

Button sewer indexer

(MB6006A)

使用说明书

Instruction Manual

常州智谷机电科技有限公司

IMB AUTOMATION CO.,LTD

在使用本设备之前请先阅读本使用说明书。

Please read the operation manual of the touch
screen interface before using the device

请将本使用说明书放在便于查阅的地方保管

Please keep this operation manual of touch screen
interface in convenient place for reference

版本信息/ Version

2020.07



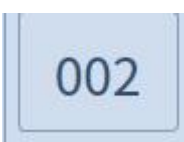


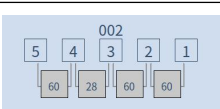
Catalog






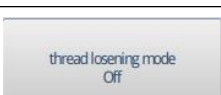

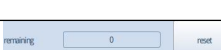




[1] Main interface description	错误！未定义书签。
[2] Style settings modification	错误！未定义书签。
[3] User parameters	6
A、 button feeding mode setting	8
B、 stacking setting	8
C、 vibrator setting	9
D、 thread breakage setting	9
E、 PANEL AND DISPLAY	10
F、 OTHER PARAMETERS	10
G、 feeding setting	11
H、 Modified	11
[4] system function	错误！未定义书签。
A、 Time Date	错误！未定义书签。
B、 software upgrading	错误！未定义书签。
C、 Second level password modification and third level password modification	15
D、 Parameter backup and recovery	错误！未定义书签。
E、 Output Log Settings	19
[5] Factory mode	20
A、 Software version	错误！未定义书签。
B、 Input signal	21
C、 output signal	21
D、 Single axis testing	错误！未定义书签。
E、 Operation information	错误！未定义书签。
F、 alarm record	错误！未定义书签。
G、 LCD detection	错误！未定义书签。
H、 functional testing	错误！未定义书签。

[1] Main interface description

The title bar at the top of the interface will display the current interface name (the name of the current button will be displayed when clicking the button), the USB flash drive prompt area (if a USB flash drive is inserted, the USB flash drive logo will be displayed in the title bar), the date, and the current version number in sequence



function	Key	Description
Motor reset		Reset the motor and start it.
Setting		Enter the settings interface
Display and switch the current pattern		Display the current style used, click to enter the style switching interface. In this interface, you can choose to switch between the used style and style settings, and cannot modify specific settings.
Pattern settings		Click to enter the style modification interface, where you can choose to modify all style settings.
Extra button		Manually feed the button
Display and Modify the Current button Spacing		Display the current style used and the spacing between each button. You can modify the spacing position by clicking on the spacing position and popping up a small keyboard

Suction mode		Switch the current suction mode between continuous and intermittent modes. You need to turn on the suction switch to operate this button
Fabric detection switch		Switching the functional status of the fabric detection module
Thread breakage detection		Click to switch the status of the disconnection detection function
Secondary thread cutting		Enable secondary thread trimming
Suction switch		Enable the suction function
Loose thread mode		Enable thread loosen
Set the number of shuttles		Click to open the input interface and input the predetermined number of shuttles
Reset remaining shuttle count		Reset the remaining number of shuttles after clicking
Increase Count		Count plus one
Reduce Count		Count minus one
Clear		Clear
Winding		Enter the winding mode, and a prompt box will pop up on the main interface. After the winding is completed, click the confirmation button in the pop-up box to end the winding mode

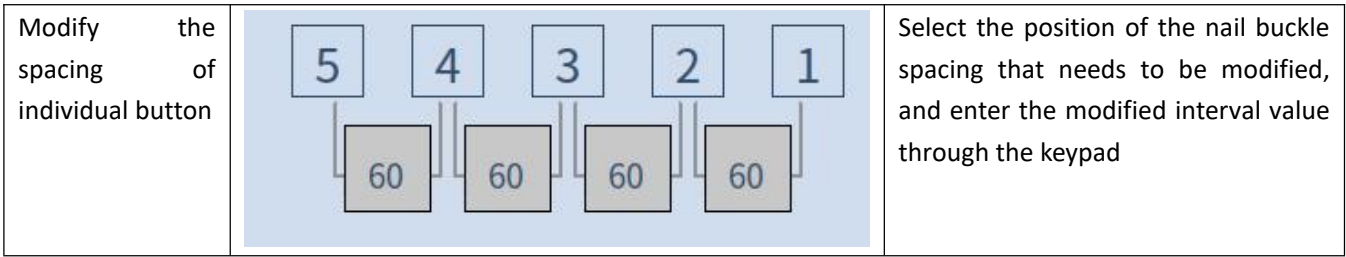
[2] Pattern settings modification

Click on the style number displayed in the main interface or click on style settings to enter the style settings interface, as shown in the following figure



1. The left list is a style list. By selecting a style from this list, the right interface will switch to display data based on the selected style;
2. The right area shows the details of style settings

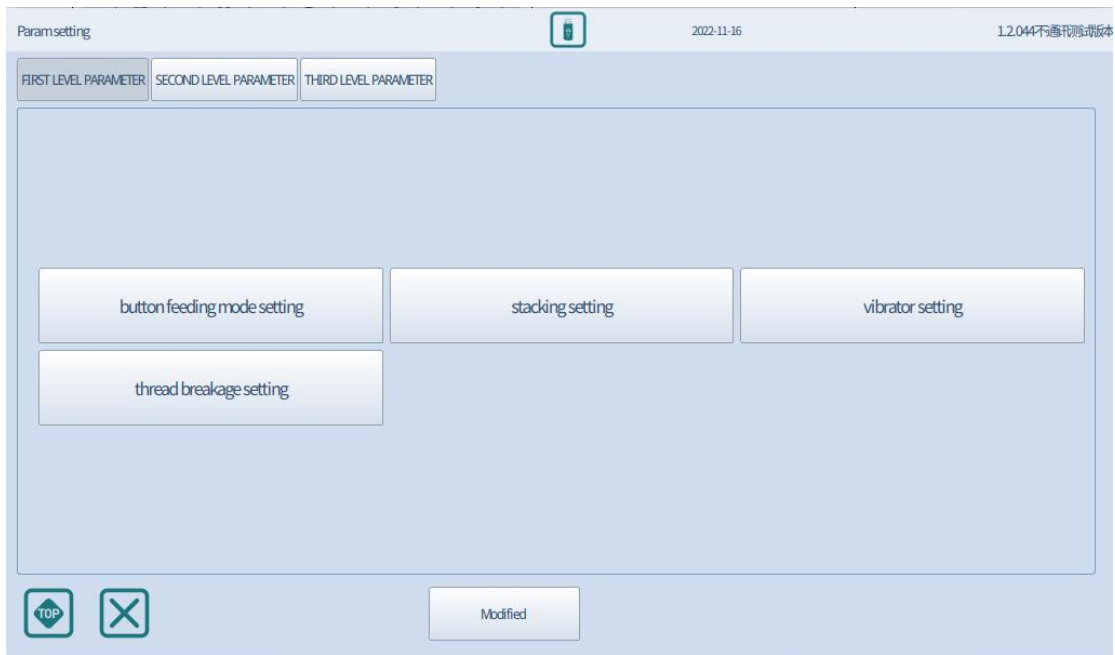
Function	Key	Description
Pattern No	NO <input type="text" value="001"/>	Display the currently selected pattern
Pattern name	Pattern Name <input type="text" value="001"/>	Display the name of the current style, click to enter the name modification interface to modify the current style name
Button numbers	button numbers <input style="background-color: yellow;" type="text" value="5"/>	Display the number of buttons used in the current style. Select the current input box, and the input box will turn yellow as shown. At this time, the current number of buttons can be modified through the small keyboard on the right
Button distance	button distance <input type="text" value="60.0"/>	After selecting the current input box, you can synchronously modify the spacing of all nails and buckles
Distance deviation	distance deviation <input type="text" value="80.0"/>	Select the current input box to set the offset of the buckle position
Stacking time	stacking timing <input type="text" value="1000"/>	Select the current input box to set the receiving time



- After modifying the corresponding settings in the interface according to the requirements, you need to choose to press the OK button in the bottom right corner to save the settings, otherwise press the Exit button in the bottom left corner to cancel the modification.

[3] User parameters

Select "Settings" from the main interface to open the user parameter directory interface



FIRST LEVEL PARAMETER			
button feeding mode setting	stacking setting	vibrator setting	thread breakage setting
button feeder block plate move out overtime	stack filping level blow delay timing	vibrator channel selection	Thread break detecting interval
button feeder vertical shaft move down timing	blowing time	vibrating timing	
button feeder vertical shaft move up timing			
button feeder vertical shaft rotate timing			
button feeder vertical shaft rotate interval			
blowing timing while attaching button			

button feeder arm move down timing			
button feeder damp open timing			
button feeder damp receive button delay time			
button feeder damp receive button overtime			
thread losing timing			
right two stage presser foot work timing			

SECOND LEVEL PARAMETER		
PANEL AND DISPLAY	OTHER PARAMETERS	feeding setting
Buzzer Sound Setting	Change language	feeding speed
PANEL LUMINANCE SETTING	Power On Password	feeding motor startup speed
PANEL LUMINANCE AUTO CLOSE SWITCH	EMBED COMMUNICATION	feeding motor accelerate speed
WAITING TIME BEFORE PANEL LUMINANCE CLOSE		feeding motor ratio
Button Display Type		sewing placket maximum distance

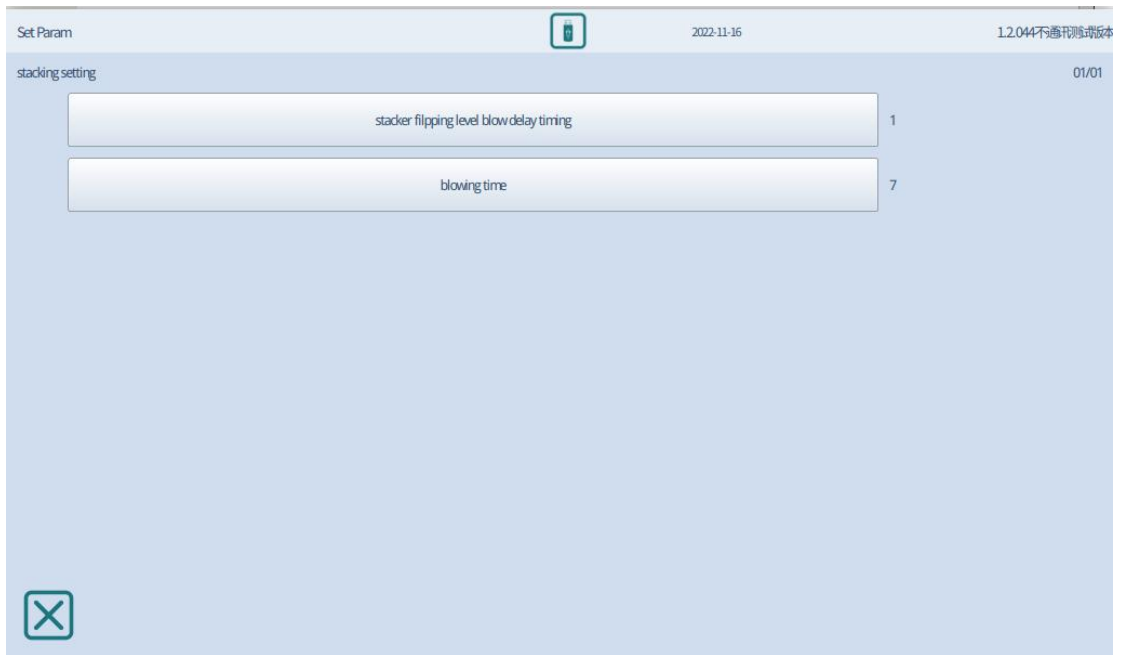
A、 button feeding mode setting

Set Param 2022-11-16 1.2.044 不透书缝制版本

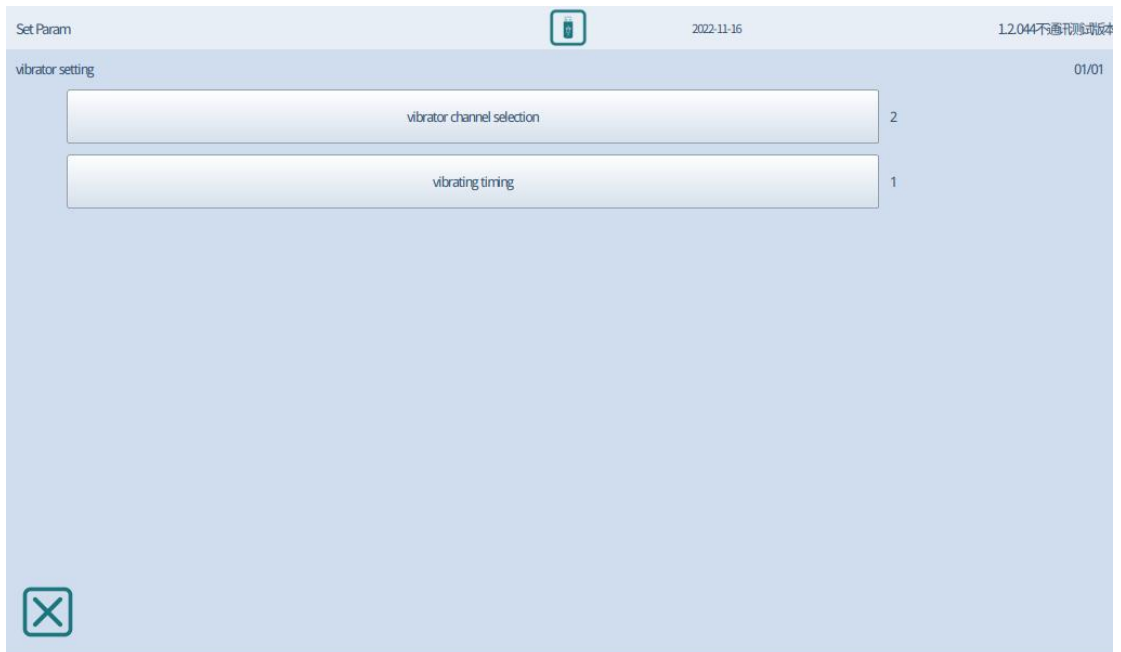
button feeding mode setting 01/02

button feeder block plate move out overtime	10
button feeder vertical shaft move down timing	10
button feeder vertical shaft move up timing	2
button feeder vertical shaft rotate timing	10
button feeder vertical shaft rotate interval	11
blowing timing while attaching button	1

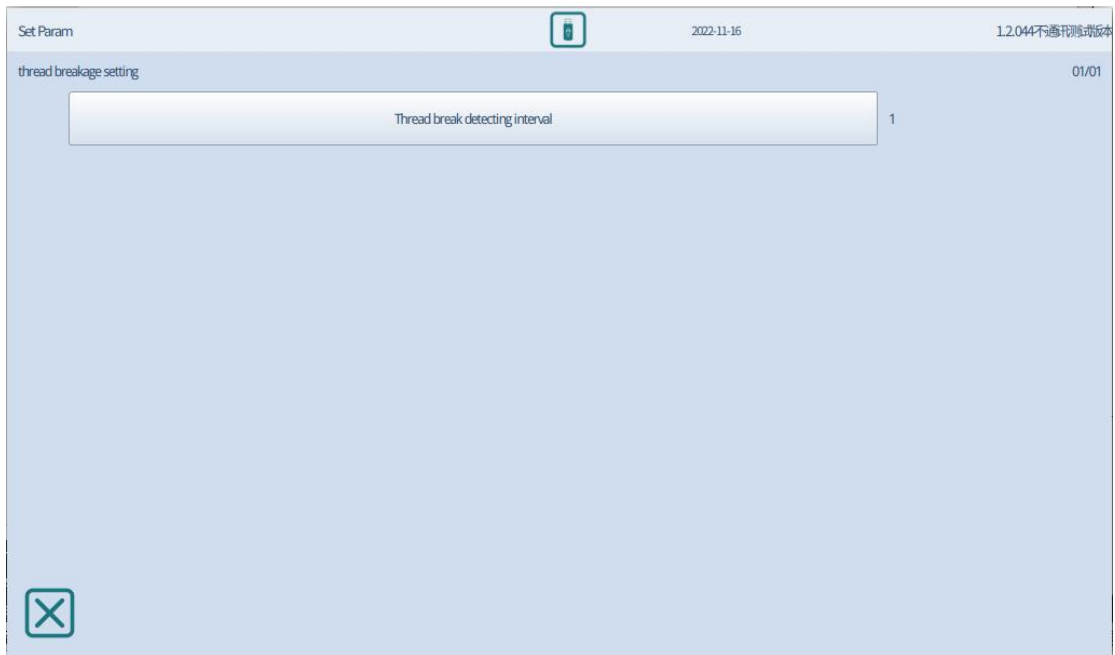
B、 stacking setting



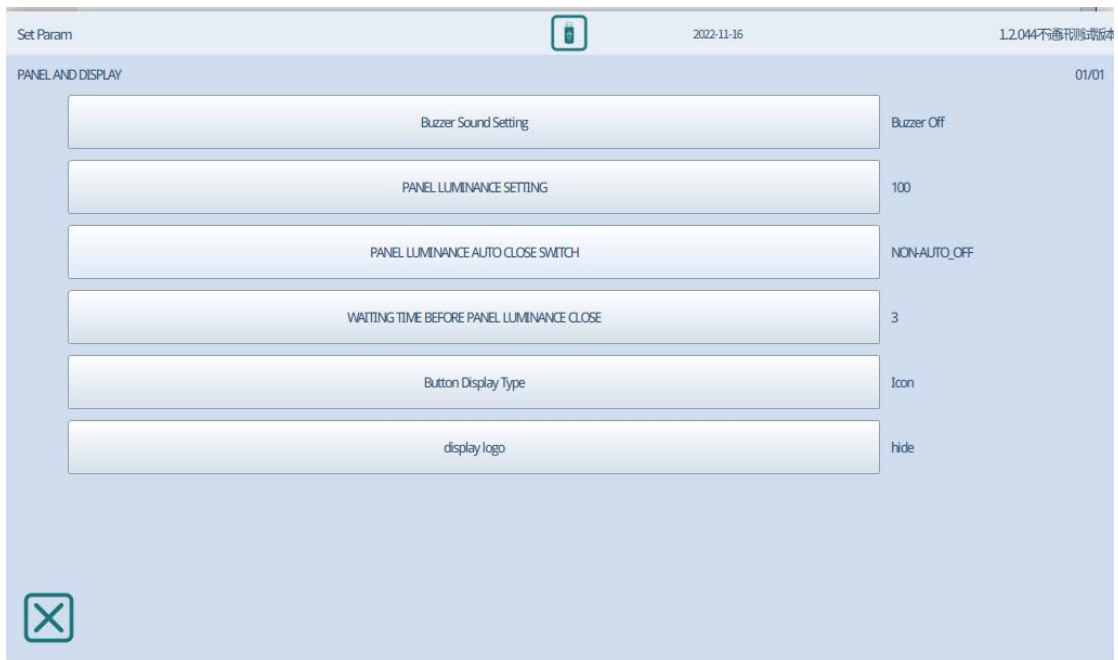
C、vibrator setting



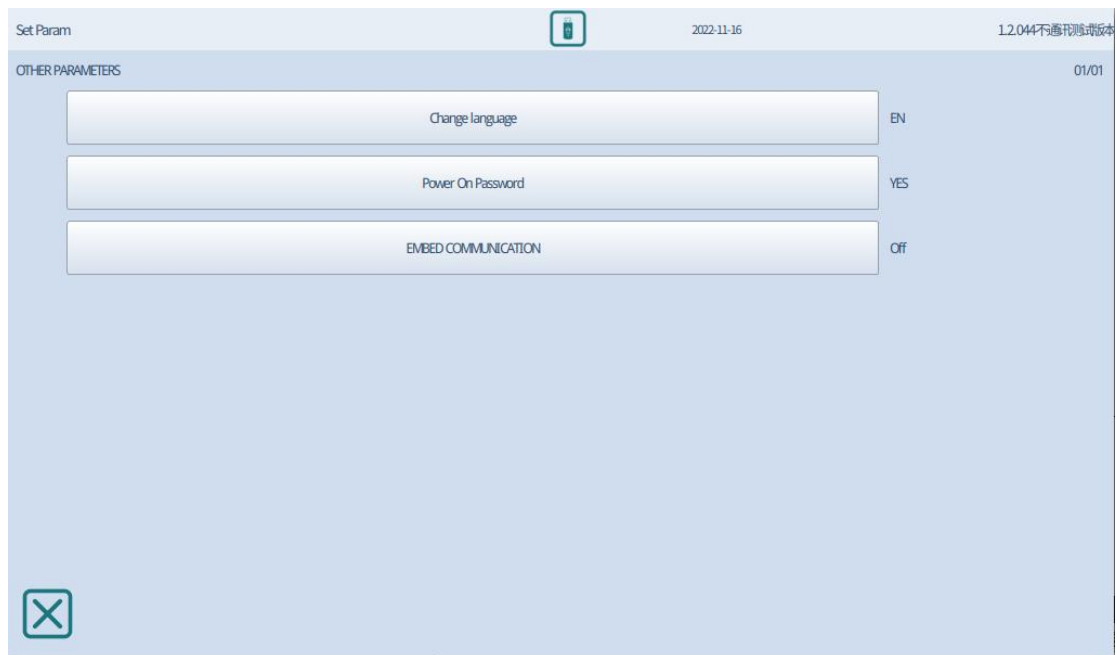
D、thread breakage setting



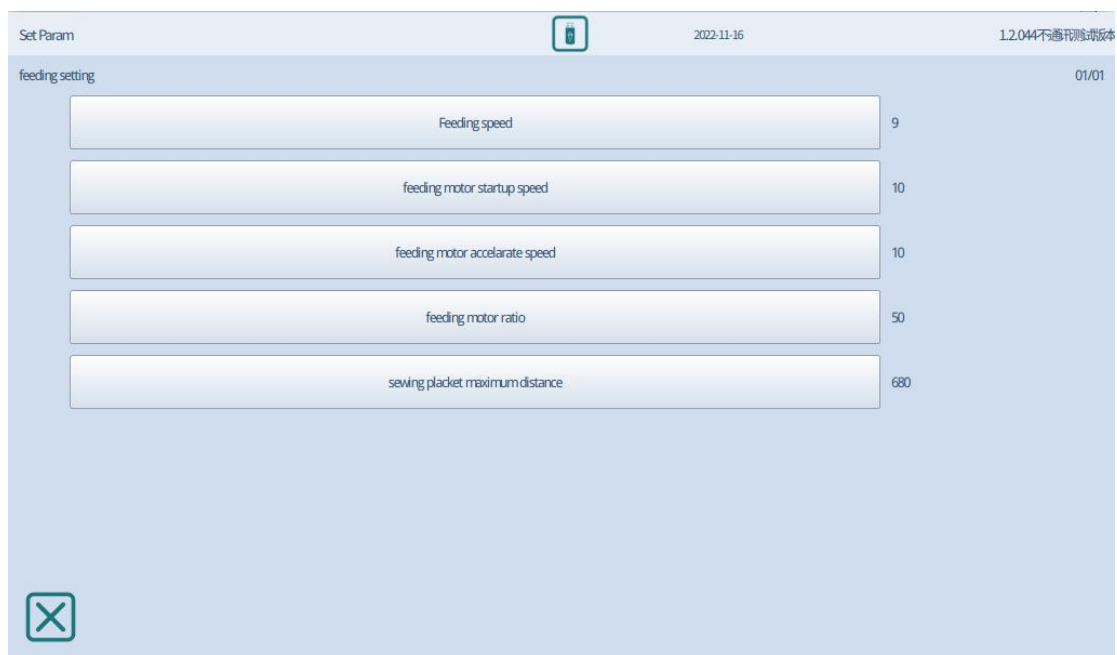
E、PANEL AND DISPLAY



F、OTHER PARAMETERS

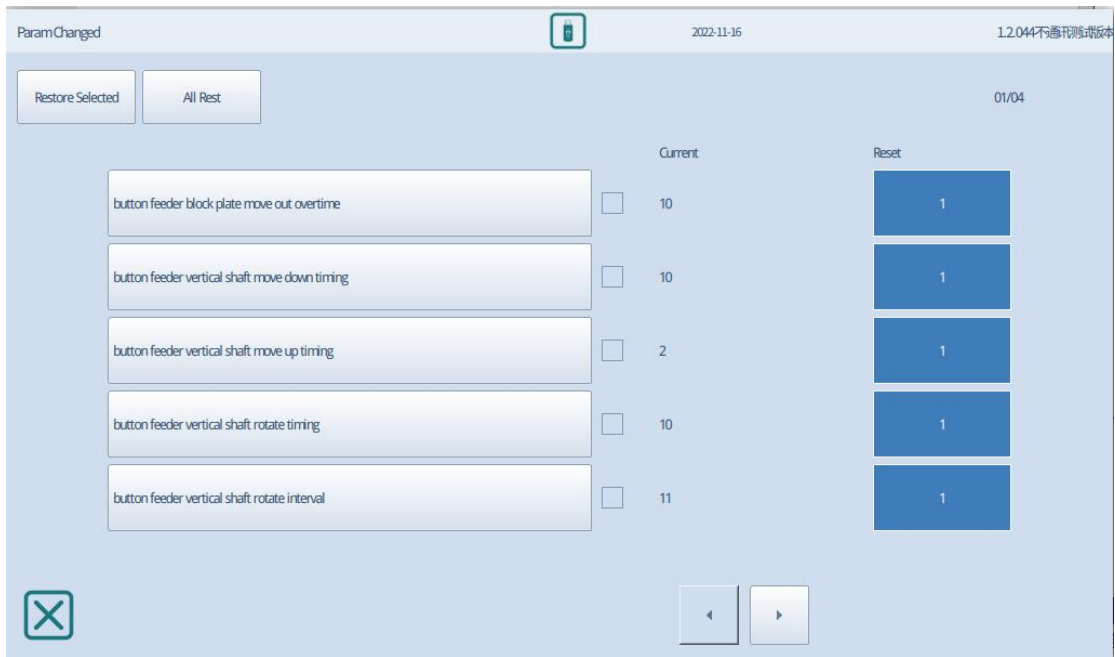


G、feeding setting



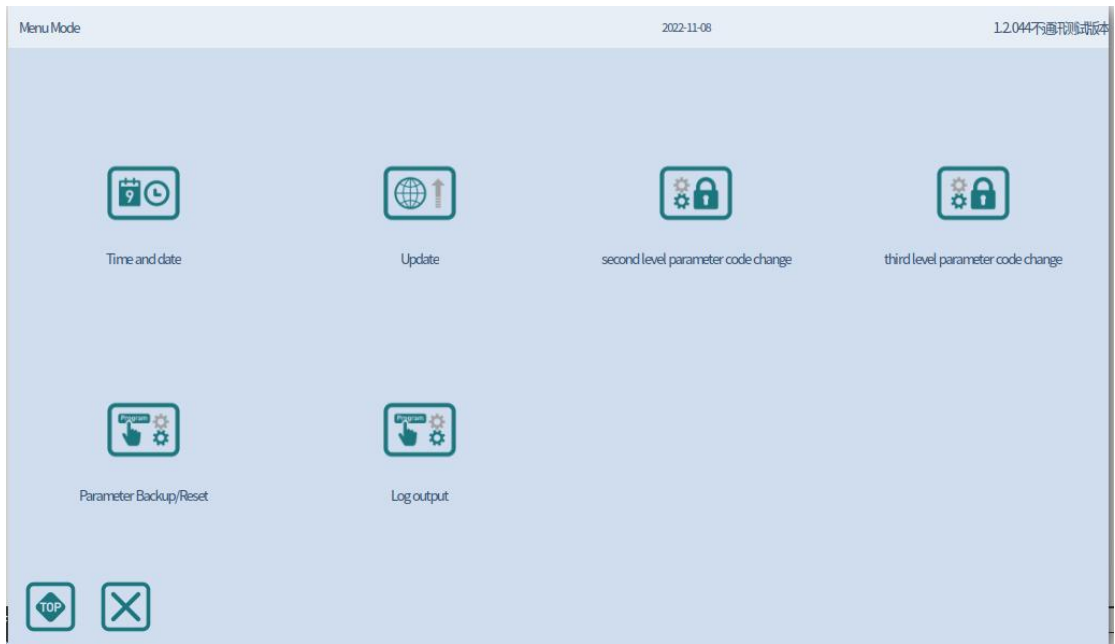
H、Modified

Select the modified settings at the bottom to view the user parameters that have been modified in the current system. You can modify the parameters again by directly clicking the corresponding parameter button, or by checking the box on the right side of the button to reset the parameters and restore them to factory parameters。



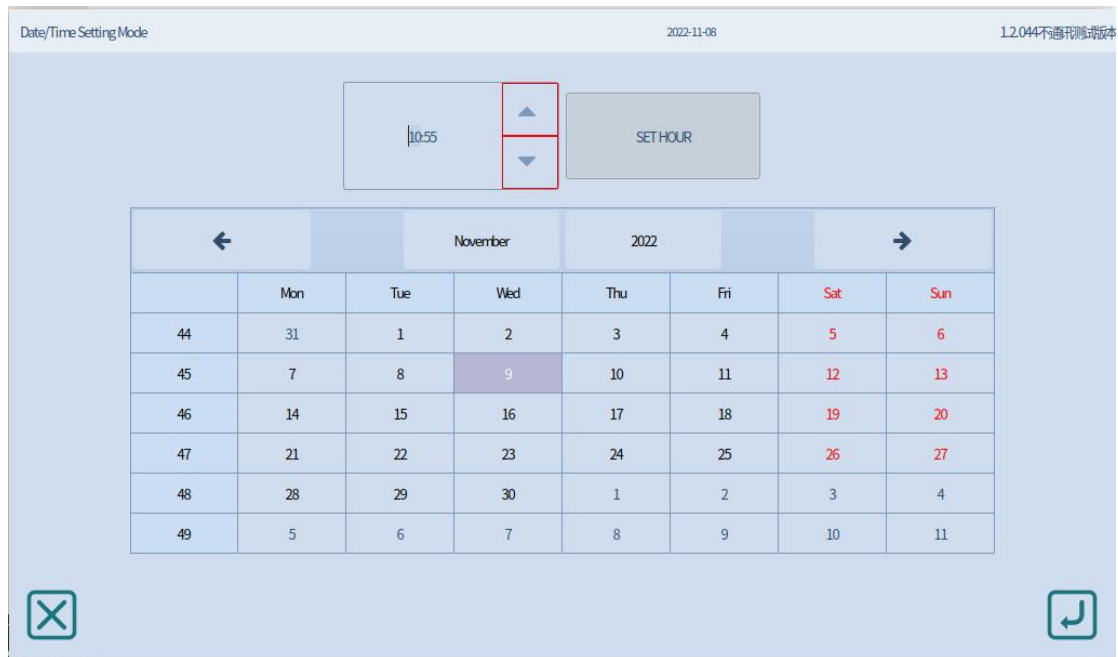
[4] System functions

Select Settings "to enter the system settings interface, where you can adjust the upper computer control board。



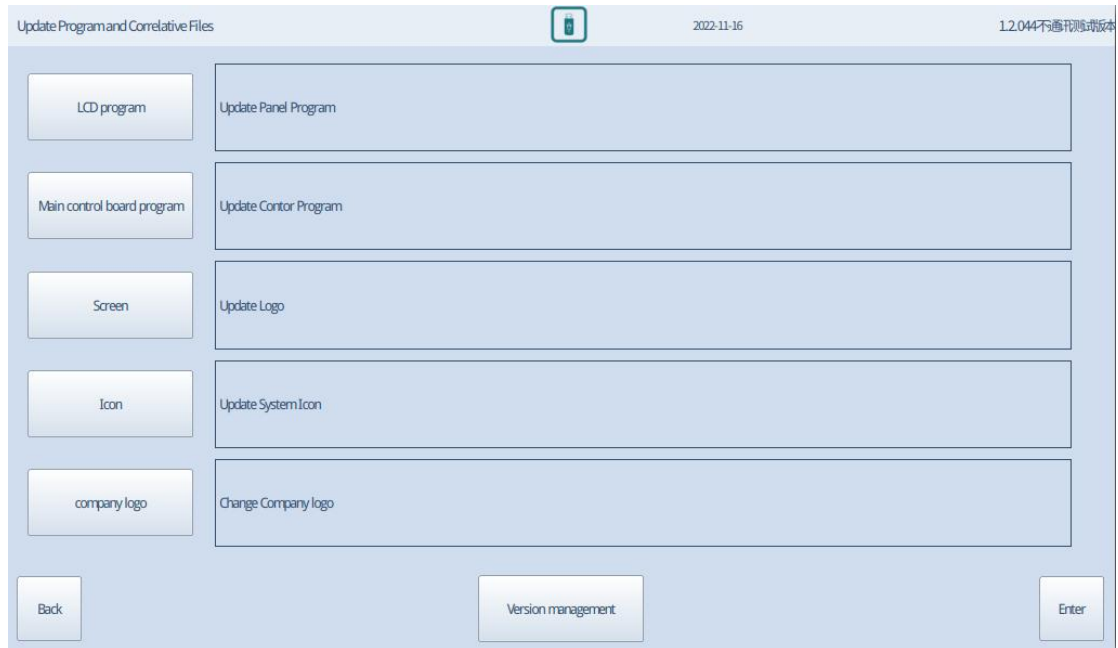
A、Time Date

Select and click on the time and date in the system function, and enter the correct password to enter the time modification interface. In this interface, you can configure the date and clock of the upper compute。



B. Software upgrade

Select and click on the software upgrade option in the system function, and enter the correct password verification to enter the software upgrade interface. The upgrade file selected for this option needs to be selected from the USB flash drive, and the USB flash drive and upgrade file need to be prepared in advance

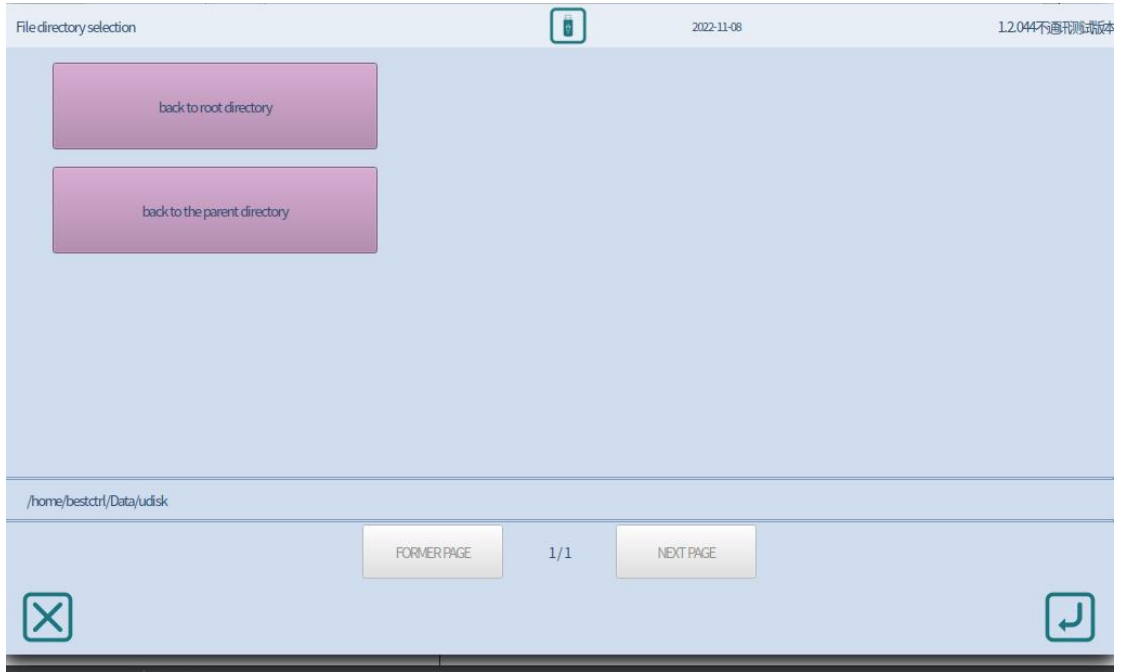


Function	Description
LCD screen program	Select the LCD screen program upgrade file in the USB flash drive with this option. After selecting the file, click OK. When prompted to restart, restart the LCD screen to complete the upgrade. It is important to confirm that the selected upgrade file is the LCD screen program. Choosing the wrong upgrade file will cause the program to crash. The default name of the LCD

	screen program is BCPanel.bin
Main control board program	Select the LCD screen program upgrade file in the USB flash drive with this option. After selecting the file, click OK. When prompted to restart, restart the LCD screen to complete the upgrade. It is important to confirm that the selected upgrade file is the LCD screen program. Choosing the wrong upgrade file will cause the program to crash. The default name of the LCD screen program is BCPanel.bin
Boot animation	Use this option to select the new startup animation of the LCD screen in the USB flash drive. Select the file and click OK. When prompted to restart, restart the LCD screen to complete the replacement. The default name for the startup animation is logo. bin
System icon	Select the new system icon for the LCD screen in the USB flash drive with this option, select the file, click OK, and when prompted to restart, restart the LCD screen to complete the replacement. The system icon defaults to BCIcon. bin
Versioning	Click to enter the LCD screen historical version interface, where you can view and trace the historical version of the LCD screen. Select the version you want to trace and confirm. When prompted to restart, restart the LCD screen to complete version tracing.

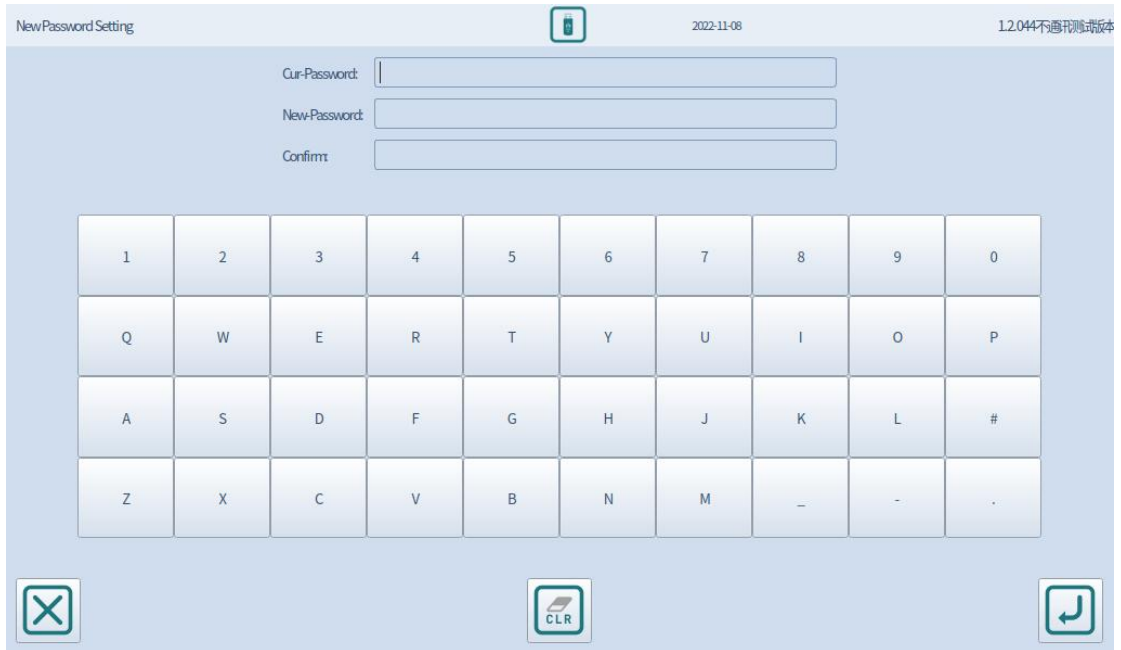
Software upgrade process:

- 1、 After clicking the corresponding project to upgrade, it will enter the USB flash disk file directory interface, where the button on the blue background is a folder, and the button on the green background is a file. You can return to the upper level or root directory through the foundation make-up button, and select the corresponding upgrade file in this interface (be sure to select the correct upgrade file, and the wrong upgrade file will lead to software problems)
- 2、 Click on the confirmation box that pops up to start the upgrade. When prompted to restart, restart the machine to complete the upgrade operation



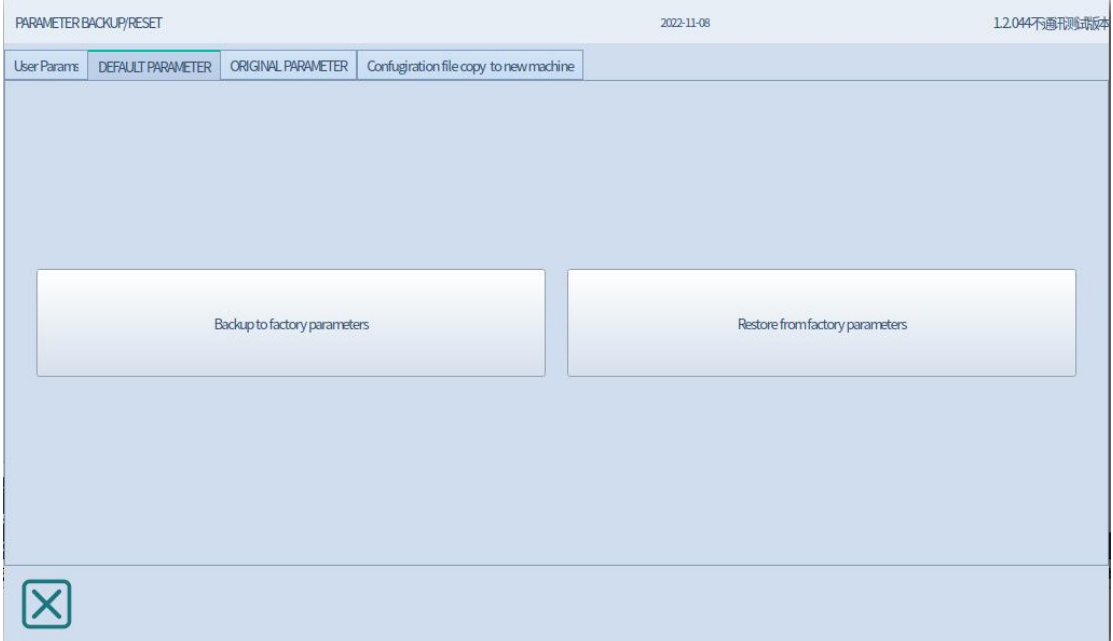
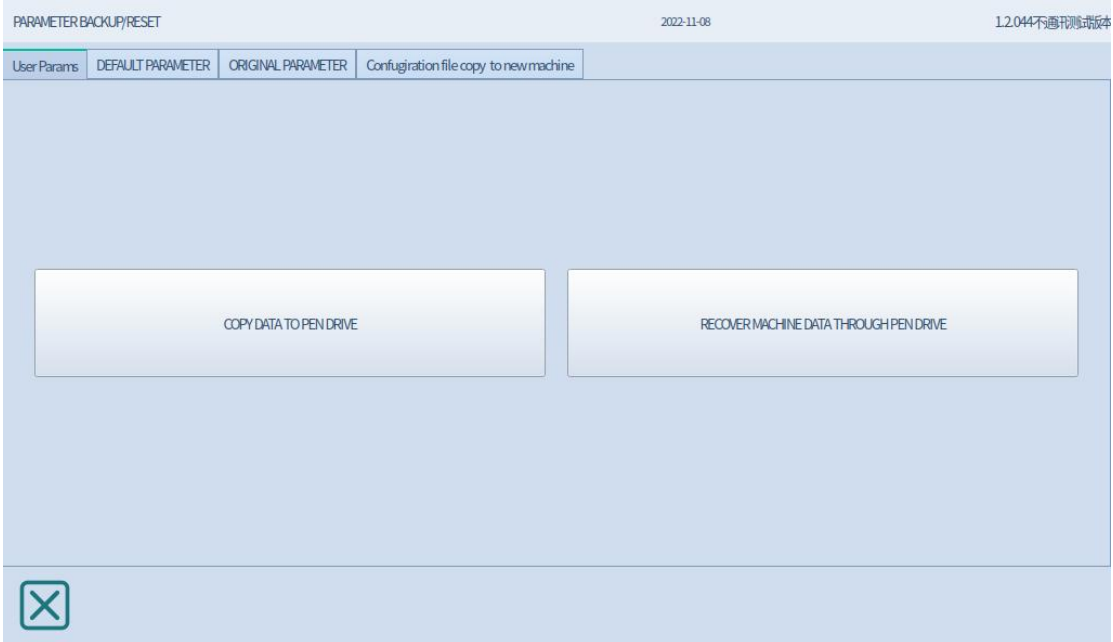
C、Second level password modification and third level password repair

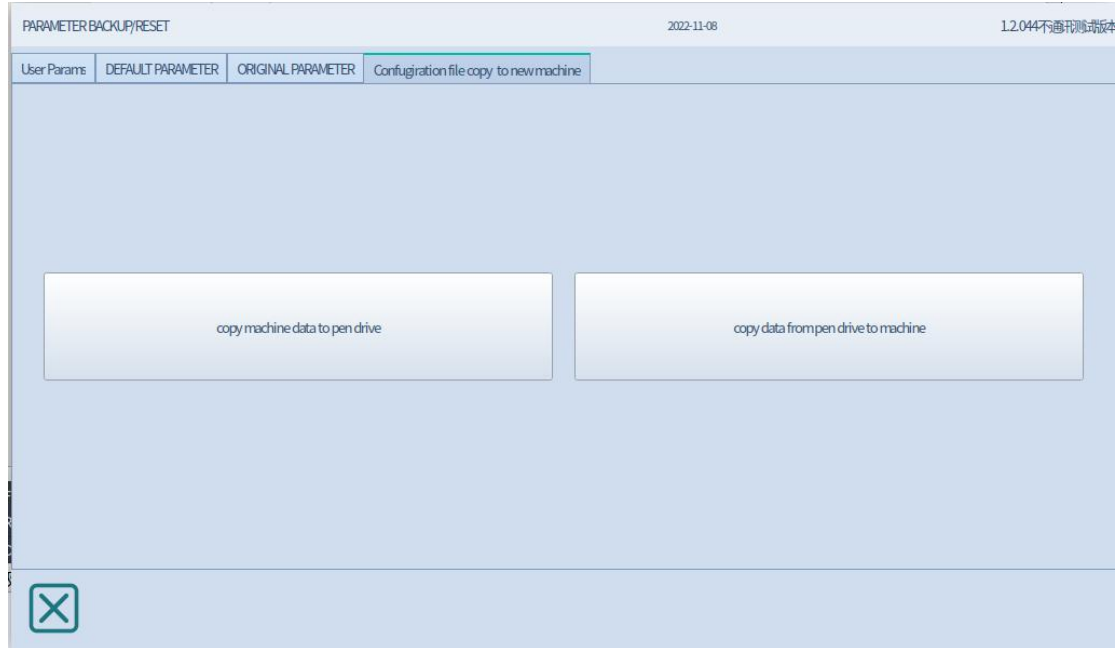
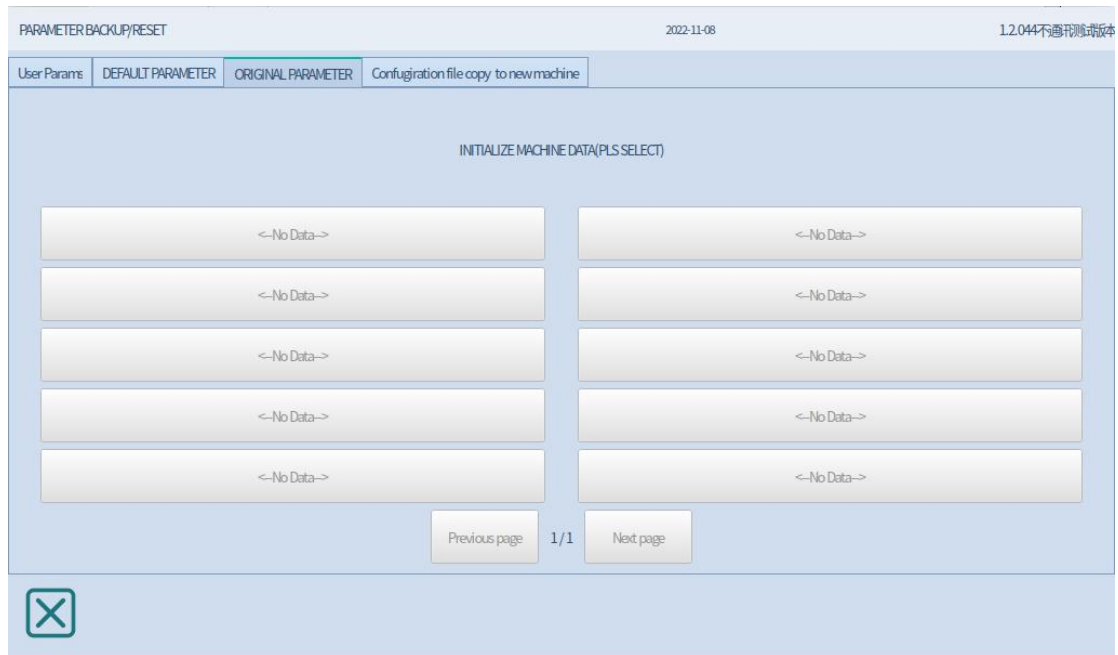
After clicking, verify the corresponding level password to enter the corresponding password modification interface. Enter the corresponding information in this interface and click OK to complete the password modification



D、Parameter backup and recovery

Click to verify the password and enter the backup and recovery interface。





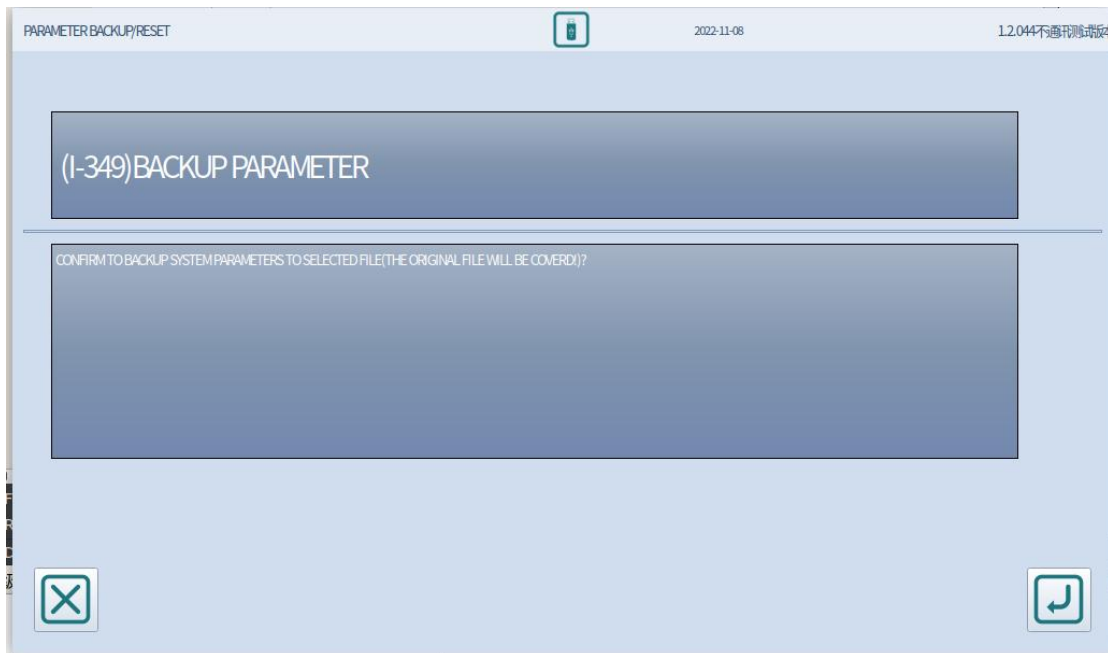
There are four types of parameter backup and recovery in this interface. User parameters and one click switch require a USB flash drive as a container for storing and retrieving backup files, while initial parameters only support recovery。

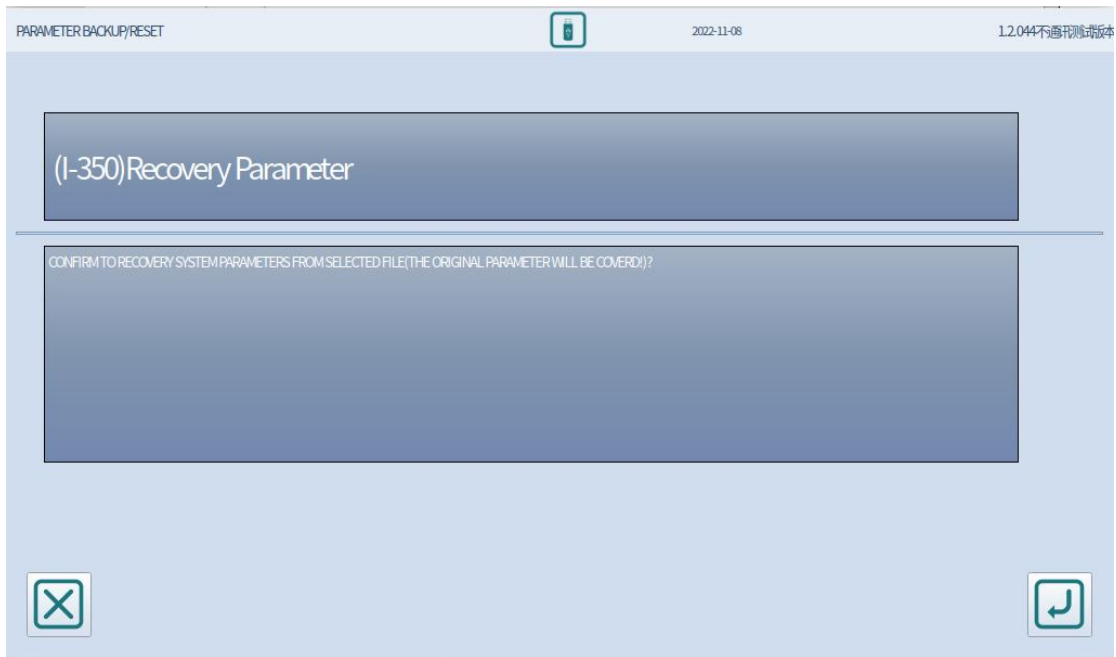
data type	Description
User parameters	Back up the current model parameters to a USB flash drive or restore the parameters from the previously saved parameter files to this program. The parameter files are saved on the USB flash drive, and after pressing, enter the USB flash drive file list and choose the save directory yourself. Be careful not to save them in the root directory of the USB flash drive
Factory parameters	Backup the current model parameters to generate a factory parameter file, or read the parameters from the factory parameter file on the LCD screen and restore them to this program. The parameter file is directly saved on the LCD

	screen without the need for a USB flash drive
Initialization	You can select the parameter file of the corresponding model in the LCD screen and restore the parameters to this program. This function can only be used for recovery and cannot be backed up
One click replacement	You can save the data used in this program as a file and then restore it on another LCD screen, achieving the function of changing the LCD screen with one click. The parameter files are saved on the USB flash drive, and after pressing, you can enter the USB flash drive file list and choose the save directory yourself. Be careful not to save it in the root directory of the USB flash drive

Backup Restore Steps:

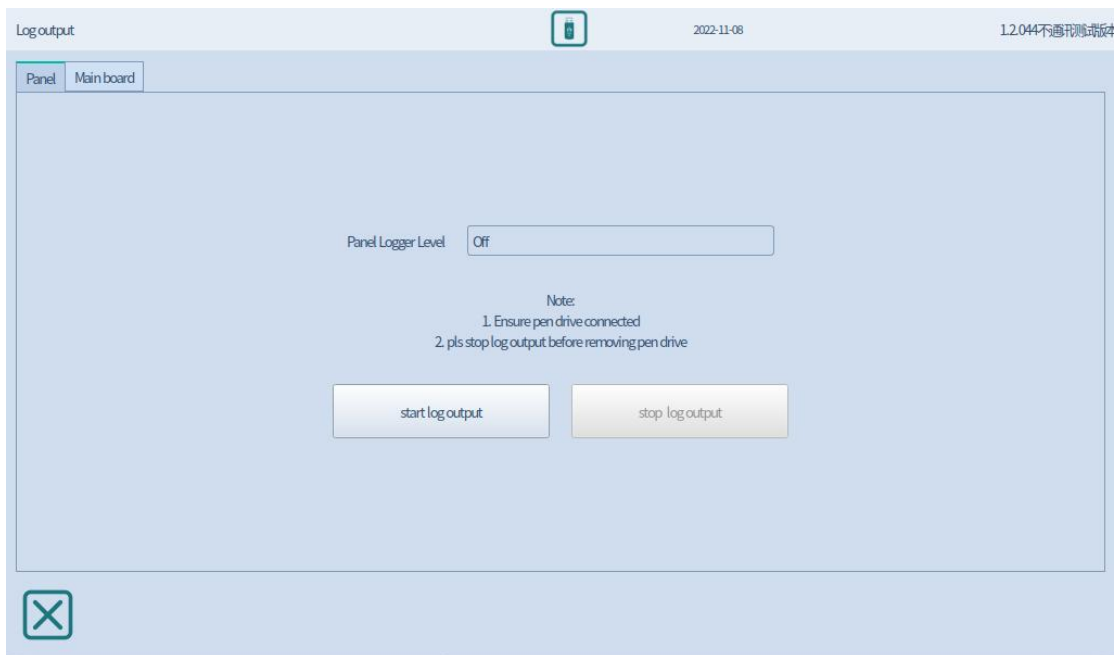
- 1、 Select the parameter type that needs to be backed up and restored, switch to its interface, and click on the backup or restore option
- 2、 After selection, a second confirmation box will pop up to confirm whether to execute. If executed, the current corresponding parameters will be saved in the corresponding directory of the USB drive or LCD screen device, or the corresponding data will be read from the corresponding directory of the USB drive or LCD screen device





E、 Output Log Settings

In this setting, the operation logs of the LCD screen and the main control board can be output, and the level of log information can be set. The output logs of the LCD screen can only be saved in the USB flash drive, while the output methods of the main control board can be saved through jLink, USB flash drive, and serial port. Be sure to insert the corresponding media before starting log output, and also stop log output before removing the media



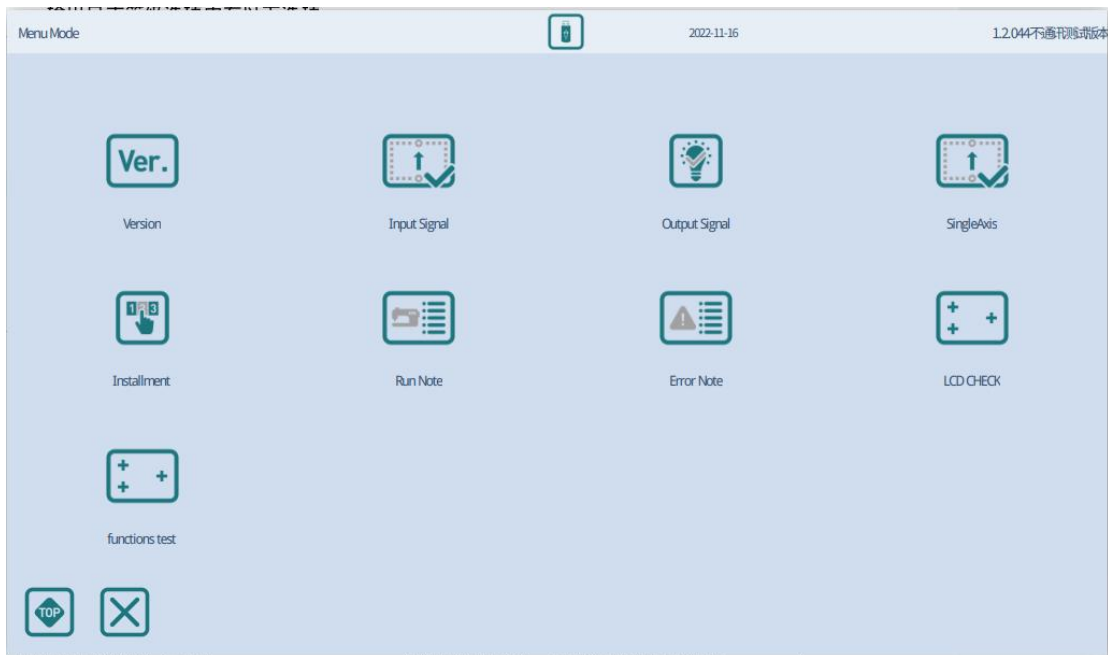
There are the following options in the output log level option

Log level options	Description
Do not output logs	Stop log output
Output Fatal Log	Only output fatal logs
Output logs of severity level and above	Output log information for fatal and severe

	levels
Output warning level and above logs	Output log information for fatal, severe, and warning levels
Output ordinary level and above logs	Output log information except for debugging and scanning levels
Output debug level and above logs	Output log information except for scan level
Output scan level and above logs	Output all log information

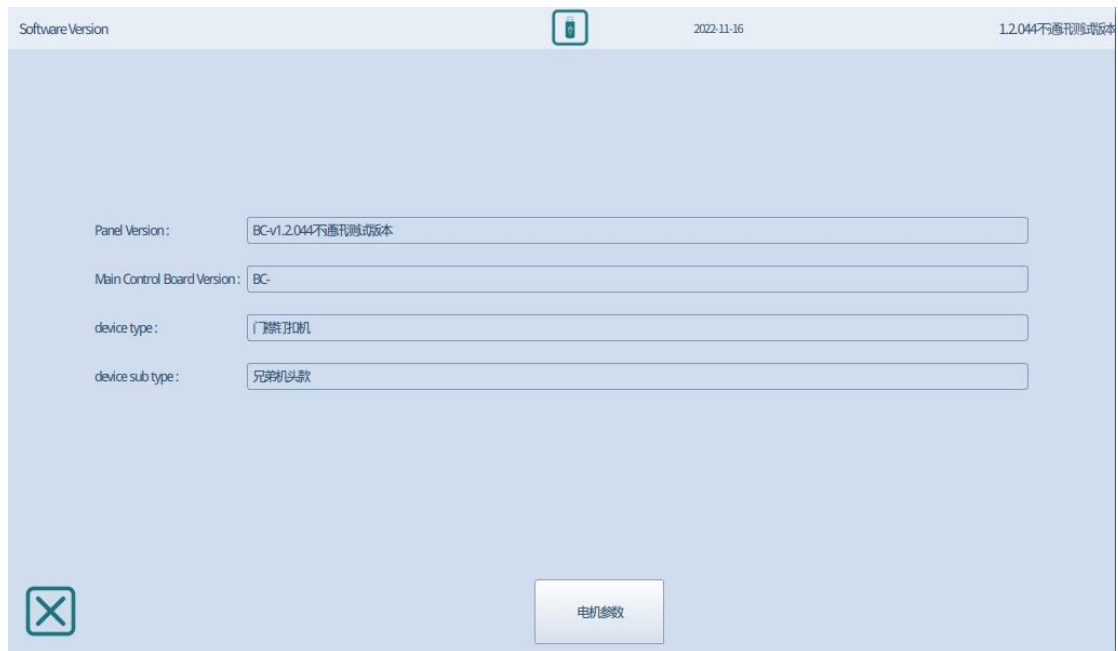
[5] Factory mode

Select Settings>Factory Mode to enter the factory mode interface, where you can perform factory mode testing



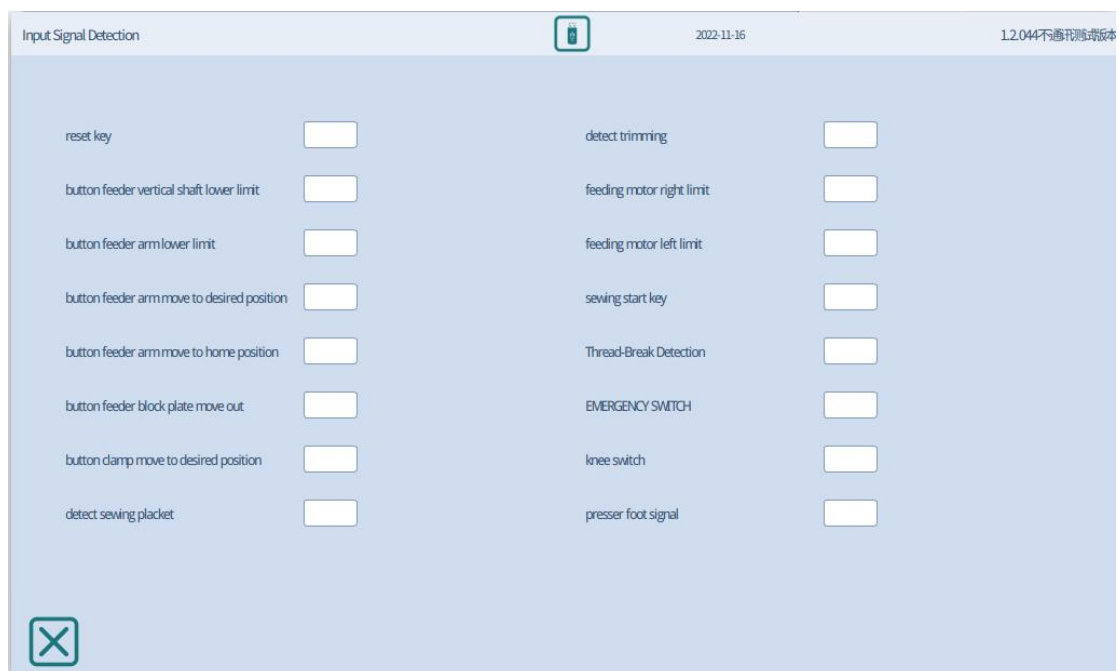
A、Software version

Select and click the software version button to enter the software version interface, where you can view the LCD program version, main control board program version, current device type, and sub models



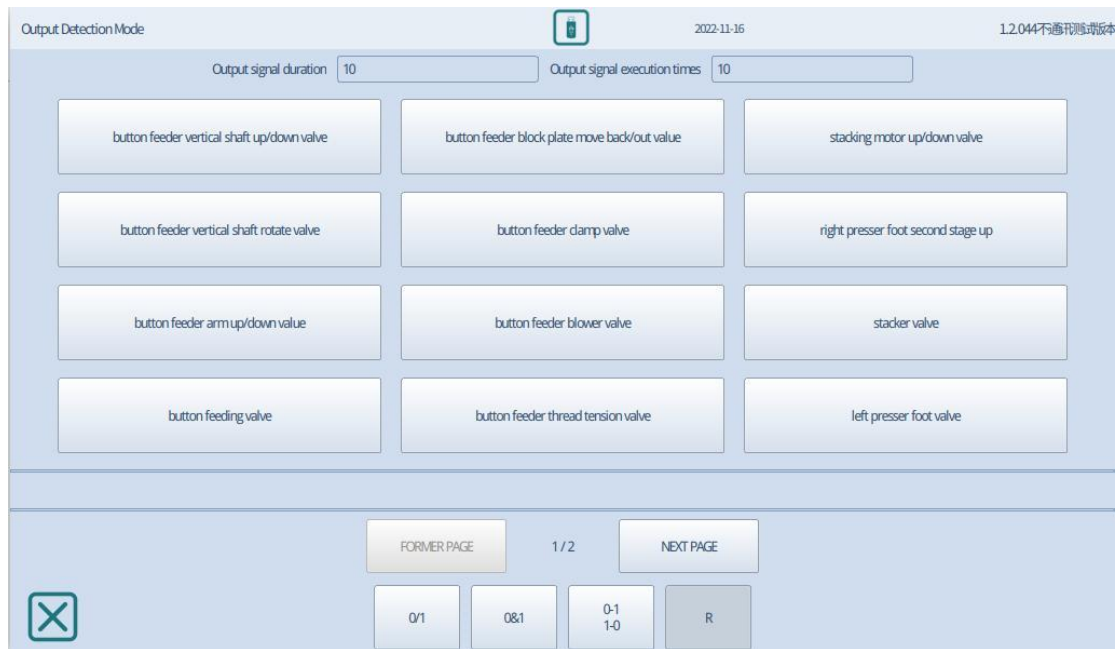
B、Input signal

Select and click the input signal button to view the current input signal. This interface displays all the input signals that will exist for this machine. The color of the square after the text can be used to determine whether there is a signal coming in. White represents no signal input, and green represents signal input.



C、output signal

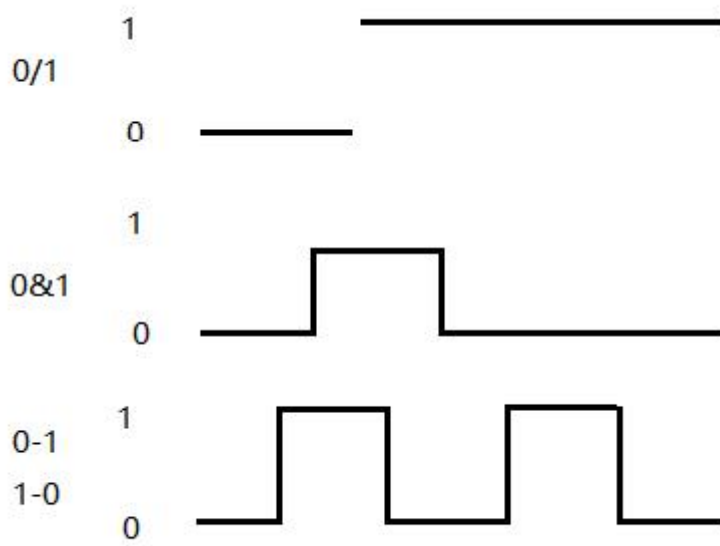
Select to click on the input signal button to enter the output signal testing interface. By clicking on the button in this interface, output signals of the corresponding button functions are transmitted, and the machine is detected to perform corresponding operations based on the transmitted operation signals.



The content of the output signal can be customized, and the type of output signal and parameter settings at the top can be controlled through the bottom

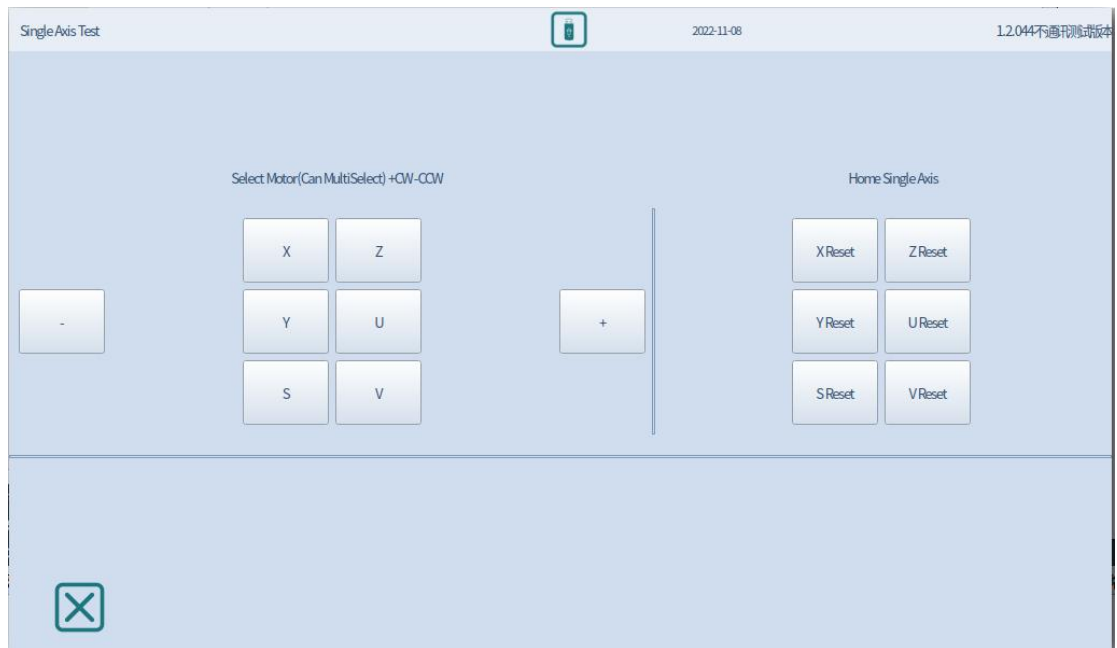
Function	Description
0/1	Perform an output signal state switch, and change the current output state at this time, regardless of the duration and number of executions
0&1	Perform a timed switch of the output signal, change the current state for a period of time, and then restore to the original state. The duration is set for the duration of the output signal, and is not affected by the number of executions
0-1 1-0	Perform multiple time-limited switching of output signals, perform multiple time-limited switching of signals, set the duration of a single signal as the output signal duration, and the total number of execution times as the output signal execution times
R	Output the signal in the format set in the current signal parameter settings, independent of duration and execution times
Output signal duration	Set the duration after signal switching
Output signal execution times	Set the number of execution times for switching signals

As shown in the following figure, the output signal will change when in the 0/1 state, and it will remain unchanged for a period of time before being restored when in the 0&1 state. In the 0-1 1-0 state, the output signal will undergo several steps of the 0&1 state, and finally restored



D、Single axis testing

Select and click the single axis test button to enter the single axis test interface. At this time, all axes are not selected. Select and press the axis that needs to be modified, and the button will change. After selection, use the forward or reverse buttons to test whether the selected axis can be used normally. At the same time, you can also choose to reset the corresponding axis.



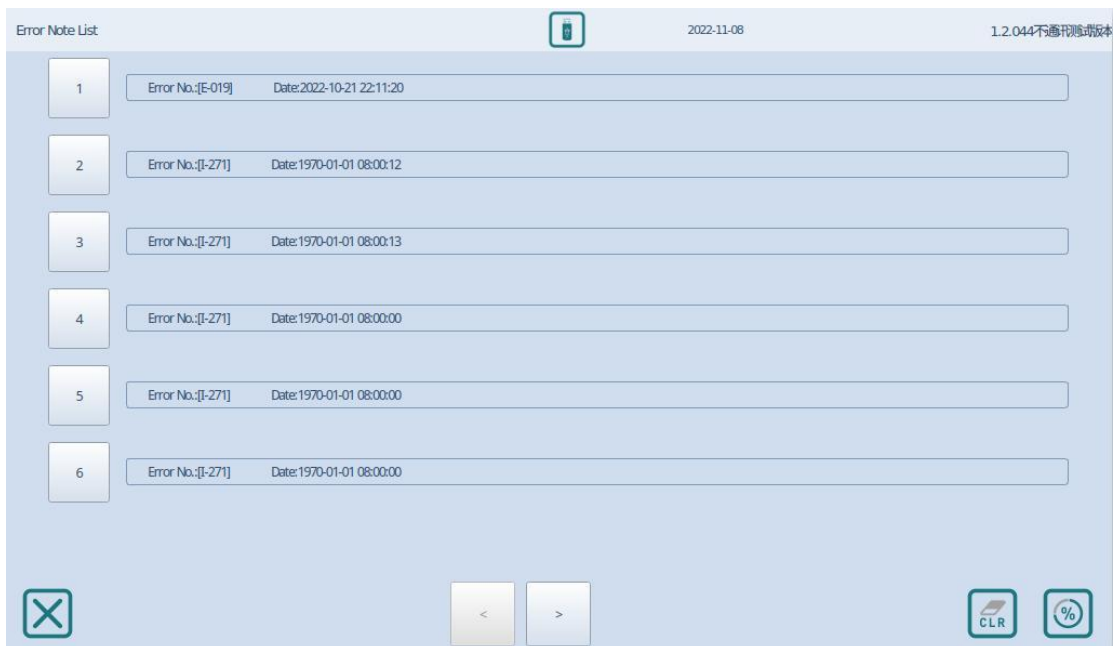
E、Operation information

Selecting Factory Mode: Enter the operation information to view the operation information of the current model

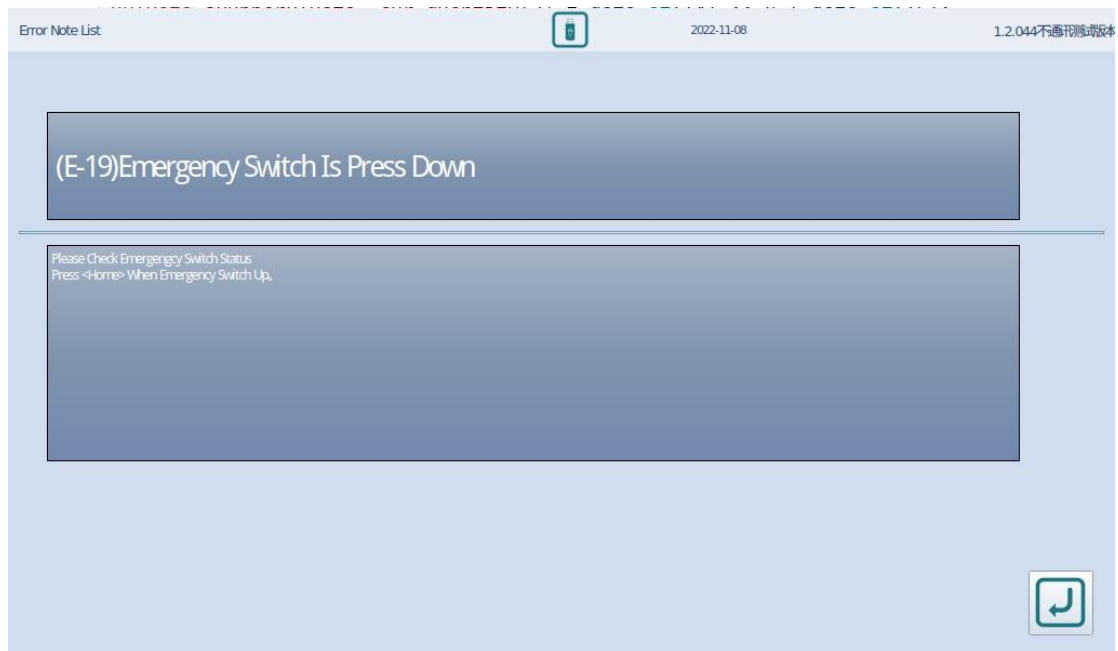


F、Alarm Record

Select Factory Mode "Alarm Record" to enter the alarm record interface, where you can see the historical record of the equipment's alarm information. Each alarm record has its error code and the current number of production pieces

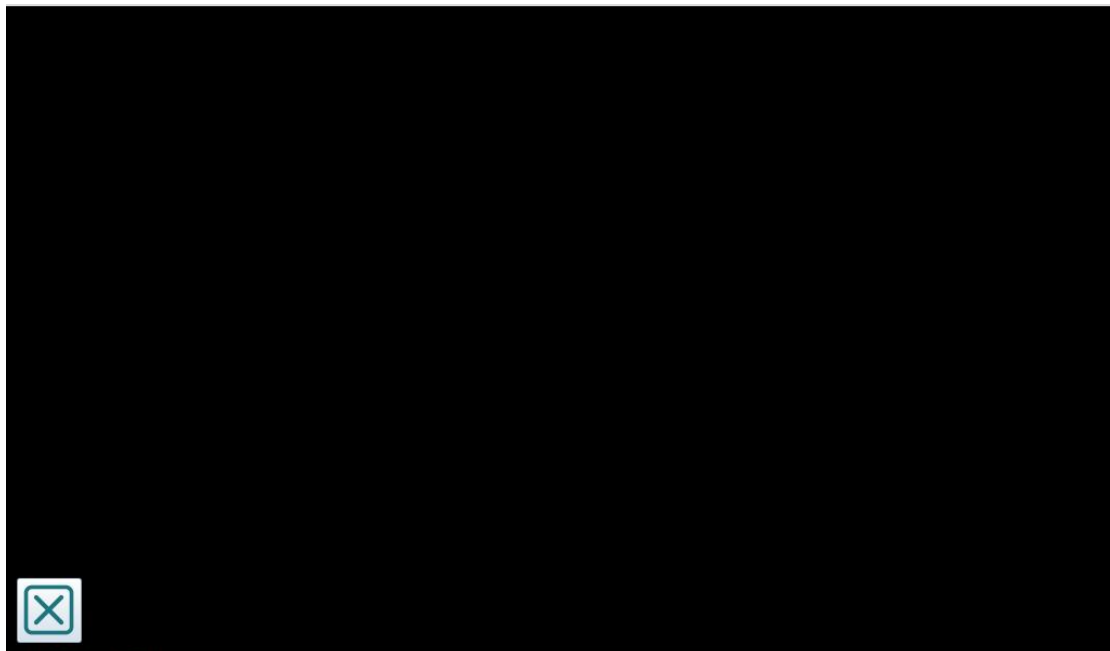


You can select the serial number of the error message and press the button to view the problem represented by the current error code.



G、LCD detection


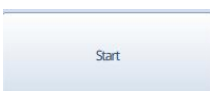
Select Factory Mode: LCD detection starts the LCD screen detection mode. At this time, the LCD screen enters a solid color display state, and clicking can switch colors. At this time, it is necessary to self detect whether there are any bad points in the LCD screen。



H、Functional testing


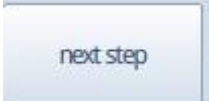

Select Factory Mode "function test to enter the testing interface and test various functions of the machine

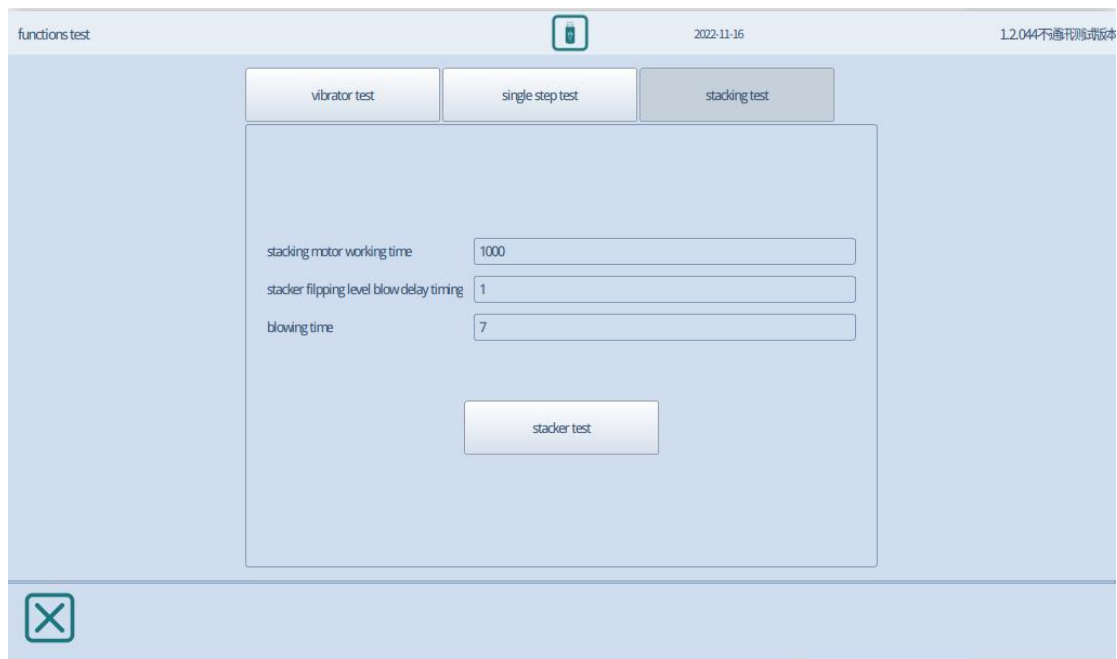



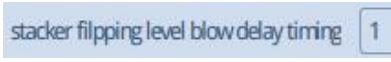


Function	Key	Description
channel select		Select one of the four channels for testing
Start/Stop		Start or stop the vibration disk test



Function	Key	Description
----------	-----	-------------

Last step		Perform the previous action
Next step		Perform the next step
Reset		Perform a reset operation to restore the machine to its initial position



Function	Key	Description
Stacking motor working time		Click on the data location to enter modification mode, where you can modify the execution time of the material receiving motor
Delayed blowing time for material dispensing		Modify the delay blowing time of material dispensing
Blow time		Modify the blowing time
Stacker test		Start the stacker test