

5780D

高速电子平头锁眼机

High speed electronic lockstitch
button hole sewing machine

安全指示

- 1) 在安装或使用本产品前，使用者必须详细阅读本操作手册。
- 2) 本产品须由受过正确训练的人员来安装或操作。安装作业时必须关闭所有电源，切记不可带电操作。
- 3) 所有标有  符号的指示，必须特别注意并按照说明书上的执行，以免造成不必要的损害。
- 4) 为安全起见，禁止以延长线作电源座供应二项以上的电器产品使用。
- 5) 在连接电源线时，必须确定工作电压符合本产品标识中规定的额定电压值。
- 6) 请不要在日光直接照射的场所、室外及室温 45℃ 以上或 0℃ 以下的场所操作。
- 7) 请不要在暖气（电热器）旁、有露水的场所及在相对湿度 10% 以下或 90% 以上的场所操作。
- 8) 请不要在灰尘多的场所、具有腐蚀性物质的场所及有挥发性气体的场所操作。
- 9) 请注意所有电源线、信号线、接地线等接线时不要受压或过度扭曲，以确保使用安全。
- 10) 电源线的接地端须以适当大小的导线和接头连接到生产工厂的系统地线，此连接必须被永久固定。
- 11) 所有可转动的部分，必须以所提供的零件加以防范露出。
- 12) 在安装完成第一次开后，先关闭切线功能以低速操作缝纫机并检查转动方向是否正确、运转是否稳定。
- 13) 在进行以下操作前，请先关闭所有电源：
 1. 在控制箱与马达上插拔任何连接插头时。
 2. 穿针线时。
 3. 翻抬缝纫机机头时。
 4. 修理或做任何机械上的调整时。
 5. 机器闲置不用时。
- 14) 修理或高层次的保养工作，仅能由受过训练的机电技师来执行。
所有维修用的零件，须由本公司提供认可，方可使用。
- 15) 使用本产品请远离高频电磁波和电波发射器等，以免所产生的电磁波干扰伺服驱动装置而发生误动作。
- 16) 请不要以不适当物体来敲击或撞击本产品及各装置。

保修期限

本产品保修期限为购买日期起一年内或出厂月份起两年内。

保修内容

本产品在日常情况使用且无人为操作失误的前提下，于保修期间无偿为客户维修使能正常操作。

但以下情况于保修期间将收取维修费用：

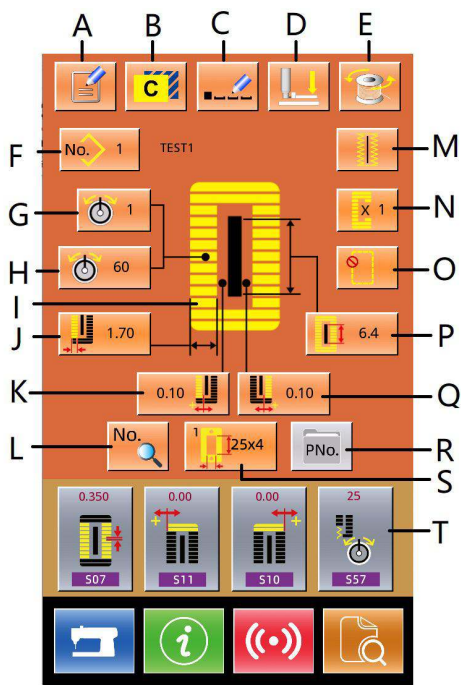
1. 不当使用包括误接高压电源、将产品移做其它用途、自行拆卸、维修、更改、或不依规格范围使用、进水进油及插入异物于本产品。
2. 火灾、地震、闪电、风灾、水灾、盐蚀、潮湿、异常电压及其它天灾或不当场所造成的损害。
3. 客户购买后摔落本产品，或客户自行运输（或托付运输公司）造成的损害。

* 本产品在生产及测试上皆尽最大努力和严格控制使其达到高品质及高稳定的标准，但外部的电磁或静电干扰或不稳定的供应电源，仍可能对本产品造成影响或损害，因此操作场所的接地系统一定要切实做好，并建议用户安装故障安全防护装置（如漏电保护器）。

1 界面功能键

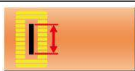
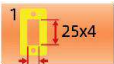
1.1 缝制数据输入界面

数据输入界面如图所示，详细功能说明请见功能键说明表。



1.1.1 功能键说明表

序号	图标	功能	备注
A		花样登记	
B		花样复制	
C		花样命名	
D		穿线（压脚下降）	可以在该状态下更换机针
E		绕线	
F		花样选择	按此键可进入花样选择界面
G		上线张力组设定： ：第一组 ：第二组	

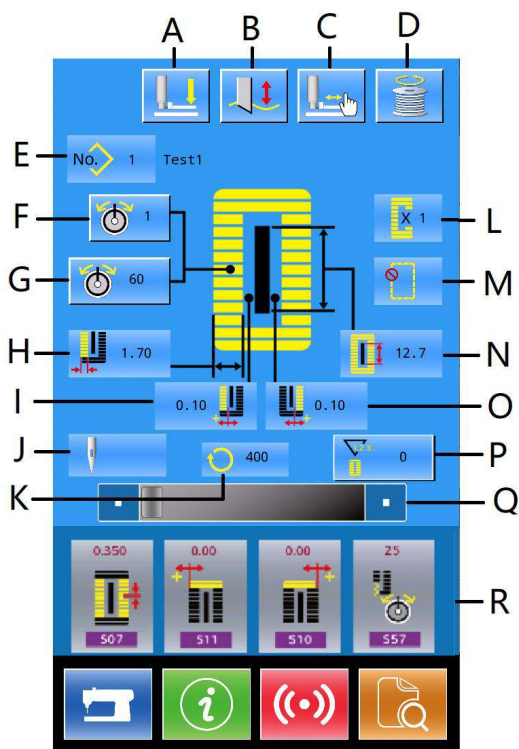
H		 : 线张力 1 设定  : 线张力 2 设定	
I		缝制形状选择	
J		左包边宽度设定/返回宽度	1~26 号形状为左包边宽度设置, 27~30 号形状为返回宽度设定
K		切刀槽左宽度设定	27, 29 号形状不支持
L		缝制数据设置	
M		 : 平缝  : 三角缝	计算自动底线检测的底线长度, 还能切换线张力组
N		双重缝/单次缝设置	27, 28, 29 号形状不支持
O		下缝次数设置	30 号形状不支持
P		切布长度	
Q		切刀槽右宽度设定	27, 28 号形状不支持
R		直接选择键	
S		压脚类型选择	
T		用户管理	可把使用频率高的 4 个缝制数据设为快捷键放在主界面

1.2 缝制界面

按下  进入缝制界面

如图所示，详细功能说明请见功能

键说明表。



1.2.1 功能键说明

序号	图标	功能	备注
A		试缝	
B		 : 切刀使能  : 切刀禁止	切换切刀使能
C		穿线（压脚下降）	
D		绕线	
E		花样号码显示	
F		上线张力组设定:  : 第一组	

		 : 第二组	
G		和线张力 2:  : 线张力 1 设定  : 线张力 2 设定	
H		左包边宽度显示	
I		切刀槽左宽度显示	
J		总针数显示	
K		当前缝制速度显示	
L		单次缝/双重缝显示	
M		下缝次数显示	
N		切布长度显示	
O		切刀槽右宽度显示	
P		计数器值显示  : 缝制计数器  : 计件计数器	
Q		速度设置	受 K07 参数影响
R		用户管理显示	

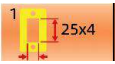
2 选择压脚类型



2.1 显示数据输入界面

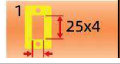
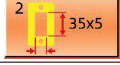
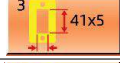
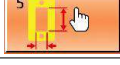
仅数据输入界面（橙色）可以变更设定内容。如果显示的是缝制界面（蓝色）时，请按准备键，显示出数据输入界面。

2.2 调出压脚类型选择界面

按了压脚类型选择按键之后，显示出压脚类型选择界面。

2.3 选择压脚类型

请按安装在缝纫机上的压脚类型的按键（B）。被按的按键翻转显示。关于压脚类型，请参考下表进行设定。

	类型	压脚型号
	1 型	
	2 型	
	3 型	
	5 型	-

※使用 1~3 型以外的压脚头时，请设定为 5 型。请根据使用的参数 U15 压脚和宽度参数 U16 压脚长度，变更存储器开关（1 级）。使用 5 型压脚摆动宽度最大可达 6mm，长度在 41mm 以上时，需要变更压脚曲柄、送布板等零件。

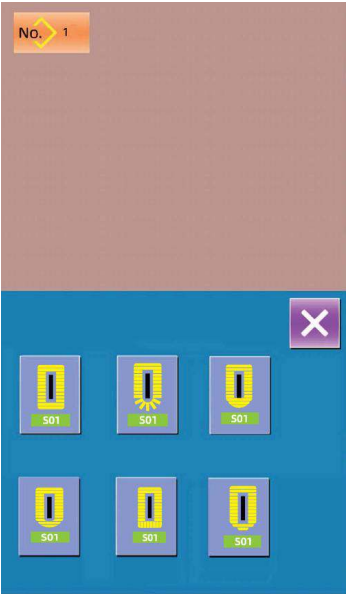
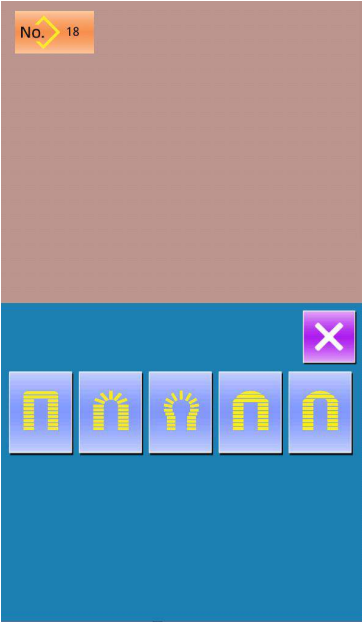
2.4 确定压脚类型

按确定按键之后，退出压脚类型变更界面，变更之后，退出压脚类型变更界面，变更完成。按退出键直接退出。

3 缝制形状选择



按下  进入缝制形状选择界面。



3.1 选择第一固定缝形状

常用的 5 种第一固定缝形状分别代表方型、放射型、圆眼型、半圆型、圆型，当参数 K04 设置为 30 种缝制形状时，还可以选择加固缝、加固左切断、加固右切断、加固中央切断 4 种类型。选择第一固定缝形状进入缝制形状选择，其中 27~30

号形状可以按下确定按钮  结束选择。按退出键  直接退出选择。

注：

- 1. 第一固定缝形状的显示受 K04 参数的影响；
- 2. 改变第一固定缝形状时，请注意修改对应该形状的缝制参数，否则有可能影响打板数据生成或缝制效果；
- 3. 形状的初始参数数值，请参考完整版说明书附录 1 的 10.4 节 “缝制初始值数据一览表”。

3.2 结束缝制形状选择

选择结束缝制形状，按下  返回主界面。按退出键  直接退出，不会改变形状号。

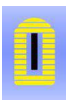
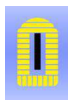
3.3 参数 K04 影响

	K04 = 12 个形状	K04 = 20 个形状	K04 = 30 个形状
方形	1	1, 18, 19, 20	1, 18, 19, 20, 21, 22
反射形	3, 4, 5, 6	3, 4, 5, 6	3, 4, 23, 24, 5, 6
圆眼形	7, 8, 9, 10	7, 8, 16, 17, 9, 10	13, 25, 11, 26, 14, 15
半圆形	11	13, 11, 14, 15	12, 2
圆形	12, 2	12, 2	12, 2
加固形			27, 28, 29, 30

注 1：表中数字代表形状号码。

注 2：缝制形状 27, 28, 29, 30 只有在 K04 设置为 30 个形状时才可以被使用。

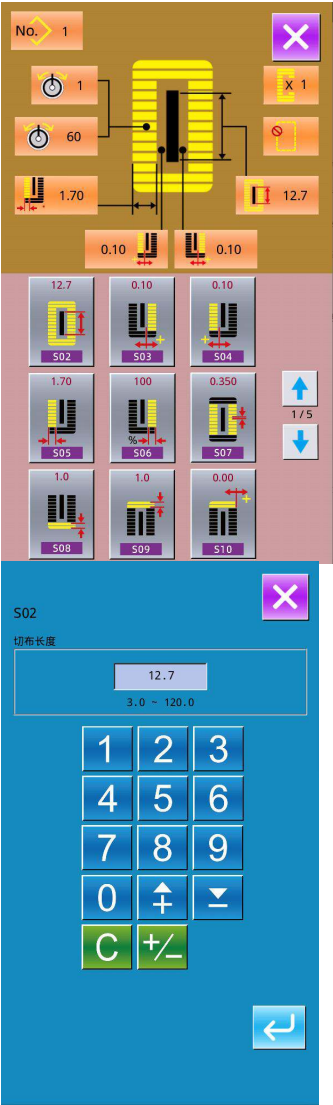
3.4 缝制形状一览

01 方形 	02 圆形 	03 放射方形 	04 放射形 	05 放射直线固定型 
06 放射锥形固定形 	07 圆眼方形 	08 圆眼放射形 	09 圆眼直线加固形 	10 圆眼锥形加固形 
11 半圆形 	12 圆方形 	13 半圆方形 	14 半圆直线加固形 	15 半圆锥形加固形 
16 圆眼半圆形 	17 圆眼圆形 	18 方放射形 	19 方半圆形 	20 方圆形 
21 方直线加固形 	22 方锥形加固形 	23 放射半圆形 	24 放射圆形 	25 半圆放射形 
26 半圆圆形 	27 加固缝 	28 加固右切断 	29 加固左切断 	30 加固中央切断 

31 打底缝				
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4 缝制数据设置

4.1 变更缝制数据



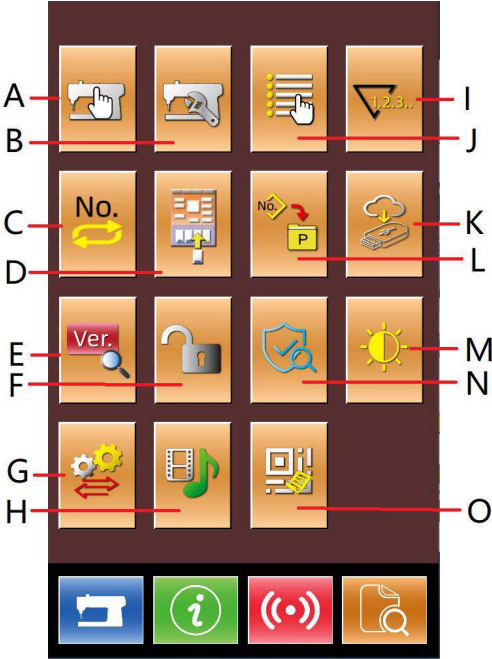
按下  进入缝制设置界面（如图所示）。选择想要修改的缝制数据后进入设置状态，参数号底色为紫色的缝制数据是数据输入类型，参数号底色为蓝色的缝制数据是图

标选择类型。按下  退出缝制数据设置。

举例如下：

选择 ，进入界面（如图所示）。

5 模式和参数设置



按下  可以切换数据输入界面和模式界面（如图所示），在该界面下可以进行一些详细的设置编辑操作。

注：部分图标需要长按  键打开。

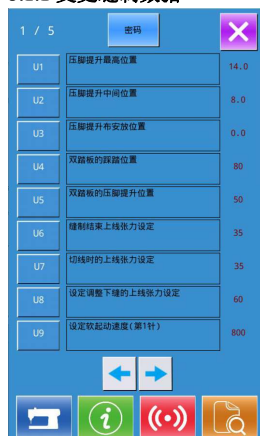
功能说明

序号	图标	功能	备注
A		一级参数设置	
B		二级参数设置	
C		缝制类型设置	
D		缝制数据编辑	
E		软件版本查询	
F		锁键盘	

G		参数备份还原	
H		多媒体	
I		计数器设置	
J		用户管理项设置	
K		格式化	
L		快速选择花样键	
M		亮度调节	
N		检测模式	
O		说明书二维码	

5.1 一级参数设置

5.1.1 变更缝制数据



选择 进入一级参数设置界面（如图所示）。按



键退出参数设置界面。

当有参数修改时，在参数设置界面显示【已修改】按键，选择想要修改的参数后进入设置状态，参数设置分为数据输入类型和选择类型。举例如下：

U1

压脚提升最高位置

14.0

mm

范围

0.0 ~ 19.0

步长

0.1

设定踏板动作的最高位置高度。

1

2

3

4

5

6

7

8

9

0

↑

↓

C

×

↩

选择 U01，进入界面。

U20

断线检测功能

1/1

OFF

无效

ON

有效

×

↩

选择 U20，进入界面。

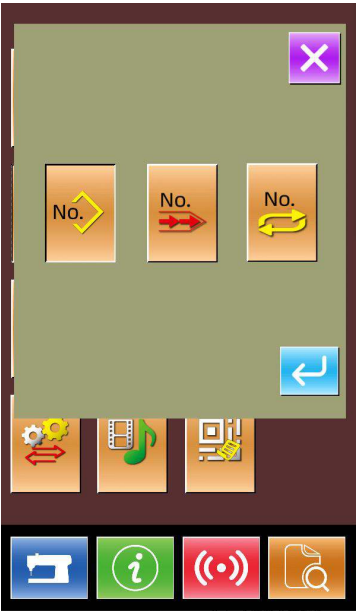
5.2 二级参数设置



在设置模式等级 3 下，选择  进入二级参数设置界面（如图所示）。操作方法参照“7.2 一级参数设置”。当有参数修改时，在参数设置界面显示【已修改】按键。

按  键退出参数设置界面

6 变换缝制类型



按下  进入缝制类型选择界面（如图所示）。

 : 普通缝

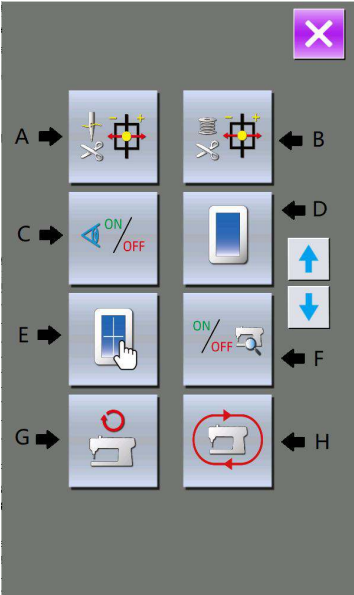
 : 连续缝

 : 循环缝

确定缝制类型之后，按下  结束。按  之后，显示出选择的缝制类型的数据输入界面。

按  键退出变换缝制类型界面，原来的缝制类型不变。

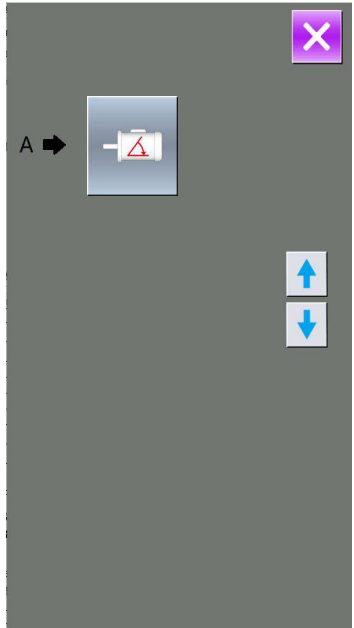
7 检测模式



在设置模式下，按下  键可以进入检测模式界面（如图所示）。

各图标功能说明详见下表：

序号	名称
A	上剪线检测
B	下剪线检测
C	输入检测
D	液晶显示检测
E	触摸屏校正
F	输出检测
G	转速测定
H	连续运转
I	电机原点



按  键退出检测模式界面

Safety Instruction

1. Users are required to read the operation manual completely and carefully before installation or operation.
2. The product should be installed and pre-operated by well-trained persons. All power supplies must be turned off during the installation work, remember not to operate with power on.
3. All the instruction marked with sign  must be observed or executed; otherwise, bodily injuries might occur.
4. For perfect operation and safety, it is prohibited that using extension cable with multi-outlet for power connection.
5. When connecting the power cord, it must be determined that the operating voltage conforms to the rated voltage value specified in the product identification.
6. Don't operate in direct sun light, outdoors area and where the room temperature is over 45°C or below 0°C.
7. Please avoid operating near the heater at dew area or at the humidity below 10% or above 90%.
8. Don't operate in area with heavy dust, corrosive substance or volatile gas.
9. Avoid power cord being applied by heavy objects or excessive force, or over bend.
10. The earth wire of power cord must be connected to the system ground of the production plant by proper size of conductions and terminals. This connection should be fixed permanently.
11. All the moving portions must be prevented to be exposed by the parts provided.
12. Turing on the machine in the first time, operate the sewing machine at low speed and check the correct rotation direction.
13. Turn off the power before the following operation:
 1. Connecting or disconnecting any connectors on the control box or motor.
 2. Threading needle.
 3. Raising the machine head.
 4. Repairing or doing any mechanical adjustment.
 5. Machines idling.
14. Repairs and high level maintenance work should only be carried out by electronic technicians with appropriate training.
15. All the spare parts for repair must be provided or approved by the manufacturer.
16. Don't use any objects or force to hit or ram the product.

Guarantee Time

Warranty period of this product is 1 year dated from purchasing, or within 2 years from ex-factory date.

Warranty Detail

Any trouble found within warranty period under normal operation, it will be repaired free of charge. However, maintenance cost will be charged in the following cases even if within warranty period:

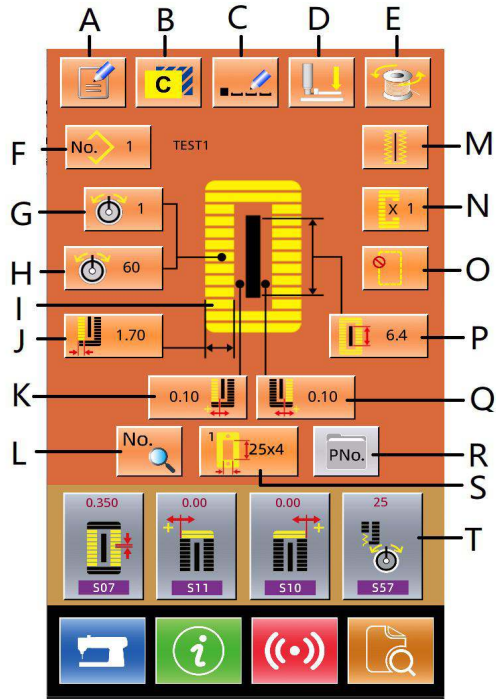
1. Inappropriate use, including: wrong connecting high voltage, wrong application, disassemble, repair, modification by incompetent personnel, or operation without the precaution, or operation out of its specification range, or inserting other objects or liquids into the product.
2. Damage by fire, Earth quake, lighting, wind, flood, salt corrosive, moisture, abnormal power voltage and any other damage cause by the natural disaster or by the inappropriate environments.
3. Dropping after purchasing or damage in transportation by customer himself or by customer's shipping agency

* We make our best effort to test and manufacture the product for assuring the quality. However, it is possible that this product can be damaged due to external magnetic interference and electronic static or noise or unstable power source more than expected; therefore the grounding system of operate area must guarantee the good earth and it's also recommended to install a failsafe device (Such as residual current breaker).

1 Interface function key

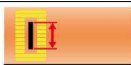
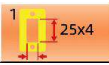
1.1 Sewing data input interface

The data input interface is shown in the figure, and detailed functional descriptions can be found in the function key description table.



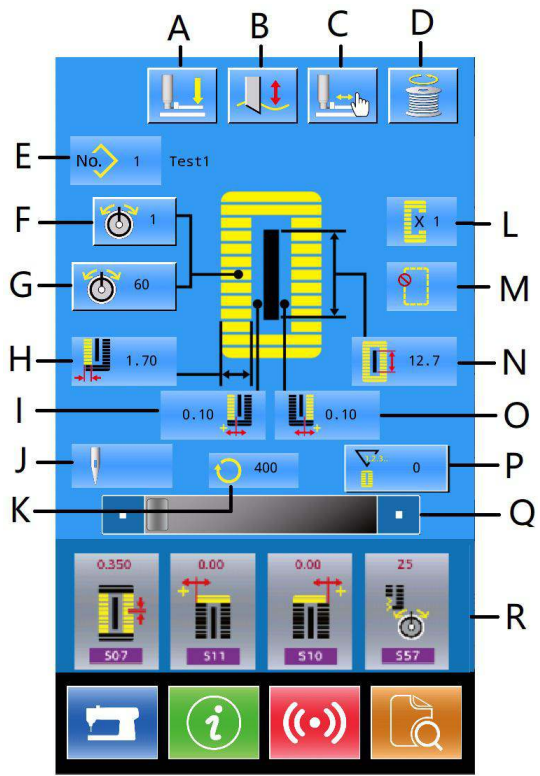
1.1.1 Function key description tale

S/L	Icon	Function	Remarks
A		Pattern registration	
B		Pattern copy	
C		Pattern naming	
D		threading (foot-lifter down)	The sewing needle can be replaced in this state
E		Winding	
F		Pattern selection	Press this key to enter the pattern selection interface
G		Setting of upper thread tension group: : the first group	

		 : the second group	
H		 : thread tension 1 setting  : thread tension 2 setting	
I		Selection of sewing shape	
J		Left edge width setting/return width	Shapes 1~26 are set for the left edge width, and shapes 27~30 are set for the return width
K		Setting the left width of the cutting groove	Shapes 27 and 29 are not supported
L		Sewing data settings	
M		 : lock stitch  : Triangular seam	Calculate the length of the bottom thread for automatic bottom thread detection, and also switch the thread tension group
N		Double seam/single seam setting	Shapes 27,28 and 29 are not supported
O		Setting the number of bottom stitches	Shapes 30 are not supported
P		Cutting length	
Q		Setting the right width of the cutting groove	Shapes 27 and 29 are not supported
R		Direct selection key	
S		Foot-lifter type selection	
T		User management	Four sewing data with high usage frequency can be set as shortcut keys and placed on the main interface

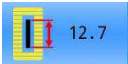
1.2 sewing interface

Press  enter sewing interface is shown in the figure, and detailed functional descriptions can be found in the function key description table.

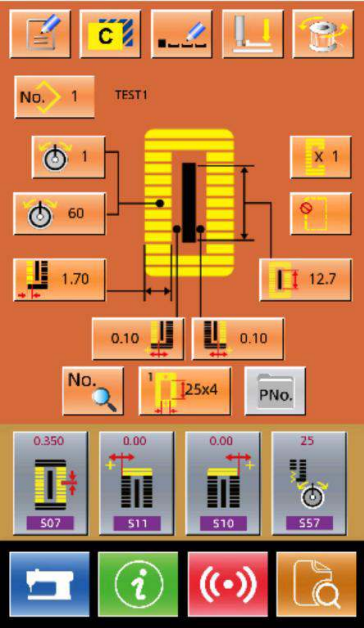


1.2.1 Function key description

S/L	Icon	Function	Remarks
A		Test sewing	
B		 : cutter Enable  : cutter prohibition	Switching cutter enable
C		Threading (foot-lifter down)	
D		winding	
E		Pattern number display	

F		Setting of upper thread tension group:  : the first group  : the second group	
G		And thread tension 2:  : thread tension 1 setting  : thread tension 2 setting	
H		Left edge width display	
I		Left width display of cutting groove	
J		Display of total stitches	
K		Current sewing speed display	
L		Single stitch/double stitch display	
M		Display of down stitching times	
N		Cut length display	
O		Display of the right width of the cutting groove	
P		Counter value display  : Sewing counter  : Piece counter	
Q		Speed setting	Affected by K07 parameters
R		User management display	

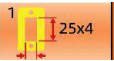
2 Select foot-lifter type



2.1 Display data input interface

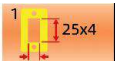
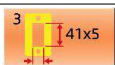
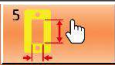
Only the data input interface (orange) can change the setting content. If the sewing interface (blue) is displayed, please press the prepare key to display the data input interface.

2.2 Call up the foot-lifter type selection interface

After pressing foot-lifter type select key , displays foot-lifter type select interface.

2.3 Select foot-lifter type

Please press the key (B) of the foot-lifter foot type installed on the sewing machine. The pressed key flips the display. Please refer to the table below for setting the type of foot-lifter.

	type	Foot-lifter model
	1 model	
	2 model	
	3 model	
	5 model	-

※ When using foot-lifter heads other than Type 1-3, please set them to Type 5. Please change the memory switch (level 1) based on the parameters U15 foot-lifter and width U16 foot-lifter length used. When using the Type 5 foot-lifter, the maximum swing width can reach 6mm, and the length is over 41mm, it is necessary to change the foot-lifter crank, cloth feeding plate, and other parts.

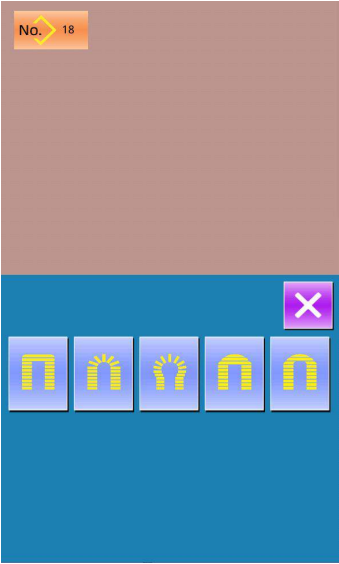
2.4 Confirm foot-lifter type

After pressing confirm key , exit foot-lifter type changing interface. After changing, exit foot-lifter type changing interface. After changing, press exit key  to exit directly.

3 sewing shape selection



Press  to enter sewing shape selection interface.



3.1 Select the first fixed seam shape

The five commonly used first fixed seam shapes represent square, radial, circular eye, semicircular, and circular shapes. When parameter K04 is set to 30 sewing shapes, four types can also be selected: reinforced seam, reinforced left cut, reinforced right cut, and reinforced central cut. Select the first fixed seam shape to enter the sewing shape selection, the shapes 27-30 can be



selected by pressing the OK button  to end the selection.

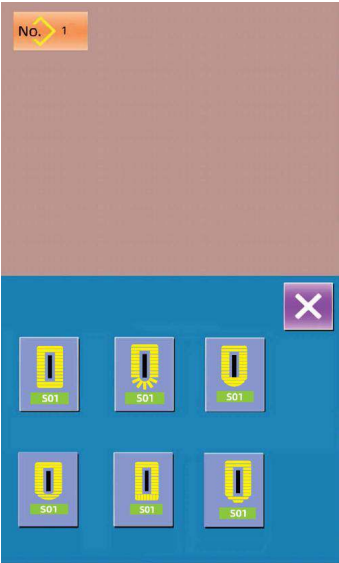


Press exit key  to exit the selection directly.

Notes:

1. The display of the shape of the first fixed seam is affected by the K04 parameter;
2. When changing the shape of the first fixed seam, please pay attention to modifying the sewing parameters corresponding to the shape, otherwise it may affect the generation of board data or the sewing effect;
3. For the initial parameter values of the shape, please refer to

Section 10.4 "List of Sewing Initial Values Data" in Appendix 1 of the complete manual.



3.2 End sewing shape selection



Select the end sewing shape, press  to return main interface. Press exit key  to exit directly, it will not change shape number.

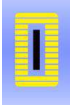
3.3 Refers to the affect of K04

	K04 = 12 shapes	K04 = 20 shapes	K04 = 30 shapes
Square shape	1	1, 18, 19, 20	1, 18, 19, 20, 21, 22
Radial shape	3, 4, 5, 6	3, 4, 5, 6	3, 4, 23, 24, 5, 6
circular eye shape	7, 8, 9, 10	7, 8, 16, 17, 9,10	13, 25, 11, 26, 14, 15
semi circular shape	11	13, 11, 14, 15	12, 2
circular shape	12, 2	12, 2	12, 2
Reinforced shape			27, 28, 29, 30

Note 1: The numbers in the table represent shape numbers.

Note 2: Stitching shapes 27, 28, 29, and 30 can only be used when K04 is set to 30 shapes.

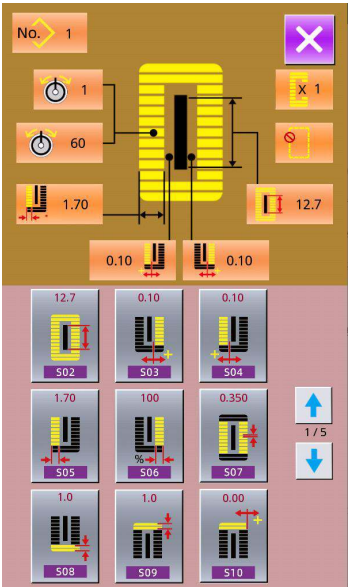
3.4 List of Sewing Shapes

01 Square shape 	02 circular shape 	03 Radial square 	04 Radial 	05 Radial straight fixed type 
06 Radial conical fixed shape 	07 Round eye square 	08 Round eye radial shape 	09 Round eye straight reinforced shape 	10 Round eye conical reinforcement shape 
11 halfround 	12 Round Square 	13 Half circle square 	14 Half circle straight reinforced shape 	15 Half circular conical reinforcement shape 
16 Round eye semi circular 	17 Circular eye round shape 	18 Square radial shape 	19 Square semicircle 	20 Square circle 

21 Square straight reinforced shape 	22 Square cone reinforced shape 	23 Radiating semicircle 	24 Radiating circle 	25 Semicircular radial shape 
26 Semicircular circle 	27 Bar-tacking 	28 Reinforcement Right cutoff 	29 Reinforcement left cutoff 	30 Reinforced central cutoff 
31 Bottoming seam 				

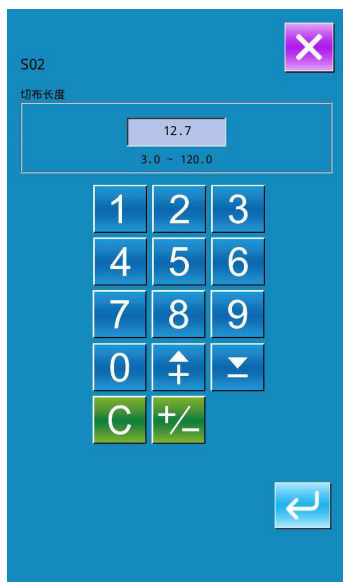
4 Sewing data settings

4.1 Change sewing data



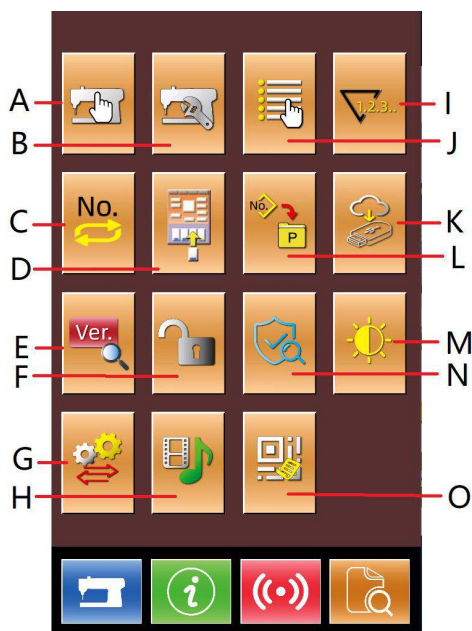
Press  enter to sewing setting interface (as shown in the figure). Select the sewing data you want to modify and enter the setting state. The sewing data with a purple background for the parameter number is the data input type, and the sewing data with a blue background for the parameter number is the icon selection type. Press  key to exit sewing data setting.

Example as follows:



Select key  to enter into interface (as shown in the figure).

5 Mode and parameter settings



Press  can switch between data input interface and mode interface (as shown in the figure), detailed settings and editing operations can be performed on this interface.

Note: Some icons need long press  key to open.

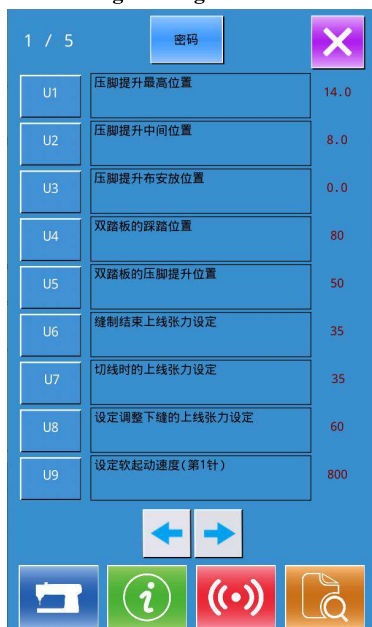
Function description

S/L	Icon	Function	Remarks
A		First level parameter settings	
B		Second level parameter settings	
C		Sewing type setting	
D		Sewing data editing	
E		Software version query	
F		Lock keyboard	
G		Parameter backup restore	
H		multi-media	
I		Counter setting	
J		User Management Item Settings	
K		format	
L		Quick selection shape keys	

M		Brightness adjustment	
N		detection mode	
O		Manual QR code	

5.1 First level parameter settings

5.1.1 Change sewing data



Select  enter first level parameter setting interface (as shown in the figure). Press  key to exit parameter setting interface.

When there is a parameter modification, the [Modified] key is displayed on the parameter setting interface. After selecting the desired parameter, it enters the setting state. Parameter settings are divided into data input type and selection type. For example:

U1 压脚提升最高位置

14.0 mm

范围 0.0 ~ 19.0 步长 0.1

设定踏板动作的最高位置高度。

1	2	3
4	5	6
7	8	9
0	↑	↓
C		

✕ ↩

Select U01 to enter into interface.

U20 断线检测功能 1/1

OFF 无效

ON 有效

✕ ↩

Select U20 to enter into interface.

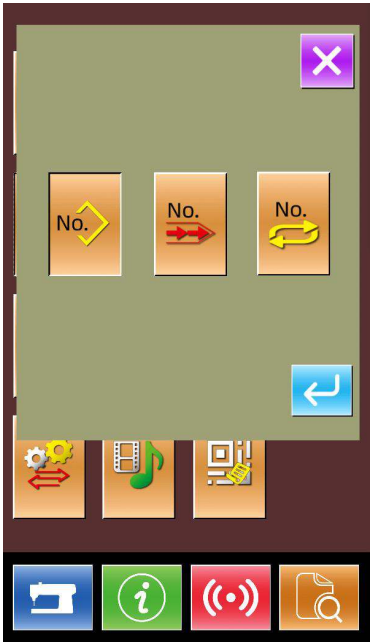
5.2 Secondary parameter settings



Under setting mode level 3,select  to enter Secondary parameter settings (as shown in the figure) .Please refer to "7.2 Primary Parameter Settings" for the operation method. When there are parameter modifications, the [Modified] key is displayed on the parameter setting interface.

Press  key to exit parameter setting interface.

6 Changing the sewing type



Press  to enter sewing type selection interface (as shown in the figure).

 : Common sewing

 : Continuous sewing

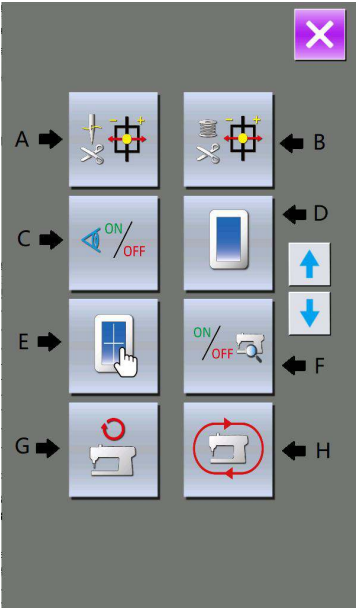
 : Recycle sewing

After confirming sewing type, press  to end. After

pressing  , display the data input interface for the selected sewing type.

Press  key to exit changing the sewing type interface, original sewing type is as same.

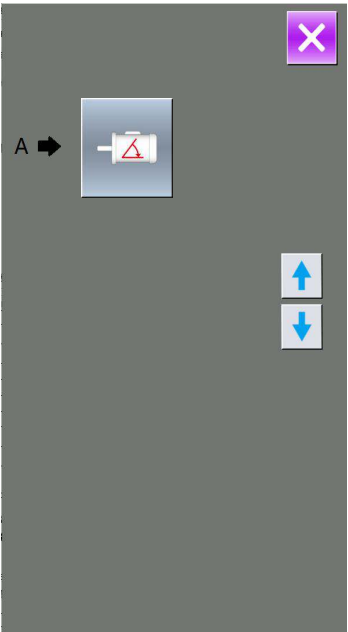
7 Testing mode



In the setting mode, press key to enter testing mode interface (as shown in the figure).

The functional descriptions of each icon are detailed in the table below:

S/L	name
A	Upper trimming detection
B	Down trimming detection
C	Input testing
D	LCD display detection
E	Touch screen calibration
F	Output testing
G	Rotation speed test
H	Continuous rotation
I	Motor origin zero



Press key to exit testing mode interface.

