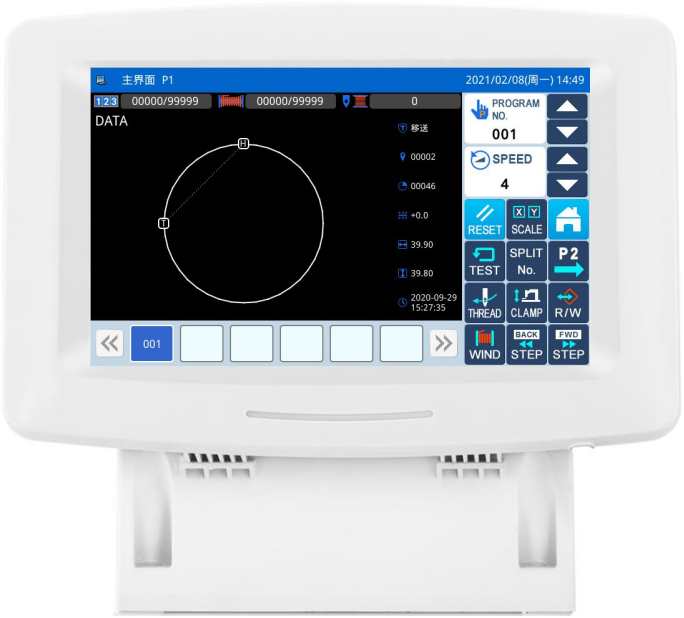
大豪 DAHAO TECHNOLOGY 科技

操作手册
OWNER'S MANUAL

触摸屏 HA
Touch Panel HA

41X 花样机
Pattern Sewing Machine



大豪公众号　大豪服务云

前　言

欢迎您使用本公司的特种缝纫机控制系统。

请您仔细阅读本操作手册，以确保正确的操作、使用特种缝纫机，请按照本手册内注明的方式进行操作，否则，如违规操作所造成损失本公司不承担责任。此外，请将本用户手册妥善保存在安全地点，以便随时查阅。若发生故障须由本公司指定的技术人员或专业人员进行维修。

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

安全注意事项

1、 安全操作的标志及含义

本使用说明书及产品所使用的安全标志是为了让您正确安全的使用产品，防止您及其他人受到伤害。标志的图案和含义如下：

⚠ 危险	如果忽视此标记而进行错误的操作，会导致人员的重伤或死亡。
⚠ 注意	如果忽视此标记而进行错误的操作，会导致人员的受伤和设备的损坏。
	该符号表示“应注意事项”。三角中的图案表示必须要注意的内容。（例如左边的图案表示：“当心受伤”）
	该符号表示“禁止”
	该符号表示“必须”。圆圈中的图案表示必须要做的内容。（例如左边的图案表示“必须接地”）

2、 安全注意事项

⚠ 危险	
	打开控制箱时，先关闭电源开关并将电源插头从插座上拔下后，等待至少 5 分钟后，再打开控制箱盖。触摸带有高电压的区域会造成人员受伤。
⚠ 注意	
使用环境	
	应避免在强电气干扰源（如高频焊机）的附近使用本缝纫机。 强电气干扰源可能会影响缝纫机的正常操作。
	电源电压的波动应该在额定电压的±10%以内的环境下使用。 电压大幅度的波动会影响缝纫机的正常操作，需配备稳压器。
	环境温度应在 0℃~45℃的范围内使用。 低温或高温会影响缝纫机的正常操作。
	相对湿度应在 35%~85%的范围内，并且设备内不会形成结露的环境下使用。干燥、潮湿或结露的环境会影响缝纫机的正确操作。
	压缩空气的供气量应大于缝纫机所要求的总耗气量。压缩空气的供气量不足会导致缝纫机的动作不正常。
	万一发生雷电暴风雨时，关闭电源开关，并将电源插头从插座上拔下。雷电可能会影响缝纫机的正确操作。
安装	
	请让受过培训的技术人员来安装缝纫机。
	安装完成前，请不要连接电源。 如果误按启动开关，缝纫机动作会导致受伤。

	缝纫机头倒下或竖起时，请用双手操作。不要用力压缝纫机。 如缝纫机失去平衡，缝纫机滑落到地上会造成受伤或机器损坏。
	必须接地。 接驳地线不牢固，是造成触电或误动作的原因。
	所有电缆应固定在离活动部件至少 25mm 以外处。另外，不要过度弯曲或用卡钉固定得过紧。 会引起火灾或触电的危险。
	请在机头上安装安全罩壳。

缝纫	
	本缝纫机仅限于接受过安全操作培训的人员使用。
	本缝纫机不能用于除缝纫外的任何用途。
	使用缝纫机时必须戴上保护眼镜。 如果不戴保护眼镜，断针时机针折断部分可能会弹入眼睛造成伤害。
	发生下列情况时，请立即切断电源。否则误按下启动开关时，会导致受伤。 1.机针穿线时　　2.更换机针时　　3.缝纫机不使用或人离开缝纫机时
	缝纫过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。
	如果缝纫机操作中发生误动作，或听到异常的噪声或闻到异常的气味，应立即切断电源。然后请与购买商店或受过培训的技术人员联系。
	如果缝纫机出现故障，请与购买商店或受过培训的技术人员联系。
维护和检查	
	只有经过训练的技术人员才能进行缝纫机的维修、保养和检查。
	与电气有关的维修、保养和检查请及时与电控厂家的专业人员进行联系。
	发生下列情况时，请关闭电源并拔下电源插头。否则误按启动开关时，会导致受伤。 1. 检查、调整和维修　　2. 更换弯针、切刀等易损零部件
	在检查、调整和修理任何使用气动设备之前，请先断开气源，并等压力表指针下降到“0”为止。
	在必须接上电源开关和气源开关进行调整时，务必十分小心遵守所有的安全注意事项。
	未经授权而对缝纫机进行改装而引起的缝纫机损坏不在保修范围内。

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.
Caution	The incorrect operation due to negligence of this Mark will cause the personal injury and the damage to mechanism.
	This symbol means "things to be noted". The pattern in the triangle indicates what must be paid attention to. (for example, the pattern on the left says, "beware of injuries")
	This kind of marks means "Forbidden".
	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	
	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	
	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.
	The voltage fluctuation shall be within ±10% of the rated voltage. Large-scaled voltage fluctuation will affect the normal operation of the sewing machine, where a voltage regulator is necessary.
	Working temperature: 0℃~45℃. The operation of the sewing machine will be affacted in environment with temperature beyond the above range.
	Relative Humidity: 35%~85% (No dew inside the machine). Otherwise, the operation of the sewing machine will be affected.
	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.
	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	
	Please ask the trained technicians to install the sewing machine.
	Don't connect the machine to power supply until the installation is finished. 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. 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	
	This sewing machine can only be used by the trained staff.
	This sewing machine has no other usages but the sewing.
	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.
	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.
	For any trouble, please contact the trained technicians or the supplier of that machine.
Maintenance & Inspection	
	Only the trained technicians can perform the repair, maintenance and inspection of this sewing machine.
	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.
	In case of damages of the sewing machine caused due to unauthorized modifications, our company will not be responsible for the repair.

目录

1 概要说明

1.1 概述

兄弟系列工业缝纫机电脑控制系统，主轴电机采用具有世界先进水平的交流伺服控制技术驱动，具有力矩大、效率高、车速稳定和噪音低等特点。操作面板设计多样化可满足不同客户的配套要求；系统采用德国式结构设计，安装和维修方便快捷。

1.2 功能和参数

序号	控制器型号	电子花样机
1	缝制范围	X(左右)方向　　Y（前后方向） 600(mm)　x　400(mm)
2	最高缝纫速度	3000rpm（针距 3mm 以下时）
3	缝迹长度	0.1～12.7mm（最小分辨率 0.10mm）
4	压脚送布	间断送布（脉冲马达双轴驱动方式）
5	针杆行程	41.2mm
6	使用机针	DP×5、DP×17
7	外压脚上升量	标准 18mm 最大 22mm（气动式最大 25mm）
8	中压脚	步进驱动（可调范围：0～8mm）
9	中压脚上升量	20mm
10	花样数据存储	内存/U 盘
11	暂停功能	在缝制途中可以让缝纫机停止
12	放大、缩小功能	可以选择缝迹缝制花样时，可以独立地放大缩小 X、Y 轴。 1%～400%（0.1%单位）
13	放大、缩小方式	增减缝迹长度/增减花样针数方式
14	缝纫速度限制	200～3000rpm（100rpm 单位）
15	花样选择功能	花样号选择方式
16	加计数器	不计数/按花样计数/按循环计数方式（0～99999）
17	减计数器	不计数/按花样计数/按循环计数方式（0～99999）
18	缝纫机马达	伺服马达
19	针杆上死点停止功能	缝制后，可以让针杆返回到上死点位置。
20	额定功率	600W
21	使用温度范围	0℃～45℃
22	使用湿度范围	35%～85% （无结露）
23	电源电压	AC 220V ± 10%；50/60Hz

产品执行标准：QCYXDK0004—2020《工业缝纫机计算机控制系统》。

1.3 安全使用注意事项

- **安装**
  - 控制箱
    - 请遵照说明正确装好
  - 附件
    - 如要安装其它附件时，请先关掉电源并拔掉电源插头。
  - 电源线
    - 请不要用重力去压住电源线或过度的扭曲电源线。
    - 请不要将电源线靠近转动的部位，最少要离开 25mm 以上。
    - 控制箱要接入电源前，请必再查看要接入的电源电压是否与控制箱上标示的电压相同及确定位置后，才可供应电源。如有接用电源变压装置的话，同样的要检查一下后才可供应电源。这时缝纫机上的按钮式电源开关一定要放在 [OFF]。
  - 接地
    - 为防止噪声干扰及漏电而发生电击事件，电源线上的接地线定要确实做好接地。
  - 附属装置
    - 如要接用电气方面的附属装置的话，请遵照指示的位置接好。
  - 拆卸
    - 要卸下控制箱时，必须要先关掉电源并拔掉电源插头。
    - 在拔离电源插头时不可只拉电源线，必须用手拿住电源插头拔出。
    - 控制箱里面有危险的高压电，所以要打开控制箱盖的话，需要先关掉电源后等候 5 分钟以上才可打开控制箱盖。

- **保养、检查和修理**
  - 修理和保养的作业，要请经过训练的技术人员执行。
  - 更换机针和梭子时，请务必要关电。
  - 请使用正厂的零件。

- **其它的安全对策**
  - 缝纫机运转中请不要去触摸会转动和会移动的部位 (特别是机针和皮带附件)等，并注意头发不要靠近它们，以免发生危险。
  - 控制装置不可摔落地，更不可在空隙间塞入其它物品。
  - 请不要在拆掉各护盖的情形下运作。
  - 如本控制装置有损伤或无法正常运作时，必要请有经验的技术人员调整，或检查修理，在故障还没排除前请不要再去运转它。
  - 敬请各客户们不要自行改造或变更本控制装置。

- **废弃处理**
  - 请以一般产业废弃物处理。

- **警告示意和危险示意**
  - 错误的行为可能会发生危险，其程度如后述的标示区别说明。

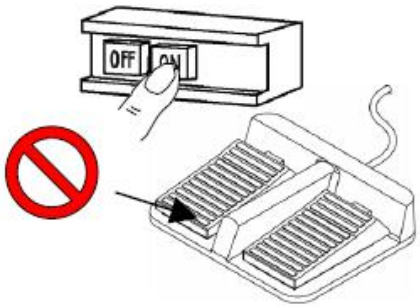
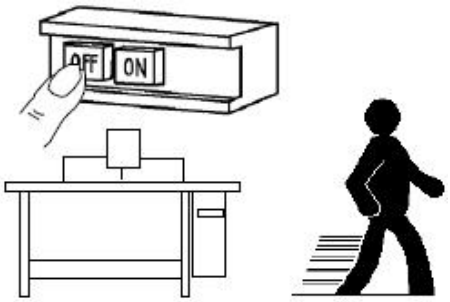
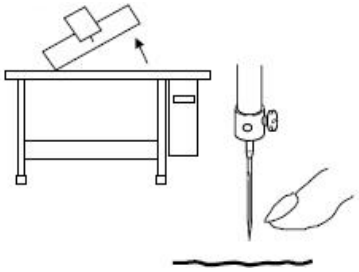
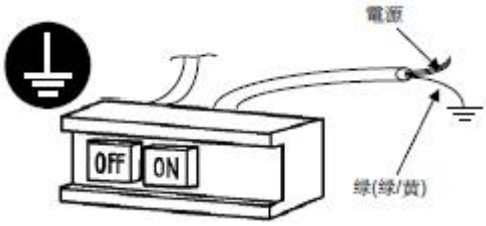
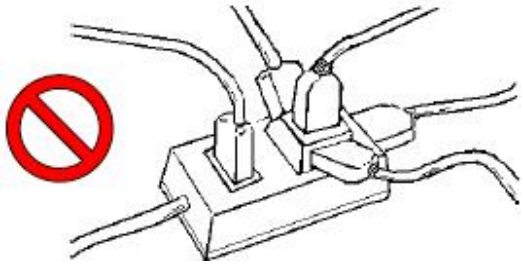
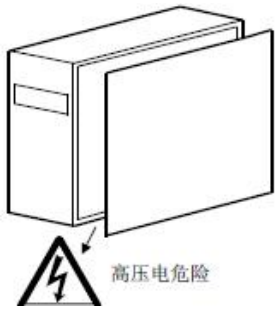
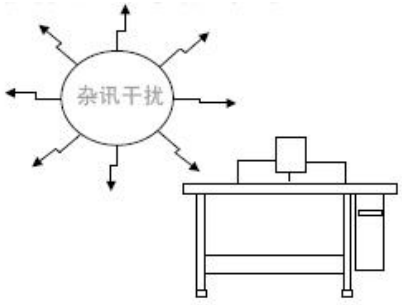
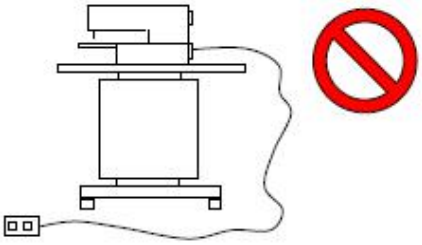
⚠警告	错误的行动可能会发生重伤或死亡	⚠注意	错误的行为可能会发生伤害或房屋或财产的损害

■ 标示符号的表示如下说明。

	请遵照指示内容作业		注意高压电（电击）的危险
	注意高温		务必接上接地线
	绝对不要执行		

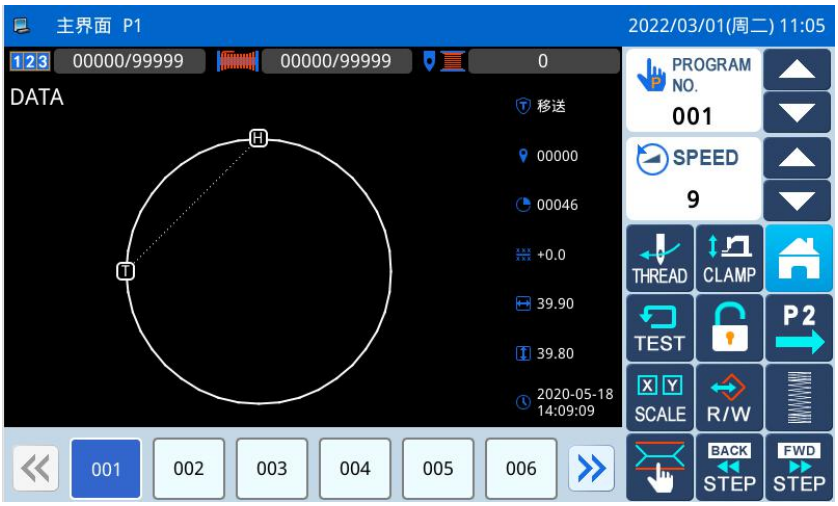
1.4 使用上的预防措施

警告

<table>
<tr><td>1、当手要按开关 [ON] 时，脚一定要离开脚踏板。
  </td><td>2、要离开工作岗位时，请务必关掉电源。
  </td></tr>
<tr><td>3、如要横倒头部或更换机针或穿面线时，请务必要关掉电源。
  </td><td>4、接地线要做好接地。
  </td></tr>
<tr><td>5、不要用家庭用多插孔式延长线。
  </td><td>6、控制箱内部存有危险的高压电，关电后等候 5 分钟才可打开控制箱盖。
  </td></tr>
<tr><td colspan="2">7、更换电机后，请务必参照本资料所示设置主轴电机安装角度。</td></tr>
<tr><td>8、请远离会产生高周波噪声干扰的机器。
  </td><td>9、如利用外接信号插座接应用附属装置时，其连接线长度请尽量越短越好，长线可能会导致误动作，连接线请用隔离线缆。
  </td></tr>
<tr><td colspan="2">10、如保险丝烧断时，请先把原因排除后再换相同容量的保险丝。</td></tr>
</table>

1.5 标准化

功能按键采用业界公认的图形标识，图形是国际化语言，各国用户都可以识别



1.6 操作方式

兄弟触摸屏操作面板采用了业界先进的触摸操作技术，友好的界面以及便捷的操控都给用户的日常使用带来革新性的变化。用户可以使用手指或者其它物体点触屏幕，完成相应的操作。

警告

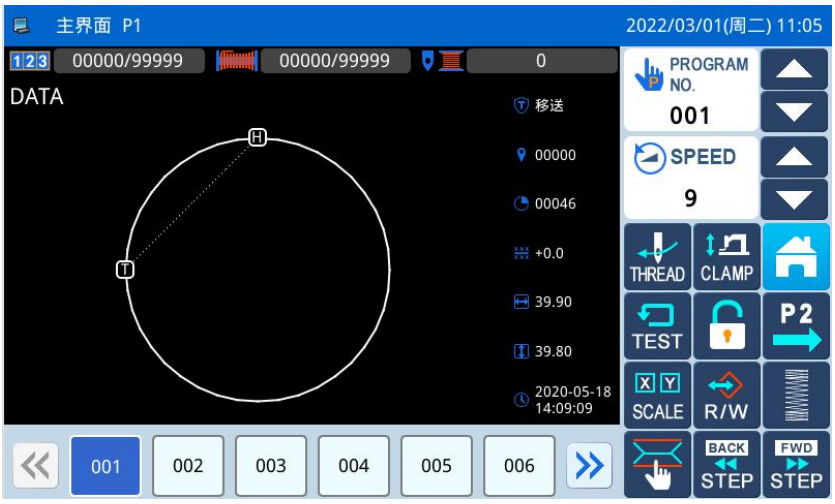
使用触摸屏时请注意:

用户在使用过程中应该注意避免使用尖锐的物体触碰屏幕，以免对触摸屏造成永久性损伤。

2 操作说明

2.1 基本操作

1、打开电源开关后，显示出主界面 P1。



2、想缝制的图案

当前界面下会显示出已选择的花样图案.，如果想要更改花样（缝制资料），请详见【2.5 花样管理】一节。

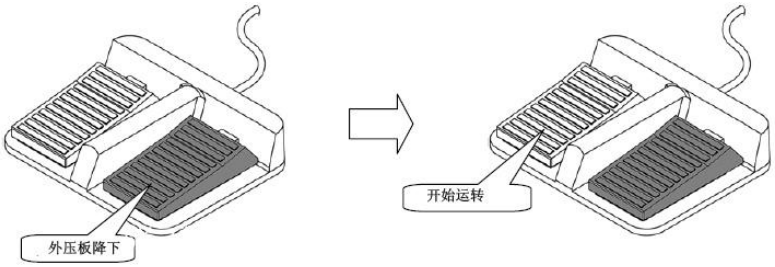
3、开始缝制

① 在实际进行缝制前，请再度确定一下缝制条件的设定，特别是速度设置值 (0~9) 的设定。

② 缝纫机速度是由速度设置值和针距决定的，速度设置值是决定缝纫机最高速度，而针距会限制缝纫机速度。

【注】当缝纫机在缝制中，请不要去变动速度设置值 (中途暂停时除外)，会影响收线情况。

③ 把缝制品放入指定位置后，用脚先踏一下外压板开关 （黑色）使外压板降下，再踏下运转开关（灰色）缝纫机就开始实际运转缝制，一旦开始运转后，脚就可以离开运转开关不必再继续踏着，缝纫机也会自动运转到结束，外压板也会自动上升。



4、中途暂停

缝制中如要停止运转的话，请按下装在头部的紧急暂停按钮（参阅下图）。缝纫机会立刻停在上停位

置（出厂标准设定），进入中途暂停状态。 要解除中途暂停状态的话，必须把紧急暂停按钮再按一次后才会解除中途暂停状态，可继续做下述的动作。

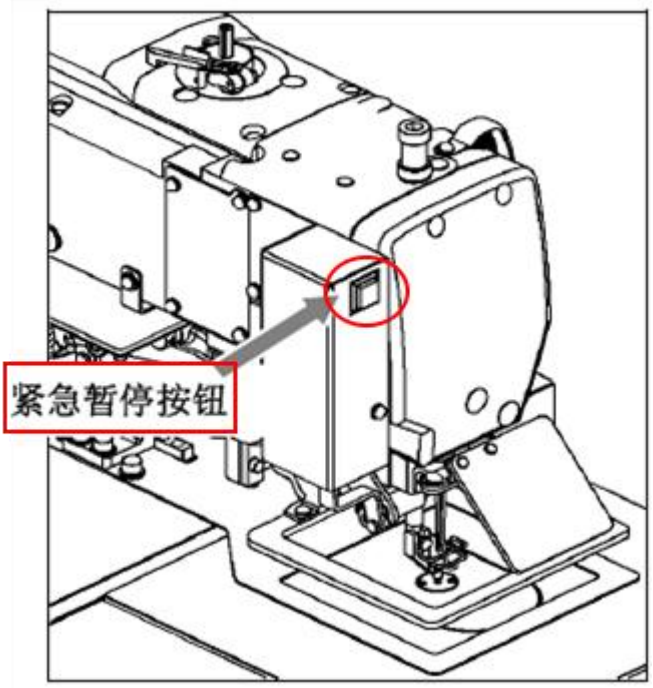
① 脚踏运转开关的话，会继续运转缝制下去。

② 按前移/后移键的话，可移动到缝制开始位置。

③ 脚踏外压板开关的话，可使外压板上升。

④ 可变更缝纫机速度设置值。

⑤ 可使中压脚升降。



5、修补的缝制方法

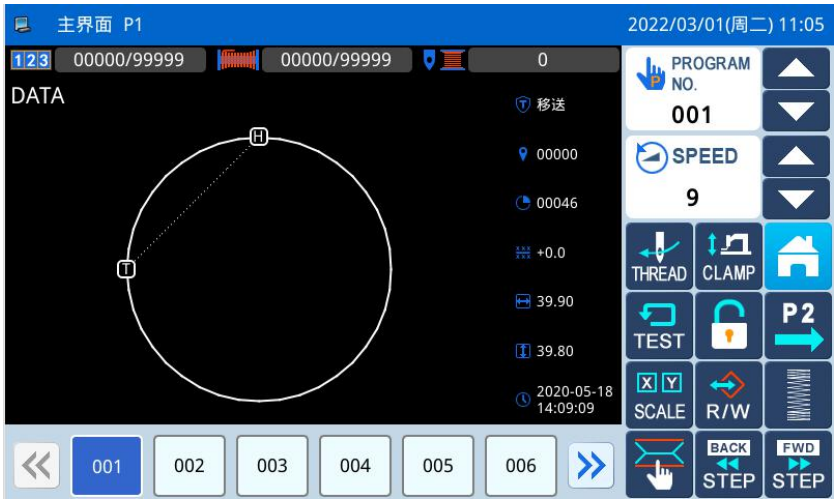
可利用上述的中途暂停机能做修补的缝法。如果断线按下紧急暂停按钮的话，机针停在上停位置后，按住后移键，把外压脚倒退到断线处的前两三针位置，穿好针线后再踏下运转开关，就可继续缝制下去。

 注意：在穿线时，绝对不可用脚去踩踏运转开关，会使缝纫机运转，是很危险的，所以在穿针线时，务必把脚移开运转开关。

2.2 界面显示状态说明

2.2.1 实例画面 1

（主界面 P1 标准显示状态）

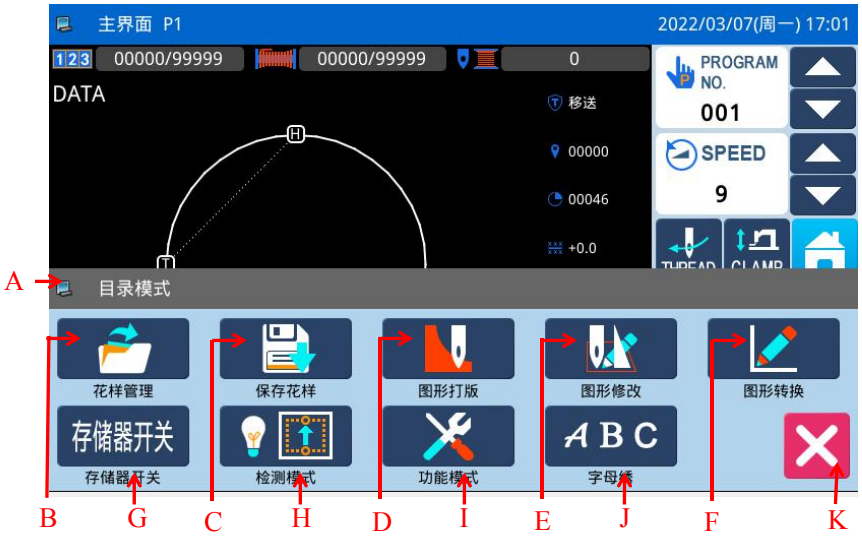


2.2.2 实例画面 2

（按下主界面 P1 的 P2 键显示状态）

2.2.3 实例画面 3

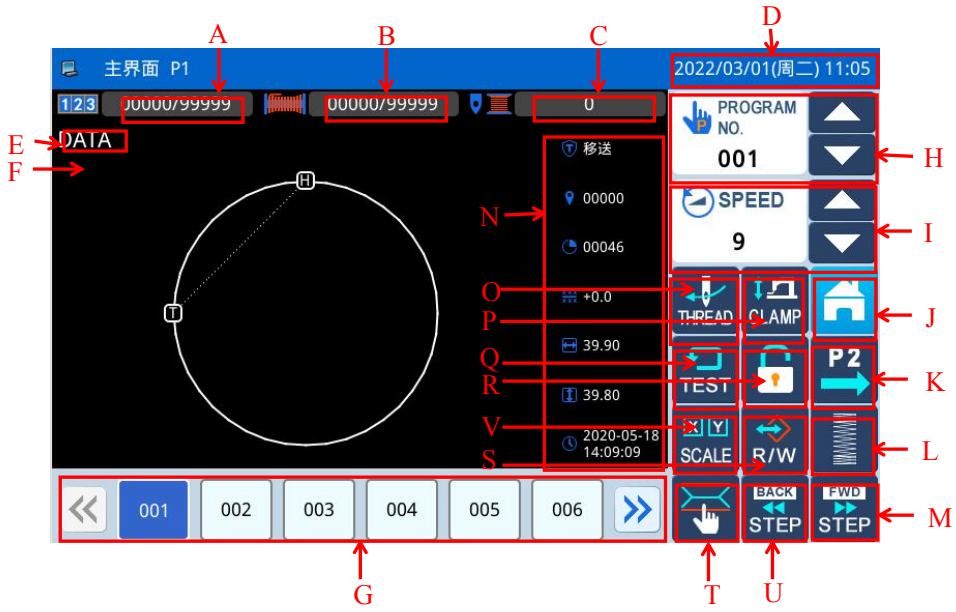
（打开主界面 P1 的多类目录状态）



功能说明：

序号	功能	内容
A	MENU 键功能界面标题栏	显示内容为 MENU 键功能界面标题。 当按下按键时，该界面下标题栏显示内容会刷新为对应按键的功能说明
B	花样管理（增删查存图形资料）	进入该界面后，执行相应的功能可对花样进行查找、排序、删除、另存、读取等相关操作。
C	保存花样（写存图形资料）	将当前花样另存到内存或者 U 盘中。
D	图形打版（图形设计模式）	进行花样编辑操作。
E	图形修改（修改模式）	进入该界面后，执行相应的功能可对花样进行编辑修改。
F	图形转换（资料转换模式）	进行花样转换操作。
G	存储器开关	进行参数设置操作。
H	检测模式	进行各类外设、液晶等检测操作。
I	功能模式	进行各类功能操作设置。
J	字母绣编辑	进行字母绣编辑操作。 **【注】可以通过参数「特殊」->「字母绣功能使能」关闭字母绣编辑功能，关闭后不显示该图标。**
K	退出	退出当前界面，返回上一级画面。

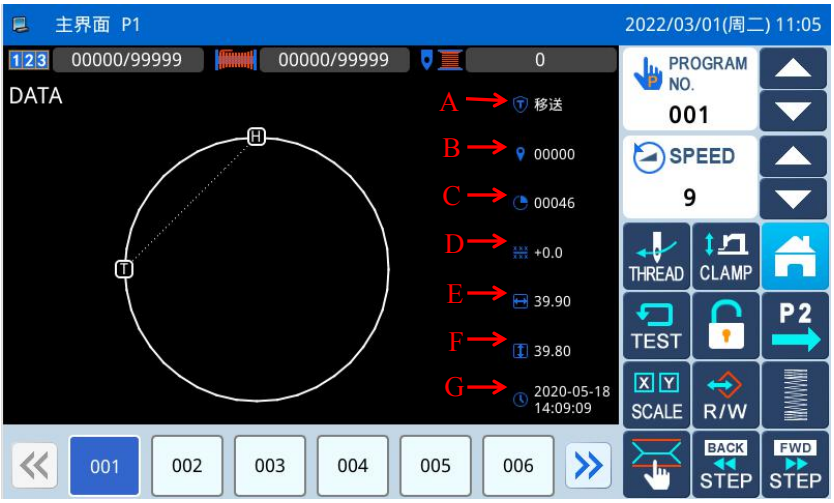
2.3 主界面 P1 说明



功能说明：

序号	功能	内容
A	加计数器	显示内容为加计数器当前值/设定值。
B	减计数器	显示内容为减计数器当前值/设定值。
C	底线计数器报警针数	进行数据设置操作
D	日期/时钟	显示时间
E	花样名称	显示当前缝制资料的花样名称。
F	花样形状	显示当前缝制资料的花样形状。**【注】表示原点位置。**
G	花样号码快捷键	显示最近使用过的花样号码，最多可存储 40 个。 选择一个花样号码键按下后会改变当前缝制资料。 **【注】组合缝花样状态下，显示内容为组合缝子花样序号/组合缝花样个数**
H	花样号码顺序选择键	顺序选择已有的花样形状
I	速度调整显示区	调整和显示当前花样缝制速度
J	目录键	打开后显示多类目录（参照【2.2.3 实例画面 3】节内容）。
K	进入主界面 P2	按下按钮后此时屏幕显示第二主界面 P2
L	人字缝模板花样设置键	按此键进入，可设置人字缝的参数
M	后移键	将缝制针向后移动
N	数据显示	显示当前花样形状数据
O	穿线键	按此键可进行穿线
P	间歇压脚设置	调整间歇压脚高度
Q	试缝键	试缝操作
R	模板锁定键	锁定使用的花样模板
S	复制花样键	按此键进入，可以选择你所需要的花样
T	绕线键	可以设置是否绕线
U	前移键	将缝制针向前移动
V	转换/缩放键	对水平/垂直比率参数进行设定

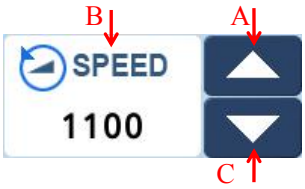
2.3.1 花样针数显示



功能说明：

序号	说明
A	显示当前外压板位置缝制资料数据类型。 （车缝「SEW」，移送「FEED」，次原点「2HP」，上暂停「USTP」，下暂停「DSTP」，剪线「TRIM」，移送速「FEDS」，重启动「ASRT」，压板重「HEVI」，物料厚「ATUM」，跳缝「BAT」，功能 1「FUN1」~功能 7「FUN7」，翻压脚「REPF」，结束「END」）
B	显示当前位置的针数。
C	显示当前花样的总针数（包括移送、剪线、结束、代码等资料）。
D	X/Y 移动的距离
E	花样水平方向的尺寸
F	花样垂直方向的尺寸
G	花样形状创建时的时间

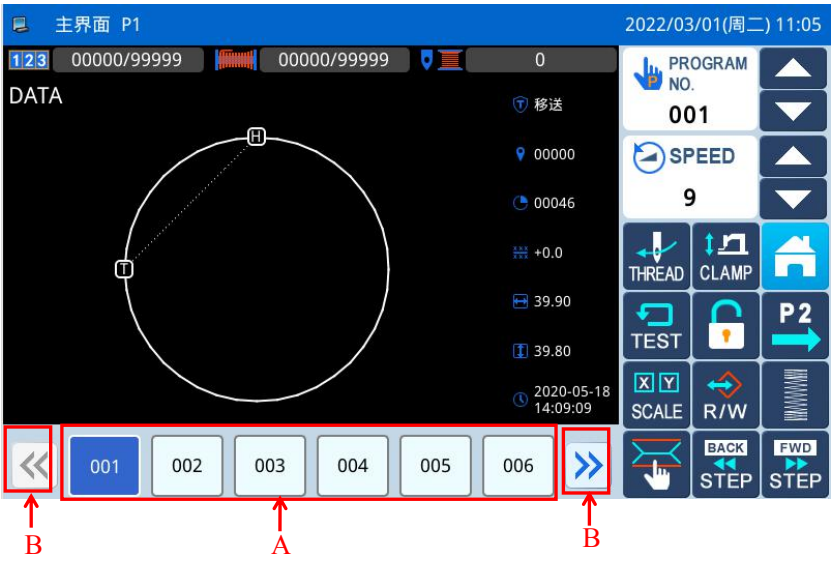
2.3.2 速度调整



功能说明：

序号	说明
A	增加缝纫机速度。
B	显示当前缝纫速度（200~2700）。 显示为速度值，若点击此图标，可跳转到标准参数设置界面---快捷操作
C	降低缝纫机速度。

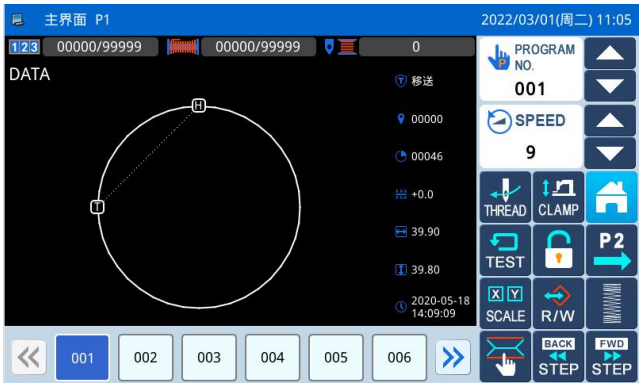
2.3.3 花样号码快捷键操作



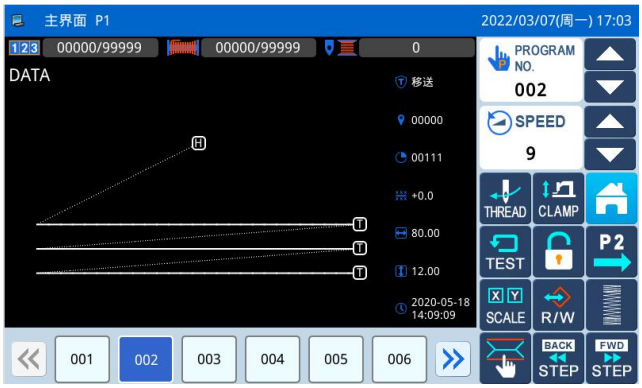
功能说明：

序号	说明
A	花样号码快捷键，选择其他的花样号码可以切换缝制花样。（蓝色为当前缝制花样）
B	花样号码显示翻页键

实例说明：



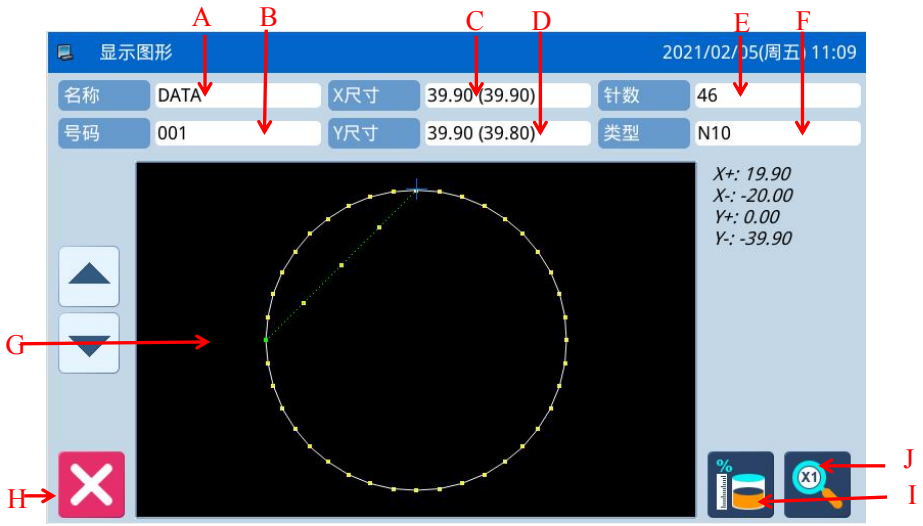
如图所示，本例中快捷键列表中共包含有花样号码 2 个，当前缝制花样号码为 001，如果选择 002 号花样，则当前缝制花样会切换为第 002 号花样。



如图所示，本示例为选择 002 号花样，则当前缝制花样会切换为第 002 号花样。

2.3.4 花样图形显示

在主界面 P1 界面，单击花样显示区域，可进入花样预览界面。



功能说明：

序号	说明
A	花样名称。
B	花样号码。
C	花样 X 方向尺寸大小。
D	花样 Y 方向尺寸大小。
E	显示当前花样的总针数（包括移送、剪线、结束、代码等资料）。
F	显示当前花样类型。
G	花样形状显示。
H	退出当前界面，返回前一画面。
I	显示内存剩余空间
J	花样显示界面循环放大

2.3.5 车缝物料厚度设定

间歇压脚下降时的高度（最低点位置）是可以修改的，比如出厂时所设置的间歇压脚最低点位置比实际缝制物料厚度低时，可使用该机能进行修正。

【注】如果当前间歇压脚位置在下时进入该界面，会提示「升高间歇压脚」。

【注】进入物料厚度设置界面后，只有间歇压脚落下时才能够设置。

【注】设置范围是 0.0~8.0mm。

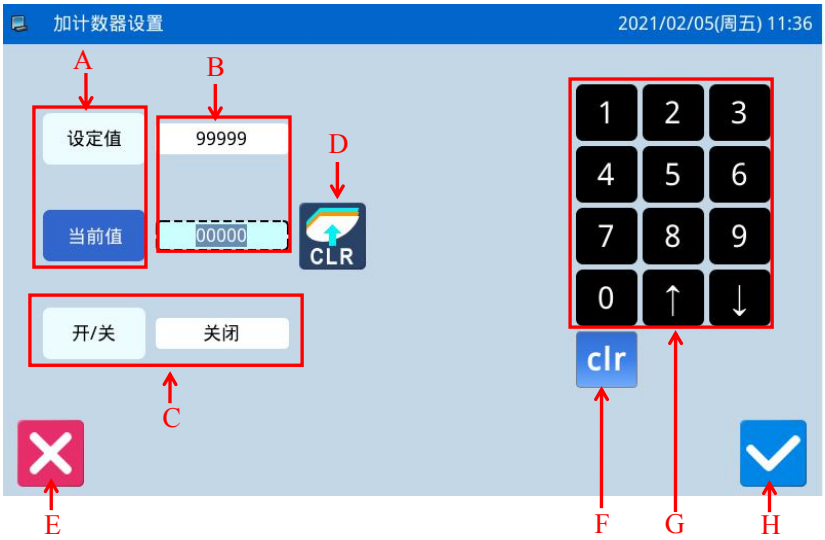
功能说明：

序号	说明
A	间歇压脚当前高度显示
B	间歇压脚设置高度显示
C	间歇压脚高度增加键 间歇压脚会随动，每次增加 0.1mm
D	间歇压脚高度减小键 间歇压脚会随动，每次减小0.1mm
E	退出当前界面，返回前一画面。
F	上下移动缝针。  ：针下降  ：针上升
G	按下后中压脚会根据箭头方向移动。  ：间歇压脚上升  ：间歇压脚落下
H	保存并退出
I	外压脚高度设定
J	二段位压脚设定

2.3.6 加计数器设置

主界面 P1 下按下 00000/99999 进入到加计数器设置界面。

【注】加/减计数器计数方式是由操作设定模式下的「计数器」参数决定的（参照【2.8.6 参数设定表】中参数说明）。



功能说明：

序号	说明
A	切换输入设定值和当前值（蓝底白字为选中状态）。
B	设定值和当前值显示（虚线框表示处于输入状态）。
C	加计数器有效开关。
D	复位当前值。
E	退出计数器设置模式，返回上一级画面。
F	清除当前输入数值。
G	数字键盘，用于输入设定值和当前值。
H	确定设置。

【注】减计数器设置操作同加计数器操作。

2.4 主界面 P2 说明

功能说明：

序号	功能	内容
A	主轴电机安装角度设置	对主轴电机安装角度参数进行设置。后面的数字表示为目前主轴的角度
B	拔线	拔线
C	剪线	剪线
D	压脚	压脚
E	间歇压脚	间歇压脚
F	松线	松线
G	翻转压脚	翻转压脚
H	辅助气阀 1	辅助气阀 1
I	输出 IO 配置	设置输出 IO 配置参数
J	输入信号	设置输入信号参数
K	伸缩压脚	设置伸缩压脚参数
L	辅助气阀 2	辅助气阀 2
M	辅助气阀 3	辅助气阀 3
N	目录键	打开后显示多类目录
O	复位键	缝制针回到原点
P	绕线模式	可设置是否绕线
Q	松线器电流	设置穿线时松线器电流
R	上下移动缝针	 ：针下降  ：针上升
S	X 锁轴	X 锁轴/释放
T	Y 锁轴	Y 锁轴/释放
U	测试剪线	测试剪线
V	返回键	按下后可返回主界面 1
W	坐标值	显示 X/Y 坐标值

2.4.1 绕线模式

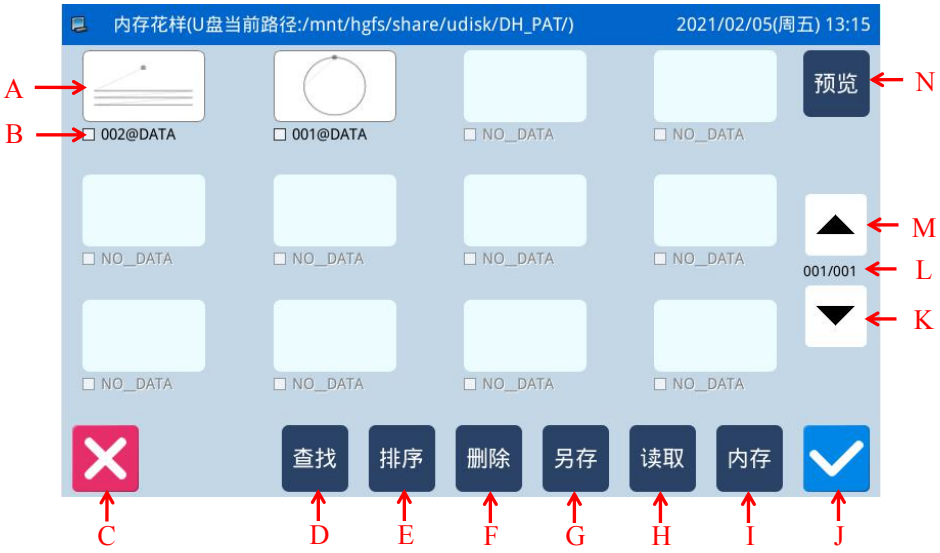
要绕线芯时必须进入到此界面。踏一下外压板开关使外压板降下，然后踏下运转开关时，缝纫机就依设定的速度转动，而X-Y移动轴不会移动，再次踩踏板，缝纫机就停在上停位置。

【注】绕线芯的动作是由操作设定模式下的「绕线芯」参数的设定而执行。（参照【2.8.6 参数设定表】中参数说明）

功能说明：

序号	说明
A	原点检测前是否允许绕线
B	实际绕线速度设置。 **【注】由参数「绕线芯」->「绕线速度设置」决定。**
C	绕线停止方式设置。 **【注】由参数「绕线芯」->「绕线器停止方式设置」决定。**
D	定时停止绕线时间设置。 **【注】由参数「绕线芯」->「定时停止绕线时间设置」决定。**

2.5 花样管理



功能说明：

序号	功能	内容
A	花样预览列表	显示已存花样列表 **【注 1】如果选择了 VDT 格式花样，会显示提示信息进行花样格式转换。** **【注 2】如果选择花样针数超出范围或者数据损坏，会显示对应的提示信息不能选择该花样。**
B	花样号码名称	显示已存花样名称。
C	返回主界面	直接返回主界面
D	查找键	可以查找花样。
E	排序键	按照修改时间或号码大小进行排序重新显示花样列表
F	删除键	删除指定花样 **【注】当前缝制花样不能被删除。**
G	另存键	可以将指定花样另存
H	读取键	从内存或者 U 盘中选择一个花样作为当前缝制花样。
I	U 盘/内存记忆选择	选择读取内存或者 U 盘花样，切换选择 U 盘或内存
J	确认键	确定操作。
K	下一页键	支持向后翻页查找界面
L	页数显示	显示内容为当前页码/总页数
M	上一页键	支持向前翻页查找界面
N	花样预览键	可预览花样

2.5.1 操作说明

1、进入花样管理界面

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下读入图形资料键 。

【注】如果不在原点位置，是无法读取图形资料的，请先执行回原点操作。

2、选择读取的对象（内存/U 盘）

进入该界面是默认选择内存读取模式（如图），可以通过切换键 切换到 U 盘读取模式，U 盘读取模式界面如下图。

【注】未插入 U 盘时执行上述操作，会显示「USB 盘已经拔出」的提示信息。

3、选择图号并确定

选择要缝制的图号然后按下确定键，选择成功后会直接返回到主界面。

【注】如果从 U 盘读取花样时，所选择的号码也同样在内存中存在的话，会显示「是否覆盖内存中花样数据」的提示信息，按照指定信息进行操作即可。

4、其它操作

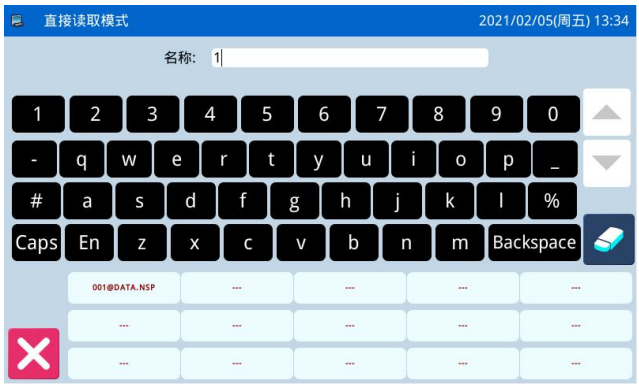
如果花样比较多，可以通过翻页键 来翻阅画面，并且通过排序键 可以更直观的查阅花样列表。如果知道花样号码的话，也可以直接指定图号 来读取图形资料。

2.5.2 直接读取模式

1、选择直接读取模式

在花样读取界面下按下直接读取键 查找，即进入到直接读取模式。

【注】直接指定图号读取资料的话，只限用于内存读取模式。



2、指定图号 1

（例：要读取「01」图号花样）

① 输入「1」。

② 下面的键盘会显示出「1」字开头，储存在内部存储器里的图号依序排列出来。

③ 清除键 可以清除掉输入号码，然后重新输入。

④ 这时要读取的「1」图号会显示在下段的键盘中，此时按下 001@DATA.NSP 键，操作成功后返回到主界面显示出「1」图号的图形资料。

3、英文切换为中文

⑤ 花样查找时，可以输入中文，切换成中文输入法模式下输入查找花样。

2.5.3 删除花样

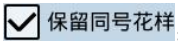
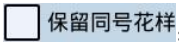
删除一个花样时需要选择删除键 删除 执行命令，此时会显示「是否从内存中删除花样数据」的提示信息（如果是 U 盘读取模式会显示「是否删除选中的文件」提示信息），按照指定信息进行操作即可，但是不能够删除当前缝制花样。

2.5.4 支持的数据格式

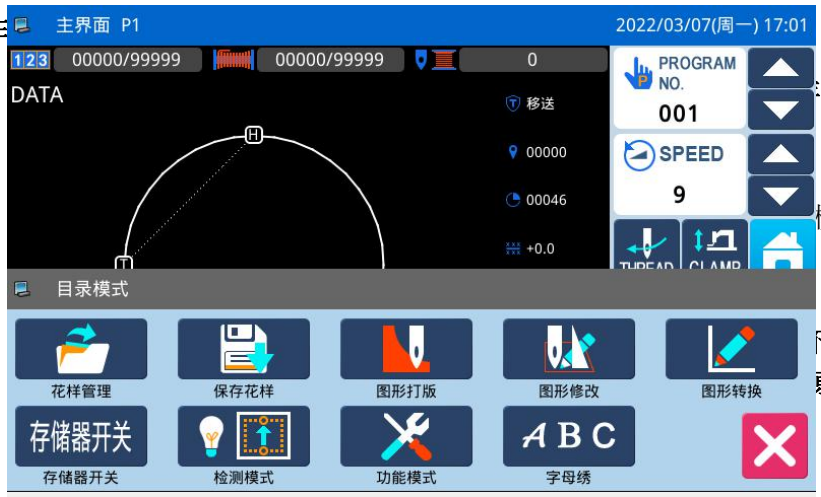
目前可以导入的花样格式有：NSP 格式、B 格式、BA 格式、VDT 格式、EMB 格式、DST 格式、DSB 格式、DSZ 格式、SEW 格式。

2.6 花样保存

功能说明：

序号	功能	内容
A	花样名称输入显示	显示输入的花样名称。
B	花样号码输入显示	显示输入的花样号码。
C	内存剩余功能	查看内存的剩余量
D	显示存储位置	 ：存储位置为内存  ：存储位置为 U 盘
E	输入键盘	用于输入名称或号码。
F	返回键	返回到上一界面
G	清除全部输入字符	按下后清除掉全部输入字符。
H	保留同号花样	 ：选择保留同号花样，保存的花样相同，花样号码不同  ：不选择保留同号花样
I	选择内存/U 盘	选择读取内存或者 U 盘花样，切换选择 U 盘或内存
J	确定键	保存当前设置并退出到上一界面

操作



界面

（或 P2）界面上操作目录键，模式，然后再按下写存图形资料键

不在原点位置，是无法写存图形资料原点操作。

2、设定名称和号码

进入该界面是默认选择内存写存模式（屏幕左上方显示），可以通过切换键切换到 U 盘写存模式

在当前界面下直接点击

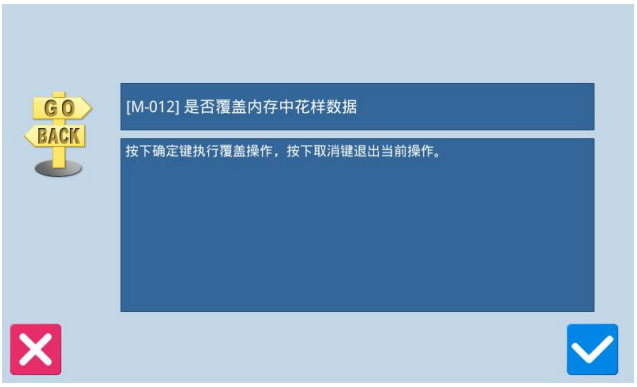
名称: DATA 或

号码: 003，可以切换输入名称或号码。

每按下一次 Backspace 键，可以清除掉光标左侧的第一个字符，而按下键会清除掉全部字符。

输入名称时如果需要大小写输入，可以通过键 Caps 实现。

【注】一个花样可以自由选择号码进行存储。花样文件名改为“花样名”+“@花样号”+“扩展名.nsp”的形式。



3、确定保存花样

输入完毕后按下确定键，操作成功后直接返回到主界面。

【注】如果写存的对象数据内存在相同图号的花样，会显示「是否覆盖内存中花样数据」的提示信息，不覆盖操作按下取消键，覆盖操作按下确定键。

2.7 花样打版

在主界面 P1 界面下，单击菜单键  →花样打版键 

，进入花样打版界面。

（1） 是否重新输入

如果已输入的资料要更换为新资料，请按下 

键（清除掉上一次打版资料，重新打版）。

如果已输入的资料要继续打版的话，请按下 

键（继续上一次的打版资料）。

（2） 设定速度

点击界面中四个速度按键，设置编辑花样数据的缝制转速：

（3） 设定针距

通过 

数字键和 

键，可以输入针距，范围为0.1mm~12.7mm。

（4） 图形参数修改

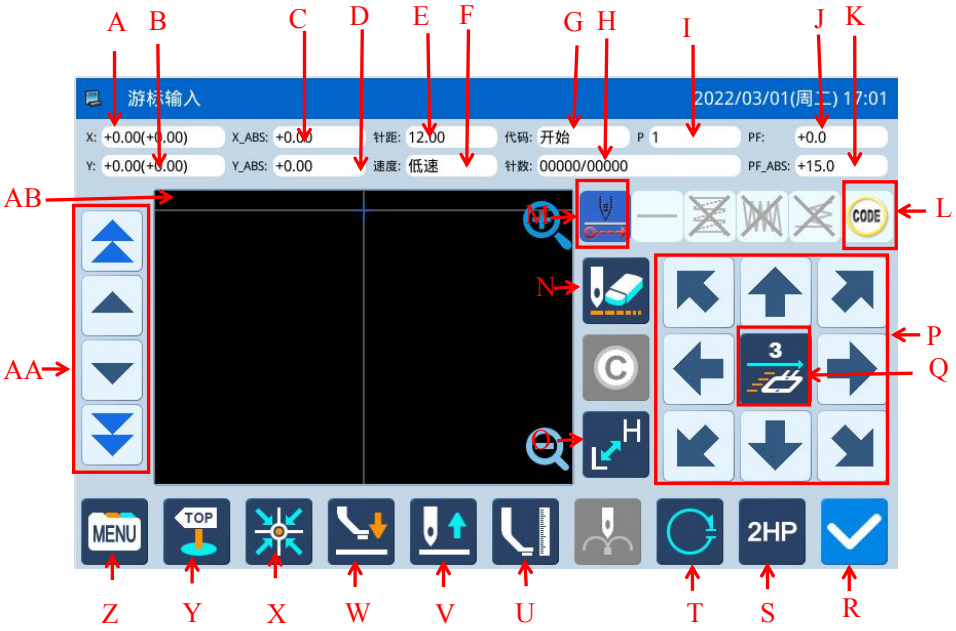
打版、修改和转换界面都有参数键  ，把相关的参数集中，便于用户设置。

（5） 确定输入

上述资料设定完成后，按下  键，进入花样打版输入界面。


游标输入
2022/03/01(周二) 17:01
X: +0.00(+0.00)
X_ABS: +0.00
针距: 12.00
代码: 开始
P 1
PF: +0.0
Y: +0.00(+0.00)
Y_ABS: +0.00
速度: 低速
针数: 00000/00000
PF_ABS: +15.0
CODE
MENU
TOP
2HP

花样打板界面补充说明



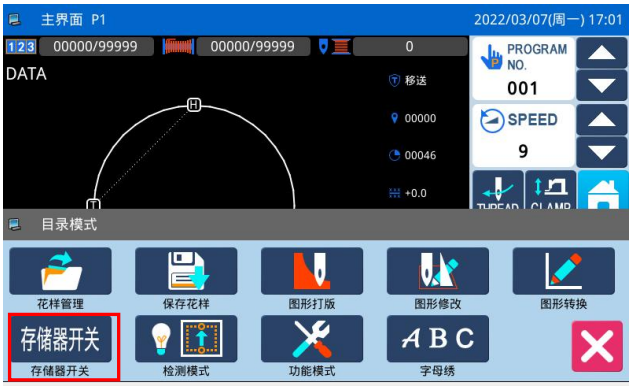
序号	功能	内容
A	X 相对坐标	显示当前移动的相对坐标 X 值（括号内是十字光标与花样位置差值）
B	Y 相对坐标	显示当前移动的相对坐标 Y 值（括号内是十字光标与花样位置差值）
C	X 绝对坐标	显示当前坐标的 X 值。
D	Y 绝对坐标	显示当前坐标的 Y 值。
E	针距	显示设置的针距。 **【注】空送针距显示为 12.0mm**
F	速度	显示当前针的速度。
G	代码	显示当前输入代码。
H	针数	显示目前机针位置的针数/总针数。
I	形状点数	当前编辑过程输入的形状点数。
J	中压脚高度相对值	显示当前中压脚高度相对值
K	中压脚高度绝对值	显示当前中压脚高度绝对值
L	输入代码被修改	代码设定模式
M	输入针步	可输入针步，但无移送，再点击一下就可移送
N	取消上次输入资料键	按此键可以把最后已确定的输入点取消，退回到前一输入点。
O	切换缝纫机速度	按此键可以依次切换缝纫机速度：低速、高速、中高速、中低速。
P	方向键	各个方向移动框架。
Q	调整压框速度	范围是 1~3
R	确定键	确认当前编辑形状。
S	输入次原点	移送后，可在当前位置插入第二原点。
T	闭合一段车缝	闭合功能。
U	修改物料厚度	可调整物料的厚度进行缝制
V	机针位置设置键	使针位上升或下降
W	中压脚上升	调整中压脚上升
X	回原点键	按下之后执行返回原点命令。

序号	功能	内容
Y	退出	返回上一级画面。
Z	目录键	进入目录模式。
AA	寸动键（点移动键）	 ：在已经生成的花样上，前进/后退进行寸动。 （在已经生成的花样上进行点移动）  ：在已经生成的花样上，前进/后退进行寸动。 （在已经生成的花样上进行快速点移动）
AB	花样屏幕显示	显示当前打板花样图形

2.8 操作设定说明

操作设定主要用于设定各个参数，各个参数的说明请参阅【2.8.6 参数设定表】

2.8.1 设定方法



1、进入操作设定的方法：

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下存储器开关键 存储器开关。

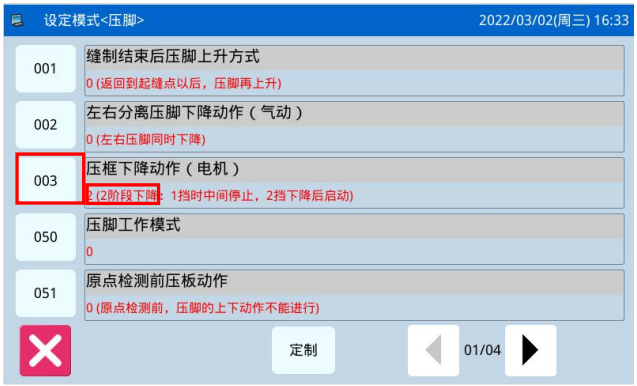
2、设定模式画面

进入操作设定界面以后，有很多参数项供选择，可以通过翻页键来翻阅画面。

3、实例说明：

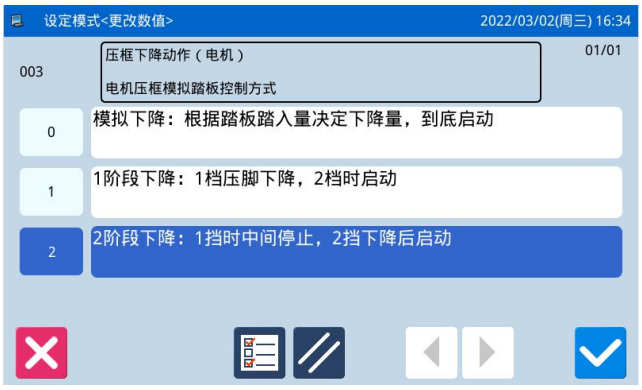
① 模式选择

选择要设定的参数项按键会显示「内部参数设定画面」。这里我们选择「压脚」键。



② 内部参数设定画面

选择要设定的参数按键会显示「设定值更改画面」。（这里按下「003」键。）



③ 更改参数设定值

按设定值键使参数的设定内容更改后（这里按下「ON」键）， 再按下确定键确定。

【注】如按帮助键，则显示该设定值的所有文字，可以看到全文的参数说明。

④ 更改后的参数设定值检查

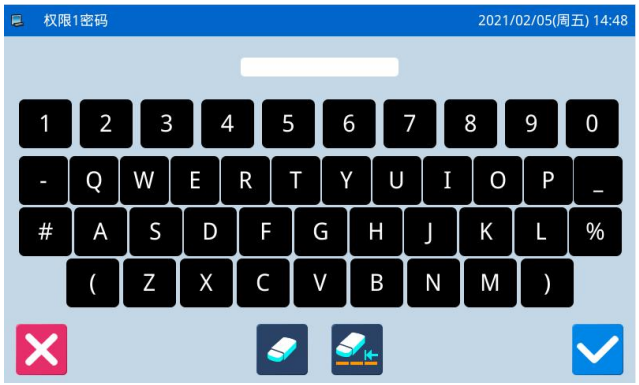
回到「内部参数设定」的画面。可检查更改后的设定值， 按下退出键离开。

⑤ 回到模式选择画面

回到「模式选择」画面。因为修改了设定值，会有「已修改设定」按键出现。

要回主界面P1（或P2）的话请按键。

要看「已修改设定」内容，请按下「已修改设定」键。



⑥ 查看已修改参数内容

a) 进入密码输入模式

在「模式选择」的画面里按「已修改设定」键，会进入到密码输入模式，密码输入正确后方可会进入到已修改参数设定模式。（关于密码设置内容详见【2.8.3 参数模式加密说明】）

b)　进入已修改参数设定模式

该界面下会显示出参数的更改内容。如要再更改的话，可在该界面下重新更改（这里可以按下「E-9」键）。

如果想要选择部分已修改的参数进行还原的话，可以选择按下标有参数名称的按键（这里可以按下「脚踏板操作方式」），然后按下「选择还原」按键，然后按照提示信息内容进行操作即可。

如果想要把更改过的全部设定恢复成出厂设定的话，请按「还原所有」键，然后按照提示信息内容进行操作即可。

2.8.2 参数设定分类说明

参数设定分为两种类型：选择型和输入型，如下图所示：

选择型

输入型

2.8.3 参数模式加密说明

参数模式下的各个操作入口都可以设定密码，以防止人为的误操作。

1、进入参数加密的方法：

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下功能设定键 

，此时会进入到功能设定界面。

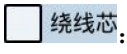
在功能设定界面下按下参数加密键 

。

2、选择加密项：

如图所示，加密项中包含了全部的参数项，可以选择一个或多个参数项进行加密（这里选择了「**绕线芯**」项）。

：选择状态



：未选择状态

选择了要加密的参数项后，按下确定键 
即可。

此后如果需要设定已加密的参数项参数时，都需要进行输入密码操作。

如果想要修改密码，请按下改密键 
。

3、修改密码

在设置新密码界面下，依次按下 当前密码: 、 新密码: 和 确认密码: 输入框，并且分别输入当前密码、新密码和确认密码，完成新密码设置操作，最后按下 键。

【注】初始密码为厂家 ID，设置一次密码后，「当前密码」即为上次设置的密码。

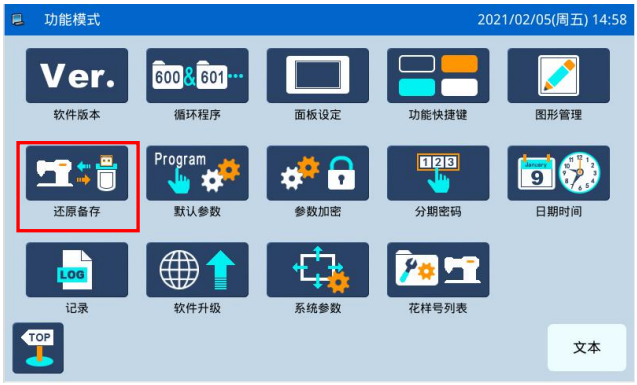
2.8.4 参数的还原与备存

可以把更改后的参数设定值保存到 U 盘中，用于以后的还原操作。

1、进入参数还原与备存的方法：

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下功能设定键（功能模式），此时会进入到功能设定界面。

在功能设定界面下按下还原备存键（还原备存）。



2、备存参数

进入还原备存参数界面，默认情况下是备份用户参数。

插入 U 盘之后按下确定键，一旦操作成功就会在 U 盘上自动建立一个「bakParam」目录，该目录下的「backup.param」文件即为参数备存文件。

【注】如有同档名文件的话会被盖写上新资料，原有资料会消失掉。

3、还原参数

单击「还原模式」键，可在界面左侧选择不恢复的参数，然后按下确定键即可执行参数还原操作，操作成功之后返回上一级画面。

4、写入用户默认值

选中「写入用户默认值」键，按下确定键，系统会提示输入权限 2 密码，输入成功后则直接执行此操作。

5、清除用户默认值

成功写入用户默认值后，「清除用户默认值」键为可选状态，选中后按下确定键即可清除用户默认值。

2.8.5 默认参数恢复

可以把参数设定值恢复为出厂值，另外用户也可以把自己设置好的参数保存起来，用于以后的调用。

1、进入默认参数恢复的方法：

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下功能设定键 功能模式，此时会进入到功能设定界面。

在功能设定界面下按下默认参数键 Program 默认参数，会要求输入密码（初始密码为厂家 ID），密码输入正确后即进入默认参数模式。

2、调用默认参数

点击相应的默认参数项，按下“机型默认”键即可重新加载相应的默认参数。

加载完毕后会自动返回到上一级画面。

【注】部分重要参数（如「主轴电机停车角度」等）不能在该操作中恢复为出厂值。

3、保存用户参数

按下“自定义”键可以进入到自定参数设置界面，该界面下用户能够把设置好的参数保存起来。

点击 自定参数02(无) ~ 自定参数15(无) 其中任意一键，以确定参数保存位置，然后点击 保存 键进行保存。可以对自定义的参数进行改名和清除自定义参数。

保存之后会自动退出，返回到上一级画面。

4、调用用户保存参数

进入该界面的方法同上，观察「自定参数 xx（有/无）」键显示内容，如果括号内显示为「有」的则表示该位置上存储了用户参数。

点击该按键，然后按下 恢复 键即可重新加载相应的参数设定值，操作成功后需要重启。

2.8.6 参数设定表

拨线器

代号	简述	详述	单位	步长	范围	出厂值	类型
566	夹线装置	起针夹线器开关			0:OFF:拨线器 无效 1:ON:拨线器 有效	0	选择
557	拨线器类型选择	拨线器类型选择			0:默认 1:使用电磁铁扫线装置 2:使用气动扫线装置	0	选择
A-1	拨线器开关	拨线器(W)输出开关			0:OFF:拨线器 无效 1:ON:拨线器 有效	1	选择
A-2	拨线器启动时间	拨线器(W)启动时间可以设定，根据剪线时序而设定，通常无需更改	毫秒	2	0~998	30	输入
A-3	拨线器保持时间	拨线器(W)保持时间可以设定，根据剪线时序而设定，需要时可以加长时间	毫秒	2	0~998	30	输入
A-4	拨线器结束延时	拨线器动作后延时等待机构复位	毫秒	1	0~255	0	输入
A-6	起针夹线器保持电流	起针夹线器保持电流		1	0~16	8	输入
A-7	拨线时机选择	拨线时机选择			0:UP:中压脚上拨线 1:MID:中压脚上拨线（中压脚下降位置） 2:DOWN:中压脚下拨线	0	选择

剪线时序

代号	简述	详述	单位	步长	范围	出厂值	类型
150	倒转针上升	剪线后机针定位角度			0:上针位 1:上死点	0	选择
164	剪线开关	剪线开关			0:关闭 1:打开	1	选择
B-2	剪线模式	剪线模式			0:MAG:电磁铁 1:AIR:气阀 2:MOTOR:电机	0	选择
B-3	剪线速度	剪线速度	x10RPM		10~40	40	输入
B-5	剪线开延时	剪线开延时	x0.01s		0~255	12	输入
B-6	剪线输出启动角度	剪线输出启动角度	度	2	0~359	210	输入
B-7	打版时自动添加剪线	打版时自动添加剪线			0:OFF:关闭 1:ON:打开	1	选择
B-8	缝制时空送前是否剪线	缝制时空送前是否剪线			0:OFF:关闭 1:ON:打开	0	选择

B-9	缝制结束时是否剪线	缝制结束时是否剪线			0:OFF:关闭 1:ON:打开	1	选择
B-10	剪线后上位置停车角度修正值	剪线后上位置停车角度修正值	度		0~100	0	输入

松线器

代号	简述	详述	单位	步长	范围	出厂值	类型
551	缝纫开始时的松线设定	缝纫开始时的松线器打开的针数设定	针	1	0~3	0	输入
552	切线时的松线同步	松线启动角度	度	2	0~359	300	输入
564	松线器打开模式	0：低，打开，无限制 1：中，关闭，5 分钟 2：高，关闭，1 分钟 3：中，打开，无限制 4：高，关闭，5 分钟 5：按穿线时间和穿线电流给定值动作		1	0~5	0	输入
567	剪线后空送是否打开松线器	剪线后空送是否打开松线器			0:OFF:关闭 1:ON:打开	0	选择
C-1	夹线器类型	夹线器类型选择			0:MCN:机械夹线 1:ELC:电子夹线	0	选择
C-2	松线开延时	松线开延时			0~255	30	输入
C-4	穿线时松线器打开延时	穿线时松线器打开延时			0~255	0	输入
C-5	穿线时松线器打开电流	穿线时松线器打开电流			0~255	25	输入
C-6	缝制结束是否打开松线器	缝制结束是否打开松线器			0:OFF:关闭 1:ON:打开	0	选择

间歇压脚

代号	简述	详述	单位	步长	范围	出厂值	类型
053	间歇压脚抬起后延时	延时防止移动撞模具	ms		0~255	0	输入
054	间歇压脚下降时间	间歇压脚下降同步			0:缝纫机机头启动之前 1:与最后的外压脚同步	0	选择
D-1	间歇压脚类型	间歇压脚气阀、步进、电磁铁选择			0:气阀 1:步进 2:电磁铁	1	选择
D-3	间歇压脚电流	间歇压脚电流			2~8	4	输入
D-5	间歇压脚行程设定	间歇压脚上下值设定	x0.1mm	2	0~220	150	输入
D-6	间歇压脚下降延时	间歇压脚下降延时			0~255	0	输入

D-7	间歇压脚动作速度	间歇压脚动作速度			8~17	13	输入
D-9	间歇压脚是否随动	间歇压脚是否随动			0:OFF:关闭 1:ON:打开	1	选择
D-16	间歇压脚降低的针数	间歇压脚降低的针数			0~3	0	输入
D-17	间歇压脚降低的高度	间歇压脚降低的高度	x0.1mm		0~30	0	输入

压板

代号	简述	详述	单位	步长	范围	出厂值	类型
001	缝制结束后压脚上升方式	缝制结束后压脚状态			0:返回到起缝点以后，压脚再上升 1:缝制结束后压脚立即上升 2:先回到起缝点，等到踩踏板后压脚再上升	0	选择
002	左右分离压脚下降动作（气动）	左右分离压脚下降动作			0:左右压脚同时下降 1:压脚先左再右下降 2:压脚先右再左下降	0	选择
003	压框下降动作（电机）	电机压框模拟踏板控制方式			0:模拟下降：根据踏板踏入量决定下降量，到底启动 1:1 阶段下降：1 档压脚下降，2 档时启动 2:2 阶段下降：1 挡时中间停止，2 挡下降后启动	2	选择
050	压脚工作模式	0:标准双踏板，压脚踏板控制大压脚，启动踏板启动车缝 1:标准双踏板，压脚踏板间隔控制大压脚和辅助压脚升降，启动踏板启动车缝 2:标准双踏板，压脚踏板间隔左右压脚，启动踏板启动缝制 3:标准三踏板，压脚踏板控制大压脚，中间踏板控制辅助压脚，启动踏板启			0~10	0	输入

		动车缝 4:左右压脚->间歇压脚的 2 段压脚。单踏板 1 档为左右压脚，2 档为间歇压脚，3 档控制启动。三踏板中间踏板控制间歇压脚升降 5:左右交替的 2 段压脚。压脚踏板控制每次缝制时 2 段压脚左右顺序互换 6:前进\后退踏板。压脚踏板控制左右压脚依次抬起，启动踏板控制左右压脚顺序落下，全落下后再踩启动开始车缝 7:踏入 2 次的 2 段压脚。单踏板控制电机压脚在中间位置、下降、启动三个位置切换，收回时压脚上升。双踏板气动压脚动作同模式 2 8:标准三踏板，压脚踏板控制电机压脚下降到二段位高度，中间踏板控制电机压脚下降到位，启动踏板启动车缝 9:三踏板带原点检测。中间踏板专用原点检测，压脚踏板控制左右压脚升降，启动踏板只用启动缝制 10:特殊三踏板带原点检测。中间踏板专用原点检测，压脚踏板控制左右压脚升降，踩启动踏板自动落下右压脚再启动					
051	原点检测前压板动作	原点检测前压板是否允许动作			0:原点检测前，压脚的上下动作不能进行 1:原点检测前，压脚的上下动作能进行	0	选择

052	断缝程序时的压脚动作	中途停止时压板状态			0:压板压下 1:压板抬起	0	选择
055	气动压框输出极性反转	气动压框输出极性反转			0:无效 1:气动规格的阀门输出反转 2：由于 2 个定位阀门相对应，同时输出反转阀门输出	0	选择
058	缝纫结束时的压脚动作	自动加工完成后压板抬起			0:缝制完成后压板自动抬起 1:缝制完成后压板不抬起	0	选择
059	压框重量选择	压框重量选择			-1：轻 1：标准 0：重	-1	选择
E-1	压板类型选择	压板类型选择			0:AIR:气动 1:MAG:电磁铁 2:MOTOR:电机	0	选择
E-2	压板抬起时能否缝纫	压板抬起时能否缝纫			0:OFF:不能缝纫 1:ON:能缝纫	0	选择
E-7	左右分离压板上升动作	左右分离压板上升动作			0:加工完成后压板抬起 1:加工完成后左压板持续压下 2:加工完成后右压板持续压下	0	选择
E-9	单脚踏板操作允许	单脚踏板操作允许			0:OFF:禁止 1:ON:允许	0	选择
E-10	二段位压板使能	二段位压板使能			0:OFF:禁止 1:ON:使能	0	选择
E-11	二段位压板高度	二段位压板高度			0~255	80	输入
E-12	压板行程设定	压板行程设定			0~200	180	输入
E-13	压板电流设定	压板电流设定			0~15	2	输入
E-14	踩踏板后延时启动设置	踩踏板后延时启动设置			0:OFF:禁止 1:ON:允许	0	选择
E-15	踩踏板后启动延时	踩踏板后启动延时			0~200	20	输入
E-16	次原点时外压框是否抬起	次原点时外压框是否抬起			0:DOWN:不抬压框 1:UP:抬压框	0	选择

伸缩压脚

代号	简述	详述	单位	步长	范围	出厂值	类型

556	翻转装置	支持翻转、伸缩压脚 0-无 1-翻转压脚(F1 压脚) 2-伸缩压脚(停车) 3-F2 压脚 4-K 压脚 5-伸缩压脚(不停车)			0~255	0	输入
F-2	回原点时伸缩压脚动作	回原点时伸缩压脚动作			0:OFF:不动作 1:MRH:先移出再回原点 2:HRM:先回原点再移出	1	选择
F-3	伸缩压脚伸出延时	伸缩压脚伸出延时	x0.01s		0~255	30	输入
F-4	伸缩压脚上升延时	伸缩压脚上升延时	x0.01s		0~255	45	输入
F-5	伸缩压脚下降延时	伸缩压脚下降延时	x0.01s		0~255	30	输入

激光切割

代号	简述	详述	单位	步长	范围	出厂值	类型
G-1	激光切割开关	激光切割开关			0:OFF:关闭 1:ON:打开	0	选择
G-2	激光切割 X 向偏移	激光切割 X 向偏移	x0.1mm		-5000~5000	0	输入
G-3	激光切割 Y 向偏移	激光切割 Y 向偏移	x0.1mm		-2000~2000	0	输入
G-4	激光切割速度	激光切割速度			1~9	1	输入
G-5	激光吸气开关	激光吸气开关			0:OFF:关闭 1:ON:打开	0	选择
G-6	激光吸气打开延时	激光吸气打开延时			0~65535	100	输入
G-7	激光吸气关闭延时	激光吸气关闭延时			0~65535	100	输入
G-8	激光启动前延时	激光启动前延时			0~65535	100	输入
G-9	激光头下降后延时	激光头下降后延时			0~65535	100	输入
G-10	激光头抬起后延时	激光头抬起后延时			0~65535	0	输入
G-11	拐点降速方式	拐点降速方式			0:OFF:不启动 1:L-ON：仅激光段启动 2：S-ON 仅车缝段启动 3：ALL 激光段和车缝段都启动	0	选择

暂停

代号	简述	详述	单位	步长	范围	出厂值	类型
651	根据暂停开关确定	暂停时机针位置			0:机针下定位	1	选择

	缝制中断时的机针停止位置				1:机针上定位		

652	暂停时的切线动作	暂停时自动剪线			0:自动剪线 1:不剪线	1	选择
656	暂停时的复位模式	暂停时的复位模式			0:复位后向缝制开始点移动 1:不进行原点复归，在缝制轨迹上倒进移动至缝制开始点	0	选择
H-2	暂停时压板动作	暂停时压板动作			0:DWN:压板压下 1:UP:压板抬起	0	选择
H-3	暂停开关类型	暂停开关类型			0:常关型 1:常开型	1	选择
H-5	安全开关类型	安全开关类型			0:常关型 1:常开型	0	选择

断线检出器

代号	简述	详述	单位	步长	范围	出厂值	类型
554	断线检测装置	断线检测			0:OFF:断线检测关闭 1:ON:断线检测打开	0	选择
555	断线检测装置的检测灵敏度	断线检测时缝制开始的无效针数			0~15	8	输入
I-3	断线检测时缝制中途的无效针数	断线检测时缝制中途的无效针数	针		0~15	3	输入
I-4	断线检测时是否剪线	断线检测时是否剪线			0:发生断线时进行剪线 1:发生断线时不进行剪线	0	选择
I-5	断线传感器灵敏度	断线传感器灵敏度			1~10	4	输入

移送方式

代号	简述	详述	单位	步长	范围	出厂值	类型
200	1 针检测送布	1 针检测送布模式			0:踩下脚踏开关自动运行到最后一针 1:踩下脚踏开关逐针前进。送布开始后，通过转动手轮逐针送布	0	选择
252	高速测试送布	高速测试送布			0:通常慢速踏入	0	选择

					踏脚开关第 1 档为高速送布 1:测试送布与缝制时的速度相同		
260	改变全部的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	-3	输入
261	改变缝纫开始第 1 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	-3	输入
262	改变缝纫开始第 2 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	-3	输入
263	改变缝纫开始第 3 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	0	输入
264	改变缝纫结束前 3 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	-1	输入
265	改变缝纫结束前 2 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	1	输入
266	改变缝纫结束前 1 针的送布同步	0:-10：提前 1:0:标准 2:10：延迟 每数字对应 8 度			-10~10	0	输入
267	送布同步有效针数	当全部的送布同步从（NO.260 设定）初始值开始变更时，指定其有效针数: 0：无限制 1~99：如果超过了缝纫开始时指定针数，返回至标准送布同步			0~99	0	输入
268	改变送布同步的基准	改变送布同步的基准			0:送布开始基准 1:上针基准 2:送布结束基准 3:速度联动	0	选择

J-1	缝纫类型选择	缝纫类型选择			0:薄 1:中 2:厚	0	选择
J-2	薄物料厚度	薄物料厚度			0~255	0	输入
J-3	中物料厚度	中物料厚度			0~255	15	输入
J-4	厚物料厚度	厚物料厚度			0~255	30	输入
J-5	试缝方式	试缝方式			0:抬起停止 1:抬起继续移动	0	选择
J-10	快速移动方式(打版)	打版和图形修改中两点移动方式			0:LINE:直线移动 1:PAT:跟随针步移动	1	选择
J-15	动框增益曲线	动框增益曲线			1~3	1	输入
J-16	X 轴刚性微调	X 轴刚性微调			-15~ 15	0	输入
J-17	X 轴速度微调	X 轴速度微调			-50~ 50	0	输入
J-18	Y 轴刚性微调	Y 轴刚性微调			-15~ 15	0	输入
J-19	Y 轴速度微调	Y 轴速度微调			-50~ 50	0	输入

绕线芯

代号	简述	详述	单位	步长	范围	出厂值	类型
056	原点检测前是否允许绕线	原点检测前是否允许绕线			0:OFF:不能绕线 1:ON:可以绕线	0	选择
K-1	绕线速度设置	绕线速度设置	x100RPM		2~27	13	输入
K-2	绕线器停止方式设置	绕线器停止方式设置			0:抬起踏板停止绕线 1:再次踩踏板停止绕线 2:定时停止绕线	1	选择
K-3	定时停止绕线时间设置(单位 秒)	定时停止绕线时间设置(单位 秒)	s	2	2~498	30	输入

起步慢针

代号	简述	详述	单位	步长	范围	出厂值	类型
100	缝纫开始速度	是否慢速起针			0:慢速 1:快速	0	选择
151	快速第一针启动速度	快速第一针启动速度	x100RPM		2~30	10	输入
152	快速第二针启动速度	快速第二针启动速度	x100RPM		2~30	15	输入
153	快速第三针启动速度	快速第三针启动速度	x100RPM		2~30	22	输入
154	快速第四针启动速度	快速第四针启动速度	x100RPM		2~30	30	输入
155	快速第五针启动速度	快速第五针启动速度	x100RPM		2~30	30	输入
156	缝纫结束前 5 针速度	倒数第 5 针给定速度	x100RPM		4~27	25	输入
157	缝纫结束前 4 针速度	倒数第 4 针给定速度	x100RPM		4~27	26	输入
158	缝纫结束前 3 针速度	倒数第 3 针给定速度	x100RPM		4~27	12	输入

159	缝纫结束前 2 针速度	倒数第 2 针给定速度	x100RPM		4~27	12	输入
L-1	第一针启动速度	第一针启动速度	x100RPM		2~30	3	输入
L-2	第二针启动速度	第二针启动速度	x100RPM		2~30	7	输入
L-3	第三针启动速度	第三针启动速度	x100RPM		2~30	10	输入
L-4	第四针启动速度	第四针启动速度	x100RPM		2~30	15	输入
L-5	第五针启动速度	第五针启动速度	x100RPM		2~30	20	输入
L-6	起缝加固方式	起缝加固方式			0:不加固 1:在第一针进行缩缝 2:在前几针进行倒回缝	0	选择
L-7	起缝加固针数	起缝加固针数		1	-4~4	0	输入
L-8	结束加固方式	结束加固方式			0:不加固 1:在最后一针进行缩缝 2:在最后几针进行倒回缝	0	选择
L-9	结束加固针数	结束加固针数			0~4	0	输入

速度

代号	简述	详述	单位	步长	范围	出厂值	类型
251	送布速度	数值越大，空速速度越快	档		0~9	7	输入
M-1	高速设定	高速设定	x100RPM		2~30	23	输入
M-2	低速设定	低速设定	x100RPM		2~30	2	输入
M-3	中高速设定	中高速设定	x100RPM		2~30	15	输入
M-4	中低速设定	中低速设定	x100RPM		2~30	10	输入
M-5	移送延时设置	移送延时设置			0~255	0	输入
M-6	打版延时设置	打版延时设置			0~9	4	输入
M-11	回起缝点速度设置	回起缝点速度设置			0~9	7	输入
M-12	找原点时间间隔	找原点时间间隔(数值越大时间越长)			5~10	7	输入
M-13	单步移动速度设置	单步移动速度设置			0~40	30	输入
M-14	缝纫速度比率	缝纫速度比率	%	5	70~100	100	输入

范围限制

代号	简述	详述	单位	步长	范围	出厂值	类型
460	设置 X 左方向有效范围	按照机型实际幅面大小设置	mm		0~2000	500	输入
460-R	设置 X 右方向有效范围	按照机型实际幅面大小设置	mm		0~2000	500	输入
461	设置 Y 上方向有效范围	按照机型实际幅面大小设置	mm		0~2000	3	输入
461-D	设置 Y 下方向有效范围	按照机型实际幅面大小设置	mm		0~2000	200	输入

N-1	取消范围保护	取消范围保护			0:OFF:范围保护关闭 1:ON:范围保护打开	1	选择

N-6	禁止 X 方向移动	禁止 X 方向移动			0:OFF:关闭 1:ON:打开	0	选择

电机

代号	简述	详述	单位	步长	范围	出厂值	类型
161	贯穿力增强动作	贯穿力增强动作			0:OFF:无效 1:ON:缝纫机马达锁定时，贯穿力增强动作进行	0	选择
165	倒转针上升的角度	上死点角度设定	度		0~50	3	输入
P-1	x 电机转向	x 电机转向			0:正向 1:反向	1	选择
P-2	y 电机转向	y 电机转向			0:正向 1:反向	1	选择
P-3	z 电机转向	z 电机转向			0:正向 1:反向	0	选择
P-4	X 传感器在机头的左侧还是右侧	X 传感器在机头的左侧还是右侧			0:L:左侧 1:R:右侧	0	选择
P-5	Y 传感器在机头的前侧还是后侧	Y 传感器在机头的前侧还是后侧			0:F:前侧 1:B:后侧	1	选择
P-6	主轴类型选择	支持 550W 和 750W 类型			0:550:550W 1:D00:750W-D00/F11 2:F00:750W-F00	1	选择
P-7	主轴电机停车角度	主轴电机停车角度	度		30~63	59	输入
P-8	上死点角度设定	设定停车到上死点的角度值	度		0~50	3	输入
P-9	P2 移框方向设置	P2 移框方向设置			0:同向 1:反向	0	选择

原点位置

代号	简述	详述	单位	步长	范围	出厂值	类型
057	原点检测后的缝制开始点移动时的压脚动作	原点压脚动作			0:回原点后压脚压下 1:回原点后压脚抬起	1	选择
250	缝纫结束时的机械原点复位	缝制结束后是否检索原点			0:无原点检索，停止在原位 1:有原点（次原点）检索 2:回起缝点 3:直接回原点	1	选择

254	向原点位置和缝纫开始点位置的移动路线	平时原点检索/原点复位线路选择			0:标准 1:反转 2:Y 轴到 X 轴 3：X 轴到 Y 轴 4:XY 轴同步	0	选择
270	花样切换时原点动作	花样切换时原点动作			0:不进行原点检索动作 1:不进行原点检索动作，但经过区域中心 2:进行原点检索动作	0	选择
450	花样切换时起点移动模式	花样切换时的原点动作			0:踩踏板起动后，再向新花样起点移动 1:切换花样的同时，移动到新花样的起点	0	选择
Q-1	加电时回原点	加电时回原点			0:OFF:不回原点 1:ON:回原点	0	选择
Q-2	压板抬起回原点禁止	压板抬起回原点禁止			0:OFF:允许回原点 1:ON:禁止回原点	0	选择
Q-4	设置起缝点复位路径	设置起缝点复位路径			0:直线返回起缝点 1:按花样图案返回起缝点 2:先原点检索再到起缝点	0	选择
Q-5	原点检索时是否选择上死点	原点检索时是否选择上死点			0:OFF:原点检索时不选择上死点 1:ON:原点检索时选择上死点	0	选择
Q-8	反转时原点检索/原点复位线路选择	反转时原点检索/原点复位线路选择			0:标准 1:反转 2:Y 轴到 X 轴 3:X 轴到 Y 轴 4:XY 轴同步	0	选择

计数器

代号	简述	详述	单位	步长	范围	出厂值	类型
R-1	加计数器模式	加计数器模式			0:加计数器禁止 1:按花样加计数 2:按循环加计数	1	选择
R-2	减计数器模式	减计数器模式			0:减计数器禁止 1:按花样减计数 2:按循环减计数	1	选择

R-3	导入花样时加计数器值是否保留	导入花样时加计数器值是否保留			0:清除 1:保留	1	选择

R-4	导入花样时减计数器值是否保留	导入花样时减计数器值是否保留			0:清除 1:保留	1	选择
R-5	电源重开时消除计算器	电源重开时消除计算器			0:清除 1:保留	1	选择
R-6	禁止加算器（UP）被修改	禁止加算器（UP）被修改			0:OFF:允许修改 1:ON:禁止修改	0	选择
R-7	禁止减算器（DN）被修改	禁止减算器（DN）被修改			0:OFF:允许修改 1:ON:禁止修改	0	选择
R-8	到达加算器（UP）设定值时缝纫机的操作	到达加算器（UP）设定值时缝纫机的操作			0:OFF:停止缝纫 1:ON:可继续缝纫	0	选择
R-9	到达减算器（DN）设定值时缝纫机的操作	到达减算器（DN）设定值时缝纫机的操作			0:OFF:停止缝纫 1:ON:可继续缝纫	0	选择
R-11	计数器换梭	计数器换梭			0:OFF:关闭 1:ON:打开	0	选择

液晶屏幕

代号	简述	详述	单位	步长	范围	出厂值	类型
401	循环程序设置	打开后，主界面 P1 的 PROGRAM 按键改变为循环程序编辑功能			0:OFF:关闭 1:ON:打开	0	选择
S-1	蜂鸣器声音设定	蜂鸣器声音设定			0:0:无蜂鸣音 1:1:操作盘音 2:2：操作盘+报警音	2	选择
S-3	背光自动关闭开关	背光自动关闭开关，OFF：不自动关闭，ON：自动关闭			0:OFF:不自动关闭 1:ON:自动关闭	0	选择
S-4	背光自动关闭等待时间	背光自动关闭等待时间	分钟		1~9	3	输入
S-5	主界面花样显示设定	设置主界面花样显示背景色 0：黑色 1：青色 2：红色 3：绿色 4：蓝色 5：紫色 6：黄色			0~6	0	输入
S-7	主界面按键显示风格	设置主界面下按键显示风格			0:ICN:图标 1:TXT:文本	0	选择

S-8	按键显示风格	设置检测模式和功能模式下按键显示风格			0:ICN:图标 1:TXT:文本	0	选择

S-9	修改和转换按键显示风格	修改和转换按键显示风格			0:ICN:图标 1:TXT:文本	1	选择
S-11	大针数花样支持	大针数花样支持			0:OFF:关闭 1:ON:打开	0	选择
S-12	矢量图形转换针距设置	矢量图形转换针距设置	x0.1mm		10~127	30	输入
S-13	花样缝纫进度描绘	花样缝纫进度描绘			0:OFF:关闭 1:ON:打开	1	选择
S-14	花样切换锁显示设定	和模板识别功能配合使用			0:OFF:关闭 1:ON:打开	1	选择
S-16	主界面 P1 显示风格	主界面 P1 显示风格			0:S1:风格 1 1:S2:风格 2	1	选择
S-18	花样号快捷键选择方式	花样号快捷键选择方式			0:位置不变 1:选择后自动变成第一个 2:按照号码大小排列	0	选择
S-19	花样号快捷键显示模式	花样号快捷键显示模式			0：最近使用的花样	0	选择
S-20	花样号快捷键显示模式	花样号快捷键显示模式			0~7	0	输入
S-21	花样号快捷键显示模式	花样号快捷键显示模式			0~2	0	输入
S-22	主界面 P1 功能区位置	主界面 P1 功能区位置			0：L：左侧 1：R：右侧	1	选择
S-23	主界面 P1 加减设置键	主界面 P1 加减设置键			0：ALL：花样号和速度键都支持设置 1：SPD:速度设置 2：PAT：花样号设置	0	选择
S-24	主界面按键风格	主界面按键风格			0：深色 1：浅色	0	选择

打版设置

代号	简述	详述	单位	步长	范围	出厂值	类型
T-1	打版操作风格	打版操作风格			0:S1:风格 1 1:S2:风格 2	1	选择
T-2	多重缝下倒缝算法	多重缝下倒缝算法			0:0:按段生成 1:1:头尾生成	1	选择
T-3	是否第一条空送后自动添加次原点	是否第一条空送后自动添加次原点			0:OFF:关闭 1:ON-S:打开(切换车缝打版) 2:ON-F:打开(继续空送打版)	0	选择

T-4	曲线角点快捷键	曲线角点快捷键			0:OFF:关闭 1:ON:打开	1	选择
T-5	打版空送后还原车缝的风格	设置打版空送后还原车缝的风格			0:0:保持 1:1:直线	0	选择
T-6	打版后针法还原	打版后针法还原			0:OFF:否 1:ON:是	0	选择
T-8	放大方法	花样打版放大方法			0:0:面积 1:1:长宽	1	选择
T-9	是否显示落针点	是否显示落针点			0:0:否 1:1:是	1	选择
T-10	花样转换选择方法	多重缝、偏移缝、倒缝、曲折缝、首尾交换等修改位置选择方法			0:0:针迹 1:1:要素	0	选择

T-11	缩放单位	缩放单位			0:0:百分比 1:1:尺寸	0	选择
T-12	多重缝缩放方式	多重缝缩放方式			0:0:间距可变 1:1:间距不变	1	选择
T-13	缩放功能下尺寸计算方式	缩放功能下尺寸计算方式			0:0:从原点开始 1:1:从起缝点开始	0	选择
T-14	修改完成后返回方式	修改完成后返回方式(点和功能码)			0:0:功能选择 1:1:继续修改	0	选择
T-15	多重缝、偏移缝、段插入修改方式	多重缝、偏移缝、段插入修改方式(转换影响后面要素的位置)			0:0:相对修改 1:1:绝对修改	0	选择
T-16	图形中心设置是否保留起始空送	花样缩放、旋转时图形中心设置			0:0:保留 1:1:去除	1	选择
T-17	旋转功能下次原点是否旋转	旋转功能下次原点是否旋转			0:0:否 1:1:是	0	选择
T-18	平行曲线算法	平行曲线算法			0:A1:算法 1 1:A2:算法 2 2:A3:算法 3	2	选择
T-19	形成角点角度标准	形成角点角度标准：0：无角点，180：全角点	度		0~180	90	输入
T-20	空送针距设置	空送针距设置	x0.1mm		10~120	120	输入
T-21	是否在打版后增加拐点降速	是否在打版后增加拐点降速			0:OFF:否 1:ON:是	0	选择
T-22	显示形状点范围	显示形状点范围			0:OFF:关闭 1:ON:打开	0	选择
T-23	打版下形状轮廓显示	打版下形状轮廓显示			0:OFF:关闭 1:ON:打开	1	选择
T-24	打版跟随动作设	打版跟随动作设定			0:OFF:禁止	0	选择

	定				1:ON:使能		
T-25	小针距形状融合	仅针对直线，1mm 距离以内形状点会融合上一条要素			0:OFF:关闭 1:ON:打开	0	选择
T-26	依据花样轮廓大小自动放大	图形修改中依据花样轮廓大小自动放大			0:OFF:关闭 1:ON:打开	0	选择
T-27	暂停码扩展气阀功能	暂停码扩展气阀功能			0:OFF:关闭 1:ON:打开	0	选择
T-28	中压脚高度修改方式	中压脚高度修改方式			0:0:选择一针 1:1:选择一段	0	选择
T-29	段移动方式	段移动方式			0:0:简易 1:1:复杂	0	选择
T-30	点移动选择方式	点移动选择方式			0:0:单选(绝对和相对方式修改) 1:1:多选	0	选择
T-31	点移动和段移动变化轨迹	点移动和段移动变化轨迹			0:0:关闭 1:1:打开	1	选择
T-32	点移动后空送合并	点移动后空送合并			0：否 1：是	0	选择

其他

代号	简述	详述	单位	步长	范围	出厂值	类型
550	机针冷却装置	机针冷却有无			0:OFF:无 1:ON:有	0	选择
U-1	语言选择	语言选择			0:CH:中文 1:EN:English 2:Bur:Burmese 3:KR:한국어 4:TK:Turkish 5:JP:日本語 6:VI:Vietnamese 7:ITA:Italiano 8:PT:Portuguese 9:ES:Español	0	选择
U-2	语音设定	语音功能设定			0：OFF：关闭 1:ON:打开	1	选择
U-3	按键语音音量大小	按键语音音量大小			0~31	25	输入
U-7	LED 灯的亮度	LED 灯的亮度			0~100	50	输入
U-8	用于自动送料等机型	用于自动送料等机型			0~10	0	输入
U-9	是否自动关闭跳转界面	确认跳转针数后，是否自动关闭跳转界面			0:OFF:否 1:ON:是	0	选择
U-10	开机是否进入语	开机是否进入语言			0:OFF:否	0	选择

	言选择	选择			1:ON:是		
U-12	DXF 文件转换方法	DXF 文件转换方法			0:0:精简 1:1:复杂	0	选择
U-13	导出其它格式	导出其它格式			0:OFF:关闭 1:ON:打开	1	选择

维修保养

代号	简述	详述	单位	步长	范围	出厂值	类型
V-1	更换机针剩余值	更换机针剩余值	x1000 针		0~9999	0	输入
V-2	更换机针设定值	更换机针设定值	x1000 针		0~9999	0	输入
V-3	清扫时间剩余值	清扫时间剩余值	小时		0~9999	0	输入
V-4	清扫时间设定值	清扫时间设定值	小时		0~9999	0	输入
V-5	机油更换剩余值	机油更换剩余值	小时		0~9999	0	输入
V-6	机油更换设定值	机油更换设定值	小时		0~9999	0	输入
V-9	底线计数器剩余针数	底线计数器剩余针数			0~60000	0	输入
V-10	底线计数器报警针数	底线计数器报警针数			0~60000	0	输入
V-11	底线计数方法	段计算：车缝段起始报警 针数计算：车缝中途报警			0:0:按段计算 1:1:针数计算 1:ON:打开	1	选择
V-17	底线检测装置剩余长度设置	底线检测装置剩余长度设置	x0.1 米		0~5000	0	输入
V-18	布料厚度	布料厚度	mm		0~20	0	输入
V-19	剪线长度	剪线长度	mm		0~50	0	输入

模板识别

代号	简述	详述	单位	步长	范围	出厂值	类型
W-1	模板识别设置	模板识别设置			0:OFF:关闭 1:ON:打开	0	选择
W-2	模板识别设备	模板识别设备			0:0:无用 1:1:条码扫描设备 2:2:RFID 读写设备	0	选择
W-3	记号笔 X 向偏移	记号笔 X 向偏移	x0.1mm		-5000~5000	0	输入
W-4	记号笔 Y 向偏移	记号笔 Y 向偏移	x0.1mm		-2000~2000	0	输入
W-5	记号笔运行速度	记号笔运行速度			1~9	1	输入
W-7	花样号不存在时读取 U 盘花样	花样不存在时读取 U 盘花样			0:OFF:关闭 1:ON:打开	0	选择

自动换梭

代号	简述	详述	单位	步长	范围	出厂值	类型
X-1	自动换梭开关	自动换梭开关			0:OFF:关闭 1:ON:打开	0	选择
X-2	换梭方式	换梭方式			0:0:底线报警后手动换梭 1:1:底线报警时自动换梭	1	选择
X-3	换梭后启动方式	换梭后启动方式			0:0:手动启动 1:1:自动启动	1	选择
X-4	空梭芯处理方式	空梭芯处理方式			0:0:放回梭盘 1:1:放收纳盒	1	选择
X-5	换梭臂停车位置	换梭臂停车位置			0:0:梭盘侧 1:1:机头侧	1	选择
X-6	换梭臂到机头位置微调	换梭臂到机头位置微调			-100~100	0	输入
X-7	换梭臂到梭盘位置微调	换梭臂到梭盘位置微调			-100~100	0	输入
X-8	梭盘电机原点偏移	梭盘电机原点偏移			-100~100	0	输入

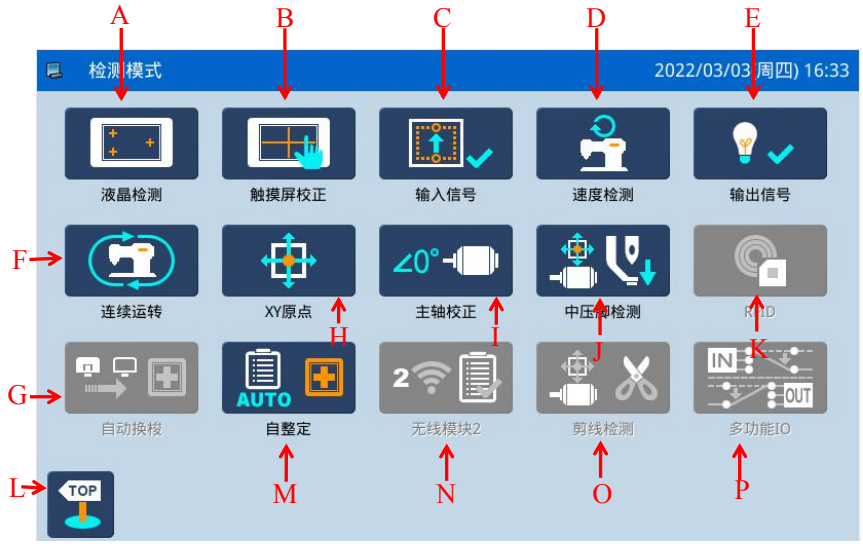
特殊

代号	简述	详述	单位	步长	范围	出厂值	类型
163	最高缝制速度	最高缝制速度	x100RPM		2~30	23	输入
Y-2	字母绣功能使能	字母绣功能使能			0:OFF:关闭字母绣功能 1:ON:打开字母绣功能	1	选择
Y-3	针长降速曲线	内置针长降速曲线选择			0~8	5	输入
Y-4	最高不降速针长	保持最高转速时的最大针长	x0.1mm		1~127	30	输入
Y-5	通讯速率提升	通讯速率提升			0~1	0	输入

2.9 检测模式说明

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下检测模式键 检测模式，即进入到检测模式。

功能说明：



序号	功能	内容
A	液晶检测	用于检测液晶显示。
B	触摸屏校正	用于校正触摸屏。
C	输入信号检测	用于检测各类开关、传感器等输入信号。
D	速度检测	用于检测主轴马达转速。
E	输出信号检测	用于检测各类压脚、剪线等输出信号。
F	连续运转	用于设定连续运转参数，进入老化状态。
G	自动换梭	自动换梭
H	XY 马达原点检测	用于检测 X 轴和 Y 轴马达原点。
I	主轴马达安装角度调整	用于显示和设定主轴马达安装角度。
J	中压脚功能检测	用于检测中压脚
K	RFID	用于设置 RFID
L	退出	退出检测模式，返回到主界面。
M	自整定	用于自整定
N	无线模块 2	用于无线模块 2 检测。
O	剪线检测	用于剪线检测

P	多功能 IO	多功能 IO

2.9.1 液晶检测

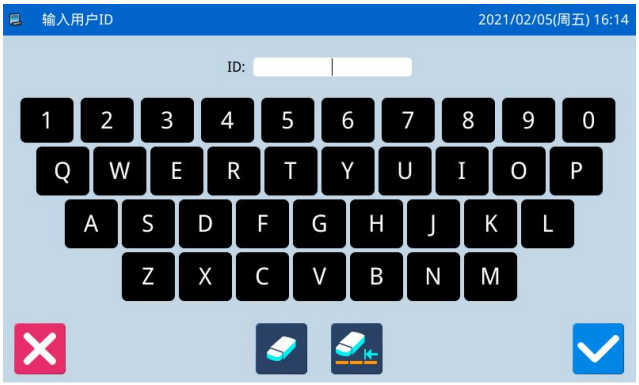
功能说明：

检测模式界面下按下液晶检测按键 

，进入液晶检测功能，点击除退出键  以外的位置，液晶会依次显示白、黑、红、绿、蓝五种颜色，用于判定液晶是否存在失色。

按下退出键  返回到上一级画面。

2.9.2 触摸屏校正



功能说明：

检测模式界面下按下触摸屏校正键 

，此时会显示「输入用户 ID」界面，见右图，输入 ID 后按下确定键  进入触摸屏校正功能。

需要进行 5 点的校正，最好采用触摸笔一类工具点击画面中的十字光标，校正结束后会显示提示信息显示本次操作是否成功。

【注】校正过程中请务必按照十字光标指示位置进行确定，否则会导致校正结束后无法正常使用触摸屏。

2.9.3 输入信号检测

功能说明：

检测模式界面下按下输入信号检测按键 

，进入输入信号检测功能。

ON：表示开启

OFF：表示关闭

输入信号种类：

① 启动开关（踏板）

② 压脚开关（踏板）

③ 暂停开关

④ 断线检测

⑤ X 马达传感器

⑥ Y 马达传感器

⑦ 中压脚原点

⑧ 安全开关

⑨ 外部输入 1（PORG）

⑩ 外部输入 2（PSENS）

⑪ 外部输入 3（CORG）

⑫ 外部输入 4（CSENS）

⑬ 外部输入 5（AORG）

⑭ 三联脚踏板

按下退出键  返回到上一级画面。

单击可编程 IO 键 

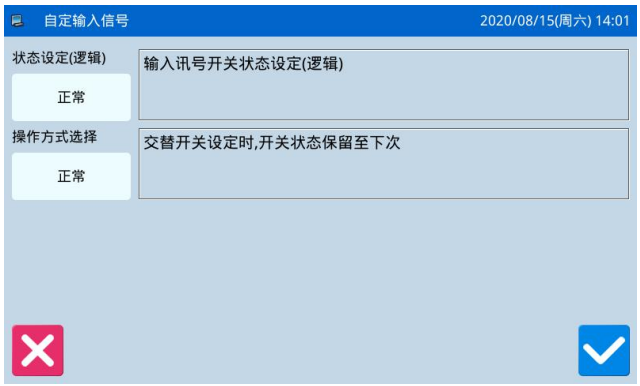
，进入输入信号配置界面，可进行输入信号配置操作。

举例说明：

单击输入 3(IN3) 输入3(IN3)，进入自定义输入信号界面，可通过单击 ▲ ▼ 按钮选择输入信号，如下：

1）无
2）找原点
3）启动缝制
4）缝制速度加
5）缝制速度减
6）气压检测
7）断线检测
8）特殊输入功能 1~9

单击确定键 ✓ 确定并返回输入信号配置界面，单击取消键 ✗ 取消操作并返回输入信号配置界面。



单击详细设定键 详细设定，进入自定输入信号界面，可设置如下参数：

1）输入讯号开关状态设定（逻辑）：
正常/反相
默认值：正常
2）交替开关设定时，开关状态保留至下次：
正常/交替开关
默认值：正常

2.9.4 主轴转速检测

功能说明：

检测模式界面下按下速度检测按键  ，进入主轴转速检测功能。

通过  和可以设置主轴马达目标转速，通过  和  可以设置主轴马达正转或反转，按下运转键  后，主轴马达会以设定的转速旋转。此时，实际测得的转速会显示在实际转速输入栏。

按下停止键  ，则机器停止运转。

按下退出键  返回到上一级画面。

2.9.5 输出信号检测

功能说明：

检测模式界面下按下输出信号检测按键  ，进入输出信号检测功能。

在该界面下按下输出信号按键，就可以检测电磁铁等输出信号的输出状态。

输出信号种类：

① 拔线

② 剪线

③ 压脚

④ 间歇压脚

⑤ 松线

⑥ 夹线器 T2

⑦ 辅助气阀 1~8

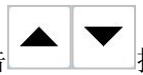
按下退出键  返回到上一级画面。

【注】缝纫机会有实际动作。

自定输出信号：

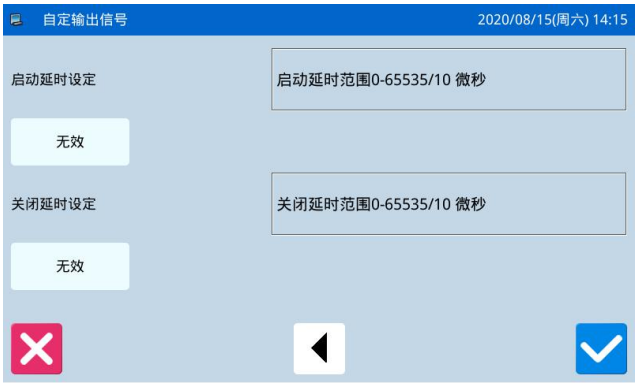
单击[可编程 IO]键，进入自定输出信号界面，可进行自定输出信号操作。

举例：

单击“气阀 1（V1）”键，进入自定义输出信号界面，可通过单击  按钮选择输出信号，如下：

1）无
2）辅助压框
3）翻转压脚
4）主轴运行
5）缝制完成
6）错误状态
7）找原点
8）次原点
9）中途停止
10）侧滑压脚伸缩
11）侧滑压脚升降
12）抓线
13）功能 1~9
14）功能 A/B/C
15）回原点压框落下
16）回次原点压框落下
17）激光
18）激光吸气
19）激光升降
20）剪线
21）松线
22）拨线
23）中压脚
24）外压框
25）缝前插刀
26）缝后吹气
27）机针冷却
28）断线输出
29）急停输出
30）记号笔
31）激光定位灯-左
32）激光定位灯-右
33）辅助夹具 1~9
34）启动自动换梭
35）工作中指示灯
36）待机指示灯
37）特殊压脚功能 1~7

单击确定键  确定并返回输出信号配置界面，单击取消键  取消操作并返回输出信号配置界面。



单击详细设定键 

，进入自定输出信号界面，可设置如下参数：

1）讯号开关之状态设定：

正常/反相

默认值：正常

2）输出反相：

正常/交替开关

默认值：正常

3）启动延时设定（启动延时范围 0-65535/10 微秒）

无效/有效

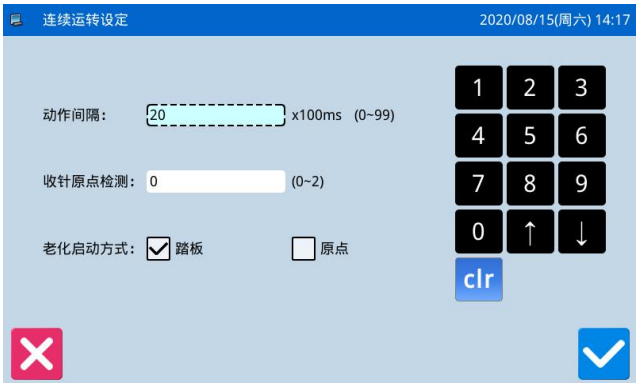
默认值：无效

4）关闭延时设定（关闭延时范围 0-65535/10 微秒）

无效/有效

默认值：无效

2.9.6 连续运转



功能说明：

检测模式界面下按下连续运转按键 

，进入连续运转设定功能。

点击动作间隔输入栏或收针原点检测输入栏，通过数字键盘输入想要设定的数值，按下确定键  返回到上一级画面。

可以通过踏板或者原点两种老化启动方式，设置完毕后返回到主界面 P1（或 P2），踩下脚踏板或者按下回原点按键使缝纫机运转起来，即进入到连续运转模式

2.9.7 XY 马达原点检测

功能说明：

检测模式界面下按下 XY 马达原点检测按键 

，进入 XY 马达原点检测功能。

在该界面下通过方向键驱动 XY 马达移动，过程中可以实时显示出传感器的 ON/OFF 状态。

ON：检测到传感器

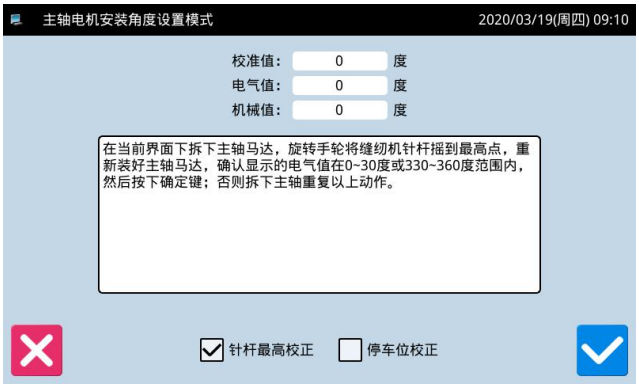
OFF：未检测到传感器

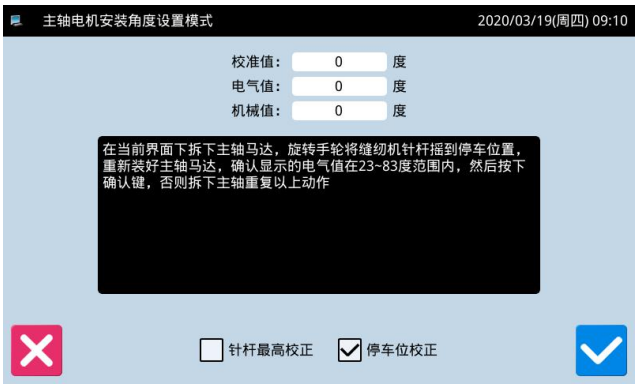
按下退出键  返回到上一级画面。

通过激光补偿参数设置激光设备的安装位置补偿量。

【注】缝纫机会有实际动作。

2.9.8 主轴马达安装角度设置





功能说明：

检测模式界面下按下主轴马达安装角度设置按键 

，进入主轴马达安装角度设置功能。

1）针杆最高校正

在当前界面下拆下主轴马达，旋转手轮将缝纫机针杆摇到最高点，重新装好主轴马达，确认显示的电气值在 0-30 度或 330-360 度范围内，然后按下确定键  ；否则拆下主轴重复以上动作。

2）停车位校正

在当前界面下拆下主轴马达，旋转手轮将缝纫机针杆摇到停车位置，重新装好主轴马达，确认显示的电气值在 23-83 度范围内，然后按下确定键  ；否则拆下主轴重复以上动作。

2.9.9 中压脚检测

功能说明：

检测模式界面下按下中压脚检测按键 

，进入中压脚检测功能。

：降低中压脚

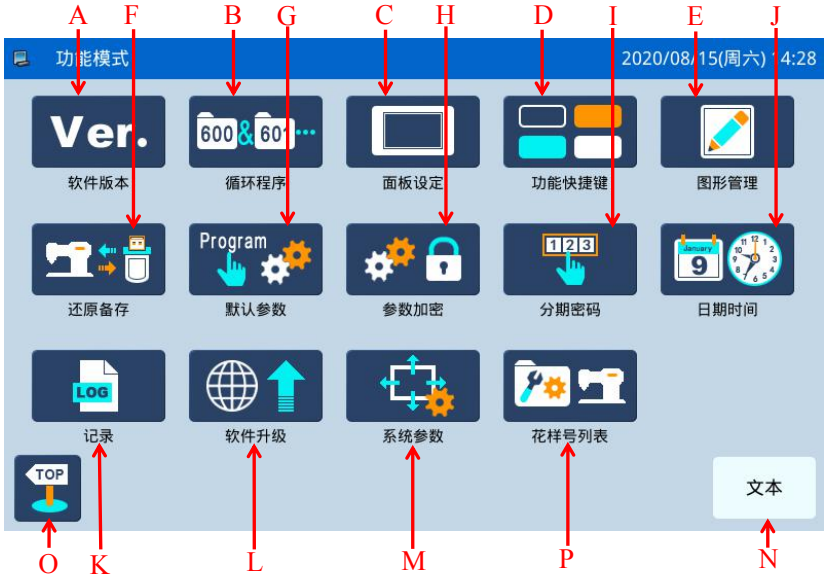
：提升中压脚

：切换中压脚位置

2.10 功能设定说明

在主界面 P1（或 P2）界面上操作目录键，即打开多类目录模式，然后再按下功能设定键 功能模式，即进入到功能设定模式。

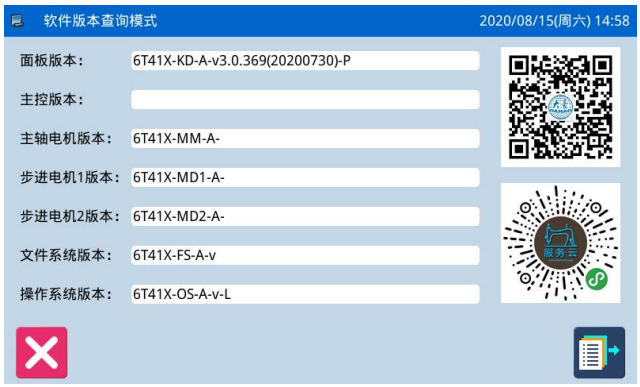
功能设定界面：



功能说明：

序号	功能	内容
A	软件版本	查询系统软件版本。
B	循环程序	编辑组合花样。
C	面板设定	提供背光、按键锁、亮度等显示设定。
D	功能快捷键	用户可根据根据自己常用的功能，编辑此快捷键，显示在主页面上，方便用户操作便捷。
E	图形管理	图形复制：内存与 U 盘之间传输拷贝花样文件。 格式化：格式化 U 盘、内存和花样号码快捷键。 批量转换：进入花样格式批量转换模式，把非标准的花样格式都修改为标注花样格式。**注：标准花样格式为 nsp 格式。**
F	还原备存	参数设定值保存到 U 盘中，用于以后的还原操作。
G	默认参数	提供默认参数的恢复和自定义读写功能。
H	参数加密	参数模式下的各个操作入口设定密码。
I	分期密码	提供用户分期密码功能。
J	日期时间	设置日期和时钟。
K	记录	报警记录：查看报警统计信息。 运转记录：查看机器运转信息。
L	软件升级	进入软件升级模式。
M	系统参数	可设置系统参数和 TD 系统参数
N	图标和文字的转换	实现快捷键在图形和文字间的转换。
O	退出	返回主界面。
P	花样号列表	花样号快捷键编辑操作。

2.10.1 软件版本查询模式



功能设定界面中按下版本查询键 

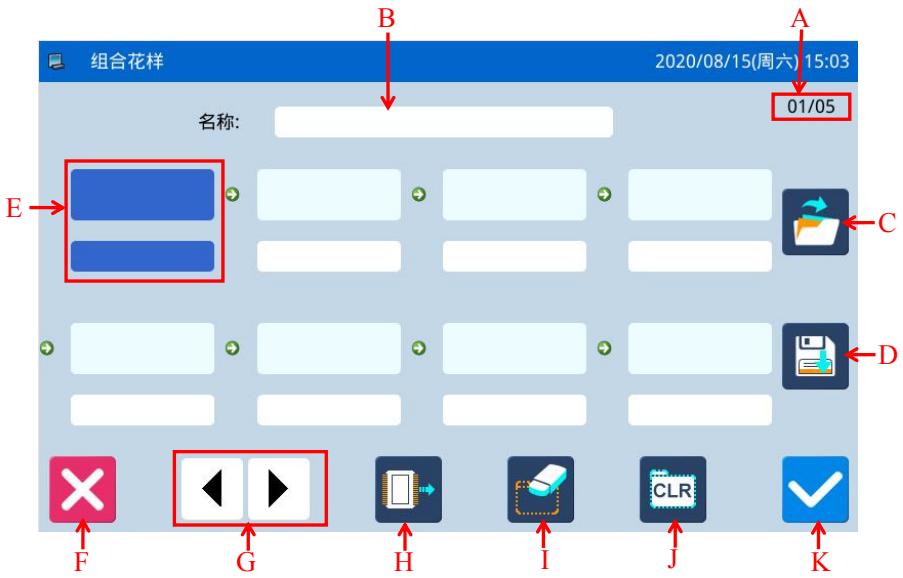
，即进入版本查询模式。

按下  键可以把软件版本导出到 U 盘根目录下，文件名为 version.png。

2.10.2 循环程序

功能设定界面中按下图形连接键 

，即进入图形连接模式。图形连接模式主要用于创建和编辑组合花样，也就是在已有的花样基础上进行组合编辑，构成组合花样的文件称为子花样文件。



功能说明：

序号	说明
A	页数显示
B	组合花样名称显示
C	读取组合花样
D	存储组合花样
E	子花样文件显示
F	退出，返回上一级画面
G	翻页
H	从内存读取已有的花样添加到组合花样中
I	删除组合花样中的子花样文件
J	取消组合花样
K	确定当前操作

操作说明：

1、 选择一个子文件

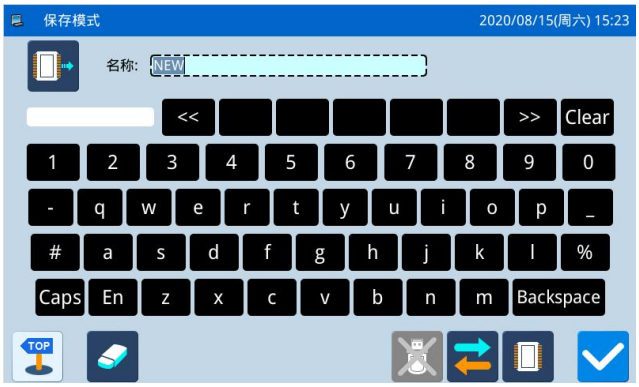
点击按键，进入到读取模式，选择想要添加的花样文件（这里选择了 001 号花样），按下确定键确定选择。

【注】组合花样中添加文件必须按前后顺序添加。

2、 继续添加子文件

同之前的操作，继续添加子花样（这里选择继续添加了 002 号花样）。

如果想要删除掉其中一个子花样文件，点击想要删除的子花样文件图号，然后再按下删除键即可。



3、 保存组合花样文件

按下保存键，进入到组合花样保存模式。

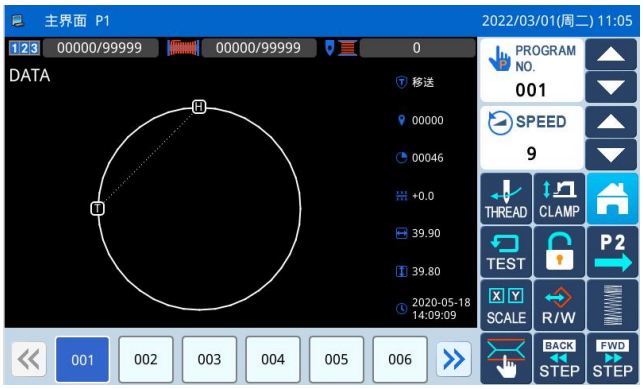
为组合花样起好名字之后，按下确定键确认保存。该界面下其他操作参照【2.6 花样保存】内容。

4、 返回主界面

当组合花样编辑结束后，按下确定键返回到主界面。

如图所示，组合花样缝制界面与普通花样缝制界面有一些区别：

① 号码区域后面显示了组合花样名称，而名称区域显示了组合花样中当前子花样文件的名称。

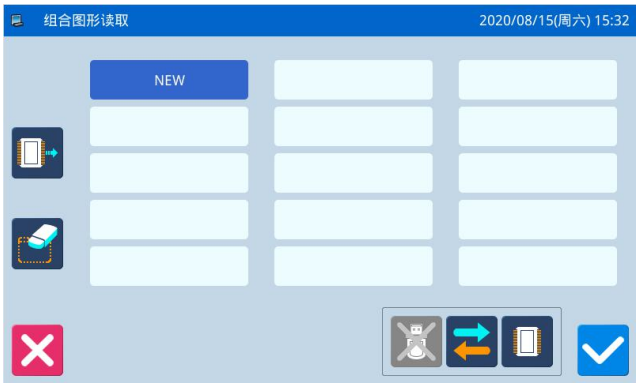


【注】如果组合花样没有名称，则什么也不显示。

② 原来的花样号码快捷键区域显示内容为组合花样所包含的子花样文件。可以直接点击子花样文件图号，这样的话就会从该花样开始进行缝制。

5、 取消组合花样缝制

如果想要取消掉组合花样缝制，需要再次进入图形连接模式，然后点击按键，然后确定键返回即可。



6、 读取组合花样文件

在图形连接模式界面下，如果存在组合花样资料显示时点击按键，此时会显示「请清除当前的合并资料」提示信息，点击按键之后会清除掉当前组合花样显示资料。

再次点击按键就可以进入到混合图形读取界面，选择想要缝制或编辑的组合花样文件即可。

2.10.3 面板设定

功能设定界面中按下面板设定键 

，即进入显示设定模式，该界面下可以调整有关显示、操作的一些设定。

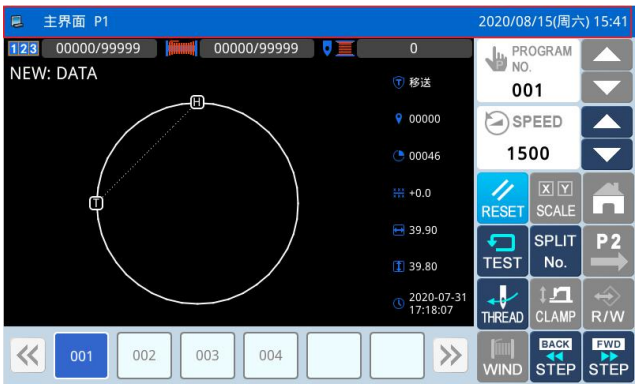
1、自动关闭背光

设定的时间一到，屏幕背光会自动关闭。

设定范围：1～9 分钟

出厂设定值：「无效」

解除方法：在背光关闭期间，只要在面板的任何地方按一下就会点亮屏幕。



2、 接触按键锁

接触按键锁为「有效」时，即进入防止误操作状态，所有按键成无作用状态（显示为灰色），确定键 
操作之后会直接返回到主界面 P1。

出厂设定值：「无效」

解除方法：按住主界面 P1 的标题栏 5 秒钟以上，等「哔」声响后即完成解除。（解除以后，解除按键锁机能会设定成「无效」）

3、 主界面速度设置方式

分档位和真值两项，出厂设定值：「档位」

4、 主界面花样显示设定

设定范围：0~6（0：黑色，1：青色，2：红色，3：绿色，4：蓝色，5：紫色，6：黄色）

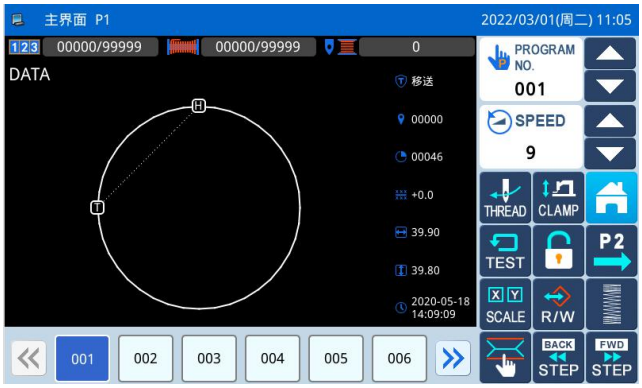
出厂设定值：0：黑色

5、 调节 LED 灯亮度

调节范围：0~100

出厂设定值：50

2.10.4 功能快捷键



快捷键功能用于设置主界面右下角四个功能键，用户可自行设置常用的功能键。

按下 

快捷功能键进入快捷功能设置。分别设置原点、图形缩放、穿线、中压脚高度、图形复制、绕线六个功能的常用功能。

图形打板设置：

按下当前需更改为图形打版的快捷键，进入快捷键设置，选取功能后显示 

，按下 
确认键，保存并退出。

2.10.5 图形管理

功能设定界面中按下图形管理键 

，即打开图形管理分组，可对以下功能进行设置：

1）图形传输

2）格式化

3）批量转换

2.10.5.1 数据传输模式

功能设定界面下按下数据传输键 

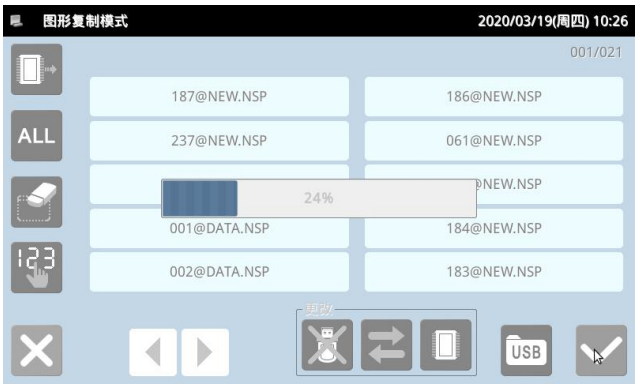
，即进入数据传输模式。

提供两种传输方式：「内存复制到 U 盘」和「U 盘复制到内存」。

功能说明：

序号	说明
A	花样列表
B	翻页查询
C	退出，返回上一级画面
D	使花样按照花样号排序
E	删除选择的花样
F	花样另存
G	选择全部花样
H	选择读取内存或者 U 盘花样 U盘：U 盘读取模式使能，此时内存读取模式禁止 内存：内存读取模式使能，此时 U 盘读取模式禁止
I	确定操作

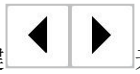
操作说明：



1、复制模式选择

默认进入该界面是内存花样复制到 U 盘模式，可以通过  键切换复制模式。

2、选择文件

在花样列表中选择要复制的花样文件（本例中选择了 001、002 号花样），如果花样较多可以通过翻页键  来翻阅画面。

如果想要复制全部花样按下  键，删除花样按下  键。

3、确定复制

选择好了花样文件之后，按下确定键  ，此时会显示「是否拷贝指定的花样数据」的提示信息，按下确定键  执行复制操作。如果是从内存复制到 U 盘，会在 U 盘根目录下自动创建「DH_PAT」目录，花样文件会拷贝到该目录下。

【注】复制时内存和 U 盘里如有相同的图号时，会被新资料盖写。

2.10.5.2 格式化模式

功能设定界面中按下格式化键 

，即进入格式化模式。

该界面下提供 4 种格式化方式：格式化 U 盘、格式化全部内存（花样）、自定义格式化内存（花样）和格式化快捷键（花样列表）。

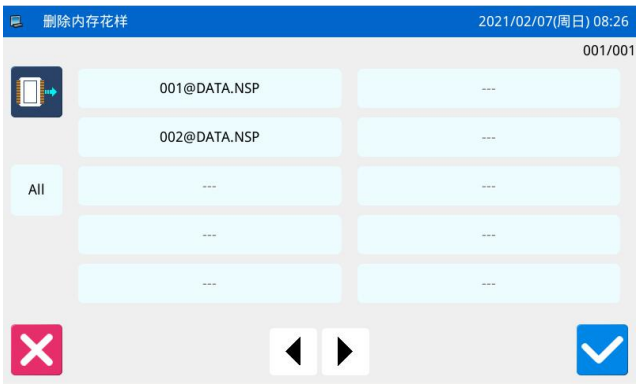
1、格式化 USB 说明：

按下「USB」按键之后会把 USB 内全部文件删除掉，需要备份资料的话请提前做好备份。

2、格式化内存说明：

按下「内存」按键之后会把内存中全部花样格式化掉。

【注】执行内存格式化命令之后，按下退出键  退出时，会显示「内存中没有花样」的提示信息，确定键  操作后会自动加载出厂花样。



3、自定义格式化说明：

按下「自定义」按键之后，会进入到自定义格式化内存花样界面。

该界面下提供了全部花样列表，可以选择性的删除花样。

【注】当前缝制花样不能删除。

4、快捷键格式化说明：

按下「快捷键」按键之后，会清除掉花样号码快捷键的内容。

【注】执行快捷键格式化命令之后，按下退出键  退出时，会显示「花样列表（快捷键）为空」的提示信息，确定键  操作后会把当前花样号码导入到快捷键中。

2.10.5.3 花样格式批量转换

花样批量转换功能，用于旧版软件升级后的花样继续使用。

花样号为默认空余号，可以手动分配花样号。

默认为全选中，左边花样名前面的 x 表示选中，空表示不选。

默认删除原始花样，如果想保留，选下方的“保留原始花样”。

2.10.6 还原备存模式

功能设定界面中按下还原备存键 

，即进入还原备存模式。

可以把更改后的参数设定值保存到 U 盘中，用于以后的还原操作。

详细内容参照【2.8.4 参数的还原与备存】节。

2.10.7 默认参数模式

功能设定界面中按下默认参数键 

，会要求输入密码（初始密码为厂家 ID），密码输入正确后即进入默认参数模式。

主要用于恢复出厂参数，以及用户自定义保存当前参数设定值，用于以后的调用。

详细内容参照【2.8.5 默认参数恢复】节。

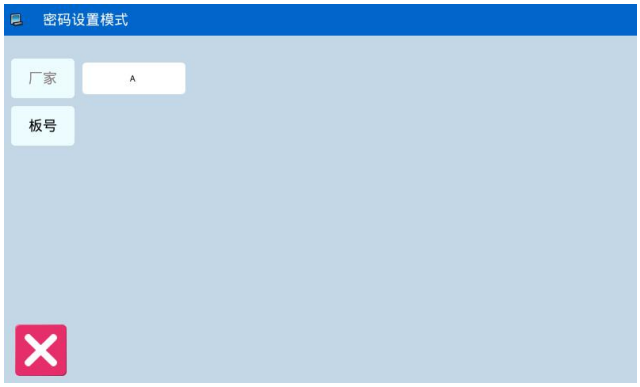
2.10.8 参数加密

在功能设定界面下按下参数加密键 

，进入参数加密模式，主要用于对指定参数进行加密和管理。

详细内容参照【2.8.3 参数模式加密说明】节。

2.10.9 密码模式



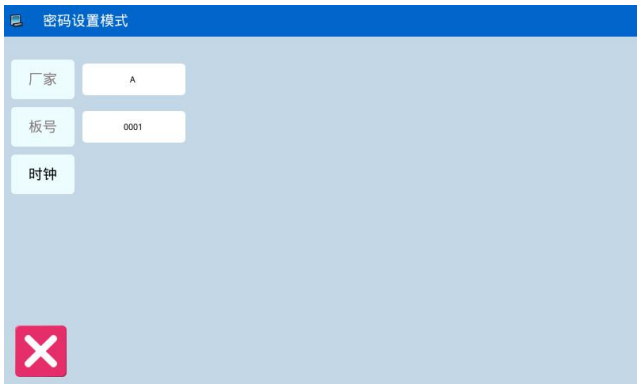
功能设定界面中按下密码管理键  ，进入密码管理模式，主要用于用户分期密码的设置和管理。

① 可以最多设置 10 个不同的密码发作日期。

②系统可以显示厂家设置的密码信息。

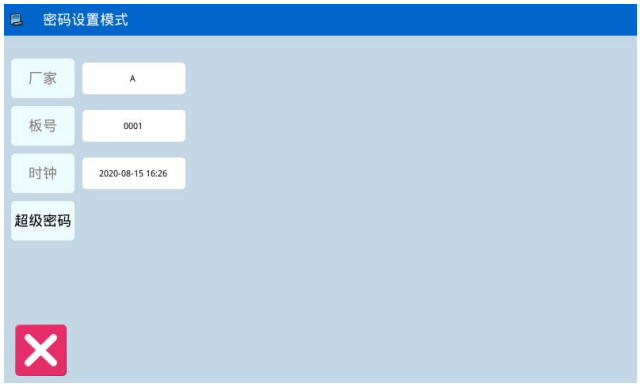
1、 输入板号

按下「板号」键，进入输入板号界面，板号为四位，范围 0000000000000000～9999999999999999，可用于厂家的密码管理。输入板号后并按下  键完成操作并返回上界面。（这里输入板号为 0001）



2、 确定系统时钟

按下「时钟」键，会进入设置系统日期和时间界面，如需要修改系统时钟，请在修改时钟后按下  键完成操作（参照【2.10.14 日期与时间设置模式】节内容），否则按下  键退出即可。



3、 输入超级密码

按下「超级密码」键，会进入输入超级密码界面。

最多可以输入 15 位总密码，画面以「•」号显示，按  键确认后，会要求再次输入密码进行确认。如果两次输入密码不一致，则要求重新输入超级密码。两次输入密码一致后，按  键保存并退出。

4、 输入分期有效日期和密码

按下「密码-1」键，会要求输入第一个有效日期。

有效日期是指第一次密码发作的时间，该日期不可早于系统日期。

选择合适的日期后按下  键完成操作，此时会进入到输入密码界面。

分期密码输入方式与输入超级密码的方式相同，确认密码完成之后按下键保存退出。

5、 选择继续输入分期密码

如果需要输入下一个有效日期和密码，具体操作同上。最多可输入 10 个有效日期和密码。

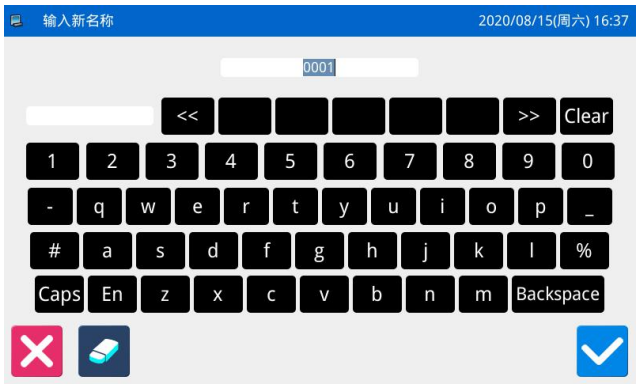
【注】下一个有效日期必须大于上一个有效日期。

6、 保存密码

输入完所需要的密码后，按下  键保存设置的全部信息，如果密码保存成功会显示「密码保存成功」的提示信息。

确定保存之后会返回到上一级画面。

【注】只有至少设置了一个分期密码后才会显示  键。



7、 保存密码信息

进入密码统计界面，显示板号和密码、分期密码和日期，插入 U 盘后，按下输出键 

，输入新名称，按下回车键  保存，密码保存成功后，会显示密码信息保存成功的提示信息。

8、 主动清除密码

主动清除密码是指在密码发作之前清除密码。

进入密码显示界面的方法与进入密码设置的方法相同。

在正确输入厂家 ID 之后，显示如右图所示，系统显示出当前时钟和各个分期密码的发作日期。

按下  键则会提示输入当前密码，清除密码依照从前往后的顺序。

此时，输入两个密码有效。当输入密码为当前提示密码时，则清除当前密码；当输入密码为超级密码时，则清除所有密码，即机器不再有密码。当清除的为当前密码时，如果后面无密码，则机器不再有密码。

按下  键完成操作。

经解密的密码显示为红色，如右图所示。如果全部密码被解密则自动退出，返回到上一级界面。

9、 密码发作时清除密码

如果系统已经设置密码并且未解除，则使用至设定密码有效日期时会遇到密码发作，此时要求用户必须输入有效密码才能使机器继续正常运行。

有效密码包括当前提示的密码和总密码。当输入密码为当前提示密码时，则清除当前密码；当输入密码为总密码时，则清除所有密码，即机器不再有密码。当输入的为当前密码时，如果后面没有密码，则机器不再有密码；如果后面还有密码，则按照设置日期生效。

2.10.10 日期与时间设置模式

功能设定界面中按下日期时间设置键  ，可以进入日期与时间设置模式。

1、 日期设置方法：

点击日历中的「年份」（这里为 2020），会显示出左右两个箭头，用于调节年分大小。

点击日历中的「月份」（这里为三月），会弹出 1~12 月的选择菜单，选择合适的月份即可。

年份和月份设置后均会刷新日历显示，显示该年月的正确月历内容。

也可以通过  键和  键前后查询月历内容。

在日历中点击日期，就可以设置好日期了。

【注】设置日期必须在月历中点击了日期才可以设置成功，不能仅修改年份和月份。

2、 时间设置方法：

默认情况下进入该界面都是先设置小时，可以通过「小时」键切换成设置分钟（此时「小时」键显示内容会改变为「分钟」），然后通过左右箭头修改内容即可。

也可以点击小时或分钟显示区域来切换修改小时/分钟修改方式。

日期或时间修改完毕后，按下  键保存并退出。

3、 禁止修改系统时间

一旦设置了分期密码，则禁止修改系统时间，清除全部密码后可以解除禁制。

2.10.11 报警记录模式

功能设定界面中按下记录键  ，即打开记录分组，可查看以下记录：

1）报警记录

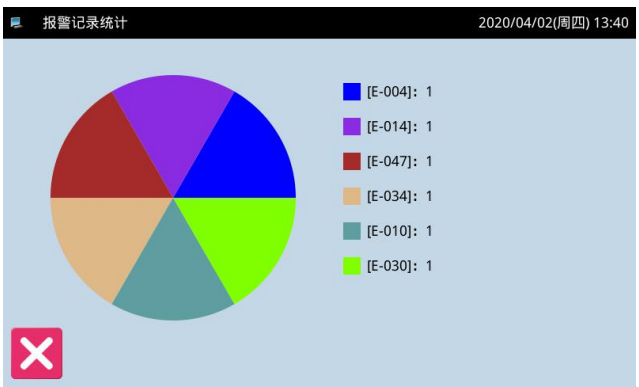
2）运转记录

2.10.11.1 报警记录模式

功能设定界面中按下报警记录键  ，可以进入报警记录模式。

报警记录模式下显示了系统最近发生的报警内容，序号越小表示该报警信息发生的时间越新。

按下数字键  后，会显示报错信息和解决措施。



按下“数据统计查看”键  ，可进入报警记录统计界面。

2.10.11.2 运转记录模式

功能设定界面中按下运转记录键  ，会要求输入厂家 ID，输入正确后可以进入运转记录模式。

① 累积运转时间：记录机器缝纫时间总和

② 累积缝纫件数：记录缝纫花样总件数

③ 累积上电时间：记录机器上电时间总和

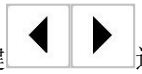
④ 累积缝纫计数：记录机器缝纫针数总和

另外点击「清除」键可以清除掉该项计数值。

【注】如果清除了累积缝纫件数，也同时会把主界面辅助信息栏的「累积计数」清零。

运转记录模式界面按下[开机时间]键

，即可查看历史开机时间列表。

使用翻页键  进行翻页，单击清除键  可删除开机记录。

2.10.12 软件升级

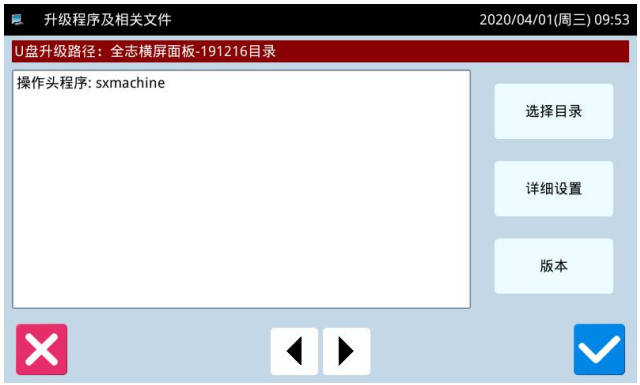
功能设定界面中按下升级键 

，会要求输入厂家 ID，输入正确后可以进入软件升级模式。

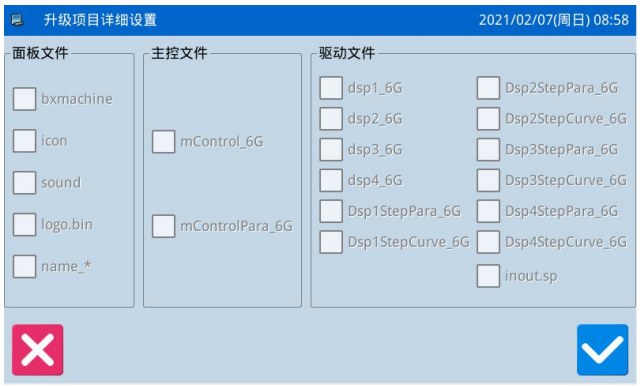
升级软件需要放在 U 盘「update」目录下。

首先单击[选择目录]键

，选择需升级软件所在目录。



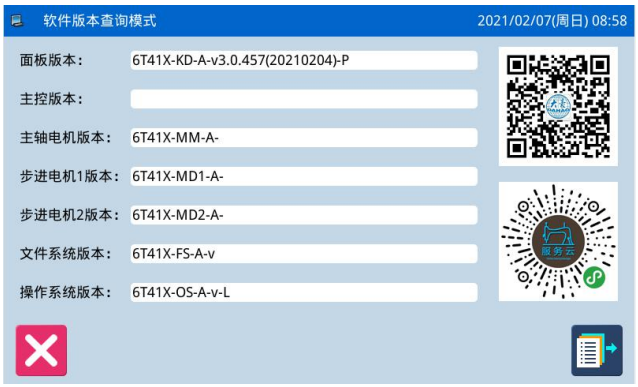
选中后单击确认键 
，将返回软件升级界面，并显示目录中全部可升级软件信息。



然后单击[详细设置]键 

，选择需升级软件明细。

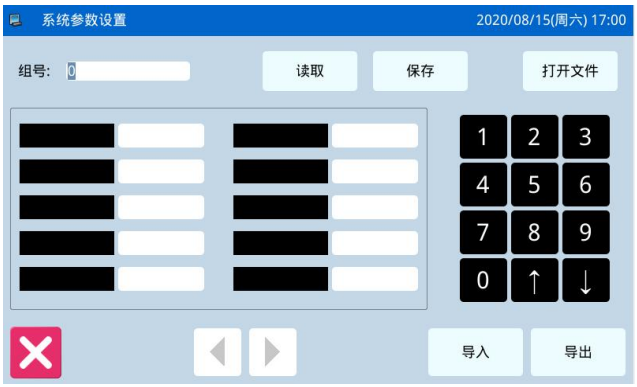
单击确认键 
，将返回软件升级界面，再次按下确认键 
，即可升级相应软件。



单击[版本]键 版本，可查询当前面板软件版本。

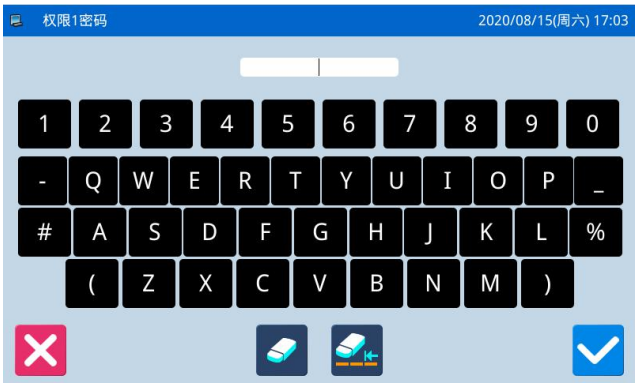
2.10.13 系统参数

功能设定界面中按下系统参数键 系统参数，可以进入系统参数设置模式。



在系统参数设置界面，单击[参数设置]键 参数设置，可以进入系统参数设置界面并进行相关操作。

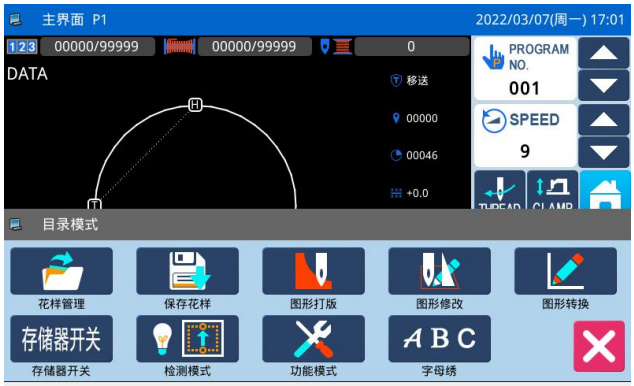
在系统参数设置界面，单击[TD 参数]键 TD参数，可以进入 TD 参数设置界面并进行相关操作。



在系统参数设置界面，单击[参数升级]键 

，可以进入参数升级设置界面并进行相关操作。

2.11 字母绣编辑



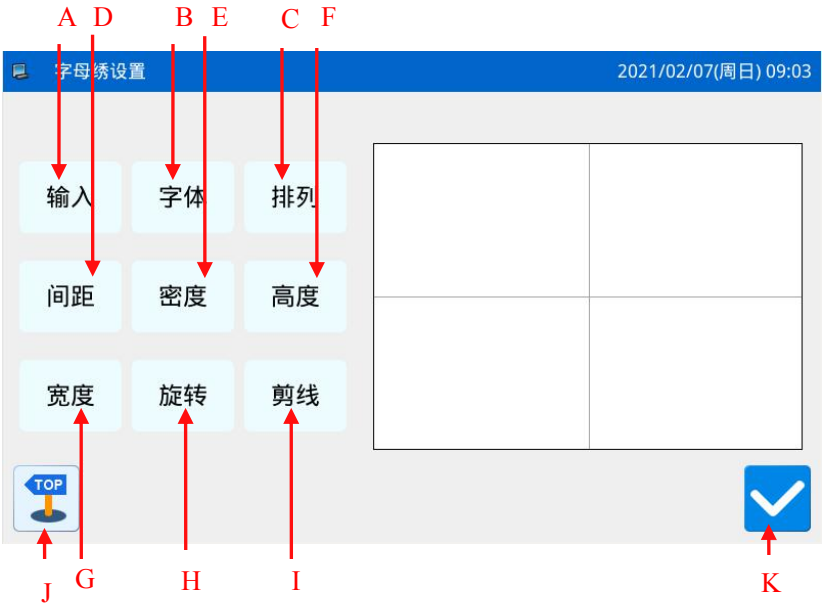
在主界面 P1（或 P2）界面上操作目录键 
，即打开多类目录模式，然后再按下字母绣编辑键 

，即进入到字母绣设置模式。

【注】参数「特殊」->「字母绣功能使能」可以关闭字母绣编辑功能，关闭后不显示该图标。

2.11.1 字母绣参数设置说明

功能说明：

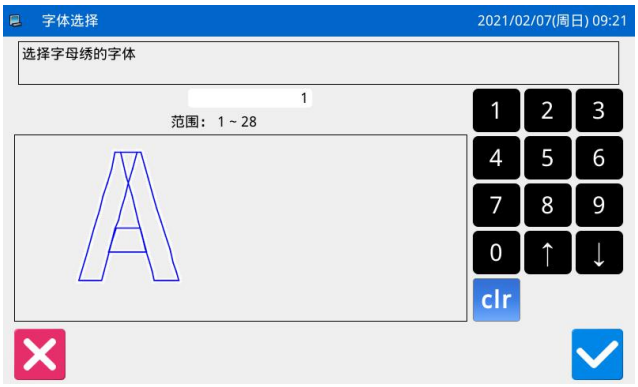


序号	功能	内容
A	字符输入	输入字符，最多可以输入 20 个字符。
B	选择字体	支持 28 种字体。
C	排列方式	提供水平、垂直、上玄弧和下玄弧排列方式。
D	字符间距	设置相邻字符间距。
E	平包针密度	设置平包针密度，设定值越大平包针越密。
F	高度缩放	设置字符的高度缩放，范围为 50~200。
G	宽度缩放	设置字符的宽度缩放，范围为 50~200。
H	旋转/跟随（不跟随）	排列方式为直线（水平、垂直）时，该按键显示内容为旋转，用于设置字符旋转角度； 排列方式为圆弧（上玄弧、下玄弧）时，该按键显示内容为跟随（不跟随），用于设置字符是否跟随圆弧旋转。
I	剪线/不剪线	确定是否自动插入剪线。
J	返回主界面	退出，返回到主界面。
K	确定	确定操作，会进入到字母绣花样调整界面。

操作说明

1、字符输入

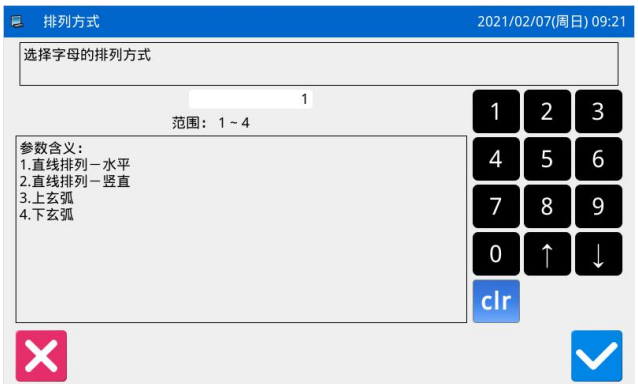
按下「输入」键，进入字符输入界面，需要至少输入一个字符，最多可输入 20 个字符，按下  键保存并退出。



2、选择字体

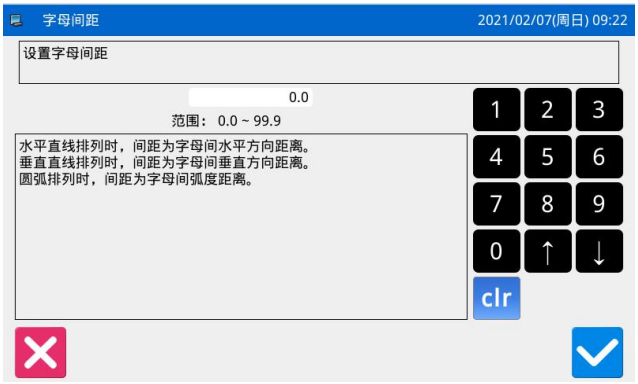
按下「字体」键，进入字体选择界面，提供 28 种不同的字体，直接输入 1-28 之间的数字进行选择，按下  键保存并退出。

该界面下提供每种字体的形状显示。



3、排列方式

按下「排列」键，进入排列方式设置界面，提供水平直线、竖直直线、上玄弧、下玄弧 4 种字符排列方式，按下  键保存并退出。



4、 字符间距

按下「间距」键，进入字符间距设置界面，水平排列时，表示相邻字符轮廓之间的水平间距。

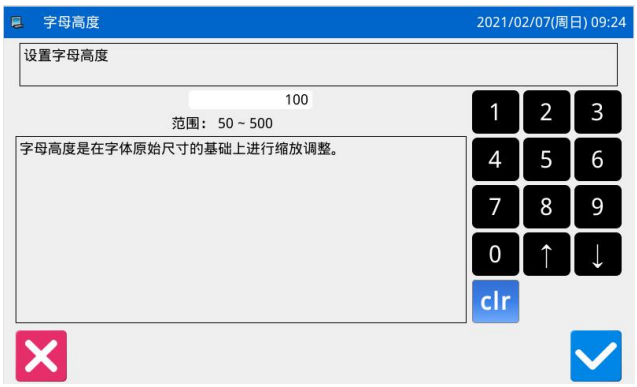
竖直排列时，表示相邻字符轮廓之间的垂直间距。

圆弧排列时，表示相邻字符轮廓之间在圆弧上的距离。

范围为 0~99.9mm。

5、 包针密度

按下「密度」键，进入平包针密度设置界面，设置的平包针密度在 50~200 之间。

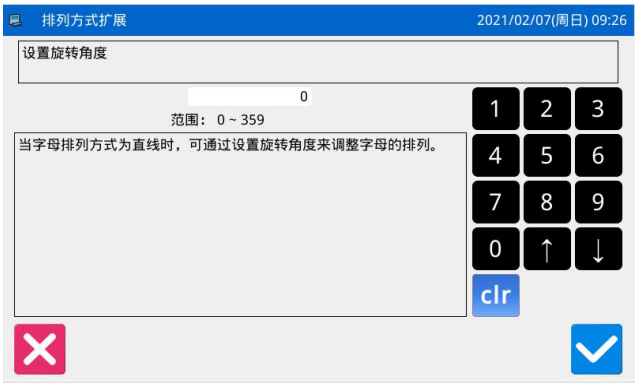


6、 字母高度缩放

按下「高度」键，进入字母高度设置界面，设置字符的高度缩放，范围为 50~200。

7、 字母宽度缩放

按下「宽度」键，进入字母宽度设置界面，设置字符的宽度缩放，范围为 50~200。



8、 旋转角度设定

排列方式为水平排列或者竖直排列时，可以设置字母旋转角度，按下「旋转」键，进入旋转角度设置界面。

旋转方向为逆时针旋转，范围为 0°~359°。

【注】排列方式为上玄弧或下玄弧时，该按键功能为设置是否跟随圆弧旋转。

排列方式为上玄弧或下玄弧时，可以设置字母的角度是否跟随圆弧旋转。按下「跟随」键，可以切换到「不跟随」，反之亦然。

【注】排列方式为水平排列或者竖直排列时，该按键功能为设置旋转角度。

9、 是否自动添加剪线

默认情况下是自动添加剪线，也就是在字母绣花样的车缝和空送连接处，以及缝纫最后添加剪线。

按下「剪线」键，可以切换该按键显示为「不剪线」，也同时取消了自动添加剪线的功能。

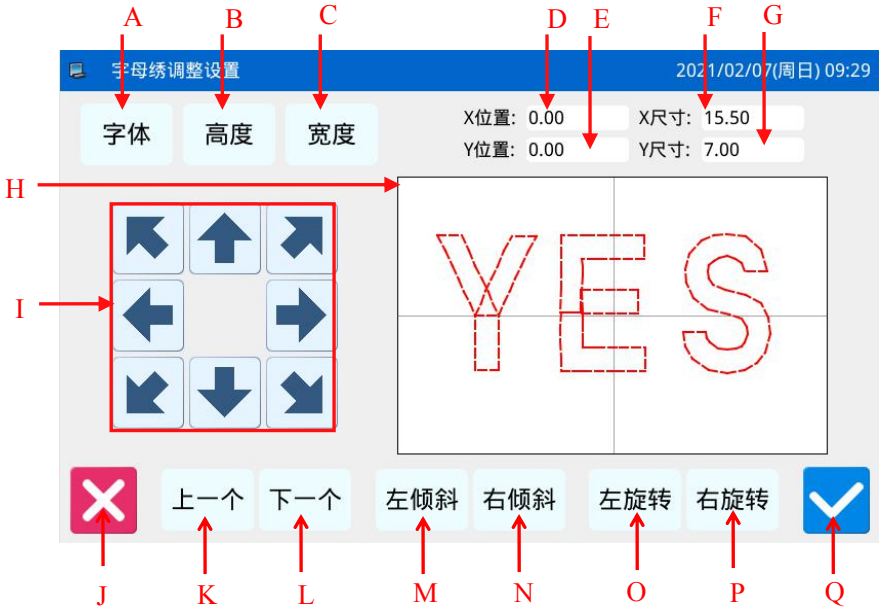
10、 确定字母绣花样

设置好要生成的字母绣花样后，按下  键，会进入到字母绣花样调整界面。

2.11.2 字母绣花样调整说明

字母绣参数设置界面完成了各项参数的设置后，按  键进入字母绣花样调整界面，该界面下可以对花样做进一步的调整。

功能说明：



序号	功能	内容
A	字体选择	更改选中字母的字体，设置的方法与参数设置时相同。
B	高度缩放	更改选中字母的高度缩放，设置的方法与参数设置时相同。
C	宽度缩放	更改选中字母的宽度缩放，设置的方法与参数设置时相同。
D	X 位置显示	显示选中字母的中心点 X 坐标。
E	Y 位置显示	显示选中字母的中心点 Y 坐标。
F	X 尺寸显示	显示选中字母的宽度。
G	Y 尺寸显示	显示选中字母的高度。
H	花样显示	显示当前字母绣花样，选中字母颜色为红色，未选中字母颜色为绿色。
I	方向键	选中字母的位置调整。
J	退出键	返回上一级画面。
K	字符选择（从右到左的方向）	向左选择想要调整的字符，选中字符显示为红色。 在选中最后一个字符时向左，会选中全部字符。
L	字符选择（从左到右的方向）	向右选择想要调整的字符，选中字符显示为红色。 在选中最后一个字符时向右，会选中全部字符。
M	左倾斜/小弧度	排列方式为水平排列或竖直排列时，显示为「左倾斜」，按下后会逆时针方向旋转整个花样，旋转以原点为圆心。 排列方式为上玄弧或下玄弧时，显示为「小弧度」，按下后减小整个花样的弧度。 【注】该操作是针对整个花样的。
N	右倾斜/大弧度	排列方式为水平排列或竖直排列时，显示为「右倾斜」，按下后会顺时针方向旋转整个花样，旋转以原点为圆心。 排列方式为上玄弧或下玄弧时，显示为「大弧度」，按下后增加整个花样的弧度。 【注】该操作是针对整个花样的。
O	左旋转	逆时针方向调整选中字符的旋转角度，旋转以各个字符的中心为中心。
P	右旋转	顺时针方向调整选中字符的旋转角度，旋转以各个字符的中心为中心。

序号	功能	内容
Q	确定	按下后会进入花样保存界面。

实例说明：

1、 选择单个字母进行调整

按下「上一个」键或「下一个」键，可以选择单个字母进行编辑，选中字母颜色为红色，未选中为绿色。

2、 字母位置调整

按下方向键可以调整选中字母的位置，可以通过「X 位置」和「Y 位置」显示区域观察坐标。

同上操作，继续调整其它字母的位置。

3、 整个花样的旋转角度调整

按下「左倾斜」键或「右倾斜」键，可以调整整个花样的旋转角度。

「左倾斜」：逆时针方向旋转

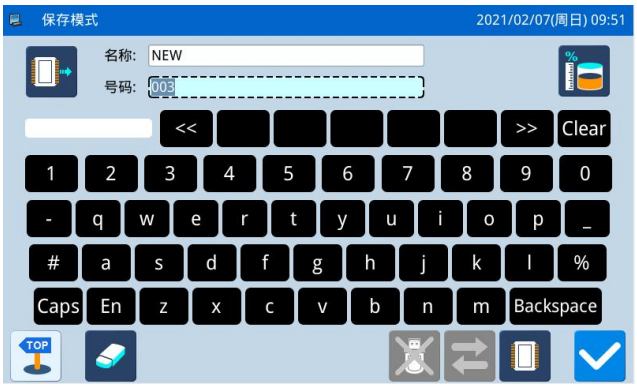
「右倾斜」：顺时针方向旋转

【注】排列方式为上玄弧或下玄弧时，该操作为「小弧度」/「大弧度」，用于调整整个花样的弧度。

4、 单个字母旋转角度调整

选择一个字母，然后按下「左旋转」键或「右旋转」键，可以调整选中字母的旋转角度。

【注】需要调整旋转角度时，最好先执行整个花样的旋转角度调整，然后再执行单个字母的旋转角度调整。如果先执行了单个字母的旋转角度调整，再执行整个花样的旋转角度调整时会取消之前单个字母的旋转角度。



5、 保存花样

调整完毕后，按下  键进入保存界面。

输入名字和号码后，按下  键会显示「字母绣花样保存成功」的提示信息。（其他操作参照【2.6 花样保存】节内容）

【注】保存成功后的字母绣花样不会自动转换为当前花样，需要进入花样读取界面进行选择。

3 附录 1

3.1 报警信息一览表

错误号	错误内容	解决办法
E-001	踏板未在中央位置	请调整踏板位置。
E-002	机器进入急停状态	请检查急停开关状态，旋转释放急停按钮，如果仍显示此信息，按以下方法检查： 1、检查急停开关是否被按下； 2、检查急停开关线缆是否接触良好； 3、若开关线缆无问题，请更换电控;
E-003	机头翻倒	1 关闭电源，检查机头是否翻倒 2 检查机头翻到开关位置是否正常、线缆是否接触良好； 3 关闭机头翻倒开关参数或更换电控
E-004	输入电压过低	请关闭电源，检查系统硬件。 1、检测交流供电电压是否异常波动，看设备周围是否有大功率设备步频繁启停，最好配备稳压器； 2、如果交流供电正常，则很可能是硬件电路故障，返厂检修主控板硬件。
E-005	交流市电过高	1、检测交流供电电压是否异常波动，看设备周围是否有大功率设备步频繁启停，最好配备稳压器； 2、如果交流供电正常，则很可能是硬件电路故障，返厂检修主控板硬件。
E-007	IPM 过压或过流	请关闭电源，检查系统硬件。 1、检测一下主轴电机是否有短路，各项绕阻是否相等，并且不为 0； 2、用万用表测一下 U\\V\\W 三项输出是否有直接与地或 300V 电源短路的情况，判定 IPM 是否损坏。
E-008	电磁阀故障	1 关闭电源，拔掉外部电磁阀线缆。 2 若开机不再报错，请检查外部电磁阀是否短路。 3 排除外部故障后仍报错，请更换电控。
E-009	辅助电源过低	请关闭电源，检查系统硬件。 1、检测外围的电磁铁、气阀是否有损坏； 2、检查一下电控箱与机头板连接线两端插头内线芯是否有短路； 3、检查机头转接板安装时是否与机头短路。
E-010	风扇或电磁铁故障	1 关闭电源拔掉外部电磁铁。 2 若开机不再报错，请检查外部电磁铁是否损坏。 3 排除外部故障后仍报错，请更换电控。
E-011	步进电机超速	如果是闭环电机，请检查： 1、检查电机编码器是否有损坏； 2、检查编码器线缆是否破损。
E-012	步进电机超差	如果是闭环电机，请检查： 1、检查电机编码器是否有损坏； 2、检查编码器线缆是否破损。
E-013	主轴编码器故障或未连	关闭电源检查主轴编码器连接是否正常。

E-014	主轴电机运行异常	1 关闭电源检查机械是否卡死，确保机械可以顺畅运转无死点。 2 更换主轴电机。 3 更换电控箱。
E-015	移动过程中超出缝制范围	检查花样是否超出面板设置的范围
E-016	请转动主轴电机码盘位置	先摇手轮，将针杆调到上位置或是上死点后，再踏启动踏板。
E-017	断线检测异常	1 检查断线检测设备位置是否正确； 2 检查断线检测线缆是否连接正常； 3 适当增大断线检测检测针数； 4 如仍未解决，可以选择关闭断线检测功能或更换电控；
E-018	剪刀位置异常	请关闭电源。
E-019	急停开关未在正常位置	1 检查急停开关是否被按下； 2 检查急停开关线缆是否接触良好； 3 若开关线缆无问题，请更换电控。 注：若按下急停开关回复正常，请更改急停开关类型。
E-020	读 E2PROM 错误	
E-021	写 E2PROM 错误	
E-023	抓线位置异常	请关闭电源。
E-024	操作头与缝纫机连接错误	请关闭电源。
E-025	X 原点检测异常	1 关闭电源，首先确认机械可以正常移动无卡点，X 感应器及挡片等可以正常工作，X 电机及感应器线缆连接完好； 2 开机进入信号检测界面，对 X 感应器进行检测，若信号无跳变，依次更换感应器、电控进行测试； 3 若信号可以正常跳变，进入 XY 检测界面检测 X 电机动作； 4 若 X 电机可以正常工作但转向相反，请更改 X 电机转向参数； 5 若 X 电机无法正常工作，依次更换 X 电机、电控箱进行测试。
E-026	Y 原点检测异常	1 关闭电源，首先确认机械可以正常移动无卡点，Y 感应器及挡片等可以正常工作，Y 电机及感应器线缆连接完好； 2 开机进入信号检测界面，对 Y 感应器进行检测，若信号无跳变，依次更换感应器、电控进行测试； 3 若信号可以正常跳变，进入 XY 检测界面检测 Y 电机动作； 4 若 Y 电机可以正常工作但转向相反，请更改 Y 电机转向参数； 5 若 Y 电机无法正常工作，依次更换 Y 电机、电控箱进行测试；
E-027	压脚原点检测异常	请关闭电源。
E-028	抓线原点检测异常	请关闭电源。
E-029	中压脚原点检测异常	1 首先确认机械可以正常移动无卡点，中压脚感应器及挡片等可以正常工作，中压脚电机及感应器线缆连接完好； 2 开机进入信号检测界面对中压脚感应器进行检测，若信号无跳变，依次更换感应器、电控进行测试； 3 若信号可以正常跳变，进入中压脚检测界面检测中压脚电机动作； 4 若中压脚电机可以正常工作但转向相反，请更改中压脚电机转向参数； 5 若中压脚电机无法正常工作，依次更换中压脚电机、电控箱进行测试；
E-030	主控与步进通讯错误	1 请检查程序版本是否正确； 2 重新升级主控及步进程序检查是否正常； 3 更换电控；

E-031	步进电机过流	请关闭电源。 1、步进电机损坏，更换步进电机； 2、步进驱动板损坏，更换步进驱动板。
E-032	步进驱动电源异常	请关闭电源。
E-034	主轴驱动短路	1 关闭电源，检查主轴电机是否损坏； 2 若电机无损坏，更换电控箱；
E-035	主轴驱动过流 1	1 关闭电源，检查机械是否卡死，确保机械可以顺畅运转无死点。 2 更换主轴电机； 3 更换电控箱。
E-036	主轴驱动过流 2	1 关闭电源，检查机械是否卡死，确保机械可以顺畅运转无死点； 2 更换主轴电机； 3 更换电控箱；
E-037	电机堵转 1	请关闭电源。 1、由于主轴角度定位不对，造成剪线时剪刀卡在机针上，主轴被卡死。解决办法：从新定位主轴角度； 2、针杆动作时被卡在中压脚上，造成主轴被卡死。解决办法：检查中压脚动作是否正确，气阀与电磁阀连接是否正确； 3、剪线时力度不够，剪刀无法剪断线，造成主轴被卡死。解决办法：调整主轴参数，增大剪线力度； 4、机械存在死点，造成主轴被卡死。解决办法：调整机械； 5、主轴电机编码器有问题，信号反馈错误，造成电机卡死。解决办法：更换主轴电机。
E-038	电机堵转 2	请关闭电源。 1、缝纫机使用材料较厚，机针无法穿透材料。解决办法：调整主轴参数，或更换升级更大功率电机。 2、针杆动作时被卡在中压脚上，造成主轴被卡死。解决办法：检查中压脚动作是否正确，气阀与电磁阀连接是否正确。 3、机械存在死点，造成主轴被卡死。解决办法：调整机械。 4、主轴电机编码器有问题，信号反馈错误，造成电机卡死。解决办法：更换主轴电机。
E-039	电机超速	请关闭电源。 主轴电机编码器有问题，信号反馈错误。
E-040	停车过流	请关闭电源。 主轴电机编码器有问题，信号反馈错误
E-041	电机过载	请关闭电源。
E-042	母线电压异常	请关闭电源。
E-043	X 步进电机位置错误	请关闭电源。
E-044	Y 步进电机位置错误	请关闭电源。
E-045	压脚没有落下	请踩压脚踏板。
E-046	不在原点，无法操作	请按回原点键。
E-047	主轴电机运行异常	1 关闭电源，检查机械是否卡死，确保机械可以顺畅运转无死点。 2 更换主轴电机； 3 更换电控箱；
E-048	中压脚原点位置异常	请关闭电源。

E-050	X 电机过流	1 关闭电源，检查 X 电机接头是否连接牢固，线缆是否完好无破损； 2 更换 X 电机； 3 更换电控。
E-051	Y 电机过流	1 关闭电源，检查 Y 电机接头是否连接牢固，线缆是否完好无破损； 2 更换 Y 电机； 3 更换电控。
E-052	X 电机大电流	X 电机大电流
E-053	Y 电机大电流	Y 电机大电流
E-054	X 电机运行异常	1 关闭电源，确认机械 X 方向可以正常移动无卡点； 2 确保 X 电机线缆连接正确牢固无破损； 3 更换 X 电机； 4 更换电控。
E-055	Y 电机运行异常	1 关闭电源，确认机械 Y 方向可以正常移动无卡点； 2 确保 Y 电机线缆连接正确牢固无破损； 3 更换 Y 电机； 4 更换电控。
E-056	X 电机失速	X 电机失速
E-057	Y 电机失速	Y 电机失速
E-058	曲线计算错误	曲线计算错误
E-059	主控与步进通信错误 1	1 确认软件版本是否正确 2 重新导入系统参数 3 更换电控
E-060	主控与步进通信错误 2	1 初始化参数 2 更换电控
E-061	伺服通讯错误 3	伺服通讯错误 3
E-062	X 电机堵转	X 电机堵转
E-063	Y 电机堵转	Y 电机堵转
E-064	X 电机指令覆盖	请关闭电源。
E-065	Y 电机指令覆盖	请关闭电源。
E-066	X 电机快走指令覆盖	请关闭电源。
E-067	Y 电机快走指令覆盖	请关闭电源。
E-068	伺服动框曲线计算异常	请关闭电源。
E-069	电源电压过高	请关闭电源。
E-070	前后移动传感器故障	请关闭电源。
E-071	左侧传感器故障	请关闭电源。
E-072	右侧传感器故障	请关闭电源。
E-073	左右传感器故障	请关闭电源。
E-074	X 电机超速	请关闭电源。
E-075	Y 电机超速	请关闭电源。
E-076	X 电机电流基准值异常	请关闭电源。
E-077	Y 电机电流基准值异常	请关闭电源。
E-078	XY 电机电流基准值异常	请关闭电源。
E-079	伺服电机通讯异常	请关闭电源。

E-080	底线气缸动作不到位	请重试。
E-081	底线不足	更换底线后按确认键恢复
E-082	油量不足	
E-083	花样数据错误 1	
E-084	花样数据错误 2	
E-085	剪线电机未找到原点	
E-086	写驱动器程序失败	请重启系统后再次进行升级操作。
E-087	机械限位	
E-088	梭盘梭芯检测异常	1.请检查梭盘是否为空，如果是请更换梭盘后按下确认。 2.如果梭盘存在梭芯，请关机重启后检查梭芯感应传感器是否正常。
E-089	自动换梭装置异常	
E-090	自动换梭进行中	
E-091	未识别模板	请重新放置模板
E-092	主控步进曲线参数不匹配	请升级曲线参数
E-093	中压脚电机过流	1、关闭电源，检查中压脚电机接头是否连接牢固，线缆是否完好无破损 2、更换中压脚电机 3、更换电控
E-094	剪线电机过流	请关闭电源。
E-095	中压脚电机运行异常	1 关闭电源，确认中压脚机械部件可以顺畅运动无卡点； 2 确保中压脚电机线缆连接正确牢固无破损； 3 更换中压脚电机； 4 更换电控。
E-096	剪线电机异常	请关闭电源。
E-097	读卡模块异常	请断电检查读卡模块是否损坏或未连接
E-098	主电源保护	请关闭电源。
E-099	控制箱与操作头类型不符	请更换面板
E-100	电磁阀故障	请关闭电源。
E-101	气阀动作超时	请检查气阀
E-102	气压不足	请检查气阀
E-103	主控与 DSP1 通讯异常	
E-104	主控与 DSP2 通讯异常	
E-105	主控与 DSP3 通讯异常	
E-106	主控与 DSP4 通讯异常	
E-107	上主轴电机过流或堵转	
E-108	下主轴电机过流或堵转	
E-109	低油量报警	机械储油壶油量过低，请补充机油!
E-110	危险警告	旋转头旋转区域有人或其物体靠近，请远离!
E-111	底线不足	按下确认键解除报警。
E-112	缝制过程中丢针或跑位	1.请关机检查主轴编码器信号连接插头是否正确，是否牢靠，连接线是否破损。 2.请检查移送方式中，动框角度微调和动框时间微调是否为默认值。 3.请检查花样中，是否有无法识别的功能码信息，是否有连续重复的功能码。

E-113	上旋转轴找原点异常(超出限定步数)	1.请关机检查上旋转轴原点传感器连接插头是否正确，是否牢靠，连接线是否破损。 2.请检查上旋转轴原点传感器是否损坏。 3.请检查上旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。
E-114	下旋转轴找原点异常(超出限定步数)	1.请关机检查下旋转轴原点传感器连接插头是否正确，是否牢靠，连接线是否破损。 2.请检查下旋转轴原点传感器是否损坏。 3.请检查下旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。
E-115	上主轴伺服驱动器故障	1.请查看主轴伺服驱动器显示的报警代码,并核查驱动器手册报警代码提示说明。 2.请关机检查主轴伺服驱动器控制线连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查上主轴机械结构是否松动，转动是否顺畅，是否有堵转情况。 4.请重启后检查机针与旋梭定位是否正确。
E-116	下主轴伺服驱动器故障	1.请查看主轴伺服驱动器显示的报警代码,并核查驱动器手册报警代码提示说明。 2.请关机检查主轴伺服驱动器控制线连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查下主轴机械结构是否松动，转动是否顺畅，是否有堵转情况。 4.请重启后检查机针与旋梭定位是否正确。
E-117	上旋转轴电机过流	1.请关机检查上旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。 2.请检查上旋转轴电机编码器连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查上旋转轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查上旋转轴电机参数配置是否正确。
E-118	下旋转轴电机过流	1.请关机检查下旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。 2.请检查下旋转轴电机编码器连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查下旋转轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查下旋转轴电机参数配置是否正确。
E-119	上旋转轴电机超差	1.请关机检查上旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。 2.请检查上旋转轴电机编码器连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查上旋转轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查上旋转轴电机参数配置是否正确。
E-120	下旋转轴电机超差	1.请关机检查下旋转轴相关机械是否松动，转动是否顺畅，是否有堵转情况。 2.请检查下旋转轴电机编码器连接插头是否正确，是否牢靠，连接线是否

		破损。 3.请检查下旋转轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查下旋转轴电机参数配置是否正确。
E-121	DSP3 第一路电机过流	关机,拔掉动力缆,确认电机还是板件故障,联系专业维修人员
E-122	DSP4 第一路电机过流	关机,拔掉动力缆,确认电机还是板件故障,联系专业维修人员
E-123	DSP3 第二路电机过流	关机,拔掉动力缆,确认电机还是板件故障,联系专业维修人员
E-124	DSP4 第二路电机过流	关机,拔掉动力缆,确认电机还是板件故障,联系专业维修人员
E-125	DSP3 第一路电机超差	关机,检测编码器接插头是否松动,是否有异物阻碍电机运行
E-126	DSP4 第一路电机超差	关机,检测编码器接插头是否松动,是否有异物阻碍电机运行
E-127	DSP3 第二路电机超差	关机,检测编码器接插头是否松动,是否有异物阻碍电机运行
E-128	DSP4 第二路电机超差	关机,检测编码器接插头是否松动,是否有异物阻碍电机运行
E-129	上旋转轴与下旋转轴同步异常	1.请关机检查旋转轴相关机械是否松动，转动是否顺畅。 2.请检查旋转轴电机编码器线与电源线是否正常，有无破损。 3.请检查旋转轴电机参数配置是否正确。
E-130	上主轴电机超差	1.请关机检查上主轴相关机械是否松动,转动是否顺畅,是否有堵转情况。 2.请检查上主轴电机编码器连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查上主轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查上主轴电机参数配置是否正确。
E-131	下主轴电机超差	1.请关机检查下主轴相关机械是否松动,转动是否顺畅,是否有堵转情况。 2.请检查下主轴电机编码器连接插头是否正确，是否牢靠，连接线是否破损。 3.请检查下主轴电机电源线连接插头是否正确，是否牢靠，连接线是否破损。 4.请检查下主轴电机参数配置是否正确。
E-132	上主轴与下主轴同步异常	1.请关机检查主轴相关机械是否松动，转动是否顺畅 2.请检查主轴电机编码器线与电源线是否正常，有无破损 3.请检查主轴电机参数配置是否正确
E-133	主轴停车超时或停车位置超差	1.请关机检查主轴相关机械是否松动，转动是否顺畅 2.请检查主轴电机编码器线与电源线是否正常，有无破损 3.请检查主轴电机参数配置是否正确。
E-134	主轴锁轴超时未完成	1.请关机检查主轴相关机械是否松动，转动是否顺畅 2.请检查主轴电机编码器线与电源线是否正常，有无破损 3.请检查主轴电机参数配置是否正确。
E-135	故障处理中...	故障排除后，确定键执行自动换梭，取消键执行手动换梭
E-136	机头升降动作异常!	请检查机头升降机构是否正常,电气接线是否完好
E-137	自动换梭模块连接失败	1.请检查自动换梭模块供电是否正常。 2.请关机检查相关线路是否正确，是否牢靠，连接线是否破损。 3.请检查自动换梭模块程序版本是否正常。
E-138	梭盘电机故障	1.请关机检查梭盘机构是否顺畅，是否有堵转情况。 2.请检查梭盘电机插头是否正确，是否牢靠，连接线是否破损。 3.请检查梭盘电机是否损坏。

E-139	梭盘电机原点检测异常	1.请关机检查梭盘机构是否顺畅，是否有堵转情况。 2.请检查梭盘电机插头是否正确，是否牢靠，连接线是否破损。 3.请检查梭盘电机原点信号是否正常。
E-140	换梭臂转动异常	1.请关机检查换梭臂转动机构是否顺畅，是否有卡顿。 2.请检查换梭臂转动接线插头是否正确，是否牢靠，连接线是否破损。 3.请检查相关传感器是否正常。
E-141	换梭臂伸缩异常	1.请关机检查换梭臂伸缩机构是否顺畅，是否有卡顿。 2.请检查换梭臂伸缩接线插头是否正确，是否牢靠，连接线是否破损。 3.请检查相关传感器是否正常。
E-142	换梭臂取梭盘梭芯异常	1.请关机检查换梭臂和梭盘对接位置是否一致。 2.请检查梭芯夹取机构是否正常。 3.请检查梭芯感应传感器是否正常。
E-143	主轴同步动作起始角度异常	1.恢复最近修改参数，确保参数在适当范围内变动。 2.请联系相关售后服务人员进行问题排查。
E-144	主轴同步旋转轴位置异常	1.缝制时，旋转轴未能正常完成旋转，造成机针角度出现偏差。 2.恢复最近修改参数，确保参数在适当范围内变动。 3.请联系相关售后服务人员进行问题排查。
E-145	主轴同步中压脚(随动)位置异常	1.中压脚(随动)未能正常完成抬起或落下动作，造成高度出现偏差。 2.恢复最近修改参数，确保参数在适当范围内变动。 3.请联系相关售后服务人员进行问题排查。
E-146	主轴同步 X-轴位置异常	1.缝制时，X 轴未能完成按照花样完成动作，造成 X 轴方向框架出现偏差。 2.恢复最近修改参数，确保参数在适当范围内变动。 3.请联系相关售后服务人员进行问题排查。
E-147	主轴同步 Y-轴位置异常	1.缝制时，Y 轴未能完成按照花样完成动作，造成 Y 轴方向框架出现偏差。 2.恢复最近修改参数，确保参数在适当范围内变动。 3.请联系相关售后服务人员进行问题排查。
E-148	主轴同步框架位置异常	1.缝制时，XY 轴未能完成按照花样完成动作，造成框架出现偏差。 2.恢复最近修改参数，确保参数在适当范围内变动。 3.请联系相关售后服务人员进行问题排查。
E-149	花样超出缝制范围	请按下确定键解除故障。 1、请修改起缝点； 2、检查一下操作头设置的缝制范围是否与所选花样不符。
E-150	主轴电机校准角度值异常	请进入主轴电机校正界面对主轴安装角度进行重新设置
E-151	激光偏移超出缝制范围	请调整激光或画笔偏移参数
E-152	扩展模块未联接	关闭系统，检查扩展模块与系统的连线及供电
E-153	扩展模块过流错误	关闭系统，检查外部是否有气阀短路情况，逐一拔掉气阀排除
E-254	未定义错误	通讯出现未定义错误

3.2 提示信息一览表

信息号	信息名称	子信息内容
M-001	上计数器达到最大值	请按下确定键。
M-002	下计数器达到最大值	请按下确定键。
M-003	不在原点，无法操作	请先回原点。
M-004	花样数据不存在	请重新读取或打版输入。
M-005	设定值太大	请输入范围内数值。
M-006	设定值太小	请输入范围内数值。
M-007	请按下回原点键	
M-008	存储参数异常	请按下确定键恢复出厂值。
M-009	内存中没有花样	请按下确定键加载出厂花样。
M-010	内存花样个数已满	请删除不使用的缝制数据。
M-011	是否内存中删除花样数据	按下确定键执行删除操作，按下取消键退出当前操作。
M-012	是否覆盖内存中花样数据	按下确定键执行覆盖操作，按下取消键退出当前操作。
M-013	花样数据不能删除	被选中的缝制数据正在使用！
M-014	是否格式化内存	按下确定键执行格式化操作，按下取消键退出当前操作。 格式化后会删除全部内存花样数据！
M-015	通讯错误	操作头与控制箱通讯异常！
M-016	超出缝制范围	请确保花样数据在缝制范围以内！
M-017	字母绣字库文件读取失败	
M-018	操作头与控制箱类型不符	请核对机型和软件版本
M-019	输入花样号码不正确	请输入正确的花样号码。
M-020	超过最大针距	
M-021	密码错误	请重新输入。
M-022	硬件时钟故障	发现硬件时钟故障，请联系厂家维修！
M-023	针数超出范围	请进入[操作设定]->[液晶屏幕]，选择'大针数花样支持'参数设置为 ON
M-024	针间距输入值太小	请输入范围内数值。
M-025	针间距输入值太大	请输入范围内数值。
M-026	已存在第二原点	只能输入一个第二原点。
M-027	请按下回原点键	
M-028	是否拷贝指定的花样数据	是否覆盖原本图形？ 是：Enter 否：X
M-029	是否恢复出厂设置	确定键执行操作，取消键退出操作
M-030	USB 盘已拔出	USB 盘已经拔出！
M-031	U 盘中没有发现花样数据	
M-032	至少输入一个字母	字母绣打版需要至少输入一个字母！
M-033	无报警记录	
M-034	更换机针	更换机针设定值已到达，请更换机针！
M-035	更换机油	更换机油时间设定值已到达，请更换机油！
M-036	清扫机器	清扫机器时间设定值已到达，请清扫机器！
M-037	数据格式不同	请确认数据格式

M-038	无法生成曲线	请根据曲线输入注意事项重新输入
M-039	当前位置无法插入剪线	请在缝制数据后插入剪线
M-040	不能在同一位置插入相同的功能码	
M-041	当前位置无法插入第二原点	请在移送后插入第二原点
M-042	输入点无法生成圆弧和圆	请重新输入
M-043	无法生成重叠缝数据	请在封闭图形后加入重叠缝
M-044	无法在下暂停后加入剪线	
M-045	无法在剪线前加入下暂停	
M-046	选择位置不正确	
M-047	无法进行缩放	
M-048	花样数据不正确	
M-049	生成圆弧数据？	
M-050	生成圆数据？	
M-051	生成曲线数据？	
M-052	生成多边形数据？	
M-053	压脚未放下	请踏下脚踏板
M-054	输入用户 ID 有误	请重新输入
M-055	禁止修改系统时间	设置了分期密码，不能修改系统时间
M-056	密码文件写入失败	
M-057	密码文件读取失败	
M-058	密码保存成功	
M-059	清除全部密码失败	密码文件无法被删除
M-060	清除密码失败	清除密码后，文件写入异常
M-061	密码文件被恶意删除	用户设置的分期密码被恶意删除，请关机
M-062	用户 ID 文件损坏	
M-063	输入花样名称	
M-064	请清除当前的合并资料	按下”CLR“,清除当前合并资料
M-065	输入不能为空	请输入密码
M-066	当前密码不符	请重新输入当前密码
M-067	新密码不一致	请重新输入新密码并再次确认
M-068	触摸屏校正成功	校正成功，请关闭电源后重启
M-069	确定清除报警记录？	是否确定？是：Enter 否：X
M-070	是否删除选中的文件	是否确定？是：Enter 否：X
M-071	复制所有的图形	是否覆盖原本图形？是：Enter 否：X
M-072	拷贝文件失败	请检查磁盘空间是否已满！
M-073	拷贝文件失败	请检查是否拔出了 USB 盘！
M-074	打开文件失败	打开文件失败！
M-075	格式不匹配	格式不匹配，放弃当前读入！
M-076	请创建目录和文件	请在 U 盘下创建 bakParam 目录，并将备份文件命名为 backup.param, 并拷贝到 bakParam 目录下！
M-077	文件读写错误	文件读写错误！

M-078	请选中条目	请选中要读写的条目！
M-079	文件不存在	当前条目对应文件不存在！
M-080	未输入移动量	请输入移动量!
M-081	确定执行当前操作？	是否确定？是：Enter 否：X
M-082	确定清除累积运转时间？	是否确定？是：Enter 否：X
M-083	确定清除累积缝纫件数？	是否确定？是：Enter 否：X
M-084	确定清除累积上电时间？	是否确定？是：Enter 否：X
M-085	确定清除累积缝纫针数？	是否确定？是：Enter 否：X
M-086	分期密码不能和总密码相同	请重新输入密码
M-087	禁止修改加算器(NUP)	当修改时，请关闭设定(NUP)
M-088	禁止修改减算器(NDP)	当修改时，请关闭设定(NDP)
M-089	花样列表(快捷键)为空	如果花样列表为空，系统会自动将当前打开花样导入列表.
M-090	没有选中升级条目	请选中要升级的条目，至少要选中一个条目
M-091	选中的升级条目中有些不存在	不存在升级文件的条目返回后将会取消选中，如果要升级剩下的条目，请再次确认
M-092	升级成功	升级成功，请重新启动机器
M-093	是否格式化 U 盘	按下确定键执行格式化操作，按下取消键退出当前操作。 格式化后会删除全部 U 盘文件！
M-094	成功	已成功执行当前操作！
M-095	失败	当前操作失败！
M-096	是否格式化花样列表(快捷键)	按下确定键执行格式化操作，按下取消键退出当前操作。
M-097	是否覆盖 U 盘中的同名花样	按下确定键覆盖文件，按下取消键退出当前操作。
M-098	触摸屏校正失败	请重新校正
M-099	字母绣花样保存成功	请进入数据读取界面下选择新生成的字母绣花样
M-100	该花样不能进行转换	请确认花样文件
M-101	是否还原所有设定	是否确定？是：Enter 否：X
M-102	是否还原选择项目	是否确定？是：Enter 否：X
M-103	未选择项目	请选择一个或几个参数项
M-104	参数初始化	清除掉存储区中全部数据，请关电并将拨码开关位置还原
M-105	不能拷贝覆盖当前花样	拷贝队列里存在当前花样号码，不能覆盖当前花样
M-106	需要转换花样格式	选择花样不是标准文件格式,请转换后使用
M-107	组合花样不能进行该操作	请进入图形连接模式，按下\"CLR\"解除组合花样
M-108	是否删除原始花样？	格式转换后是否删除原始花样。是：Enter 否：X
M-109	中压脚处于下降位置	请升高中压脚
M-110	关机，再见！	
M-111	大针距花样文件格式	该花样格式本系统不支持
M-112	转换花样格式错误	请确认花样文件
M-113	转换花样数据超长	请进入[操作设定]->[液晶屏幕]，选择'大针数花样支持'参数设置为 ON
M-114	转换花样无法打开	请确认花样文件
M-115	转换花样精度错误	打版软件中的分辨率设为 0.1mm(工具->选项设置->分辨率)
M-116	恢复参数成功	恢复参数成功，请重新启动机器
M-117	保存软件版本成功	软件版本已经成功保存到 U 盘根目录下
M-118	设置成功	需要重新启动机器

M-119	usb 盘不存在	请插入包含 mp3 文件的 usb 盘
M-120	不存在第二原点	当前花样不存在第二原点。
M-121	升级主控程序时校验失败	
M-122	正在穿线...	
M-123	是否恢复已存自定参数	确定键执行操作，取消键退出操作
M-124	当前花样被模板锁定	请解除模板锁定!
M-125	参数加载失败	请联系厂家维修!
M-126	底线不足	请更换底线，按下确定键后重新计数
M-127	不能生成多重缝数据	
M-128	完成图形复制？	
M-129	内存分配错误	
M-130	继续使用会转换为点缝	
M-131	面板与主控不匹配	当前系统存在分期密码，需要联系厂家解除锁定!
M-132	当前面板存在密码，需要同步	面板存在密码，主控没有密码!
M-133	当前主控存在密码，需要同步	主控存在密码，面板没有密码!
M-134	需要更换字库，请关电重启	特殊语种会关闭语音功能
M-135	主板 ID 不存在	
M-136	缺少语言字库	请升级所需字库文件
M-137	C 花样打开失败	花样文件错误，将会被删除!
M-138	花样快捷键内容错误	
M-139	不能进入批量转换功能	
M-140	号码已被占用	
M-141	无法生成线迹	
M-142	内部数据异常	
M-143	存在圆弧	椭圆将转换为点缝
M-144	确定清除生产记录？	是否确定？是：Enter 否：X
M-145	打卡成功	
M-146	打卡失败	
M-147	缩缝转换成功	缩缝部分已变成点缝，无法再次转换缩缝，建议保留原始花样，以便下次修改
M-148	确定清除开关机记录？	是否确定？是：Enter 否：X
M-149	无开关机记录	
M-150	升级驱动器程序失败	
M-151	请求失败	
M-152	密码信息保存成功	
M-153	升级文件不存在	目录不存在或者该目录下没有文件
M-154	请设置加计数器无效	
M-155	请设置减计数器无效	
M-156	确定进行主轴校正?	是否确定？是：Enter 否：X
M-157	分组号无效	
M-158	拒绝当前操作	
M-159	接收参数为空	
M-160	参数未发生变化	

M-161	二维码显示失败	
M-162	由于读取新的花样,当前位置需要补正	请按下确认键
M-163	缩缝针数超出实际针数	
M-164	不能生成缩缝数据	
M-165	确定进行上轴校正?	是否确定？是：Enter 否：X
M-166	确定进行下轴校正?	是否确定？是：Enter 否：X
M-167	不能输入点	与上一次输入点位置重合
M-168	生成曲线数据？	
M-169	软件与文件系统不匹配	
M-170	密码日期修改失败	输入日期应在下一次密码发作日期之前
M-171	是否确定绕线	是否确定？是：Enter 否：X
M-172	起始针包含功能码，请确认是否修改	确定键表示修改该功能码，取消键退出重新选择。 如果希望保留功能码，请参照界面右侧代码信息继续移动，使起始针为功能码。
M-173	面板未加密,主控加密	请确认是否更换了新面板
M-174	面板加密,主控未加密	确定键同步加密状态
M-175	系统已经存在远程分期设置	确定键继续操作，取消键退出操作
M-176	无线模块 1 联接失败	系统转速降至最低，请联系厂家
M-177	是否立即更新花样缩略图?	花样使用后也会同时生成缩略图
M-178	系统已经设置为不联网模式	打开联网功能后可以进行检测
M-179	联接失败	
M-180	无法转换	
M-181	本机存在密码,敬请知悉!	
M-182	是否删除选中形状点	
M-183	是否修改形状点属性	
M-184	花样不存在，是否从服务器下载	是否确定？是：Enter 否：X
M-185	请求花样不是标准 NSP 格式	
M-186	服务器不存在请求花样	
M-187	服务器更新软件，是否进行升级操作	是否立刻升级？是：Enter 否：X
M-188	机器未注册	
M-189	动作未完成超时	
M-190	位置查询超时	
M-191	伸缩会影响缩缝数据	缝制数据存在缩缝,伸缩会自动添加缩缝,破坏之前的缩缝数据,请用户注意另存花样
M-192	开机画面升级异常	
M-193	请扫码后开始加工	
M-194	人字缝宽度过大,需要插入横向针数	
M-195	面板与主控未联接	拨码开关 5 被打开
M-196	花样精度高于系统精度	花样数据会有精度损失

M-197	是否覆盖 U 盘中的同名其他格式花样	按下确定键覆盖文件，按下取消键退出当前操作。
M-198	生成花样,是否继续编辑?	是：Enter,继续设置参数或者功能码;　否：X,退出保存花样.
M-199	是否将所有针距的刚性恢复初始值?	是否确定？　　是：Enter　否：X
M-200	是否保存激光偏移数值?	是否确定？　　是：Enter　否：X
M-201	是否保存原点偏移数值?	是否确定？　　是：Enter　否：X

4 附录 2

4.1 操作箱安装尺寸

4.2 控制箱安装尺寸

4.3 系统框图

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 Pattern-sewing Machine
1	Sewing Area	X(Lateral) Direction Y(Longitudinal) Direction 600(mm) x 400(mm)
2	Max. Sewing Speed	3000rpm（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	Memory of Pattern Data	Memory/U Disk
11	Pause function	Stop the machine during the sewing
12	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)
13	Scaling Up/Down Method	Increasing / decreasing stitch length & Increasing / decreasing stitch number
14	Sewing Speed Limitation	200～3000rpm（100rpm per step）
15	Pattern Selection Function	Pattern No. selection method
16	Up counter	No Count/Count of Pattern /Count of Cycle (0～99999)
17	Down Counter	No Count/Count of Pattern /Count of Cycle (0～99999)
18	Sewing Machine Motor	Servo Motor
19	Stop Needle at Highest Position Function	After the completion of sewing, the needle can return to its highest position.
20	Rated Power	600W
21	Operation Temperature Range	0℃～45℃
22	Operation Humidity Range	35%～85% （No Dew Condensation）
23	Line Voltage	AC 220V ± 10%；50/60Hz

※ Effective standard for product: QCYXDK0004—2020 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:

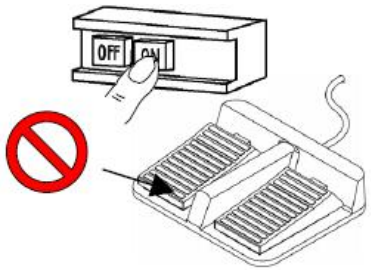
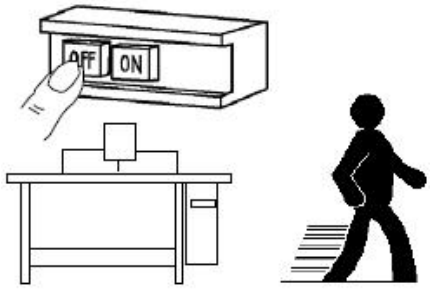
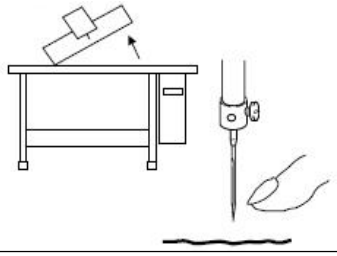
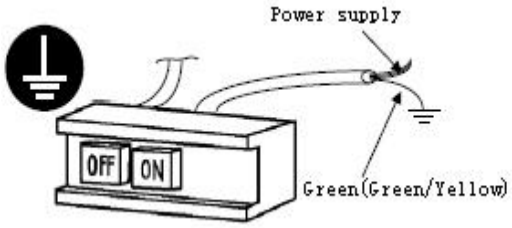
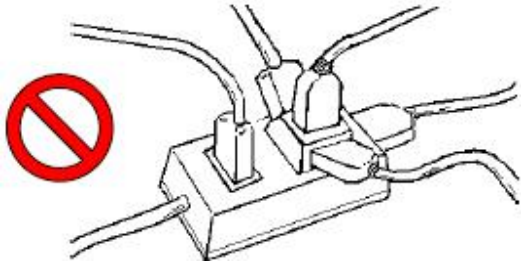
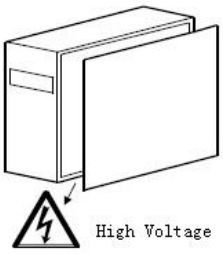
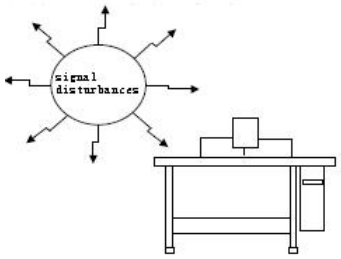
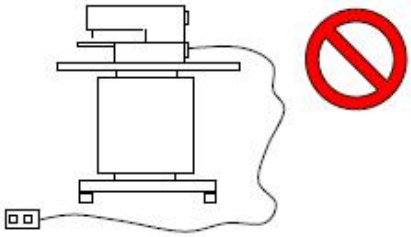
 Warning	The wrong operation may ca use serious injury or death.	 Caution	The wrong operation may caus e personal injury or loss of pr operty.

- The meanings of the marks are shown below:

	Please operate machine according to ins truction		Caution:High Voltage
	Caution:High Temperature		Grounding is a must
	Never do this		

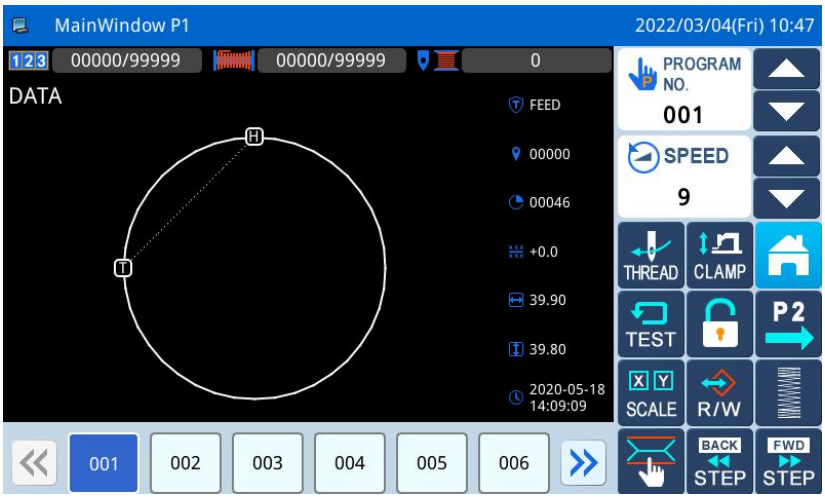
1.4 The Preventive Measures in Use

Warning

<table>
<tr><td>1. When you press the switch [ON], please do not step the pedal.
  </td><td>2. When you leave the machine, please turn it off.
  </td></tr>
<tr><td>3. If user needs to tilt the head or replace the needle or thread the upper thread, please turn off the power.
  </td><td>4. Ground well the grounding cable.
  </td></tr>
<tr><td>5. Do not use the household terminal block to let machines to share one power supply.
  </td><td>6、 For opening the control box, please turn off the power and pull out the plug from socket firstly, and then wait for at least 5 minutes before opening the control box.
  </td></tr>
<tr><td colspan="2">7、After replacing the motor, user has to adjust the main motor installation angle according to this manual.</td></tr>
<tr><td>8、Please keep it away from the disturbance of high frequency machines.
  </td><td>9、If user needs the external signal socket to connect the attachments, the connecting wire shall be as short as possible. The long cable may cause mistake operations. And the connection cable shall be the shielded.
  </td></tr>
<tr><td colspan="2">10、If the fuse is burnt, please solve the problem before replacing a new one with same capacity.</td></tr>
</table>

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.

Warning

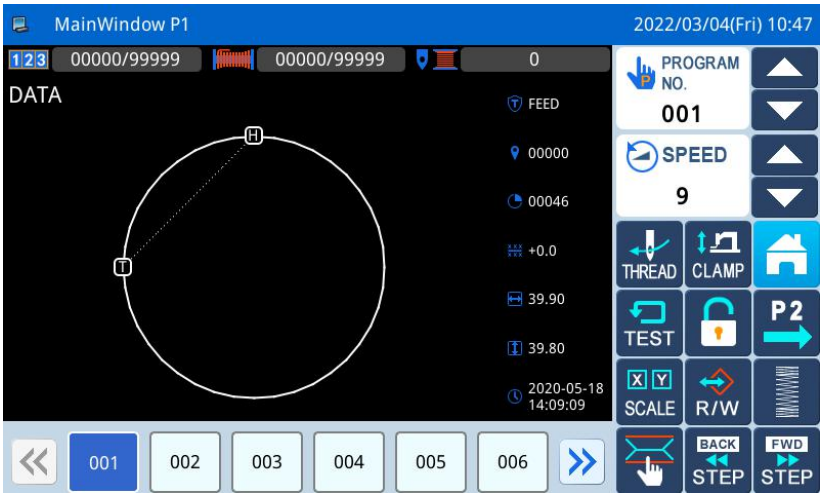
Don’t use sharp objects to touch the screen so as to avoid causing permanent damage to the touch panel.

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.



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].

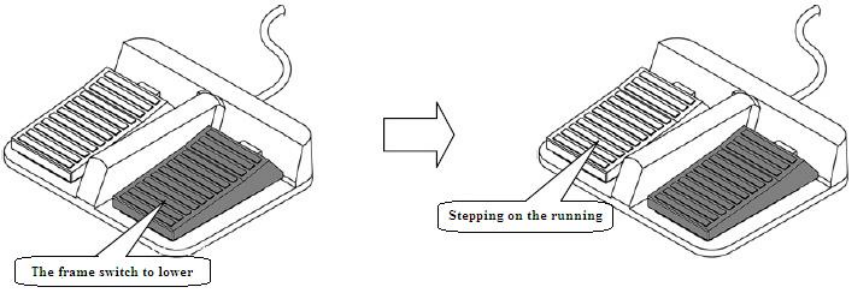
3、Start Sewing

① Before the actual sewing, user need confirm the settings of the sewing conditions again, especiall y the setting of the speed (Range: 0~9).

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:

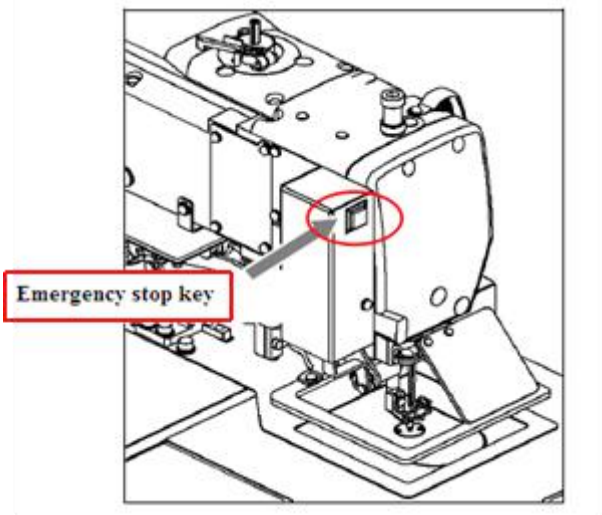
① Step on the running switch to continue the sewing;

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.



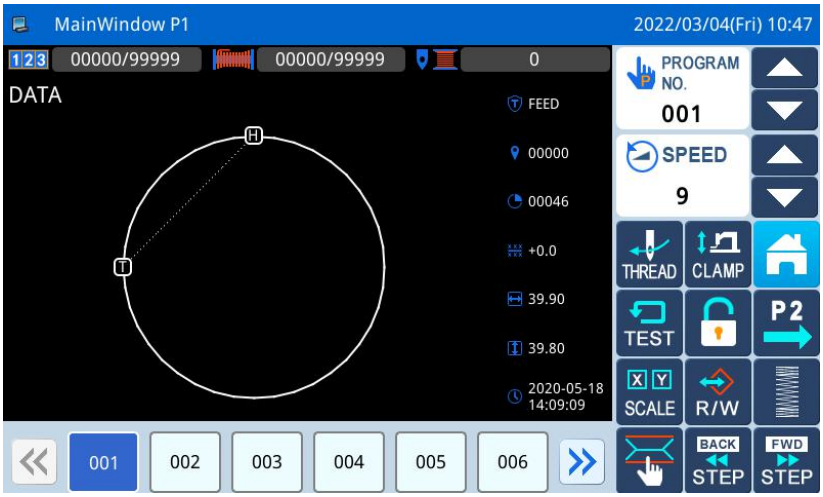
5、Method for Mending the Sewing

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.

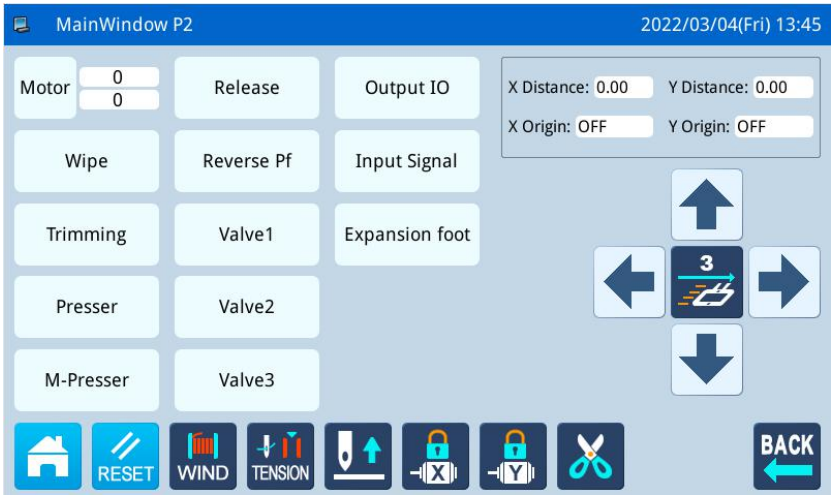
Note: never use your foot to step on the running switch when threading. It is very dangerous to run the sewing machine when threading, so be sure to remove your foot from the running switch when threading.

2.2 Instructions on Interface Display Status

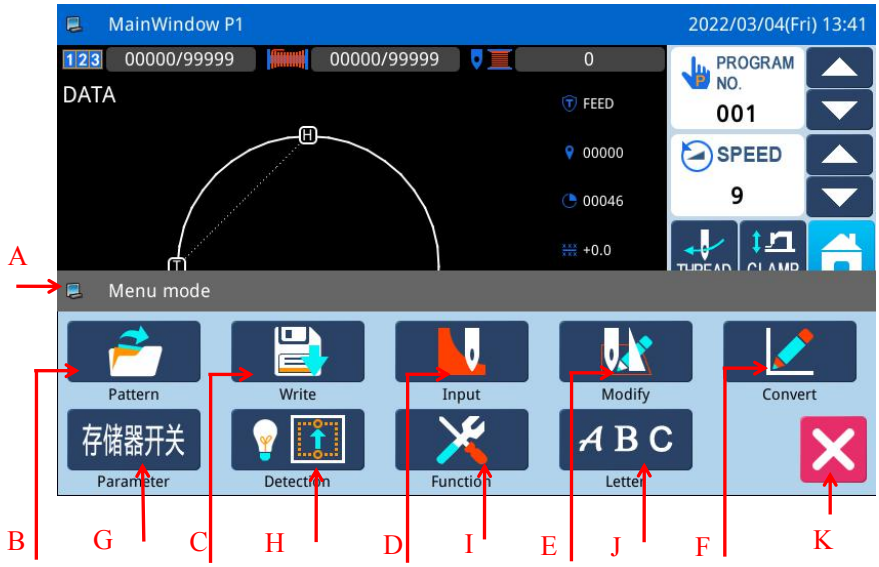
2.2.1 Interface 1 (Main Interface P1: Standard Display Status)



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



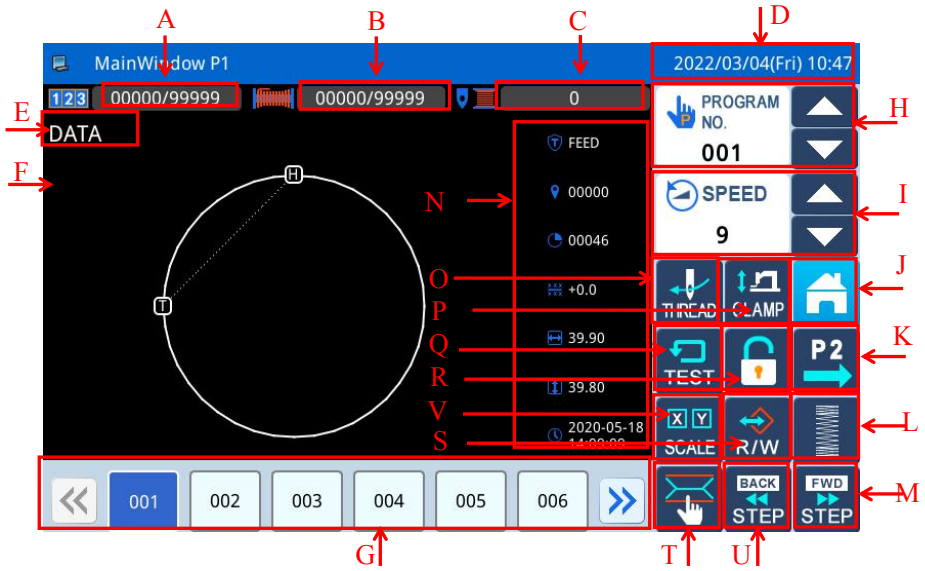
2.2.3 Interface 3 (Catalogue Mode in Main Interface P1)



Functions：

No.	Function	Content
A	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.
B	Pattern management (adding, deleting, checking and saving graphic data)	After entering the interface, execute the corresponding functions to search, sort, delete, save, read and other related operations for patterns.
C	Save Pattern (Save Pattern Data)	Save the pattern to memory or U disk
D	Edit Pattern (Pattern Design Mode)	Edit the pattern
E	Modify Pattern (Modification Mode)	Modify the pattern
F	Data Transformation (File Transformation Mode)	Transform the data
G	Operation Setting	Set the operation parameters
H	Test Mode	Test the external devices, LCD screen and so on.
I	Function Setting	Perform the function operations
J	Letter Sewing Edition	Perform letter sewing edition。 **[Note]: User can close letter sewing edition function via Parameter “Special” -> “Enable Letter Sewing”. The figure will disappear when it is deactivated.**
K	Quit	Quit the current interface, and return to the upper interface.

2.3 Instructions on Main Interface P1

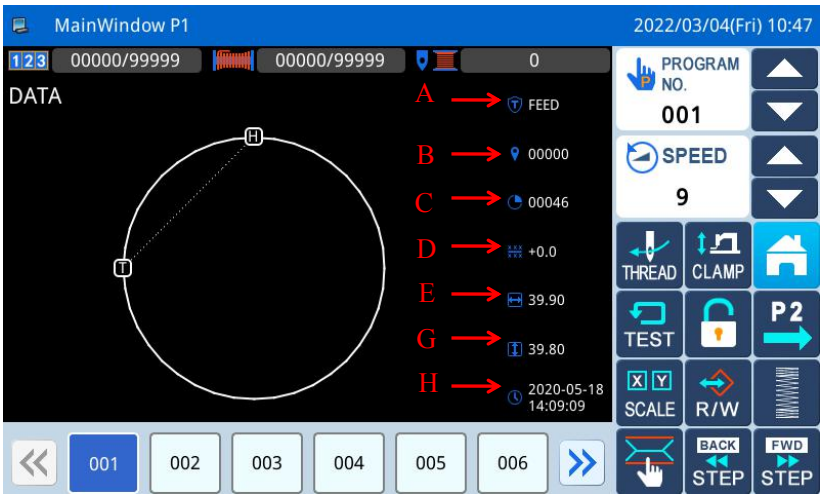


Functions：

No.	Functions	Content
A	Up-counter	Display the current value/set value of the Up-counter .
B	Down- counter	Display the current value/set value of the Down- counter .
C	The robbin counter's alarms number of stitches	Perform data setup operations
D	Date/Clock	Show time
E	Pattern Name	Display the name of current pattern
F	Pattern Shape	Display the shape of the current pattern **[Note]: is the position of origin.**
G	Pattern Number Hot Key	Display the recently used pattern numbers, at most 40 numbers can be saved. Pressing the pattern number will activate that pattern for sewing. **[Note]: In combined pattern sewing mode, the displayed content is the sub-pattern numbers and their number.**
H	Pattern Selection Function	Pattern No. selection method
I	Speed Adjustment Area	Adjust and display the sewing speed of the current pattern
J	MENU	Display the catalogue (refer to [2.2.3 Interface 2])
K	Enter Main Interface P2	Press it to enter Main Interface P2.
L	Herringbone sewing template pattern setting key	Press this button to enter,parameters of herringbone seam can be set
M	Forward key	Press this key,X-Y (frame) will move forward on the pattern
N	Display the data	Displays the current pattern data
O	Copy pattern key	Press this button to enter, you can choose the pattern you need
P	Threading key	Press this key to thread
Q	Intermittent presser foot setting	Adjust the intermittent presser foot height
R	Trial sewing key	Trial sewing operation
S	Template lock key	Lock the pattern template used

No.	Functions	Content
T	The winding key	You can set whether to winding
U	Forward key	Move forward moves the sewing needle forward
V	Convert / zoom key	Press this key to enter and select the pattern you need

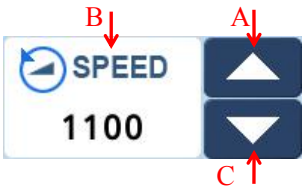
2.3.1 Pattern Stitch Number Display



Functions:

No.	Descriptions
A	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")
B	Display the stitch number at current position
C	Display the total stitch number of the current pattern (Including Feed, Thread-trimming, End, Code, etc.)
D	The distance that X/Y has traveled
E	Size of Pattern in X Direction
F	Size of Pattern in Y Direction
G	The time when the pattern was created

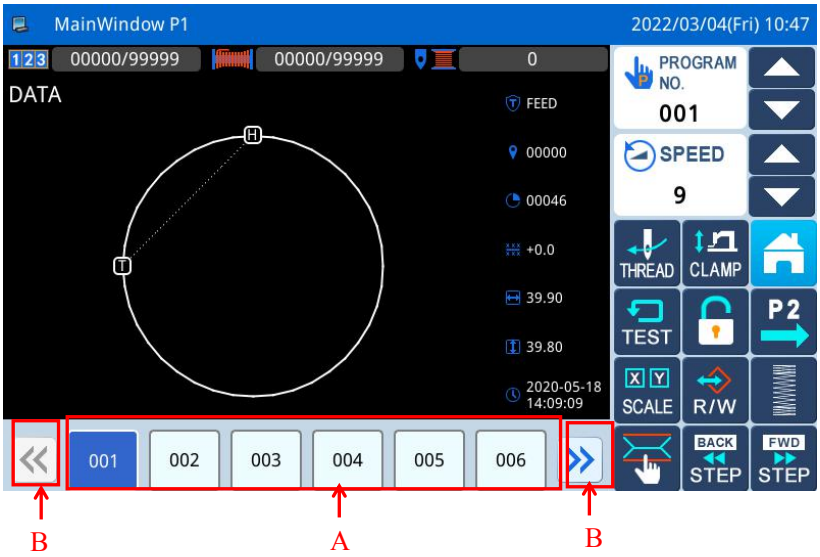
2.3.2 Speed Adjustment



Functions：

No.	Description
A	Increase the speed
B	Current sewing speed（200~2700） Display as speed value, if click this icon, you can jump to the standard parameter setting interface -- shortcut operation
C	Reduce the speed

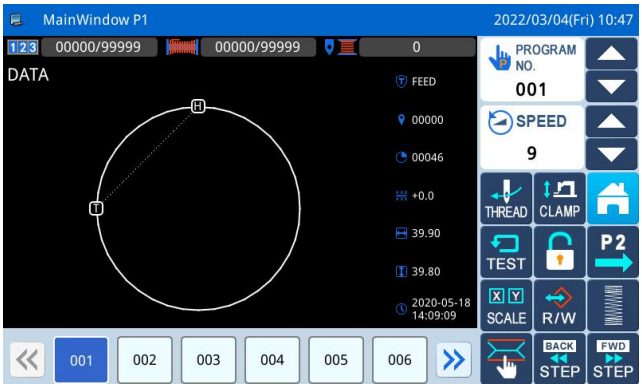
2.3.3 Operation of Pattern Number Hot key



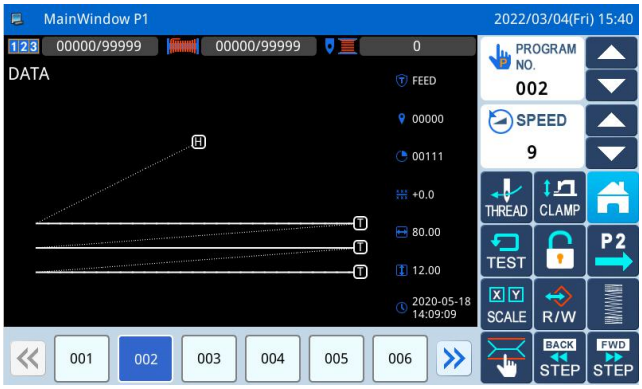
Functions：

No.	Description
A	Pattern number hot key (Current pattern: Displayed in white figure on blue background), select other number to shift the pattern.
B	Pattern number display page turn key

Example：



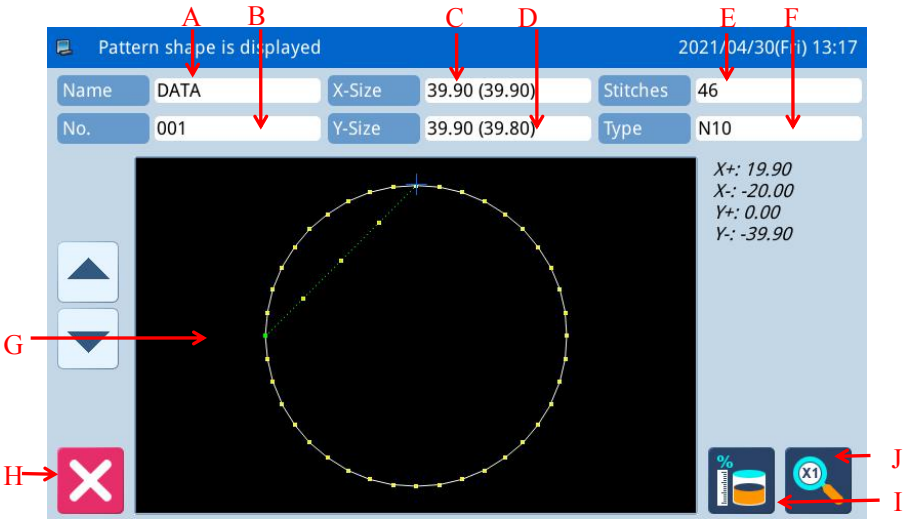
As shown in the figure, the shortcut key list in this example contains 2 pattern numbers. The current pattern number is 001. If we select pattern No. 002, the current pattern will be shifted to pattern No.002



As shown in the figure,This example selects the number 002 pattern, the current pattern will be shifted to pattern No.002

2.3.4 Pattern Display

In the Main interface P1, click the pattern display area to enter the pattern preview interface



Functions：

No.	Description
A	Pattern Name
B	Pattern Number
C	Size of Pattern in X Direction
D	Size of Pattern in Y Direction
E	Display Total Stitch Number of Pattern (Including Feed, Trimming, End, Code and so on).
F	Displays the current pattern type
G	Pattern Display.
H	Quit current interface and return to the previous interface.
I	Free space in memory display
J	The pattern display interface is cyclically enlarged

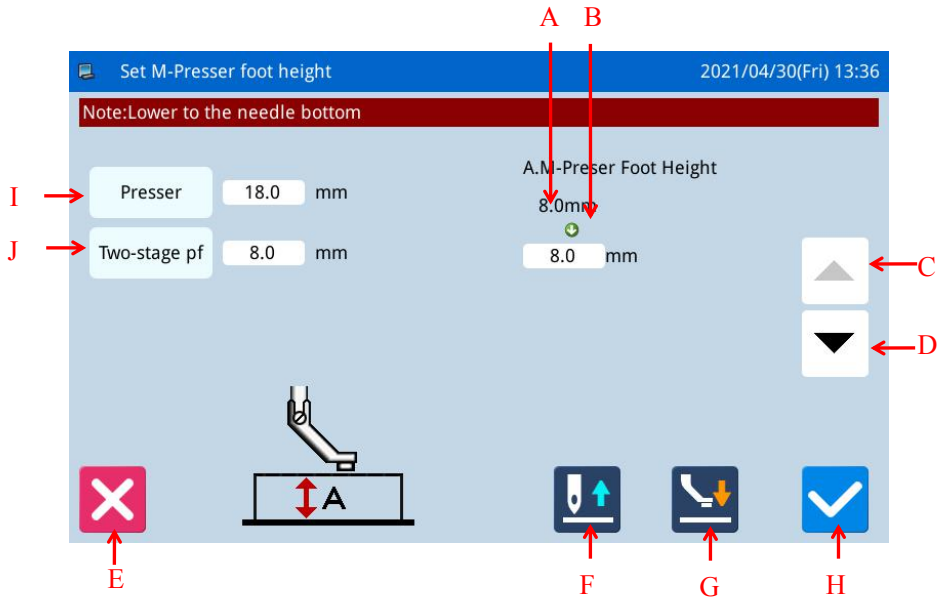
2.3.5 Sewing Fabric Thickness Setting

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。



Functions：

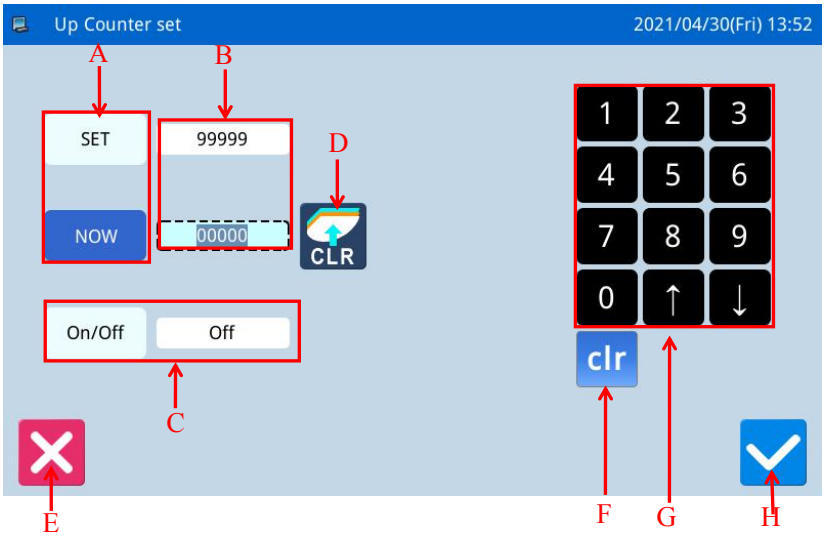
No.	Description
A	Current Height of Intermediate Presser
B	Target Height of Intermediate Presser
C	Increase Height The intermediate presser goes up by 0.1mm at each pressing
D	Decrease Height The intermediate presser goes down by 0.1mm at each pressing
E	Quit the current interface and return to the previous interface.
F	Move needle vertically. : Needle down : Needle up
G	Press it to move the intermediate presser in the arrow direction : Intermediate presser up : Intermediate presser down

H	Save and Quit
I	Height setting of presser foot
G	Two - stage presser foot setting

2.3.6 Add counter setup

Push down 00000/99999 **in P1 to enter the setting interface of adding counter.**

[Note] Counting mode of add/subtract counter is determined by the "counter" parameter in operation setting mode (refer to parameter description in [2.8.6 parameter setting table]).

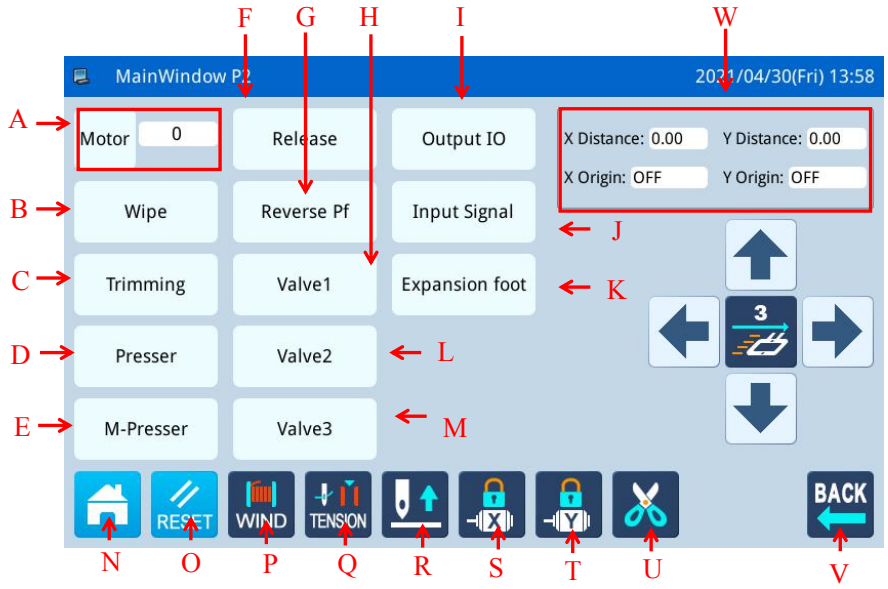


Functions:

No.	Content
A	Shift the input between the set value and the current value (The button in shadow is the selected one).
B	Display the set value and current value (User can input the value in the dotted frame)
C	Up Counter Switch
D	Clear current value.
E	Quit counter setting mode and return to previous interface.
F	Clear the value inputted currently
G	Number keyboard, used to input set value and current value
H	Confirm the setting

[Note] The subtraction counter setting operation is the same as the addition counter operation.

2.4 Main Interface P2



Functions：

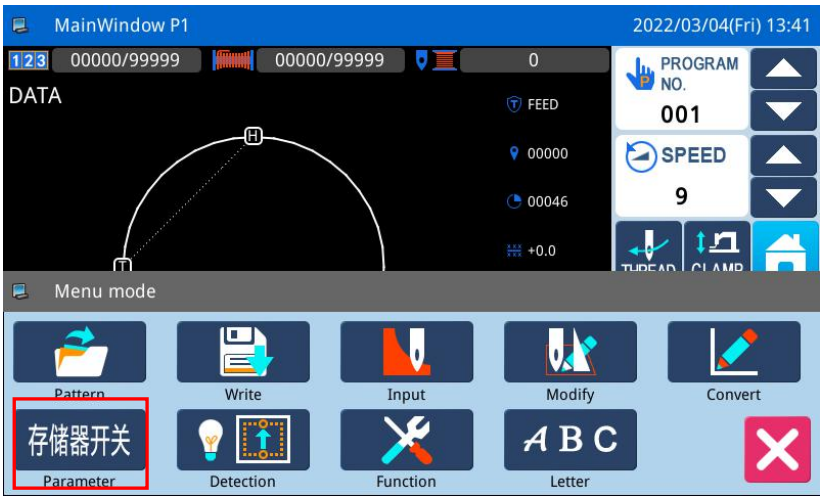
No.	Functions	Content
A	Main motor Angle setting	Set the Angle of main motor. The following number represents the Angle of the current angle.
B	wiper	Thread wiping output detection.
C	Trimming	Thread Trimming output detection.
D	Presser	Presser foot output detection.
E	Middle-presser foot	M-presser foot output detection.
F	Release	Thread release output detection.
G	Reverse Presser	Reverse Presser foot output detection
H	Auxiliary valve 1	Auxiliary valve 1 output detection
I	IO configuration	IO configuration parameters
J	Input signal	Input signal test
K	Reverse Pressers foot	Reverse presser output detection
L	Auxiliary valve 2	Auxiliary valve 2
M	Auxiliary valve 3	Auxiliary valve 3
N	MENU key	Display the catalogue
O	Reset button	The sewing needle goes back to its original point
P	Winding pattern	Can be set whether winding
Q	Thread Looser current	Set the current of Thread loosening device when threading
R	Needle Positin Setup	 : The needle down  : The needle up
S	X lock shaft	X axis lock /release
T	Y lock shaft	Y axis lock /release
U	Trimming	Thread Trimming output detection.

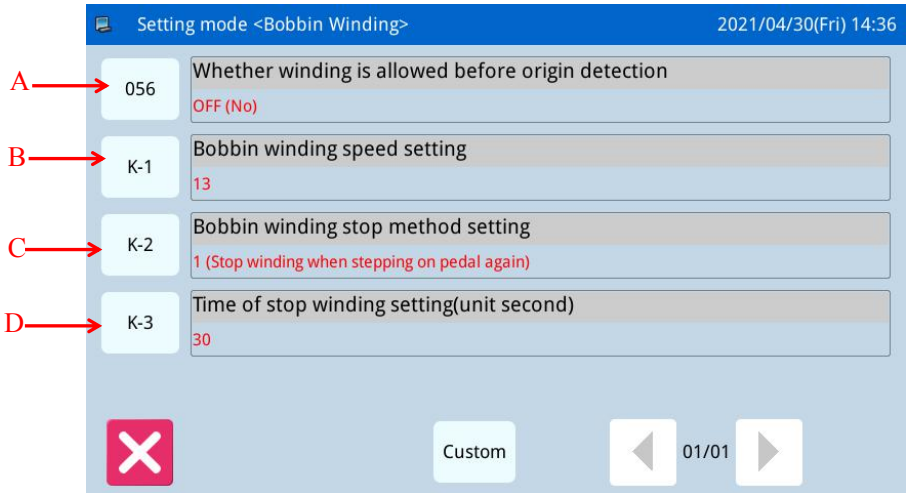
V	Return key	Press it to return to the main interface 1
W	Coordinate values	Displays X/Y coordinate values

2.4.1 Winding Mode

For winding, user has to activate this interface . 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. Step on the pedal again and the machine will stop in the up position.

[Note]: The winding action is determined by the parameter "Winding" set in the Operation Setting Mode. (Please refer to [2.8.6 Parameter List])

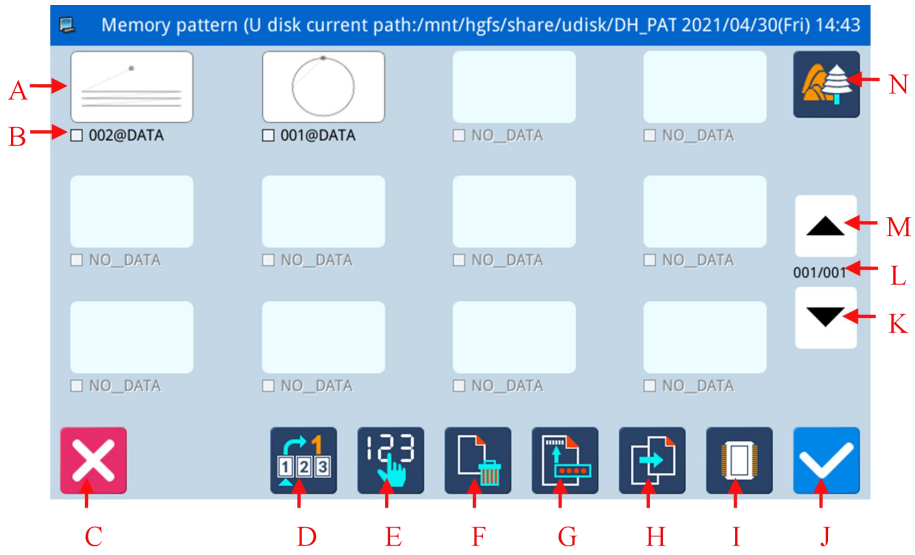




Functions：

No.	Description
A	Whether winding is allowed before origin detection
B	Actual winding speed setting. **[Note] Decided by the parameter "winding core" -> "winding speed setting".**
C	Winding stop mode setting. **[Note] Decided by the parameter "winding core" -> "winding stop-mode setting".**
D	Timed stop winding time setting. **[Note] Decided by the parameter "winding core" -> "timing stop winding time setting".**

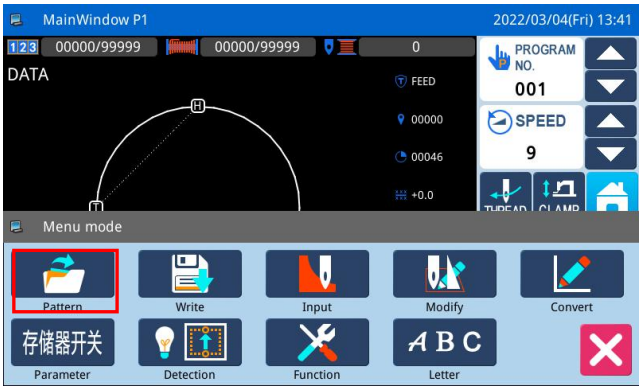
2.5 Load Pattern



Functions:

No.	Functions	Content
A	Pattern preview list	Display the list of the saved pattern (Both number and name will be displayed). **[Note 1]: If user selects pattern in VDT format, 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	Pattern No List	Display the list of the saved pattern number.
C	Return to Main Interface	Return to main interface directly
D	Find patterns	Find patterns
E	Sequencing	Sequence the patterns according to their modification time or number.
F	Delete Pattern	Delete the selected pattern. **[Note]: The currently sewing pattern cannot be deleted.**
G	The save button	You can save the specified pattern
H	Access key	Select a pattern from memory or USB drive as the current sewing pattern.
I	Select Memory/ U Disk	Load pattern from memory or U disk Shift between U Disk and Memory
J	Enter	Confirm the operation. After the operation, the sewing pattern will turn to the newly selected pattern.
K	Page down	Page down to look up interface
L	Page	Display current page number/ total page number
M	Page up	to look up interface
N	Pattern Display	Can preview patterns

2.5.1 Operation Instructions：

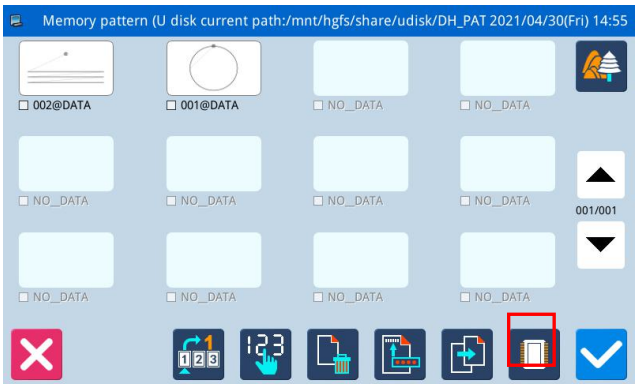


1、Open the Interface to Load Pattern

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

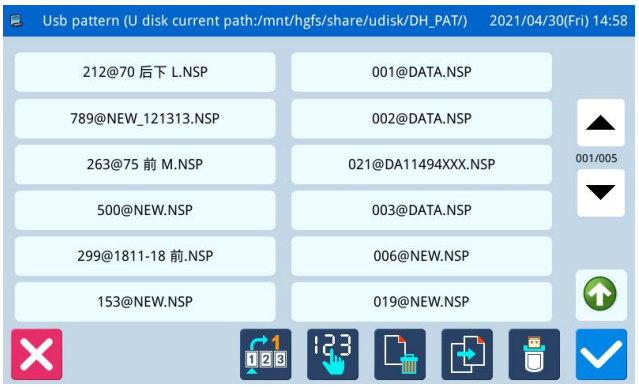
.

[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)

The default setting in this interface is the Memory Load Mode. You can press  to shift to U Disk Load Mode, which is shown at below.



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

3、Select and Confirm Pattern Number

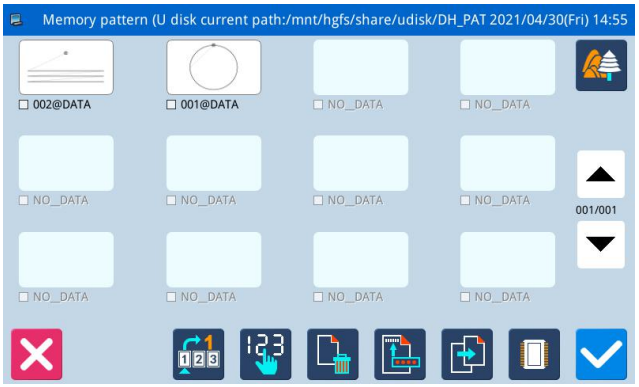
Select the pattern number for sewing and then press  . After the selection, the system will return to the main interface directly.

[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  to load the pattern directly.

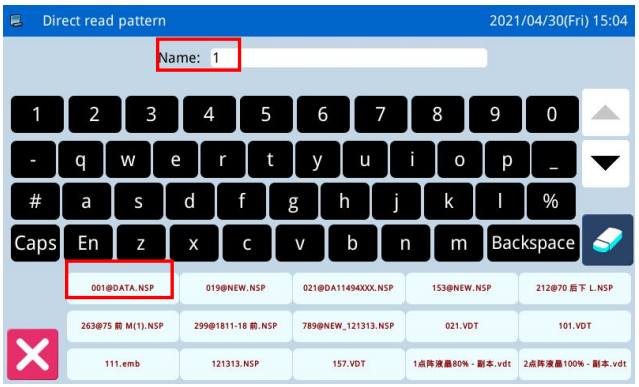
2.5.2 Direct Load Mode



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.



2、Input the First Number

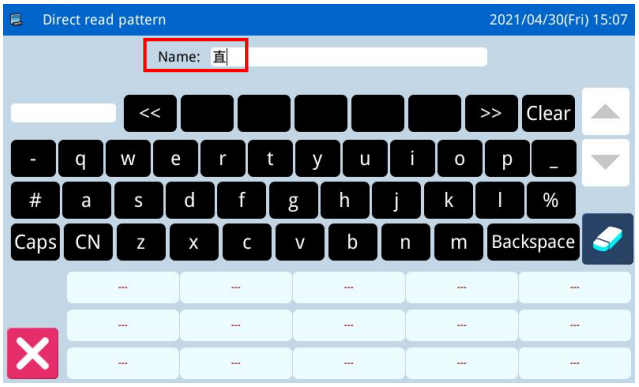
(E.g. Load pattern No.01)

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

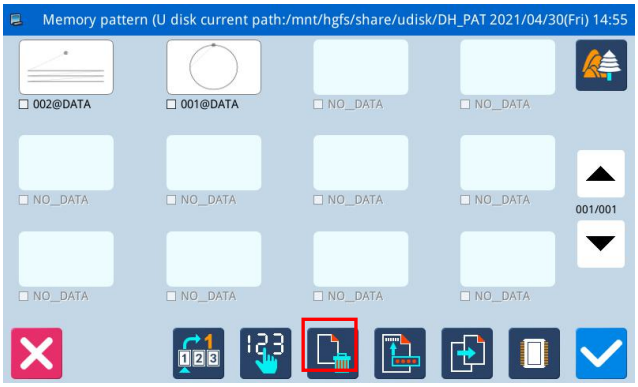
④ At this moment, press to activate the pattern and then the system will return to the main interface and display the selected pattern.



3、Switch English to Chinese

⑤ pattern search, you can input Chinese, switch to the Chinese input method mode to enter the search pattern.

2.5.3 Delete Pattern

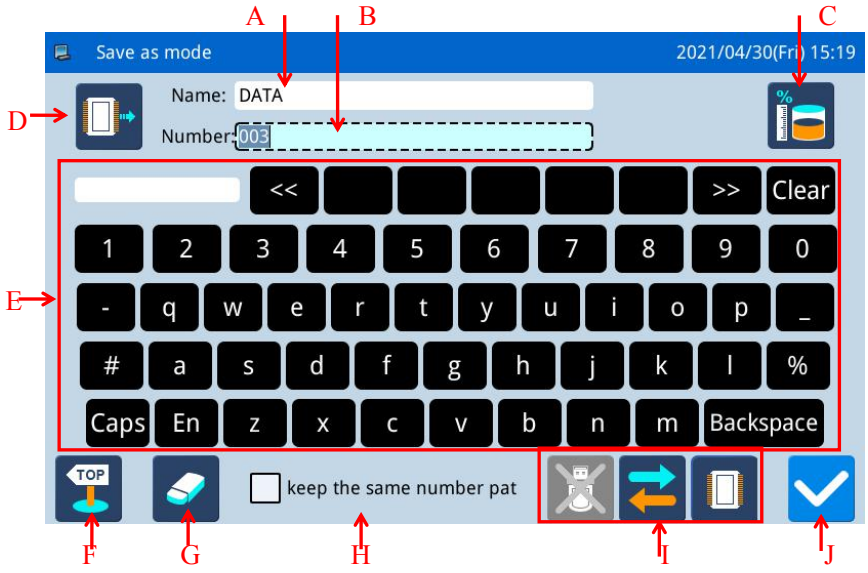


User can press  to delete a pattern. At this moment, the system will display “Delete Pattern from Memory?” (If the system is at U Disk Load Mode, the system will display “Delete the Selected File?”.). User need follow the given instructions, but the pattern being sewn cannot be deleted.

2.5.4 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,SEW format.

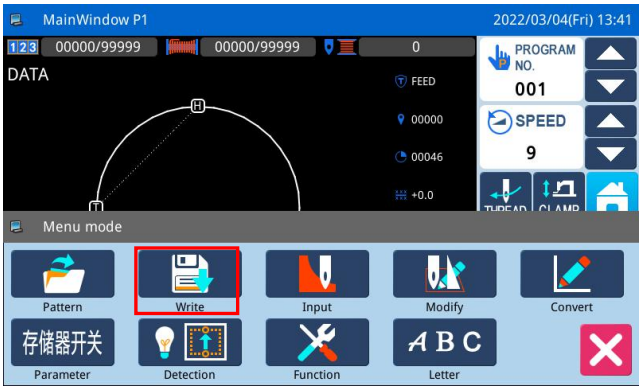
2.6 Save Pattern



Function:

No.	Functions	Content
A	Input Pattern Name	Display the pattern name
B	Input Pattern Number	Display the pattern number
C	Memory surplus function	Look at the amount of memory left
D	Display storage location	: The storage location is memory : The storage location is a usb flash drive
E	Keyboard	Input name or number
F	Return key	Return to the previous screen
G	Clear All Characters	Press it to clear all the inputted characters
H	Keep Pattern with Same Number	keep the same number pat:Choose to keep the same number pattern, save the same pattern, pattern number is different keep the same number pat: not to keep the pattern with the same number
I	Select Memory/ U Disk	Select read memory or U disk pattern, toggle to select U disk or memory
J	Identify key	Save the current Settings and exit to the previous screen

Operation Instructions:

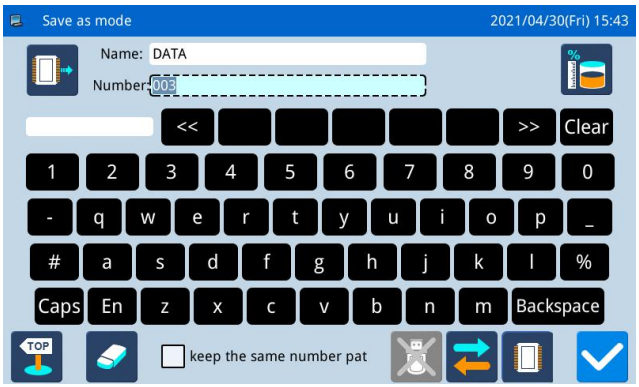


1、Enter the pattern save interface

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

.

[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.



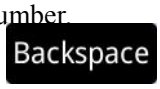
2、Set Name and Number

The default setting in this interface is the Memory Save Mode (you can see  at the upper left of the screen). You can press  to shift to U Disk Save Mode.

Press 

or 

to input the name or number.

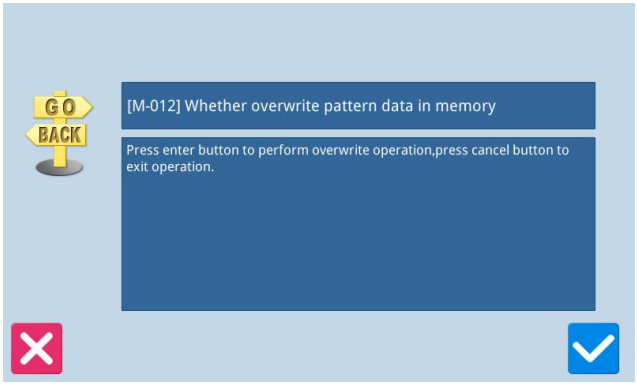
Pressing 

is to delete the first character at the left of the cursor, while pressing  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".

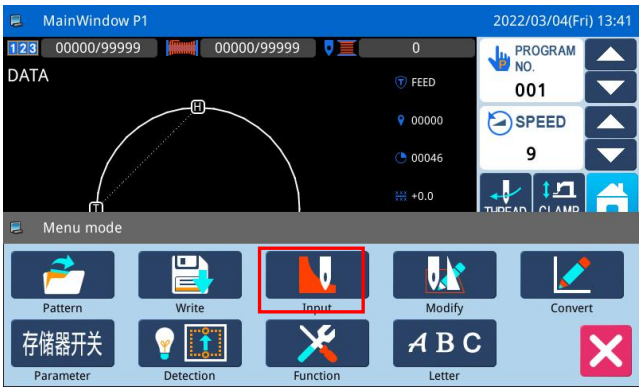


3、Save Pattern

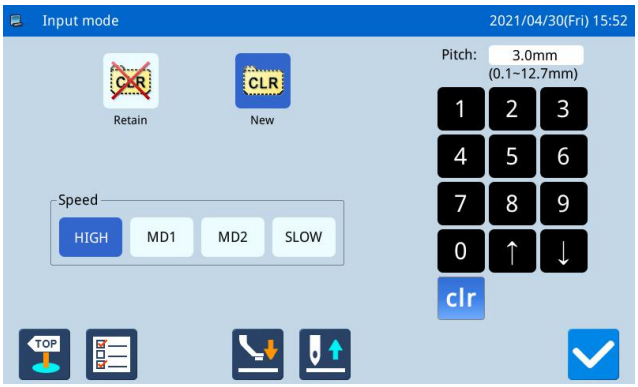
After the input, press  to return to the main interface directly

[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  to cancel the replacement; press  to perform the replacement.

2.7 Figure play version



Under the main interface P1 interface, click the menu key → pattern typesetting key Input to enter the pattern typesetting interface.



（1） Whether to re-enter

If you want to replace the entered data with a new one, press CLR (clear the last copy, reprint).

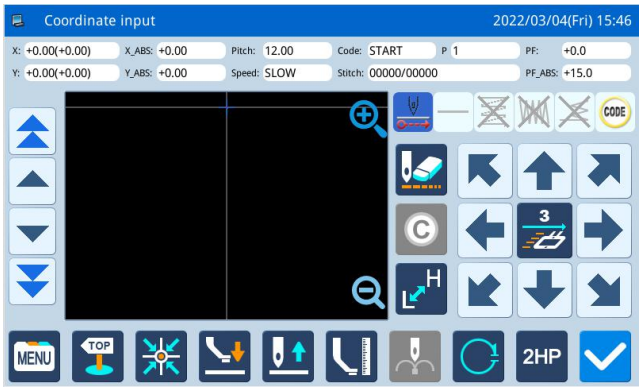
If you want to continue with the data you have entered, press CLR (continue with the last version).

（2） Set Speed

Click four speed buttons in the interface to select different speeds: HIGH MD1 MD2 SLOW

（3） Set the pitch

Through the 0 ~ 9 digital key and ↑ ~ ↓ key, you can enter the pitch, ranging from 0.1 mm to 12.7 mm.



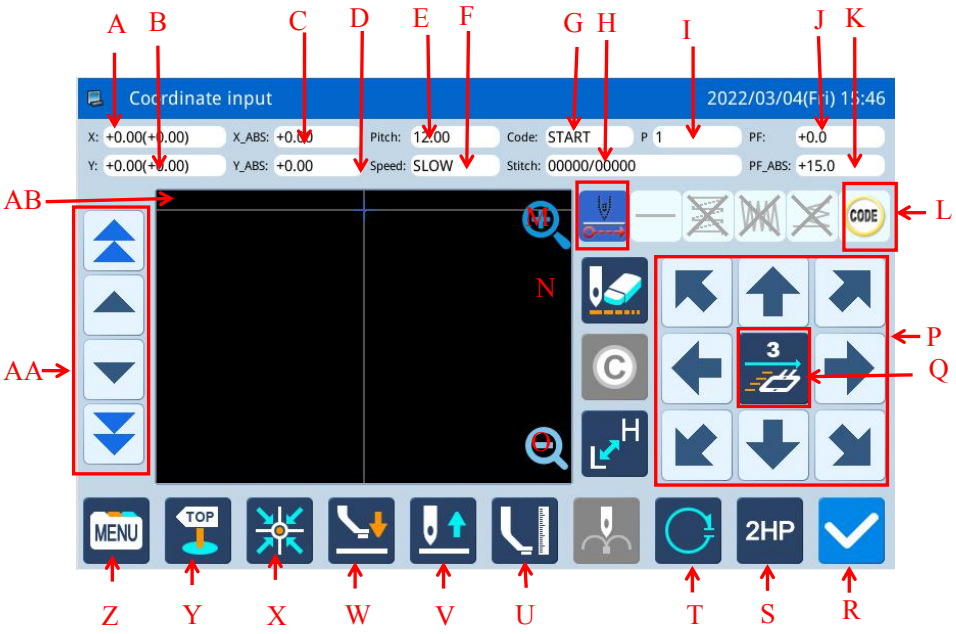
（4） Graphical parameter modification

There are parameter keys in the interface for printing, modifying, and converting, and the related parameters are concentrated to facilitate user settings.

（5） Determine input

After the above data setting is completed, press the key to enter the cursor input interface.

Supplementary Instructions



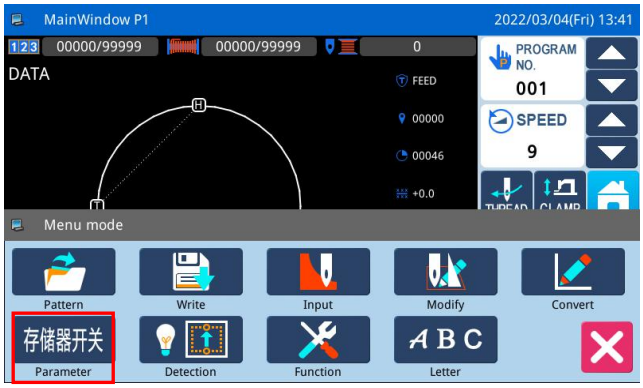
No.	function	content
A	X relative coordinates	Displays the relative coordinate X value of the current move. （In parentheses is the difference between the position of the cross cursor and the pattern）
B	Y relative coordinates	Displays the relative coordinate Y value of the current move. （In parentheses is the difference between the position of the cross cursor and the pattern）
C	X absolute coordinates	Displays the X value of the current coordinates.
D	Y absolute coordinates	Displays the Y value of the current coordinates.
E	Stitch length	Displays the set stitching distance. **[Note] Air feeding needle distance is 12.0mm**
F	Speed	Displays the current needle speed.
G	Code	Displays the current input code.
H	Needle count	Display the number of pins/total number of pins in the current machine needle position.
I	Number of shape points	The number of shapes entered during the current editing process.
J	Relative value of intermediate presser height	Displays the current intermediate presser height relative value
K	Absolute value of intermediate presser height	Displays the current intermediate presser height absolute value
L	Typesetting	Various typing functions.
M	Amplification	The pattern can be enlarged
N	Cancel last input	Press this key to cancel the last determined input point and return to the previous input point.
O	Change sewing machine speed	Press this button to switch sewing machine speed successively: low

No.	function	content
		speed, high speed, medium high speed, medium low speed.
P	Direction key	Move the frame in all directions.
Q	Table move speed set	The range is 1~3
R	Enter	Confirm the current edit shape.
S	Second origin	After the transfer, a second origin can be inserted at the current position.
T	Close	Closing function.
U	Needle position setting key	Raise or lower the needle position
V	Machine needle position setting key	Make the needle position rise or fall
W	Intermediate presser up	Adjust the intermediate presser to rise
X	Return to origin	Press and then execute the return to origin command.
Y	Quit	Return to the previous screen.
Z	Menu	Go into directory mode.
AA	Inching Movement(Click Move button)	 : make inching movement forward/backward on generated pattern.  : make fast inching movement forward/backward on generated pattern.
AB	Pattern screen display	Display the current printing pattern

2.8 Operation Setting

It is to set each parameter. For the description of each parameter, please refer to [2.8.6 Parameter List].

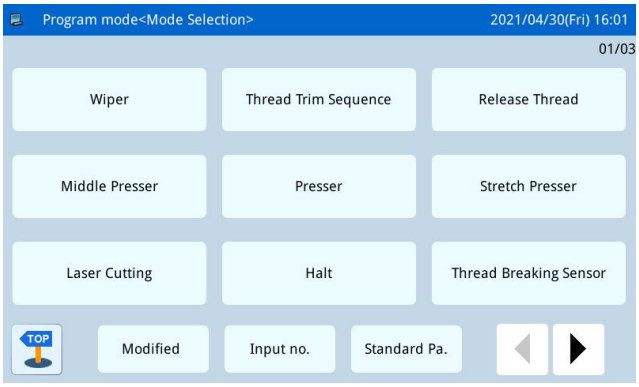
2.8.1 Setting Method



1、Enter Operation Setting:

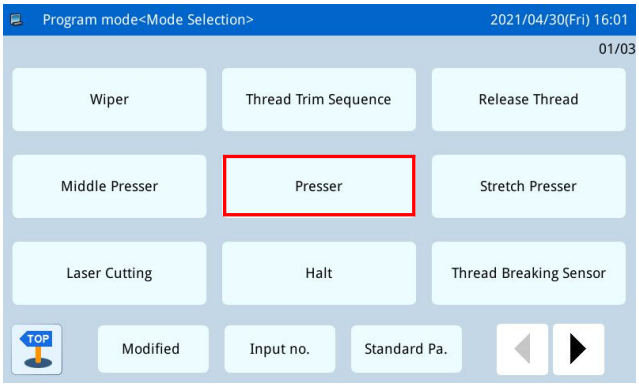
In main interface P1 (or P2), press  to activate the catalogue mode, and then press 

.



2、Interfaces at Setting Mode

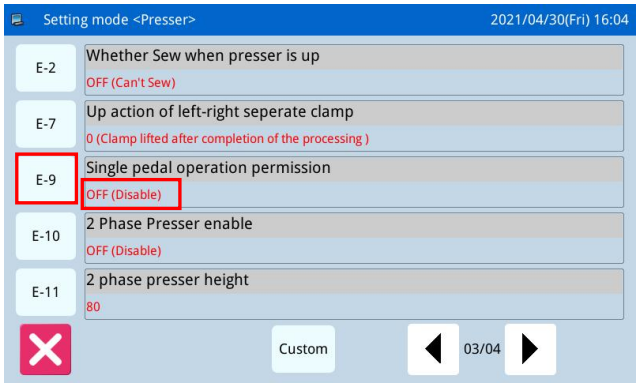
After entering the operation setting interface,There are many parameters can be chose , user can use  to turn the pages for selecting parameters.



3、Example ：

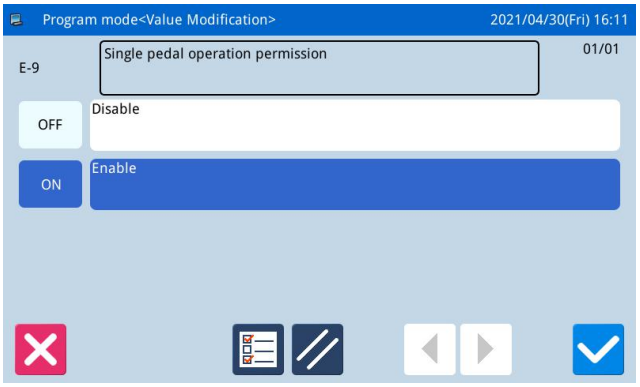
① Mode Selection

Select the parameter for setting to activate the “Internal Parameter Setting Interface”. Here, we press “Presser foot”



② Internal Parameter Setting Interface

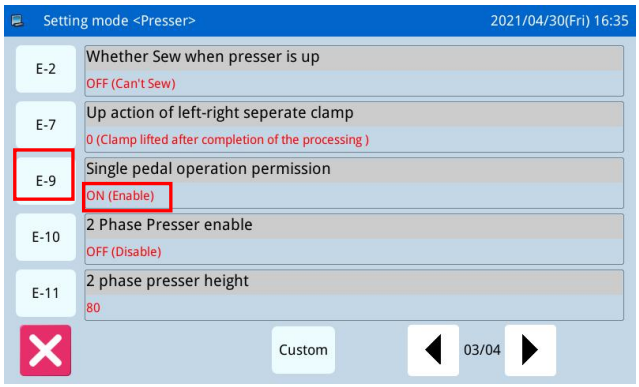
Select the parameter for setting to activate the "interface for changing the set value". (We press "E-9" here.)



③ Change Set Value of Parameter

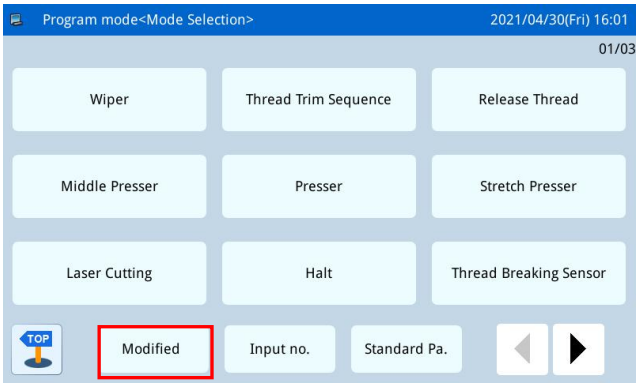
Press parameter to change the set value (here, we press "ON"). Then, press  to confirm it.

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



④ Check the Changed Parameter Set Value

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



⑤ Return to Mode Selection Interface

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

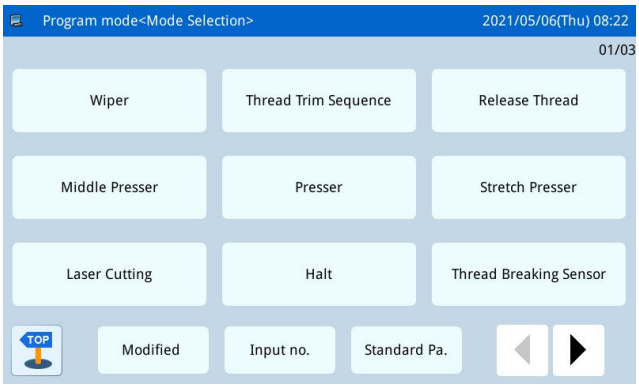
For returning to main interface P1 (or P2), please press  .

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

⑥View the modified parameters

a)Enter password input mode

In the "Mode Selection" screen, press the "Modified Settings" button.,After the password is entered correctly, the modified parameter setting mode will be entered.(See [2.8.3 Parameter Mode Encryption Instructions] for more information on password setting.)



b) Enter Modified Parameter Setting Mode

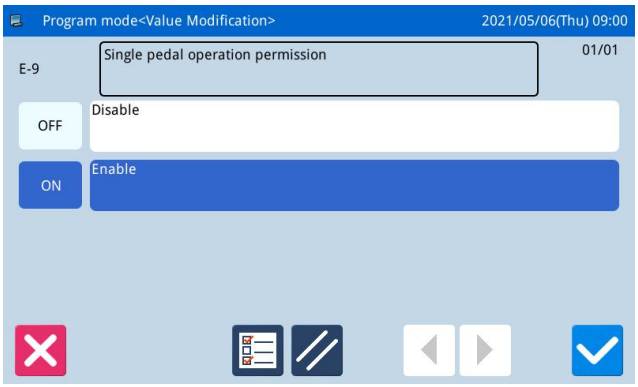
In this interface, the modified content of the parameter will be displayed. User can modify it again in this interface (Here, press “E-9”).

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”) and then click “Restore”. After that user only needs to follow the instruction of the system.

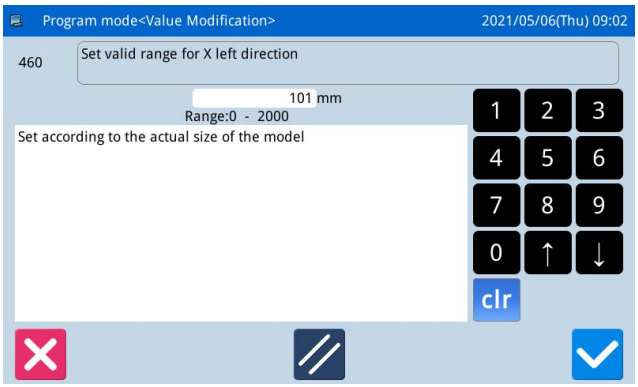
If user wants to restore the entire setting to their default values, he can press “Restore All”. After that user only needs to follow the instruction of the system.

2.8.2 Types of Parameter Setting

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



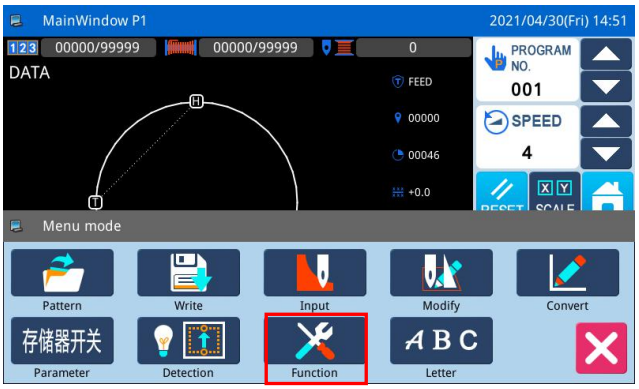
Selection Type

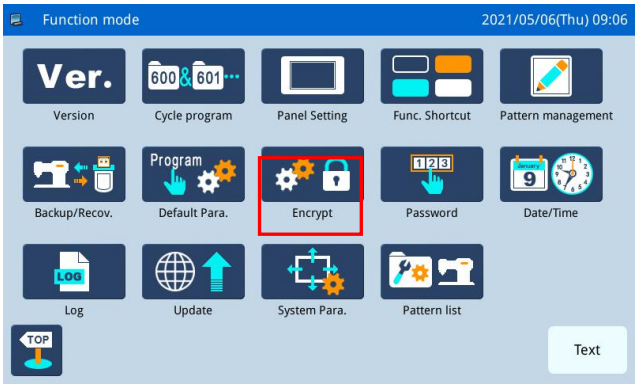


Input Type

2.8.3 Parameter Encryption

In the parameter mode, each operation entrance can be attached a password, so as to avoid the mistake operation.





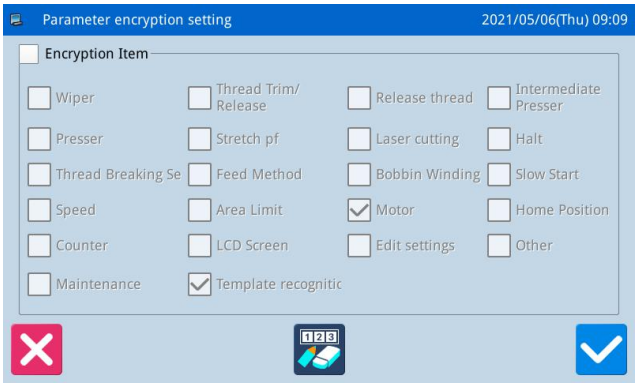
1、Enter Parameter Encryption Interface:

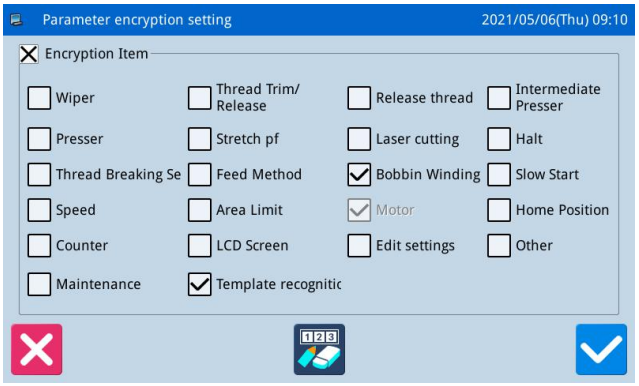
In main interface P1 (or P2), press  to activate the catalogue mode, and then press 

to Enter the interface for setting functions.

In the function setting interface, press 

.





2、Select Parameter for Encryption:

As shown in the picture, user can select one or many parameters for encryption. (Here, we select “Bobbin Winding”.)

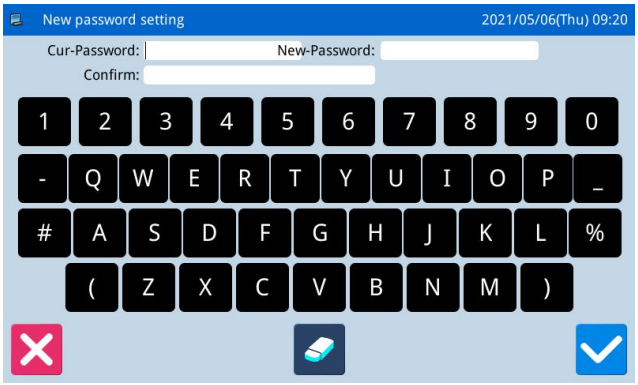
: Selected

: 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 press 
.



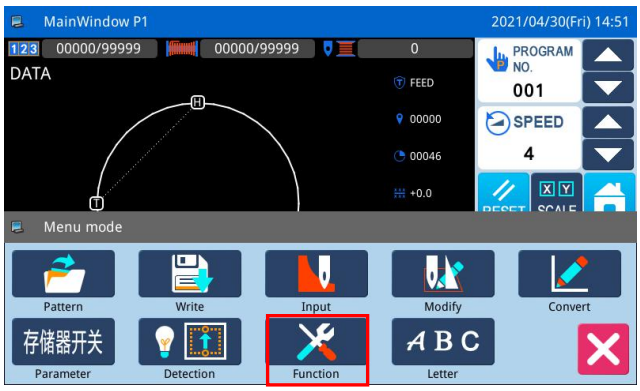
3、Change Password

In the interface of setting new password, press Cur-Password: New-Password: & Confirm: in order and input the current password, new password, new password confirmation respectively. At last press .

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

2.8.4 Recovery and Back-up of Parameters

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

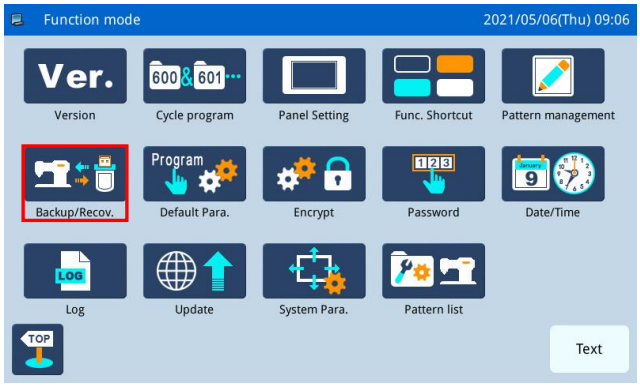


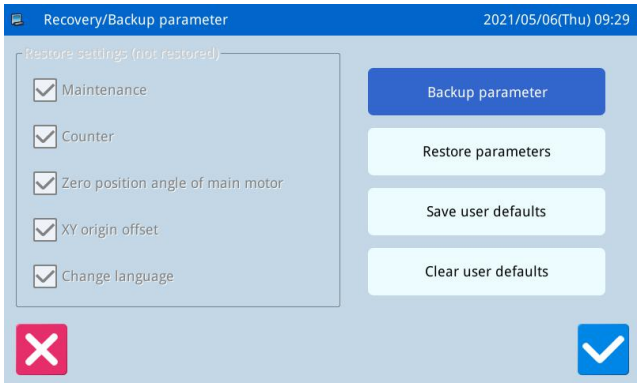
1 、 Enter Interface of Parameter Recovery and Back-up:

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

to Enter the interface for setting functions.

In the function setting interface, press 



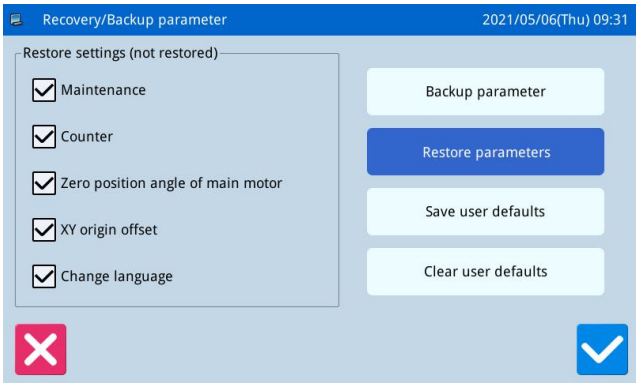


2、Back up Parameters

Enter the restore backup parameters interface. By default, backup user parameters.

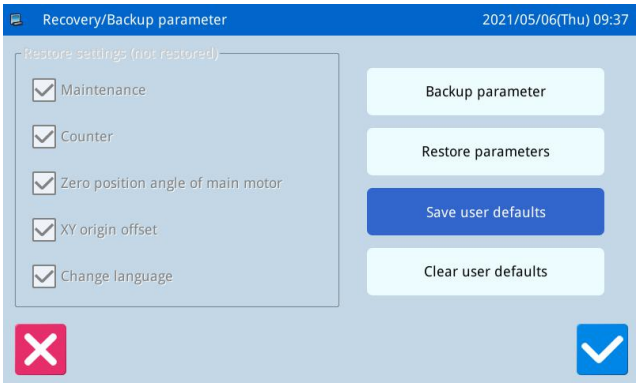
After inserting the usb flash drive, press  . Once the operation is successful, a "bakParam" directory will be automatically created on the usb flash drive. The "backup.param" file in this directory is the parameter backup file.

[Note] if there is a file with the same name, it will be stamped with new data and the original data will disappear.



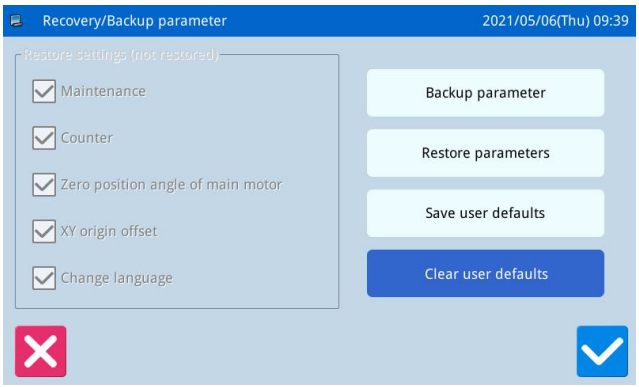
3、Restore parameters

Click the "restore mode" key to select the parameters that are not restored on the left side of the interface, and then press the "ok" key to perform the parameter restore operation, and return to the previous screen after the operation is successful.



4、Save user defaults

Select the "write user default value" key, press the "ok" key, the system will prompt for the input of permission 2 password, after the successful input will directly perform this operation.

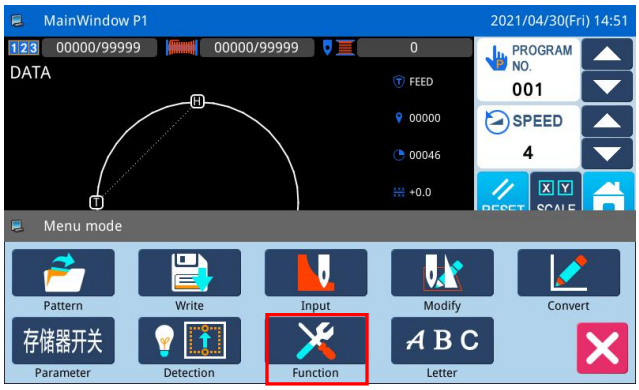


5、Clear user defaults

After successfully writing the user default value, the "clear user default value" key is optional, and the user default value can be cleared by pressing .

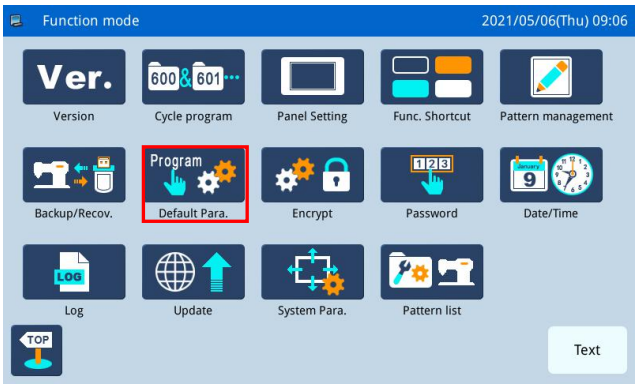
2.8.5 Default Parameter Recovery

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



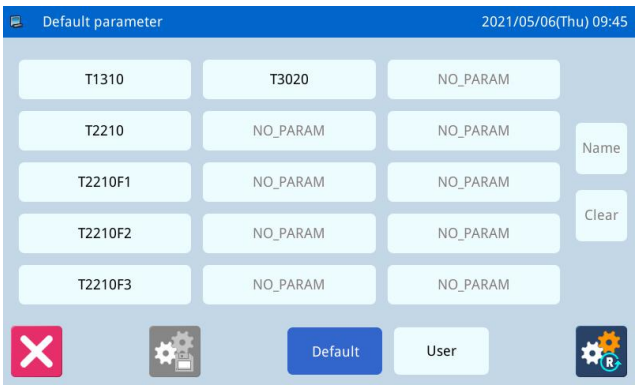
1、Enter Default Parameter Recovery:

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

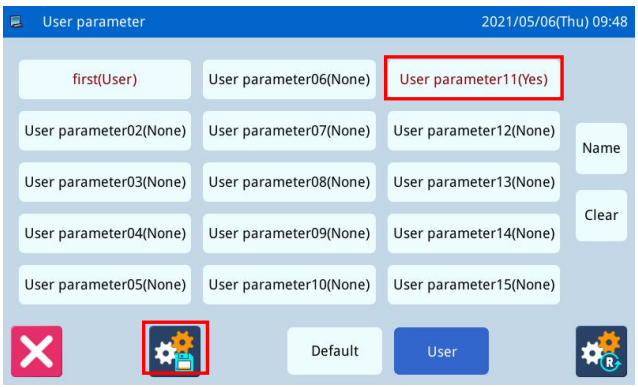


2、Use the Default Parameter

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

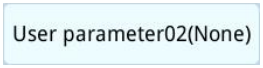
After the reloading, the system will return to the upper interface automatically.

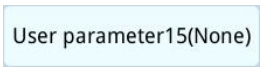
[Note] Some important parameter, like “Spindle Motor Stop Angle” cannot be restored in this operation.



3、Save Customized Parameter

Press “Custom” to enter the interface of Customized parameter setting interface, where user can save the parameter set value.

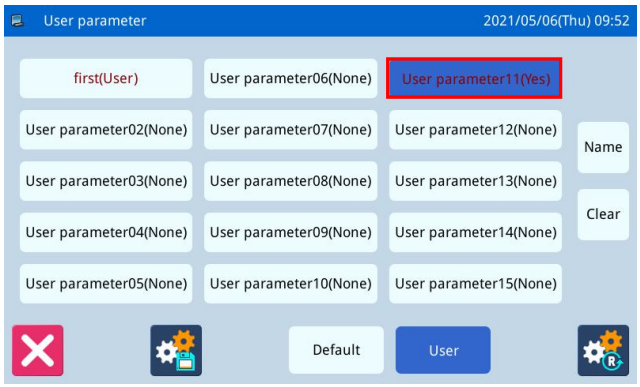
Click 

~ 

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] After saving, it will exit automatically and return to the previous screen.



4、Load Parameter Saved by User

The method to enter the interface is the same as above,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  to reload the corresponding parameter. After the operation, the system will return to the upper interface automatically.

2.8.6 Parameter List

1、Wiper

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
566	Trapper	Switch of needle lifter			OFF:The wiper is off ON:The wiper is on	0	Choose
557	Line dialer type selection	Line dialer type selection			0:Default 1: Use electromagnet wire sweeping device 2: Use pneumatic line sweeping device	0	Choose
A-1	Dial switch	Line puller (W) output switch			OFF:The wiper is off ON:The wiper is on	ON	Choose
A-2	Puller start time	The starting time of the line puller (W) can be set according to the time of line cutting, usually don ‘t need to change.	ms	2	0~998	30	Input
A-3	Line puller hold time	The holding time of the line puller (W) can be set, which can be set according to the time of line cutting.The time can be extended if necessary	ms	2	0~998	30	Input
A-4	The delayer ends the delay	After the line puller action, delay waiting for the reset mechanism	ms	1	0~255	0	Input
A-6	The wire clip holds the current	The wire clip holds the current		1	0~16	8	Input
A-7	Dial the timing	Dial the timing			0:UP:mid-pressor top 1:MID:mid-pressor top(Down position) 2:DOWN:mid-pressor bottorn	0	Choose

2、Thread Trim Sequence

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
150	The inverted needle goes up	Position Angle of needle after cutting thread			0: the needle 1: top dead center	0	Choose
164	Shear line switch	Shear line switch			0:OFF:OFF 1:ON:ON	1	Choose
B-2	Trimming mode	Trimming mode			0:MAG: Solenoid 1:AIR: Air valve 2:MOTOR: Motor	0	Choose

B-3	Shear velocity	Shear velocity	x10RPM	1	10~40	40	Input
B-5	Thread cutting delay	Thread cutting delay	x0.01s	1	0~255	12	Input
B-6	Cutting output startup Angle	Cutting output startup Angle	Degree	2	0~359	210	Input
B-7	Automatically add cutting line when printing	Automatically add cutting line when printing			0:OFF:OFF 1:ON:ON	1	Choose
B-8	Whether to cut the thread before sewing time and space	Whether to cut the thread before sewing time and space			0:OFF:OFF 1:ON:ON	0	Choose
B-9	Whether to cut the thread at the end of sewing	Whether to cut the thread at the end of sewing			OFF:OFF ON:ON	1	Choose
B-10	Correction of parking Angle in upper position after line cutting	Correction of parking Angle in upper position after line cutting	Degree	1	0~100	0	Input

3、Release Thread

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
551	The loose thread setting at the beginning of sewing	Set the number of stitches that the looser will open at the beginning of sewing	stitches	1	0~3	0	Input
552	Loose line synchronization during tangent	Start Angle of loose wire	Degree	2	0~359	300	Input
564	Looser turns on mode	0: Low, open, unlimited 1: in, off, 5 minutes 2: High, off, 1 minute 3: Medium, open, unlimited 4: High, off, 5 minutes 5: Action according to the given value of threading time and threading current		1	0~5	0	Input
567	Whether to open the thread looser after wire cutting by air	Whether to open the thread looser after wire cutting by air			0:OFF:close 1:ON:open	0	Choose

C-1	Type of wire clamper	Type Choose			0:MCN:Mechanical thread nipper 1:ELC:Electrical thread nipper	0	Choose
C-2	Loose wire delay	Loose wire delay			0~255	30	Input
C-4	Thread looser opens delay when threading	Thread looser opens delay when threading			0~255	0	Input
C-5	The wire looser turns on the current when threading	The wire looser turns on the current when threading			0~255	25	Input
C-6	Whether to open loose thread after sewing	Whether to open loose thread after sewing			0:OFF:OFF 1:ON:ON	0	Choose

4、Middle Presser

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
053	Delay time after intermediate presser up	Delay time to prevent colling with mold in movement	ms		0~255	0	Input
054	Intermittent presser foot lowering time	Intermittent presser foot lowering synchronization			0: Before the sewing machine head starts 1: Synchronize with the final presser foot	0	Choose
D-1	Intermittent presser foot type	Selection of intermittent presser foot gas valve, stepping and electromagnet			0:AIR:Air Valve 1:STP:Step motor 2:MAG:Solenoid	1	Choose
D-3	Intermittent presser foot current	Intermittent presser foot current			2~8	4	Input
D-5	Intermittent presser foot stroke setting	Setting of upper and lower values of intermittent presser foot	x0.1mm	2	0~220	150	Input
D-6	Intermittent presser foot lowering delay	Intermittent presser foot lowering delay			0~255	0	Input
D-7	Intermittent presser foot action speed	Intermittent presser foot action speed			8~17	13	Input
D-9	Does the intermittent presser foot follow	Does the intermittent presser foot follow			0:OFF:OFF 1:ON:ON	1	Choose
D-16	Number of stitches reduced by intermittent presser foot	Number of stitches reduced by intermittent presser foot			0~3	0	Input
D-17	Height of intermittent presser foot lowering	Height of intermittent presser foot lowering	x0.1mm		0~30	0	Input

5、Clamp

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
001	Presser foot rising mode after sewing	Presser foot status after sewing			0:After returning to the starting point, the presser foot rises again 1:The presser feet rise immediately after sewing 2:Return to the starting seam first, and then press the foot up after stepping on the pedal	0	choose
002	Left and right separation presser foot descending action (pneumatic)	Separate the presser foot from the left to the right			0: Lower the left and right presser feet simultaneously 1: The presser foot drops left and then right 2: Presser foot first right and then left drop	0	choose
003	Pressure frame drop action (motor)	Motor pressure frame simulates pedal control mode			0: Simulated descent: Decide the descent amount according to the step amount of the pedal, and finally start 1:1 stage drop: the pressure foot drops in the first gear, and starts in the second gear 2 Stage 2 descent: stop in the middle of gear 1, start after gear 2 descent	2	choose
050	Presser foot working mode	0: Standard double pedal, pressing foot pedal controls the big pressing foot, starting pedal starts the sewing 1: Standard double pedal, pressure foot pedal interval control large pressure foot and auxiliary pressure foot lifting, start the pedal to start the sewing 2: Standard double pedal, press foot pedal spacing left and right press foot, start the pedal to start sewing 3: Standard three			0~10	0	input

		pedals, pressing foot pedal to control the big pressing foot, the middle pedal to control the auxiliary pressing foot, the starting pedal to start the sewing 4: Left and right presser feet -> intermittent presser feet of 2 sections. Single pedal gear 1 is left and right presser foot, gear 2 is intermittent presser foot, gear 3 controls start. The middle pedal controls the lifting of intermittent presser foot 5: 2 sections of presser foot alternately left and right. The pressing foot pedal controls the left and right order of the two pressing feet to be exchanged each time sewing 6: Forward/Back Pedal. The press foot pedal controls the left and right press feet to lift up in turn, and the starting pedal controls the left and right press feet to fall down in order, and then presses on to start sewing after all falls down 7: Step twice on the 2 stage presser foot. Single pedal control motor presser foot in the middle position, down, start three					

		position switch, when the presser foot back up. Double pedal pneumatic presser action is the same as mode 2 8: Standard three pedal, press foot pedal control motor press foot to the height of the second stage, the middle pedal control motor press foot to drop to the position, start the pedal to start the seam 9: Three pedals with origin detection. Special origin detection for the middle pedal, pressing foot pedal to control the lifting of the left and right pressing foot, starting pedal can only start sewing 10: Special three pedals with origin detection. Special origin detection of the middle pedal, press foot pedal to control the left and right press foot rise and fall, press the starting pedal automatically down the right press foot and then start					
051	Pressing plate action before origin detection	Check whether the pressure plate before the origin is allowed to move			0: Before the origin detection, the up and down movement of the presser foot cannot be carried out 1: Before the origin detection, the up and down movement of the presser foot can be carried out	0	choose

052	Presser foot action during seam breaking procedure	Pressing plate state when stop midway			0: Press down the plate 1: the pressure plate is lifted	0	choose
055	Pneumatic pressure frame output polarity reversal	Pneumatic pressure frame output polarity reversal			0: invalid 1: Pneumatic specifications for valve output reversal 2: Because the two positioning valves correspond to each other, the output reverses the valve output at the same time	0	choose
058	The foot pressing movement at the end of sewing	After the completion of automatic processing, the press plate is lifted			0: The press plate will automatically lift after sewing 1: The press plate does not lift after sewing	0	choose
059	Pressing frame weight selection	Pressing frame weight selection			-1:light 1:Standard 0: heavy	-1	choose
E-1	Press type selection	Press type selection			0:AIR:pneumatic 1:MAG:electromagnet 2:MOTOR:motor	0	choose
E-2	Can we sew when the press is up	Can we sew when the press is up			0:OFF:Can't sew 1:ON:Can sew	0	choose
E-7	Left and right separation pressure plate lifting action	Left and right separation pressure plate lifting action			0:LRT:The press plate is lifted after processing 1:LTD:After finishing the machining, the left press plate is pressed down continuously 2:RTD:After finishing the machining, the right press plate is continuously pressed down	0	choose
E-9	Single foot pedal operation is allowed	Single foot pedal operation is allowed			0:OFF:Prohibit 1:ON:Permit	0	choose
E-10	Two stage press enabler	Two stage press enabler			0:OFF:Prohibit 1:ON:Permit	0	choose
E-11	Height of two stage press plate	Height of two stage press plate			0~255	80	Input
E-12	Press plate stroke setting	Press plate stroke setting			0~200	180	Input

E-13	Pressure plate current setting	Pressure plate current setting			0~15	2	Input
E-14	Delay start setting after pedaling	Delay start setting after pedaling			0:OFF:Prohibit 1:ON:Permit	0	choose
E-15	Start delay after pedaling	Start delay after pedaling			0~200	20	Input
E-16	Whether the external pressure frame is raised at the secondary origin	Whether the external pressure frame is raised at the secondary origin			0:DOWN:Don't lift pressure box 1:UP:Lift pressure box	0	choose

6、Stretch Presser

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
556	Turnover device	Support for turning and stretching the foot 0 - no 1- flip foot (F1 foot) 2- telescopic pressure foot (parking) 3 - F2 presser foot 4 - K presser foot 5- telescopic foot (no stopping)			0~255	0	Input
F-2	Telescopic foot action when returning to the origin	Telescopic foot action when returning to the origin			0:OFF:No action 1:MRH:Move out first and return to the origin 2:HRM:Return to the origin first and then move out	1	Choose
F-3	Extension delay of telescopic press foot	Extension delay of telescopic press foot	x0.01s	1	0~255	30	Input
F-4	Expansion foot rise delay	Expansion foot rise delay	x0.01s	1	0~255	45	Input

F-5	Telescopic foot drop delay	Telescopic foot drop delay	x0.01s	1	0~255	30	Input

7、Laser Cutting

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
G-1	Laser cutting switch	Laser cutting switch			0:OFF:OFF 1:ON:ON	0	Choose
G-2	Laser cut X offset	Laser cut X offset	x0.1mm		-5000~5000	0	Input
G-3	Laser cut Y offset	Laser cut Y offset	x0.1mm		-2000~2000	0	Input
G-4	Laser cutting speed	Laser cutting speed			1~9	1	Input
G-5	Laser suction switch	Laser suction switch			0:OFF:OFF 1:ON:ON	OFF	Choose
G-6	Laser suction opens the delay	Laser suction opens the delay			0~65535	100	Input
G-7	Laser suction closes the delay	Laser suction closes the delay			0~65535	100	Input
G-8	Delay before laser start	Delay before laser start			0~65535	100	Input
G-9	Delay after the laser head drops	Delay after the laser head drops			0~65535	100	Input
G-10	Delay after lifting the laser head	Delay after lifting the laser head			0~65535	0	Input
G-11	Inflection point deceleration mode	Inflection point deceleration mode			0: OFF: don't start 1:L-ON: laser phase only 2: S-ON starts only at the seam section 3: All laser section and seam section are activated	0	Choose

8、Halt

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
651	According to the stop switch to determine the sewing stop position	Pause timing pin position			0: Positioning of the down needle 1: Positioning of the up needle	1	Choose
652	The tangential action of a	Automatic trimming during			0: Automatic thread	1	Choose

	pause	pause			cutting 1: Don't cut line		
656	Reset mode during pause	Reset mode during pause			0: Moving to start point of sewing after reset 1: Do not return to the origin, and move backward on the sewing track to the starting point of sewing	0	Choose
H-2	Press action during pause	Press action during pause			0: DWN:Clamp down 1: UP:Clamp up	0	Choose
H-3	Pause switch type	Pause switch type			0: often shut 1: often open	0	Choose
H-5	Safety switch type	Safety switch type			0: often shut 1: often open	0	Choose

9、Thread Breaking Sensor

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
554	Break line detection	Break line detection			0: OFF:Thread Breaking detection off 1:ON:Thread Breaking detection on	0	Choose
555	Detection sensitivity of broken wire detection device	The number of invalid stitches at the beginning of stitching during thread break testing			0~15	8	Input
I-3	The number of invalid stitches during sewing during the detection of broken thread	The number of invalid stitches during sewing during the detection of broken thread	stitches		0~15	3	Input
I-4	Whether to cut the wire when testing broken wire	Whether to cut the wire when testing broken wire			0:ON:Perform thread trimming when thread breaking 1: OFF:Don't perform thread trimming when thread breaking	0	Choose
I-5	Sensitivity of wire break sensor	Sensitivity of wire break sensor			1~10	4	Input

10、Feed Method

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
200	1 needle test feed cloth	1 needle to detect the feeding mode			0: Push down the foot switch to automatically run to the last stitch	0	Choose

					1: Step down the foot switch and move forward needle by needle. After feeding the cloth, feed the cloth needle by needle by turning the hand wheel		
252	High speed test feeding cloth	High speed test feeding cloth			0: Usually slow step foot switch gear 1 for high speed cloth feeding 1: Test the speed of cloth feeding and sewing	0	Choose
260	Change all feeding synchronizations	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	-3	Input
261	Change sewing to start the first stitch feeding synchronize	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	-3	Input
262	Change sewing to start the 2nd stitch feeding synchronize	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	-3	Input
263	Change sewing to start the 3rd stitch feeding synchronize	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	0	Input
264	Change the feeding synchronization of 3 stitches before the end of sewing	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	-1	Input
265	Change the feeding synchronization of 2 stitches before the end of sewing	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to 8 degrees			-10~10	1	Input
266	Change the feeding synchronization of 1 stitch before sewing	0:-10: in advance 1:0:norm 2:10: delay Each digit corresponds to			-10~10	0	Input

		8 degrees					
267	The number of effective stitches in synchronous feeding	When the total feed synchronization changes from the initial value (set to No.260), specify the number of effective stitches: 0: Unlimited 1~99: If more than the number of stitches specified at the beginning of sewing, return to the standard feeding synchronization			0~99	0	Input
268	Change the base of feeding synchronization	Change the base of feeding synchronization			0: starting datum of cloth feeding 1: needle benchmark 2: the end of cloth feeding benchmark 3: speed linkage	0	Choose
J-1	Sewing type Choose	Sewing type Choose			0:Tin 1:Middle 2:Thick	0	Choose
J-2	Thin material thickness	Thin material thickness			0~255	0	Input
J-3	Medium material thickness	Medium material thickness			0~255	15	Input
J-4	Thick material thickness	Thick material thickness			0~255	30	Input
J-5	Fitting way	Fitting way			0:Stop the lift 1:Pick up and continue to move	0	Choose
J-10	Fast moving mode (type)	The mode of moving two points in printing and graphics modification			0: LINE:Linear movement 1:PAT:Follow the needle	1	Choose
J-15	Moving frame gain curve	Moving frame gain curve			1~3	1	Input
J-16	X axis rigidity fine tuning	X axis rigidity fine tuning			-15~ 15	0	Input
J-17	X axis speed adjustment	X axis speed adjustment			-50~ 50	0	Input
J-18	Y axis rigidity fine tuning	Y axis rigidity fine tuning			-15~ 15	0	Input
J-19	Y axis speed adjustment	Y axis speed adjustment			-50~ 50	0	Input

11、Bobbin Winding

No.	Brief description	Detailed instructions	Unit	Step	Range	Factory	Type

				length		value	
056	Whether winding is allowed before origin detection	Whether winding is allowed before origin detection			0:OFF:Can't winding 1:ON:Can be winding	0	Choose
K-1	Winding speed setting	Winding speed setting	x100RPM		2~27	13	Input
K-2	Setting the stop mode of winder	Setting the stop mode of winder			0:Stop winding when pedal up 1:Stop winding when stepping on pedal again 2:Time to stop winding	1	Choose
K-3	Fixed stop winding time setting (unit second)	Fixed stop winding time setting (unit second)	s	2	2~498	30	Input

12、Slow Start

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
100	Sewing start speed	Whether to slow up the needle			0:low speed 1: high speed	0	Choose
151	Fast first stitch start speed	Fast first stitch start speed	x100RPM		2~30	10	Input
152	Fast second stitch start speed	Fast second stitch start speed	x100RPM		2~30	15	Input
153	Fast third stitch start speed	Fast third stitch start speed	x100RPM		2~30	22	Input
154	Fast fourth stitch start speed	Fast fourth stitch start speed	x100RPM		2~30	30	Input
155	Fast fifth stitch start speed	Fast fifth stitch start speed	x100RPM		2~30	30	Input
156	Speed of 5 stitches before sewing	Speed of 5 stitches before sewing	x100RPM		4~27	25	Input
157	Speed of 4 stitches before sewing	Speed of 5 stitches before sewing	x100RPM		4~27	26	Input
158	Speed of 3 stitches before sewing	Speed of 3 stitches before sewing	x100RPM		4~27	12	Input
159	Speed of 2 stitches before sewing	Speed of 2 stitches before sewing	x100RPM		4~27	12	Input
L-1	First start speed	First start speed	x100RPM	1	2~30	3	Input
L-2	Second start speed	Second start speed	x100RPM	1	2~30	7	Input
L-3	Third starting speed	Third starting speed	x100RPM	1	2~30	10	Input
L-4	Fourth starting speed	Fourth starting speed	x100RPM	1	2~30	15	Input
L-5	Fifth start speed	Fifth start speed	x100RPM	1	2~30	20	Input

L-6	The method of seam reinforcement	The method of seam reinforcement			0:None 1:Condensed sewing at the first stitch 2:Backtack at begining several stitches	0	Choose
L-7	Number of reinforcement stitches	Number of reinforcement stitches		1	-4~4	0	Input
L-8	End reinforcement method	End reinforcement method			0:None 1:Condensed sewing at the first stitch 2:Backtack at begining several stitches	0	Choose
L-9	End reinforcement needle count	End reinforcement needle count			0~4	0	Input

13、Speed

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
251	Feed speed	The higher the value, the faster the airspeed	file		0~9	7	Input
M-1	High speed setting	High speed setting	x100RPM		2~30	23	Input
M-2	Low speed setting	Low speed setting	x100RPM		2~30	2	Input
M-3	Medium high speed setting	Medium high speed setting	x100RPM		2~30	15	Input
M-4	Medium-low speed setting	Medium-low speed setting	x100RPM		2~30	10	Input
M-5	Transfer delay setting	Transfer delay setting			0~255	0	Input
M-6	Version delay setting	Version delay setting			0~9	4	Input
M-11	Back stitch speed setting	Back stitch speed setting			0~9	7	Input
M-12	Find the interval at the origin	Find the origin time interval (the larger the value, the longer the time)			5~10	7	Input
M-13	Single step speed setting	Single step speed setting			0~40	30	Input
M-14	Sewing speed ratio	Sewing speed ratio	%	5	70~100	100	Input

14、Area Limit

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
460	Set the effective range to the left of X	Set the effective range to the left of X	mm		0~2000	500	Input
460-R	Set the effective range to the right of X	Set the effective range to the right of X	mm		0~2000	500	Input

461	Set the effective range in the Y up direction	Set the effective range in the Y up direction	mm		0~2000	3	Input
461-D	Set the effective range in the direction below Y	Set the effective range in the direction below Y	mm		0~2000	200	Input
N-1	Cancel range protection	Cancel range protection			0:OFF:Range protection off 1:ON:Range protection on	1	Choose
N-6	It's forbidden to move in the X direction	It's forbidden to move in the X direction			0:OFF:OFF 1:ON:ON	0	Choose

15、Motor

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
161	Penetrating force enhancement action	Penetrating force enhancement action			0:OFF:Invalid 1:ON:When the motor of the sewing machine is locked, the penetration enhancement action is carried out	0	Choose
165	Reverse the Angle at which the needle rises	Angle setting of upper dead center	Degree		0~50	3	Input
P-1	X motor steering	X motor steering			0:Positive 1:Negative	1	Choose
P-2	Y motor steering	Y motor steering			0:Positive 1:Negative	1	Choose
P-3	Z motor steering	Z motor steering			0:Positive 1:Negative	0	Choose
P-4	The X sensor is on the left or right side of the nose	The X sensor is on the left or right side of the nose			0:L:Left side 1:R:Right side	0	Choose
P-5	Is the Y sensor on the front or rear of the nose	Is the Y sensor on the front or rear of the nose			0:F:Front 1:B:Back	1	Choose
P-6	Spindle type Choose	Support for 550W and 750W types			0:550:550W 1:D00:750W-D00/F11 2:F00:750W-F00	1	Choose
P-7	Spindle motor stop Angle	Spindle motor stop Angle	Degree		30~63	59	Input
P-8	Upper dead point Angle setting	Set the Angle of parking to the top dead center	Degree		0~50	3	Input
P-9	P2 frame shift direction	P2 frame shift direction			0:Same	0	Choose

	setting	setting			1:Reverse		

16、Home Position

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
057	The presser foot action when the starting point of sewing moves after the origin detection	Origin foot action			0: Press down the presser foot after returning to the origin 1: After returning to the origin, the presser foot is lifted	1	Choose
250	Mechanical origin reset at the end of sewing	Whether to retrieve the origin after sewing			0: No origin search, stop in situ 1: Origin (sub-origin) retrieval 2: Back up seam point 3: Go straight back to the origin	1	Choose
254	The route of movement towards the origin position and the starting point of sewing	Normal origin retrieval/origin reset circuit selection			0: standard 1: reverse 2:Y axis to X axis 3:X axis to Y axis 4: x, y axis synchronous	0	Choose
270	Origin action when pattern switching	Origin action when pattern switching			0: No origin retrieval action 1: The origin retrieval action is not carried out, but it passes through the regional center 2: Perform the origin retrieval action	0	Choose
450	The starting point movement mode when the pattern is switched	The origin action when switching patterns			0: Step on the pedal to start, and then move to the new pattern starting point 1: While switching patterns, move to the starting point of the new pattern	0	Choose
Q-1	It goes back to the origin	It goes back to the origin			0:OFF:Don't return to home position 1:ON:Return to home position	0	Choose
Q-2	Lifting back to the origin is prohibited	Lifting back to the origin is prohibited			0:OFF:Permit returning to home position 1:ON:Forbid returning to home position	0	Choose

Q-4	Set the reset path of the starting point	Set the reset path of the starting point			0: the line returns to the starting seam 1: return the starting point by pattern 2: search at the origin and then at the seam	0	Choose
Q-5	Whether to Choose the dead point when the origin is retrieved	Whether to Choose the dead point when the origin is retrieved			0:OFF:do not Choose the dead point when retrieving the origin 1:ON: Choose upper dead point when retrieving the origin	0	Choose
Q-8	Reverse origin retrieval/origin reset line Choose	Reverse origin retrieval/origin reset line Choose			0:Standard 1:Reverse 2:Y-Axis to X-Axis 3:X-Axis to Y-Axis 4:Synchronize X and Y axis	0	Choose

17、Counter

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
R-1	Counter mode	Counter mode			0:Up counter is not executed 1:Up counter increases every 1 sewing pattern is executed 2:Up counter increases every 1 combined data cycle is executed	1	Choose
R-2	Decrement counter mode	Decrement counter mode			0:Up counter is not executed 1:Up counter increases every 1 sewing pattern is executed 2:Up counter increases every 1 combined data cycle is executed	1	Choose
R-3	Whether the increment counter value is retained when importing the pattern	Whether the increment counter value is retained when importing the pattern			0:Clear 1:Reserve	1	Choose
R-4	Whether the decrement counter value is retained when importing the pattern	Whether the decrement counter value is retained when importing the pattern			0:Clear 1:Reserve	1	Choose
R-5	Remove calculator when power is restarted	Remove calculator when power is restarted			0:Clear 1:Reserve	1	Choose
R-6	The UP is not allowed to be modified	The UP is not allowed to be modified			0:OFF:The current value of the UP counter can be modified 1:ON:The current value of the UP counter can't be modified	0	Choose
R-7	The subtracter (DN) is	The subtracter (DN) is			0:OFF:The current value of the	0	Choose

	not allowed to be modified	not allowed to be modified			UP counter can be modified 1:TON:he current value of the UP counter can't be modified		
R-8	Operation of the sewing machine when the UP set point is reached	Operation of the sewing machine when the UP set point is reached			0: OFF:Stop sewing 1: ON:Sewing operation can be continued	0	Choose
R-9	Operation of the sewing machine when the subtracter (DN) setting value is reached	Operation of the sewing machine when the subtracter (DN) setting value is reached			0: OFF:Stop sewing 1: ON:Sewing operation can be continued	0	Choose
R-11	Counter shuttle change	Counter shuttle change			0: OFF:OFF 1: ON:ON	0	Choose

18、LCD Screen

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
401	Loop program setup	After opening, the "Program" button on the main interface P1 is changed to the function of cyclic PROGRAM editing			0: OFF:OFF 1: ON:ON	0	Choose
S-1	Buzzer sound setting	Buzzer sound setting			0: 0:Mute 1:1: Panel voice 2:2:Panel voice+alarm	2	Choose
S-3	Backlight auto off switch	Backlight auto OFF switch, OFF: not auto OFF, ON: auto OFF			0: OFF:Disable auto off 1: ON:Enable auto off	0	Choose
S-4	Backlight automatically turns off wait time	Backlight automatically turns off wait time	Minute		1~9	3	Input
S-5	Main interface pattern display Settings	Set main screen pattern to display background color 0: black 1: cyan 2: red 3: green 4: blue 5: purple 6: yellow			0~6	0	Input
S-7	Main interface button display style	Set the key display style under the main interface			0: ICN:Icon: 1: TXT:Text	0	Choose
S-8	Key display style	Set the display style of the key in detection mode and function mode			0: ICN:Icon: 1: TXT:Text	0	Choose
S-9	Modify and change the key display style	Modify and change the key display style			0: ICN:Icon: 1: TXT:Text	1	Choose

S-11	Large needle count pattern support	Large needle count pattern support			0：OFF:OFF 1：ON:ON	0	Choose
S-12	Vector graphics conversion stitch Settings	Vector graphics conversion stitch Settings	x0.1mm		10~127	30	Input
S-13	Description of sewing progress	Description of sewing progress			0：OFF:OFF 1：ON:ON	1	Choose
S-14	Switch lock display Settings	Work with template recognition			0：OFF:OFF 1：ON:ON	1	Choose
S-16	Main interface P1 display style	Main interface P1 display style			0:S1:style1 1:S2:style2	1	Choose
S-18	Pattern number shortcut key selection method	Pattern number shortcut key selection method			0: The position remains the same 1: It will automatically become the first one after selection 2: Arrange by size	0	Choose
S-19	Pattern number shortcut key display mode	Pattern number shortcut key display mode			0:Recent use of patterns	0	Choose
S-20	Pattern number shortcut key display mode	Pattern number shortcut key display mode			0~7	0	Input
S-21	Pattern number shortcut key display mode	Pattern number shortcut key display mode			0~2	0	Input
S-22	Main interface P1 function area location	Main interface P1 function area location			0:L:Left side 1:R:Right side	1	Choose
S-23	P1 addition and subtraction setting key on the main interface	P1 addition and subtraction setting key on the main interface			0: All:Both pattern number and speed key support setting 1:SPD：Speed setting 2:PAT:Pattern number setting	0	Choose
S-24	Key style of main interface	Key style of main interface			0:Dark 1:Light	0	Choose

19、Editting Settings

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
T-1	Operating style	Operating style			0：S1:Style 1 1：S2:Style 2	1	Choose
T-2	Multiple seam down algorithm	Multiple seam down algorithm			0:0:According to segment 1:1:Only start and end	1	Choose

T-3	Whether the first null is automatically added after the secondary origin	Whether the first null is automatically added after the secondary origin			0:OFF:OFF 1:ON-S:ON(Switch sewing) 2:ON-F:ON(Continue feed)	0	Choose
T-4	Curve corner shortcut	Curve corner shortcut			0:OFF:OFF 1:ON:ON	1	Choose
T-5	Make a version of the air after the return of the sewing style	Set up a version of the return to sewing style after empty send			0:0:Keep shape 1:1:Line	0	Choose
T-6	Stitch reduction after printing	Stitch reduction after printing			0：OFF:No 1：ON:Yes	0	Choose
T-8	Amplification method	Pattern printing version amplification method			0:0:Square 1:1:Length and width	1	Choose
T-9	Whether to show drop point	Whether to show drop point			0:0:No 1:1:Yes	1	Choose
T-10	Choose method of pattern transformation	Multiple seam, offset seam, inverted seam, zigzag seam, fore-and-aft exchange, etc			0:0:Stitch 1:1:Element	0	Choose
T-11	The zoom unit	The zoom unit			0:0:Percent 1:1:Size	0	Choose
T-12	Multiple seam scaling	Multiple seam scaling			0:0:Variable 1:1:Fixed	1	Choose
T-13	Size calculation under the zoom function	Size calculation under the zoom function			0:0:From home 1:1:From start sew point	0	Choose
T-14	Return mode after modification	Return mode after modification (dot and function code)			0:0:Function selection 1:1:Continue to modify	0	Choose
T-15	Multiple seam, offset seam, segment insertion modification	Multiple seam, offset seam, segment insertion modification (conversion affects the position of the following elements)			0:0:Relative 1:1:Absolute	0	Choose
T-16	The center of the graph is set to retain the initial null feed	Center Settings for pattern scaling and rotation			0:0:Reserve 1:1:Remove	1	Choose
T-17	Rotation function next time whether the origin rotation	Rotation function next time whether the origin rotation			0:0:No 1:1:Yes	0	Choose
T-18	Parallel curve algorithm	Parallel curve algorithm			0:A1:Algorithm-1 1:A2:Algorithm-2 2:A3:Algorithm-3	2	Choose

T-19	Form the standard of Angle	Angle standard: no Angle, 180: full Angle	Degree		0~180	90	Input
T-20	Empty feed spacing setting	Empty feed spacing setting	x0.1mm		10~120	120	Input
T-21	Whether to increase the inflection point deceleration after the version	Whether to increase the inflection point deceleration after the version			0:OFF:No 1:ON:Yes	0	Choose
T-22	Displays the range of shape points	Displays the range of shape points			0:OFF:OFF 1:ON:ON	0	Choose
T-23	Make a version of the shape outline display	Make a version of the shape outline display			0:OFF:OFF 1:ON:ON	1	Choose
T-24	Version following action Settings	Version following action Settings			0:OFF:Disable 1:ON:Enable	0	Choose
T-25	Small stitching shape fusion	For straight lines only, shape points within 1mm will fuse the previous element			0:OFF:OFF 1:ON:ON	0	Choose
T-26	Automatically enlarge according to the size of the pattern outline	Automatically enlarge according to the size of the pattern outline			0:OFF:OFF 1:ON:ON	0	Choose
T-27	Pause code to expand valve function	Pause code to expand valve function			0:OFF:OFF 1:ON:ON	0	Choose
T-28	Medium presser foot height modification method	Medium presser foot height modification method			0:0: Choose a shot 1:1: Select a paragraph	0	Choose
T-29	Segment movement mode	Segment movement mode			0:0:Simple 1:1: complex	0	Choose
T-30	Point move selection mode	Point move selection mode			0:0: Radio (absolute and relative mode modifications) 1:1: alternative	0	Choose
T-31	Point movement and segment movement change trajectories	Point movement and segment movement change trajectories			0:0: close 1:1:open	1	Choose
T-32	Empty delivery and consolidation after point movement	Empty delivery and consolidation after point movement			0:NO 1:YES	0	Choose

20、Other

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type

550	Machine needle cooling device	Needle cooling with or without			0:OFF:without 1:ON:have	0	Choose
U-1	Language selection	Language selection			0:CH:中文 1:EN:English 2:Bur:Burmese 3:KR:한국어 4:TK:Turkish 5:JP:日本語 6:VI:Vietnamese 7:ITA:Italiano 8:PT:Portuguese 9:ES:Español	0	Choose
U-2	Voice setting	Voice function setting			0:OFF 1:ON	1	Choose
U-3	Key voice volume	Key voice volume			0~31	25	Input
U-7	The brightness of LED lights	The brightness of LED lights			0~100	50	Input
U-8	Used for automatic feeding machine	Used for automatic feeding machine			0~10	0	Input
U-9	Whether to automatically close the jump interface	After confirming the number of jump pins, whether to automatically close the jump interface			0:OFF:No 1:ON:Yes	0	Choose
U-10	Boot whether to enter the language selection	Boot whether to enter the language selection			0:OFF:No 1:ON:Yes	0	Choose
U-12	DXF file conversion method	DXF file conversion method			0:0:Simple 1:1: complex	0	Choose
U-13	Exporting other formats	Exporting other formats			0:0: close 1:1:open	0	Choose

21、Maintenance

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
V-1	Change the needle residual value	Change the needle residual value	x1000Sth		0~9999	0	Input

V-2	Change needle setting value	Change needle setting value	x1000Sth		0~9999	0	Input
V-3	Cleaning time residual value	Cleaning time residual value	Hour		0~9999	0	Input
V-4	Set cleaning time value	Set cleaning time value	Hour		0~9999	0	Input
V-5	Oil replacement residual value	Oil replacement residual value	Hour		0~9999	0	Input
V-6	Oil change Settings	Oil change Settings	Hour		0~9999	0	Input
V-9	Bottom line counter number of stitches left	Bottom line counter number of stitches left			0~60000	0	Input
V-10	The baseline counter alarms the number of stitches	The baseline counter alarms the number of stitches			0~60000	0	Input
V-11	Bottom line counting method	Segment calculation: alarm at the beginning of seam section Stitch count calculation: alarm during sewing			0:0: By segment 1:1: Count of stitches 1: ON: open	1	Choose
V-17	Baseline detection device residual length setting	Baseline detection device residual length setting	x0.1M		0~5000	0	Input
V-18	The thickness of the fabric	The thickness of the fabric	mm		0~20	0	Input
V-19	Length of the line	Length of the line	mm		0~50	0	Input

22、Template Recognition

No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
W-1	Template identification Settings	Template identification Settings			0:OFF:OFF 1:ON:ON	0	Choose
W-2	Template identification equipment	Template identification equipment			0:0:Useless 1:1:Bar code scanner 2:2:RFID read-write device	0	Choose
W-3	The marker is offset in the X direction	The marker is offset in the X direction	x0.1mm		-5000~5000	0	Input
W-4	The marker is offset Y	The marker is offset Y	x0.1mm		-2000~2000	0	Input
W-5	The speed of the marker	The speed of the marker			1~9	1	Input
W-7	Read the USB flash disk pattern when the pattern number does not exist	Read the USB flash disk pattern when the pattern number does not exist			0:OFF 1:ON	0	Choose

23、Automatic shuttle change

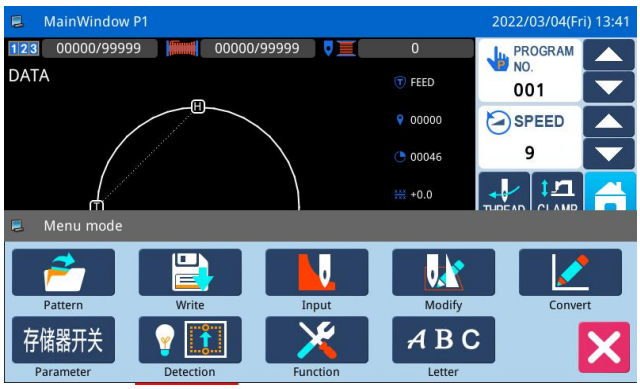
No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type

X-1	Automatic shuttle switch	Automatic shuttle switch			0:OFF: Close 1:ON: open	0	Choose
X-2	Shuttle change	Shuttle change			0:0:Manual shuttle change after the bottom thread alarm 1:1:Automatically change the shuttle when the bottom thread alarms	1	Choose
X-3	Start mode after shuttle change	Start mode after shuttle change			0:0:Manual start 1:1:Automatic start	1	Choose
X-4	Empty bobbin processing method	Empty bobbin processing method			0:0:Put back the shuttle 1:1:Put the storage box	1	Choose
X-5	Shuttle arm parking position	Shuttle arm parking position			0:0:Bobbin side 1:1:Nose side	1	Choose
X-6	Fine adjustment of shuttle arm to nose position	Fine adjustment of shuttle arm to nose position			-100~100	0	Input
X-7	Fine adjustment of shuttle arm to shuttle plate position	Fine adjustment of shuttle arm to shuttle plate position			-100~100	0	Input
X-8	Origin offset of shuttle motor	Origin offset of shuttle motor			-100~100	0	Input

24、Automatic shuttle change

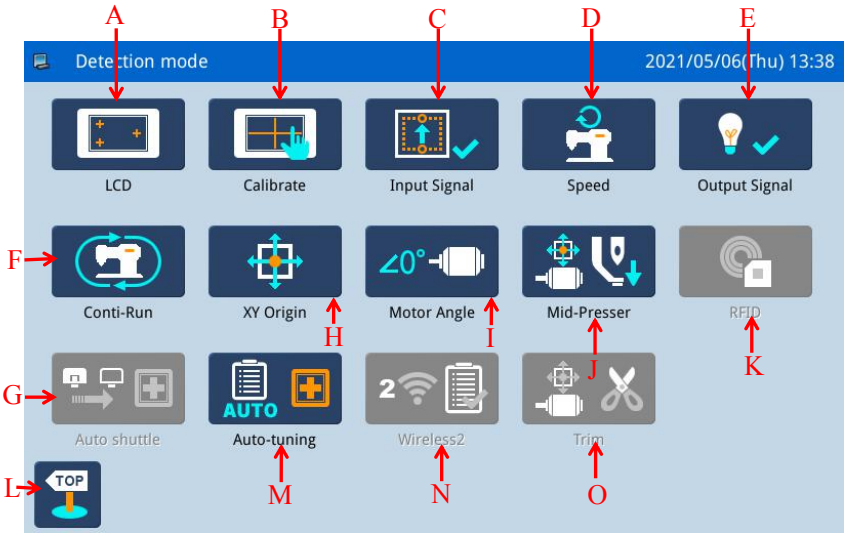
No.	Brief description	Detailed instructions	Unit	Step length	Range	Factory value	Type
163	Maximum sewing speed	Maximum sewing speed	x100RPM		2~30	23	Input
Y-2	Letter embroidery function enable	Letter embroidery function enable			0:OFF:Letter sew function off 1:ON:Letter sew function on	1	Choose
Y-3	Needle length deceleration curve	Internal needle length drop curve Choose			0~8	5	Input
Y-4	The maximum length of needle without lowering the speed	Maintain maximum needle length at maximum speed	x0.1mm		1~127	30	Input
Y-5	Communication rate increase	Communication rate increase			0~1	0	Input

2.9 Test Mode



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

to enter the test mode.



Functions：

No.	Functions	Content
A	LCD Test	Test LCD displayer
B	Touching Screen Correction	Correct the touching screen
C	Input Signal Test	Test the input signal of switches and sensors
D	Speed Test	Test the speed of main shaft motor
E	Output Signal Test	Test the output signal of pressers and thread-trimming devices
F	Continuous Running	Set continuous running parameter and enter aging status
G	Automatic shuttle changing	Automatic shuttle changing
H	XY Motor Origin Test	Test the motor origins of X /Y motors
I	Main Motor Installation Angle Adjustment	Display and set the installation angle of main shaft motor
J	Medium pressure Function Test	Used to test intermediate presser
K	RFID	For setting RFID
L	Quit	Quit test mode and return to main interface
M	Self-adjusting	For self-adjusting

N	Wireless module 2	For wireless module 2 detection
O	Shear line detection	For shear line detection

2.9.1 LCD Test

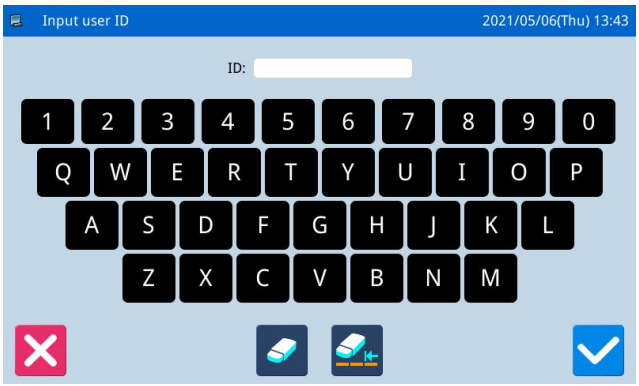
Function：

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.

2.9.2 Touching Screen Correction



Functions：

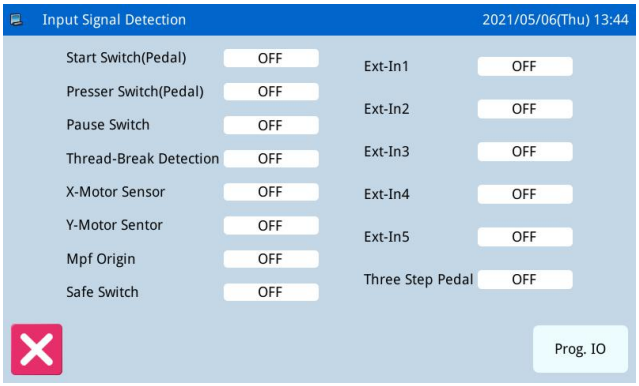
Under test mode, press 

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

2.9.3 Input Signal Test



Function：

In the test mode, press 

to activate the Input Signal Test Function.

ON：Activation

OFF：Deactivation

Types of Input Signal：

① Start switch (Pedal)

② Presser switch (Pedal)

③ Pause Switch

④ Thread-breakage Detection

⑤ X Motor Sensor

⑥ Y Motor Sensor

⑦ Intermediate presser origin

⑧ Security switch

⑨ External input 1 (PORG)

⑩ External input 2 (PSENS)

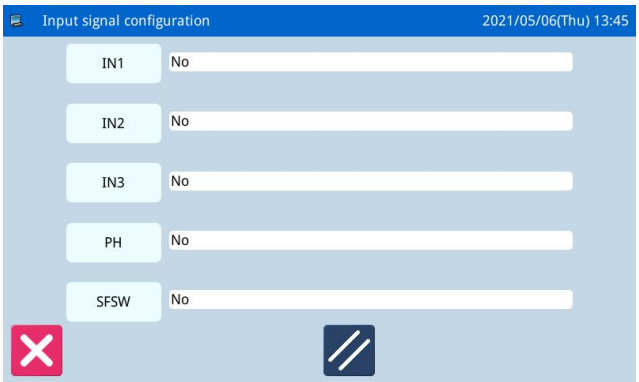
⑪ External input 3 (CORG)

⑫ External input 4 (CSENS)

⑬ External input 5 (AORG)

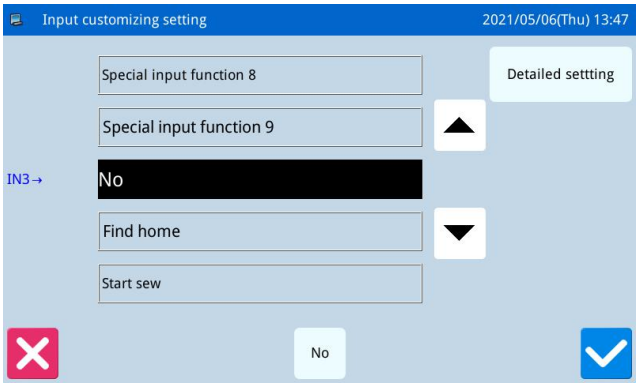
⑭ Three-in-one Pedal

Press  to return to the upper level interface.

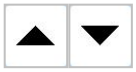


Click the programmable IO key 

to enter the interface of input signal configuration.



Examples:

Click the input 3(N3) key to enter the interface of customized input signal. You can click  to select the input signal, as follows:

1）No

2）Auxiliary press frame

3）Start sew

4）Sewing speed plus

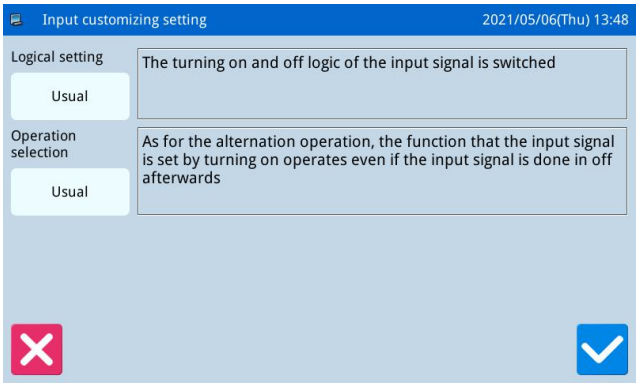
5）Sewing speed reduction

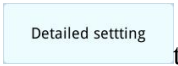
6）Air pressure detection

7）Disconnection detection

8）Special input function 1~9

Click the ok key  to confirm and return to the input signal configuration interface, and click the cancel key  to cancel the operation and return to the input signal configuration interface.



Click the detailed setting key  to enter the interface of self-determined input signal. The following parameters can be set:

1）The turning on and off logic of the input signal is switched：

Usual/Reverse

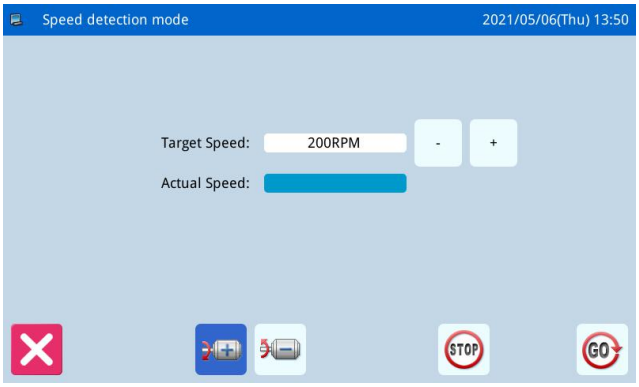
The default value：Usual

2）As for the alternation operation,the function that the input signal is set by turning on operates even if the input signal is done in off afterwards：

Usual/Alternation

The default value：Usual

2.9.4 Main Shaft Speed Test



Functions:

In the test mode, press 

to enter the main shaft speed test function.

Use

and

to set the aim speed of main shaft motor.Through  and  , the spindle motor can be set to turn forward or backward. After user presses 

, the main shaft 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  to return to the upper level interface.

2.9.5 Output Signal Test

Functions:

In the test mode, press 

to activate the output signal test function.

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

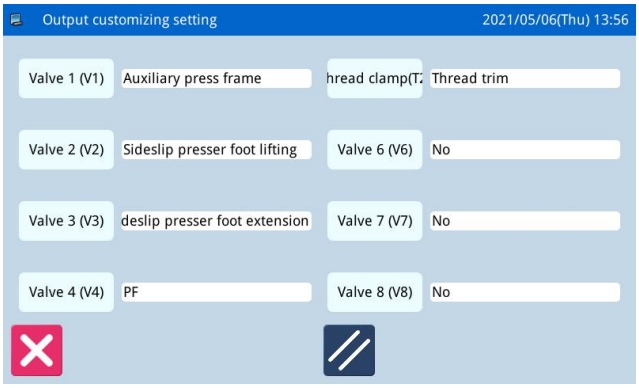
⑤ Thread-loosing

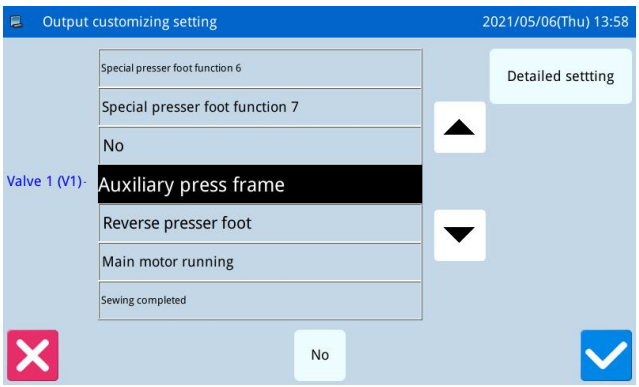
⑥ Clamp T2

⑦ Auxiliary air valve 1~8

Press  to return to the upper level interface.

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





Output customizing setting:

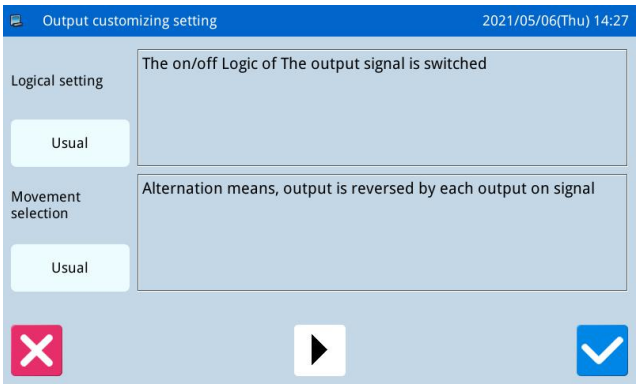
Click [programmable IO] key to enter the interface of self-determined output signal

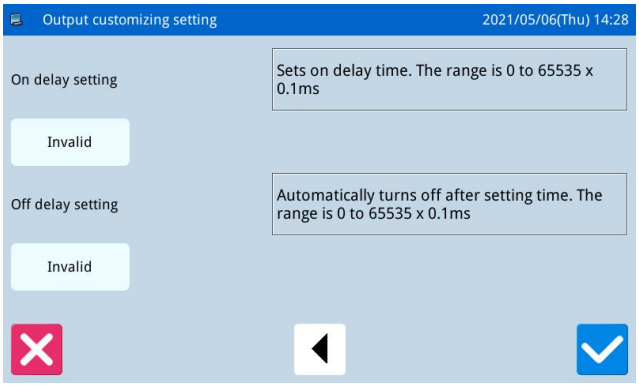
For example:

Click the "valve 1(V1)" key to enter the interface of customized output signal. You can select the output signal by clicking the button , as follows:

1) no
2) auxiliary pressure frame
3) turn over the foot
4) spindle operation
5) finish sewing
6) error status
7) find the origin
8) secondary origin
9) stop in the middle
10) lateral slip press foot expansion
11) sideslip pressure foot lifting
12) line
13) functions 1~9
14) function A/B/C
15)The pressure box falls back to the origin
16) back to the origin pressure box fell
17) laser
18) laser suction
19) laser lifting
Cut line 20)
Loose line 21)
22) line
23) medium pressure foot
24) external pressure frame
25) knife before sewing
26) blow after sewing
27) needle cooling
28) disconnected output
29) emergency stop output
30)Marker pen
31)Laser Positioning Light-Left
32) Laser positioning light-right
33) Auxiliary fixture 1~9
34) Start automatic shuttle change
35)Working indicator
36) Standby indicator
37)Special presser foot function 1~7

Click ok to determine and return to the output signal configuration interface, click cancel to cancel the operation and return to the output signal configuration interface.





Click the detailed setting key Detailed settting to enter the interface of self-determined output signal. The following parameters can be set:

1) state setting of signal switch:

Usual/Reverse

Default:Usual

2) output inversion:

Usual/Alternation

Default:Usual

3) start delay setting (start delay range 0-65535/10 microseconds)

Invalid/Valid

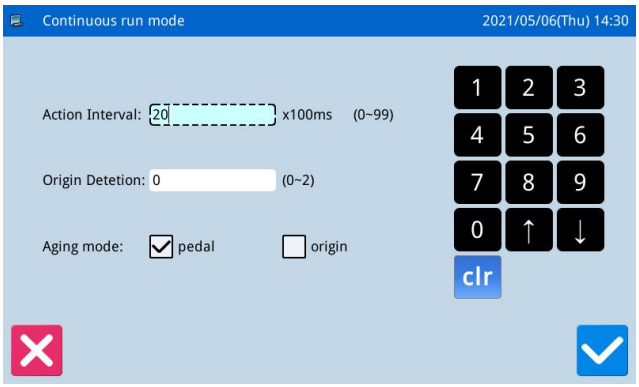
Default: invalid

4) close delay setting (close delay range 0-65535/10 microseconds)

Invalid/Valid

Default: invalid

2.9.6 Continuous Running



Function：

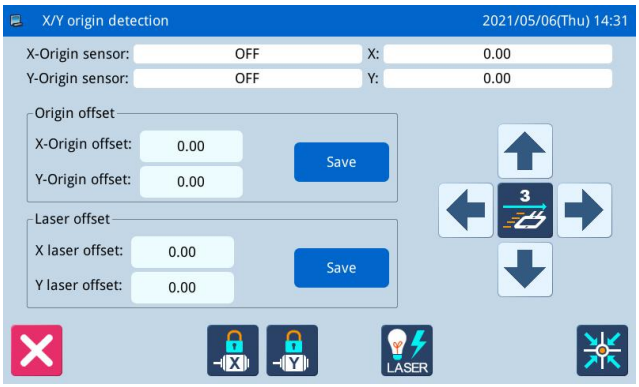
In the test mode, press 

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.

2.9.7 XY Motor Origin Test



Functions:

In the test mode, press 

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.

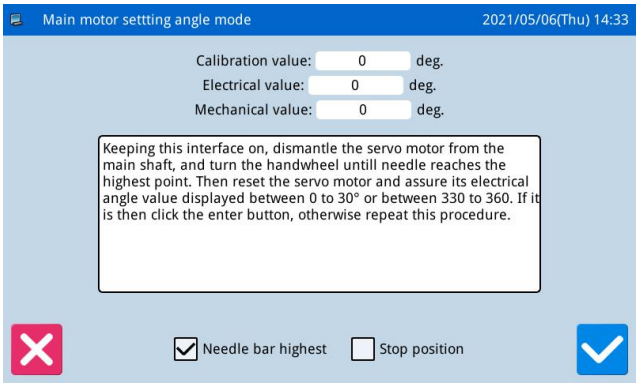
ON：Sensor Detected

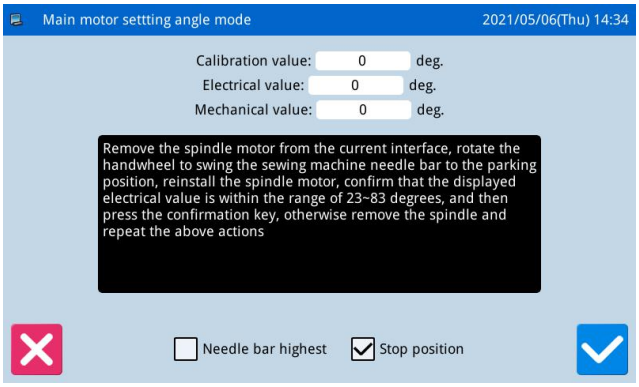
OFF：Sensor Undetected

Press  to return to the upper level interface.

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

2.9.8 Main Motor Installation Angle Adjustment





Functions：

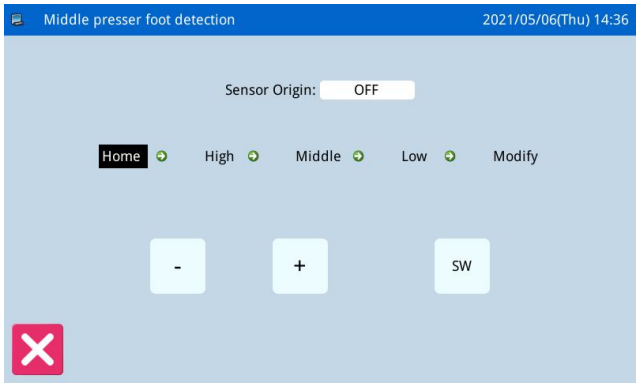
In the test mode, press 

to enter the main motor installation angle adjustment.

1）Keeping this interface on, dismantle the servo motor from the main shaft, and turn the hand wheel untill needle reaches the highest point. Then reset the servo motor and assure its electrical angle value displayed between 0 to 30 or between 330 to 360. If it is then click the enter button  , otherwise repeat this procedure.

2）Remove the spindle motor from the current interface, rotate the hand wheel to swing the sewing machine needle bar to the parking position, reinstall the spindle motor, confirm that the displayed electrical value is within the range of 23~83 degrees, and then press the confirmation key  ,otherwise remove the spindle and repeat the above actions

2.9.9 Intermediate Presser Test



Functions：

In the test mode, press 

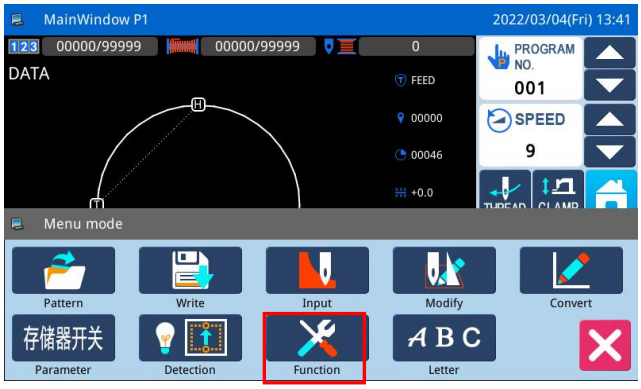
to enter intermediate presser test.

:Intermediate Presser Down

:Intermediate Presser Up

:Shift Intermediate Presser Position

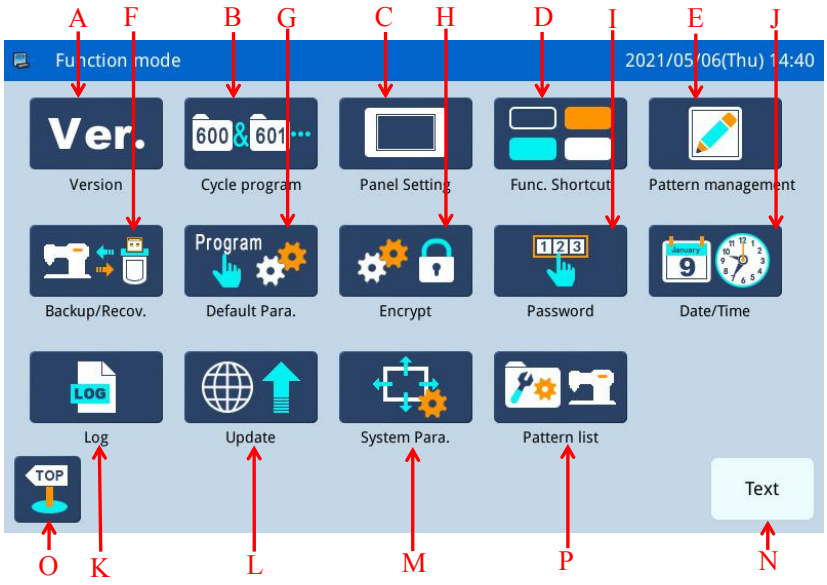
2.10 Function Setting



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

to enter the Function Setting Mode.

Function setting interface:

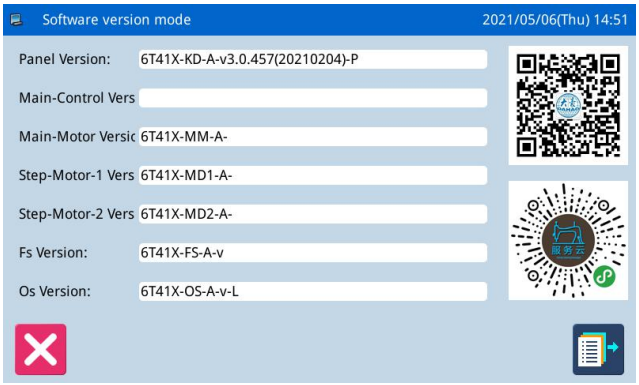


Functions:

No.	Functions	Content
A	Version Inquiry	Inquire the version of system software
B	Pattern Connection	Edit combined pattern
C	Display Setting	Set background light, keyboard lock, lightness and so on
D	Function shortcut key	Users can edit this shortcut key according to their common functions and display it on the main page for convenient operation.
E	Pattern management	Data Transfer:Transfer pattern file between memory and U disk Formatting:Initialize the U disk, memory and pattern number hotkeys. Pattern Transformation in Batch:Change the patterns of non-standard formats into standard formats. **Note: standard format means nsp format.**
F	Back-up Parameter Recovery	Save parameter values into U disk for the parameter recovery in future
G	Default Parameters	Recovery and self-defined read-write function of the default

No.	Functions	Content
		parameter values
H	Parameter Encryption	Set passwords for each operation entrance in parameter mode.
I	Password Mode	Provide periodical password function
J	Time Setting	Set the date and time
K	Log	Alarm Record:Check the alarm statistic information Running Record:Check running information of machine
L	Software Update	Enter software update mode
M	System parameters	System parameters and TD system parameters can be set
N	Shift between Icon and Description	Shift between the icon and description of the hotkeys
O	Quit	Return to main interface
P	Pattern number list	Pattern number shortcut key editing operation.

2.10.1 Version Inquiry Mode



In function setting interface, press 

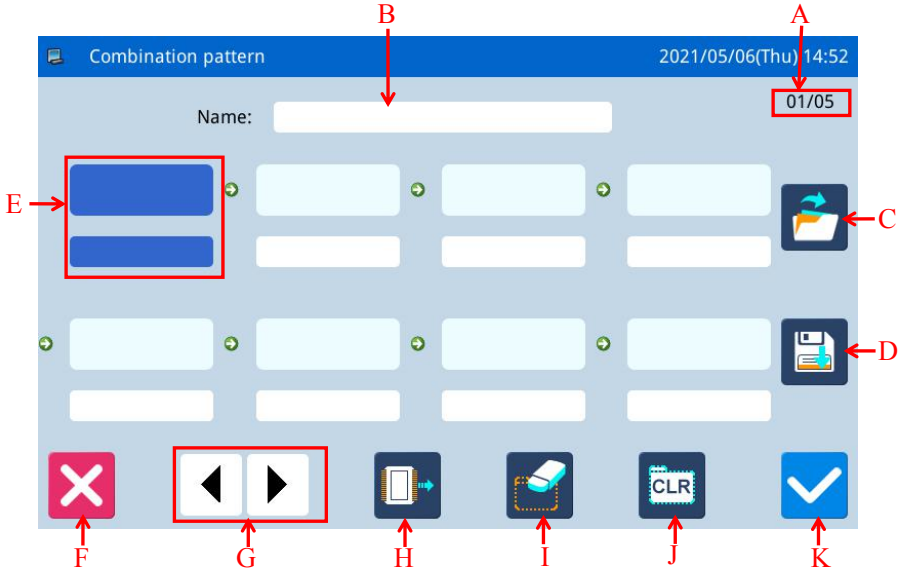
to enter version inquiry mode.

Press  to output the software version to the base catalogue of the U disk with name “version.png”.

2.10.2 Pattern Connection Mode

In function setting interface, press 

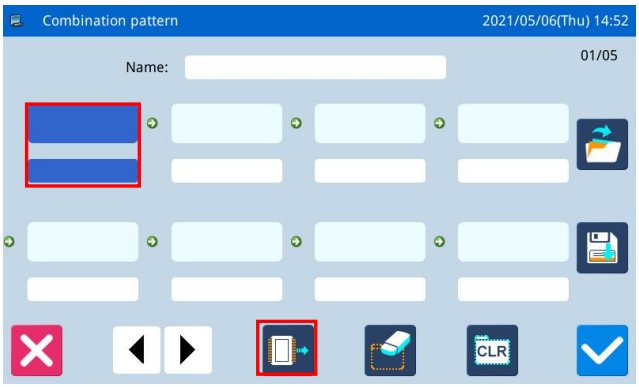
to enter Pattern Connection Mode. The pattern connection mode is mainly used to create and edit the combined pattern, which is to perform the combination edition on the basis of the existing patterns. The pattern used in combined pattern is called as sub-pattern.



Function:

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

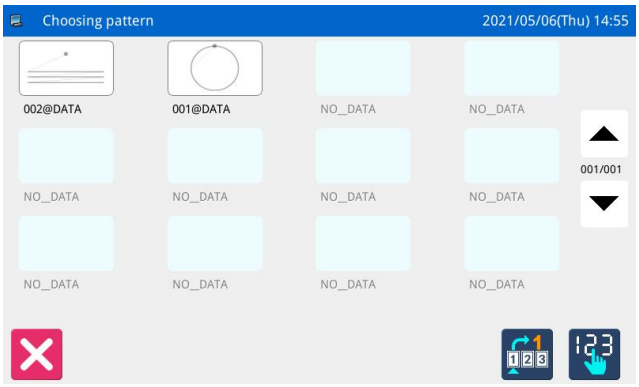
Operation：

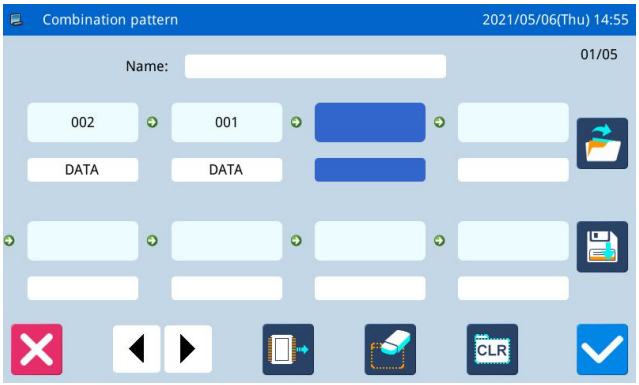


1、 Select a Sub-pattern

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.

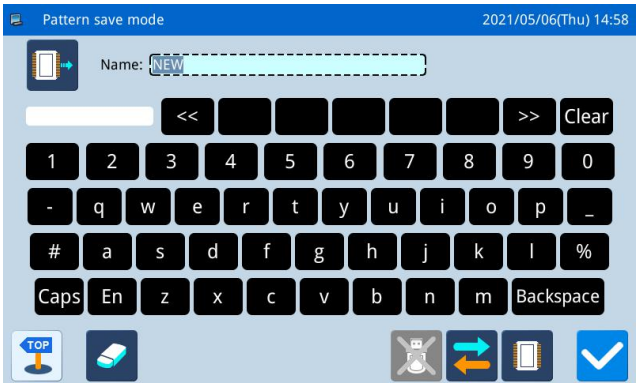




2、 Continue Adding

Repeat the above operation to add more sub-patterns (Add patterns No.002)

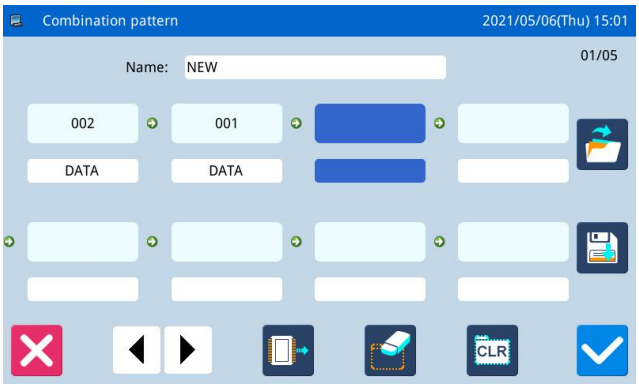
If user wants to delete one of them, please select the number of the sub-pattern and then press  .

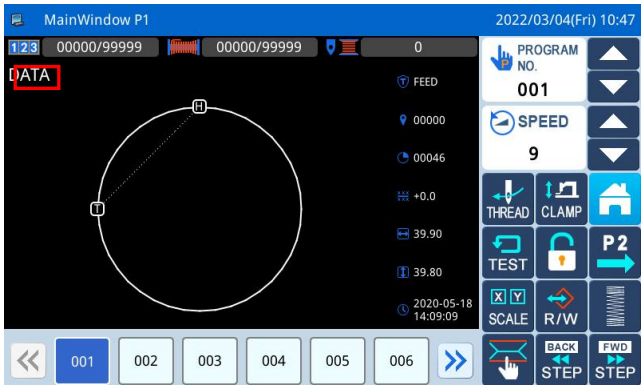


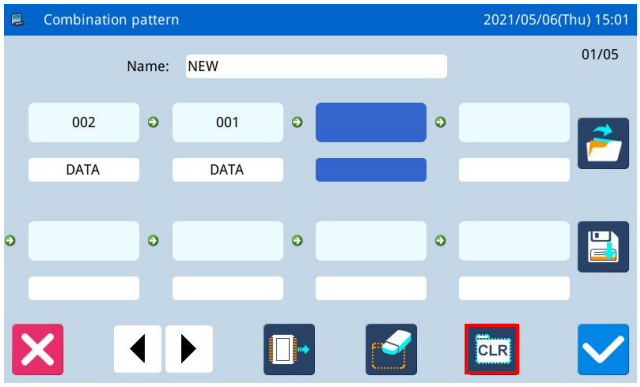
3、 Save the Combined Pattern

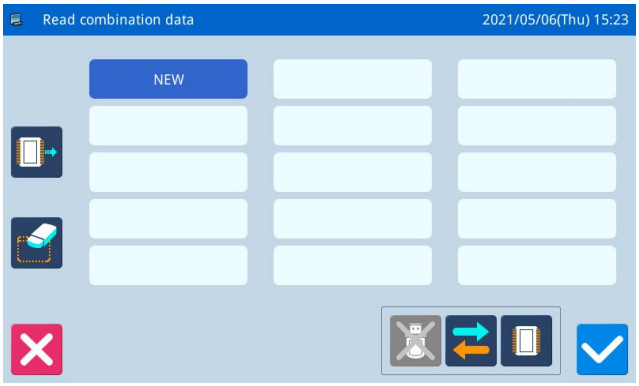
Press  to enter the mode for saving combined pattern.

Name the combined pattern and press  to confirm it. For other operations within this interface, please refer to [2.6 Save Pattern].









4、 Return to Main Interface

After finishing edition of the combined pattern, press  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

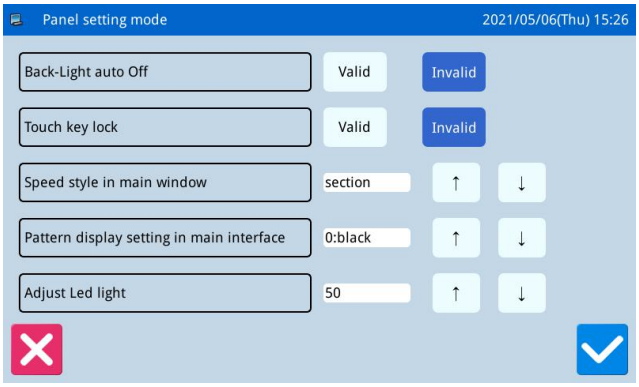
In order to cancel the combined pattern, user has to enter the pattern connection mode again, presses  and clicks  .

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.

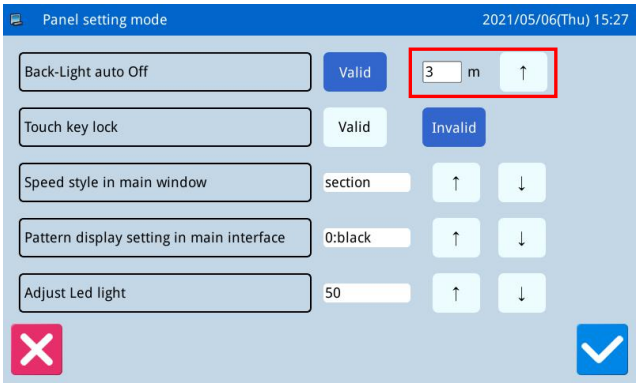
Press  again to enter the interface for loading the combined pattern, where users can select the combined pattern for sewing or editing.

2.10.3 Version Inquiry Mode



In function setting interface, press 

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



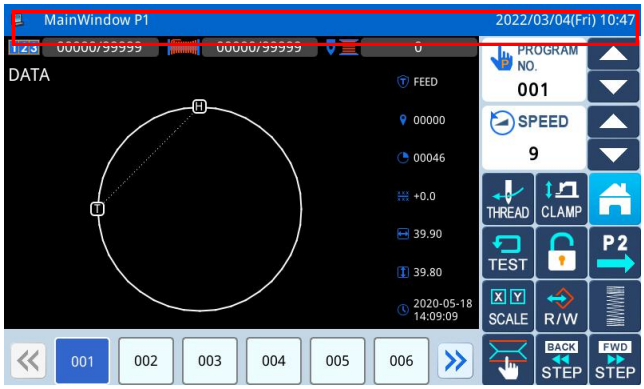
1、Backlight Auto Turn-off

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、 Speed style in main window

[Section] and [speed]

Default Value: [Section]

4、 Pattern display setting in main interface

Range： 0~6 (0:Black, 1: Dark Blue, 2: Red, 3: Green, 4: Blue, 5: Purple, 6: Yellow)

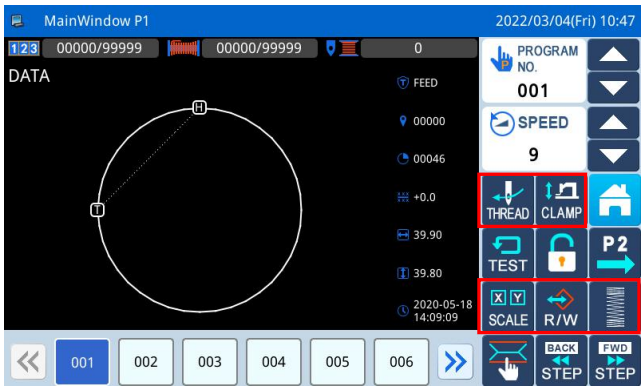
Default Value：0

5、 Adjust Led light

The adjustment range is 0~100.

Default Value：50

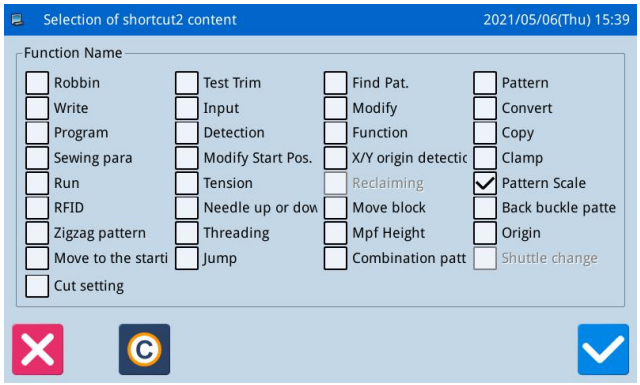
2.10.4 Hotkey Setting



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

Press 

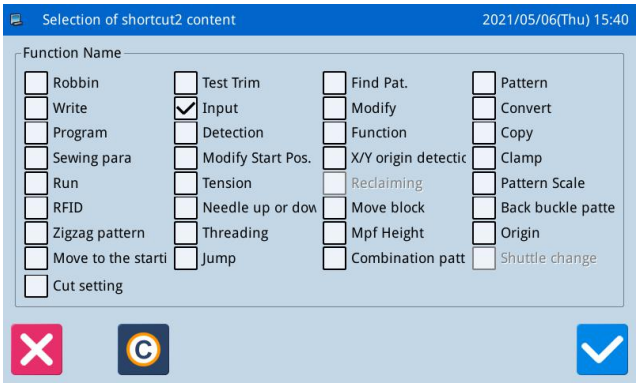
to enter hotkey function setting interface. Setting the common functions of origin, graphic zoom, threading, middle presser foot height, graphic copy, and winding.



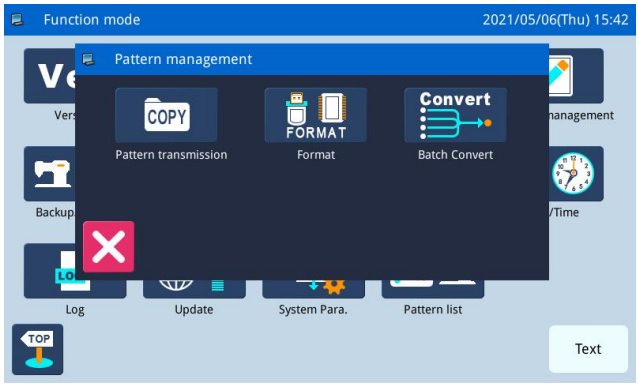
Input setting:

Press the shortcut key that needs to be changed to Input, enter the shortcut key setting, select the function and display 

, press the confirm key  , save and exit.



2.10.5 Data Transfer Mode



In the function setting interface, press 

to open the graph management group. The following functions can be set:

1)Pattern transmission

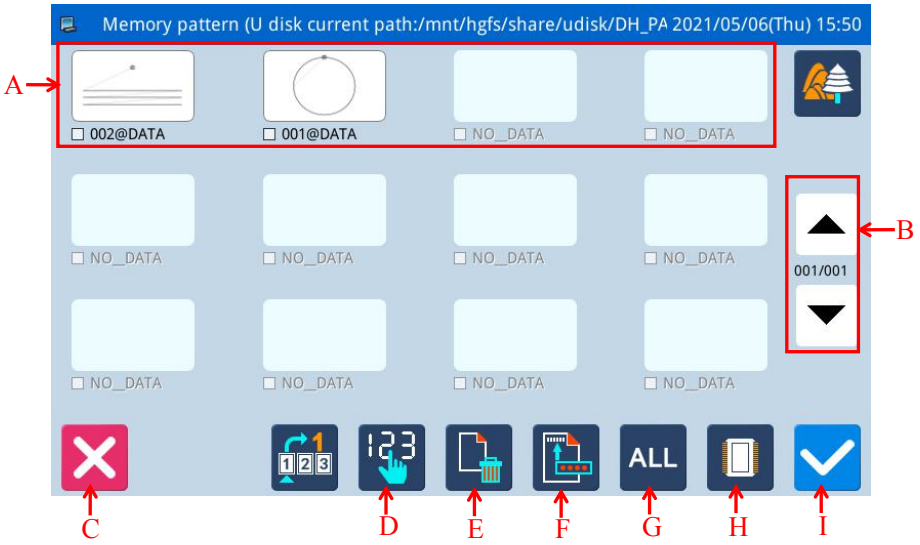
2)Format

3)Batch Convert

2.10.5.1 Data Transfer Mode

In function setting interface, press 

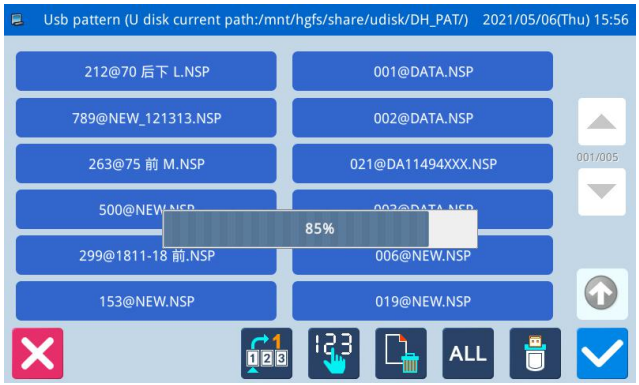
to enter data transfer mode, where two ways are provided: “Memory to U Disk” and “U Disk to Memory”



Functions：

No.	Description
A	Pattern List
B	Turn page query
C	Quit and Return to Upper Interface
D	Arrange the patterns according to the pattern number
E	Delete Pattern
F	Save pattern as
G	Select All Patterns
H	Load pattern from memory or U disk  : Activate the U Disk Load Mode: At this moment, user can not load pattern from memory.  : Activate the Memory Load Mode: At this moment, user cannot load pattern from U disk.
I	Enter

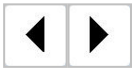
Operation：



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.001 and No.002). If the patterns are so many, please use  to turn the page.

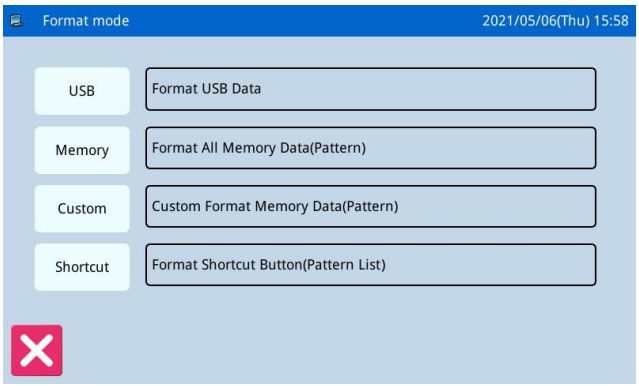
For copying all the patterns, please press  and please press  to delete patterns.

3、Confirm the Copy

After selection, please press  and then the system will display “Copy the Selected Pattern”, where user can press  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.

2.10.5.2 Formatting Mode



In function setting interface, press 

to activate formatting mode

There are four formatting methods in this interface: USB formatting, Memory formatting, Self-defined formatting and Pattern number hotkey formatting

1、USB Formatting：

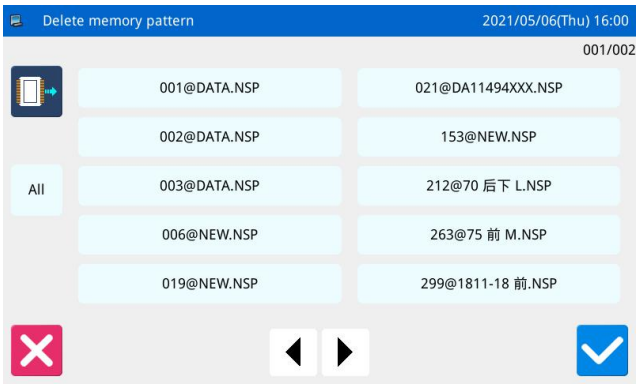
Press “USB” to delete all the patterns in the U disk. So user need back up the data if necessary.

2、Memory Formatting：

Press “Memory” to delete all the patterns in the memory.

[Note]: After the memory formatting, pressing  will have system display “Pattern Not 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.

4、Hotkey Formatting：

Pressing “Hotkey” to delete the content of the hotkeys of pattern number.

[Note]: After the hotkey formatting, pressing  will have system display “Pattern List (Hotkey) Is Empty”. Pressing  will automatically load the current pattern number to the hotkey.

2.10.5.3 Pattern Transformation in Batch

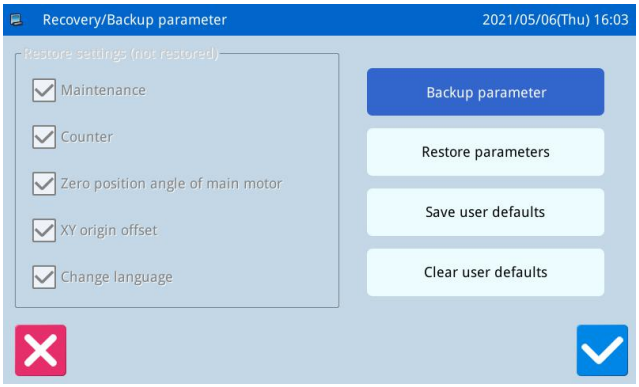
This batch transformation function can enable the continual availability of the patterns after software update.

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.

2.10.6 Back-up Recovery Mode



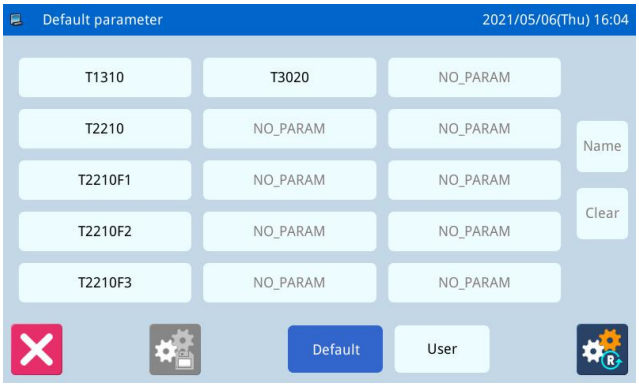
In function setting interface, press 

to enter back-up 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 [2.8.4 Recovery and Back-up of Parameter]

2.10.7 Default Parameter Mode



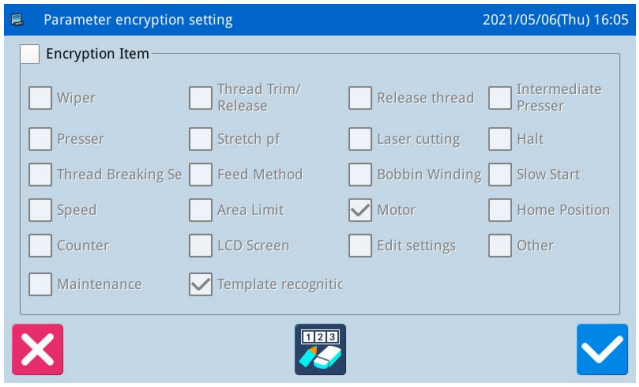
In function setting interface, press 

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 [2.8.5 Default Parameter Recovery] for details

2.10.8 Encrypt

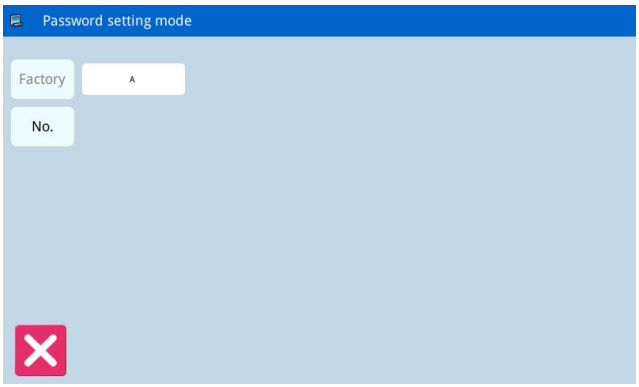


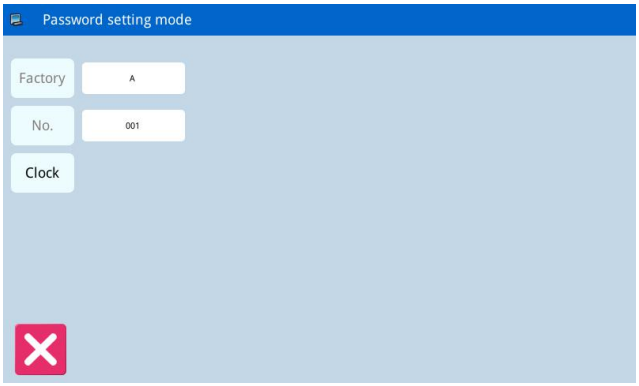
Press the parameter encryption key 

in the function setting interface to enter the parameter encryption mode, which is mainly used to encrypt and manage the specified parameters.

Please refer to [2.8.3 Parameter Encryption] for details.

2.10.9 Password Mode





In function setting interface, press 

to activate the interface for inputting the user ID. Input the correct manufacturer ID to enter the password management mode, where user can set and manage the periodical password.

② At most 10 different password action times can be set.

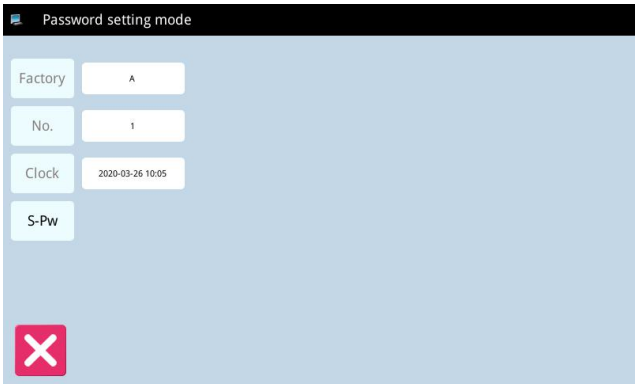
② System can display the password information of the manufacturer.

1、 Input Board Number

Press "Board Number" to enter the interface for inputting the board number. The board is formed by four figures, the range is from 000000000000000 to 999999999999999. This can be used for the management of the password by the manufacturer. After inputting the board number, user can press  to finish the operation and return to the previous interface. (Here, we input 0001 as the board number).

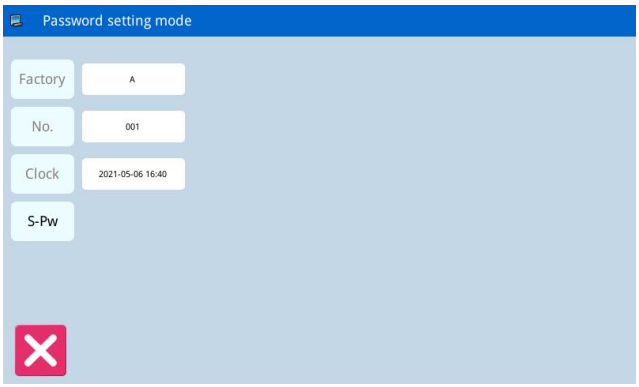
2、 Confirm the System Clock

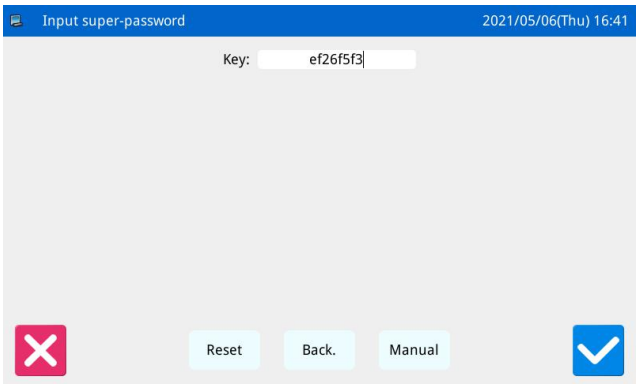
Press "Clock" to enter the interface for setting system time and date. For changing the system clock, user need press  after the modification (Refer to [2.10.14 Date and Time Setting Mode], or press  to quit.



3、 Input the Super Password

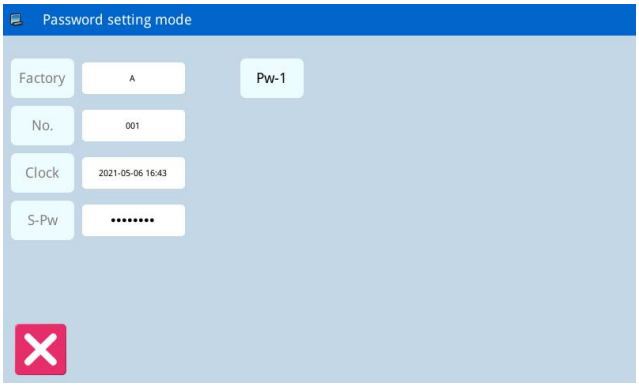
Press “Super Password” to enter the interface for inputting the super password.





At most 15 figures can be inputted, which are displayed as “ • ”. After user presses, the system will ask user to input that password again for confirmation.

If the inputted passwords in these two times are different, the system will ask user to input the super password again. After these two inputted passwords agree, user can press to save it and quit.

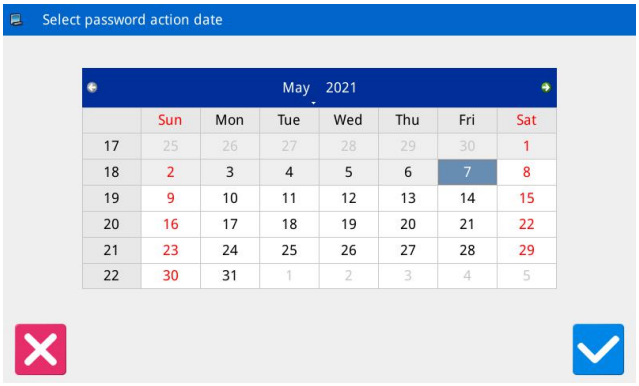


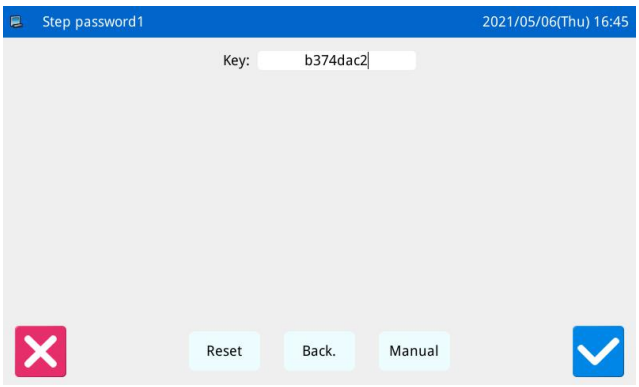
4、 Input Activation Time and Periodical Password

Press “pw-1” to input the first activation date.

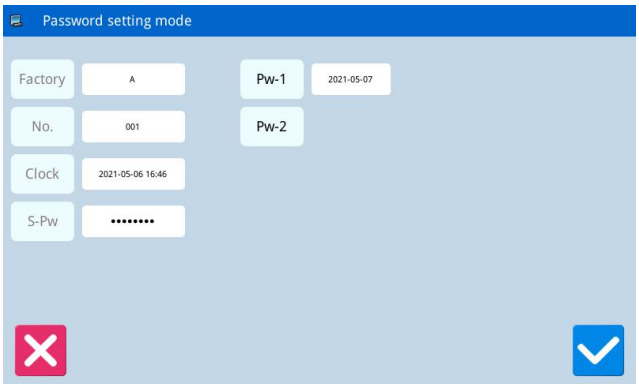
The activation date is the first time when the password is activated. This date shall be later than the system date.

Select the proper date and press to finish the operation. At this moment, the system will turn to password input interface





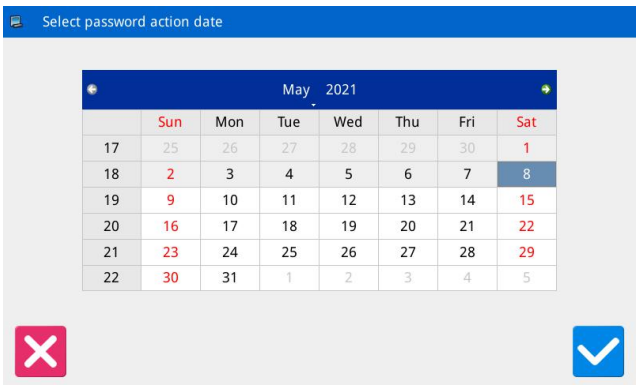
The input method of the periodical password is the same as that of the super password. After the confirmation, press  to quit.

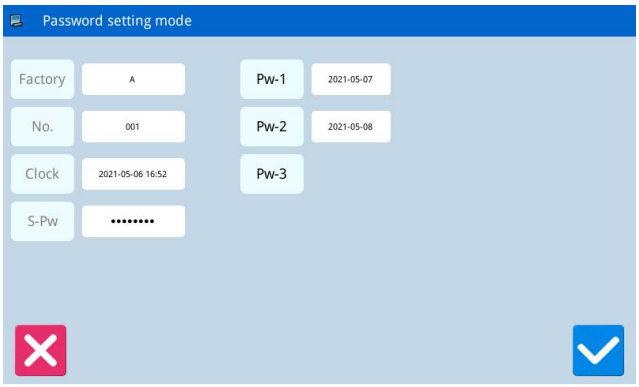


5、 Continue Inputting Periodical Password

If user need input the next activation date and password, he should repeat the above operation. At most, ten dates and passwords can be inputted.

[Note]: The next date shall be later than the previous one.





6、 Save Password

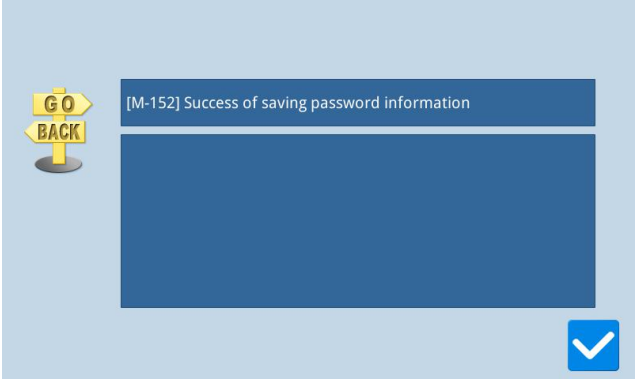
Input the needed password, and then press  to save the entire information. The system will display “Password Saved Successfully”.

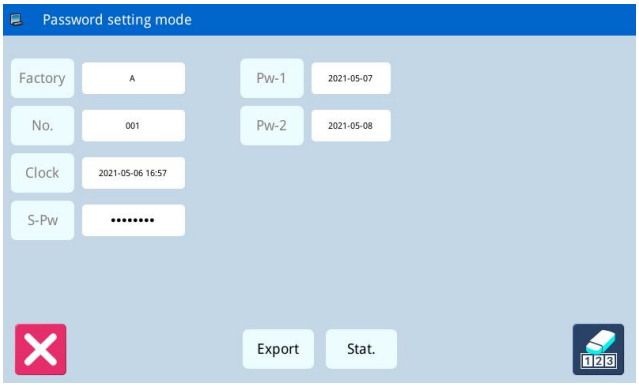
After confirmation, the system will return to the previous interface.

[Note]: Only when user set at least one periodical password, can  be displayed.

7、 Save Password Information

Enter the password statistics interface to display the panel number and password, staged password and date. After inserting the USB disk, press the output key  , enter a new name, and press the return key  to save. After the password is saved successfully, the password information will be displayed to save the successful prompt information.





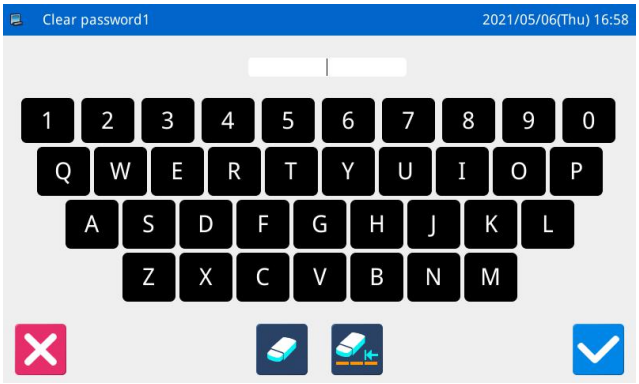
8、 Clear Password before Activation

Clearing password is to delete the password before it activates.

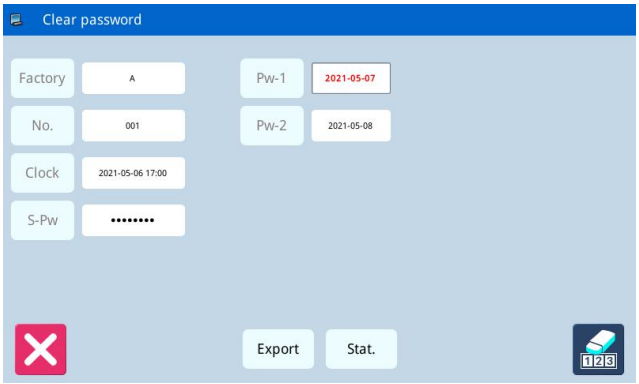
The method for entering the password display interface is the same as that of password setting

After user input the right manufacturer ID, the system will display the current time and activation dates of periodical passwords, as shown in right figure

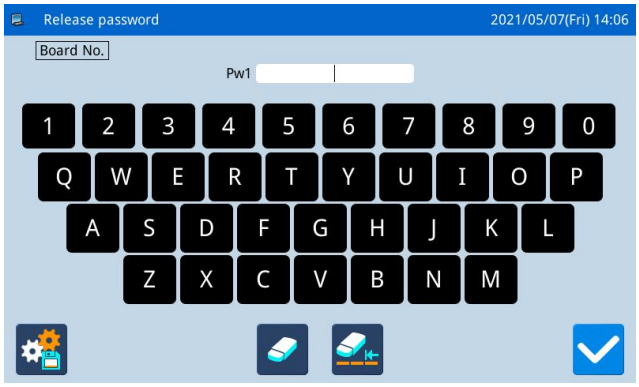
Press  to input the current password. The password is cleared in order of from front to behind.



At this moment, user can input two passwords. If the inputted password is the current password, the current password will be deleted. If the super password is inputted, the entire password will be deleted. If the current password is deleted and the current password is the last password, the system will have no password any more. Press  to finish the operation.



The deleted password will display in red color as shown in the right picture. If the entire password is deleted, the system will return to the upper level interface.

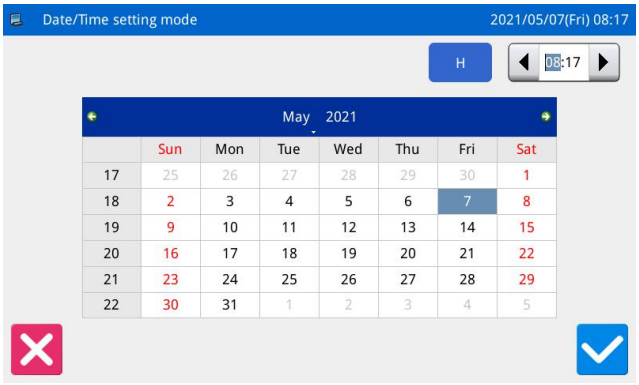


9、 Clear Password at Activation

If the system has the password and that password is not canceled, the password will activate at the set date. At this moment, user has to input the effective password to have the machine continue to work normally.

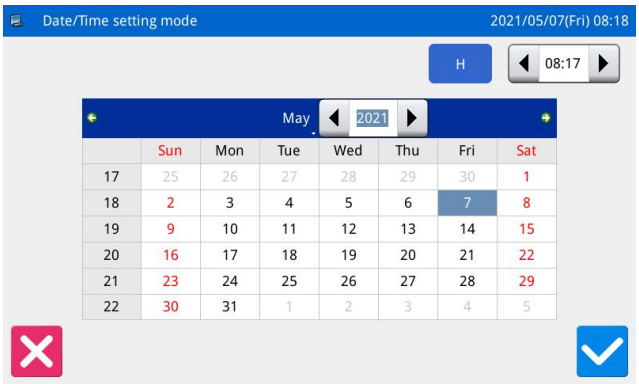
The effective passwords include the current password and the super password. If the inputted password is the current password, the current password will be deleted. If the super password is inputted, the entire password will be deleted. If the password is current password and the current password is the last password, the system will have no password any more. If the machine still have other password other than the current password, the next password will activate according to the set date

2.10.10 Date and Time Setting



In function setting interface, press 

to enter the date and time setting mode.



11、 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  &  to check the content in calendar.

Click the day to complete the setting.

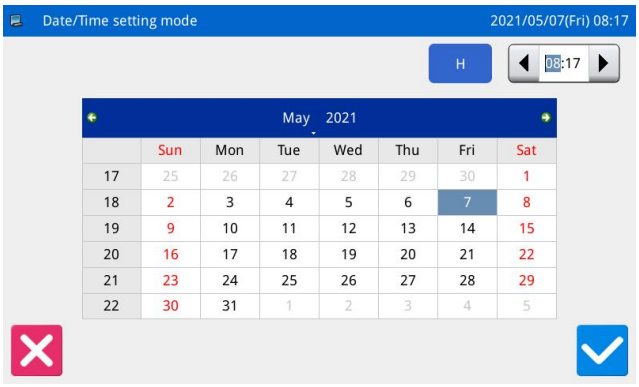
[Note]: User has to set year, month and date to finish the setting. Only setting the year and month will not complete this operation.

12、 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.

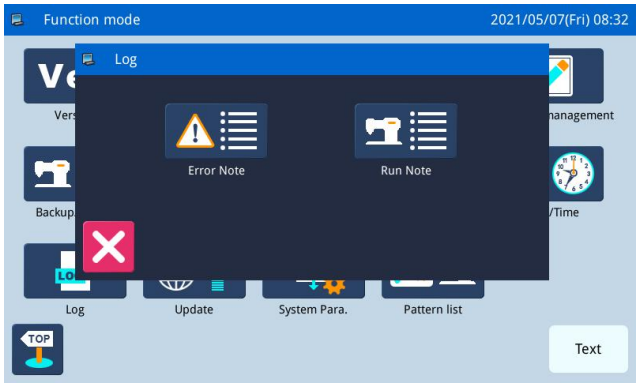
After the setting of date and time, please press  to save it.



13、 Forbid to Change System Time

Once the machine is set with the periodical passwords, the system will deny the change on the system time. After all the passwords are cleared, the system will unlock the setting of the system time.

2.10.11 Alarm Record Mode



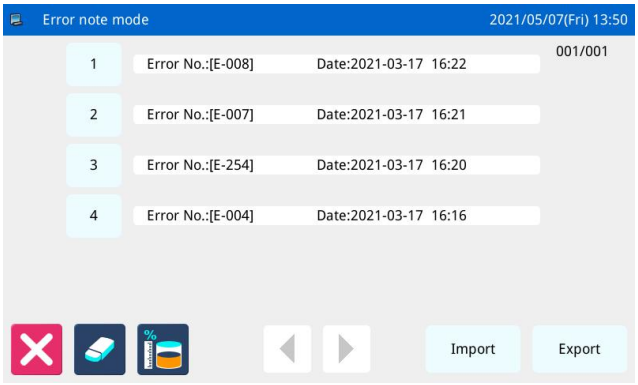
In the function setting interface, press the record key 

to open the record group. The following records can be viewed:

1)Error Note

2)Run Note

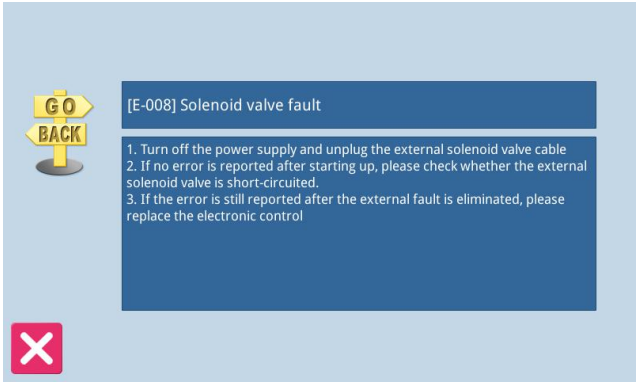
2.10.11.1 Error Note



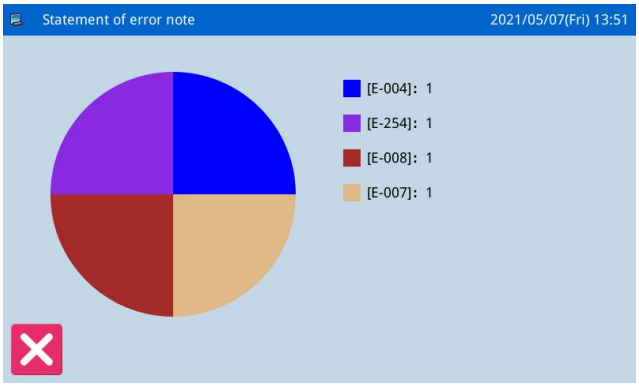
In function setting interface, press 

, then system will ask for the manufacturer ID. After user gives the right ID, the system will enter the alarm record mode

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

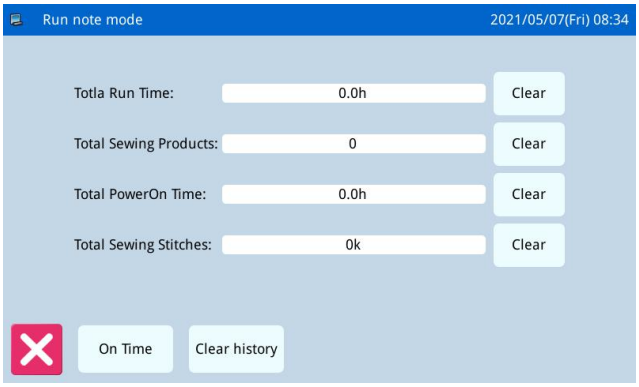


Click each number, and the information of and solution for the error will be displayed.



Press the "data statistics view" key 
to enter the alarm record statistics interface.

2.10.11.2 Run Note



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.

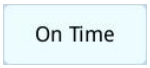
② Accumulated Sewing Pieces: Record the total number of the sewn patterns.

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

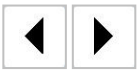
④ Accumulated Stitch Number: Record the total stitch number of the machine.

Additionally, click “Clear” to clear the counting value.

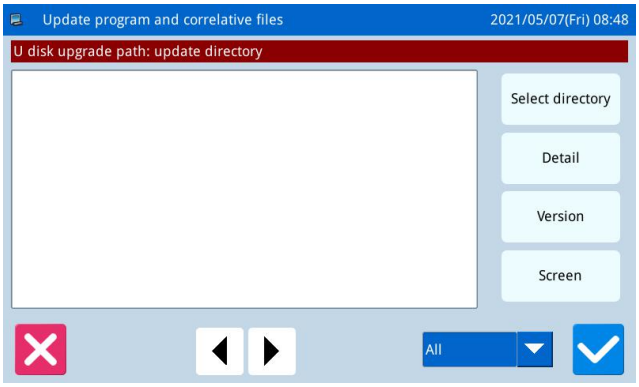
[Note]: If the Accumulated Sewing Pieces is cleared, the system will also clear the Accumulated Counter in the assistant information bar at main interface.

Press [on time] 

on the operation record mode interface to view the power on/off time notes..

Use the page turning key  to turn the page, click the clear key  to delete the boot record.

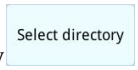
2.10.12 Update Mode



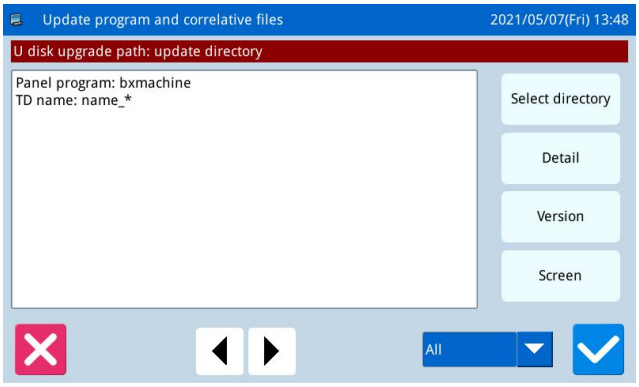
In function setting interface, press 

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

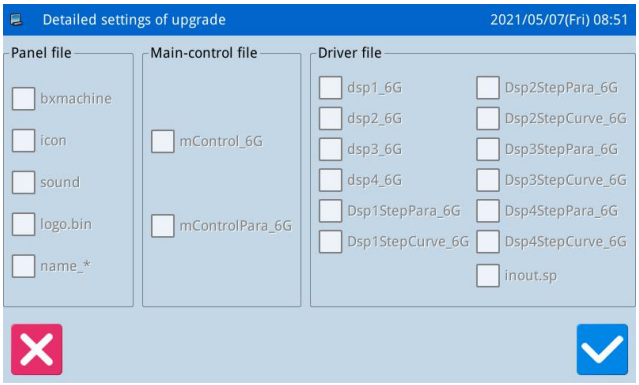
The updating software shall be located in the catalogue “Update” in the U disk.

First click the [select directory] key 

to select the directory where you want to upgrade the software.



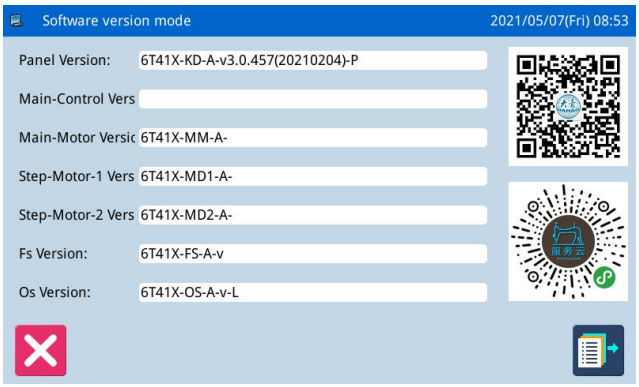
Then select and click the ok key  to return to the software upgrade interface and display all the upgradable software information in the directory.



Click the details key

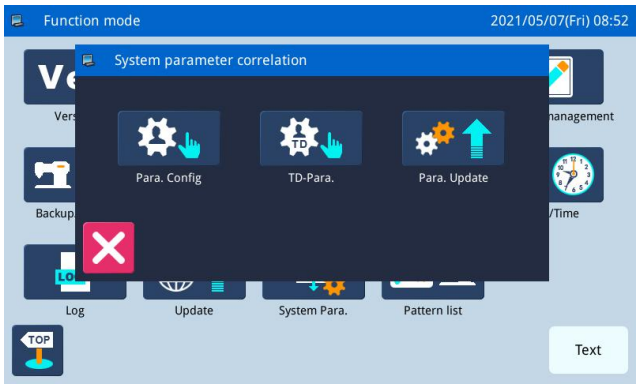
to select the details of the software to be upgraded.

Click the "confirm" key  to return to the software upgrade interface. Press the "confirm" key  again to upgrade the corresponding software.

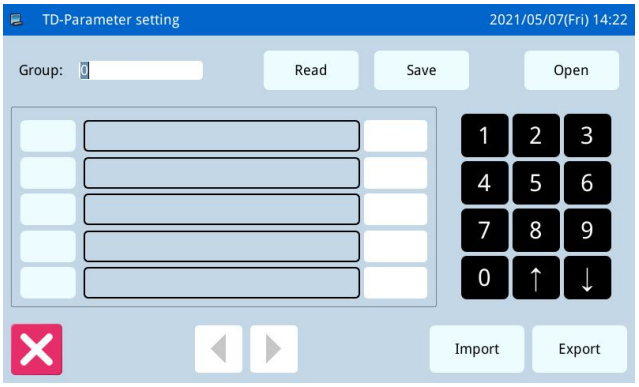


Click the [version] key Version to query the current software version of the panel.

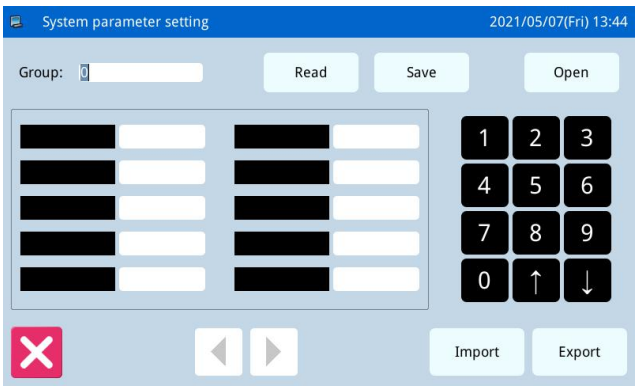
2.10.13 System Para



Press the system parameter key System Para. in the function setting interface to enter the system parameter setting mode.



In the system parameter setting interface, click the [parameter setting] key Para. Config to enter the system parameter setting interface and perform related operations.

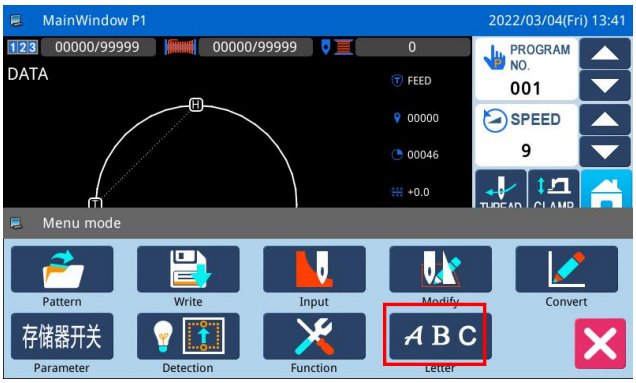


In the system parameter setting interface, click the [TD parameter] key TD-Para. to enter the TD parameter setting interface and perform relevant operations.

In the system parameter setting interface, click the [TD parameter] key 

to enter the parameter update setting interface and perform relevant operations.

2.11 Letter Sewing Edition

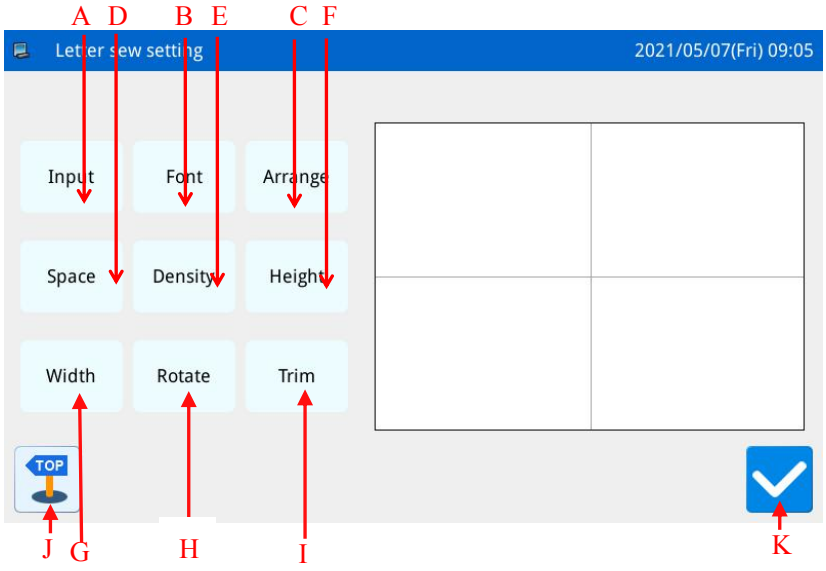


In main interface P1 (or P2), press  to activate the catalogue mode, and then press 

to enter letter sewing edition mode.

[Note]: Parameter [Special] -> [Letter Sewing Function Enable] can be used to close the function of letter sewing edition. After that, this icon will not be displayed

2.11.1 Parameters of Letter Sewing



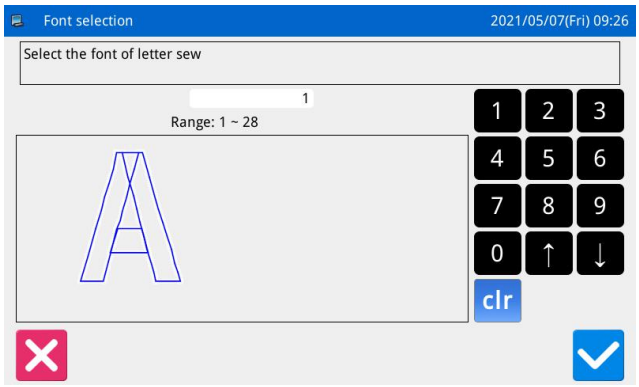
Functions：

No.	Functions	Content
A	Figure Input	Input figures. At most, 20 figures can be inputted
B	Font Selection	28 fonts are available。
C	Array Method	User can select “Horizontal”, “Vertical”, “Upper Arc” “Down Arc”
D	Letter Pitch	Set the interval between letters
E	Density of Satin	Set the satin density. The larger value means the denser satin stitches
F	Scaling in Height	Scale the height of letter, range: 50~200.
G	Scaling in Width	Scale the width of letter, range: 50~200.
H	Rotation/Follow (Not Follow)	When the array method is linear (vertical or horizontal), the content 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.
I	Trim/Not Trim	Set whether to automatically insert thread-trimming code
J	Return	Quit and return to main interface
K	Enter	Confirm operations. And then enter pattern adjustment interface.

Instructions for

1、Figure input

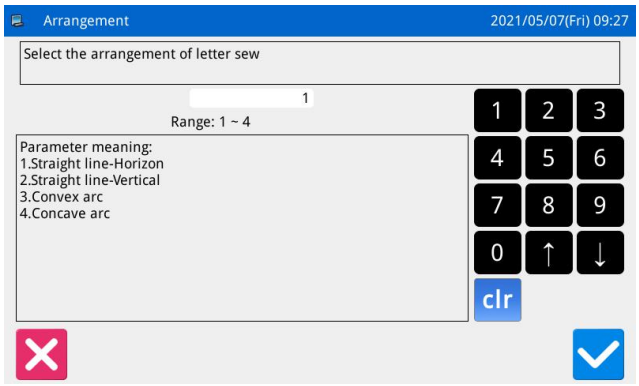
Press “Input” to enter figure input interface, where user have to input at least one figure. 20 figures can be inputted at most. Press to save the input and quit.



2、Font Selection

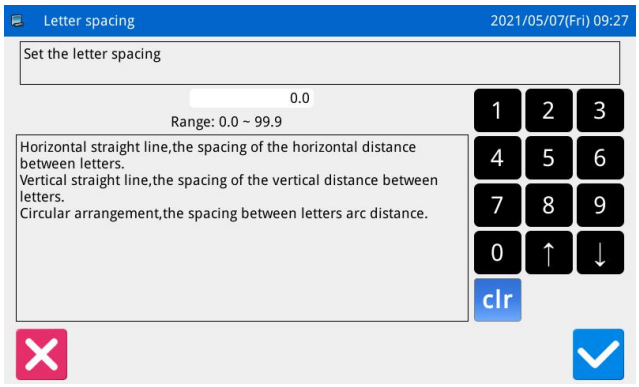
Press “Font” to enter font selection interface, where 28 types of fonts are provided. Input the numbers from 1 to 28 to select the font. Press to save it and quit.

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.



4、 Figure Pitch

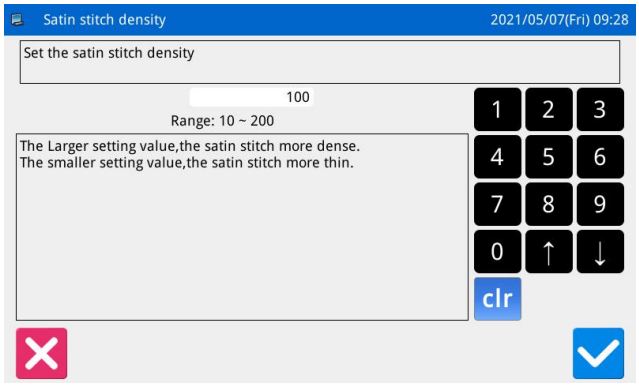
Press “Pitch” to enter the letter pitch setting interface.

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

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

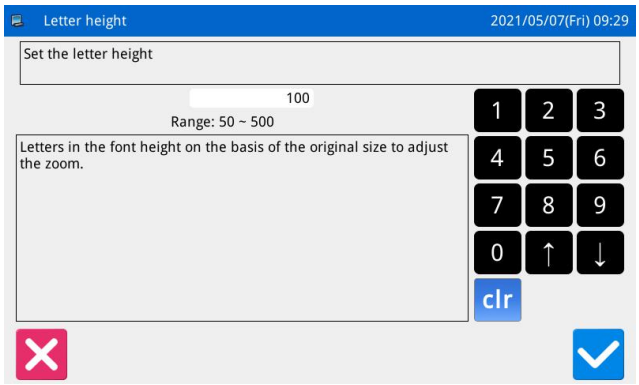
In arc array, it is to set the distance between the letters on arc.

Range: 0~99.9mm。



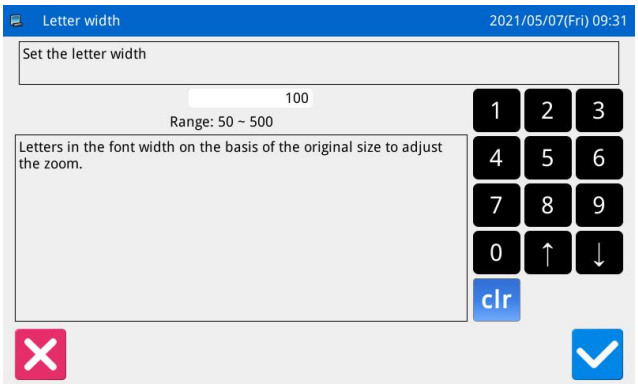
5、 Density of Satin

Press “Density” to enter the interface for setting satin density. The range is among 50~200.



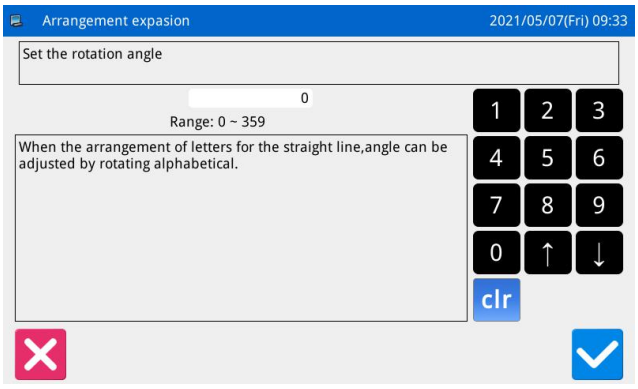
6、 Scaling in Height

Press “Height” to enter the interface for setting letter height， where user can scale the height of letter. Range: 50~200.



7、 Scaling in Width

Press “Width” to enter the interface for setting letter width， where user can scale the width of letter. Range: 50~200.



8、 Rotation Angle Setting

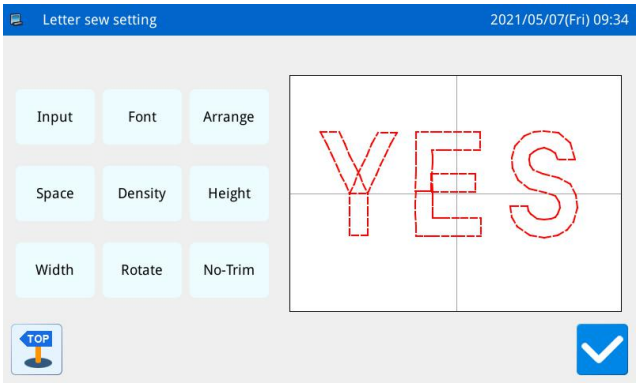
When the array method is set at “Horizontal” or “Vertical”, user can set the rotation angle of the letter. Press the “Rotation” to enter the interface for setting rotation angle.

The rotating direction is counter-clockwise. Range: 0°~359°.

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

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.

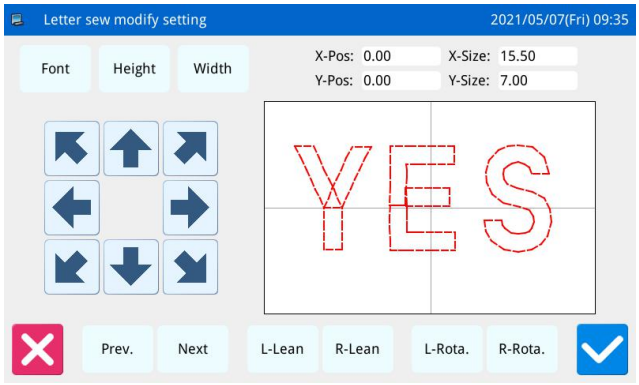
[Note]: when the array method is “Horizontal” or “Vertical”, this button is to set the rotating angle.



9、 Trim/No Trim

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.

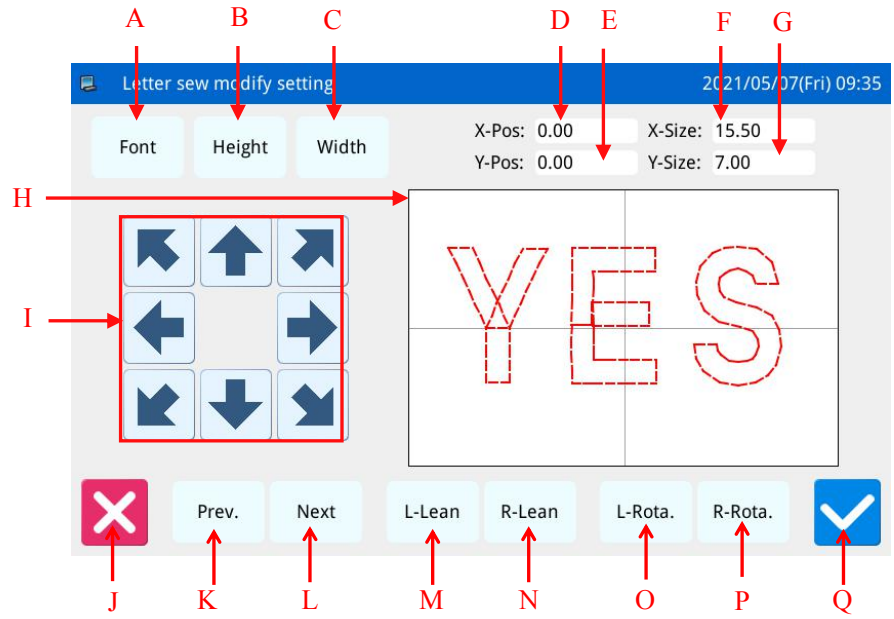


10、 Confirm the Pattern

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

2.11.2 Adjustment of Letter Sewing Pattern

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

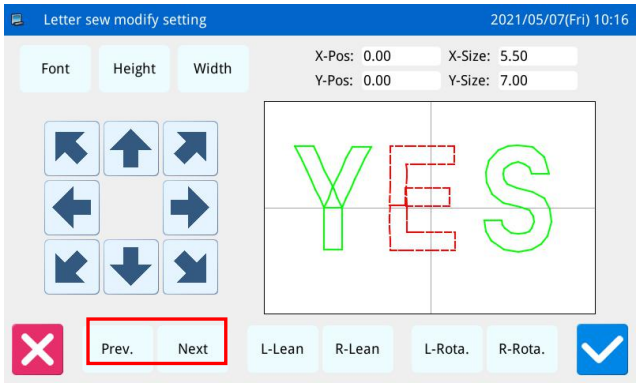


Functions:

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

No.	Functions	Content
	left to right)	red. When the icon still goes to right at selecting the last letter, the entire letters will be selected.
M	Left Tilt/Radian Down	When the array method is horizontal array or the vertical array, this button will display “Left Tilt”. Pressing this button will rotate the entire pattern counterclockwise in the center of origin 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.
N	Right Tilt/Radian Up	When the array method is horizontal array or the vertical array, this button will display “Right Tilt”. Pressing this button will rotate the entire pattern clockwise in the center of origin 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.
O	Left Rotation	Adjust the rotating angle of the selected letter counterclockwise. The rotation center is the center of the letter
P	Right Rotation	Adjust the rotating angle of the selected letter clockwise. The rotation center is the center of the letter
Q	Enter	Press it to Enter the pattern save interface

Example：



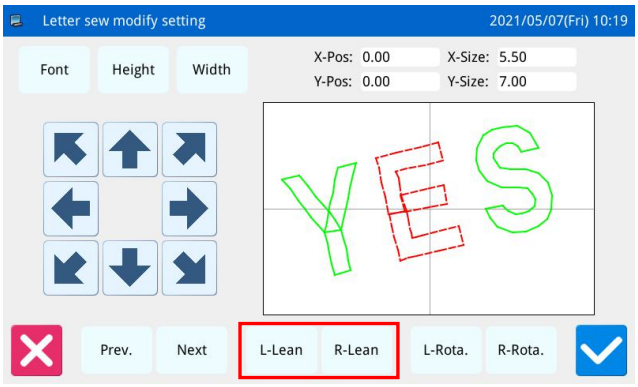
1、 Select Single Letter for Adjustment

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.



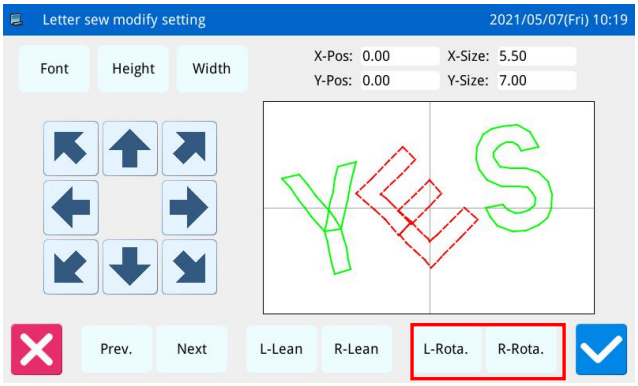
3、 Adjust the Rotating Angle of Entire Pattern

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

“Left Tilt”: Counter-clockwise Rotation

“Right Tilt”: Clockwise Rotation

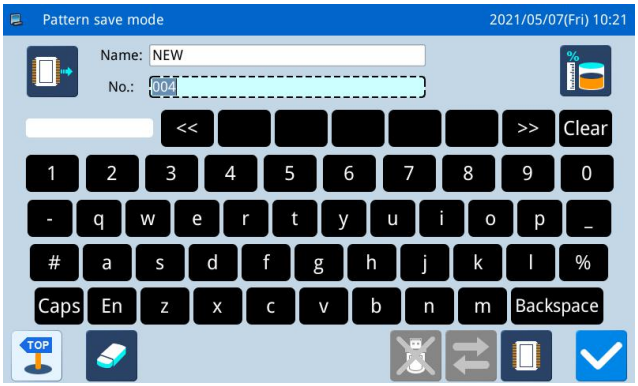
[Note]: When the array method is arc, these buttons will turn to “Radian Up”/ “Radian Down”, which are to adjust the radian of the entire pattern



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 Saved Successfully”. (For other operations, please refer to [2.6 Save Pattern].)

[Note] After the successful saving, the letter sewing pattern will not turn to current pattern automatically. User has to enter the pattern loading interface to select it.

3 Appendix 1

3.1 Warning Information List

Number	Name of Malfunction	Solution
E-001	Pedal not at centre position	Please adjust pedal position
E-002	Machine is in emergency stop	Check the condition of emergency switch.Turn and release the emergency button. If the screen keep displaying this hint, please check in the following way: 1、Check whether the emergency stop switch is pressed 2、Check whether the emergency stop switch cable is in good contact; 3、If there is no problem with the switch cable, please replace the electric control;
E-003	The nose tip over	1Turn off the power and check whether the nose is overturned 2Check whether the switch position of the machine head is normal and whether the cable is in good contact; 3Turn off the nose tip switch parameters or replace the electric control
E-004	Input voltage is too low	Please turn off power and check system hardware 1、Check if the AC power supply has abnormal fluctuation; Make sure there is no high-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 mains are too high	1、Check if the AC power supply has abnormal fluctuation; Make sure there is no high-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-007	IPM is over-voltage or over-current	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 out to earth or the 300V power supply, so as to judge the condition of IPM.
E-008	Solenoid valve failure	1.Power off and unplug the external solenoid valve cable. 2.If no more error is reported, please check whether the external solenoid valve is short circuit. 3.Error still reported after troubleshooting the external fault, please replace the electric control.
E-009	Auxiliary power is too low	Please turn off power and check system hardware。 1、Check if the peripheral solenoids and valves are damaged； 2、Check whether there is a short circuit in the inner core of the plug at both ends of the connecting wire between the electric control box and the nose

		board; 3、Check whether the nose transfer plate is short circuit with the nose during installation.
E-010	Fan or electromagnet failure	1.Turn off the power and unplug the external electromagnet. 2.If no more errors are reported, please check whether the external electromagnet is damaged. 3.Error still reported after troubleshooting the external fault, please replace the electric control.
E-011	Stepper motor over speed	If closed loop motor, please check: 1、Check whether the motor encoder is damaged; 2、Check whether the encoder cable is damaged.
E-012	Stepper motor out of tolerance	If closed loop motor, please check: 1、Check whether the motor encoder is damaged; 2、Check whether the encoder cable is damaged.
E-013	Spindle encoder is malfunctioning or not connected	Turn off the power and check whether the spindle encoder is connected properly.
E-014	Spindle motor runs abnormally	1.Turn off the power to check whether the machine is stuck, to ensure that the machine can run smoothly without dead spots. 2.Replace spindle motor. 3.Replace the electric control box.
E-015	Exceeds sewing area	Check if the pattern is out of the range of the panel Settings
E-016	Please turn the code plate position of spindle motor	Turn the hand wheel to lift the needle bar to the upper position of the upper dead point, and then step the pedal.
E-017	Disconnection detection anomaly	1.Check whether the position of broken wire detection equipment is correct; 2.Check whether the cable is normally connected; 3.Appropriately increase the number of broken wire detection needles; 4.If still not solved, you can choose to turn off the broken line detection function or replace the electric control;
E-018	Trimmer position abnormal	Please turn off power.
E-019	Emergency switch is not at the right position	1.Check whether the emergency stop switch is pressed; 2.Check whether the emergency stop switch cable is in good contact; 3.If there is no problem with the switch cable, please replace the electric control. Note: If the emergency stop switch is pressed and returns to normal, please change the type of emergency stop switch.
E-020	Error reading E2PROM	
E-021	Error writing E2PROM	
E-023	Abnormal position of grabber line	Please turn off the power.
E-024	Wrong connection between operation head and sewing	Please turn off power.

	machine	
E-025	X origin detection abnormal	1.Turn off the power. First of all, make sure that the machine can move normally without sticking points, X sensor and baffle can work normally, and the cable connection between X motor and sensor is intact. 2.Switch on the machine and enter the signal detection interface to detect X Sensor. If the signal does not jump, replace the sensor and electric control in turn for testing. 3.If the signal can jump normally, enter the XY detection interface to detect the action of X motor; 4If X motor can work normally but the steering direction is opposite, please change the steering parameters of X motor; 5If the X motor cannot work normally, replace the X motor and electric control box in turn for testing.
E-026	Y origin detection abnormal	1.Turn off the power. First of all, make sure that the machine can move normally without sticking points, Y inductor and baffle can work normally, and Y motor and inductor cable are well connected; 2.Switch on the machine and enter the signal detection interface to detect Y sensor. If the signal does not jump, replace the sensor and electric control in turn for testing. 3.If the signal can jump normally, enter the XY detection interface to detect the action of Y motor; 4.If the Y motor can work normally but the steering direction is opposite, please change the steering parameters of Y motor; 5.If Y motor cannot work normally, replace Y motor and electric control box in turn for testing;
E-027	Presser origin detection abnormal	Please turn off power.
E-028	Thread-catching origin detection abnormal	Please turn off power.
E-029	Intermediate presser origin detection abnormal	1.First of all, make sure that the machine can move normally without sticking points, the sensor and the baffle of the middle pressor foot can work normally, and the motor of the middle pressor foot and the sensor cable are intact. 2.Start the machine and enter the signal detection interface to detect the sensor of medium pressure foot. If the signal does not jump, replace the sensor and electric control in turn for testing; 3.If the signal can jump normally, enter the middle presser foot detection interface to detect the motor action of the middle presser foot; 4.If the motor of the middle presser foot can work normally but the steering direction is opposite, please change the steering parameters of the motor of the middle presser foot; 5. If the motor of medium pressor foot cannot work normally, replace the motor of medium pressor foot and electric control box in turn for testing;
E-030	Master and step communication	1.Please check whether the program version is correct;

	error	2.Re-upgrade the master control and step procedure to check whether it is normal; 3.Replace the electric control;
E-031	Stepping motor over-current	Please turn off power 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-032	Stepping driver power abnormal	Please turn off power.
E-034	Spindle drive short circuit	1.Turn off the power and check whether the spindle motor is damaged; 2.If the motor is not damaged, replace the electric control box;
E-035	Spindle drive over current 1	1.Turn off the power, check whether the machine is stuck, to ensure that the machine can run smoothly without dead point. 2.Replace the spindle motor; 3.Replace the electric control box.
E-036	Spindle drive over current 2	1.Turn off the power, check whether the machine is stuck, to ensure that the machine can run smoothly without dead point; 2.Replace the spindle motor; 3.Replace the electric control box;
E-037	Motor is blocked 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 mechanism; 5、The encoder at the main shaft motor has problem, which responses the wrong signal, thus causes the blockage of the motor. Solution: replace the main shaft motor
E-038	Motor is blocked 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 motor. Solution: replace the main shaft motor

E-039	Motor over speed	Please turn off power. Spindle motor encoder has a problem, the signal feedback is wrong.
E-040	Over current in stop status	Please turn off power. Spindle motor encoder has a problem, the signal feedback is wrong.
E-041	Motor overload	Please turn off power.
E-042	Bus voltage abnormal	Please turn off power.
E-043	X stepping motor position error	Please turn off power.
E-044	Y stepping motor position error	Please turn off power.
E-045	Presser not down	Step the pedal
E-046	Not at origin cannot operate	Press key to return to origin
E-047	Spindle motor runs abnormally	1.Turn off the power, check whether the machine is stuck, to ensure that the machine can run smoothly without dead point. 2.Replace the spindle motor; 3.Replace the electric control box；
E-048	Abnormal origin position of middle presser foot	Please turn off power.
E-050	X motor over current	1.Turn off the power and check whether the connector of X motor is firmly connected and whether the cable is intact and without damage; 2.Replace X motor; 3.Replace the electric control.
E-051	Y motor over current	1.Turn off the power and check whether the connector of Y motor is firmly connected and whether the cable is intact and without damage; 2.Replace Y motor; 3.Replace the electric control.
E-052	X Large current of motor	X Large current of motor
E-053	Y Large current of motor	Y Large current of motor
E-054	X Motor is running abnormally	1.Turn off the power and make sure that no sticking point can be moved normally in the X direction of the machine. 2.Ensure that the cable connection of X motor is correct and firm without damage; 3Replace X motor; 4.Replace the electric control.
E-055	Y Motor is running abnormally	1.Turn off the power and make sure that no sticking point can be moved normally in the Y direction of the machine. 2.Ensure that the cable connection of Y motor is correct and firm without damage; 3Replace Y motor; 4.Replace the electric control.
E-056	X Motor stall	X Motor stall
E-057	Y Motor stall	Y Motor stall
E-058	Curve calculation error	Curve calculation error
E-059	Master and step communication	1.Verify that the software version is correct

	error 1	2.Re-import system parameters 3.Replace the electric control.
E-060	Master and step communication error 2	1.Initialization parameter 2.Replace the electric control.
E-061	Servo communication error 3	Servo communication error 3
E-062	X Motor is locked	X Motor is locked
E-063	Y Motor is locked	Y Motor is locked
E-064	X Motor instruction coverage	Please turn off power.
E-065	Y Motor instruction coverage	Please turn off power.
E-066	Coverage of X motor fast walking instruction	Please turn off power.
E-067	Coverage of Y motor fast walking instruction	Please turn off power.
E-068	Abnormal calculation of servo moving frame curve	Please turn off power.
E-069	Supply voltage is too high	Please turn off power.
E-070	Front and rear motion sensor failure	Please turn off power.
E-071	Left sensor failure	Please turn off power.
E-072	Right sensor failure	Please turn off power.
E-073	Left and right sensor failure	Please turn off power.
E-074	X Motor over speed	Please turn off power.
E-075	Y motor over speed	Please turn off power.
E-076	X motor current reference value is abnormal	Please turn off power.
E-077	Y motor current reference value is abnormal	Please turn off power.
E-078	The XY motor current reference value is abnormal	Please turn off power.
E-079	Communication of servo motor is abnormal	Please turn off power.
E-080	Bottom line cylinder action is not in place	Please try again.
E-081	The bottom line is insufficient	Press the confirm button to restore after replacing the bottom line
E-082	Oil shortage	
E-083	Variant data error 1	
E-084	Variant data error 2	
E-085	The origin of the wire cutting motor was not found	
E-086	Write drive program failed	Please restart the system and upgrade again.
E-087	Mechanical limit	
E-088	Abnormal detection of bobbin bobbin	1.Please check whether the shuttle tray is empty. If so, press confirm after replacing the shuttle tray.

		2.If there is a bobbin on the bobbin, please turn it off and restart it and check whether the bobbin sensor is normal.
E-089	The automatic shuttle changer is abnormal	
E-090	Automatic shuttle change in progress	
E-091	Unrecognized template	Please replace the template
E-092	Parameter mismatch of master stepping curve	Please update the curve parameters
E-093	Medium presser foot motor over current	1、Turn off the power and check whether the motor connector of the middle presser foot is firmly connected and whether the cable is intact and without damage 2、Replace motor of medium presser foot 3、Replace the electric control
E-094	Over current of wire cutting motor	Please turn off the power.
E-095	Abnormal operation of medium presser foot motor	1.Turn off the power and confirm that the mechanical parts of the middle presser foot can move smoothly without sticking points; 2.Ensure that the motor cable of the middle presser foot is connected correctly and firmly without damage; 3.Replace motor of medium presser foot 4.Replace the electric control
E-096	Abnormal wire cutting motor	Please turn off power.
E-097	The card reader module is abnormal	Please power off and check whether the card reader module is damaged or not connected
E-098	Main power protection	Please turn off power.
E-099	Control box does not match operation head type	Please replace the panel.
E-100	Solenoid valve failure	Please turn off power.
E-101	The air valve action timed out	Please check the air valve
E-102	Air pressure is insufficient	Please check the air valve
E-103	Abnormal communication between master and DSP1	
E-104	Abnormal communication between master and DSP2	
E-105	Abnormal communication between master and DSP3	
E-106	Abnormal communication between master and DSP4	
E-107	Over current or blocking of the upper spindle motor	

E-108	The motor of the lower spindle is over current or blocked	
E-109	Low oil rate alarm	The oil quantity of the mechanical oil storage pot is too low, please replenish the oil!
E-110	Warning against danger	Rotating head rotating area is close to someone or its object, please stay away!
E-111	The bottom line is insufficient	Press the OK button to cancel the alarm.
E-112	Loss of needle or out of position during sewing	1.Please shut down and check whether the signal connection plug of the spindle encoder is correct and reliable, and whether the connecting wire is damaged. 2.Please check whether the moving frame Angle fine-tuning and moving frame time fine-tuning are the default values in transfer mode. 4. Please check whether there is any unrecognized function code information and whether there is continuous repetition in the pattern Function code.
E-113	The upper rotation axis looks for the origin anomaly (beyond the limited number of steps)	1.Please turn it off and check whether the connecting plug of the sensor at the origin of the upper rotation shaft is correct and firm, and whether the connecting wire is damaged. 2.Please check whether the origin sensor of the upper rotation axis is damaged. 3.Please check whether the related machinery of the upper rotation shaft is loose, whether the rotation is smooth, and whether there is rotation blocking.
E-114	The lower rotation axis looks for the origin anomaly (beyond the limited number of steps)	1.Please turn it off and check whether the connecting plug of the sensor at the origin of the rotation axis is correct and firm, and whether the connecting wire is damaged. 2.Please check whether the origin sensor of the rotation axis is damaged. 3.Please check whether the related machinery of the rotating shaft is loose, whether the rotation is smooth, and whether there is blocking rotation.
E-115	Upper spindle servo drive failure	1.Please check the alarm code displayed on the spindle servo driver and check the warning code instructions in the driver manual. 2.Please shut down and check whether the connecting plug of the control line of the spindle servo drive is correct and reliable, and whether the connecting wire is damaged. 3.Please check whether the mechanical structure of the upper spindle is loose, whether the rotation is smooth, and whether there is rotation blocking. 4.Please restart the machine and check whether the needle and spindle are positioned correctly.
E-116	Lower spindle servo drive failure	1.Please check the alarm code displayed on the spindle servo driver and check the warning code instructions in the driver manual. 2.Please shut down and check whether the connecting plug of the control line of the spindle servo drive is correct and reliable, and whether the connecting wire is damaged. 3.Please check whether the mechanical structure of the spindle is loose, whether the rotation is smooth, and whether there is blocking rotation. 4.Please restart the machine and check whether the needle and spindle are

		positioned correctly.
E-117	Over current of upper rotating shaft motor	1.Please turn off the machine and check whether the related machinery of the upper rotation shaft is loose, whether the rotation is smooth and whether there is blocking. 2.Please check whether the connecting plug of the encoder of the upper rotating shaft motor is correct and firm, and whether the connecting wire is damaged. 3.Please check whether the connecting plug of the power cord of the upper rotating shaft motor is correct and firm, and whether the connecting wire is damaged. 4.Please check whether the motor parameters of the upper rotating shaft are configured correctly.
E-118	Lower rotating shaft motor over current	1. Please turn off the machine and check whether the related machinery of the rotating shaft is loose, whether the rotation is smooth, and whether there is blocking rotation. 2. Please check whether the connecting plug of the encoder of the rotary shaft motor is correct and reliable, and whether the connecting wire is damaged. 3. Please check whether the connecting plug of the power cord of the rotating shaft motor is correct and firm, and whether the connecting wire is damaged. 4. Please check whether the configuration of rotary shaft motor parameters is correct.
E-119	The motor of the upper rotating shaft is out of tolerance	1. Please turn off the machine and check whether the related machinery of the upper rotation shaft is loose, whether the rotation is smooth, and whether there is blocking rotation. 2. Please check whether the connecting plug of the encoder of the upper rotating shaft motor is correct and reliable, and whether the connecting wire is damaged. 3. Please check whether the connecting plug of the power cord of the upper rotating shaft motor is correct and firm, and whether the connecting wire is damaged. 4. Please check whether the motor parameters of upper rotating shaft are configured correctly.
E-120	The motor of the lower rotating shaft is out of tolerance	1.Please turn off the machine and check whether the related machinery of the rotating shaft is loose, whether the rotation is smooth, and whether there is blocked rotation Situation. 2. Please check whether the connecting plug of the encoder of the rotary shaft motor is correct and reliable, and whether the connecting wire is damaged. 3. Please check whether the connecting plug of the power cord of the rotating shaft motor is correct and firm, and whether the connecting wire is damaged. 4. Please check whether the configuration of rotary shaft motor parameters is correct.
E-121	DSP3 first line motor over current	Power off, unplug the power cable, confirm the motor or plate fault, contact professional maintenance personnel

E-122	DSP4 first line motor over current	Power off, unplug the power cable, confirm the motor or plate fault, contact professional maintenance personnel
E-123	DSP3 second circuit motor over current	Power off, unplug the power cable, confirm the motor or plate fault, contact professional maintenance personnel
E-124	DSP4 second circuit motor over current	Power off, unplug the power cable, confirm the motor or plate fault, contact professional maintenance personnel
E-125	DSP3 first circuit motor out of tolerance	Turn off the machine and check whether the encoder plug is loose or whether there is a foreign body that prevents the motor from running
E-126	DSP4 first circuit motor out of tolerance	Turn off the machine and check whether the encoder plug is loose or whether there is a foreign body that prevents the motor from running
E-127	DSP3 second circuit motor out of tolerance	Turn off the machine and check whether the encoder plug is loose or whether there is a foreign body that prevents the motor from running
E-128	DSP4 second circuit motor out of tolerance	Turn off the machine and check whether the encoder plug is loose or whether there is a foreign body that prevents the motor from running
E-129	The upper rotation axis and the lower rotation axis are out of sync	1.Please turn off the machine and check whether the related machinery of the rotating shaft is loose and smooth. 2.Please check whether the encoder wire and power cord of the rotary shaft motor are normal and damaged. 3.Please check whether the configuration of rotary shaft motor parameters is correct.
E-130	The motor of the upper spindle is out of tolerance	1.Please turn off the machine and check whether the related machinery of the upper spindle is loose, whether the rotation is smooth and whether there is blocking. 2. Please check whether the connecting plug of the encoder of the upper spindle motor is correct and reliable, and whether the connecting wire is correct Have been broken. 3. Please check whether the connecting plug of the power cord of the upper spindle motor is correct and reliable, and whether the connecting wire is correct Have been broken. 4. Please check whether the motor parameters of the upper spindle are configured correctly.
E-131	The motor of the lower spindle is out of tolerance	1.Please turn off the machine and check whether the related machinery of the lower spindle is loose, whether the rotation is smooth and whether there is blocking. 2.Please check whether the connecting plug of the encoder of the lower spindle motor is correct and reliable, and whether the connecting wire is correct 3.Please check whether the connecting plug of the power cord of the lower spindle motor is correct and reliable, and whether the connecting wire is correct Have been broken. 4. Please check whether the motor parameters of the lower spindle are

		configured correctly.。
E-132	Abnormal synchronization between upper spindle and lower spindle	1.Please turn off the spindle and check whether the related machinery is loose and rotation is smooth 2.Please check whether the encoder wire and power cord of the spindle motor are normal and damaged 3.Please check whether the spindle motor parameters are configured correctly.
E-133	Spindle parking overtime or parking position out of tolerance	1.Please turn off the spindle and check whether the related machinery is loose and rotation is smooth 2.Please check whether the encoder wire and power cord of the spindle motor are normal and damaged 3.Please check whether the spindle motor parameters are configured correctly.
E-134	Spindle lock time out not completed	1.Please turn off the spindle and check whether the related machinery is loose and rotation is smooth 2.Please check whether the encoder wire and power cord of the spindle motor are normal and damaged 3.Please check whether the spindle motor parameters are configured correctly.
E-135	Troubleshooting...	After troubleshooting, confirm key for automatic shuttle change, cancel key for manual shuttle change
E-136	The head lifting action is abnormal!	Please check whether the head lifting mechanism is normal and whether the electrical wiring is intact
E-137	The automatic shuttle changeover module failed to connect	1.Please check whether the power supply of the automatic shuttle changing module is normal. 2.Please shut down and check whether the related lines are correct and reliable, and whether the connecting lines are damaged. 3.Please check whether the program version of the automatic shuttle changing module is normal.
E-138	Bobbin motor malfunction	1.Please turn off the shuttle-board and check whether the shuttle-board mechanism is smooth or not. 2.Please check whether the plug of the shuttle motor is correct and firm, and whether the connecting wire is damaged. 3.Please check whether the shuttle motor is damaged.
E-139	Abnormal detection of spindle motor origin	1.Please turn off the shuttle-board and check whether the shuttle-board mechanism is smooth or not. 2.Please check whether the plug of the shuttle motor is correct and firm, and whether the connecting wire is damaged. 3.Please check whether the origin signal of shuttle motor is normal.
E-140	The bobbin arm rotation is abnormal	1.Please shut down and check whether the bobbin arm rotation mechanism is smooth and whether there is a jam. 2.Please check whether the switch plug is correct and reliable, and whether the connecting wire is damaged. 3.Please check whether the relevant sensor is normal.
E-141	Abnormal expansion of shuttle	1.Please shut down and check whether the shuttle boom expansion mechanism

	changer arm	is smooth and whether there is a jam. 2.Please check whether the telescopic plug of the shuttle changer arm is correct and reliable, and whether the connecting wire is damaged. 3.Please check whether the relevant sensor is normal.
E-142	The bobbin core is abnormal when changing bobbin arm	1.Please power off and check whether the bobbin arm and bobbin butt position are consistent. 2.Please check whether the bobbin clamping mechanism is normal. 3.Please check whether the bobbin sensor is normal.
E-143	Abnormal starting Angle of spindle synchronous action	1.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 2.Please contact relevant after-sales service personnel for problem solving.
E-144	Abnormal position of spindle synchronous rotation axis	1.During sewing, the rotating shaft failed to rotate normally, resulting in the deviation of needle Angle. 2.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 3.Please contact relevant after-sales service personnel for problem solving.
E-145	Abnormal position of spindle synchronous middle presser foot	1.The middle presser foot (follow up) fails to lift or fall properly, resulting in height deviation. 2.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 3.Please contact relevant after-sales service personnel for problem solving.
E-146	Spindle synchronous X- axis position abnormal	1.During sewing, the X axis failed to complete the action according to the pattern, resulting in the deviation of the X axis direction frame. 2.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 3.Please contact relevant after-sales service personnel for problem solving.
E-147	Spindle synchronous Y- axis position abnormal	1.During sewing, the Y axis failed to complete the action according to the pattern, resulting in the deviation of the Y axis frame. 2.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 3.Please contact relevant after-sales service personnel for problem solving.
E-148	Spindle synchronous frame position abnormal	1.During sewing, XY axis failed to complete the action according to the pattern, resulting in the deviation of the frame. 2.Restore the recently modified parameters, making sure that the parameters have changed within the appropriate range. 3.Please contact relevant after-sales service personnel for problem solving.
E-149	The pattern is beyond the scope of sewing	Please press OK to remove the fault. 1、Please modify the starting point; 2、Check that the sewing range set by the operator head does not match the selected pattern.
E-150	The calibration Angle value of	Please enter the spindle motor calibration interface to reset the spindle

	spindle motor is abnormal	installation Angle
E-151	Laser offset out of stitching range	Adjust the laser or brush offset parameters
E-152	The extension module is not connected	Shut down the system and check the connection and power supply between the extension module and the system
E-153	Extended module over current error	Close the system, check whether there is an external valve short circuit, pull out the valve one by one to eliminate
E-254	Undefined error	An undefined error occurred in communication

3.2 Hint Information List

No.	Name	Content of Sub-information
M-001	Up counter reaches set value	Press Enter
M-002	Down counter reaches set value	Press Enter
M-003	Not at origin, cannot operate	Return to origin firstly
M-004	Pattern data not exist	Please reload or input again
M-005	Set value is too large	Please input value within valid range
M-006	Set value is too small	Please input value within valid range
M-007	Please press “Return to Origin”	
M-008	Save parameter abnormal	Press Enter to restore the default values
M-009	Cannot find pattern in memory	Press Enter to load the default patterns
M-010	Memory full	Please delete the idle sewing data
M-011	Delete pattern data from memory?	Press OK to delete the operation and cancel to exit the current operation.
M-012	Replace pattern data in memory?	Press OK to delete the operation and cancel to exit the current operation.
M-013	Can not delete pattern data.	The selected sewing data is being used
M-014	Format memory?	Press OK to delete the operation and cancel to exit the current operation. All memory pattern data will be deleted after formatting!
M-015	Communication error	Abnormal event occurs in the communication between the operation head and the control box.
M-016	Beyond sewing range	Make sure pattern data is in sewing range
M-017	Fail to load letter sewing file	
M-018	Operation head does not match the type of control box	Please check the model and the software version
M-019	Wrong pattern number	Please input the right pattern number
M-020	Beyond max stitch interval	
M-021	Wrong password	Please input password again
M-022	Hardware clock error	The hardware clock has problem, please contact manufacturer for repair.
M-023	Stitch number beyond range	Please enter [Operation Settings]->[LCD Screen], select 'Large Sticker Count Pattern Support' parameter set to ON
M-024	Inputted stitch interval is too low	Please input value within valid range
M-025	Inputted stitch interval is too low	Please input value within valid range
M-026	Offset origin existed	User can only input one offset origin.
M-027	Please press Return to Origin	
M-028	Copy the pointed pattern?	Do you want to overwrite the original graph?

		Yes: Enter, no: X
M-029	Restore to default setting?	Press OK to delete the operation and cancel to exit the current operation.
M-030	USB is pulled out	U Disk Is Pulled Out！
M-031	Cannot find pattern data in U disk	
M-032	At least input one letter	At making pattern of letter sewing, user has to input at least one letter
M-033	No alarm record	
M-034	Replace needle	Reach set value for needle replacement, please replace needle!
M-035	Replace oil	Reach set value for oil replacement, please replace oil!
M-036	Clean machine	Reach set value for cleaning machine, please clean machine!
M-037	Different data format	Please confirm the data format
M-038	Cannot create curve	Please input again according to the standards of curve input.
M-039	Cannot insert trimming at current position	Please add trimming behind sewing data
M-040	Cannot add same function code in one position	
M-041	Cannot insert offset origin at current position	Please add offset origin after feeding
M-042	Cannot create arc or circle at the inputted point	Please input again
M-043	Cannot create overlapped sewing data	Please add overlapped sewing after close shape
M-044	Cannot insert trimming after down pause	
M-045	Cannot insert down pause before trimming	
M-046	Select wrong position	
M-047	Cannot scale	
M-048	Wrong pattern data	
M-049	Create arc?	
M-050	Create circle?	
M-051	Create curve?	
M-052	Create polygon?	
M-053	Presser is not down	Please step pedal
M-054	Wrong User ID	Please input again
M-055	Cannot change system time	The periodical password is set. Can not change system time.
M-056	Fail to save password file	
M-057	Fail to load password file	
M-058	Password saved successfully	
M-059	Fail to clear all passwords	Cannot delete password file
M-060	Fail to clear password	After the password is cleared, the file input becomes abnormal

M-061	Password file is deleted without authorization	Periodical password is deleted without authorization, please turn off machine
M-062	User ID file damage	
M-063	Input pattern name	
M-064	Please clear current combination data	Press “CLR” to delete current combination data
M-065	Empty input invalid	Please enter your password.
M-066	Password not match	Please re-enter the current password
M-067	New password is different.	Please re-enter a new password and reconfirm
M-068	Touching panel correction successful	Correction is successful. Please turn off power to restart.
M-069	Clear alarm records?	Yes: Enter No: X
M-070	Delete the selected file?	Yes: Enter No: X
M-071	Copy all patterns	Cover the original patterns? Yes: Enter No: X
M-072	Fail to copy file	Please check the space in memory
M-073	Fail to copy file	Please check if the USB disk is pulled out!
M-074	Fail to open file	Fail to open file
M-075	Format not match	Formats don’t match, current load denied
M-076	Please create catalogue and file	Please create catalogue bakParam in U disk. Name the back-up file as backup.param and copy it to bakParam catalogue !
M-077	File I/O error	File I/O error
M-078	Please select file	Select the file for input/ output
M-079	File not exist	Cannot find the corresponding file
M-080	Not input move amount	Please input move amount
M-081	Determine to perform the current action?	Are you sure? Yes: Enter, no: X
M-082	Clear accumulated running time?	Are you sure? Yes: Enter, no: X
M-083	Clear accumulated sewing pieces?	Are you sure? Yes: Enter, no: X
M-084	Clear accumulated power-on time?	Are you sure? Yes: Enter, no: X
M-085	Clear accumulated stitch numbers?	Are you sure? Yes: Enter, no: X
M-086	Periodical passwords can’t be same to super password	Please input password again
M-087	Cannot change up counter (NUP)	At change, please turn off setting (NUP)
M-088	Cannot change down counter (NDP)	At change, please turn off setting (NUP)
M-089	Pattern list (hotkey) is empty	If the pattern list is empty, the system will automatically input the current pattern to list

M-090	Not select update item	Please select item for updating. At least select one item
M-091	Some selected update items don’t exist.	The item not existing will be cancelled after return. For updating the rest items, please confirm again
M-092	Update successful	Update is successful, please restart machine.
M-093	Format U Disk?	Press Enter to perform formatting operation. Press Esc to quit current operation. After formatting, all pattern files will be deleted.
	Update successful	Update is successful, please restart machine.
M-094	Successful	Current operation is successful!
M-095	Failed	Current operation is failed!
M-096	Format pattern list (hotkey)?	Press Enter to perform formatting operation. Press Esc to quit current operation
M-097	Cover the pattern with same name in U disk?	Press Enter to cover files. Press Esc to quit current operation
M-098	Fail to correct touching panel	Please perform correction again
M-099	The selected pattern is not normal format, please transform.	Press Enter to perform transforming operation. Press Esc to quit current operation
M-100	Cannot transform this pattern	Please confirm pattern
M-101	Restore all the settings?	Are you sure? Yes: Enter, no: X
M-102	Restore the selected item?	Are you sure? Yes: Enter, no: X
M-103	Not select item	Please select one or more parameters
M-104	Parameters initialization	Clear all data in . Please turn off power and restore the setting of DIP switch.
M-105	Cannot copy and cover current pattern	Current pattern number in copy group, system cannot cover it.
M-106	Need transform pattern format	Select pattern is not a standard file format, please convert it to use
M-107	Cannot perform operation to combined pattern	Please enter pattern connection mode, press “CLR” to cancel the combined pattern
M-108	Delete original pattern?	Delete original pattern after format transforming? Yes: Enter No: X
M-109	Intermediate presser in down position	Please lift intermediate presser
M-110	Turn off machine, Bye	
M-111	Large stitching pattern file format	Not support this pattern format in this system
M-112	Wrong transformed pattern format	Please confirm pattern
M-113	Transformed pattern data is too long	Please enter [Operation Settings]->[LCD Screen], select 'Large Sticker Count Pattern Support' parameter set to ON
M-114	Cannot open transformed pattern	Please confirm pattern
M-115	Wrong accuracy of transformed pattern	Set the resolution in the platemaking software to 0.1mm(Tools -> Options Settings - BBB>

		Resolution)
M-116	Parameter recovery successful	Parameter recovery is successful, please restart machine
M-117	Software version saving successfully	Software version is saved to the base catalogue of U disk successfully
M-118	Successfully set	The machine needs to be restarted
M-119	USB drive does not exist	Please insert the USB drive containing the MP3 files
M-120	There is no second origin	There is no second origin for the current pattern.
M-121	Validation failed while upgrading master program	
M-122	Threading a thread...	
M-123	Whether to restore the saved custom parameters	Determine the key to perform the operation, cancel the key to exit the operation
M-124	The current pattern is locked by the template	Please unlock the template!
M-125	Parameter loading failed	Please contact the manufacturer for maintenance!
M-126	The bottom line is insufficient	Please change the bottom line, press the OK key and re-count
M-127	Cannot generate multiple slit data	
M-128	Complete the graph copy?	
M-129	Memory allocation error	
M-130	Continued use will convert to dot seam	
M-131	The panel does not match the main control	The current system has a staging password, you need to contact the manufacturer to unlock!
M-132	The current panel has a password and needs to be synchronized	There is a password in the panel, but no password in the master control!
M-133	Current master exists password, need synchronization	There is a password in the master control, but there is no password in the panel!
M-134	You need to replace the font, please turn off the power and restart	Special languages turn off speech
M-135	Motherboard ID does not exist	
M-136	Language font is missing	Please update the required font file
M-137	C pattern Failed to open	Error in pattern file, will be deleted!
M-138	Incorrect content of pattern shortcut key	
M-139	The batch conversion function cannot be accessed	
M-140	The number has been taken	
M-141	A trace could not be generated	
M-142	Internal data exception	

M-143	There arc	The ellipse will be converted to point slits
M-144	Determine clearance of production records?	Are you sure? Yes: Enter, no: X
M-145	Clock in success	
M-146	Clock in failure	
M-147	Shrinkage seam conversion is successful	Shrinkage seam part has become a point seam, can not be converted to shrink seam again, it is suggested to keep the original pattern, for the next modification
M-148	Determine clear switch machine record?	Are you sure? Yes: Enter, no: X
M-149	No switching machine record	
M-150	Failed to upgrade the drive program	
M-151	The request failed	
M-152	Password information saved successfully	
M-153	The upgrade file does not exist	The directory does not exist or there are no files in the directory
M-154	Please set the add counter invalid	
M-155	Please set the subtraction counter invalid	
M-156	Are you sure to correct the spindle?	Are you sure? Yes: Enter, no: X
M-157	Invalid block number	
M-158	Reject the current operation	
M-159	The receive parameter is null	
M-160	The parameters have not changed	
M-161	QR code display failed	
M-162	The current position needs to be corrected due to reading new patterns	Please press the OK button
M-163	Shrinkage stitch number exceeds actual stitch number	
M-164	Cannot generate slot data	
M-165	Are you sure to correct the upper shaft?	Are you sure? Yes: Enter, no: X
M-166	Are you sure to correct the lower shaft?	Are you sure? Yes: Enter, no: X
M-167	No input point	Coincident with the previous input point position

M-168	Generate curve data?	
M-169	The software does not match the file system	
M-170	Password date change failed	The date entered should be before the date of the next password attack
M-171	Whether to confirm winding	Are you sure? Yes: Enter, no: X
M-172	Start pin contains function code, please confirm whether to modify	The "OK" key means to modify the function code, and the "Cancel" key means to exit and reselect. If you want to keep the function code, please refer to the code information on the right side of the interface to continue moving and make the starting pin the function code.
M-173	The panel is not encrypted, the master control is encrypted	Please confirm whether a new panel has been replaced
M-174	The panel is encrypted, the main control is not encrypted	Determines key synchronization encryption status
M-175	Remote staging Settings already exist on the system	Determine the key to continue operation, cancel the key to exit operation
M-176	Wireless module 1 connection failed	System speed reduced to the minimum, please contact the manufacturer
M-177	Do you want to update the pattern thumbnails immediately?	The thumbnail image will also be generated after the pattern is used
M-178	The system has been set to not network mode	After the networking function is turned on, it can be detected
M-179	A join failure	
M-180	Unable to convert	
M-181	This machine has a password, please note!	
M-182	Whether to delete the selected shape point	
M-183	Whether to modify shape point properties	
M-184	Trick does not exist, whether to download from the server	Are you sure? Yes: Enter, no: X
M-185	The request pattern is not in standard NSP format	
M-186	There is no request pattern on the server	
M-187	Server update software, whether to upgrade operation	Do you want to upgrade immediately? Yes: Enter, no: X
M-188	Machine not registered	
M-189	The action did not complete and timed out	

M-190	Location query timeout	
M-191	Stretch will affect the shrinkage data	There is a shrinkage seam in the sewing data, and the shrinkage seam will be automatically added by expansion, which will destroy the previous shrinkage seam data. Please pay attention to save another pattern
M-192	Upgrade of boot screen is abnormal	
M-193	Please scan the code and start processing	
M-194	Herringbone seam width is too large, need to insert transverse stitch number	
M-195	The panel is not connected to the main control	Dial switch 5 is turned on
M-196	The pattern accuracy is higher than the system accuracy	There will be a loss of precision in the pattern data
M-197	Whether to overwrite other format patterns of the same name on a USB disk	Press OK to overwrite the file, and press Cancel to exit the current operation.
M-198	Generate pattern, continue editing?	Enter, continue to set parameters or function code; No: X, exit save pattern.
M-199	Do you restore rigidity of all stitches to their original values?	Are you sure? Yes: Enter, no: X
M-200	Do you want to save laser offset values?	Are you sure? Yes: Enter, no: X
M-201	Do you want to save the origin offset value?	Are you sure? Yes: Enter, no: X

4.Appendix 2

4.1 Operating box mounting dimensions

4.2 Control box mounting dimensions

4.3 Diagram and Cable Connection

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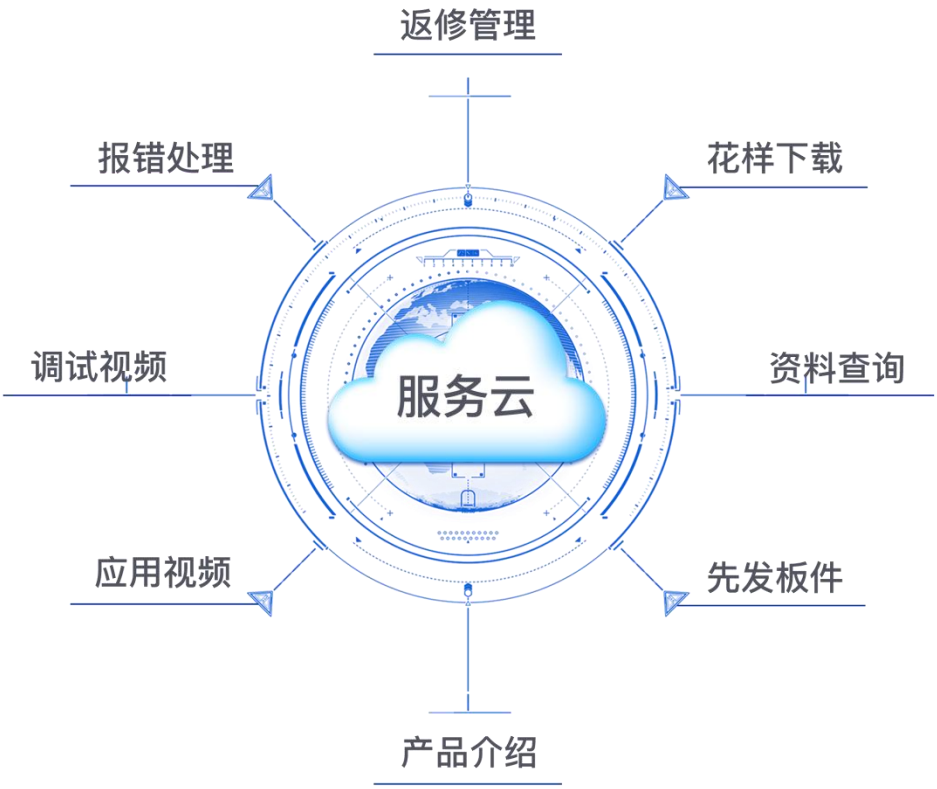

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