

CONTROL PANEL MANUAL

TRECCIA 1F

Industrial flat bed interlock sewing
machine



1. General Safety Instructions

1. Do not put your feet on the pedals when the control box and motor is switched on (boot status)
2. Let professionals to install and debug this product
3. Do not open the control box and the motor cover when energized
4. Please turn off the power when changing the needle, threading or replacing the bottom line
5. During installation and removal service, please turn off the power and pull the plug
6. Please turn off the power when turn lift sewing machine
7. When use this product, please stay away from high-frequency electromagnetic waves and radio wave transmitters, etc., in case the electromagnetic waves generated interfere with the servo drive to occur wrong action .

2. Product Instruction

Control system includes control box and pedal.

This control system features is easy to use and features in excellent performance, including quick start, quick stop (sewing machine), accurate needle Position. Furthermore, the modular circuit has Self-Protection System when against lower voltage, over current, over heat etc. Speed stepless is realized by the pedal speeder.

Specification:

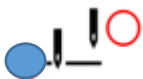
Voltage	220V2 phase
Frequency	50~60HZ
Speed	200-6000RPM
Motor torque	≤2.2NM

The system key diagram is as follows



3. Installation for Control Panel

Keys description:

No	Button	Description
1	 (Menu button)	Press and hold the key  and  to enter user parameters, no password is required. Press and hold the key  and  to enter system parameters, a password is required to enter.
2	 (Confirm button)	Parameter confirm button
3	 (Numerical adjustment key)	Increasing value
4	 (Numerical adjustment key)	Decreasing value
5	 (Machine LED button)	LED on – the function in on; LED off – the function in off.
6		Press button to switch up or down needle position during sewing lights  means up needle position, if down pinhole lamp lights  means down needle position, if two lamps off means needle positioning is off.

Example: How to change the motor from Clockwise to Counterclockwise

Step 1: Turn on the power first.

Step 2: Press and hold the "P" key, then press the "+" key with your other hand, the screen will display P-00.

Step 3: Press the "+" key, the screen will display P-02, (P-02) is the motor forward and reverse parameters (available on the common parameter table).

Step 4: Press the "P" key, the screen will display "1".

Step 5: Press the "-" key to adjust "1" to "0" ("1" means clockwise rotation, "0" means counterclockwise rotation, available on the common parameter table).

Step 6: Press the "S" key to confirm that the parameter adjustment is complete and exit the parameter.

2.To enter the parameter method of operation:

Step 1: Turn on the power first.

Step 2: Press the "P" key, no leave, and use the other hand press the "+" key, the screen will display the p-00.

Step 3: press "+" key, the screen will display p-02, (p-02) is a motor clockwise or Counterclockwise wise parameters (common parameter list has).

Step 4: Now press "P" key (enter into parameter) screen will display "1".

Step 5: press "-" key, change "1" to "0"
("1" clockwise "0" for the counter-clockwise, common parameters list has).

Step 6: Press the "S" key to determine the parameters, save and exit the parameter.

Restore factory settings: Press the P key, no leave, and use the other hand press the "+" key, the screen will display the p-00, then press "S" key for a few seconds, it will Restore factory settings.

Commonly used parameter setting:

No	Parameter	The parameter name	Adjusting range		Factory Setting	Remark
1	P-01	Maximum speed lock	200-6500RPM		4500	
2	P-02	Direction of rotation	0 - counter clockwise	1 - clockwise	1	
3	P-03	The needle Angle	6-18		12	
4	P-04	Start sewing speed	200-800		250	
5	P-05	Speed up and slow	2000-4000		3500	
6	P-06	Set the seam	0-999		0	
7	P-07					
8	P-08					
9	P-09					
10	P-10	Automatic clearance run(run)	01S Then press the S key change to I		0	Turn off the electricity stopped running
11	P-11	Presser foot ascend starting time	0-2000ms		0	
12	P-12	Ascension presser foot protection time	1-120s		4s	
13	P-13	Maximum current limiting	50-1000		280	
14	P-14	Needle position	1:up 0:down		1	
15	P-15	Whether to detect the up needle position	1:detecting needle 0:no detection		1	Set "1", if there is no upper needle stop sensor will alarm ER01; set "0" no alarm
16	P-17	factory reset code	1-3		1	When open the parameter "P09", then it can occur "P17",set "3", then long press "OK" button to recover the factory code
17	P-18	factory code	0000-9999		2013	
18	P-19	soft start stitches	0-15		0	0 stitch is close this function, 1-15stitches is open the soft start , and set the stitches(upper needle position is effective)
19	P-20	soft start speed	200-3500		800	
20	P-21	suction function	0: close 1:start		1	motor running open/close suction function

21	P-22	suction start stitches	1-200	30	suction open stitches (P23 stitches open have effective)
22	P-23	suction close stitches	0-200	0	
23	P-24	suction action maintain time	50-2000ms	120ms	this parameter do not use now
24	P-25	suction full power time	35-1000ms	120ms	
25	P-26	the power of suction full power	5-100%	100%	
26	P-27	suction maintain power	1-100%	80%	
27	P-28	suction release time	0-500ms	20ms	
28	P-29	suction protection time	1-120s	30s	the longest time of suction single action
29	P-30	foot presser trigger mode	0: close 1:start	0	1, set "0", back step the pedal,the foot presser is not up, set "1", back step the pedal, the foot presser is up. 2, the foot presser is maintain up, until front step the pedal or the protection time is finish then release, and motor stop, the foot presser is up automatic.
30	P-31	back foot presser lifter start time	0-2000ms	0	the time of back step delay start foot presser
31	P-32	foot presser lifter action maintain time	50-1000ms	160ms	this parameter do not use now
32	P-33	foot presser lifter full power time	35-1000ms	160ms	
33	P-34	the power when the foot presser lifter full power	5-100%	100%	
34	P-35	foot presser lifter maintain power	1-500%	80%	
35	P-36	foot presser lifter release time	0-120ms	30ms	the foot presser lifter release time
36	P-37	foot presser lifter protection time	1-100s	10s	the biggest maintain time of the foot presser lifter single time
37	P-38	realtime speed	200-6500RPM		display the current motor real speed

38	P-39	display the volt of speed controller	14-1010	195 Neutral point volt	Display the current speed controller volt 0-1024, it is equal 0-5V
39	P-40	display DC buses voltage	60-500V	310v	When the volt is higher than 395V will alarm,(DC buses volt/1.414 = AC buses volt)
40	P-41	overload protection switch	0: close 1:start	1	“0” is close the overload alarm, set “1” is open the alarm, when DC buses voltage is over 395 V , will display Er16, the motor will stop automatic, when volt is lower 385V, the motor can run.

Common faults and treatments:

No	Error	Description	Solution
1	Er01	No stop signal	1. locator signal plugs not inserted 2. the locator induction position close to the point keep 1mm-1.5mm distance and magnetic steel
2	Er02	Not find the speed controller	1.Speed control device plug is not insert. 2.Speed controller wire is broken
3	Er03	Motor Hall or phase error	1.: Nine hole plug contact undesirable 2.: The motor doesn't install good 3.: Hall bad
4	Er04	Lacked-rotor protection	1.The motor overload 2.The motor and the controller connected four hole line contact is not good
5	Er05	Hardware over-current Protection	1.The motor overload 2.Signal wire not good or broken
6	Er07	Serial per communication	Display to the system board signal bad or bad
7	Er16	Overload protection	The motor drive power supply voltage is too high, the 220V power supply voltage exceeds the limit value(AC310V), or the load inertia is too large to the regenerative voltage exceeds the limit value(DC440V), or the voltage detection circuit fails.
8	Er20	Deficiency protection	The motor drive power supply voltage is too low, the 220V power supply voltage is lower than the limit value(AC91V), or the motor drive power supply voltage is lower than the limit value(DC130V), or the voltage detection circuit fails.

Environmental Requirements:

Please do not work at damp place.

220V electronic control: [220V access to power supply voltage stability between (200V~260V)].

Must be adequately grounded for safety.

Do not work at high temperature.

Do not run motor and control system near to ferromagnetic or high-radiance area.

一体机节能单抬压脚直驱使用说明书

欢迎使用本公司产品，制衣行的正确投资选择！

本说明书为本公司新研发的“一体机节能单抬压脚直驱控制箱”产品参考手册，请认真阅读此手册以更好运用本公司产品。

- 1: 电机电控接通电源时（开机状态）请不要把脚放在脚踏板上
- 2: 本产品请专业人士安装调试
- 3: 严禁在通电时打开控制箱与电机端盖
- 4: 换针，穿线或更换底线时请关闭电源
- 5: 安装，拆卸维修时请拔掉电源插头
- 6: 翻抬缝纫机时请关闭电源
- 7: 使用本产品请远离高频电磁波和电波发射器等，以免所产生的电磁波干扰伺服驱动器而发生错误动作。

郑重申明：

- 1: 不遵守安全使用说明操作规章，发生意外后果自负。
- 2: 未经本公司授权，请勿擅自改动产品，由此而引起的后果本公司不负任何责任。

二、产品介绍：

本产品由本公司自主研发,产品个性鲜明,真正体现出了机电一体化的概念,更是节能,高效,环保,优美集结于一身。可广泛适用于多种缝设备。

1. 组成部分：

控制系统由控制器和电机两部分：

控制器：控制箱和脚踏调速器。

本控制系统体现出了超前的设计理念,系统操作简单易上手,整个控制系统性能优越。具有起步快,停车快、准等优点。而且电路模块保护功能完善：有欠压、过流、过压、掉电等一系列保护功能。踏调速器可实现无级调速。

2. 220/110 性能参数指标：

220 性能参数指标

电源供电电压	220 单相 2
频率	50~60
电机转速	200-6000
电机扭矩	≤ 2.2

3. 系统按键图如下:



三、控制面板使用说明:

1. 各按键的用途:

序 号	按键图标	功 能 说 明
1	 (菜单键)	按住  键和  键入用户参数，不需要密码。
		按住  键和  键入系统参数，需要密码进入。
2	 (确认键)	参数确定键
3	 (数值调整键)	向上键（修改数据时加）
4	 (数值调整键)	向下键（修改数据时减）
5	 (机头灯调整键)	点动  键，数码管显示 L on，机头灯功能开启；再按一下数码管显示 L oFF，机头灯功能关闭。
6	 (停针位调整键)	点动  键，数码管显示区会出现：up 为上停针；在按一下出现 dp 为下停针；再接按出现 on 为无停针。

2. 进入参数的操作方法:

例如: 怎样把电机的顺时针转调到逆时针转

第一步:先打打开电源;

第二步:先按“”键不放,再用另一只手按“”号键,此时画面会显示-00

第三步:此时按“”号键,画面会显示-02,(-02)就是电机正反转参数(常用参数表上有)。

第四步:此时按“”键画面会显示“1”

第五步:此时按“”号键把“1”调到“0

(“1”为顺时针转,“0”为逆时针转,常用参数表上有)。

第六步:按“”键确定参数调整完毕并退出参数。

3. 恢复出厂设置:

恢复出厂设置方法:先按 “ ” 键不放,再用另一只手按 “+” 号键、此时画面会显示-00,再长按 “ ” 键约 3 秒即可,(恢复出厂设置值在常用参数表里)。

四、电机常用参数设置:

序号	参数编号	参数名称	参数范围		出厂设置	备注
1	P-01	最大速	200-6500		4500 转	
2	P-02	电机方向	是逆针转 0	是顺时针 转“1”	1	
3	P-03	下停角	6-18 度		12 度	
4	P-04	起缝速度	200-800 转		250 转	
6	P-06	定针缝	0-999 针		0	
7	P-07	空				
8	P-08	空				

9	P-09	空			
10	P-10	自动间隙运行(跑合)	把 0 把改成 1 再按键	0	关掉电源停止跑合
11	P-11	抬压脚起动时间	0-2000	0	
12	P-12	抬压脚保护时间	1-120	4	
13	P-14	最大电流限制	50-1000	280	
15	P-15	是否检测上针位	1:检测针位, 0:不检测	1	设为 1 时, 如果无上定位传感器则报警 01, 设为 0 时则不报警
16	P-17	复位出厂密码	1-3	1	-09 参数开启后才能出现 -17 参数、设为 3 长按键恢复出厂密码
17	P-18	出厂密码	0000-9999	2013	
18	P-19	软起动针数	0-15	0	0 针关闭该功能, 1-15 针时启用软启动, 并设定针数(上停针时有效)
19	P-20	软起动速度	200-3500	800	
20	P-21	吸气功能	0:关闭 1:开启	1	电机运转时开启/关闭吸气功能
21	P-22	吸气开启针数	1-200	30	吸气打开针数 (23 针数打开时有效)
22	P-23	吸气关闭针数	0-200	0	
23	P-24	吸气动作维持时间	50-2000	120	此参数暂时不用
24	P-25	吸气全功率时间	35-1000	120	
25	P-26	吸气全功率时功率	5-100%	100%	
26	P-27	吸气维持功率	1-100%	80%	
27	P-28	吸气释放时间	0-500	20	
28	P-29	吸气保护时间	1-120	30	吸气单次动作最长时间
29	P-30	压脚触发模式	0:关闭 1:开启	0	1.设为 0 时, 后踏速控器压脚不抬。设为 1 时后踏速控器压脚抬起, 2.维持抬起, 直到前踏或保护时间到才会释放压脚, 并且每次电机停止时自动抬

					压脚
30	P-31	后抬脚启动时间	0-2000	0	后踏延迟启动压脚的时间
31	P-32	抬压脚动作维持时间	50-1000	160	此参数暂时不用
32	P-33	抬压脚全力功率时间	35-1000	160	
33	P-34	抬压脚全力功率时功率	5-100%	100%	
34	P-35	抬压脚维持功率	1-500%	80%	
35	P-36	抬压脚释放时间	0-120	30	压脚释放时间
36	P-37	抬压脚保护时间	1-100	10	压脚单次抬起最大维持时间
37	P-38	显示速度	200-6500		显示当前电机实际速度
38	P-39	显示速控器电压	14-1010	中点电压 195	显示当前速控器电压 0—1024，相当于 0-5
39	P-40	显示直流母线电压	60-500	310	当电压高于 395 会报警，(直流母线电压/1.414=交流母线电压)
40	P-41	过压保护开关	0:关闭 1:开启	1	设为 0 关闭过压报警，设为 1 打开报警，当直流母线电压超过 395 时，报警 16，电机自动停止运行，报警后当电压低于 385 电机可再次运行

五、一般故障处理：

序号	错误码	错误内容	错误问题的多种可能
1	Er01	找不到停车位	1. 定位器信号插头未插好 2. 定位器感应位置靠近一点与磁铜(1-15)距离
2	Er02	开机没有检测到调速器	1. 调速器插头没有插 2. 调速器线断了
3	Er03	电机霍尔或相位线错误	1. 九针插头接触不良： 2. 电机没有安装好： 3. 霍尔坏：

4	Er04	堵转保护	1. 电机过载 2. 电机与电控根连接的四心线接触不好
5	Er05	硬件过流保护	1. 电机过载 2. 信号线接触不好或断了
6	Er07	串口通信时错误	显示屏至主板信号线不良或主板坏

六、作业环境要求：

1. 请不要在过潮湿环境中作作业
2. 220 电控：【220 接入供电时电压稳定在（200～260/单相）之间】
3. 用户使用前必须接地, 确保人身安全
4. 不要在过热地方作业
5. 控制系统与电机不要在强磁高辐射环境中作业, 以免干扰而使系统错误

七、保修服务：

1. 本产品自购买起免费保修 1 年, 终身维护。

保修期内除人为损坏以外出现任何质量问题可免费维修。

2. 在保修期内, 以下情况出现损坏本公司不给予保修服务。

(1). 未经本公司同意自行拆卸, 修理, 改装造成的故障或损坏。

3. 但凡出现无法解决的问题可以联系本公司。

NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface. There is no handwriting or other markings on the paper.

Dealer:

The taxi logo, featuring a stylized taxi cab icon and the word "taxi" in a lowercase, italicized, sans-serif font.