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PART 1 THE INTRODUCTION OF THE SYSTEM

1.1 Summary

Thank you very much for using our computerized embroidery machine control system!

This system can be applied to variety of embroidery machines to meet different requirements of yours, it will provide you with satisfactory effect for thin and thick materials as well as 3D embroidery!

The advanced DSP control technology makes the system work faster, the friendly man-machine interface of the system effectively improves the productivity; This control system adopts smooth curve regulation, which makes the machine running more stable, reduces the noise and extends the service life of the machine!

Please read carefully this Manual before using so as to ensure correct operation of the system.

Please keep this Manual properly for future reference.

Due to the difference of configuration, some machines may not be equipped with some functions listed herein, please follow corresponding functions.

1.2 Precautions

Non-professional personnel can never be allowed to carry out maintenance and debugging of the electric system, or the safety performance of the equipment will be reduced, the malfunction will be more serious, and even personnel and property damage will be caused.

Some parts in the case are with high tension, in order to avoid any accidental damage, when the system is powered on, do not open the cover of the case.

Please replace the protective tube strictly in accordance with the identification of the product to ensure personal and property safety.

The power switch of this product is provided with over-current protection, in case the over-current protection switch acts, it will not be closed again until 3 minutes later.

The floppy drive is a precision device, please always remember to insert the disc in the right direction, to avoid damage of the disc or the drive, do not eject or insert the disc during reading or write of the disc (when the floppy disc indicator is on). As the disc is made of magnetic material, it should be kept away from any magnetic field to avoid damage of the disc or loss of the data.

Do not pile up sundries around the control box, and during the operation, the surface of the control box and the filter mesh should be cleaned regularly to keep fine ventilation of the system and facilitate the cooling.

Do not modify the product without authorization of the company; the company should bear no responsibility for any consequence resulted therefrom!

Warning

If it's necessary to open the cover of the case, do not touch any part in the electric cabinet unless you are under direction of professional personnel and the power has been turned off for over 5 minutes!

Prohibitions

Do not touch any moving part or open the control device during operation of the machine, otherwise, it may cause personal damage or abnormal operation of the machine!

It is prohibited to operate any electrical equipment in damp location or environments with dust, corrosive, flammable or explosive gases, otherwise, it may cause electric shock or fire!

1.3 Working Environment

Ventilating and sanitary environment with little dust;

Working Temperature: 5-40°;

Working RH: 30%-90%, no frost.

1.4 System Power Supply and Grounding

This electric control system can use the following power supplies:

Single phase AC100-220V/50-60HZ

According to different configuration, The consumption power is between 0.1-0.4KW

To avoid electric shock or fire due to leakage of electricity, over-voltage or insulation etc., please ground the electric control system reliably.

Grounding resistance less than 100 ohms, wire length within 20M, the area of wire greater than 1.0 MM²

1.5 Control Panel and Keys Function

1.5-1 Control Panel

Control panel is that interface display and operation control in the system, show as:



1.5-2 Keys Function



select key: to choose frame movement and control main axis speed.



manually trimming key: when it's in the working status and preparation status, do the manually trimming operation



jog main axis key: click the key to jog main axis to 100 degree.



directional keys: when in the embroidery and preparation status, to move frame.

1.5-3 Touch Icons



adjust main axis speed



main menu



origin point



offset point



work mode switch key(automatically change color automatically start embroidery mode)



manually change color



set change color



embroidery mode switch (normal embroidery)



remove embroidery



idling embroidery



return stop point

AX/AY: display relative design origin coordinate

PX/PY: display relative frame origin coordinate

1.5-4 Function

This system has friendly man-machine interface and the operations are simple with powerful functions, which can greatly facilitate the operations of the user and improve the performance and efficiency.

Multiple language supported, select according to your requirement

With large memory capacity, the system can store 20000000 stitches and 200 designs

Multiple means for designs, greatly facilitate to select and use for customer. U disk, USB (required supporting PC software), network (required supporting PC software)

Support multiple design file formate, can recognize Tajima DST and Barudan DSB, etc..

Strong parameter adjustment functions enable you to adjust various parameters according to different requirements to achieve the system control performance you need.

When power off, the function of “Auto Restoring embroidery after power off” enables the machine to continue embroidering from the stitches just before the power off, you need not worry about displacement of designs and realign the positions.

The “Self-checking of devices” function enables checking of the status and parameters of external devices and facilitates adjustment and maintenance.

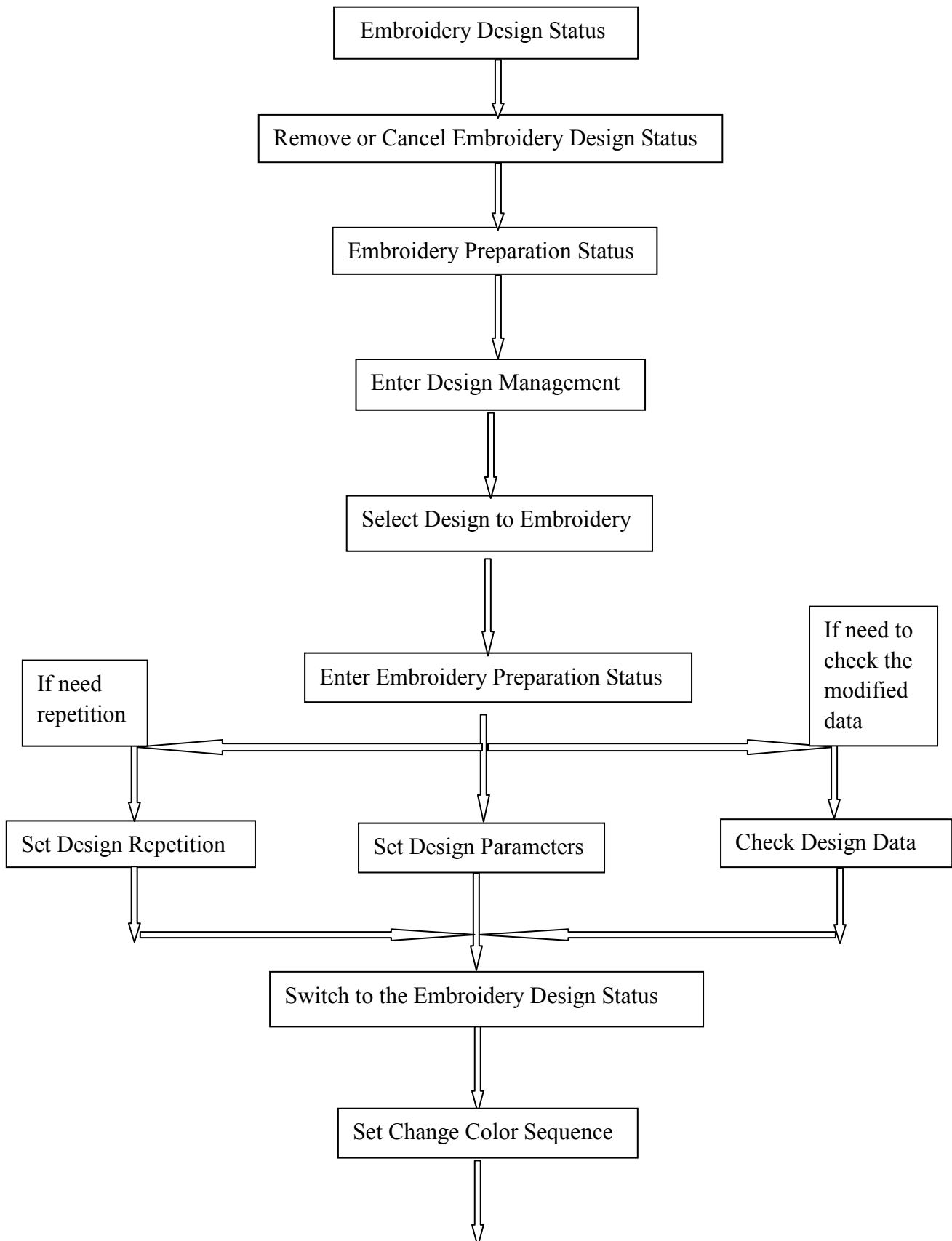
The “Main axis stop position adjustment” function enables the user to adjust parameters of the system according to the characteristics of the embroidery machine to achieve correct stop position.

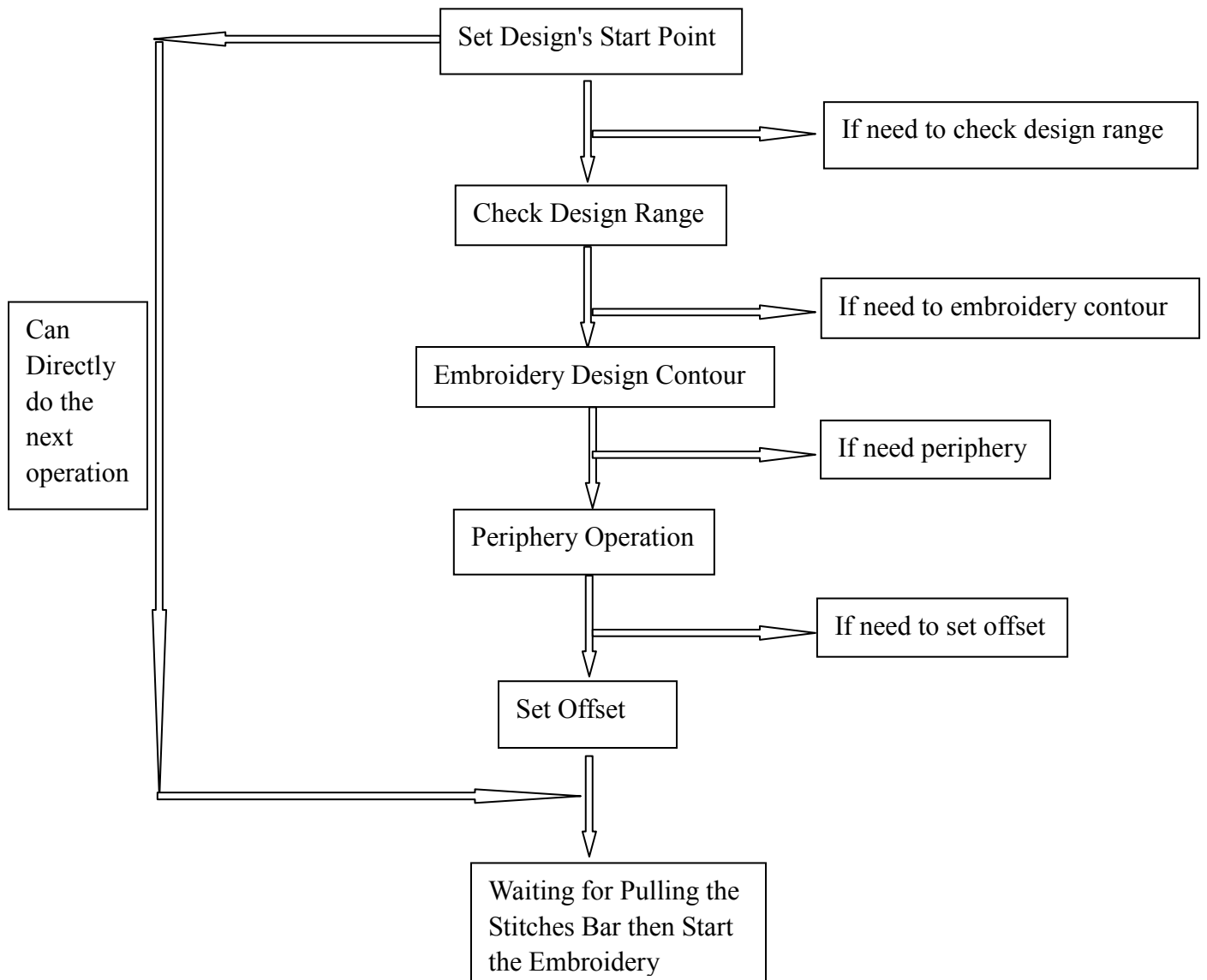
The “Auto memorizing of embroidery design parameters” function can automatically store the preset embroidering parameters or related data of embroidered designs, including color changing, the origin, the offset point, embroidering parameters and repetition etc., so as to facilitate the embroidery of the next time.

The “Patching offset” function enables user to set any change color stitch bar to path the frame, facilitate the patching embroidery.

The precise pattern beeline embroidering functions can meet you requirements for locating design embroidery.

PART 2 EMBROIDERY WORKING PROCESS





PART 3 DESIGN INPUT

Design input is that designs in the U disk input to memory, which can be operated in the embroidery preparation status and embroidery design status.

Design input, files in the external storage medium input to system memory, facilitate to select embroidery. If no designs in memory, it'll enter into the interface when start system.


The system, support reading Tajima DST and Barudan DSB 2 formats.

Before reading design, insert U disk to USB port, then operate panel.


Click  to "Main Menu" interface, show as:





3.1 Design in the U Disk Input to Memory

In the "Main Menu" interface, click , show as:



Click the required designs, click , automatically display "input process" situation: memory No. And input process, after finishing, automatically return back U disk interface, do the next operation.

Click  directly to return the working status interface

Click  to return the last interface.

3.2 Delete Designs in the U Disk


In the "U disk Operation" interface, click the required designs in the U disk to delete,

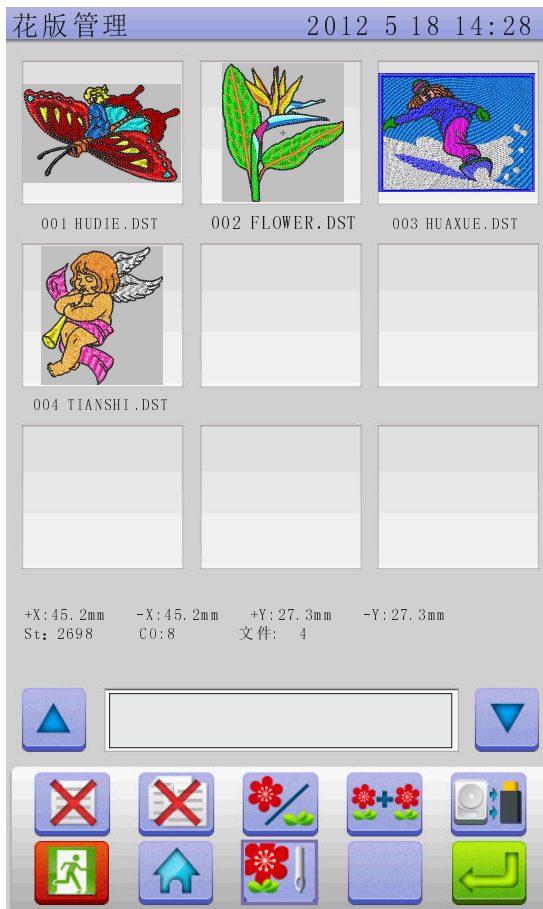
click  to delete

PART 4 DESIGNS MANAGEMENT

Designs management, contain that select design, output design, combine design, cut design, delete design, delete all designs(can not delete in the embroidery status).




In the "Main Menu" interface, click , enter "Designs Management" interface, show as::



4.1 Select Design



In the "Design Management" interface, click  to enter "Select Design" operation.

Click the required design, whose relative information will be displayed in the screen. The selected design No. And name background change as blue. Click  to enter "embroidery preparation status".

When memory design has many pages, click the directional keys to turn the page.

Longly click the selected design 3 seconds, can show the design in full-screen, touch screen a time to return the selected design interface.

In the embroidery preparation status, can set the required embroidery parameters, design rotate direction, zoom, rotate angle, repetition, satin stitch compensation.

4.2 Cut Design


In the "Design Management" interface, click .

Click the required design, Click the required design, whose relative information will be displayed in the screen. The selected design No. and name background change as blue. Click



, show a box, input the cut stitches, show as:



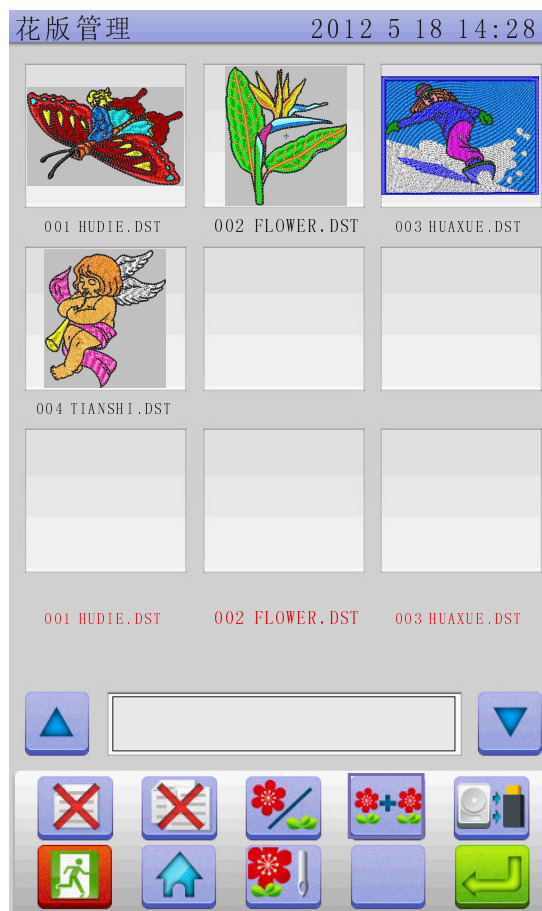
Click  to confirm, then it'll prompt that the design's storage number and cut

progress after cutting. After finishing, it'll automatically return "Cut Design" interface.

4.3 Combine Design

In the "Design Management" interface, click .


Click the required design, a design can be selected more times, the maximum is 4 designs to combine a file, the selected design number and name will display in the screen, show as:



Click , show as:



花版管理		2012 5 18 14:28		
	方向	角度	X倍率	Y倍率
001 ALONGS02.DST	F ▼	0	100	100
	间距	0.0		0.0
001 ALONGS02.DST	F ▼	0	100	100
	间距	0.0		100.0
001 ALONGS02.DST	F ▼	0	100	100
	间距	100.0		0.0
001 ALONGS02.DST	F ▼	0	100	100
	间距	100.0		100.0
组合方式	独立 ▼	<div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>+/-</div> <div>0</div> <div>CL</div> </div>		
<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>				

According to combination requirements, set the need value, then choose combination

mode, click  to confirm. Storage number and name will be automatically generated.

Combination mode has independent and joint. Independent, is that, selected designs regenerate a new design, which can not modify combination parameter, and design can be exported; **Joint**, is that, the selected design generate a boot file, which can modify combination parameters after selecting, can not be exported, the selected and combined designs can not be deleted, if deleted, the combined file will be deleted.

4.4 Delete Single Design

In the "Design Management" interface, click , select design, click  to confirm.

4.5 Delete All Designs

In the "Design Management" interface, click , click , if you confirm to delete, click , if don't delete, click  to quit.

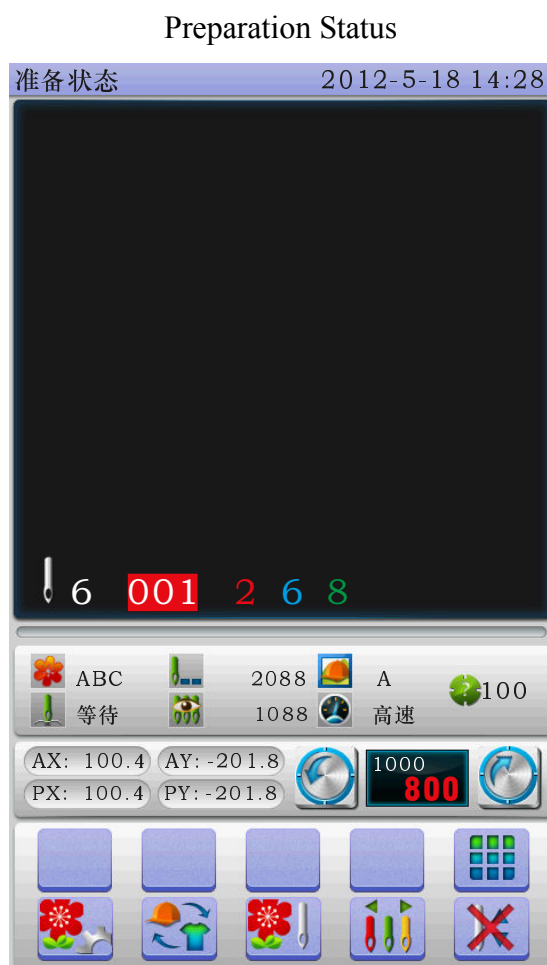
4.5 Input Designs to U disk



In the "Design Management" interface, click , select designs, click  to U disk.

PART 5 EMBROIDERY DESIGN

5.1 Embroidery Status Switch

Embroidery status has 3 kinds: preparation status, working status, and running status. You can switch them by the keys on the interface. Pull stitch bar to enter "running status", show as:





In the preparation status, click , show a dialogue box "whether to enter working status?" click  to confirm, show as:

If no designs in memory, it'll prompt that "don't choose design", and can not enter working status.

Working Status




In the working status, click , show a dialogue box "whether to remove working status ? " click  to enter preparation status.

5.2 Preparation Status

In preparation status, can do the operations: main axis jog, trimming, switch frame, manually change color, set design parameter and select design etc.

5.2-1 Set Design Parameter

In preparation status, click , show as:

准备状态 2012-5-18 14:28

方向	F	▼	
角度	0		
X倍率	100		
Y倍率	100		
反复方式	普通	▼	
优先方式	X	▼	
X反复数	1		
Y反复数	1		
X向间距	0.0		
Y向间距	0.0		
Xy补偿	0.0	▼	


1 2 3


4 5 6

7 8 9

+/- 0 CL




Modify the numerical value according to your requirements, then click  to save,

or click  to return the preparation status interface.

Parameter Range:

Rotation Direction: default has 8: 0° 、 90° 、 180° 、 270° 、 0° mirror、 90° mirror、 180° mirror、 270° mirror

Rotate Angle: 0-89° (calculate after the rotation direction)

X/Y direction magnification: 50%-200%

Repetition: ordinary, X symmetry, Y symmetry, XY symmetry

Priority: X priority, Y priority


X/Y repetition: 1-99 (ordinary X/Y99, X symmetry X2/99, Y symmetry X99/Y2, XY symmetry X2/Y2)

X/Y distance: 0-±999.9mm

The unit is mm, and numeric value input 0.1m, for example, if need to input 100mm, please input 10000.

X/Y compensation (satin stitch): 0 ± 0.3

5.2-2 Switch Frame

In the preparation status interface, click , show as:



Select the current required frame type from A-F and cap frame, the frame will automatically find absolute origin, and stop at the middle of the frame, please note the frame movement. Embroidery range and the middle point of Cap frame and A-F frame, see the **frame set**. Other frame don't find absolute origin, embroidery range set as software limit (detail operation see **software limit set**)



After choosing frame, automatically return to the preparation status interface, if not choose, the system will use the last used type.



When choose cap frame, the current selected design will automatically rotate 180° . The others not change.

5.3 Work Status

In the working status, can set design origin(start point), offset (another start point), return origin, return offset, return stop point, change color sequence, jog main axis, manually trimming, manually change color, change working mode, embroidery mode switch, position idling, embroidery design contour, embroidery straight angled line, embroidery + line, embroidery straight line, moving frame generated design, view embroidery range, power off return embroidery working point, check design and frame proportion etc.




5.3-1 Design Origin (Start Point) Set

In the working status, move frame to design's origin (start point), click  to enter origin point interface, click  to set design origin, AX/AY coordinate clear.

If the current design had been set origin point, it'll prompt that "origin point had been set, if need to reset again?" click  to reset the current position as origin point, the old offset also will be cleared. Click , not set, continue to use the last origin.

5.3-2 Offset (Another Start Point) Set




Set offset, mainly convenient to put embroidery material and place stitch cloth, **before setting offset, must set origin point (start point).**

Click  to enter "Origin" interface, click , it'll prompt that " move frame to offset, click confirm key", manually move frame to the required place, click  to complete.

After set, each start, frame will auto-return to design origin to embroidery. When embroidery completed, frame will move offset point and stop.




5.3-3 Return Origin (Start Point)

In the embroidery midway, if need to return origin to start again, can do the operation.

Click , click , the system will prompt that "if terminate embroidery, return origin?", click , frame will move to design origin and stop, AX/AY coordinate clear.


5.3-4 Return Offset (Another Start Point)

In the embroidery midway, if need to return offset to start again, can do the operation.

Click , click , the system will prompt that "if terminate embroidery, return offset?", click , frame will move to design offset and stop.


5.3-5 Return Stop point

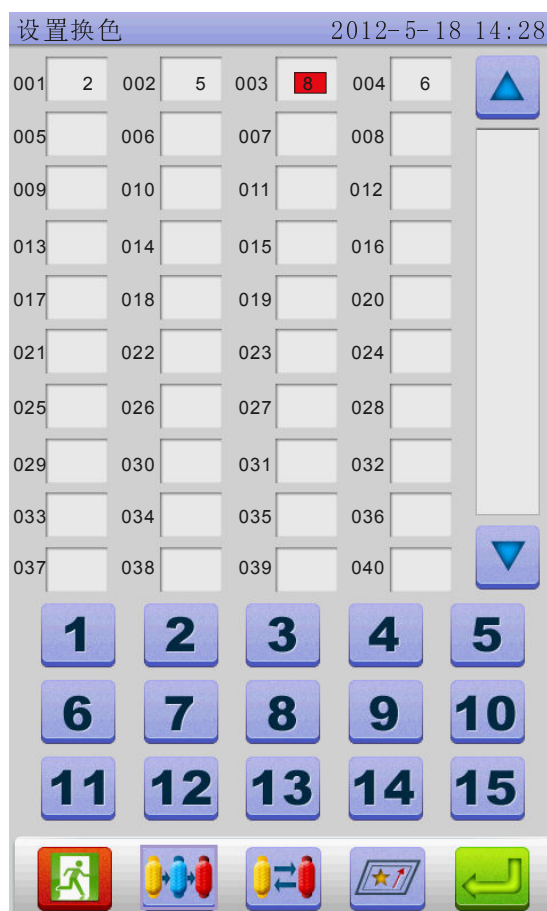
Stop in the embroidery midway, after manually moving frame, need to return stop point, can do the operation.

Click , the frame will auto-move to the point that manually move, and stop.

5.3-6 Set Change Color


Set change color contains change color sequence, replace stitch bar.

In the working status, click , show as:



5.3-6-1 Set Change Color Sequence (sticking cloth offset)






In the interface, click , 001~200 means the change color times (the system only support 200 times), the cursor in the interface will start with the last position which has stitch bar value, input the current color sequence corresponding stitch bar No., then the cursor will move the next sequence.

In the setting midway, if the front stitch bar No. error, select it and reset.

When a color sequence need **offset frame out (stitching cloth path embroidery)**,



before inputting stitch bar No., please click  a time, the background of the current stitch bar will change as red. If you need to cancel it, click  a time.


Complete setting, click  to save, **in the function, the system will save the the cursor position prior data**

In the embroidery design interface, the color sequence background will be red when it has offset frame out, if no, the background will be yellow.





5.3-6-2 Replace Stitch Bar

The function is used for disposable modify a certain stitch of all color sequence.

In the change color setting interface, click , it'll prompt that a dialogue box.

Click numeric keys to input the stitch value and the used stitch value, click  to complete the operation.

5.3-7 Change Working Mode





In the working status interface, click  to change working mode, click a time and change a mode(cycle change), click keys follow change, the following is  automatically change color automatically start mode,  automatically change color manually start mode,  manually change color manually start mode.

In the manually change color manually start mode, the set color sequence invalid.

Shutdown and power on, it is still the modified mode.

5.3-8 Embroidery Mode Switch

Switch embroidery mode, mainly for realization the compensation operation. Users can move the stitch tracking to the specified position by idling embroidery.

In the working status interface, click  to change embroidery mode, click a time and change a mode(cycle change), click keys follow change, the following is  normal embroidery,  low speed idling embroidery,  high speed idling embroidery.



low speed idling embroidery:

Stop status, click start key(low speed forward) a time, main axis not move, frame will go forward with embroidery stitch track, and click stop key to stop.

Stop status, click stop key (low speed backward) a time, main axis not move, frame will go backward with embroidery stitch track, and click stop key to stop.




high speed idling embroidery:

Stop status, click start key(high speed forward) a time, main axis and frame not move, embroidery stitches increasing greatly, click stop key to stop, frame will directly move to the forwarded stitch track position.

Stop status, click start key(high speed backward) a time, main axis and frame not move, embroidery stitches decreasing greatly, click stop key to stop, frame will directly move to the back stitch track position.

5.3-9 Positioning Idling

Positioning idling contains add the specified stitch, reduce the specified stitch, forward a color, backward a color.

In the working status interface, click , show as:




Complete the positioning idling, click  to return working status.



5.3-9-1 Add the Specified Stitch/Reduce the Specified Stitch

In the positioning idling interface, click  or  to choose them, show as:



Click numeric keys to input the required stitches, click , frame will directly move to the specified stitch position.



5.3-9-2 Forward a Color / Backword a Color

In the positioning idling interface, click  or  to choose them, frame will directly move to the specified stitch position.

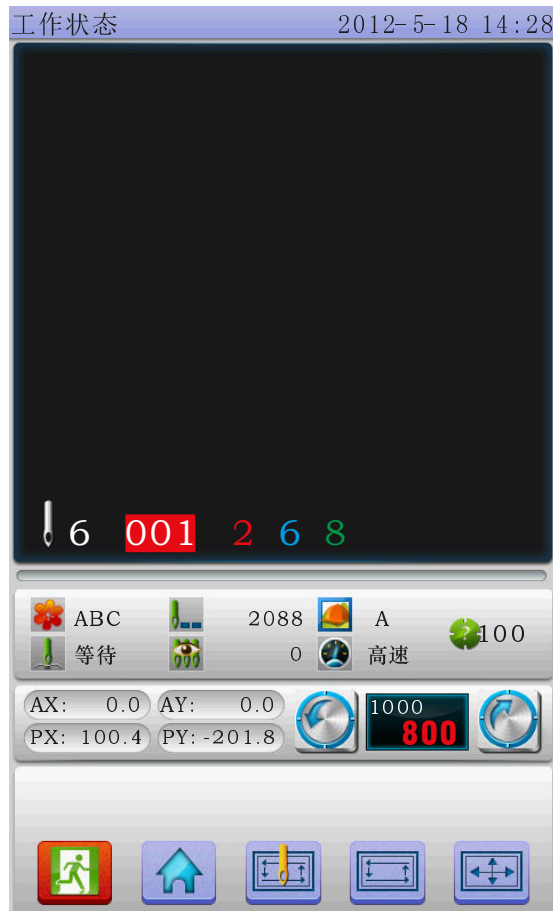
5.3-10 Design Contour Operation

After the design origin set, if need to view embroidery range and idling embroidery or embroidery design contour, we can do the operation.

The operation only can be set before pulling stitch bar, and set design origin. When have pulled stitch bar, we can not to this.


In the working status, click  to enter "Origin Operation interface", click ,

show as:




If you don't need contour operation, click  to exit.

5.3-10-1 View Embroidery Range

In the contour operation interface, click , frame not in the design origin, the system will auto-return origin point and then start to check range, if the current design not set origin point, it'll directly check the range, while checking, if the current set start point will cause limit (Limit Set Effective), the system will auto-adjust. If the design exceed frame range, the system will prompt a error message.


5.3-10-2 Idling Embroidery Idling Contour

In the contour operation interface, click , start to generate design contour, after completed, frame will automatically low speed idling embroidery contour, after embroidery

contour, frame will return the design start point. If design exceed the frame range, the system will prompt a error message.

5.3-10-3 Embroidery Design Contour






In the contour operation interface, click , start to generate design contour, after completed, frame will automatically low speed idling embroidery contour, after embroidery contour, frame will return the design start point. If design exceed the frame range, the system will prompt a error message.

5.3-11 Power off and Return Embroidery

The operation, mainly used for suddenly power off in the embroidery running, frame position.

If the frame type is Other, before embroidery, need to find frame absolute origin, the operation is effect.





In the working status, click  to enter "Origin Operation interface", click , the system will prompt that "please ensure limit switch work normal?". Click  to find absolute origin, then auto-move the prior position before power off and stop. Pull the stitch bar to continue embroidery.

5.4 Embroidery Running Status

In the embroidery running status, only do the main axis lift speed operation.



click  to slow down or speed up main axis rotation speed. Click  to choose the lifting speed.

5.5 Stitch Bar Operation

After completed the relative embroidery parameters, you can click the start key to

embroidery.

Stop in the embroidery design status: click start key a time to embroidery; click stop key a time to backward the stitch.

Back the stitch in the embroidery design status: click stop key a time to stop backward the stitch.

In the embroidery running status: click the start key more than 3 seconds, the main axis embroidery with the lowest speed, click the stop key to stop.

5.6 Sequin Head Switch Control and Indicator


Toggle the switch from up to middle, the indicator is green, the landing gear put down (machine lock open), toggle the switch down, slice motor work a time; toggle the switch down more than 2 seconds, the indicator will be orange, release the switch, the landing gear will rise (air pressure)

Switch in the middle, don't enter the sequin embroidery, the indicator is orange, landing gear up, wait send slice. When enter sequin embroidery, landing gear down, indicator change as green.

Sequin head switch up, the indicator off, and close landing gear(when has air pressure, landing gear will automatically rise).


PART 6 MANUALLY CHANGE COLOR



In the working or preparation status, click  to switch manually change color operation, it'll prompt that a numeric keypad, according to your requirements, click the corresponding numeric value to change color.

PART 7 MANUALLY TRIMMING

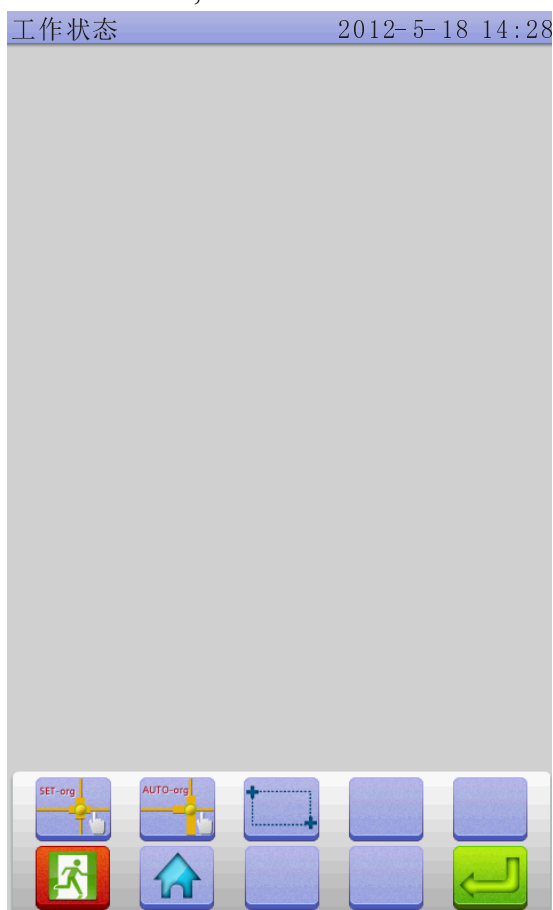
In the embroidery preparation or working status, can do the trimming operation.

Click  on the panel to do bottom side trimming operation.



PART 8 FRAME ORIGIN

Frame origin operation contains manually set origin, find absolute origin and set software limit.

In the main menu, click , show as:



8.1 Manually Set Frame Origin



In the "Frame Origin" interface, click , it'll prompt a dialogue box "Whether set the current point as frame origin?", click  to complete, PX/PY coordinate change as 0.0.

8.2 Automatically Find Absolute Origin

Absolute origin take use of frame limit to detect frame's absolute position, to ensure that

some accidents happen in the embroidery midway, can use recovery embroidery to continue.




The function is automatically find by system, must confirm that limit sensor is effect, or it'll cause machine parts destroy!


In the frame origin interface, click , it'll prompt a dialogue "Please confirm limit switch work normal?", click  to find frame origin absolute origin, completed, return the prior stop point.

After finding the absolute origin, the operation will be not effect until the frame moves after power off.

8.3 Set Software Limit

The feature is only effect when the frame type is "Other".

In the frame origin interface, click , it'll prompt a dialogue "move frame to the left upper corner, then confirm", then click , it'll prompt a dialogue "move frame to the right lower corner, then confirm", then click  to complete.

Cancel software limit: in the software limit interface, not move frame, continuously click  2 times , which can cancel software limit.













PART 9 FRAME SET






The feature use to set the size of cap frame and A-E frame, and the distance between from frame absolute origin to frame middle.


In the main menu, click , show as:

绣框设置 2012-5-18 14:28

类型	X中心距离	Y中心距离	X尺寸	Y尺寸
帽框	0.0	0.0	300.0	100.0
A	0.0	0.0	300.0	300.0
B	0.0	0.0	300.0	300.0
C	0.0	0.0	300.0	300.0
D	0.0	0.0	300.0	300.0
E	0.0	0.0	300.0	300.0
F	0.0	0.0	300.0	300.0






















Input numeric value according to your requirements, then click  to save.

PART 10 STATISTIC

The feature use to view generated statistic and clear statistic.


In the main menu, click .

Click  to clear the current statistic value.

PART 11 MAIN AXIS JOG OPERATION

The feature use that main axis position stop, can operate it in the interface matched with keys.

According to your requirements to do it.





Click  to jog main axis to 100 degree (Zero positon)

PART 12 LANGUAGES

In the main menu, click  to change required languages.

PART 13 EMBROIDERY PARAMETERS

Owing to different machine configuration and embroidery process requirements, need to change some commonly used parameters to meet.

In the main menu, click , click the required parameter, click  or  to modify, click  to save, then return the main menu.

The definition and the value range of embroidery parameter, see **Table 1**.

Restore the factory settings: factory settings can meet many users' requirements, when you changed some settings, the effects no good, you can restore the factory settings.

In the embroidery parameter interface, click , it'll prompt a dialogue "whether to restore the factory settings?", click .

PART 14 SET MACHINE PARAMETERS

The parameters only can be set by professional engineers, the other can not, please don't freely change and modify, to avoid machine can not work.

PART 15 USERS MANAGEMENT

The parameters only can be set by professional engineers, the other can not, please don't freely change and modify, to avoid machine can not work.

PART 16 REMOVE RESTRICTION

16.1 Remove lock

Because limit use expired, the system will lock, and prompt to input password, show as:

解除限制 2012-5-18 14:28

系统编号: TEC07018

到期次数: 3

解除密码: *****


1 2 3

4 5 6

7 8 9

+/- 0 CL

Icons: [Red square with white person icon] [Blue square with white house icon] [Empty blue square] [Empty blue square] [Green square with white left arrow icon]

After inputting password, click  to remove.

16.2 Remove Unlock


Because machine is restricted, the system will lock, you can input the password ahead to remove the restriction.

PART 17 SYSTEM TEST



The operation mainly be used by maintenance engineer, check and test machine.

In the main menu, click  to enter "System Test" interface.

17.1 Input Test

In the test interface, click , view the input status changes, if no change, the input signal fault, please check and repair.

17.2 Output Test

In the test interface, click , click the corresponding  key of required testing items, check whether output has effect or not, if the output device no action, the output is fault, please check and repair.

Hook Test: each click, hook knife will do the alternating movement between stretch and reverse.



Trim Test: each click, trim motor will do the alternating movement that turn a half of circle and stop, and one-half turn in the same direction in place.


Buckle Test: each click, buckle electromagnets pull 2 seconds to automatically disconnect.


Left Sequin Test: each click, sequin landing gear perform decline, slice 3 times, rising.

Right Sequin Test: each click, sequin landing gear perform decline, slice 3 times, rising.


17.3 Axis Test

In the "Test" interface, click  into "Axis Test", and click the corresponding  key of required testing items, check whether axis has effect or not, if the output device no action, the output is fault, please check and repair.

XY axis Test: click direction keys to change motor moving pulse numbers(1-127), the default is 127 pulses, click  to begin to move back and forth.

Main Axis Test: click  to begin to turn by 100 rev/min, click direction keys to modify main axis speed. Check target speed and actual speed are the same(1000rpm difference of less than 5rpm)

17.4 Head Test

In the "Test" interface, click  into "Head Breaking" test, click numeric keys test the corresponding bar, check whether head breaking testing has effect or not, if the output is fault, please check and repair.

Width Test: close width line detect spring, the indicator red light, it'll turn green after separation.

Bottom Test: Toggle the detect wheel, the indicator will light by toggle speed.

Select the width test or bottom test according to your requirements.

PART 18 SYSTEM INFORMATION

In the main menu, click



18.1 System No. and Version Info

In the system info interface, click



to view.

18.2 System Update

Used to update new software.

In the system info interface, click



to update, while it's in the update status, do not power off, usually it'll take 3 minutes to finish.

The update does not affect machine current status, can continue to do the operation updated before.

PART 19 IP SET



In the main menu, click .

The IP in the machine and LAN IP must be in the same number, or you can not connect.

The first three numbers the same paragraph, the last address conflict.

PART 20 SYSTEM INITIALIZATION

After power on and icons shown, continuously click the right key 3 times, the system will initial, the buzzer will ring “Di, Di, Di” , and the system will automatically enter the Import design interface.

PART 21 APPENDIX

20.1 Parameter Table

Name	Functions	Default	Range
Jump stitch trim number	Several jump stitch and start to trim, or no trim	3	1-9、no trim
Width thread trim length	After trim, the thread length, the larger the number, the longer the remaining.	3	1-7
Jump stitch lock?	Whether or not to lock before jump stitch? To avoid embroideries off-thread after trimming	Yes	Yes、No
Width thread break detect	Check sensitivity	5stitches	3-9stitches、no detection
Jump stitch break detect	Whether or not detect breaking when jumping	No	Yes、No
Bottom thread break detect	Check sensitivity	middle	High, middle, low, no detection
Trim start lock	Lock several stitches after trimming when starting, to avoid off-thread.	1	1-3
Trim lock times	Lock several stitches when trimming, to avoid off-thread	1	1-3
Trim lock stitch length	The material thin, lock stitch length increase, if it's thick, length decrease.	0.6mm	0.5-1.0mm
Break auto-return	Auto-return stitches after breaking, the break head will compensation embroidery ahead	4	0-9
Full head compensation embroidery	Start full head before several stitches that compensation embroidery completed	0	0-5

stitches			
Machine head compensation embroidery mode	Use single head or full head when embroidery	single	single、full
Compensation embroidery end deceleration	Whether or not to decelerate when compensation embroidery completed	Yes	Yes、No
Auto-set start point	Set "Yes" when designs in the head and tail continuous embroidery	Yes	Yes、No
Auto-return start point	Whether or not to return start point after embroidery, set "No"when designs in the head and tail continuous embroidery	Yes	Yes、No
Pull stitches continuous back	Automatically continuously return stitches after several stitches when pull stitches	0	0-9
Pull stitches slow rotation speed	Main axis rotation speed when pull stitches	100	100-500
Large stitch embroidery mode	Which modes do you use when large stitch	Low speed	Low speed、jump
Auto-jump stitches	When large stitch as auto-jump, automatically divided into 2 stitches more than how many stitches	6.5mm	6.5-8.5mm
Auto-decelerate stitches	Decelerate embroidery speed when stitches more than how many	6.0mm	2.0-9.0mm
Continuously jump deceleration	When continuously jump, decelerate to a percentage of the current speed	80%	60%-90%
Start main axis	Main axis rotation speed when starting	100	60-200

rotation speed			
Max. restrict speed	Main axis maximum rotation speed (by machine parameter limit)	750	550-1000
High-speed moving frame speed	Set high-speed moving speed	5	1-9
Stepper change color speed	Change color speed when use stepper motor	5	0-9
Auto-start same color	Wether or not to auto-start when meet same color stitch bar	Yes	Yes、 No
pull stitch beyond frame and stop	Wether or not to stop when pull stitch beyond frame	Yes	Yes、 No
Machine stitch bar quantity	The current machine used stitch bar quantities	n*	1-15
Sequin stitch bar	Use left, right or both of them, if the feature closed in the machine parameter, it's invalid	left*	left、right、left and right
Sequin embroidery limit speed	Main axis max. rotation speed at the sequin embroidery	700	300-1000
Carve knife stitch position	Use the position of carve knife (no breaking detection)	0	0-n
Rope embroidery stitch position	Use rope embroidery stitch position (auto-deceleration)	0	0-n
Rope embroidery limit speed	Main axis max. Rotation speed at the rope embroidery	300	300-600
Circle	Whether or not to continue to embroidery	No	Yes、 No

embroidery			
Display design's stitches	Whether or not to display stitches	Yes	Yes、No
Filter 0 stitch data	Whether or not to filter 0 stitch	Yes	Yes、No
Background color	Embroidery interface background color	Black	Black、white
Frame moving curve	Frame moving mode, adjustment according to the actual embroidery effect	F5*	F1-F5
Frame moving angle	Frame moving angle, adjustment according to the actual embroidery effect	230*	220-270°
Moving frame compensation time	Thin material use positive compensation, thick material use negative compensation, adjustment according to the actual embroidery effect	0	5 %、0、-5%、-10%
Whether or not to use trimming	Whether or not to use trimming	Yes	Yes、No
Screen-saver waiting time	How long	close	5、10、20、30minutes、close
Break rise landing gear	Whether or not to rise landing gear after breaking in the sequin	Yes	Yes、No
Reset frame after power on	Whether or not find frame absolute origin after power on	No	Yes、No
Landing gear type	Sequin landing gear mode	motor	motor、pneumatic
Left sequin size	Left sequin slice size	3*	3-9
Right sequin size	right sequin slice size	3*	3-9
Solenoid voltage value	Adjust solenoid voltage value	2*	0-5
Buckle angle	Extend buckle time when starting	1	1-4

compensation			
Various speed stitch numeric	Adjust speed less than continuous stitches	20*	1-20
Main axis brake delay	The larger the numeric, the later the brake angle	6*	2-8
Width thread detection adjustment	Detect spring's sensitivity	2*	1-9
Whether or not to move frame after trimming	Whether or not to move frame after trimming	No	Yes、No
Hook motor speed	Adjust hook stepper motor speed	5*	1-5
Sequin lift speed	Adjust lift stepper motor speed	3*	1-4

n* machine use stitches (no default)

-* set according to your requirements (no default)

20. 2 System Fault and Solution

Fault	Cause	Solution
Main axis not in the 100 degree	Main axis don't stop 100 degree	Jog or manually move main axis to 100 degree
Main axis not turn	1. Main axis controller no signal or power input 2. Main axis motor no power input or input fault 3. Controller or motor destroy 4. Coder disconnect	1.check signal wire or power wire 2.check main axis motor input power 3.replace controller or motor 4.connect coder
Main axis reverse turn	1. Inverter output power reversed 2. Servo controller parameter error 3. Coder A/B phase reversed	1.adjust inverter output UVW any 2 phase 2.reset servo controller parameter 3.adjust coder A/B phase connection
Coder no zero position	1. Coder zero signal output 2. Coder to main board connection fault	1.replace coder 2.check or replace connection wire

Change color overtime	1.change color motor not turn 2.Machine part of change color stuck 3.change color motor to power wire fault	1.check change color motor or wire 2.repair or replace the stuck machine part 3.check or replace wire
No stitch position	1.stitch detection wheel position fault 2.stitch detection board destroy	1.adjust the position 2.replace the board
Stitch position not in place	1.stitch detection wheel position fault 2.stitch detection board destroy	1.adjust the position 2.replace the board
X motor driver fault	1.X driver over-voltage or over-current protection 2.driver destroy	1.check driver input power and power on again 2.replace driver
Y motor driver fault	1.Y driver over-voltage or over-current protection 2.driver destroy	1.check driver input power and power on again 2.replace driver
Hook not in place	1.proximity switch detection not in place 2.proximity switch destroy	1.manually adjust hook position 2.replace proximity switch
Hook motor fault	Hook motor or connection wire fault	Check or replace wire
Trim not in place	1.proximity switch detection not in place 2.proximity switch destroy	1.manually adjust trim position 2.replace proximity switch
Sequin position fault	Sequin stitch bar set fault	Reset change color sequence
+X limit fault	+X direction limit	Manually move frame in opposite direction
-X limit fault	-X direction limit	Manually move frame in opposite direction
+Y limit fault	+Y direction limit	Manually move frame in opposite direction
-Y limit fault	-Y direction limit	Manually move frame in opposite direction