ENGLISH

PS-810 Pattern editing
INSTRUCTION MANUAL

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Revision History

Version No.	Changes	Edited by	Modified on
1.0.0	Preliminary framework and content	Huang Xingjin, Yang Yongjie	2024/3/28
1.1.1	New functions	Yang Yongjie	2024/10/23
1.1.2	Function optimization	Yang Yongjie	2024/12/30

I. System Introduction

1.1 Software overview

Welcome to the computer-based drawing software for processing files that integrated with our template machine control system

The software has the following features:

a) The software is capable of recognizing designs created by AutoCAD or mainstream CAD software, supporting file formats such as dxf and plt.

b) In the work area, you can edit designs with the mouse.

c) After converting points, you can preview the processing path and provide detailed guidance on the coordinates for each stitch point.

d) With robust drawing capabilities, you can use the mouse to add points, straight lines, rectangles, ellipses, etc.

e) With extensive customization options, you can insert various control commands at any stitching point to meet flexible and diverse operational needs.

f) Key functionalities include: Graphics processing: It features graphic file import, recognition, design, sorting, editing, modification, transformation, canvas manipulation, graphic listing, batch processing, as well as handling of closed and open graphics. ② Layer settings: converting lines to points, special seam, slowing down at inflection points, shrinkage at the head and tail, front and rear backstitch, repeated stitching, special seam after converting points, etc. ③ Processing file output: benchmark settings, default parameter settings, command set, *.SCO file output, etc.

1.2 Software Interface Introduction

The interface of the drawing software is illustrated in Fig. 1.2.1 below

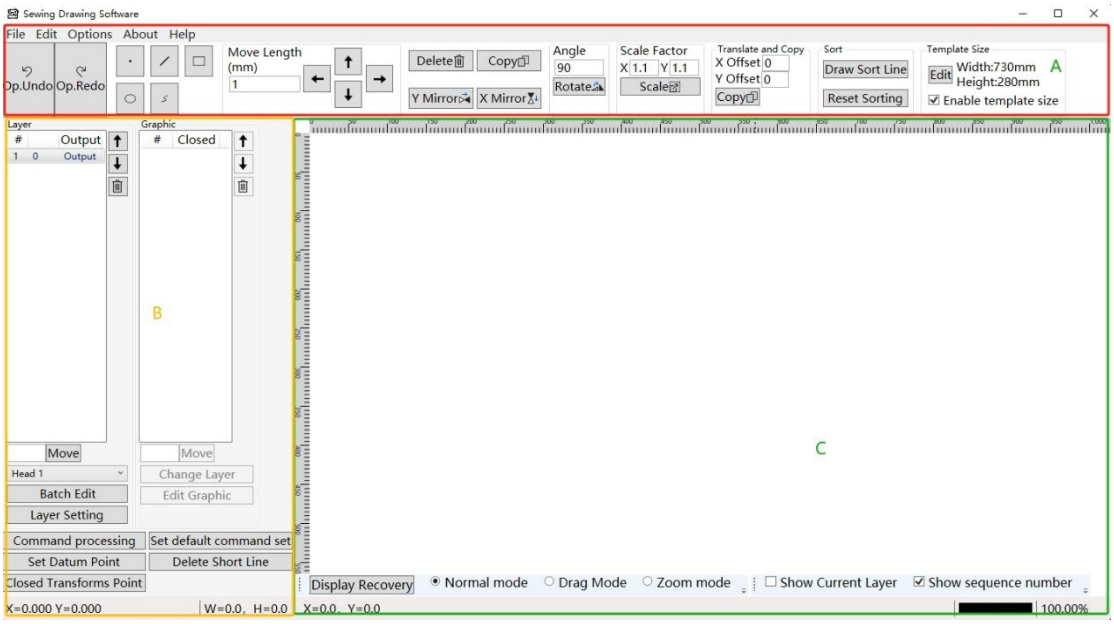


Fig. 1.2.1 Sewing Drawing Software Interface

This interface can be divided into the following sections:

A: Toolbar, consisting mainly of various functional operation buttons and drawing buttons

B: Parameter setting area, used to configure parameters, layers, datum points, commands, and other settings for the graphics on the canvas

C: Canvas, an area for displaying and editing various graphics

1.3 Commands for Using This Document

Chapters two through six of this document provide a functional introduction to the drawing software.

To get started quickly, first read the Chapter 7 Quick Start section. If you encounter something unclear, refer to the corresponding chapter for a detailed explanation.

This document is drafted based on the QD-V01.01.02 version of the software. In the event of any future amendments, the actual functionality of the software shall take precedence.

II. Software Installation

2.1 Provide the RAR file

Our company provides the RAR file of the drawing software, as shown in Fig. 2.1.1 below.

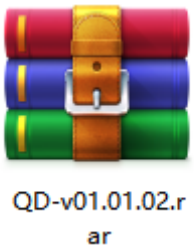


Fig. 2.1.1 Software RAR File

2.2 Extract the RAR file

Extract the file, select qsoft and click Unzip to, as shown in Fig. 2.2.1 below.

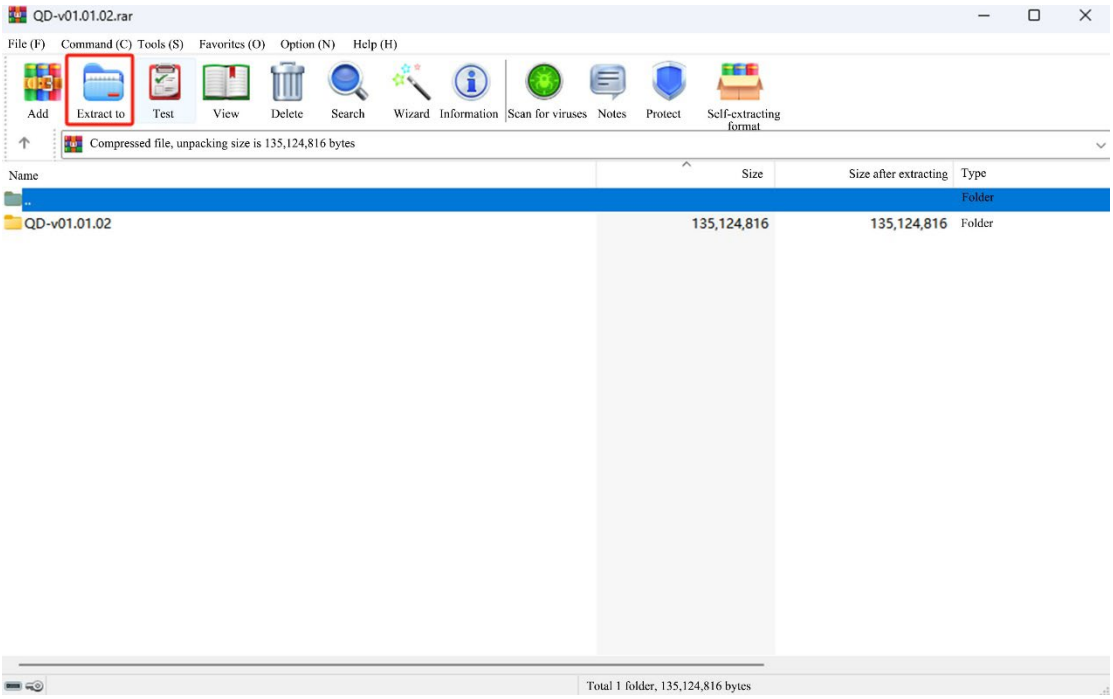


Fig. 2.2.1 RAR Package Opening Page

Select the path to be extracted. Click to select path as shown in Fig. 2.2.2.

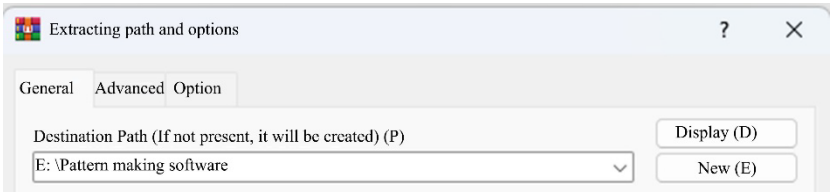


Fig. 2.2.2 Path Selection

Select the folder to be extracted, click OK to select the folder as shown in Fig. 2.2.3.

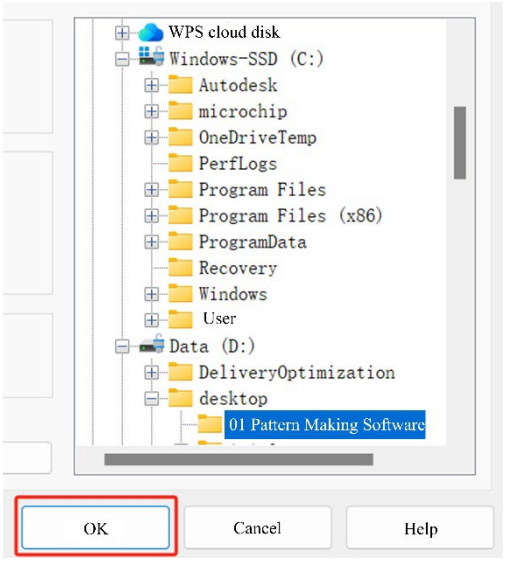


Fig. 2.2.3 Folder Selection

Finally, click Extract and wait for the progress bar to finish. You can find the drawing software in the corresponding folder, as shown in Fig. 2.2.4.

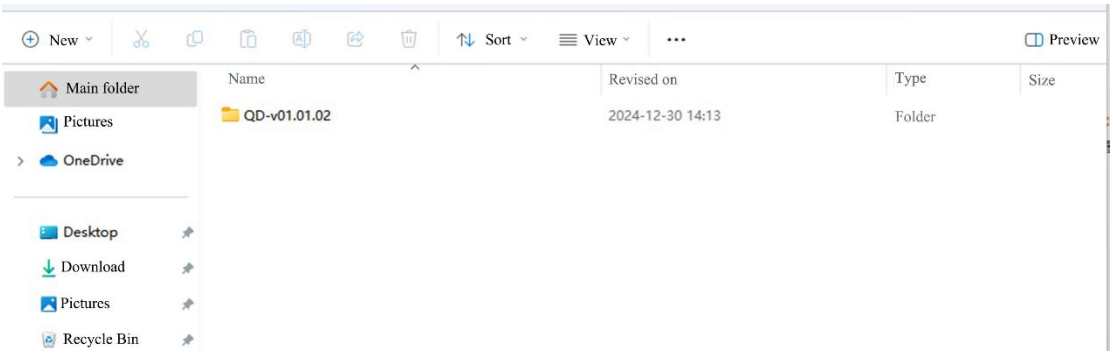


Fig. 2.2.4 Extract the File

III. Menu

3.1 Document

3.1.1 Open

Open the graphic file to be processed. This software can recognize graphics drawn by Autocad or mainstream CAD software for clothing industry, including files in formats such as dxf and plt.

Note: If there are other graphic files (including processed files) in the canvas when clicking "Open", all existing graphics will be cleared when opening a new graphic file.

Operation: Click "File" on the menu bar, and then click the "Open" button to pop up the file selection window, as shown in Fig. 3.1.1 below. After selecting the file, click "Open" to open the graphic file in the canvas.

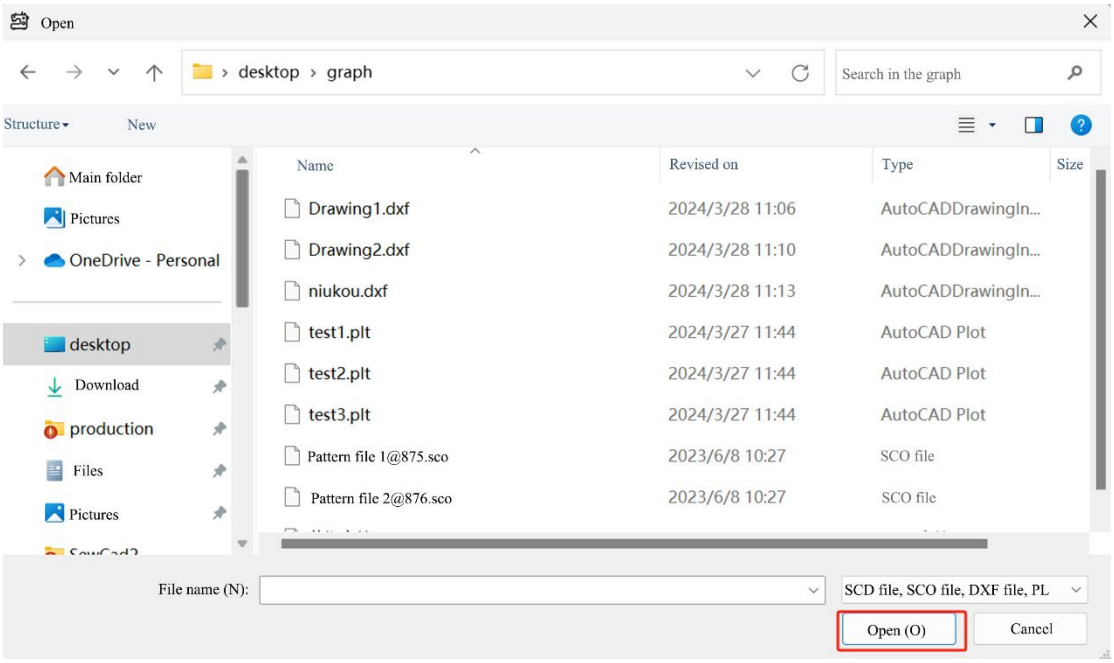


Fig. 3.1.1 File Selection Window

3.1.2 Save as

This function is to save the graphic file in the current canvas as a .scd file and save it to the set path, so that it is convenient to open this file for operation and editing next time.

Operation: When there is a graphic file in the canvas, click "File" on the menu bar and then click the "Save As" button to pop up the folder selection window. After selecting the folder, enter the name of the file to be saved and click "Save". As shown in Fig. 3.1.2.

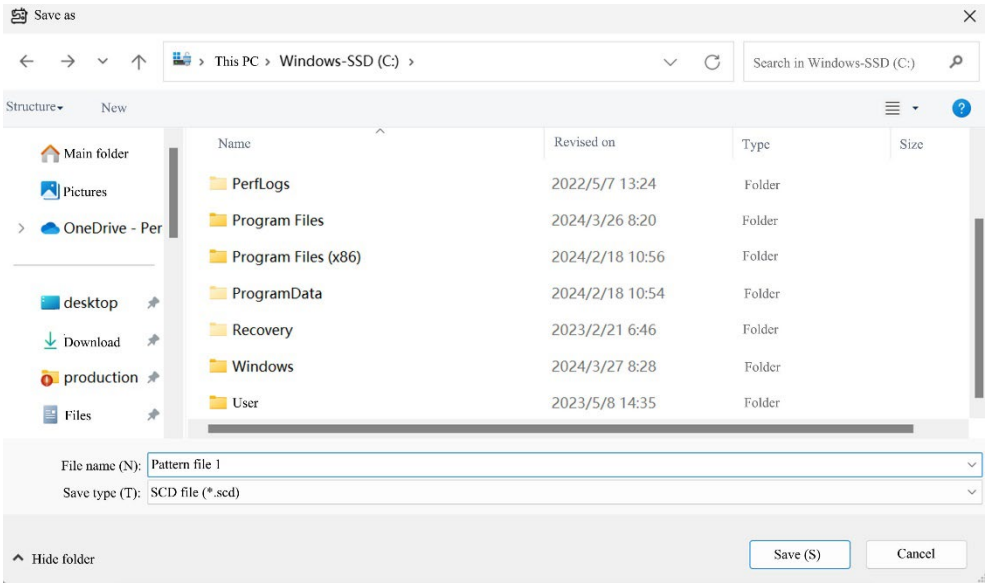


Fig. 3.1.2 File Saving Window

3.1.3 Exit

This function is used to exit this drawing software. The × in the upper right corner of the software interface can also perform this operation.

Operation: Click "File" on the menu bar, then click the "Exit", and this drawing software will be closed.

3.2 Edit

3.2.1 Insert

This function is used to insert a graphic file from the outside when there are already graphics in the canvas, so that the graphics exist on the canvas synchronously.

Operation: When there is a graphic file in the canvas, click "Edit" on the menu bar, then click "Insert", and the file selection interface will pop up. Select the graphic file to be added and click "Open" to insert the graphic file into the canvas. As shown in Fig. 3.2.1.

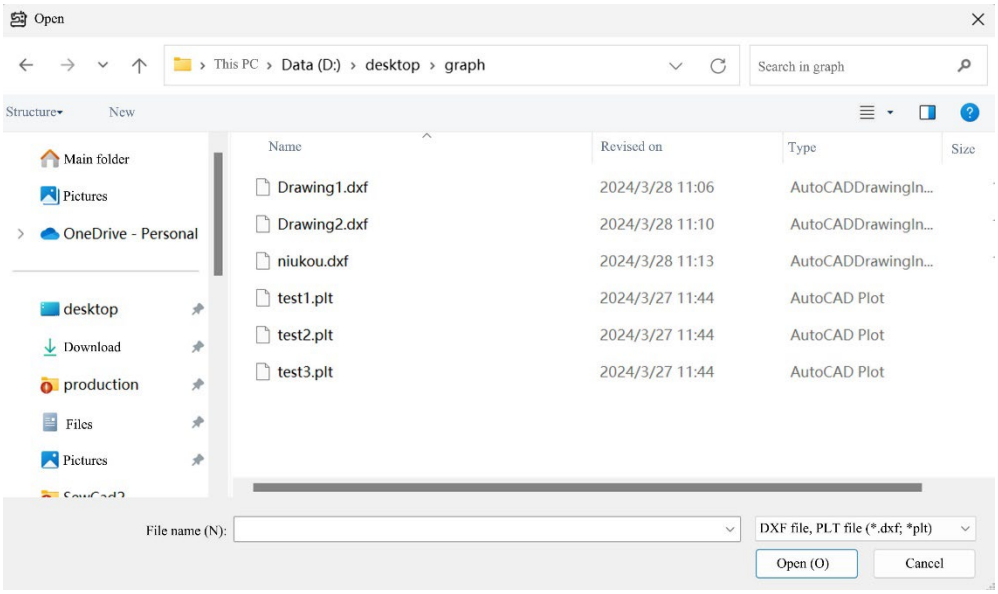


Fig. 3.2.1 File Inserting Window

3.3 Option

3.3.1 Automatic line connection

When this function is on, if there are two graphics in the graphic file with the same coordinates at the head and tail points but not connected, after importing the file, the heads and tails of the two graphics will be automatically connected.

3.3.2 Delete overlapping graphics when opening files

When this function is on, if there are two identical and overlapping graphics in the graphic file, after importing the file, one of the overlapping graphics will be deleted and the other will be retained.

3.3.3 Benchmark-free mode

Check the benchmark-free mode, enable the template size and set the corresponding template size parameters. If there are outer frame graphics in the graphic, a benchmark-free pattern file can be generated.

3.3.4 Merge adjacent points

When this function is on, if there are overlapping points in the graphic file, after importing the file, one of the overlapping points will be deleted and one will be retained.

3.3.5 First stitch from the default datum point

When this function is on, after the graphic file points converting and no datum point is set, the output file will default to the first stitch as the datum point.

3.3.6 Configure layer color

Users can customize the color of different layers. After setting, they need to restart the software to take effect.

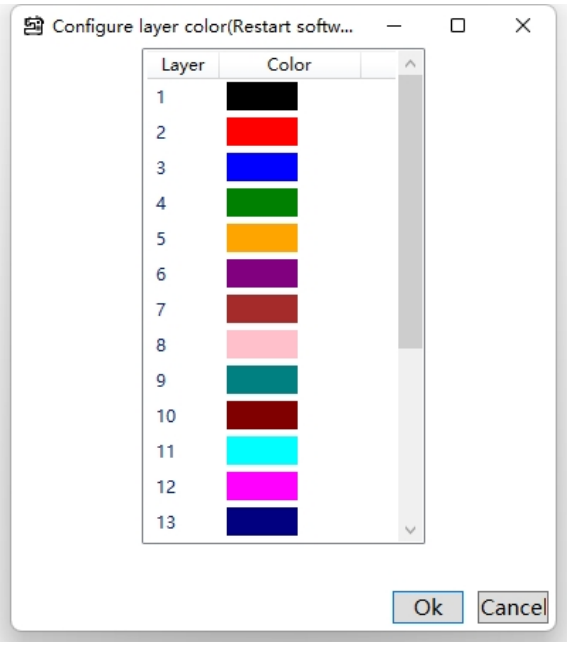
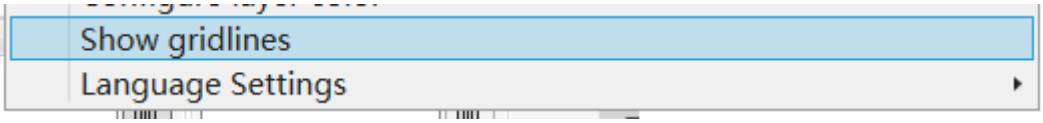


Fig. 3.3.6 Configure Layer Color

3.3.7 Show gridlines

When this function is on, gridlines will appear in the canvas.



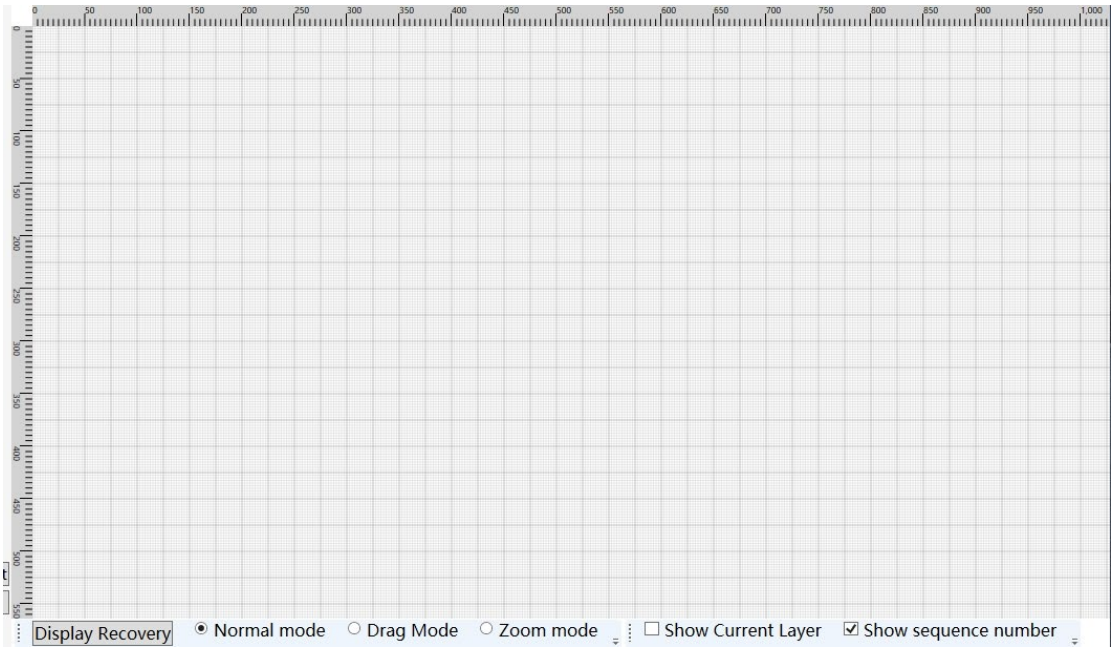


Fig. 3.3.7 Show Gridlines

3.3.8 Language setting

There are menu items in various languages under this menu. Click the corresponding language item and restart the program, and it will automatically switch to the corresponding language after startup.

Note: Before switching languages, if there is any data modification, it must be saved first.

Fig. 3.3.8 Language Settings

3.4 About

After clicking, a pop-up window of the current version number will pop up. As shown in Fig. 3.4.1 below

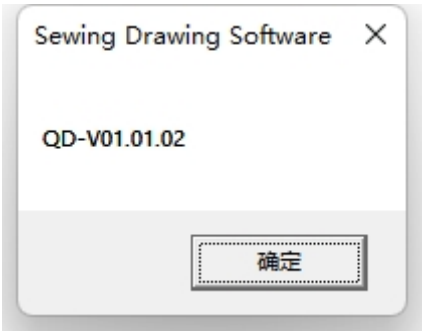


Fig. 3.4.1 Software Version Number

3.5 Help

The command document of this software can be viewed under this menu.

IV. Toolbar

4.1 Operation Undo

To roll back the current operation, you can return to the previous step to ensure that it is revoked after an error in the operation. The buttons are shown in Fig. 4.1.1 below

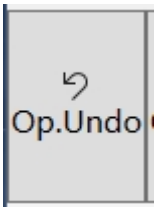


Fig. 4.1.1 Operation Undo Button

4.2 Operation Redo

This button can return to the operation before rollback, preventing mistakes from clicking the rollback button multiple times. The buttons are shown in Fig. 4.2.1 below.

Fig. 4.2.1 Operation Redo Button

4.3 Graphic drawing

This function is used to draw the required graphics. The buttons are shown in Fig. 4.3 below.

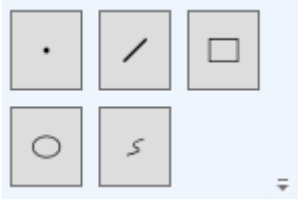


Fig. 4.3 Graphic Drawing Button

4.3.1 Draw at any point

This function is used to draw points. The buttons are shown in Fig. 4.3.1a below.

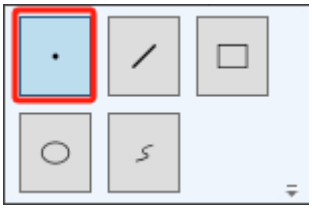


Fig. 4.3.1a Arbitrary Point Drawing Button

Operation: This feature can be used in two ways:

① Left-click to enter the point drawing mode, and then left-click at any position on the canvas to generate points. Multiple points can be generated by multiple clicks of the mouse.

When the drawing is completed, you can exit the drawing mode by pressing the "Esc" key on the keyboard or clicking the "Normal Mode" button at the bottom of the canvas, as shown in Fig. 4.3.1b.

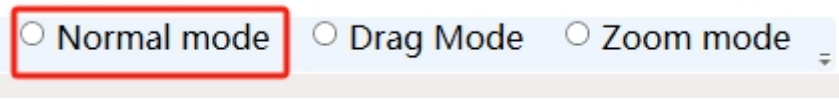


Fig. 4.3.1b Exiting Drawing Mode

② Right-click to open the point coordinate input window, enter the X and Y coordinate values, and click "Create" to draw a point at the corresponding position, as shown in Fig. 4.3.1c.

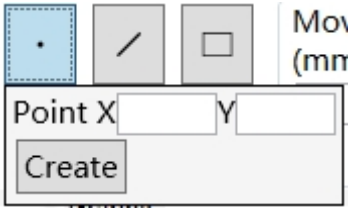


Fig. 4.3.1c Coordinate Creation Points

4.3.2 Multi-line segment drawing

This function is used to draw straight lines. The buttons are shown in Fig. 4.3.2a below.

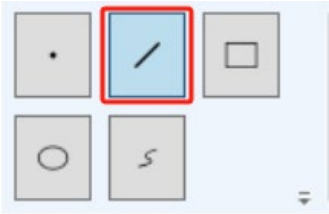


Fig. 4.3.2a Draw Button

Operation: This feature can be used in two ways:

① Left-click to enter the drawing mode, and then left-click at any position on the canvas to determine the starting point of the first line segment. Move the mouse and click again to determine the end point of the first line segment, that is, the first line segment is drawn. Meanwhile, this point is also the starting point of the second line segment. Move the mouse and click again to determine the second line segment, and so on. As shown in Fig. 4.3.2b.

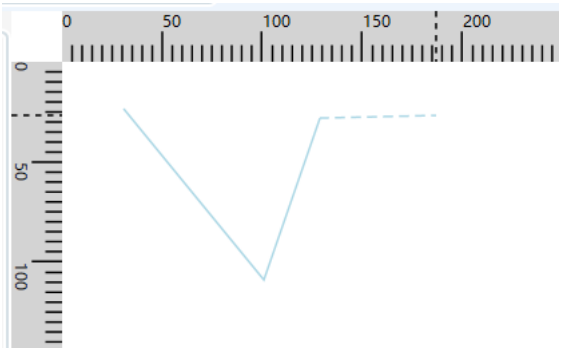


Fig. 4.3.2b Multi-segment Drawing

When the drawing is completed, right-click the mouse and select the "Finish Drawing" button, as shown in Fig. 4.3.2c, to complete the drawing of the multi-segment graphic.

Fig. 4.3.2c "Finish Drawing" Button

When the drawing is completed, you can exit the drawing mode by pressing the "Esc" key on the keyboard or clicking the "Normal Mode" button at the bottom of the canvas, as shown in Fig. 4.3.2d.

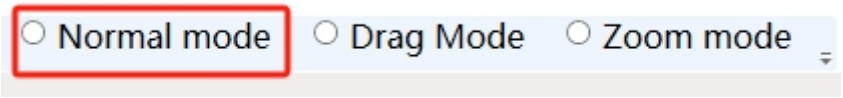


Fig. 4.3.2d Exiting Drawing Mode

② Right-click to open the coordinate input window, and pop up the X and Y coordinate input boxes for point 1 and point 2. Enter the coordinates of two points in the box. After clicking "Create", a straight line will be created by determining the rule of a straight line with two points. As shown in Fig. 4.3.2e and 4.3.2f below.

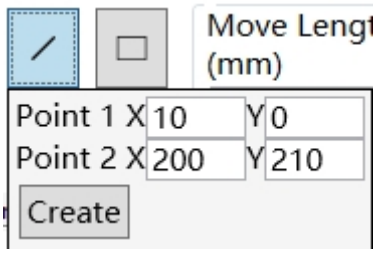


Fig. 4.3.2e Straight Line Creation Pop-up Window

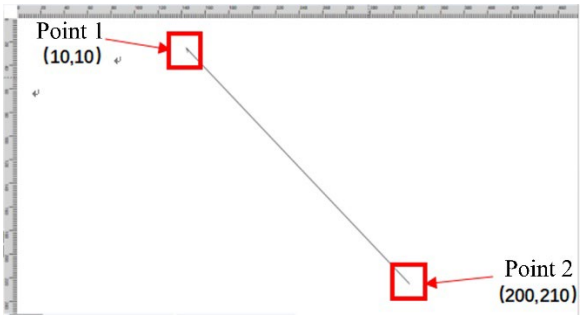


Fig. 4.3.2f Straight Line Creation Completed

4.3.3 Rectangle drawing

This function is used to draw rectangles. The buttons are shown in Fig. 4.3.3a below.

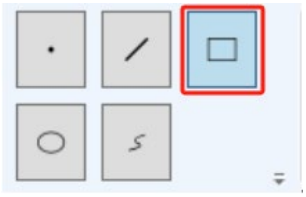


Fig. 4.3.3a Rectangle Drawing Button

Operation: This feature can be used in two ways:

① Left-click to enter the drawing mode, and then left-click at any position on the canvas to determine the coordinates of the upper left corner of the rectangle, as shown in Fig. 4.3.3b. Move the mouse and click again to complete the drawing of the rectangle. Move the mouse and click again to start drawing the second rectangle.

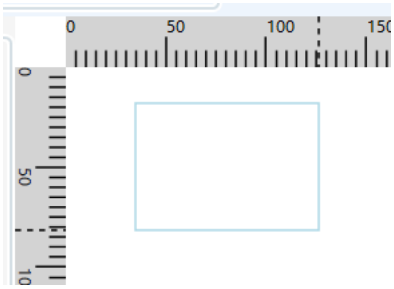


Fig. 4.3.3b Rectangle Drawing

When the drawing is completed, you can exit the drawing mode by pressing the "Esc" key on the keyboard or clicking the "Normal Mode" button at the bottom of the canvas, as shown in Fig. 4.3.3c.

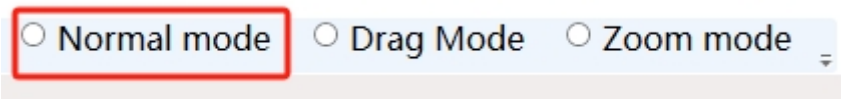


Fig. 4.3.3c Exiting Drawing Mode

② Right-click to open the coordinate input window, enter the coordinates and width and height values in the box, and click "Create" to create a corresponding rectangle according to the set parameter values. As shown in Fig. 4.3.3d and 4.3.3e below.

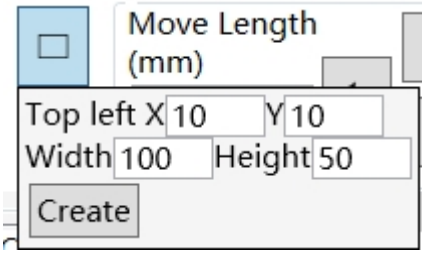


Fig. 4.3.3d Rectangle Creation Pop-up Window

Fig. 4.3.3e Rectangle Creation Completed

4.3.4 Ellipse (circle) drawing

This function is used to draw ellipses and circles. The buttons are shown in Fig. 4.3.4a below.

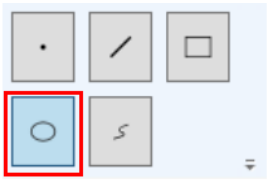


Fig. 4.3.4a Ellipse (Circle) Drawing Button

Operation: This feature can be used in two ways:

① Left-click to enter the drawing mode, and then left-click at any position on the canvas to start drawing an ellipse (circle) as shown in Fig. 4.3.4b. Move the mouse to a suitable position and click again to complete the drawing of the ellipse (circle). Move the mouse and click again to start drawing the second ellipse (circle).

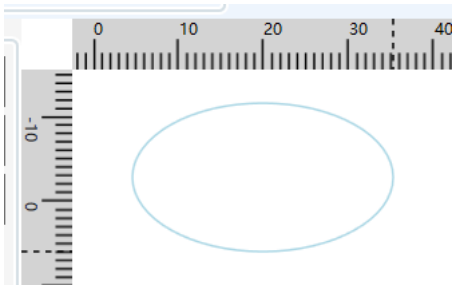


Fig. 4.3.4b Ellipse (Circle) Drawing

When the drawing is completed, you can exit the drawing mode by pressing the "Esc" key on the keyboard or clicking the "Normal Mode" button at the bottom of the canvas, as shown in Fig. 4.3.4c.

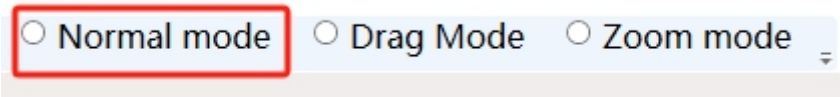


Fig. 4.3.4c Exiting Drawing Mode

② Right-click to open the coordinate input window, and pop up the center X, Y coordinates and X radius, Y radius input box. Enter the coordinates and the values of X radius and Y radius in the box. After clicking "Create", the corresponding ellipse will be generated according to the set parameters. If you want to generate a circle, you need to ensure that the values of X radius and Y radius are the same. As shown in Fig. 4.3.4d and 4.3.4e below

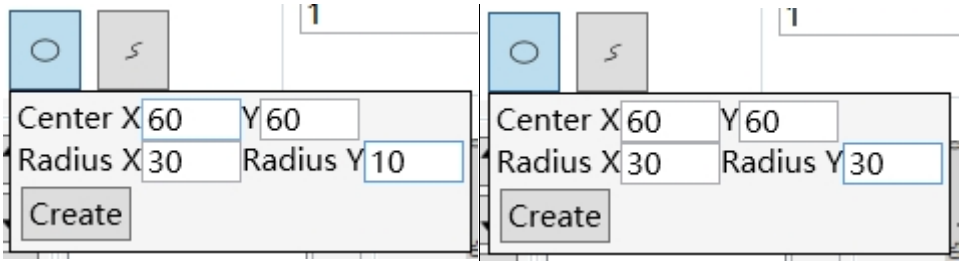


Fig. 4.3.4d Pop-up Window for Creating an Ellipse (Circle)

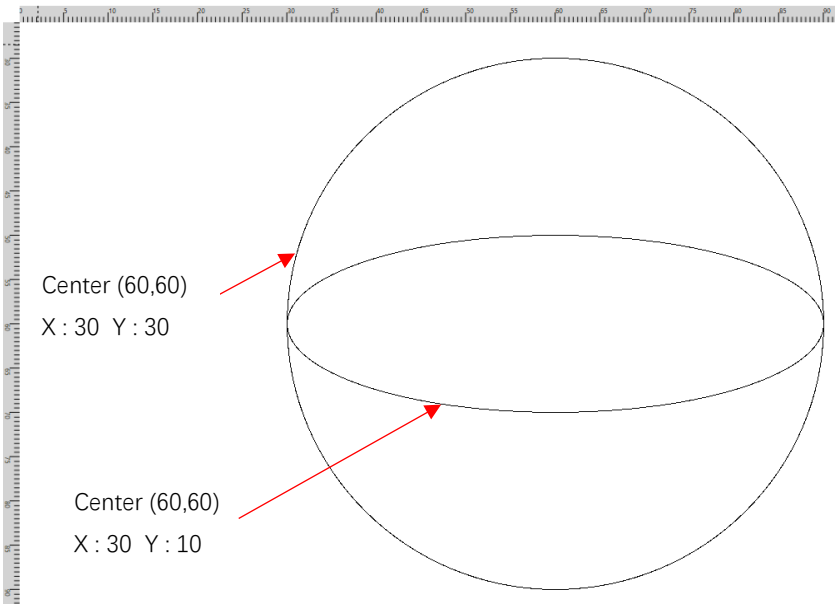


Fig. 4.3.4e Ellipse (Circle) Created

4.3.5 Spline curve drawing

This function is used to draw spline curves. The buttons are shown in Fig. 4.3.5a below.

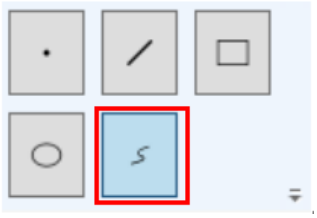


Fig. 4.3.5a Spline Curve Drawing Button

Operation: Left-click to enter the drawing mode, and then left-click at any position on the canvas to start drawing a spline curve as shown in Fig. 4.3.5b. By moving the mouse and clicking, the spline curve changes continuously and passes through the point clicked by the user.

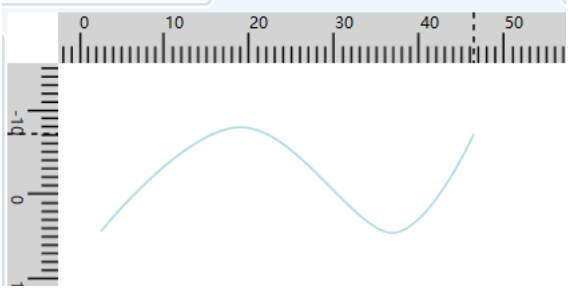


Fig. 4.3.5b Spline Curve Drawing

When the spline curve is drawn, right-click the mouse, as shown in Fig. 4.3.5c:

a. Select the "Finish Drawing" button to complete the drawing of the spline curve graphic.

b. Select the "Finish Drawing-Close" button, and a curve connection will be generated at the beginning and end of the spline curve to close the entire spline curve and complete the drawing of the spline curve graphic.

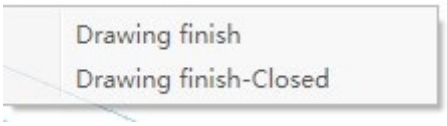


Fig. 4.3.5c Drawing Finish Button

When the drawing is completed, you can exit the drawing mode by pressing the "Esc" key on the keyboard or clicking the "Normal Mode" button at the bottom of the canvas, as shown in Fig. 4.3.5d.

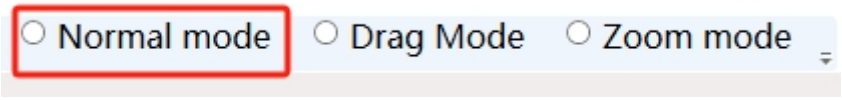


Fig. 4.3.5d Exiting Drawing Mode

4.4 Translation

This function is used to translate the graphics in the canvas. The buttons are shown in Fig. 4.4.1 below.

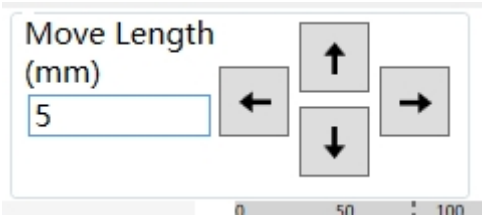


Fig. 4.4.1 Translation Function Button

Operation: First select a graphic in the canvas (the selected graphic will appear as a blue box) as shown in Fig. 4.4.2 below. Then enter the moving distance (unit: mm) in the input box under the moving distance, and click the four direction keys to move the set distance in the corresponding direction. As shown in Fig. 4.4.3, 4.4.4 and 4.4.5 below.

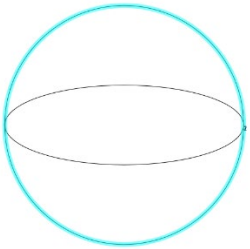


Fig. 4.4.2 Graphics are Selected

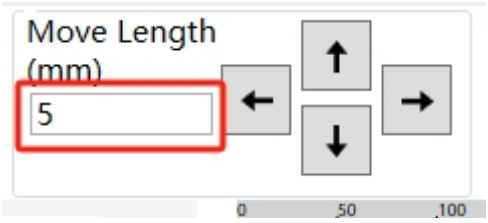


Fig. 4.4.3 Enter value

Fig. 4.4.4 Click the Arrow Keys

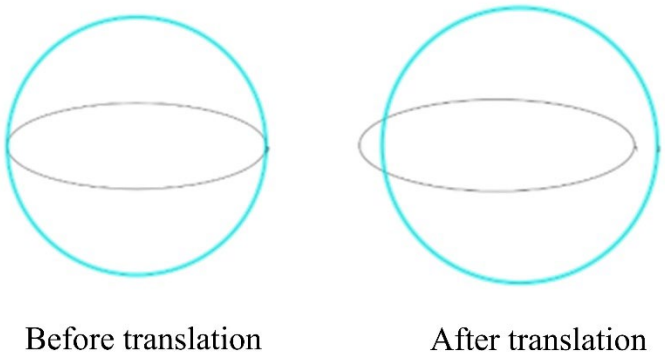


Fig. 4.4.5 Schematic Diagram of Operation

4.5 Delete

This function is used to delete graphic files. The buttons are shown in Fig. 4.5.1 below.

Fig. 4.5.1 Delete Button

Operation: First select a graphic in the canvas (a blue box will appear for the selected graphic), click the "Delete" button to delete this graphic, or you can use the "Delete" button on the keyboard to delete it.

4.6 Copy

This function is used to copy graphic files. The buttons are shown in Fig. 4.6.1 below.

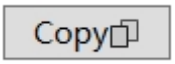


Fig. 4.6.1 Copy Button

Operation: First select a graphic in the canvas (a blue box will appear for the selected graphic), click the copy button, and a new graphic with the same original graphic will be generated at the same coordinate point position, and one more graphic will be added to the graphic list. As shown in Fig. 4.6.2 and 4.6.3 below.

Before operation **After operation (the graphic moves 5mm to the right after copying)**

Fig. 4.6.2 Schematic Diagram of Operation

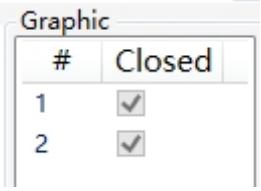


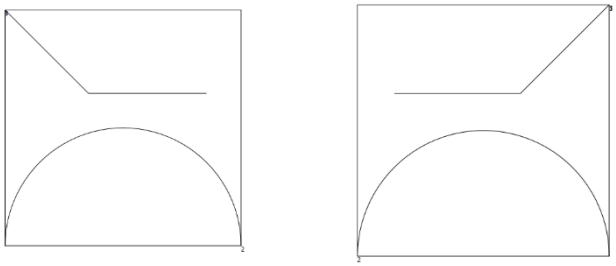
Fig. 4.6.3 Graphic List

4.7 Mirror image

This function can mirror all graphics in the canvas, which are divided into X-axis mirroring (vertical mirroring) and Y-axis mirroring (horizontal mirroring). The buttons are shown in Fig. 4.7.1 below.

Fig. 4.7.1 Mirror Button

Operation: Take Y-axis mirroring as an example: click "Y-axis Mirroring" on the toolbar, and the entire canvas will be mirrored along the Y axis, that is, vertically. As shown in Fig. 4.7.2.



Before operation **After operation**

Fig. 4.7.2 Schematic Diagram of Y-axis Mirroring Operation

4.8 Rotation

This function can rotate all graphics in the canvas. The buttons are shown in Fig. 4.8.1 below.

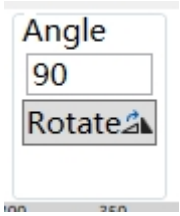
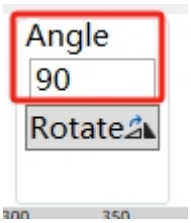


Fig. 4.8.1 Rotate Button

Operation: First enter the angle to be rotated in the rotation angle input box, and then click "Rotate". The entire canvas will rotate according to the set angle value (taking 45° as an example). As shown in Fig. 4.8.2, 4.8.3 and 4.8.4 below.



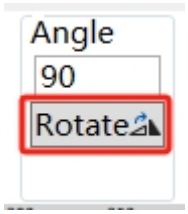
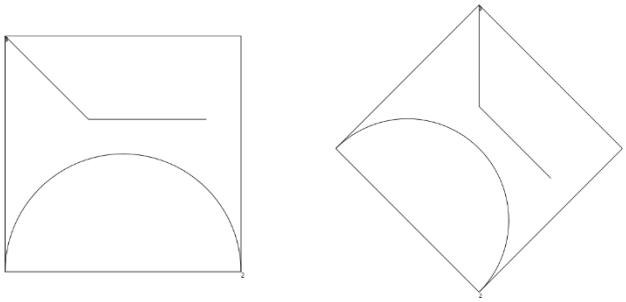


Fig. 4.8.2 Enter Values **Fig. 4.8.3 Click Rotate**



Before operation **After operation**

Fig. 4.8.4 Schematic Diagram of Rotation Operation

4.9 Scaling

This function allows scaling of all the graphics on the canvas. The buttons are shown in Fig. 4.9.1 below.

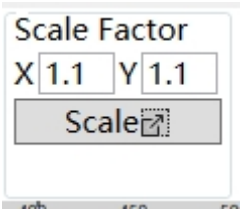


Fig. 4.9.1 Scale Button

Operation: First, set the scaling size of X and Y in the scaling multiple input box. After entering, click "Scale". At this time, the graphics in the canvas will be scaled according to the parameter value. As shown in Fig. 4.9.2 and 4.9.3 below.

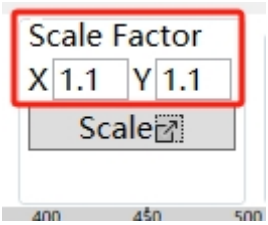


Fig. 4.9.2 Enter values

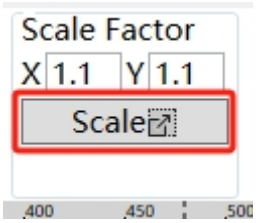


Fig. 4.9.3 Click Scale

4.10 Translate and copy

This function can copy the selected graphics and perform translation operations while copying. The buttons are shown in Fig. 4.10.1 below.

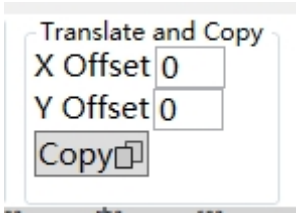


Fig. 4.10.1 Translate and Copy Buttons

Operation: First select the graphic in the canvas, set the horizontal and vertical offset sizes in the translation and copy input boxes respectively. After entering, click "Copy". At this time, the selected graphic in the canvas will be copied and translated according to the parameter value. As shown in Fig. 4.10.2, 4.10.3 and 4.10.4 below.

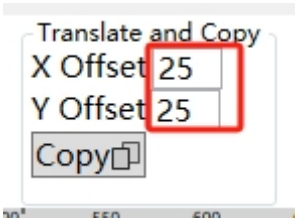


Fig. 4.10.2 Enter values

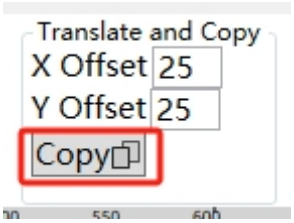
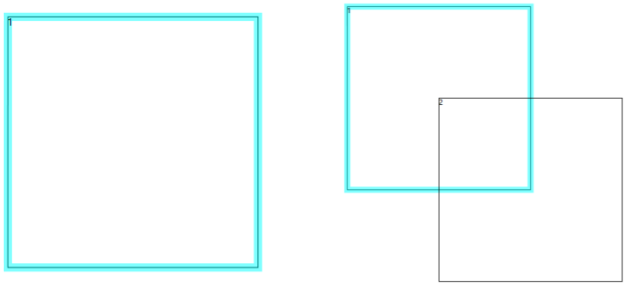


Fig. 4.10.3 Click Copy



Before operation After operation

Fig. 4.10.4 Schematic Diagram of Rotation Operation

4.11 Sort

4.11.1 Draw sorting line

This function can sort the graphics of the selected layer. Each sorting can only sort the graphics of the same layer. After the sorting is completed, you need to switch to normal mode before selecting other layers for new sorting.

Operated by:

① Select the layer to be sorted, and select layer 1 as shown in Fig. 4.11.1a.

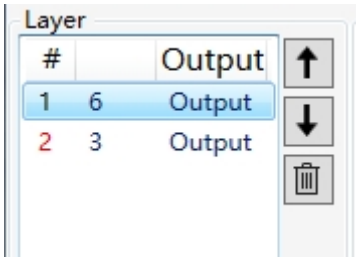


Fig. 4.11.1a Selecting Layer 1

② Click the "Draw Sorting Line" button to enter sorting mode.

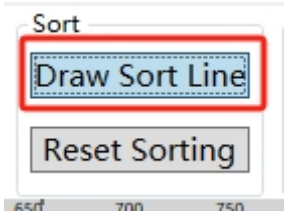


Fig. 4.11.1b "Draw Sort Line" Button

Press and hold the mouse to move, and pass through the graphics to be sorted in turn. The passed-through graphics will turn green. When release the mouse, the serial number will be updated according to the order of the graphics passing through, as shown in Fig. 4.11.1c and 4.11.1d.

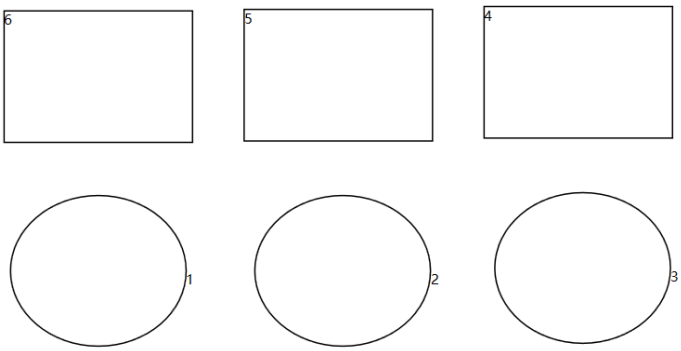


Fig. 4.11.1c Before Sorting

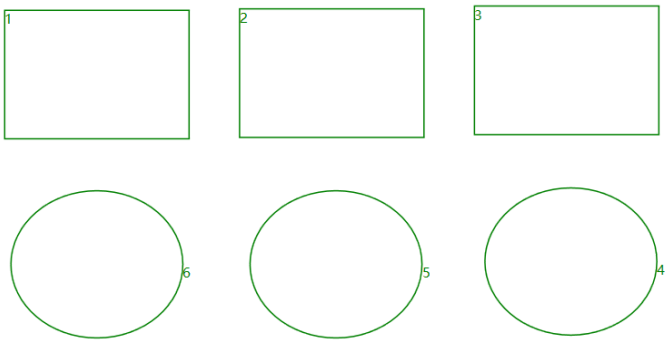


Fig. 4.11.1d After Sorting

③ After sorting, you need to press the "Esc" key on the keyboard or click the "Normal Mode" button at the bottom of the canvas to exit the "Sorting Mode".

4.11.2 Reset sorting

This software can quickly sort by holding down the shortcut key left Shift key, or the left Ctrl key, and clicking on the graphics in sequence with the mouse.

Operation: ① Select the layer to be sorted

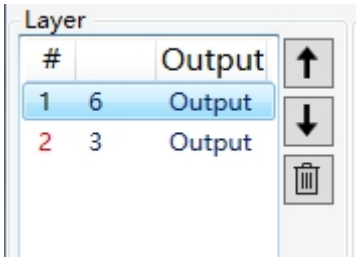


Fig. 4.11.2a Selecting Layer 1

② Press and hold the left Shift key or the left Ctrl key, click on the graphics to be sorted in turn, and they will be sorted from sequence number 1. After the sorting is completed, release the shortcut key to complete the sorting.

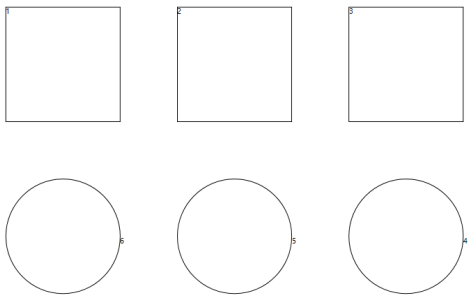


Fig. 4.11.2b Before Sorting

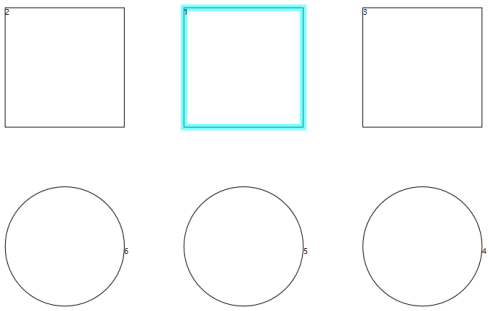


Fig. 4.11.2c After Sorting

When you need to re-sort halfway through using shortcut keys, you can click the "Reset Sorting" button, as shown in Fig. 4.11.2d. At this time, you can start sorting again from sequence number 1.

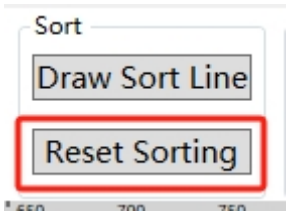


Fig. 4.11.2d Sort Reseting Button

4.12 Template size

This function can set the size of the graphic template. The size of the drawn graphic needs to be within the set template size parameter range for the generation of free reference coordinates.

Operation: Check the start template size, click "Edit", and the template size setting page will pop up. You can set the template size parameters according to actual conditions. As shown in Fig. 4.11.1.

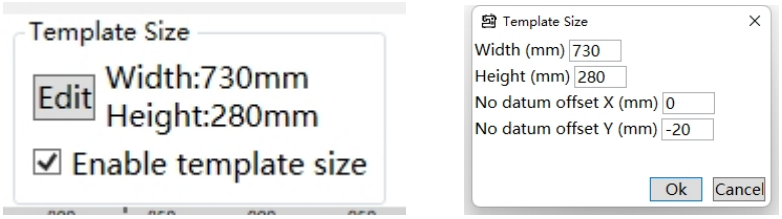


Fig. 4.12.1 Setting Template Size

If the drawn graphics exceed the set template size, a warning will pop up when processing commands. As shown in Fig. 4.12.2.

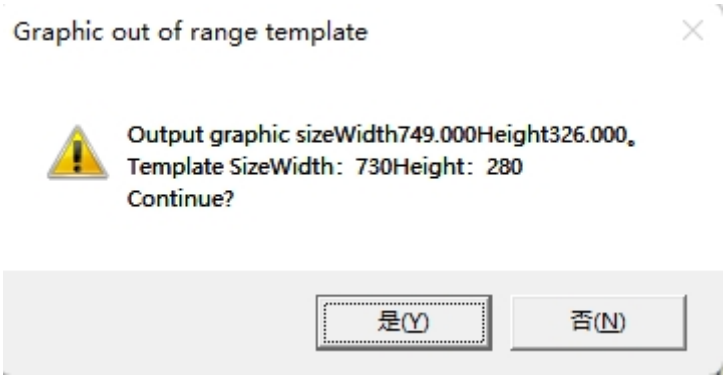


Fig. 4.12.2 Graphic Out of Range Template

V. Parameter Setting Area

5.1 List of layers

Display how many layers there are in the current graphics file, move the layer order, delete layers and layer information, header selection, etc. The list is shown in Fig. 5.1a below.

Fig. 5.1a List of layers

Double-click the layer to pop up the layer setting page, as shown in Fig. 5.1b below. The setup of this page is described in 5.4.

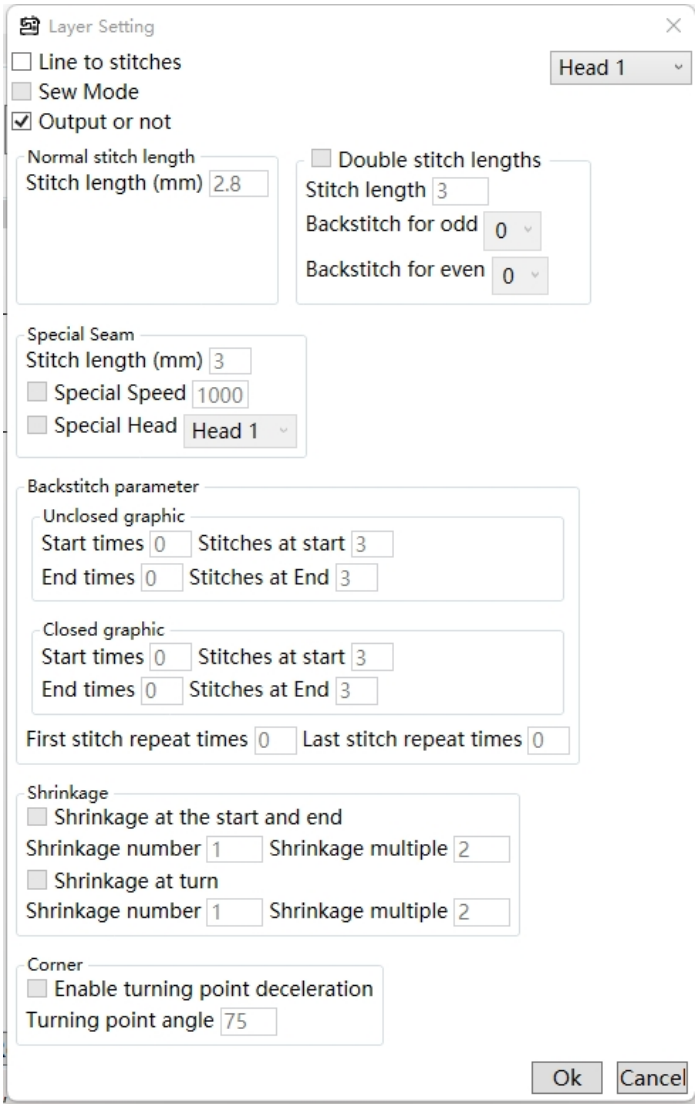


Fig. 5.1b Layer Settings

5.1.1 Number of layers

Display the number of layers, and different layer graphics will be displayed in different colors. The represented layer S/N will also be distinguished by different colors. Graphics of different layers can also be edited separately. The number is shown in Fig. 5.1.1a below. The layer graphics are shown in Fig. 5.1.1b below.

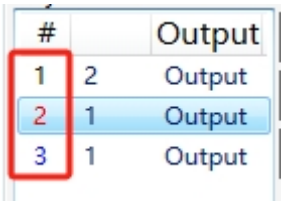
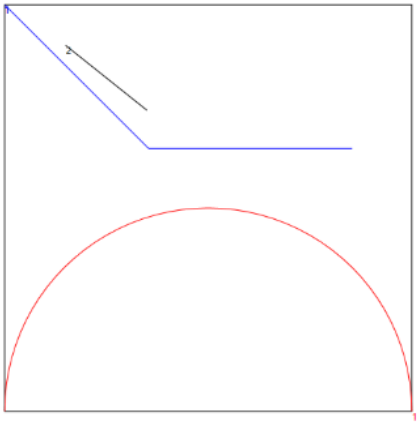


Fig. 5.1.1a Display of Number of Layers



Black is layer 1, red is layer 2, and blue is layer 3

Fig. 5.1.1b Display of Graphical Distinction

5.1.2 Moving Graph Order

Sort the layers in the layer list. The buttons are shown in Fig. 5.1.2a below.

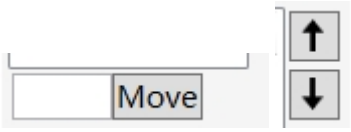


Fig. 5.1.2a Move Order Button

Operation: ① Select the layer whose order needs to be changed. Taking Layer 1 as an example, the selected graphic will be displayed with a blue background, as shown in Fig. 5.1.2b.

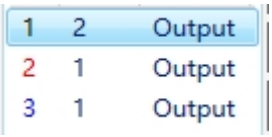
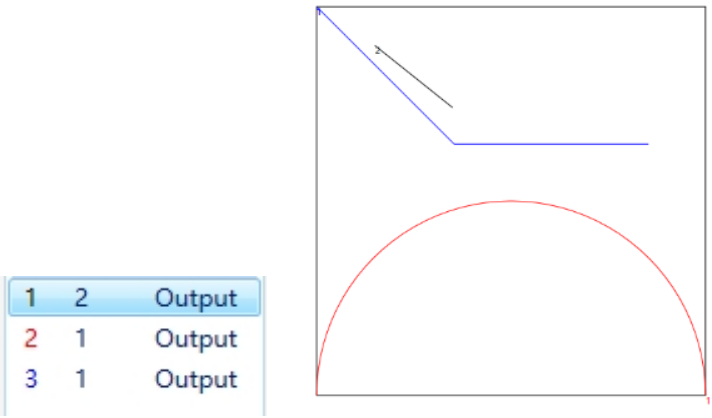


Fig. 5.1.2b Display of Selected Layer

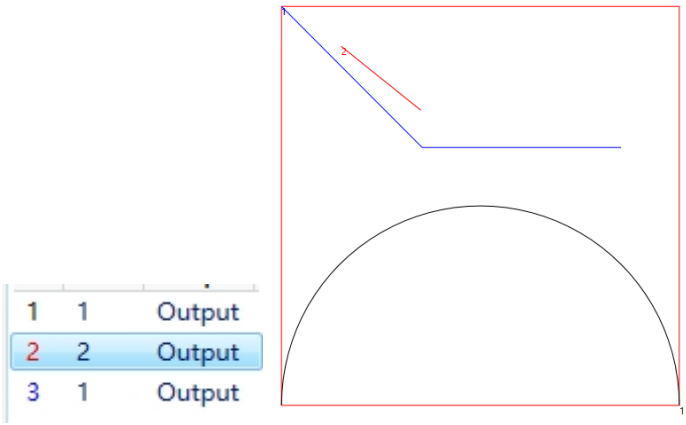
Then enter the number of digits to move to in the input box before the movement order button (taking input 2 as an example), as shown in Fig. 5.1.2c below. After clicking the "Move Order" button, layer 1 will move to the second position and layer 2 will move to the first position. As shown in Fig. 5.1.2d and 5.1.2e.

Fig. 5.1.2c Enter values

Fig. 5.1.2d Click Move Order



Before Operation



After Operating

Fig. 5.1.2e Schematic Diagram of Move Order Operation

② Select the layer (the selected effect is shown in Fig. 5.1.2b), click the up and down keys, as shown in Fig. 5.1.2f. After clicking the down button, layer 1 and layer 2 will swap positions, as shown in Fig. 5.1.2e.

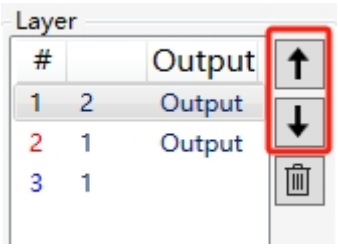
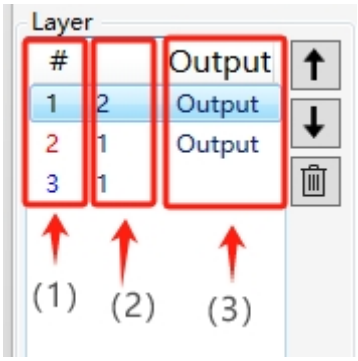


Fig. 5.1.2f Up and Down Key Move Order

5.1.3 Layer information

Display information such as the S/N of the layer, the number of graphics in the layer, and whether the layer is output. As shown in Fig. 5.1.3.



(1) Layer S/N (2) Number of graphics (3) Output or not (empty means no output)

Fig. 5.1.3 Layer Information

5.1.4 Delete layer

Delete the selected layer. The buttons are shown in Fig. 5.1.4.

Fig. 5.1.4 Delete Button

Operation: Select the layer to be deleted (the selected style is shown in 5.1.2b), click Delete, and the original layer will be deleted, along with the graphic files.

5.1.5 Head selection

Select the stitching head for the selected layer. Currently, our company selects Head 1 (i.e. stitching head). The buttons are shown in Fig. 5.1.5.

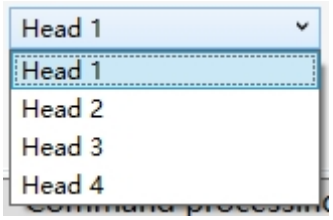


Fig. 5.1.5 Head Selection

5.2 Graphic list

Display how many graphics there are in the current layer, the order of moving graphics, and deleting graphics. The list is shown in Fig. 5.2a below.

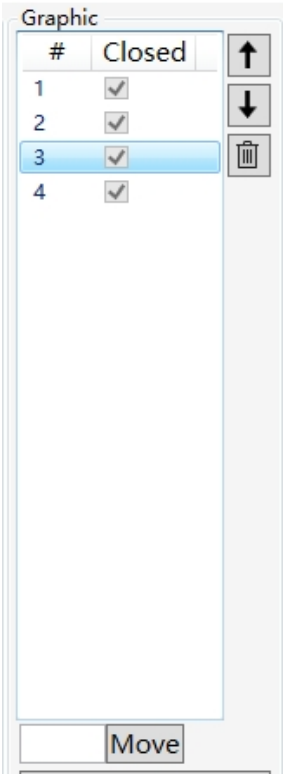


Fig. 5.2a Graphic List

Double-click the graphic to pop up a single graphic editing page, as shown in Fig. 5.2b below. The settings of this page are introduced in 6.1.1.

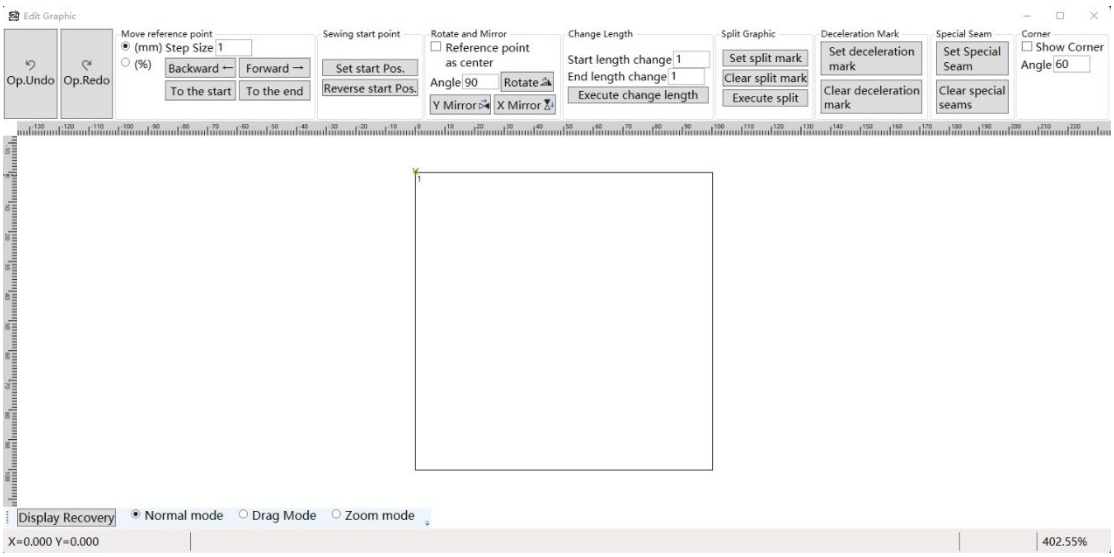


Fig. 5.2b Single Graphic Editing Page

5.2.1 Number of graphics

Display the number of graphics, and distinguish the graphics by serial numbers. As shown in Fig. 5.2.1 below

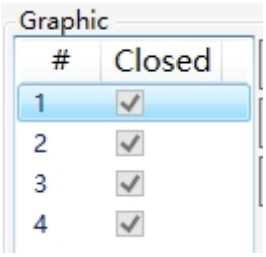


Fig. 5.2.1 Number of Graphics

5.2.2 Moving graphics order

The operation of sorting the graphics in the graphic list. The buttons are shown in Fig. 5.2.2a below.

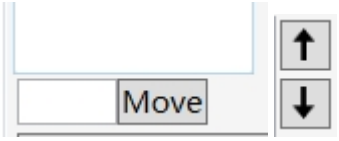


Fig. 5.2.2a Move Order Button

Operation: ① Select the graphic whose order needs to be changed. Taking Fig. 3 as an example, the selected graphic will be displayed on a blue background. In the canvas, the graphic will appear in a blue box selection style, as shown in Fig. 5.2.2b and 5.2.2c.

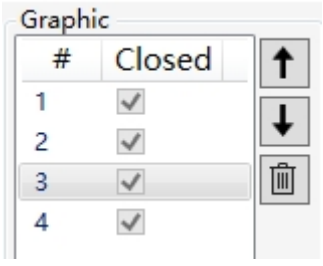


Fig. 5.2.2b Display of Selected Graphic List

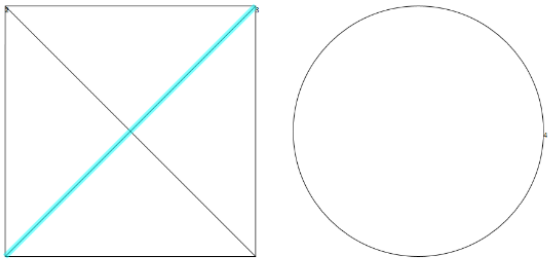


Fig. 5.2.2c Display of Selected Graphic Canvas

Then enter the number of digits to move to in the input box before the movement order button (taking input 1 as an example), as shown in Fig. 5.2.2d below. After clicking the "Move Order" button, graphic 3 will move to the first position, graphic 1 will move to the second position, graphic 2 will move to the third position, and so on. As shown in Fig. 5.1.2e and 5.1.2f.

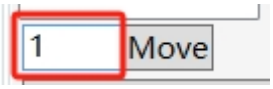
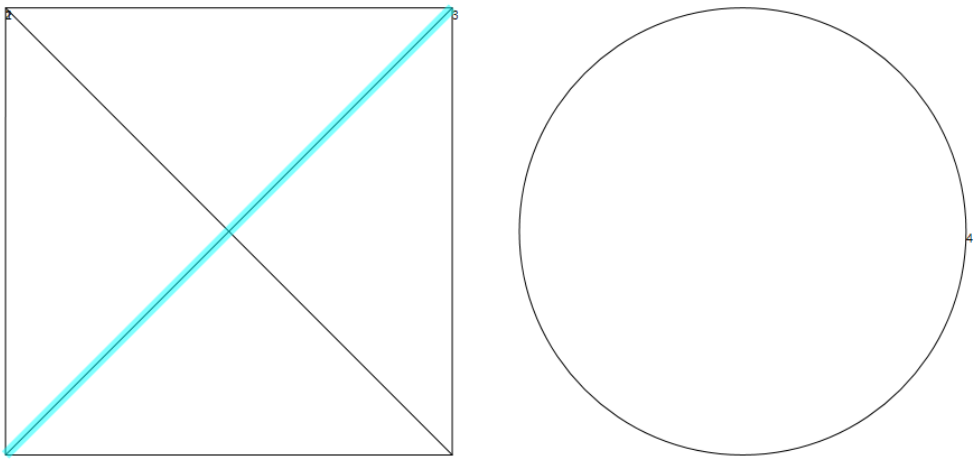
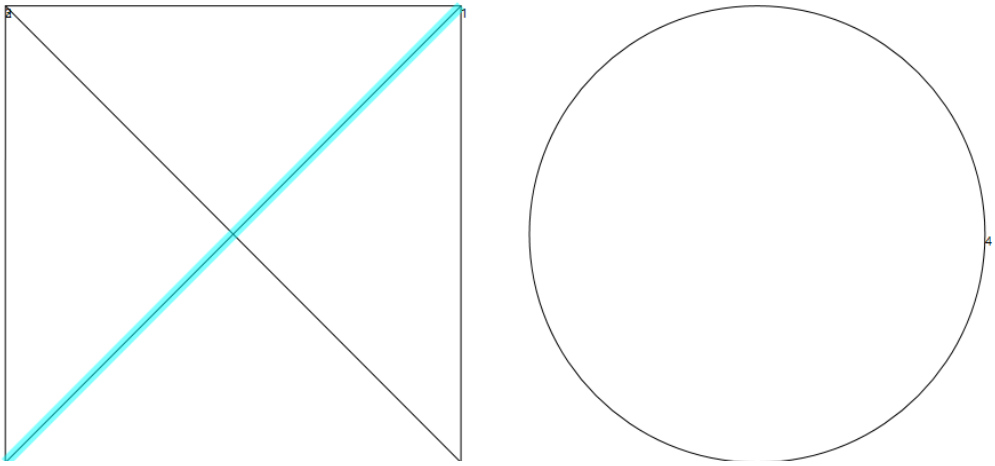


Fig. 5.2.2d Enter values

Fig. 5.2.2e Click Move



Before Operation



After Operating

Fig. 5.2.2f Schematic Diagram of Move Order Operation

② Select the graphic (the selected effect is shown in Fig. 5.1.2b), click the up and down keys, as shown in Fig. 5.1.2g. After clicking the down key, graphic 3 and graphic 4 will swap positions.

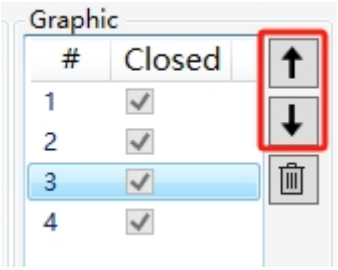


Fig. 5.2.2g Up and Down Key Move Order

③ Press and hold the Shift key on the keyboard, and then left-click the graphics in the canvas in sequence to sort the graphics from 1 to the last graphic. As shown in the figure above, there are 4 graphics, which can be sorted from 1 to 4 in this way.

5.2.3 Graphic information

Display the serial number of the graphic. As shown in Fig. 5.2.3.

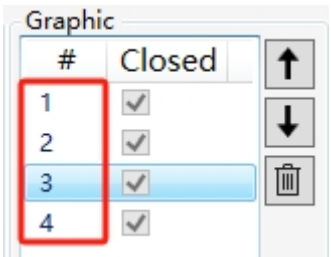


Fig. 5.2.3 Display of Graphic S/N

5.2.4 Graphic deletion

Delete the selected graphic. The buttons are shown in Fig. 5.2.4.

Fig. 5.2.4 Delete Button

Operation: There are four ways to delete the operation ① Select the graphic to be deleted in the list (the selected style is shown in 5.2.2b), click Delete, and the original graphic will be deleted. ② Select the graphic to be deleted in the canvas (the selected style is shown in 5.2.2b), click Delete, and the original graphic will be deleted. ③ After selecting a graph in the graph list, directly click the "Delete" button on the keyboard to delete the layer. ④ After selecting the graphic in the canvas, directly click the "Delete" button on the keyboard to delete the layer.

5.3 Batch edit

Batch editing operations can be performed on the graphics in the canvas. You can select all, only a part, or a single selection. You can also press and hold the "Ctrl" key on the keyboard while selecting multiple graphics as needed. The batch editing page is shown in Fig. 5.3 below.

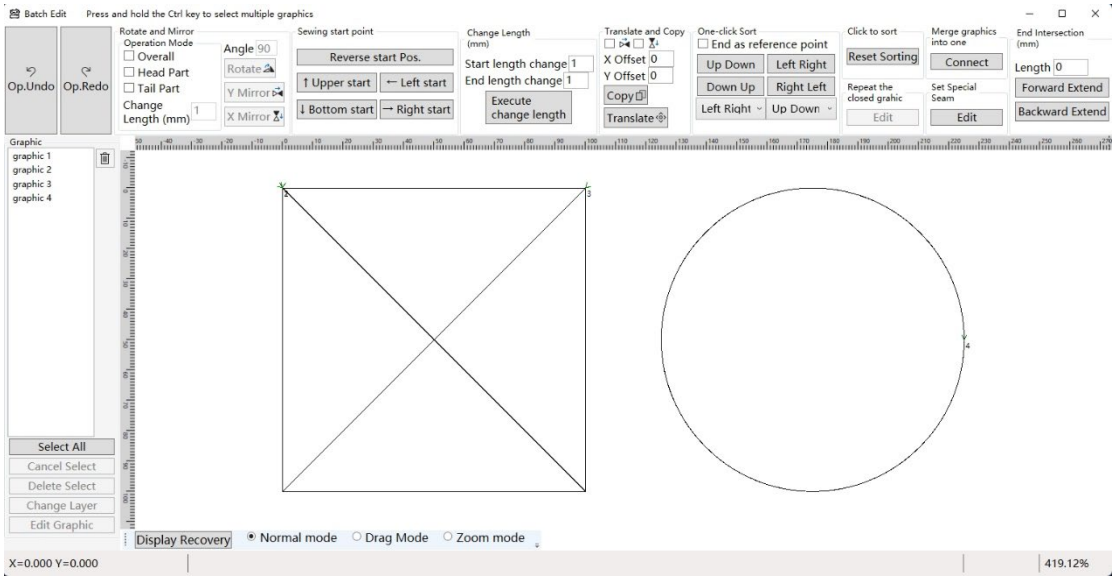


Fig. 5.3 Batch Editing Page

5.3.1 Operation Undo

Refer to 4.1 Operation Undo.

5.3.2 Operation Redo

Please refer to 4.2 Operation Redo

5.3.3 Rotate & Mirror

The selected graphics can be rotated or mirrored head to tail, as a whole. The parameter settings and buttons are shown in Fig. 5.3.3a below.

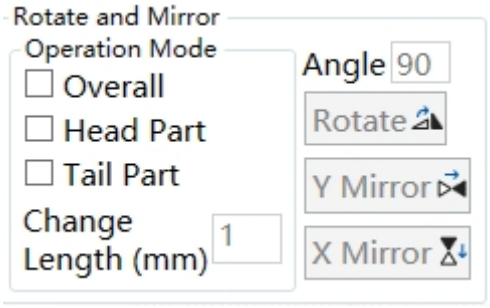
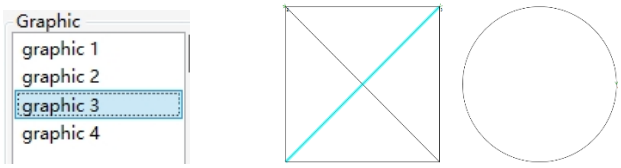


Fig. 5.3.3a Rotate and Mirror

Operation: ① Select the graphic to be modified and edited, which can be selected through the graphic list or in the canvas. Take the selected graphic 3 as an example, as shown in Fig. 5.3.3b below.



Graphic list selection Canvas selection

Fig. 5.3.3b Selecting Graphics

② Select the operation mode, check the whole or head and tail, and select the part to be rotated. After checking the whole, you need to click the whole button again to uncheck it, and then you can select the head and tail mode. When selecting the head and tail mode, you need to enter the length of the head and tail (entering a value of 20 as an example). As shown in Fig. 5.3.3c below.

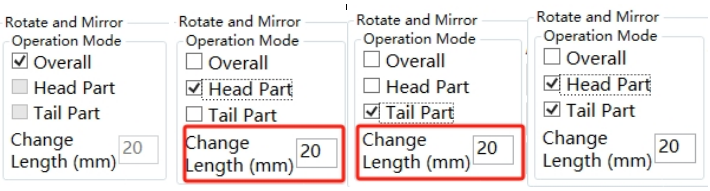
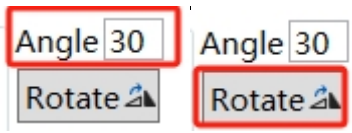


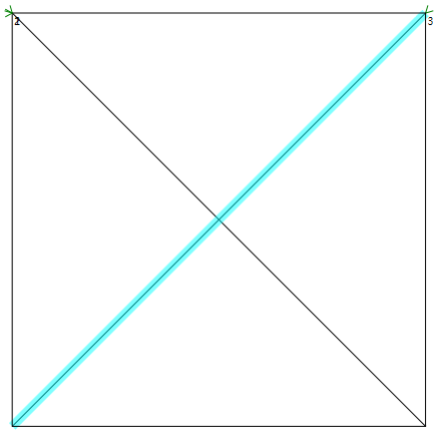
Fig. 5.3.3c Operation Mode Selection

③ Enter the angle parameter and click "Rotate". As shown in Fig. 5.3.3d and 5.3.3e below.

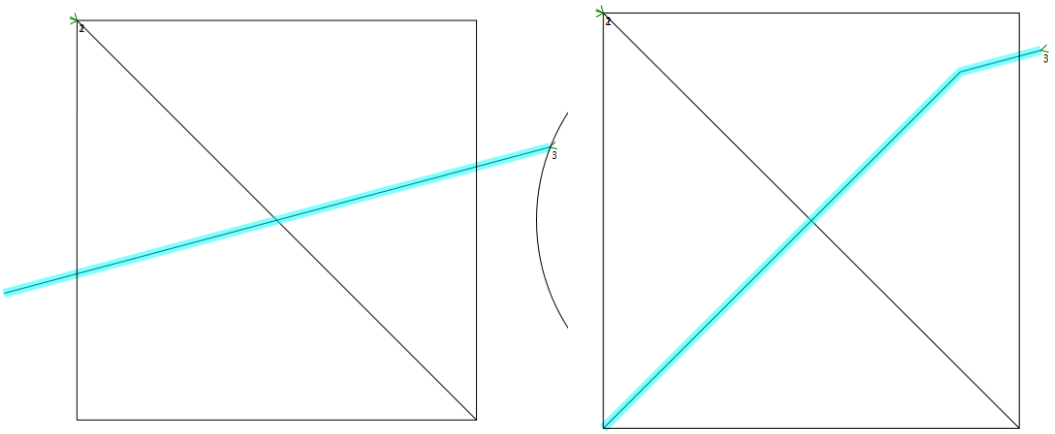


Angle input Rotary button

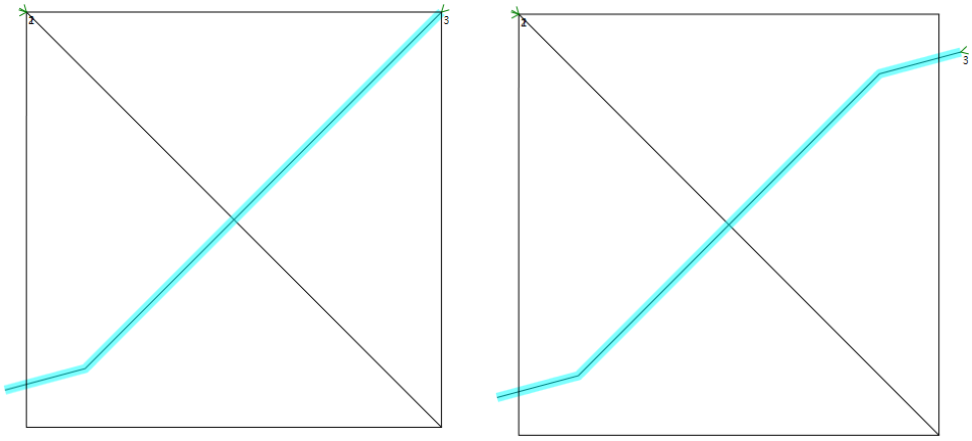
Fig. 5.3.3d Input Parameters and Rotary Buttons



Before Operation



Integral rotation Head rotation

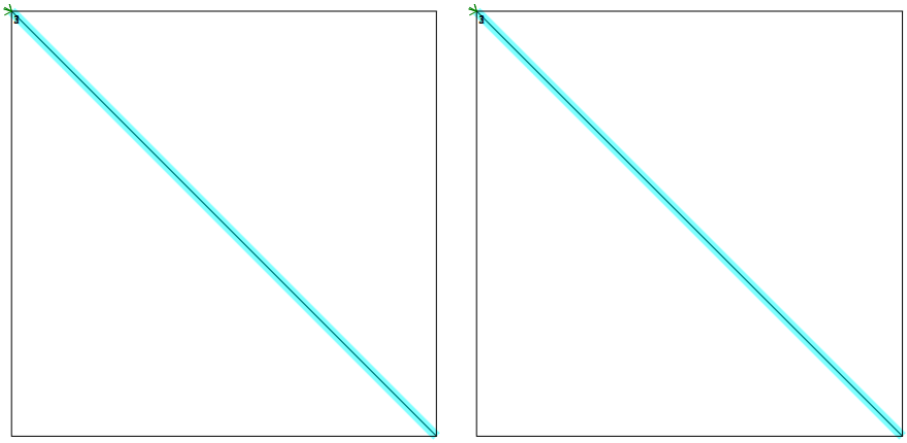


Tail rotation Head & tail rotation

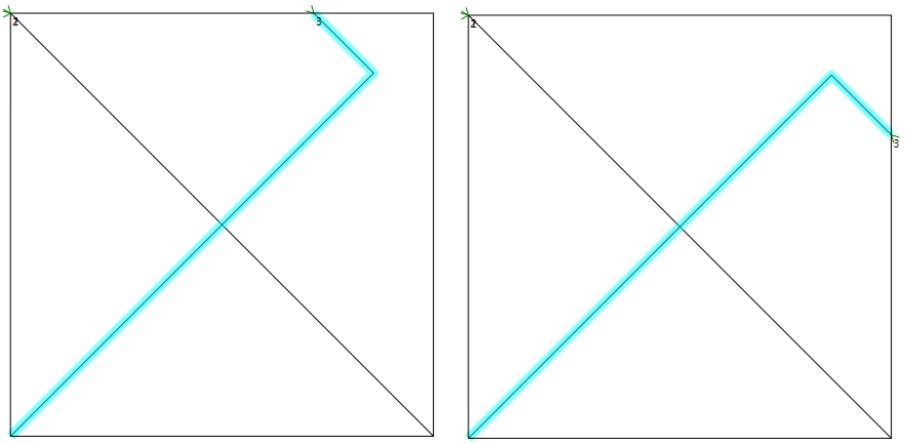
Fig. 5.3.3e Schematic Diagram of Rotation Operation

④ Click X-axis Mirror or Y-axis Mirror to mirror the selected part. As shown in Fig. 5.3.3f and 5.3.3g below. The schematic diagram before operation is shown in 5.3.3e.

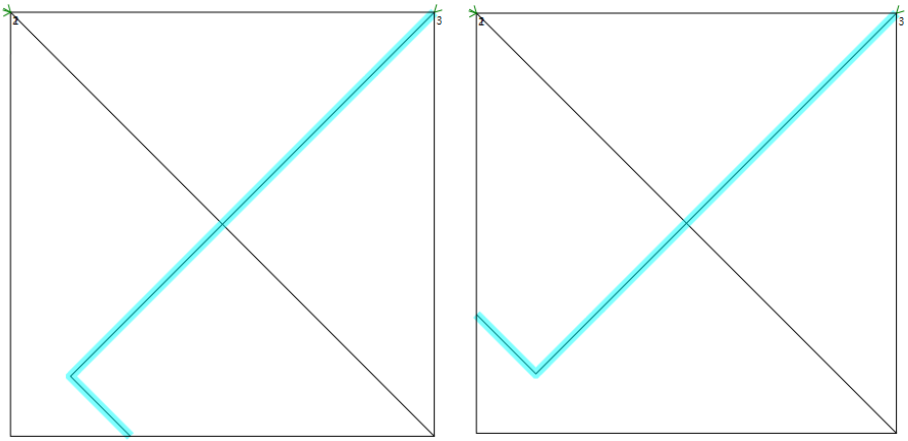
Fig. 5.3.3f X/Y Axis Mirror Button



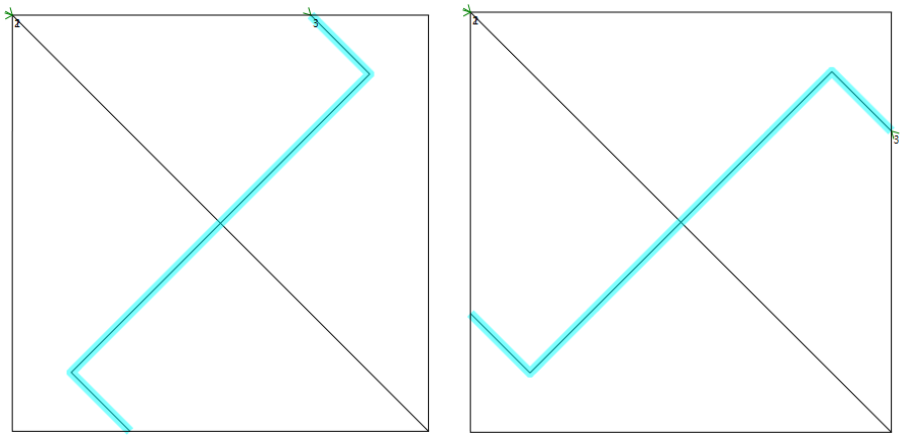
Overall Y-axis Mirror Overall X-axis Mirror



Head Y-axis Mirror Head X-axis Mirror



Tail Y-axis Mirror Tail X-axis Mirror



Head & Tail Y-axis Mirror Head & Tail X-axis Mirror

Fig. 5.3.3g Mirror Operation Diagram

5.3.4 Setting of sewing start point direction

This parameter mainly sets the direction of the sewing start point of the currently selected graphic. The parameter keys are shown in Fig. 5.3.4a below.

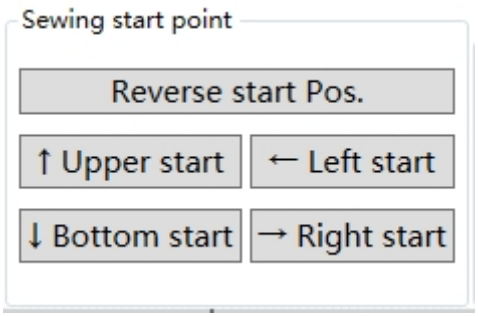


Fig. 5.3.4a Sewing Start Point Parameter Button

Operation: ① Select the graphic to be edited, as shown in Fig. 5.3.3b.

② Click the reverse button of the sewing start point, and the green arrow is the sewing start direction of the graphic, as shown in Fig. 5.3.4b and 5.3.4c.

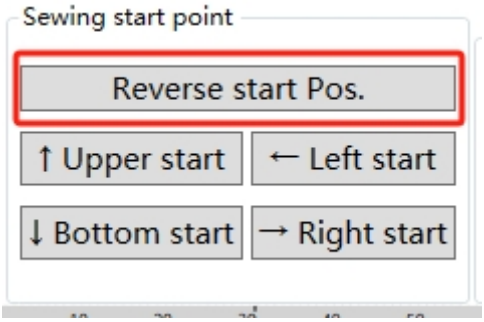
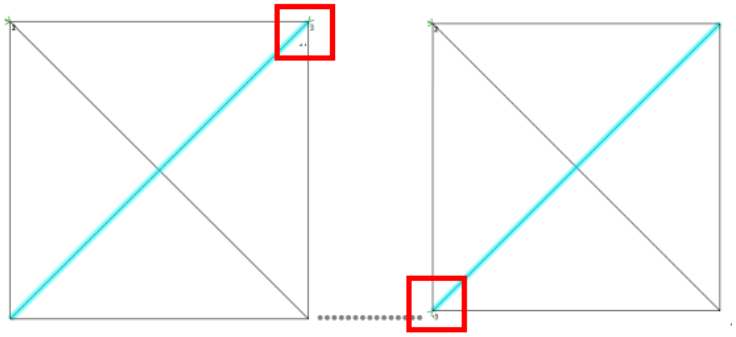


Fig. 5.3.4b Reverse Button at the Sewing Start Point



Before operation **After operation**

Fig. 5.3.4c Schematic Diagram of Reverse Operation at the Sewing Start point

③ Take the circle in the figure below as an example and click the upper start point, lower start point, left start point, and right start point buttons respectively, as shown in Fig. 5.3.4d.

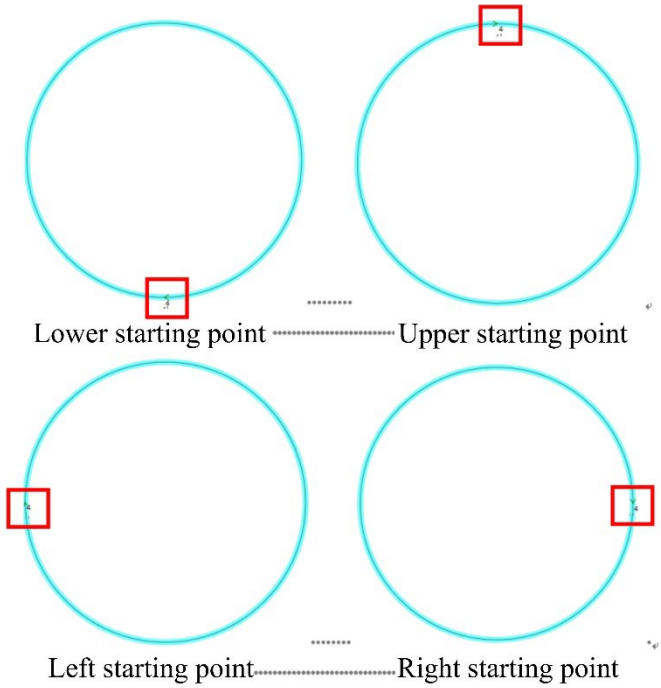


Fig. 5.3.4d Schematic Diagram of Four-way Sewing start Point Operation

5.3.5 Change the start and end length

Change the start and end length of the selected graphic. The parameter settings and buttons are shown in Fig. 5.3.5a below.

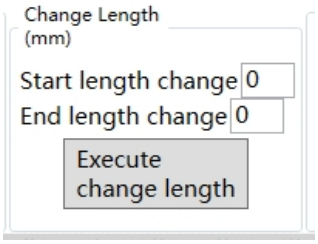


Fig. 5.3.5a Change the Start and End Length

Operation: ① Select the graphic to be edited, as shown in Fig. 5.3.3b.

② Enter the value in the variable head length and variable tail length parameter boxes. The following is an example of a variable head length. As shown in Fig. 5.5.5b.

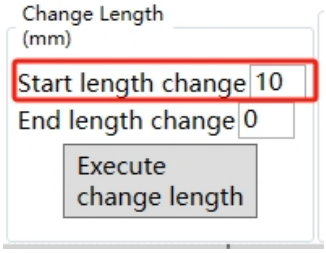


Fig. 5.3.5b Enter values

③ Click Execute to make it longer. As shown in Fig. 5.3.5c. The graphical changes are shown in Fig. 5.3.5d.

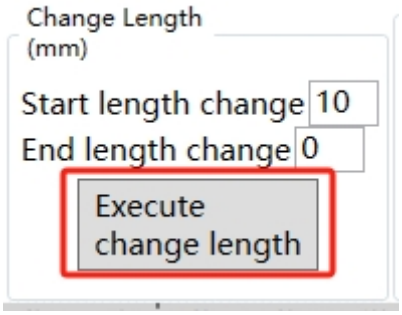
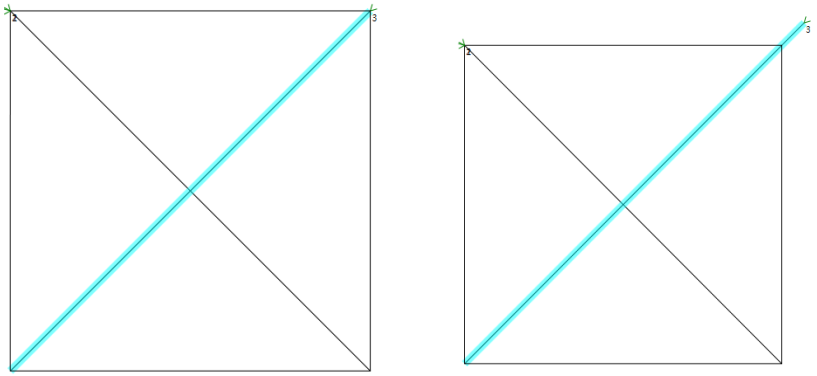


Fig. 5.3.5c Click Execute Change Length



Before operation **After operation**

Fig. 5.3.5d Schematic Diagram of Variable Length Operation

5.3.6 Translate and copy operations

Translate and copy the selected graphics. The parameter settings and buttons are shown in Fig. 5.3.6a below.

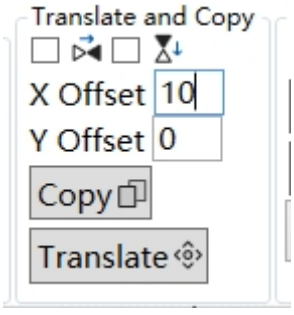


Fig. 5.3.6a Translate and Copy

Operation: ① Select the graphic to be edited, as shown in Fig. 5.3.3b.

② Enter the value in the horizontal offset and vertical offset parameter boxes. As shown in Fig. 5.3.6b.

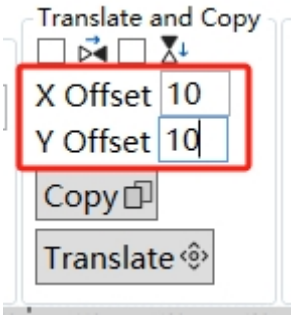


Fig. 5.3.6b Enter values

③ After clicking the "Translate", the graphic will be moved a distance. As shown in Fig. 5.3.6c. The graphical changes are shown in Fig. 5.3.6d.

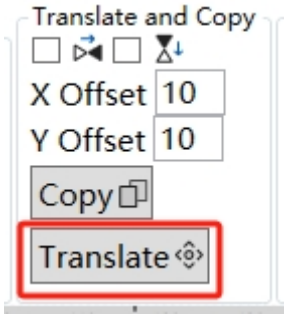
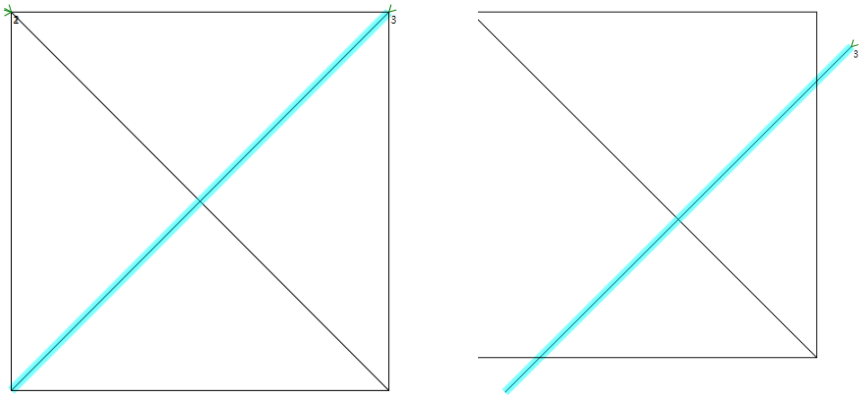


Fig. 5.3.6c Click Translate



Before operation **After operation**

Fig. 5.3.6d Schematic Diagram of Translation Operation

④ Check whether to perform X/Y axis mirroring and enter the offset distance. Take vertical mirroring as an example, as shown in Fig. 5.3.6e below.

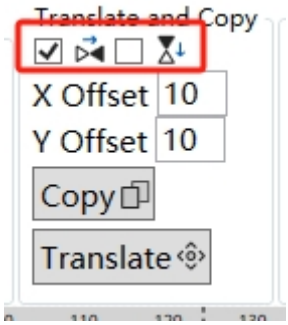


Fig. 5.3.6e X/Y Axis Mirror Setting

⑤ Click the copy button to mirror its original graphic and move it a distance before copying it into a new graphic. As shown in Fig. 5.3.6f below. The graphical changes are shown in Fig. 5.3.6g.

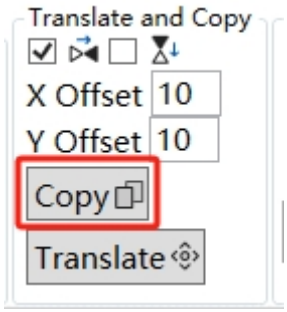
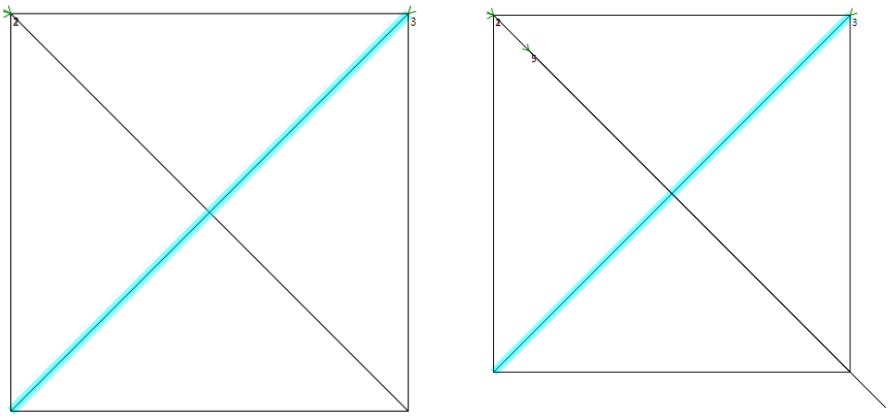


Fig. 5.3.6f Click Copy



Before operation **After operation**

Fig. 5.3.6g Schematic Diagram of Copy Operation

5.3.7 One-click sorting

Perform one-click sorting on the selected graphics in the canvas. The function keys are shown in Fig. 5.3.7a below.

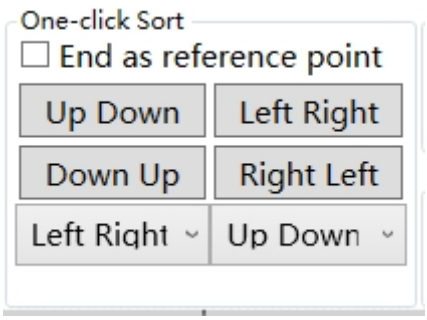


Fig. 5.3.7a One-click Sort Button

Operation: ① Click the "Up Down", "Down Up", "Left Right", "Right Left" buttons to perform different sorting respectively. If check the "based on the tail point", it will be sorted based on the tail point, otherwise it will be based on the sewing start point.

② Click "Up Down" to sort from top to bottom.

③ Click "Down Up" to sort from bottom to top.

④ Click "Left Right" to sort from left to right.

⑤ Click "Right Left" to sort from right to left.

⑥ As shown in Fig. 5.3.7b below, if the Y coordinates of the benchmarks are the same and the "up & down" or "down & up" sorting method is selected at the same time, they will be sorted from left to right; if the X coordinates of the benchmarks are the same and the "left & right" or "right & left" sorting method is selected at the same time, they will be sorted from top to bottom.

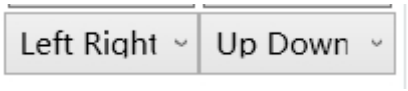


Fig. 5.3.7b Sorting Parameters

5.3.8 Merge graphics into one

The function of connecting two independent lines with overlapping points, the operation button is shown in Fig. 5.3.8a below.

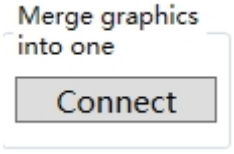


Fig. 5.3.8a Wire Connection Button

Operation: ① First select two independent lines with overlapping points, as shown in Fig. 5.3.8b below.

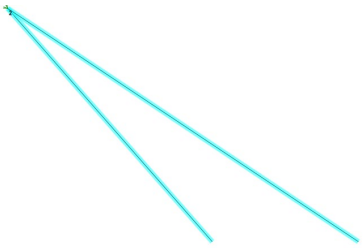
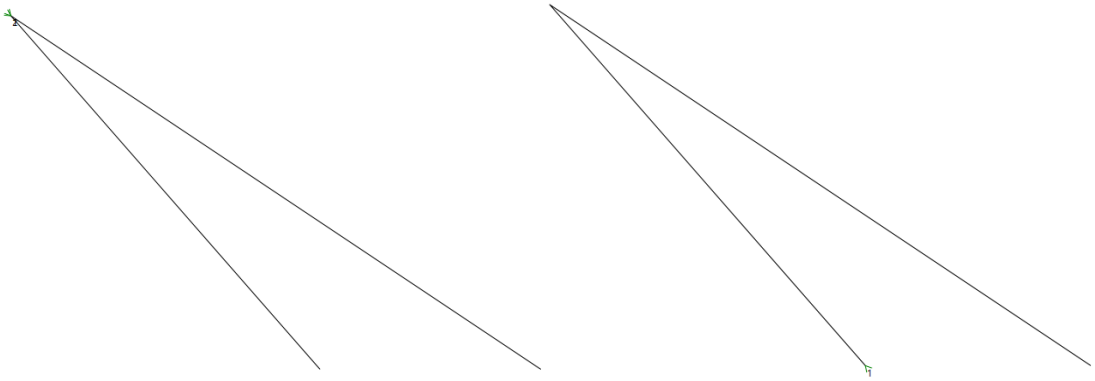


Fig. 5.3.8b Selected Graphics

② Then click the "Connect" button, and the two lines will be connected into a graphic. The operation diagram is shown in Fig. 5.3.8c below.



Before operation After operation

Fig. 5.3.8c Schematic Diagram of Line Connection Operation

5.3.9 Repeat the closed graphic

Repeated stitch operations on closed graphics. The function buttons are shown in Fig. 5.3.9a below.

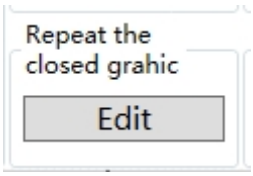


Fig. 5.3.9a Closed Graphic Repeat Button

Operation: Select the graphic to be repeated, and then click Edit. The pop-up window is shown in Fig. 5.3.9b below. Select the number of repetitions (take 3 times as an example here). Click "OK". After the graphic turns, this graphic will be stitched three times. As shown in Fig. 5.3.9c below.

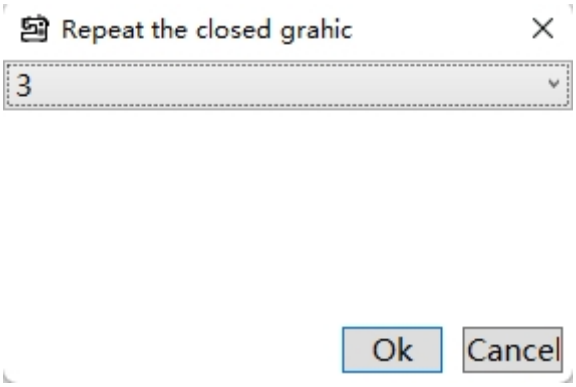


Fig. 5.3.9b Closed Graphic Repeat Editing Window

5.3.10 Settings of special seam

Add the function of special seam to the selected section (the graphic file needs to be transferred first), and the function keys are shown in Fig. 5.3.10a below.

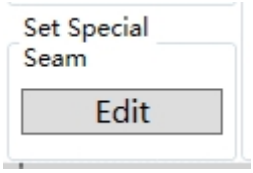


Fig. 5.3.10a Setting Special Seam Button

Operation: ① Turn the graphic file to point as shown in Fig. 5.3.10b below.

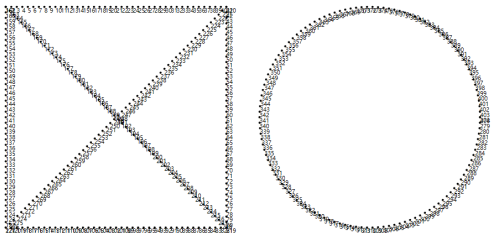


Fig. 5.3.10b Graphic File Point Converting

② Enter the batch editing page, select the start and end points of the special seam to be added, and click the edit button under Setting Special seam. The pop-up window is shown in Fig. 5.3.10c. If there is no point transfer, a pop-up window will appear indicating that the layer has not been transferred. As shown in the Fig. 5.3.10d.

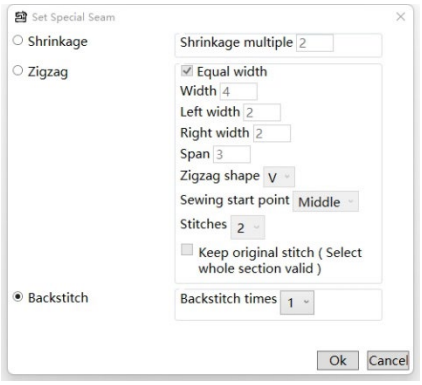
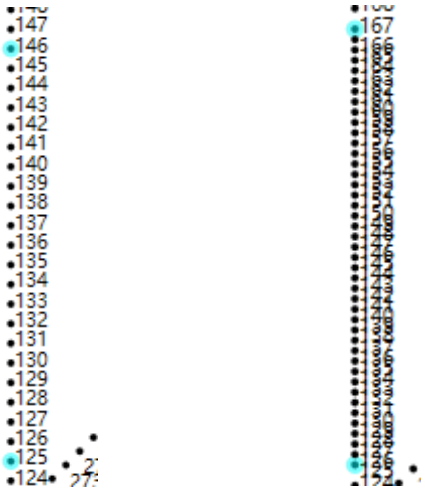


Fig. 5.3.10c Pop-up Window for Setting Special Seam **Fig. 5.3.10d Error Pop-up Prompt**

③ You can select the style of special seam (shrinkage, bartack stitching, reverse stitching). If you select different styles, the parameter setting box on the right will be activated. Taking the shrinkage as an example, you can set the shrinkage factor (2 times as an example). After point converting of the graphic file, each point is a graphic. By holding down the "Ctrl" key on the keyboard and clicking different points with the mouse, we can select a certain number of points. After clicking OK, the selected section contained in the selected point will be processed by shrinkage according to factor. As shown in Fig. 5.3.10e below.



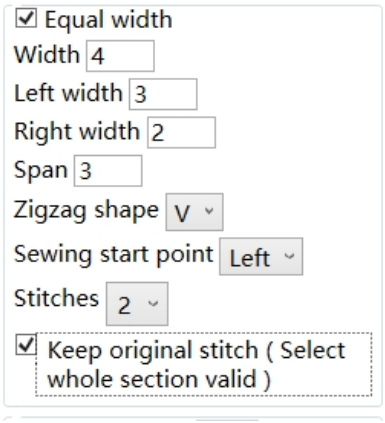
Before operation **After operation**

Fig. 5.3.10e Schematic Diagram of Setting Special Seam

Introduction to various special seam:

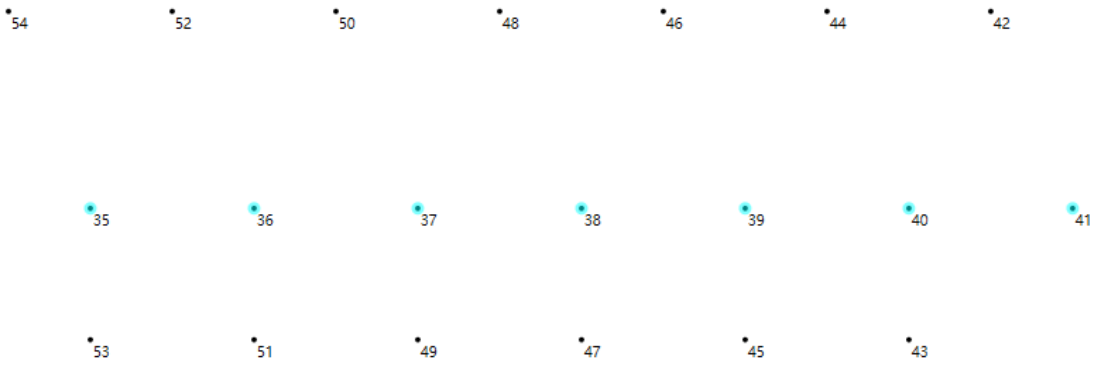
(1) Shrinkage: refer to Fig. 5.3.10e.

(2) V-shaped stitching: With the parameter width of 4, left width of 3, right width of 2, span of 3, sewing start point is left, number of stitches is 2, equal width unchecked, keep the original stitch (select the whole section to be valid) checked, and the zigzag stitching shape is V. When the stitch length is less than the span, only one point is inserted between the original needle points. As shown in Fig. 5.3.10f below.



Bartack stitching parameter setting

Before Operation



After Operating

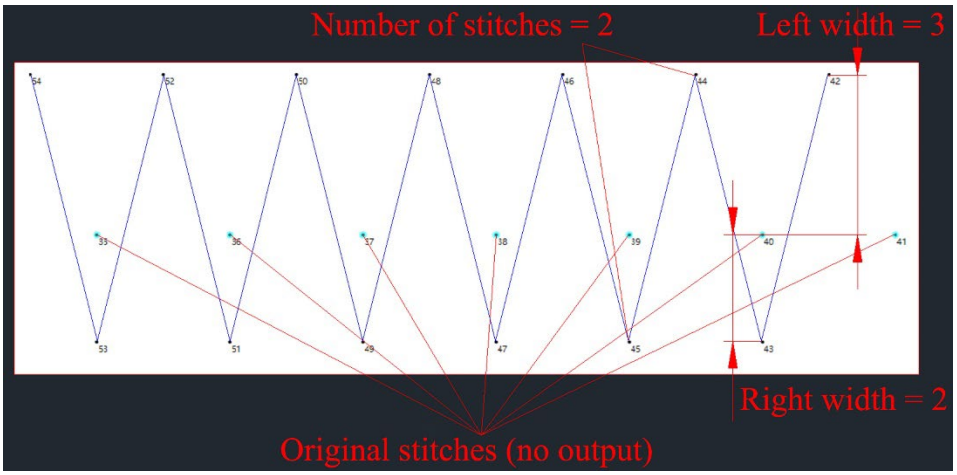
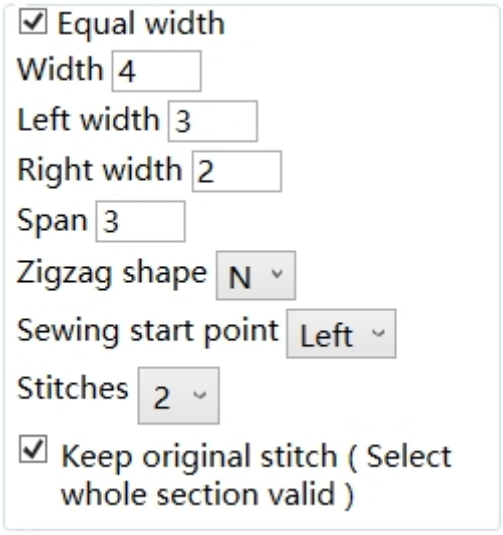


Fig. 5.3.10f Schematic Diagram of V-shaped Stitching Operation

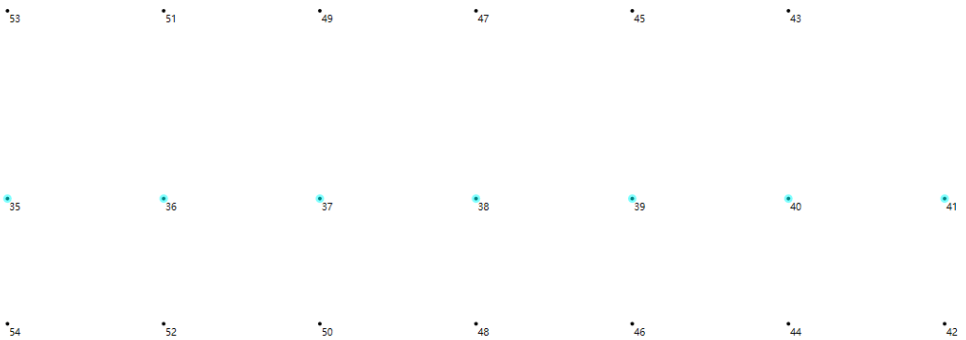
Note: If equal width is checked, you only need to change the width parameter, and the sum of the widths will be distributed 1:1 on the left and right. If the width is set to 4, the left and right widths are both 2.

(3) N-shaped stitching: with parameter width of 4, left width of 3, right width of 2, span of 3, sewing start point is left, number of stitches is 2, equal width unchecked, keep the original stitch (select the whole section to be valid) checked, zigzag stitching shape is N. When the stitch length is less than the span, only one point is inserted between the original needle points. As shown in Fig. 5.3.10g below.



Bartack stitching parameter setting

Before Operation



After Operating

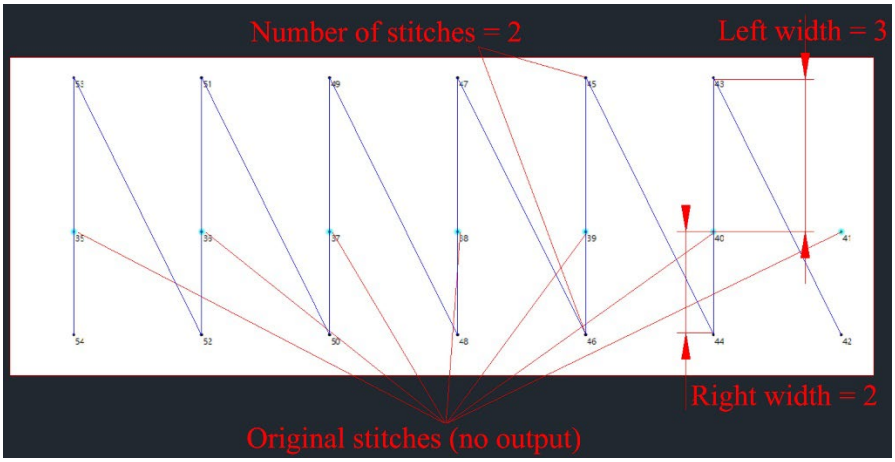


Fig. 5.3.10g Schematic Diagram of N-shaped Stitching Operation

Note: If equal width is checked, you only need to change the width parameter, and the sum of the widths will be distributed 1:1 on the left and right. If the width is set to 4, the left and right widths are both 2.

(4) Reverse stitch: Just check the reverse stitching button, and the selected section will be reversed once. As shown in Fig. 5.3.10h below.

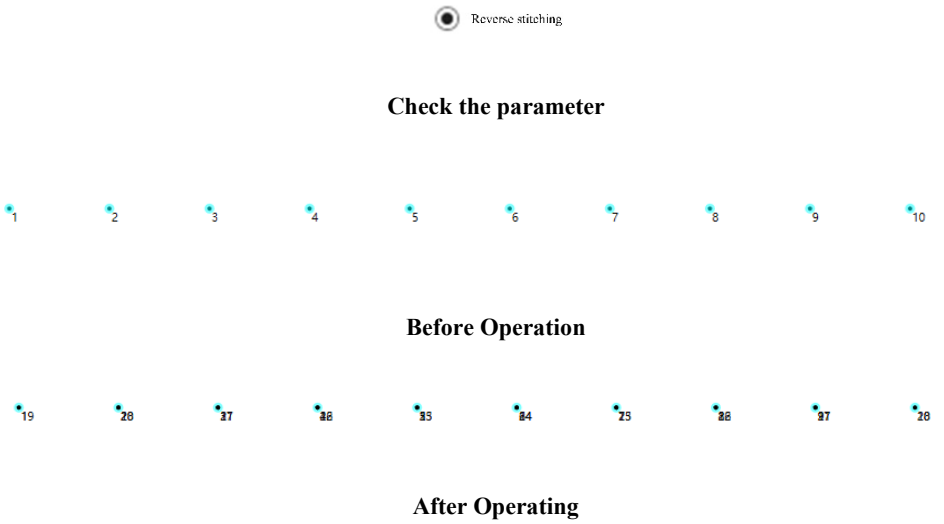


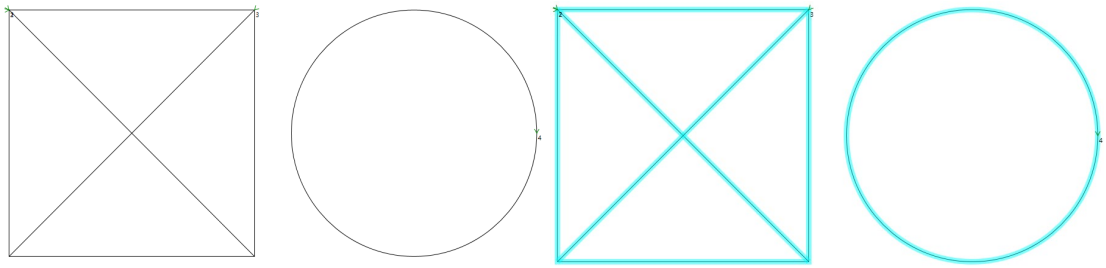
Fig. 5.3.10h Schematic Diagram of Reverse Stitching Operation

5.3.11 Select all

Select all graphics in the current canvas, and the operation buttons are shown in Fig. 5.3.11a below.

Fig. 5.3.11a Select All Buttons

Operation: Click the button directly, and all graphics in the canvas will be selected. The operation diagram is shown in Fig. 5.3.11b below.



Before operation **After operation**

Fig. 5.3.11b Schematic Diagram of All Selected Operations

5.3.12 Cancel selection

When there are graphics selected in the canvas, you can clear the selection status of all graphics with one click. The buttons are shown in Fig. 5.3.12a below.

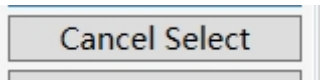
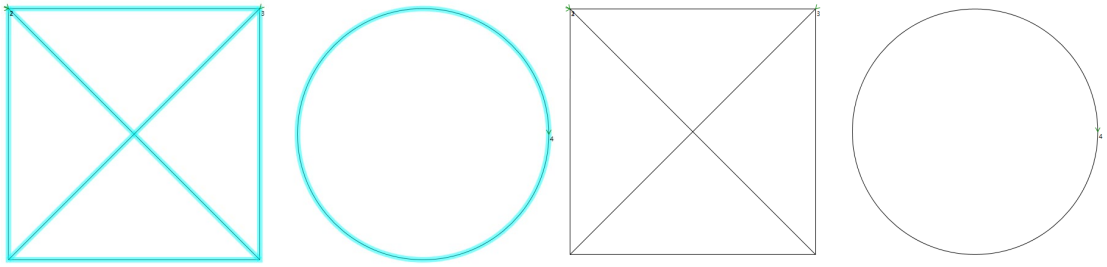


Fig. 5.3.12a Cancel Select Button

Operation: When a graphic is selected in the canvas, click the "Deselect" button to clear the selection. The operation diagram is shown in Fig. 5.3.12b below.



Before operation **After operation**

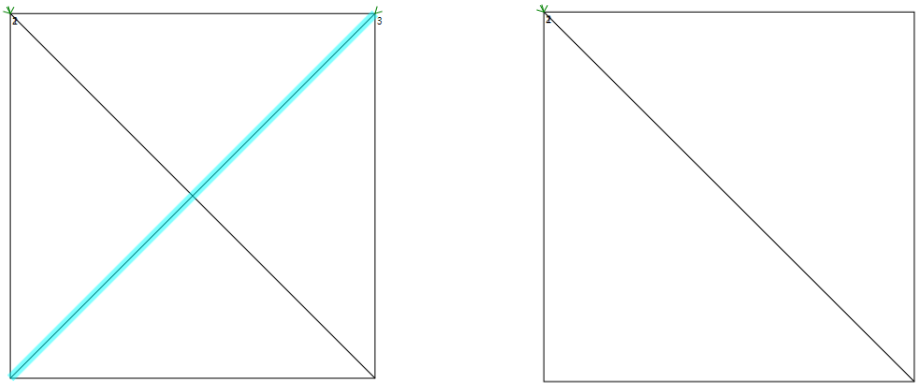
Fig. 5.3.12b Schematic Diagram of Unchecking Operation

5.3.13 Delete selected

Delete the selected graphics in the current canvas. The operation buttons are shown in Fig. 5.3.13a below.

Fig. 5.3.13a Delete Select Button

Operation: Click the button directly, and the selected graphics in the canvas will be deleted. The operation diagram is shown in Fig. 5.3.13b below.



Before operation **After operation**

Fig. 5.3.13b Schematic Diagram of Delete Selected Operation

5.3.14 Change layer

To change the layer of the selected graphics, press the button as shown in Fig. 5.3.14a below.

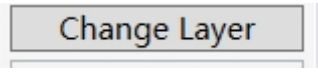


Fig. 5.3.14a Layer Change Button

Operation: ① Select the graphic that needs to change the layer. Here, take graphic 2 as an example, click the "Change Layer" button, and the pop-up window is shown in Fig. 5.3.14b below.

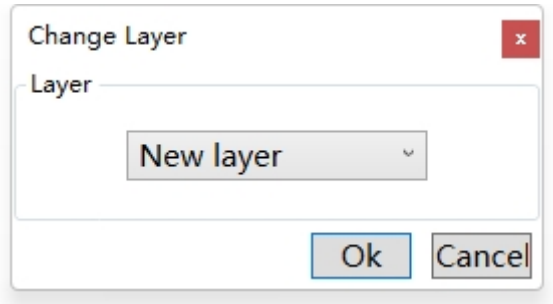
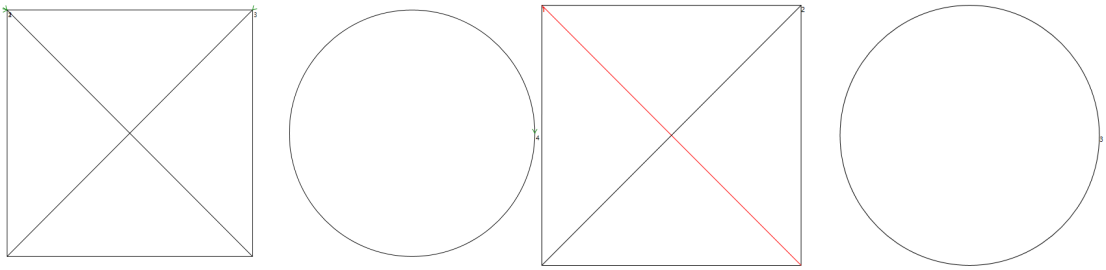


Fig. 5.3.14b Pop-up Window for Layer Change

② Select a new layer and click the "OK" button. The selected graphic will become the first graphic of layer 2, and the relative graphic color will change. The operation diagram is shown in Fig. 5.3.14c below.



Before operation **After operation**

Fig. 5.3.14c Schematic Diagram of Variable Layer Operation

5.3.15 Single graphic editing

Enter the single graphic editing page for the selected graphics. In the case of multiple graphics, this button will not be activated. The buttons are shown in Fig. 5.3.15a below.

Fig. 5.3.15a Single Graphic Editing Button

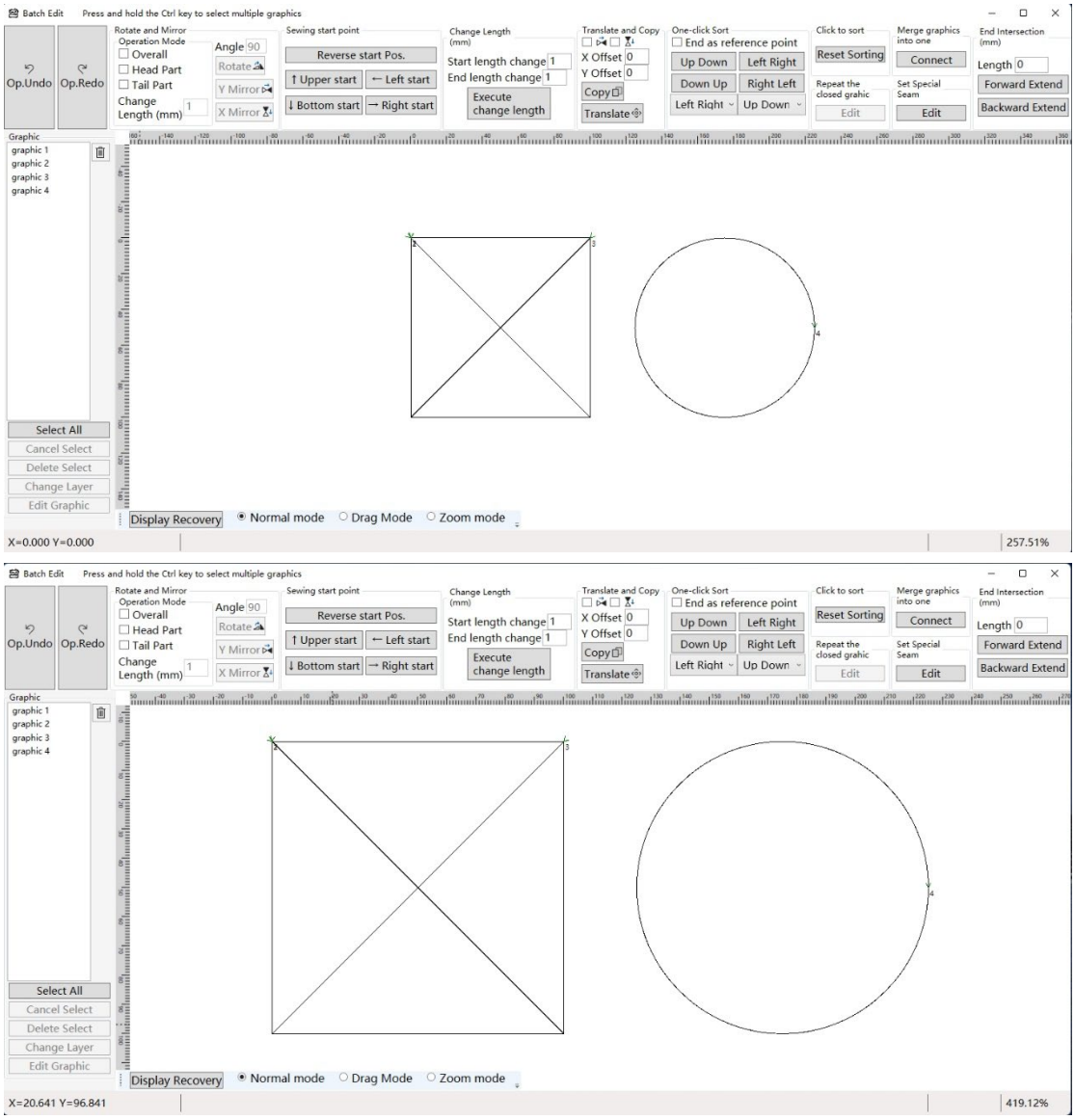
Operation: Select a graphic to be edited, click the "Single Graphic Edit" button, and the single graphic editing page will pop up.

5.3.16 Display recovery

After moving, scaling and other operations on the graphics, if you want to return the graphics to the center display, you can press this button to restore it. The button is shown in Fig. 5.3.16a below.

Fig. 5.3.16a Display Recovery Button

Operation: Click the "Display Recovery" button, and all graphics in the canvas will be displayed in the center of the canvas. As shown in Fig. 5.3.16b below.



Before operation After operation

Fig. 5.3.16b Schematic Diagram of Display Recovery Operation

5.3.17 Operation mode selection

There are three operation modes: normal mode, drag mode, and zoom mode.

① In normal mode, the mouse button is used to select a graphic, the scroll wheel is used to zoom in and out of the graphic, and pressing and holding the scroll wheel to move the graphic.

② In drag mode, press and hold the left mouse button to move the mouse. After releasing the button, the graphics will be moved. The scroll wheel is used to zoom in and out of the graphics, and pressing and holding the scroll wheel to move the graphics.

③ In zoom mode, the left mouse button is to enlarge the graphic, the right mouse button is to reduce the graphic, the scroll wheel is to zoom the graphic, and pressing the scroll wheel to move the graphic.

The selection button is shown in Fig. 5.3.17a below.

Fig. 5.3.17a Operation Mode Selection Button

5.3.18 Click to sort

Refer to 4.11.2 Reset sorting

5.3.19 Extension of tail intersection point

To use this function, you need to select the graphics without point converting. When the end point of the selected graph intersects with the edge of another graphic, the selected graphic will start from the end point and move along the trajectory of the other graphic for a specified length (the value entered in the length edit box). The direction is to follow the direction of the other graphic.

Operated by:

① Select a graphic whose tail needs to meet the condition of intersecting with the edge of another graphic. As shown in Fig. 5.3.19a.

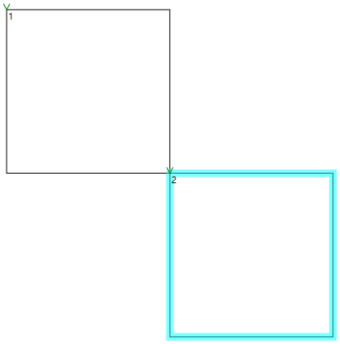


Fig. 5.3.19a Select the Graphic to be Extended

② Set to extend the specified length.

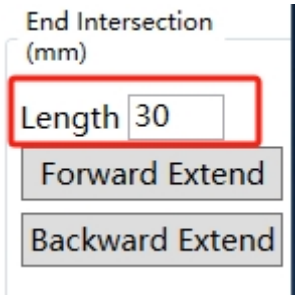


Fig. 5.3.19b Setting the Specified Length

③ The user selects "forward extension" or "reverse extension".

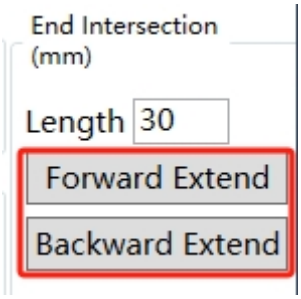
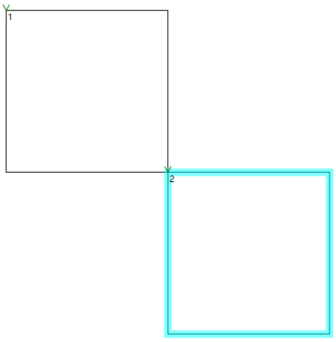
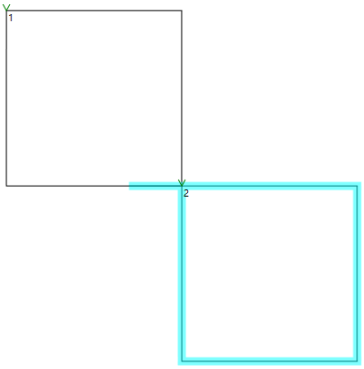


Fig. 5.3.19c Select the Extension Direction

④ Execution extension.



Before operation



After operation

5.4 Layer setting

This page is a page for setting a series of parameters for the currently selected layer, as shown in Fig. 5.4 below.

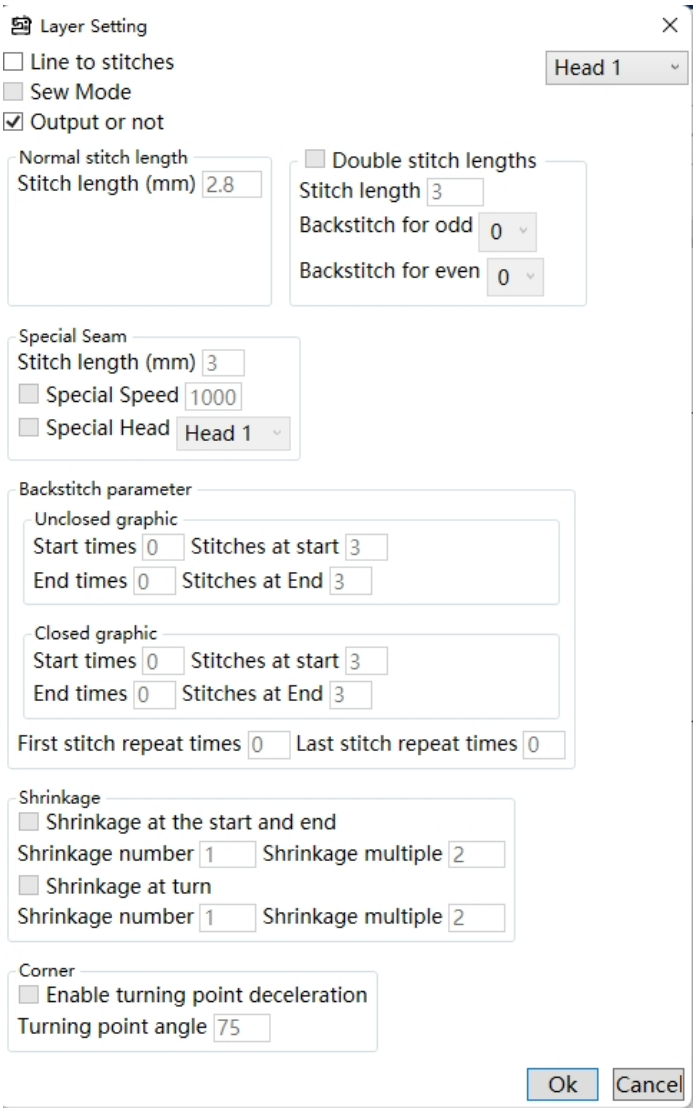


Fig. 5.4 Layer Settings Page

5.4.1 Layer Attribute

Set the point converting, Sew Mode, whether to output, head selection and other functions of this layer. The buttons are shown in Fig. 5.4.1a below.

Fig. 5.4.1a Layer Attribute Settings

Operation: ① The graphic of this layer will be converting points only when Line to Stitches is checked, and it cannot be activated without checking the Sew Mode. ② When the Line to Stitches

is checked, and the Sew Mode is activated, the stitching command will be issued only when the command is output. Otherwise, this pattern file will only move empty on the machine without stitching. ③ Whether the output is checked, this layer will be output and displayed in the program segment. Otherwise, this layer will not be written into the program. ④ Select the head, please refer to the functions described in 5.1.5.

5.4.2 Stitch length setting

Set the stitch length after the current layer point converting (need to be set when the Line to Stitches is checked). The parameter setting box is shown in Fig. 5.4.2a below.

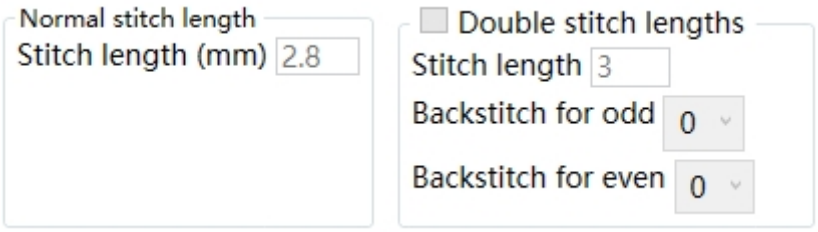


Fig. 5.4.2a Stitch Length Setting

Operation: ① Normal stitch length, enter a number in the stitch length box, taking 2.5mm as an example here (as shown in Fig. 5.4.2b). After clicking OK, the graphic in the canvas will be point converted, as shown in Fig. 5.4.2c below.

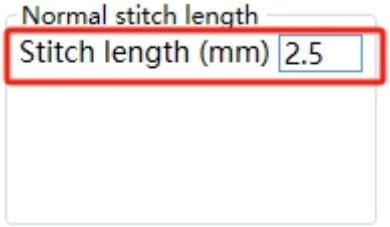
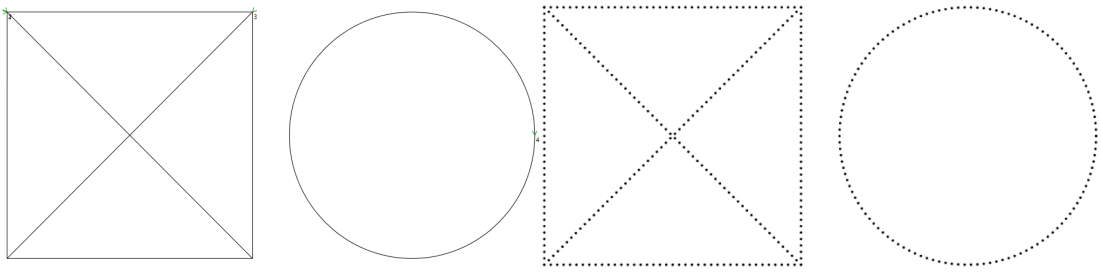


Fig. 5.4.2b Normal Stitch Length Setting



Before operation After operation

Fig. 5.4.2c Schematic Diagram of Normal Stitch Length Converting Point

② To set the double stitch length, you need to check the double stitch length and then enter the value in the stitch length box. Here, 5mm is taken as an example (as shown in Fig. 5.4.2d). The

normal stitch length is still 2.5mm. After clicking OK, the graphic on the canvas will have one stitch of 2.5mm and one stitch of 5mm point converting, as shown in Fig. 5.4.2e.

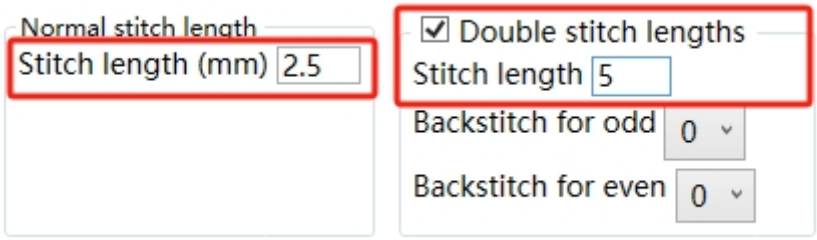
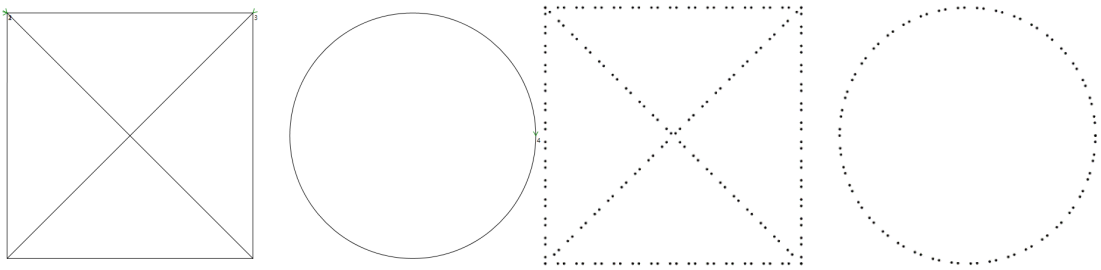


Fig. 5.4.2d Double Stitch Length Setting



Before operation After operation

Fig. 5.4.2e Schematic Diagram of Double Stitch Length Converting Point

③ Backstitch for odd and backstitch for even. After selecting the number of backstitches, the number of backstitches will be set in the odd or even segments. Here, 3 times of backstitch for odd is taken as an example. The setting is shown in Fig. 5.4.2f below. At this time, three backstitch will be performed in the odd-numbered sections.

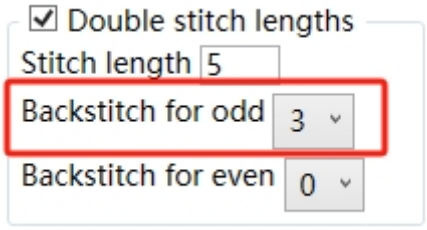


Fig. 5.4.2f Backstitch for Odd Setting

5.4.3 Setting of special seam

Set the parameters of special seam for places where special seam are set (need to be set when the Line to Stitches is checked). The parameter setting box is shown in Fig. 5.4.3a below.

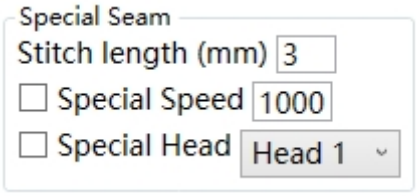


Fig. 5.4.3a Special Seam Setting

Operation: ① First select the special seam position in the single graphic editing. The setting button is shown in Fig. 5.4.3b below. For the setting method, please refer to 5.6.9 Special Seam Settings.

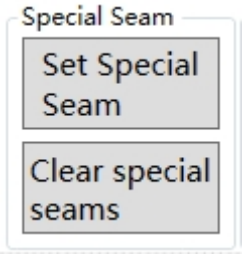


Fig. 5.4.3b Special Seam Setting Button

② After setting the special seam segment, enter the layer setting page and set the special seam parameters, as shown in Fig. 5.4.3c below. Click OK, as shown in Fig. 5.4.3d below.

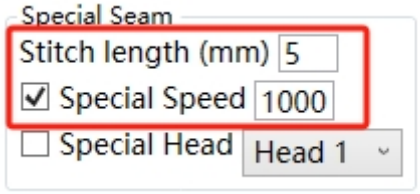
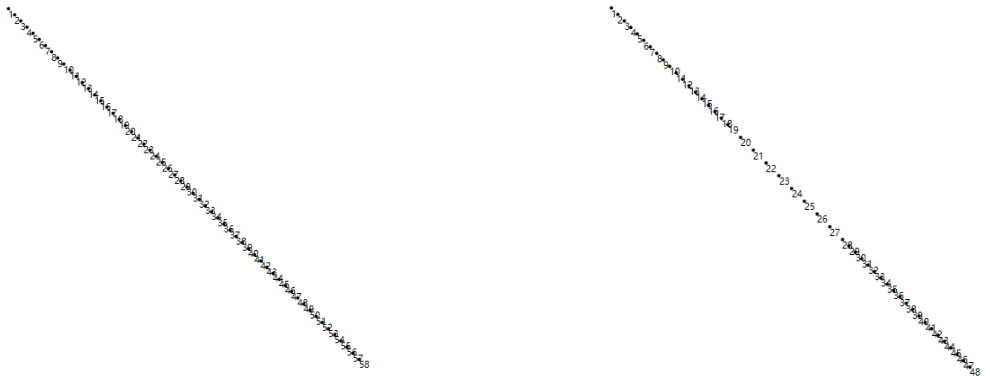
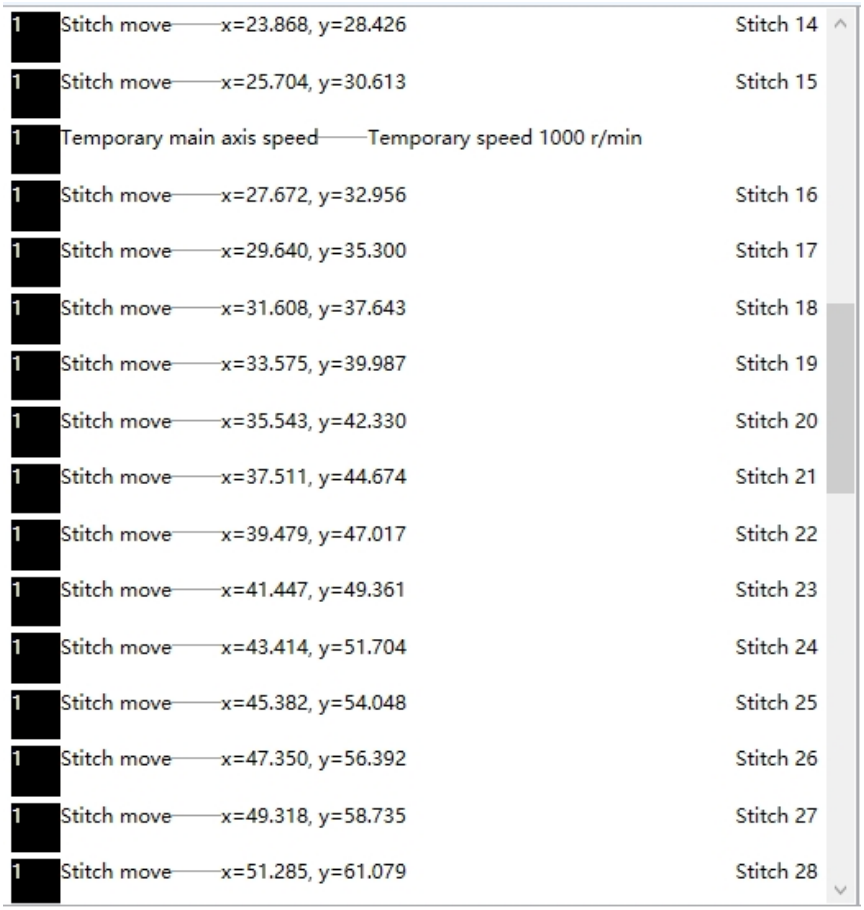


Fig. 5.4.3c Special Seam Parameter Setting



Normal point converting **Special seam point converting**



Special speed section

Fig. 5.4.3d Schematic Diagram of Special seam Setting Operation

5.4.4 Backstitch parameter setting

Set the parameters for backstitch of the graphics (need to be set when the Line to Stitches is checked). The setting parameter box is shown in Fig. 5.4.4a below. Backstitch settings are divided into unclosed graphics and closed graphics.

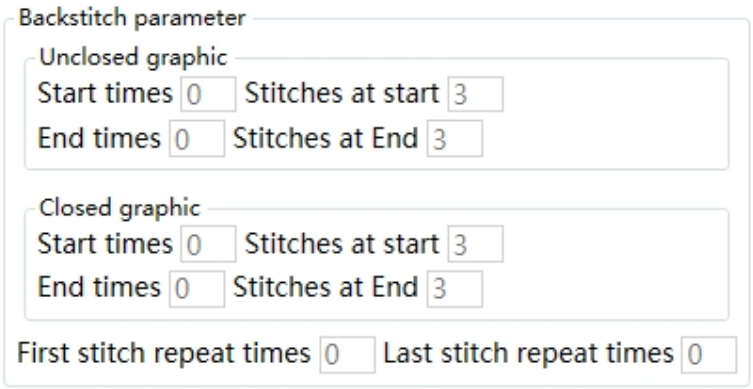


Fig. 5.4.4a Backstitch Parameter Setting

Operation: ① Enter the parameters in the parameter box of the unclosed graphic, and click "OK". All unclosed graphics in this layer will be reinforced. The setting parameters are shown in

Fig. 5.4.4b below. The operation diagram (graphic 2 and 3 are unclosed graphics) is shown in Fig. 5.4.4c.

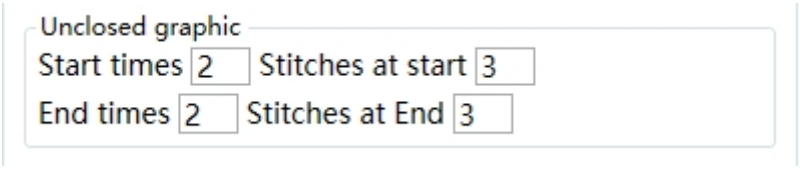


Fig. 5.4.4b Unclosed Graphic Parameter Setting

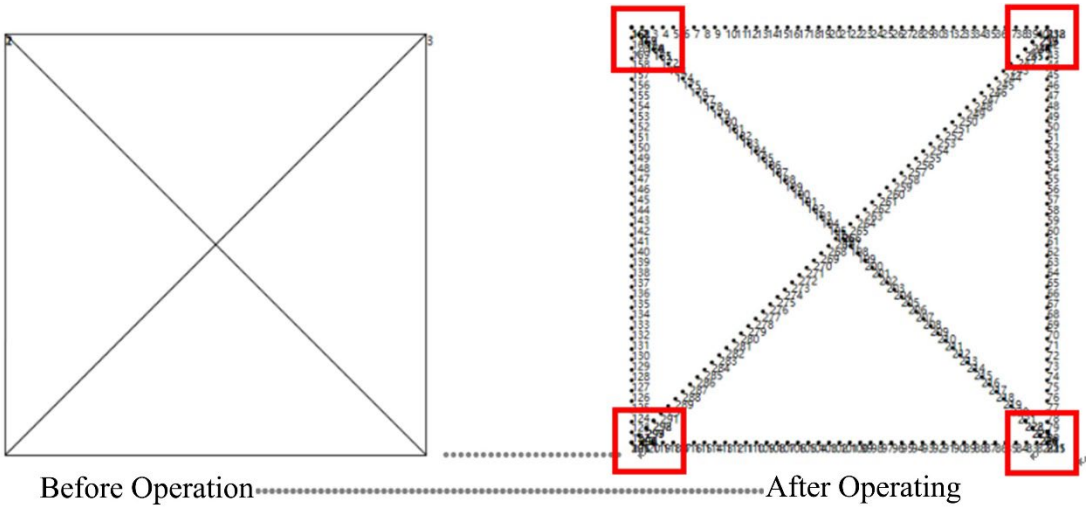


Fig. 5.4.4c Schematic Diagram of Unclosed Graphic Backstitch Operation

② Enter the parameters in the parameter box of the closed graphics and click "Confirm". The closed graphics in this layer will be reinforced. The setting parameters are shown in Fig. 5.4.4d below. The operation diagram (graphic 1 is a closed graphic) is shown in Fig. 5.4.4e.

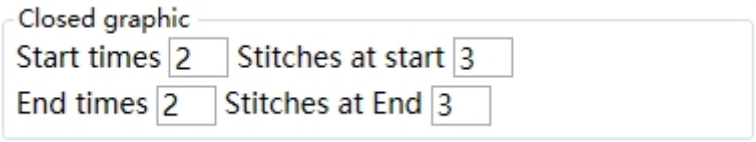


Fig. 5.4.4d Closed Graphic Parameter Setting

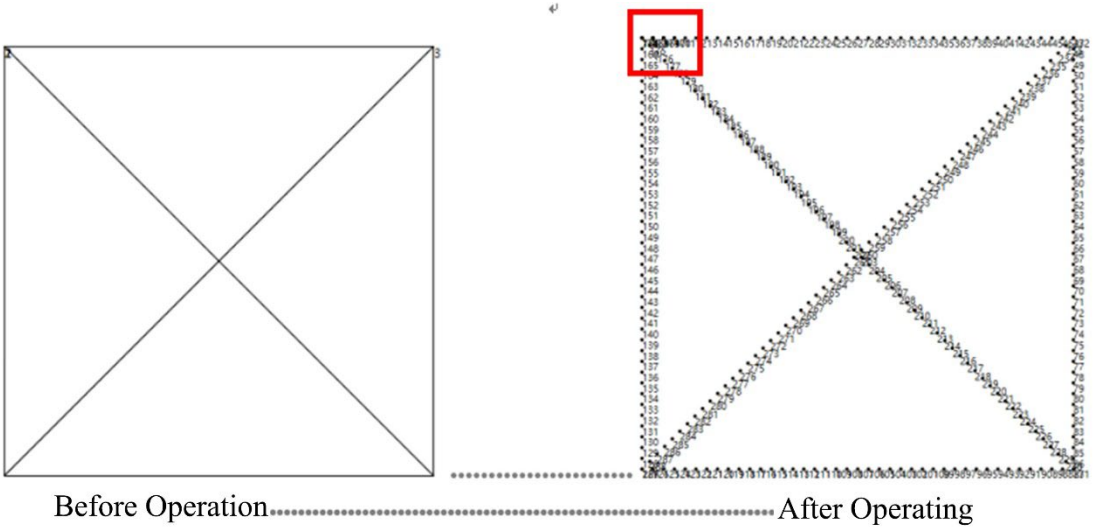


Fig. 5.4.4e Schematic Diagram of Closed Graphic Backstitch Operation

③ Enter the value in the parameter box of the number of repetitions for the first and last stitches, and click "OK". All graphics on this layer will be repeatedly stabbed when the first and last stitches are taken out. The setting parameters are shown in Fig. 5.4.4f below. The operation diagram is shown in Fig. 5.4.4g.

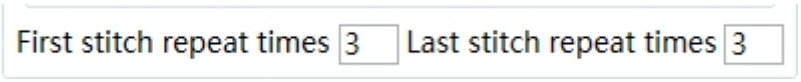


Fig. 5.4.4d Repeat Stitch Parameter Setting

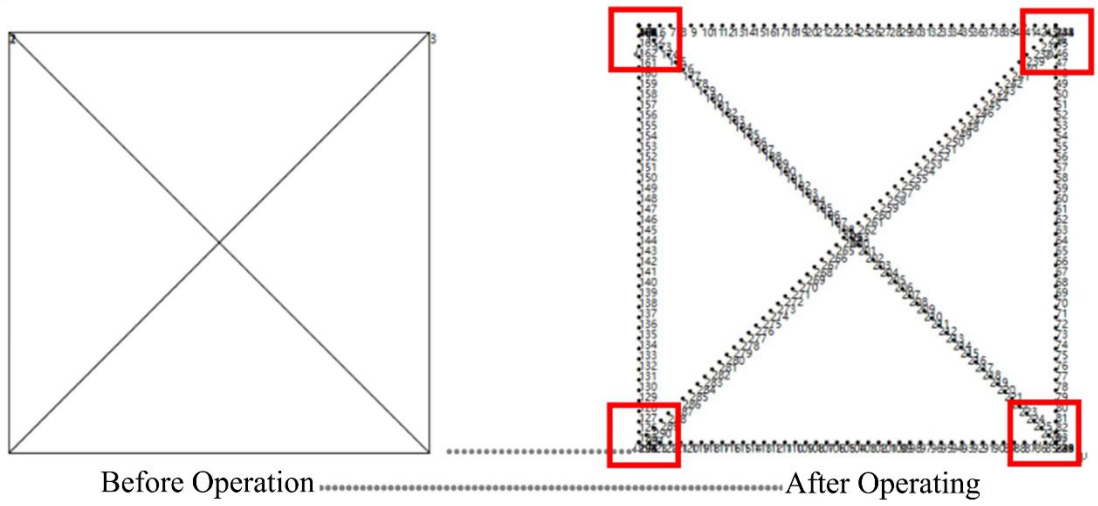


Fig. 5.4.4e Schematic Diagram of Closed Graphic Backstitch Operation

5.4.5 Shrinkage parameter setting

Set the parameters of shrinkage stitching for the graphics (need to be set when the Line to Stitches is checked). The parameter setting box is shown in Fig. 5.4.5a below. The shrinkage setting is divided into the setting of shrinkage at start and end and shrinkage at turn.

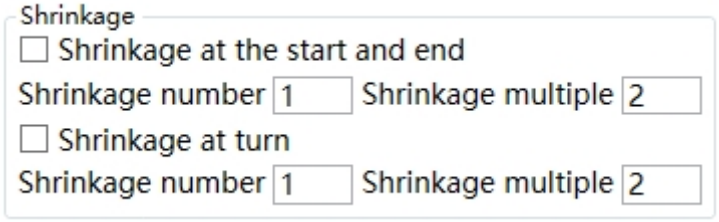


Fig. 5.4.5a Backstitch Parameter Setting

Operation: ① Check shrinkage, then set the number of contraction joint points and contraction joint multiples. After clicking "OK", all graphics in this layer will be contracted at the first and last positions. The setting parameters are shown in Fig. 5.4.5b below. The operation diagram is shown in Fig. 5.4.5c below.

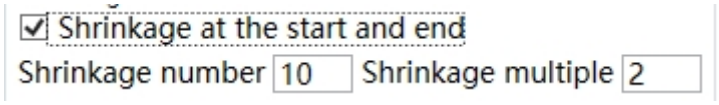
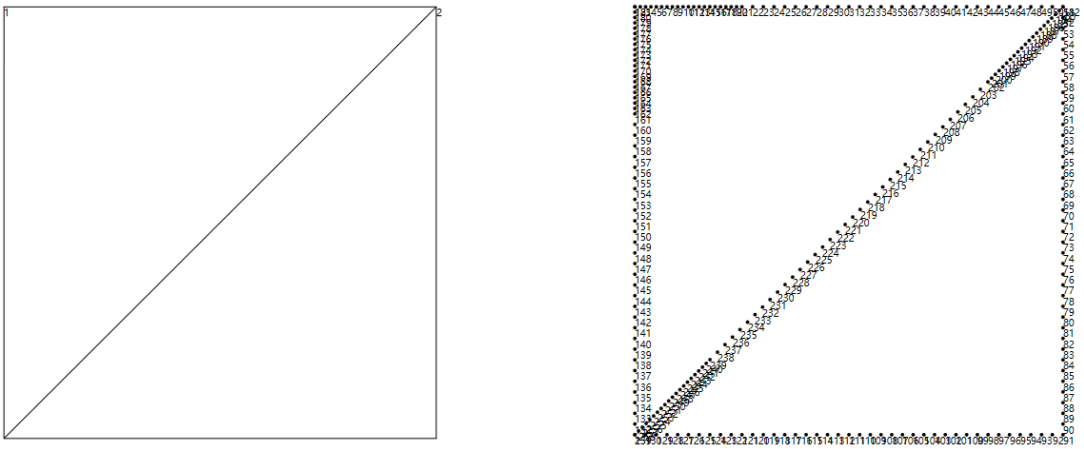


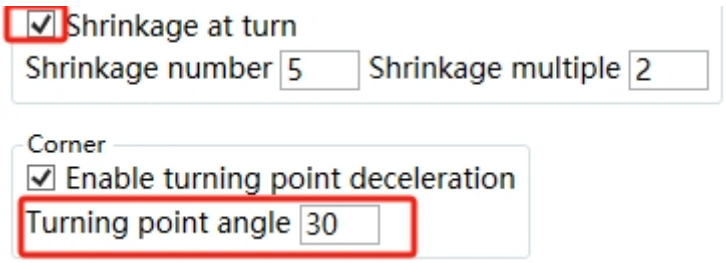
Fig. 5.4.5b Parameter Setting of Shrinkage at Start and End



Before operation **After operation**

Fig. 5.4.5c Schematic Diagram of the Operation of the Start and End Shrinkage

② Check the inflection point shrinkage, then set the inflection point angle in the corner parameters (refer to 5.4.6 Corner Setting for inflection point angle setting), and finally set the number of shrinkage points and shrinkage factors. After clicking "OK", all graphics in this layer will be processed at the inflection point position. The setting parameters are shown in Fig. 5.4.5d below. The operation diagram is shown in Fig. 5.4.5e below.



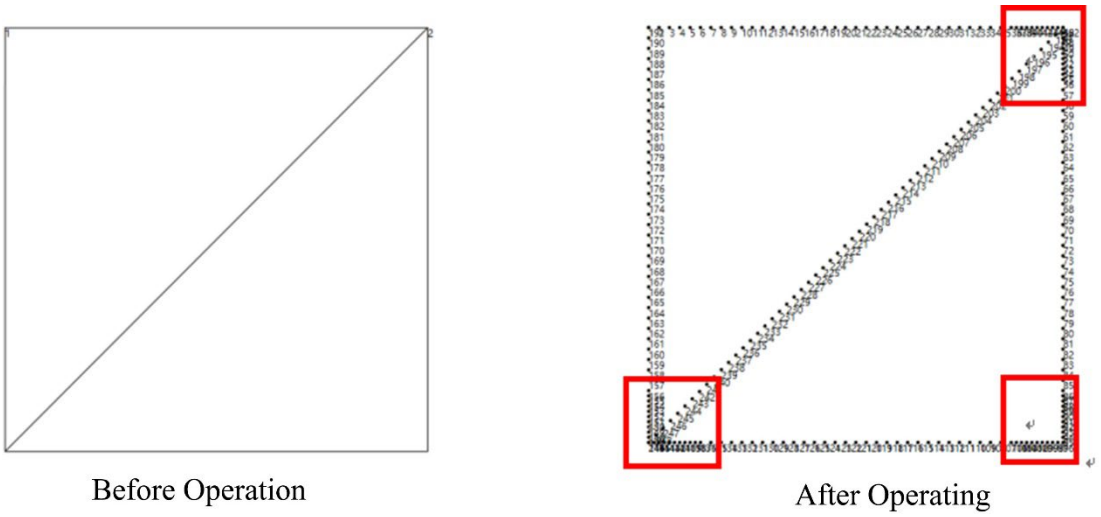


Fig. 5.4.5d Inflection Point Shrinkage and Inflection Point Angle Parameter Setting

Fig. 5.4.5e Schematic Diagram of Inflection Point Shrinkage Operation

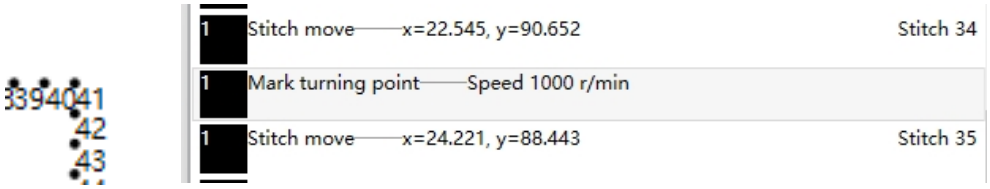
5.4.6 Corner parameter setting

Set the angle value of the inflection point and whether to enable the inflection point deceleration processing. The parameter settings are shown in Fig. 5.4.6a below.

Fig. 5.4.6a Corner Parameter Setting

Operation: ① Take the inflection point angle setting of 60° as an example. The 60° angle must be less than the supplementary angle value you set. For example, if you set the value to 80 and use 180°-80°=100°, at this time 60°<100°, then the point where this angle is located will be determined as the inflection point. This parameter is mainly used to set the inflection point deceleration and inflection point shrinkage.

② Check "Enable inflection point deceleration", the inflection point deceleration process will be performed at the set inflection point position. As shown in Fig. 5.4.6b below.



Inflection point position **Inflection point deceleration position**

Fig. 5.4.6b Schematic Diagram of Inflection Point Deceleration

5.5 Change layer

Refer to 5.3.13 Change Layer.

5.6 Single graphic editing

There are three ways to enter this page for editing a single graphic: ① Select a graphic on the main page and click the "Single Graphic Edit" button. ② In the graphic list on the main page, double-click the graphic name. ③ After selecting a graphic on the batch editing page, click the "Single Graphic Edit" button. The single graphic editing page is shown in Fig. 5.6 below.

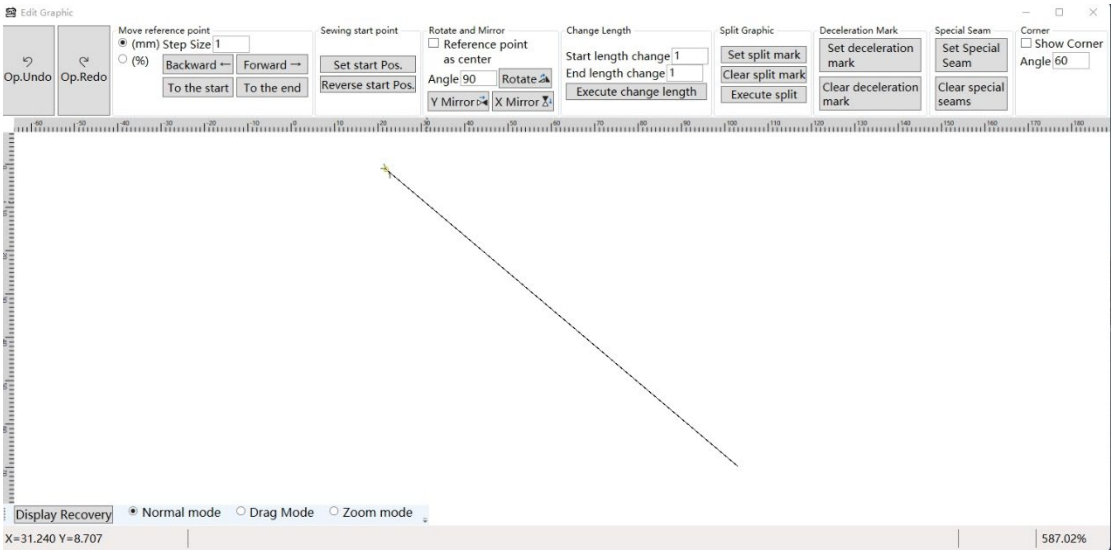


Fig. 5.6 Single Graphic Editing

5.6.1 Operation Undo

Refer to 4.1 Operation Undo.

5.6.2 Operation Redo

Refer to 4.2 Operation Redo.

5.6.3 Moving reference point

Move the position of the reference point, which appears as a small circle with a yellow frame on the canvas. As shown in Fig. 5.6.3a below. The moving reference point button is shown in Fig. 5.6.3b below.

Fig. 5.6.3a Reference Point

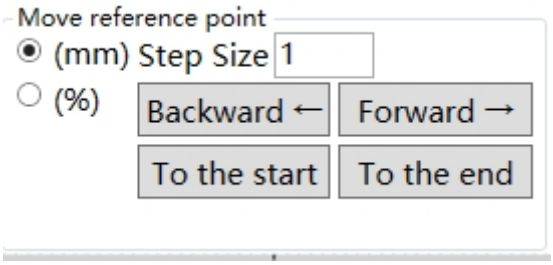


Fig. 5.6.3b Reference Point Move Button

Operation: ① Select the unit to be moved and move in mm or percentage.

② Enter the number of mm or percentage value moved in the step parameter box.

③ Click "Back ←" or "Forward →", and the corresponding distance will be moved forward or backward according to the entered value and the selected moving unit. If it reaches the head/tail position, it will not move backward/forward again.

④ Click "End" or "End", and the reference point will move directly to the end position or tail position.

5.6.4 Sewing start point

Settings for changing the position of the sewing start point. The buttons are shown in Fig. 5.6.4a below.

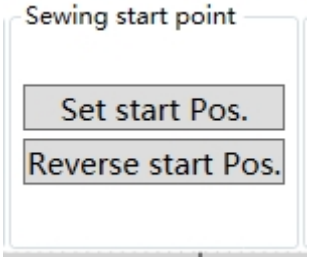


Fig. 5.6.4a Sewing Start Point Button

Operation: ① Select the reference point position, as shown in Fig. 5.6.4b below.

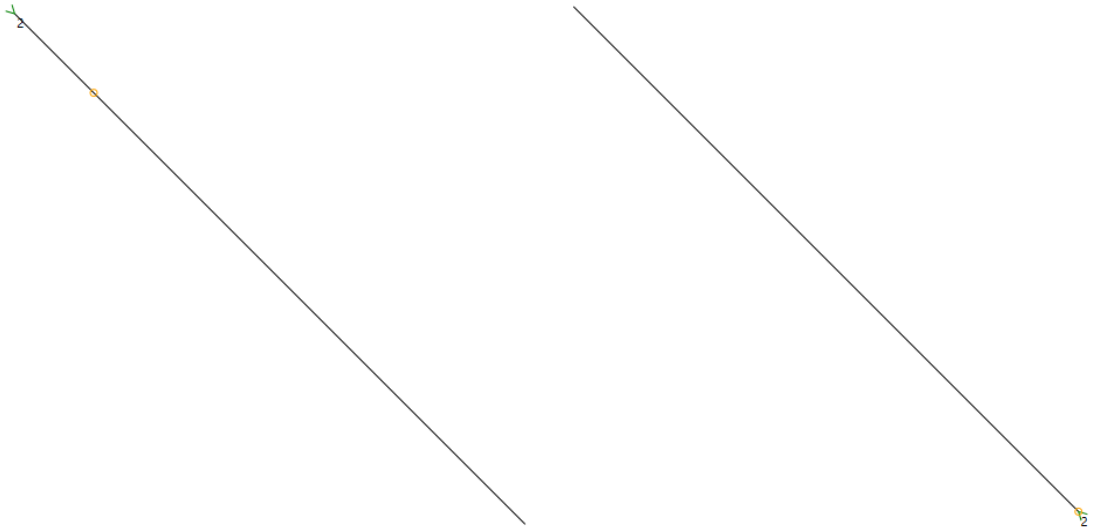
Fig. 5.6.4b Reference Point Location

② After clicking to set the sewing start point, the position of the sewing start point changes, as shown in Fig. 5.6.4c.

Before operation **After operation**

Fig. 5.6.4c Schematic Diagram of the Setting of the Sewing Start Point

③ Click "Reverse Starting Point" to directly set the direction of the sewing start point opposite to the current direction. As shown in Fig. 5.6.4d below.



Before operation **After operation**

Fig. 5.6.4d Schematic Diagram of the Reverse Starting Point

5.6.5 Rotate & Mirror

Rotate and mirror the graphics for single graphic editing. The operation buttons are shown in Fig. 5.6.5a below.

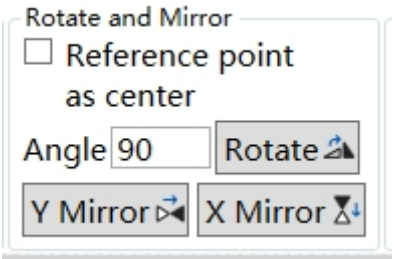


Fig. 5.6.5a Rotate and Mirror Buttons

Operation: ① When "reference point as the center" is not selected, you can refer to the operation methods of 4.7 Mirroring and 4.8 Rotation.

② When the "reference point as the center" is checked, enter a value in the angle box (taking 45° as an example) and click Rotate, as shown in Fig. 5.6.5b. The graphic will be rotated around the reference point, as shown in Fig. 5.6.5c below.

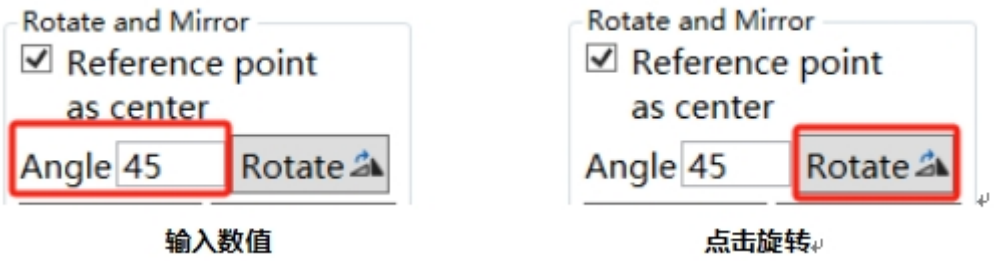
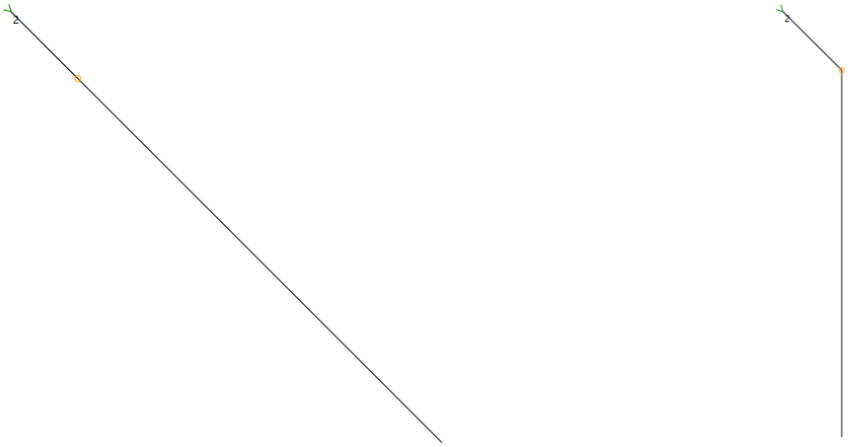


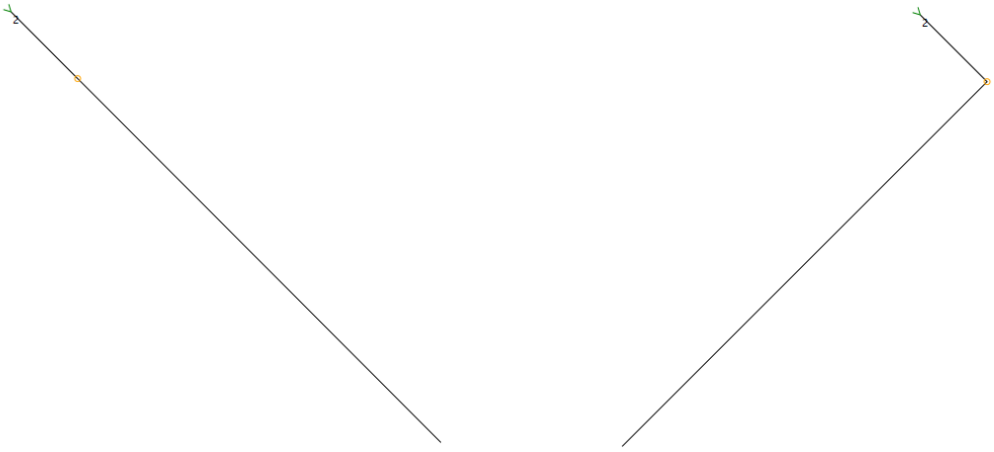
Fig. 5.6.5b Rotation Operation



Before operation **After operation**

Fig. 5.6.5c Schematic Diagram of Rotation Operation

③ When the "Reference Point as Center" is checked, click "Y-axis Mirroring" or "X-axis Mirroring". Here, Y-axis mirroring is taken as an example. The graphics will be mirrored on the Y axis with the reference point as the center, and the operation diagram is shown in Fig. 5.6.5d below.



Before operation **After operation**

Fig. 5.6.5d Schematic Diagram of Y-axis Mirroring Operation

5.6.6 Change start and end length

Lengthen the start and end of the graphics in the canvas. The operation buttons are shown in Fig. 5.6.6a below.

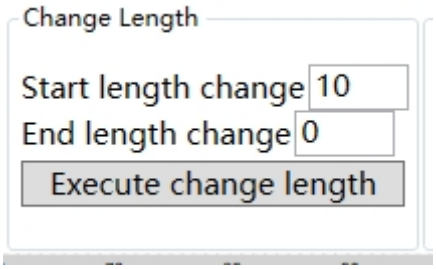


Fig. 5.6.6a Start and End Length Changing Button

Operation: ① Enter the value in the "change head length" or "change tail length" parameter box. Here, variable head length is taken as an example.

② Click "Execute Lengthening", and the graphic will be lengthened accordingly, as shown in Fig. 5.6.6b below.

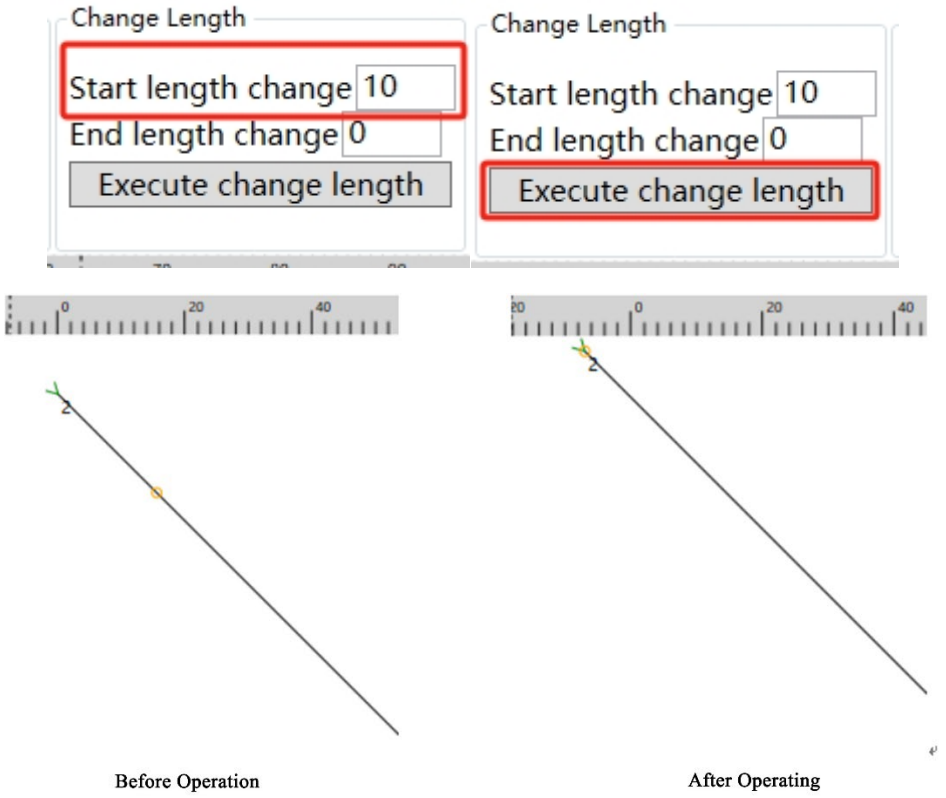


Fig. 5.6.6b Schematic Diagram of Change Length Operation

5.6.7 Graphic Splitting

Split the current graphic, and the operation buttons are shown in Fig. 5.6.7a below.

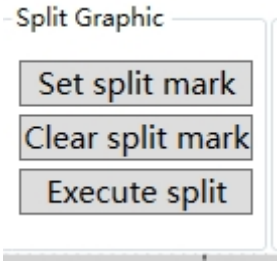


Fig. 5.6.7a Graphic Split Button

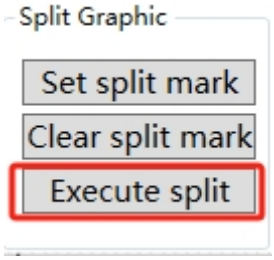
Operation: ① First select the location to be split, that is, the location of the reference point. As shown in Fig. 5.6.7b below.

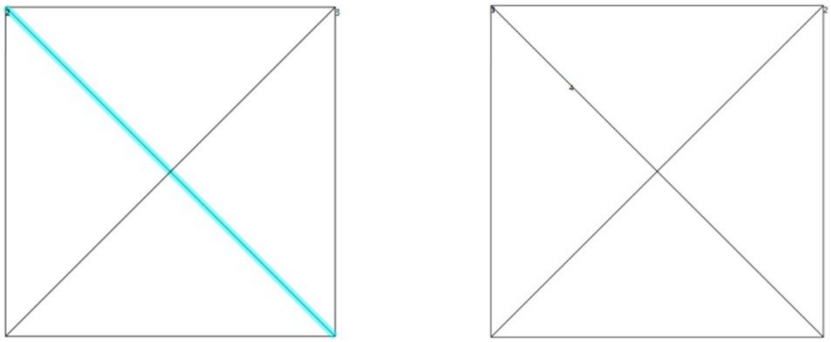
Fig. 5.6.7b Split Point Location

② Click the "Set split mark" button, and this mark will be displayed in red with a cut-off line. As shown in Fig. 5.6.7c below.

Fig. 5.6.7c Set Split Mark

③ After clicking "Execute Split", the single graphic editing will exit, and one more graphic will appear in the graphic list. The single edited graphics will be split into two. As shown in Fig. 5.6.7d below.





Before Operation　　After Operating

Fig. 5.6.7d Schematic Diagram of Graphic Splitting Operation

④ After placing the split points, if you want to clear them, you need to click the "Clear Split Points" button, and all split points on this graphic will be cleared.

5.6.8 Manual deceleration mark

Add deceleration processing at the selected position, and the operation buttons are shown in Fig. 5.6.8a below.

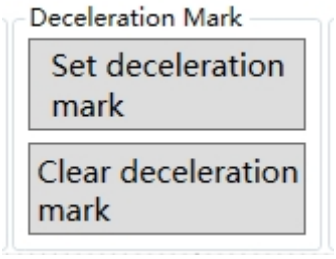


Fig. 5.6.8a Manual Deceleration Mark Button

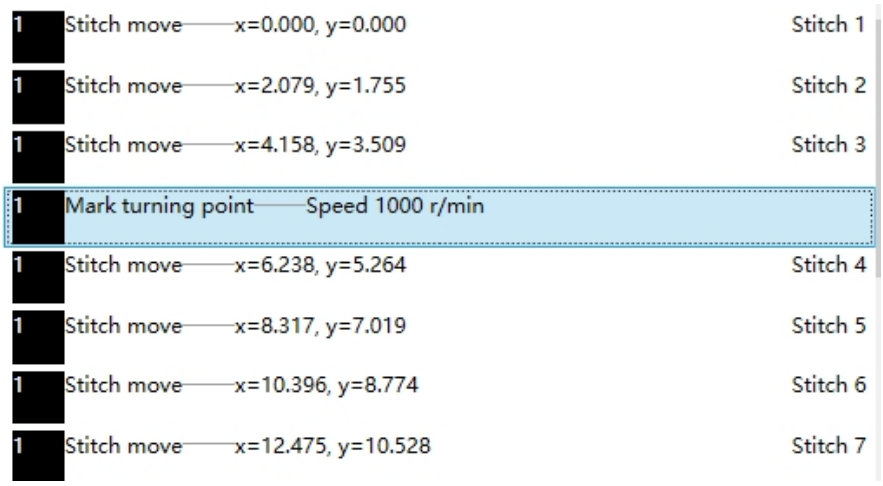
Operation: ① Select the position where deceleration needed, that is, the location of the reference point.

② Click "place deceleration mark" to exit the single graphic editing page.

③ Converting the graphics to points in the layer settings.

④ Click "Command Processing" and this point will be displayed in the program segment after entering for deceleration processing. The speed can be set. As shown in Fig. 5.6.8b below.

Placement of deceleration point　　Deceleration position



Deceleration program segment

Fig. 5.6.8b Schematic Diagram of Manual Deceleration Operation

⑤ If deceleration is not required, you need to cancel the point converting first, enter the single graphic editing page, click "Clear Deceleration Mark", and all deceleration marks will be cleared. The operation can also be undone until the deceleration mark is placed.

5.6.9 Special seam

The operation buttons for setting special seam sections are shown in Fig. 5.6.9 below.

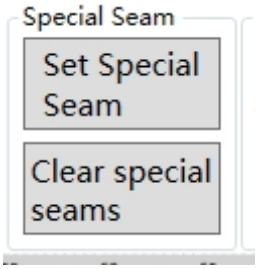
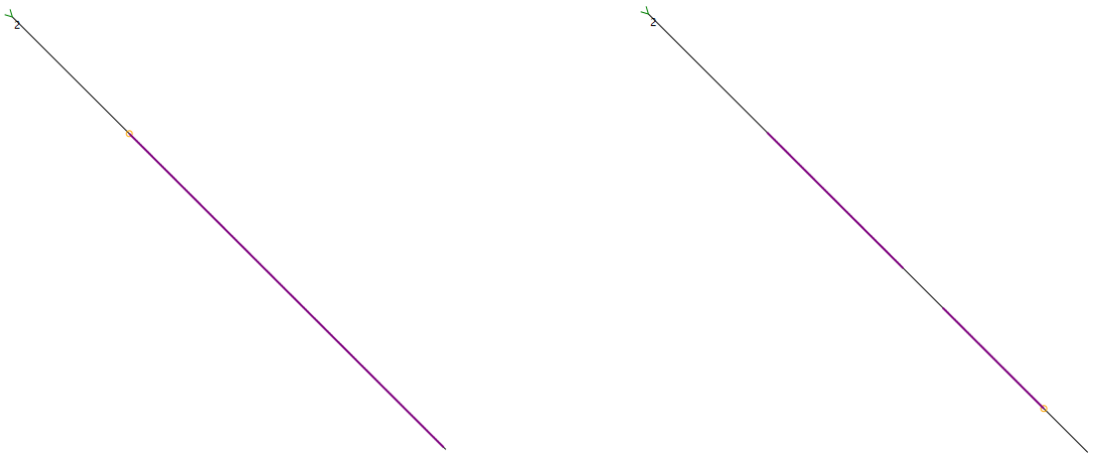


Fig. 5.6.9a Special Seam Button

Operation: ① Select the location where the special seam needs to be set, that is, the location of the reference point.

② After selecting a point, click "Set Special Seam", and the stitching segments after this point will be set as special seam segments (special seam segments will be displayed in purple); after performing the above operations, select another point and click "Set Special Seam", and the gap between two points will be set as a special seam segment. By analogy, each additional point is a section between two points, and the odd-numbered points are special seam sections from the last point to the end position. As shown in Fig. 5.6.9b.



Select one point, select multiple points

Fig. 5.6.9b Schematic Diagram of Special Seam Setting

③ Exit the single graphic editing page and set special seam in the layer settings, see 5.4.3 Special Seam Setting.

④ Enter the command processing page and find the corresponding position to see the special seam parameters set for it.

5.6.10 Corner

Display the length from the corner of the set value (refer to 5.4.6 Corner Parameter Setting) to the sewing start point. The setting parameters are shown in Fig. 5.6.10a below.

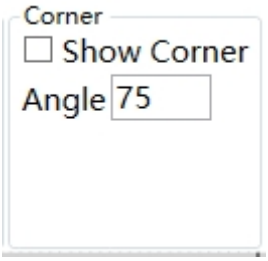


Fig. 5.6.10a Corner Parameter Setting

Operation: ① Check the "display corner" parameter, as shown in Fig. 5.6.10b below.

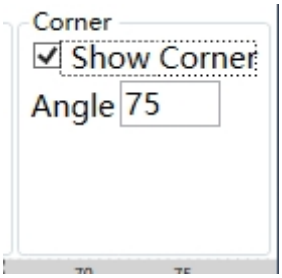


Fig. 5.6.10b Show Corner Settings

② Enter the set value into the "Angle" parameter box, taking 75 and 100 as examples. After pressing Enter, the angle position that meets the set value will display the value, and those that do not meet the requirements will not be displayed. As shown in Fig. 5.6.10c below.

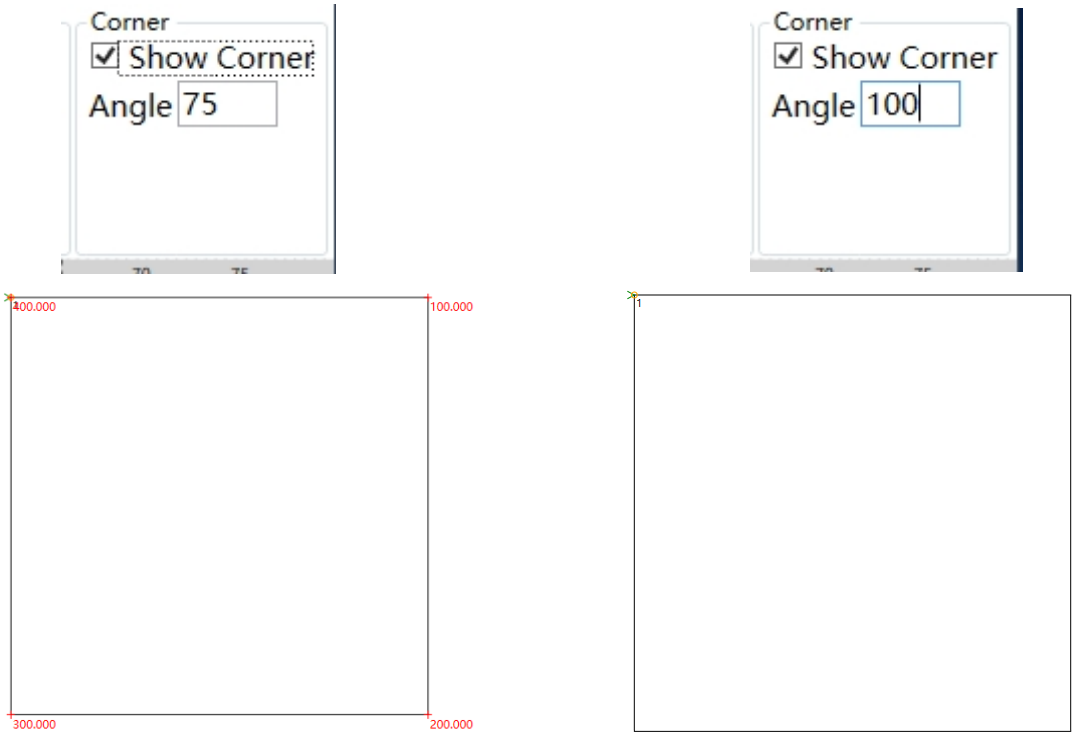


Fig. 5.6.10c Schematic Diagram of Corner Display Operation

5.6.11 Display recovery

Refer to 5.3.16 Display recovery.

5.6.12 Operation mode

Refer to 5.3.17 Operation mode selection.

5.7 Command processing

Modify, add, and output the command segment of the graphics after the point converting. The page is shown in Fig. 5.7 below.

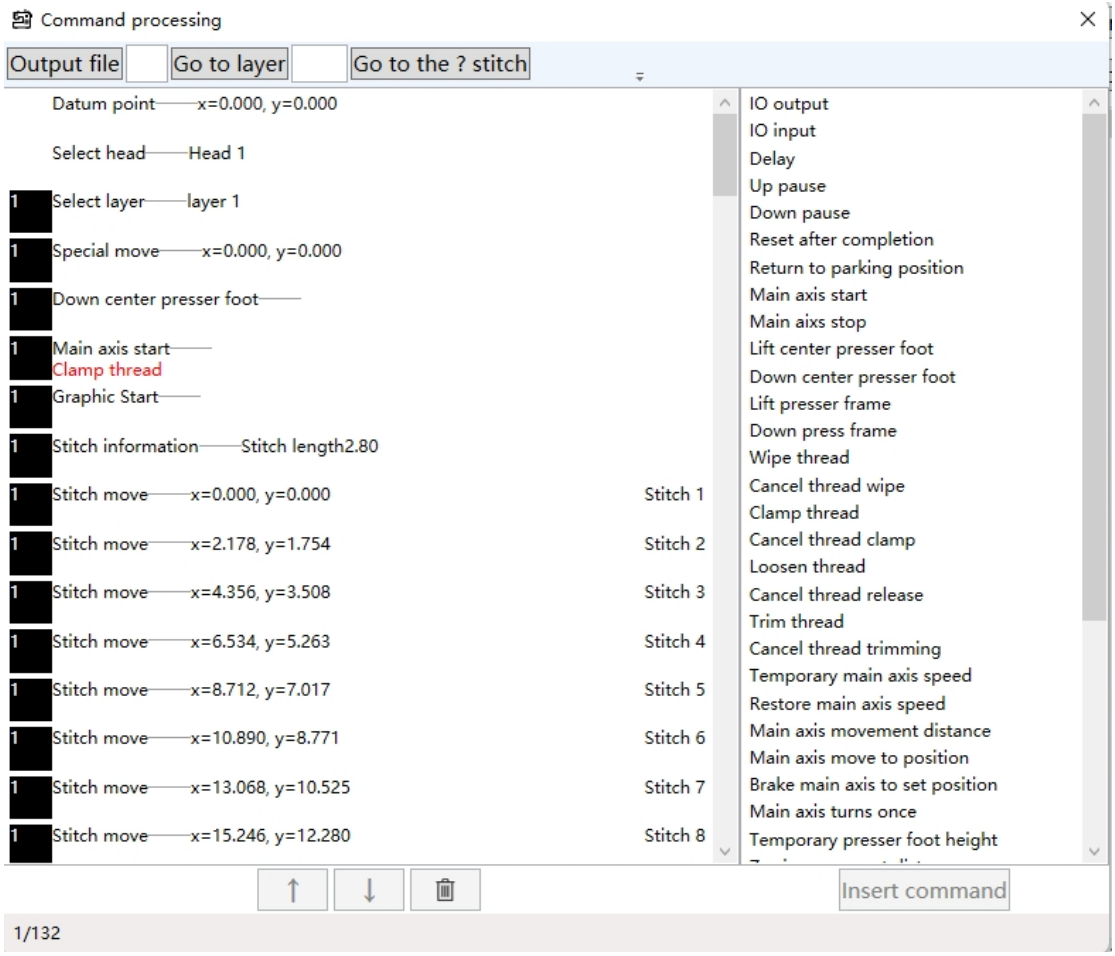


Fig. 5.7 Command Processing Page

5.7.1 Output file

Output the graphic file after point converting as a .sco file, which can be imported into the pattern file used by our company's panel. The buttons are shown in Fig. 5.7.1a below.

Fig. 5.7.1a Output File Button

Operation: ① Click the "Output File" button to pop up the file save page. As shown in Fig. 5.7.1b below.

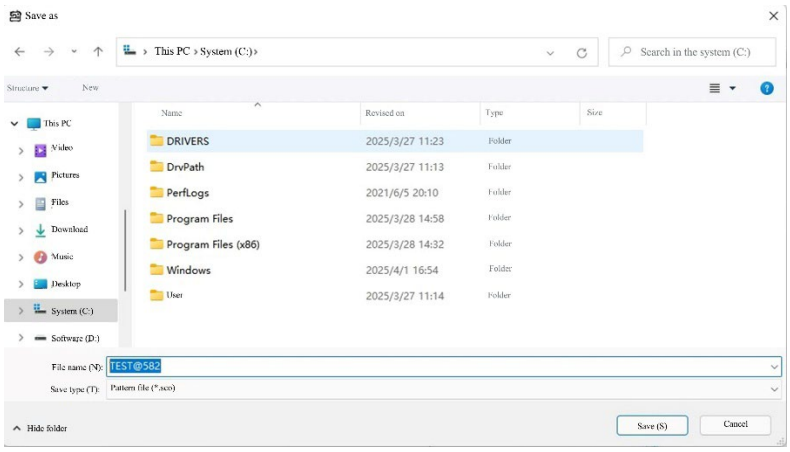


Fig. 5.7.1b File Saving Page

② Enter the name of the pattern file and save it as a pattern file (*.sco). Note: User-defined names must be entered before @, and the number after @ is the pattern file number, which is automatically generated by the system. As shown in Fig. 5.7.1c below.

Fig. 5.7.1c File Saving Settings

③ Click the "Save" button to find this file in the corresponding folder. As shown in Fig. 5.7.1d below.

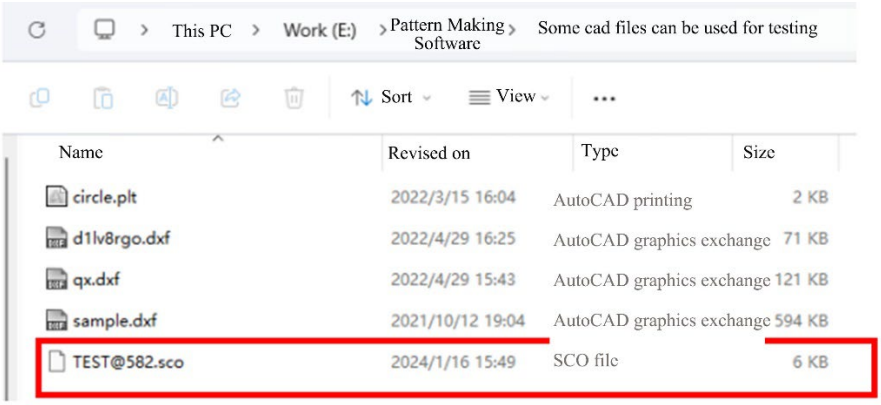


Fig. 5.7.1d File Location

5.7.2 Command segment display area

It is used to display the command segment of this pattern file and set parameters for operable commands. The display area is shown in Fig. 5.7.2a below.

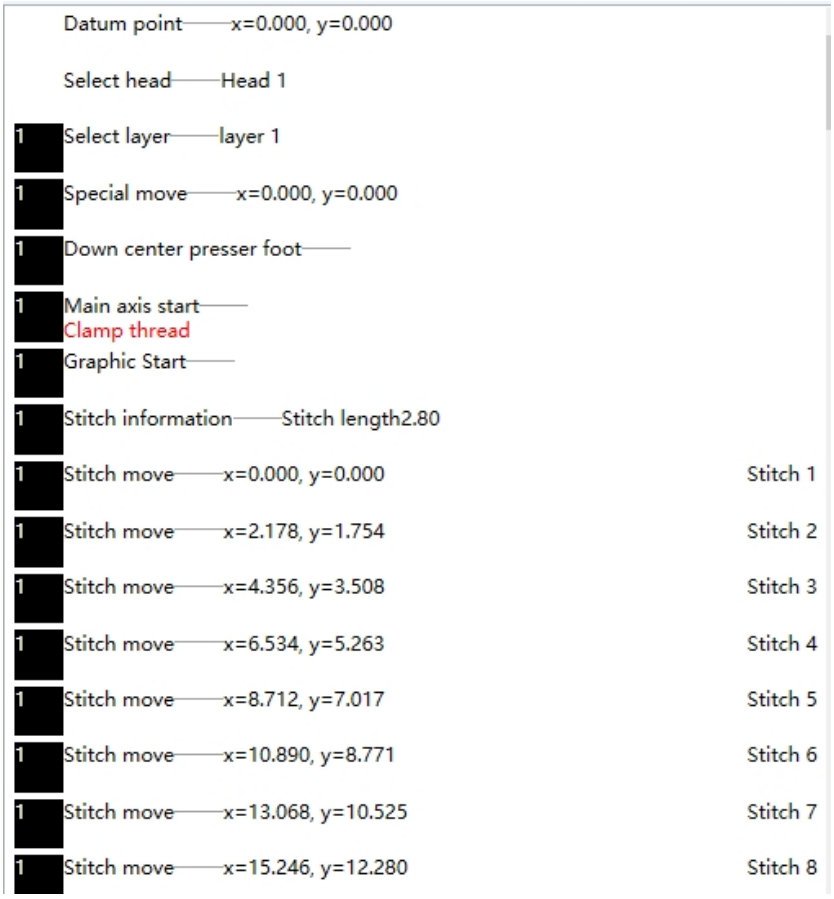


Fig. 5.7.2a Command Segment Display Area

Operation: ① This area can display the command segment for each step of operation. After the stitching command segment, it will show which stitch is currently in progress.

② For some commands with settable parameters, take "main axis start" as an example. Double-click this command and the pop-up window is shown in Fig. 5.7.2b below.

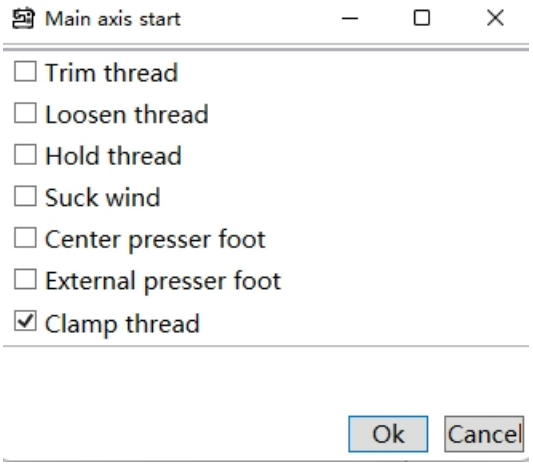


Fig. 5.7.2b Command Parameter Setting (main axis start)

③ After setting, click "OK", and the corresponding parameters will be displayed in the command segment.

5.7.3 Command Segment Movement

Move the selected command segment, and press the button as shown in Fig. 5.7.3a below.

Fig. 5.7.3a Command Segment Movement Button

Operation: ① Select the command segment to be moved, and the selected command segment will be displayed with a blue background. As shown in Fig. 5.7.3b below.

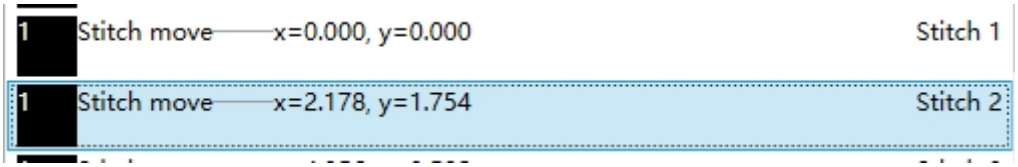
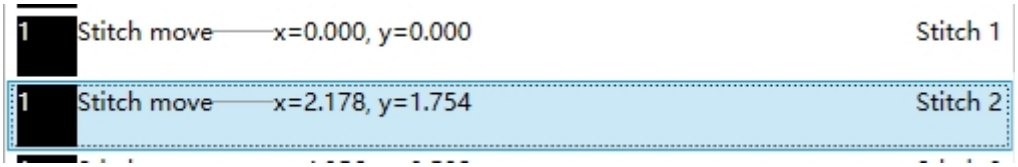
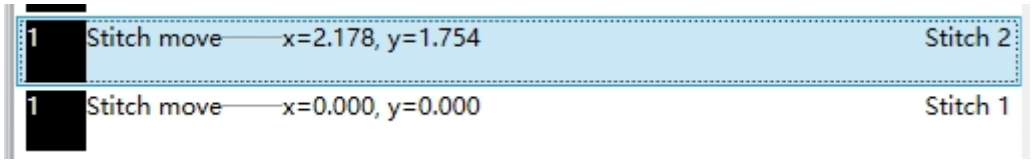


Fig. 5.7.3b Command Segment Selected

② Click the "↑" or "↓" button, and the command segment will move up/down by one section accordingly. Take moving up, for example. As shown in Fig. 5.7.3c below.



Before Operation



After Operating

Fig. 5.7.3c Schematic Diagram of Moving Command Segment Operation

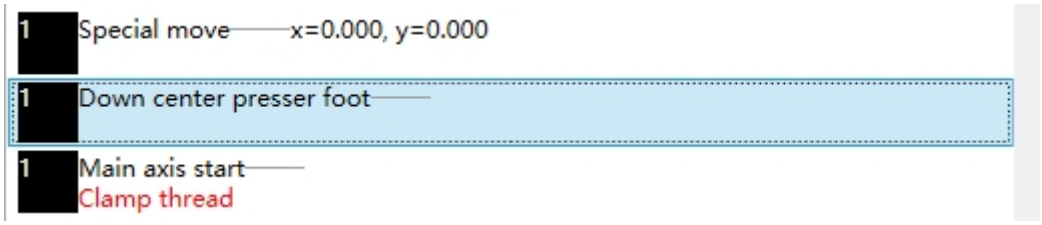
5.7.4 Command segment deletion

Delete the selected command segment, and press the button as shown in Fig. 5.7.4a below.

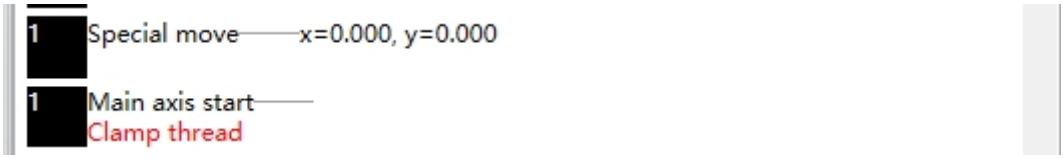
Fig. 5.7.4a Delete Command Segment Button

Operation: ① Select the command segment to be deleted, and the selected command segment will be displayed with a blue background. As shown in Fig. 5.7.3b.

② Click the " " button, and the selected command segment will be deleted. As shown in Fig. 5.7.4b below.



Before Operation



After Operating

Fig. 5.7.4b Schematic Diagram of the Operation of Deleting Command Segments

5.7.5 Command Library

Commands in the library can be added to the command segment, and corresponding parameters will be set before adding them. The library display area is shown in Fig. 5.7.5a below.

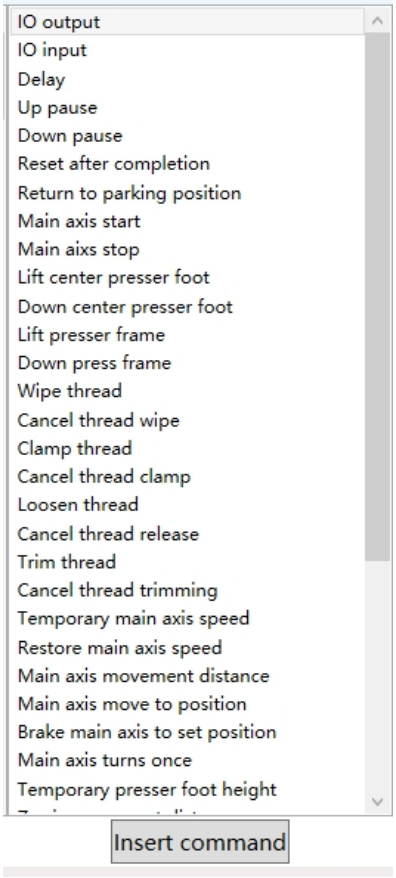


Fig. 5.7.5a Command Library

Operation: ① Select the command segment, and the selected command segment will be displayed with a blue background. As shown in Fig. 5.7.3b.

② There are two ways to add: double-click the name of the command to be added; click to select the command to be added, click "Insert Command" (as shown in Fig. 5.7.5b), and the parameter setting box will pop up. Here, the thread clamping is taken as an example, as shown in Fig. 5.7.5c below.

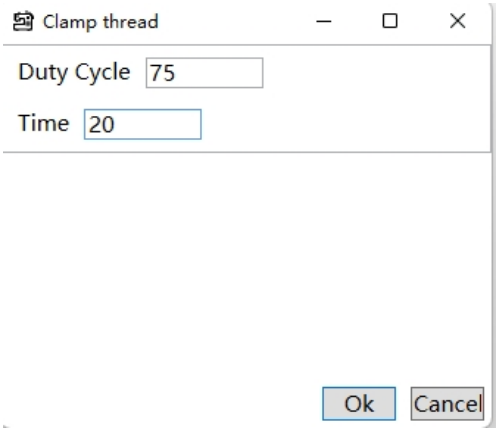
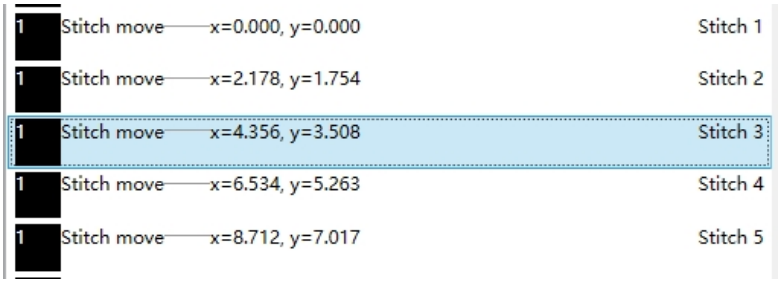
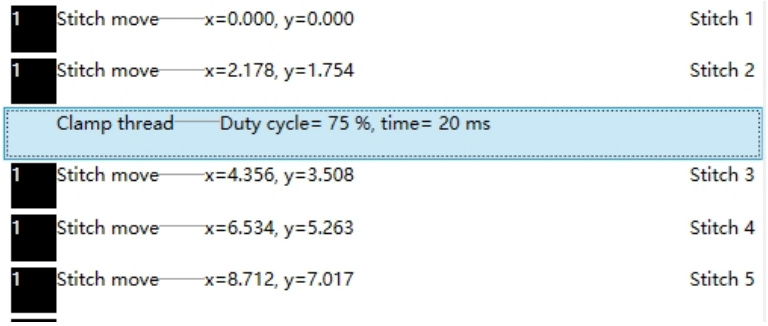


Fig. 5.7.5b Insert Command Button **Fig. 5.7.5c Thread Clamping Parameter Setting**

③ After clicking "OK", this command will be added above the selected command segment. As shown in Fig. 5.7.5d below.



Before Operation

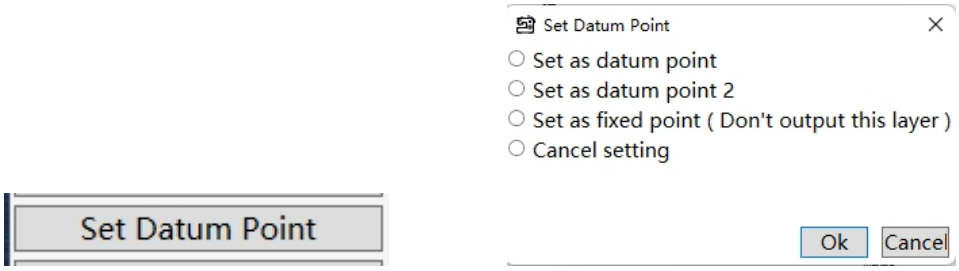


After Operating

Fig. 5.7.5d Schematic Diagram of Adding Commands

5.8 Datum point setting

Set the datum point for the current pattern file to facilitate the calibration of the datum point on the panel. The buttons and pop-up windows are shown in Fig. 5.8.1 below.



Datum point setting button, datum point setting pop-up window

Fig. 5.8.1 Datum Point Setting

Operation: ① Converting the graphic files to points for which the datum point needs to be set, and click "Layer Settings" to perform the point converting. If the datum point setting button is clicked without point converting, a warning pop-up window will appear. As shown in Fig. 5.8.2.

Fig. 5.8.2 Warning Pop-up Window

② Select the point that needs to be set as the datum point. Taking the first point as an example, the selected point will be displayed in a blue frame. As shown in Fig. 5.8.3.

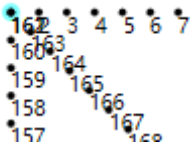


Fig. 5.8.3 Selected Points

③ Click the "Datum Point Setting" button. After a pop-up window appears, you can select "Set as Datum Point", "Set as Datum Point 2", "Set as Alignment Point" and "Cancel Setting". Take "Set as Datum Point" as an example. After clicking OK, a red cross cursor will appear on the point. As shown in Fig. 5.8.4.

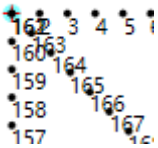


Fig. 5.8.4 Datum Point Setting Successfully

④ Click the "Datum Point Setting" button again and check "Cancel Setting". This point will not become a datum point, and the cross cursor will also be eliminated.

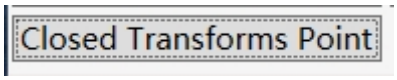
⑤ Check "Set as alignment point", and this point will also display a red cross cursor, but the layer where this point is located is automatically set to not be output during command processing. You can create a new layer only for alignment points.

5.9 Closed transform point

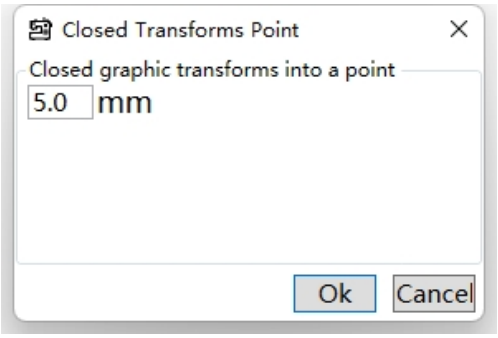
Closed graphics with a length less than the set value can be converted into points

Operation: ① Draw a rectangle with a length less than the set value, and a rectangle with a length greater than or equal to the set value (for example, the set value is 5).

② Click the Closed Transforms Point button to set the closing graphic parameters of the point converting, as shown in Fig. 5.9.1 below.



Closed Transforms Point setting button



The pop-up window of closed transforms point parameter setting

Fig. 5.9.1 Closed Transforms Point Parameter Setting

③ After clicking the OK button, closed graphics in the canvas that are smaller than the set value will be converted to points. The operation diagram is shown in Fig. 5.9.2 below.

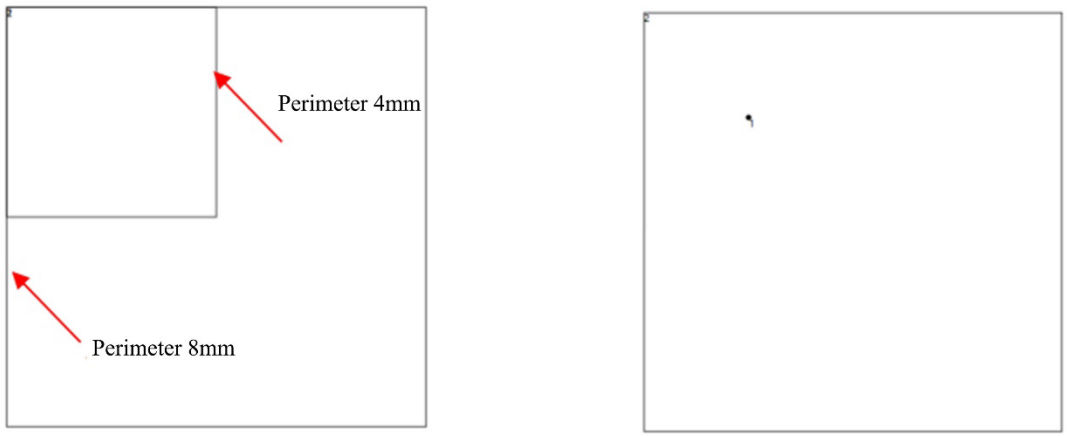


Fig. 5.9.2 Schematic Diagram of Closed Transforms Point

5.10 Default command set settings

To set some default commands, you don't need to keep setting and adding common commands. They will be automatically added to the command code when needed. The setting page is shown in Fig. 5.10 below.

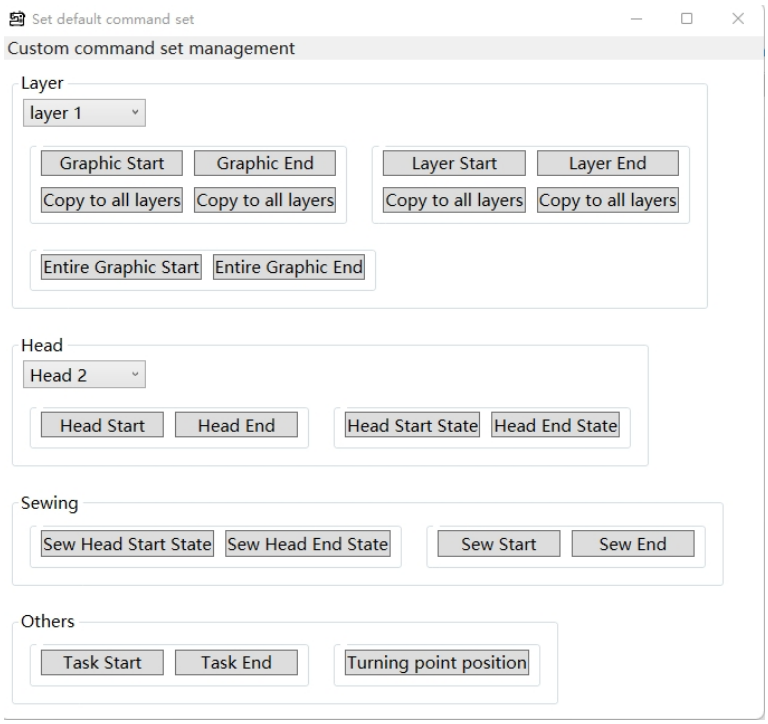


Fig. 5.10 Custom Command Set Setting Page

5.10.1 Graphic start

Add commands at the the graphic start. The setting page is shown in Fig. 5.10.1a below.

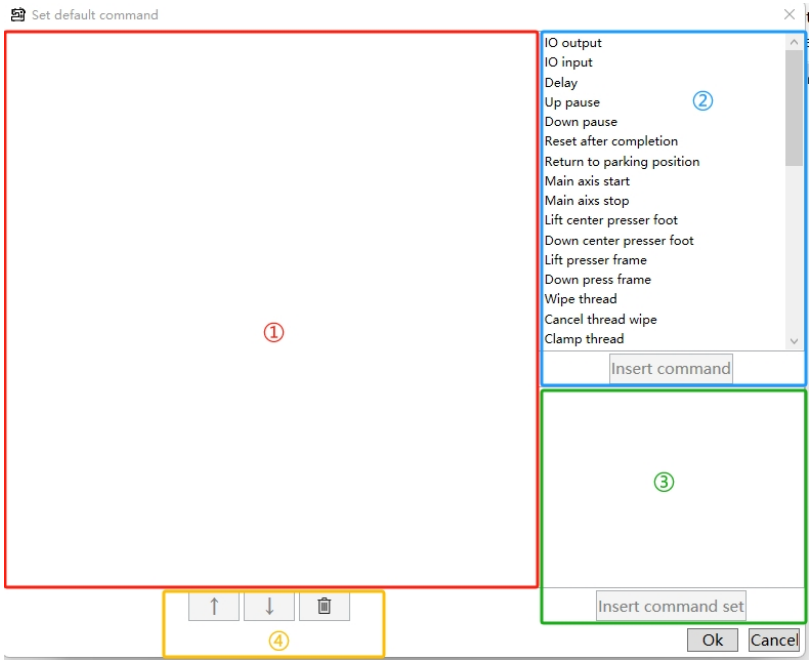


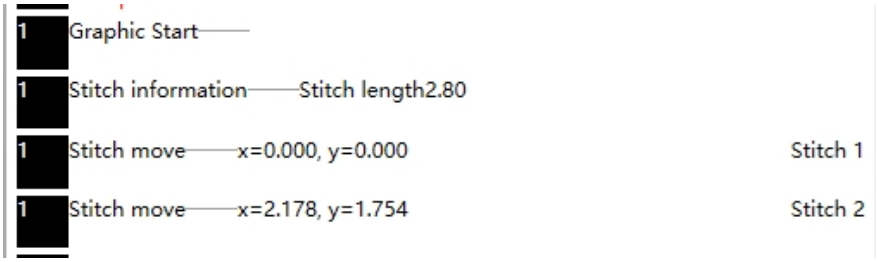
Fig. 5.10.1a Graphic Start Command Set Setting Page

Operation: ① Enter the graphic start command set page, select commands from the right command library, or select an command set from the right command set library.

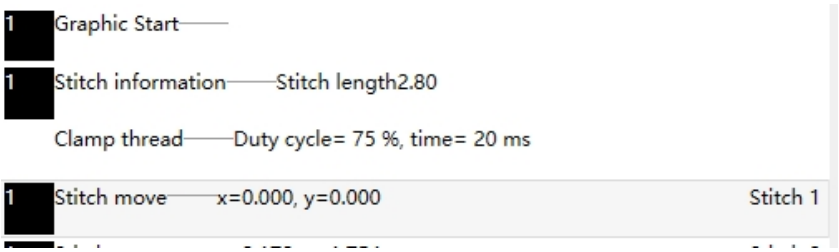
② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the starting position of the graphic. The operation diagram is shown in Fig. 5.10.1b below.



Before Operation



After Operating

Fig. 5.10.1b Schematic Diagram of the Operation of the Graphic Start Command Set

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c below.

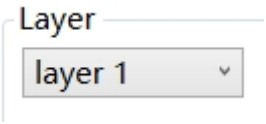


Fig. 5.10.1c Layer Selection Box

5.10.2 Graphic end

Add commands at the end of the graphic. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the graphic end command set page, select commands from the command library on the right, or select command sets from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

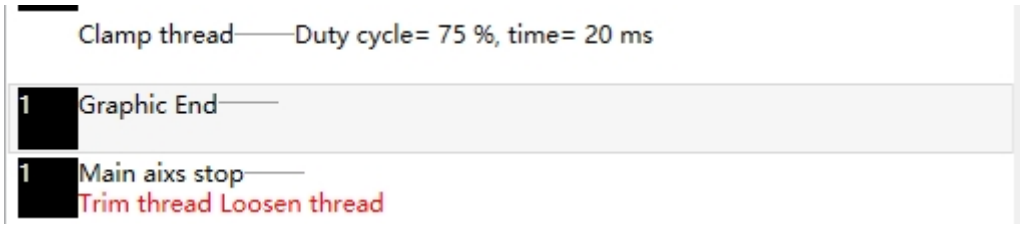
③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the end of the graphic. The operation diagram is shown in Fig. 5.10.2a below.

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer

selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c.

Before Operation



After Operating

Fig. 5.10.2a Schematic Diagram of the Operation of the Graphic End Command Set

5.10.3 Layer start

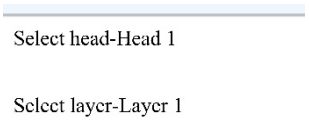
Add commands at the beginning of the layer. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the layer start command set page, select commands from the command library on the right, or select an command set from the command set library on the right.

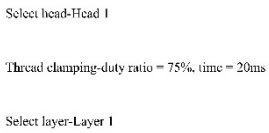
② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the beginning of the layer. The operation diagram is shown in Fig. 5.10.3a below.



Before Operation



After Operating

Fig. 5.10.3a Schematic Diagram of Layer Start Command Set Operation

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c.

5.10.4 Layer end

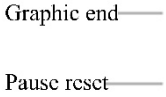
Add commands at the end of the graphic. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the layer end command set page, select commands from the command library on the right, or select an command set from the command set library on the right.

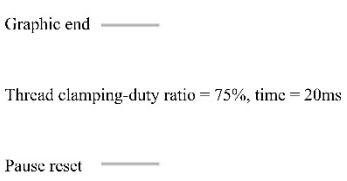
② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the end of the layer. The operation diagram is shown in Fig. 5.10.4a below.



Before Operation



After Operating

Fig. 5.10.4a Schematic Diagram of Layer End Command Set Operation

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c.

5.10.5 Whole graphic start

Add commands at the whole graphic start. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the command set page of the whole graphic start, select commands from the command library on the right, or select command sets from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the whole graphic start. The operation diagram is shown in Fig. 5.10.5a below.

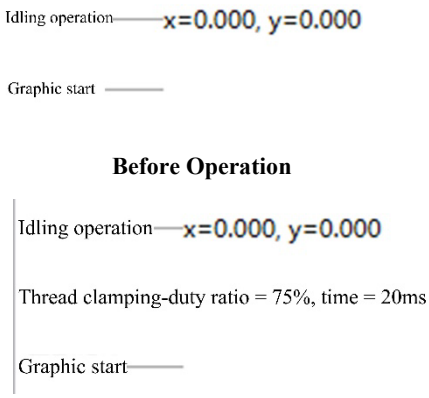


Fig. 5.10.5a Schematic Diagram of the Operation of the Whole Graphic Start Command Set

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c.

5.10.6 Whole graphic end

Add commands at the whole graphic end. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the command set page of the whole graphic start, select commands from the command library on the right, or select command sets from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the whole graphic end. The operation diagram is shown in Fig. 5.10.6a below.

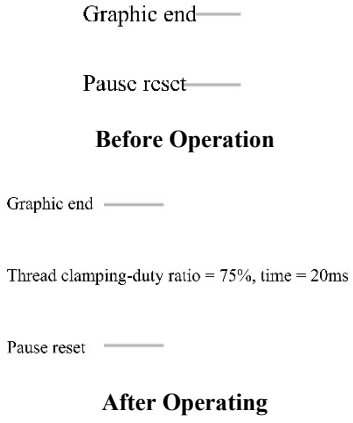


Fig. 5.10.6a Schematic Diagram of the Operation of the Whole Graphic End Command Set

⑤ Layers can also be set. If you only set the default command set for layer 1, select layer 1 to set it. If you want to set the default command set for all graphics, you need to click the layer selection box and select each of the remaining layers to set the command set. The layer selection box is shown in Fig. 5.10.1c.

5.10.7 Head start

Add commands at each graphic start position of the setup header. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the starting command set page, select commands from the command library on the right, or select an command set from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the starting position of each graphic in the setting header. The operation diagram is shown in Fig. 5.10.7a below.

⑤ The head can also be set. If only the default command set is set for head 2, select head 2 to set it. If you want to set the default command set for all head positions, you need to click the head selection box and select each of the remaining heads to set the command set. The header selection box is shown in Fig. 5.10.7b below.

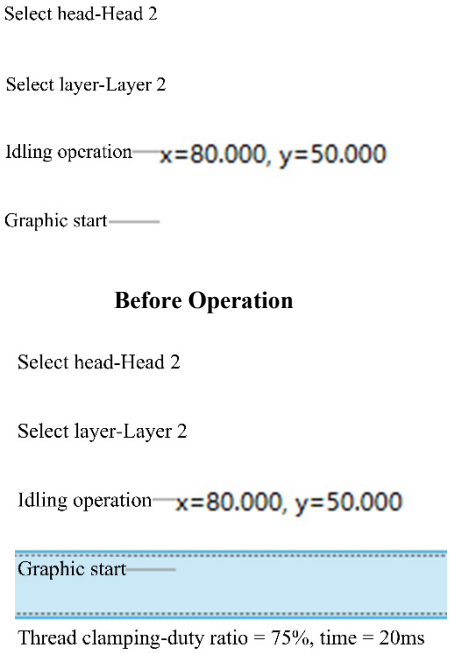


Fig. 5.10.7a Schematic Diagram of the Operation of the Head Start Command Set

Fig. 5.10.7b Head Selection Box

5.10.8 Head end

Add commands at the end of each graphic in the setup header. The setting page is shown in Fig. 5.10.1a.

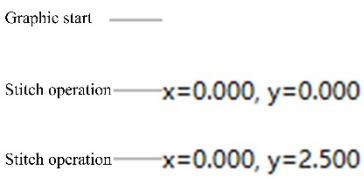
Operation: ① Enter the End Command Set page, select commands from the command library on the right, or select command sets from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

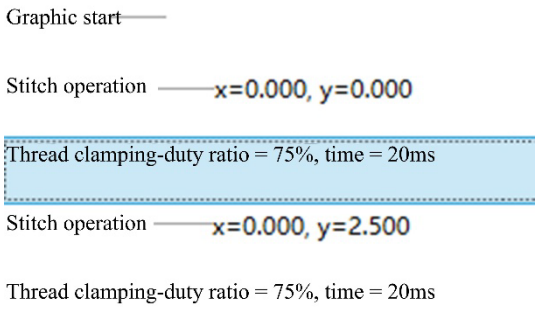
③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the end of each graphic in the setting header. The operation diagram is shown in Fig. 5.10.8a below.

⑤ The head can also be set. If only the default command set is set for head 2, select head 2 to set it. If you want to set the default command set for all head positions, you need to click the head selection box and select each of the remaining heads to set the command set. The header selection box is shown in Fig. 5.10.7b.



Before Operation



After Operating

Fig. 5.10.8a Schematic Diagram of the Operation of the Head End Command Set

5.10.9 Head start state

Add commands at the position of the selection head. The setting page is shown in Fig. 5.10.1a.

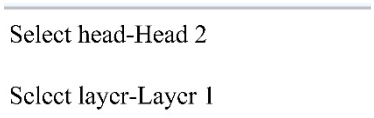
Operation: ① Enter the initial state command set page, select commands from the command library on the right, or select an command set from the command set library on the right.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

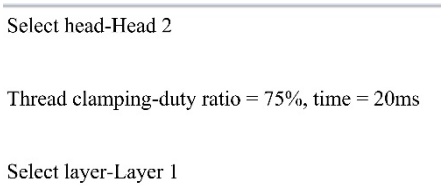
③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking Command Processing, these commands will be added by default in the selection header position. The operation diagram is shown in Fig. 5.10.9a below.

⑤ The head can also be set. If only the default command set is set for head 2, select head 2 to set it. If you want to set the default command set for all head positions, you need to click the head selection box and select each of the remaining heads to set the command set. The header selection box is shown in Fig. 5.10.7b.



Before Operation



After Operating

Fig. 5.10.9a Schematic Diagram of the Operation of the Head Start State Command Set

5.10.10 Head end state

Add commands at the position before the next head selection. The setting page is shown in Fig. 5.10.1a.

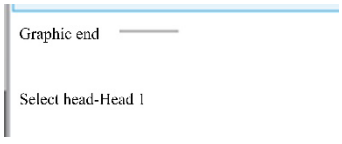
Operation: ① Enter the end state command set page, select commands from the right command library, or select command sets from the right command set library.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

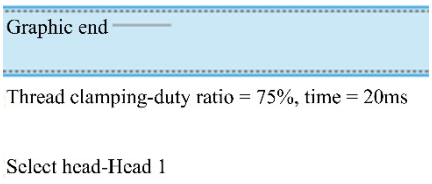
③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK and this default command set will be saved. After clicking the command processing, these commands will be added by default in the position before the next selection head. The operation diagram is shown in Fig. 5.10.10a below.

⑤ The head can also be set. If only the default command set is set for head 2, select head 2 to set it. If you want to set the default command set for all head positions, you need to click the head selection box and select each of the remaining heads to set the command set. The header selection box is shown in Fig. 5.10.7b.



Before Operation



After Operating

Fig. 5.10.10a Schematic Diagram of the Operation of the Head End State Command Set

5.10.11 Start state of stitch head

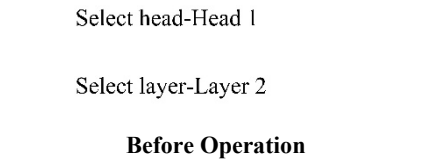
Add commands at the position of the stitch head (head 1). The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the stitch head starting state command set page, select commands from the right command library, or select an command set from the right command set library.

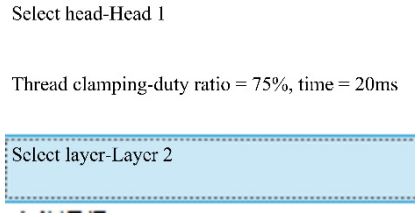
② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the position of the stitch head (head 1). The operation diagram is shown in Fig. 5.10.11a below.



Before Operation



After Operating

Fig. 5.10.11a Schematic Diagram of the Operation of the Stitch Head Starting State Command Set

5.10.12 End state of stitch head

Add commands at the end of the stitch head (head 1) graphic. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the stitch head starting state command set page, select commands from the right command library, or select an command set from the right command set library.

② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the end of the stitch head (head 1) graphics. The operation diagram is shown in Fig. 5.10.12a below.

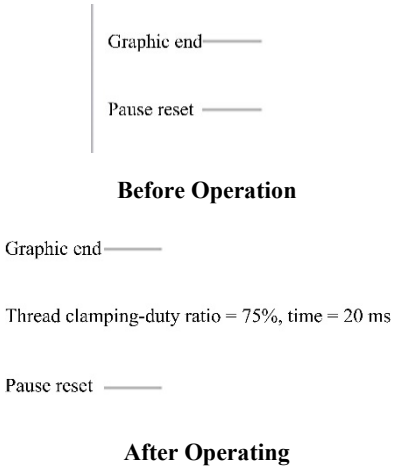


Fig. 5.10.12a Schematic Diagram of the Operation of the Stitch Head End State Command Set

5.10.13 Sewing start point

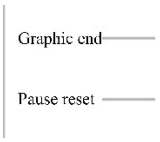
Add commands at the end of the stitch head (head 1) graphic. The setting page is shown in Fig. 5.10.1a.

Operation: ① Enter the stitch head starting state command set page, select commands from the right command library, or select an command set from the right command set library.

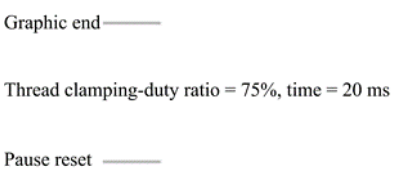
② If you select a command from the command library, click insert command or double-click this command, and a parameter pop-up window will appear. The parameter page is shown in Fig. 5.7.5c. After confirmation, the command will be displayed in the command segment area.

③ After adding all commands, if there are any that need to be deleted or modified, just double-click the command segment to change the parameters and the parameter setting box will pop up. To delete a command, just select the command segment and click the Delete button. To move the command segment, just select the command and click the "↑" and "↓" buttons to move the command segment up/down.

④ Finally, click OK to save this default command set. After clicking the command processing, these commands will be added by default at the end of the stitch head (head 1) graphics. The operation diagram is shown in Fig. 5.10.13a below.



Before Operation



After Operating

Fig. 5.10.13a Schematic Diagram of Sewing Start Point Command Set Operation

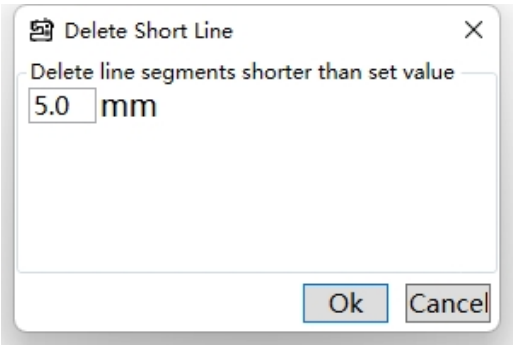
5.11 Delete short line

Function used to delete short lines less than the set value.

Operation: ① Draw a line less than the set value and a line greater than or equal to the set value (for example, the set value is 5).

② Click the Delete Short Line button to set the length of the short line to be deleted, as shown in Fig. 5.11.1 below.

Delete short line button



Parameter setting box

Fig. 5.11.1 Delete Short-line Parameter Settings

③ After clicking the OK button, the short line in the canvas will be deleted. The operation diagram is shown in Fig. 5.11.2 below

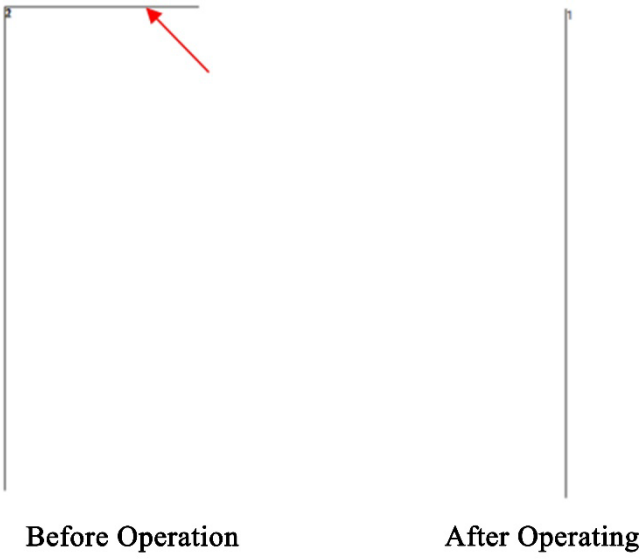


Fig. 5.11.2 Schematic Diagram of Deleting Short Lines

VI. Canvas

6.1 Canvas and Ruler

Show the current graphics and graphic size. As shown in Fig. 6.1 below. The numbers on the ruler represent the X and Y coordinates of the current point. Graphics will be displayed in a blank space after they are added, or open files will also be displayed in a blank space.

Fig. 6.1 Canvas and Ruler

6.2 Display recovery

Refer to 5.3.16 Display recovery.

6.3 Operation mode selection

Refer to 5.3.17 Operation mode selection.

6.4 Show only the current layer

Used to display only the current layer graphics. The buttons are shown in Fig. 6.4.1 below.

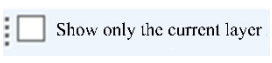
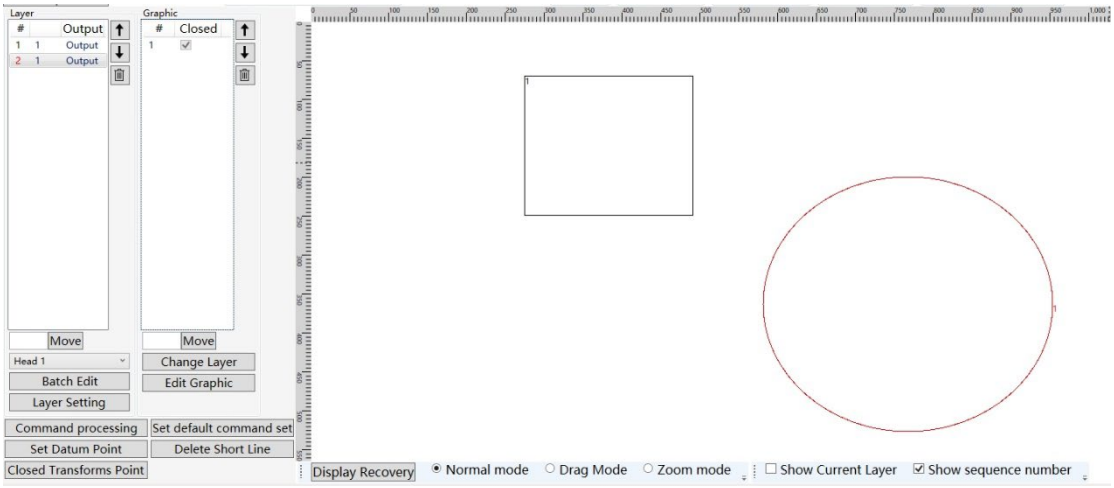


Fig. 6.4.1 Selection Button

Operation: ① Prepare graphics of different layers.

② Select a graphic from one of the layers, taking layer 2 as an example.

③ Select the "Show only current layer" option. Observe the canvas display, as shown in Fig. 6.4.2 below.



Before Operation

After Operating

Fig. 6.4.2 Schematic Diagram of Operation

6.5 Display S/N

Function used to display the serial number of graphics in the canvas. The buttons are shown in Fig. 6.5.1 below.

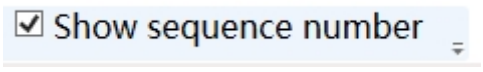
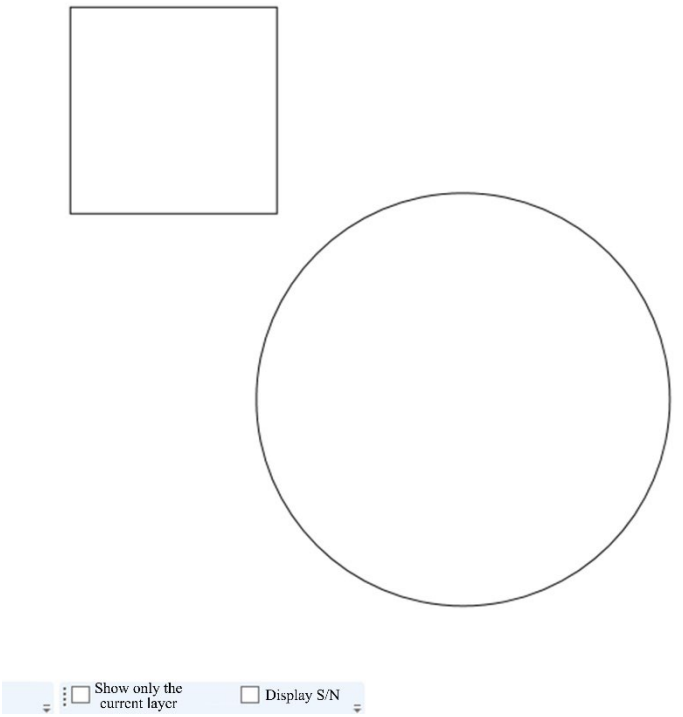


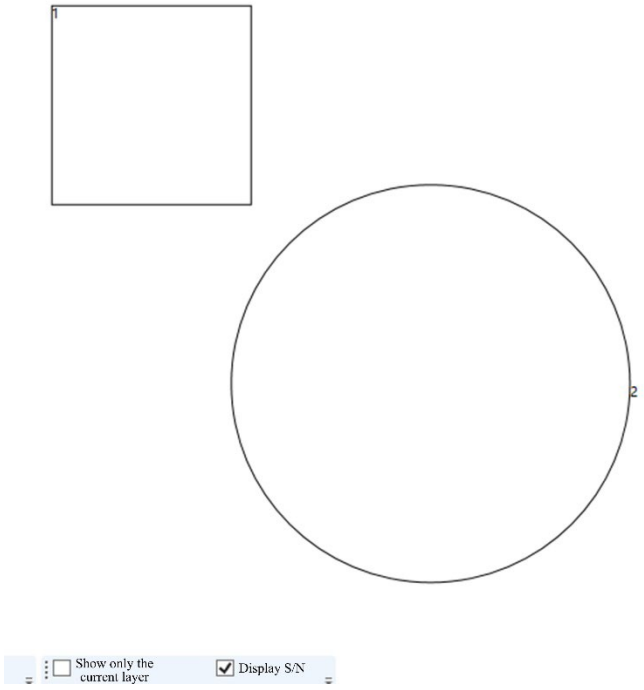
Fig. 6.5.1 Selection Button

Operation: ① Prepare two or more graphics.

② Select the "Display Serial Number" option. Observe the canvas display, as shown in Fig. 6.5.2 below.



Before Operation



After Operating

Fig. 6.5.2 Schematic Diagram of Operation

6.6 Right-click menu bar

As shown in Fig. 6.6.1, right-click on the blank space of the canvas to pop up a menu bar, where you can perform operations such as zooming, dragging, and display recovery.

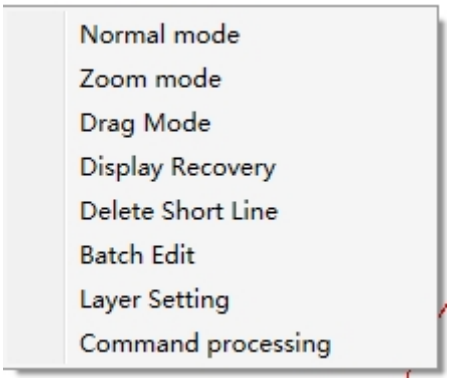


Fig. 6.6.1 Right-click Menu Bar

Operation: ① In the blank space of the canvas, right-click the mouse to pop up a menu bar.

② Click the required action.

Functions of each option in the menu bar:

Normal mode: Refer to 5.3.17 Operation Mode Selection

Zoom mode: refer to 5.3.17 Operation Mode Selection

Drag mode: refer to 5.3.17 Operation Mode Selection

Display recovery: refer to 5.3.15 Display Recovery

Delete short lines: refer to 5.11 Delete Short Lines

Batch edit: refer to 5.3 Batch Edit

Layer setting: refer to 5.4 Layer Setting

Command processing: refer to 5.7 Command Processing

VII. Quick Start

7.1 Startup software

7.1.1 Software installation

Use the drawing software compression package provided by our company to install the software, refer to Chapter 2 Software Installation.

7.1.2 Open the software

After the software is installed, double-click the icon to run the software.

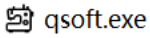


Fig. 7.1.2a Sewing Drawing Software

After opening, you can enter the following page, Fig. 7.1.2b, where users can draw and edit graphics.

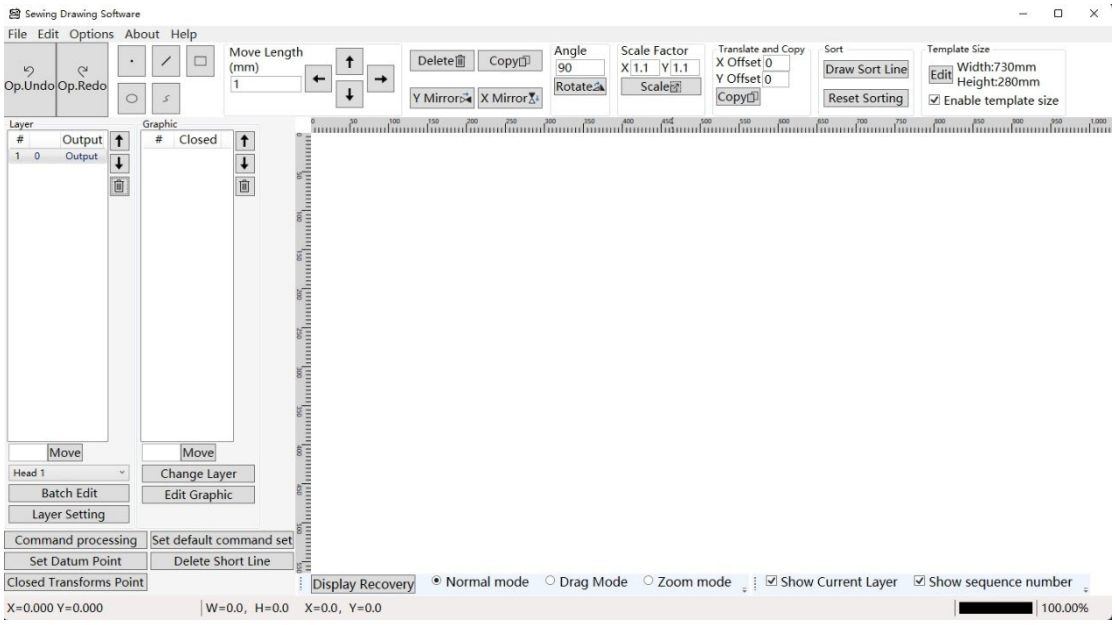


Fig. 7.1.2b Main Page of Sewing Drawing Software

7.2 Graphic Editing

7.2.1 Open and insert files

1. You can directly open the existing graphic files in SCD, SCO, DXF, PLT and other formats, and add, modify, edit and other operations on our software.

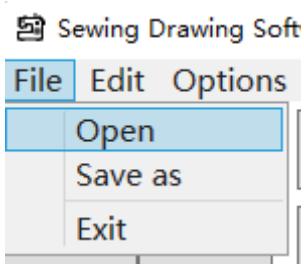


Fig. 7.2.1 Opening a Graphic File

2. Graphic files in DXF and PLT formats can be inserted on the basis of existing graphics on the canvas, so that the graphics exist on the canvas at the same time, and then modified, edited, etc.

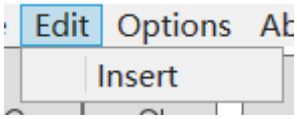


Fig. 7.2.1 Insert Graphic File

7.2.2 Draw new graphics

If you want to draw a new graphic, you can select the drawing tool in the toolbar for drawing. For detailed drawing operations, see Chapter 4 Toolbar.

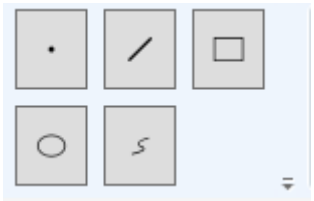


Fig. 7.2.2a Graphic Drawing Button

As shown in Fig. 7.2.2b below, it is a graphic drawn by the drawing tool.

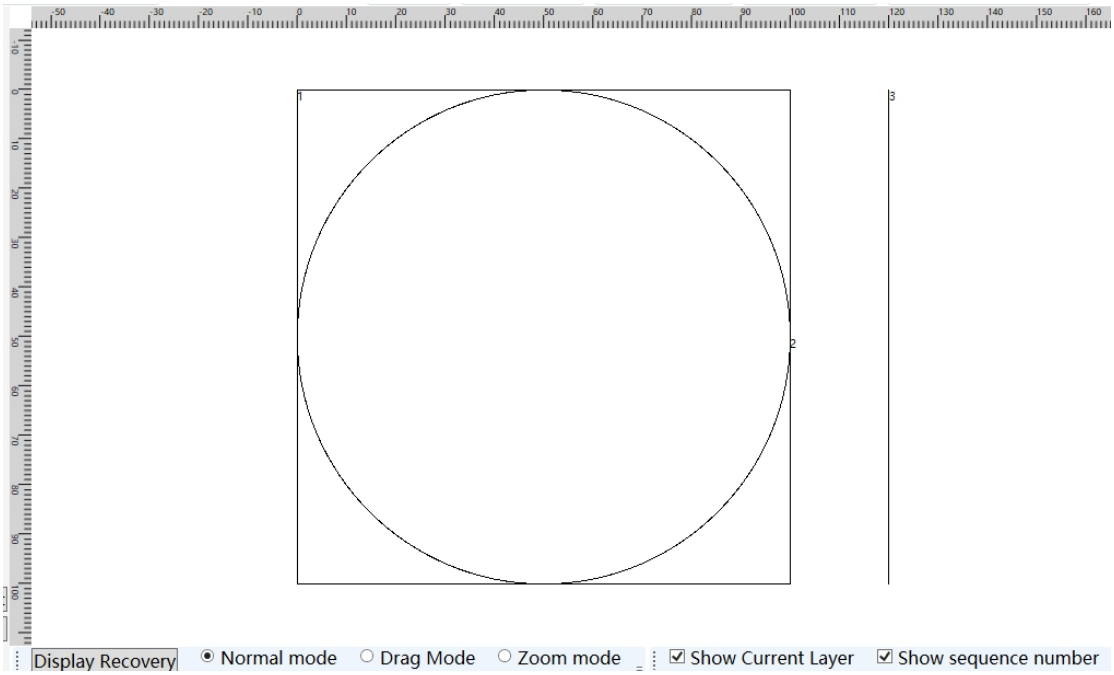


Fig. 7.2.2b Graphic

7.3 Line to Stitches

7.3.1 Layer selection

After drawing the graphics, select the layer that needs to be point converted, and the selected layer will display a blue background. Click Layer Settings to enter the parameter setting operation before Line to Stitches. As shown in Fig. 7.3.1.

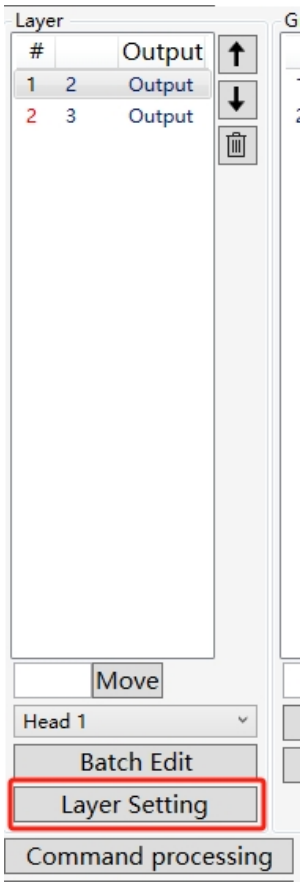


Fig. 7.3.1 Layer Selection

7.3.2 Layer setting

On the layer setting page, you need to check "Line to Stitches", and then "Sew Mode" will be automatically checked. You can set the stitch length, backstitch parameters, special seam and other parameters on this page as needed. After clicking OK, all graphics of this layer will be point converted. If special seam are required after the Line to Stitches is completed, please refer to the relevant commands for operation. As shown in Fig. 7.3.2.

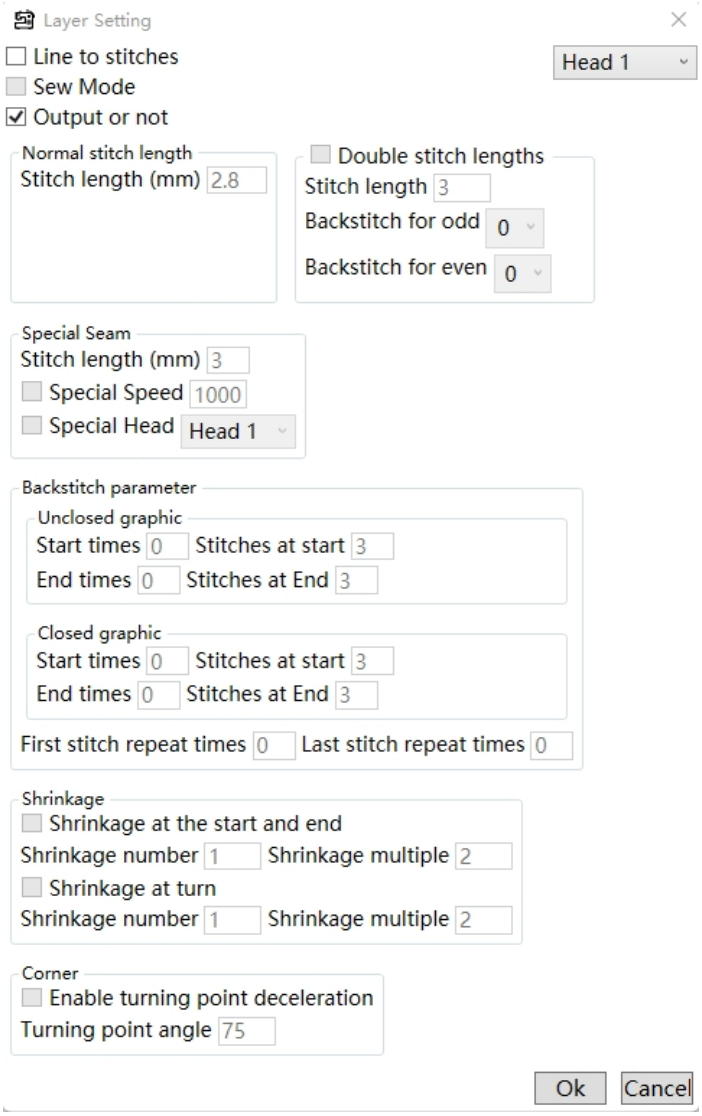


Fig. 7.3.2 Layer Settings Page

7.4 Datum point setting

7.4.1 Selection of datum point

After completing the point converting, it is necessary to set the datum point. According to the actual selected point (select the first point here, as shown in Fig. 7.4.1), click the "Datum Point Setting" button.

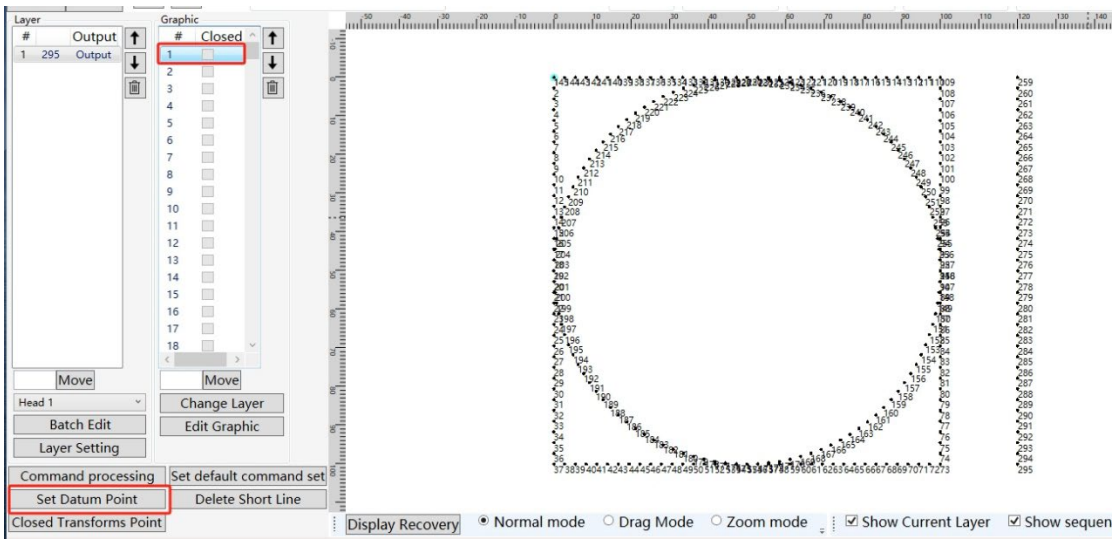


Fig. 7.4.1 Selection of Datum Point

7.4.2 Datum point setting

On the pop-up window, select "Set as datum point". At this point, the datum point setting is completed. For detailed description of the datum point, please refer to 5.8 Datum point setting. As shown in Fig. 7.4.2.

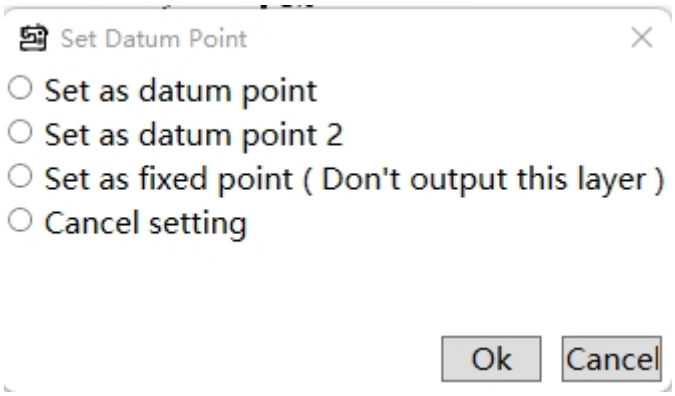


Fig. 7.4.2 Datum Point Setting

7.5 Output file

7.5.1 Command processing

Click the "Command Processing" button to pop up the command processing window, as shown in Fig. 7.5.1a. On this page, you can insert, move, delete and other operations on the commands after the graphics are point converted.

Fig. 7.5.1a Command Processing

On this page, you can modify, add, and output the command segments of the graphics after the point converting according to actual needs. For specific operations, please refer to 5.7 Command processing. The command processing window is shown in Fig. 7.5.1b below.

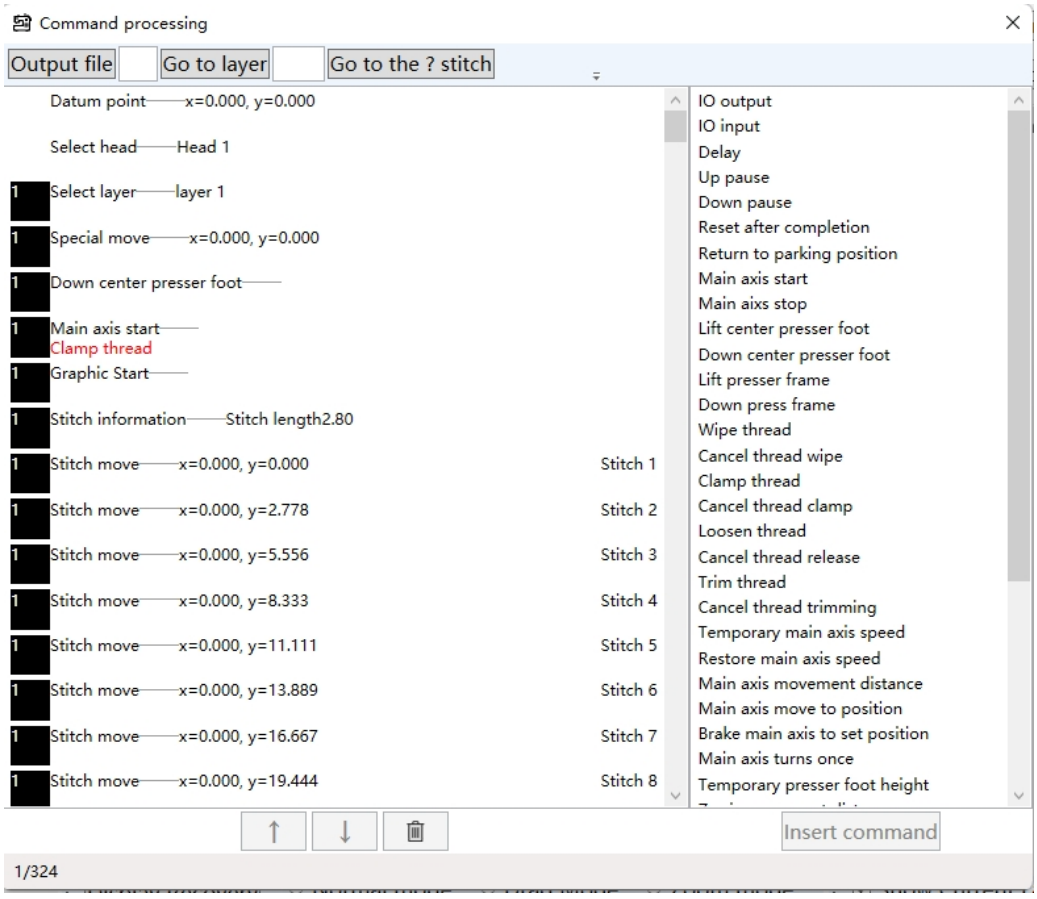


Fig. 7.5.1b Command Processing Window

If the command processing has been opened before, a window pops up saying that there are existing commands. Click "Yes" to restore the previous command, and click "No" to regenerate a new corresponding command. As shown in Fig. 7.5.1c.

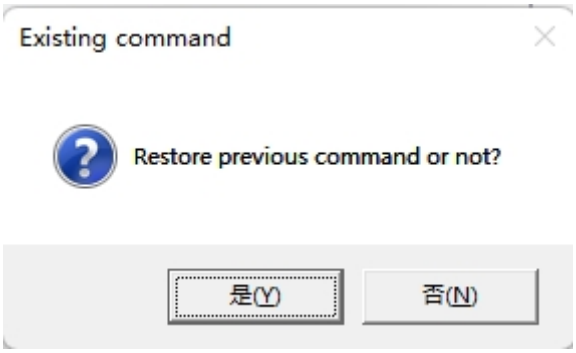


Fig. 7.5.1c Command Existence Prompt Window

7.5.2 Output file

After the command setting is completed, click "Output File" to output the graphic file after the point converting as a .sco file, which can be imported into the pattern file used by our company's panel. The buttons are shown in Fig. 7.5.2a below.

Fig. 7.5.2a Output File Button

Operation: ① Click the "Output File" button to pop up the file save page. As shown in Fig. 7.5.2b below.

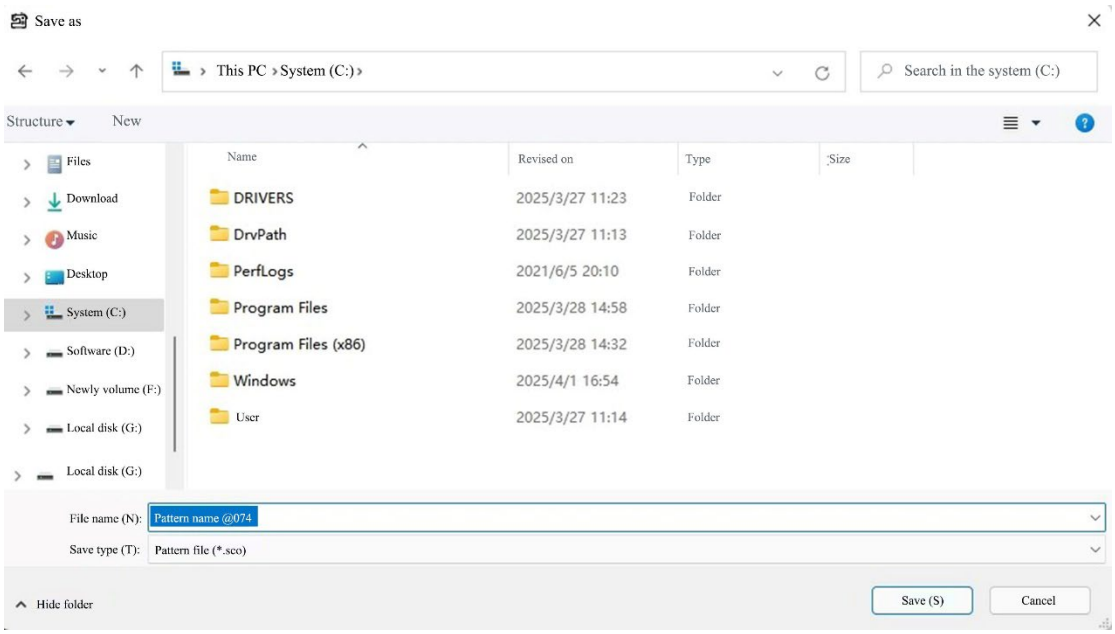


Fig. 7.5.2b File Saving Page

② Enter the name of the pattern file and save it as a pattern file (*.sco). Note: User-defined names must be entered before @, and the number after @ is the pattern file number, which is automatically generated by the system. As shown in Fig. 7.5.2c below.

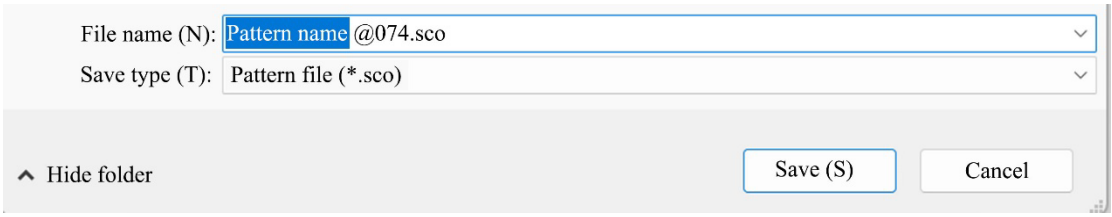


Fig. 7.5.2c File Saving Settings

③ Click the "Save" button to find this file in the corresponding folder. As shown in Fig. 7.5.2d below.

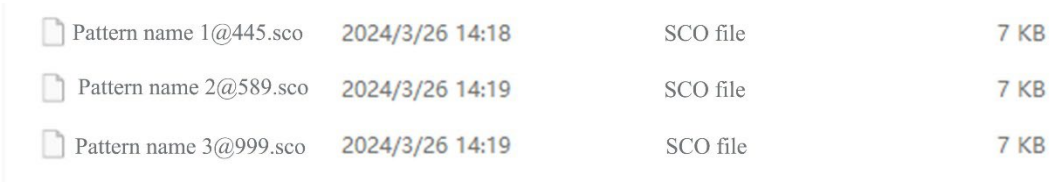


Fig. 7.5.2d File Location

④ Copy the saved .sco file to a U disk and import it into the panel for processing.