Single-Head Computerized Embroidery Machine

Quick Operation Guide

10.1-inch Touch screen

Version: 202510V1.0

CONTENTS

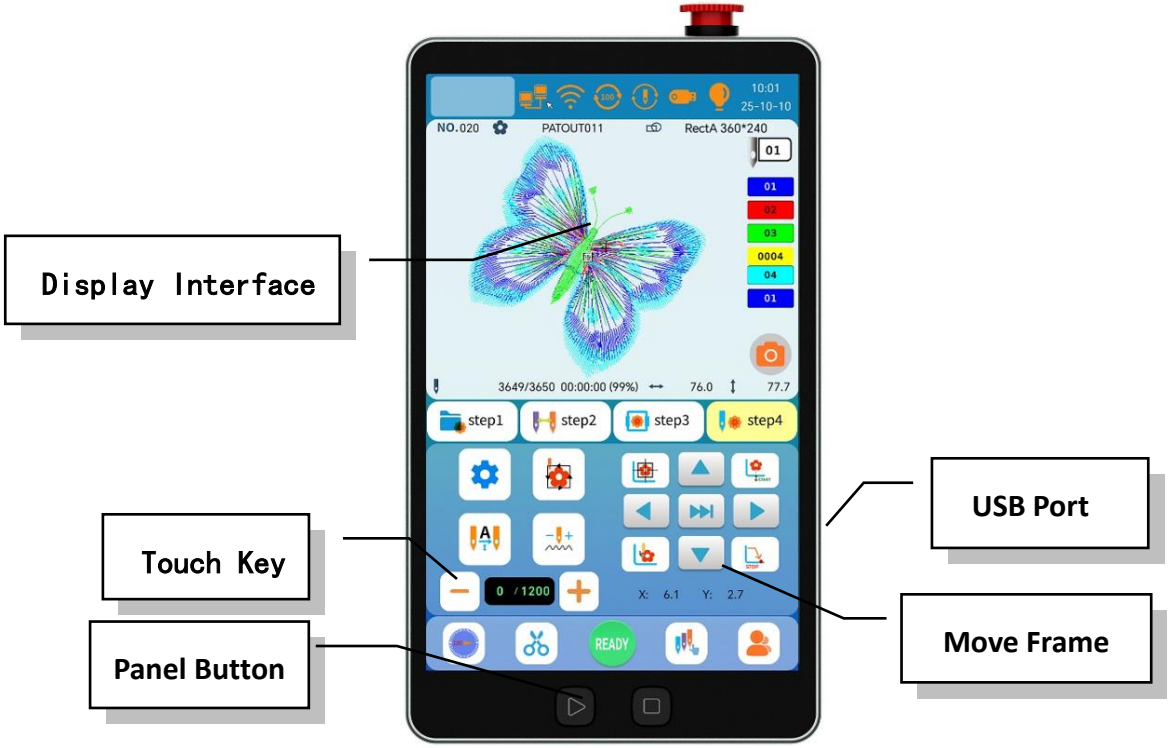
Chapter 1Introduction to the Embroidery Machine Control Panel 3
1-1 Structure of the Embroidery Control Panel 3
1-2 Explanation of Operation Buttons 3
1-3 Frame Selection and Setting 4
1-4 Main Interface Icon Descriptions 5
Chapter 2 Introduction to Embroidery Operations 11
2-1 Basic Embroidery Operation Process 11
2-2 Common Operations 13
Chapter 3: Introduction to Memory Pattern Management 16
3-1 Memory Pattern Management Interface 16
3-2 Memory Pattern Management Icon Overview 16
3-3 Common Pattern Extended Functions 19
3-3-1 Divide Memory Pattern 20
3-3-2 Combined Pattern Editing 20
3-3-3 Generate Pattern via Frame Movement 21
Chapter 4: Common Embroidery Pattern Functions 22
4-1 Paste Embroidery Setting 22
4-2 Offset Point Setting 23
4-3 Other Function Descriptions 23
Chapter 5: Letter Embroidery Operation Guide 25
5-1 Character Input and Editing Guide 25
5-2 Detailed Explanation of Character Layout Interface 27
Chapter 6: Graffiti Embroidery Operation Guide 32
6-1 Generating Graffiti Patterns 32
6-2 Detailed Explanation of the Graffiti Embroidery Editing Interface 33
Chapter 7: Embroidery System Software Update 36
7-1 Update Soft of Host Computer UI Software and Sub-Controller 36

7-2 Update Software of Peripheral Board..... 37

Chapter 8 Common Troubleshooting..... 38

Chapter 1Introduction to the Embroidery Machine Control Panel

1-1 Structure of the Embroidery Control Panel



1-2 Explanation of Operation Buttons

Button Symbols	Button Name	Button Function
▷	Start Button	①After confirming the embroidery design, press this button to start embroidery. ②When embroidery is paused, press this button to resume operation.
□	Pause Button	①During embroidery, press this button to stop the machine. ②When embroidery is stopped, press this button and the machine will go back, long time press the machine will roll back continuously.

1-3 Frame Selection and Setting



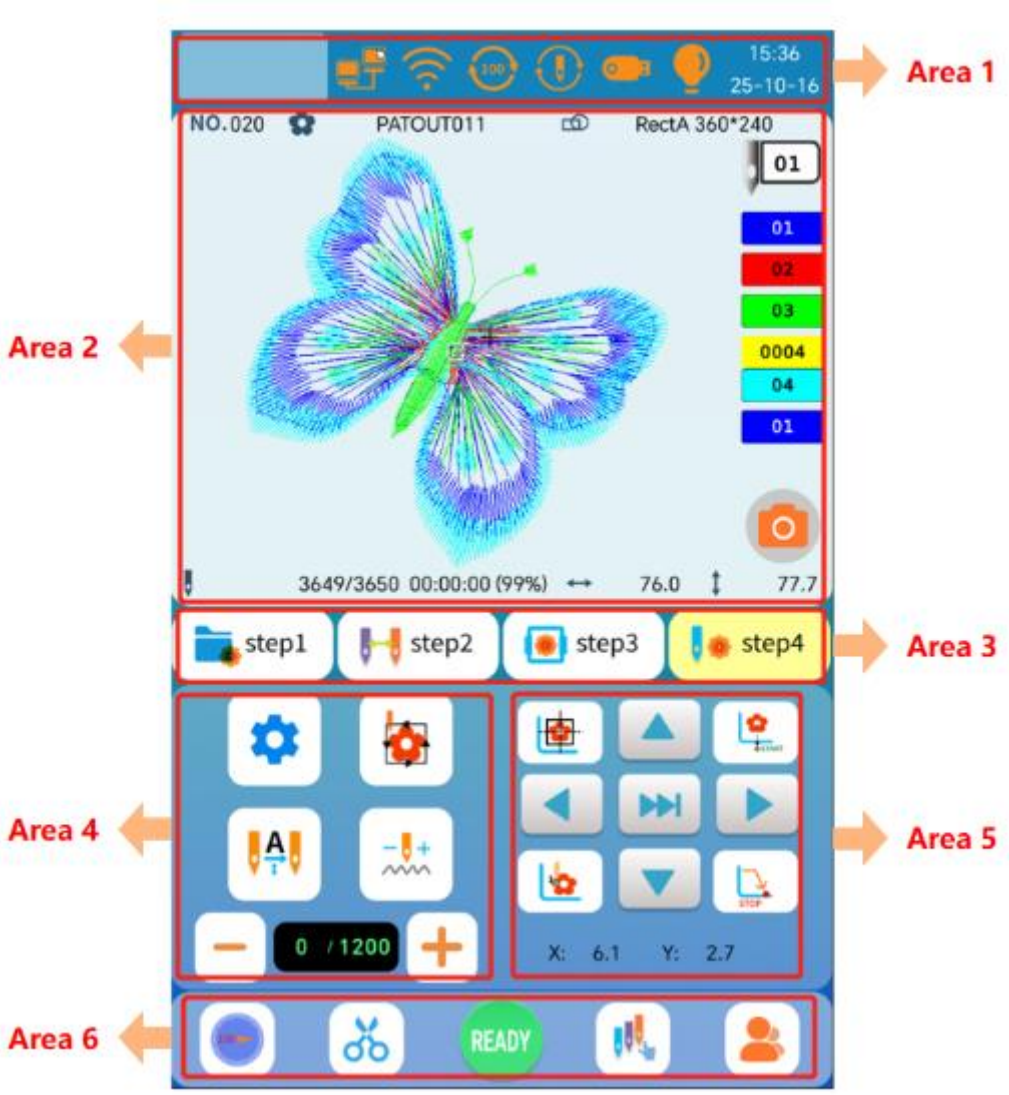
Click the main interface step3 → Click → (Left image) Select a frame matching your actual embroidery hoop: e.g., flat embroidery hoop 

or cap embroidery hoop 

→ Click and enter your password to view/modify hoop parameters (Right image) → After verification, click " " to confirm and return to the hoop selection interface → Click " "again to confirm, and the system will switch the embroidery hoop

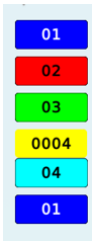
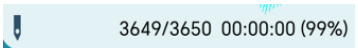
1-4 Main Interface Icon Descriptions

The main embroidery operation interface window is shown below:



Area	Icon Status	Content/Operation Description
1	: Control cable connection status (i.e., the cable connecting the main control box to the operation box)	: Control cable connection normal; : Control cable is not connected properly.

1	: Network connection status	: Network connection normal; : Network not connected.
1	: Main shaft status and Manual Adjustment	: Main shaft stop in place; : Main shaft stop not in place. Click to jog operation and main shaft rotate to 100 degrees.
1	: System set to cyclic embroidery mode	: System set for cyclic embroidery; : System not set for cyclic embroidery; Click the icon directly to switch cyclic embroidery, or set "Loop Embroidery" to "Yes" in the auxiliary embroidery functions at .
1	: USB Drive Connection Status	: USB drive connected; : USB drive not connected.
1	:Machine light status	: Light on; : Light off; Click to switch.
1	10:02 25-10-10 : System current time	Displays the current system time. Click directly to modify, or set the current system time under the "Calibrate Clock" menu in "System Management" at .
2	01 : Current needle position	The "01" above the color sequence chart indicates the machine is currently at needle position "1". If a color change fails to complete, the needle position number will display as "?".

2	 : Current Pattern Color Sequence table	Displays the color sequence table for the current embroidery pattern: "0004" Indicates the current embroidery has reached the 4th color, which increases as the number of color changes increases. The "04" below "0004" indicates the needle number will be used; Click anywhere on the color sequence table to enter the color sequence settings interface and modify the embroidery color order for the current pattern.
2	: Display Status	: Display Pattern Drawing; : Display Pattern Hoop Position
2		Display the current pattern number, pattern name in memory, and current frame.
2	 Display the current embroidery pattern status	Real-time display of the embroidery pattern's stitching progress.
2		Display: Current needles completed / Total needles, remaining embroidery time (embroidery progress percentage)
2		Display pattern width and height information (in mm)
3	 : Memory Pattern Management Function	(Embroidery Step 1) Click to enter the "Memory Pattern Management" interface.

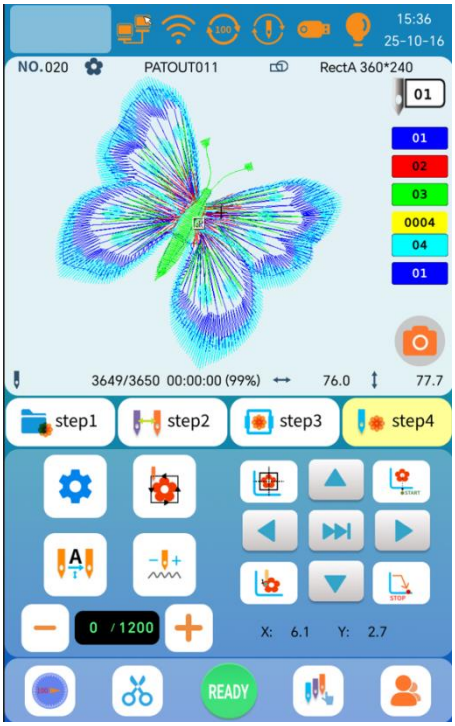
3	 step2 : Color Sequence Settings	(Embroidery Step 2) Click to enter the "Color Sequence Settings" interface.
3	 step3 : Embroidery Position Selection	(Embroidery Step 3) Click to enter the "Embroidery Position Selection" interface.
3	 step4 : Embroidery Confirmation	(Embroidery Step 4) Tap to confirm the current embroidery pattern and return to the main interface.
4	 : Settings Management	Click this icon to enter the Settings Management interface
4	 : Trace	After selecting the pattern and before embroidering starts, The embroidery frame moves around the XY boundary of the pattern to check whether the limit is exceeded.
4	 : Color Change Mode Icons	 : Auto color change, auto start mode;  : Auto color change, manual start mode;  : Manual color change, manual start mode; Each click switch between color change modes.
4	 : Idling	Click this icon to enter the idle operation interface
4	 Adjust the embroidery machine's maximum working speed and display the machine's running speed.	"0" indicates the machine current speed is 0 rpm. which will vary with the stitch length in the pattern when running."1200" represents the maximum set speed limit. Click "" or "" to modify the embroidery speed.

5	 : Frame shift Operations	Directional icons (up, down, left, right). Click to access frame shift operations.  : Manual low-speed frame shifting mode; click to toggle  : Manual high-speed frame shift mode.
5	 : Automatically find pattern origin	Center the pattern on the embroidery hoop
5	 : Return to Offset point	Move the frame to the Offset point
5	 : Origin operation	 : Return to origin;  : Save the origin position;  : Restore to the saved "memorized pattern origin" position
5	 : Return to Last Stitch	Click this icon to perform the "Return to last Stitch " operation.
5		Displays the displacement from the X and Y origin in millimeters (mm). In embroidery stop mode, clicking the numbers resets the current X and Y displacement values to zero and recalculates them using the current position as the origin.
6	 : Main Shaft Jog	Click this icon to perform "  " (confirm jog operation) or " " (needle stop position operation).
6	 : Trimming operation	Click this icon to perform the "  " operation to cut upper and lower threads, or the "  " operation to cut trim bobbin only.
6	 : Manual Color Change Icon	Click this icon to enter the manual color change interface.
6	 : Auxiliary Embroidery Functions	Click this icon to open the "Auxiliary Embroidery Functions" interface.

6	 : Embroidery Status	 : Embroidery Confirmation Status;  : Embroidery Preparation Status; Click to toggle.

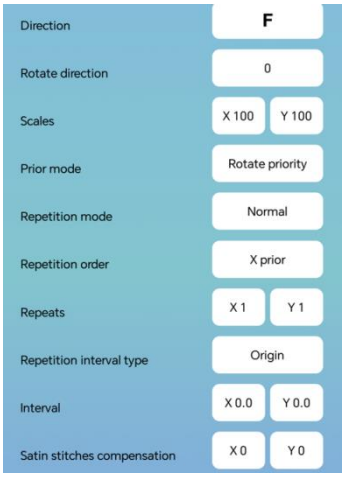
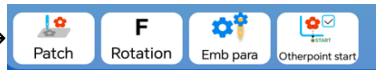
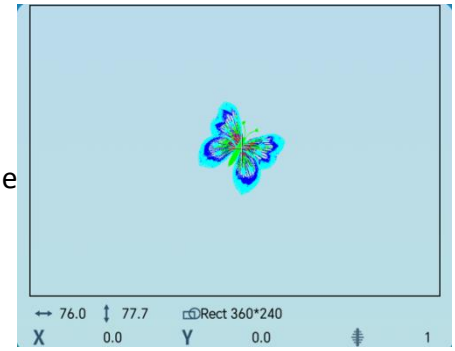
Chapter 2 Introduction to Embroidery Operations

The main embroidery operation interface is shown below:



2-1 Basic Embroidery Operation Process

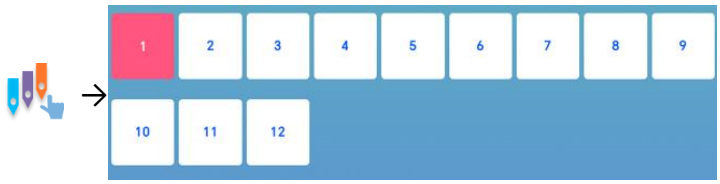
No.	Function	Content/Operation Instructions
1	: USB Drive Input Pattern	Insert USB drive → step1 → → Use to navigate pages, click to select desired pattern → → Enter pattern number → Enter
2	step1 :Select Pattern	step1 → Use to navigate pages, click to select desired pattern
3	step2 : Color sequence setting	step2 → Click the color sequence icon to modify  → Select the desired

		needle bar  → Optionally input the color sequence and repeat (Alternatively, double-click the pattern → click Edit color-changing order in the pop-up dialog →)
4	: Parameter Setting	step1 → Use to navigate pages, double-click desired embroidery pattern → Click Setting General Parameters in the pop-up dialog → Modify parameters as needed  → (step2 interface allows quick modification of some parameters → )
5	step3 : Selecting the embroidery position	step3 → Display the pattern's position within the frame  → Use to move the frame to the desired position
6	step4 : Embroidery	step4 Click to confirm the pattern

	Confirmation	
7	: Color Change and Star Mode	Click this icon to switch color change star mode. : Automatic color change, automatic star : Automatic color change, manual star : Manual color change, manual star.
8	: Release embroidery	Click → Prompt: "Change to EDIT mode?" →
9	Physical button	Start embroidery; Pause embroidery
10	:Confirm embroidery	Press → Prompt: "Confirm embroidery pattern?"→

2-2 Common Operations

No.	Function	Content/Operation Instructions
1	: Main Shaft	→ Confirm jog operation
2	:Needle down	→ Needle down → Manual Frame Movement (**Frame movement prohibited while embroidery fabric is not released**) → Exit
3	: Manual thread trimming	→ Cut upper/lower thread / Cut bobbin thread → Exit
4	: Manually move the hoop	When embroidery is paused, press the virtual keys on the control panel: to manually move the frame. Press to switch between high-speed and low-speed frame movement.

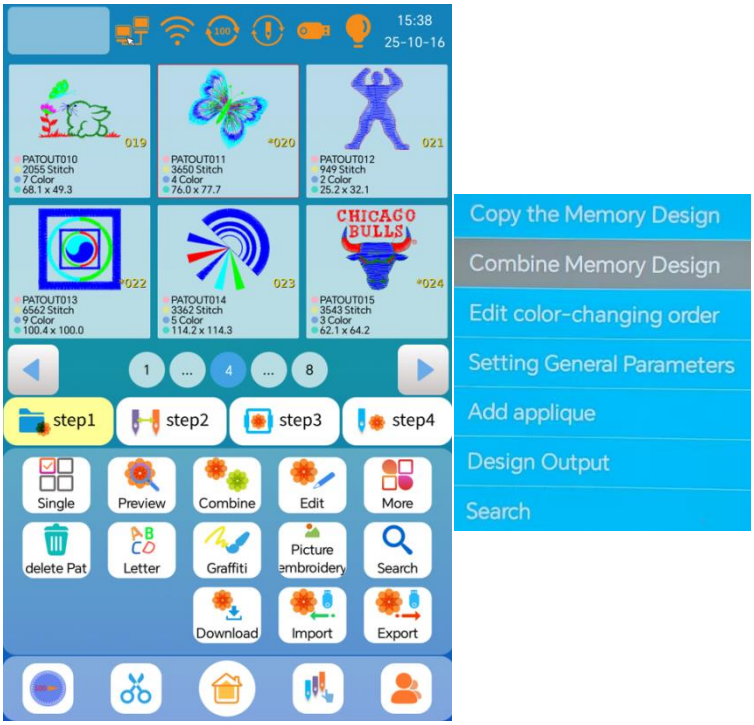
5	: Manual Color Change	 →Press the corresponding number key for the target needle position to change colors
6	: Idling	→ Click to select the corresponding option for operation. : Low-speed idling back : Low-speed idling go ahead : Low-speed idling back 1stitch : Low-speed idling advance 1 stitch : High-Speed idling Back : High-Speed idling go ahead : Idle back to last Color : Idle to next Color : High-Speed idling back to last stop-code, :High-Speed idling to next stop-code 3649 : Set idle stitch numbers
7	: Return to origin	→ Return to origin
8	: Return to stop point	→ Return to stop Point
9	: Trace the pattern outline	step3 → The frame will move along the pattern

		outline
10	: Pattern repeat settings	step3 → → Modify pattern repeat parameters →
11	Stitch Patching	Patching is divided into two modes: manual patching and automatic patching. **Manual Patching:** If observing the leakage embroidery ,the operator can press to stop the machine. Then press to roll back. After the frame rolling back in place, press to star patching. **Automatic Patching:** During embroidery, the system automatically detects thread breaks, stops the machine, and flashes a red light. It can automatically reverse by the preset number of stitches (or manually reverse as needed). Pressing to star patching .

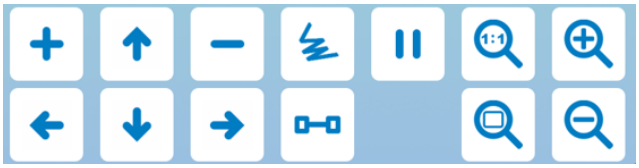
Chapter 3: Introduction to Memory Pattern Management

3-1 Memory Pattern Management Interface

On the embroidery main interface, click the icon → step1 to enter the "Memory Pattern Management Interface" as shown below:



3-2 Memory Pattern Management Icon Overview

No.	Function	Content/Operation Description
1	: Pattern Preview	Click to select the pattern you wish to preview → Click " " → Preview the selected pattern in full screen along with its detailed information. Simultaneously, use the tool buttons "  " to zoom in or out, scale proportionally, display full screen, slow or tracing speed, switch tracing modes, pause display,

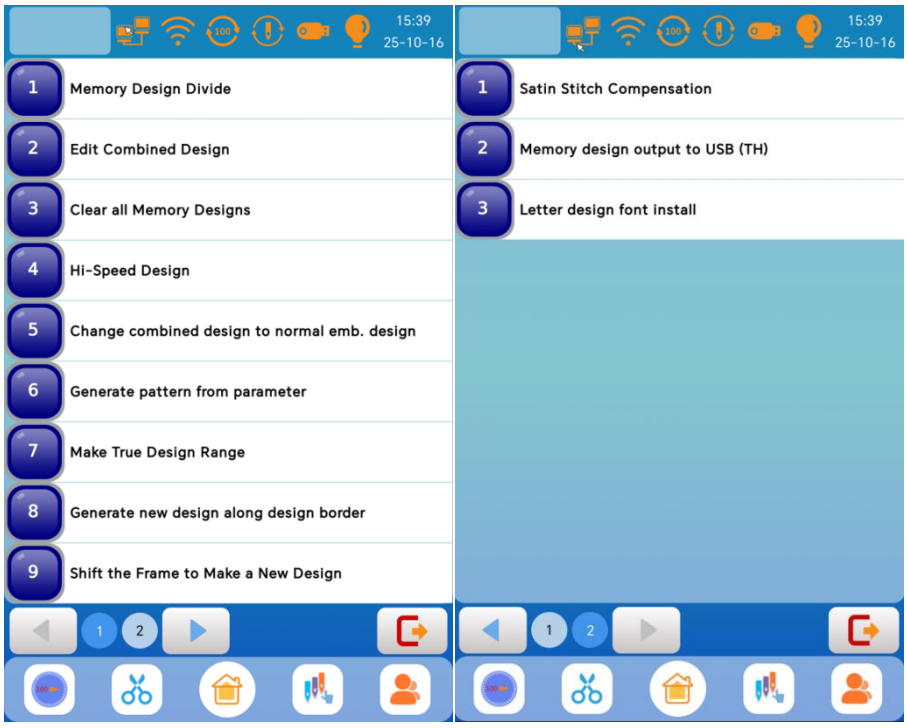
		simulate embroidery and the directional movement. To examine detailed sections of the pattern.
2		Single/Multi-Select Switch Button: When the icon switches to  , you can click multiple times to select multiple patterns stored in memory.
3	Embroidery Parameter Editing	Use the  to navigate pages. Double-click to select the design whose embroidery parameters you wish to view or set → In the pop-up dialog, click "Setting General Parameters"→ View or modify embroidery parameters, including setting rotation direction/angle, scaling, repeating, flat stitch compensation, etc. → 
4	Color Sequence Settings	Use the  to navigate pages. Double-click to select the pattern whose color sequence you wish to view or set → In the pop-up dialog box, click "Edit color-changing order"→ View or modify the color change sequence for the selected pattern →  .
5	: Pattern Input	Click "" to access the USB drive interface, where you can perform the following operations: format the USB drive, return to the previous directory level, create a new directory, input patterns, etc.
6	:Pattern Output	First insert the USB drive → Use  to navigate pages, click to select the pattern to output→ Click  → Select the output directory → Then click  → Enter the pattern name →  to export the pattern from memory to the USB drive.
7	Delete Pattern	Use  to navigate pages, click to select the pattern

		to delete (switch to  to select multiple patterns) → Click  to delete → Click  to confirm.
8	Searching for Patterns	Double-click any pattern → Click 搜索 in the pop-up dialog → A keyboard will appear; enter the pattern name or number to search → Click "Search" to quickly locate the pattern.
9	Pattern Copy	Use the page navigation keys () to scroll through patterns. Double-click to select the pattern you wish to copy → In the pop-up dialog box, click "Copy the Memory Design" → Enter the pattern number and pattern name → Click the "Enter" confirmation key.
10	Mosaic Pattern	 Switch to multi-select mode → Use  to navigate pages, select two patterns to mosaic , then double-click → In the pop-up dialog, click Combine Memory Design → Enter the pattern number to save and the X/Y spacing relative to the first pattern → Enter
11	Paste Embroidery Setting	Use  to navigate pages, double-click to select the pattern to copy → In the pop-up dialog, click Add applique → Configure applique points and displacement settings.
12	 :Combined Pattern	Packed several designs for saving as one and visually typesetting. Use the tool buttons  to add memory designs, lettering embroidery patterns, or doodle embroidery patterns. Use these buttons  to modify parameters, color sequences, delete designs, zoom in/out, position, switch selected designs, etc.

13	: Letter Embroidery	Click to input characters and set font and letter height parameters → Click to confirm and enter the editing layout interface → Use function keys to edit and arrange the input characters → Click to save the generated pattern.
14	: Graffiti Embroidery	Click to enter canvas settings → Click Enter to confirm and enter graffiti embroidery pattern editing interface → Use interface function keys for drawing and editing → After completing graphic editing, click to save the edited pattern.
15	: Extended Function	Click to enter the pattern extended function menu

3-3 Common Pattern Extended Functions

On the main pattern management interface, click "" to enter the "Pattern Extended Functions" menu, as shown below:



Note: The "Clear All Memory Patterns" and "Generate Pattern by Moving Frame" functions cannot be operated when the embroidery status is confirmed.

3-3-1 Divide Memory Pattern

Click " step1 " → Use " " to navigate pages → Select the pattern to split → Click " " and choose the "Divide Pattern" menu → Enter the split point and desired pattern number → Click the " Enter "confirmation key → The system will generate two split patterns.

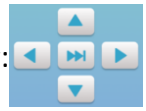
3-3-2 Combined Pattern Editing

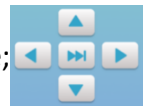


Click step1 → Click → Click "Combined Pattern Editing" → Click "Create New Pattern" → Enter the Combined pattern number to be saved → Enter → Enter the pattern number of the first pattern to be combined, and set parameters such as pattern magnification rate, rotation direction, rotation angle, and priority method. After setting, click the icon to proceed to the selection and setting of the next combination pattern →Edit the second pattern

combination (you can set the spacing of this pattern relative to the first one). Similarly, you can click the  icon to select multiple pattern combinations → Click  to save and exit → 

3-3-3 Generate Pattern via Frame Movement

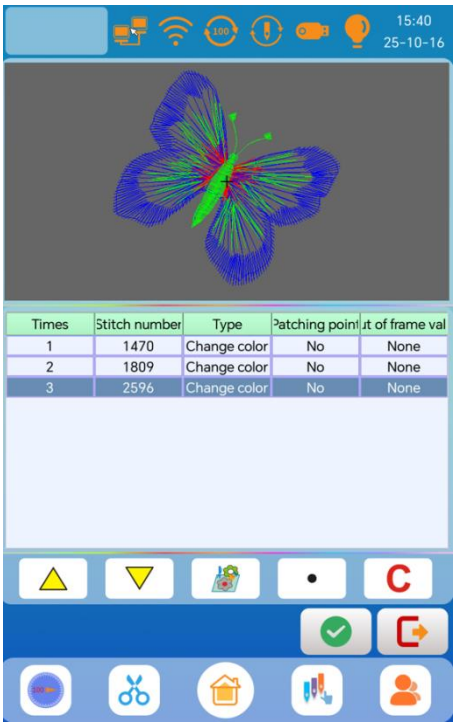
 →Click  →Click "Move Frame to Generate Pattern" →Edit using the  function key and the move frame key:  →After editing, click  to exit and save →Enter the pattern number to save, then click  to save.

Icon Descriptions:  : Switch stitch attributes (select flat stitch or jump stitch);  : Modify stitch length value;  : Manually move the frame to create displacement paths;  : After determining displacement paths, must click this key to confirm them;  : Delete confirmed displacement paths.

Chapter 4: Common Embroidery Pattern Functions

4-1 Paste Embroidery Setting

1、 Before confirming the embroidery pattern, click step1 → Use to navigate pages and select the desired paste pattern → In the pop-up dialog, click Add applique to access the paste settings interface. The system automatically lists all color change codes for the pattern. As needed, click the icon to select points for paste embroidery, then click the icon to set paste points and frame offset values (alternative starting point or offset frame values). Finally, click the Enter icon to confirm. After configuration, click " " to save and exit. (● : Repeat the previous step. C : Delete the paste points.) The paste embroidery settings interface is as follows:



2、 Select the pattern with pre-set paste points to confirm embroidery. After starting embroidery with the lever, when the system reaches a set paste point, it will automatically move the embroidery frame out to the designated paste position and stop, waiting for the operator to place the paste. Once the paste is placed, restart

embroidery with the lever. The system will automatically move the frame back and resume embroidery.

Note: You can also conveniently set paste points by clicking " 

" in the embroidery process at 

.

4-2 Offset Point Setting

1. Offset Point Setting: Click 

→ Click  → Select the frame matching your actual embroidery hoop: 

or 

→ Click  and enter your password → Move the frame to the desired alternate starting point, then click "Save" 

→ Verify the correctness and click "  "to confirm, returning to the embroidery hoop selection interface → Click "  " again to confirm, and the system will switch the embroidery hoop.

2. Set embroidery pattern: Refer to 2-1 Basic Embroidery Operation Process and 4-1 paste Embroidery Settings for details.

3. Enable alternate start point: In the embroidery process 

, click 

to activate the alternate start point feature.

4. After setting the alternate starting point, press  to start embroidery. When the pattern reaches the paste point, the hoop will automatically move to the "alternate starting point" for easier operator access.

4-3 Other Function Descriptions

No.	Function	Content/Operation Description
1	Turn on/off the head	Auxiliary Embroidery Function → Turn the machine head on or off
2	Upper Thread Clamping Action	Auxiliary Embroidery Function → Upper Thread Clamping Action → ① Open upper thread clamping

		mechanism; ② Close upper thread clamping mechanism
3	Power-off Frame Protection Settings	→ Professional Parameters → Embroidery Frame Parameters → Click to scroll → Click "Power-Off Frame Protection Settings"→ System prompts "Confirm Power-Off Frame Origin Settings?"→
4	Power-off Frame Protection Recovery	→ Professional Parameters → Embroidery Frame Parameters → Click to turn page → Click "Power-Off Frame Protection Recovery"→ System prompts "Confirm power-off frame recovery operation?"→

Chapter 5: Letter Embroidery Operation Guide

5-1 Character Input and Editing Guide

1. step1 → 字母绣 Enter interface to select character string:



2. step1 → 字母绣 Enter the character string → ✓ Enter the letter embroidery operation interface → A Enter the "Character Input Editing "interface as shown below:

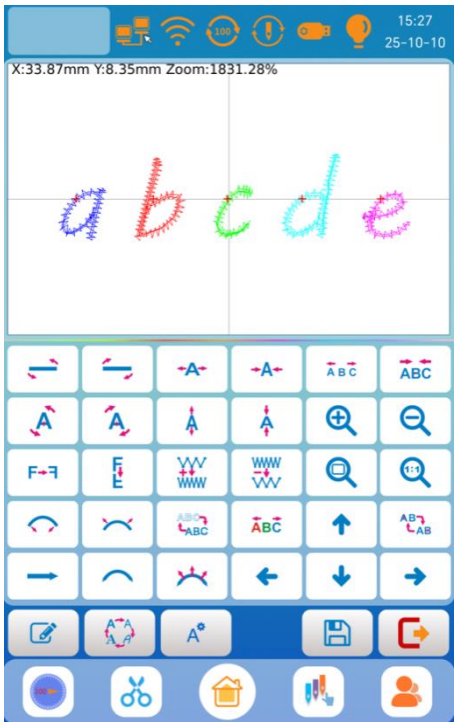


No.	Parameter Name	Parameter Description	Default Value
1	String	That is: the English words, characters, or numbers to be embroidered.	
2	Font	Specifies the font style for the embroidered text. The font selected here applies to all input text. To modify the font for individual characters, adjust settings in the "Character Layout" interface.	1# Font
3	Arrangement Style	Four arrangement options are available: 1. Horizontal Arrangement 2. Vertical Arrangement 3. Upward Curved Arc 4. Downward Curved Arc.	Horizontal Arrangement
4	Letter Height	Refers to the character height corresponding to the selected font, measured in millimeters (mm).	20mm
5	Character Spacing	Refers to the spacing between character centers, measured in millimeters (mm).	0mm
6	Character Angle Fixed	Refers to whether the angle of each character changes according to its position on the arc when characters are arranged in an arc.	No
7	String Rotation Angle	Refers to the angle by which the input string is rotated around its center.	0
8	Letter tilt angle	Refers to the tilt angle of the input character relative to its own vertical centerline.	0
9	Satin density	Refers to the distance between adjacent satin stitches in the generated letter pattern. A smaller value indicates higher satin stitch density.	4
10	Letter Rotation Angle	Refers to the angle by which each input letter is rotated around its own center point.	0

11	letter Color Alternation	Indicates whether each letter in the input uses an independent color for display	No
12	Letter Stitch Mode	Select stitch mode	Satin Stitch Mode
13	Single Stitch Length	Single Stitch Length	1.5
14	Single-needle closed stitch	Single-needle stitch closure	Yes

5-2 Detailed Explanation of Character Layout Interface

The Character Layout interface appears as shown below:



(Note: The "+" symbol above each character indicates its center point)

After entering the "Character Layout "interface, users can refer to the meanings in the table below and click the corresponding function icons to edit the layout of selected letters or word combinations.

No.	Icon	Icon Description	Remarks
1		Enter the "Character Input Edit "interface to modify the English words, characters, or numbers to be embroidered.	
2		Change the font of the selected characters.	Applies to selected characters
3		Switch character display modes: 1. Display character outlines; 2. Display character stitch trace.	Applies to all characters.
4		Whether selected characters use independent colors for display in embroidery.	Applies to all characters
5		Move selected characters upward.	Applies to selected characters only.
6		Move selected characters down.	Applies to selected characters
7		Move selected characters to the left.	Applies to selected characters
8		Move selected characters to the right.	Applies to selected characters
9		All entered characters are arranged horizontally.	Applies to all characters. Click icon 9/10 to switch between options.
10		All entered characters are arranged vertically.	Applies to all characters

11		All entered characters are arranged in a downward-curving arc pattern.	Applies to all characters. Click icons 11/12 to switch between them.
12		All entered characters are arranged in an upward-curving arc.	Applies to all characters.
13		When characters are arranged in an arc, their angles adjust based on the arc's position (i.e., character angles are perpendicular to the arc).	Applies to all characters. Click icons 13/14 to switch between them.
14		When characters are arranged in an arc, their angles do not change based on their position along the arc (i.e., character angles are perpendicular to the horizontal line).	Applies to all characters.
15		Enlarge all entered characters for detailed inspection.	Applies to all characters
16		Shrink all input characters for display.	Applies to all characters
17		Display all input characters at a 1:1 ratio.	Applies to all characters.
18		Display all input characters at full screen size.	Applies to all characters.
19		Rotate all input strings counterclockwise around the center of the string.	Applies to all characters.
20		All input strings are rotated clockwise around the center of the string.	Applies to all characters.
21		When the string is arranged in an arc, increases the arc angle of the string's arrangement.	Applies to all characters

22		When the string is arranged in an arc, decrease the curvature of the arc.	Applies to all characters
23		Increases the spacing between each character in the string.	Applies to all characters
24		Reduce the spacing between characters in the string.	Applies to all characters.
25		Rotate the selected characters counterclockwise around their respective centers.	Applies to selected characters
26		Rotate the selected characters clockwise around their respective centers.	Applies to selected characters
27		Increases the height of the selected characters.	Applies to selected characters
28		Decrease the height of selected characters.	Applies to selected characters.
29		Horizontally mirror the selected characters along their respective centers.	Applies to selected characters.
30		Vertically mirrors the selected characters along their respective centers.	Applies to selected characters
31		Increase the satin stitch density for all characters.	Applies to all characters
32		Reduce the satin stitch density for all characters.	Applies to all characters
33		Increase the width of the selected character.	Applies to selected characters
34		Decrease the width of selected characters.	Applies to selected characters.

35		Switch selected characters. By default, all characters are selected. After clicking the "  " button, the first character is selected. Click again to select the second, and so on. After selecting the last letter, click the "  " button again to reselect all characters.	You must select all characters or select a specific character before editing its layout. A red "+" in the center of a character indicates it is selected.

Chapter 6: Graffiti Embroidery Operation Guide

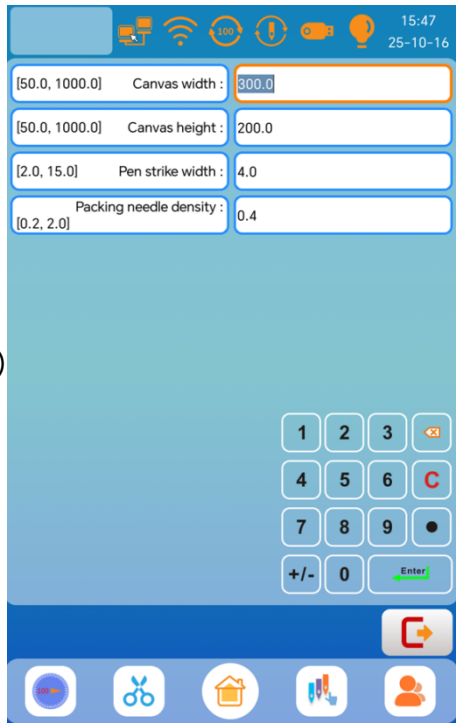
6-1 Generating Graffiti Patterns

Steps: ① Enter Graffiti Embroidery → ② Input parameters → ③ Manually draw →④ Select corresponding function icons for settings →⑤ Save () →⑥ Generation complete ().

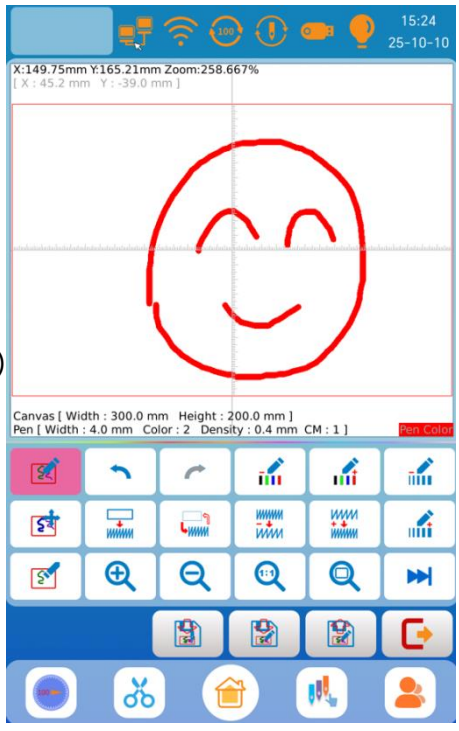
①



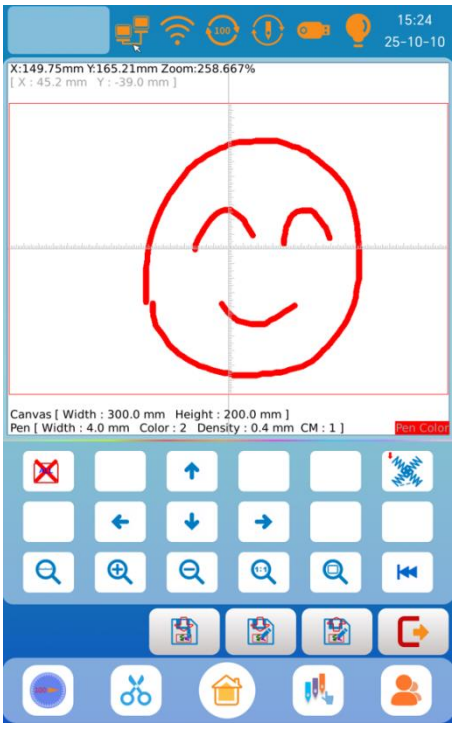
②



③



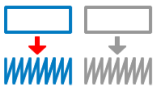
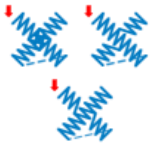
④



6-2 Detailed Explanation of the Graffiti Embroidery Editing Interface

The "Character Input Edit "interface appears as shown below:

No.	Icon	Icon Description	Notes
1		Click this icon to enter the "Drawing" mode of the graffiti embroidery. In this mode, you can draw patterns on the touch screen.	This icon is active when its background is red.
2		Click this icon to enter the "Move Edit" mode for graffiti embroidery. In this mode, you can rearrange drawn patterns, change colors, adjust line thickness, modify stitch density, and perform other related editing operations.	This icon is active when its background is red.
3		Click this icon to enter the "Erase Edit" mode for graffiti embroidery. In this mode, you can erase the drawn pattern.	This icon is active when its background is red.
4		Click this icon to undo the previous operation.	When this icon  appears grayed out, the function is unavailable.
5		Click this icon to repeat the previous action.	When this icon  appears grayed out, the function is unavailable.
6		Click this icon to modify the color of the currently drawn or selected line.	1. In the "Draw" state of the  , this applies to lines drawn before they are converted into stitches. 2. In the "Move Edit"
7		Click this icon to modify the color of the currently drawn or selected line.	
8		Click this icon to reduce the thickness of the currently drawn or selected line.	

9		Click this icon to increase the thickness of the currently drawn or selected line.	state of  , the currently selected stitch pattern is affected.
10		Click this icon to increase the spacing between currently drawn or selected lines.	
11		Click this icon to decrease the spacing of the currently drawn or selected line.	
12		Click this icon to toggle between displaying all current stitch lines as outlines or stitches.	Non-stitch lines are not affected.
13		Click this icon to convert the currently drawn line into a stitch.	When this icon  appears grayed out, the function is unavailable.
14		Click this icon to delete all currently drawn patterns.	Use with caution
15		In "Move Edit" mode, clicking this icon will apply "Stitch Overlay,""Lower Stitch Avoidance," or "Upper Stitch Avoidance" to the selected overlay stitches.	
16		Clicking the left icon shifts the entire canvas left; clicking the right icon shifts the entire canvas right.	
17		Click the top icon to move the entire canvas up; click the bottom icon to move the entire canvas down.	
18		Click this icon to show or hide the ruler on the canvas.	

19		Click this icon to zoom in on the drawn pattern for detailed inspection of the pattern or stitching.	
20		Click this icon to zoom out the displayed pattern.	
21		Click this icon to display all drawn patterns at a 1:1 scale.	
22		Click this icon to display all drawn patterns at full screen scale.	
23		Proceed to the next page menu.	
24		Return to the previous page menu.	
25		Tap this icon to save the stitch pattern of the currently drawn design.	
26		Click this icon to save the currently drawn pattern (not the stitch pattern) for future import and editing.	
27		Click this icon to import the last saved drawing pattern for further editing.	
28		Click this icon to exit the current graffiti embroidery editing interface.	

Chapter 7: Embroidery System Software Update

7-1 Update Soft of Host Computer UI Software and Sub-Controller

Serial No.	Function	Operation
1	System Software Update (Host Computer UI Software)	Insert USB drive containing host computer UI software → → System Management → Execute "System Software Update" → Use to navigate pages, select file name such as: "Raysita_SDXS2025 xxxx.1.1.1LEU" → Click → → System requires power cycle after update completion.
2	Sub-Controller Software Update (Slave Device Control Software)	Insert the USB drive containing the host computer UI software → Navigate to → System Management → Execute "Peripheral Board Software Upgrade" → Use to scroll through pages, select a file such as "ZK_SD_C125xxxx.rnupd" → Click → → After the update completes, the system requires a power cycle to restart.

7-2 Update Software of Peripheral Board

No.	Function	Operation
1	Head Software Update	Insert USB drive containing host computer UI software →  →  System Management → Execute "Peripheral Board Software Upgrade" → Use  to navigate pages, select file named "Multi-function Head Board_xxxxxxx.rnupd" → Click  →  → CAN1 → System requires power cycle after update completes.
2	Servo Software Update	Insert the USB drive containing the host computer UI software →  →  System Management → Execute "Peripheral Board Software Upgrade" → Use  to navigate pages, click to select the file named "MCU_P23_V21_Nxxxx_Axisxx.rnupd" → Click  →  → CAN2 → After the update is complete, the system requires a power-off restart.

Chapter 8 Common Troubleshooting

Issue	Cause	Solution
Communication packet loss	1. Faulty connection between the control panel and main control unit signal cables 2. Machine is affected by interference	1. Inspect and repair cables 2. Eliminate interference sources
Touch screen unresponsive	1. Poor contact at the touch screen connector 2. Touch screen damaged	1. Reinsert the touch screen connector 2. Replace the touch screen
Touch screen drifting (Touch position misalignment)	1. Touch screen aging 2. Touch screen damage	1. Recalibrate touch screen position 2. Replace the touch screen
Main shaft not in position	Main shaft not at zero position (100 degrees)	Jog or manually rotate the main shaft to zero position
Main shaft zero position stop timeout	1. Zero position signal board damaged 2. Faulty connection cable between zero position and main control board	1. Replace the zero position board 2. Inspect or replace the connection cable
Main shaft does not rotate	1. No signal or power input to the main shaft controller 2.Main shaft motor has no power input or incorrect input 3. Controller or main shaft	1. Check the main shaft controller signal cable or power cable 2. Check the main shaft motor input power supply 3. Replace the controller or motor

	motor damaged	
Color change timeout	1. Color change motor does not rotate 2. Mechanical part of color change is jammed 3. Faulty cable connection between color change motor and power board	1. Inspect the color change motor or connecting cable 2. Repair or replace the jammed mechanical component 3. Inspect or replace the connecting cable
XX communication timeout	1. Signal cable connection failure between XX driver and main control box 2. Incorrect mechanism type configuration 3. XX component damage	1. Inspect or replace the connecting cables 2. Under Accessibility → Machine Parameters → Model Configuration Parameters → Mechanism Type Configuration, select the correct mechanism type 3. Replace the XX mechanism
False thread broken alarm	1.Thread not properly wound around the break detection mechanism (spring + pulley) 2. Bottom inspection board is damaged 3. Faulty cable or connector between the bottom detection plate and the machine head plate 4. Headboard is damaged 5. Incorrect head break detection parameter settings	1. Re-adjust the winding 2. Replace the bottom inspection board 3. Inspect the cable and reinsert the connector 4. Replace the headboard 5. Correctly adjust parameters in Auxiliary Functions → Machine Parameters → Head Break Detection Parameters

Needle Bar Drop	1. Poor contact at motor plug or cable 2. Damaged machine head plate 3. Damaged motor 4. Mechanical misalignment or jamming	1. Inspect cables or plugs; reinsert plug 2. Replace the head plate 3. Replace the motor 4. Inspect mechanical components
Thread clamp error	1. Check if the thread clamp solenoid is damaged 2. Inspect the mechanical linkage between the thread clamp solenoid and needle bar drive for faults	1. Replace the thread clamp solenoid 2. Replace or repair the mechanical structure