

OPERATION INSTRUCTION OF OPERATION PANEL



Picture1

This products with the double digit tube display and two press key.

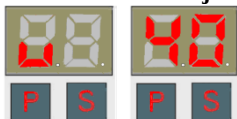
Picture 1 : the interface when turn on the machine

1. Parameter list

Parameter	function	description
V	Parameter for adjust the speed	Speed=Value show in the digital X100(RPM/Min)
M	Set needle position function	0: turn off needle position function 1: turn on needle position function
Y	Parameter for needle position	Digital tube show “-” in upper location means upper needle position and in down location means down needle position Note: Y do not work when M value is 0
b	Set the rotation	The LED light running direction in the right side digital tube means the rotation of the motor

2. Parameter adjustment

2.1 Parameter Adjustment For Speed



Picture 2



Picture 3

On the interface, press P, and then the digital show V(Picture 2), press S show the speed value(Picture 3), continue press S can adjust the speed value. When adjust ,if the small point of the digital is twinkling ,means adjustment is not saved,

The way to save the adjustment: press P. Show OK(Picture 4) means success, show Er(Picture 5) means failed

The way to give up adjustment: turn off the power, and waiting till the digital tube light turn off.



Picture 4



Picture 5

2.2 Parameter Adjustment For Auto-Needle Position Function



Picture 6

In the P interface, press key P several times quickly, will enter parameter M(Picture 6). Through press the right key S can adjust the value of M

Save the adjustment: press P.

Show OK means success, show Er means failed

Give up adjustment: turn off the power, and waiting(about 20s) till the digital tube light turn off.

2.3 Auto-Needle Position Model Adjustment

In P interface, to press the key P with several times quickly, the left side digital tube will show Y, and then press the right side key to adjust the needle position model.



Picture 7



Picture 8

Note: If parameter M value is 0 then this parameter not work

2.4 Motor Rotation Adjustment



Picture 9

In P interface, press left side key with several times quickly till the left side digital tube show b, then through press the right side key to adjust the ration of the motor.

1) Before use the motor ,confirm the rotation of the sewing machine head first(clockwise rotation or counter clockwise rotation)

2) When the motor used in different type of sewing machines, please to adjust the motor rotation accordingly in parameter b. details refer to“b the list of motor parameter and motor direction”.

2.5 Restoring To Factory Setup

When the control box can not work regularly, through restoring to factory setup make the machine can work regular again.

Press S (about 3 seconds)on the P interface till the digital tube shows “OK” will recover the system parameter to the factory setting. If shows Er means failed.

Please find the list of motor parameter and motor direction. as below

Parameter b	Belt Driver	Direct Driver Overlock/Inter-lock	Direct Driver Lockstitch
Right digit tube run in clockwise			
Right digit tube run in counter clockwise			

MANTAINANCE AND GENERAL RECOVERY PROCESSING

If the machine went wrong, maintenance and operation should be operated under professional trained person.

1. No reaction when turn on the power control box.



Picture 10

Please check whether the plug is inserted, the power cord and the fuse are in good condition(The fuse is inside the control box as picture 10 , please replace the fuse which as the same type as before if the original one is burnt.)

2. Control box is connected, but the motor doesn't work when pressing the pedal. Motor speed is not controlled by the governor.

Please check if the plug of speed controller, motor and motor signal wire is connected to the socket in control box correctly. Check if the speed controller is broken or not.

3. The rotate speed of motor sometimes fast and sometimes slow

Please check if the belt is too loose, or the belt puller slipped, or the pedal and tension rod is loose.

4. The motor suddenly stopped during running

Please check if the machine load too heavy first or there is mechanical problems. Then check if the power socket and plug connect well to the motor hall socket and plugs well. It's same to the socket and plug of speed controller.

5. The motor will run without stop when the control box is turning on.

Please check it if the position of alnico within speed adjustor changed. The method is as below mentioned: Open the plastic cover of speed controller, loose the fixed screw. Then adjust the position of swinging arm (picture 11 is the position of swinging arm when working), make the alnico within swinging arm on the right up of the part hall, (picture 12 is the position of swinging arm when stopping), generally, the machine could stop. If not, adjust the position again by clockwise.



Picture 11



Picture 12

6. If turn on the machine the fuse immediately burnt, after change the same specification fuse the problem still can't solve, please contact with the local agent to replace.

7. Other problems not list above, please contact with the local agent

Error code	Reasons	Solution
E1	Motor with locked-rotor problem	Please reduce the load capacity and then restart the motor Please check if the sewing material is too heavy Please check if the machine needs lubrication. Please check if the 10core line connect well or not
E2	over-current or under-voltage	Please check the voltage Because of supercharge or controller failure, if turn on the motor again can't solve the problem, please contact the local agent Please check if the 10core line connect well or not
E3	The board can not read the parameter	Please turn off the power and then turn it on again. If can't solve the problem, please contact the local agent
E4	Hall signal error	Please check if the 10core line connect well or not, Please check if the connect line of hall is well or not
E5	Needle position with problem	Please check if the positioner connect well (if the positioner damage or don't need needle position function and with Er5 code, please keeping press S around 3seconds, enter parameter model, set M value into 0 can turn off the function

Note: If the control box give the error code made the machine can't run, please don't turn on the power till the problem solved

操作面板使用说明



本控制器使用双位数码管显示实现参数调整，两个数码管和 2 个按键。
左图 1 为双显数码管开机操作界面。

图 1

1. 参数表

参数	参数作用	参数说明
V	速度	速度=显示值 x100（转/分）
M	自动停针功能开关	0: 关闭自动停针功能 1: 打开自动停针功能
Y	自动停针	右数码管上横亮表示上针位；右数码管下横亮表示下针位。 注意：当 M 参数设置为 0 时，Y 参数将不显示。
b	电机转动方向	数码管笔断转动方向表示电机转动方向

2. 参数调整

2.1 调整速度参数

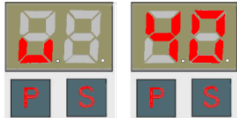


图 2



图 3

在开机界面按左键 P，然后左数码管显示 V（图 2），按右键 S 显示当前速度值（图 3），继续按 S 键可调节数值，调节数值时，右侧数码管处小圆点闪烁，表示参数还未保存。



图 4



图 5

如要保存修改的参数，请按左键 P。显示 oK（图 4）表示保存成功。显示 Er（图 5）表示保存失败。

如要放弃修改的参数，请直接关闭电源，等数码管熄灭后重新开机。

各式电机参数和电机转向表

电机转向参数 (b)(数码管旋转方向)	下挂式电机	直驱式电机 (包缝/绷缝电机)	直驱式电机 (平缝电机)
右边数码管的段位顺时针旋转			
右边数码管的段位逆时针旋转			

常见故障的排除

机器发生故障，请由受过专业培训的人员维修和操作

1. 控制器开机无电无任何反应



图 10 保险丝位置图

请检查电源插头是否插好、电源线是否完好、保险丝是否完好（保险丝在控制箱内部，如左图所示为保险丝管座。如保险丝损坏请更换保险丝管座内部的保险丝，注意保险丝规格要一致。）

2. 控制器有电，但踩踏板电机不转，电机转速不受调速器控制

请检查调速器插头、电机插头，电机信号线插头与控制器上的插座接触是否良好，调速器是否损坏。

3. 电机转动时快时慢

请检查皮带是否太松，皮带盘是否打滑，踏板及拉杆是否松动。

4. 电机在转动中自动停止

首先请检查机器负荷是否太重，是否存在机械故障，其次检查电源插座、插头和电机霍尔插座、插头、调速器插座、插头接触是否良好。

2.2 调整自动停针功能开关参数



图 6

在 P 界面下，连续按下左键 P 数次，直到显示 M 界面（如图 6）。通过按右键 S 修改 M 的值。

如果要保存修改的参数，请按左键 P。

显示 oK 表示保存成功。显示 Er 表示保存失败。

如果要放弃修改的参数，请直接关闭电源，等待数码管熄灭（约需 20 秒），然后重新开机。

2.3 调整自动停针模式

在开机界面按左键 P 数下，左数码管显示 Y，然后通过按动右键调整右数码管笔断的位置来调整针位。

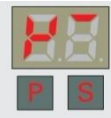


图 7



图 8

注意：当 M 参数设置为 0 时，Y 参数将不显示。
左图图 7 上针位、图 8 下针位

2.4 调整电机转动方向



图 9

在开机界面按左键 P 数下，直到左数码管显示 b，然后通过按动右键调整右数码管笔断的旋转方向来调整电机的旋转方向。如左图所示。

3) 使用电机前请确认缝制设备主轴转向（顺时针或逆时针）。

4) 当电机用于不同的缝制设备上时，请在使用前及时调整“电机转向控制参数 b”。具体参考“b 参数和电机转向关系表”。

2.5 一键恢复出厂参数

当控制器无法正常操作使用或者错误修改参数导致不能正常工作时，使用一键恢复出厂参数功能可恢复出厂配置参数。

在 P 界面（开机界面），长时间按下右键 S（约 3 秒钟），数码管显示 oK 后放开按键，所有的参数就恢复到了出厂时设置的值。如果显示 Er 表示恢复参数失败。

5. 控制器在开机后电机转动不停

其次请检查调速器中磁钢的位置是否有变化，检查调整的方法如下：打开调速器的塑料盖板，松开塑料摆臂的固定螺丝，仔细调整塑料摆臂的位置（图 11 为工作状态下的摆臂位置），使摆臂中的磁钢位于霍尔元件的正上方（图 12 为停止状态下的摆臂位置），一般情况机器转动可停止，若机器继续转动，可稍将摆臂即磁钢向顺时针方向调整。



图 11



图 12

6. 开机即烧毁保险管，当换用同规格的保险管故障依然存在，发生此种故障时，请与当地经销商联系维修事宜。

7. 其他超出以上指示范围的故障，请与当地经销商联系。

错误代码一览表

错误码	原因	解决方法
E1	电机发生堵转故障	电机负荷过大，请减轻负荷后重启电机； 请检查缝料是否太厚； 机器是否缺少润滑油； 检查 10 芯电机插件是否松动或者脱落
E2	过流或者欠压	请检查供电电压是否正常； 一般是负荷过大或者控制器故障引起的，若重启后也不能解决，建议联系经销商解决； 检查 10 芯电机插件是否松动或者脱落
E3	主板读参数错误	出现此种状况，需要关闭电源，稍后再打开电源开关即可； 若重启后也不能解决，建议联系经销商解决
E4	电机霍尔信号出错	请检查电机 10 芯插头连接是否可靠，霍尔信号线是否有断线，插针是否退出或者变形
E5	定针位出错	请检查定位器插头连接是否可靠。 (如果定位器损坏或者不需要定位功能时，当报 E5 后，按住右键 S 约 3S，就可以进入参数设置界面，把 M 设置成 0，即可关闭定针功能)

注意：系统报错后，机器将无法运行，显示面板持续显示错误码，请排除故障后再上电。

