

使用说明书

User Guide

工业包缝机

Industrial sewing machine

感谢您购买本公司的产品。

为了您的使用安全，请您在使用之前一定仔细阅读本使用说明书。

Thank you for purchasing our products.

For your use safety, please must read the instruction manual before use.

● 前言

感谢你选购本产品，为了你更好的使用本产品，在安装与调试前，请仔细阅读本操作说明及所搭配的缝纫机设备使用说明书，并由专业人员来安装与调试。

注意：

使用中若出现任何疑问或对我们的产品及服务有任何的意见或建议，请随时与我们联系；

本公司拥有对此手册的最终解释权。

本操作指南的用途：

本操作指南基于用户的要求提供相关指导信息；

这些信息涉及设备及其他使用场合、运输、安装、使用和维护；

本操作指南主要面向用户和技术人员。

● 安全说明

1. 请确保在插上插头通电以前，控制器开关按钮为关闭；
2. 请确保在开关按钮打开前已将线插好，否则会提示出错；
3. 无专业人员在场，请勿拆开控制器，以免造成意外；
4. 请确保可靠接地，避免触电；

警告：控制器内部及接口线头均带强电，切勿触碰，以免触电！

◆ 接口插头的连接

将脚踏板及机头的各连接插头安插到控制器后面对应的插座上。连接好，请检查插头是否插牢。

◆ 操作面板说明

| 图标 | 功能说明 |
|---|---|
|  | 1: 工作模式下，切换上、下停针位； 2: 参数模式下，作参数设置。 |
|  | 1: 工作模式下，开关 LED 灯； 2: 参数模式下，作参数保存。 |
|  | 1: 工作模式下，调节电机转速； 2: 参数模式下，作参数的选择及调整。 |
|  | |

● 参数调整及示例

1.1 控制器操作面板显示方式为四位共阴数码管。

待机界面下，按“+”、“-”键，可以调节即时转速。

1.2 待机界面下，按“P”键，上针位指示灯亮时，为上停针；下停针指示灯亮时，为下停针；指示灯不亮，关闭停针功能。

1.3 待机界面下，按“S”键，可以打开和关闭机头灯。

1.4 进入及修改系统参数：

① 先按住“P”键不放，再按“+”键，进入参数模式，此时数码管显示“P-00”；

② 按“+”、“-”键可切换参数号；

③ 选择好参数后，按“P”键进入参数，使用“+”、“-”键修改参数值；

④ 修改完毕后，按“S”键保存退出。

1.5 恢复出厂设置：

① 先按住“P”键不放，再按“+”键，进入参数模式，此时数码管显示“P-00”；

② 长按“S”键3秒即可恢复出厂设置。

● 错误代码及参数表

附表 1：错误代码显示

| 错误代码 | 代表含义 | 可能出现的问题 |
|------|-----------|------------------------------|
| Er01 | 停针错误 | ①电机霍尔坏 ②手轮磁铁脱落 ③停车信号线接触不良或损坏 |
| Er02 | 检测不到脚踏信号 | ①脚踏信号线接触不良或损坏 ②脚踏控制器型号不对 |
| Er03 | 电机霍尔或相位错误 | ①电机信号线接触不良或损坏 ②电机霍尔坏 |
| Er04 | 堵转保护 | ①电机过载 ②电机电源线接触不良 |
| Er05 | 硬件过流 | ①电机过载 ②电机信号线接触不良 |
| Er07 | 串口通讯错误 | ①操控盒连接线接触不良或损坏 |

附表 2：用户参数内容详解

| 序号 | 名称 | 参数范围 | 默认值 | 功能 |
|------|-----------|----------|------|--------------------------------|
| P-01 | 最高转速锁定 | 200~7000 | 5500 | rpm |
| P-02 | 电机正反转设置 | 0~1 | 1 | 0 代表反转，1 代表正转 |
| P-03 | 下停角度 | 0~23 | 12 | 基于上停针位置 180° |
| P-04 | 最低转速 | 300~800 | 500 | |
| P-05 | 脚踏曲线修正 | 1~100 | 50 | 小于 50，曲线上抛；大于 50，曲线下抛 |
| P-08 | 下停找上停功能 | 0~1 | 1 | 0：关闭 1：打开 |
| P-10 | 自动跑合测试 | 0~1 | 0 | 该参数改为“1”时自动跑合，设置为“0”或关闭电源，跑合停止 |
| P-14 | 电机输出功率 | 100~999 | 750 | |
| P-15 | 主板版本号 | / | | |
| P-16 | 面板版本号 | / | | |
| P-19 | 抬压脚开关 | 0~1 | 1 | 0：关闭 1：打开 |
| P-20 | 停车抬压脚开关 | 0~1 | 0 | 0：关闭 1：打开 |
| P-21 | 抬压脚保持时间 | 1~99 | 5 | 单位：S |
| P-22 | 抬压脚全力时间 | 1~999 | 180 | 单位：ms |
| P-23 | 抬压脚保持功率 | 1~100 | 20 | 单位：% |
| P-26 | 抬压脚释放保护时间 | 1~999 | 30 | 单位：ms |

● Preface

Thank you for purchasing this product, In order to make use of product better, Before installing and testing, please read the operating instructions and the sewing equipment specification carefully, to use correctly, and be installed and tested by professionals.

Note:

This product is only applicable to the specified range of sewing equipments, please do not use for other purposes.

Our company has the right of final interpretation of this manual.

If there is any doubt when using product or any comments or suggestions of our products and services, please feel free to contact us!

Due to upgrade products, features and specifications are subject to change without notice.

The usage of the operating instructions:

The operating instructions provide guidance information based on user's requirements.

The information involves equipments and other usage occasions, transportation, installation, use and maintenance.

The operating instructions are intended for users and technical staff.

● Safety Instructions





- (1) Make sure that the controller switch button is off before plugging in power.
- (2) Make sure that all the motor connector cord is plugged in before the switch button turn on, otherwise it will be an error.
- (3) The connection plugs are one-to-one. Please confirm that the terminals match each other when the connection is connected..Please do not over-force when inserting, so as not to cause damage to the system.
- (4) Do not press or over-twist the motor wire by external objects. To avoid damage to the joint signal line.
- (5) Do not disassemble the controller without professionals, to avoid accidents.

Caution: Inside of the controller and interface wire are with strong power, please do not touch, in order to avoid an electric shock!

● Interface plug connections

The pedals and the machine head of the connector plug are mounted to the corresponding position in the controller back of socket. Please check if the plug is inserted firmly.

● Operation panel description

| Operation panel description | |
|---|---|
|  | Working mode, switch the up-down needle position; Parameter mode, setting the parameter. |
|  | Working mode, switch the LED light; Parameter mode, save the parameter. |
|  | Working mode, adjust the motor speed; Parameter mode, choice and adjust for parameter. |
|  | |

● Parameter adjusting and example

1. 1 The panel is four digital Nixie tube display.

Adjust the speed by press the “+” , “-” ,key when in standby interface.

1. 2 In standby interface ,press the “P” ,when the up needle position indicator light is on ,it is on up needle stop , when the down needle position indicator light is on , it is on down position stop, when the indicator light is off ,the needle position function turn off.

1. 3 In standby interface , press the “S” key , can turn on/off the machine head light.

1. 4 Enter in and change the system parameter:

①When the power is on ,press the “P” key for some seconds ,then press the “+” key , it enters into the parameter mode. The nixietube shows “P-00” ,

②Press the “+” 、 “-” key ,can change the parameter.

③After choose the parameter , press the “P” key ,enter into the parameter ,then can change the value of the parameter by “+” 、 “-” key,

④Press the “S” key save the value

1.5 The setting of motor rotate way:

①When the power is on ,press the “P” key for some seconds ,then press the “+” key , it enters into the parameter mode. The nixietube shows “P-00” ,

②Press the “+” key can change parameter to “P-02” ,

③chosen parameter,press “P”,using “+” 、 “-” for changing value:

0: negative rotate 1:positive rotate,the original is positive notate.

④Press the “S” key save the value.

1.6 Reset:

①When the power is on ,press the “P” key for some seconds ,then press the “+” key , it enters into the parameter mode. The nixietube shows “P-00” ,

②Press the “S” key for three seconds to reset

● Error code and parameter

List 1: Error code

| Error Code | Representative Meaning | Possible Problems |
|-------------------|------------------------------------|--|
| Er01 | Stop needle error | 1) Motor Hall bad . 2) Hand wheel magnet shedding. 3) Parking signal line contact bad or damage |
| Er02 | No foot signal was detected | 1) The foot signal line contact is bad or damaged. 2) The model of the foot pedal controller is incorrect |
| Er03 | Motor Hall or phase error | 1) Motor signal line contact bad or damage. 2) Motor Hall bad |
| Er04 | Plugging protection | 1) Motor overload. 2) Poor contact of motor power line |
| Er05 | Hardware overflow | 1) Motor overload. 2) Poor contact of the motor signal line |
| Er07 | Serial communication error | 1) Bad or damage to the connection line of the control box |

List 2: Parameter

| Serial Number | Name | Parameter range | Default | Function |
|---------------|---------------------------------------|-----------------|---------|---|
| P-01 | Maximum speed lock | 200~7000 | 5500 | |
| P-02 | Positive and reverse setting of motor | 0~1 | 1 | 0 represents reversal, 1 represents positive rotation |
| P-03 | Down stop angle | 0~23 | 12 | 180 degrees based on the position of top stop needle |
| P-04 | The starting speed | 300~800 | 500 | RPM |
| P-05 | Pedal acceleration curve | 1~100 | 50 | Less than 50, the curve up; More than 50, curve under the cast |
| P-08 | Stop and stop function | 0~1 | 1 | 0: close 1: open |
| P-10 | Automatic running in test | 0~1 | 0 | The parameter is changed to "1" automatically running in, set to "0" or turn off the power, run in and stop |
| P-14 | Motor output power adjustment | 100~999 | 750 | |
| P-15 | Electric control version | | | |
| P-16 | Display version | | | |
| P-19 | Presser foot switch | 0-1 | 1 | 0: close 1: open |
| P-20 | Stop presser foot switch | 0-1 | 0 | 0: close 1: open |
| P-21 | Holding time of presser foot | 1-99 | 5 | S |
| P-22 | Presser foot full force time | 1-999 | 180 | ms |
| P-23 | Presser foot holding power | 1-100 | 20 | % |
| P-26 | Presser foot release protection time | 1-999 | 30 | ms |