

User's Manual REX-10S





V1.0

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Part 1 Overview

Thank you for using our computer embroidery machine control system ! Please read this Manual carefully before using the embroidery machine (the Machine), in order to handle it properly and avoid an accident. Meanwhile, please keep this Manual properly for further reference.

Note: Due to the difference of machine configuration, some functions in this Manual may not apply to some models of machine. The Machine's actual configuration and computer operation functions should prevail.

1.1 Precautions

Non-professional personnel are not allowed to repair nor debug the electrical system; otherwise, it may weaken the Machine's safety performance, increase the faults and even lead to personal injuries and property losses.

Do not dismantle the case cover plate after the Machine is powered on to ensure safety, for high voltage exists in some areas in the case.

Please replace the fuse in strict accordance with the product marks and specifications, in order to ensure safety.

The Machine's power switch supports overcurrent protection function. When overcurrent protection switch acts, wait for 3min before switching it on again.

Do not stack sundries around the Machine. Remove the dust on control box surface and filter regularly in use process, to ensure good ventilation and cooling of system.

Do not alter the product unless authorized by the Company. The Company does not bear any liability for any consequence caused by alteration of the product without authorization of the Company !

Warning:

When the case cover plate needs to be opened, cut off power supply, wait for at least 5min and follow the guidance of professional technicians before touching the internal control parts.

Prohibited:

Do not touch the moving parts or open the control box while the Machine is running, to keep safety and avoid affecting the Machine's normal functioning.

Do not use the Machine in places with moisture, dust, corrosive gas, inflammable/explosive gas; otherwise, electric shock or fire hazard may occur.

1.2 Working Environment

Good ventilation, sanitary environment, less dust; Ambient temperature: 5-40°C; Relative humidity of workplace: 30%-90%, no condensation.

1.3 System Power Supply and Grounding

The electric control system's power supply is as follows: Single-phase AC100-240V/50 -60HZ The power consumption varies between 0.1-0.4KW depending on the machine configuration.

The Machine must be grounded reliably in order to avoid electric shock and fire hazards due to the faults such as electric leakage, overvoltage and insulation and keep safety.

The grounding resistance should be less than 100Ω ; the conductor length should be within 20m; the conductor cross section should be above 1.0mm2.

1.4 Main Performance of System

The REX-10S embroidery system (the System) is furnished with 10.1" 800*1280 HD LCD to show clear-cut picture and bright colors; mounted with capacitive full-touch screen that supports multi-point touch and control function. Besides, the System's user-friendly HMI has similar operation habits with the mobile devices and easy learning, to greatly simplify the operation of users, improve the operation performance and efficiency.

Memory : 100 million stitches, 1,000 designs
Color change times : 1,000 times
Supported formats : DST/DSB/TBF
Max. rotation speed : 1000 or 1200 SPM
Language : Chinese, English, Spanish, Arabic, Portuguese, German, French, Korean, Russian, Dutch, Turkish, Vietnamese, Thai, Italian, Czech, Polish, Ukraine, etc.
Networking : Online, WIFI
Software upgrade : Online upgrade, USB upgrade

The System supports auto memory of embroidery pattern parameters, auto saving of set or embroidered pattern data, including pattern original point, color stop step, function code; as well as setting of pattern parameters, rotation and repeat; so, this pattern can be applied directly in repeated embroidery of this pattern.

Part 2: Introduction to Homepage Functions

2.1 Introduction to Icons in Homepage



2.1.1 Set mode

Enter set mode to select design, select hoop and design settings;

the response of float, trace, hoop in/out, original point and enable embroidery function is prohibited, and the action execution can be responded under EMB mode;

1. Company LOGO

2. Stitch count: Current stitch count/total stitch count Progress: Completion progress, remaining time Hoop: Name and size of current hoop Color stop: A| A auto color change and auto start A|M auto color change and manual start M|M manual color change and manual start 1/2: Current color stop/total color stops #1923

Needle:

3. 4. 5. #1 Current needle bar number (red means needle bar is not in place) 100° main axis angle (red means main axis is not at zero position)

3. Name and size of current pattern
4. Selected frame pattern
5. Current embroidery pattern (double click to preview)
6. AX/Y: Original coordinates of pattern
PX/Y: Current coordinates of hoop
7. 🗩 Design selection/check
Hoop selection
Color stop setting
Design setting
8. Manual operation button
VVV Manual color change
Jog spindle 100° (press and hold to take effects)
Manual cut (press and hold to take effects)
9. Manual operation is valid under EMB mode
10. OStart (valid under EMB mode)
11 🔆 Help center
Light on
12. 🕤 Setup mode
Settings

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			E	M1010-LOGO2 160-30.	DST 6.32>	c 1.20 inch				
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		?	۲	STA	ART		•	*		12
		Help Center	Light or			ЕМВ	Mode	Setting	5	12

2.1.2 EMB mode

"Select hoop" and "Design settings" are disabled under EMB mode; other functions can be operated manually;

2.1.3 Shortcut menu









2.2 Manual Operation Functions

2.2.1 Manual color change

Click VVV needle key on homepage to enter color change page



1. The left [Numeric key] is the target needle bar number. Click the number to change to the designated needle bar.

 The right [Angle key] is the stop angle of target main axis. Click the common angle or enter any angle to stop the main axis at the designated angle.

2.2.2 Jog reset

Press and hold \bigcirc key on homepage to move main axis to 100° position. When main axis is not at zero position, use this function to move main axis to 100° position.

2.2.3 Manual cut

Press and hold key on homepage to execute cut of bottom line and upper thread. Perform the relevant cut operation as required.

2.2.4 Backward/forward (effective under EMB mode)





- 1. Stitch backward key: Press and hold it to move stitch backwards continuously
- 2. Stitch forward key: Press and hold it to move stitch forwards continuously
- 3. Stitch forward/backward speed key: Click it to switch the speed between X1, X5 and X10

X1 mode : Move stitch backwards/forwards in every **1 stitch**, and **the** hoop will move forwards or backwards along with the needle;

x5 X5 mode : Move stitch backwards/forwards in every **5 stitches**, and the hoop will start moving after stitch backward/forward key is uplifted;

: Move stitch backwards/forwards in every **10 stitches**, and X10 mode the hoop will start moving after stitch backward/forward key is uplifted;

Backward/forward in progress:

The current stitch count and current color stop in stitch count and color stop column will change according to the operation value

The design preview will have real-time change and drawing according to the operation of backward/forward

backward by color

The hoop will move backwards to the start position of current color, while the start position

of current color will move backwards to the start position of the previous color



forward by color

The hoop will move forwards to the start position of the next color



8 Move hoop to the designated stitch count

Click and enter the stitch count, and the hoop will move to the designated stitch count position

2.2.5 Design tracing (valid under EMB mode)

Click Click

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STITCH COUNT	PROGRESS RATE	HOOP	COLOR STOP	NEEDLE
0 / 11,746	0% 00:00:00	Hoop E 10.63 x 10.63 inch	A A 1/2	#1 100°
	EM1010-L0	DGO2 160-30.DST 6.32	x 1.20 inch	
			13	
K Home	1	race Options 🚯		
	Т	race Area		
	ΟT	race Design		
	💓 s	titch Design C	ontour	

Make sure to execute "Trace area" or "Trace design" before starting embroidery, to make sure the embroidery design range is within the valid range of hoop.

2.2.6 Hoop in/out (valid under EMB mode)

Click \square hoop output key, the hop will move to the top point of current hoop and stop, the status will become \square hoop in; click hoop again to return to the previous stop position and continue embroidery. This function applies to the operation such as applique, viewing of embroidery effects during embroidery, or removing hoop after embroidery is done.



Note: When "Trace design" is executed while embroidery is in progress, it will prompt whether stop current embroidery and enter the design contour tracing page.





along with the contour track of design



Stitch design contour: The current

stitch and design contour will generate a new design that has contour, it is commonly used in applique

2.2.7 Original point (valid under EMB mode)

Return to the original point in embroidery progress, to start embroidery.

Click \square original point key in homepage, the hoop will move to the original point position of current design, the original point position of design is determined by the previous embroidery, or after execution of trace area or trace design, and is recorded.

When original point is executed while embroidery is in progress, it will prompt whether return to the original point when current embroidery is completed, in order to avoid misoperation.

2.2.8 Stop point (valid under EMB mode)

When it is stopped and hoop is manually moved in embroidery progress, this operation can be performed to return to the stop position and continue the embroidery.

Click \bigcirc stop point key in homepage and the hoop will move to the embroidery position when it is stopped.

Under hoop in \square in embroidery process, it can also return to the embroidery position through stop point.

Part 3 Design Management

3.1 Design Management

Click select design/view design in homepage to enter design management page



Design management function: Browse the design by **sliding up/down**, support design search, sorting and rename, deletion, new folder, display design in multiple modes, favorite function, multi select, image embroidery, USB embroidery; it can also show the embroidery format file and image file, letter embroidery, design combination, etc.

Embroidery format: Support the general DST, DSB and TBF embroidery formats in market.

Image format: Support the image formats of BMP, PNG, JPG, JPEG, WEBP and GIF.



3. 🚺 Favorite folder

4. Click the design to view the information, click the

bottom selection key to select the embroidery design,

or select the design, press and hold it to enter edit item.



Select the design requiring embroidery, and click select to issue the current design data and start embroidery.

3.1.1 Design display mode

Click display mode key based on the favorite design display mode, (large picture, thumbnail and list) and display according to the selected mode



3.1.2 Design search

Click Click contert search mode, and enter content to display the related designs



USE H Machine 에 Multi Se × Machine showing 5 of 5 design ☆ Rricoma EM1010-LOGO2 160-30.DST EM1010tr039-56-5 EM1010250-150.D ÷ EM-1010-c8314-230-300.DST ÷ : ☆ Q W Е R Y U 0 Ρ Т А S D F G н J Κ L Z С ٧ × ♠ Х В Ν Μ 123 #+= Done ,

Both **memory** designs and **USB** designs can be displayed in big picture, thumbnail and list mode.

Both memory designs and USB designs support search by design name.

Support design search by letter and figure.

1. Click search to show the input box, and enter the design keyword or full name to display the related designs

2.Click **X** to quit search mode

3.1.3 Design sort

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		Size(w x h) Stitch Count Colors	0 x 0 inch 0 0		
🤇 Но	me	Select Design 🔞		Combina	ation
Machir	ne USB	Text		:	=
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Machine			Sor	t by Name ↓	
#	Name	Size(w x h)	Stitch Cour	t by Date Added	
	Favorite		Sor	t by Last Used ↓	
	Images		Sor	t by Stitch Count	1
☆ 2	DH26.DST	3.56 x 0.98 inch	4528	,	
☆ 3	叠珠绳.DST	12.31 x 10.41 inch	37476	28	:
☆ 4	EM1010-LOGO2 160-3	6.32 x 1.20 inch	11746	2	-
☆ 5	EM-1010-c8314-230-30	8.78 x 11.90 inch	92887	12	-
☆ 6	EM1010rcm150-58.DST	4.92 x 2.32 inch	19381	2	-
☆ 7	EM1010tr039-56-55.DST	2.25 x 2.20 inch	9432	6	:
* 8	EM1010250-150.DST	10.03 x 5.80 inch	77403	16	
∯ 9	MT-1501-85180-200.DST	7.09 x 7.87 inch	23278	1	
10 No 44	MT1501250-129 DST	10.04 x 5.80 inch	58044	4	:
ਸ਼ 11	MT 1501250-139.05T	10.04 X 5.80 INCh	58044	18	

The **memory** designs support sorting by design name, import time, use time and total stitch count.

The **USB** designs supports sorting by design name and total stitch count only.

position shows the current sorting mode and it is also the drop-down menu key; click it to show

2 other sorting modes, and click the sorting modes required.

Arrow thehind sorting: Positive order Arrow thehind sorting: Negative order

For example, when sort by **total stitch count** is selected, the design will be displayed from large to small total stitch count, click sort by **total stitch count 1** again and the design will be displayed from small and large total stitch count

3.1.4 Multi-select function

Multi Select key to enter multi-select mode; meanwhile, the

key will become select all function

Click

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	Снеерб	k Rricoma	
Favorite Images	DH26.DST 量珠绳.DST	r EM1010-LOGO2 EM-1010-	2
			<u>ن</u>
EM1010rcm150-5 EM1010tr039-56-	EM1010250-150. MT-1501-8	85180-2 MT-1502-85160-5 MT1501250-13	19.
			3
MT2001-249-249. SWD-1501-85c83	SWM1501-420-20		
			
Cancel		Options	

 Select all key, click it to select all designs; click it again to deselect all.

2. Design display area, click design to **select** or **multi select.**

- 3. Cancel key, quit multiple select mode
- 4. Edit key, process the selected design.

Enter multi-select mode to have single selection, multi selection, or directly click the selected design for editing.

Memory design edit supports save to USB, move to file, delete, rename, edit letter embroidery (only letter embroidery generated by the machine supports reedit)

USB design edit supports save to memory and delete

3.2 USB Design



Size(v x h) 0 x 0 inch Size(v x h) 0 x 0 inch	
Stitch Count 0 Stitch Count 0	
Colors 0 Colors 0	



USB design: Support design search, sorting , multi-mode display of design, design single select or multi select, import machine memory and delete, display design file and image file by type.

 After inserting USB into machine in homepage, enter design management page and USB design will be entered by default; the USB design will also be entered automatically when inserting USB in design management page

2. In view mode, click to select: All design files, embroidery file and image file

 Design display area supports browsing in the mode of large picture, thumbnail and list;

 Select the design, click select key or select the design, press and hold to enter edit: Save to machine, delete

Save to machine, select other designed folder in memory for convenient management.

Embroidery file mode: Display embroidery file DST, DSB and TBF Image file mode: Display BMP, PNG, JPG, JPEG, WEBP and GIF image file

The image file is imported into the Images folder of machine memory by default

3.3 Memory Design

Memory design: Support save to USB, move to folder, delete, rename, search sorting, new folder, multi-mode display, favorite function, single select, multi select and image embroidery.

3.3.1 Favorites



In single select mode, **press and hold** image to enter edit item

You can add the favorite or frequently used designs into the favorite holder

for quick searching and management.

 Favorite folder
 The star at the upper left corner of design means the favorite status; click it to add to favorite or cancel collection, means added to favorite.

3. Click ***** Favorite folder to enter view or select the favorite designs

4. Click "**Memory**" position to return to the memory designs

3.2.2 New folder

New folder can realize classified management of design with higher efficiency, move the design to the designated folder; when USB design is imported in machine memory, it can also be saved in the designed folder for easy management.



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TR 189					





LOGO folder.

 Design display area, select the design that needs to be moved (support multi select).

4. Click Edit and select Move to folder

5. Select folder to move your file to, such as LOGO folder, and the selected design will be moved to the LOGO file

Note: When the corresponding folder is not selected, the design will be directly saved in **memory**, and it will prompt whether cover the existing designs (if any); click cover to **cover** the designs with the same name, click **not cover** to create one optional design

The designs in memory directory has been moved to the LOGO folder

3.3.3 Image embroidery

Image embroidery: Generate the image into 4 colored embroidery files by means of CMYK.

The image files imported by USB will be automatically saved in Images folder of memory.



Click Click Images in memory to enter image embroidery folder that saves the image files which are imported from USB

1. Select the image that needs to generate embroidery

 Click generate embroidery key to enter the page to generate image embroidery
 The name of generated design can be set

Embroidery width (10.0 - 1000.0mm) Design stitch length (0.5 - 5.0mm)

4. Click generate to generate the preview

5. The image has generated embroidery preview

6. Click save to save the generated embroidery file into memory.

 Click memory to return to memory column, select the design and click select to issue data and start embroidery.

3.4 Letter Embroidery

Support **24 fonts**; support input of capital and lower-case letter, figure, some special characters; support setting of parameters such as character width, stitch density, character spacing and tilt angle.

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Done

Click letter embroidery column to enter edit page 1. Click input character in input box, confirm (Done) to generate character preview 2. Letter embroidery parameters Font: (support 24 fonts) Width: (5.0 ~ 100.0mm) Character spacing (0.0 ~ 100.0mm) Density: (0.2 ~ 2.0mm) Angle: (-45° ~ 45°) Compensation: (-0.3 ~ 0.3mm) Margin: (0.5 ~ 5.0mm)

 Select font: Click it to show the drop-down menu and select the font required;

Other parameters: Click **— +** to make fine adjustment, or click the middle figure to pop up the input box and enter the value directly.

4. Click save as to save the the character file

5. Enter the name of file to be saved, click next to select the saving position, USB or memory;

6. When file is saved to memory, click memory column to view the generated letter embroidery file, select the design, click select to issue the data and start embroidery.

3.5 Design Combination

Design combination, multiple different or the same embroidery files can be combined into one design file, and single design can be selected to realize resize, flip, rotate and move and have combination, in order to have flexible combination to realize the effects as required.

Enter design management page, click ^{Combination} key to enter edit page of design combination.



3.5.1 Combination parameter

Realize resize, flip and rotate of single design



Application scenario, such as creative stitching, or add your mark on the favorite design.

1. Design preview area

Parameter column: Resize, flip, rotate
 Move design direction key, the middle
 is switch key of move speed

4. Save as key: Save the combined key into USB or memory

5. **Confirm** key: Save the combined design into **memory** and directly jump to the **homepage**; meanwhile, send the embroidery data to start embroidery directly.

6. Delete and reset key

Delete: Delete the selected and added design

Reset: Select the added design, clear the related parameters, resize, flip and rotate

7. Add design key

Resize: (50% ~ 200%) Flip: (Horizontal, vertical) Rotate : (Common angle key, click the angle to pop up box to enter angle 0°~359°)

3.5.2 Add design



Click add design to jump to design selection - memory page.

Select the target design, click select to add design into combination page.

The default add position of design is the start position of the previous design; use hoop direction key to move the design to the required position.

1 Design preview area

2 Design icon list

Click to select single design for parameter selecting, relocation, deletion or reset, to reach the required combination effects.

Part 4 Select Hoop

4.1 Select Hoop

Click key in homepage to enter select hoop page, select the hoop as required.



Preset hoop: The hoop count and size may vary along with machine; preset hoop supports edit; the factory authority is required for importing/exporting hoop data.

Custom hoop: Support creation and deletion, sorting by name and creation time; when the first three characters of custom hoop are Cap and the latter character is figure (such as Cap1, Cap123), it will be recognized as cap hoop and current design will be automatically selected as 180°, in order to create cap hoop easily 1. Display the information of current hoop and design

2. The hoop is divided into preset hoop and custom hoop



4. Current hoop

5. The key of hoop display mode is large picture, thumbnail and list in turns

Incompatible size means the hoop
 size is smaller than the current design, it will
 give out warning when the hoop is selected

7. Select the required hoop, click select hoop to return to the homepage and it will find the mechanical original point automatically; move the hoop to the middle point position and pay attention to hoop movement.

Prompt: When **Cap hoop** is selected, the selected design will have **auto setting of horizontal and vertical flip (i.e. rotation for 180°)** after returning to the homepage, while other hoops remain unchanged.

4.2 Edit Hoop

Factory authority is required for editing the preset hoop, while custom hoop has no restriction. Press and hold the hoop or click to pop up edit key.

FICOMO Solutions (2024 11:29 AM Hoop F Width 490.0 mm Height 345.0 mm Round 85.0 Max Speed 1005FM	Preset hoop can be operated by professional technicians only Custom hoop has no restric- tions
Select Hoop Preset Oricompatible Stre Oricompatible Stre Oricompatible Stre Hoop A 1 1 100x 1100 mm Hoop E Hoop F Hoop S Capital Anti-Anti-Anti-Anti-Anti-Anti-Anti-Anti-	 Edit key Import hoop, export hoop key They are available under factory mode only
220.9 x 270.9 mm • 440.0 x 350.0 mm • 240.9 x 60.0 mm • 240.0 mm • 240.0 mm • 240.9 x 60.0 mm • 240.0 mm • 240.9 x 60.0	Edit hoop page 1. Hoop parameters (input parameters as required) Hoop name: X size, Y size: Hoop size Rounded: Rounded corner of hoop Max. speed: The max. speed of hoop embroidery Set center point of hoop, see schematic diagram
I I I I <td> below (it can be set through two methods). Method 1: Measure the distance from machine original point to hoop center point by using a ruler; Method 2: Set the center point by moving the frame 3. Synchronize center point (factory authority is required) Tick the hoop that needs synchronization, save them and the center points of corresponding hoops will be synchronized as the current center point </td>	 below (it can be set through two methods). Method 1: Measure the distance from machine original point to hoop center point by using a ruler; Method 2: Set the center point by moving the frame 3. Synchronize center point (factory authority is required) Tick the hoop that needs synchronization, save them and the center points of corresponding hoops will be synchronized as the current center point
Save	



Schematic diagram of setting hoop center point:

Direction of center point distance:

X direction: It is Negative (-)/positive (+) when the hoop center point is at the left/right of mechanical original point

Y direction: It is Negative (-)/positive (+) when the hoop center point is at the lower/upper side of mechanical original point

Frame to set the center point:

≅ ricoma	ର୍ବ୍ଦ January 08, 2024 11:31 AM 🗮
Dis	+
Select Hoop	Edit Hoop 🚯
Hoop Name	Hoop F
X Size	490.0
Y Size	345.0
Rounded (mm)	85.0
Max Speed	1000
	Frame to set the center point
X Center (mm)	0.00
Y Cener (mm)	0.0
Reset	Mechanical origin search
Center point	 ✓ Hoop A ✓ Hoop B ✓ Hoop C ✓ Hoop D ✓ Hoop E ✓ Hoop F Hoop G Cap
	Save

Point A The position of hoop relative to mechanical original point is related to the installation position of XY limit sensor



Direction of center point distance:(+X, - Y)
 Direction of center point distance: (- X, - Y)
 Direction of center point distance: (- X, +Y)
 Direction of center point distance: (+X, +Y)

Steps of setting center of moving hoop: 1. Firstly, identify the position of hoop center point in the hoop that is loaded with cloth, and install the hoop on the machine.



 Click search mechanical original point, then stop the hoop at the mechanical original position (the mechanical original point is related to the position of mounted XY stopper)



3. Use direction key to move the hoop until the hoop center point is overlapped with the lower needle position of current stitch (use reset key to observe the stitch hole); the display value is X/Y center point value, click save to finish.



4.3 New Hoop

Custom hoop: Support creation of hoop, create hoop as required.

Rricoma	न्त्रे January 08, 2024 11:34 AM 📃
Design Size 180.2 x 199.8	Hoop E Width 270.0 mm Height 270.0 mm Round 70.0 Max Speed 10005FM
K Home	Select Hoop 🚯
Preset C	ustom
+ Add New Hoop	showing 4 of 4 designs Sort by Name 🗸
HO1 100.9 x 100.0 mm	H002 300 J 200 0 mm : Cap01 50 J 400 mm : A123 400 J 300 0 mm :
R ricoma	Select Hoop
Die	+
< Select Hoop	Add New Hoop 🚯
Hoop Name	Enter Hoop Name
x Size (mm)	00
Y SIZE (mm)	00
Rounded (mm)	00
Max Speed	1000
V Contor	Frame to set the center point
(mm)	0.00
(mm)	
Reset	Mechanical origin search
After performing the mec determine the center poir	hanical origin search, move the frame to the center position to save to t offset distance.

Custom hoop: Support creation and deletion, sorting by name and creation time; when the first three characters of custom hoop are Cap and the latter character is figure (such as Cap01, Cap123), it will be recognized as cap hoop and current design will be automatically selected as 180°, in order to create cap hoop easily

Center point synchronization is not supported

while editing custom hoop; other edit parameters are consistent with preset hoop and it supports frame to set the center point.

Part 5 Color Stop Setting

5.1 Color Stop Setting

Click key in homepage to enter color stop setting page, set parameters according to design and embroidery thread arranged on the machine wire coil.



1. Design preview is used currently, and the current **color block** of current color stop has

dynamic display

2. Select the **preview of current color stop**

3. Current design name and total color stops

4. Return **homepage** key, click it and it will prompt whether save settings when color stop

page has any modification

5. Execution mode of color stops in embroidery process

Full auto A|A Auto color change and auto start

Semi auto A|M Auto color change and manual start

Manual M/M Manual color change and manual start

List of current design color stops and steps **S/N | Stitch No. | Color Block | Function Code** Select certain color stop, click the right **stitch number key** to set the stitch number as required. Or click the right stitch number in sequence and it will jump to the next color stop automatically. After setting, the corresponding **stitch number | color block and corresponding color block of preview** will be updated at the same time.

Function code: P stop code, L low speed code,O hoop-out offset code, click the function key atthe right and lower side, to add or cancel theselected color stop.

6. Function code key

Hoop out offset (complete hoop-out by sequence of color stop)

- Stop code (complete embroidery stop by sequence of color stop)
 - by sequence of color stop

Low speed code (low speed embroidery by sequence of current color stop)

7. **Stitch number key,** show the corresponding color at the same time

8. S Match thread color, set the stitch color

9. **.** Swap color, swap the stitch

10. 💾 Save key

5.1.1 Stitch setting



Click to select the color stop requiring modification, then click the right **stitch number** key to complete settings; the corresponding color blocks will be updated to the color of stitch number; meanwhile, the selection status of color sequence will jump to the next color sequence automatically.

Set design through the same stitch embroidery



Enter **color sequence** list, select certain color step, **press and hold** it to pop up the the function key: **Loop the color sequence** and **delete all function codes**

When design requires one stitch embroidery only, set the first color sequence, return to the first color sequence, **press and hold it**, **click loop the color sequence above** to set all color as the same stitch (for example, the first color sequence is No. 9, click it, press and hold to select **loop the color sequence above**, and all color sequences will become No. 9 stitch)

5.1.2 Color match

Click key to enter color match page, set the corresponding color of stitch as required.

ଟି ricoma ବ୍ଳ January 06, 2024 11:42 AM \Xi	ল াcomə হু January 08, 2024 11:43 AM 🗧
R EKGNLDST has 6 ofer steps	R Remains a color trage
Select Color Match Thread Color	Select Color Match Thread Color Select the thread conclusion acales to and then click Next to continue
Next	Next HII
😨 ମCOMƏ 🛛 ବ୍ଲ January 08, 2024 11:44 AM 🚍	হি ncomə হু january 08, 2024 11:44 AM \Xi
R Exercision for the four steps	R RORADT AL CONTRA
Select Color Match Thread Color	Select Color Match Thread Color
Next	Select the needle you want to assign a color to. Citck "Next" to continue making charges. Citck "Done" to save your changes.

The number can be defined by color block automatically; the match color can be selected easily according to the actual embroidery thread color.

Suggestion: Make sure the stitch color is consistent with the color of coil on machine; therefore, the design that is acquired through design color sequence can match the design configuration, in order to display the design effects directly.

Click the target **stitch number** (such as No. 5), then click **next**

Click the target **color block**, click **next** and the corresponding stitch color has become the set color (for example, the color of No. 5 has changed), then click **complete**;

To set color (such as No. 15) of other stitches continuously, click **next** to return to **color block** page and continue setting.

5.1.3 Swap color

Click \overrightarrow{c} to enter color swap page, select stitch swap according to actual requirements of embroidery.



This function is required when embroidery thread on coil has wrong placement, or the current stitch needs swap due to a fault.

 Swap from: Select (the target stitch number), click the stitch number (such as No.
 that needs swap in the stitch number keyboard

 Swap to: Select (the stitch number after swap), click the target stitch number (such as No. 6) in the stitch number keyboard

3. Click swap to swap all original stitch numbers to the current stitch number (for example, the No. 1 stitch in list of design color sequence becomes No. 6 stitch completely)

For any error in swap, click reset key to recover the color sequence to the original status.

Part 6 Design Settin

6.1 Design Setting

Click key in homepage to enter design setting page, perform resize, duplicate, flip and rotate, and also set Pull Comp and Filter Stitch to adjust the embroidery effects.

Note: The original stitch data of design will be changed by Pull Comp and Filter Stitch. Excessive adjustment may affect the actual embroidery effects. Please set it according to the actual embroidery effects.

6.1.1 Resize



Resize rate: 50% - 200%, locking of aspect ratio supported



simultaneously



respectively

6.1.1.1 Pull Comp

Schematic Diagram of Compensation



Pull Comp (flat wrapping stitch): 0^{\pm} 0.3mm Compensation can be made when the actual embroidery is smaller or larger than the design due to cloth shrinkage or other reasons.

6.1.1.2 Filter Stitch

Filter the short stitch in design, reduce broken stitch due to short stitch.

Filter stitch: 0~0.9mm

6.1.2 Duplicate



Duplicate (repeated embroidery): Duplicate one design into multiple designs for arrangement and embroidery; the horizontal and duplicate direction can be set respectively;
Duplicate count: 1-99
Spacing: 0~±999.9mm

6.1.3 Flip

R LICOMA		হ	🞗 January 08, 20	24 11:53 AM 🗮	Rricoma			ন্থি January 08, 2	024 11:53 AM 🗮
STITCH COUNT	PROGRESS RATE	HOOP	COLOR STOP	NEEDLE	STITCH COUNT	PROGRESS RATE	HOOP	COLOR STOP	NEEDLE
0 / 1,740	0% 00:00:00	Hoop E 270.0 x 270.0mm	A A 1/6 #1923	#1 100°	0 / 1,740	0% 00:00:00	Hoop E 270.0 x 270.0mm	A A 1/6 #1923	#1 100*
		Ricoma.DST					Ricoma.DST		
		<mark>Ricoma</mark>)		\Rightarrow		8mooif		
	AX	30.00 Y30.00 PX30.00 Y3	0.00			AX	:0.00 Y:0.00 PX:0.00 Y	co.oo	
< Home		Design Settings 🕔			K Home	D	Design Settings	3	
Resize	Duplic	ate	Flip	Rotate	Resize	Duplic	ate	Flip	Rotate
□ ⊿\L Horizon Flip	ntally			000	■ IL Horizor Flip	itally			000
Save	Design As		ок		Save	Design As		ок	

Set the embroidery as required

Note: The **horizontal flip** and **reset flip** will be set automatically after cap hoop is selected;

6.1.4 Rotate



Rotate: 0° by default Common keys: ±1°, ±10°, ±45° 0°, 90°, 180°, 270°

Click the **middle display angle** position to pop up the angle input box, enter the target rotation angle directly.

Part 7 Setting Page

Click in homepage to enter setting page.



1. Embroidery parameters: Set the common parameters of embroidery

2. **Q User action:** Recover the mechanical original points and power failure

3. A* Admin: Set the common applications, such as display time, language, screen brightness, horn, machine lock and interface style

4. **Software update**, restore factory settings, system information, Front WiFi Transmission Design, etc.

5. A Machine parameters: Set the machine configuration and working parameters, authority is required for setting

 Machine test: Used by maintenance personnel to see if machine functions and actions are normal

7. **Production repor t:** View production data and clear the statistics data (authority is required)

7.1 Embroidery Parameters

Click conter embroidery parameters and set the basic parameters of embroidery, export the parameters through USB, set the parameters according to actual demands of embroidery.



- 1. Thread break: Set the thread break sensitivity
- 2. Trimming: Set jump to trim, trim top thread length, etc.
- 3. Needle: Related to needle use, machine needle count, same ST auto startup

and special embroidery function (needle of boring, rope embroidery, gold sheet and bead embroidery), etc.

4. Speed: Set the main axis max. speed, main axis start speed, max. frame move speed, color change motor speed and low speed embroidery

color change motor speed and low speed embroidery.

5. Other: Auto jump stitches, auto back to origin position, auto back offset, repeat embroidery,

box movement, specify needle walk around/trace, etc.



7.1.1 Upper thread detection parameters

✓ Settings	En	nbroidery Paramete	rs		≡
Thread Break					r
A01. Thread Break S	Sensitivity		•	5	Þ
A02. Bottom T.B. De	efective		•	Middle	Þ
Bottom line de	etection ratio		•	50	Þ
A03. Auto Back Whe	en T.B.		•	4	Þ

See Appendix: List of Embroidery Parameters for the definition and range of embroidery

parameters

See Appendix: **8.1.1** for the definition and scope of thread break sensitivity in embroidery process

7.1.2 Trimming setting

✓ Settings	Embroidery Parameters			≡
Thread Break Trimming	Needle	Speed	Oti	her
B01. Jump to Trim			3	Þ
B02. Trim Top Thread Length			0.6mm	F
B03. Length After Trim			5	F
B04. L.S. Times During Trim			2	F
B05. L.S. Number After Trim			2	F
B06. Moving Frame After Trim			ON	F
B07. Hook Motor Speed			2	F
B08. Trim Function			ON	F
B09. When the face clamp is locked	ł		А	F
B10. When the face clip is unlocked	ł	•	А	F

7.1.2 Needle setting

✓ Settings	Embroidery Parameter	s	≡
Thread Break Trimming	Needle	Speed	Other
C01. Needles in a Head		•	15
C02. Same ST Auto Startup			ON 🕨
C03. Needle of Boring		•	0
C04. Rope Embroidery Needle Roc	1	•	Off
C05. Bead Embroidery Needle Pos	ition	•	Off
C06. Left gold sheet embroidery n	eedle position	•	Off
C07. Right gold sheet embroidery	needle position	•	Off

Set the needle parameters, such as Jump to Trim, Trim Top Thread Length, L.S. Times During Trim, times and clip

See Appendix: 8.1.2 for the definition and range.

Set the needle related parameters, such as Needles in a Head, Same ST Auto Startup and special embroidery functions (needle of boring, rope embroidery, gold sheet and bead embroidery).

See Appendix: 8.1.3 for the definition and range.

See Appendix 8.1.4 ~ 8.1.7 for special embroidery

7.1.3 Speed setting

Settings	En	nbroidery Paramete	ers		≡
		Needle	Speed		ther
D01. Main Axis Max Sp	eed		•	1000	Þ
D02. Main Axis Start Sp	peed		•	120	Þ
D03. Max Frame Move	Speed		•	3	Þ
D04. Color Change Mo	tor Speed		•	2	Þ
D05. Low Speed Embro	bidery		•	500	Þ
D06. Laser Cutting Para	ameters		•	¥	Þ

Set the machine speed parameters, such as main axis max. speed, main axis start speed, max. frame move speed, color change speed, slow embroidery speed, as well as laser cutting parameters.

See Appendix: 8.1.8 for the definition and range.

7.1.4 Other

✓ Settings	Er	nbroidery Paramete	rs		≡
				Othe	er
E01. Spindle Excitation			•	ON	Þ
E02. Long Sti. EMB Mod	e		•	Jump	Þ
E03. Auto Jump Stitches	i		•	6.5mm	F
E04. Auto Shift Speed			•	20	F
E05. Auto Back to Origir	n Position		•	ON	F
E06. Repeat Embroidery	,		•	OFF	Þ
E07. Filter 0 Stitch Data			•	ON	F
E08. Reset Frame			•	OFF	F
E09. Box Movement			 M 	erge Needle	F
E10. Auto Back Offset			•	OFF	F
E11. Start Slow Motion S	Stitches		•	0	F
E12. Specify Needle Wal	lk Around/Trace	2	•	0	Þ
E13. Positioning red ligh	it mode		•	Auto	Þ

Set the parameters such as Auto Jump Stitches, Auto Back to Origin Position, Repeat Embroidery, Auto Back Reset, Specify Needle Walk Around/Trace and positioning red light mode.

See Appendix: 8.1.9 for the definition and range.

7.2 User Action

Click R to enter user action, to set machine origin and power off to back.

✓ Settings	User Action	≡
Machine Origin		>
Power Off to Back		>

7.2.1 Machine origin



Manual setting: Set the current position of hoop as mechanical origin, change PX/PY coordinates into 0.0 (operated by professional technician only. Note: Any misoperation may lead to mechanical damage).

Automatic setting: The absolute origin of machine is to detect and determine the absolute position through hoop limit sensing, to find the embroidery position and continue embroidery through power off to back function when a fault occurs during embroidery (such as hoop offset due to hoop movement after sudden power failure or shutdown).

7.2.1 Power off to back



Note: Make sure hoop limit sensor is normal before executing automatic setting; otherwise, mechanical damage may occur.

The hoop offset due to hoop movement after sudden power failure or shutdown can be recovered through power off to back function.

7.3 Admin

Click **R**^{*} to enter admin, to set the parameters such as time/date, language, units, screenshot, alert settings, light settings, machine lock, maintenance tasks, network settings, interface style settings and set embroidery frame background.

✓ Settings	Admin	≡
Time/Date		>
Language		>
Units		>
Screenshot		>
Alert Settings		>
Light Settings		>
Machine Lock		>
Maintenance Tasks		>
Network Settings		>
Screen Settings		>
Interface Style Settings		>
Set embroidery frame background		>

7.3.1 Time/date



Note: It is forbidden to modify the time/date when the machine has limitation of use time.

7.3.2 Language

Multiple languages are supported. The user can change the language as required. Click the language, the system will prompt auto reboot dialogue and it will take effects after confirmation and reboot.

means the current language



7.3.4 Alert settings

The screen touch sound, back thread sound, completion notification and error alert sound can be set; the alert can have different tones. The user can set the favorite tones as required.



Slide to the left/right to adjust the volume

7.3.5 Light settings

The auxiliary light can be adjusted to reach the most comfortable brightness according to the environment and light reflection of cloth.



Slide to the left/right to adjust the brightness

7.3.6 Machine lock - Decrypt

The system will have auto lock (prohibit embroidery) after reaching the expiration time of machine, and it will prompt user to input machine lock - password.



to the supplier, to provide the decryption password.

Please send the encrypted serial number

Click the password from the supplier for decryption, enter the password correctly to unfreeze and continue the embroidery of machine.

The QR code is used for recording the encrypted serial number. The user can scan the code directly with a mobile device to read the encrypted serial number, and send it to the supplier.

When starting the machine and embroidery 3 days before expiration date, it will prompt to make arrangement, to avoid affecting the use.

Or you can acquire password and decrypt it in advance as required.

7.3.7 Maintenance tasks

Carry out reasonable maintenance according to the machine running period and maintenance prompts of different parts, to reduce the machine's wear and increase its service life.



K Home M	aintenance Tasks	≡
Complete tas	ks according to timeline	
DAILY		0
Oil rotary hook Suggested oil: White #22 machine oil Oil needle bar	Last Completed: 2024-01-10 09:27 AM Last	Completed
Suggested oil: White #22 machine oil	09:24 AM	Mark as Complete
WEEKLY		0
Front shaft brushing Suggested oil: White #22 machine oil	Last Completed: 2024-01-09 09:24 AM Last	Mark as Complete
Back shaft brushing Suggested oil: White #22 machine oil	Completed: 2024-01-09 09:24 AM	Mark as Complete
Arm drive shaft Suggested oil: White #22 machine oil	Completed: 2024-01-09 09:24 AM	Mark as Complete
Needle plate base cleaning Suggested oil: n/a	Completed: 2024-01-09 09:24 AM	Mark as Complete
MONTHLY		0
Oil needle bar Suggested oil: Lithium grease (NLGi#2)	Last Completed: 2024-01-09 09:24 AM Last	Mark as Complete
Needle bar lower rail Suggested oil: Lithium grease (NLGi#2)	Completed: 2024-01-09 09:24 AM	Mark as Complete
Color change cam Suggested oil: Lithium grease (NLGi#2)	Completed: 2024-01-09 09:24 AM	Mark as Complete
Shuttle box gear Suggested oil: Lithium grease (NLGi#2)	Completed: 2024-01-09 09:24 AM	Mark as Complete
X-rail Suggested oil: Lithium grease (NLGi#2)	Last Completed: 2024-01-09 09:24 AM Last	Mark as Complete

Enter the prompt of maintenance tasks in title bar of homepage, select complete now, enter the page and carry our maintenance task according to prompt, then click mark as complete when the task is done. Or you can select remind me later.

7.3.8 WiFi setting



When WIFI is enabled, it will search the WIFI signals of accessories nearby, display the searched name, click the target WIFI, enter the password and click save.

Normal connection status

The WIFI icon in homepage will become 🗢

7.3.9 Ethernet

< Back	Wifi Setting	≡
Open WIFI		
Ethernet		
Nearby WiFi		
🕻 Wifi Setting	IP Settings	≡
IP Address		
0.0.0.0		
Subnet Mask		
0.0.0.0		
Gateway		
0.0.0.0		
DNS 1		
0.0.0.0		
DNS 2		
0.0.0.0		
Enable DHCP Static Mode		

Click **Ethernet** to enter the Ethernet setting page.

The wired network has two modes: **Dynamic acquisition**: Use DHCP service to connect the router, to acquire the IP address and other parameters automatically

Static mode: Connect the wired network as required, enter the related network address and other parameters.

confirm it and click **connect;** when connection is established, the icon at WIFI position in homepage will become

7.3.10 Screen settings

Support backlight brightness adjustment and screensaver setting function.

🕻 Admin	Screen Settings	≡
Backlight Brightness	Sur Star	+
Set picture source	Ŷ	>
Set screensaver period		>





Slide to the left/right to adjust the backlight brightness

Set **picture source**, the attached picture of machine can be used or be imported from USB. **Note:** The resolution of imported picture should be 800 x 1280; otherwise, it may affect the display effects.

Set screensaver period: Support 2min, 5min, 15min, 30min and 60min (enable screensaver), and **never** (disable screensaver).

When screensaver is enabled, it will take effects when the machine is under non-operation status and there's no operation.

7.3.11 Interface style settings

Support light mode and dark mode, which can be selected as required.

Alert Settings			>
Light Settings	Interface Styl	e Settings 🛛 🗙	×
Machine Lock	After selecting your mo panel will automatically	ode, click OK. The / restart.	>
Maintenance Tas	🔾 Dark Mode		>
Network Settings	Cancel	ОК	>
Screen Settings			>

After switching mode, it will restart automatically and take effects



(Light mode)



Use shortcut menu in homepage, to enter setting, 🔅 light mode and 🦕 dark mode quickly

7.3.12 Set embroidery frame background

Importance of setting embroidery frame background: It can avoid unclear presentation of embroidery pattern during preview when the embroidery thread color is similar with background color. Besides, the embroidery frame background can also use the uploaded picture as background; the embroidery color effects can be previewed when the picture selected is close to the cloth.





Select the picture and set it as embroidery background, or click delete to **delete** the pictures not required; besides, the user can click **add picture** to select picture from USB as the background.

Note: The resolution of imported picture should be 800 x 487; otherwise, it may affect the display effects.

Click **change color** key to set the pure-color embroidery background.

7.4 Machine Manage

Click Sto enter machine manage, to operate or check software upgrade, update logo, front WiFi transmission design, export log, system info, boot animation settings and factory parameter restore.

✓ Settings	Machine Manage	≡
Software Update		>
Update Logo		>
FTP		>
Front WiFi Transmission Design		>
Export Log		Export
System Info		>
Boot Animation Settings		>
Welcome page Settings		>
Reset		Reset

7.4.1 Factory parameter restore



Please restore the corresponding parameters as required, such as embroidery parameters, machine parameters and hoop data.

7.4.2 Software update

Support USB update and online network update.

K Machine Manage	Software Update	≡
Арр	1.083	Update
Mainboard	V mb 102.114.100052	- 1
System	V mb: 1.02	Update
Software	V mbsv: 1.00.052	Update
Firmware	V mbfv: 1.14	Update
Headboard	V hb 1.13	Update
		Check for updates
Network update software		
Auto Update		
Help Center	V 102	Update

Mainboard update: Click unfold to operate mainboard software and mainboard firmware.

USB update: Copy the relevant update files into the root directory of USB, insert the USB into the machine, click the corresponding keys for update. When update is done, it will prompt reboot, click it to confirm.

K Machine Manage	Software Update	≡
Арр	1.083	Update
Mainboard	V mb 102.114.100045	-
System	V mb: 1.02	Update
Software	V mbsv: 1.00.045	UpdateV1.00.047
Firmware	V mbfv: 1.14	Update
Headboard	V hb 0.00	UpdateV1.10
	②►	Check for updates
Network update software	1	
Auto Update		
Help Center	V 102	Update

Online network update: (Normal networking is required)

1. Open network update

2. Click check for updates

3. When new version is detected, the corresponding keys will turn **orange** or **the key will show the new version number,** click the corresponding update key; after download or update succeeds, it will prompt reboot, click it to confirm.

Or **auto update** can be enabled; click **check for updates** and when new version is detected, it will be downloaded and updated automatically, and it will reboot automatically.

Make sure network is connected normally

before using front WiFi transmission design.

7.4.3 Front WiFi transmission design

When network service mode is adopted, the remote transmission of design can be realized through the network browser without installing other software at the transmission end. The upload end devices include but not limited to the mobile devices, such as laptop, mobile phone and tablet PC.





- 1. Click 🕞 🖓 Upload kev
- 2. Click the file area that needs upload
- 3. Select design
- 4. Click send

7.5 Machine Parameters (read only)

Click to enter machine parameters (read only) for reviewing; this parameter is used by professional technicians only and should not be modified by other personnel, to avoid a malfunction.

✓ Settings	Machine Parameters			≡
Machine Parameters	Machine Configuration		Laser Config	
G01. Machine Type			SWM	Þ
G02. Number of Heads Used		•	1	F
G03. Number of needle bars of mac	hine head		15	Þ
G04. Embroidery Frame Limit Meth	od		NP	Þ
G05. Lock Mode			Motor	F
G06. Upper Thread Detection Metho	od		Head Board Inspection	F
G07. Thread Break Detection Type			Raster Single Point	Þ
G08. Motor Function Switch			Lock	F
G09. Spindle Encoder Signal			BA	F
G10. Spindle Zero Signal Reverse			OFF	Þ
G11. Main Driver Ratio			1:2	F
Color Change Parameters				
G12. Color Change Detection Metho	d		Photoelectric Sensor	Þ
612 Color Change Deduction Patio			1.1	
Import Settings	Save Settings	Save F		ers

7.6 System Test

The system test function is mainly used by maintenance personnel to see if the machine is normal.

Click Oto enter system test, including input test, output test, axis test and head test. head test.

7.6.1 Input test



Disable Embroidery Frame Lock as required; it will be enabled automatically after quitting this page.

Check if the **on/off** of each item changes when sensor input status is changed during the test; if not, the sensor input signal is faulty, please inspect and handle it.

7.6.2 Output test

Settings	Machin	e Test	≡
Input Test	Output Test		Head Test
Hook Test	<i>Gli</i> .)		Test
Trim Test			Test
Pick Test			Test
Lock Test			Test
Test clip			Test
Rope Embroidery Test			Test
Left Gold Piece Test			Test
Right Gold Piece Test			Test
Laser Test			

Press **test** key of corresponding items as required, to see if output is effective; when output function module has no action, the current function module is faulty, please inspect and handle it.

Hook test: Tick test key once, the hook will stretch and retract alternatively. **Trim test:** Click test key once and the trimming motor will rotate, stretch or retract the needle alternatively.

Pick test: Click test key once, the pick electromagnet will be connected for 3s and then disconnected automatically.

Lock test: Click test key once, the lock motor or lock electromagnet will retract or withdraw the lock black adhesive alternatively.

Test clip: Click test key once, the two-way clip electromagnet will have downward/upward connection alternatively.

Rope embroidery test: Click test key once, the rope will descend, rotate for 1 circle and uplift the device.

Left gold piece test: Click test key once, the gold piece will descend, send out piece for 3 times and then ascend the device.

Right gold piece test: Click test key once, the gold piece will descend, send out piece for 3 times and then ascend the device.

Laser test: For machine with laser cutting function, enable the laser test switch on the test page in order to enter the laser test mode.

7.6.3 Axis test



7.6.4 Head test



X/Y axis test: Press the left/right key to modify the hoop movement distance (1-127mm) and the default distance is 127mm; click start key to move the hoop back and forth, click the key again to stop inspection.

QEP test: Check the thread count and zero position width of main axis encoder; the normal value is 22 /1000 \pm 5; otherwise, the encoder has error and needs inspection and reconfirmation.

Main axis speed: The default speed of main axis is 100 rpm; click the left/right key to change the rotation speed; the front figure is actual rotation speed, while the back value is target speed. Check if the actual speed and target speed is consistent (the difference should be within 8 rpm).

It is mainly used for detecting whether thread break sensor on the head is normal.

The **stitch keyboard** corresponds to the head stitch; click the figure to switch to the corresponding stitches (**the green figure means the current stitch**); dial the detection wheel or spring according to the machine configuration, observe the head lamp to see if the sensor has a fault;

Pure wheel configuration detection: Dial the detection wheel, it is normal when head machine indicator flickers in green; Spring configuration detection: Dial the

detection spring and it is normal when red indicator flickers in red;

When one indicator is normally on or off during detection, please inspect and handle it.

7.7 Production Report

✓ Settings	Production Report	≡
Total Stitches	0	Empty
Number of Embroidery Workpieces	0	Empty
Number of Threadbreaks	0	Empty

This function is used for viewing and clearing the embroidery statistics (authority is required).

Part 8 Appendix

8.1 List of Embroidery Parameters

8.1.1 Thread break detection

Parameter name	Parameter function	Default value	Scope
Thread break detection	Tread break sensitivity (the sensitivity increases along with value decrease)	5	3~9, no detection
Bottom thread break detection	Sensitivity of bottom thread break detection	Medium	High, middle and low, no detection
Bottom line detection ratio	Bottom line detection percentage (the sensitivity increases along with value increase)	50	30~100
Auto Back When T.B	Auto back count when T.B.	4	0~9

8.1.2 Trimming

Parameter name	Parameter function	Default value	Scope
Jump to Trim	Carry out jump of several stitches to see if trimming is required	3	1~9.Off
Trim Top Thread Length	Stitch length of trip font thread	0.8mm	0.4~2.0mm
Length After Trim	Residual length of thread after trimming (the residual length increases along with the value)	5	1~7
L.S. Times During Trim	Times of lock stitch before trimming	1	0、1、2
L.S. Number After Trim	Lock stitch count after trimming	On	0、2、4
Moving Frame After Trim	Whether move the frame after trimming	2	On, off
Hook Motor Speed	Speed of hook motor during trimming (the speed increases along with the value)	On	1、2、3
Trim Function	Whether use auto trimming function during embroidery	2	On, off
Clip lock mode	Surface clip has action during trimming	A	A、 B
Clip unlock mode	Surface clip has action after trimming	A	A、 B

8.1.3 Needle

Parameter name	Parameter function	Default value	Scope
Needles in a Head	The number of needles used in current embroidery machine (set according to actual configuration)		1~20
Same ST Auto Startup	Whether have auto start when the same stitch has 2 and more color changes continuously	On	On, off
Position of carving knife and needle	Number of stitch that uses carving knife (not conduct thread break detection) 0 not use	0	0~20

8.1.4 Needle

Parameter name	Parameter function	Default value	Scope
Rope Embroidery Needle Rod	Position of stitch that installs rope embroidery	Off	Off, right, left, left + right
Cording Lifting Speed	Ascending/descending speed of rope embroidery device (the speed increases along with the value)	3	1~5
Cording Shelf Type	Model of rope embroidery device manufacturer	JY	JY、GJ、RKM
Cording Lifting Methods	Ascending/descending control mode of rope embroidery	Motor	Motor, air valve
Cording Swing Amplitude	The swinging amplitude during embroidery (the swinging increases along with the value)	20	0-20
Cording Slack Adjuster	The rope feeding length of rope feeding motor (the feeding length increases along with the value)	0	0-9
Rope Embroidery Speed Limit	The max. speed limit of rope embroidery	800	400~1000

8.1.5 Bead embroidery parameters

Parameter name	Parameter function	Default value	Scope
Bead embroidery stitch position	The position of stitch that is mounted with bead embroidery Reuse of other parameters and gold piece embroidery parameters	Off	Off, right, left, left + right

8.1.6 Stitch position of left gold piece needle

(reuse of bead embroidery)

Parameter name	Parameter function	Default value	Scope
Position of left gold piece embroidery stitch	Installation type of left gold piece embroidery device; A: Single gold piece; AB: Double gold piece	Off	Off, left A, left AB
Sequin Max Speed	Max. speed of gold piece embroidery	800	400~1000
Piece Speed	Ascending/descending speed of gold piece embroidery device (the speed increases along with the value)	3	1~5
Type Of Lifting Device	Control mode for ascending/descending of gold piece embroidery device	Motor	Motor, air valve
Gold piece discharge mode	Discharge sequence of Piece A and B in double gold piece embroidery	AB	AB、BA
Left A Sequin Size	Left A Sequin Size	2mm	2~9mm
Left B Sequin Size	Left B Sequin Size	5mm	2~9mm
Break Thread Up	Whether ascend the left gold piece device automatically after thread break No		No, yes

8.1.7 Stitch position of right gold piece needle (reuse of bead embroidery)

Parameter name	Parameter function	Default value	Scope
Right gold sheet embroidery needle position	Installation type of right gold piece embroidery device; A: Single gold piece; AB: Double gold piece	Off	Off, right A, right AB
Sequin Max Speed	Max. speed of gold piece embroidery	800	400~1000
Piece Speed	Ascending/descending speed of gold piece embroidery device (the speed increases along with the value)	3	1~5
Type Of Lifting Device	Control mode for ascending/descending of gold piece vembroidery device	Motor	Motor, air valve
Gold piece discharge mode	Discharge sequence of Piece A and B in double gold piece embroidery	AB	AB、 BA
Right A Sequin Size	Right A Sequin Size	2mm	2~9mm
Right B Sequin Size	Right B Sequin Size	5mm	2~9mm
Break Thread Up	Whether ascend the right gold piece device automatically after thread break	No	No, yes

8.1.8 Speed setting

Parameter name	Parameter function	Default value	Scope
Main Axis Max Speed	Set the max. rotation speed of main axis (restricted by the max. speed of machine and hoop)	750	400~1200
Main Axis Start Speed	The speed when starting embroidery	120	80、100、120、140
Max Frame Move Speed	The speed of moving frame manually (the speed increases along with the value)	3	1、2、3、4、5
Color Change Motor Speed	beed Speed set of color change (the speed increases along with the value)		1、2、3
Low Speed Embroidery	Set the embroidery speed of stitch low speed function code	500	400~600

Laser Cutting Parameters	Switch of laser cutting parameters (restricted by model configuration parameters)	Off	Off, on
Laser Parameter Selection	Preset 8 groups of laser parameters	1	1~8
Light Max	Strength of laser emission (the strength increases along with the value)	30	1~100
Light Min	Same as above	5	1~.00
Speed Max	The hoop move speed during laser cutting (the speed increases along with the value)	50	10~100
Speed Min	Same as above 10		10~100

8.1.9 Other

Parameter name	Parameter function	Default value	Scop
Spindle Excitation	Whether hold the power when main axis is stopped	On	Off, on
Long Sti. EMB Mode	Long stitch embroidery mode, and embroidery can be modified under setting mode only	Slow	Slow, jump
Auto Jump Stitches	Set the auto jump condition and stitch length of auto jump (valid when long Sti. EMB mode is set as jump)	6.5mm	2.0~9.0mm
Auto Shift Speed	The speed change during embroidery (the speed increases along with the value)	40	10~50
Auto Back to Origin Position	Return to the embroidery start position of design automatically after design embroidery is completed	On	Off, on
Repeat Embroidery	The design selected during repeated embroidery	Off	Off, on
Filter 0 Stitch Data	The stitch trace when filter design stitch is 0	Off	Off, on
Reset Frame	The machine will prompt dialogue box of power failure restore after each startup or sudden power failure during embroidery	Off	Off, on
Box Movement	The frame movement method when machine stops and has embroidery at the next position during embroidery; for example, multi-stitch jump code is required after trimming, in order to reach the next stitch embroidery position	Merge needle	Merge needle, single needle
Auto Back Offset	After design embroidery is done, have auto back offset to the top position of hoop	Off	Off, on
Start Slow Motion Stitches	When starting embroidery, have slow motion of several stitches before acceleration	0	0~5
Specify Needle Walk Around/Trace	Set the designated stitch number when executing needle walk around / trace; 0: Current stitch. (The range of other values is restricted by the stitch parameter limitation of machine)	1	0~20
Positioning red light mode	The mode when red light positioning is enabled	Auto	Auto, open

8.2 List of System Prompt Information and Handling

No.	Information	Processing mode
E102	Communication data error: 01	
E103 E104	Communication data error: 02	Power off, wait for over 5s and then power on again Please contact the technician when it is not restored
E106 E108 E109	Communication data error: 03	

E105 E107 E110	Communication incorrect, please check again!	Power off, detect the wiring of operation head, then power on again. Please contact the technician when it is not restored
E201	Update failed	Try update again. Please contact the technician when it is not restored normally
E202	Failed to send pattern data	
E203	Failed to send the total number of pins	Reselect the design that needs embroidery, or power off, wait for over 5s before powering on. Please contact the technician when it is not restored normally
E204	Sending failed	
E205	Parameter sending failure	Enter the parameter page and return to homepage, or reselect the embroidery design required. Please contact the technician when it is not restored normally
E206	Color sequence sending failure	Enter color sequence setting to reset the color sequence, save it and quit the homepage, or reselect the embroidery design required. Please contact the technician when it is not restored normally
E301	Device out of place	Detect whether the special embroidery device has ascending/descending in place
E302	Device out of place	Detect whether the special embroidery device has ascending/descending in place
E401	Embroidery Incorrect!	Try to click embroidery again. Please contact the technician when it is not restored
E801	Time setting failure	Power off, wait for over 5s and then power on again to reset the time. Please contact the technician when it is not restored
E802	Apk information is null, file may be damaged	Please contact the technician
E803	Apk share user ID and name do not match	Please contact the technician
E804	File error, check if file exists	Inspect the files by prompt
E805	Recovery Failed	Try to recover again. Please contact the technicians when it is not restored.
E806	File error	Please contact the technician
E807	Type incorrect	Please contact the technician
E808	Export Failed	Please contact the technician
E809	File Does Not Exist	Check if the corresponding files exist.
E810	Import Failed	Please contact the technician
E811	Save Error	Please contact the technician
E812	Operation failed	Please contact the technician
A902	Embroidery frame has reset, please reselect frame	Please reselect the hoop by promp
A903	Insufficient storage space	Clear some memory designs and try again. Please contact the technician when it is not restored
A904	Max Stitched Cannot Exceed 1,000,000	
A905	The maximum number of stitches for pattern combination is 1,000,000	
A906	The maximum color ordinal number of pattern combination is 1000	

137	The inductive surface line is broken	Check embroidery thread
	Sensing surface line or bottom line break	
133	Color Change Incorrect!	Try to change color manually or power off, wait for over 5s, power on again and try to change color again. Please contact the technician when it is not restored
130	Color change incorrect!	 Execute manual color change to other stitches Or manually rotate the color change motor in place Please contact the technician when it is not restored
138	Scissors incorrect!	When it prompts dialogue box, click OK key (clean it when scissors are blocked by thread). Please contact the technicians when it is not restored.
131 140 141 142 143 144	Main shaft is not set to 100°!	Execute jog, or manually rotate main shaft to 100°
139	"-X Limit Error"!	Manually move the hoop reversely
13A	"+X Limit Error"!	Manually move the hoop reversely
13B	"+Y Limit Error"!	Manually move the hoop reversely
13C	"-Y Limit Error"!	Manually move the hoop reversely
132	Embroidery data is not ready!	Reselect the embroidery pattern required
136	Power failure recovery is not enabled	
14A	X-direction sensor not found	Please contact the technician
14B	Y-direction sensor not found	Please contact the technician
14E	Power recovery incorrect	Please contact the technician
145	Scissor action incorrect	Check if the scissors are stuck by thread; if so, clean it firstly. Please contact the technicians when it is not restored.
146	Hook action incorrect	Check if the hook is stuck by thread; if so, clean it firstly. Please contact the technicians when it is not restored.
147	Head communication incorrect	Power off, check the communication cable of machine head plate, then power on again. Please contact the technician when it is not restored
584	Hook Position Error!	When it prompts dialogue box, click OK key (clean it when hook is blocked by thread). Please contact the technicians when it is not restored.
585	Drive Incorrect!	Power off, wait for over 5s and then power on again Please contact the
587	Main Axis Drive Incorrect!	technician when it is not restored.
58D	Firmware communication incorrect	Update the mainboard firmware program, power off, wait for over 5s and power on again. Please contact the technician when it is not restored.
58E	Communication error of needle position plate	Please contact the technician