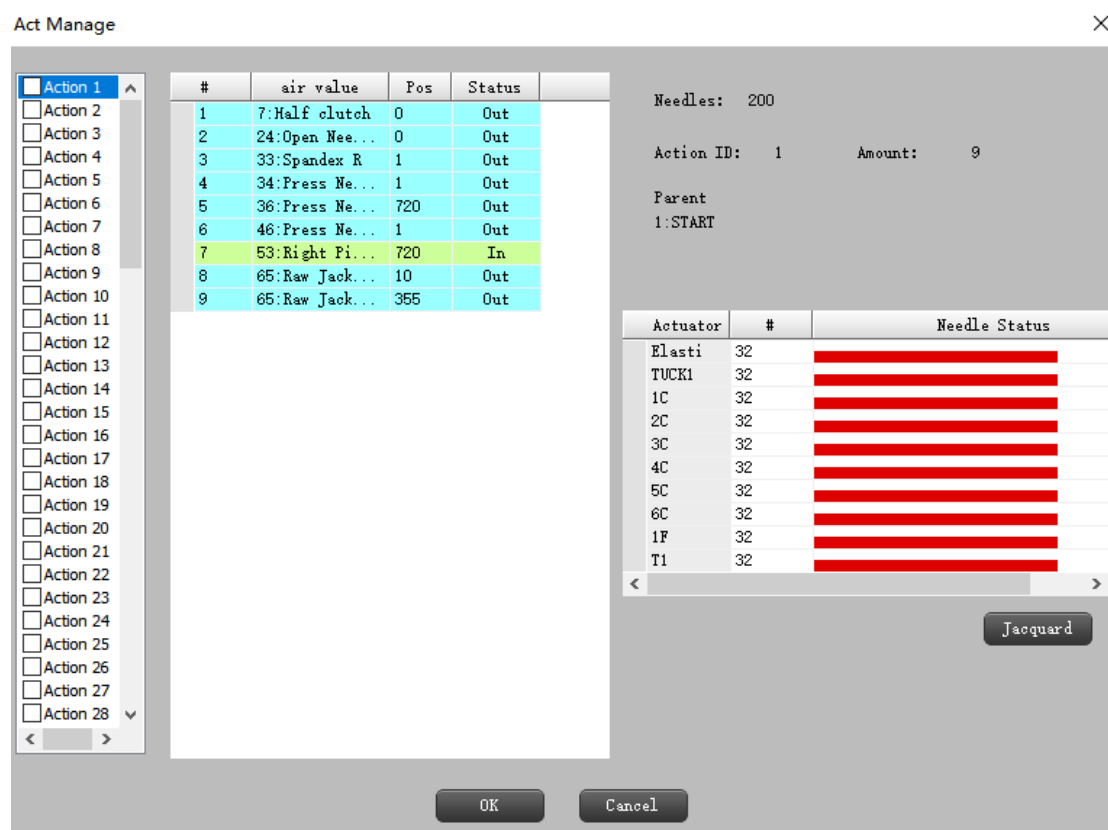


Figure 6.37 The dialog of action manager

Choose an action in the list of left side in figure 6.37, click the right mouse button, the menu likes figure 6.38.

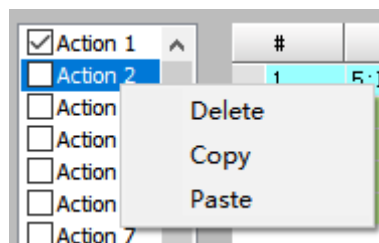


Figure 6.38 Edit of actions

The edit of actions contains following parts.

Delete: Delete the action's data you select.

Copy: Copy the action's data you select.

Paste: Paste data you copy to the action you select(This option will not appear until the data has been copied).

Click the right mouse button in the blank area of the interface, then there will be a menu, see figure 6.39. Because there is no line in the region, so only "Insert" in menu.

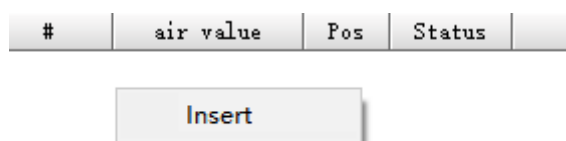


Figure 6.39 Edit the field

In figure 6.39, choose “Insert”, and then you can insert a new line, see figure 6.40. You can choose an air value, set a value of position (range is 0 to 720) and choose a status with “Out” or “in”.

#	air valve	Pos	Status
▶ 1	0: (Invalid)	0	Out
	1:L-STI CAM		
	2:L_RAISING CAM		
	3:LATCH OPEN		
	4:reserved		
	5:reserved		
	6:PRESS PICKER		
	7:H-RASING CAM		
	8:Needle Opener		
	9:Heel Low CAM		
	10:Latch Open CAM		
	11:NO. 4 HALF		

Figure 6.40 Insert a new line

After you insert a new line, you can select the line and click the right mouse button, then there will be a menu like figure 6.41.

#	air value	Pos	Status
▶ 1	11:Open r...	180	Out

Insert
 Delete
 Copy
 Paste

Figure 6.41 Editing the new line

The functions of the items in this menu will be decried in following section.

Insert: Insert a new line.

Delete: Delete the current line.

Copy: Copy the current line.

Paste: Paste the line you have copied to current line(This option will not appear until the data has been copied).

Click button “Jacquard” in action manage interface to enter needle setup dialog, see figure 6.42.

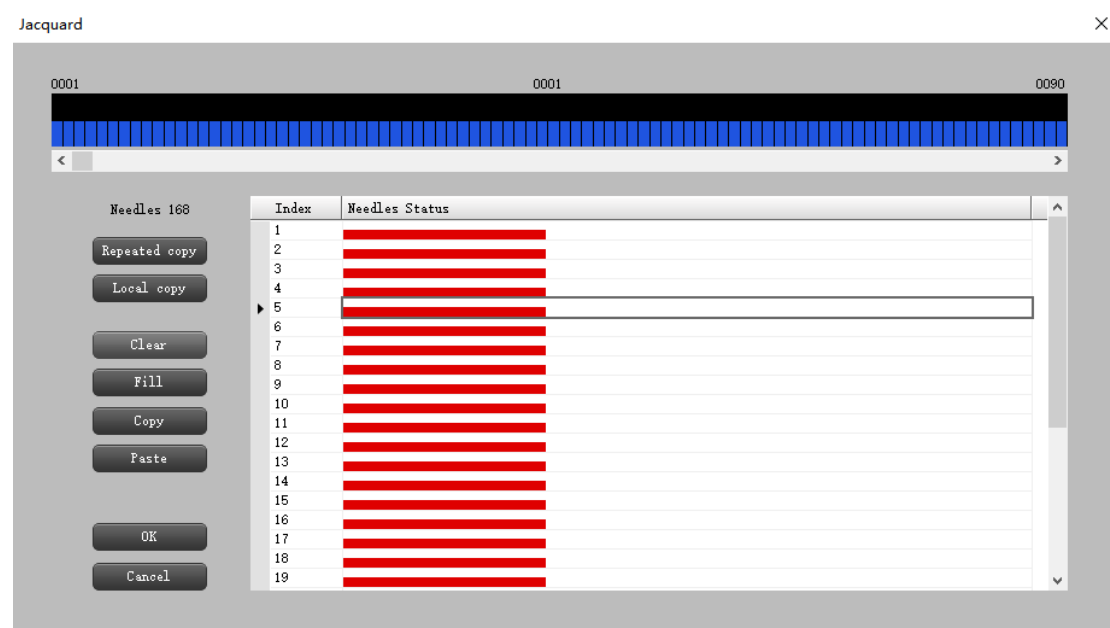


Figure 6.42 Needle setup dialog

There are Thirty-two jacquards in the list. Choose one of them, and blue part in top of dialog is showing the every needle's status. Click one of the needles, the needle's status will change to "out", while the default status is "in". The number top of the needle status is current needle's serial number, see figure 6.43.

The status will change after click it **Current needle's serial number**

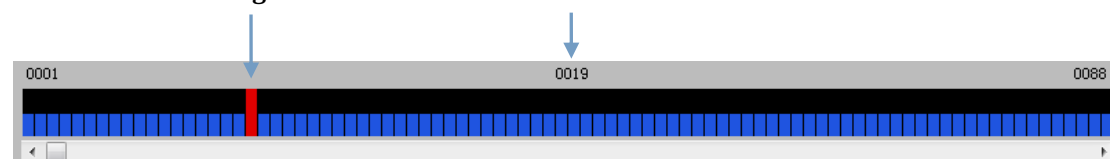


Figure 6.43 Editing the needle's status

There are two groups of buttons in left of the dialog: Modify and Unitary. These two groups of buttons are used to edit the jacquards, there will be the paraphrases for each button in following section.

Buttons in "Modify" contains: Repeated copy and Local copy.

Repeated copy: Copy the status which is between serial number A and B ($A < B$), repeat this part of status after location B until the end of needles.

Figure 6.44 shows the needle's status result through the operation "Repeated copy" in figure 6.43.

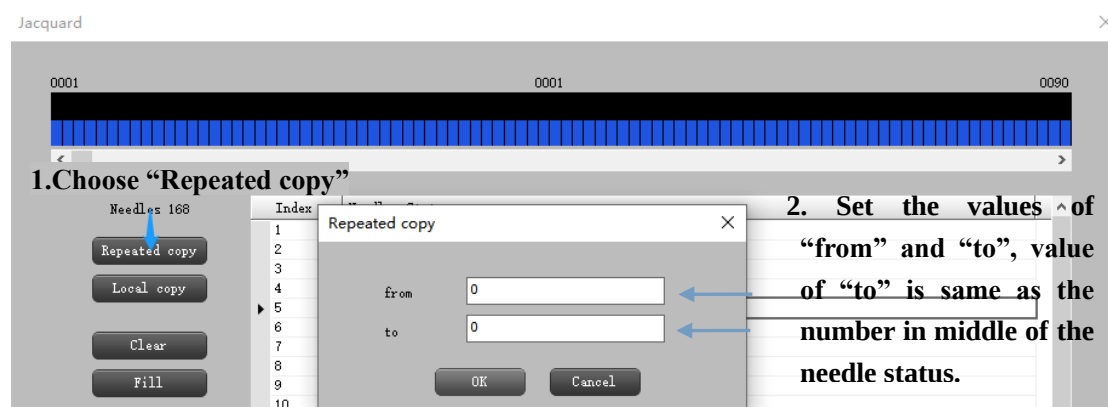


Figure 6.44 Repeated copy

At last, click button "OK" to save the result, see figure 2.44, which shows the status of jacquard.

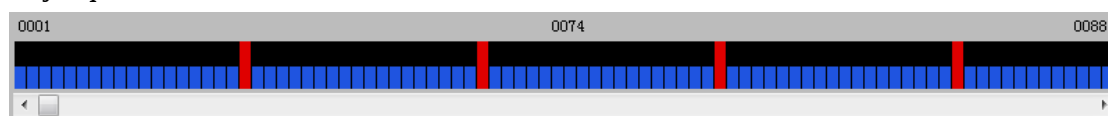


Figure 6.45 The status of jacquard after "Repeated copy"

Local copy: Copy the status which is between serial number A and B ($A < B$), repeat this part of status between C and D ($C < D$) after location B.

Figure 6.46 shows one jacquard's initial status. We will copy the status between needle 1 and needle 5, and then repeat this part's status to needle 11 to needle 15 through button "Local copy". The steps are described in figure 6.47.

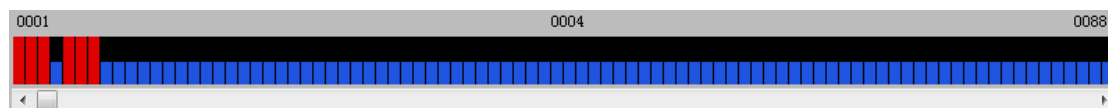


Figure 6.46 Jacquard's initial status

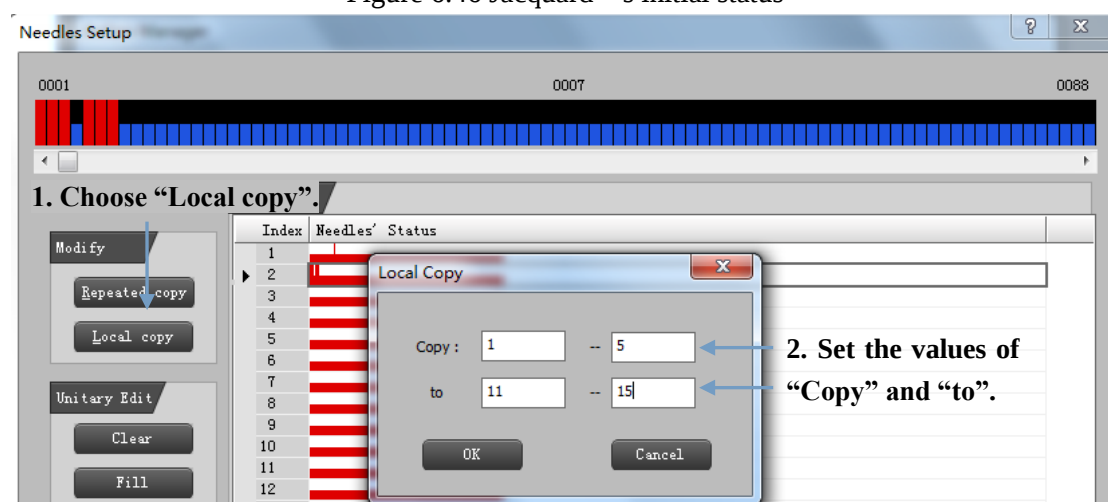


Figure 6.47 Local copy

At last, click button "Ok" to save the result, see figure 6.48, which shows the status of jacquard.

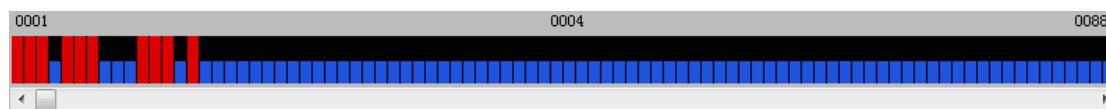


Figure 6.48 The status of jacquard after “Local copy”

Buttons in “Unitary” contains: Clear, Fill, Copy and Paste.

Clear: Set all needles’ status default, which is “in”.

Fill: Set all needles’ status “out”.

Copy: Copy all the needles’ status in current jacquard.

Paste: Paste the status has copied to the current jacquard.

There are two same buttons in both needles setup dialog and action manage interface: “OK” and “Cancel”. “OK” is used to save the result, while “Cancel” is used to cancel the operation.

6.7 Languages

The shortcut key for choosing menu “Languages” is “Alt” + “L”. There are five languages in this menu: Chinese(Simplified), English, Turkish, Russian and Arab, When you choose one of them, the system language will change to the language what you choose. The menu is shown in figure 6.59.

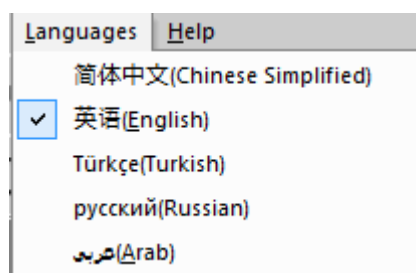


Figure 6.59 Languages menu

6.8 Help

This menu provides the user matters need attention in the manual. You can also see the version information from this menu.

Help Topics

“Help Topics” provides user the instruction and help information, if you need some help, you can click the menu.

Version

“Version” provide user the software version and company information, see figure 6.60.

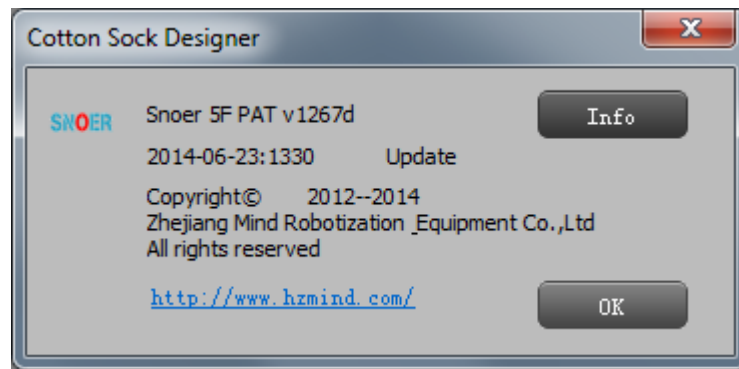


Figure 6.60 Version information

6.9 Expot Module

In chain edit dialog, Select the steps to be exported, right-click the menu and select “export” item, See Figure 6.61. Figure 6.62 is Export Module Diglog

 Chain Advance Editor

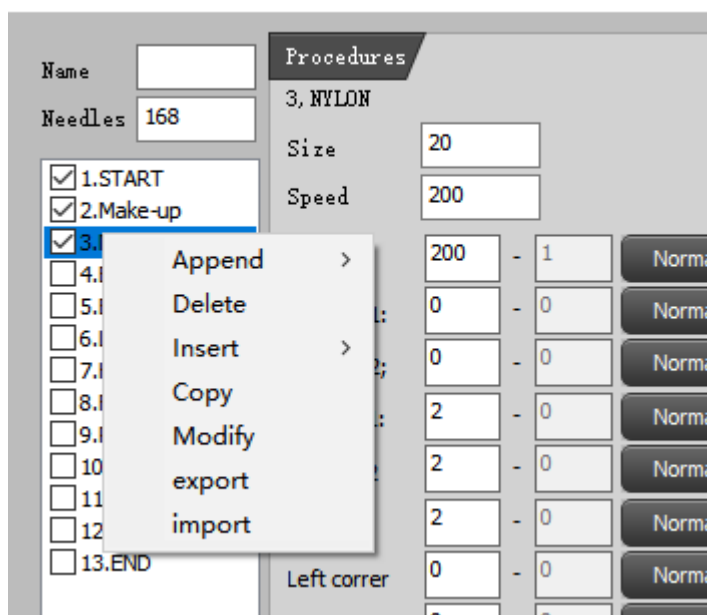


Figure 6.61 Export Menu

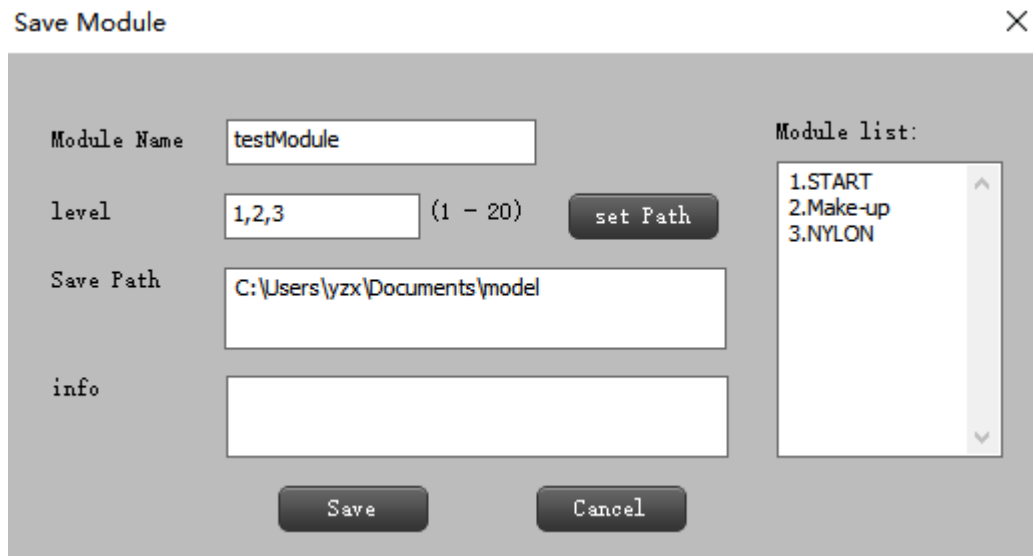


Figure 6.62 Save Module

Module Name: Save the module's file name

Level: setting the module's level, You can set one and more and use ',' or ' ' separated

Save Path: module save path, you can set the path, in import module also use this path load module info.

Info: module Description

6.10 Import Module

right-click the menu and select “export” item, See Figure 6.61, Enter the Import Module Dialog, see Figure 6.63

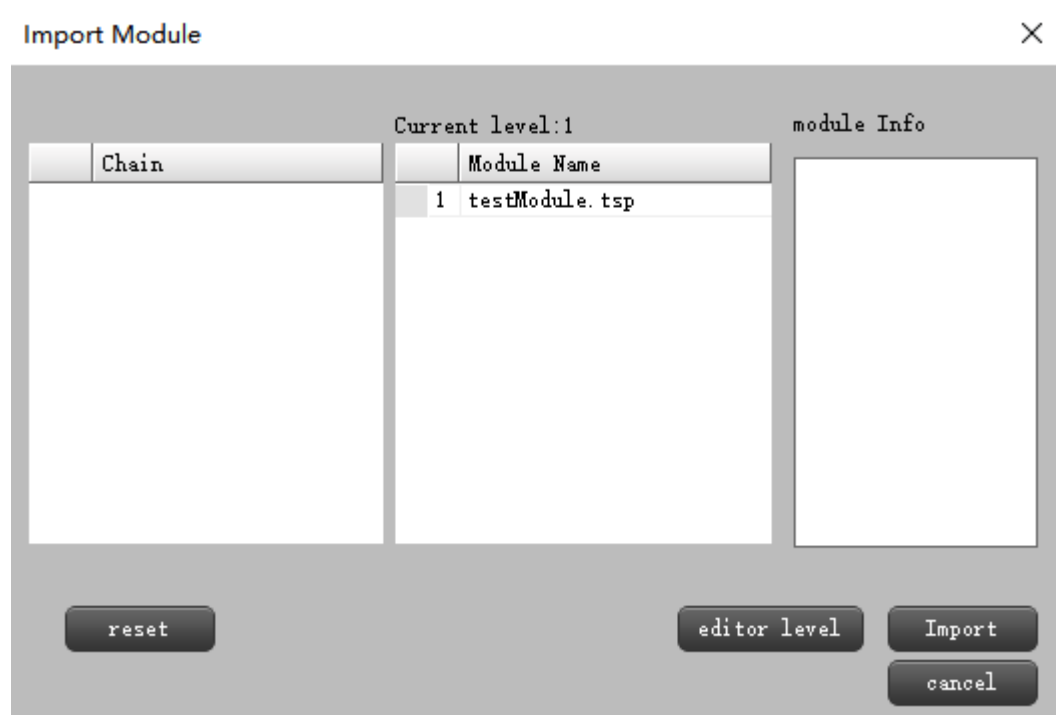


Figure 6.63 import Module Diglog

Module Name: the module list of current level, double click modules to import, Then auto enter

the next level(if has it)

Reset Button: if you select error, you can click this button re-select,that is, select from the first level

Import Button: Import the module of you choose

Editor Lvevl Button: click the button ,enter the editor level dialog,See Figure 6.64



Figure 6.64 Editor Level

The left list show all Level,total twenty,the red tiem means this level have Module.the chain list show module of current level. You can add or delete module from this list. You can double click the Module Name list's item add to this list(the Chain List). Right-click the menu to select the module to be deleted ,See Figure 6.65. Module Name List Show All Modules that you save.Click "OK" Button save level and return the import Module Dialog .

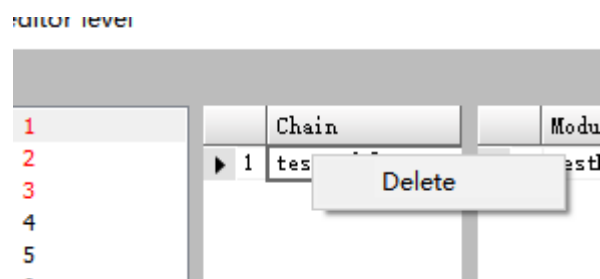


Figure 6.65 Delete Item

7 Toolbar under menu

Toolbar under menu is a group of icons, which have similar functions. This is easy for

editing and operation.

The common toolbars contains “Common toolbar”, “Draw Settings”, “CAT toolbar” and “Map Views”, these toolbars correspond with first four items in submenu “Toolbar” of menu “View”, when you choose them, the toolbar will display in the software.

7.1 Common toolbar

Common toolbar locates at top left, which has tools for common use when you editing a pattern file, see figure 7.1. You can also drag the toolbar with mouse to anywhere in workspace.



Figure 7.1 Common toolbar

Table 7.1 describes the functions of tools in “Common toolbar”.

Table 7.1 The function of tools in “Common toolbar”

No.	Icons	Name	Shortcut key	Function	Remarks
1		New	Ctrl + N	Create a new file	
2		Open	Ctrl + O	Open an existing file	
3		Save	Ctrl + S	Save the file	
4		Save to flash drive	Ctrl + U	Save the file to flash drive	
5		Backup	-	Keep a backup of the file	
6		Cut	Ctrl + X	Cut the content user selected	
7		Copy	Ctrl + C	Copy the content user selected	
8		Paste	Ctrl + V	Paste the content user cut or copy	
9		Undo	Ctrl + Z	Undo the operation, return to previous operation	
10		Redo	Ctrl + Y	Redo the operation been cancelled	
11		Zoom in	Num +	Zoom in the editing region	
12		Zoom out	Num -	Zoom out the editing region	

13		Gridlines	-	Display or hide the gridlines: display when you press it, hide when you	
14		About	-	Show the version, copyright, company information and so on	
15		Help	Shift + F1	Open the document for help	

7.2 Draw Settings

The draw settings toolbar is shown in figure 7.2. The tools in this toolbar are used to setting of some function related to drawing pattern. You can also drag the toolbar with mouse to anywhere in workspace.



Figure 7.2 Draw Settings

Table 7.2 describes functions of tools in “Draw Settings” toolbar.

Table 7.2 The functions of tools in “Draw Settings” toolbar

No.	Icons	Name	Shortcut key	Functions	Remarks
1		Choose lines	-	Choose different lines for drawing	
2		Picture transparent	-	Set the picture loaded transparent	
3		Fill with shape	-	Fill the shape you selected with a template	
4		Edit shapes	-	Edit shapes in template	
5		Multiple yarn setting	-	Needle thread repeatedly	
6		Replace Color	-	Replace a color with another one	
7		Exchange Color	-	Exchange two colors designated	

7.3 CAT toolbar

There are two tools in CAT toolbar, one is used to import a template file, and the other is used to edit the template. See figure 7.3. You can also drag the toolbar with mouse to anywhere in workspace.

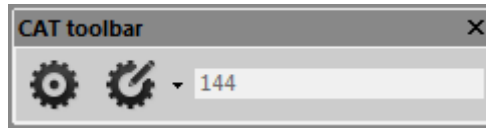


Figure 7.3 CAT toolbar

Table 7.3 describes functions of tools in CAT toolbar.

Table 7.3 The functions of tools in CAT toolbar

No.	Icons	Name	Functions	Remarks
1		Import a template file	Import a template file for drawing	
2		Chain basic edit	Edit the chain in basic	

7.4 Map Views

There are twelve tools in “Map Views” toolbar, preceding nine of them are nine different views of pattern, and last three of them are assistant ones, see figure 7.4. You can also drag the toolbar with mouse to anywhere in workspace.

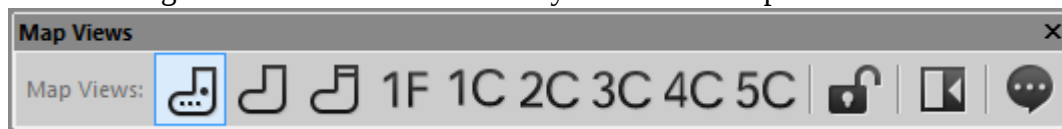


Figure 7.4 Map views

Table 7.4 describes functions of tools in View toolbar.

Table 7.4 The functions of tools in View toolbar

No.	Icons	Name	Functions	Remarks
1		Pattern view	Draw current action to pattern view	
2		Main shuttle view	Draw current action to main shuttle view	
3		Elastic view	Draw current action to elastic view	
4		1F View	Draw current action to 1F view	
5		1C View	Draw current action to 1C view	
6		2C View	Draw current action to 1C view	
7		3C View	Draw current action to 1C view	
8		4C View	Draw current action to 1C view	

9		5C View	Draw current action to 1C view	
10		Lock status	The actions will drawn to the current view when the status is lock, or only the next action will drawn to the current view	
11		Toggle Control View	Show or hide the toggle	
12		Cursor information	Show the information about the cursor position	

8 Color Bar

The color bar provides you different colors. You can choose one of them as foreground color or background color. When you choose the different view, the color related to the view will be different. Figure 8.1 to figure 8.4 lists four different color bars related to the four different views.

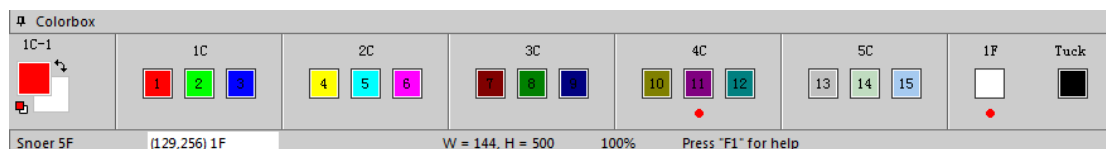


Figure 8.1 Color bar related to pattern view

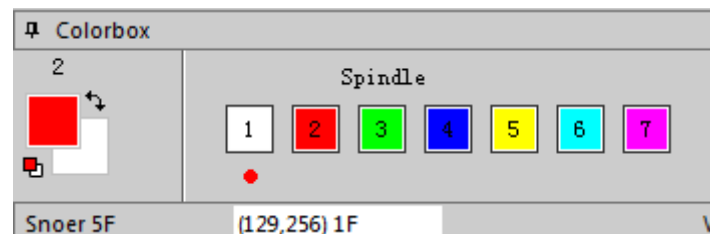


Figure 8.2 Color bar related to main shuttle view

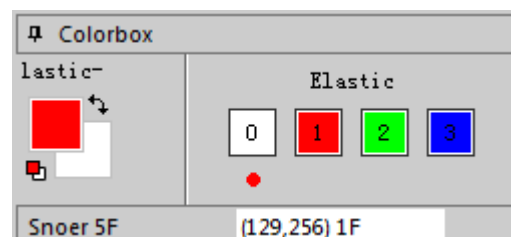


Figure 8.3 Color bar related to elastic view

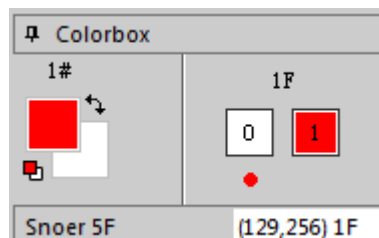


Figure 8.4 Color bar related to 1F view

There are only two colors in 1C view to 5C view, same with 1F view.

How to choose a color as foreground color or background color:

1. Click the color-block with the left mouse button, it will be the foreground color.
2. Click the color-block with the right mouse button, it will be the background color.

9 Workspace

The center of workspace is painting area, there are two hiding windows in the right, which are merged views and chain standard edit.

9.1 Merged views

When your cursor hover the “Merged views”, the dialog will open, see figure 9.1.

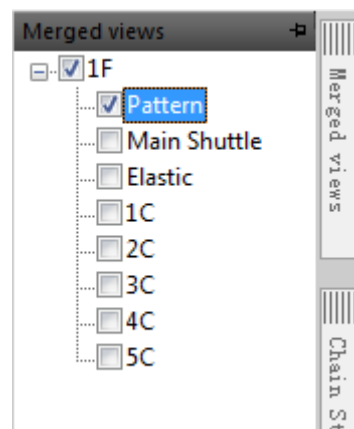


Figure 9.1 Merged views

The function of merged views is merging the pattern view with any other views. Choose “Pattern” first, then choose another view, you can see the effect in painting area.

9.2 Chain Standard Edit

When your cursor hover the “Chain Standard Edit”, the dialog will open, see figure 9.2.

Chain standard edit is used to edit the chain’s parameters, the operation is same with the related content in “6.5 Pattern Edit”.

Chain Standard Edit

Name

Needles

☐ 1.START
☐ 2.Make-up
☐ 3.NYLON
☐ 4.Elastic
☐ 5.Elastic-Welt
☐ 6.LEG
☐ 7.HEEL
☐ 8.FOOT
☐ 9.RING-TOE
☐ 10.TOE
☐ 11.LOSE
☐ 12.FT END
☐ 13.END

Procedures

1. START

Size

Speed

Rubber -

Rub KTF1: -

Rub KTF2: -

density-1: -

density-2: -

sinkDen -

Left correr -

Right correr -

Heel Settings

Heel Center

Heel Offset

Addition

Pat Para

Pat Set

LM Set

CMD Page

CMD Page	Data...	Status
Head-N	0	Zero
Knit Fun	180	Zero

CY	Action	Cir...	Property
1	1	1	0:Default

Figure 9.2 Chain Standard Edit

10 Context Menu

When you click the right mouse button in workspace, there will pop-up a menu, that is context menu. Context menu takes great convenience to the user.

The context menu is shown in figure 10.1, you can click any one of them to use it. Most functions of these items are described in above. There will be a table with brief description, see table 10.1.

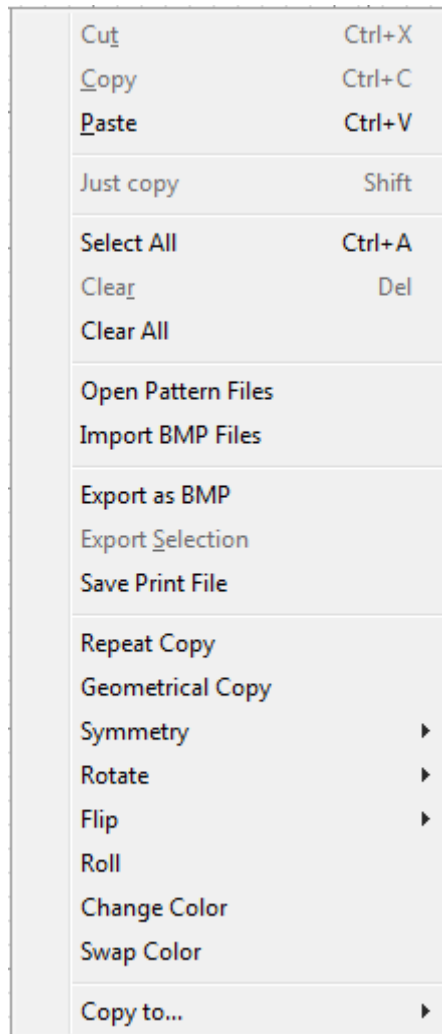


Figure 10.1 Context Menu

Table 10.1 Brief description about context

No.	Name	Shortcut key	Description	Remarks
1	Cut	Ctrl + X	Cut the content has been selected	
2	Copy	Ctrl + C	Copy the content has been selected	
3	Paste	Ctrl + V	Paste the content has been copied or cut	
4	Just copy	Shift	Open or forbid copy operation	
5	Select All	Ctrl + A	Choose all pattern in painting area	
6	Clear	Del	Delete the pattern in selection	
7	Clear all	-	Clear all pattern in painting area	
8	Open Pattern Files	-	Open a pattern file in the folder	
9	Import BMP Files	-	Import a BMP file in the folder	

10	Export as BMP	-	Export the pattern as BMP format	
11	Export Selection	-	Export the selection pattern	
12	Save Print File	-	Save the selection as a document	
13	Repeat Copy	-	Copy the selection repeatedly	
14	Geometrical Copy	-	Copy the selection, use it to liner painting or array painting	
15	Symmetry	-	Copy the painting area's left half or its mirror, paste it to right half	
16	Rotate	-	Change the angle of selection	
17	Flip	-	Flip the selection in horizontal or vertical	
18	Roll	-	Move the pattern in selection area	
19	Change Color	-	Change one color in selection	
20	Swap Color	-	Swap two colors in selection	
21	Copy to	-	Copy the current view's pattern to another view	

See figure 10.2, when you want to change one color in selection, you should designate the original color and the substitute color.

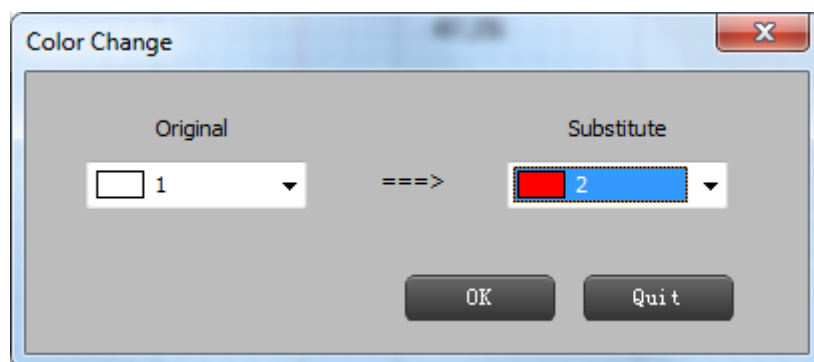


Figure 10.2 Change color

See figure 10.3, when you want to swap two colors in selection, you should designate the original color and the substitute color.

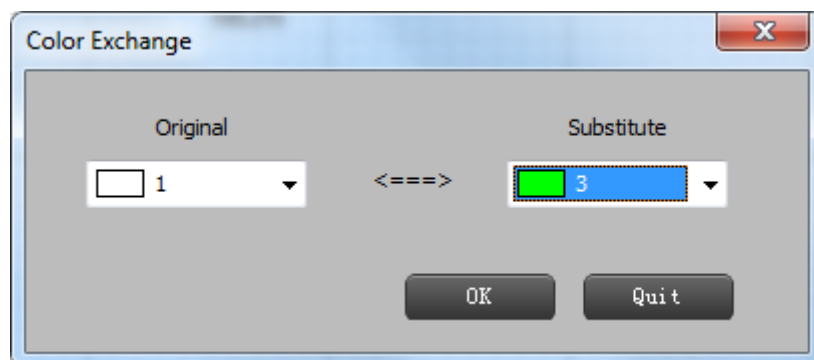


Figure 10.3 Swap color

See figure 10.4, when you want to copy the current view's pattern to another view, you should designate the original color and the substitute color for two views.

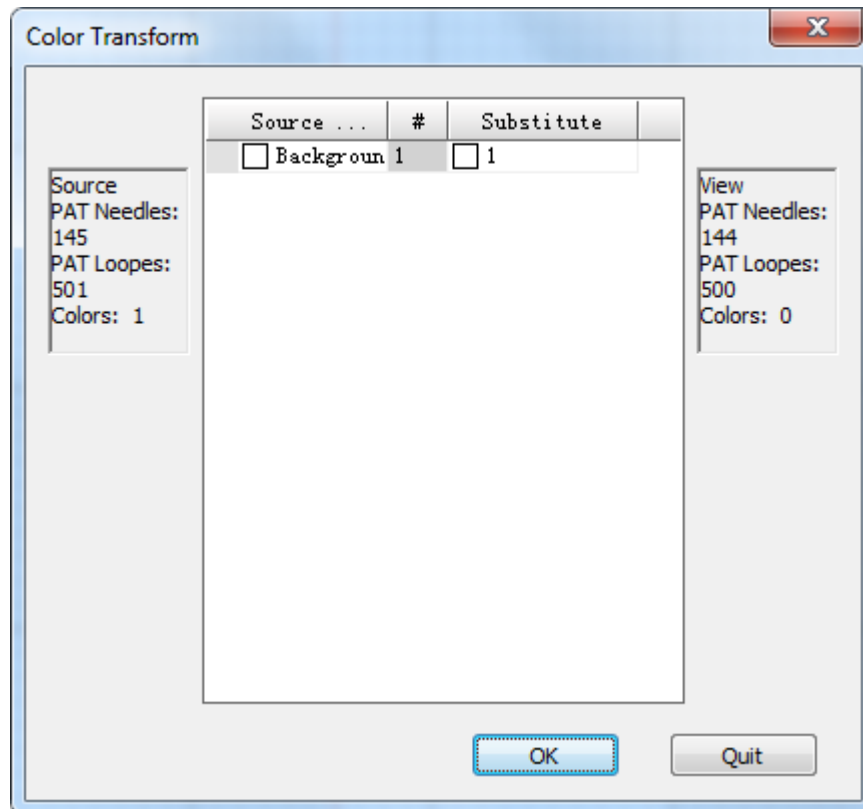


Figure 10.4 Copy current view's pattern to another view

11 Hotkeys

To make a great convenient for user, the software provides a lot of hotkeys, see table 11.1.

Hotkeys	Function	Remarks
F1	Open help manual	
F2	Open chain edit dialog	
F3	Change current view	
F9	Show/Hide the cross lines	
F10	Maximum/Minimu show the painting area	
F11	Zoom -	
F12	Zoom +	
Alt + F	Open "File" menu	
Alt + V	Open "View" menu	
Alt + E	Open "Edit" menu	

Alt + C	Open “Multiple” menu	
Alt + P	Open “Pattern Edit” menu	
Alt + M	Open “File Edit” menu	
Alt + L	Open “Languages” menu	
Alt + H	Open “Help” menu	
Ctrl + N	Create a new file	
Ctrl + O	Open a file	
Ctrl + S	Save a file	
Ctrl + U	Save the file to flash disk	
Ctrl + Shift + S	Save the file as	
Ctrl + Z	Undo the last operation	
Ctrl + A	Select the whole pattern in in painting area	
Ctrl + X	Cut the selection	
Ctrl + C	Copy the selection	
Ctrl + V	Paste the pattern you have copied	
Del	Delete the pattern you have selected	