

OWNER'S MANUAL

Touching Panel H

SC4XX/MAS4XX Pattern-sewing Machine







Dahao public number Da

Dahao service cloud

V 2024-10 Copyright © 2024 DAHAO Technology

Forewords

Thank you for using our Computerized Control System for Special Sewing Machine.

It is appreciated that you do read this manual carefully in order to operate the machine correctly and effectively. If the user operates the machine contrary to regulations herein, we will not take responsibility for any loss caused thereby to the user or any third party. Besides, you should keep this manual safely for future use. For any fault or problem of machine, please ask the professionals or the technicians authorized by our company for repair service

Safety Matters for Attention

1. Signs & Definitions of Safety Marks

This User's Manual and the Safety Marks printed on the products are for you to use this product correctly so as to be away from personal injury. The signs and definitions of Marks are as follows:

Danger	The incorrect operation due to negligence of this Mark will cause the serious personal injury or even death.	
A Caution	The incorrect operation due to negligence of this Mark will cause the personal injury and the damage to mechanism.	
	This kind of marks indicates "Matters for Attention", and the figure inside the triangle is the content for attention. (E.g. The left figure is "Watch Your Hand!")	
\bigcirc	This kind of marks means "Forbidden".	
e	This kind of marks means "Must". The figure in the circle refers to the thing that has to be done. (E.g. The left figure is "Grounding!")	

2. Safety Matters for Attention

Danger		
A	For opening the control box, please turn off the power and pull out the plug from the socket first, and then wait for at least 5 minutes before opening the control box. Touching the part with high voltage will cause personal injury.	
	Caution	
	Using Environment	
0	Try not to use this sewing machine near the sources of strong electric disturbance like high-frequency welding machine. The source of strong electric disturbance may affect the normal operation of the sewing machine.	
0	The voltage fluctuation shall be within $\pm 10\%$ of the rated voltage. Large-scaled voltage fluctuation will affect the normal operation of the sewing machine, where a voltage regulator is necessary.	
0	Working temperature: $0^{\circ}C \sim 45^{\circ}C$. The operation of the sewing machine will be affacted in environment with temperature beyond the above range.	
0	Relative Humidity: 35%~85% (No dew inside the machine). Otherwise, the operation of the sewing machine will be affected.	
0	The supply of compressed gas shall be over the consumption required by the sewing machine. The insufficient supply of compressed gas will lead to the abnormal action of the sewing machine.	
0	In case of thunder, lightning or storm, please turn off the power and pull out the plug from the socket, for the operation of sewing machine may be affected.	
	Installation	
\bigcirc	Please ask the trained technicians to install the sewing machine.	

\wedge	Don't connect the machine to power supply until the installation is finished.		
U	Otherwise the action of the sewing machine may cause personal injury once the		
	start switch is pressed by mistake.		
	When you tilt or erect the head of sewing machine, please use both of your hands		
	in that operation. And never press the sewing machine with strength.		
	If the sewing machine loses its balance, it will fall into floor thus causes the		
	personal injury or mechanical damage.		
	Grounding is a must.		
ð	If the grounding cable is not fixed, it may cause the electric-shock and		
	mis-operation of the machine.		
	All the cables shall be fixed at least 25mm away from the moving components. By		
	the way, don't excessively bend or over-tightly fix the cable with nails or clamps,		
	or it may cause the fire or electric shock.		
	Please add security cover on the machine head.		

Sewing		
\bigcirc	This sewing machine can only be used by the trained staff.	
\bigcirc	This sewing machine has no other usages but the sewing.	
0	When operating the sewing machine, do put on the protection glasses. Otherwise, the broken needle will cause personal injury if it hurts the eyes.	
	Under following circumstances, please cut off the power at once so as to avoid the personal injury caused by the mis-operation of start switch: 1.Threading on needles; 2. Replacement of needles; 3. The sewing machine is not at work or beyond supervision.	
	During working, don't touch or lean anything on the moving components, which will cause personal injury or damage the sewing machine.	
0	During working, in case of mis-operation, or abnormal noise or smell, user shall cut off the power at once, and then contact the trained technicians or the supplier of that machine for solution.	
0	For any trouble, please contact the trained technicians or the supplier of that machine.	
	Maintenance & Inspection	
\bigcirc	Only the trained technicians can perform the repair, maintenance and inspection of this sewing machine.	
0	For the repair, maintenance and inspection of electrical components, please contact the professionals at the manufacturer of control system in time.	
	 Under following circumstances, please cut off the power and pull out the plug at once so as to avoid personal injury caused by the mis-operation of start switch:. 1.Repair, adjustment and inspection ; 2. Replacement of components like curve needle, cutter and so on. 	
	Before the inspection, adjustment or repair of any gas-driven devices, user shall cut off the gas supply till the pressure indicator falls to 0.	
	When adjusting the devices with the power supply and gas supply on, users can't be too careful at following the entire Safety Matters for Attention.	
\bigcirc	In case of damages of the sewing machine caused due to unauthorized modifications, our company will not be responsible for the repair.	

1 General Information	3
1.1 General Introduction	3
1.2 Functions and Parameters	3
1.3 Matters for Safe Using	4
1.4 The Preventive Measures in Use	5
1.5 Standardization	7
1.6 Operation Method	7
2 Operation Instructions	8
2.1 Basic Operation	8
2.2 Instructions on Interface Display Status	10
2.2.1 Interface 1 (Main Interface P1: Standard Display Status)	10
2.2.2 Interface 2 (Display Status after Users Press NEXT in Main Interface P1)	11
2.2.3 Interface 3 (Catalogue Mode in Main Interface P1)	11
2.3 Instructions on Main Interface P1	
2.3.1 Pattern Stitch Number Display & Forward/ Backward Moving	14
2.3.2 Speed Adjustment	14
2.3.3 Operation of Pattern Number Hotkey	15
2.3.4 Pattern Display	16
2.3.5Sewing Fabric Thickness Setting	16
2.4 Main Interface P2	18
2.4.1 Winding Mode	
2.4.2 Up Counter	19
2.5 Load Pattern	
2.5.1 Direct Load Mode	24
2.5.2 Delete Pattern	25
2.5.3 Supported Data Format	26
2.6 Save Pattern	
2.7 Operation Setting	
2.7.1 Setting Method	29
2.7.2 Types of Parameter Setting	32
2.7.3 Parameter Encryption	
2.7.4 Recovery and Back-up of Parameters	
2.7.5 Default Parameter Recovery	
2.7.6 Parameter List	
2.8 Test Mode	64
2.8.1 LCD Test	65
2.8.2 Touching Screen Correction	
2.8.3 Input Signal Test	66
2.8.4 Main Shaft Speed Test	67
2.8.5 Output Signal Test	68
2.8.6 Continuous Running	69

catalogue

2.8.7 XY Motor Origin Test	69
2.8.8 Main Motor Installation Angle Adjustment	
2.8.9 Network Setting	
2.8.10 Intermediate Presser Test	71
2.9 Function Setting	71
2.9.1 Data Transfer Mode	73
2.9.2 Formatting Mode	75
2.9.3 Pattern Connection Mode	
2.9.4 Version Inquiry Mode	
2.9.5 Display Setting Mode	
2.9.6 Back-up Recovery Mode	
2.9.7 Default Parameter Mode	84
2.9.8 Pattern Hotkey Management Mode	
2.9.9 Password Mode	
2.9.10 Parameter Encryption Mode	
2.9.11 Motor Configuration Mode	
2.9.12 Alarm Record Mode	
2.9.13 Running Records Mode	
2.9.14 Date and Time Setting	
2.9.15 Update Mode	
2.9.16 Player	
2.9.17 Pattern Transformation in Batch	
2.9.18 Hotkey Setting	
2.10 Letter Sewing Edition	
2.10.1 Parameters of Letter Sewing	
2.10.2 Adjustment of Letter Sewing Pattern	
3 Appendix 1	
3.1 Warning Information List	
3.2 Hint Information List	
4. Appendix 2	121
4 Unstallation Size of Control Box	121
4.2 External Cable Connection of Control Box	
4.3 Installation Size of Control Panel	
4.4 Diagram and Cable Connection	124 125
4.5 Cable Connection	123

1 General Information

1.1 General Introduction

Mitsubishi series computerized control system for industrial sewing machine: 1) Adoption of the world leading AC servo control technology on main shaft motor provides large torque, high efficiency, stable speed and low noise; 2) Diversified design of control panel can meet the special requirements of users on attachment; 3) System adopts German style structure, which greatly facilitates the installation and maintenance.

1.2 Functions and Parameters

NO.	Type of Controller	Computerized Control System for Mitsubishi Series
		Pattern-sewing Machine
1	Sewing Area	X(Lateral) Direction Y(Longitudinal)
		Direction
		Normal format: 300mm*200mm
		Large format :450mm*300mm, 600mm*400mm
		Maximum width range: 1000mm*400mm or
		1000mm*600mm
2	Max. Sewing Speed	2500rpm (with stitch interval below 3mm)
3	Stitch Length	0.1~12.7mm (Min Resolution: 0.10mm)
4	Feed Motion of Frame	Intermittent feeding (2-shaft driven by pulse motor)
5	Needle Bar Stroke	41.2mm
6	Needles	DP×5、DP×17
7	Lift of Frame	Standard 18mm to Max. 22mm (Pneumatic type: Max.
		25mm)
8	Intermediate Presser	Stepping Driving (Range: 0~8mm)
9	Lift of Intermediate Presser	20mm
10	Rotating Shuttle	Double-capacity semi-rotary hook
11	Memory of Pattern Data	Memory/U Disk
12	Pause function	Stop the machine during the sewing
13	Scaling Up/Down Function	Allows a pattern to be scaled up/down on the X axis and
		Y axis independently when user sews a pattern. Ratio: 1%
		to 400% (0.1% per step)
14	Scaling Up/Down Method	Increasing / decreasing stitch length & Increasing /
		decreasing stitch number
15	Sewing Speed Limitation	$200 \sim 2500$ rpm (100rpm per step)
16	Pattern Selection Function	Pattern No. selection method

17	Up counter	No Count/Count of Pattern /Count of Cycle ($0 \sim 99999$)
18	Down Counter	No Count/Count of Pattern /Count of Cycle ($0 \sim$ 99999)
19	Sewing Machine Motor	Servo Motor
20	Stop Needle at Highest	After the completion of sewing, the needle can return to
	Position Function	its highest position.
21	Rated Power	600W
22	Operation Temperature	0°C~45°C
	Range	
23	Operation Humidity Range	35%~85% (No Dew Condensation)
24	Line Voltage	AC 220V \pm 10%; 50/60Hz

* Effective standard for product: QCYXDK0004—2022 "Computerized Control System for Industrial Sewing Machine".

1.3 Matters for Safe Using

- Installation
 - Control Box
 - Please install the control box according to the instructions
 - Attachments
 - ♦ If other attachments are needed, please turn off the power and pull out the power plug.
 - Power Cable
 - Do not press power cables forcefully or twist power cable excessively.
 - The power cables shall be fixed at least 25mm away from the rotating component.
 - Before powering the control box, user shall carefully check the voltage of power supply and the position of power input on the control box. If the power transformer is used, user should also check it before powering the machine. The power switch of the sewing machine must be set as "Off".
 - Grounding
 - In order to avoid the noise disturbance and electric shock caused by electric leakage, user should ground the grounding cable.
 - Attachments
 - If any electric attachments are needed, please connect them to proper positions.
 - Disassemble
 - When removing the control box, user must turn off the power and pull out the power plug.
 - When pulling out the power plug, user should hold the plug and remove it, instead of pulling the power cable only.
 - The control box contains the dangerous high voltage power. For opening the control box, please turn off the power and pull out the plug from socket first, and then wait for at least 5 minutes before opening the control box.

• Maintenance, Inspection and Repair

- Only trained technicians can perform the repair and maintenance of this machine.
- When replacing the needles and shuttles, user should turn off the power.
- Please use the spare parts from the authorized manufacturers.

• Others

- Do not touch the rotating or moving parts of the machine, especially the needle and belt, when the machine is working. User should also keep his/her hair away from those moving parts, so as to avoid the danger.
- Do not drop the control device on the floor, nor insert any stuff into the slots on the control box.
- Do not run the machine without the cover shells.
- If this control device is damaged or unable to work normally, please ask the technicians to adjust or repair it. Do not run the machine when the problem is not solved.
- Please do not change or modify this control device without authorization.

• Abandonment

■ Dispose it as common industrial trash.

• Warning and Danger

The mistake operation may cause danger. For the serious level, please refer to the figure below:



■ The meanings of the marks are shown below:



1.4 The Preventive Measures in Use



1.	When you press the switch [ON], please	2. When you leave the machine, please turn it
	do not step the pedal.	off.





1.5 Standardization

The function keys use figures commonly recognized within the industry. Figures, as international language, are recognizable to users in every country.



1.6 Operation Method

The Mitsubishi type touching panel adopts the advanced touching operation technology, whose user-friendly interface and easy control bring the revolutionary changes to the daily usage of the users. For performing relevant operations, user can use his fingers or other objects to touch the screen.

Don't use sharp objects to touch the screen so as to avoid causing permanent damage to the touch panel.

2 Operation Instructions

2.1 Basic Operation

1. Turn on Power Switch

After user turns on the power, the main interface P1 will be displayed.

[Note]: If the memory of system contains no pattern when user turns on the power, the system will display "Cannot Find Pattern in Memory". At this moment, user needs to press



📕 to close the message and shift to the main interface.

2. Pattern for Sewing

Display the selected pattern in the current interface. If user wants to change the pattern, he should refer to section [2.5 Load Pattern].

3、Start Sewing

(1) Before the actual sewing, user need confirm the settings of the sewing conditions again, especially the setting of the speed (Range: $0 \sim 9$).

② The speed of sewing machine is determined by the speed value and stitch interval. The speed value will determine the max speed of sewing machine, while the stitch interval will limit the speed of sewing machine.

[Note]: Do not change the speed value during the sewing, except the condition of pause, otherwise it may cause influence on the thread-withdrawing condition.

③ Put the sewing material to the appointed position, step the frame switch (black one) to lower the frame and step the running switch (grey one) to start the actual sewing. Once the sewing starts, user will not need to continue stepping on the running switch. When the sewing machine finishes the work, the frame will go up automatically.



4, Pause

If user wants to stop the machine during the sewing, please press the emergency stop button on the head (Please refer to the following figure for details). After user presses that key, the sewing machine will stop at the upper position (default setting) and enter the pause status. For releasing the pause status, please press that emergency stop button again. Then user can continue to perform the following operation:

- ① Step on the running switch to continue the sewing;
- 2 Press Forward Moving/ Backward Moving to change the sewing start position;
- ③ Step on the frame switch to lift frame;
- (4) Change the speed value of sewing machine; and/or
- (5) Move the intermediate presser.



5. Method for Mending the Sewing

User can use the pause function to perform the mending sewing. If user presses emergency stop key in case of thread-breakage, the needle will stop at the upper position. Press backward moving key to move the frame to the position that is two or three stitches before the thread-breakage point, finish threading and step the running switch to continue the sewing.

Caution When wearing a needle and theread ,absoulutely not trample operation switch with therir feet,That can make the machine running,it is dangerous.

2.2 Instructions on Interface Display Status

can use



2.2.1 Interface 1 (Main Interface P1: Standard Display Status)

[Note] The comparison among Product Counter, Power-on Counter and Accumulation Counter:

Product Counter is to record the accumulated sewing number. But user

to clear the value and restart counting;

- Power-on Counter is to count number from 0 after the machine is turned on;
- Accumulation Counter is to record the accumulated sewing number, which can't be cleared in the current interface.



2.2.2 Interface 2 (Display Status after Users Press NEXT in Main Interface P1)

2.2.3 Interface 3 (Catalogue Mode in Main Interface P1)



No.	Function	Content
А	MENU Function Interface Title	The displayed content is the interface title of the
		MENU.
		When user press the button, the displayed content
		in the title bar will become the functional
		description of the corresponding key.
В	Load Pattern (Load Pattern Data)	Load a pattern from memory or U disk for sewing.
С	Operation Setting	Set the operation parameters
D	Test Mode	Test the external devices, LCD screen and so on.
Е	Function Setting	Perform the function operations
	Letter Sewing Edition	Perform letter sewing edition.
F		[Note]: User can close letter sewing edition
		function via Parameter "Special" -> "Enable

		Letter Sewing". The figure will disappear when
		it is deactivated.
G	Owit	Quit the current interface, and return to the upper
	Quit	interface.
Н	Data Transformation (File	Transform the data
	Transformation Mode)	Transform the data
т	Modify Pattern (Modification	Modify the pattern
1	Mode)	
G	Edit Pattern (Pattern Design	Edit the pottorn
	Mode)	Eur me pattern
K	Save Pattern (Save Pattern Data)	Save the pattern to memory or U disk

2.3 Instructions on Main Interface P1



No.	Functions	Content	
А	Pattern Name	Display the name of current pattern	
В	Pattern Number	Display the number of the current pattern	
С	Dattarn Shana	Display the shape of the current pattern	
	Pattern Snape	[Note]: 🔳 is the position of origin.	
D	Test wire cutting	Test wire cutting ability	
	ability		
F	Speed adjustment	A divise and display the aureant pattern solving speed	
E	display area	Aujust and display the current pattern sewing speed	
F	clock	Display time	
G	Product Counter and	Product Counter: to record the accumulated sewing number, but	
	Robin Thread		

	Counter	cir	
		user can use to clear the value and restart counting;	
		Robbin Thread Counter:	
H	Shortcut key Settings	Users can set 4 commonly used function keys by themselves	
T	The main screen P2	After pressing the button, the screen displays the main interface	
	is displayed	P2	
T	Medium pressure	Adjust the position of the press foot	
	foot setting		
ĸ	Move the Settings	Press this key to enter the fast-moving Settings screen	
	key quickly	Tress tins key to enter the fast-moving Settings screen.	
T	Figure display key	Show current selection	
L	rigure display key	The shape and details of the pattern.	
м	Return to the starting	Back seam point setting	
IVI	point key	Back seam point seamg	
N	Sewing material	A diust material thickness	
1	thickness	Aujust material unexitess	
0	Back to origin	Back to mechanical origin	
		After the MENU key is opened, multiple categories of	
Р	MENU key	directories are displayed (refer to section [2.2.2 Example	
		Screen 2]).	
		Displays the most recently used pattern numbers. A maximum	
	Figure number shortcut key	of 40 can be stored.	
		Select a pattern number key and press it to change the current	
Q		sewing data.	
		[Note] In the state of combination stitch pattern, the display	
		content is the serial number of combination stitch pattern/the	
		number of combination stitch pattern	
	Figure stitch count		
R	display and advance	Sewing data needle number information display and test stitch	
	/ Move back key	operation.	

2.3.1 Pattern Stitch Number Display & Forward/ Backward Moving

	No.	Descriptions
FEED A 00000 B 00046 C 00041 D E	А	Display the current frame position and sewing data type. (Sewing "SEW", Feed "FEED", Sub-origin "2HP", Upper Stop "USTP", Down Stop "DSTP", Thread-trimming "TRIM", Feed Speed "FEDS", Restart "ASRT", Board Heavy "HEVI", Fabric Thick "ATUM", Jump Sewing "BAT", Function 1 "FUN1"~Function 7 "FUN7", Reverse Presser Feet "REPF", End "END")
	В	Display the stitch number at current position
	С	Display the total stitch number of the current patterr (Including Feed, Thread-trimming, End, Code, etc.)
	D	Display the total sewing stitch number of current patterr (Excluding Feed, Thread-trimming, End, Code, etc.)
	Е	 Test Pattern (Forward / Backward).: 1. After it returns to origin, X-Y (frame) will move forward on the pattern when users press the "Upper". Release the key to stop moving. Holding the "Down", the X-Y (frame) will move backward. Release the key to stop moving. 2. If the frame is at down position and the pattern is right, user can step the pedal to start sewing.

Functions:

2.3.2 Speed Adjustment



No.	Description
А	Increase the speed
В	Current sewing speed (0~9)
С	Reduce the speed

2.3.3 Operation of Pattern Number Hotkey



Functions:

No.	Description				
А	Patten number hotkey (Current pattern: Displayed in white figure on blue				
	background), select other number to shift the pattern.				
В	Pattern number display and inquiry key				

Example:

As shown above, the shortcut key list in this example contains 3 pattern numbers, the current sewing pattern number is 023, if you select pattern 01, the current sewing pattern will be switched to pattern 01, as shown below:



2.3.4 Pattern Display



Functions:

No.	Description	
А	Pattern Name	
В	Pattern Number	
C	Size of Pattern in X Direction	
D	Size of Pattern in Y Direction	
Б	Display Total Stitch Number of Pattern (Including Feed, Trimming,	
E	End, Code and so on).	
F	Origin Correction in X Direction	
G	Origin Correction in Y Direction	
Н	Quit current interface and return to the previous interface.	
I	Pattern Display.	

2.3.5Sewing Fabric Thickness Setting

The lowest position of the intermediate presser is changeable. If the lowest position of intermediate presser in the default setting is lower than the thickness of the used fabric, user can use this function to change it.

[Note]: If users enter this interface when the intermediate presser is at down position, the system will hint "Lift Intermediate Presser".

[Note]: After entering the interface for setting the fabric thickness: only when the intermediate presser goes down, can user set this parameter.

[Note]: The range of this parameter is 0.0~8.0mm.

[Note]: SC442 medium pressure foot is generally pneumatic control, not motor control, can not adjust the height, set seam material thickness



No. Description			
Α	Current Height of Intermediate Presser		
В	Target Height of Intermediate Presser		
C	Increase Height		
C	The intermediate presser goes up by 0.2mm at each pressing		
D	Decrease Height		
	The intermediate presser goes down by 0.2mm at each pressing		
Е	Quit the current interface and return to the previous interface.		
	Move needle vertically.		
F	. Needle down		
	. Needle up		
	Press it to move the intermediate presser in the arrow direction		
G	Li. Intermediate presser up		
	Let Intermediate presser down		
Н	Save and Quit		

2.4 Main Interface P2



No.	Functions	Content
А	Up Counter	Enter interface for setting up counter
В	Down Counter	Enter interface for setting down counter
С	Up Counter Value	Display the current value/ set value of up counter
D	Down Counter Value	Display the current value/ set value of down counter
E	Return	Press it to return to Main Interface P1
F	Origin Correction and Jump Stitches Setting	 : valid setting of origin : invalid setting of origin : set the number of jump stitches
G	MENU Open the catalogue menu	
Н	Winding	Check the winding speed and time
I	Needle Lift	Move needle vertically. Use the second seco
J	Needle move, adjust the frame speed setting	The direction of needle movement and the speed of frame movement can be set

2.4.1 Winding Mode

For winding, user has to activate this interface (Press in main interface P2 and the intermediate presser will go down). Step the frame switch to lower the frame and then step the running switch to run the sewing machine at the set speed. But the X & Y axis will not move. When user releases the running switch, the sewing machine will stop at the upper stop position. [Note]: The winding action is determined by the parameter "Winding" set in the Operation Setting Mode. (Please refer to [2.7.6 Parameter List])

3	Wind Mode			2023/11/21(Tue) 09:40
	А — В —	└Wind Speed W → Set-Speed 1300 → Cur-Speed 0	RPM RPM	
	С ——	→ Stop winding when s	tepping on pedal again(RTS	5)
	D E	Wind Time WT → Set-Time 30 → Remain-Time 0	S S	
>	<			

Functions:

No.	Description	
А	Set Speed of Winding	
	[Note]: Determined by Parameter "Winding" -> "Winding Speed Setting"	
В	Actual Speed of Winding	
C	Winding Operation Method	
C	[Note]: Determined by Parameter "Winding" -> "Winding Stop Method".	
D	Set Time of Timing Winding	
D	[Note]: Determined by Parameter "Winding" -> "Timing Stop of Winding"	
E	If the operation method of winding is the timing winding, this place will display	
	the time leftover.	

2.4.2 Up Counter

In main interface P2, press

Up Counter

to Enter the interface for setting the up counter.

[Note]: The counting method of the up/down counter is determined by the parameter "Counter" set in Operation Setting Mode (Please refer to [2.7.6 Parameter List]).

📮 Up Counter set	2023/11/	21(Tue) 09:44
A → SET 999999	1 2 3 4 5 6 7 8 9	
$\begin{array}{c} C \\ \downarrow \\ B \\ \hline \end{array} \begin{array}{c} \bullet \\ B \\ D \\ E \end{array} \begin{array}{c} \bullet \\ B \\ B \\ D \\ E \end{array}$	$ \begin{array}{c c} 0 & \uparrow & \downarrow \\ \hline Ctr & \uparrow \\ \hline F & G \end{array} $	⊢ ↓

Functions:

No.	Content	
٨	Shift the input between the set value and the current value (The button in	
A	shadow is the selected one).	
р	Up Counter Switch (This button will be effective when it is in blue	
В	background).	
С	Quit counter setting mode and return to previous interface.	
D	Clear current value.	
Б	Display the set value and current value (User can input the value in the	
E	dotted frame)	
F	Clear the value inputted currently	
G	Number keyboard, used to input set value and current value	
Н	Confirm the setting	

 H
 Confirm the setting

 [Note]: The setting of the down counter is the same as that of the up counter, and the only

difference is the icon indicating the effective status of the down counter (\checkmark).

2.5 Load Pattern



No.	Functions	Content
		Display the list of the saved pattern (Both number and
		name will be displayed).
		[Note 1]: If user selects pattern in VDT format,
А	Pattern List	system will ask user to transform the pattern format.
		[Note 2]: If the stitch number of the selected pattern
		is over range or the data is damaged, the system will
		hint that the pattern is unable to be selected.
B	Fyit/return	Exit the current screen and return to the previous
D		screen.
C	Read Keys Directly Specify pattern number to enter direct read mode	
П	Sort Key	Redisplay the list of patterns sorted by modification
		time or number size
F	Delete Key	Removes the specified pattern
	Delete Key	[Note]: The current stitch pattern cannot be deleted.
F	Save patterns (write graphic data)	Save the current pattern to memory or USB flash drive.
G	Duplication	
		Load pattern from memory or U disk
		. Activate the Memory Load Mode: At this
Н	Select Memory/USB Key	moment, user cannot load pattern from U disk.
		E Deactivate the Memory Load Mode: At this
		moment, user can load pattern from U disk.

		Retivate the U Disk Load Mode: At this moment,
		user can not load pattern from memory.
		💥 : Deactivate the U Disk Load Mode: At this
		moment, user can load pattern from memory.
		➡: Shift between U Disk and Memory
Ι	Enter Key	Determine the action.
J	Page Number Display	Display content is the current page number/total page number
K	Page Turn Button	Support front and back page search interface
L	Pattern Display Key	Press the function key with the main interface P1

Operation Instructions:

1、 Open the Interface to Load Pattern

In main interface P1 (or P2), press







[Note]: If the moving frame is not at the origin, the system will be unable to load pattern. Therefore, please perform the operation for returning to origin first.

2、 Select the Object for Loading (Memory/ U Disk)

📮 Read patter	rn (U disk current path:/m	nt/hgfs/share/)	2023/11/21(lue) 13:44
				001/001
□ NO_DATA	□ NO_DATA	D NO_DATA	□ NO_DATA	
	3			ł

upper left of the screen). You can press to shift to U Disk Load Mode, which is shown at below:

Read pattern (U disk current path:/m	nt/hgfs/share/) 2023/11/21(Tue) 13:45
NO_DATA	NO_DATA
NO_DATA	NO_DATA
NO_DATA	NO_DATA 001/001
NO_DATA	NO_DATA
NO_DATA	NO_DATA
NO_DATA	

[Note]: If user performs the above operation without inserting the U disk, the system will display "U Disk Is Pulled Out".

[Note]: If user inserts the U disk in the current interface, the system will need 5 seconds to

identify the U disk. After the identification, user can press to enter the U Disk Load Mode. As long as the U disk is not pulled out, the system will not need to identify the U disk again when user enters the U Disk Load Mode again.

3、Select and Confirm Pattern Number

Select the pattern number for sewing and then press \leftarrow . After the selection, the system will return to the main interface directly.

[Note]: If the pattern with the same number exists in the memory when user loads pattern from U disk, the system will display "Replace Pattern in Memory?". At this moment, user need follow the given instructions.

4. Other Operations

If there are many patterns, user can use for page turning and press to view the pattern list more directly. If user knows the pattern number, he can use $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ to load the pattern directly.

2.5.1 Direct Load Mode

1、 Select Direct Load Mode

Press in pattern loading interface to enter the Direct Load Mode.

[Note]: To load pattern by directly inputting the pattern number is limited to the memory load mode.

📮 🛛 Read pattern (U disk current path:/r	nnt/hgfs/share/)	2023/11/21(Tue) 13:44
● 001@DATA1	002@DATA1	003@DATA1	□ NO_DATA	
□ NO_DATA	□ NO_DATA	□ NO_DATA	□ NO_DATA	001/001
□ NO_DATA	□ NO_DATA	□ NO_DATA	□ NO_DATA	
	F C	🔡 🞯 🚺		ł

2. Input the First Number

(E.g. Load pattern No.012)

- ① Input "1".
- ② The patterns saved in the memory whose first number is 1 will be displayed on the bottom keyboard as below:



- 3、Input the Second Number
 - ① Then input "2".

⁽²⁾ The patterns saved in the memory whose number begin with "12" will be displayed on the keyboard at the bottom of the interface.

③ Press circ to clear the inputted number and re-input them.

(4) At this moment, press to activate the pattern and then the system



5 Shift to Chinese input method, and user can use Chinese to look up patterns.

📮 Dire	ect read	patterr				202	3/11/21(Tue) 13:55
		1	lame:	花样			
		<<				>>>	Clear
-	q	w	e	r t	y u	i o p	
#	а	s	d	f	g h	j k l	%
Caps	CN	z	x	c	v b	n m E	Backspace
		-					-
				-	-	-	-
X			T	-	_		-

2.5.2 Delete Pattern

User can press to delete a pattern. At this moment, the system will display "Delete Pattern from Memory?" (If the system is at U Disk Load Mode, the system will display "Delete the Selected File?".). User need follow the given instructions, but the pattern being sewn cannot be deleted.



2.5.3 Supported Data Format

At present, the supported formats by the system are: NSP format, B format, BA format, VDT format, EMB format, DST format, DSB format, DSZ format, PLT format and DXF format.

2.6 Save Pattern

To save the data of a pattern, select the Save key executive command, You can enter the save mode.



				A	В						С
1	Save as	mode							202	3/11/21	(Tue) 14:12
D —	• • •	Name: lumber	DATA1 :005	•							* *
										>>	Clear
	1	2	3	4	5	6		7	8	9	0
F	•	Q	w	E R	Т	γ	U	I	0	Р]
L	#	Α	S	D	F	G	н	J	к	L	%
	Caps	En	Z	x	с	V	В	N	M	Backs	pace
			🗆 keep	the sam	ie numb	er patter	'n	X	1		ł
	Î F	Ť G		 H					Î		Ĵ

Function:

No.	Functions	Content		
Α	Input Pattern Name	Display the pattern name		
В	Input Pattern Number	Display the pattern number		
C, D,	Same as Pattern Load	Defense the descriptions in Dettern Load Interface		
F, I	Interface	Refer to the descriptions in Pattern Load Interface		
Е	Keyboard	Input name or number		
Н	Keep Pattern with Same Number	 keep the same number pattern : select to keep the pattern with the same number keep the same number pattern : not to keep the pattern with the same number 		
G	Clear All Characters	Press it to clear all the inputted characters		

Operation Instructions:

1. Enter Pattern Load Interface

In main interface P1 (or P2), press to activate the catalogue mode, and then



[Note]: If the moving frame is not at the origin, the system will be unable to save pattern. Therefore, please perform the operation for returning to origin first.

Name DATA1 No. 001 FEED 0 000046 1500 00041 1500 0 <th>MainWindow P1</th> <th>2023/11/21(Tue)</th> <th>17 42</th>	MainWindow P1	2023/11/21(Tue)	17 42
FEED 000046 000046 000046 00004 0004 0004 </td <td>No. 001</td> <td>TEST</td> <td>Pdt Counter</td>	No. 001	TEST	Pdt Counter
00000 00046 00041 PowerOn Counter Menu mode 0 Program Image: Construction Function Image: Construction	FEED	■ 1500	0 cir
Image: Menu mode Image: Menu mode	00000 00046 00041		PowerOn Counter-
Program 💡 🛐 Function 🗡 BC 🛛 🗙 🧀 🛹	E Menu mode		
	Program 😨 🚺 Function ABC		

.

2、Set Name and Number

The default setting in this interface is the Memory Save Mode (you can see \blacksquare	at the
upper left of the screen). You can press to shift to U Disk Save Mode.	
Press NEW or 603] _{to} input
the name or number.	

Pressing \overrightarrow{ABQ} is to delete the first character at the left of the cursor, while pressing \overrightarrow{CLR} is to clear all the characters.

If user need shift between capital and small letters, please press

[Note]: User can decide the number for a pattern before saving; the filename of a pattern consists of "Pattern Name" + "@Pattern Number" + "Format Type.nsp".



3、Save Pattern

After the input, press \checkmark to return to the main interface directly

[Note]: If the memory contains the pattern with the number same to that of the inputted one, the system will display "Replace Pattern in Memory?" Press X to cancel

the replacement; press *d* to perform the replacement.

2.7 Operation Setting

It is to set each parameter. For the description of each parameter, please refer to [2.7.6 Parameter List].

2.7.1 Setting Method

1. Enter Operation Setting:



MainWindow P1		
Name DATA1	8	
No. 001	TEST	Pdt Counter
FEED	1500	0 Cir
00000 CD 00046 ()	↓ LOW	PowerOn Counter-
A Menu mode		0
🚊 🗄 🏄 7		
Program & II Function ABC		

2. Interfaces at Setting Mode

After entering the operation setting interface, user can use to turn the pages for selecting parameters.

Program mode <mode selection=""></mode>	2023/11/21(Tue) 14:25	3	Program mode <mode selection=""></mode>	2023/11/21(Tue) 14:25
	01/03			02/03
Wiper	Area Limit		Halt	Bobbin Winding
Slow Start	Thread Breaking Sensor		Counter	Feed Method
Clamp	Home Position		Middle Presser	Speed
Modified			Modified	

3、Example :

(1) Mode Selection

Select the parameter for setting to activate the "Internal Parameter Setting Interface". Here, we press "Frame"

Program mode <mode selection=""></mode>	2023/11/21(Tue) 14:25				
	01/03				
Wiper	Area Limit				
Slow Start	Thread Breaking Sensor				
Clamp	Home Position				
Modified					

② Internal Parameter Setting Interface

Select the parameter for setting to activate the "interface for changing the set value". (We press "POP" here.)

📮 Proj	gram mode <set selection=""> 2023/11/.</set>	21(Tue) 14:27						
Clamp		01/03						
SYN1	Whether Sew when presser is up							
TFS	Presser status at ending of sew	SUP						
ATU	Presser up after work automatic finish	PUP						
РОР	Pedal operation mode	BUD						
LRD	Down action of left-right seperate clamp							
LRU	Up action of left-right seperate clamp	LRT						
X	Custom							

③ Change Set Value of Parameter

Press parameter to change the set value (here, we press "ILR"). Then,

press to confirm it.

[Note]: Pressing is to display the descriptions of that parameter and its value.

📮 Progra	m mode <value modification=""></value>	2023/11/21(Tue) 14:29
POP	Pedal operation mode	01/02
BUD	Control large clamp up/down	
IUD	Interval control large clamp and auxiliary clamp lift/drop	
ILR	Interval control left-right clamp	
X		

④ Check the Changed Parameter Set Value

Return to the "Internal Parameter Setting Interface", where user can check the set value after change. Press

X to quit.

Prog	ram mode <set selection=""> 2023/1</set>	1/21(Tue) 14:30					
lamp		01/03					
SYN1	Whether Sew when presser is up	OFF					
TFS	Presser status at ending of sew	SUP					
ATU	Presser up after work automatic finish						
POP	Pedal operation mode						
LRD	Down action of left-right seperate clamp						
LRU	Up action of left-right seperate clamp	LRT					
X	Custom	•					

(5) Return to Mode Selection Interface

Return to "Mode Selection" interface. Because the set value is changed, the button "Modified" is displayed.

For returning to main interface

P1 (or P2), please press \checkmark .

For checking the modified content, please press the "Modified" key.

(6) Check the Content of the Modified Parameter

a) Enter Password Input Mode

Pressing "Modified" in the "Mode Selection" interface will activate the Password Input Mode, where user can enter the Modified Parameter Setting Mode with the correct password. (For setting the password, please refer to [2.7.3 Parameter Encryption].)

Program mode <mode selection=""></mode>	2023/11/21(Tue) 14:25
	01/03
Wiper	Area Limit
Slow Start	Thread Breaking Sensor
Clamp	Home Position
Modified	

_											
3											ue) 15:03
	Password:										
	1	2	3		4 5		6	7	8	9	0
	-	Q	w	E	R	т	r L	I	0	Р	_
	#	A	S	D	F	G	Н	J	К	L	%
		(Z	x	с	v	В	N	м)	
>	<				CL	RA	BC				ł

b) Enter Modified Parameter Setting Mode

In this interface, the modified content of the parameter will be displayed. User can modify it again in this interface (Here, press "POP").

If user wants to restore the modified parameters, he should press the button with the name of that parameter (Here, he can press "Pedal Operation Method", "Intermediate Presser Down Synchronization") and then click "Restore". After that user only needs to follow the instruction of the system.

If user wants to restore the entire setting to their default values, he can press "Restore All". After that user only needs to follow the instruction of the system.

2.7.2 Types of Parameter Setting

101
701

la Progr	am modes value modification 2	023/11/21(1ue) 15:06		Stati mode - value modification-			
POP	Pedal operation mode	01/02	SEW	SEW Sew speed setting(section)			
BUD	Control large clamp up/down			4 Range: 0 - 9	1	2	3
	Interval control large clamp and auxiliary clamp lift/drop		Sew sp	eed setting(section)	4	5	6
IOD					7	8	9
ILR	Interval control left-right clamp				0	1	
					clr		
X			×				ł
	1 .' T			I (T			
	election Type			Input Typ	e		

There are two ways for setting parameter: selection type and input type, as shown below:

2.7.3 Parameter Encryption

In the parameter mode, each operation entrance can be attached a password, so as to avoid the mistake operation.
1 Senter Parameter Encryption Interface:

In main interface P1 (or P2),

press

to activate the catalogue

mode, and then press Function to Enter the interface for setting functions.

In the function setting interface,



MENU





2. Input Password:

Before entering the Parameter Encryption Mode, user need input password. (The original password is the manufacturer ID).

In case of wrong input,

pressing \overrightarrow{ABQ} will delete the first figure at the left of the cursor, while pressing \overrightarrow{CLR} will delete the entire

password inputted.

Input the password and



📮 Pro	ogram mo	de <pass\< th=""><th>word></th><th></th><th></th><th></th><th></th><th>2023</th><th>/11/21(T</th><th>ue) 15:16</th></pass\<>	word>					2023	/11/21(T	ue) 15:16
		Pass	word:							
1	2	3	4	5	;	6	7	8	9	0
-	Q	w	E	R	T N	r U	Ι	0	Р	-
#	A	S	D	F	G	Н	J	К	L	%
	(Z	x	с	v	В	N	м)	
X					RA	BC)			ł

2、 Select Parameter for Encryption:

As shown in the picture, user can select one or many parameters for encryption. (Here, we select "Pause".)

Halt : Selected

□ Halt : Unselected

After selecting the parameter for

encryption, user can press

From then on, user has to input password when setting the parameter that was encrypted.

For changing password, please



3、Change Password

In the interface of setting new password,



order and input the current password, new password, new password confirmation respectively. At last



[Note]: The original password is the manufacturer ID. After setting the password, the current password is the password set last time.

2.7.4 Recovery and Back-up of Parameters

User can save the changed parameter into U disk for the recovery operation in future.

Ę	Parameter encryp	tion setting		2023/11/21(Tue) 15:17
	🛪 Encryption Item —			
	□ Wiper	Slow Start	🗆 Clamp	🗆 Area Limit
	Thread Break Sensor	Home Position	🗷 Halt	Counter
	□ Intermediate Presser	□ Bobbin Winding	Feed Method	🗆 Speed
	□ Thread Trim/ Release	LCD Screen	🗆 Other	Maintenance
	×		<u>11213</u>	

📮 N	ew passwo	ord setting	5					2023	/11/21(T	ue) 15:21
Ć	ur-Passwo Confii	ord:		N	ew-Passw	vord:				>
1	2	3	4	5	;	5	7	8	9	0
-	Q	w	E	R	Т	r U	I	0	Р	-
#	A	S	D	F	G	н	J	К	L	%
	(Z	x	с	v	В	N	М)	
X					CLR					ł

1 Senter Interface of Parameter Recovery and Back-up:

In main interface P1 (or P2),

press

to activate the catalogue

mode, and then press Function to Enter the interface for setting functions.

In the function setting interface,



MENU



2. Back up Parameters

In the interface of parameter recovery and back-up, the default setting is to back-up the parameters.

After inserting the U disk,

press • After the operation, the system will create a catalogue named "bakParam" in U disk automatically. The file "backup.param" within that catalogue is the parameter back-up file.

[Note]: the file with the same name will be replaced with new data. The original data will be lost.

In parameter recovery operation,

to shift to

user can press recovery mode.

USER Backup user parameter

3 N Parameter Recovery

At recovery mode, press to recover the parameters. After the operation, the system will return to the previous level.	l	USER Backup user parameter	
	×	Backup	

2.7.5 Default Parameter Recovery

User can restore the parameters to their default values. Additionally, user can also save the set parameters for the usage in future.

1 **Senter Default Parameter Recovery:**

In main interface P1 (or P2),

press to activate the catalogue

mode, and then press Function to enter the interface for setting functions.

In Function Setting Interface,

press and then input the password (the original password is the manufacturer ID). With the correct password, user can enter Default Parameter Mode



Function mo	de		202	23/11/21(Tue) 15:15
COPY	FORMAT	600&601	Ver.	
	Program		123	
-		53	9	
	Convert		*	
				Icon

2. Use the Default Parameter

Click the corresponding default parameter and then press "System Default" to reload that value

After the reloading, the system will return to the upper interface automatically.

[Note] Some important parameter, like "Spindle Motor Stop Angle" cannot be restored in this operation.

📮 Default parameter(0) 2023/11/21(Tue) 15:42 NO_PARAM NO_PARAM 2010 2516 NO_PARAM NO_PARAM NO_PARAM NO_PARAM 3020 NO_PARAM NO_PARAM NO_PARAM NO_PARAM NO_PARAM NO_PARAM User

3, Save Customized Parameter

Press "Custom" to enter the interface for saving parameters, where user can save the parameter set value.

Click	
-------	--

自定参数01(无)

自定参数10(无) to confirm the

position for saving, and then click to save it.

After the saving, the system will return to the upper interface automatically

[Note] The parameter for repair and maintenance cannot be saved.

[Note] The motor installation angle and motor parameters can be saved.

and the second second			
📮 User parameter		2023/11/21(1	īue) 15:44
ParamCollection(User)	User parameter06(None)	User parameter11(None)	
WET(User)	User parameter07(None)	User parameter12(None)	Name
User parameter03(None)	User parameter08(None)	User parameter13(None)	
User parameter04(None)	User parameter09(None)	User parameter14(None)	Clear
User parameter05(None)	User parameter10(None)	User parameter15(None)	
X	Default User)	R
User parameter		2023/11/21(1	īue) 15:44
User parameter		2023/11/21(1	īue) 15:44
User parameter ParamCollection(User)	User parameter06(None)	2023/11/21(User parameter11(None)	īue) 15:44
User parameter ParamCollection(User) WET(User)	User parameter06(None) User parameter07(None)	2023/11/21(User parameter11(None) User parameter12(None)	fue) 15:44
User parameter ParamCollection(User) WET(User) User parameter03(None)	User parameter06(None) User parameter07(None) User parameter08(None)	2023/11/21(User parameter11(None) User parameter12(None) User parameter13(None)	Tue) 15:44
User parameter ParamCollection(User) WET(User) User parameter03(None) User parameter04(None)	User parameter06(None) User parameter07(None) User parameter08(None) User parameter09(None)	2023/11/21(User parameter11(None) User parameter12(None) User parameter13(None) User parameter14(None)	Tue) 15:44 Name Clear
User parameter ParamCollection(User) WET(User) User parameter03(None) User parameter04(None) User parameter05(None)	User parameter06(None) User parameter07(None) User parameter08(None) User parameter09(None) User parameter10(None)	2023/11/21(User parameter11(None) User parameter12(None) User parameter13(None) User parameter14(None) User parameter15(None)	Tue) 15:44 Name Clear
User parameter ParamCollection(User) WET(User) User parameter03(None) User parameter04(None) User parameter05(None)	User parameter06(None) User parameter07(None) User parameter08(None) User parameter09(None) User parameter10(None)	2023/11/21(User parameter11(None) User parameter12(None) User parameter13(None) User parameter14(None) User parameter15(None)	iue) 15:44 Name Clear

4. Load Parameter Saved by User

Enter the Customized Parameter interface. Check the content on button "Customized Parameter xx (Y/N)". If it is Y in the bracket, it means there is saved customized parameter.

Click that key and press \ll to reload the corresponding parameter. After the operation, the system will return to the upper interface automatically.

ParamCollection(User)	User parameter06(None)	User parameter11(None)	
WET(User)	User parameter07(None)	User parameter12(None)	Nar
User parameter03(None)	User parameter08(None)	User parameter13(None)	
User parameter04(None)	User parameter09(None)	User parameter14(None)	Cle
User parameter05(None)	User parameter10(None)	User parameter15(None)	

2.7.6 Parameter List

1、Thread Adjuster:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
WIP	Thread	Thread adjuster			OF:Thread	ON	Selection
	Adjuste	(W) switch			Adjuster off		
	r				ON:Thread		
	Switch				Adjuster on		
W1	Thread	Set the start time	ms	2	0~998	30	Input
	Adjuste	of thread					
	r Start	adjuster (W)					
	Time	according to the					
		thread-trimming					
		order. Usually,					
		there is no need					
		for change.					
W2	Thread	Set the working	ms	2	0~998	30	Input
	Adjuste	time of thread					
	r Work	adjuster (W)					
	Time	according to the					
		thread-trimming					
		order. User can					
		prolong the time					
		if necessary.					
W3	Thread	The delay time	ms	1	0~255	0	Input
	Adjuste	for the device					
	r Stop	return after the					
	Delay	action of thread					

		adjuster (W)				
CSS	Needle	Needle thread		OFF:Close	OFF	Selection
	Thread	clamp device		ON:Open		
	Clamp	switch				
	Device					
CRS	Needle	Needle thread		0~16	8	Input
	Thread	clamp device				
	Clamp	power-on				
	Device					
	Power-					
	on					

2, Slow Start Stitch:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
ST1	Start Speed	Start Speed of	100RPM	1	2~27	3	Input
	of 1 st Stitch	1 st Stitch					
ST2	Start Speed	Start Speed of	100RPM	1	2~27	5	Input
	of 2nd Stitch	2 nd Stitch					
ST3	Start Speed	Start Speed of	100RPM	1	2~27	10	Input
	of 3rd Stitch	3 rd Stitch					
ST4	Start Speed	Start Speed of	100RPM	1	2~27	15	Input
	of 4th Stitch	4 th Stitch					
ST5	Start Speed	Start Speed of	100RPM	1	2~27	20	Input
	of 5 th Stitch	5 th Stitch					

3, Frame:

Cod	Brief	Details	Unit	Step	Range	Default	Туре
e				Length		Value	
SY	Sewing	Can the			OFF: No	OFF	Selection
N1	When	machine			ON:Yes		
	Frame Is Up	perform					
		sewing when					
		the board is					
		up					
TFS	Frame Status	Frame Status			SUP: Back to	SUP	Selection
	at Sewing	at Sewing			start point		
	End	End			and go up		
					SLU: Go up		
					at sewing		
					end.		
					SBU: Back		
					to start point.		
					It goes up		

				when user		
				steps pedal.		
AT	Frame Auto	After		PUP:Auto	NUP	Selection
U	Up after	working, the		UP		
	Work	Frame goes		NUP:Not		
		up		Auto Up		
		automatically				
POP	Pedal	Pedal		BUD:Frame	BUD	Selection
	Operation	Operation		Up/Down		
	Method	Method		IUD: Indirect		
				Control of		
				Frame &		
				Help Frame		
				Up/ Down		
				ILR: Indirect		
				Control of		
				L/R Frame		
LR	Lower	Lowering		LRU:Down	LRU	Selection
D	Action of	action of left		at Same Time		
	L/R Separate	presser and		LRN:Left		
	Frames	right presser		Then Right		
				RLD:Right		
				Then Left		
LR	Lift Action	Lifting action		LRT: Up	LRU	Selection
U	of L/R	of left frame		after work		
	Separate	and right		LTD:Left		
	Frames	frame		Frame Down		
				after Work		
				RTD: Right		
				Frame Down		
				after Work		
DY	Special	Support flip,	1	0-255	0	Input
N	Presser	telescopic				
		pressure foot				
		0- None				
		1- Flip				
		press				
		foot (F1				
		press				
		foot)				
		2- Telescop				
		ic press				
		foot				
		3- F2 press				

		foot				
		4- K press				
		foot				
PSS	Presser	Presser		UP:Presser	UP	Selection
	Status at	Status at		Down		
	Stop	Stop		DN:Presser		
	1	1		Up		
OP	Platen type	Support		AIR:	AIR	Selection
T1	selection	motor		Pneumatic		
		pressure		MAG:		
		plate,		Electromagn		
		pneumatic		et		
		pressure		-Leonard:		
		plate.		Motor.		
		Also set the				
		platen type in				
		the Transfer				
		Mode				
2PE	The	It is only		OFF:	OFF	Selection
	two-stage bit	effective		prohibited		
	clamp is	when the		ON: enables		
	enabled	motor		the function		
		external				
		pressure				
		plate,				
		supports				
		two-stage				
		operation,				
		and can be				
		stopped in				
		the set				
		position				
TH	Two stage	Two stage		0~255	140	Input
G	clamp height	clamp height				1
OP	Pressure	Effective		0~200	180	Input
R	plate stroke	only when				1
	setting	the motor				
		external				
		pressure				
		plate, set the				
		height value				
		of the				
		external				
		pressure				

		plate rise				
OP	Platen	Effective	1	0-15	2	Input
C	current	only when				
	setting	the motor				
		external				
		pressure				
		plate, set the				
		external				
		pressure				
		motor action				
		speed				
РО	Stretch foot	Stretch foot	1	0-255	30	Input
D	extension	extension				
	delay	delay				
AS	Expansion	Expansion	1	0-255	45	Input
D	foot rise	foot rise				
	delay	delay				
DS	Expansion	Expansion	1	0-255	30	Input
D	foot drop	foot drop				
	delay	delay				

4, Range Limitation:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
ALC	Cancel	Cancel Range			OF:Protectio	ON	Selectio
	Range	Protection			n Off		n
	Protectio				ON:Protectio		
	n				n On		
XL	Set	Set effective	mm	1	2~255	101	Input
	Effective	range in left X					
	Range in	direction					
	Left X						
	Direction						
XR	Set	Set effective	mm	1	2~255	101	Input
	Effective	range in right X					
	Range in	direction					
	Right X						
	Direction						
YU	Set	Set effective	mm	1	2~255	50	Input
	Effective	range in up Y					
	Range in	direction					
	Up Y						
	Direction						
YD	Set	Set effective	mm	1	2~255	50	Input
	Effective	range in down					

	Range in	Y direction				
	Down Y					
	Direction					
FXM	Moveme	Movement in		OFF:Close	OFF	Selectio
	nt in the	the X direction		ON:Open		n
	Х	is prohibited				
	direction					
	is					
	prohibite					
	d					

5, Thread-breakage Detector:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
PRT	Thread-b	Thread-breakag			OFF:	OFF	Selection
	reakage	e Detection			Line break		
	Detection				detection is		
					turned off		
					ON:Line		
					break		
					detection		
					turned on		
ISD	Invalid	Invalid Stitches		1	0~15	8	Input
	Stitches	at Sewing Start					
	at	for					
	Sewing	Thread-breakag					
	Start for	e Detection					
	Thread-b						
	reakage						
	Detection						
IND	Invalid	Invalid Stitches		1	0~15	3	Input
	Stitches	during Sewing					
	during	for					
	Sewing	Thread-breakag					
	for	e Detection					
	Thread-b						
	reakage						
	Detection						
TRM	Trim at	Trim at			ON: Trim at	ON	Selection
1	Thread-b	Thread-breakag			Thread-break		
	reakage	e Detection			age		
	Detection				OFF: Not		
					Trim at		
					Thread-break		
					age		

、**Origin Position:**

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
PTR	Return to	Return to origin			OFF:Not	OFF	Selection
	Origin at	at power-on			Return		
	Power-on				ON:Return		
PRF	Forbid	Forbid			OF:Permitted	OFF	Selection
	Returnin	returning to			ON:Forbidde		
	g to	origin at			n		
	Origin at	presser up					
	Presser						
	Up						
DOG	Search	Search origin at			OFF:Not	RET	Selection
	Origin at	sewing end			Search		
	Sewing				Origin, Stop		
	End				at End Point		
					ON:Search		
					Origin		
					(Sub-origin)		
					RET:Return		
					to Sewing		
					Start		
RST	Set	Set sewing start			LIN:Linear	LIN	Selection
	Sewing	resetting path			Return to		
	Start				Sewing Start		
	Resetting				PAT:Return to		
	Path				Origin along		
					Pattern		
					ORG:Search		
					Origin Then		
					Return to		
					Sewing Start		
DED	Select	Whether to			OFF:No	OFF	Selection
	Highest	select highest			upper dead		
	Position	position at			center is		
	at	searching			selected for		
	Searchin	origin			origin		
	g Origin				retrieval		
					ON:The		
					upper dead		
					center is		
					selected for		
					origin		
					retrieval		

OPA	Origin	Origin presser		DNW:Presser	DNW	Selection
	Presser	action		Down		
	Action			UP:Presser		
				UP		
NRM	Search/R	Path selection		NRM:	NRM	Selection
	eturn to	of searching/		Standard		
	Origin	returning to		REV:		
	Path	origin		Reverse		
				YTX:Y to X		
				XTY:X to Y		
REV	Search/	Path selection		NRM:	NRM	Selection
	Return to	of searching/		Standard		
	Origin	returning to		REV:		
	Path at	origin at		Reverse		
	Reveres	reverse		YTX:Y to X		
				XTY:X to Y		
XSP	X Axis	X axis sensor is		L:Left	L	Selection
	Sensor	at the left or		R:Right		
	Position	right side of the				
		head				

7, Pause

Cod	Brief	Details	Unit	Step	Range	Default	Туре
e				Length		Value	
POS	Needle	Needle position			DWN:Needle	DWN	Selectio
	Position	at pause			Down		n
	at Pause				UP:Needle		
					Up		
ACT	Presser	Presser action			DWN:Presser	DWN	Selectio
	Action at	at pause			Down		n
	Pause				UP: Presser		
					Up		
TYP	Pause	Pause switch			AUT:Auto	AUT	Selectio
	Switch	type			Lock		n
	Туре				NRM:Normal		
TRM	Auto	Auto trimming			AUT:Auto	OFF	Selectio
2	Trimmin	at pause			OFF:No trim		n
	g at						
	Pause						
SYP	Security	Security switch			NCT: always	NCT	Selectio
	Switch	type			off		n
	Туре				NOT: always		
					on		

8, Counter:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
UCM	Up Counter	Up counter			OFF:Up Counter	PAT	Select
	Mode	mode			Off		ion
					PAT:Count by		
					Pattern		
					CYC:Count by		
					Cycle		
DCM	Down	Down			OFF:Down	PAT	Select
	Counter	counter			Counter Off		ion
	Mode	mode			PAT:Count by		
					Pattern		
					CYC:Count by		
					Cycle		
URV	Reserve Up	Reserve up			CLR:Clear	RSV	Select
	Counter	counter			RSV:Reserve		ion
	Value at	value at					
	Inputting	inputting					
	Pattern	pattern					
DRV	Reserve	Reserve			CLR:Clear	RSV	Select
	Down	down			RSV:Reserve		ion
	Counter	counter					
	Value at	value at					
	Inputting	inputting					
	Pattern	pattern					
POC	Clear	Clear			CLR:Clear	RSV	Select
	Counter at	counter			RSV:Reserve		ion
	Repowerin	value at					
	g	repowering					
NUP	Cannot	Cannot			OFF: Permitted	OFF	Select
	Change Up	change up			ON:Forbidden		ion
	Counter	counter					
	(UP)	(UP)					
NDP	Cannot	Cannot			OFF: Permitted	OFF	Select
	Change	change			ON: Forbidden		ion
	Down	down					
	Counter	counter					
	(DN)	(DN)					
UTO	Sewing	Sewing			OFF:Stop Sewing	OFF	Select
	Machine	machine			ON:Continue		ion
	Action at	action at			Sewing		
	Reaching	reaching					

	Up Counter	up counter				
	(UP) Set	(up) set				
	Value	value				
DTO	Sewing	Sewing		OFF:Stop Sewing	OFF	Select
	Machine	machine		ON:Continue		ion
	Action at	action at		Sewing		
	Reaching	reaching				
	Down	down				
	Counter	counter				
	(DN) Set	(DN) set				
	Value	value				
NPC	No Change	No change		OFF: Change	ON	Select
	of	of		Permitted		ion
	Production	production		ON: Change		
	Amount	amount		Forbidden		
DCE	Counter	Counter		OFF:Close	OFF	Select
	linkage	linkage		ON:Open		ion

9. Intermediate Presser:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
SYN2	Down	Synchronizati			BEF:	BEF	Selec
	Synchronizati	on of lowering			Before		tion
	on	intermediate			Head Start		
		presser			OUT:Same		
					with Last		
					Outer		
					Presser		
CUR1	Intermediate	Intermediate		1	2~8	8	Input
	Presser	presser current					
	Current						
MDY	Intermediate	Delay the	ms	1	0~255	0	Input
	Presser Up	action to					
	Delay	prevent					
		running into					
		mould					
TYE	Intermediate	Select type of			AIR:Air	STP	Selec
	Presser Type	intermediate			Valve		tion
		presser			STP:		
					Stepping		
					MAG:Magn		
					et		
PLP	Intermediate	Set	0.1m	2	0~180	150	Input
	Presser	intermediate	m				
	Stroke Setting	presser					

		vertical				
		stroke.				
PDD	Intermediate	Delay at	1	0~255	0	Input
	Presser Down	lowering the				
	Delay	intermediate				
		presser				
MSP	Intermediate	Set the		8-17	13	Input
	Presser	moving speed				
	Moving	of				
	Speed	intermediate				
		presser when				
		CUR=8				
THS	Prompt	Prompt		OFF:Close	ON	Selec
	information is	information is		ON:Open		tion
	displayed	displayed after				
	after	threading				
	threading					

10、Winding:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
SPD1	Winding	Set wind	100RPM	1	2~27	13	Input
	Speed	speed					
STP1	Winding	Set method			UTS: Release	RTS	Selection
	Device	to stop			Pedal to Stop		
	Stop	winding			winding		
	Method				RTS:Step		
					Pedal again to		
					stop winding		
					TTS: Set Time		
					to Stop		
					Winding		
TPD	Set Stop	Set the time	s	2	2~498	30	Input
	winding	to stop					
	time	winding					
	(Unit	(Unit					
	Second)	Second)					

11, Feed Method:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
TYP	Pressing	Select			AIR:Air-driven	AIR	Sele
	Board Type	Pressing			MAG: Magnet		ction
		Board			ADP:		
					Self-adopt		
WEI	Weight of	Select the			HIG: Light	MID	Sele

	Pressing	weight of			MID:Middle		ction
	Board	pressing			WEG:Heavy		
		board					
HIG	Light Board	Light board		1	0~255	0	Inpu
	(Air Amount	(Air					t
	L)	Amount					
		L)					
MID	Middle	Middle		1	0~255	0	Inpu
	Board (Air	board (Air					t
	Amount	Amount					
	M)	M)					
WEG	Heavy Board	Heavy		1	0~255	0	Inpu
	(Air Amount	board (Air					t
	H)	Amount					
		H)					
STP2	Sewing Type	Select			TIN:Thin	TIN	Sele
	Selection	sewing			MID:Middle		ction
		type			TIC:Thick		
THIN	Thin Fabric	Thin fabric		1	0~255	0	Inpu
		thickness					t
MID	Middle	Middle		1	0~255	15	Inpu
	Fabric	fabric					t
		thickness					
THC	Thick Fabric	Thick		1	0~255	30	Inpu
K		fabric					t
		thickness					
SUI	Pattern-maki	Pattern-ma			OFF: Forbid	OFF	Sele
	ng Follows	king			ON: Permit		ction
	Action	follows the					
	Setting	action					
		setting					
SMD	Start	Adjust the	Degre	1	-10000~+1000	0	Inpu
	Frame-movin	start	e		0		t
	g Angle	frame-movi					
	Adjustment	ng angle					
STD	End	Adjust the	Degre	1	-10000~+1000	0	Inpu
	Frame-movin	end	e		0		t
	g Angle	frame-movi					
	Adjustment	ng angle					
SAE	Frame-movin	Set the	Degre	1	135-280	135	Inpu
	g Initial	initial	e				t
	Angle	frame-movi					
	Setting	ng angle					
		with speed					

		over				
		1800rpm				
MMD	Move Mode	XY axis		ETM: Equal	ETM	Sele
		action		Time		ction
		mode		NTM: Unequal		
				Time		
RSE	8 slow down	8 slow	Degre	0~720	250	Inpu
	curve	down curve	e			t
	starting	starting				
	frame Angle	frame				
		Angle				
REE	8 slow down	8 slow	Degre	0~720	110	Inpu
	curve end	down curve	e			t
	moving	end moving				
	frame Angle	frame				
		Angle				
SSM	Test seam	Test seam		STP: lift stop	STP	Inpu
	system	system		MOV: Lift to		t
				continue		
				moving		
MCX	X axis			0~10	0	Inpu
	moving					t
	frame curve					
	number					
MCY	Y-axis			0~10	0	Inpu
	moving					t
	frame curve					
	number					
FAY1	1Y axis	1Y axis	Degre	-150~+150	0	Inpu
	motion frame	motion	e			t
	Angle fine	frame				
	adjustment	Angle fine				
		adjustment				
XSO	X gap	X gap	0.1m	-50~+50	0	Inpu
	compensatio	compensati	m			t
	n	on				
YSO	Y gap	Y gap	0.1m	-50~+50	0	Inpu
	compensatio	compensati	m			t
	n	on				
JSS	Micro switch	Micro		ICA: Fully	ICA	Sele
	selection	switch		automatic		ction
		selection		template		
				recognition		
				NIA:		

						Semi-automati		
						c template		
						recognition		
						MSR: fully		
						manual		
PDL	Drop pedal	Drop pedal	ms			0-255	0	Inpu
	time delay	time delay						t
12、Spe	ed:	I.		1			1	1
Code	Brief	Details	Un	it	Step	Range	Default	Туре
					Lengt	h	Value	
HSP	High Speed	Set high	100R	PM	1	2~28	23	Input
1		speed						-
LSP	Low Speed	Set low speed	100R	PM	1	2~28	2	Input
MHS	Middle High	Set middle	100R	PM	1	2~28	15	Input
	Speed	high speed						-
MLS	Middle Low	Set middle	100R	PM	1	2~28	10	Input
	Speed	low speed						-
EDL	Feed Delay	Delay after			1	0~500	0	Input
		feeding						-
		action						
JDL	Step Moving	Delay after			1	0~9999	0	Input
	Delay	step moving						-
		action						
IDL	Plate delay	After the			1	0~2700	4	Input
	setting	plate action						-
		delay						
SEW	Sewing speed	Sewing speed			1	0~9	4	Input
	setting (gear)	setting, 0-9						
		evenly						
		divided into						
		10 speed,						
		each speed						
		determined						
		by HSP and						
		LSP						
REL	Sewing speed	Sewing speed	100r	pm	100	2~28	15	Input
	setting (true	setting, set						
	value)	the speed						
		directly in						
		100rpm						
FED	Feed Speed	Set speed at			1	0~9	7	Input
		empty feed						
		section						
FRM	Frame-moving	Set			1	1~3	2	Input

	Speed	frame-moving				
		speed				
SPS	Returning to	Set speed for	1	0-9	7	Input
	Start Point	returning to				
	Speed	the start point				
HPS	Search Origin	Set speed for	1	5~10	7	Input
	Speed	searching				
		origin				
SMS	Single Step	Set speed of	1	0~40	30	Input
	Move Speed	moving of				
		single step				
SRT	Sewing speed	Sewing speed		70~100	100	Input
	ratio	ratio				
BPT	Setting mode	Setting mode		PRE: A	FRE	Selecti
	of datum point	of datum		preset		on
	2	point 2		fixed		
				value		
				FRE:		
				Freely		
				choose		
				any point		
				of the		
				pattern		

13、Thread-trimming Order:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
TRM	Trimming	Trimming			OFF:Off	ON	Selecti
3	Switch	Switch			ON:On		on
SPD2	Trimming	Trimming	10RP	1	10~40	40	Input
	Speed	Speed	М				
ANG	Needle	Needle			UP: Upper	UP	Selecti
	Position	position			Needle		on
	Angle After	angle after			Position		
	Trimming	trimming			DED: Upper		
					Dead Point		
TDY	Thread-trimm	Thread-trim	0.01s	1	0~255	12	Input
	ing delay	ming delay					
TST	Trimming	Trimming	mm/	2	0~998	210	Input
	Output Start	output start	Degre				
	Time/ Angle	time/ angle	e				
TET	Trimming	Trimming	mm/	2	0~998	0	Input
	Output End	output end	Degre				
	Time/ Angle	time/ angle	e				
TMD	Trimming	Select			MAG:	MAG	Selecti

	Mode	thread-trim			electromagn		on
		ming order			et		
					AIR: Air		
					valve		
					MOTOR:ele		
					ctrical		
					machinery		
OPT2	Thread-loosin	Thread-loos		1	0~255	30	Input
	g Delay	ing delay					
OSA	Thread-loosin	Thread-loos	mm/	2	0~998	300	Input
	g Start	ing start	Degre				
	Time/Angle	time/angle	e				
OEA	Thread-loosin	Thread-loos	mm/	2	0~998	0	Input
	g End	ing end	Degre				
	Time/Angle	time/angle	e				
TFE	Cutting line is	Whether to			OFF:Close	ON	Selecti
	added	add a line			ON:Open		on
	automatically	cutting					
	when printing	code before					
		the end					
		character					
		during the					
		printing					
		operation					
TBE	Sew space	Whether			OFF:Close	OFF	Selecti
	before	the thread			ON:Open		on
	sending	is cut					
	whether to	before					
	cut thread	sending					
		during the					
		sewing					
		process					
TBD	Whether to	Set whether			OFF:Close	ON	Selecti
	cut thread at	to cut			ON:Open		on
	the end of	thread at					
	sewing	the end of					
		sewing,					
		ignore					
		whether					
		there is a					
		cutting					
		code					
UAT	The revised	The revised	Degre		0~100	0	Input
	value of	value of	e				

stopping	stopping			
Angle at the	Angle at			
upper	the upper			
position after	position			
cutting the	after cutting			
wire	the wire			

14、LCD Screen:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
WRN	Warning of	Set the			OFF: No	ALL	Selection
	Buzzer	warning			Voice		
		voice of			PAR:Panel		
		buzzer			Voice		
					ALL:Panel		
					+ Warning		
					Voice		
DEL	Touching	Adjust		1	1~5	3	Input
	Panel	sensitivity of					
	Sensitivity	touching					
	Adjustment	panel					
LIG	Back Light	Adjust the		1	20~100	100	Input
	Adjustment	back light					
ATO	Back Light	Auto			OFF:Not	OFF	Selection
	Auto	turn-off of			Auto		
	Turn-off	back light			Turn-off		
					ON:Auto		
					Turn-off		
TIM	Back Light	Time for	Minute	1	1~9	3	Input
	Auto	waiting auto					
	Turn-Off	turn-off of					
	Waiting Time	back light					
BTN	Button	Set the			ICN: Icon	ICN	Selection
	Display Style	display style			TXT: Text		
		of the button					
		in Test					
		Mode and					
		Function					
		Mode					
BKC	Background	Set the		1	0~6	0	Input
	Color Setting	background					
		color of the					
		pattern					
		display area					
		in main					

		interface				
		0: Block				
		1: Dark Blue				
		2: Red				
		3: Green				
		4: Blue				
		5: Purple				
		6: Yellow				
ZST	Scaling	Scaling		SQA:	L-W	Selection
	Method	Method		square		
				L-W:		
				length-width		
RBS	Return to	Return to		OFF:Close	ON	Selection
	Sewing Start	sewing start		ON:Open		
	Hotkey	hotkey				
DPN	Display	Whether to		NO	YES	Selection
	Needle Drop	display		YES		
	Point	needle drop				
		point				
CCS	Continuous	Whether to		NO	NO	Selection
	Sewing of	sew		YES		
	Combination	combination				
	Pattern	pattern				
		continuously				
LPT	Support	Support		OFF:Close	OFF	Selection
	Pattern of	pattern of		ON:Open		
	Large	large				
	Number of	number of				
	Stitches	stitches				
SCS	Main	Whether to		OFF:Close	ON	Selection
	Interface	display the		ON:Open		
	Function	function				
	Hotkeys	hotkeys on				
		the main				
		interface				
CSM	Pattern	Set the		STI: stitch	STI	Selection
	Transforming	pattern		ELE:		
	Method	transforming		element		
		method				
PSU	Scaling Unit	Set the		%:	%	Selection
		scaling unit		percentage		
				SIZ: size		
MSM	Scaling	Set the		VAR:	FIX	Selection
	Method for	scaling		variable		

	Multiple	method for		interval		
	Sewing	multiple		FIX: fixed		
		sewing		interval		
PMR	Return after	Set the		FUN:	FUN	Selection
	Modification	return		function		
		method after		selection		
		finishing		CNT:		
		modification		continue		
				modification		
OFM	Multiple	Set the		REL:	REL	Selection
	Sewing,	modification		relative		
	Deviating	method for		modification		
	Sewing	multiple		ABS:		
	Modification	sewing and		absolute		
	Method	deviating		modification		
		sewing				
MBN	Main	Main		ICN: Icon	ICN	Selection
	interface	interface		TXT: Text		
	button	button				
	display style	display style				
RSS	The style of	The style of		KPS: Save	KPS	Selection
	the car seam	the car seam		SLN:		
	is restored	is restored		straight line		
	after the	after the				
	empty	empty				
	delivery of	delivery of				
	the plate	the plate				
SMC	Size	Size		FHM: Start	FHM	Selection
	calculation	calculation		at the origin		
	under zoom	under zoom		FSR: from		
	function	function		the starting		
				seam point		
RME	The stitching	The		OFF:NO	OFF	Selection
	is restored	stitching is		ON:YES		
	after making	restored				
	the plate	after making				
	-	the plate				
EDS	Style of	Style of		S1: Style 1	S1	Selection
	operation	operation		S2: Style 2		
MBS	Modify and	Modify and		ICN: Icon	ICN	Selection
	change key	change key		TXT: Text		
	display style	display style				
EBP	Derive the	Derive the		OFF:Close	OFF	Selection
	rabbit	rabbit		ON:Open		

	reference	reference				
	pattern	pattern				
PTD	Preset time	0 means off,	Day	0~7	0	Input
	hint	other means				
		a few days				
		in advance				
		of the preset				
		time				

15, Others:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
NLD	Needle-co	Needle			OFF:No	OFF	Selecti
	oling	cooling device			ON:Yes		on
PEM	Permission	Permission of			OFF:	OFF	Selecti
	of Single	single pedal			Forbidden		on
	Pedal	operation			ON: Permitted		
	Operation						
LAG	Language	Language			CH:Chinese	СН	Selecti
	Selection	selection			EN:English		on
SSW	Sound	Set sound			OFF:Close	ON	Selecti
	Setting	function			ON:Open		on
VOL	Volume of	Volume at			30~63	50	Input
	Operation	pressing					
	Voice	button					
NSW	Network	Activate the			OFF:Close	OFF	Selecti
	Connectio	network			ON:Open		on
	n	connection					
LED	LED	For machine			0-100	50	Input
	Brightness	with LED					
		output, set the					
		brightness of					
		LED					
DLY	Thread	When	S		0-255	0	Input
	Loosing	threading, the					
	Device	opening time					
	Open	of the thread					
	Delay	loosing device					
	When	when the					
	Threading	intermediate					
		presser goes					
		down					
CUR2	Thread	The value of			0-255	0	Input
	Loosing	the thread					
	Device	loosing device					

	Open	open current				
	Current	when				
	When	threading				
	Threading					
SEC	Automatic	Whether to		OFF:Close	OFF	Selecti
	ally Add	add sub-origin		ON:Open(Swit		on
	Sub-origin	automatically		ch sewing		
	after First	after the first		plate)		
	Empty	empty feed		ON-F:Open(Co		
	Feed			ntinue to empty		
				print)		
EMM	Whether	Edit whether		OFF:Close	ON	Selecti
	Intermidiat	intermediate		ON:Open		on
	e Presser	presser moves				
	Moves	along with				
	Along	pattern-designi				
	with	ng				
	Pattern-de					
	signing					
MAH	Applicable	Set the		0-10	0	Input
	to	parameters of				
	Machine	machine type				
	Type with	with				
	Automatic	automatical				
	Feed	feed function				
	Function					
DSP	Start	Set the		OFF:	OFF	Selecti
	Delay after	activiation of		prohibited		on
	Stepping	start delay		ON: allowed		
	Pedal	after stepping				
		pedal				
DEP	Start	Set the start		0~200	0	Input
	Delay	delay time				
	Time after	after stepping				
	Stepping	pedal				
	Pedal					
FEP	Empty	Set the stitch	mm	10~120	120	Input
	Feed	length when				
	Stitch	empty feed				
	Length					
PTP	Vector	Vector		10~127	30	Input
	graphics	graphics				
	conversion	conversion				
	needle	needle spacing				

	spacing Settings	Settings				
JAC	Whether to	Whether to		OFF:YES	OFF	Selecti
	automatica	automatically		ON:NO		on
	lly close	close the jump				
	the jump	interface				
	interface					
CNA	Form	Forming	Degr	0~180	90	Input
	corner	corner Angle	ee			
	Angle	standard: 0: no				
	standard	corner, 180:				
		full corner				
LGS				OFF:YES	OFF	Selecti
	Whether to	Whether to		ON:NO		on
	boot into	boot into the				
	the	language				
	language	selection				
	selection					
RFM	The seam	The seam		ST: Seam	ST	Selecti
	point	point modifies		starting point		on
	modifies	the baseline		2H: the		
	the	setting		secondary		
	baseline			origin		
	setting					
CES	Curve	Curve printing		S1: Style 1	S2	Selecti
	printing	style		S2: Style 2		on
	style			~ ~		~
PMS	P2 Frame	P2 Frame		SAM: Same	REV	Selecti
	moving	moving		direction		on
	direction	direction		REV: Reverse		
LOD	setting	setting			OFF	<u> </u>
LSF	Small	Small needle		OFF:Close	OFF	Selecti
	needle	pitch shape		UN:Open		on
	pitch	IUSION				
	snape					
	fusion					

16, Repair & Maintenance:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
NRT	Needle Replacement Left Value	Left stitches for needle replacement	1000 Stitch	1	0~9999	0	Input
NST	Needle	Set stitches for	1000	1	0~9999	0	Input

	Replacement	needle	Stitch				
	Set Value	replacement					
HRT	Clearing	Left hours for	Hour	1	0~9999	0	Input
	Time Left	clearing					
	Value						
HST	Clearing	Set hours for	Hour	1	0~9999	0	Input
	Time Set	clearing					
	Value						
ORT	Oil	Left hours for oil	Hour	1	0~9999	0	Input
	Replacement	replacement					
	Left Value						
OST	Oil	Set hours for oil	Hour	1	0~9999	0	Input
	Replacement	replacement					
	Set Value						
BRT	Bobbin	Click in, but	0.1m		0~5000	0	Input
	Thread	unable to input					
	Replacement						
	Residual						
	Value (Stitch						
	Number)						
BST	Bobbin	Bobbin thread	0.1m		0~5000	0	Input
	Thread	replacement set					
	Replacement	value					
	Set Value						
	(Stitch						
	Number)						
OLI	Oiling	Oiling interval	S		0~999	90	Input
	Interval	time					
	Time						
OLW	Oiling Work		MS		0~9999	1000	Input
	Time						
XOI	Pumping	Pumping interval	min		0~240	0	Input
	interval time	time					
XOW	Pumping	Pumping hours	s		0~60	0	Input
	hours						
BLL	The	The remaining	0.1m		0~5000	0	Input
	remaining	length of the					
	length of the	bottom line					
	bottom line	detection device					
	detection	is set					
	device is set						
CTN	Fabric	Fabric thickness	mm		0~20	0	Input
	thickness						
TD1	Length of	Length of cut	mm		0~50	0	Input

cut wire wire

[Note]: Parameters, like NRT, HRT and ORT can not be set. User can only check them in the Internal Parameter Setting Interface

[Note]: After the modification of parameters for repair and maintenance, the corresponding parameters of "Left Value" will be changed to the set value

[Note]: After the parameter value of repair and maintenance are set (value over 0), the corresponding counting function for repair and maintenance will be activated as well. 17, Special:

Code	Brief	Details	Unit	Step	Range	Default	Туре
				Length		Value	
HSP	Max Speed	Max Speed	100RP	1	2~28	23	Input
2			М				
MAE	Main Stop	Stop angle of	Degree	1	30~80	53	Input
	Angle	main shaft					
		motor					
DEB	Letter	Activate			OFF:Turn off	ON	Input
	Embroider	letter			Letter		
	у	embroidery			Embroidery		
					Function		
					ON: Turn on		
					Letter		
					Embroidery		
					Function		
DAE	Upper	Set angle	Degree	1	0~50	3	Input
	Dead Point	from stop					
	Angle	point to					
		upper dead					
		point					
RSC	Stitch	Select		1	0-8	5	Input
	Length	built-in stitch					
	Deceleratio	length					
	n Curve	deceleration					
		curve					
HSL	Max Stitch	Max stitch	0.1mm	1	1-127	30	Input
	Length at	length at					
	Keeping	keeping					
	Speed	highest speed					
MTS	Main Shaft	Support			550:550W	D00	Select
	Motor	550W &			D00:750W~D		ion
	Туре	750W			00/F11		
	Selection				F00:750W~F0		
					0		
xDIR	X Motor	Switch			POS: forward	NEG	Selec

	Rotation	X-axis	direction	tion
	Direction	stepping	NEG: Reverse	
		motor	direction	
		rotation		
		direction		
yDIR	Y Motor	Switch Y-axis	POS: forward POS	Selec
	Rotation	stepping	direction	tion
	Direction	motor	NEG: Reverse	
		rotation	direction	
		direction		
zDIR	Z Motor	Switch Z-axis	POS: forward POS	Selec
	Roatation	stepping	direction	tion
	Direction	motor	NEG: Reverse	
		rotation	direction	
		direction		
ADR	Main	The write-in	655360 917504	Input
	Control	address of the	~917504	
	Burned-in	main control		
	Address	update		
		program		
		stored in the		
		U disk		
CVE	Parallel	Set the	A1: algorithm A3	Selec
	Cureve	parallel curve	1	tion
	Algorithm	generated	A2: algorithm	
		during	2	
		pattern	A3: algorithm	
		edition	3	
MUS	Reverse	Set the	ALL: by ALL	Selec
	Sewing	reverse	section	tion
	Algorithm	sewing of	SE: end to end	
	under	multiple		
	Multiple	sewing		
	Sewing	during		
		pattern		
		eddition		
TID	Pattern	Pattern	OFF:Close OFF	Selec
	Recognizat	recognization	ON:Open	tion
	ion Setting	setting		

PFT	Pattern			0~9	0	Input
	Correspond			0:001~031		
	ing No.			1:101~131		
	Section			2:201~231		
				3:301~331		
				4:401~431		
				5:501~531		
				6:601~631		
				7:701~731		
				8:801~831		
				9:901~931		
PXO	Х	X diviation		-5000~5000	0	Input
	Diviation	of marker				
	of Marker					
PYO	Y	Y diviation of		-2000~2000	0	Input
	Diviation	marker				
	of Marker					
PSP	Marker	Marker		1~9	1	Input
	Running	running				
	Speed	speed				
TTY	Pattern	Pattern		SEN: sensor	SEN	Selec
	Recognizat	recognization		BAR: bar-code		tion
	ion Device	device		scanning		
				device		
ICS	Communic	Communicati		OFF:Close	OFF	Selec
	ation	on speed		ON:Open		tion
	Speed	improvement				
	Improveme					
	nt					
PTY	Template	Template		NUM: Pattern	NUM	Selec
	recognition	recognition		number		tion
	method	method		NAME: Name		
				of the pattern		
CXO	The laser	The laser cut	0.1mm	-5000~5000	0	Input
	cut is offset	is offset in				
	in the	the				
	x-direction	x-direction				
CYO	The laser	The laser cut	0.1mm	-2000~2000	0	Input
	cut is offset	is offset in				
	in the Y	the Y				
	direction	direction				
UM	Upgrade	Upgrade		PA: parameter	PA	Selec
D	method	method		AU: automatic		tion
PRS	Non-origin	Non-origin		NOT:Immobili	NOT	Selec

	position	position		ty		tion
	template	template		ST: Move to		
	identificati	identification		the seam point		
	on control	control				
SCS	Closed	Closed curve		OFF:Close	OFF	Selec
	curve	self-intersecti		ON:Open		tion
	self-interse	on setting				
	ction					
	setting					

18、 Step and close the loop

The stepper closed loop is used to adjust the motor servo gain

2.8 Test Mode





Functions:

No.	Functions	Content		
А	Liquid crystal detection	Used to detect liquid crystal display		
В	Touch screen calibration	Used to calibrate the touch screen		

С	Input signal detection	Used to detect all kinds of switches, sensors and other input signals		
D	Speed Test	Used to detect spindle motor speed		
Е	Output signal detection	It is used to detect all kinds of output signals such as pressing foot and cutting line.		
F	Medium pressure foot function test	Used to detect medium pressure foot		
G	Network Settings	Used in network-related Settings.		
Н	Spindle motor installation Angle adjustment	Used to display and set spindle motor mounting Angle.		
Ι	XY motor origin detection	It is used to detect the X axis and Y axis motor origin.		
J	Quit	Exit the detection mode and return to the main interface.		
K	RFID Settings	For RFID card number writing and reading Settings.		
L	Continuous operation	Used to set continuous operation parameters and enter the aging state.		

2.8.1 LCD Test

Function:

In the test mode, press to activate LCD test function. Click the area other than to have LCD screen display white, black, red, green and blue so that user can judge whether the LCD screen has problem.

Press to return to the upper level interface.



2.8.2 Touching Screen Correction

Functions:

Under test mode, press

to display the interface for ID input, as shown on the right.

Then input the ID and press \leftarrow to enter touch screen correction function.

User has to correct 5 spots. The touching pen is recommended to be used at touching the cross icon on the interface. After the correction, the system will display the result of this operation

[Note]: During the correction, please perform the operation strictly according to the position of the cross icon, otherwise the touching screen may be unable to be used normally after the correction.

2.8.3 Input Signal Test

Function:



- ① Start switch (Pedal)
- 2 Presser switch (Pedal)
- ③ Pause Switch

📮 Input	user ID							20	23/11/2	8(Tue) 15:05
			ID:							
1	2	3	4	5		5	7	8	9	0
Q	w	E	R	Т	. ,	Y	U	I	0	Р
	A	s	D	F	G	н	J	к	L	
		z	x	с	v	В	N	М		



- (4) Thread-breakage Detection
- 5 X Motor Sensor
- 6 Y Motor Sensor
- ⑦ Intermediate presser origin
- (8) Security switch
- (9) External input 1 (PORG)
- ① External input 2 (PSENS)
- (1) External input 3 (CORG)
- 12 External input (CSENS)
- (13) External input (AORG)
- 14 Three-in-one Pedal

Press X to return to the upper level interface.

2.8.4 Main Shaft Speed Test

upper level interface.

Functions:

0	Speed detection mode		
In the test mode, press			
to enter the main shaft speed test	Target Speed: 200RPM	- +	
function.	Actual Speed:		
Use + and - to set the			
aim speed of main shaft motor. After			
user presses 🞯 , the main shaft		(STOP)	
motor will rotate at the set speed. At			
this moment, the actual speed will be			
displayed in the input column of			
actual speed.			
Press to stop running			
Press X to return to the			

2.8.5 Output Signal Test

Functions:

In the test mode, press **v** to activate the output signal test function.

Y//

In this interface, user can press output signal button to test the status of output signals of solenoids

Types of Output signals:

- 1 Thread-wiping
- 2 Thread-trimming
- ③ Presser
- (4) Intermediate presser
- 5 Thread-loosing
- 6 Reverse Presser
- (7) Auxiliary air valve 1
- (8) Auxiliary air valve 2
- (9) Auxiliary air valve 3
- (1) Auxiliary air valve 4
- (1) Auxiliary air valve 5

down

Prog. IO

The air valve can set a self-adjustable output signal.

to return to the upper Press

level interface.

Press

[Note]: The sewing machine will have the actual movement.

3	Output detection mode		2023/11/28(Tue) 15:12
	Wipe	R-Presser	Valve5
	Trim	Valve1	Valve6
	Presser	Valve2	
	M-Presser	Valve3	
	Release	Valve4	
	$\boldsymbol{\boldsymbol{K}}$		Prog. IO


2.8.6 Continuous Running

Function:

In the test mode, press to enter the continuous running function

Click Action Interval bar or Origin Detection of Needle-withdrawing bar and use number keys to input the figures. Press

to return to the upper level interface.

There are two ways to activate the aging status: pedal or origin; after setting this parameter, return to main interface P1 (or P2). Step pedal or press the Return to Origin key to run the machine, and enter continuous running mode.

	Continuous run	mode		2023/	11/28(Ti	ue) 15:15
				1	2	3
	Action Interval:	20	x100ms (0~99)	4	5	6
	Origin Detetion:	0	(0~2)	7	8	9
	Aging mode:	🛎 pedal	🗆 origin	0 clr	Î	Ļ
>	<					ł

2.8.7 XY Motor Origin Test

Functions:

In the test mode, press \checkmark to activate the XY Motor Origin Detection Function.

In this interface, use direction keys to move XY motor. During this process, the system will display the ON/OFF status of the sensors.

ON: Sensor Detected

OFF: Sensor Undetected

Press X to return to the upper

level interface.

[Note]: The sewing machine will have the actual movement.

-					
3	X/Y origin detection				2023/11/28(Tue) 15:16
	X-Origin sensor:	OFF			
	Y-Origin sensor:	OFF]		
	X-Origin compensa	0.0			1
	Y-Origin compensa	0.0			2
	X offset space:	0.0]		
	Y offset space:	0.0			
	X reference offset:	0.0			
	Y reference offset:	0.0			
>			Auto correctior	Save correct	×

2.8.8 Main Motor Installation Angle Adjustment

Functions:

In the test mode, press 20°to enter the main motor installation angle adjustment. In the current interface, remove

the main motor, turn the hand wheel to lift the needle bar to the highest point and turn the main shaft joint to adjust the electrical angle within less than 30 degree. After that, reinstall the main

motor and press 🖊 to confirm.



2.8.9 Network Setting

Functions:



Use number keys to input parameters, make sure the "IP Address" and "Server IP" are within

the same section. Use

and

to move the cursor. After finishing the setting, press the Connection key to get connected with the computer via internet.

Network	setting				2023/11	/29(We	d) 13:24
IP Address:					1	2	3
Sever IP					4	5	6
Machine ID					7	8	9
AP name:					0	Del	
MAC :	0000				clr	←	→
State:Startt	ing WIFI Server,p	lease wait a r	noment				
X		Scan		Detect			ł

2.8.10 Intermediate Presser Test

Functions: 2023/11/29(Wed) 13:24 In the test mode, press Ð 0 Sensor Origin: OFF to enter intermediate Modify Middle O presser test. 0 High 🔾 Low 0 :Intermediate Presser + SW Down + X :Intermediate Presser Up SW

Presser Position

[Note]: In this interface, step pedal to return the intermediate presser to origin (the highest position of intermediate presser); the highest point is 71mm, middle point is 35mm, and the lowest point is 0mm. The adjusted position is the fabric thickness.

Shift Intermediate

This function is only available for G Type.

2.9 Function Setting

In main interface P1 (or P2),

press **MENU** to activate the catalogue

mode, and then press Function to enter the Function Setting Mode.





Functions:

No.	Functions	Content		
A	Data Transfer	Transfer pattern file between memory and U disk		
В	Formatting	Initialize the U disk, memory and pattern number hotkeys.		
C	Pattern Connection	Edit combined pattern		
D	Version Inquiry	Inquire the version of system software		
Е	Display Setting	Set background light, keyboard lock, lightness and so on		
Б	Back-up Parameter	Save parameter values into U disk for the parameter		
F	Recovery	recovery in future		
C	Defeelt Demonstern	Recovery and self-defined read-write function of the		
G	Default Parameters	default parameter values		
п	Pattern Number Hotkey	Edit the content of notions number botton		
п	Edition	Edit the content of pattern number hotkey		
Ι	Password Mode	Provide periodical password function		
т	Denomentan En american	Set passwords for each operation entrance in parameter		
J	Parameter Encryption	mode.		
K	Quit	Return to main interface		
L	Motor Configuration	Enter main motor, stepping current configuration mode		
Μ	Alarm Record	Check the alarm statistic information		
N	Running Record	Check running information of machine		
N	Date & Time Setting	Set data and time		
0	Time Setting	Set the date and time		
Р	Software Update	Enter software update mode		
	Shift between Icon and	Shift between the icer and description of the between		
V V	Description	Shift between the icon and description of the notkeys		
R	Player	Play audio in the formats of mp3, AVI, etc.		
c	Pattern Transformation in	Change the patterns of non-standard formats into standard		
S	Batch	formats. Note: standard format means nsp format.		
т	Hatkova Satting	Edit and display hotkeys in the main interface for		
	Thorkeys Setting	convenient operation by the users according to their habits		

	U	System Sifferential	Users can set parameter Settings, TD parameters, and
		Correlation	parameter upgrades according to their own needs

2.9.1 Data Transfer Mode



In function setting interface, press to enter data transfer mode, where two ways are provided: "Memory to U Disk" and "U Disk to Memory"

Functions:

No.	Description			
А	Page information, displaying the present page/total pages			
В	Pattern List			
C Memory Pattern List				
D	Select All Patterns			
E	Delete Pattern			
F	Quit and Return to Upper Interface			
G	Page Key			
	Load pattern from memory or U disk			
Н	E. Activate the Memory Load Mode: At this moment, user cannot load pattern from U disk.			
	E . Deactivate the Memory Load Mode: At this moment, user can load			
	pattern from U disk.			

: Activate the U Disk Load Mode: At this moment, user can			
pattern from memory.			
	Example: Deactivate the U Disk Load Mode: At this moment, user can load pattern from memory.		
	Example: Shift between U Disk and Memory		
Ι	Display the file folders of the U disk		
J	Enter		
K	The patterns are displayed in order of number		

Operation:

1. Copy Mode Selection

The default setting is to copy pattern from memory to U disk, user can press	 to
change the copy mode.	

2、File Selection

Select the pattern for copy from the pattern list (here, we select No.400, 401 and 600). If the

patterns are so many, please use	to turn the page.		
	All	e	

For copying all the patterns, please press and please press to delete patterns.

3、Confirm the Copy



After selection, please press 🛀 and then the system will display "Copy the Selected

Pattern", where user can press \leftarrow to perform the operation. If the pattern is copied from memory to U disk, the system will automatically create a catalogue naming "dh_pat" at the base catalogue of U disk and save the pattern under that catalogue.

[Note]: During the copy process, if the memory contains the pattern with the number same

to that of the pattern in the U disk, the new pattern will replace the old one.

2.9.2 Formatting Mode

In function setting interface,		
	📮 Format mode	2023/11/29(Wed) 13:46
press FORMAT to activate formatting mode	USB Format USB Data	
There are four formatting	Memory Format All Memory Data(Pattern)	
methods in this interface: USB	Custom Custom Format Memory Data(Pattern)	
formatting, Memory formatting,	Shortruit Format Shortruit Button/Pattern List)	
Self-defined formatting and		
Pattern number hotkey formatting	×	

1 USB Formatting:

Press "USB" to delete all the patterns in the U disk. So user need back up the data if necessary.

2. Memory Formatting:

Press "Memory" to delete all the patterns in the memory.



Found in Memory". Pressing *will automatically load the default patterns*.

3、Self-defined Formatting:

Press "Self-defined" to enter the interface for Self-defined formatting

In that interface, user can delete all patterns or selected patterns.

[Note]: The pattern being sewn can not be deleted.

📮 🛛 Delete m	nemory pattern	2023/11/29(Wed) 13:48
		001/001
	001@DATA1.NSP	
	002@DATA1.NSP	
All	003@DATA1.NSP	
	012@DATA1.NSP	
X		لب

4. Hotkey Formatting:

Pressing "Hotkey" to delete the content of the hotkeys of pattern number.

[Note]: After the hotkey formatting, pressing X will have system display "Pattern List

(Hotkey) Is Empty". Pressing 🛹 will automatically load the current pattern number to the hotkey.

2.9.3 Pattern Connection Mode



In function setting interface, press to enter Pattern Connection Mode. The pattern connection mode is mainly used to create and edit the combined pattern, which is to perform the combination edition on the basis of the existing patterns. The pattern used in combined pattern is called as sub-pattern.

T .	. •
Fu	nction:

No.	Description			
А	Name of Combined Pattern			
В	Page			
C	Load Combined Pattern			
D	Save Combined Pattern			
E	Display Sub-pattern			
F	Quit & Return to Previous Interface			
G	Page Key			
Н	Add Pattern from Memory to Combined Pattern			
Ι	Delete Sub-pattern			
J	Cancel Combined Pattern			
K	Enter			

1. Select a Sub-pattern

Press to enter Load Mode and select the pattern to add (select pattern No.612 as an example). Press

📕 to confirm it.

[Note]: Patterns should be added to the combined pattern in order.





2、 Continue Adding

Repeat the above operation to add more sub-patterns (Add patterns No.600, 602 and 401)

If user wants to delete one of them, please select the number of the

sub-pattern and then press

Name: 01/05 001 002 003 Image: Constraint of the second sec

3. Save the Combined Pattern



Name the combined pattern and

press to confirm it. For other operations within this interface, please refer to [2.6 Save Pattern].



📮 Patter				2023	/11/29(Wed) 1	
•	Name: compat				%	
					>> Clear	
1	2 3	4 5	6	7 8	9 0	
-	Q W E	RT	Y U	ΙΟ	Р _	
#	A S	DF	5 H	ЈК	L %	
Caps	En Z	x c	V B	N M	Backspace	
TOP	CLR			₹		J

4. Return to Main Interface

After finishing edition of the

combined pattern, press \leftarrow to return to main interface.

As shown in right figure, there are some differences between the combined pattern sewing interface and the normal pattern sewing interface.

(1) The name of combined pattern is displayed behind the number and the name of the current sub-pattern will be displayed at the name area.

[Note]: If the combined pattern has no name, nothing will be displayed.

(2) The original pattern number hotkeys will display the sub-patterns in this combined pattern. Click the sub-pattern to start the sewing from that sub-pattern.



5. Cancel the Combined Pattern

In order to cancel the combined pattern, user has to enter the pattern connection mode again, presses

and clicks 🗲



6. Load Combined Pattern

In pattern connection mode, if user presses when the combined pattern exists, the system will display "Clear Current Combined

Pattern". Clicking will clear the current combined pattern.

Press again to enter the interface for loading the combined pattern, where users can select the combined pattern for sewing or editing.

	Combination mode					/ed) 14:12
	Name:	compat				01/05
	001 O	002 오	003	0		
	DATA1	DATA1	DATA1			
0	0	0		0		
>					CLR	←

Read con	nbination data		2023/11/29(Wed	1) 14:28
	001	002	1	
	ComPat	compat		
×		Chan	ge	ł

2.9.4 Version Inquiry Mode

In function setting interface,

press **Ver.** to enter version inquiry mode.

Press ito output the software version to the base catalogue of the U disk with name "version.png".

Software version n	node	2023/11/29(Wed) 14:30
Panel Version:	ASC447-KD-A-v3.0.3724(20231024)	Entrol Section
Main-Control Version:	ASC447-MC-A-	
Main-Motor Version:	ASC447-MM-A-	
Step-Motor-1 Version:	ASC447-MD1-A-	
Step-Motor-2 Version	ASC447-MD2-A-	
Fs Version:	ASC447-FS-A-v1.0.57	
Os Version:	ASC447-OS-A-v1.0.47-L	
X		

2.9.5 Display Setting Mode

In function setting interface,

press **to** enter display setting mode, where user can perform the settings about the display, operation and so on.



1. Backlight Auto Turn-off

By the set time, the screen backlight will be turned off automatically.

Range: 1~9 min

Default Value: Invalid

Releasing Method: if the backlight is off, user can touch any position of the screen to turn it on.

2 Keyboard Lock

When it is set as "Valid", all the buttons will turn to grey in display and become useless.

Pressing 🛹

will directly return to main interface P1.

Default Value: Invalid

Releasing Method: Hold the title bar at main interface P1 for over 5 seconds, until user hear "Bee--m". After that the lock is released. (After the releasing, this function will be set as Invalid.)



3、 Turn off Buzzer

When it is set as "Valid", system will keep silence when user presses button. Default Value: "Invalid"

4. Sensitivity of Touching Panel

Adjust the sensitivity of the touching panel. The larger value means the higher sensitivity Range: $1 \sim 5$ Default Value: 3

5. Lightness Control

Adjust the lightness of the LCD screen. The larger value is, the lighter will be Range: $1 \sim 100$ Default Value: 100

6. Button Display Style

Set the display style of some buttons. After the successful setting, the button display under interfaces of "Catalogue Mode", "Test Mode" and "Function Setting" will be changed

Range: 0~1 (0: Icon, 1: Text) Default Value: 0

📮 Function mode	2		202	3/11/29(Wed) 14:33	Function mode	2		202	3/11/29(Wed) 14:33
COPY	FORMAT	600&601	Ver.		Сору	Format	Link Mode	Version	Panel Setting
	Program	<u>}</u>	123		Backup/Recov.	Default Para.	Pattern List	Password	Encrypt
			9 😥	1	Motor Config	Error Note	Run Note	Date/Time	Update
Ð	Convert		* 1		Player	Batch Convert	Func. Shortcut	System Para.	
TOP				Icon	TOP				Text

Icon Style Display

Text Style Display

7. Background Color Setting

Set the background color of the pattern display area in main interface Range: 0~6 (0:Black, 1: Dark Blue, 2: Red, 3: Green, 4: Blue, 5: Purple, 6: Yellow) Default Value: 0

8. Display Style of Pattern Selection

Set the display style of the interface for loading patterns. Only the used patterns can be displayed.

Range: 0~1 (0: Number, 1: Shape) Default Value: 0 Please refer to [2.5.5 Display Style of Pattern List]

9、 Panel Display Style

Adjust the panel display style Range: 0~2 (0: plastique, 1: cleanlooks, 2: windows) Default Value: 0

10, Position of Assistant Information Bar

Set the position of the assistant information bar Range: 0~1 (0: Right, 1: Left) Default Value: 0 [Note]: After the setting, user has to restart the system

11、 Main Interface Background Color

Set the background color of the main interface

board.



Select the color and press "OK" to confirm and turn off the color board



At this time, the color display area will show the selected color.

Press to return to the main interface P1 directly and change the background color of the main interface.

Panel setting mode	2023/11/3	30(Thu) 10:50
Background color of main window	Set	
Background color of information bar	Set	
Adjust Led light	50	
×		ł

12 **Background Color of Assistant Information Bar**

Set the background color of assistant information bar. The operation is same as above.

13、 Speed Setting in the Main Interface The speed can be set by level or by value.

14, **LED Lightness Adjustment**

The adjustment range is $0 \sim 100$.

2.9.6 Back-up Recovery Mode

In function setting interface,

• to enter back-up press recovery mode.

User can save the value of changed parameter into the U disk for the parameter recovery in future.

For details, please refer to [2.7.4 Recovery and Back-up of Parameter]

Recovery/Back	up parameter	2023/11/30(Thu) 10:52
	USER Backup user parameter	
×	Backup	لب

2.9.7 Default Parameter Mode

In function setting interface,

press to input the password (the original password is the manufacturer ID). After the input of password, the system will enter Default Parameter Mode.

It is used to recover the default parameters and to save the parameter values for future.

Please refer to [2.7.5 Default Parameter Recovery] for details

2.9.8 Pattern Hotkey Management Mode

In function setting interface,

press to enter Parameter Hotkey Management Mode, where user can edit the pattern number hotkeys.

1. Input Pattern Number and Select the Position of Hotkey for Editing

Please refer to [2.5.1 Direct Load Mode]. User can input the number to find the pattern, if he knows that number.

Then select the position of edition in the hotkey display area (We select the third blank)

2010	NO_PARAM	NO_PARAM
2516	NO_PARAM	NO_PARAM
3020	NO_PARAM	NO_PARAM
NO_PARAM	NO_PARAM	NO_PARAM
NO_PARAM	NO_PARAM	NO_PARAM

📮 Shortcut but	ton manage				2023/11/	/30(Thu	ı) 10:53
	[]	1	1		1	2	3
	4	5	6				
					7	8	9
					0		
← 0	03 002	001	→	Delete Format			
			03/40				
×							ł



2、 Edit the Hotkey

Select a pattern number in the pattern list, then that number will be displayed at the position that we selected in the previous operation.

User can also add the pattern at the position that already has a pattern in the hotkey list. This is to insert a number at this position. The numbers after will be moved correspondingly.

[Note]: If the pattern number for adding has already existed in the hotkeys, the system will adjust its position to the location that is closest to the selected position

3 Deletion and Formatting

Select a pattern number in the

hotkey display area and press to delete that number. Then the system will automatically adjust the number position in the hotkey list.

Press to delete all the number in the list.

[Note]: After the hotkey

formatting, pressing will have system display "Pattern List (Hotkey) Is Empty". After confirming the operation the system will automatically load the current pattern number to the hotkey.





2.9.9 Password Mode

1. Actively clear the password

Actively clearing a password means clearing a password before it takes effect.

On the function setting screen, press

the password key then select View PW file to enter the password information screen.

The date displayed on the right of the interface is the expiration date. You

can click the key to clear the password before the expiration date.



You can clear only the current password or all passwords on the machine.

1) If the password is the current prompt password, the current password is cleared. If the current password is not followed by the password, the machine no longer has the password. If there is a password,

the password takes effect on the set date.

② If the password is super password, all passwords are cleared. That is, the machine no longer has passwords.

Clear passwo	ord1						2	2023/12/0)1(Fri) 11:49
Clear password1:									
1 2	3	4	5		5	7	8	9	0
Q W	/ E	R	Т		Y	U	I	0	Р
A	s	D	F	G	н	J	к	L	
	z	x	с	v	В	N	м		
K			CLI	RA	BC				ł

2. Clear your password when it occurs

If the system has set a password and does not cancel it, the system will encounter a password attack when the password is used until the set password validity date. In this case, the user is required to enter the current prompt password or super password to unlock the machine before it can continue to operate normally.

📕 Clear passwo	ord1						2	023/12/	01(Fri) 11:49	
	Clear password1:									
1 2	3	4	5	;	6	7	8	9	0	
QW	'	E I	۲.	т	Y	U	I	0	Р	
A	S	D	F	G	Н	J	к	L		
	z	x	с	v	В	N	M			
×			CL	R	BC				ł	

2.9.10 Parameter Encryption Mode

In function setting interface,

press , then system will ask for the password (default password is manufacturer ID). Input the right password to enter the parameter encryption interface.

For details, please refer to [2.7.3 Parameter Encryption]

Parameter encryption setting 2023/11/30(Thu) 11:											
ſ	Encryption Item										
	🗆 Wiper	Slow Start	🗆 Clamp	🗆 Area Limit							
	Thread Break Sensor	Home Position	🗆 Halt	Counter							
	□ Intermediate Presser	🗆 Bobbin Winding	□ Feed Method	□ Speed							
	□ Thread Trim/ Release	LCD Screen	🗆 Other	Maintenance							

2.9.11 Motor Configuration Mode

In function setting interface,

press , then system will ask for the password (default password is manufacturer ID). Input the right password to enter the motor configuration interface.

📮 Pro	gram mo	de <passv< th=""><th>vord></th><th></th><th></th><th></th><th></th><th>2023</th><th>/11/30(T</th><th>hu) 11:07</th></passv<>	vord>					2023	/11/30(T	hu) 11:07	
		Pass	word:								
1	2 3 4		4	5		6 7		8	9	0	
-	Q	w	E	R T	Y	U	I	0	Р	-	
#	A	S	D	F	G	Н	J	К	L	%	
	(Z X		с	v		B N)			
X				CLR	A	3 <u>C</u>				ł	

Config motor parameter	2023/11/30(Thu) 11:0
Step Current	Main Motor
XY-Axis Scale	Step Motor
×	

Example:

Press the "Main Motor" to enter the main motor configuration parameter interface.

We can see all the parameters are displayed in forms. Clicking any grid will display the arrow for adjusting the parameter value. No arrow means the parameter can not be set.

Set the parameter and then click the area beyond the grid to save that parameter value. (Here, we changed No.1 parameter. After the modification, we need click at the area pointed by arrow to save the value)

	-	2	3	4	5	
1~5	$\mathbf{\cdot}$	10	5	5	0	
6~10	0	9	1	2	0	
11~15	0					

2.9.12 Alarm Record Mode

Function setting interface press a

larm record key , Enter alarm recording mode.

In this mode, the current alarm will be recorded. The smaller number means the later alarm.

It also records the accumulated production value at each alarm.

Click each number, and the information of and solution for the error will be displayed.

			2023/11/	
1	Error No.:[E-070]	Date:2017-01-04	11:02	001/003
2	Error No.:[E-070]	Date:2017-01-04	11:00]
3	Error No.:[E-070]	Date:2017-01-04	10:59]
4	Error No.:[E-018]	Date:2014-07-03	10:57]
5	Error No.:[E-055]	Date:2014-07-03	10:56]
6	Error No.:[E-047]	Date:2014-07-03	10:56]
	%		Import	Export
	Error note n 1 [2 [3 [4 [5 [6 [C	Error note mode 1 Error No.:[E-070] 2 Error No.:[E-070] 3 Error No.:[E-070] 4 Error No.:[E-070] 5 Error No.:[E-018] 5 Error No.:[E-055] 6 Error No.:[E-047]	Error note mode 1 Error No.:[E-070] Date:2017-01-04 2 Error No.:[E-070] Date:2017-01-04 3 Error No.:[E-070] Date:2017-01-04 4 Error No.:[E-018] Date:2014-07-03 5 Error No.:[E-055] Date:2014-07-03 6 Error No.:[E-047] Date:2014-07-03 Image: Content of the state of the stat	Error note mode 2023/11. 1 Error No.:[E-070] Date:2017-01-04 11:02 2 Error No.:[E-070] Date:2017-01-04 11:00 3 Error No.:[E-070] Date:2017-01-04 11:00 4 Error No.:[E-070] Date:2017-01-04 10:59 4 Error No.:[E-018] Date:2014-07-03 10:57 5 Error No.:[E-055] Date:2014-07-03 10:56 6 Error No.:[E-047] Date:2014-07-03 10:56

2.9.13 Running Records Mode

In function setting interface,

press , then system will ask for the manufacturer ID. After user gives the right ID, the system will Enter the running record mode.

(1) Accumulated Running Time: Record total sewing time of machine.

② Accumulated Sewing Pieces: Record the total number of the sewn patterns.

③ Accumulated Power-on
 Time: Record the total time of power-on

④ Accumulated StitchNumber: Record the total stitchnumber of the machine.

Additionally, click "Clear" to clear the counting value.

[Note]: If the Accumulated Sewing Pieces is cleared, the system will also clear the Accumulated Counter in the assistant information bar at main interface.

2.9.14 Date and Time Setting

Press the date and time setting button in the function setting

interface You will be asked to enter the manufacturer ID, and you will be able to enter the date and time setting mode.

							Н	•	12
-	9			Novemb	er 2023			٠	
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	
	44	29			1	2	3	4	
	45	5	6	7	8	9	10	11	
	46	12	13	14	15	16	17	18	
	47	19	20	21	22	23	24	25	
	48	26	27	28	29	30	1	2	
	49	3	4	5	6	7	8	9	
	48 49	26 3	27 4	28 5	29 6	30 7	8	2	

	Run note mode		2023/11/30(Thu) 11:11
	Totla Run Time:	0.0h	Clear
	Total Sewing Products:	0	Clear
	Total PowerOn Time:	0.0h	Clear
	Total Sewing Stitches:	4025479k	Clear
>	On Time Clear histo	ry	

1 Method for Setting Date

Click "Year" (Here, it is 2011) to display two arrows to adjust it

Click "Month" (Here, it is June) to display the list of months. User can select the proper month.

After the setting, the display of year and month will be refreshed to the right ones.

User can also use 🚺 & 횓



to check the content in calendar.

Click the day to complete the setting.

[Note]: User has to set year, month and date to finish the setting. Only setting the year and month will not complete this operation.

2. Method for Setting Time

In default, user has to set hour first. Press "hour" to shift the setting to minute (Pressing "hour" is to change it to "minute") and then press the arrows to change the time.

User can also click the display area to shift between hour and minute.

After the setting of date and

time, please press \leftarrow to save it.

2.9.15 Update Mode

In function setting interface,

. The system will ask press for the manufacturer ID. Input the correct ID to enter the software update mode.

The updating software shall be located in the catalogue "Update" in the U disk.

Click the content for update (the content in shadow is the selected),



📮 Da	ite/Time sett	ing mode							
							Н		:12
	e			Novemb	er 2023			٠	
	1	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
	44	29			1	2	3	4	
	45	5	6	7	8	9	10	11	
	46	12	13	14	15	16	17	18	
	47	19	20	21	22	23	24	25	
	48	26	27	28	29	30	1	2	
	49	3	4	5	6	7	8	9	

📮 Update pro	gram and correlative files							
Panel Pram.	Update panel program, please name the file update in the U disk directory	e plkMachine,and place under						
Icon	Update icon file,please name the file icon,a disk directory	nd place under update in the U						
Sound	und Update sound file,please name the file sound,and place under up the U disk directory							
Infor	Update information of display,please name under update in the U disk directory	ase name the file infor.txt,and place ary						
Screen	Update boot screen,please name the file sc update in the U disk directory	reen.bin,and place under						
×		VER						



user can press

2.9.16 Player

In function setting interface,



play videos and audios. Videos shall be of avi format.



2.9.17 Pattern Transformation in Batch

This batch transformation function can enable the continual availability of the patterns after software update.

The default pattern number after transformation can be allocated manually.

The default setting is to select all patterns, and pattern names marked with x are selected.

The original patterns will be deleted. If you want to keep them, please select Keep Original Patterns at the bottom.

	花样格式批量转换	2015-03-20 13:25					
	转换花样	分配号码					
	■ NEW.001	146@NEW					
	■ NEW.401	147@NEW					
	■ NEW.602	148@NEW					
	■ NEW.612	149@NEW					
>	All Reverse 001/001	□ 保留原始花样					

2.9.18 Hotkey Setting

Hotkey function is used to set the four function keys at the lower right corner according to the user's habits.



Press **—** to enter hotkey

function setting interface. User can set these four commonly used functions respectively: pattern-making, test mode, pattern loading, and pattern modification.





0	Co	ordinate	input								2023	/11/30	(Thu)	11:29
X:	+0.0(+	0.0)	X_ABS:	+0.0	Pitch:	12.0	Code:	STAR	r	P 1		PF:	+0.0	
Y:	+0.0(+	0.0)	Y_ABS:	+0.0	Speed:	SLOW	Stitch:	00000)/00000	1		PF_ABS:	+15.0)
4									→		- 🔀	MAG.	×	CODE
-									0		K	1		
	~								C		4	2		
	¥								<mark>رک</mark>		K	↓		
	IENU	TOP		₩		1				KI	No.	211	,	ł

2.10 Letter Sewing Edition

In main interface P1 (or P2),



MainWindow P Name DATA1 × No. 001 Pdt Co 1500 erOn Counte 0000 LOW H 12 91 Function (Program Y Ť

2.10.1 Parameters of Letter Sewing



Functions:

No	Functions	Content	
А	Figure Input	Input figures. At most, 20 figures can be inputted	
В	Font Selection	28 fonts are available.	
С	Array Method	User can select "Horizontal", "Vertical", "Upper Arc" "Down Arc"	
D	Density of Satin	Set the satin density. The larger value means the denser satin	
		stitches	
Е	Scaling in Height	Scale the height of letter, range: 50~200.	
F	Letter Pitch	Set the interval between letters	
G	Scaling in Width	Scale the width of letter, range: 50~200.	
Η	Return	Quit and return to main interface	

Ι	Rotation/Follow	When the array method is linear (vertical or horizontal), the content
	(Not Follow)	on the button will be displayed as "Rotation", which is to set the
		rotation angle of letter;
		When the array method is arc (Upper Arc or Down Arc), this button
		will display "Follow" or "Not Follow", which is to set whether the
		letter rotates with the arc.
J	Trim/Not Trim	Set whether to automatically insert thread-trimming code
K	Enter	Confirm operations. And then enter pattern adjustment interface.

1 Figure input

Press "Input" to enter figure input interface, where user have to input at least one figure. 20 figures can be

inputted at most. Press \leftarrow to save the input and quit.



2、Font Selection

Press "Font" to enter font selection interface, where 28 types of fonts are provided. Input the numbers from 1 to 28 to select the font.

Press to save it and quit.

In this interface, the font will be displayed to users.

3、Array Method

Press "Arrange" to enter the interface for setting array method, where user can select horizontal linear, vertical linear, upper arc and down arc.

Press to save it and quit.



Arrangement	2023/1	1/30(Th	u) 11:3
Select the arrangement of letter sew			
[1] Range: 1 ~ 4	1	2	3
Parameter meaning: 1.Straight line-Horizon	4	5	6
2.Straight line-Vertical 3.Convex arc 4.Concave arc	7	8	9
	0	1	↓
	clr		
X			ł

4、 Figure Pitch

Press "Space" to enter the letter pitch setting interface.

In horizontal array, it is to set the horizontal pitch between letters.

In vertical array, it is to set the vertical pitch between letters.

In arc array, it is to set the distance between the letters on arc.

Range: 0~99.9mm.

5 Density of Satin

Press "Density" to enter the interface for setting satin density. The range is among $10\sim200$.

Letter spacing	2023/1	1/30(Th	u) 11:38
Set the letter spacing			
0.0 Range: 0.0 ~ 99.9	1	2	3
Horizontal straight line, the spacing of the horizontal distance between etters. /ertical straight line, the spacing of the vertical distance between etters. irrcular arrangement, the spacing between letters arc distance.		5	6
		8	9
	0	Î	Ļ
	clr		
×			ł

Satin stitch density	2023/11/30(Thu) 11:40
Set the satin stitch density	
100 Range: 10 ~ 200	1 2 3
The Larger setting value, the satin stitch more dense. The smaller setting value, the satin stitch more thin.	4 5 6
	7 8 9
	• ↑ ↓
	cir
×	-

6. Scaling in Height

Press "Height" to enter the interface for setting letter height, where user can scale the height of letter. Range: 50~500.

📮 Letter height 🛛 💈	2023/11	/30(Th	u) 11:41
Set the letter height			
100 Range: 50 ~ 500	1	2	3
Letters in the font height on the basis of the original size to adjust the zoom.	4	5	6
	7	8	9
	0	Î	↓
	clr		
×			ł

7、 Scaling in Width

Press "Width" to enter the interface for setting letter width, where user can scale the width of letter. Range: $50\sim500$.

	Letter width	2023/1	1/30(Th	u) 11:42
	5et the letter width			
	100 Range: 50 ~ 500	1	2	3
L z	Letters in the font width on the basis of the original size to adjust the zoom.		5	6
			8	9
		0	Î	Ļ
		cir	ſ	_
	×			┛

8 Rotation Angle Setting

When the array method is set at "Horizontal" or "Vertical", user can set the rotation angle of the letter. Press the "Rotation" to enter the interface for setting rotation angle.

The rotating direction is counter-clockwise. Range: $0^{\circ} \sim 359^{\circ}$.

[Note]: When the array method is arc (Upper Arc or Down Arc), this button is to set whether the letter rotates with the arc.

9, Follow/Not Follow

When the array method is arc (Upper Arc or Down Arc), user can set whether the letter rotates with the arc. Press "Follow" to shift it to "Not Follow", vice versa.

[Note]: when the array method is "Horizontal" or "Vertical", this button is to set the rotating angle.

10 Add Auto-Trimming

In default setting, the system will add auto-trimming, which is to add trimming code at the end of sewing, joint of empty feeding (or sewing).

Press "Trim" to change the content on button and cancel the function for automatically adding trimming functions.

11、 Confirm the Pattern

Set the letter sewing pattern for

generation. Press \leftarrow to enter the interface for adjusting the letter sewing pattern.

Arrangement expasion	2023/11	/30(Th	u) 11:43
Set the rotation angle			
0 Range: 0 ~ 359	1	2	3
When the arrangement of letters for the straight line, angle can be adjusted by rotating alphabetical.		5	6
		8	9
	0	Î	Ļ
	clr		
×			ł

3	Letter sew setting	2023/11/30(Thu) 11:43
	Input Font Arrange Space Density Height Width Rotate Trim	YES
T	P	Ţ





2.10.2 Adjustment of Letter Sewing Pattern

In the interface for setting parameters of the letter sewing, user can press \leftarrow to enter the interface for adjusting the letter sewing pattern. In this interface, user can have the further adjustment on the pattern.



	. •	
Hun	ctions.	
1 un	cuons.	

No.	Functions	Content	
A		Change the font of selected letter. The setting method is the same as	
	Font Selection	that in Parameter Setting.	
D		Scale the height of the selected letter. The setting method is the	
В	Scale in Height	same as that in Parameter Setting.	
G	G 1 . W. 14	Scale the width of the selected letter. The setting method is the same	
C	Scale in Width	as that in Parameter Setting.	
D	X Position	Display the X coordinate of center point of the selected letter	
Е	Y Position	Display the Y coordinate of center point of the selected letter	
F	X Size	Display the width of the selected letter	
G	Y Size	Display the height of the selected letter	
TT	D.4 D. 1	Display the current pattern for letter sewing. The selected letters are	
Н	Pattern Display	displayed in red; the unselected letter is displayed in green.	
Ι	Direction Key	Adjust the position of the selected letter.	
J	Esc	Return to the previous interface	
	Previous Letter	Select the letter for adjustment from right to left. The selected figure	
K	(from right to	is displayed in red. When the icon still goes to left at selecting the	
	left)	last letter, the entire letters will be selected.	
	Next Letter	Select the letter for adjustment from left to right. The selected figure	
L	(from left to	is displayed in red. When the icon still goes to right at selecting the	
	right)	last letter, the entire letters will be selected.	

М		When the array method is horizontal array or the vertical array, this
		button will display "Left Tilt". Pressing this button will rotate the
	Left Tilt/Radian	entire pattern counterclockwise in the center of origin
11/1	Down	When the array method is arc, this button will display "Radian
		Down". Pressing this button will reduce the radian of entire pattern.
		[Note] This operation is for the entire pattern.
		When the array method is horizontal array or the vertical array, this
		button will display "Right Tilt". Pressing this button will rotate the
N	Right	entire pattern clockwise in the center of origin
IN	Tilt/Radian Up	When the array method is arc, this button will display "Radian Up".
		Pressing this button will increase the radian of entire pattern.
		[Note] This operation is for the entire pattern.
0	Laft Datation	Adjust the rotating angle of the selected letter counterclockwise.
0	Left Kolation	The rotation center is the center of the letter
р	Dialet Datation	Adjust the rotating angle of the selected letter clockwise. The
r	Right Kotation	rotation center is the center of the letter
Q	Enter	Press it to Enter the pattern save interface

Example:

1、 Select Single Letter for Adjustment

Press "Previous Letter" or "Next Letter" to select the single letter for adjustment. The selected letter is displayed in red, while the unselected are displayed in green

2. Letter Position Adjustment

Press direction keys to adjust the position of the selected letter. User can see the coordinates from "X Position" and "Y Position"

With the same operations, user can adjust the position of other letters.





3、 Adjust the Rotating Angle of Entire Pattern

Press "Left Tilt" or "Right Tilt" to adjust the rotating angle of the entire pattern

"Left Tilt": Counter-clockwise

Rotation

"Right Tilt": Clockwise Rotation

[Note]: When the array method is arc, these buttons will turn to "Radian Up"/ "Radian Down", which are to adjust the radian of the entire pattern

4、 Rotation of Single Letter

Select a letter and then press "Left Rotation" or "Right Rotation" to adjust the rotating angle of the selected letter

[Note] When adjusting the rotating angle, user had better adjust the rotating angle of the entire pattern at first. If user adjust the rotating angle of the single letter at first, the adjustment will be canceled when user rotates the entire pattern.

5. Save Pattern

After the adjustment, press to enter interface for saving patterns.







Input name and number, and then

press. The system will display"Letter Sewing Pattern SavedSuccessfully". (For other operations,please refer to [2.6 Save Pattern].)[Note] After the successful saving,the letter sewing pattern will notturn to current patternautomatically. User has to enter thepattern loading interface to select it.

📮 Pa	ttern	save m	ode						202	3/11/30	(Thu) 13:08
	•	Name: No.:	NEW						%		
										>>	Clear
1		2	3	4	5	6		7	8	9	0
-		Q	w	E F	R T	Y	U	I	0	Р	_
#		A	s	D	F	G	н	J	к	L	%
C	aps	En	z	x	с	v	В	N	м	Backs	space
TOP								X	ţ		ł

3 Appendix 1

Number	Name of Malfunction	Sub-information content
E-001	Pedal isn't at central position.	Please adjust pedal position.
E-002	Halt sw is pressed power on	 Turn and release the halt button. If the screen keep displaying this hint, please check the following way: 1. Check the condition of halt button. 2. Check the connection between the halt button and head transfer board. 3. Test the connection between the head board and control box,check the terminal of the control box.
E-003	Machine head reverse	 Check the safe switch is triggered correctly,this is pressed status in normal working; check the connection between the safe switch and the head board.
E-004	Lower voltage	 Please turn off power and check system hardware. 1、 Check if the AC power supply have abnormal fluctuation; Make sure there is no large power device that is turned on/off frequently; equip the voltage regulator. 2、 If the AC power supply is normal, the problem may be at the hardware. Please return the main control board for repair.
E-005	AC voltage is too high	 Check if the AC power supply have abnormal fluctuation; Make sure there is no large power device that is turned on/off frequently; equip the voltage regulator. If the AC power supply is normal, the problem may be at the hardware. Please return the main control board for repair.
E-006	IPM abnormality	 Please turn off power and check system hardware. 1 Make sure no short circuit at main motor; check if the value of each winding is equal and not 0; 2 Check whether the output at U\V\W is shorted to earth or the 300V power supply, so as to judge the condition of IPM.

3.1 Warning Information List

		Please turn off power and check system hardware 1. Make sure no short connection is at the peripheral		
		solenoids and valves. At first, remove the entire		
	Current of auxiliary	external solenoids and valves; secondly, install them		
E-007	electrical sourse	one by one to find the problem part;		
	exceed.	2. Check if the inner core connector plug of the wire		
		between the control box and head board is short;		
		3. Make sure no short connection is between head		
		and head board during the process of installation.		
		Please turn off power and check system hardware		
		1. Check if the peripheral solenoids and values are		
	Current of auxiliary	damaged;		
E-008	electrical sourse	2. Check if the inner core connector plug of the wire		
	defficient.	between the control box and head board is short;		
		3. Check whether the head transfer board is shorted		
		to head at installation.		
		Please turn off the power and check the system		
		hardware.		
	Valve is short circuit	1. Check whether the power of fan has problem.		
E-009	Or Fon foult	2. Check whether there is a short circuit phenomenon		
		in the peripheral valve, pull out all external		
		electromagnets and valves, and then insert it one by		
		one to determine the fault device.		
	Step motor over	If your motor is close loop motor, please:		
E-010	speed	1. Check the encoder of motor;		
	-1	2. Check the cable of encoder		
	Motor running	If your motor is close loop motor, please:		
E-011	abnormality	1. Check the encoder of motor;		
		2, Check the cable of encoder		
	Coder fault or isn't	1. Turn off machine and check the connection		
E-012	connected	conditions of encorder cable and control box plugs.		
		2, Check the encoder cable.		
		Please turn off power and check system hardware		
		1, Check whether the main shaft is blocked by the		
E-013	Motor running	load;		
	abnormality	2. Turn the hand wheel and repower the machine		
		when the main shaft is at another angle;		
		5. Check the encoder cable or replace the motor.		
		Please press Enter.		
E 014	Out of sewing range	not ration and solving it again often acting the anisian		
E-014	in moving	2. Check whather the serving range set in energy is		
		2. Check whether the selects 1 with the		
		nead matches to the selected pattern.		

E-015	Needle thread broken detection abnormality	 Please press Enter. 1 Detect the thread-breakage signal at normal working; 2 Turning off the function of "Thread-breakage Detection" can make machine not give this warning again.
E-016	Halt sw isn't at normal position Or air pressure isn't enough	It is common hint, not the problem. Please release the halt switch Turn and release the halt button. If the screen keep displaying this hint, please check the following way: 1、 Check the condition of halt button. 2、 Check the connection between the halt button and head transfer board. 3、 Check the connection is loose between the X9 and the head transfer board.See if the cable is broken.
E-017	Read E2PROM error	
E-018	Write E2PROM error	
E-019	X-Motor origin detection abnormality	 Please turn off power. 1、 Use debugging function to move the frame manually and test whether the coupler signal is displayed; 2、 When the machine is on, user can use a piece of metal sheet to approach the proximity switch. This is to test whether the system can give the vocal warning. 3、 Adjust the installation position of the proximity switch to ensure its reliable actions. 4、 Test the working condition of the stepping motor and make sure they have no step missed; 5、 Test the conditions of the stepping cables and sensor cables. 6、 Check the cable connection between the control box and head board. Make sure no short connection or thread breakage at both ports.

		Please turn off power.	
		1. Use debugging function to move the frame	
		manually and test whether the coupler signal is	
		displayed:	
		2. When the machine is on user can use a piece of	
		metal sheet to approach the proximity switch This is	
		to test whether the system can give the vocal	
	V-Motor origin	warning	
E 020	detection	A diust the installation position of the provimity	
E-020	abnormality	switch to ensure its reliable actions	
	aononnanty	A Test the working condition of the stepping motor	
		and make sure they have no step missed:	
		5 Test the conditions of the stepping cobles and	
		5. Test the conditions of the stepping cables and	
		Check the apple connection between the control	
		by and head head. Make sure no short connection	
		on thread breakage at both monte	
		Disease turn off neuver	
		1 Use debugging function to move the frame	
		manually and test whether the coupler signal is	
		displayed	
		2. When the machine is on user can use a piece of	
		25 when the machine is on, user can use a piece of motol shoot to approach the provinity switch. This is	
		to test whether the system can give the vocal	
	Middle Dresser	Worning	
E 021	wildule-Flesser	a direct the installation position of the provinity	
E-021	oligili detection	switch to oncure its reliable actions	
	aononnanty	4 Test the working condition of the stepping motor	
		and make sure they have no step missed:	
		5 Test the conditions of the stepping cobles and	
		sensor cohles	
		6 Check the cable connection between the control	
		by and head heard. Make sure no short connection	
		or thread breakage at both ports	
		Disease turn off neuror	
		1 Check the connection of cable between the main	
	Driver of step motor	control board and the stepping board	
F-022	communication	2. Check the power supply of stepping boards Make	
L-022	abnormality	sure the power indicator and working indicator work	
	aunormanty	normally. If the stepping beard has no nower	
		indication user should replace the stepping board	
		mulcation, user should replace the stepping board.	
E-023Step motor overflowing1. The stepping motor is broken; user needs to replace the stepping motor. 2. The stepping drive board is broken; user needs to replace the stepping drive board.E-024Abnormal currentPlease turn off the power. Turn the hand wheel to test the running of the main shaft. Check whether any mechanism is blocked. 2. Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3. Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4. Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			Please turn off power.
--	-------	------------------------------	--
E-023Step motor overflowingreplace the stepping motor. 2、 The stepping drive board is broken; user needs to replace the stepping drive board.E-024Abnormal currentPlease turn off power. 1、Turn off the power. Turn the hand wheel to test the running of the main shaft. Check whether any mechanism is blocked. 2、 Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3、 Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4、 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.	E-023	Step motor overflowing	1_{Σ} The stepping motor is broken; user needs to
E-024 Abnormal current E-024 Abnormal current 2. The stepping drive board is broken; user needs to replace the stepping drive board. Please turn off power. 1. Turn off the power. Turn the hand wheel to test the running of the main shaft. Check whether any mechanism is blocked. 2. Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3. Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4. Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			replace the stepping motor.
E-024Abnormal currentreplace the stepping drive board.E-024Abnormal currentPlease turn off power. 1 \ Turn off the power. Turn the hand wheel to test the running of the main shaft. Check whether any mechanism is blocked. 			2. The stepping drive board is broken; user needs to
 E-024 Abnormal current Please turn off power. 1, Turn off the power. Turn the hand wheel to test the running of the main shaft. Check whether any mechanism is blocked. 2, Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3, Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4, Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 			replace the stepping drive board.
E-024 Abnormal current Honormal current E-024 Abnormal current E-024 Abnormal current E-024 Abnormal current E-024 Abnormal current E-024 Abnormal current Abnormal current E-024 Abnormal current Abnormal current E-024 Abnormal current E-024 Abnormal current Abnormal current Abnormal current Abnormal current E-024 Abnormal current Abnormal current E-024 Abnormal current E-024 Abnormal current Abnormal cur			Please turn off power.
 E-024 Abnormal current Fundamental curre			1, Turn off the power. Turn the hand wheel to test the
 E-024 Abnormal current mechanism is blocked. 2、 Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3、 Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4、 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 			running of the main shaft. Check whether any
 E-024 Abnormal current 2. Turn off the power. Check the connection at the coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor 3. Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4. Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 			mechanism is blocked.
E-024 Abnormal current coupling of the main shaft motor. The large interval at the coupling will cause the over-current at the motor $3 \\$ Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. $4 \\$ Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			2. Turn off the power. Check the connection at the
 E-024 Abnormal current Abnormal current at the coupling will cause the over-current at the motor 3 Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 			coupling of the main shaft motor. The large interval
E-024 Abnormal current motor Abnormal current motor 3、Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4、Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			at the coupling will cause the over-current at the
 E-024 Abnormal current Abnormal current 3 Turn off the power. Measure whether the resistance values at the three-phase resistance are equal. If not, the motor is down. 4 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 			motor
 E-024 Abnormal current resistance values at the three-phase resistance are equal. If not, the motor is down. 4、 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it. 	E 024	A h a	3, Turn off the power. Measure whether the
equal. If not, the motor is down. 4、 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.	E-024	Abnormal current	resistance values at the three-phase resistance are
4、 Turn off the power. Use the multimeter to test the IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			equal. If not, the motor is down.
IPM module, if IPM is down, please do not repower the machine. User needs to replace or repair it.			4. Turn off the power. Use the multimeter to test the
the machine. User needs to replace or repair it.			IPM module, if IPM is down, please do not repower
			the machine. User needs to replace or repair it.
5_{3} When the system gives warning, please make sure			5. When the system gives warning, please make sure
whether the machine is at the process of trimming or			whether the machine is at the process of trimming or
stop. If so, please adjust the main shaft parameters to			stop. If so, please adjust the main shaft parameters to
solve this problem.			solve this problem.
Please turn off power.		IPM overflow frequently 1	Please turn off power.
1, Turn off the power. Turn the hand wheel to test the			1, Turn off the power. Turn the hand wheel to test the
running of the main shaft. Check whether any			running of the main shaft. Check whether any
mechanism is blocked.			mechanism is blocked.
2_{γ} Turn off the power. Check the connection at the			2, Turn off the power. Check the connection at the
coupling of the main shaft motor. The large interval			coupling of the main shaft motor. The large interval
at the coupling will cause the over-current at the			at the coupling will cause the over-current at the
motor			motor
E-025 IPM overflow 3, Turn off the power. Measure whether the	E-025		3、Turn off the power. Measure whether the
frequently 1 resistance values at the three-phase resistance are	L-023		resistance values at the three-phase resistance are
equal. If not, the motor is down.			equal. If not, the motor is down.
4. Turn off the power. Use the multimeter to test the			4. Turn off the power. Use the multimeter to test the
IPM module, if IPM is down, please do not repower			IPM module, if IPM is down, please do not repower
the machine. User needs to replace or repair it.			the machine. User needs to replace or repair it.
5, when the system gives warning, please make sure			5, when the system gives warning, please make sure
whether the machine is at the process of trimming or			whether the machine is at the process of trimming or
stop. If so, please adjust the main shaft parameters to			stop. It so, prease adjust the main shaft parameters to

E-026	Motor is stucked 1	 Please turn off power. 1、 Due to the wrong location of the main shaft angle, the trimmer is jammed on the needle when cutting the thread, thus causes the main shaft to be blocked. Solution: Relocate the main shaft angle 2、 The needle rod is jammed on the intermediate presser at moving, which causes the blockage of the main shaft. Solution: check the action of the intermediate presser and the connection between the air valve and the solenoid valve. 3、 The trimmer can't cut the thread due to lacking of strength, which causes the blockage of the main shaft. Solution: adjust the main shaft parameter and increase the strength of trimming. 4、 The mechanism has dead point, so the main shaft is blocked. Solution: adjust the main shaft motor has problem, which responses the wrong signal, thus causes the blockage of the main shaft motor
E-027	Motor is stucked 2	 Please turn off power. 1 The used fabric is too thick to be penetrated by the needle. Solution: adjust the main shaft parameters or change to a motor with larger power capacity; 2 The needle rod is jammed on the intermediate presser at moving, which causes the blockage of the main shaft. Solution: check the action of the intermediate presser and the connection between the air valve and the solenoid valve; 3 The mechanism has dead point, so the main shaft is blocked. Solution: adjust the mechanism; 4 The encoder at the main shaft motor has problem, which responses the wrong signal, thus causes the blockage of the main shaft motor.
E-028	Motor over speed	Please turn off power. The encoder on the main motor has problem, so the signal response is wrong.
E-029	Overflow in stop status	Please turn off power. The encoder on the main motor has problem, so the signal response is wrong.
E-030	DC-Line voltage abnormality	Please power off.

E-031	X-Motor position confirm error	Please power off.
E-032	Y-Motor position confirm error	Please power off.
E-033	Presser isn't down	Please step on presser foot pedal.
E-034	Can't operation because of not at home position	Please press home button.
E-035	X motor overflowing	 Check the motor cable connections and tie-in. Swap the motor to confirm the problem of motor or driving circuit board.
E-036	Y motor overflowing	 Check the motor cable connections and tie-in. Swap the motor to confirm the problem of motor or driving circuit board.
E-037	X motor high-current	X motor high-current
E-038	X motor running out	 Check the motor cable connections and tie-in. Swap the motor to confirm the problem of motor or driving circuit board.
E-039	Y motor running out	 Check the motor cable connections and tie-in. Swap the motor to confirm the problem of motor or driving circuit board.
E-040	Servo communication error1	Servo communication error1
E-041	Servo communication error2	Servo communication error2
E-042	Servo communication error3	Servo communication error3
E-043	Coil cylinder unfinish the action	Retry please.
E-044	Bobbin thread is not enough	Press confirm key to cancel alarm.
E-045	Trimming-Motor origin detection abnormality	
E-046	Write driver failed	Please restart the system and upgrade again.
E-047	Unrecognized template	Please replace the template
E-048	Mpf motor overflowing	Please power off.
E-049	Trim motor overflowing	Please power off.

E-050	Mpf motor abnormality	Please power off.
E-051	Trim motor abnormality	Please power off.
E-052	Card read module exception	Please check to see if the card module is damaged or disconnected
E-053	Air pressure lack	Please check the air valve
	Abnormal	
	communication	
E-054	between main	
	control and DSP1	
	Abnormal	
	communication	
E-055	between main	
	control and DSP2	
	Abnormal	
E OFC	communication	
E-056	between main	
	control and DSP3	
	Abnormal	
E 057	communication	
E-057	between main	
	control and DSP4	
E-058	Bobbin thread is not enough	Press confirm key to cancel alarm.
E-059	The needle is lost or displaced during sewing	 Please shut down the machine and check whether the spindle encoder signal connection plug is correct, reliable and damaged. Please check whether the moving frame angle fine adjustment and moving frame time fine adjustment are the default values in the transfer mode. 3. Please check whether there is any unrecognized function code information in the pattern, and whether there are continuously repeated function codes.
E-060	Abnormal origin finding of upper rotation axis (beyond the limited number of steps)	 Please shut down the machine and check whether the connection plug of the origin sensor of the upper rotating shaft is correct and reliable, and whether the connection wire is damaged. Please check whether the upper rotation axis origin sensor is damaged. Please check whether the relevant machinery of the upper rotating shaft is loose, whether the rotation is smooth and whether there is any blockage.

		1. Please shut down the machine and check whether
		the connection plug of the origin sensor of the lower
	Abnormal origin	rotating shaft is correct and reliable, and whether the
	finding of lower	connection wire is damaged.
E-061	rotation axis (beyond	2. Please check whether the lower rotation axis
	the limited number	origin sensor is damaged.
	of steps)	3. Please check whether the relevant machinery of
		the lower rotating shaft is loose, whether the rotation
		is smooth and whether there is any blockage.
E-062	Unknow error	Unknown error in communication

3.2 Hint Information List

Display number	Main message	Word information
M-001	Up counter setting value up	Please press enter button.
M-002	Down counter setting value up	Please press enter button.
M-003	Can't operation because of not at home position	Please return to home position first.
M-004	Pattern data does not exist	Please read or input again.
M-005	Too large setting value	Please input value within the range.
M-006	Too small setting value	Please input value within the range.
M-007	Please press home button	
M-008	Storage parameter abnormality	Please press enter button to recovery default value.
M-009	There is no pattern data in memory	Please press enter button to load default pattern.
M-010	Number of pattern data in memory is full	Please delete pattern data of not used.
M-011	Whether the pattern data in memory to delete	Press enter button to perform delete operation, press cancel button to exit operation.
M-012	Whether overwrite pattern data in memory	Press enter button to perform overwrite operation, press cancel button to exit operation.

M-013	Can't delete pattern data	The selected data is used now!
M 014	Whether format	Press enter button to perform format operation, press
IVI-014	memory	cancel button to exit operation.
M-015	Communication error	Panel and control-box connection abnormal!
M-016	Out of sewing range	Please confirm pattern data in sewing range!
M-017	Read char sew file failure	
M-018	Type of panel and control box does not match	Please check machine type and software version
M-019	Memory space not enough	Please delete pattern data of not used.
M-020	Illegal setting pattern number	Please input the correct pattern number.
M-021	Out of max pitch	
M-022	Password error	Please input again.
M-023	RTC clock error	Find rtc clock error, please contact factory to repair!
M-024	Out of stitch count range	Please enter the [operation set]]->[LCD], select the parameter of large stitch pattern support is set to ON
M-025	Too small pitch of input	Please input value within the range.
M-026	Too large pitch of input	Please input value within the range.
M-027	Second-origin is exist	Only input one second-home.
M-028	SKIP JOG setting is out of range	Please input value within the range.
M-029	Please press home button	
M-030	Whether copy the special pattern data	Whether to overwrite the same number patterns? Yes:Enter No:X
M-031	Whether copy all pattern data	Press enter button to perform operation, press cancel button to exit operation
M-032	Whether recovery default	Press enter button to perform operation, press cancel button to exit operation
M-033	USB is unplugged	USB is unplugged!
M-034	There is no pattern data in usb	
M-035	Input one letter at all	Need to input one letter at all in letter sewing

M-036	No error notes	
M-037	Replace the needle	Replace of the needle has reached the set
		value,replace the needle
MO20	D 1	Time to change the oil has reached the set
IVI-038	Replace the off	value, replace the oil
M 030	Clean the machine	Cleaning machine time setting is reached, please
11-039		clean the machine
M-040	Data type is different	Please confirm data type
M-041	Curve data isn't able	Please input again referring to curve input notes
	to be made	Trease input again referring to carve input notes
	Trim code can't be	
M-042	inserted at current	Please insert trim code after sew data
	position	
	Can't insert same	
M-043	code at the same	
	position	
	Can't insert second	
M-044	home at current	Please insert second home after feed data
	position	
	The circle or the arc	
M-045	isn't made from the	Please input again
	input point	
MOAC	The multiple back	The multiple back tacking can be used only for the
M-046	tacking can't be	figure where circle, curve and broken line shut
	Trim code con't be	
	inserted after the	
M-047	needle down position	
	ston code	
	Needle down	
	position stop code	
M-048	can't be inserted	
	before the trim code	
M-049	Can't find offset data	The offset data transform function can't be used
	Can't find multiple	
M-050	data	The multiple data transform function can't be used
	The selected position	
M-051	isn't correct	
MOCO	Can't perform pattern	
M-052	sacle	
M-053	Out of max pitch	
NI 054	Pattern data isn't	
IVI-034	correct	
M-055	Make arc data?	

M-056	Make circle data?	
M-057	Make curve data?	
M-058	Make break line data?	
M-059	Presser foot is at up position	Please turn on the pedal foot switch
M-060	Enter the user ID wrong	Please input again
M-061	Confirm the password failure	Please input again
M-062	Forbid to adjust system time	Can't adjust system time because of stage password setting
M-063	Failed to write the password file	
M-064	Failed to read the password file	
M-065	Save the password successfully	
M-066	Failed to clear all the password	Can't delete the password file
M-067	Failed to clear the password	Failed to write the file after the password cleared
M-068	Remove the password file maliciously	The phase password file of user setting is removed maliciously, please power off
M-069	User ID file is corrupt	
M-070	Input pattern name	
M-071	Please clear the current combined data	Press the "CLR" to clear the current combined data
M-072	Can't input nothing	Please input the password
M-073	The current password does not match	Please input the password again
M-074	The new password does not match	Please input new password and confirm again
M-075	Success of the touch panel calibration	Success of calibration, please restart after power off
M-076	Sure to clear error notes?	Sure? Yes:Enter No:X
M-077	Whether to delete the selected file	Sure? Yes:Enter No:X

M-078	Copy all patterns	Whether to overwrite the same number patterns? Yes:Enter No:X
M-079	Failed to copy file	Please check whether the disk space is full!
M-080	Failed to copy file	Please check whether the pull of USB
M-081	Failed to open file	Failed to open file!
M-082	Format does not match	Format does not match, giving up the current reading
M-083	Parameter out of range	Parameter out of range, press the enter button will be out of range of the parameter default values restored!
M-084	Please create directory and file	BakParam in the U disk to create the directory, and backup file name backup.param, and copied to the U disk directory
M-085	File read and write error	File read and write error!
M-086	Please select the entry	Please select the entries to read or write
M-087	File does not exist	The current entry corresponding file does not exist
M-088	The amount of movement does not input	Please input the amount of movement!
M-089	Sure to enter the touch panel calibration mode?	Sure? Yes:Enter No:X
M-090	Sure to clear the total time of machine running?	Sure? Yes:Enter No:X
M-091	Sure to clear the total number of sewing?	Sure? Yes:Enter No:X
M-092	Sure to clear the total time of power on?	Sure? Yes:Enter No:X
M-093	Sure to clear the total number of stitches?	Sure? Yes:Enter No:X
M-094	Stage can't be the same password and super password	Please input again
M-095	Forbid to modify up-counter current value(NUP)	Please close setting(NUP), when modifying
M-096	Forbid to modify dn-counter current value(NDP)	Please close setting(NDP), when modifying
M-097	Pattern list(Short Cut) is empty	If the pattern list is empty, system will automatically import the current pattern pattern list.

M-098	Not select the upgrading entries	Please select the entry you want to upgrade, at least choose one
M-099	Some of the selected upgrading entry does not exist	Upgrading files that does not exist will be to uncheck after pressing enter button, if you want to upgrade the rest of the file, check again.
M-100	Upgrade success!	Success of upgrading, please restart after power off
M-101	Whether to format U disk	Press enter button to perform format operation,press cancel button to exit operation. All files of U fisk will be lost after formating!
M-102	U disk does not exist	Please insert U disk to be formatted!
M-103	Success	Successfully perform the current operation!
M-104	Failure	The current operation failed!
M-105	Whether to format pattern list(shortcut button)	Press enter button to perform format operation, press cancel button to exit operation.
M-106	Whether to overwrite the same name pattern of U disk.	Press enter button to perform overwrite operation, press cancel button to exit operation.
M-107	Failure of the touch panel calibration	Please calibrate again.
M-108	Success of saving letter-sew pattern	Please enter the data read interface, select the newly generated letter-sew pattern.
M-109	The selected pattern isn't a normal format,the need for format conversion.	Press enter button to perform convert operation, press cancel button to exit operation.
M-110	The pattern can't be converted.	Please confirm the pattern file.
M-111	Whether to restore all items	Sure? Yes:Enter No:X
M-112	Whether to restore the selected items	Sure? Yes:Enter No:X
M-113	Item not selected	Please select one or several items
M-114	Parameter initialization	Removed all the data in memory storage, please power off and restore the DIP switch position
M-115	Can't copy to overwrite the current pattern	Copy of the current pattern number in the queue,can't overwrite the current pattern
M-116	Need to convert the format pattern	The selected pattern is not a standard file format. Please use it after conversion
M-117	Combination of	Please enter the pattern connection mode, press the

	patterns can not	"CLR" to lift combination patterns
	enter this operation	
N (110	Whether to delete	Whether to delete origin pattern after converting
M-118	origin pattern?	Yes:Enter No:X
N 110	Intermediate presser	
M-119	at down position	Please lift Intermediate presser
M-120	Power off,bye-bye!	
	Not support the	
M-121	Format that has big	Not support the file format on this system
	stitch space	
M 122	Conversion pattern	Plaga confirm the pattern file
101-122	format error	riease comminue patient me.
M 123	Conversion data too	Please enter the [operation set]]->[LCD], select the
101-123	big	parameter of large stitch pattern support is set to ON
M_124	Can't open the	Please confirm the pattern file
101-12-4	pattern	
M-125	Conversion pattern	Set scale of edit software to 0.1mm(Tools->Option
	accuracy error	Setting->Scale)
M-126	Recovery parameters	Success of recoverying parameters, please restart
11120	success!	after power off
M-127	Software version is	Software version has been successfully saved to usb
191-12/	saved successfully	root directory
M-128	Success of setting	Need to restart machine
	parameters	
M-129	u disk no exist	Please insert u disk which includes mp3 files
	no video file of	please copy video file video.avi into update directory
M-130	video avi	in u disk, then enter into update window and choose
		videofile
	Presser is In down	
M-131	position	Please lift presser
	No exist second	
M-132	home point	No exist second home point in current pattern
M-133	Network set failure	
7.124	Network connect	
M-134	failure	
	Verifying Failed	
M-135	when burning	
	control application	
M-136	Threading	
	Whether to recovery	Press enter button to perform operation press action
M-137	saved custom	hutton to evit operation
	parameter	
M-138	Current pattern is	Please unlock template!

	locked		
N 120	Parameter loaded		
M-139	failure	Please change bobbin thread press enter key to con	
M 140	Bobbin thread is not	Please change bobbin thread, press enter key to count	
101-140	enough	again	
M 141	Can not create		
101-141	multisewing data		
M-142	Finish pattern copy?		
M-143	Memory allocate		
	error		
	Continue to use will		
M-144	be converted to dot		
	sewing		
	The panel and the	The current system has a password need to contact	
M-145	main control does	the factory to unlock	
	not match		
	The current panel	The nanel has password but the main control has not	
M-146	has a password,need	password!	
	to synchronize	r	
	The current main		
M-147	control has a	The main control has password, but the panel has not	
	password,need to	password!	
	synchronize		
M-148	Need to change	Some special language will close the sound function	
	font, please power off		
M-149	The main board ID		
	does not exist		
	Would you resume		
M-150	to restore the default		
	param of this type?		
M-151	Lack of language	Please update font file	
	font		
M-152	Failure of open	Pattern file error, will be deleted!	
	combination pattern		
M-153	Content of pattern		
	list is error		
M-154	Can't enter batch		
N 155	conversion function		
M-155	I his number is saved		
M-156	End of converting		
M-157	Can't generate stitch		
M-158	Inner data error		
M-159	Exist arc	Ellipse will be converted to point	

M-160	Sure to clear the product statement?	Sure? Yes:Enter No:X
M-161	Punched card success	
M-162	Punched card failure	
M-163	Take shrinked stitchs as an isolate part?	Confirm:detach, cancle:keep unifom
M-164	Success of dense sew convert	Part of dense sew is converted to dot sew, this can't be converted again. Proposed to save the original pattern, so that modify next time.
M-165	Current pattern is uesd for milling	
M-166	Error on accessing FTP	Please check connection, account, path existence
M-167	Failure of moving file	
M-168	Sure to clear on/off notes?	Sure? Yes:Enter No:X
M-169	No on/off notes	
M-170	Verify failed when updating driver	
M-171	Request failed	
M-172	Success of saving password information	
M-173	Upgrade file does not exist	/sysParam directory does not exist or there are no files in this directory
M-174	Please set the up counter invalid	
M-175	Please set the down counter invalid	
M-176	Sure to confirm the main motor angle correction?	Sure? Yes:Enter No:X
M-177	Invalid group number	
M-178	Reject current operation	
M-179	Receive parameter is empty	
M-180	Parameters have not changed	
M-181	The two-dimensional	

	code display failed		
	The current position		
M 192	needs to be corrected	Please press the confirmation key	
101-102	as new pattern is		
	read		
	The stitches of dense		
M-183	sew exceeds the		
101-105	actual stitches of		
	needle		
M-184	No dense sew data		
	can be generated		
	Sure to confirm the		
M-185	upper shaft motor	Sure? Yes:Enter No:X	
	angle correction?		
	Sure to confirm the		
M-186	lower shaft motor	Sure? Yes:Enter No:X	
	angle correction?		
M-187	Cannot input point	Coincide with the last input point position	
M-188	Make curve data?		
M-189	Software does not		
	match file system		
M-190	Machine switching	Please turn off and restart	
	Failure of password	The entry date should be before the next persword	
M-191	date modification	avpiration date	
	Whether to bobbin		
M-192	winding	Sure? Yes:Enter No:X	
	The start stitch	Confirm the key to modify the code, cancel the key	
	contains the function	to quit and choose again.	
M-193	code. Please confirm	If you want to retain the code, please refer to the	
	whether or not it is	code information on the right side of the interface to	
	modified.	move so that the starting stitch is the code.	
	The panel is not		
M-194	encrypted, and the	Please confirm whether the new panel has been	
	main control is	replaced.	
	encrypted.	1	
	Panel encryption,		
M-195	main control not	Confirm key synchronization encryption status	
	encrypted.		
	The system has been	Make sure the key continues to ensure and consel	
M-196	installed in remote	the key exit operation	
	installments.		

M-197	Wireless module 1 connection failure	System speed down to the lowest, please contact the manufacturer.	
M-198	Do you want to update the thumbnail immediately?	The thumbnail will also be generated when the pattern is used.	
M-199	The system has been set to no networking mode.	After opening the networking function, it can be detected.	
M-200	Connect failure		
M-201	Unable to convert		
M-202	The machine has a password, please know!		
M-203	Do you want to delete the selected shape points		
M-204	Do you want to modify the shape point properties		
M-205	The pattern does not exist. Do you want to download it from the server	Sure? Yes:Enter No:X	
M-206	Request pattern is not standard NSP format		
M-207	There is no request pattern on the server		
M-208	The server updates the software. Do you want to upgrade it	Do you want to upgrade now? Yes: Enter no: x	
M-209	Machine not registered		
M-210	The action did not complete and timed out		
M-211	Location query timed out		
M-212	Flex maybe modified shrinked stitchs	Pattern has the shrinked stitchs, flex convert operation will add new shrinked stitches, destory the old shrinked stitchs, you should save the old pattern	
M-213	Please scan the code and start sewing.		

	Zigzag width is too		
M-214	big,you need to		
	insert stitch		
	breadthwise		
	Pattern has created	VEStEnter continue modify the peremeter or odd	
M-215	sucessfully,contiue	A ES.Enter, continue modify the parameter of add	
	modify pattern?	code; NO:X,exit and save the pattern	
M-216	Is the rigidity of all		
	stitch lengths	Sure? VociEnter No:V	
	restored to the initial	Sure: 1 es.Enter NO:A	
	value?		
M 217	The same name	Confirm the selected pattern is what you need really	
101-21/	pattern exists		
	Do you want to save		
M-218	the laser offset	Sure? Yes:Enter No:X	
	value?		
M-219	Do you want to save		
	the origin offset	Sure? Yes:Enter No:X	
	value?		
M-220	Base two can not be		
	the same with the		
	base one		
M-221	Preset time reminder		

4.Appendix 2

4.1Installation Size of Control Box

1、 ASC Installation Size of Control Box



Figure 1 Installation Size (4 Holes)

2、 MAS41X/MASC44X Installation Size of Control Box



3、 TASC41X Installation Size of Control Box







MAS41X/MASC44X Control Box Back Wiring Interface Diagram

4.3 Installation Size of Control Panel



Figure 2 Installation Size of Control Panel

4.4 Diagram and Cable Connection

1、MASC41X Diagram



2、MASC44X Diagram



126

3、TASC41X Diagram



4、RASC442 Diagram



128



5, RASC447 Diagram

4.5 Cable Connection

1、HSC41X Cable Connection

Socker	Functions	Pin definitions
L627 (White)	Presser Pneumatic Valve	1+, 2-
L627 (Yellow)	Feeding Frame Pneumatic Valve	1+, 2-
L627 (Blue)	Trimming Pneumatic Valve	1+, 2-
L627 (Black)	Wipe Solenoid	1+, 2-
L627 (Red)	Thread releasing Solenoid	1+, 2-
L627 (White)	Trimming Solenoid	1+, 2-
L628 (White)	Auxiliary	1+, 2-
L628 (Yellow)	Emergency Stop	1+, 2-
L628 (Black)	Safety Switch	1+, 2-
L628 (White)	X Origin	1-, 2, 3+
L628 (Yellow)	Y Origin	1-, 2, 3+
L628 (Red)	Z Origin	1-, 2, 3+
L628 (Black)	Thread Breakage Detection	2
L659 (Yellow/White/ White/Black/Blue/White)	Auxiliary Pneumatic 1/2/3/4/5/6	1+, 2-
L659 (Red)	LED Light	1+, 2-

2、MASC41X Cable Connection

Socker	Functions	Pin definitions
L758 (Yellow)	Emergency Stop	1+, 2-
L758 (Black)	Safety Switch	1+, 2-
1759 (Plack)	Thread Breakage	2
	Detection	
L758 (White)	X Origin	1-, 2, 3+
L758 (Yellow)	Y Origin	1-, 2, 3+
L758 (Red)	Z Origin	1-, 2, 3+
	Feeding Frame	1+, 2-
	Pneumatic Valve	
	Presser Pneumatic	1+, 2-
	Valve	
	Trimming Pneumatic	1+, 2-
	Valve	
L759 (Red)	LED Light	1+, 2-

L759 (White)	Auxiliary Pneumatic Valve 2/3	1+, 2-
L760	Auxiliary Pneumatic	1+ 2
(Yellow/Black/Blue/White)	Valve 1/4/5/6	1+, 2-
L760 (White)	Auxiliary	1+, 2-
L760 (Black)	Wipe Solenoid	1+, 2-
L760 (White)	Trimming Solenoid	1+, 2-
	Thread releasing	1, 0
	Solenoid	1+, 2-

3、MASC44X Signal Transform-connecting Board Connection

SC0413 Signal Transform-connecting Board

Socker	Functions	Pin definitions
CZ134	Emergency Stop	1+, 2-
CZ139	Safety Switch	1+, 2-
CZ1313	Thread Breakage Detection	2
CZ1317/1321/1327	Input 1/2/2/4/5	1 2 2+
/1316/1320		1-, 2, 3+
CZ133	X Origin	1-, 2, 3+
CZ138	Y Origin	1-, 3, 4+
CZ1312	Z Origin	1-, 2, 3+
CZ1326	Auxiliary Pneumatic Valve	1+, 2-
CZ135	Presser Pneumatic Valve	1+, 2-
CZ137	Feeding Frame Pneumatic Valve	1+, 2-
CZ1310	Trimming Pneumatic Valve	1+, 2-
CZ1314	Trimming Solenoid	1+, 2-
CZ136	Wipe Solenoid	1+, 3-
CZ1311	Thread releasing Solenoid	1+, 3-
CZ1315	LED Light	1+, 2-
CZ1319/1323/1325	Nolve 1/2/2/1/5/6	4. 0
/1318/1322/1324		17, 2-