

2023

Shenzhen Yuntu Intelligent Control Co., Ltd.

Automatic screw locking motion control system

User Manual



云途智控

YUNTU INTELLIGENT CONTROL Yuntu Intelligent Control Technology

2023-6-15

深圳市云途智控有限公司

Thank you for purchasing and using Shenzhen Yuntu Intelligent Control's products. In order to make you use the products better, please

Please read this manual carefully before using the product. If you have any questions during use,

Welcome to contact us by phone or email.



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## Chapter 1: Product Description

### 1.1 Overview

Our screw machine product series include 4-axis, 5-axis and 6-axis motion control systems. This

version of the manual is based on the control system running software

version MLS000, MLS500 and MLS600, and can support single Y and double Y platform

screw machines, gantry structure screw machines, screw machines with rotating structure,

screw machines with product taking axis, double X double Z single Y five-axis screw machines,

double X double Y double Z independent processing six-axis screw machines, and double

X double Y double Z cross processing six-axis screw machines.

Support 24 input ports, which can be configured with any functions, such as feeding signal, electric

screw torque feedback, axis fault, and axis limit sensing. If the program group alignment is

not used, an 8-input 8-output expansion board can be used.

Support 16 output ports, which can be configured arbitrarily, such as drive electric batch port, suction

port, motor fault clearing. If the program group alignment is not used, an 8-input 8-output

expansion board can be used.

Support RS-232, RS-485, network port, can realize communication with third-party products, such

as configuration software (Wei Lun screen), servo electric screwdriver, MES system.

Support U disk to update applications, update the boot screen, and backup and download processing files and system file parameters.

Supports mainboard storage of more than 960 processing files, and each processing file can edit 1000 programming points. If more processing files are needed,

Or more programming points can be modified to customize the software.

Support 5-inch color LCD display, the handheld programmer uses 800 X 480 pixels, can store 30 processing files and 30 system parameter files

Piece.

Support full pinyin Chinese input method.



### 1.2 Features

Number of motor axes: 3 axes, 4 axes, 5 axes, 6 axes Pulse frequency:

4M Acceleration and deceleration

refresh frequency: 100K Input port: 24 Output port:

16; if there is a brake function,

please use output 16 Storage capacity: 256M Working voltage: 24V Working current: 2A Working

temperature: 0~45 Storage

temperature: -40~70 Working

humidity: 40%~80 Storage

humidity: 0%~95%

1.3 Accessories

Mainboard, handheld programmer, and accessories (as shown below)



Small keypad

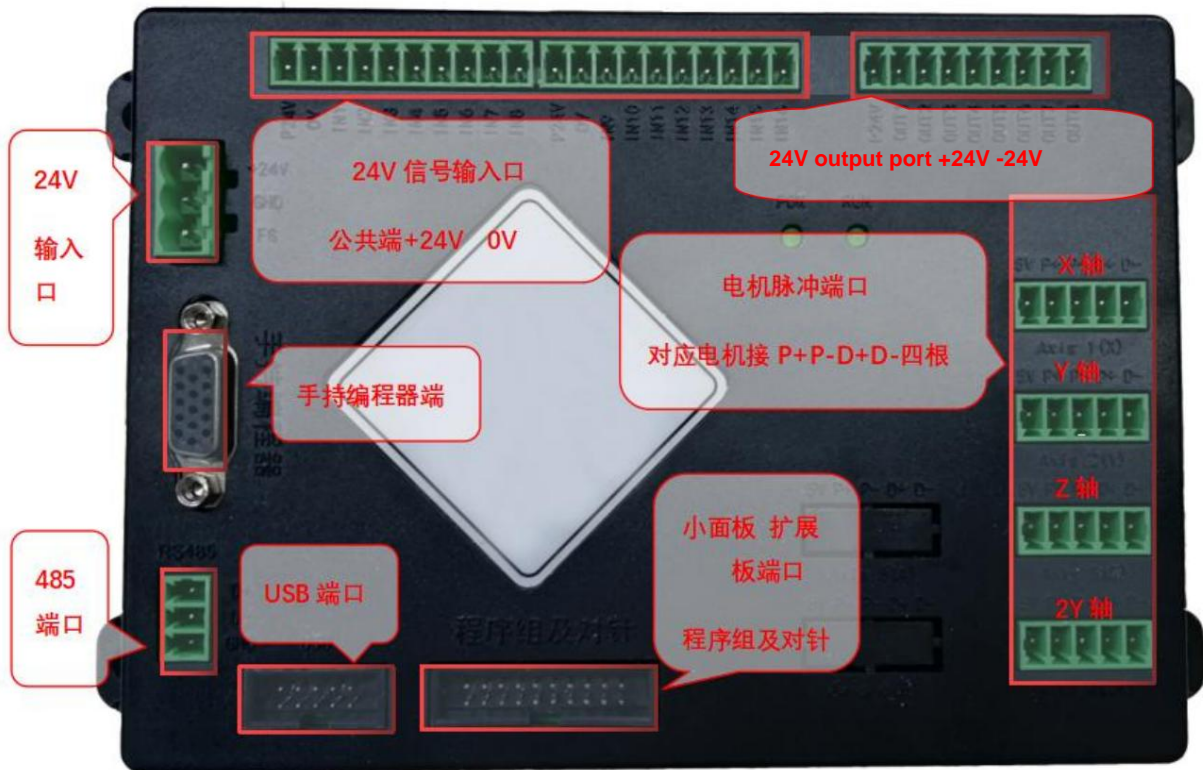
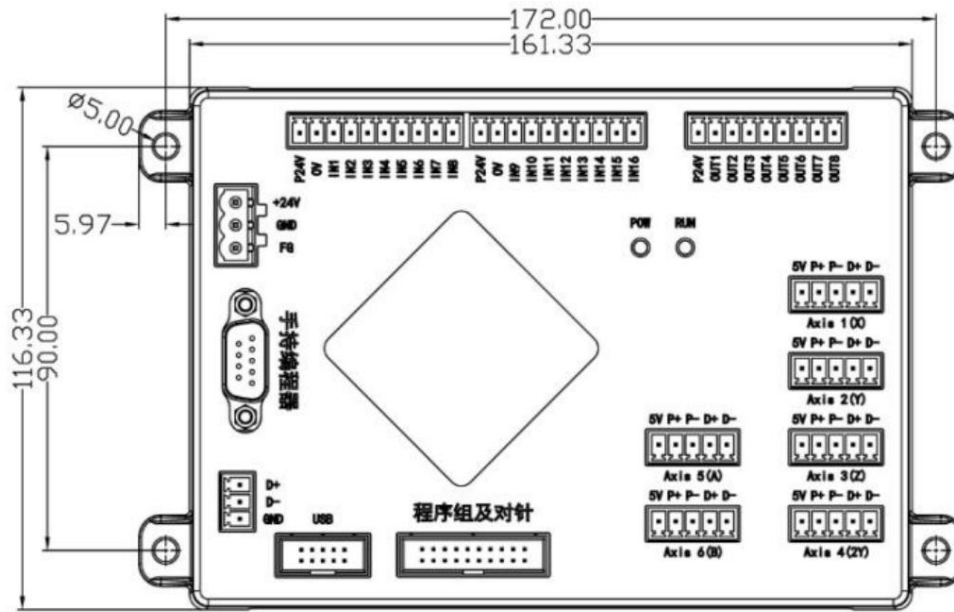
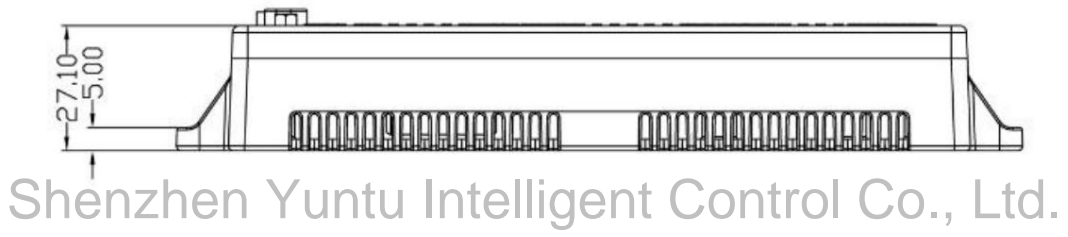
## Chapter 2: Wiring Instructions

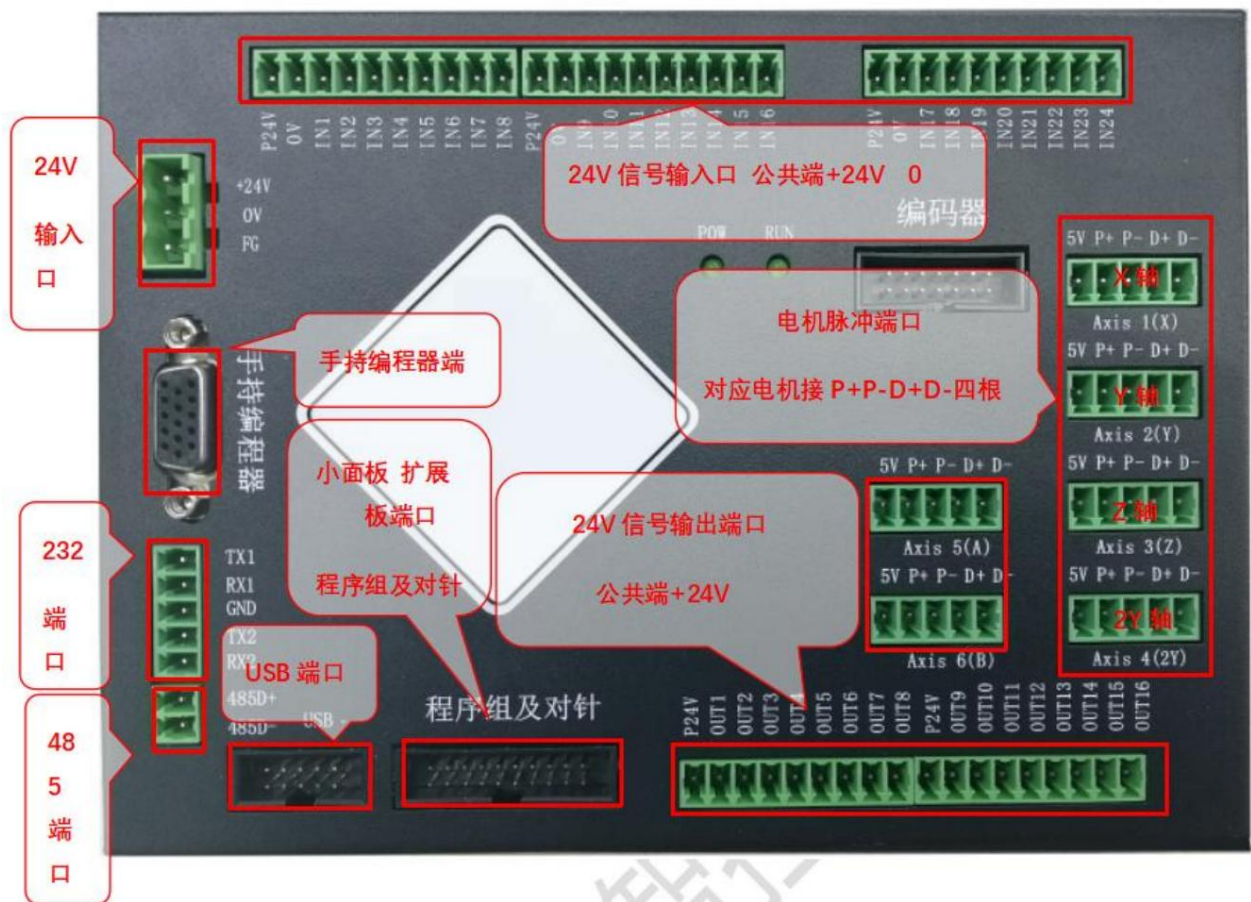
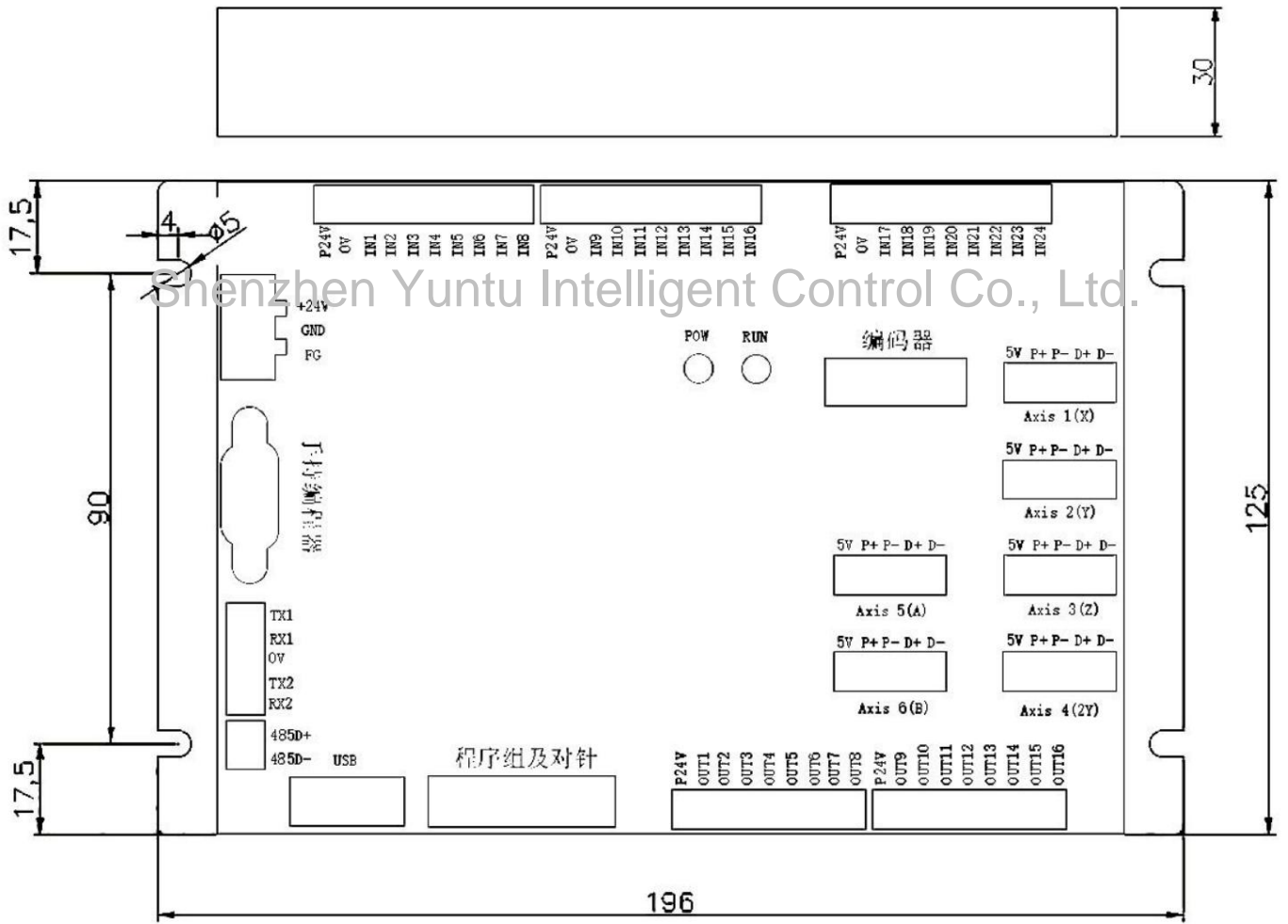
### 2.1 Interface Description

The use of different axis numbers of screw machines

Single Y:	1-X	2-Y	3-Z			
Double Y:	1-X	2-Y	3-Z	4-2Y		
Single Y-belt rotation	1-X	2-Y	3-Z	4-2Y		
Double Y with rotation (pendant)	1-X	2-Y	3-Z	4-2Y	5-R Rotation	
Double Y with rotation (platform)	1-X	2-Y	3-Z	4-2Y	5-R Rotation	6-2R Rotation

2.2 Interface Description



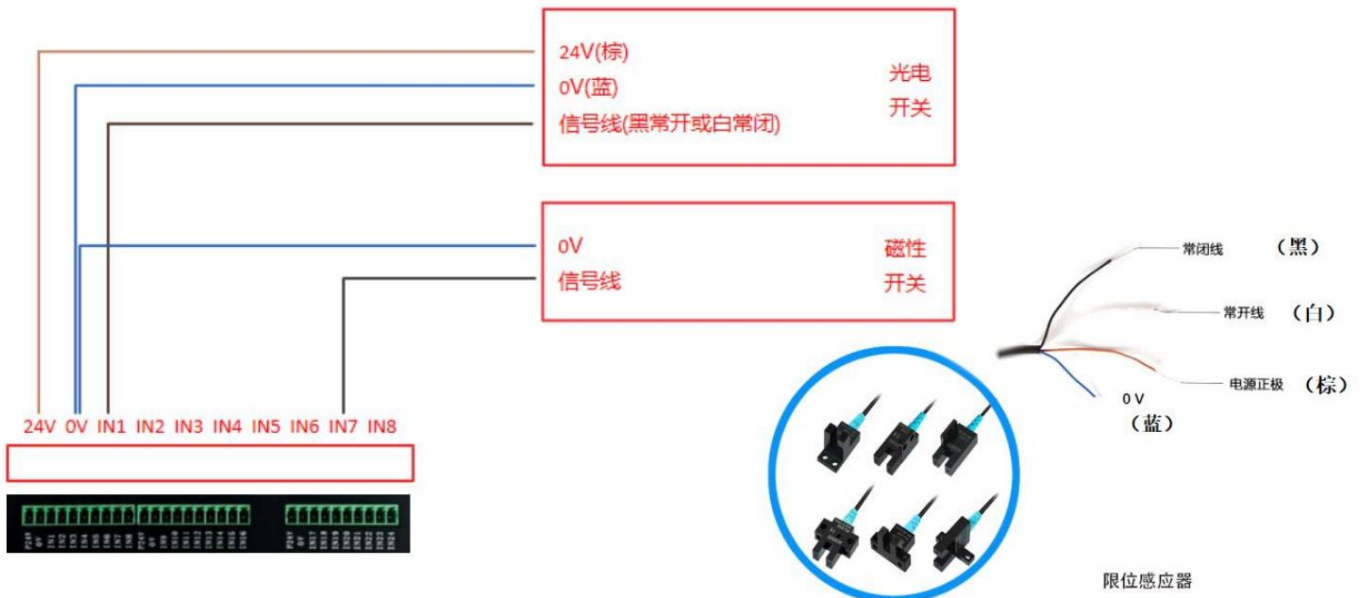


## 2.3 Motor Wiring

2.3.1 Motor wiring is as shown below: The motor output is a differential signal, please operate corresponding to the motor port P+ P- D+ D-



## 2.4 Input Interface



### 2.5 Output Interface



## Chapter 3: Menu Card – File Editing

### 3.1 File Editing

Menu Tab

Current: File Edit

Manual speed: fast, medium, slow

User Type: User/Administrator/Manufacturer

Mode: Working, Aging

USB host drive

002:文件001 | 慢 | 管理员 | 工作 |

**文件编辑** | 路径预览

0001	跟进速度(mm/s):20 跟进长度(mm):10
0002	超时时间(s):1.5 最小时间:0 取延时:0 完成后延时:0
0003	送料信号:使用 扭力检测:使用 异常报警:打开
0004	自动运行速度(mm/s):X:600 Y:600 Z:600
0005	送料器上方安全高度(mm):10 螺丝孔上方安全高度(mm):10
0006	螺孔位置 X:6.066 Y:173.409 Z:46.125
0007	螺孔位置 X:51.872 Y:173.409 Z:46.125
0008	螺孔位置 X:28.000 Y:187.959 Z:46.125
0009	横向阵列(间距) 调用行:6 横向个数:3 纵向个数:2
0010	未编辑空白行

X:0.000      Y:0.000      Z:0.000      | 09:25:16

Current coordinates      System time

3.2 Keyboard Function

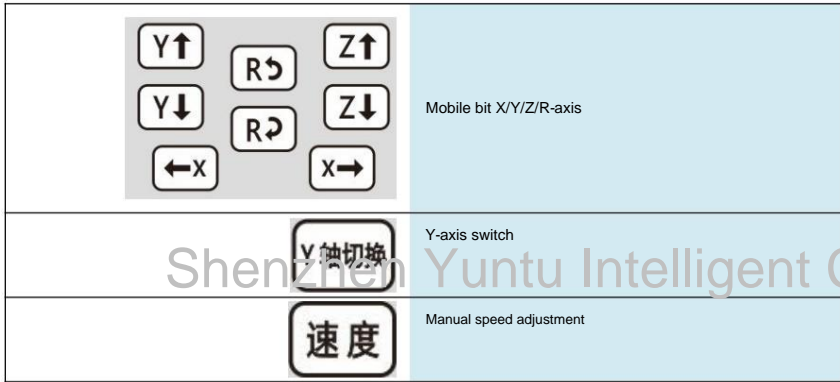
System time

3.2.1 Menu Options



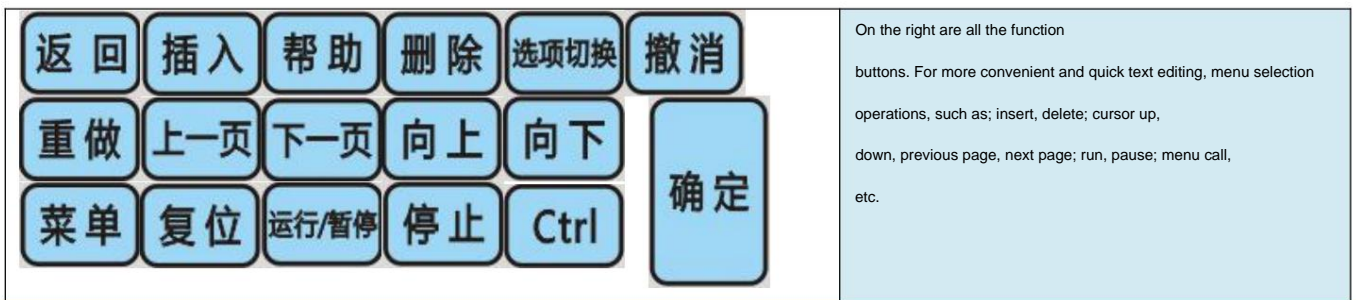
<b>File Editing</b>	In the file editing interface, you can edit, delete, and modify the running file content. For example, set the screw hole position, set the electric screwdriver running path, etc.
<b>Processing information</b>	In the processing information interface, the processing status of various screw holes and workpieces is displayed. For example, the number of screw holes completed; completion percentage, etc.
<b>IO Ports</b>	In the IO interface, you can configure and monitor the input interface and output interface status.
<b>System Parameters</b>	In the system parameter interface, configure various operating parameters, system parameters, machine parameters, default parameters, etc.
<b>Production Management</b>	In the production management interface, manage user permissions, system time, etc.

3.2.2 Direction buttons



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3.2.3 Function buttons



On the right are all the function buttons. For more convenient and quick text editing, menu selection operations, such as; insert, delete; cursor up, down, previous page, next page; run, pause; menu call, etc.

3.2.4 Numeric shortcut keys

	Number 1 Screw hole	Enter the screw hole position In the file editing interface, move the bit to the specified position, press this key to enter the current coordinates as the screw hole position
	position Number 2	and enter the feeder position In the file editing interface, after moving the batch head to the feeder position, press this key to enter the current coordinates as the feeder position.
	Feeding position Number	In the file editing interface, quickly set the "feed selection".
	3 Feeding selection	In the file editing interface, click the "Material Pickup Test" shortcut key.
	Number 4 Pickup test	In the file editing interface, you can swap the current line with the previous line; press "CTRL+this key" to swap the current line with the next line. In the file editing interface,
	Number 5 Line swap	press this key to operate multiple lines at the same time, such as 1. copy; 2. set Z axis value; 3. delete; 4. Mark offset
	Number 6 Multi-line editing	In the file editing interface, the shortcut key to start on the current line
	Number 7 Current line	In "File Edit", the shortcut key to jump to the specified line number
	start Number 8 Line	In "File Edit", if the current line programming point is a single point, press "Go to current line" and the bit will move to the programming point.
	jump Number	In "File Edit", shortcut keys for single-step operations
	9 Go to current	In "File Edit", use the shortcut keys for file operations.
	line Number 0 Single-step	a. In "File Edit", open the shortcut key of the file; b. Switch the input method: "123: numbers" / "abc: lowercase letters" / "ABC: uppercase letters" / "File: open

## 3.3 File Edit - Menu

In "File Edit", press "Menu" to bring up the function menu to edit the file.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 螺孔位置 X:125.194 Y:78.347 Z:19.997 编程界面菜单 1 / 4页

0002 螺孔位置 X:176.822 Y:78.347 Z:19.997 1. 文件操作

0003 螺孔位置 X:176.822 Y:84.150 Z:19.997 2. 生成默认加工参数

0004 螺孔位置 X:125.194 Y:84.150 Z:19.997 3. 打螺丝跟进参数 Edit Menu

0005 未编辑空白行 4. 打螺丝延时设置

0006 未编辑空白行 5. 供料器与扭力开关

0007 未编辑空白行 6. 空移速度

0008 未编辑空白行 7. 工作安全高度

0009 未编辑空白行 8. 避障点

0010 未编辑空白行 9. 智能电批工艺

X:176.822 Y:84.150 Z:19.997 | 16:00:03

## 3.3.1 File Operation In

the file editing interface, press "Menu"/"File Operation"

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 123

文件编辑 | 路径预览

0001 跟进速度(mm/s):20 跟进长度(mm):10

0002 超时时间(s):1.5 最小时间:0 取延时:0 完成后延时:0 Input

0003 供料信 新建文件 method: "123":

0004 自动运 文件名: 文件011 numbers "abc": lowercase letters

0005 供料器 ' #' : 切换输入法 "ABC": uppercase letters

0006 避障点 中文输入法时, 向上向下: 左右选择拼音 "Pinyin":

0007 停留点 中文输入法时, 上下页: 上下切换拼音与汉字

0008 MARK点

0009 空闲停留点 X:0.000 Y:0.000 Z:0.000

0010 标号:aa

X:0.000 Y:0.000 Z:0.000 | 16:27:34

Select a line in the file editing process that does not have the prompt "Unedited Blank Line" and press the Confirm key to change the data in that line.

## 3.3.2 Generate default processing parameters

In the file editing interface, press "Menu" / "Generate default processing parameters"

文件编辑 路径预览

0001 跟进速度(mm/s):20 跟进长度(mm):10

0002 超时时间(s):1.5 最小时间:0 取延时:0 完成后延时:0

0003 送料信号:使用 扭力检测:使用 异常报警:打开

0004 自动运行速度(mm/s):X:600 Y:600 Z:600

0005 送料器上方安全高度(mm):10 螺丝孔上方安全高度(mm):10

0006 标号:ab

0007 螺孔位置 X:42.000 Y:20.000

Default machining parameters for run files

001-文件001 螺丝 快 管理员 顺序

运行参数 位置设置 机器参数 系统设置

01. 电机 默认加工参数 参数

02. 电机转 选择: 1

03. 行程 (

04. 回原

05. 电机

06. 电机

1. 跟进参数

2. 安全高度

3. 打螺丝延时

4. 送料与扭力

5. 自动运行速度

If the run file does not set default parameter values, the system will call these preset values by default

X:0.000 Y:0.000 Z:0.000 16:27:58

## 3.3.3 Screwdriver follow-up parameters

In the file editing interface, press "Menu" / "Screw follow-up parameters"

001-文件001

文件编辑 路径预览

0001 螺孔位置 X:176.822 Y:84.150 Z:5.

0002 跟进速度(mm/s):20 跟进长度(mm):1

0003 超时时间(s):1.5 最小时间:0 取延时

0004 送料信号:使用 扭力检测:使用 异常报

0005 自动运行速度(mm/s):X:600 Y:600 Z:

0006 供料器上方安全高度(mm):10 螺丝孔上

0007 螺孔位置 X:125.194 Y:78.347 Z:19.9

0008 螺孔位置 X:176.822 Y:78.347 Z:19.9

0009 螺孔位置 X:176.822 Y:84.150 Z:19.9

0010 螺孔位置 X:125.194 Y:84.150 Z:19.9

X:204.750

Y:84.150

Z:5.456

17:31:55

打螺丝跟进参数

跟进速度(mm/s): 20

跟进长度(mm): 10

2. 生产默认加工参数

3. 打螺丝跟进参数

4. 打螺丝延时设置

5. 供料器与扭力开关

6. 空移速度

7. 工作安全高度

8. 避障点

9. 智能电批工艺

Set the follow-up speed (mm/s), follow-up length (mm): Set the corresponding speed and screw-driving depth according to the actual screw specifications.

## 3.3.4 Screw Driving Delay Setting

Set appropriate parameters to enable the system to correctly detect the sliding tooth floating lock state

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览 | Yuntu Intelligent Control Co., Ltd.

打螺丝延时设置(s)

打螺丝超时时间(滑牙):

打螺丝最小时间(浮锁):

取螺丝后延时:

打完螺丝后延时:

0001 螺孔位置 X:176.822 Y:84.150 Z:5.456

0002 跟进速度(mm/s):20 跟进长度(mm):10

0003 超时时间(s):1.5 最小时间:0 取延时:0

0004 送料信号:使用 扭力检测:使用 异常报警:使用

0005 自动运行速度(mm/s):X:600 Y:600 Z:600

0006 送料器上方安全高度(mm):10 螺丝孔上

0007 螺孔位置 X:125.194 Y:78.347 Z:19.9

0008 螺孔位置 X:176.822 Y:78.347 Z:19.9

0009 螺孔位置 X:176.822 Y:84.150 Z:19.9

0010 螺孔位置 X:125.194 Y:84.150 Z:19.9

X:204.750 Y:84.150 Z:5.456 | 17:32:24

3. 打螺丝跟进参数

4. 打螺丝延时设置

5. 送料器与扭力开关

6. 空移速度

7. 工作安全高度

8. 避障点

9. 智能电批工艺

## 3.3.5 Feeder and torque switch

settings Feeder signal and torque switch signal open or shield

001-文件001 | 螺丝 | 快 | 管理员 | 顺序

文件编辑 | 路径预览

0001 螺孔位置 X:176.822 Y:84.150 Z:5.456

0002 跟进速度(mm/s):20 跟进长度(mm):10

0003 超时时间(s):1.5 最小时间:0 取延时

0004 送料信号:使用 扭力检测:使用 异常

0005 自动运行速度(mm/s):X:600 Y:600 Z:600

0006 送料器上方安全高度(mm):10 螺丝孔上

0007 螺孔位置 X:125.194 Y:78.347 Z:19.9

0008 螺孔位置 X:176.822 Y:78.347 Z:19.9

0009 螺孔位置 X:176.822 Y:84.150 Z:19.9

0010 螺孔位置 X:125.194 Y:84.150 Z:19.9

X:204.750 Y:84.150 Z:5.456 | 17:32:45

供料器与扭力开关

送料信号: 1. 使用 2. 屏蔽

扭力检测信号: 1. 使用 2. 屏蔽

打螺丝异常报警: 1. 打开 2. 关闭

## 3.3.6 Idle speed

The system moves at a speed when there is no processing point during operation. The idle speed can be set in the default parameters of the editing program or in the menu.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序

文件编辑 | 路径预览

0001 螺孔位置 X:176.822 Y:84.150 Z:5.456

0002 跟进速度(mm/s):20 跟进长度(mm):10

0003 超时时间(s):1.5 最小时间:0 取延时

0004 送料信号:使用 扭力检测:使用 异常

0005 自动运行速度(mm/s):X:600 Y:600 Z:600

0006 送料器上方安全高度(mm):10 螺丝孔上

0007 螺孔位置 X:125.194 Y:78.347 Z:19.9

0008 螺孔位置 X:176.822 Y:78.347 Z:19.9

0009 螺孔位置 X:176.822 Y:84.150 Z:19.9

0010 螺孔位置 X:125.194 Y:84.150 Z:19.9

X:204.750 Y:84.150 Z:5.456 | 17:33:06

空移速度(单位:mm/s)

X轴:

Y轴:

Z轴:

## 3.3.7 Safe working height

Set the safety height above the feeder and the safety height above the screw hole, which is consistent with the default interface

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 螺孔位置 X:176.822 Y:84.150 Z:5.456

0002 跟进速度(mm/s):20 跟进长度(mm):10

0003 超时时间(s):1.5 最小时间:0 取延时

0004 送料信号:使用 扭力检测:使用 异常报警

0005 自动运行速度(mm/s):X:600 Y:600 Z:4.5

0006 送料器上方安全高度(mm):10 螺丝孔上方安全高度(mm):10

0007 螺孔位置 X:125.194 Y:78.347 Z:19.997

0008 螺孔位置 X:176.822 Y:78.347 Z:19.997

0009 螺孔位置 X:176.822 Y:84.150 Z:19.997

0010 螺孔位置 X:125.194 Y:84.150 Z:19.997

X:204.750 Y:84.150 Z:5.456 | 17:33:22

工作安全高度

送料器上方安全高度(mm):

螺丝孔上方安全高度(mm):

3.3.8 Obstacle

Avoidance Point Enter "File Edit" / "Menu" / "Obstacle Avoidance Point". The obstacle avoidance point position is a position set to avoid obstacles. It can be one point or several points. In the file edit, you can select it and press the OK key to edit it again.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997

0002 未编辑空白行

0003 未编辑空白行

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 Y:0.000 Z:19.997 | 16:26:58

编程界面菜单 1 / 4页

1. 文件操作
2. 生成默认加工参数
3. 打螺丝跟进参数
4. 打螺丝延时设置
5. 送料器与扭力开关
6. 空移速度
7. 工作安全高度
8. 避障点
9. 智能电批工艺

3.3.9 Intelligent electric screwdriver

Enter "File Edit" / "Menu" / "Smart Screwdriver"

This function is used when a smart electric screwdriver is installed. This function cannot be set if a smart electric screwdriver is not installed.

001-文件001
螺丝 | 快 | 管理员 | 顺序

文件编辑
路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997
0002 未编辑空白行
0003 未编辑空白行
0004 未编辑空白行
0005 未编辑空白行
0006 未编辑空白行
0007 未编辑空白行
0008 未编辑空白行
0009 未编辑空白行
0010 未编辑空白行

编程界面菜单
1 / 4页

1. 文件操作
2. 需要安装智能电批可选参数
3. 需要安装智能电批可选参数
4. 需要安装智能电批可选参数
5. 需要安装智能电批可选参数
6. 需要安装智能电批可选参数
7. 工作安全高度
8. 避障点
9. 智能电批工艺

X:0.000    Y:0.000    Z:19.997
16:27:19

3.3.10 Relative movement of axes

Go to "File Edit" / "Menu" / "Axis Relative Move"

Move the specified distance relative to the last valid position of the line

001-文件001
螺丝 | 快 | 管理员 | 顺序

文件编辑
路径预览

0001 跟进速度(mm/s):20 跟进长度(mm):10
0002 超时时间(s):1.5 最小时间:0 取延时
0003 送料信号:使用 扭力检测:使用 异常报
0004 自动运行速度(mm/s):X:600 Y:600 Z:
0005 送料器上方安全高度(mm):10 螺孔上方
0006 避障点 X:0.000 Y:0.000 Z:0.000
0007 停留点 X:0.000 Y:0.000 Z:0.000 H:
0008 MARK点 X:0.000 Y:0.000 Z:0.000
0009 空闲停留点 X:0.000 Y:0.000 Z:0.000
0010 标号:aa

编程界面菜单
2 / 4页

1. 轴相对移动
2. 轴相对移动(mm)
3. 轴相对移动(mm)
4. 轴相对移动(mm)
5. 轴相对移动(mm)
6. 移动到指定位置
7. 单点校准
8. 标号
9. 阵列

X:0.000    Y:0.000    Z:0.000
16:28:24

3.3.11 Rotation axis method

Set the working mode of the rotation axis and its coordinated movement with the horizontal axis

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997 | 编程界面菜单 | 2 / 4页

0002 未编辑空白行

0003 未编辑空白行

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 | Y:0.000 | Z:19.997 | 16:27:27

1. 旋转轴方式

旋转轴方式

选择:

1. 先旋转到位再水平移动
2. 旋转轴与水平移动同时进行
3. 先水平移动到目标上方, 旋转轴再工作

7. 单点校准

8. 标号

9. 阵列

## 3.3.12 Stopover Points

To set the machine stop point, first move any point and select it as the stop point. You can select it and press the OK button to edit it again.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997 | 编程界面菜单 | 2 / 4页

0002 停留点 X:0.000 Y:0.000 Z:19.997 | H

0003 未编辑空白行

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 | Y:0.000 | Z:19.997 | 16:27:59

1. 旋转轴方式

2. 停留点

3. M

4.

5.

6.

7.

8. 标号

9. 阵列

Set the stop point location

## 3.3.13 MARK point

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997	编程界面菜单	2 / 4页
0002 停留点 X:0.000 Y:0.000 Z:19.997 H	1. 旋转轴方式	
0003 未编辑空白行	2. 停留点	
0004 未编辑空白行	3. MARK点	
0005 未编辑空白行	4. 空闲停留位置	
0006 未编辑空白行	5.	
0007 未编辑空白行	6.	
0008 未编辑空白行	7.	
0009 未编辑空白行	8.	
0010 未编辑空白行	9.	

X:0.000      Y:0.000      Z:19.997      | 16:28:12

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Set the MARK point for calibration

## 3.3.14 Idle parking positions

The machine will stop at a specific location after the current program is finished.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997	编程界面菜单	2 / 4页
0002 停留点 X:0.000 Y:0.000 Z:19.997 H	1. 旋转轴方式	
0003 MARK点 X:0.000 Y:0.000 Z:19.997	2. 停留点	
0004 未编辑空白行	3. MARK点	
0005 未编辑空白行	4. 空闲停留位置	
0006 未编辑空白行	5.	
0007 未编辑空白行	6.	
0008 未编辑空白行	7.	
0009 未编辑空白行	8.	
0010 未编辑空白行	9.	

X:0.000      Y:0.000      Z:19.997      | 16:28:23

Set idle stop location

## 3.3.15 Process selection

Choose the corresponding function according to different screw processes. Locking/removing screws/throwing to the designated position after removing screws/reinforcement/adding glue

001-文件001

螺丝 快 管理员 顺序

文件编辑 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997

0002 停留点 X:0.000 Y:0.000 Z:19.997

0003 MARK点 X:0.000 Y:0.000 Z:19.997

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 Y:0.000 Z:19.997 | 16:28:38

工艺选择

选择:

1. 锁付
2. 拆螺丝
3. 拆螺丝后抛到设定位置
4. 加固(不用取螺丝)
5. 加胶

3. MARK点

4. 空闲停留位置

5. 工艺选择

6. 移到指定位置

7. 单点校准

8. 标号

9. 阵列

### 3.3.16 Move to a specified location

In programming, you need the machine to reach a specified position and enter the selected coordinates.

001-文件001

螺丝 快 管理员 顺序

文件编辑 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997

0002 停留点 X:0.000 Y:0.000 Z:19.997 H

0003 MARK点 X:0.000 Y:0.000 Z:19.997

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 Y:0.000 Z:19.997 | 16:28:57

移到指定位置

X轴: 0

Y轴: 0

Z轴: 0

5. ...

6. 移到指定位置

7. 单点校准

8. 标号

9. 阵列

### 3.3.17 Single-point calibration

Use the first screw hole position in the run file as the calibration reference position, move the coordinate axis to the new coordinate point, press "Confirm" to calibrate, and press "Return" to return.

remove

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 避障点 X:0.000 Y:0.000 Z:19.997  
 0002 停留点 X:0.000 Y:0.000 Z:19.997 H:1  
 0003 MARK点 X:0.000 Y:0.000 Z:19.997  
 0004 未编辑空白行  
 0005 未编辑空白行  
 0006 未编辑空白行  
 0007 未编辑空白行  
 0008 未编辑空白行  
 0009 未编辑空白行  
 0010 未编辑空白行

编程界面菜单 2 / 4页

1. 单点校准  
 7. 单点校准  
 8. 标号  
 9. 阵列

X:0.000 Y:0.000 Z:19.997 | 16:29:14

3.3.18 Labels

Go to "File Edit" / "Menu" / "Number" to set the line number

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 跟进速度(mm/s):20 跟进长度(mm):10  
 0002 超时时间(s):1.5 最小时间:0 取延时  
 0003 送料信号:使用 扭力检测:使用 异常报  
 0004 自动运行速度(mm/s):X:600 Y:600 Z:  
 0005 送料器上方安全高度(mm):10 螺孔上方  
 0006 避障点 X:0.000 Y:0.000 Z:0.000  
 0007 停留点 X:0.000 Y:0.000 Z:0.000 H:  
 0008 MARK点 X:0.000 Y:0.000 Z:0.000  
 0009 空闲停留点 X:0.000 Y:0.000 Z:0.000  
 0010 标号:aa

编程界面菜单 2 / 4页

1. 轴相对移动  
 2. 停留点  
 3. MARK点  
 7. 单点校准  
 8. 标号  
 9. 阵列

标号  
 标号名称:

X:0.000 Y:0.000 Z:0.000 | 16:30:00

3.3.19 Arrays

Go to "File Edit" / "Menu" / "Array"

**阵列设置**

阵列方式选择:

1. 横向与纵向参考点

2. 间距值

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1. Reference point: Select the starting point of the array. For example, row #007 or label "ab" as the starting point of the array

阵列调用	阵列调用
1. 行 2. 标号: <input type="text" value="1"/>	1. 行 2. 标号: <input type="text" value="2"/>
行号: <input type="text" value="7"/>	行号: <input type="text" value="1"/>
标号: <input type="text"/>	标号: <input type="text" value="ab"/>

**0006 标号:ab**

0007 螺孔位置 X:5.000 Y:5.000 Z:12.810

0008 螺孔位置 X:20.000 Y:30.000 Z:12.810

0009 螺孔位置 X:30.000 Y:60.000 Z:12.810

**0010 横向阵列(参考点) 调用行:7 横向个数:3 纵向个数:2**

001-文件001 慢 管理员 一般

文件编辑 路径预览

**阵列-横向与纵向参考点**

起始坐标 (A):

1. 横向 2. 纵向:

横向个数:

纵向个数:

横向坐标 (B):

纵向坐标 (C):

**数字键1录入坐标, 数字键2移到起始坐标!**

X:137.738    Y1:149.719    Z:76.238    Y2:0.000    | 09:28:25

1. Horizontal 2. Vertical: This line indicates the order of program execution. 1 Horizontal, the program starts from the starting point to the right of the screw hole to start processing; 2

Vertically, the program starts from the starting point and moves toward the first screw hole below.

Horizontal number: the number of array groups generated in the horizontal direction (including the reference

group) Vertical number: the number of array groups generated in the vertical direction (including the reference

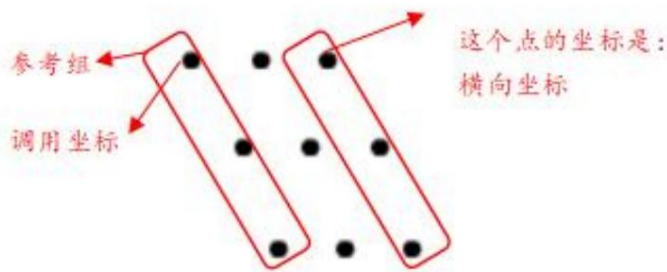
group) Horizontal coordinate: the reference coordinate generated by the horizontal array, take the coordinate of the first screw hole of the last group of the first row of the horizontal array,

as shown below: Vertical coordinate: the reference coordinate produced by the vertical array, take the coordinate of the first screw hole of the last group of the first row of the vertical array,

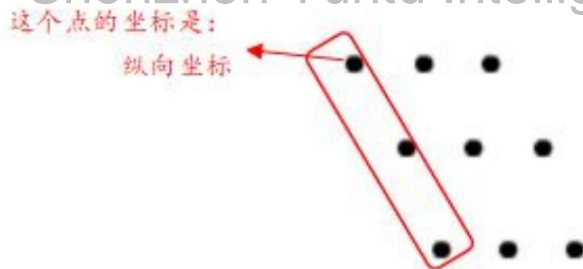
as shown below: Call coordinate: the coordinate of the first screw hole of the reference group array. It is mainly for the convenience of generating horizontal and vertical coordinates. (When the

hour,

cursor is on this line, press "Go to current line" to quickly adjust the screw head to this coordinate)



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2. Spacing value: Horizontal offset/Vertical offset/Horizontal number/Vertical number

阵列-间距值	
1. 横向 2. 纵向:	<input type="text" value="1"/>
横向个数:	<input type="text" value="3"/>
纵向个数:	<input type="text" value="2"/>
横向偏移(mm):	<input type="text" value="20"/>
纵向偏移(mm):	<input type="text" value="100"/>

Horizontal offset: The horizontal spacing between each adjacent horizontal array, as shown below:

Longitudinal offset: The longitudinal spacing between each adjacent longitudinal array, as shown below:

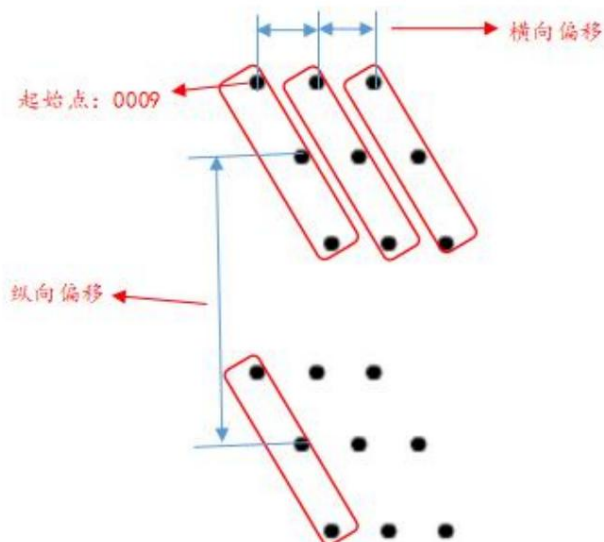
0006 标号:ab

0007 螺孔位置 X:5.000 Y:5.000 Z:12.810

0008 螺孔位置 X:20.000 Y:30.000 Z:12.810

0009 螺孔位置 X:30.000 Y:60.000 Z:12.810

0010 横向阵列(间距) 调用行:7 横向个数:3 纵向个数:2



## 3.3.20 Array expansion

Go to "File Edit" / "Menu" / "Array Expand", select the array row (0010), and then expand the array as follows:

001:文件001 | 慢 | 管理员 | 工作 | 

文件编辑 | 路径预览

0005 供料器上方安全高度(mm):10 螺丝孔上方安全高度(mm):10  
0006 标号:ab  
0007 螺孔位置 X:42.000 Y:20.000 Z:12.000  
0008 螺孔位置 X:28.000 Y:48.000 Z:12.000  
0009 螺孔位置 X:58.000 Y:48.000 Z:12.000  
0010 螺孔位置 X:142.000 Y:20.000 Z:12.000  
0011 螺孔位置 X:128.000 Y:48.000 Z:12.000  
0012 螺孔位置 X:158.000 Y:48.000 Z:12.000  
0013 螺孔位置 X:242.000 Y:20.000 Z:12.000  
0014 螺孔位置 X:228.000 Y:48.000 Z:12.000

X:0.000      Y:0.000      Z:0.000      | 14:11:07

Expand section

3.3.21 Glue gun selection

Choose between glue gun or shielding glue gun

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 

文件编辑 | 路径预览

0001 跟进速度 (mm/s):20 跟进长度 (mm):10 编程界面菜单 3 / 4页

0002 超时时间 (s):1.5 最小时间:0 取延时

0003 送料信号:使用 扭力检测:使用 异常报

0004 自动运行速度 (mm/s):X:600 Y:600 Z:0

0005 送料器上方安全高度 (mm):10 螺孔上方

0006 螺孔位置 X:0.000 Y:112.097 Z:0.000

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

1. 阵列展开

2. 胶枪使用选择

3. 激光测高点

胶枪使用选择

1号:1, 使用 2, 屏蔽

9. 教导偏移

X:0.000 Y:0.000 Z:0.000 | 15:17:53

3.3.22 Laser height measurement point

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 跟进速度(mm/s):20 跟进长度(mm):10  
 0002 超时时间(s):1.5 最小时间:0 取延时  
 0003 送料信号:使用 扭力检测:使用 异常报  
 0004 自动运行速度(mm/s):X:600 Y:600 Z:  
 0005 送料器上方安全高度(mm):10 螺孔上方  
 0006 螺孔位置 X:0.000 Y:112.097 Z:0.00  
 0007 未编辑空白行  
 0008 未编辑空白行  
 0009 未编辑空白行  
 0010 未编辑空白行

编程界面菜单 3 / 4页

1. 阵列展开
2. 胶枪使用选择
3. 激光测高点
4. 暂停

激光测高点(1-录入坐标 '帮助'-退)

测高点:	X:0.000 Y:0.000 Z:0.000
高度测量值(mm):	0
允许误差(mm):	5
站号:	0

X:0.000      Y:0.000      Z:0.000      | 15:19:06

## 3.3.23 Pause

Insert a "Pause" step in the program run menu to make the program run to this "Pause"

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 超时时间(s):1.5 最小时间:0 取延时  
 0002 送料信号:使用 扭力检测:使用 异常报  
 0003 自动运行速度(mm/s):X:600 Y:600 Z:  
 0004 送料器上方安全高度(mm):10 螺孔上方  
 0005 螺孔位置 X:0.000 Y:112.097 Z:0.00  
 0006 螺孔位置 X:47.972 Y:42.272 Z:35.0  
 0007 暂停  
 0008 未编辑空白行  
 0009 未编辑空白行  
 0010 未编辑空白行

编程界面菜单 3 / 4页

1. 阵列展开
2. 胶枪使用选择
3. 激光测高点
4. 暂停

Insert a pause in the edit menu

Place

X:47.972      Y:42.272      Z:35.072      | 15:20:45

## 3.3.24 Delay

Insert a delay step in the program run menu to make the program run to this delay. The delay time can be customized

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 超时时间(s):1.5 最小时间:0 取延时  
 0002 送料信号:使用 扭力检测:使用 异常报  
 0003 自动运行速度(mm/s):X:600 Y:600 Z:  
 0004 送料器上方安全高度(mm):10 螺孔上方  
 0005 螺孔位置 X:0.000 Y:112.097 Z:0.000  
 0006 螺孔位置 X:47.972 Y:42.272 Z:35.0  
 0007 暂停  
 0008 延时 10s  
 0009 未编辑空白行  
 0010 未编辑空白行

编程界面菜单 3 / 4页

1. 阵列展开
2. 胶枪使用选择
3. 激光测高点
4. 暂停
5. 延时
6. 输入检测
7. 输出控制
8. 平台选择
9. 教导偏移

X:47.972      Y:42.272      Z:35.072      | 15:25:30

## 3.3.25 Input Detection

Insert input detection in the program running menu, so that the program runs to the detection signal trigger condition here, and the input detection signal can be used. After the conditions are met, the program can be set to jump

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 超时时间(s):1.5 最小时间:0 取延时  
 0002 送料信号:使用 扭力检测:使用 异常报  
 0003 自动运行速度(mm/s):X:600 Y:600 Z:  
 0004 送料器上方安全高度(mm):10 螺孔上方  
 0005 螺孔位置 X:0.000 Y:112.097 Z:0.000  
 0006 螺孔位置 X:47.972 Y:42.272 Z:35.0  
 0007 暂停  
 0008 延时 10s  
 0009 未编辑空白行  
 0010 未编辑空白行

输入检测

输入口:

1, 开 2, 关:

等待条件满足后程序跳转到

1, 下一行 2, 标号:

标号:

5. 延时
6. 输入检测
7. 输出控制
8. 平台选择
9. 教导偏移

X:47.972      Y:42.272      Z:35.072      | 15:27:04

## 3.3.26 Output Control

Set output port to define the duration of the output port switch state

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 超时时间(s):1.5 最小时间:0 取延时  
 0002 送料信号:使用 扭力检测:使用 异常报  
 0003 自动运行速度(mm/s):X:600 Y:600 Z:4  
 0004 送料器上方安全高度(mm):10 螺孔上方  
 0005 螺孔位置 X:0.000 Y:112.097 Z:0.000  
 0006 螺孔位置 X:47.972 Y:42.272 Z:35.072  
 0007 暂停  
 0008 延时 10s  
 0009 未编辑空白行  
 0010 未编辑空白行

编程界面菜单 3 / 4页

输出控制  
 输出口(1-16):   
 1,开 2,关:   
 持续时间(s):   
 结束关闭:1,是 2,否   
 等待:1,是 2,否:

6. 输出控制  
 7. 平台选择  
 8. 平台选择  
 9. 教导偏移

X:47.972      Y:42.272      Z:35.072      | 16:06:21

## 3.3.27 Platform Selection

Select the platform type, you can choose the platform yourself

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0002 送料信号:使用 扭力检测:使用 异常报  
 0003 自动运行速度(mm/s):X:600 Y:600 Z:4  
 0004 送料器上方安全高度(mm):10 螺孔上方  
 0005 螺孔位置 X:0.000 Y:112.097 Z:0.000  
 0006 螺孔位置 X:47.972 Y:42.272 Z:35.072  
 0007 暂停  
 0008 延时 10s  
 0009 输入 10 '开' 时,程序跳转到下一行.  
 0010 输出 15 打开  
 0011 未编辑空白行

编程界面菜单 3 / 4页

1. 阵列展开  
 2. 胶枪使用选择  
 3. 激光测高点

平台选择  
 平台(1-2):

7. 教导偏移  
 8. 平台选择  
 9. 教导偏移

X:47.972      Y:42.272      Z:35.072      | 16:11:30

## 3.3.28 Teach Offset

Generally, "Teach Offset" is often used when importing DXF files. Go to "File Edit" / "Menu" / "Teach Offset"

Example: Line 0014 is used as a calibration reference point

$(oldX,oldY,oldZ)=(3,32,22)$   $\ddot{y}(newX,newY,newZ)=(3.122,33.122,23.222)$

$OffsetX = oldX - newX$ ,  $OffsetY$

$= oldY - newY$ ,  $OffsetZ = oldZ -$

$newZ$ , the coordinates of all

points in the program are corrected in the X / Y / Z directions according to the values of (OffsetX, OffsetY, OffsetZ)

001:文件001 | 慢 | 管理员 | 工作 |

文件编辑 | 路径预览

0012 空点 X:10.000 Y:10.000 Z:60.000

0013 螺孔位置 X:20.000 Y:30.000 Z:12.810

0014 螺孔位置 X:3.000 Y:32.000 Z:22.000

0015 横向阵列 教导偏移

0016 输出口 8

0017 延时 2s

0018 输出口 8

0019 停留位置 X:12.094 Y:16.669 Z:14.588

0020 停留位置 X:0.000 Y:0.000 Z:0.000 按下'运行'后继续运行

0021 程序跳转到 标号:ab 限制次数:10

X:3.122      Y:33.122      Z:23.222      | 17:03:21

### 3.3.29 Get product location

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0004 送料器上方安全高度(mm):10 螺孔上方

0005 螺孔位置 X:0.000 Y:112.097 Z:0.000

0006 螺孔位置 X:47.972 Y:42.272 Z:35.072

0007 暂停

0008 延时 10s

0009 输入 10 '开'时,程序跳转到下一行.

0010 输出 15 打开

0011 平台:1

0012 取放产品设置

0013 未编辑空白行

X:47.972      Y:42.272      Z:35.072      | 16:34:39

### 3.3.30 Program Jump

To set the program jump function: Enter "File Edit" / "Menu" / "Program Jump", as follows:

001:文件001

中

管理员

工作



文件编辑

路径预览

0013 延时 2s

0014 输出口 8 关闭

0015 停留位置 X:12.094 Y:16.669 Z:14.588

0016 停留位置 X:0.000 Y:0.000 Z:0.000 按下'运行'后继续运行.

0017 程序跳转到 标号:ab 限制次数:10

0018 未编辑空白行

0019 未编辑空白行

0020 未编辑空白行

0021 未编辑空白行

0022 未编辑空白行

Jump to "label:  
aa", 10 times

X:12.094

Y:16.669

Z:14.588

程序跳转

1. 行 2. 标号:

行号:

标号:


产品计数:1, 否 2, 是

跳转次数:

被设置为0, 程序无限次跳转!

## 3.3.31 Start running from the selected line

Run the program starting from the currently selected line

014-文件014 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0005 螺孔位置 X:0.000 Y:112.097 Z:0.000 编程界面菜单 4 / 4页

0006 螺孔位置 X:47.972 Y:42.272 Z:35.000

0007 暂停

0008 延时 10s

0009 输入 10 '开' 时, 程序跳转到下一行.

0010 输出 15 打开

0011 平台:1

0012 取放产品设置

0013 程序跳转到 行:1

0014 未编辑空白行

1. 取产品位置

2. 程序跳转

3. 从选中行开始运行

4. 程序结束

The program starts running from the selected line

X:47.972      Y:42.272      Z:35.072      | 16:35:23

## 3.3.32 End of program

The program runs to this line and ends. The end point of the program

014-文件014 | 螺丝 | 快 | 用户 | 顺序 |

文件编辑 | 路径预览

0007 暂停

0008 延时 10s

0009 输入 10 '开' 时, 程序跳转到下 一行

0010 输出 15 打开

0011 平台:1

0012 取放产品设置

0013 程序跳转到 行:1

**0014 程序结束**

0015 未编辑空白行

0016 未编辑空白行

X:0.000      Y:0.000      Z:0.000

The program runs to the end of this time

编程界面菜单      4 / 4页

1. 取产品位置
2. 程序跳转
3. 从选中行开始运行
4. 程序结束

3.3.33 File upload/unlock

Set file lock: Press "Help" and enter the number 513 "Help" to lock/unlock the file

001:文件001 | | 慢 | 管理员 | 工作 |

文件编辑 | 路径预览

0002 超时时间(s):1.5 最小时间:0 取延时:0 完成后

0003 送料信号:使用 扭力检测:使用 异常报警:打开

0004 自动运行速度(mm/s):X:600 Y:600 Z:600

0005 送料器上:文件上/解锁 (m):10

0006 未编辑空 操作选择:

0007 未编辑空 **1. 解锁**

0008 未编辑空 2. 上锁

0009 未编辑空白行

0010 标号:ab

**0011 螺孔位置 X:5.000 Y:5.000 Z:12.810**

X:3.122      Y:33.122      Z:23.222      | 17:07:35

Unlock: There is no restriction on file editing. Lock: File editing is not allowed. When you press "Menu", the "File unlock/lock" dialog box will pop up.

3.3.34 Feeder Selection Number 3

on the keyboard of the handheld device "Feeder Selection" can only be selected when there are more than two feeders.

As follows: 0010# and 0011# take screws from 1# feeder; 0013# and 0014# take screws from 2# feeder

001:文件001 | 慢 | 管理员 | 工作 | 

文件编辑 | 路径预览

0007 选择供料器1 供料器选择  
选择:

0008 空点 X:10.000 Y:10.000 Z:60.000

0009 选择供料器1

0010 螺孔位置 X:20.000 Y:30.000 Z:12.810

0011 螺孔位置 X:3.000 Y:32.000 Z:22.000

0012 选择供料器2

0013 螺孔位置 X:3.122 Y:33.122 Z:23.222

0014 螺孔位置 X:3.122 Y:33.122 Z:23.222

0015 横向阵列(间距) 调用行:7 横向个数:3 纵向个数:2

0016 输出口 8 打开

X:3.122      Y:33.122      Z:23.222      | 17:09:36

### 3.3.35 Feeder Position

Use keyboard number 2 on the handheld device to set the "feeder position". You can set the feeding position of different feeders and move the coordinates to confirm the feeder position.

Note that the feeder position cannot be entered, and the coordinates must be manually moved and entered

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

文件编辑 | 路径预览

0001 未编辑空白行

0002 未编辑空白行

0003 未编辑空白行

0004 未编辑空白行

0005 未编辑空白行

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

供料器位置设置

X轴:

Z轴:

X:37.359      Y:50.166      Z:0.000      | 17:36:40

### 3.3.36 Material collection test

Number 4 on the keyboard of the handheld device is set to "material picking test", which can grab the screw to test whether the position of the feeder is correct, making it easier to adjust the position of the feeder.

## 3.4 Path Preview

001:文件001

快

管理员

工作



文件编辑

路径预览

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1. Black indicates the screw hole of the Y1 platform. Blue indicates the screw hole of the Y2 platform.

2. Red indicates the screw hole position of the current cursor line. 3. Press

"Up" or "Down" to select the screw hole. 4.

Press "Go to current line" to move the screw head to the current screw hole.

X:0.000

Y1:0.000

Z:0.000

Y2:0.000

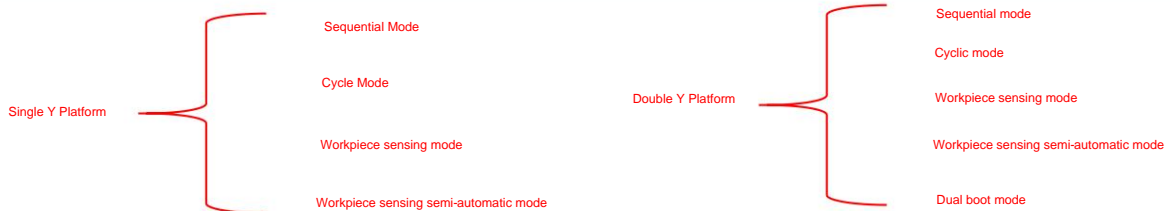
19:50:52

3.5 Automatic operation interface

001:文件001
快 | 管理员 | 工作 |

	<b>螺丝统计</b>	● ● ● ● ● ● ● ● ● ●	
Number of screw holes completed	3		
Screw hole failure rate	0		
Screw hole success rate	100.000%		
Running status:	<b>运行</b>		
running; paused			
Duration of operation	00:00:07		
	<b>产品统计</b>		
Number of completed	0		
products Product failure rate	0		
Product success rate	0.000%		
Current screw hole processing status	OK		
1.OK 2.Sliding teeth 3.Floating lock			
	Y平台-产品正在加工		2Y平台-空闲状态
	X:98.691	Y1:15.000	Z:100.000
			Y2:0.000   19:52:48

3.6 Program Examples



3.6.1 Single Y Platform - General Mode

Configure the operating mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings"

运行模式设置

选择:

1. 顺序模式
2. 循环模式
3. 工件感应模式
4. 工件感应半自动

1. Select "1. Sequential Mode" as the operation mode. 2. After

pressing the "Run" key, the bit will process the Y platform product. The program will execute the programming points in sequence from top to bottom.

001:文件001 快 管理员 工作

I0监控 输入口配置 输出口配置

输入01	X轴原点	输入09	按钮启动/暂停	输入17	输入 17
输入02	Y轴原点	输入10	输入 10	输入18	输入 18
输入03	Z轴原点	输入11	输入 11	输入19	输入 19
输入04	输入 04	输入12	输入 12	输入20	输入 20
输入05	输入 05	输入13	输入 13	输入21	输入 21
输入06	输入 06	输入14	输入 14	输入22	输入 22
输入07	供料感应	输入15	输入 15	输入23	输入 23
输入08	扭力到位	输入16	输入 16	输入24	输入 24

X:0.000 Y:0.000 Z:0.000 09:20:39

### 3.6.2 Single Y Platform - Cycle Mode

Select "2. Cycle mode" as the operation mode. After pressing the "Run" key, the bit will process the Y platform product and execute the program in a cycle.

### 3.6.3 Single Y-Stage - Workpiece Sensing Mode

Configure the operation mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings" 1. Select "2. Workpiece

Sensing Mode" for the operation mode 2. After pressing the "Run"

button, the program enters the automatic operation state and waits for the product to be placed. When the product induction is triggered, the delay "Product Sensing Delay" is used, the cylinder is clamped, and the delay "Clamping Cylinder

Clamping Delay" is used, and the product moves to the processing position to start screwing. After the product is completed, the product moves to the product removal position and waits for the product to be taken away. After the product

induction disappears, the delay "Product Removal Delay" is used, and the product moves to the product placement position

and waits for the product to be placed. 3. Configure workpiece detection and tightening cylinder: Enter "System Parameters" / "Operation Parameters" / "Product Induction Tightening Cylinder"

#### 产品感应与夹紧气缸设置(单位:s)

产品感应延时:	<input type="text" value="1"/>
夹紧气缸夹紧时间:	<input type="text" value="1"/>
夹紧气缸松开时间:	<input type="text" value="0"/>
产品取出后延时:	<input type="text" value="1"/>

Product sensing delay (t1): In "workpiece sensing mode" and "workpiece sensing semi-automatic" modes, after the product is placed, the clamping cylinder starts working after sensing time t1. Clamping

cylinder clamping time (t2): After the clamping cylinder is output, after time t2, the product goes to the processing position. Clamping

cylinder release time (t3): When the product reaches the product removal position, the cylinder clamps and releases, and after delay time t3, the product can be taken

away. Product removal delay (t4): After the product is taken away, the sensing disappears, and after delay t4, the product returns to the product placement position.

001:文件001 快 管理员 工作

I0监控 输入口配置 输出口配置

输入01	X轴原点	输入09	按钮启动/暂停	输入17	输入 17
输入02	Y轴原点	输入10	工件感应Y	输入18	输入 18
输入03	Z轴原点	输入11	输入 11	输入19	输入 19
输入04	输入 04	输入12	输入 12	输入20	输入 20
输入05	输入 05	输入13	输入 13	输入21	输入 21
输入06	输入 06	输入14	输入 14	输入22	输入 22
输入07	供料感应	输入15	输入 15	输入23	输入 23
输入08	扭力到位	输入16	输入 16	输入24	输入 24

X:0.000 Y:0.000 Z:0.000 09:20:54

## 3.6.4 Single Y platform workpiece sensing semi-automatic mode

Configure the operation mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings" 1. Select the operation

mode "3. Workpiece Induction Semi-automatic" 2. After pressing the "Run"

button, the program enters the automatic operation state and waits for the product to be placed. After the product is placed on the Y platform, you still need to wait to press the "Start/Pause Button" to start the batch.

Head processing Y1 platform products

3. Configure workpiece detection and clamping cylinder: refer to 3.6.2

## 3.6.5 Double Y platform sequence mode

Configure the operating mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings"

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1. Select "1. Sequential Mode" for the operation mode.

0004 自动运行速度 (mm/s) :X:600 Y:600 Z:600

0005 送料器上方安全高度 (mm) :10 螺丝孔上方安全高度 (mm) :10

0006 螺孔位置 X:22.000 Y1:22.000 Z:12.000

0007 螺孔位置 X:20.000 Y1:30.000 Z:12.810

0008 螺孔位置 X:125.000 Y2:125.000 Z:25.000

0009 螺孔位置 X:110.000 Y2:114.000 Z:12.000

2. After pressing the "Run" button, the processing file will execute the screw hole positions from top to bottom. The screw hole positions of "0006, 0007, 0008, 0009" will be executed in sequence.

3. When the Y-axis platform is replaced, the processed Y-axis will return to the '0' position. In the above figure, after processing the "0007" screw hole position, the Y1 platform will return to the '0' position. After processing the "0009" screw hole position, the Y1 platform will return to the '0' position.

After the hole position is reached, the Y2 platform will return to the '0' position.

## 3.6.6 Double Y platform cycle mode

Select "2. Cycle mode" as the operation mode. After pressing the "Run" key, the bit will process the Y1Y2 platform products and execute the program in a cycle.

## 3.6.7 Double Y platform workpiece sensing mode

Configure the operating mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings"

1. Select "3. Workpiece Sensing Mode" for the operation mode.

2. After pressing the "Run" button, the program enters the automatic running state and waits for the product to be put in.

When the Y1 platform is placed in the product, the screw hole is processed on the Y1 platform product

When the product is placed on the Y2 platform, the screw holes are processed on the Y2 platform product. The two platforms do not interfere with each other.

3. Configure workpiece detection and clamping cylinder: refer to 3.6.2

001: 文件001				快	管理员	工作	
IO监控		输入口配置	输出口配置				
输入01	X轴原点	输入09	工件感应Y	输入17	输入 17		
输入02	Y轴原点	输入10	工件感应Y2	输入18	输入 18		
输入03	Z轴原点	输入11	按钮启动/暂停	输入19	输入 19		
输入04	2Y轴原点	输入12	输入 12	输入20	输入 20		
输入05	输入 05	输入13	输入 13	输入21	输入 21		
输入06	输入 06	输入14	输入 14	输入22	输入 22		
输入07	扭力到位	输入15	输入 15	输入23	输入 23		
输入08	供料感应	输入16	输入 16	输入24	输入 24		

X:0.000      Y1:0.000      Z:0.000      Y2:0.000      | 08:47:08

## 3.6.8 Double Y platform workpiece sensing semi-automatic mode

Configure the operating mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings"

1. Select "4. Workpiece induction semi-automatic" for the operation mode

2. When "Button Y1 Start" and "Button Y2 Start" are configured, and "Button Start/Pause" is not configured, press "Button Y1 Start" or "Button Y2 Start" to enter the automatic operation state

After the product is placed on the Y1 platform, press the "Y1 Start Button" and the bit starts processing the Y1 platform.

After the product is placed on the Y2 platform, press the "Y2 Start Button" and the bit starts processing the Y2 platform. The two platforms do not interfere with each other.

3. When "Button Start/Pause" is configured, and "Button Y1 Start" and "Button Y2 Start" are not configured, press "Button Start/Pause" to enter the automatic operation state

After the product is placed on the Y1 platform, press the "Start/Pause" button and the bit starts processing the Y1 platform.

After the product is placed on the Y2 platform, press the "Start/Pause" button and the bit starts processing the Y2 platform. The two platforms do not interfere with each other.

4. Configure workpiece detection and clamping cylinder: refer to 3.6.2

001: 文件001				快	管理员	工作	
IO监控		输入口配置	输出口配置				
输入01	X轴原点	输入09	工件感应Y	输入17	输入 17		
输入02	Y轴原点	输入10	工件感应Y2	输入18	输入 18		
输入03	Z轴原点	输入11	按钮Y1启动	输入19	输入 19		
输入04	2Y轴原点	输入12	按钮Y2启动	输入20	输入 20		
输入05	输入 05	输入13	按钮启动/暂停	输入21	输入 21		
输入06	输入 06	输入14	输入 14	输入22	输入 22		
输入07	扭力到位	输入15	输入 15	输入23	输入 23		
输入08	供料感应	输入16	输入 16	输入24	输入 24		

X:0.000      Y1:0.000      Z:0.000      Y2:0.000      | 08:31:36

## 3.6.9 Dual Y Platform - Dual Boot Mode

Configure the operation mode: Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings" 1. Select "5. Dual Start

Mode" for the operation mode 2. When you press "Button Y1

Start", the bit will process the Y1 platform product. When you press "Button Y2 Start", the soldering iron head will process the Y2 platform product. The two platforms do not interfere with each other 3. After pressing "Button Y1 Start" or


"Button Y2 Start", the program enters the automatic operation state. The first time it is started, the bit will process the corresponding Y-axis platform

4. Configure workpiece detection and clamping cylinder: refer to 3.6.2

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## Chapter 4: Main Menu – Processing Information

## 4.1 Processing information

001:文件001 快 管理员 工作 

加工信息

孔位数量: 0	螺孔时间(s): 0.000	
孔位OK数量: 0	产品时间(s): 0.000	
孔位故障数量: 0	电批使用次数: 0	Restrictions on trial use of electric batch
螺孔故障比例: 0.000%	电批限制次数: 0	
产品数量: 0	产品加工数量: 0	Production restrictions
产品OK数量: 0	产品限制数量: 0	
产品故障数量: 0		
产品故障比例: 0.000%		

X: 0.000    Y: 0.000    Z: 0.000    | 18:36:55

Number of holes: In working mode, the number increases by 1 for each screw installed.

Hole OK Quantity: In working mode, when each screw is driven and the result is normal, the quantity is increased by 1

Hole fault quantity: In working mode, every time a screw is driven and the result is a fault, the quantity increases by 1

Screw hole failure ratio: the ratio of the number of hole failures to the number of holes

Product quantity: In workpiece mode, the quantity increases by 1 after each product is processed.

Product OK Quantity: In workpiece mode, after processing a product, if the processing results of each hole on the product are normal, the quantity will be increased by 1

Product failure quantity: In workpiece mode, after processing a product, if there is a screw hole processing failure during the processing of the product, the quantity will be increased by 1

Product failure ratio: the ratio of the number of product failures to the number of products

Screw hole time: the time it takes for the screwdriver bit to take out a screw and drive a screw into the hole.

Product time: the time taken to process a product.

Number of times the electric screwdriver is used: When the electric screwdriver limit is non-zero, the number will increase by 1 for each screw. When the number reaches the electric screwdriver limit,

Tip: "The screw hole limit has been reached!"

Electric screwdriver limit times: When set to 0, there is no limit. When it is non-zero, a message "The screw hole limit has been reached!" will be displayed when the number of uses is reached.

Product processing quantity: When the product limit is non-zero, the quantity will increase by 1 for each product processed. When the quantity reaches the product limit,

Then it will prompt "The product limit quantity has been reached!"

Product limit times: When set to 0, there is no limit. When it is non-zero, when the number of processed products is reached, a message "Product limit quantity has been reached!" will be displayed.

4.2 Processing Information – Menu

Enter "Processing Information" / "Menu" 1.

Clear screw hole processing count: clear "Hole Number", "Hole OK Number", "Hole Failure Number", "Hole Failure Ratio" 2. Clear product

processing count: clear "Product Number", "Product OK Number", "Product Failure Number", "Product Failure Ratio" 3. Clear screw hole and

product counts at the same time: perform "Clear screw hole processing count" and "Clear product processing count" operations at the same

time 4. Set the number of electric batch limit times:

5. Product limit settings

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电批限制次数设置		产品限制数量设置	
电批使用次数:	<input type="text" value="0"/>	产品加工数量:	<input type="text" value="0"/>
电批限制次数:	<input type="text" value="0"/>	产品限制数量:	<input type="text" value="0"/>

001:文件001
快 | 管理员 | 工作 |

加工信息

孔位数量: <input type="text" value="0"/>	螺孔时间(s): <input type="text" value="0.000"/>	加工信息菜单 <span style="float: right;">1 / 1页</span>
孔位OK数量: <input type="text" value="0"/>	产品时间(s): <input type="text" value="0.000"/>	1. 清除螺孔加工计数
孔位故障数量: <input type="text" value="0"/>	电批使用次数: <input type="text" value="0"/>	2. 清除产品加工计数
螺孔故障比例: <input type="text" value="0.000%"/>	电批限制次数: <input type="text" value="0"/>	3. 同时清除螺孔和产品计数
产品数量: <input type="text" value="0"/>	产品加工数量: <input type="text" value="0"/>	4. 电批限制次数设置
产品OK数量: <input type="text" value="0"/>	产品限制数量: <input type="text" value="0"/>	5. 产品限制次数设置
产品故障数量: <input type="text" value="0"/>		
产品故障比例: <input type="text" value="0.000%"/>		

X:0.000
Y:0.000
Z:0.000
17:04:05

# Chapter 5: Main Menu - IO Ports

## 5.1 IO Monitoring

Green 1: Displays that the current input port has input or displays that the current output port has

output. Red 0: Displays that the current input port has no input or displays that the current output port has

no output. In this interface, you can also control the status of

outputs 1-16. Number keys (1-9): Control output ports 1-9 respectively, "Ctrl" + number keys (0-6): Control output ports 10-16 respectively.

001:文件001 | 快 | 管理员 | 工作 |

IO监控 | 输入口配置 | 输出口配置

输入01	1	输入09	0	输入17	0	输出01	0	输出09	0
输入02	1	输入10	0	输入18	0	输出02	0	输出10	0
输入03	1	输入11	0	输入19	0	输出03	0	输出11	0
输入04	1	输入12	0	输入20	0	输出04	0	输出12	0
输入05	1	输入13	0	输入21	0	输出05	0	输出13	0
输入06	0	输入14	0	输入22	0	输出06	0	输出14	0
输入07	0	输入15	0	输入23	0	输出07	0	输出15	0
输入08	0	输入16	0	输入24	0	输出08	0	输出16	1

X:0.000    Y:0.000    Z:0.000    | 18:37:03

### 5.1.1 IO Monitoring-Menu

ÿ Y-axis clamping cylinder: Open or close the clamping Y cylinder. The premise is that the output function "Product clamping cylinder" has been configured

ÿ Y2 axis clamping cylinder: Open or close the clamping cylinder Y2. The premise is that the output function "Product clamping cylinder" has been configured.

014-文件014 | 螺丝 | 快 | 厂商 | 顺序 |

IO监控 | 输入口配置 | 输出口配置

01 X轴原点	09 工件感应Y	17 按钮计数清
02 Y轴原点	10 工件感应Y2	18 电批/补螺
03 Z轴原点	11 Y1运行	19 输入19
04 输入04	12 Y2运行	20 输入20
05 输入05	13 按钮单步	21 输入21
06 输入06	14 按钮复位	22 输入22
07 扭力到位	15 保护启动	23 产品放反
08 送料感应	16 按钮停止	24 清除报警

IO监控菜单    1 / 1页

- Y轴夹紧气缸
- Y2轴夹紧气缸

X:0.000    Y:0.000    Z:0.000    | 10:13:20

5.2 Input port configuration

5.2.1 Operation Instructions



The above is the factory default input port configuration of the single Y platform screw machine system. Input ports 1#, 2#, and 3# are configured as X-axis, Y-axis, and z-axis origin signals respectively.

Press "Up", "Down", "Previous Page", "Next Page" to move the focus and select the port.

Press "OK" to start configuring the current port

5.2.2 Input port configuration Enter

"IO port" / "Input port configuration" / "OK"



The following is the input port function configuration table, all functions can be queried in it:

## 机器IO端口输入配置

### 螺丝相关

选择:

- |           |            |
|-----------|------------|
| 1. 供料信号   | 7. 向下气缸原位  |
| 2. 电批扭力反馈 | 8. 分料前感应   |
| 3. 深度感应   | 9. 供料准备好信号 |
| 4. 浮锁信号   | 10. 切换气缸下位 |
| 5. 滑牙信号   | 11. 切换气缸上位 |
| 6. 真空检测   |            |

### 夹具相关

选择:

- |             |            |
|-------------|------------|
| 1. 产品感应     | 7. 固定气缸出位  |
| 2. 产品扩展感应   | 8. 产品夹紧B检测 |
| 3. 产品夹紧检测   | 9. 产品放反检测  |
| 4. 旋转气缸到位检测 |            |
| 5. 旋转气缸返回检测 |            |
| 6. 固定气缸原位   |            |

### 按钮

选择:

- |           |              |
|-----------|--------------|
| 1. 复位按钮   | 7. 运行/暂停     |
| 2. 急停按钮   | 8. 保护启动按钮    |
| 3. 单步按钮   | 9. 计数清零按钮    |
| 4. Y1运行按钮 | 10. 电批/补螺丝按钮 |
| 5. Y2运行按钮 | 11. 手动出胶按钮   |
| 6. 停止按钮   | 12. 扭力测试按钮   |

### 电机相关

选择:

1. 原点
2. 负限位
3. 正限位
4. 电机故障

### 下料机构

选择:

1. 垂直气缸下位
2. 垂直气缸上位
3. 水平气缸出位
4. 水平气缸原位
5. 吸嘴检测

### 光栅功能

选择:

1. 光栅保护
2. Y1平台光栅
3. Y2平台光栅
4. 开门保护
5. 开门保护2

### 拨码开关

选择:

- |         |         |
|---------|---------|
| 1. 个位_1 | 7. 十位_4 |
| 2. 个位_2 | 8. 十位_8 |
| 3. 个位_4 | 9. 快捷按钮 |
| 4. 个位_8 |         |
| 5. 十位_1 |         |
| 6. 十位_2 |         |

### 自动对针

选择:

1. 前后对射(校准X方向)
2. 左右对射(校准Y方向)

### 机器接收信号

选择:

1. Y轴返回信号
2. 报警清除

## 5.2.3 Input Port Configuration – Menu

014-文件014		螺丝	快	厂商	顺序	
I/O监控		输入口配置		输出口配置		
输入01	X轴原点	输入09	工件感应Y	输入口菜单		1 / 1页
输入02	Y轴原点	输入10	工件感应Y2	1. 输入口功能配置		
输入03	Z轴原点	输入11	Y1运行按钮	2. 输入口信号类型配置		
输入04	输入 04	输入12	Y2运行按钮	3. 取消输入口配置		
输入05	输入 05	输入13	按钮单步	4. 重命名		
输入06	输入 06	输入14	按钮复位	5. 输入口端口初始化		
输入07	扭力到位	输入15	按钮保护启			
输入08	供料感应	输入16	按钮停止			
X:0.000		Y:0.000		Z:0.000		10:00:06

1. Configure input port function: To configure the function of the input port, you can press the "OK" button in the main interface of the input port configuration to achieve the same purpose.
2. Configure input port signal type: To configure the signal type of the input port function, such as configuring the signal type of "torque feedback of electric screwdriver", normally open and normally closed; for level detection; rising edge and falling edge; for edge detection.
3. Cancel input port configuration: Cancel the function of the input port.
4. Rename: Customize the IO port name.
5. Input port initialization: Restore all input ports to factory settings

## 5.3 Output port configuration

## 5.3.1 Operation Instructions

001:文件001		快	管理员	工作	
I/O监控		输入口配置		输出口配置	
输出01	输出 01	输出09	输出 09		
输出02	输出 02	输出10	输出 10		
输出03	输出 03	输出11	输出 11		
输出04	输出 04	输出12	输出 12		
输出05	输出 05	输出13	输出 13		
输出06	输出 06	输出14	输出 14		
输出07	输出 07	输出15	输出 15		
输出08	输出 08	输出16	刹车		
X:0.000		Y:0.000		Z:0.000	
17:38:28					

The above is the factory default output port configuration of the single Y platform screw machine system. Output port 16# is positioned as a brake. If the z-axis has a brake signal, please use output port 16# Press "Up", "Down", "Previous Page", "Next Page" to move the focus, select a port, and press "OK" to start configuring the current port

5.3.2 Output port configuration

The following is the output port function configuration table. All configurable functions are in the table below:

机器IO端口输出配置																	
<p><b>螺丝相关</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. 吸气端口</td> <td style="width: 50%;">7. 电批反转</td> </tr> <tr> <td>2. 驱动电批端口</td> <td>8. 自由旋转</td> </tr> <tr> <td>3. 向下气缸端口</td> <td>9. 请求(吹气)端口</td> </tr> <tr> <td>4. 吹气清洁端口</td> <td>10. 点胶端口</td> </tr> <tr> <td>5. 吹料回收</td> <td>11. 切换气缸端口</td> </tr> <tr> <td>6. 分料气缸</td> <td></td> </tr> </table>	1. 吸气端口	7. 电批反转	2. 驱动电批端口	8. 自由旋转	3. 向下气缸端口	9. 请求(吹气)端口	4. 吹气清洁端口	10. 点胶端口	5. 吹料回收	11. 切换气缸端口	6. 分料气缸		<p><b>夹具相关</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. 产品夹紧端口</td> <td style="width: 50%;">2. 产品旋转端口</td> </tr> <tr> <td>3. 固定气缸</td> <td>4. 产品夹紧B端口</td> </tr> </table>	1. 产品夹紧端口	2. 产品旋转端口	3. 固定气缸	4. 产品夹紧B端口
1. 吸气端口	7. 电批反转																
2. 驱动电批端口	8. 自由旋转																
3. 向下气缸端口	9. 请求(吹气)端口																
4. 吹气清洁端口	10. 点胶端口																
5. 吹料回收	11. 切换气缸端口																
6. 分料气缸																	
1. 产品夹紧端口	2. 产品旋转端口																
3. 固定气缸	4. 产品夹紧B端口																
<p><b>指示灯</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr><td>1. 红灯(三色灯)</td></tr> <tr><td>2. 绿灯(三色灯)</td></tr> <tr><td>3. 黄灯(三色灯)</td></tr> <tr><td>4. 蜂鸣器</td></tr> <tr><td>5. 刹车</td></tr> <tr><td>6. Y轴运行灯</td></tr> </table>	1. 红灯(三色灯)	2. 绿灯(三色灯)	3. 黄灯(三色灯)	4. 蜂鸣器	5. 刹车	6. Y轴运行灯	<p><b>下料机构端口</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr><td>1. 垂直气缸</td></tr> <tr><td>2. 水平气缸</td></tr> <tr><td>3. 吸产品气缸</td></tr> </table>	1. 垂直气缸	2. 水平气缸	3. 吸产品气缸							
1. 红灯(三色灯)																	
2. 绿灯(三色灯)																	
3. 黄灯(三色灯)																	
4. 蜂鸣器																	
5. 刹车																	
6. Y轴运行灯																	
1. 垂直气缸																	
2. 水平气缸																	
3. 吸产品气缸																	
<p><b>电机相关</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr><td>1. 故障清除</td></tr> <tr><td>2. 电机使能</td></tr> </table>	1. 故障清除	2. 电机使能	<p><b>机器给出信号</b></p> <p>选择: <input style="width: 50px;" type="text"/></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. 准备好信号</td> <td style="width: 50%;">7. 产品ng信号</td> </tr> <tr> <td>2. 加工完成信号</td> <td>8. 休眠信号</td> </tr> <tr> <td>3. 产品计数</td> <td>9. 暂停信号</td> </tr> <tr><td>4. 故障信号</td></tr> <tr><td>5. 复位完成信号</td></tr> <tr><td>6. 等待产品放入</td></tr> </table>	1. 准备好信号	7. 产品ng信号	2. 加工完成信号	8. 休眠信号	3. 产品计数	9. 暂停信号	4. 故障信号	5. 复位完成信号	6. 等待产品放入					
1. 故障清除																	
2. 电机使能																	
1. 准备好信号	7. 产品ng信号																
2. 加工完成信号	8. 休眠信号																
3. 产品计数	9. 暂停信号																
4. 故障信号																	
5. 复位完成信号																	
6. 等待产品放入																	

5.3.3 Output port configuration – Menu

Go to "IO Port" / "Output Port Configuration" / "Menu"

014-文件014				螺丝	快	厂商	顺序		
IO监控	输入口配置	输出口配置							
输出01	<input type="text" value="输出 01"/>	输出09	<input type="text" value="输出 09"/>	<b>输出口菜单</b>				1 / 1页	
1. 输出口功能配置									
2. 取消输出口配置									
3. 重命名									
4. 输出口端口初始化									
5. 输出口类型配置									
输出02	<input type="text" value="输出 02"/>	输出10	<input type="text" value="输出 10"/>						
输出03	<input type="text" value="输出 03"/>	输出11	<input type="text" value="输出 11"/>						
输出04	<input type="text" value="输出 04"/>	输出12	<input type="text" value="输出 12"/>						
输出05	<input type="text" value="输出 05"/>	输出13	<input type="text" value="输出 13"/>						
输出06	<input type="text" value="输出 06"/>	输出14	<input type="text" value="输出 14"/>						
输出07	<input type="text" value="夹紧气缸"/>	输出15	<input type="text" value="输出 15"/>						
输出08	<input type="text" value="夹紧气缸B"/>	输出16	<input type="text" value="刹车"/>						
X:0.000			Y:0.000			Z:0.000			10:04:40

Configure output port function: To configure the function of the output port, you can press the "OK" button on the output port configuration main interface to achieve the same purpose.

Cancel output port configuration: cancel the output  
port function. Output port initialization: restore all output ports to factory settings.

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## Chapter 6: Main Menu – System Parameters

### 6.1 Operating parameters

The operating parameters mainly include various configuration parameters in automatic mode, such as time parameters, cylinder parameters, sensor parameters, working mode, time parameter configuration, etc.

wait



Press "Up", "Down", "Previous Page", "Next Page" to select a submenu, and press "OK" to enter the submenu configuration interface. Press the number keys

(1-9) to enter the menu directly, for example, press the number key 2 to enter "02. Acceleration Settings"; press "Ctrl" + (0-2) to enter "10-12 Submenu", press "Ctrl + 0" to enter "10. Parameter Option\_1"

#### 6.1.1 Speed setting Enter "System

parameters" / "Operation parameters" / "Speed setting"

速度设置 (单位: mm/s)			
手动速度(高):	<input type="text" value="100"/>	启动速度:	<input type="text" value="10"/>
手动速度(中):	<input type="text" value="50"/>	停止速度:	<input type="text" value="10"/>
手动速度(低):	<input type="text" value="5"/>	旋转轴速度比例:	<input type="text" value="1"/>
回原点靠近速度:	<input type="text" value="50"/>	空点线段速度:	<input type="text" value="500"/>
回原点捕获速度:	<input type="text" value="30"/>		
去目标位置时速度:	<input type="text" value="800"/>		

Manual speed (fast): the speed when the speed gear is in "fast" during manual movement

Manual speed (medium): the speed when the speed gear is in "medium" during manual movement

Manual speed (slow): the speed when the speed gear is in "slow" during manual movement

Home point approach speed: the speed at which the bit approaches the origin during the home point operation

Home point capture speed: the speed at which the bit leaves the origin for capture after reaching the origin during the home point operation

Go to target position speed: the speed at which the bit moves when "going to current line" or when editing the position, when the bit moves to the last entered position coordinates

Startup speed: the startup speed of each axis of XYZ. The general value is (5mm/s-20mm/s)

Empty point segment speed: the interpolation speed when interpolating an empty point path

## 6.1.2 Acceleration setting

Enter "System Parameters" / "Operation Parameters" / "Acceleration Settings"

加速度设置 (单位: mm/(s*s))	
X轴:	<input type="text" value="1000"/>
Y轴:	<input type="text" value="1000"/>
Z轴:	<input type="text" value="700"/>
手动移动加速度:	<input type="text" value="100"/>
回原点加速度:	<input type="text" value="200"/>
多轴加速度:	<input type="text" value="800"/>

γ X-axis: During automatic operation, the acceleration of the X-axis when the bit is moving in vain. Generally set to (2000-12000) γ Y-axis:

During automatic operation, the acceleration of the Y-axis when the bit is moving in vain. Generally set to (2000-12000) γ Z-axis: During

automatic operation, the acceleration of the Z-axis when the bit is moving in vain. Generally set to (2000-12000) γ Manual movement

acceleration: The acceleration of each axis during manual movement. Generally set to (1000-4000) γ Home point acceleration: The

acceleration of each axis when returning to the origin. Generally set to (1000-6000) γ Multi-axis acceleration: The acceleration of

the interpolation path of the empty point. Generally set to (500-6000)

## 6.1.3 Product induction clamping cylinder

Go to "System Parameters" / "Operation Parameters" / "Product Induction Cylinder"

产品感应夹紧气缸 (单位: s)	
产品感应延时:	<input type="text" value="0"/>
夹紧气缸夹紧时间:	<input type="text" value="0"/>
夹紧气缸松开时间:	<input type="text" value="0"/>
产品取出后延时:	<input type="text" value="0.5"/>
产品未取出超时:	<input type="text" value="0"/>

γ Product induction delay (t1): In "workpiece induction mode" and "workpiece induction semi-automatic" mode, after the product is placed, the clamping cylinder starts working after the induction time t1.

γ Clamping cylinder clamping time (t2): After the clamping cylinder is output, after time t2, the product goes to the processing position.

γ Clamping cylinder release time (t3): When the product reaches the product removal position, the cylinder clamps and releases, and after a delay of t3, the product can be removed.

γ Delay after product removal (t4): After the product is taken away, the sensor disappears, and after a delay of t4, the product returns to the place where it was placed.

γ Product not taken out timeout (t5): When the product reaches the product taking position and is not taken out after t5, a timeout alarm is triggered.

## 6.1.4 Return to origin after running times

Enter "System Parameters" / "Operation Parameters" / "Number of Operations Return to Origin"

运行次数回原点	
加工产品个数:	<input type="text" value="0"/>
1, 直接 2, 先回到'0':	<input type="text" value="1"/>
X轴: 1, 打开 2, 屏蔽	<input type="text" value="1"/>
Y轴: 1, 打开 2, 屏蔽	<input type="text" value="1"/>
Z轴: 1, 打开 2, 屏蔽	<input type="text" value="1"/>

• Number of processed products:

When set to 0, the automatic return to origin function is disabled during automatic operation.

When set to a non-zero value n, the machine will return to the origin after the number of processed products reaches n. After returning to the origin, the machine will continue to run.

• Ways to return to origin: 1, directly 2, return to '0' first

• Direct: When the machine automatically returns to the origin during automatic operation, it first returns to the origin at the return to origin approach speed, and then searches for the origin at the return to origin

capture speed. • Return to '0' first: When the machine automatically returns to the origin during automatic operation, it first returns to the coordinate '0' at the idle speed XYZ, and then searches for the origin at the return to origin capture speed.

It can improve efficiency and make the return to origin process complete quickly

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### 6.1.5 Grating trigger mode

Enter "System Parameters" / "Operation Parameters" / "Grating Trigger Mode"

#### 光栅触发设置

光栅触发后:

1. 暂停, 光栅消失一段时间后继续运行
2. 暂停, 光栅消失后按'运行'键继续运行
3. 停止, 并提示光栅故障

1. Pause, the grating disappears for a while and then continues to run

#### 光栅触发设置

消失多长时间后恢复(s):

The grating triggers the automatic operation to pause. When the grating disappears, the timing starts. As shown in the figure above, when the timing reaches 2s, the automatic operation continues.

2. Pause, press the "Run" key to continue running after the grating disappears

Grating triggers, automatic operation is paused, when the "Run" key is pressed and the grating disappears, it continues to run

3. Stop and prompt grating failure

The grating is triggered, the automatic movement stops, and the prompt "grating sensing failure!"

### 6.1.6 Operation mode setting

Enter "System Parameters" / "Operation Parameters" / "Operation Mode Settings"

#### 运行模式设置

选择:

1. 顺序模式
2. 循环模式
3. 工件感应模式
4. 工件感应半自动

1. Sequential mode:

The program executes the programming points sequentially from top to bottom

2. Loop mode: the program

loops back and forth according to the file

3. Workpiece sensing mode:

When it is single Y, after pressing the start button, the machine will automatically run. When the product induction is triggered, the delay "product induction delay" is delayed, the cylinder is clamped, and the delay "clamping cylinder clamping delay" is delayed. The product moves to the processing position and starts screwing. After the product is completed, the product moves to the product removal position and waits for the product to be taken away. After the product induction disappears, the delay "product removal delay" is delayed, and the product moves to the product placement position and waits for the product to be placed. When it is double Y, after pressing the start button, the machine automatically runs. Y1 platform and Y2 platform, waiting for the product to be placed. After the product is placed, the action refers to the description of single Y. The two Y-axis platforms place and take products

independently without interfering

with each other. 4. Workpiece induction semi-automatic: The only difference between "work induction semi-automatic" and "workpiece induction mode" is that after the product is placed, after the delay "product induction delay", you need to wait to press the "run" key to continue the next step. (Note: Y1 platform can also respond to Y1 start button, Y2 platform can also respond to Y2 start button, and continue to run downward)

#### 5. Dual boot mode (dual Y mode)

Y1 platform, when the Y1 start button is pressed, the Y1 platform clamps the cylinder and delays the "clamping cylinder clamping delay", and the product moves to the processing position to start screwing. After the product is screwed, the product moves to the '0' position and waits for the product to be taken away. After the product is taken away, wait for the next time to put the product and press the Y1 start button

Y2 platform, when the Y2 start button is pressed, the Y2 platform clamps the cylinder and delays the "clamping cylinder clamping delay", and the product moves to the processing position to start screwing. After the product is screwed, the product moves to the '0' position and waits for the product to be taken away. After the product is taken away, wait for the next time to put the product and press the Y2 start button

The Y1 platform and the Y2 platform do not interfere with each other. When the product is placed on the platform, press the corresponding start button to start screwing.

#### 6.1.7 Product cylinder time

Enter "System Parameters" / "Operation Parameters" / "Get Product Cylinder Time"

取产品气缸时间(s)	
水平气缸推出时间:	<input type="text" value="1"/>
水平气缸返回时间:	<input type="text" value="1"/>
垂直气缸向下时间:	<input type="text" value="1"/>
垂直气缸向上时间:	<input type="text" value="1"/>
吸产品时间:	<input type="text" value="0.8"/>
放产品时间:	<input type="text" value="0.1"/>

γ Horizontal cylinder push-out time: The horizontal cylinder pushes out after the delay of this time. γ Horizontal cylinder

return time: The horizontal cylinder returns after the delay of this time. γ Vertical cylinder down time: The vertical

cylinder moves down after the delay of this time. γ Vertical cylinder up time: The vertical cylinder moves up after the

delay of this time. γ Product suction time: After the suction nozzle reaches the product pickup position, it sucks the

product after the delay of this time. γ Product placement time: If it is a claw instead of a suction nozzle, a delay needs to be set when

placing the product to allow the claw to release.

#### 6.1.8 Number of runs Cleaning air blowing

Enter "System Parameters" / "Operation Parameters" / "Number of Operations Cleaning Blow"

运行次数清洁吹气	
计数: 1, 螺孔 2, 产品	<input type="text" value="2"/>
间隔次数:	<input type="text" value="0"/>
吹气清洁时间:	<input type="text" value="0.2"/>
位置: 1, 上方 2, 下方 3, 指定	<input type="text" value="1"/>

γ Counting method: 1, screw hole 2, when the product is set as screw hole, blow and clean according to the number of screw holes processed. When setting the product, according to the number of processed products

Air blowing cleaning

γ When the interval times is set to 0, the automatic air blowing cleaning function is turned off during automatic operation. When it is set to a non-zero value n, the number of processing counting units reaches n.

After that, the machine performs air blowing cleaning action. The air blowing cleaning action is carried out during movement, and the screwdriver bit will not stay and affect the efficiency.

• Air blowing cleaning time (t) The duration of the output of the air blowing cleaning signal t When the screw is slipped and the floating lock alarm occurs, the Z axis is lifted and the screw is moved forward.

After returning to the origin, the "air blowing cleaning" will be output, and the duration is t.

• Cleaning position: 1, top 2, bottom Set the cleaning position

#### 6.1.9 Electric screwdriver working mode

Enter "System Parameters" / "Operation Parameters" / "Electric Batch Work Mode"

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### 电批工作方式

供料上方开启:1, 否 2, 是

移动中停止:1, 否 2, 是

扭力延时检测(s):

• Open above the feeder: 1, No 2, whether to open the electric screwdriver signal or free rotation signal above the feeder • Stop during movement:

1, No 2, whether the electric screwdriver stops when moving to the screw hole after taking the screw. In the air blowing mode, this option is '1, No'

The electric screwdriver will rotate for a while during the idle shift process.

• When the interval times is set to 0, the automatic air blowing cleaning function is turned off during automatic operation. When it is set to a non-zero value n, the number of processing counting units reaches n.

After that, the machine performs air blowing cleaning action. The air blowing cleaning action is carried out during movement, and the screwdriver bit will not stay and affect the efficiency.

• Torque delay detection (s) After reaching the top of the screw, the electric screwdriver works, and then the torque is detected after a delay setting time to prevent the last torque signal from affecting it. Normally at this time

Set the time to 0

#### 6.1.10 Air blowing and feeding time

Enter "System Parameters" / "Operation Parameters" / "Blowing Time"

### 吹气供料时间设置(s)

分料时间:

请求(吹气)时间:

检测螺丝超时时间:

检测到螺丝后延时:

• Feeding time: For air-blowing screw machines, when the feeding cylinder needs a card to control it, the working time of the feeding cylinder. •

Request (blow) time: The time to request the feeder to feed.

ÿ Detection screw timeout (t): After the request signal is sent, the feeding signal is detected within the set time t. If the feeding signal is not detected after time t, the request signal is sent again to re-

detect the feeding signal. Horizontal cylinder return time: The horizontal cylinder returns after this time delay.

ÿ Delay after screw detection (t1): After the feed signal is detected for time t1, screw driving can be carried out.

6.1.11 Intelligent Electric Batch Process

Enter "System Parameters"/"Operation Parameters"/"Intelligent Electric Batch Process" and set the corresponding parameters according to the actual electric batch.

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 跟进速度 (mm/s):20 跟进长度 (mm):10 编程界面菜单 1 / 4页

0002 超时时间 (s):1.5 最小时间:0 取延时

0003 送料信号:使用 扭力检测:使用 异常报

0004 自动运行速度 (mm/s):X:600 Y:600 Z:600

0005 送料器上方安全高度 (mm):10 螺丝孔上

0006 未编辑空白行

0007 未编辑空白行

0008 未编辑空白行

0009 未编辑空白行

0010 未编辑空白行

X:0.000 Y:0.000 Z:0.000 | 12:07:27

1. 文件操作

2. 生成默认加工参数

3. 打螺丝跟进参数

4. 打螺丝延时设置

5. 送料器与扭力开关

6. 空移速度

7. 工作安全高度

8. 避障点

9. 智能电批工艺

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |

文件编辑 | 路径预览

0001 跟进速度 (mm/s):20 跟进长度 (mm):10

0002 超时时间 (s):1.5 最小时间:0 取延时:0 完成后延时:0

0003 送料信号:使用 扭力检测:使用 异常报警:打开

0004 自动运行速度 (mm/s):X:600 Y:600 Z:600

0005 送料器上方安全高度 (mm):10 螺丝孔上方安全高度 (mm):10

0006 电批参数设置

0007 螺孔位置 X:39.759 Y:61.903 Z:53.550

0008 螺孔位置 X:78.909 Y:84.431 Z:53.550

0009 未编辑空白行

0010 未编辑空白行

X:78.909 Y:84.431 Z:53.550 | 12:08:01

## 智能电批工艺

第一段速度(r/min):  力矩补偿值(kgf.cm):

第二段速度(r/min):  力矩保持(ms):

第三段速度(r/min):  最小圈数(r):

第一段百分比(%):  最大圈数(r):

第二段百分比(%):  反转速度(r/min):

锁付力矩(kgf.cm):

启动力矩(kgf.cm):

## 6.1.12 Intelligent Electric Screwdriver Mode

Enter "System Parameters" / "Operation Parameters" / "Smart Electric Screwdriver Mode" and confirm whether it is torque or number of turns control according to the mode of the smart electric screwdriver.

001-文件001 螺丝 慢 管理员 顺序

运行参数 位置设置 机器参数 系统设置

01. 速度设置	07. 取产品气缸时间	13. 智能电批模式
02. 加速度设置	08. 运行次数清洁吹气	14. 通信测试
03. 产品感应夹紧气缸	<b>智能电批模式</b>	15. 旋转轴相关
04. 运行次数回原点	1. 扭力, 2. 圈数: <input style="width: 50px;" type="text" value="1"/>	16. 时间参数
05. 光栅触发方式	11. 拆螺丝工艺	17. 参数选项_1
06. 运行模式设置	12. 智能电批工艺	

X:0.000
Y:0.000
Z:0.000
R:0.000
19:08:49

## 6.1.13 Communication test Enter

"System parameters" / "Operation parameters" / "Communication test"

通信测试(主机)

站号:

地址:

1, i16 2, i32:

值:

'帮助' 键可以读取地址的值

• Station number for station number

access • Address for slave address access

• 1,16 2,32 1, 16-bit integer 2, 32-bit integer. The default value is 2. When 2 is selected normally, it can be compatible with 1. • Value The value read from the slave address, or the value written. • "Help" In this interface, press the 'Help' key

to read the value of the slave address.

## Shenzhen Yuntu Intelligent Control Co., Ltd.

### 6.1.14 Rotation axis related Enter

"System parameters" / "Operation parameters" / "Rotation axis related"

015-文件001
螺丝 | 快 | 厂商 | 顺序

运行参数

位置设置

机器参数

系统设置

01. 速度设置	07. 取产品气缸时间	13. 通信测试
02. 加速度设	03. 产品感应	04. 运行次数
05. 光栅触发	06. 运行模式设置	12. 智能电批模式

旋转轴相关

旋转负角度: 1, 禁止 2, 允许	<input style="width: 80%;" type="text" value="2"/>
旋转: 1, 平移前 2, 平移中 3, 平移后	<input style="width: 80%;" type="text" value="2"/>
固定气缸推出时间 (s)	<input style="width: 80%;" type="text" value="0.3"/>
固定气缸缩回时间 (s)	<input style="width: 80%;" type="text" value="0.3"/>

X:0.000
Y:0.000
Z:20.000
17:50:19

• Rotation negative angle: 1, prohibited 2, allowed:

whether to allow rotation of negative

coordinates. • Rotation 1, before translation 2, during translation

3, after translation 1, before translation: rotation

operation before translation 2, during translation: rotation

operation during translation 3, after translation: rotation

operation after translation • Fixed cylinder push-out time (s): fixed cylinder push-out t seconds.

•Fixed cylinder retraction time (s): The fixed cylinder retracts for t seconds.

## 6.1.15 Time parameters Enter

"System parameters" / "Operation parameters" / "Time parameters"

时间参数(时间:(s))			
完成信号时间:	<input type="text" value="0.1"/>	分料气缸返回时间:	<input type="text" value="0.2"/>
切换气缸时间:	<input type="text" value="0.2"/>	反转时间:	<input type="text" value="0"/>
供料器来料超时:	<input type="text" value="0.3"/>		
吸气提前关闭时间:	<input type="text" value="0"/>		
吸气延后打开时间:	<input type="text" value="0"/>		
分料气缸时间:	<input type="text" value="3"/>		

## 6.1.16 Parameter Option\_1 Enter "System

Parameters" / "Operation Parameters" / "Parameter Option\_1"

参数选项_1			
校准时z轴上方高度(mm):	<input type="text" value="20"/>	重复取螺丝次数:	<input type="text" value="0"/>
产品感应:1, 单个 2, 两个	<input type="text" value="1"/>	空点:1, 原路 2, 提起	<input type="text" value="2"/>
启动键暂停:1, 是 2, 否	<input type="text" value="1"/>	dx:1, 点 2, 圆 3, 多线段	<input type="text" value="1"/>
复位去空闲:1, 否 2, 是	<input type="text" value="1"/>		
切换时提起高度:	<input type="text" value="0"/>		
重复上抬:1, 是 2, 否	<input type="text" value="1"/>		

• Safety height above the z-axis during calibration (mm) (h1):

When performing single-point calibration or double-point calibration, when the bit moves to the calibration position, in order to prevent it from hitting the bit, h1 can be set. The bit will move to h1 above the target position. In order to improve efficiency, h1 can be set to a reasonable height. When going to the target position, the z-axis is raised to the h1 coordinate mark and then xy moves. • Product sensing: 1, single 2, two workpiece mode is workpiece sensing mode or workpiece sensing semi-automatic. 1. Single:

There is only one product sensor. After the product is sensed, the product can be processed.

After the product is processed, the sensor disappears, and it is considered that the product has been taken away. 2. Two: There are two product sensors. After the two product sensors are sensed at the same time, the product can be processed. After the product is processed, the two product sensors disappear at the same time

After that, it is considered that the product

has been taken away. • Start pause: 1, yes 2, no

1, Yes: When running, the start key and start button can pause the machine 2, No: When running,

the start key and start button pause function are blocked • Reset to idle: 1, No 2, Yes 1, No: Do not

go to idle position after reset 2, Yes: Go to idle position after reset • When switching, lift the height first, lift the Z axis height, then switch the cylinder • Repeat lifting:

1, Yes 2, No

It works only when the machine is in air blowing mode. After the product is processed, the bit stops at the idle position. When the repeat lift is set to No, the Y coordinate of the idle position is valid.

When the lift function is set to yes, the next product starts processing and the Z axis will rise to position 0. When the lift function is set to no, the Z axis will go directly to the screw hole position. •Repeat

screw removal times: During automatic

operation, after the feeder takes the screw, the Z axis is lifted. If the "feeding signal" is detected, it is determined that the screw has not been taken away by the bit, and the bit will be moved again.

Next, go down to remove

the screw. • Empty point: 1, original path 2, lift

Original path: The empty point is used to avoid obstacles when driving the screw machine. After driving the screw, the bit returns along the original path. Lift: The empty point

is used to avoid obstacles when driving the screw machine. After driving the screw, the bit is directly lifted to the feeder position.

•Dxf: 1, point 2, circle 3, multi-line segment When reading dxf file, it is recognized as the graphic type of hole position and the corresponding parameters are set.

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## 6.2 Location Settings

## 6.2.1 Idle parking positions

Go to "System Parameters" / "Position Settings" / "Idle Stay Location"

015-文件001 螺丝 快 厂商 顺序

运行参数 位置设置 机器参数 系统设置

01. 空闲停留位置 07. 拆螺丝工艺

02. 相机与加工头校准 空闲停留位置

03. 相机与加工头校准 选择:

04. 自动对针参数 1. 指定的位置

05. 搜索针头位置 2. 作业结束上方

06. 自动对针校准 3. 供料器上方

X:0.000 Y:0.000 Z:20.000 17:50:51

1. Specified position: When it is a blow screw, the place where the screwdriver bit stays. This position setting does not work for the suction

screw machine. 2. Above the end of the operation: When the product is idle after processing, the screwdriver bit stays above the last programming point after

processing. 3. Above the feeder: When the product is idle after processing, the screwdriver bit stays above the feeder, and the product stays at the product position '0' coordinate

## 6.2.2 Camera and processing head calibration

Go to "System Parameters" / "Position Settings" / "Camera and Processing Head Calibration"

015-文件001 螺丝 快 厂商 顺序

运行参数 位置设置 机器参数 系统设置

01. 空闲停留位置 07. 拆螺丝工艺

02. 相机与加工头校准 相机与加工头校准(数字键1录入坐)

03. 相机与加工头校准 相机移到参考点: X:0.000 Y:0.000 Z:0.000

04. 自动对针参数 胶枪移到参考点: X:0.000 Y:0.000 Z:0.000

05. 搜索针头位置 相机与加工头偏移值: X:0.000 Y:0.000 Z:0.000

06. 自动对针校准 数字键2计算偏移值!

X:0.000 Y:0.000 Z:20.000 17:51:01

Move the camera to the reference point When the cursor is on this line, move the camera to align it with the reference point. Press the "OK" key to enter


Move the machining head to the reference point When the cursor is on this line, move the machining head to align it with the reference point. Press the "OK" key to enter The offset value

between the camera and the machining head When the cursor is on this line, press the "OK" key to calculate the offset value between the camera and the machining head through the positions of "Move the camera to the reference point"

and "Move the machining head to the reference point"

### 6.2.3 Camera and processing head compensation

Go to "System Parameters" / "Position Settings" / "Camera and Processing Head Compensation"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置 | Control Co., Ltd.

01. 空闲停留位置 | 07. 拆螺丝工艺

02. 相机与加工头补偿 | 相机与加工头补偿

03. 相机与加工头补偿 | X方向 (mm):

04. 自动对针参数 | Y方向 (mm):

05. 搜索针头位置 | Z方向 (mm):

06. 自动对针校准 | 对点: 1, 加工头 2, 相机

X: 0.000 | Y: 0.000 | Z: 20.000 | 17:51:19

When the input coordinates are input through the camera, in automatic operation, the XYZ processing position is compensated in the X direction, Y direction, and Z direction respectively.

### 6.2.4 Automatic Needle Alignment Parameters

Enter "System Parameters" / "Position Settings" / "Automatic Needle Alignment Parameters"

自动对针参数

搜索慢速 (mm/s):  允许误差 (mm):

搜索快速 (mm/s):

搜索距离 (mm):

Z轴抬升高度 (mm):

Z轴回探深度 (mm):

Z轴补偿深度 (mm):

Search slow speed (mm/s) The speed of slow search for needle position. Slow search is to get the prepared position. The default value is 2. Search fast speed (mm/s) The speed of fast

search for needle position. Fast search is to get the approximate needle position. The default value is 20. Search distance (mm) The distance of left and right or front and back exploration. The default

value is 3. Z axis lifting height (mm) The lifting height when searching for needle position. The default value is 0.2. Z axis

back-probing depth (mm) The back-probing depth when the needle leaves the sensor. The default value is 0.6. Z axis compensation

depth (mm) When automatically aligning the needle, the Z axis compensates downward when it reaches the search position. The default value

is 0.6. Allow error (mm) When the Z axis deviation value of automatic needle alignment is greater than the error value, a fault prompt is given. When the value is 0, the function is not

started. The default value is 0.

6.2.5 Searching for the needle position

Go to "System Parameters" / "Position Settings" / "Self-Search Needle Position"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空闲停留位置 | 07. 拆螺丝工艺

02. 相机与加工头校准 | 08. 扭力测试设置

03. 相机 | **搜索针头位置**

搜索坐标: X:0.000 Y:0.000 Z:0.000

数字键2进行搜索!

04. 自动 |

05. 搜索针头位置 | 11. 蘸胶设置

06. 自动对针校准

6.2.6 Automatic Needle Alignment Enter "System

Parameters" / "Position Settings" / "Automatic Needle Alignment"

Automatic needle alignment machine needs to be equipped with a shooting device

001-文件001 | 快 | 管理员 | 顺序

IO监控 | 输入口配置 | 输出口配置

输入01  自动对针

输入02  选择:

输入03  1. 前后对射(校准X方向)

输入04  2. 左右对射(校准Y方向)

输入05  输

输入06  输

输入07  输

输入08  输

Front-to-back shooting (calibration in x direction)

Calibrate the signal in the X-axis direction during automatic needle alignment.

Left-to-right shooting (calibration in y direction)

Calibrate the signal in the Y-axis direction during automatic needle alignment.

## 6.2.7 Screw removal process

Enter "System Parameters" / "Position Settings" / "Screw Removal Process"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空位停留位置 | 07. 拆螺丝工艺

拆螺丝工艺 (数字键1录入坐标)

02. 木 向下速度 (mm/s):

03. 木 向下距离 (mm):

04. 自 延时等待上抬:

拆螺丝检测: 1, 否 2, 是

05. 抛 抛螺丝延时:

06. 自 抛螺丝位置:

Downward speed reading (mm/s) Electric screwdriver downward running speed

Downward distance (mm) Downward running distance of electric screwdriver

Delayed waiting for the lifting of the electric batch after the work is completed.

Screw removal detection: 1, No 2, Yes Whether to detect when removing screws

The time that the screw throwing delay stays at the screw throwing position.

Position of the screw y Platform screw hole, position of the screw

Position of the screw 2 2y Platform screw hole, position of the screw

## 6.2.8 Torque test setup

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空闲停留位置 | 07. 拆螺丝工艺

02. **扭力测试设置**

扭力测试位置: X:0.000 Y:0.000 Z:0.000

03. 扭力测试跟进速度 (mm/s): 20

04. 扭力测试跟进长度 (mm): 10

05. 扭力达到后稳定时间 (s): 0

**数字键1录入坐标!**

06. 自动对针校准

X:0.000 | Y:0.000 | Z:0.000 | 16:34:04

Torque test position: The position where the torque test is

performed Torque test follow-up speed (mm/s) Torque test follow-up

speed Torque test follow-up length (mm) Torque test follow-up length

#### 6.2.9 Performing a torque test

"System Parameters" / "Position Settings" / "Perform Torque Test"

Perform torque test

015-文件001 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空闲停留位置 | 07. 拆螺丝工艺

02. 相机与加工头校准 | 08. 扭力测试设置

03. 相机与加工头补偿 | **09. 执行扭力测试**

04. 自动对针参数 | 10. 吹料回收设置

05. 搜索针头位置 | 11. 蘸胶设置

06. **扭力测试中**

#### 6.2.10 Blowing material recovery settings

Enter "System Parameters" / "Position Settings" / "Blowing Material Recovery Settings"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空闲停留位置 | 07. 拆螺丝工艺

**吹料回收设置**

1, 关闭 2, 打开:

回收位置: X:0.000 Y:0.000 Z:0.000

回收吹气时间(s):

安全高度(mm):

数字键1录入坐标!

02. 相...  
03. 相...  
04. 自...  
05. 搜...  
06. 自动对针校准

X:0.000      Y:0.000      Z:10.000      | 17:52:47

1, off 2, on Set the switch of the blowing material recovery function Recovery

position Throwing screw position

Recovery Blowing Time (t) Open the output port at the recovery position and "blow recovery" for a duration of t

Safety height (mm) Safety height when the bit is lifted

#### 6.2.11 Glue Dipping Setting Enter

"System Parameters" / "Position Setting" / "Glue Dipping Setting"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 空闲停留位置 | 07. 拆螺丝工艺

**蘸胶设置(数字键1录入坐标!)**

1, 关闭 2, 单个 3. 两个:

蘸胶位置1: X:0.000 Y:0.000 Z:0.000

蘸胶位置2: X:0.000 Y:0.000 Z:0.000

蘸胶时间(s):

蘸胶气缸时间(s):

电批停止:1, 否 2, 是:

02. 蘸...  
03. 蘸...  
04. 蘸...  
05. 蘸...  
06. 电批停止

X:0.000      Y:0.000      Z:10.000      | 17:52:56

1, off 2, single 3, double 1, off do not start the glue dipping function

2. There is one single glue dipping position, set glue dipping position 1, glue dipping position 2, no need to set.

If it is a double Y machine, the left and right platforms use the same glue dipping position 3. When

it is a double Y mode, the glue dipping positions of the two platforms are different. They are glue dipping position 1 and glue dipping position 2.

Glue dipping position 1 When the cursor is on the No. 1 glue dipping position, press the "1" key to enter the glue dipping position. Glue

dipping position 2 When the cursor is on the No. 2 glue dipping position, press the "1" key to enter the glue dipping position. Glue dipping

time (t2) The time for dispensing glue at the glue dipping position. Glue

dipping cylinder time (t1) After reaching the glue dipping position, the glue dipping cylinder opens t1 first, and then the glue dipping signal

opens. Electric screwdriver stop: 1, No 2, Yes Set whether to stop the electric screwdriver when going to the glue dipping position, to prevent the screw position from changing when the electric screwdriver is rotating in the glue.

## 6.3 Machine parameters

016-文件016 | 螺丝 | 快 | 用户 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 电机一圈脉冲数 | 07. 机台原点安装位置 | 13. 默认安全高度  
 02. 电机转一圈位移 | 08. 机型设置 | 14. 默认打螺丝延时  
 03. 行程(软限位) | 09. 速度最大值设置 | 15. 默认供料与扭力  
 04. 回原点偏移值 | 10. 加速度最大值设置 | 16. 默认空移速度  
 05. 电机控制方向 | 11. 电批厂商选择  
 06. 电机编码器 | 12. 默认跟进参数

X:0.000    Y1:0.000    Z:10.000    G:0.000    D:0.000    | 10:24:20

## 6.3.1 Number of pulses per motor revolution

Enter "System Parameters" / "Machine Parameters" / "Number of Pulses per Motor Revolution"

电机一圈脉冲数(单位:脉冲数)

X轴:

Y轴:

Z轴:

Number of pulses per motor

revolution: The number of pulses received by the driver when the motor rotates one revolution. This is the subdivision of the stepper driver. Generally, it is recommended to:

x axis X axis pulse number, generally set to 6400

Y axis Y axis pulse number, generally set to 6400

Z axis Z axis pulse number, generally set to 6400

## 6.3.2 Displacement per Motor Rotation

Enter "System Parameters" / "Machine Parameters" / "Motor Displacement per Rotation"

电机转一圈时位移(单位:毫米)

X轴:

Y轴:

Z轴:

Displacement when the motor rotates one circle: The distance (mm) that the mechanism travels on the guide rail when the motor rotates one circle. If it is a rotating axis, it refers to the degree of rotation. It can also be regarded as the circumference of the synchronous wheel, or the pitch of the screw rod.

X axis X axis motor rotation one circle displacement length, generally set to 60

Y axis Y axis motor displacement length per revolution, generally set to 60

Z axis Z axis motor rotation one circle displacement length, generally set to 60

### 6.3.3 Travel (soft limit)

Enter "System Parameters" / "Machine Parameters" / "Travel (Soft Limit)"

行程(单位:毫米)	
X轴:	<input type="text" value="300"/>
Y轴:	<input type="text" value="300"/>
Z轴:	<input type="text" value="100"/>

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The maximum moving distance of the XYZ axis, also known as "soft limit", is the maximum travel of the machine limited by the software.

## 6.3.4 Offset value after returning to origin

Enter "System Parameters" / "Machine Parameters" / "Offset after Returning to Origin"

回原点偏移值(单位:毫米)

X轴:

Y轴:

Z轴:

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Offset value after returning to the origin: After returning to the origin, the position of the offset origin, a positive number means moving away from the origin, and a negative number means moving towards the origin.

## 6.3.5 Motor direction control

Go to "System Parameters" / "Machine Parameters" / "Motor Direction Control Settings"

电机控制方向设置

X轴: 1. 正向 2. 反向

Y轴: 1. 正向 2. 反向

Z轴: 1. 正向 2. 反向

Let the machine axes move a certain distance away from the origin. When the origin signal is not triggered, press the button to

return to the origin. If the axis searches in the direction close to the origin, the direction of the axis is correct.

If the axis searches in a direction away from the origin, the direction of the axis is reversed. You can switch the direction by setting "1. Forward 2. Reverse"

## 6.3.6 Machine encoder settings

Go to "System Parameters" / "Machine Parameters" / "Machine Encoder Settings"

电机编码器(1, 无 2, 正向 3, 反向)

X轴:

Y轴:

Z轴:

1 means the motor has no encoder, 2 means the motor has encoder forward encoding, and 3 means the motor has encoder reverse encoding.

## 6.3.7 Machine origin installation position

Enter "System Parameters" / "Machine Parameters" / "Machine Origin Installation Position"

机台原点安装位置

X轴: 1. 左侧 2. 右侧

Y轴: 1. 前方 2. 后方

Z轴: 1. 上方 2. 下方

On the premise that the machine can return to the origin normally, if you press the arrow keys, the directions of the arrow keys for left and right movement, forward and backward movement are opposite. Setting this option can make the movement

direction the same as the direction of the arrow keys. If the X-axis origin is installed on the right, you need to set "X-axis: 1. Left 2.

Right" to "Right" If the Y-axis origin is installed at the back, you need to set "Y-axis: 1. Front 2. Back" to "Back" If the Z-axis origin is

installed at the bottom, you need to set "Z-axis: 1. Top 2. Bottom" to "Bottom"

## 6.3.8 Model Settings

According to the specific screw machine model, configure the corresponding business and control system. Enter "System Parameters" → "Machine Parameters" → "Model Settings"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序

运行参数 | 位置设置 | 机器参数 | 系统设置

01 机型设置

02 1, 单Y 2, 双Y 3, 龙门:  供料器个数(1-2):

03 切换气缸个数(1-16):  电批个数(1-2):

04 旋转轴:1, 无 2, 有

05 旋转轴:1, 平台 2, 挂件

06 取料:1, 无 2, 气缸 3, 轴

1, 吸式 2, 吹式:

X:0.000      Y:0.000      Z:10.000      | 17:54:17

ÿ 1. Single Y 2. Double Y 3. Gantry: Choose according to your own machine model ÿ

Switch the number of cylinders (1-16): Select the platform structure ÿ

Rotation axis: 1, no 2, yes Select the number of feeders ÿ Rotation axis:

1. No 2. Yes: Select whether there is a rotation axis ÿ Rotation axis: 1,

platform 2, pendant ÿ Material collection: 1, no 2,

cylinder 3, axis: 1 No: No product collection mechanism 2. Cylinder, the product collection mechanism is horizontal cylinder, longitudinal cylinder, suction cup 3. Axis, the product collection mechanism is product collection axis G, longitudinal

cylinder, suction cup ÿ 1, suction 2, blowing: Choose suction or blowing according to the material

collection method ÿ Number of feeders (1-2): Select according to the number of

feeders ÿ Number of electric batches (1-2): Select according to the number of electric batches

## 6.3.9 Maximum speed setting

Enter "System Parameters" / "Machine Parameters" / "Maximum Speed Setting"

各轴最大速度(单位:毫米/秒)

X轴:

Y轴:

Z轴:

2Y轴:

Maximum speed of each axis: Set the maximum speed of the X axis, Y axis, and Z axis. If the set speed exceeds these speeds, it will prompt "number out of range" and the cursor will stay

Incorrect value in input box

### 6.3.10 Maximum acceleration setting

Enter "System Parameters" / "Machine Parameters" / "Maximum Acceleration Setting"

各轴最大加速度(单位:毫米/(秒\*秒))

X轴:

Y轴:

Z轴:

2Y轴:


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Maximum acceleration of each axis: Set the maximum acceleration of the X axis, Y axis, and Z axis. If the acceleration exceeds these accelerations, it will prompt "number out of range" and the light will be off.

The cursor will stay on the input box with incorrect value

### 6.3.11 Manufacturer Name

Go to "System Parameters" / "Machine Parameters" / "Manufacturer Name"

001-文件001 | 螺丝 | 快 | 管理员 | 顺序 |  123

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 电机一圈脉冲数 | 07. 机台原点安装位置 | 13. 默认加工参数

02. 电机转一圈位移 | 08. 机型设置

03. 行程(软限) | 厂商名称  
名称:   
输入8个0取消显示!

04. 回原点后 |

05. 电机控制方向 | 11. 厂商名称

06. 电机编码器 | 12. 电批厂商选择

X:0.000 | Y:0.000 | Z:0.000 | 16:34:39

## 6.3.12 Selection of electric batch manufacturers

Enter "System Parameters" / "Machine Parameters" / "Electric Screwdriver Manufacturer Selection"

015-文件001 | 螺丝 | 快 | 厂商 | 顺序

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 电机一圈脉冲数 | 07. 机台原点安装位置 | 13. 默认安全高度

电批/商选择

1, 研控 2, 炜华 3, 深丝微:

打螺丝延时

02. 电机转一圈 | 1, 50W 2, 100W 3, 200W 4, 400W:

供料与扭力

03. 行程(软限) | 任务号个数(1-8):

空移速度

04. 回原点后备 | COM口(1-3, 3为485):

05. 电机控制方 | 波特率:

06. 电机编码器 | 12. 默认跟进参数

X:0.000 Y:0.000 Z:10.000 | 17:54:52

Set different parameters according to the manufacturer model of the electric screwdriver, and

select different power task numbers (1-8). Different task numbers represent different screw locking processes. For example, it will be used when there are multiple torques.

COM port (1-3, 3 is 485) Select different port baud rates according to the port type to be received: Set the

communication baud rate of the batch

## 6.3.13 Default follow-up parameters

Go to "System Parameters" / "Machine Parameters" / "Default Follow-up Parameters"

打螺丝跟进参数

跟进速度(mm/s):

跟进长度(mm):

## 6.3.14 Default safety height

Go to "System Parameters" / "Machine Parameters" / "Default Safety Height"

工作安全高度

供料器上方安全高度(mm):

螺丝孔上方安全高度(mm):

## 6.3.15 Default screw driving delay

Go to "System Parameters" / "Machine Parameters" / "Default Screw Driving Delay"

## 打螺丝延时设置(s)

打螺丝超时时间(滑牙):

打螺丝最小时间(浮锁):

取螺丝后延时:

打完螺丝后延时:

## 6.3.16 Default feed and torque

Enter "System Parameters" / "Machine Parameters" / "Default Feed and Torque"

## 供料器与电批设置

供料信号: 1. 使用 2. 屏蔽

扭力检测信号: 1. 使用 2. 屏蔽

打螺丝异常报警: 1. 打开 2. 关闭

## 6.3.17 Default speed setting

Go to "System Parameters" / "Machine Parameters" / "Default Speed Settings"

## 速度设置(单位:mm/s)

X轴空移速度:

Y轴空移速度:

Z轴空移速度:

## 6.4 System Settings

016-文件016 螺丝 | 快 | 厂商 | 顺序 

运行参数	位置设置	机器参数	系统设置
<b>01. 程序版本查看更新</b>		07. 手持编程器操作	13. 从机设置
02. 更新开机画面		08. U盘操作	14. 主机设置
03. 程序组配件设置		09. 参数初始化	15. 系统选项_1
04. 手持编程器声音		10. 语言切换(中英)	16. 系统选项_2
05. 设置开机状态		11. 更新字体	17. 系统选项_3
06. 老化设置		12. 回原点顺序设置	

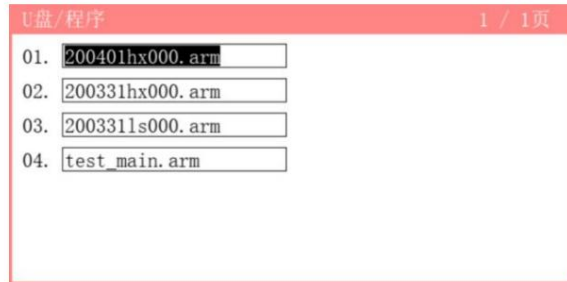
X:0.000    Y1:0.000    Z:10.000    G:0.000    D:0.000    | 11:26:49

## 6.4.1 Check and update the program version

Check and update the system firmware version. Enter "System Parameters" / "System Settings" / "Program Version Check Update"



## 1. Update ARM chip application



## 2. Update FPGA underlying driver



File storage path: You can refer to the USB disk compression package provided by the manufacturer. The decompressed files are as follows:

名称	修改日期	类型
DXF	2019/10/24 星期...	文件夹
程序	2019/10/24 星期...	文件夹
开机画面	2019/10/24 星期...	文件夹
生产文件	2019/10/24 星期...	文件夹
系统参数	2019/10/24 星期...	文件夹
字体	2019/10/24 星期...	文件夹
u盘压缩包.rar	2019/10/19 星期...	WinRAR

DXF: The storage location when reading CAD generated DXF files from a USB flash drive.

Program: The storage location of the application and driver. Startup

screen: Import the image displayed on the startup screen, the storage location of the image.

Production file: The storage location for importing and exporting processing

files. System parameters: The storage location for importing and exporting

system parameters. Font: The storage location of fonts when importing fonts

## 6.4.2 Update the boot screen

Set the startup picture. Enter "System Parameters" / "System Settings" / "Update Startup Picture"

U盘/开机画面		1 / 1页	
01.	<input type="text" value="1. bmp"/>	08.	<input type="text" value="test_16. bmp"/>
02.	<input type="text" value="2. bmp"/>	09.	<input type="text" value="test_256. bmp"/>
03.	<input type="text" value="3. bmp"/>	10.	<input type="text" value="white. bmp"/>
04.	<input type="text" value="800x480_海滩. bmp"/>		
05.	<input type="text" value="test_1. bmp"/>		
06.	<input type="text" value="IO界面_0. bmp"/>		
07.	<input type="text" value="test_24. bmp"/>		

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When the machine is powered on, the startup screen is displayed on the handheld programmer screen. You can create a picture of company information as the startup screen

## 6.4.3 Program Group Accessory Settings

To set system components, go to "System Parameters" / "System Settings" / "Program Group Accessories Settings"

016-文件016 | 螺丝 | 快 | 厂商 | 顺序 | 

运行参数 | 位置设置 | 机器参数 | 系统设置

01. 程序版本查 **程序组配件设置** 设置, Ltd.

02. 更新开机画 选择:  设置

03. 程序组配件 1. 按键 选项\_1

04. 手持编程器 2. 拨码开关(小键盘) 选项\_2

05. 设置开机状 3. 扩展输入输出(8进8出) 选项\_3

06. 老化设置 4. 拨码开关(输入输出)

5. 8按钮

6. 无配件

X:0.000 Y1:0.000 Z:10.000 G:0.000 D:0.000 | 11:27:22

1. Button: 2.

DIP switch: 3.

Extended input and output (8 in-8 out): 4. Button

input (8 buttons) 5. 8 buttons 6. No

accessories

## 6.4.4 Handheld programmer sound Set the

handheld programmer buzzer sound. Enter "System Parameters" / "System Settings" / "Handheld Programmer Sound"

**手持编程器按键声音设置**

选择:

1. 打开

2. 关闭

1. On: The handheld programmer will make a sound when a key is pressed 2.

Off: The handheld programmer will be silent when a key is pressed

## 6.4.5 Set the power-on status

Set the power-on status; Enter "System Parameters" / "System Settings" / "Set Power-on Status"

**设置开机状态**

开机状态选择:

1. 开机后, 提示进行回原点

2. 开机后, 直接进行回原点

3. 开机后, 不提示也不回原点

1. After powering on, the machine will prompt you to return to the origin: After the machine is powered on, the buzzer will beep at intervals to prompt you to return to the origin

2. After starting up, the machine will directly return to the origin: After the machine power is turned on, the machine will return to the origin.

3. After starting up, there is no prompt or return to the origin: After the machine power is turned on, the machine does not move.

#### 6.4.6 Aging settings

Set the aging mode; enter "System Parameters" / "System Settings" / "Aging Settings"

老化设置

模式选择:

1. 工作模式
2. 老化模式, 循环老化运行

1. Working mode: Normal working mode 2. Aging

mode, cycle aging operation: In aging mode, when processing the screw hole position, the feeding signal and torque signal are not detected.

老化设置

老化次数:

设置为0时则不限制次数

Aging times: When set to 0, it will keep running in a loop; when set to a non-zero value n, it will run in a loop n times and then end.

#### 6.4.7 Handheld programmer operation

Handheld programmer data reading and writing; enter "System Parameters" / "System Settings" / "Handheld Programmer Operation"

手持编程器操作

操作选择:

1. 从手持编程器读取内容
2. 保存内容到手持编程器备份

Read content from the handheld programmer: Read production files or system parameters from the handheld programmer

手持编程器内容 1 / 1页

01.
02.
03.

读取生产文件或者系统参数

Save content to handheld programmer for backup: save current production files or system parameters to the handheld programmer

保存内容到手持编程器备份

文件选择:

1. 生产文件
2. 系统参数

保存内容到手持编程器备份

生产文件名称:

保存内容到手持编程器备份

系统参数名称:

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## 6.4.8 USB disk operation

Read and write data from the USB flash drive; enter "System Parameters" / "System Settings" / "U disk operations"

First, create a corresponding folder in the root directory of the USB drive according to the red file name on the computer.

## U盘操作

选择:

1. 从U盘读取内容
2. 保存内容到U盘备份

文件路径(需要在U盘建立文件夹):

U:\生产文件

U:\系统参数

U:\DXF



Read content from USB flash drive: Read production files or system parameters from USB flash drive

## U盘操作-从U盘读取内容

文件选择:

1. 生产文件
2. 系统参数
3. DXF文件

Production file: Read production file from USB flash drive



System parameters: read system parameters from USB disk



DXF file: Use

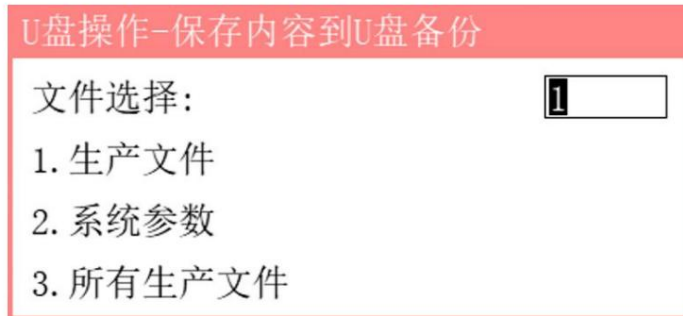
CAD to edit drawings, save them in DXF format, put them in "U disk/DXF", read DXF files

Recognized elements: points, circles, and polylines. Points, circles, and vertices of polylines can all be identified as holes.



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Save content to USB disk backup: Save the current production files or system parameters to USB disk



1. Production file: save the current production file to the U disk 2.

System parameters: save the system parameters to the U

disk 3. All production files: save all production files to the U disk

#### 6.4.9 Parameter Initialization

Configure initialization parameters; enter "System Parameters" / "System Settings" / "Parameter Initialization"



1. All parameters are initialized,

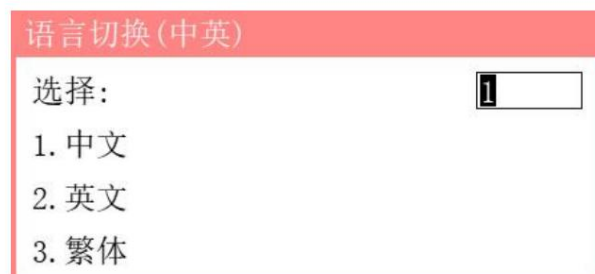
including "input and output port initialization", "operation parameter initialization", and "machine parameter initialization"

2. Input and output port initialization

Input port and output port initialization

#### 6.4.10 Language Switching

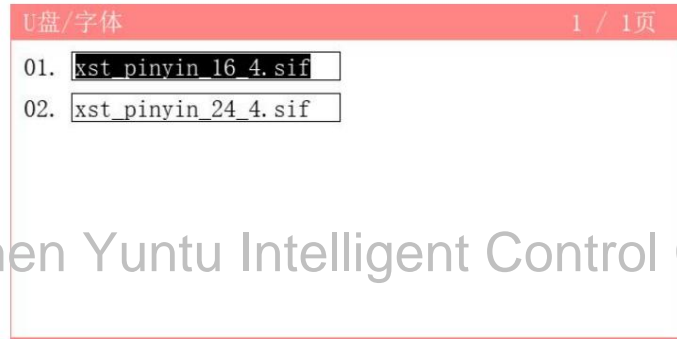
Go to "System Parameters" / "System Settings" / "Language Switch"



Set language

## 6.4.11 Update font library

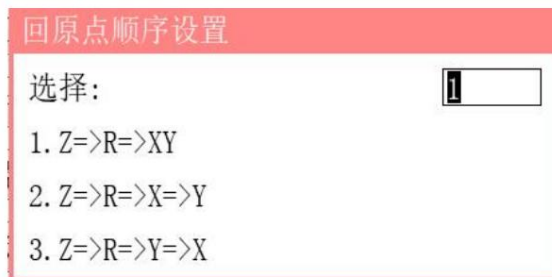
Go to "System Parameters" / "System Settings" / "Update Fonts"



Read the font file from the USB disk and update it.

## 6.4.12 Setting the sequence of returning to origin

Enter "System Parameters" / "System Settings" / "Back to Origin Sequence Settings"



1.Z=>XY: This is the default mode, the Z axis returns first, and the XY returns at the same time.

2.Z=>X=>Y=>Z axis returns first, then X, then Y.

3.Z=>Y=>X: Z axis returns first, then Y, then X.

## 6.4.13 Slave Settings Enter

"System Parameters" / "System Settings" / "Slave Settings"



Slave

communication: 1. Close: The default

is closed 2. Open: Open in the following two situations.

COM Port:

1.1-3, there are 3 ports, 1 is 232, 3 is 485. Slave station number: When a host

touches multiple

boards, the station number of the board. Slave baud rate: Set the

baud rate of the

slave serial port.

## 6.4.14 Host Settings

Go to "System Parameters" / "System Settings" / "Host Settings"

**主机设置**

主机通信: 1. 关闭 2. 打开  弹簧无压缩位移(mm):

COM口(1-3, 3为485):  弹簧无压缩位移2(mm):

主机站号:

主机波特率:

0v时位移(mm):

每1V对应位移(mm):

Host

communication: 1. Close: The default

is closed 2. Open: Open in the following two situations.

COM Port:

1.1-3, there are 3 ports, 1 is 232, 3 is 485. Host station number: When a host

touches multiple

boards, the station number of the board. Host baud rate: Set the

baud rate of the

host serial port.

## 6.4.15 System Option\_1 Enter

"System Parameters" / "System Settings" / "System Option\_1"

016-文件016 | 螺丝 | 快 | 厂商 | 顺序

运行参数 | 位置设置 | 机器参数 | 系统设置

**系统选项\_1**

地址: 1, 行号 2, 标号 3, 两者  休眠时间(分钟):

dxfl图mark点半径(mm):

蜂鸣器提示: 1, 是 2, 否

Z轴下降提示: 1, 否 2, 是

结束运行: 1, 否 2, 是

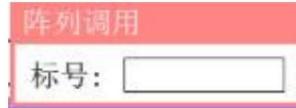
扩展输出模式:

• Address: 1, row number 2, label 3, both take array call as an example. Select 1, row number. Use the row number to determine the calling area.

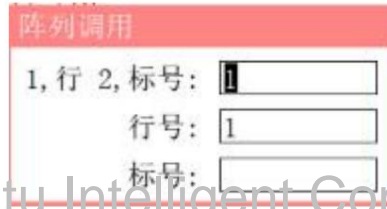
**阵列调用**

行号:

Option 2, Label: Use the label to identify the calling area.



Option 3, Both: Use line numbers or labels to identify the calling area.



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• dxf mark point radius (mm) 1 When set to 0, some functions are disabled

2 When set to a non-zero value r, if the dxf file contains a circle with radius = r, it will be regarded as a mark point. 3 If the number of mark points is 2, when importing the dxf graphic, it will prompt you to enter the location of mark point 1 and mark 2.

After successful entry, the imported graphics will enter the dual-point calibration based on the two mark points.

• Buzzer prompt 1, no, move directly to the target position. • Z axis drop prompt: whether the

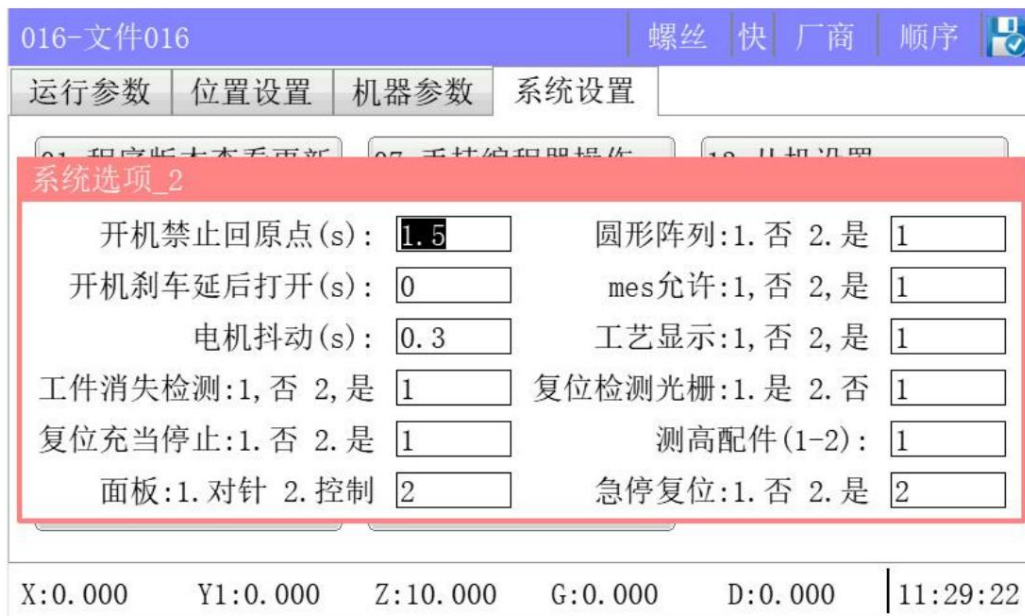
Z axis drops when going to the target position. • End operation: end the operation. •

Extended output mode: you can use the

output port of the slave card. • Sleep time (minutes): how long the machine will sleep.

#### 6.4.16 System Option 2

Go to "System Parameters" / "System Settings" / "System Options\_2"



• Forbidden to return to origin after power on (s) Return to origin is not allowed for a period of time after power on. This is because when using servo motors or closed-loop stepping, some brands of motors may not be properly installed on the machine.

The preparation time is relatively long. If the motor is not ready, returning to the origin will cause failure.

• Delay brake opening at startup (s) Delay brake opening at startup for a period of time. When the Z axis is using the brake, delay brake opening to prevent the Z axis from falling.

• Motor jitter (s) Set the motor jitter time

• Workpiece disappearance detection: 1, No 2, Yes Whether to detect when the workpiece disappears

• Reset as stop: 1, No 2, Yes The reset button is used as the stop button

- Panel: 1, needle alignment 2, control glue dispenser and soldering machine 1, screw machine 2
- Circular array: 1, No 2, Yes Whether the array is in circular order
- mes allow: 1, no 2, yes whether to allow mes communication
- Process display: 1, No 2, Yes Whether to display the process (cutting feet, soldering, dispensing glue...)
- Reset detection grating: 1, yes 2, no Whether to detect the grating when resetting
- Height measuring accessories (1-2) Height measuring accessories mode
- Emergency stop reset: 1, No 2, Yes Whether to automatically reset after emergency stop.

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### 6.4.17 System Option 3 Enter

"System Parameters" / "System Settings" / "System Option\_3"

系统选项_3	
双吹气同时:1, 是 2, 否	<input type="text" value="1"/>
跟进:1, 方式1 2, 方式2	<input type="text" value="1"/>
扭力实时:1, 否 2, 是	<input type="text" value="1"/>
反转模式:	<input type="text" value="1"/>
Z轴检测:1, 否 2, 是	<input type="text" value="1"/>
攻牙:1, 否 2, 是	<input type="text" value="1"/>

- Double Blow Simultaneously: 1. Yes 2. No Whether to blow simultaneously when there are two blows
- Follow-up: 1. Method 1 2, Method 2 Method 1: Follow-up length does not include the Z axis Method 2: Follow-up length includes the Z axis
- Torque real-time; 1, no 2, yes whether the torque is displayed on the operation interface
- Reversal Mode: Set the reversal mode
- Z axis detection: 1, no 2, yes Check whether the Z axis is in place
- Tapping: 1, No 2, Yes Whether to enable the tapping mode

## Chapter 7: Main Menu - Production Management

## 7.1 Usage Rights

001:文件001 | 中 | 管理员 | 工作 | 

使用权限

01. 用户登陆

02. 管理员密码设置

03. 厂商密码设置

04. 系统时间设置

05. 机器使用限制

06. 解除使用限制

X:4.997    Y1:4.997    Z:12.272    Y2:0.000    T:0.000    | 17:36:46

## 7.1.1 User Login

Configure user type; enter "Production Management"/"User Login"

用户登陆

用户选择:

1. 普通用户

2. 管理员

3. 厂商

## 1. Ordinary users

Some functions are blocked, usually for people who operate machines on the production line. 2. All

functions are

open to administrators, usually for equipment manufacturers or engineers who manage equipment in factories.

## 3. All

functions are open to manufacturers, and they can set and remove system restrictions on usage time. After the power is turned on again, the user identity will become "ordinary user"

## 7.1.2 Administrator password setting

Configure the administrator password; go to "Production Management" / "Administrator Password Settings"

管理员密码设置

旧密码:

新密码:

重复新密码:

Set an administrator password

## 7.1.3 Manufacturer password setting

Configure the manufacturer password; enter "Production Management" / "Manufacturer Password Settings"

厂商密码设置

旧密码:

新密码:

重复新密码:

Set the manufacturer password.

## 7.1.4 System time settings

Configure system time; go to "Production Management" / "System Time Settings"

系统时间设置

年:

月:

日:

时:

分:

秒:

If the machine is restricted in usage time, it will prompt "The current user is not the manufacturer!". If the machine is not restricted in usage time, it can be modified.

## 7.1.5 Machine Usage Restriction

Configure usage control; go to "Production Management" / "Machine Usage Restriction"

机器使用限制时间设置

当前限制:

当前时间:

限制时间 年:

限制时间 月:

限制时间 日:

解除限制: 1, 否 2, 是

1. Only "Manufacturers" can enter the interface

settings. 2. The set time must be after the current time. As shown in the figure above, the set time must be after November 7, 2019.

机器使用限制时间设置

当前限制:	<input type="text" value="2020-01-01"/>
当前时间:	<input type="text" value="2019-11-07"/>
限制时间 年:	<input type="text" value="2020"/>
限制时间 月:	<input type="text" value="1"/>
限制时间 日:	<input type="text" value="1"/>
解除限制: 1, 否 2, 是	<input type="text" value="1"/>

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In the above picture, the restriction time is January 1, 2020.

Remove restriction: 1 No 2 Yes: If you select Yes, the time restriction will be removed.

### 7.1.6 Lifting usage restrictions

Remove usage restrictions: go to "Production Management" / "Remove Usage Restrictions"

限制时间已到, 请输入解锁码

机器码:	<input type="text" value="20393557"/>
解锁码:	<input type="text"/>

ÿ If there is no time limit for use, it will prompt "Current use has no limit!"

ÿ Unlock code:

ÿ The restricted use date can be modified. The restricted use time has a new deadline.

ÿ You can completely unlock restrictions and clear usage restrictions.

ÿ The generation of the unlock code requires the use of the above machine code. Then use the special software provided by the manufacturer to generate the unlock code.

Manual version:

M\_LS\_2023-02-03