



## Richpeace®

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#### **Chapter 1** Summarize

In order to avoid you suffering from injury, and prevent the embroidery machine and any equipments connected to being damaged, please read the following attentions carefully before operating the machine to ensure that you use the embroidery machine correctly.

1. Prohibit using of the machines without grounding. When the machine performance decline or failure, grounding can prevent the operators getting the risk of electric shock. When setting up the embroidery machine, the protect-pole on the box should be connected with the machine's shelf reliably; when machine setup and the power connecting (including connecting power supply), they should be connected to the power supplying grounding reliably pole directly through the pole of the controller box and the machine's shelf grounding pole of the embroidery machine to the ground should be connected to the protect-pole supply should be in line

with a grounded plug or use a grounding cable.

- 2. The grounding cable's color should be yellow alternating with green, the cable's section should be no less than 1.5mm²; the grounding circuit should be consecutive reliably, adopting PELV (ensure security lowest voltage) electrical source, the corresponding test current is 10A. The greatest actual testing voltage of grounding pole of the controller box and the machine's shelf grounding pole of the embroidery machine to the ground should be less then 2.6V.
- 3. Turn off the power or draw out the power plug before opening any electrical boxes and replacing any circuit board in these boxes.
- 4. Don't let the embroidery machine be placed in electricity prolonged without using. In addition, the electrical system must be shut off after using the machine and before machine cleaning.
- 5. When cleaning the machine-plate, you mustn't clean it with water or blow it with the pneumatic gun, because the air out form the air

compressor has hydrosphere, which can cause short circuit.

- 6. You must turn off the power or draw out the power plug when moving away the cover of the mechanical system for oiling or other purposes.
- 7. Any actions near to the needles on the machine as thread pull on, needle installation and bobbin changing must be sure of under the state of machine stopping or offline.
- 8. Don't work under status of wire or plug damaged, machine abnormal acts, machine works malfunction and leakage. When such situations occurring, please consign the task of checking and repairing to the technicians of the manufacturer.
- 9. After the operation, please place all the switches on the position of "off", then turn off the power and draw out the power plugs. Don't draw out the plug by holding the wire; the proper way is holding the plug.
- 10. Don't piling up debris around electrical boxes, just for thermolysis.
- 11. Prohibit electrical equipment work overtime and work in dust, corrosive gases, inflammable and explosive gas location which may cause electric shock or fire.
- 10.4 inches screen and color LCD display, operation interface showing the icons matching with characters, you can master the operation easily in a short time .what is more, and the present design can be simulated showing real timely.
- The machine can store 200 designs in the memory, storage stitches amounting to two million.
- Can operate through hand click on the screen directly or use mouse in addition.
- Add USB disk connection. Comparing with normal floppy disk, it has bigger capacity, faster speed of reading-writing, and convenient to be taken with
- Function keys ash-showing

  In different running status, function keys can ash-showing when it is invalid, so distinguish from effective ones.

Preview designs information directly

When you select a design, you can preview it directly.

Read various formats disk

Including Tajima binary system, Tajima three enter the system, Barudan FDR (including binary system, three enter the system and Z enter the system), ZSK disk designs.

Synchronous disk management

You can read and write disks, editing designs and other operations while machine running, greatly improve the efficiency.

Forbid illegal outputting designs

Once the master set password, the other persons can't make "Write" operation without knowing it. So protect designs resource.

Designs rotary, turnover and enlarged and narrow

You can rotary the designs in any turn angel, in addition, the designs can be zoom in

/out at different rates in X or Y directions.

Special wide embroidery function

This equipment has the function of batch embroidery, it allows for large embroidered; greatly enhance the

efficiency of the work. function.

In the embroidery process, as a result of broken string, and other factors, there are one or more frame heads will lack of stitches, then the indicate lights will be on timely and automatically mend the work after backing the stitches and restart.

Frame limitation equipment and designs area confirmation

Frame limitation setting includes hardware and software limit, both prevent from the needle falling dawn and hitting the frame, in addition, embroidery area confirmation

before the work starting can prevent and reset the embroidery area when it beyond the frame, also an accident prevention measure.

High-speed running

Computer support normal embroidered working at the highest speed of 850rpm.

Automatically speed changing.

Within the speed rang, machine can automatically adjust the most proper speed according to the stitch wid

Automatic / manual color changing

In the embroidery process, users can choose automatic or manual color changing according to the actual needs of embroidered to obtain the needles required to complete the embroidery.

#### ldling

If the design selected needs idling, actually no embroidery will be done, only move the frame along the stitches trace and show the moving stitches; in addition, you can move the frame to the position in certain stitches directly by moving forward/backward the frame; also, A change in color can move the frame to the back color or the next color directly.

**Editing designs** 

You can divide up or merger the designs, and so on.

Protect function when power cut

If power cut when embroidering, get power again, the design can continue embroidering at the status that before power cut.

Error prompt

During Embroidering, when mistakes,

such as "Upper thread breakage", it will be shown on the screen to help workers analysis the cause rapidly.

#### Statistics

Automatically storage the production statistics of certain term, can inquire the amount and time consumed at any moment.



Provides mighty sequin embroidery.

#### 1. 3 Technical standard

Content	Technical norms
Memory designs number	200
Memory capability	Standard 2 million stitches
Display resolution	640×480dpi,40×30lines
Touching screen rigidity	≥3H
Stress sensitivity	<b>≤</b> 80g
Touching precision	≥98.5%
Touching screen	≥70%
transparency	
Screen thickness	1. 0mm∼3. 5mm
Touching life-span 📋	≥1,000, <mark>00</mark> 0 次
	AC220V, single phase, 50HZ
Input power	AC220V, three phase, 50HZ
	AC380V, three phase, 50HZ
Consume power	1.5kW
Environment temperature	$5-40^{\circ}$ C (working); $-10-60^{\circ}$ C (storing)
Humidity	30-95%RH (relative humidity)
Machine head number	$1\sim$ 36 heads;
Speed	200 rpm~850rpm
Needle number	1~15;
Diskette reader	3.5-inch floppy diskette reader 1 set
	and an USB drive
	Memory designs number Memory capability Display resolution Touching screen rigidity Stress sensitivity Touching precision Touching screen transparency Screen thickness Touching life-span Input power Consume power Environment temperature Humidity Machine head number Speed Needle number

#### 1.4 Attentions on using touching screen

Because of the particularity of touching screen, you must pay attention to the followings to assure its life-span;

- 1. Don't press it at full tilt, just touch lightly with hand; don't flap or knock the screen forcibly;
- 2. Don't use nail poke the screen, forbid nicking the screen with hardy thing;
- 3. Keep the screen clean, too much dust will weaken the screen's delicacy degree;
- 4. While operating, you need press screen with fingers lightly for one second, if have hand icon and the key is concave down, it means the operation has not take effect, you must press again until the key flip up.

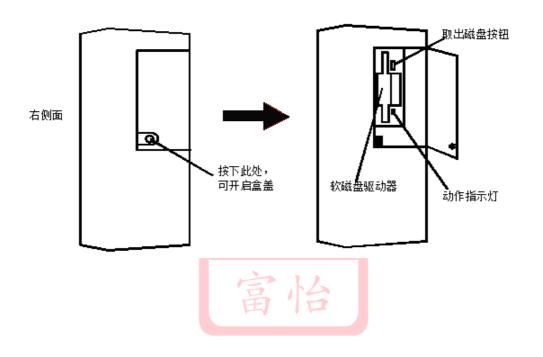
**Chapter 2** Appearance and functions

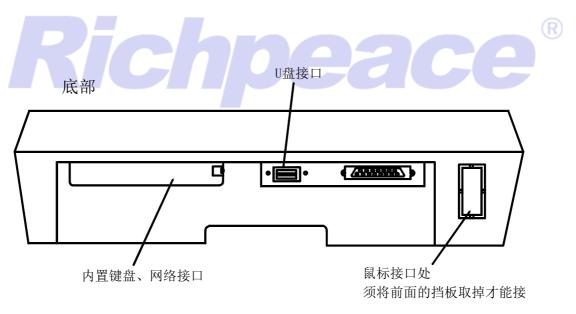
2.1 Appearance of operation box

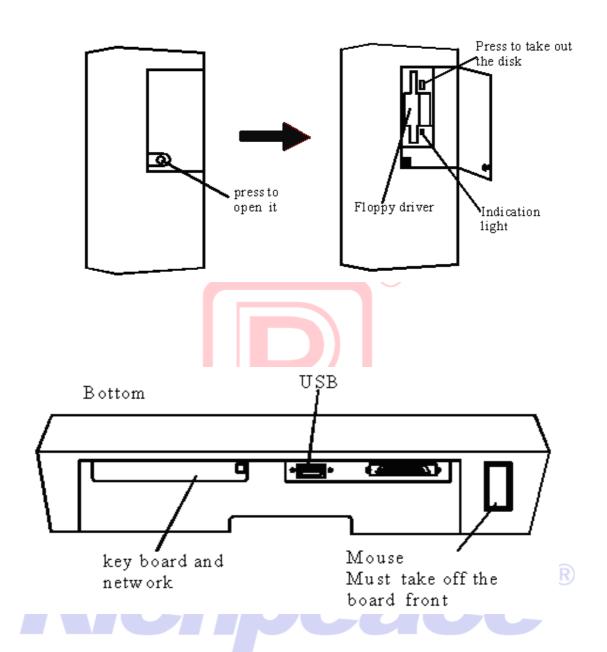


- 1. Buzzer;
- 2. Display area;
- **3.Embroidery/offline key:** Press the key to switch states between embroidery and offline, the main shaft don't run by any operations when offline.
- **4.Frame forward/backward key:** Press the key to enter the idling embroidery, left direction makes backward idling; right direction makes forward idling.
- **5.Speed switch key:** Press the key to switch the speed between "high" and "low" when moving the frame manually.

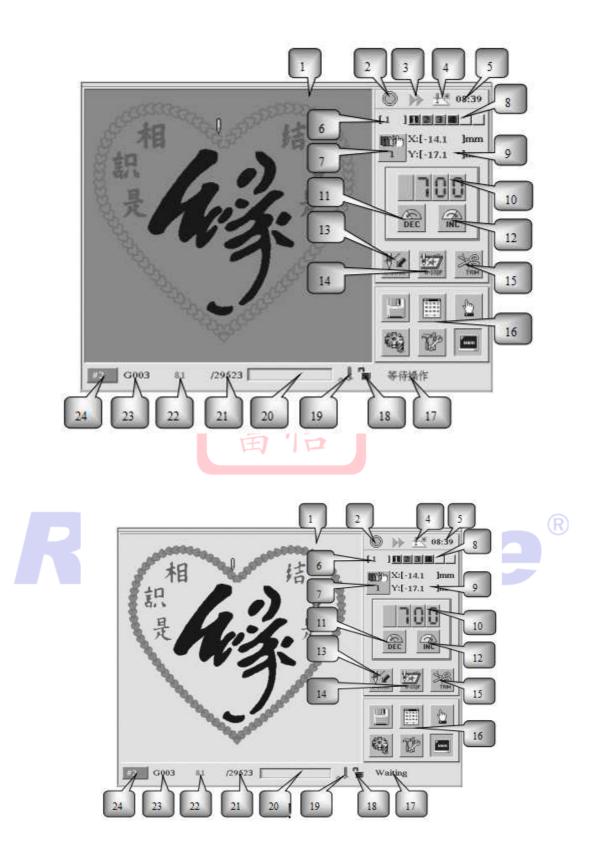
**6.Frame move keys:** Press the four direction keys up, down, left and right to move the frame to an appropriate position. The middle key is for adjusting the moving speed of the frame.







#### 2.2 Display interface introduction



- 1. Design displaying field.
- 2. **Symbol of main shaft:** Green circle indicates that the main shaft is at the zero position; red circle indicates not.
- 3. **Symbol of high/low speed:** The current is the icon of high speed; the icon of low speed is " ...".
- 4. **Symbol of offset:** The icon on the interface means the offset point is set, or else, there is blank.
- 5. System clock.
- 6. Color change times.
- 7. <u>Manual color change shortcut key</u>: Digital on the button is the current needle, if there is no needle, it will show zero.
- 8. Color list.
- 9. Current frame's coordinates.
- 10. Real time rotates speed: Press the key "DEC" or "INC" when the machine doesn't do the embroidery, displaying the setting speed; else, displaying the real-time rotary speed.
- 11. **Speed lowing key:** Press the key to slow the running speed of the machine.
- 12. **Speed rising key:** Press the key to raise the running speed of the machine.
- 13. Return to start point shortcut key.
- 14. Return to stop point shortcut key.
- 15. Manual trimming shortcut key.
- 16. <u>Main function keys</u>: there are six main function keys. Press different operation keys to choose different functions, details are in section 2.3.
- 17. **Prompt information column:** Show the working status and error information.
- 18. Lock interface key: Press the key, all function keys is locked to prevent mistakes;

press the key again can release the lock.

- 19. **Symbol of embroidery/offline**: Indication of the system state currently. The current is embroidering state; the icon of offline is "XI". At the state of offline, the main shaft doesn't running, the operations of pulling to embroider and main shaft turning to zero are invalid.
- 20. Progress gauge.
- 21. Total needle number of current design.
- 22. Finished stitches.
- 23. Current design name.
- 24. <u>Design information</u>: This function is information at the locking state, which is used to see the current design's information. At the locking state, errors that caused by design info dialog box covering other dialog boxes can be prevented. Press design info key again or release lock can paste up the design info dialog box, and resume the primary dialog box, after released lock, this key can not be used.



#### 2.3 Dictates and icons



Designs choosing  Cancel  Digital keys  Confirm a design  Output to disk  Pgup  Pgdn  Digital keys  Ok/Cancel  Output to disk  Pgup  Output to disk  Pgup  Digital keys  After executing the third grade command, will pop up dialog box;  Press the confirm key to save design to the memory.  After confirming the design, name and choose style for the design, then conform, the design can be output to the diskette.	1 <sup>st</sup> grade	2 <sup>nd</sup> grade	3 <sup>rd</sup> grade	4 <sup>th</sup> grade	Illumination
	<u> </u>	Choosing  State  Output to disk	Pgdn PGDN  Cancel  Confirm a design  Pgup PGDN  Pgdn  Cancel  Cancel  Confirm a	Prev UP  Next DOWN  Ok/Cancel  Digital keys	embroidery are stored in memory; press on it directly to choose it.  After executing the third grade command, will pop up dialog box; Press the confirm key to save design to the memory.  After confirming the design, name and choose style for the design, then conform, the design can be

	<u> </u>	1	<u></u>
Output to U disk	The operation is	Confirm  Style  Ok/Cancel s the same as disk op	eration above.
Simulating display  SIMULATE	Speed double  Pause  Full display	Move up  Movedown  Move left  Zoom out  Zoom in  Cancel	After confirm a design and execute the command, the design will be shown on the LCD display.      ■ The confirm a d
Disk	Pgup		♦ Inputting designs to

disposal		Pgdn		memory in disk;
		Prev		
		Next		can make the design
•	Inputting	Preview PREVIEW		display beforehand.
	CD.	Cancel		
			Last num. NUM-	
		Confirm	Next num.	
			Ok/Cancel (V)	
		Pgup Pgdn		<ul><li>Move the cursor to choose a design and</li></ul>
	Delete one	Prev		then delete it from the
		Next		diskette.
	DEL	Del <mark>et</mark> e design		
		Can <mark>c</mark> el		
	Delete all	Del <mark>et</mark> e all		♦ Delete all the designs
		Confirm		in the diskette.
	DEL ALL	Ok/Cancel	怡	
U disposal				
	The ope	ration is the same	e as disk disposal ope	eration above.
				R
Network			n transfer the design	ns to the control boxes by



1 <sup>st</sup> grade	2 <sup>nd</sup> grade	Illumination
Transform/repeat	Digital keys Prev Next Ok/Cancel	<ul> <li>Designs can be rotated with any degree and turned up or down, zoomed in or out.</li> <li>Dialog box will appear after executing the first grade command.</li> <li>Confirm after choosing.</li> </ul>
Color sequence	Next color  Change manner  Start manner  Interval head	<ul> <li>♦ Set the needles sequence of embroidery;</li> <li>♦ Dialog box will appear after executing the first grade command, and then choose auto or manual manner.</li> <li>♦ If the software version supply ,it can supply the function to use the combination embroidery or interval head embroidery.</li> <li>♦ Mode change, set the mode to embroidery(flat embroidery, laser or cord embroidery).</li> <li>♦ Set laser cutting speed level.</li> <li>♦ Confirm after choosing.</li> </ul>
	The two heads Combination embroidery  Mode change  Laser speed level set	

	Pgup	
	Pgdn	
	Ok/Cancel	
Set start point	Ok/Cancel	♦ Only after setting the start point, then the embroidery can be done, the start point is the first stitch's position of the embroidery.
Set offset point	Cancel offset	♦ If offset point has been set, the frame will back to the offset point after embroidery finishing.     ♦ The offset signal will show on the set.
	Ok/Cancel	<ul> <li>The offset signal will show on the interface after setting offset, else, when the offset point is canceled, the signal will disappear.</li> </ul>
Outline check	Ok/Cancel	Make outline checking after setting the start point, this function can prevent embroidery machine from damage when the design is beyond frame.
Outline embroidery	Ok/Cancel	♦ Adding a rectangle outline along the designs
Free embroidery	Prev point Prev point	Make free embroidery.
FREE EMB	Next point	ace®
	Confirm point	
	Ok/Cancel	



1 <sup>st</sup> grade	2 <sup>nd</sup> grade	3 <sup>rd</sup> grade	Illumination
Idling  MOVE	For-C For-C	Digital keys Ok/Cancel	<ul> <li>→ Move to the position directly without doing stitches;</li> <li>→ A dialog box pops up after executing the 2<sup>nd</sup> grade command;</li> <li>→ Input numbers directly in the dialog box with the digital keys. The maximum doesn't exceed the whole stitch number of the embroidery designs.</li> </ul>
Manual trim	Ok/Cancel		→ Manually control the trimming.
Manual color change  NEEDLE  R-Start	Select needle  Select needle  Digital keys Ok/Cancel  Ok/Cancel	富怡	<ul> <li>At the status of manual changing color, carry out various colors match by manual color changing;</li> <li>After executing 1<sup>st</sup> grade command, a dialog box pops up;</li> <li>Inputting the needle directly.</li> <li>Return to the start point rapidly.</li> </ul>
R-Offset R-OFFSET	Ok/Cancel		♦ Return to the offset point rapidly.
R-Stop R-STOP	Ok/Cancel		In some special situation (such as broken thread parking), return to the stop point manually to mend.
Wide EMB WIDEMB	Exit EXIT  Ok/Cancel		→ Do wide embroidery at the status of power on, the needle gets into the cloth material and fixes it.

R-Origin	Ok/Cancel	♦ Return to the origin point.
100°	Ok/Cancel	♦ When the machine doesn't stop at 100°, doing this operation can get the main shaft to this position.



1 <sup>st</sup> grade	2 <sup>nd</sup> grade	Illumination		
Set origin	Ok/Cancel	When the designs are not block out, setting origin point can make the finish position at the start point.		
Speed setting  High speed  Low speed		<ul> <li>♦ Set the highest and lowest speed, restrict the adjust range of the main shaft;</li> <li>♦ Range: 300-850RPM (the highest speed is set by the machine parameter).</li> </ul>		
	Digital keys			
	Ok/Cancel			
Software limit	First 2	<ul> <li>♦ The two points defined are the diagonally point of the design rectangle;</li> <li>♦ The software limit is usually used for the machine that hasn't the hardware limit, such as limit switch.</li> </ul>		
	Ok/Cancel			
EMB parameter Modify		<ul> <li>♦ Setting proper EMB parameter can make the embroidery work efficiently.</li> <li>♦ Confirm after choosing.</li> </ul>		
林調	Prev			
PARAM	Next			
	Pgdn			
	Pgup			

	T	
	Default DEFAULT	
	Password Password	
	Ok/Cancel	
Machine	♦ Set the parameter of	of the machine to make it work best.
parameter	♦ The setting manner	is the same as the embroidery parameter.
PARAM		
	Chinese CHINESE	R
	English ENGLISH	
Languages	C+ Turkish TURKISH	
LANG	Romania ROMANIAN	
	Portugal PORTUGAL	
Ri	Spanish SPAISH	)eace®
	Italian	
	Cancel	
	BD/NDL BD/NDL	<ul><li>♦ The background and needle color can be changed.</li><li>♦ Confirm after choosing.</li></ul>
Display DISPLAY	Prev color COLOR	
	Next color COLOR	

	I			
	Select needle	₩ <b>®</b> s-ndl		
Total TOTAL	Clear all stitch Pgup Pgdn Clear statistics		Add up stitch nu     to now.	mbers from starting embroidery
Speed curve manager	Ok/Cancel Input speed curve	Prev	(R)	Change cursor to choose the curve file ,pressing
	Input	Next D	own Own	" ,send the current curve file to RAM of control box .
		Prev	<b>□</b>	Select speed curve file in the RAM of control box,
	Select speed		112	pressing "send", send
Ri	Select	- // - // <b>-</b>	DOWN	X-curve ,pressing  ",send  Y-curve ,pressing
				"×",exit
	Delete	Prev	UP UP	Select speed curve file,
	Delete	Next	OOWN COWN	pressing ", delete the current curve file.

### 5. Auxiliary functions"

1 <sup>st</sup> grade	2 <sup>nd</sup> grade	3 <sup>rd</sup> grade	4 <sup>th</sup> grade	Illumination
	Digital	Prev		♦ For the
	keys	Next		manufacturer
	Ok/Cancel	Pgdn		using; if you are a
Test		Pgup		laypeople don't use
function				this function.
A.		Start test		♦ Test the hardware.
		Start test	(R)	
		Stop test		
	Confine	Cancel		
	Confirm items	Ok/Cancel		
	items			
	25 T6			
System				
clock	Decrease	官小	ム	
		国 1	口	♦ Control the system
				clock.
	********			
	Increase			
	‡ 2 <sup>+</sup>		004	(R)
	***************************************			
		111114		♦ Edit a certain
	Edit	Prev stitch		design in the
Designs				memory.
manage	EDIT	₩		
		Next stitch		on the design
		Select modify		directly to choose
		Jelect		it;
				grade command

1	T .	Г	
	Function code		and concert digital
	FUNC		keys to finish the editing.
	Zoom out		
	Zoom in		
	Insert		
	Delete 🔻 🗑	T (K)	
	Prev color		
	Next color		
	Seek function code	台	
	Digital keys		
	Ok/Cancel		R
	Digital keys		
	Ok/Cancel		♦ One design split to
		Prev letter	two;
		Next letter	♦ Input the split
Split		Select letter	numbers by digital
SPLIT		First design NAME	keys;  ♦ After confirming,  name the two
		Second design NAME	designs and save them in the memory.
		Digital keys	
		Ok/Cancel	
	Pgup		♦ Combine less than
Combine	Pgdn		10 designs into one
	Ok/Cancel	Prev	design.

I		ı	1	
<b>88</b>		Next		
COMBINE		Left		
COMBINE		Right		
		Digital		
		keys		
			Prev letter	
			Next letter	
		01./01	Confirm	
		Ok/Cancel	Digital	
			keys	
			Ok/Cancel	
	Pgup			♦ Delete several
Delete	rgup			designs from
one	Pgdn	Confirm d	elete DEL	memory.
		Cancel		,
<b>6</b>				
DEL				
Delete all	Ok/Cancel			♦ Delete all the
<b>III</b>				designs in the
DEL ALL				memory.
	Prev letter	,		♦ Design a new
	Next letter			design, name it
	Confirm			first, then design it
	Digital keys			according to the
	Ok/Cancel	Prev stitch		forth grade
		Next stitch	)	command.
Manual		Select mo	dify	
knit		Function c	ode	
		Zoom out		
		Zoom in		
NEW		Insert		
		Delete		
		Prev color		
		Next color		
		Seek funct		
		Digital key		
		Ok/Cancel		
Patch	Prev	,		♦ This function can
embroider	Next			set the stop code or
у	Pgdn			the color change
,	Pgup			code to patch point,
		i .		code to pater point,

	1			
	8 <b>- 1</b>	NA III	Ok/Cancel	press modify key to change the patch
	Patch	Modify MODIFY		point's attribute.
	Design	Pgdn		
	Outline	Pgup		outline
	apa mu	Prev		
	DESIGN	Next	Ok/Cancel	
	DESIGN	Modify		
Supper	Digital	♦ Some less used	commands or only mar	nager using commands,
user	keys	inputting code	to operate them, su	ch as renew process,
<b>@ @</b>		password.		
	Ok/Cancel	♦ This function is only used for manufacture person.		
Renovate	Ok/Cancel	♦ All the designs	will be deleted after	this operation and the
	Change	system parameters are defaulted, this function is only used for		
		manu <mark>facture pe</mark>	rson.	
	CHANGE			
Screen	Ok/Cancel	→ If the screen is	not at the middle, we c	an do this operation to
emendatio	Change	emend the posit	cion.	
n	.°O.°	富	台	
Ration	Chose	Change the value	-	
moving		+/	Ok	
III U	<b>■</b> H		UK	R
x=? y=?	ĬC		Cancel	



Press this key to return to the main

#### **Chapter 3** How to start embroidery

#### 3.1 How to do the first embroidery

Embroidering with computer embroidery machine is based on designs stored in

its memory. We use the machine for the first time in accordance with the following steps:

The first step: setting the system parameters. (Detailed in Chapter 6);

**The second step:** inputting the designs you need to the memory from disk. (Detailed in Chapter 4);

The third step: choose and identify the embroidery design from the memory. (Detailed in Chapter 3.5);

The fourth step: setting embroidery parameters:

- 1) Set the transform and repeat for the design; (Detailed in Chapter 5);
- 2) Set the start point and the offset point for the design; (Detailed in Chapter 8);
- 3) Detect the frame-boundary to confirm the embroidery area; which can prevent the frame being impinged on ;( Detailed in Chapter 8);
- 4) Set the colors sequence and the start mode; (Detailed in Chapter 8);
- 5) We can choose the needle and embroidery mode manually when we did not set the colors sequence; (Detailed in Chapter 8.11);

**The fifth step:** pull the bar rightward to start embroidery when have finished the above steps.

#### 3.2 How to turn on the machine

Turn on the main power, and then turn on the black switch in front of the control box (indicated ON as right), the LCD display will start to display, when entering the main menu, we can start the embroidery operations.



#### 3.3 How to use the embroidery bar

**Parking:** Pull the bar rightward to start embroidery;

Pull the bar leftward to backward stitches;

Working: Withstand the bar rightward to embroider at low speed, release the bar

and the speed rise to original speed;

Pull bar leftward is to stop embroidering.

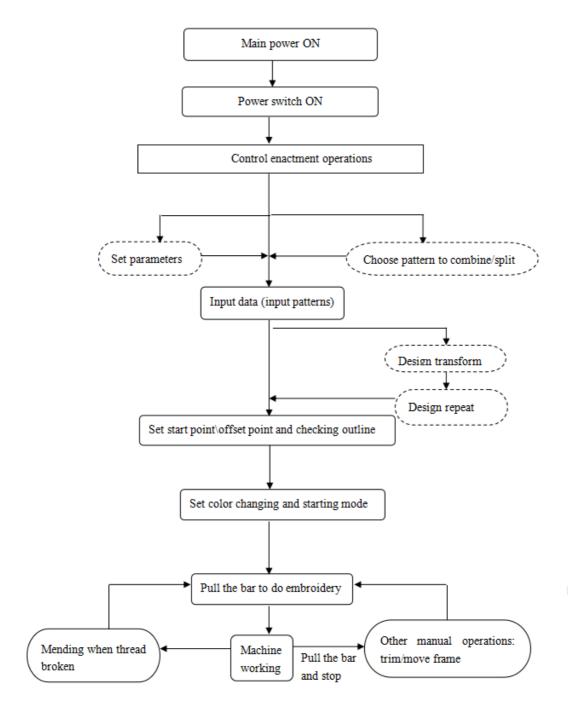
**Backing**: Pull the bar leftward, then the machine stop backing.

#### 3.4 Basic flow of embroidery

For the consumers that use the machine for the first time without any operation experience, they can operate the machine according to the following flow indication; and for that experienced consumers, it also conduces to master the operation again.



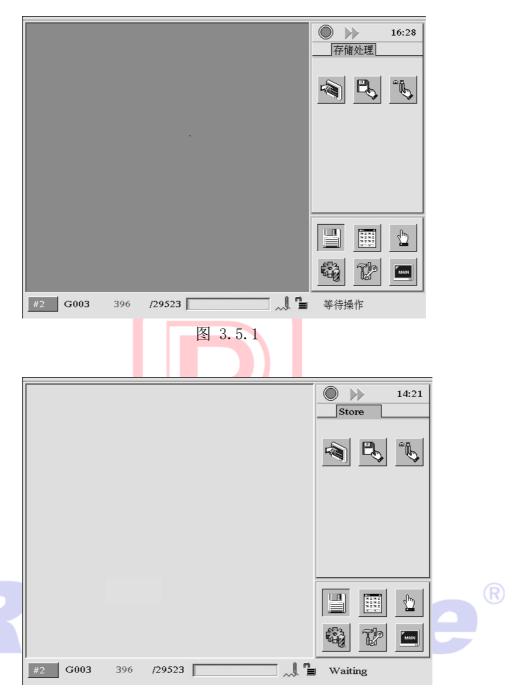




**[ Explanation ]:** The operation in dashed circle needn't be done every time, it can be jumped over to the next operation directly.

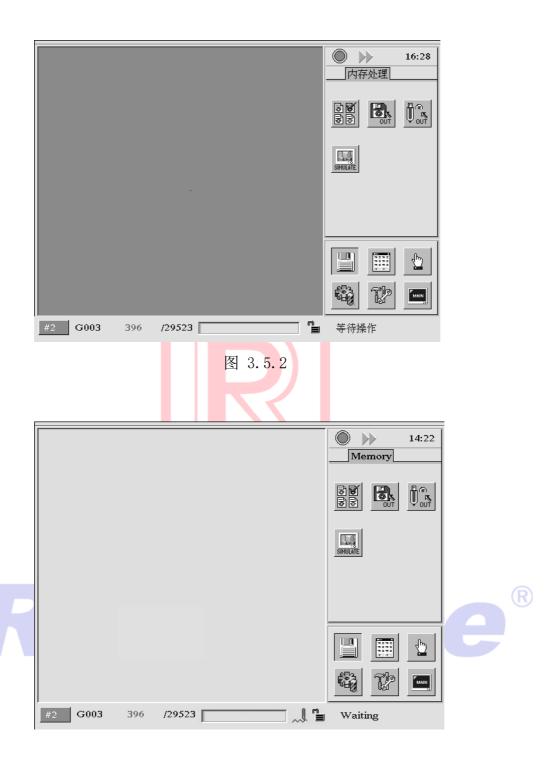
#### 3.5 Choose design for embroidery

1. Press memory manage key" , enter the following menu;



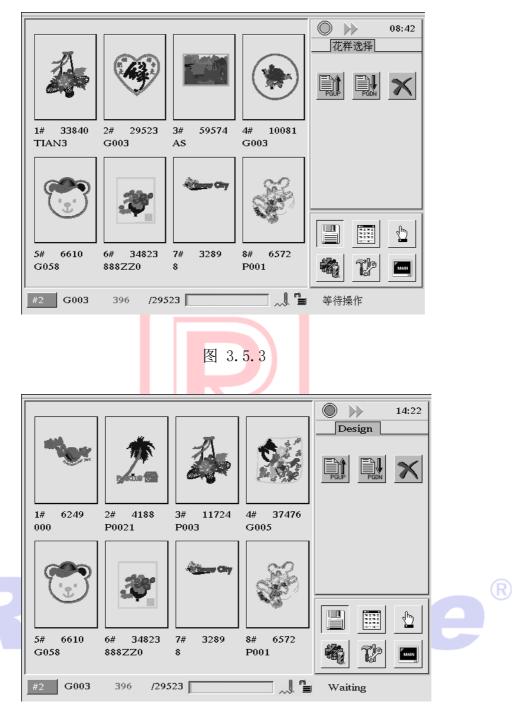
Picture 3.5.1

2. Press ", enter the following menu;



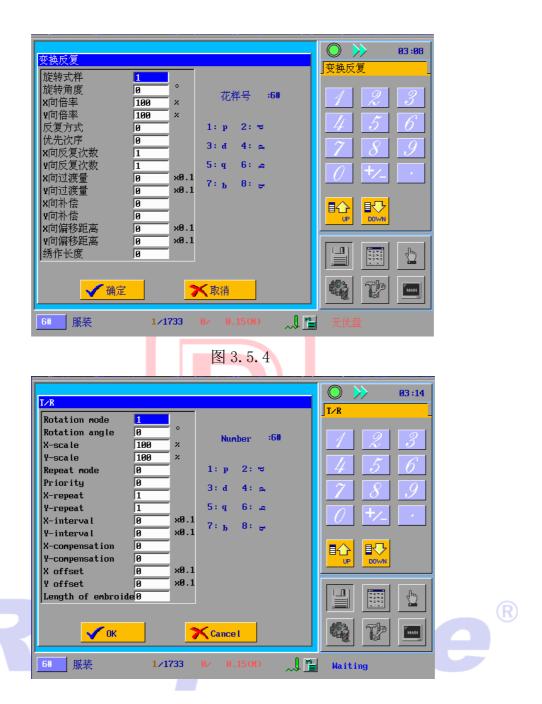
Picture 3.5.2

3. Press " , enter the following menu;



Picture 3.5.3

4.Press pgup key "FGUP" or pgdn to scan designs, press on the design you choose directly and enter the following menu;



Picture 3.5.4

There are some default values of the present design shown on the menu, press

"or "pain" to choose the item needing modification, then press digital keys to modify the parameter's value (detailed in chapter five).

- 5. When finished the modification, press the confirm key and the design's information will be saved in the memory; after saving the design, return to the main menu;
- 6. Setting the parameters according to the later chapters and the process introduced in section 3.1 and section 3.4, and then pull the bar to start embroidery.

# **Chapter 4 Diskette management**

### 4.1 Diskette designs input to memory

1. Firstly, insert a diskette that stored designs into the floppy drive box, then press the memory manage key", enter the following menu;



图 4.1.1

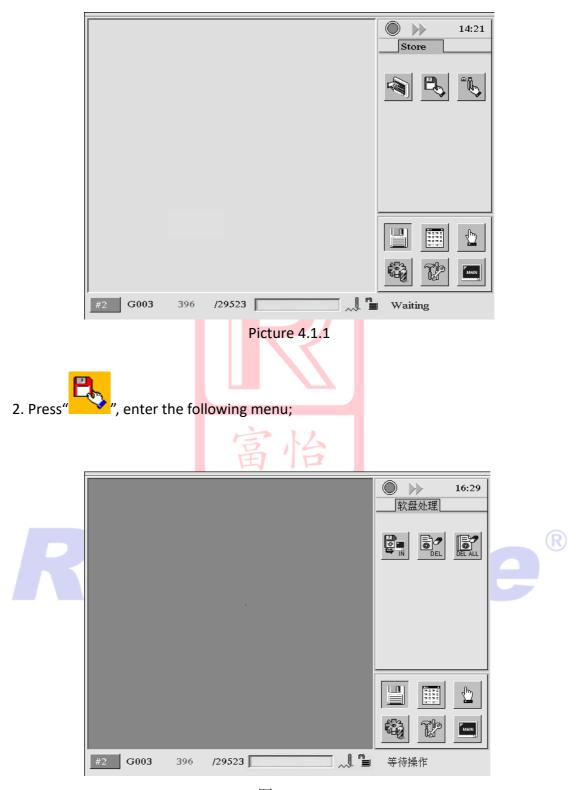
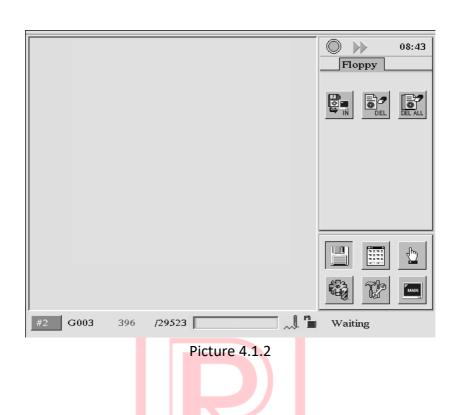


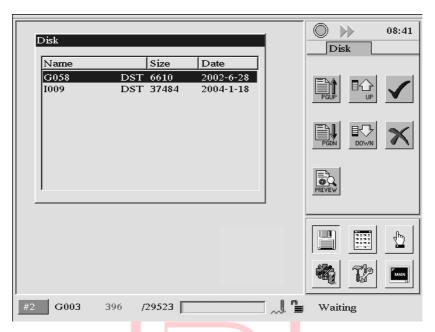
图 4.1.2



3. Press ", the designs in the diskette will be shown as follow;



图 4.1.3

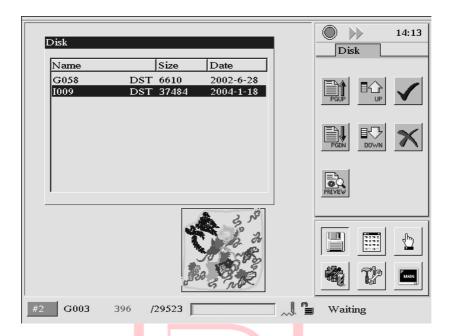


Picture 4.1.3

4. Move the cursor to choose the design you want; press "PREVIEW" to preview the designs you chose, shown as follow;



图 4.1.4



Picture 4.1.4

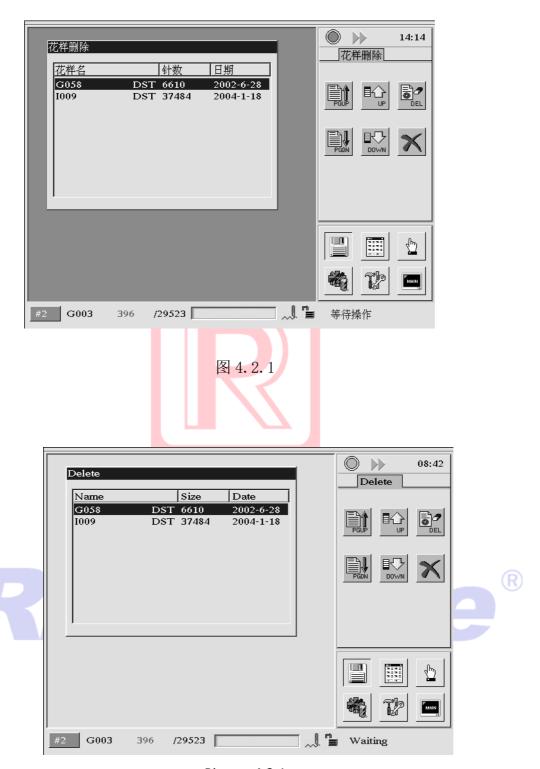
**[Note]**: 1. when preview a design for the first time, it runs slowly, when preview again, it will runs fast;



- 2. Only DOS disk has the function of preview.
- 3. Choose a design and press", the design will be stored in the system, once you need it; you can choose it from the memory directly.

# 4.2 Delete designs in diskette

1. Press" at the menu of picture 4.1.2, enter the following menu;



Picture 4.2.1

2. Move the cursor to choose the design you want to delete, and then press "
the design you chose is deleted.

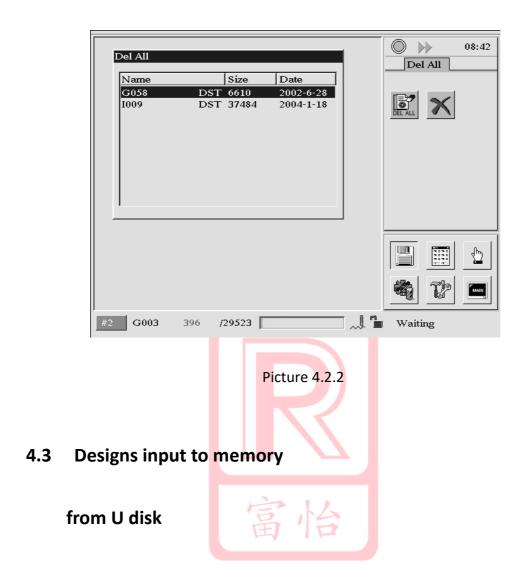
Adding: press" at the menu of picture 4.1.2, enter the following menu; and

then press "DEAL", all the designs in the diskette will be deleted; or else, press





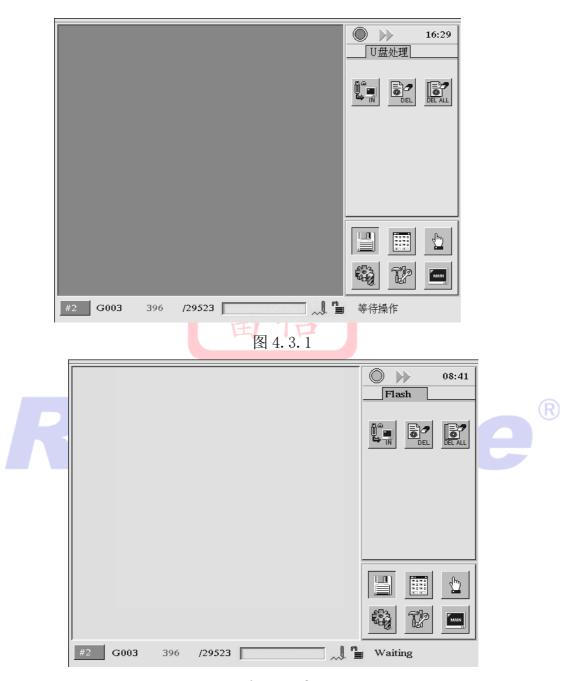
图 4. 2. 2 图 4. 2. 2 图 4. 2. 2



# Richpeace®

1. Firstly, insert an USB that stored designs into the USB drive box, then press the

memory manage key", enter the menu of picture 4.1.1, press" and enter the following menu;



Picture 4.3.1

1. Press "Fin", system will read USB designs; you can preview them in the same way as diskette. The next processes are the same as the designs inputting to the memory from the diskette.

#### 4.4 Delete designs in U disk

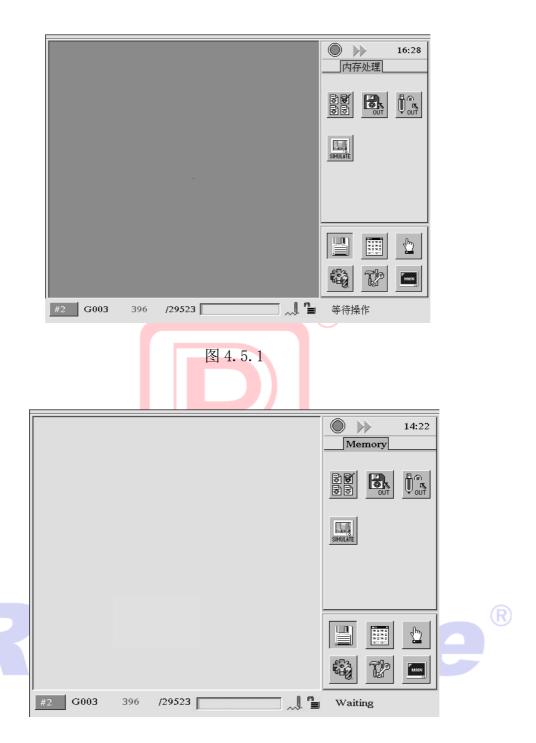
At the menu of picture 4.3.1, press " you can delete a single design;

press "", you can delete all the designs in the U disk. The detail operation is the same as deleting designs from diskette.

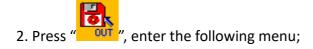
# 4.5 Designs output to diskette

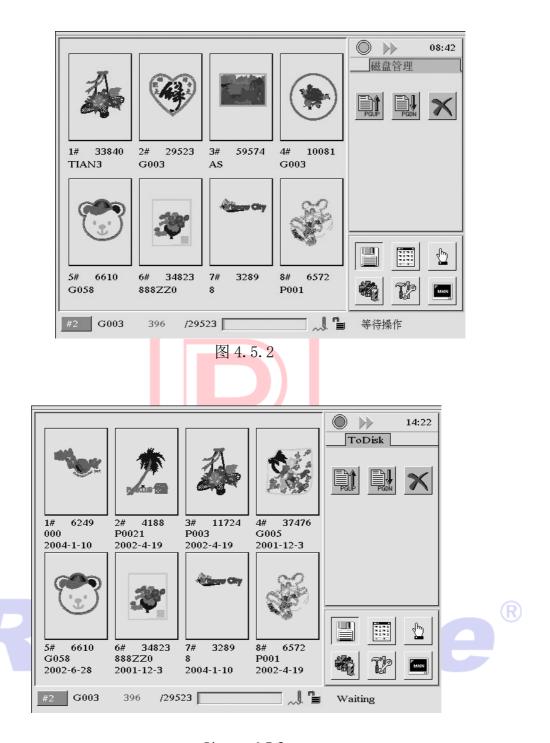
1. Insert a floppy diskette into the floppy drive box, then press " and enter

the menu of picture 4.1.1; and then press", enter the following menu;



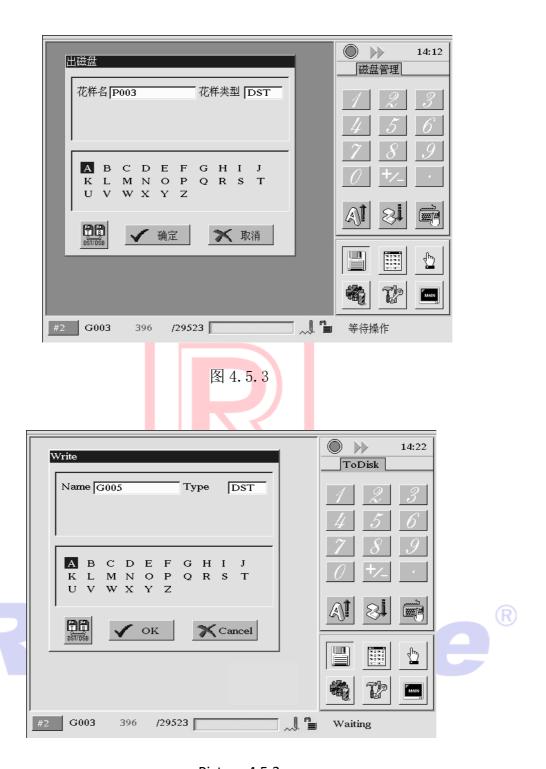
Picture 4.5.1





Picture 4.5.2

3. Choose a design will be output to the diskette and enter the following menu;



Picture 4.5.3

4.Press "or "to choose a letter naming for the design, then press

"to choose it; press" to choose the type for the design.

Press the confirm key, the design chosen will be output to the diskette. Press



Here designs have two types, DST and DSB which are design's storage format.

#### 4.6 Designs output to U disk

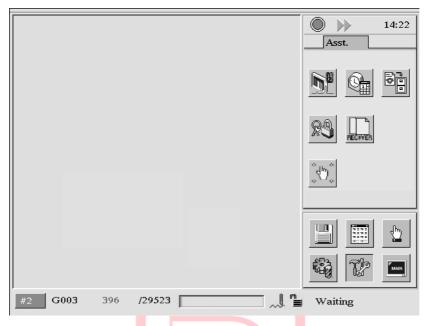
Insert an USB into the USB drive box, then press "at the menu of picture" at the menu of picture 4.5.1, the left operations are the same as chapter 4.5 said, we won't dilate here.

# 4.7 Delete memory designs

1. Press " at the main menu and enter the following menu;



图 4.7.1

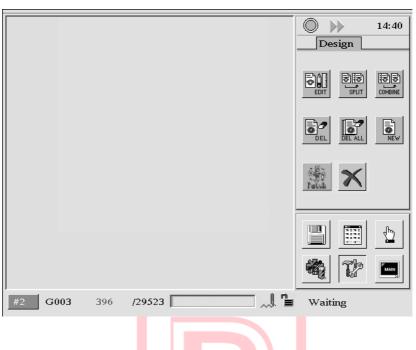


Picture 4.7.1

2. Press ", enter the following menu;



图 4.7.2



Picture 4.7.2

3. Press "DEL "and enter the following menu;

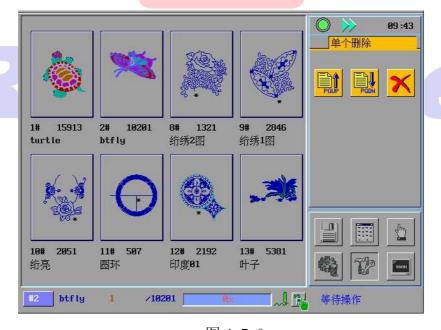
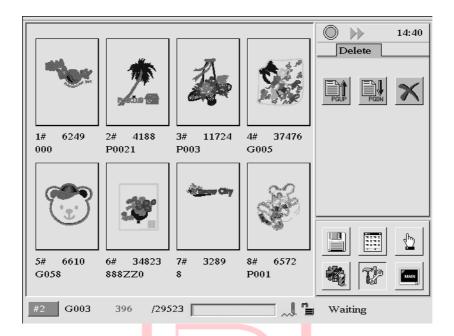


图 4.7.3



Picture 4.7.3

- 4. Move the cursor to choose the design you want to delete and confirm, enter the following menu;
- 5. Press "DEL", the design you choose is deleted, the menu will return to picture 4.7.3; repeat the before operations, we can delete the other unnecessary designs;

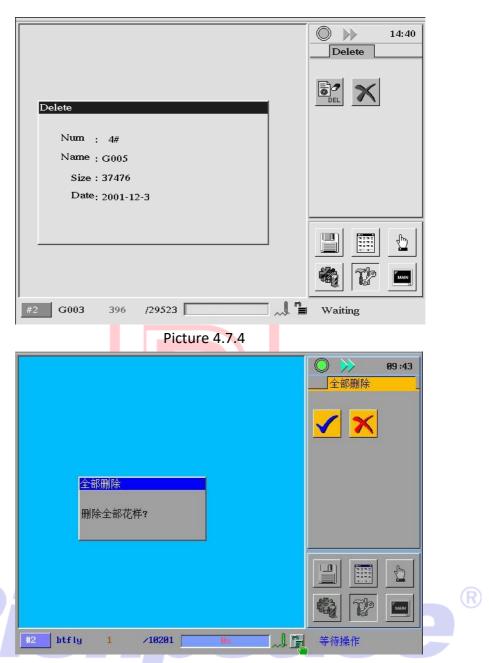
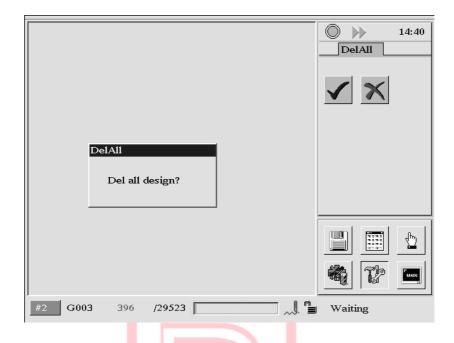


图 4.7.5



Picture 4.7.5

6. If you want to delete all the designs once time, you can press "DELALL" at the menu of picture 4.7.2, enter the following menu;

1. Press the confirm key, all the designs in the memory will be deleted.

# **Chapter 5** Designs setup

"Transform and repeat" is to set the transform mode and repeat mode of the designs.

1. Choose a design and confirm, the menu will appear as picture 5.1.2; also we can press the embroidery setting key "and enter the following menu;



Picture 5.1.1

2. Then press", enter the following menu, we can set design's T/R parameters at this menu;



Picture 5.1.2

## ① Setting transform mode

- Rotary mode: There are eight types of rotary mode, press digital keys 1~8 to choose them. Seen as the eight icons "P" in different directions at the above picture.
- 2. Rotary angle: Input any degree to rotate the design a discretional angle when you want to get the other types .The range of the degree is 0~89, the impact on the design is rotating clockwise the degree you input. Press digital key 0~9 to input the degree directly.
- **3. X-scale:** Zoom in or out the design at X direction. Input the scale value by pressing digital key, the range of the value is between 50 and 200. 100 means the original dimension, 50 means half of the original dimension (50%), 200 means twice (200%).
- 4. Y-scale: Zoom in or out the design at Y direction. Input the scale value by pressing digital key, the range of the value is between 50 and 200. 100 means the original dimension, 50 means half of the original dimension (50%), 200 means twice (200%).

# 2 Setting repeat mode

- Repeat mode: There are eight types of repeat modes marked with 0—7 to choose. When you choose the repeat mode, you can input the digital the mode marked.
- (1) **Normal:** All the embroideries patterns are the same when repeating time after time.

**Example:** The original design is **p**. (X-Repeat 5 times, Y-Repeat 3 times), then the array of the embroideries patterns as following:

p	p	p	p	p
p	p	p	p	p
p	p	p	p	p

(2) **X-Symmetry:** All the embroideries patterns are interphased between **p** and **q** when repeating time after time.

**Example:** The original design is **p**. (X-Repeat 5 times, Y-Repeat 3 times), then the array of the embroideries patterns as following:



(3) **Y-Symmetry**: All the embroideries patterns are interphased between **p** and **b** when repeating time after time.

**Example:** The original design is **p**. (X-Repeat 5 times, Y-Repeat 3 times), then the array of the embroideries patterns as following:

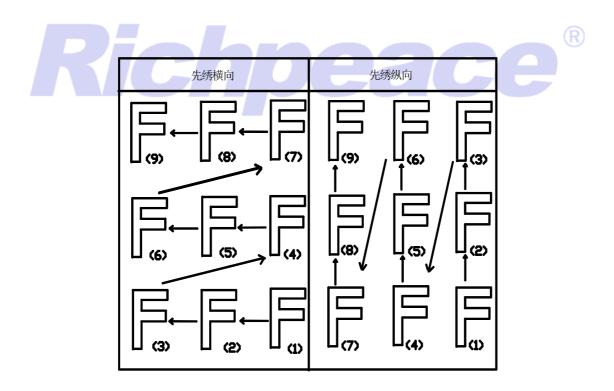


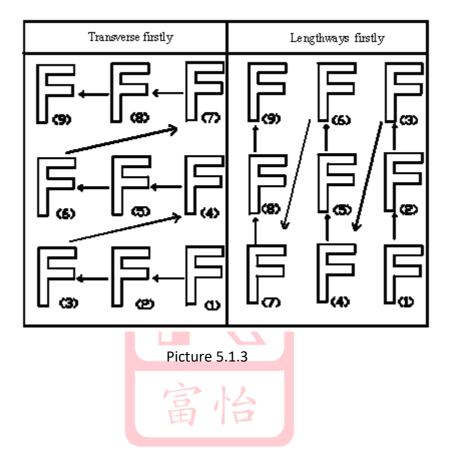
(4) **XY-Symmetry:** All the designs of embroidery are interphased between **p** with **d** by repeat time after time.

**Example:** The original design is **p**. (X-Repeat 5 times, Y-Repeat 3 times), then the array of the embroideries patterns as following:

P	d	p	d	P
d	p	d	p	d
p	d	p	d	p

- (5) **Colors:** Firstly embroider the same color of all the designs, the embroideries patterns are the same as the Normal;
- (6) **X-axis:** Firstly embroider the same color of all the designs, the embroideries patterns are the same as the X-Symmetry;
- (7) **Y-axis:** Firstly embroider the same color of all the designs, the embroideries patterns are the same as the Y-Symmetry;
- (8) **XY-axis:** Firstly embroider the same color of all the designs, the embroideries patterns are the same as the XY-Symmetry;
- **2. Priority sequence:** Setting the X axis embroider or the Y axis embroidery as the first when repeat embroidering.
- (1) **Horizontal-first:** When doing repeated embroidering, embroider the horizontal (X-axis) patterns first, finish the lines one by one;
- (2) **Vertical-first:** When doing repeated embroidering, embroider the vertical (Y-axis ) patterns first, finish the rows one by one; The sketch map is as following:





- **3.X-Repeat:** Setting the repeat times in X-axis, which means the number of the columns. The range of the value is between 1 and 200;
- **3. Y-Repeat:** Setting the repeat times in Y-axis, which means the number of the lines. The range of the value is between 1 and 200;

**Example:** Set the X-axis repeat times is 5,Y-axis repeat times is 1,then the array after embroidered as following:

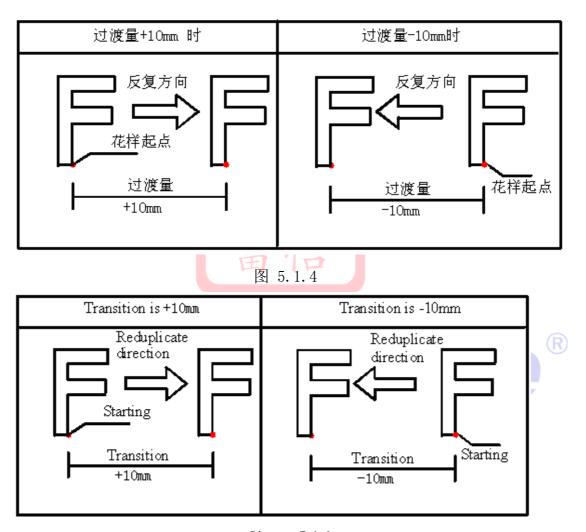
$$X$$
  $X$   $X$   $X$ 

**Example:** Set the X-axis repeat times is 5, Y-axis repeat times is 3, then the array after embroidered as following:

**4. X/Y-Interval:** The distance between two design's start points, the range of values is between –30000 and 30000. The unit is 0.1mm, 200 means 20mm.

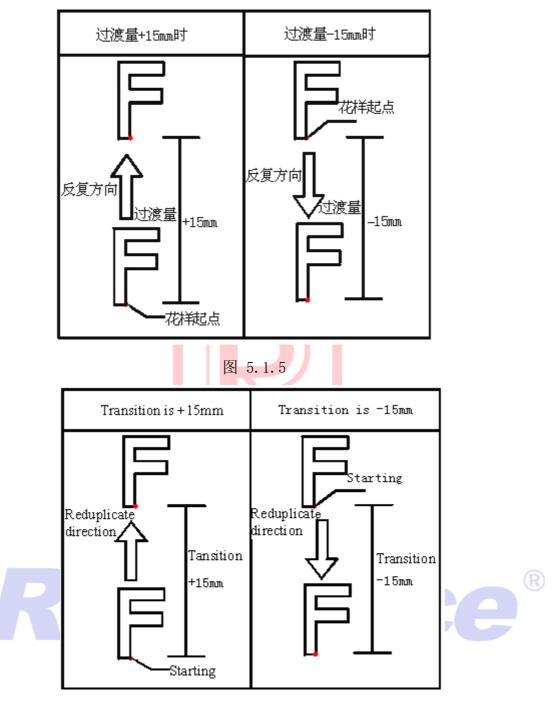
The sketch map of X-Interval is as

following:



Picture 5.1.4

The sketch map of Y-Interval is as following:



Picture 5.1.5

- **5. X/Y-Compensation:** Input number to compensate width of systyle satin stitches, the value is between –5 and +5. The unit is 0.1mm, 2 means 0.2mm.
- **6. X direction offset distance, Y direction offset distance:** When setting repeated embroidery, adjust the distance and spacing between the two flowers by setting the offset value distance between X and Y direction.

7. Embroidery length: set the length of the fabric embroidery.

## **Chapter 6** Parameters setup

The parameters are generally set to the default values except special needs. Users set the parameters according to

their own needs and make the machines work at the best conditions.

### 6.1 Machine parameters

1. Press " at the main menu, enter the machine setting menu;

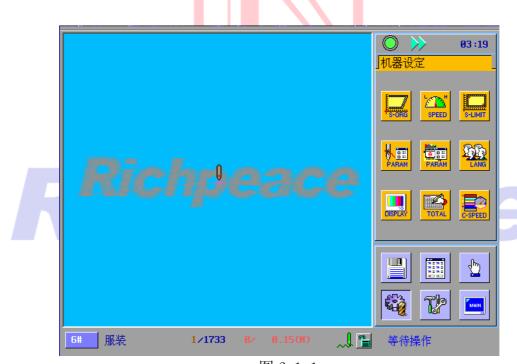


图 6.1.1



2.Press "PARAM", enter the following menu;

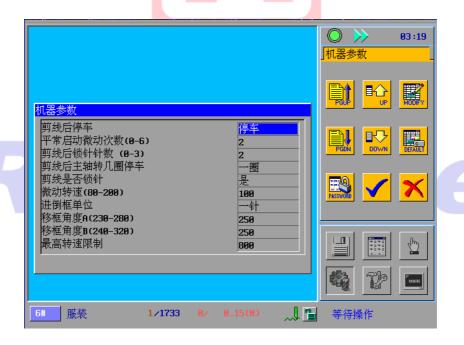
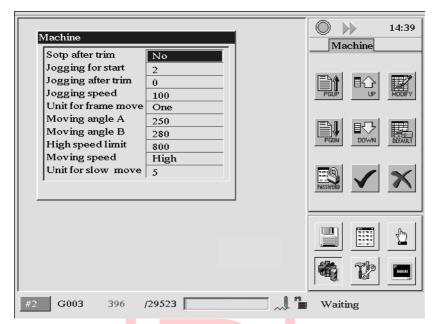


图 6.1.2



Picture 6.1.2

**Note:** If we intercalate password here, we should input the password to enter the following menu. Setting a password can prevent the machine being used random and the machine parameters and embroidery parameters being changed, so keeping the system resources. The detail of setting password is in chapter 9.

- 3. Move the cursor to choose the item needing modification, then press " to change the parameters which values are in the scope of the system restrictions. Specific parameter values' scopes are in Table 6-1;
- 4. When finishing the parameters modification, press ", the menu will return to the menu of picture 6.1.1.

#### Machine parameters (Table 6-1)

PARAMETERS	DEFAULT	PARAMETERS VALUES
Stop after trim	No	Stop/No
Jogging for start	2	0-6
Locked stitch after trim	1	0-3
Rounds after trim	1 round	1 round/2 round
Lock when trimming	Yes	Yes/No
PARAMETERS	DEFAULT	PARAMETERS VALUES
Jogging speed	100	80-200 (Accuracy 20)

Unit for frame move	One	One/Three	
Moving angle A	230	230-280 (Accuracy 10)	
Moving angle B	240	240-320 (Accuracy 10)	
Max speed limit	800	600-850 (Accuracy 50)	
Minimum speed	400	200-800 (Accuracy 50)	
Speed when over frame	5	1-8	
Unit for slow move	5	0-9	
Offset after bored	No	Yes/No	
Boring embroidery needle	0	0-9	
Software limitation	No	Yes/No	
Main motor type	Servo motor	,	
Needle number	9	0-15	
Thick cloth compensation	0	0-4	
Cutter open modification	2	0-9	
Cutter close modification	1	0-9	
Hook modification	4	0-9	
Head pulse modification	2	0-9	
R-sequin out manner	device A	device A/device B	
L-sequin out manner	device A	device A/device B	
R-sequin out angle	5	0-10	
L-sequin out angle	5	0-10	
Sequin shelf fall time	2	0-10	
R-sequin max speed	600	200-1000(Accuracy 10)	
L-sequin max speed	600	200-1000(Accuracy 10)	
Stitches in sequins	0	0-50 (Accuracy 5)	
X-axis drive parameter	1.00	0.90-1.10 (Accuracy 0.01)	
Y-axis drive parameter	1.00	0.90-1.10(Accuracy 0.01)	
Transducer speed	1.00	0.85-1.15(Accuracy 0.01)	
Speed when trim	80	60-250(Accuracy 10)	
Speedup accelerate	6	3-10	
Max speed for jump stitch	500	500-750(Accuracy 50)	
Param. of needle down	15	0-30	
Check trim is ok	No	Yes/No	
PARAMETERS	DEFAULT	PARAMETERS VALUES	
Check hook is ok	No	Yes/No	
Cord embroidery	No	No/1-9	
Boring embroidery speed	400	300-800(Accuracy 50)	
Auto-start sequin	Yes	Yes/No	
Cord embroidery speed 400		300-800(Accuracy 50)	
Head number	6	0-64	
Add oil needles	0	0-250	
Add oil time	3	0-5	
Laser emb. speed level	5	0-10	

#### Machine parameters definitions and explanations:

- **Stop after trim:** Stop or not for the follow-up action after trimming.
- Jogging for start: Rotary Circle numbers of main shaft at the low speed from high-speed states. Choose "0" indicates automatic, software adjusts to two times automatically.
- Locked stitch after trim: Rotary Circle numbers of main shaft at the fixed low speed from starting after trimming to normal embroidery speed. Choose 0 indicates automatic, software adjusts to two times automatically.
- Rounds after trim :after trim ,rounds of the main from deceleration to stop
- Lock when trimming :after trimming ,the machine lock the needle.
- Jogging speed: The speed of the main shaft when machine is starting or jogging for rounding.
- Unit for frame move: Indicating the stitch number when the frame moves forward and backward by pulling the bar: If you choose "Three", that means there will be three stitches when the frame move one time.
- Moving angle A, Moving angle B: The degree of the main shaft when moving the frame; if the speed is higher than the lowest speed and the needle is bigger; choose angle A, otherwise angle B. As to three-dimensional embroidery, this angle should be wider so as to make the needle can full out of the fabrics before moving frame, which can prevent needle breakage.
- Max speed limit: It used to limit the maximum speed of the main shaft.
- Minimum speed: It used to limit the minimum speed of the main shaft.
- **Speed when over frame** :At the R-START or R-OFFSET condition, the speed of frame .There are two kinds :High-speed and low-speed.
- Unit for slow move: Slow stitch will be adopted at the beginning of the frame moving, as only the frame moving finish the fixed slow stitch, it can goes to the exact stitch.

- Offset after boring: When the first needle of flat embroidery is equipped with a knife with offset versus the under needlepoint of flat embroidery, this parameter needs to be set to "Yes", the software will increase the offset automatically. If the carve hole was made in other needles, no need to set this parameter.
- Boring embroidery needle :the needle you need when you use the boring embroidery.
- **Software limitation:** Only when you set the "whether use software restriction or not" parameter into "restriction", this operation works. When there have no hardware restriction switch or the pattern needs to be defined in a small scope, you can open this parameter, and use "soft restriction" to define the embroidery area. Generally it used in cap embroidery.
- Main motor type: The type of the motor drives the shaft run. If you use electromagnet motor, you should choose "electromagnet".
- Needle number: The needle number of each head.
- Thick cloth compensation : If you add the thick cloth , plesae add the parameter.
- Cutter open modification: This parameter is used to adjust main shaft angle
  while starting cutting. The bigger value is, the wider angle is, applicable to the
  particular motor cutting line model.
- Cutter close modification: This parameter is used to adjust main shaft angle
  while closing the cutter. The bigger value is, the wider angle is, applicable to the
  particular motor cutting line model.
- Hook modification: This parameter is used to adjust main shaft angle while starting hook. The bigger value is, the wider angle is, applicable to the particular stepping motor hook model.
- Head pulse modification: This parameter is used to adjust the pulse voltage. The
  greater value is, the greater the voltage is. Users should not change the default
  value of the parameter without exceptional reasons.

- L-sequin our manner/R-sequin our manner: The out mode of sequin is set according to the mechanical structure of the sequin devices. The mode has two types: "device A and device B".
- L-Sequin speed angle/R-Sequin speed angle :When the main shaft reach the angle ,send the signal then the sequin come out .
- **Sequin shelf fall time**: The time when the machine put down the sequin shelf.
- Sequin speed setup/R-Sequin speed setup: The maximum rotational speed limit for left/right sequin embroidery. If the sequin max speed is higher than the machine's maximum rotational speed, the maximum embroidery speed is the machine's maximum speed; if the sequin max speed is lower than the machine's maximum rotational speed, the maximum sequin embroidery speed is the limitation of the sequin max speed. After the sequin out, the rotational speed is limited under the machine's max rotational speed.
- Stitches in sequins :Set the needle number .when you embroidery the sequins ,there are N jumpers between the first sequins and the sencond sequins,if the needle number(you set )>N, the sequin shelf will not lift up,else it will lift up.
- X-axis drive parameter :Change the time ,change the width each stitch.it can
   adjust the width of the embroidery.
- Y-axis drive parameter :Change the time ,change the length each stitch.it can adjust the length of the embroidery.
- Transducer speed :When transducer can't reach the speed you set the speed ,you can adjust the parameter.
- Speed when trim :Trimming ,the speed of the main shaft.
- **Speedup accelerate** :Accelerate when the machine speed up .

- Max speed for jump stitch: When it is jump stitch ,the maximum speed of the main shaft.
- Parameter of needle down: When the needle is down, changing the parameter,
   you can change the angle.
- Check trim is ok: 'YES', when you pull bar, it will check trim is ok or not, if it's ok, move; else it will show 'trim is not ok'. 'NO', It won't check the trim, pull bar, move(it may broke the needle if the trim is not ok).
- Check hook is ok :'YES' ,when you

pull bar ,it will check hook is ok or not ,if it's ok ,move ;else it will show 'hook is not ok'. 'NO', It won't check the hook , pull bar ,move(it may broke the needle if the hook is not ok).

- Cord embroidery :Cord embroidery ,setting which needle you will use.
- Boring embroidery speed :The maximum speed of the boring embroidery.
- Auto-start sequin :'yes' when it has

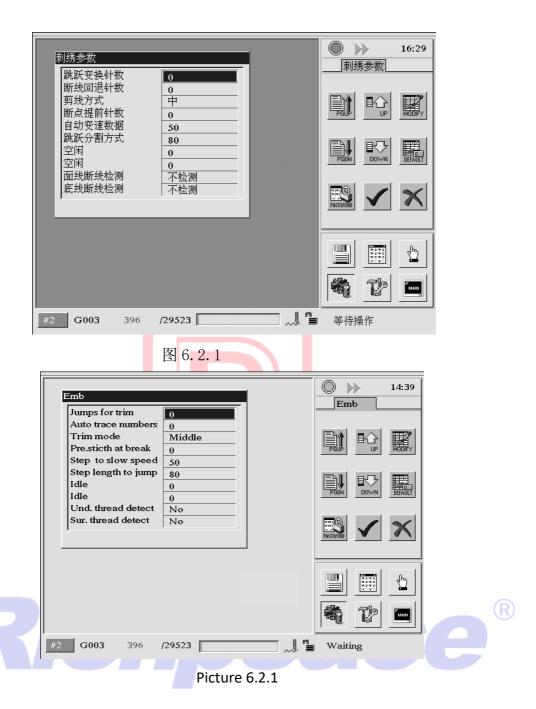
the sequin ,the sequin shelf will auto lift or auto fall . 'NO' when it has the sequin ,the machine will stop ,wait ,you have to pull bar.

- Cord embroidery speed: The maximum speed of cord embroidery.
- **Head number**: The number of this machine' head.
- Add oil needles :Setting the number needle you will add oil.
- Add oil time: The time for adding oil. the longer, the more.

#### 6.2 Embroidery parameters

The users can setup relevant parameters during the embroidery process according to the patterns feature to make the embroidery more efficient and the quality better.

1. Press "FARAM" at the menu of picture 6.1.2, enter the following menu;



- 2. Move the cursor to choose the item needing modification, then press" to change the parameters which values are in the scope of the system restrictions. Specific parameter values' scopes are in Table 6-2;
- 3. When finishing the parameters modification, press ", the menu will return to the menu of picture 6.1.1.

#### **Embroidery parameters (Table 6-2)**

PARAMETERS	DEFAULT	PARAMETERS VALUES
Jumps for trim	3	0-9
Auto trace numbers	0	0-5
Trim mode	Middle	Short/Middle/Long
Pre- stitch at break	1	0-9
Auto speed shift	50	30/35/40/45/50/55/60/65/70
Jump split mode	80	63/80
Shaft breaker type	0	0-9
Stop at same color	Yes	Yes/No
Surface. thread detect	detect	detect /No
Bottom thread detect	No	Yes/No
Auto trace mode	Broken head	Broken head/All
Stop at breakage	Deceleration	Deceleration/ Stop / No decelerating
Return to start	Return	Return/No
Jump to move/Trim	No	Yes/No
Large steps	Jump	Slow/Jump
Frame swing after trim	Y direct	X/Y/X-Y direct/not move
Speed shift for jump	Solid	Solid/Auto
Auto set start point	Yes	Yes/No
Stitch locked length	0.7	0.5-1.5(Accurary 0.1)
Trimming pause	NO	Yes/No
Button angle compensation	0	0-3
Store manual-color	Yes	Yes
Stitch not T.B. detect	8	0-15
Stitch for filter T.B.	3	1-6
PARAMETERS	DEFAULT	PARAMETERS VALUES
Pulling bar after break	NO	Yes/No
Speed after patch	0	0,200-850(Accurary 50)
Stitch after patch	0	0-9999 (you can set)
Speed after trimming	80	60-150 (Accurary 10)
Jogging speed for main	400	80-400(Accurary 10)
Stop ok before pull bar	Yes	Yes/No
Stitches after trimming	2	1-7
Height of Lock-chenille	0	0-35

# **Embroidery parameters explanations:**

a) Jumps for trim: When the stitches distance is big, machine trim or jump; if you

- set the values to zero, then just jump no trim; if the value of the jumps is less then the parameter setting, then just jump no trim, otherwise, jump and trim. When jump but no trim, jump needles codes need jump; when jump and trim, jump needles codes need over-frame, namely stopping automatically, trimming, moving frame, restarting automatically
- **b) Auto trace numbers:** During the embroidery, if this parameter is at "Yes", the machine will go back automatically some needle steps when it detect the thread breakage. If the parameter is set to "0", no automatic stitch back. If the parameter is set above "0", there will be fixed number automatic stitch back.
- c) Trim mode: Thread length after trimming. Choosing appropriate length can make the embroidery smooth and tidy.
- d) Pre-stitch at break: At which needle before thread breakage point of the head without thread breakage to begin to embroider when the embroidery is mended: If the parameter's value is zero, all heads will work when mending embroidery back to the starting back point; if the value is above zero, all heads will work at the needle place where the embroider starting.
- e) Auto speed shift: To define a long stitch by fixing a value. If you choose data "50", it means the large step is 50mm. The main axis will shift according to the length of stitch automatically, the greater the stitch is, and the lower the rate is. When making three-dimensional embroidery, the greater the three-dimensional embroidery height is, the smaller the parameter value is, which can prevent needle breakage. When the actual stitch is less than fixed value, the machine works at the normal speed, otherwise, machine will work according to the fixed value of "Long Stitch", but the lowest speed should be more than the minimum fixed speed of the machine. Therefore, users should set the value according to the model of the, machine. Generally the parameter defaults to "70" when the machine heads are less than six; defaults to "60" when less than twelve; defaults to "50" or less when the machine head is twenty; defaults to less than "45" when then machine head is more the twenty or it is long heads-distance machine or it is wide frame machine.

- f) Jump split mode: The parameter unit is 0.1mm. There are two selections "6.3mm" and "8.0mm". The stitch will jump if actual needle steps distance is bigger than setting value. On the contrary, the stitch will not jump, but this operation in only usable when you choose "jump" at the machine parameter "Large steps".
- g) Shaft breaker type: Prepared breaking compensation when main shaft breaks, the bigger the parameter is, the sooner the breaking is, thus can solve the problem of main shaft breaking at an error position to a certain extent.
- h) Stop at same color: At the state of changing color and starting automatically, if the adjacent two colors are same, whether to stop the machine or not according to the parameter value after the former color sequence is finished.
- i) Surface thread detect/ bottom thread detect: Detect or not broken thread. If you choose "No", the computer system will not alarm for thread breakage.
- j) Stop at breakage: After mending and embroidering, stop or not at the break point.
- k) **Return to start:** Whether the frame will return to the start point when the design was embroidered completely.
- L) **Jump to move/Trim:** This parameter is used to set trimming or not, if you choose "No", there will not have any trimming during the pattern embroidery.
- M) Long steps: There are two selections "Slow" and "Jump" for your choose when the actual needle steps are larger than the setting value in "Step length to jump", machine deal with the large step according to the selection parameter. Slow processing is the action of slowing automatically based on the length of the needle steps, the greater the needle steps are, the lower the speed is; Jump processing is the action of division the actual needle steps according to "Step length to jump", then jumping at the division point, main shaft running two rounds (when needle step is twice longer than the set value of "Step length to jump", machine will have the actions of locking head and moving frame according to the multiple of the division parameter's value), the first round just to move frame, no needle working, the second round(if more than two rounds, lock head and move frame to the last round

and needle start working at the end of the Large step) a Large step set at "Jump" is completed.

N) **Frame swing after trim:** Direction of frame moving after trimming, so as to make the upper thread break away the fabric for improving the quality.

**O)Speed shift for jump:** Adjust the speed of jump stitch when run into the code of jump stitch. There are two manners "Atopic" and "Auto" for choosing.

**P)Auto set start point:** 'Yes', When you pull bar, the machine will move at this point, you have not to set S-start. 'No', you have to set the S-start.

Q)Stitch locked length: The length of locking stitch.

**R)Trimming pause**: Set trimming 'Yes' ,trim.' 'No ',not trim

**S)Button angle compensate:** When you get ready to embroider ,it can adjust the button angle .

T)Store manual-color: 'Set Emb'is 'Needle', finish each color, the machine will stop and wait, then you change color, the software will remember, and next time you choose this pattern, the machine will embroider with this sequence.

**U)Stitch not T.B. detect**: Stitch for the machine don't detect whether the thread has broken. at the starting.

**V)Stitch for filter T.B**.: the machine judge whether the thread has broken, when the machine detect the number (broken) >=N(you set the parameter),then the machine will stop. If the number <N (you set the parameter) ,won't stop.

**W)Pulling bar after break**: 'Yes' The machine stop because the thread break, then pull bar, the operation box will show 'pull bar', you need confirm, the machine will embroider. 'NO' The machine stop because the thread break then pull bar ,the machine embroider. This parameter can improve security, avoid hurt.

X)Speed after patch: after patch, the speed of the main shaft.

**Y)Stitch after patch**: after patch ,pull bar , in N needles(you set this parameter) the main shaft will move with low-speed .

**Z)Speed after trimming**: After trim, the speed of the main shaft when the machine

start.

**aa)Jogging speed for main**: speed--- when you pull bar, don't release the bar.

**ab)Stop ok before pull bar**: When the machine stop ,the main shaft should is  $100^{\circ}$  in normal.' Yes' If the main shaft is  $100^{\circ}$  ,pull bar ,the machine embroider ,else the operating box show 'the main shaft is not at  $100^{\circ}$ '. 'No' ,pull bar , the machine will auto do R100,then embroider.

**ac)Stitch after trim** :After trim, in N needles(you set this parameter).the main shaft will move with low-speed .

ad)Start end point intersection: set the start end point intersection.

ae)Cycle embroidery: set whether to run cycle embroidery.

af)Quilted patterns interval (mm): Set the interval between quilted patterns.

aj)Press the pattern number bottom line prompt: set the bottom line according to the pattern number prompt

#### 6.3 Default parameters

This function is used to restore all the parameters to the defaults.

Press "DEFAULT" in the menu of picture 6.1.2/6.2.1, and then Press the confirm key, all the parameters are restored to defaults.

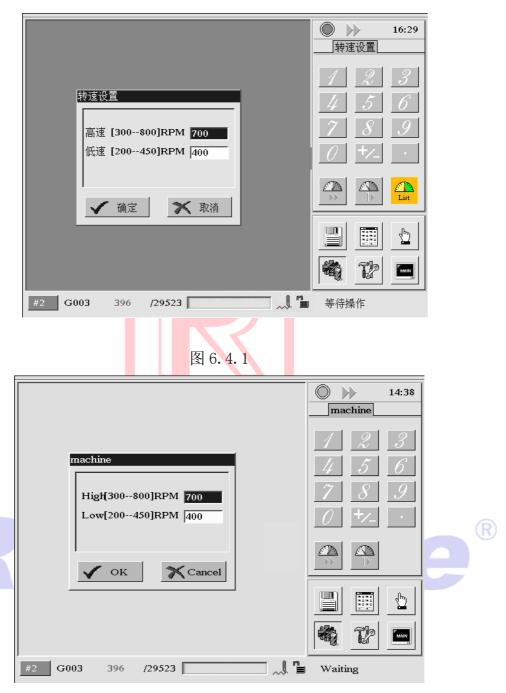
# 6.4 Set embroider speed

In the parameters setting, we have introduced how to set the high speed of the main axis, the highest speed can be set to the maximum speed the machine can reach or the speed lower than the maximum speed.

**[Note]:** We don't suggest the customers to set the machine speed as the maximum speed for long time, it'll fasten the wear, and shorten the machine life.

After setting the main axis speed, you can set the embroidering speed of the machine under the high speed limit; the embroidering speed must be lower than the setting high speed of the main axis.

1. Press " at the menu of picture 6.1.1, enter the following menu;



Picture 6.4.1

2. Press " or " to choose the parameters needing modification, and then set the appropriate speed by inputting figure, the scope of the parameters'

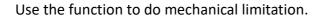
value is shown on the menu.

3. When finishing the parameters modification, press the confirm key to save the setting.

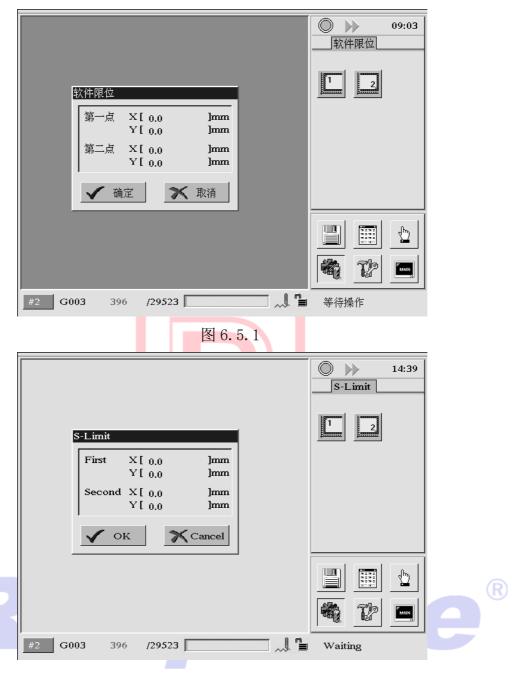
#### [ Notes ]:

- 1. When setting the speed, the high speed / low speed of left and right heads can not exceed their respective maximum speed and minimum speed limitation.
- 2. There are two selections for manual moving frame high speed "" mode and low speed "" mode; you can press the key in the middle of move-keys to carry out the switches between the two modes.
- 3. You can change the working speed by pressing the shortcut keys on the panel during embroidery. Press key "to increase the speed; Press key "to decrease the speed. In the "high speed" mode, each press can up the speed 50 rounds. In the "low speed" mode, each press can down the speed 10 rounds.

#### 6.5 Software limit



1. Press "at the menu of picture 6.1.1, enter the following menu;



Picture 6.5.1

- 2. Move the frame to the left down corner. Press "to set the first point;
- 3. Move the frame to the right down



4. After finishing the setting, press the confirm key to save the setting.

[Note]: Set the machine parameter "software limit" to "Yes", then the software limit function can be effective.

#### **Chapter 7** Colors sequence setup

Colors sequence is the changing sequence of colors, different colors use different needles during the embroidering, so setting the colors sequence also means setting the needles sequence when making multicolor embroidery. Inputting the digital keys directly to set the needle. (the needle sequence rule: from right to left in file is 1、2、3、4......)

# 7.1 Setting colors sequence

1. Press embroidery setting key " and enter the following menu;



图 7.1.1

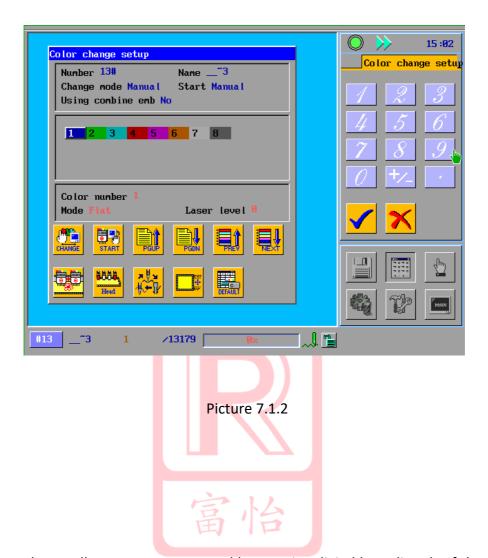


Picture 7.1.1

2. Press ", enter the following menu;



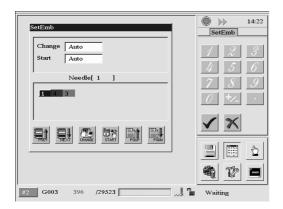
图 7.1.2



3. Input the needles sequence you need by pressing digital keys directly. If the figure

is not bigger then four then we should press "to enter the next color, if the figure is bigger then four, the cursor will go ahead automatically;

For the combine embroidery "and interval head embroidery "head", we will introduce in the succeeding chapter.



Picture 7.1.3

4. After finishing the colors sequence setting, press the confirm key to save, the current menu returns to the embroidery setting menu and the finished colors sequence will appear on the screen.

#### 7.2 Cycle colors sequence setup

# 7.3 Set colors changing mode and starting mode

Press "CHANGE" at the menu of picture 7.1.2 the colors changing mode will switch between "Auto" and "Manual" which indicate the color changing modes, stopping to change automatically and starting again or waiting for color changing when falling across change code. If set to "Auto", we should set the auto-change colors sequence.

Press "START" at the menu of picture 7.1.2, the start mode will switch between "Auto" and "Manual" which indicate the starting modes after color changing, the

machine starts automatically and continues embroidering after color changing or machine stops and waits for pulling bar to continue embroidery after auto-changing color. **Note: In manual change-color mode, this function doesn't act**.

[Note] :you can choose the needle and embroidery mode manually when there is no colors sequence setting.

#### **Chapter 8 Manual operations**

#### 8.1 Manual frame moving

Press the frame moving keys on the operation panel when machine stop, the frame can be moved up, down, left or right.

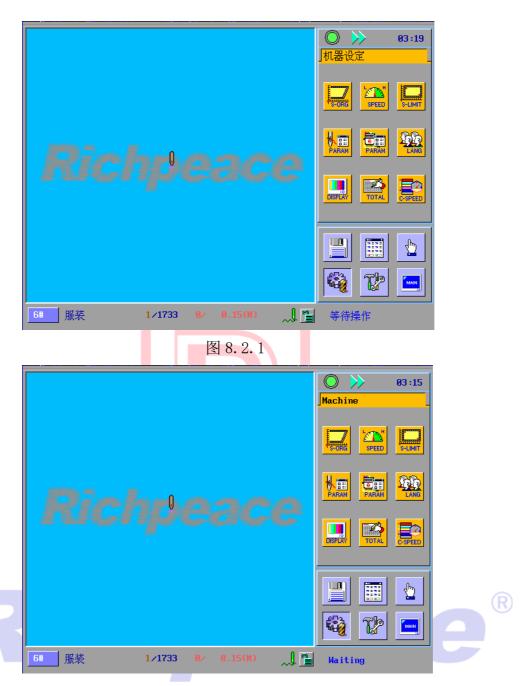
The manual frame moving mode has high speed "and low speed". Press the key in the middle of moving keys, the speed will switch between the two states. When pressing moving keys at the low speed, the displacement unit of frame moving is 0.1mm.

#### 8.2 Setting design origin

Set the machining datum mark. The origin is usually set at the machine origin; it is used for confirming coordinates of the start point.

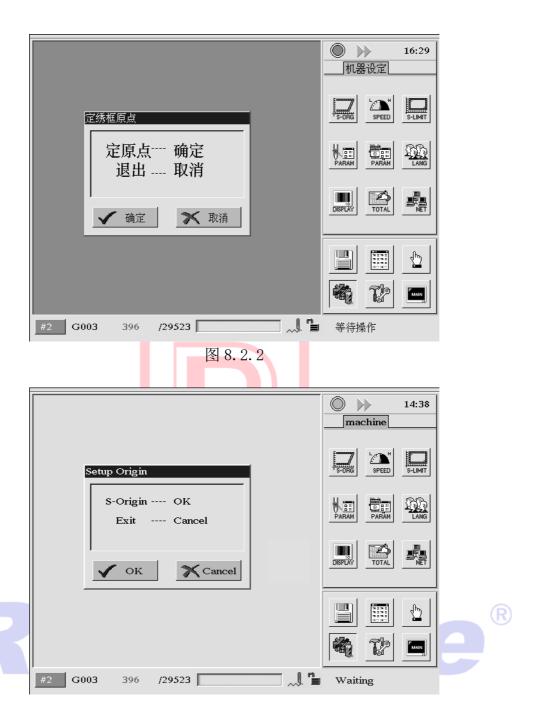
**[Note]:** If the machine isn't installed with origin sensor, the origin is chose by the computer automatically. No need to change the origin always, if the origin is changed, the start point of each design will be changed also. This function is just used by maintenance personnel.

1. Press the embroidery setting key" , enter the following menu;



Picture 8.2.1

2. Press " , enter the following menu;



Picture 8.2.2

3. Move the frame to an appropriate position and press " to save the setting

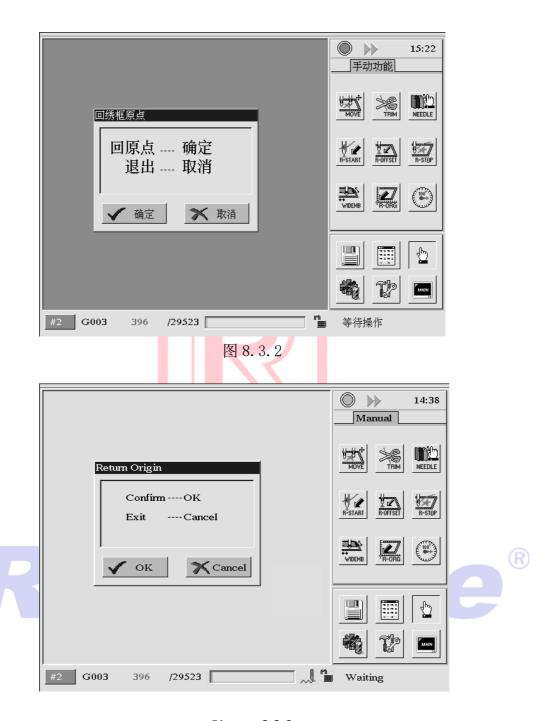
# 8.3 **Return to origin**

1. Press " at the main menu, enter the following menu;



Picture 8.3.1

2. Press "ROBE", enter the following menu;



Picture 8.3.2

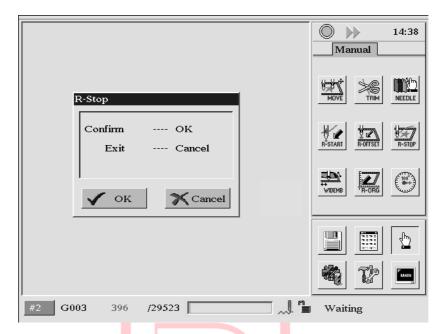
3. Press the confirm key, the frame start moving back to the origin position; press exit key to quit.

# 8.4 Return to the stop position

Under the state of power on, if the embroidery frame is moved after the machine stopping or having other operations with the machine, use the function to make the frame back to the stop position.

1. Press "R-STOP" at the main menus (also can be at the manual menu of picture 8.3.1), enter the following menu;





Picture 8.4.1

2. Press the confirm key and the frame will back to the normal embroidery position.

# 8.5 Setting start point

Before embroidering when the design has been chosen, we must set a start point which is the beginning position for embroidering.

1. Press embroidery setting key ", enter the following menu;

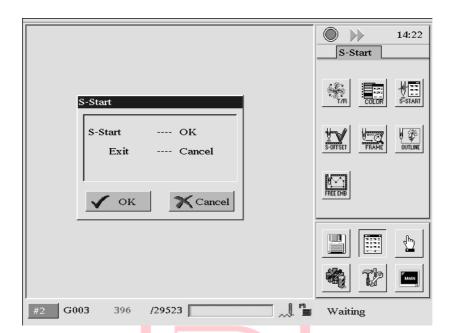


图 8.5.1





图 8.5.2



Picture 8.5.2

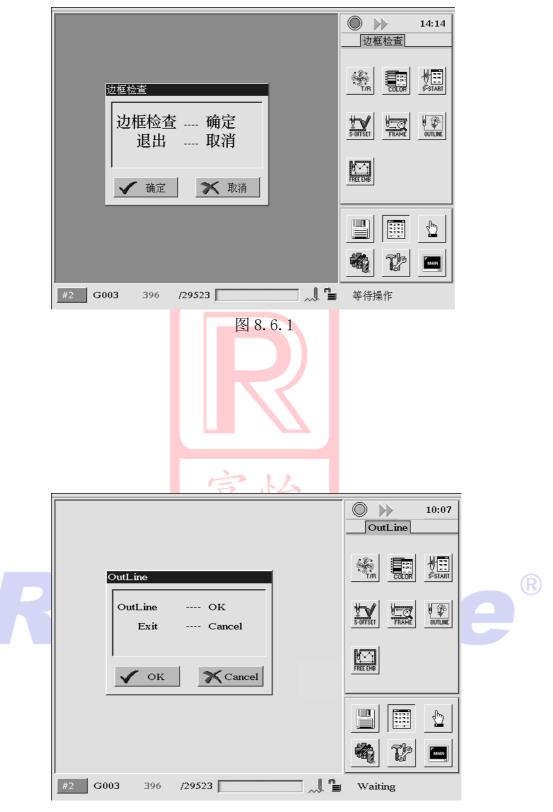
3. Press the frame moving keys to move the frame to an appropriate position (move the frame low-speedily to an exact position in low speed state). Press the confirm key to carry out the operation, cancel key to quit.

# 8.6 Frame boundary checking

After choosing the design and setting the start point, we can do this operation to check whether the design's start point is appropriate, for using the embroidery cloth reasonably and avoiding limitation during embroidering.

NOTE: The limit switch must work normally to prevent the needles striking on the frame.

1. Press " at the embroidery setting menu of picture 8.5.1, enter the following menu;



Picture 8.6.1

- 2. Press the confirm key to carry out the operation, cancel key to quit.
- 3. Press the confirm key, the frame moves leftward, rightward, upward and downward to check whether the start point is appropriate and whether the design is

over the frame area.

4. If the design is not over the frame area, the frame will back to the start point after the checking; or else, the computer will choose an appropriate position close to the start point to stop and make it as a new start point. Doing embroidery based on the new start

point will be proper. If the design is too big to embroider, it will return the message: X-limit, -X-limit, -Y-limit.

#### 8.7 Return to start point

This function is used for moving the frame to the start point and clearing the X and Coordinates to zero. The computer can remember the start point. In the normal case (such as pushing the frame when the machine is in power), choosing a new design and carrying out the "R-Start" operation may move the frame to the position set of late. In some unwonted case, we should check whether the limit switch is working normally in order to prevent the needles striking on the frame.

1. Press "R-START" at the main menu (also can be at the manual menu of picture 8.3.1), enter the following menu;

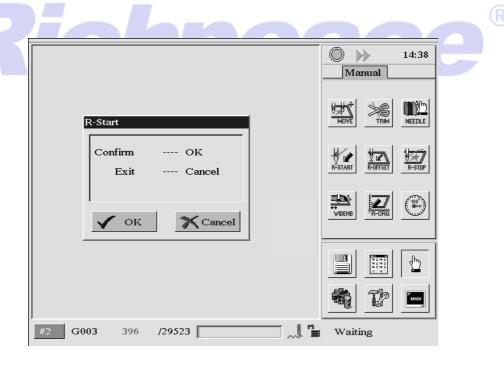




图 8.7.1

2. Press confirm key to carry out the operation, press cancel key to quit.

# 8.8 Setting offset point

Offset point is the stop position for patching during embroidering or after finishing the embroidery. After setting the offset point, when the machine received offset order, the machine will move to the offset point automatically and wait for the next operation and the

machine returns to the offset point after finishing embroidery.

1. Press " at the embroidery setting menu, enter the following menu;



2. Move the frame to an appropriate position, press the confirm key to carry out the operation, then the icon" will appear on the main menu. If you want to set the offset point again, press " at the menu, the offset point will be cleared, move

the frame to another position and confirm, the new offset point is set.

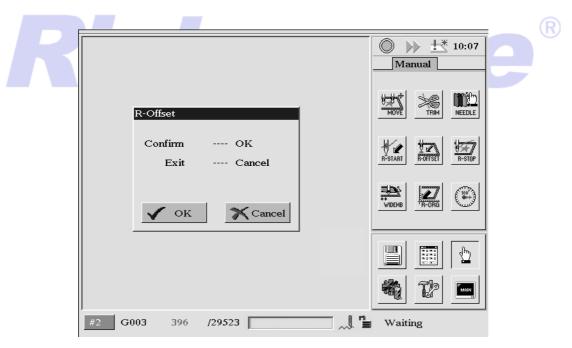
### 8.9 Return to offset point

Make the frame return to the offset point quickly. This operation is useful under

the operation of setting offset point.

1. Press " at the manual menu of picture 8.3.1, enter the following menu;





Picture 8.9.1

2. Press confirm key to carry out the operation, press cancel key to quit.

# 8.10 Manual trimming

You can do manual trimming if the control system having trimming function.

1. Press the trim key " at the main menu (also can be at the manual menu of picture 8.3.1), enter the following menu;



图 8.10.1



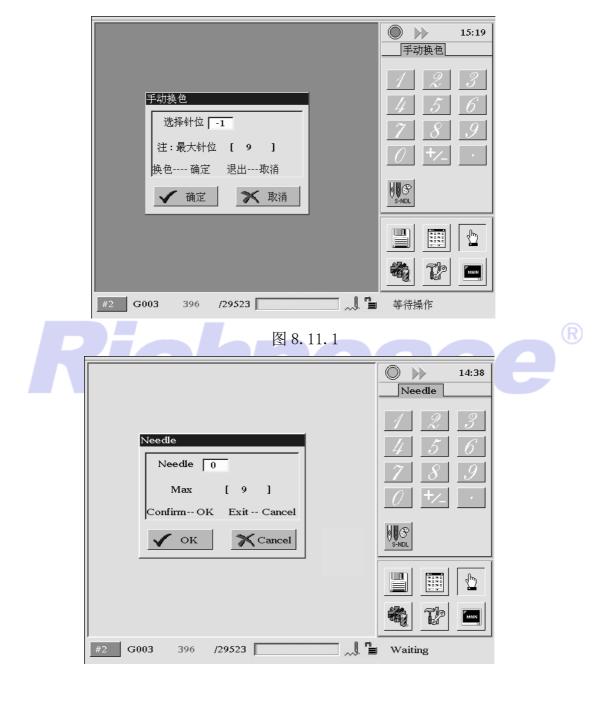
#### Picture 8.10.1

2. Press confirm key to carry out the trimming operation.

### 8.11 Manual color change

Under some situations, we should change color by choosing needle manually.

1. Press" NEEDLE" at the main menu (also can be at the manual menu of picture 8.3.1), enter the following menu;



#### Picture 8.11.1

- 2. Press "S-NDL" to choose needle, also, we can input the number to choose needle directly (each machine head has 9 needles).
- 3. Then press the confirm key after choosing the needle, the plain head switch to the needle chosen.

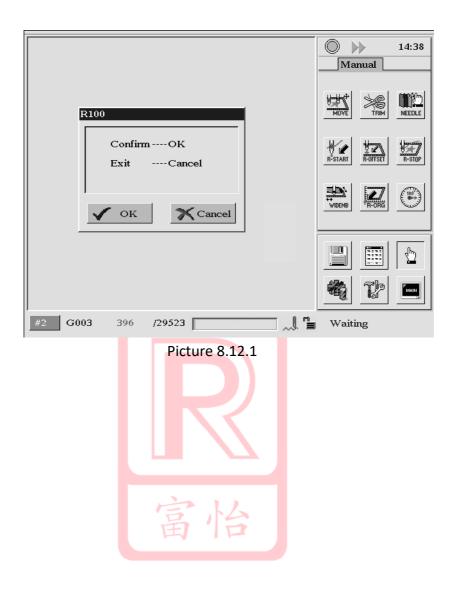
# 8.12 Main shaft jogging

Press the main axis to zero key to make the main axis turn to zero position if the main axis doesn't stop at zero degree.

- 1. Press " at the main menu, appear the following menu;
- 2. Press the confirm key to carry out the operation, the main shaft return to 100 degree, else, press the cancel key to quit.



图 8.12.1



# **Chapter 9** System limitation

# 9.1 Set password

The password should be started from the super user. Inputting password "8210" at the super user menu to start the password, after starting the password, the

ash-shown "esswood" is changed into operational.

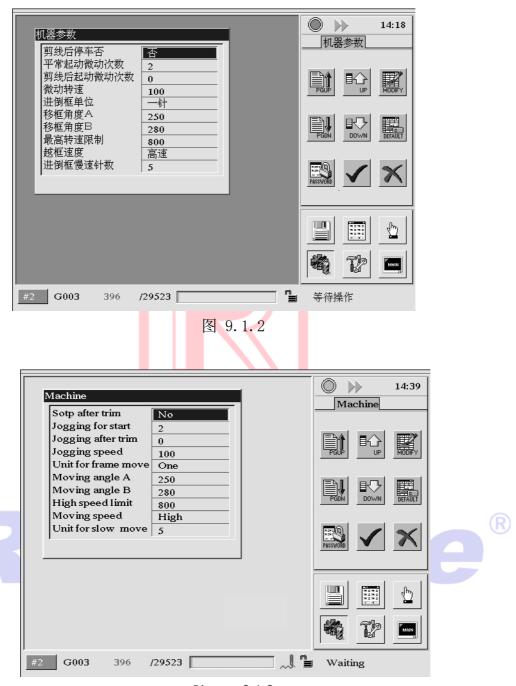
1. When there is no password limit, press " at the main menu, enter the following menu;



Picture 9.1.1

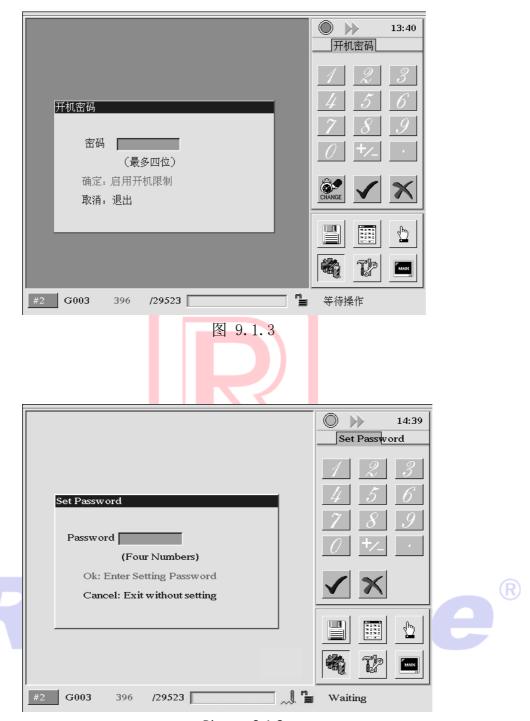
2. Press machine setting key "PARAM" or embroidery setting key "PARAM", take

machine setting menu as example, enter the following menu;



Picture 9.1.2

3. Press "ASSWORD", enter the following menu;

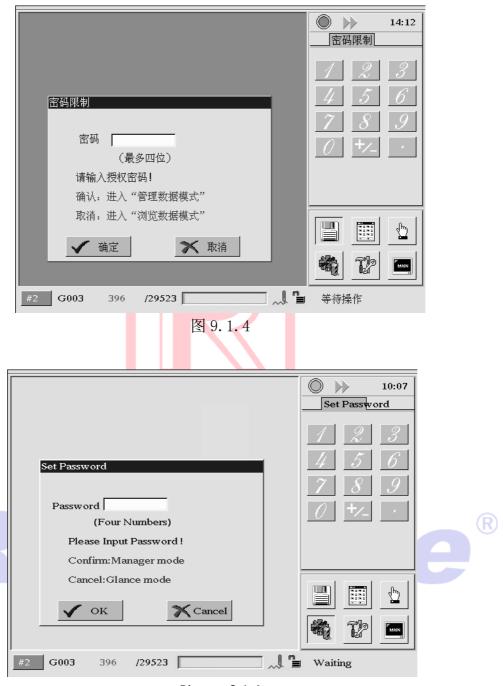


Picture 9.1.3

#### 4. Input the password and confirm; the password can be used now.

When there has been password, we can enter the parameter menu in two modes: "Manager mode" (the parameters can be changed) and "Glance mode" (the parameters can't be changed). Input the password and confirm to enter the

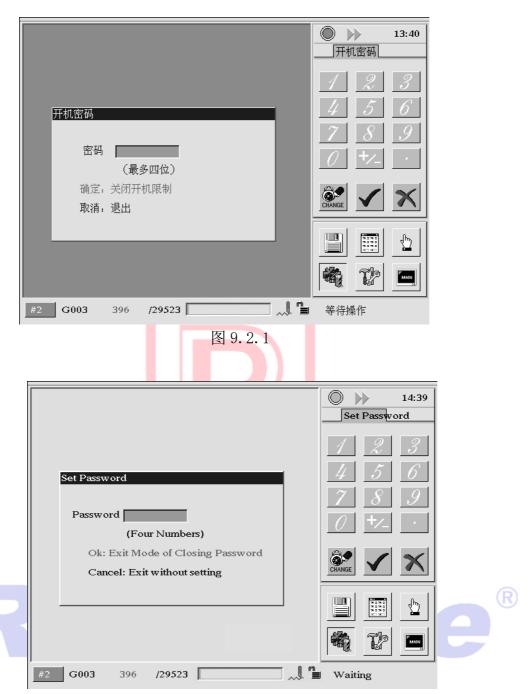
"Manager mode"; press the cancel key directly and enter the "Glance mode", shown as below;



Picture 9.1.4

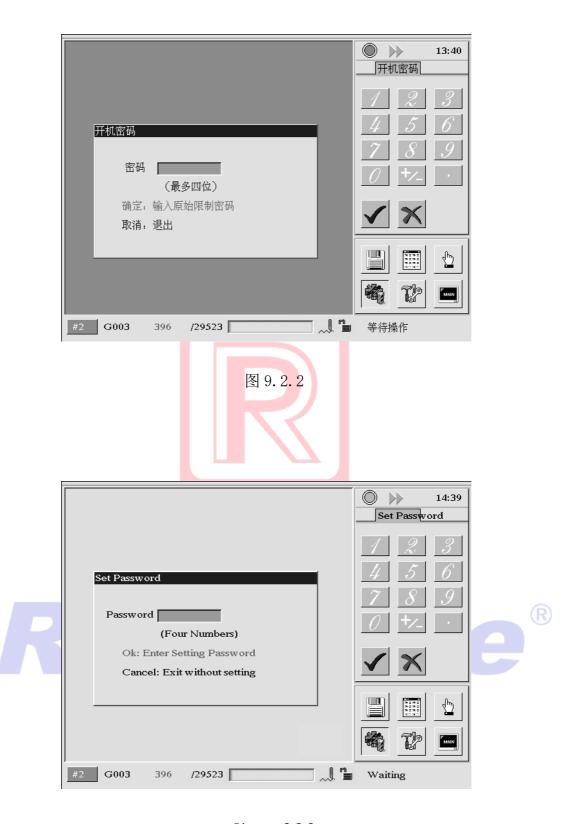
# 9.2 Modify the password

1. When entering the manager menu (picture 9.1.1), press "PASSWORD" and entering the following menu;



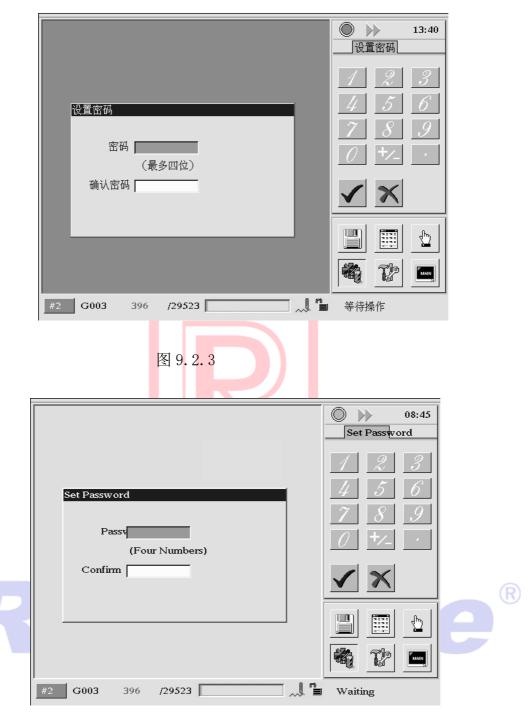
Picture 9.2.1

2. Press "CHANGE" to reset the password, enter the following menu;



Picture 9.2.2

3. Input the initial password and confirm, enter the following menu;



Picture 9.2.3

4. Input the password you set again and confirm to save the setting.

# 9.3 Cancel the password

Input the setting password and press the confirm key at the menu of picture 9.2.1 to cancel the password.

**Note**: Be sure to remember the password in order to prevent from establishing a new password, because you will not alter original password unless input the original password first, and establish the new password.

#### 9.4 Forbidden designs outputting

The function is to prevent the designs in memory from illegal copying, once you set limit password, you must input the password before outputting designs to the disk. When cancel the password, this function is not available also

# **Chapter 10** Mending operations

## 10.1 Idling by stitches or colors

If we make idling stitch operation, we needn't do the actual operation, only need to move the frame along the stitches and show the real-time moving stitches. Beside, we can move the frame to appointed stitch by inputting the stitch number directly, also, we can move to the last or the next color by color. This function is used for moving the frame forward or backward to the stitches or colors users needed, fleetness celerity orientation go to.

1. Press " at the embroidery setting menu when the machine stops, enter the following menu;



Picture 10.1.1

2. Press "When the machine is stopped, enter the following menu;

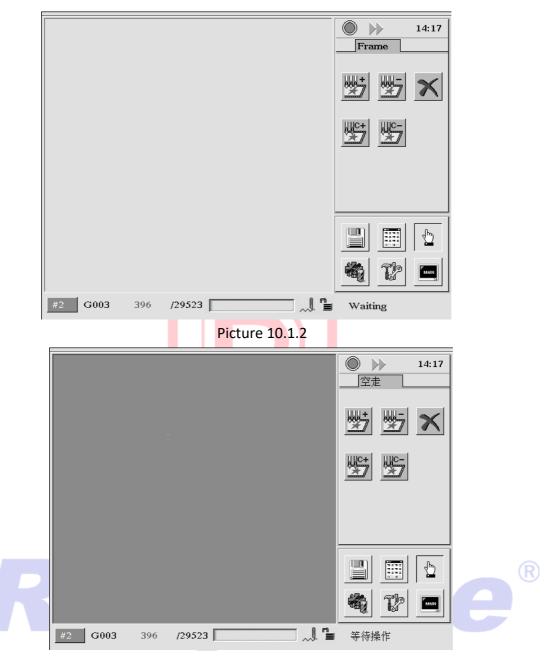
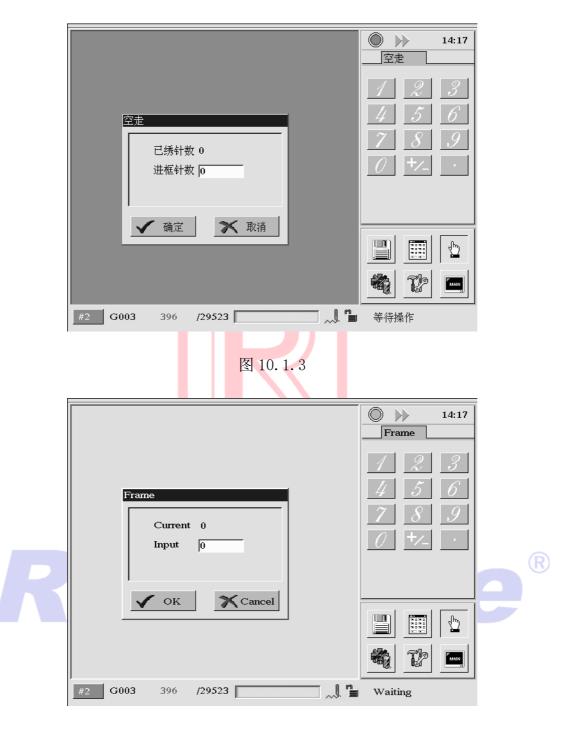


图 10.1.2

3.There are four sub-functions: move-forward by stitches, move-backward by stitches, move-forward by colors and move-backward by colors. If choose move-forward by stitches, press

", enter the following menu;



Picture 10.1.3

4. Input the stitches number you want to move forward, after confirming, the stitch number will be shown on the menu, the frame start to move. After finishing the

moving, the design stitches will display dynamically on the menu. If choose "For-C" or "Back-C", the frame and needle will move to the next or the last color's position.

#### 10.2 Pull the bar to idling

- 1. Press the idling key"" when the machine stops, the machine will make high-speed idling, at this time, pull the bar rightward continually, we can see the real-time embroidering design without the frame moving, when arrive at the stitch position needed, loose up the bar, then the frame is moved to the needing position once. If pull the bar leftward, it makes high-speed idling.
- 2. After high-speed idling, press the idling key" again, the machine enter the embroidery state, pull the bar to start embroidery.

## 10.3 Indicator light of broken thread

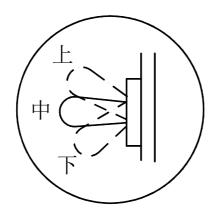
On each machine head there is a thread broken indicator light and a switch as following;



This switch has three turned positions, but only two can lock the positions. The switch can't be put at UP position actually, turn it upward once, the indicator light on the head will light on, which means the head is at the state of mending; when the switch is put at middle position, it means normal embroidery; when it's put at Down position, it means this head is locked and can't do embroidery.

#### 10.4 Return to mending

During embroidering, when encountering thread broken on some heads, you need to mend for them. You can use the function of frame



backward/forward to

mend (refer to chapter 10.1), or press the forward/ backward button on the operation panel directly to move backward the frame; in addition, you can move backward the frame to mend by pulling the bar leftward when the machine has stopped. Refer to sequin embroidery, its mending has some differences from plain embroidery, we should pay much attention to it, as detailed in chapter 13.3.

[Explanation]: 1.During embroidering, when encounter thread broken, the indicator light of broken light will light on promptly and the machine stop embroidering automatically, then back to the position needed mending and pull the bar, the machine start to mend; if the users don't think the thread broken cause any bad effect on the embroidery quality and have no need to mend, we can turn the switch upward once, the indicator light will turn off, pull the bar rightward to embroider continually.

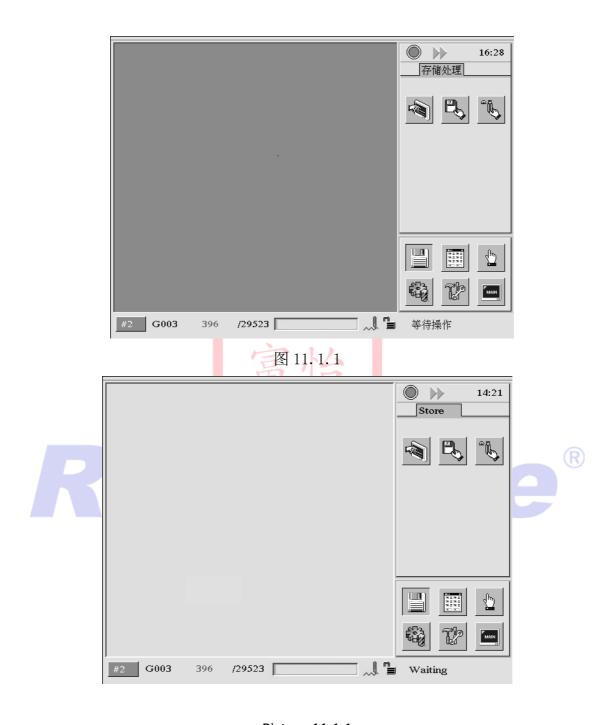
2. when embroidering, the users want to mend without any thread broken or other case needed mending, at this time, we need to stop the machine first, then turn upward the switch whose head needs mending once, the indicator light will light on, then back to the position needed mending and pull the bar, the machine start to mend.

# **Chapter 11** The display menus

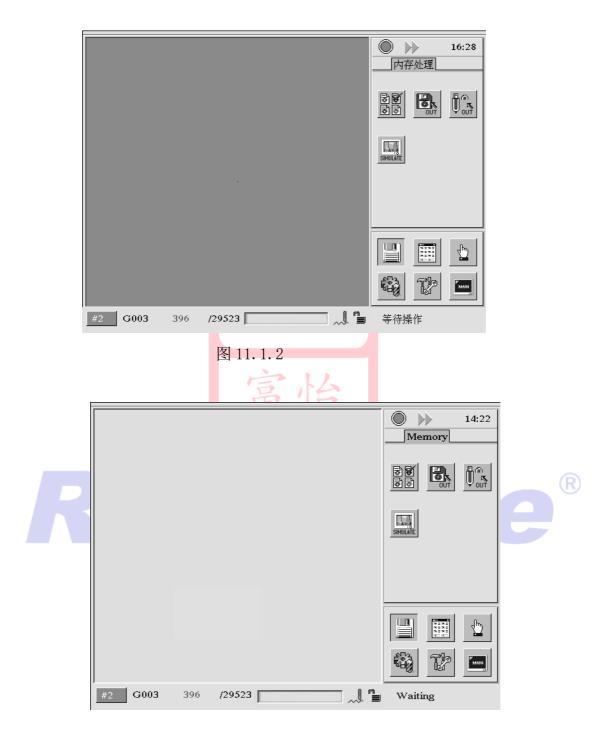
## 11.1 Design's simulative display

You can preview the design you chose through this operation.

1. Press the memory manage key", enter the following menu;



Picture 11.1.1



Picture 11.1.2

shown lively on the interface;

3. Press "SIMULATE", the design will be



Picture 11.1.3

It is displaying slowly at the first time, please wait for a moment. Press the confirm key and the whole design will be performed; if the designs shows slowly, we

can press", the simulation speed will be doubled; press ", the speed

restore, press ", the whole design will be shown at once.



Picture 11.1.2

4. After the design is displayed out, press the corresponding keys to do the corresponding operations, the design can be zoomed out or in.

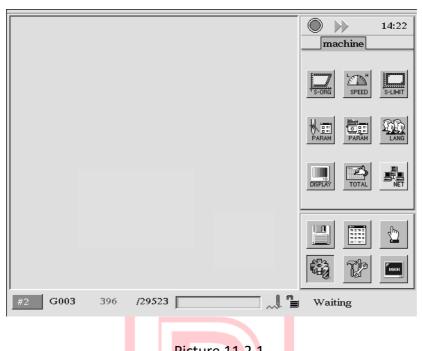
## 11.2 Setting background and needle pole's color

The background color and needle-pole's color can be changed in accordance with the user's tastes and habits.

1. Press the machine setting key ", enter the following menu;







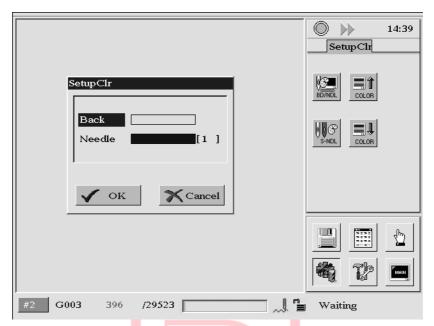
Picture 11.2.1

2. Press " , enter the following menu;





图 11.2.2



Picture 11.2.2

- 3. The default is the background color setting, press" BD/NOL ", the cursor switches between Back and Needle;
- 4. Press "COLOR" or "COLOR" to choose color;
- 5. When choosing the needle, press "s-NDL" to choose it;
- 6. Confirm and the menu return to the machine setting menu, the background color is changed to the set one.

## 11.3 Design info/screen locking function

Under the main interface there is an interface locking icon, which can be displayed in locking and unlocking two statuses. When press "", it switch to "", which means unlocking status switches into locking status, if you press again, it switches into unlocking status. This function

is used for preventing the causal mistakes in operation by touching the screen.

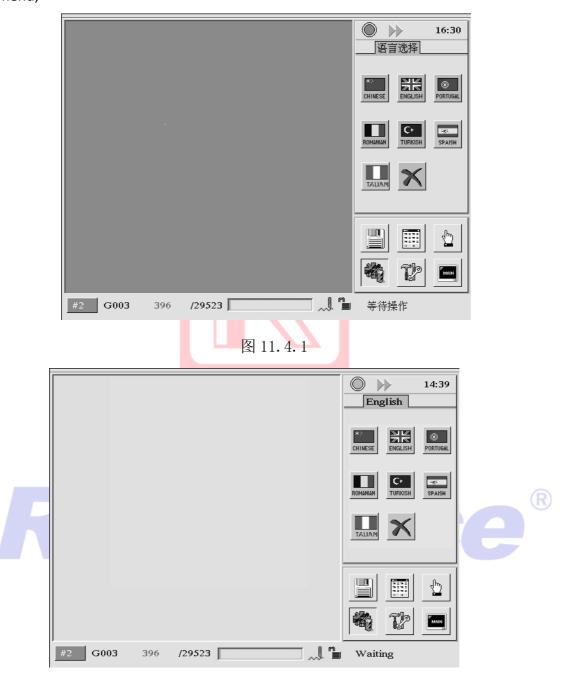
At the locking status ", we can only skim the design's info, no other function available. Press the design icon "#2" at the locking status, showing as the following picture;



Picture 11.3.1

# 11.4 Setting menu language

1. Press " at the machine setting menu of picture 11.2.1, enter the following menu;



Picture 11.4.1

2.Press the different icons to choose different languages, and then press" to confirm, the menu will be shown in the language you choose.

# 11.5 Setting system clock

You can adjust the time to be synchrony with the local time by this function.

1. Press the auxiliary function key

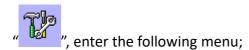
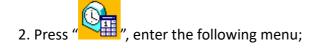


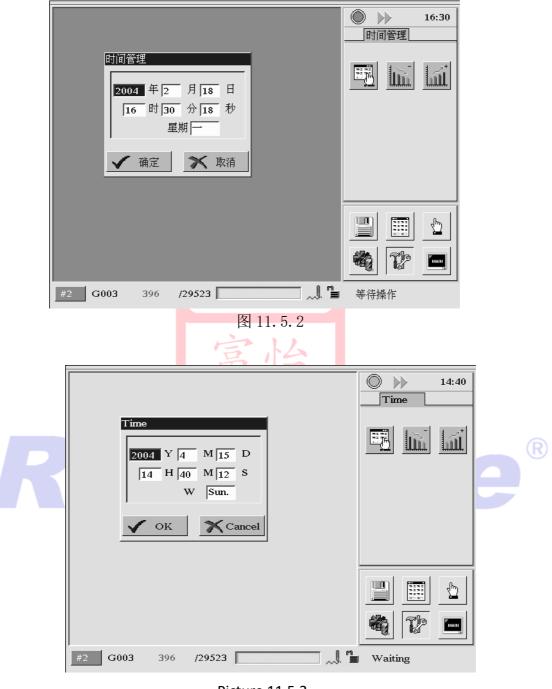


图 11.5.1



R





Picture 11.5.2

3. Press "to choose the item needed adjust; press "or" to revise the value.

4. Press the confirm key to save the revision.

#### 11.6 Statistical information

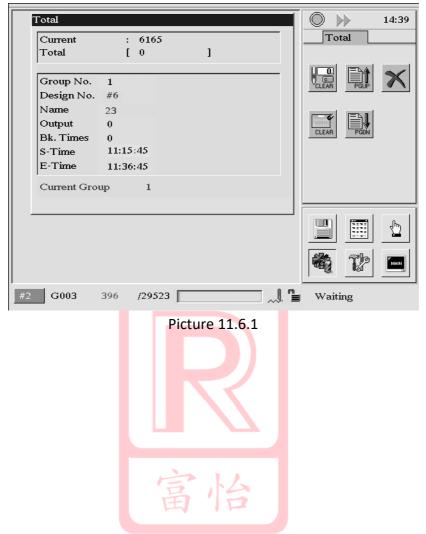
The function is used to show the statistic information of the production. The content includes the stitches

number of the current design, the total stitches number and the production of each group.

1. Press "Total" at the machine setting menu of picture 11.2.1, enter the following menu;



图 11.6.1



### **Explanation of the information:**

**Current:** It shows the finished stitches of the current design.

**Total:** It refers to the total stitches from the start to current. Press F1 to clean the accumulated stitches, make it zero for the next start.

**Group No.:** It shows which time the current record is belonged to.

**Design No.:** It indicates the current design's series number.

**Name:** It shows the design's name which is used at present embroidery.

**Output:** It shows the quantity of the single head at the current embroidery. For example, if you set the parameter "repeat" to 4, when finished the embroidery, the quantity is 4.

**Bk. Times:** How many times of thread broken during the current embroidering.

S-Time: It shows the start time

of the current embroidery.

**F-Time:** It shows the finish time of the current embroidery.

2. The finished stitches and total stitches are shown on the menu, according to the

prompt, press "FGUP" or "FGUP" to see the other information pages down or up.

Press "CLEAR", the total stitches is cleared; press "CLEAR", the whole statistics information will be cleared.

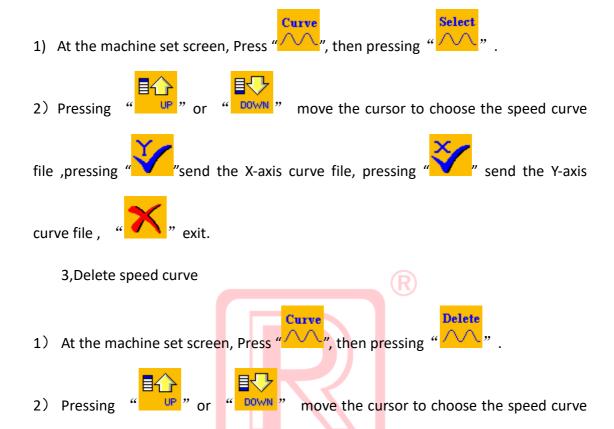
## 11.7 Speed curve manage (Just for the maintenance engineer)

1,Input speed curve

- 1) Insert U flash into the connector ,make sure there are speed curves in the U flash.
- 2) At the machine set screen .Press "Curve", then pressing "...".
- 3) Pressing "UP" or "DOWN" move the cursor to choose the speed curve file,

press"", you can input the speed curve from the U flash to the control box.

2,Choose the speed curve



#### 11.8 Ash-shown affection

At some status, some keys is ash-shown, this keys is invalid when it is ash-shown. The keys displaying switch between ash-shown and light-shown at different statuses.

#### 11.9 System test

At the menu of auxiliary functions, press "to choose system test function, this function is only used for manufacture person.

#### 11.10 Super users

At the menu of auxiliary functions,

press "to choose system test function, this function is only used for manufacture person.

#### 11.11 System renovating

At the menu of auxiliary functions, press "CHANGE" to choose system renovating function, according to the prompt on the menu, input the password and then we can do the operation. After system renovating, all the design in the system will be deleted, the system parameters are all defaulted. This function is only used for manufacture person.

#### 11.12 Screen emendation

Pressing "at the auxiliary menu to modify the screen displaying.

According to the prompt on the menu, input the password to create the operation. If the screen don't display in the middle of the area, please do this operation to modify it.

#### 11.13 Move the frame accurately

- 1, At the assistant screen, press "x=? y=?".

  2,Pressing "move the cursor to the option .pressing the number to input the value , "change the positive number or negative number .X-axis ,Y-axis distance can be changed between -20000mm to 20000mm.
- 3, Pressing " make the frame to move; press " , the frame don't move and exit the function.

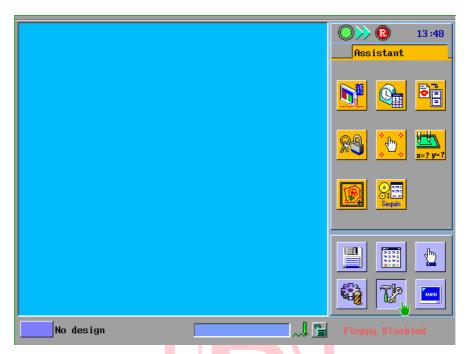
# Chapter 12 Designs management & auxiliary EMB

# 12.1 Edit designs

Modify and edit the designs, including zoom in and zoom out the design; insert or delete one stitch somewhere; modify the function code of one stitch somewhere.

1. Press the auxiliary function key" at the main menu (if not, we should press" first to back to the main menu), enter the following menu;



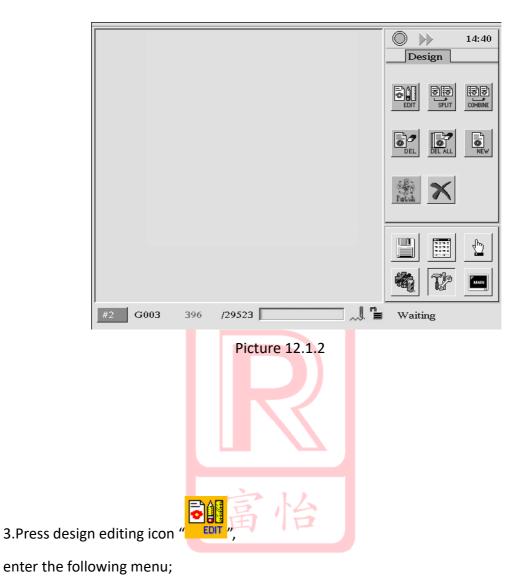


Picture 12.1.1

2. Press "", enter the following menu;



图 12.1.2



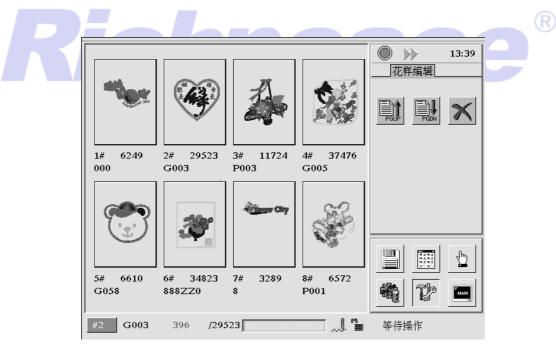
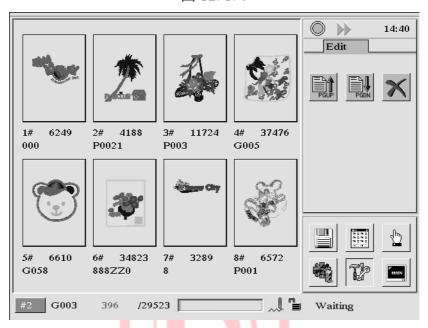


图 12.1.3

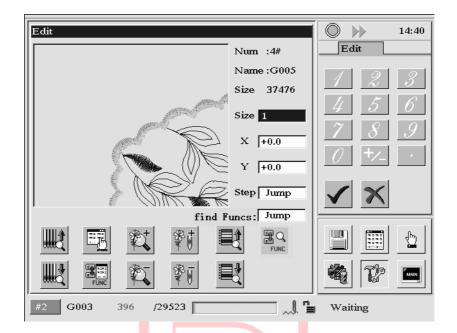


Picture 12.1.3

4. Choose the design needed editing and confirm, then the system will dispose the design and enter the following menu;



图 12.1.4



Picture 12.1.4

- 5. Press ", the cursor switches at the four items, choose the item you need and edit it by pressing the corresponding keys;
- 6. The stitches number can input by digital keys directly, press "or" or to choose the last or the next stitch, X and Y coordinates show the present stitch position, input the coordinates values by pressing digital keys, use the key to switch the sign of the coordinates;
- 7. Press "Func", the function codes switch among "data", "jump", "color" "trim", "offset", "sequin" and "laser".
- 8. Press " or " or " to zoom out or zoom in the design, press " or " or
- " to insert or delete a stitch;

9. Press "FUNC" to search function code, press "FUNC" or "FUNC" to look over the last color code or the next color code.

### 12.2 Dividing designs

1. Press "at the menu of picture 12.1.2, enter the following menu;

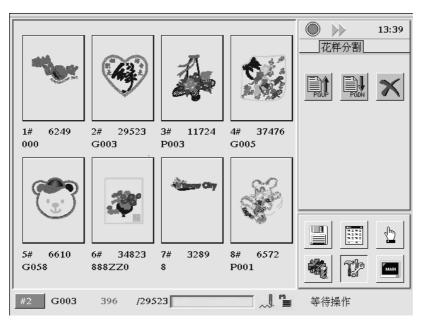
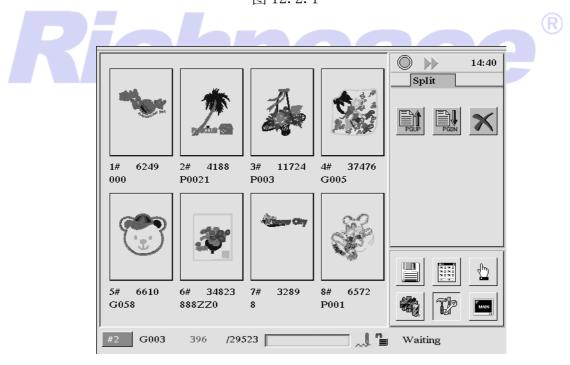
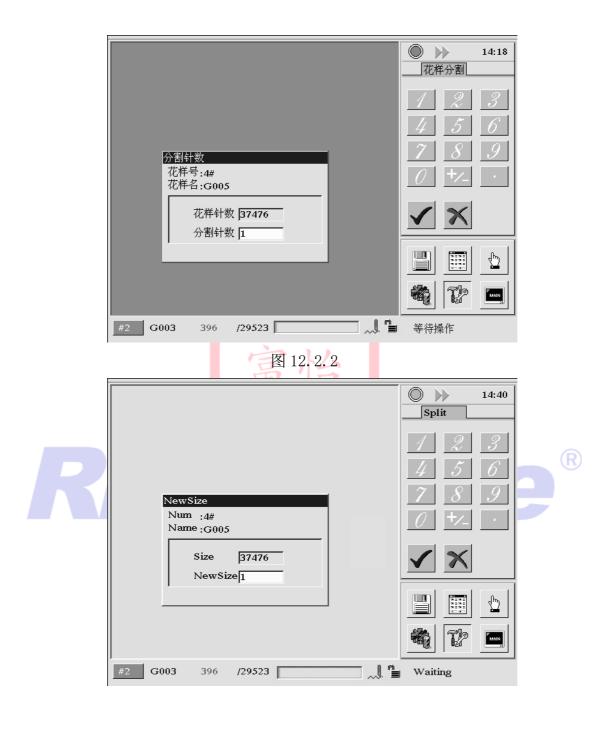


图 12.2.1

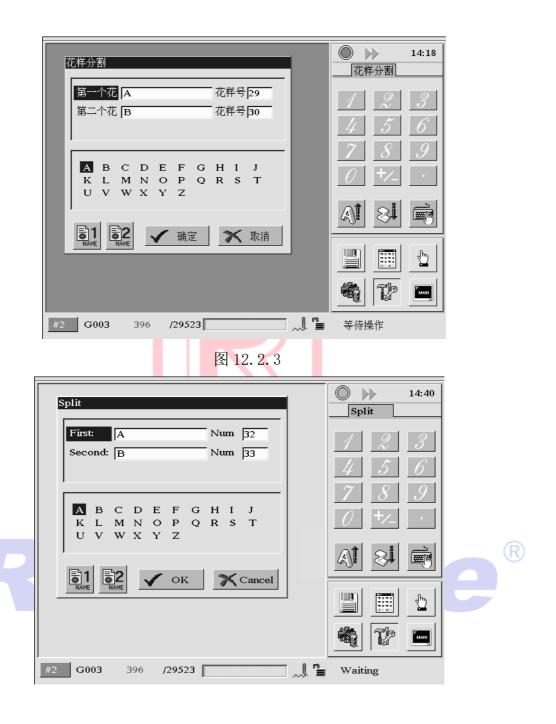


2. Choose the design to be divided, confirm and enter the following menu;



Picture12.2.2

3. Input the stitches number and confirm, enter the following menu;



Picture 12.2.3

3. Press " to choose the first design, Press " or " to choose the letter, press " to

confirm the choosing; press" to choose the second design and name it by the same way; after confirming, the design is divided into two designs which will be saved in the memory of the system for later using.

## 12.3 Copying designs

**8** 

Copying designs means merging designs. We can merge two or more designs into one to make various variform and colors patterns.

1. Press" at the menu of picture 12.1.2, enter the following menu;

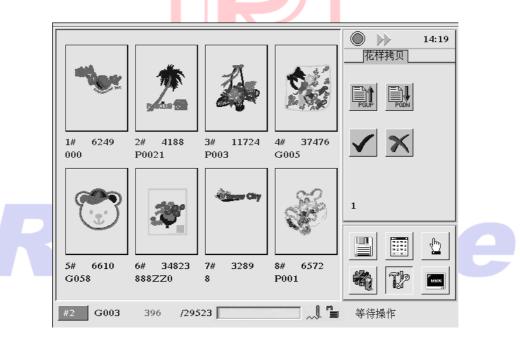


图 12.3.1



Picture 12.3.1

2. Choose the designs needed merging, we can choose as many as ten designs to merge, press a design, and enter the following menu;



图 12.3.2

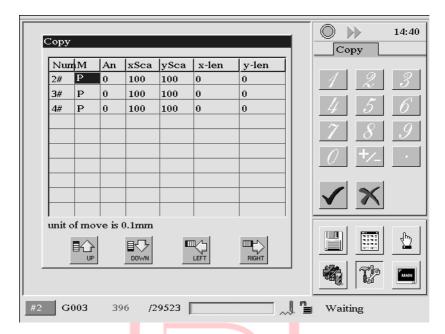


Picture 12.3.2

3.Input the times of the designs and confirm, return to the menu of picture 12.3.1, repeat the operation until finishing the choose, and then press the confirm key and enter the following menu;



图 12.3.3

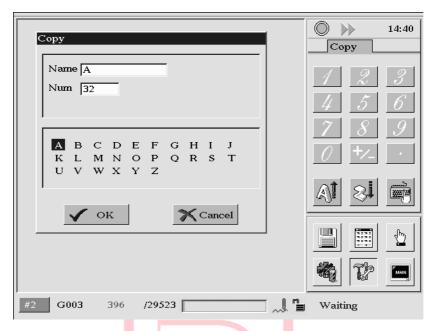


Picture 12.3.3

4. The parameters showing in the menu is the parameters of the new design (detail in chapter 5), each item can be changed by digital keys. There are eight modes which can be changed by digital keys 1 to 8; the other parameters can be changed by inputting values directly. When finish the modification, press the confirm key and enter the following menu;



图 12.3.4



**Picture 12.3.4** 

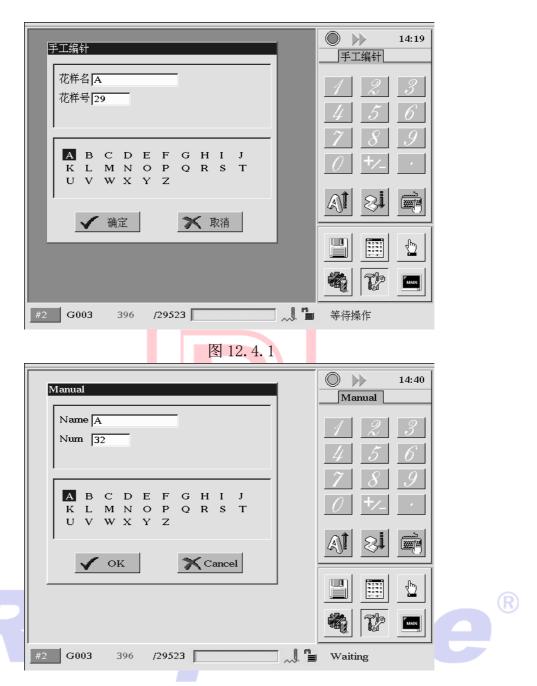
5. Select letter and name the merged design, after confirming, the merged design will be saved in the memory of the system.



## 12.4 Manual editing stitches

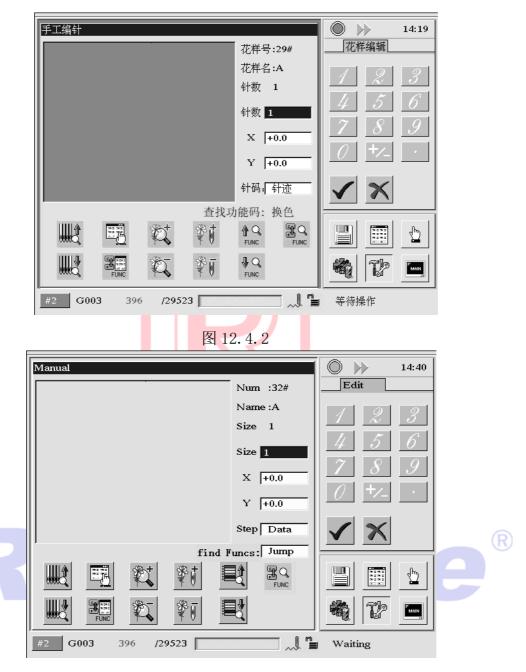
Design a new design.

1. Press " NEW " at the menu of picture 12.1.2, enter the following menu;



Picture 12.4.1

- 2. Firstly, we should name for the new design, the method is the same as chapter
- 12.3, then press the confirm key and enter the following menu;



Picture 12.4.2

3. Finish the manual editing the stitches according to the steps of "edit designs" in chapter 12.1, confirm and the new design will be saved in the memory.

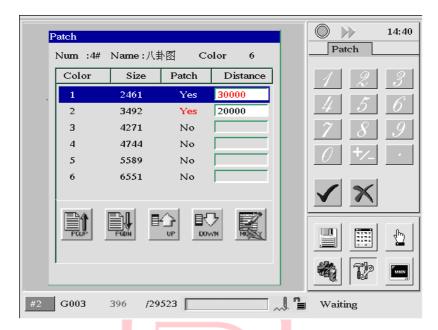
## 12.5 Patch embroidery(only be used in special model)

This function is used for setting patch node at the position of color changing or stopping code. When embroidering to the patch node, the machine stops and out of the frame automatically, after patching, pull the bar to embroider continually.

1. Firstly, the offset manner in the embroidery parameter should be set to "stop",

then press" Patch " at the menu of picture 12.1.2 and enter the following menu;





Picture 12.5.1

2. Move the cursor to the color number needing patch, press "MODIFY", the sign of "No" changes to "Yes" which means adding patch node here, then you can input the patch distance in the box. If you want to delete this node, move the cursor to this

position and press "MODIFY", the sign of "Yes" changes to "No" which means deleting the patch node here.

3.After finishing setting the patch nodes, press the confirm key and return to the main menu; when falling across the patch node during embroidering, the machine will stop automatically, and then you can patch a cloth and pull the bar to embroider continually.

Note: when finishing the patch setting for the current design, only press the confirm key at the status of stopping can this setting be valid.

#### 12.6 Pattern outline

This function is for ordinary figure generated nearly real contour pattern. The user can select the contour pattern for embroidery, it is convenient to open position and dig holes.

1. Enter the auxiliary function interface, select icon " to enter pattern

management interface, select "to enter pattern outline management interface."

2. Select memory tricks which need to generate contour Pattern, "and "Browse tricks files in the memory."

3. After choose pattern, enter into pattern outline parameter settings interface, "
" and " Move the cursor bar positioning input items, " "
Revise the present value of the input items.

Outline needle step: setting the length of generating contours pattern needle

step.

Outline amplification: setting amplification values of generating contours pattern.

Profile: setting generating contours pattern for convex or concave.

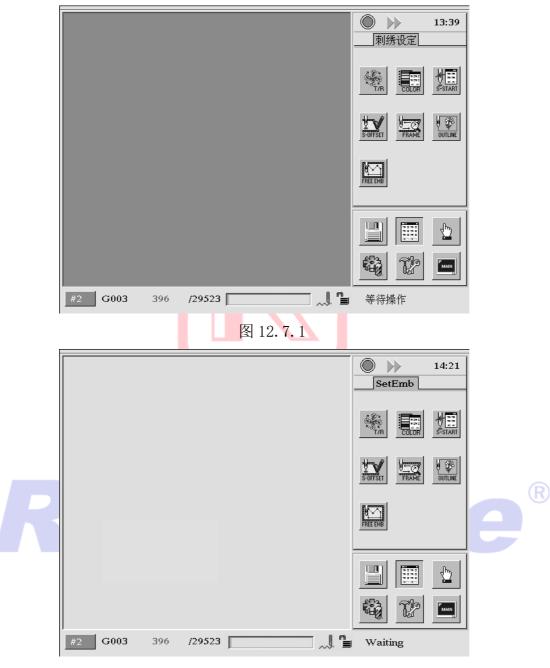
4. Use the button " " to execute generating pattern contour action, the button " not to enforce generating pattern outline operation and exit pattern contour interface. For example:



## 12.7 Free embroidery

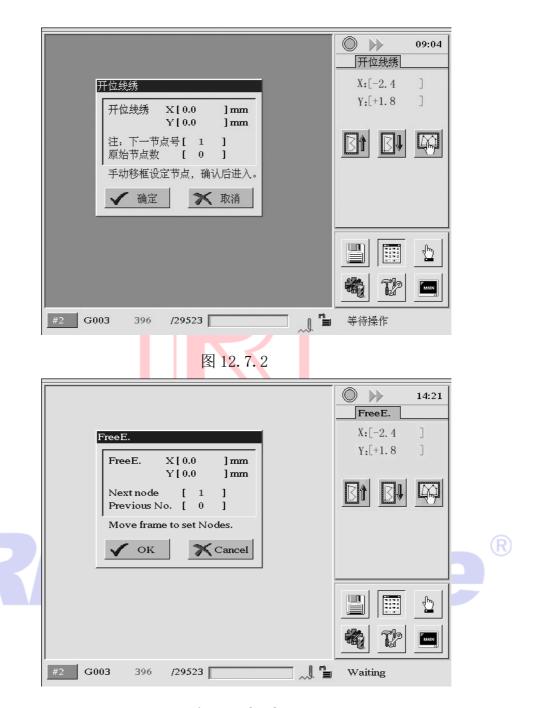
It is used to define the patch position and benchmark direction of the design.

1. Press the embroidery setting



Picture 12.7.1

2. Press ", enter the following menu directly;



**Picture 12.7.2** 

The original node number is 1; move the frame to a proper position and press

"to confirm the node; at this time the node number jump to 2 automatically, move the frame to a

proper position and press "to confirm it. The rest may be deduced by analogy, we can confirm as much as 20 nodes. Additional, if you want to change a node, you can press

"or" to choose this node and then move the frame to a new position to confirm this node again.

3. After finishing all the nodes, press the confirm key and pull the bar to do the embroidery.

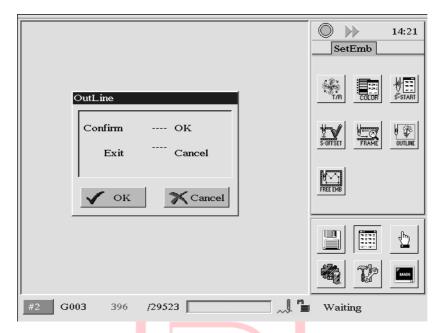
## 12.8 Outline embroidery

Add a rectangle rim around the design.

1. Press "OUTLINE" at the embroidery setting menu (picture12.6.1), enter the following menu;



图 12.8.1



Picture 12.7.1

2.Press the confirm key, complete the operation according to the prompt on the menu.

## 12.9 Wide embroidery



This function is used for the embroidering of whole cloth, when the part of whole

cloth have been embroidered finish, with power on by clicking "WIDEHB" key to make the needle down into the fabric and press foot presses the fabric (be careful here!), then loose the cloth clips and move the frame to the next position and re-fix the cloth clips and start to work. In this way,

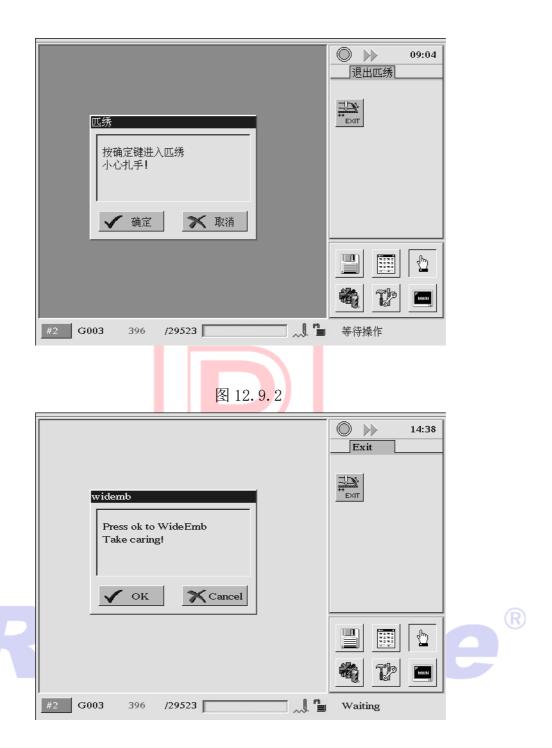
you need not to cut the whole roll cloth into pieces to embroider, so improve you working efficiency greatly.

1. Press " at the main menu and enter the following menu;



Picture 12.9.1

2.Press "VIDEMB", enter the following menu;



Picture 12.9.2

3. Press the confirm key, complete the operation according to the prompt on the menu. If you want to quit this operation, press the key "EXIT".

## **Chapter 13** Sequin embroidery

Sequin is a new embroidery technology, which can be carried out with the flat embroidery machine. According to the number and setting position of the sequin equipment, there are five different modes including single sequin, double sequins, left/right single sequin, left double/right single sequin and left double/right double four sequin. In these modes, double sequin's setting includes sequin1, sequin 2 and double superposition sequin. So many embroidery

## **13.1** Basic operation

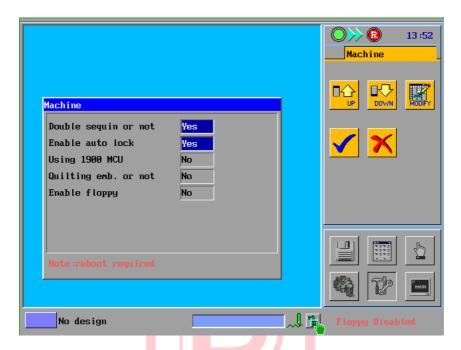
modes can satisfy the users.

As the common embroidery, sequin embroidery has its special design format. Using the special format, in terms of the manner told in the anterior chapter to choose design, do the transform and repeat and edit design, you can do embroidery after those operations. Also, we can merge the sequin pattern with the plain pattern or any other patterns to make new designs.

1, Sequin device sets password protection function enter the auxiliary function

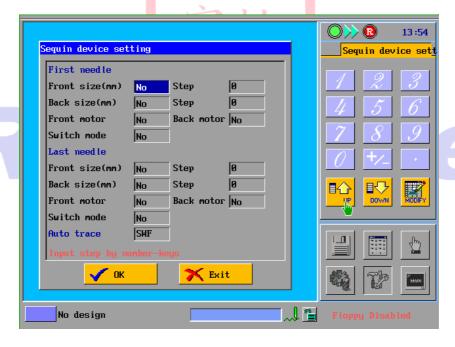
interface, choose icon "sequin" and press it, select sequins device settings interface, sequin device settings operating needs password "121603", according to defined button to enter sequin device setting function interface.

When the auxiliary function doesn't have icon "sequin" enter auxiliary function---super user---input password 111---come into setting interface; whether using double sequin anthology "is" in the setting interface, after confirmed, operation box will restart automatically.



Picture 13.1.1

2, Set sequin device parameters:



Picture 13.1.2

- 1) Press the button "and" to move cursor bar, "moory" modify the current value of cursor.
- 2) Sequin device parameter Settings explanation:

head/end needle position	Parameter scope				
Former					
sequin					
specification	invalid 3mm 4mm 5mm 6.75mm 8mm 9mm				
	livalide Silline 411111 Silline 6.7511111 Silline Silline				
Latter sequin					
specification					
Step number	0~100				
Former sequin motor	nothing、former motor、latter motor				
Latter sequin motor	Hothing Torrier motory latter motor				
Big or small slice switch	yes/no				
or not	yes/110				
Fill embroidery way	Be in common use/SWF				

Table 13.1.3

- 3) Sequin size steps setting according to device to set, general condition: 3mm—8 step, 4mm—11 step, 5mm—13 step, 7mm—19 step, 9mm—24 step
- 4) Use the button " to save settings parameter value and exit, the button



not to save settings parameter value and exit.

## 13.2 Sequin speed

When falling across sequin stitches

during embroidery, the embroidery speed changes according to the value of the parameter "Jump speed". If the parameter is set to solid, the sequin speed is 50rpm higher than the low setting speed; If the parameter is set to automatic, the sequin embroidery speed is limited by the highest speed. For example, if "sequin high speed"

is set to 800rpm, then the actual highest sequin embroidery speed will achieve 800rpm. Besides, the sequin speed should change according to the size of the sequin.

#### 13.3 Sequin mending

The way of sequin fill embroider is separated into general-purpose fill embroidery and SWF fill embroidery.

Use generic type filling embroider function, all head rising while backing. When backing to break points, fill embroidery needle bar will pierce 1 needle in-situ. Then the sequin of fill embroidery needle position will drop. Fill embroider to break point to park, and all head rises and pierce one needle again in-situ. Then stop and all drop heads enter normal embroidery. "breakpoint stitch count in advance" of embroidery parameters doesn't work in sequin embroidery supplement.

SWF fill embroidery way: When breaking thread all head rises, sequin of all heads of draw bar falls. Sequin of non-breaking sequins device doesn't come out. Fill embroider to break points, all the devices embroidery together.

## 13.4 Sequin out modes

#### 13.4.1 Early send slice mode option

For double sequins connection method, there are 3 kinds method of a slice: sequin 1, sequin 2 and double sequins superposition. But How can choose a slice way? We adopt virtual needle position ways to choose. For example:

Such as 6 needle sewing machine, situated in one needle (or six needle position) connect double sequins, so may have 1 (or 6) bits for sending piece 1, suppose needle digits 7 which is larger than the actual needle digits for

sent slices 2, suppose 8 needles were biplanes superposition sending. It realized the choice of the ways of the piece. Other needle bits of machines analogize according to this method.

Attention: Set virtual needle bits can only choose digital beginning which is greater than the actual needle bits, cannot choose intermediate values of actual

needle position.

#### 13.4.2 New double sequin sent slices mode option

Ordinary punching system designs sequin yards to 1 needle jumping, but cannot distinguish various sequin combination of a needle bits. For example: cannot distinguish gold foil code of the same needle bits for A sequin or B the piece of gold. Special many gold heroine edition production methods principle is primarily through in the original sequin code (needle jumping), add a few empty sequin code (empty needle jumping), which indicates the gold foil is what combination, realize in the same position of embroidering cloth to embroider out several sequin lamination. For instance, "C" stands for the lamination of A slice and B slice.

Specific rules as follows:

A sequin is stood for by 1 sequin yards.

B sequin is stood for by 1 sequin yards and 1 empty needle jumping.

C lamination is stood for by 1sequin yards and 2 empty needle jumping.

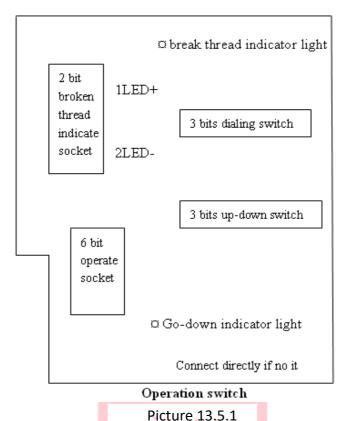
#### 13.4.3 Sequin data editors' choice send slice method

When a flower version format is single sequin data format, can use gold foil data editing functions convert a single sequin data flower version into support double sequin format data flower version. The method is as follows: Enter the auxiliary

function interface, choose "Sequin" and enter, choose sequin data editing functions, choose a single sequin data format flower version that needs to convert, interface displays all color change position and sequin sent slices way of this flower version. Users can set different quantity and different sequin to undertake combination repeatedly in every change color position. Such as selecting 3C + 4B + 5A, indicates in the change color position a slice method for three lamination with 4 back part again with five pieces front part. Then in turn send slice way cycle in current color order. According to this method convert this single sequin data format flower version into the new tricks of supporting double sequin data format flower version.

## 13.5 Sequin operation switch

Operation switch can convenient for the testing, setting and pulling tread. Shown as below;



When single head drives, switch/indicator instructions on sequins operating

1. direction switch is three-position switch, when switch is on the median, sequins break away from working state. When switch is on the hypostasis, manual drop head and receive sending slice instructions. When switch is on the epitasis, sequins receive embroidery promotion and demotion and send chip

control instruction.

board:

- 2、What is under direction switch is promotion and demotion work indicator light. When the light goes on, sequin head is below. When the light puts out, sequin head is above.
- 3. Manually send slice switch, manually send slice switch is three-position self-replacement switch. As the sequin head locates below position, sending slice switch sends the piece when you press each time; But as the bright picking located above position, press sending slice switch doesn't send slice. Another note:

thread-breaking detection switch is in lower level, press sending slice switch doesn't send slice.

- 4. Located in sequins operation switch above the indicator light is disconnected position indicator lights; When normally embroider, direction switch should put in superior on online controlled condition, and receive promotion and demotion and sending slices instructions of receiving system. When receive promotion and demotion instruction, if machine head isn't in cylinder state, sequin head will fall down. If machine head is in cylinder state, sequin head won't fall down. Sequin places in below position in embroidering, Lock head can close sent slices command. But it won't rise the head, only lift the head when stop and cancel promotion and demotion instruction. Besides, if cylinder switch locates in below position on falling head, and sequin head doesn't land, Embroidery put switch in normal embroidery position (median), needle bar can embroidery, sequin head will land and easy to cutting knife and damage sequins device. Therefore, prohibit changing disconnection detection switch in embroidery from lower level into meso-position.
- 5. Switch 1-5 ON all set for automatic sequin size, or for a switch setting size. Before power up, switch setting is effective, after power up, change switch is ineffective. Charged change Settings can be effective which must again start up after shut down.

The settings way of dial switch of pick gold plaque driver boardC16C:

Angle set							CT-current	set		
Pull code s	witch	1	2	3	4	5				
step	angle						current (A)	6	7	8
number							/open or			
6	5.4	OFF	OFF	OFF	OFF		close			

8	7.2	OFF	OFF	OFF	ON			0.25	OFF	OFF	OFF		
9	8.1	OFF	OFF	ON	OFF		•	0.3	OFF	OFF	ON		
10	9	OFF	OFF	ON	ON			0.4	OFF	ON	OFF		
11	9.9	OFF	ON	OFF	OFF					0.5	OFF	ON	ON
12	10.8	OFF	ON	OFF	ON		•	0.6	ON	OFF	OFF		
13	11.7	OFF	ON	ON	OFF			0.7	ON	OFF	ON		
14	12.6	OFF	ON	ON	ON		•	0.8	ON	ON	OFF		
15	13.5	ON	OFF	OFF	OFF			0.9	ON	ON	ON		
16	14.4	ON	OFF	OFF	ON	OFF		R					
17	15.3	ON	OFF	ON	OFF								
18	16.2	ON	OFF	ON	ON								
19	17.1	ON	ON	OFF	OFF								
20	18	ON	ON	OFF	ON								
21	18.9	ON	ON	ON	OFF	77							
24	21.6	ON	ON	ON	ON	2							
25	22.5	OFF	OFF	OFF	OFF	台							
26	23.4	OFF	OFF	OFF	ON								
28	25.2	OFF	OFF	ON	OFF	ON							
32	28.8	OFF	OFF	ON	ON						R		
36	32.4	OFF	ON	OFF	OFF					Ь			
40	36.0	OFF	ON	OFF	ON								
42	37.8	OFF	ON	ON	OFF								
44	39.6	OFF	ON	ON	ON								
46	41.4	ON	OFF	OFF	OFF								
48	43.2	ON	OFF	OFF	ON								
50	45.0	ON	OFF	ON	OFF	ON							
54	48.6	ON	OFF	ON	ON								
55	49.5	ON	ON	OFF	OFF								
60	54.0	ON	ON	OFF	ON								

64	57.6	ON	ON	ON	OFF				
72	auto	ON	ON	ON	ON	ON			

Table 13.5.1

## **Chapter 14 Relate to the operation of tracing cording**

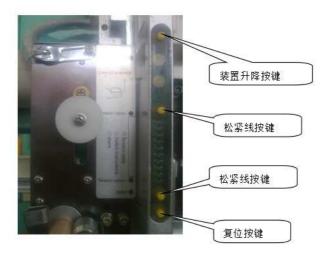
Tracking rope embroider can embroider any rope by make use of traditional dribbling machine, including bead string and tube rope, and embroidery effect is excellent. It can be realized on the basis of flat embroidery machine. And it can choose any first needle position and end needle position installation. Automatic control, according to embroidery, adjusting wire speed and tension, effectively improve the embroidery quality.

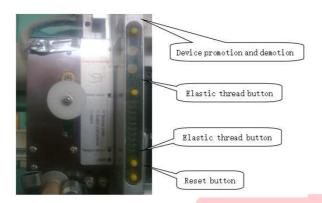
## 14.1 The operation of tracing cording

As the same as flat embroidery, tracking rope embroiders have their own proprietary flower version format. Using special flower version, according to the preceding chapter account synchronized methods, to conduct the pattern choice and pattern editing to process pattern,

namely, can bars embroider. It also will rope embroidery, paillette embroiders and flat embroidery or other formats of flower version embroidered all kinds of novel designs through pattern combined.

## 14.2 introduction of tracing cording device





Device promotion and demotion button: Manual control device fluctuation, if press time is longer, it can control all the devices fluctuation.

**Elastic thread button:** Control the wire firmness, above buttons make wire loose, and below buttons make wire get tighter.

## 14.3 Tracing Cording parameter setting

Needle position setting of Tracing Cording

Setinwrought needle position before tracing cording. First needle set to 1 needle position. Last needle set to the last needle position base on Needle bar number. For example, the needle bar number is 9, the last needle setting as shown in figure:



Picture 14-3-1

#### 2. Tracing Cording speed setting

Upon the picture above, Rope below inwrought needle position, the rope embroidery limit the speed, can choose according to the requirement of the highest speed. Speed in (300-800) before is adjustable.

Parameter Settings after finishing can choose embroidery patterns.

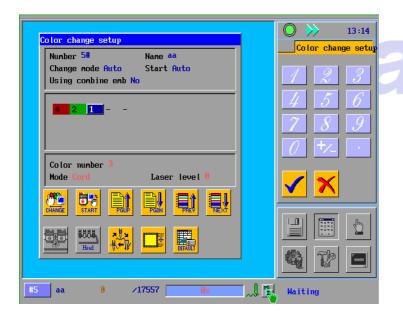
## 14.4 Cording tracing can be achieved by manual operation

Before cording tracing embroidery, for single rope embroidery pattern, can not need to set the color with manual sequence, choosing effective installation needle position and tracking rope embroidered embroidery. Also can be mixed pattern, select manual change

color when embroider achieve rope while embroidering, manual switching to effective needle bits can.

## 14.5 Tracing cording achieved automatically

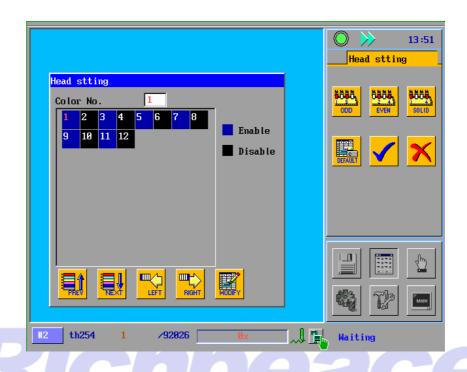
When embroidery, patterns is mixed pattern, we should install the embroider pattern color sequence to achieve automatic color change. Figure in embroidery process will set in good order in accordance with the color mode automatically converts. The diagram below, when embroider achieve third color sequence, automatic conversion to set the rope embroidery patterns.



Picture 14-5-1

# Chapter 15 Relevant of alternating head embroidering operation

- 1, setting the numbers of the noses of the machine
- 2, Helicopter set interface functional specification



Picture 15-1 Alternate head set interface

## 1) Keys function explanation:

keys	Function explanation
LEFT	Left shift cursor
RIGHT	Right shift cursor
	Choose the last color order

	Choose the next color order
MODIFY	Amend working condition of the prow
000	Even number prow working, in operation condition of odd number
EVEN	Odd number working, even number do not work
SOLID	Circulation set head working state
DEFAULT	Sweep away the alternate head set of all the head
	confirm
*	exit

#### 2) Working status display state:

Nosing state is made of rectangle and numbers, digital presentation the nosing number, color lump is blue mean nosing working, color lump is red mean nosing does not work. For example, the color lump is blue, figure in the color lump is 1, show that the first nosing working in the embroidering, if the color lump is black, is show that the nosing working do not work in embroidering.

### 3, Prow working status setting explanation:

Start the alternating head embroidering, entrance the color change

set face, choose the icon "Head" enter into prow set face.

User-defined the prow working condition

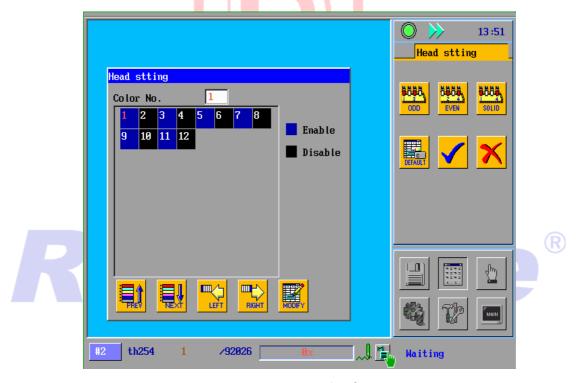
Enter into the prow setting face ,use "LEFT" or "RIGHT" the button move to the

number of prow need to modify the working state, press "can modify the current state of helicopter is work or doesn't work."

shortcut function number-setting even number working(as the picture of 15-1)

Use the shortcut function ", setting the current color order as even number prow working. Uneven number does not work.

Shortcut function-setting uneven number prow working, as follows:

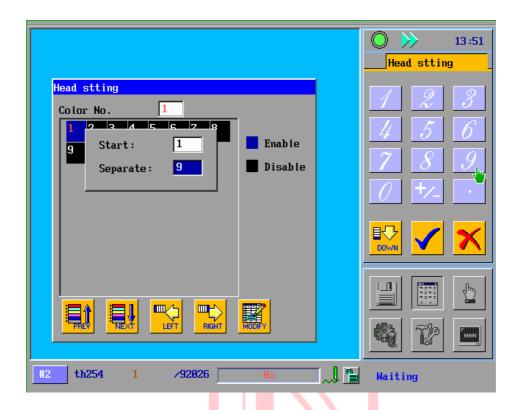


Picture 15-2

Use the function key "

setting the current color order as uneven prow working, even prow does not work.

shortcut function--Circulation set the prow working condition



Picture 15-3

Use the function key "solid", enter into the face of circulation set prow working condition. Now the cursor stop at input item of "start working prow",

through the key "to amend the circulation set prow number,

Use function key "to put the cursor into "distance number of prow",

through the button "amend the circulation set prow number. After setting, put the confirm key quit the surface.

#### For example:

Set the current prow number as 10, start the prow number is 1, the distance prow number is 5, the first and 7th prow working, others do not work. show as follows:

1 2 3 4 5 6 7 8 9 10

#### 4, setting the color order selection

After setting the prow working condition of the current color order opposite, if you want to set the prow working condition opposite the other color order ,you can choose

kinds of color order through the"





use the key of





to change the current color order, put the confirm key into the prow condition set face. Just now, amend the prow condition "prow working condition state" as what mentioned before.

#### 5. Save and quit

After setting the prow working condition, put confirm key holding and quitting, put confirm key to hold and quit the set face. If have no need to modify the current setting, put the cancel key.

Note: the embroidery, the need for each color sequence alternate head Settings, or only for selected color sequence alternate head embroidery, not set the default for full head embroidery.

## Chapter16 About the Two-headed combination embroider introduction

(Only suit the Fu Yi 02F Touch-screen computer, need master support)

About the Two-headed combination embroider operation

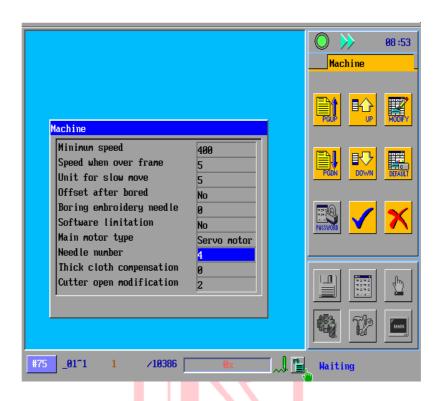
1.enter into miscellaneous function—superuser—entry the password 111—enter into setting face; At the setting face, need to do—whether use automatic alternate head choose "yes", after you confirmed, the operation box can automatic restart.



2.Inside the machine set - machine parameters, need to put the machine parameters nose number and helicopter spacing (mm), according to the actual machine type correctly set.

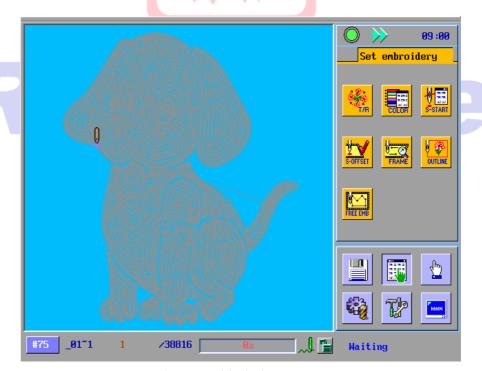


3. Machine Settings - machine parameters, Need to put the needle bar several machine parameters according to the actual machine type correctly set.



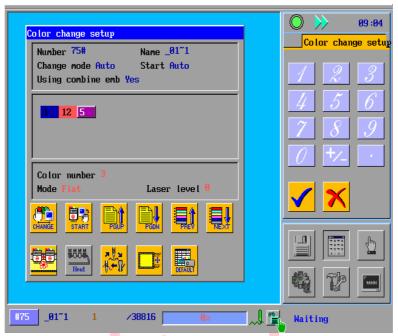
4. Choose the inwrought pattern from the operation.

Choose after completing into embroidery design - color sequence Settings,



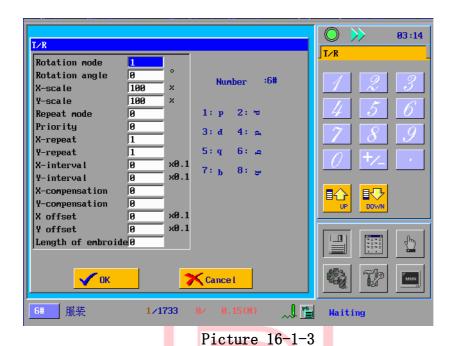
Picture 16-1-1

5. Touch shown button, whether to two-headed combination is "instead of" and then set pattern color sequence, such as 9 needle machine, choose 10-18 needles bits, the default is even head unit and confirm key preservation.



Picture 16-1-2

5. Save will automatically be popup dialog box below, please click "yes" to save Settings while pattern automatic input to the main board. Now complete function setting two-headed combination, can press the usual procedure for the next step of setting up embroider point, open embroider etc operation. Two-headed combination embroider,



appendix:



Error	Trouble shooting				
Main shaft position wrong	Main shaft jogging and back to Zero				
Left limitation					
Right limitation	Move the frames to the opposite direction				
Front limitation					
Back limitation					
Frame out	Re-define the start point of designs				
Applique position wrong	Re-define the applique points				
Color change overtime	Check the color change device				
Surface thread breakage	Threading and amending				
Down thread breakage	Check the down thread and amend work				
Input error	Re input the designs				
Data error	Designs information error and re-select the designs				
Memory writing error	Check the data and re-input it				
Thread pick up not back	Check the picker device				
No design selected	Select the designs				
Chan improved to	Adjust the mechanic parts relates to the				
Stop improperly	main shaft				
Stepping motor drive error	Check the driver				
Trimmer not back	Check the trimmer backing device				
No.1 battery voltage short	Change the battery				
No.2 battery voltage short	Change the battery				
Open file failure	Re choose the file				
New file error	Correct and re-built a design file				
Words library file error	Check the control system				
Memory application error	Check if there is enough memory				
Bar switch error	Check the bar switch				
Serial port communication error	Check or re-insert the communication				
Serial port communication error	cable				
Memory full	Delete the no-useful design				
Designs checking error	Re-correct the designs data				
Alternative Current failure	Check the AC power				
Memory error on the main board	Check the main board				
No pulse of head locking	Check the signal cable and main board				
Sub-processor error	Re-insert the chip and change the main				
·	control board				
DC failure	Check the power box				
Running without needling	Check the color change device				
Needle position error	Re-select the needle position				
Main shaft motor error	Check the cable connecting to the motor				

- 1. Common trouble shooting and processing method
- 2. Setting the DIP switch of C1 main board

#### 4 bit DIP switch:

	Sta	Definition		
1	2	3	4	Definition
ON	OFF	OFF	ON	Servo motor
OFF	OFF	OFF	ON	Electromagnet motor
ON	ON	ON	OFF	Transducer motor

#### 8 bit DIP switch:

State								Definition
1	2	3	4	5	6	7	8	Definition
				ON	OFF	OFF	OFF	Bore is efficient
BCD code of needle,				OFF	ON	OFF	OFF	Coiling is efficient
ON is efficient			OFF	OFF	ON	OFF	Cut back is efficient	
				OFF	OFF	OFF	ON	Hook back is efficient

### Example:

The BCD code of 3 needles machine: ON ON OFF OFF

The BCD code of 9 needles machine: ON OFF OFF ON

