

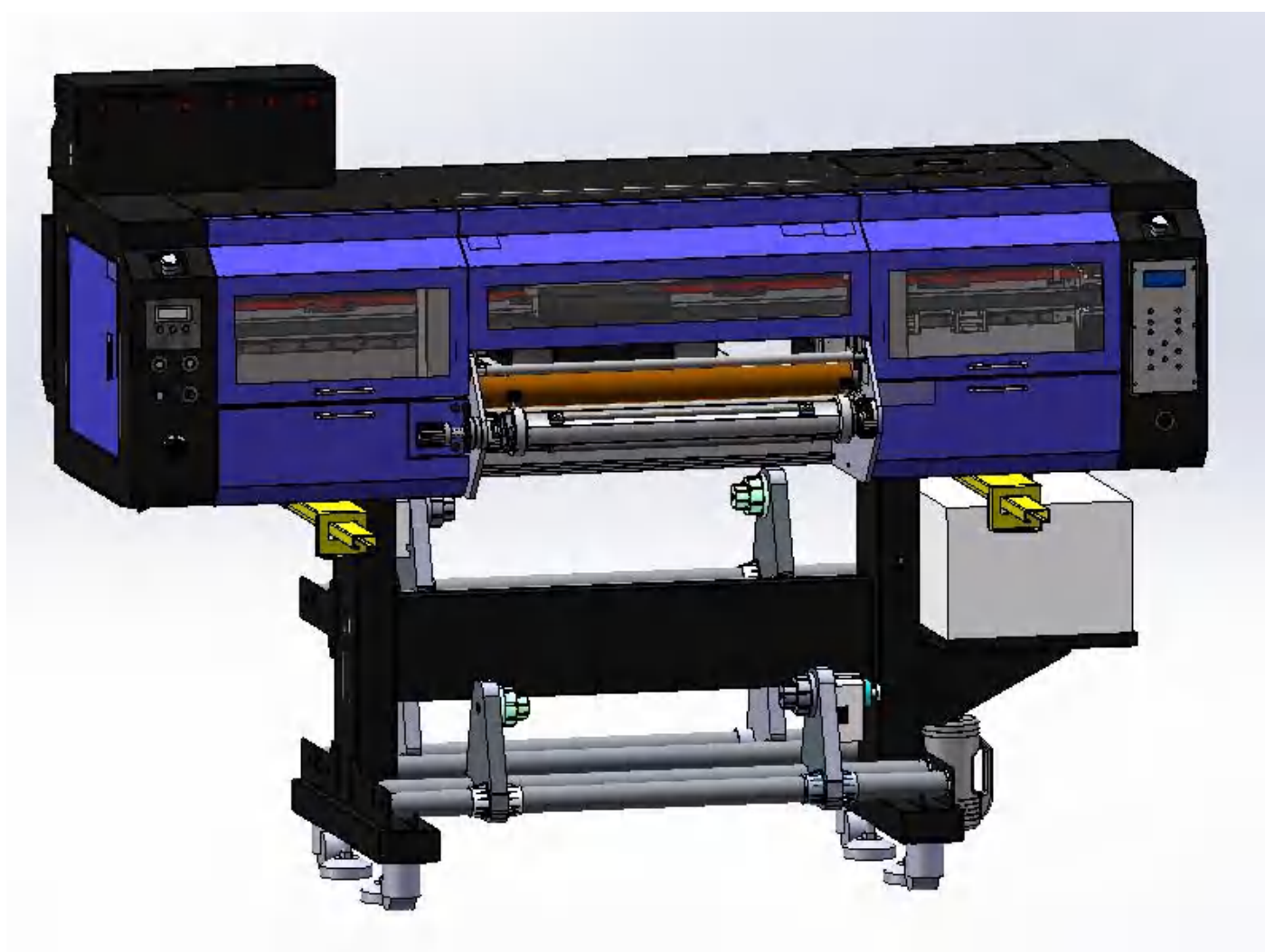
70 Crystal Label Printer Instructions

National service hotline: 400-617-9998

Henan United Color Co., Ltd.

07N02UV crystal label

Equipment Instructions



☞ Please read this instruction carefully before use and keep the instruction properly.

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Preface

- Thank you very much for choosing our printer.
- To ensure that you fully understand the performance of this product and use it correctly and safely, please be sure to read this instruction manual thoroughly and keep it properly.
- The contents of this manual and product parameters are subject to change without prior notice. If you have any questions about the product, please consult relevant technicians.
- We have done our best to compile this instruction and test the printer. If you find any errors, please let us know. We will be very grateful.
- To ensure safe and correct use of this product, please read this manual carefully before use.
-

Ensure installation and correct use

- Please keep the instruction in a safe place and refer to it when necessary.
- Keep the printer out of reach of children or non-professionals.

Description of usage conventions

- To ensure safe and correct use of this product, to avoid personal injury and property damage, make sure you fully understand the differences between the following categories before reading the instructions.
- **WARNING** If such precautions are ignored, operator injury may happen.
- **CAUTION** Ignoring this precautionary information could result in operator injury or equipment damage.

Safety Guide

Please read the following instructions before using this product.

Printer Installation Notes



WARNING

- Do not install or use the printer near volatile solvents (alcohol or thinners). Do not place any objects on top of this product.

CAUTION

- Do not place the product in a tilted or vibrating location.
- Such placement may cause the device to tip over or be damaged.

Avoid using this product in the following places

- Excessively humid or dry places
- Direct sunlight
- High temperature places
- Near open flame or moisture
- The suitable environment for this product is: temperature 20°C-30°C, humidity 40%-60%.

Power supply safety precautions

WARNING

If the power cord is damaged, please disconnect the power as soon as possible and repair it yourself

- Be careful that electricity may leak from the damaged part, causing fire or short circuit.
- Do not plug or unplug the power supply with wet hands to avoid electric shock or short circuit.

Avoid using the same electrical outlet for multiple devices

- This may cause a short circuit or even a fire.

Do not bundle or wrap the power cord.

- This may cause a short circuit or even a fire.

When installing the ground wire, special attention should be paid

- Suitable ground wire location: power supply terminal and terminals for ground piles
 - It is prohibited to ground wires near water pipes, gas pipes, telephone lines, lightning conductors, etc.
-

Operational safety precautions



WARNING

- Do not attempt to disassemble or repair the device yourself.
- If the equipment makes noise, produces smoke or flames, or has unpleasant odors, etc., you must turn off the power immediately and contact the manufacturer from which you purchased the equipment.
- Do not use flammable objects or products around the device.
- Before moving the device, you need to unplug it from the power source.
- When moving the device, make sure the print head is in the home position.

Maintenance and inspection



WARNING

- Before cleaning, make sure the power is off and the power cord is unplugged.
- Clean the printer with a cloth moistened with cleaning fluid. Do not use volatile solvents like alcohol to clean the printer.

Precautions and handling of consumables such as ink cartridges



WARNING

- Do not use any ink outside the specified range; otherwise, the print quality may be affected.
- Do not use expired ink, as this may cause device malfunction.
- The disposal of waste ink must comply with relevant laws and regulations.
- Be careful not to let ink come into contact with your skin or clothing.
- Check the waste ink bottle regularly to avoid overflow.
- The ink needs to be stored in a cool place, away from high temperatures or direct sunlight.

Chapter 1 Equipment Parameters

1、Product Technical Parameters

Equipment type: Crystal label UV printer.

Device Model: 70 crystal label

Board Type: Honson.

Number of nozzles: 3 heads.

Ink Type: UV.

Print width:600mm.

Supported printing solutions:White+color+varnish.

White color printing mode:4PASS: 10 m²/H (production mode).

6PASS: 7 m²/H (accuracy mode).

8PASS: 4 m²/H (high precision mode).

Configuration standard:

※.X-axis high quality Leadshine servo motor.

※.Y-axis high torque motor + high precision reducer.

※. Resistance is adjustable on both sides for the Unwinding system.

※.HIWIN high speed silent linear guide.

※.Printheads carriage configuration: The height of the nozzle base can be adjusted by lifting, making operation more convenient.

※.White ink automatic stirring system.

※.Add high quality filter system to ink supplying system.

※.Automatic rubber roller lifting system.

✖.Inkjet technology: drop-on-demand piezoelectric inkjet technology.

✖.Ink type: Environmentally friendly, colorful and durable UV special ink.

✖.Color configuration: W (white ink) + K/C/M/Y (color) + V (varnish).

✖.Ink curing configuration: high-power UV lamp, more stable curing effect, two large lamps plus two small lamps.

✖.Paper feeding and laminating configuration: high-precision rubber roller, intelligent temperature-controlled rubber roller heating

✖.Main body configuration: High-precision all-aluminum main body and high-precision platform bracket configuration provide high-precision printing support for high-quality printing output.

✖.Ink barrel configuration: 1.5L.

✖.Ink shortage alarm configuration: automatic ink shortage alarm system.

✖.Out of paper alarm: equipped with out of paper alarm sensor function

✖. Waste film collection: Swing rod tensioning intelligent waste film collection system

✖.RIP software configuration: MainTop/PP.

✖.Color control: International standard ICC color control, user adjustable curve and density, etc.

✖.File format: TIFF, JPEG, etc.

Media System

✖.Material loading and unloading: resistance double-sided adjustable paper feeding system.

✖. Printing Roll specifications: 600mm.

✖.Data transmission: High-speed Gigabit Ethernet transmission.

✖.Device size: Length 2117mm x Width 800mm x Height 1550mm.

※.Packing size: Length 2224mm x Width 835mm x Height 1152mm.

※.Operating Voltage:AC220V.

※.Equipment power: 2000W.

※.Equipment weight: 210KG.

Work Environment

※.temperature: 200C --300C.

※.Relative humidity: 40%--60%.

Chapter 2 Installation Guide

2.1 Computer configuration preparation



Desktop computer requirements

CPU	Intel(R) Core(TM)i7-9700K
Memory	Kingston 8G or above
Motherboard	GIGABYTE Z370 HD3 Motherboard
Hard disk	Solid-state drive 128G + 1T mechanical hard drive (recommended mainstream brands such as Seagate, Samsung, Toshiba, etc.)
system	Win7 64bit/Win10 64bit
Network Card	Gigabit LAN

2.2 Power on and Self-Test

2.2.1 Choosing the right power supply

- Power supply voltage requirements

2.2.1.1 Depending on the country and region, you can choose:

Printer power supply: AC 220V 50Hz, Computer Power Supply: Select the power supply requirements that match your computer and monitor

- For the equipment, the ground wire must be connected properly. (It is recommended to connect a separate ground wire to the ground terminal of the machine)
- To ensure stable power supply, it is best to configure uninterruptible UPS voltage stabilizing power supply.
- The machine power supply needs to be wired separately from the drying power supply.
- Without power on, observe whether the left side of the machine printhead-carriage is tilted against the table, turn on the power to check the reset status, and add pure water or coolant to the UV light cooling box.

- Turn on the machine and print a blank picture to test whether the function is normal. Then add ink and install the print head.

2.3 Equipment installation steps

2.3.1 Machine Observation

- After opening the packaging box, in the power-off state, observe the space (1.8MM) between the machine platform and the bottom of the printhead carriage frame, whether the positions of the grating and the grating decoder are deviated, whether the positions of the printhead carriage origin limiter and the limit plate will not cause collision, whether there are creases or dead bends on the ink tube behind the ink cartridge, and whether the fan and water tank wiring is correct.
- Use a multimeter to measure the power supply. If the power supply voltage exceeds $220V \pm 10V$, a 3000-5000VA voltage regulator must be used. The equipment needs to be grounded, and the voltage between the power supply neutral line and the machine housing should be measured to ensure that the voltage between them is less than 5V.
- Check the accessories box to see if the main accessories are complete and inject any one of distilled water, purified water, or refrigerant into the UV lamp water tank.

2.3.2 Machine Operation

- First remove the fixing screws of the crossbeam, and then power on to see if the machine resets normally. Adjust the ink station origin, scraper position, scraper blade height, and sealing nozzle height.
- Add ink, ink sac and nozzle, use a syringe to draw ink from the ink sac to add ink manually, and insert the ink sac.
- Plug the printhead cable into the carriage board, turn on the machine to manually draw ink, automatically clean, print the printhead test, and observe the printhead status.

2.3.3 Machine debugging

- Install the printing software and control center, set the curve of the printing software, and control the basic parameters of the nozzle mechanical verticality, head horizontal spacing calibration, step calibration, nozzle verticality, and UV lamp in the control center.
- Calibration and debugging: step calibration, print head mechanical vertical calibration, white+color+varnish print head vertical calibration, print head horizontal calibration, bidirectional calibration.
- Print online to see if the machine's carriage pauses at the left and right ends. If so, replace the operating system with a pure version of Windows 7 64-bit, or replace the independent network card.



CAUTION

- Please select the power supply marked on the printer to avoid damage to the device due to using a power supply that does not meet the requirements.

Before connecting the power supply, please carefully clean and check the internal packaging foam paper, tape and the clips that fix the nozzle, etc.

Connect the power cord

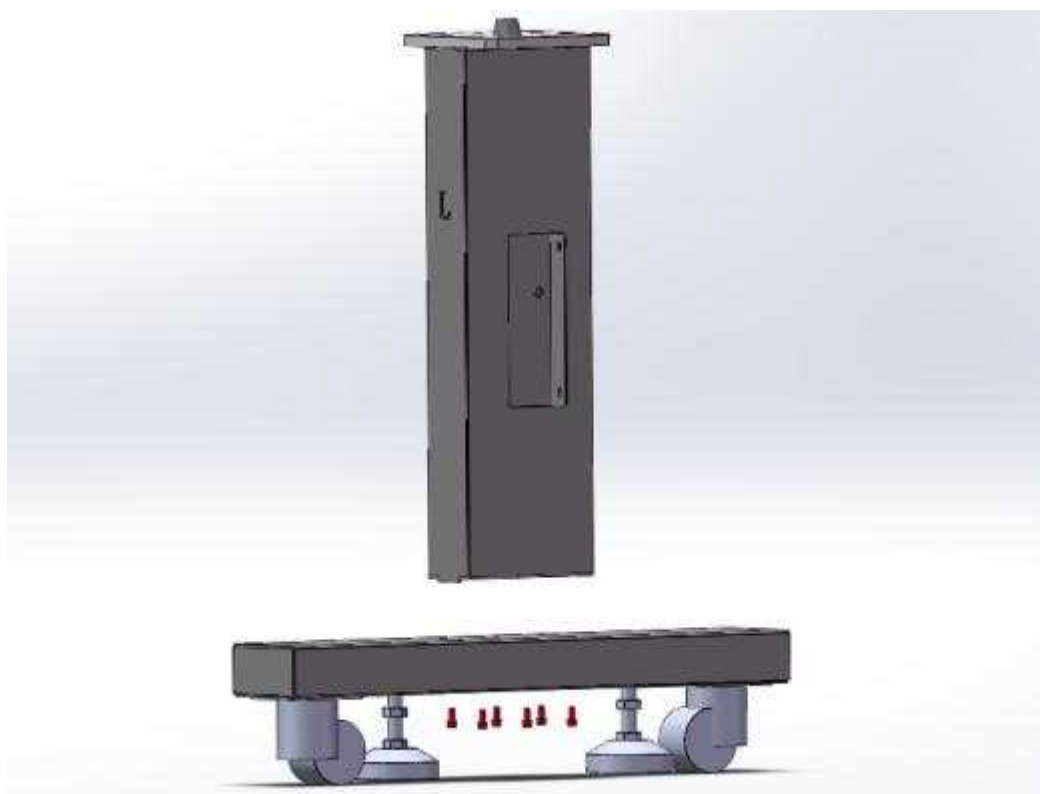
Power on device self-test

- Note: Before starting the machine, it is recommended that the user manually pull the carriage left and right once to ensure that there is no foreign matter interfering with the printhead bottom plate. The pipes on the carriage frame do not interfere with the printer shell.

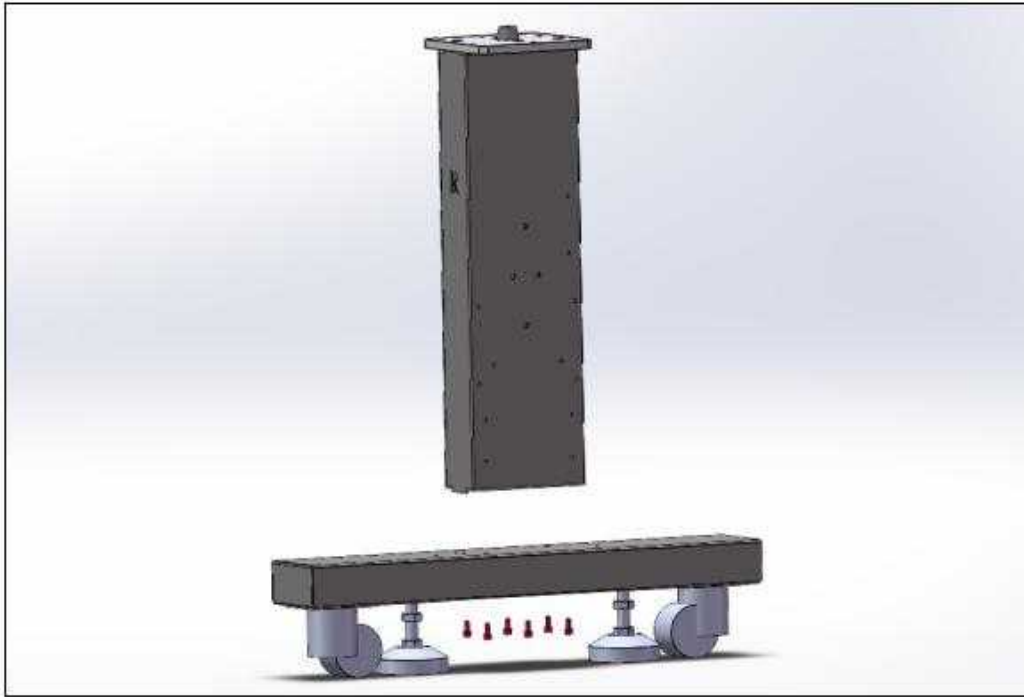
Chapter 3 Equipment Hardware Description

1. Equipment Assembly Instructions

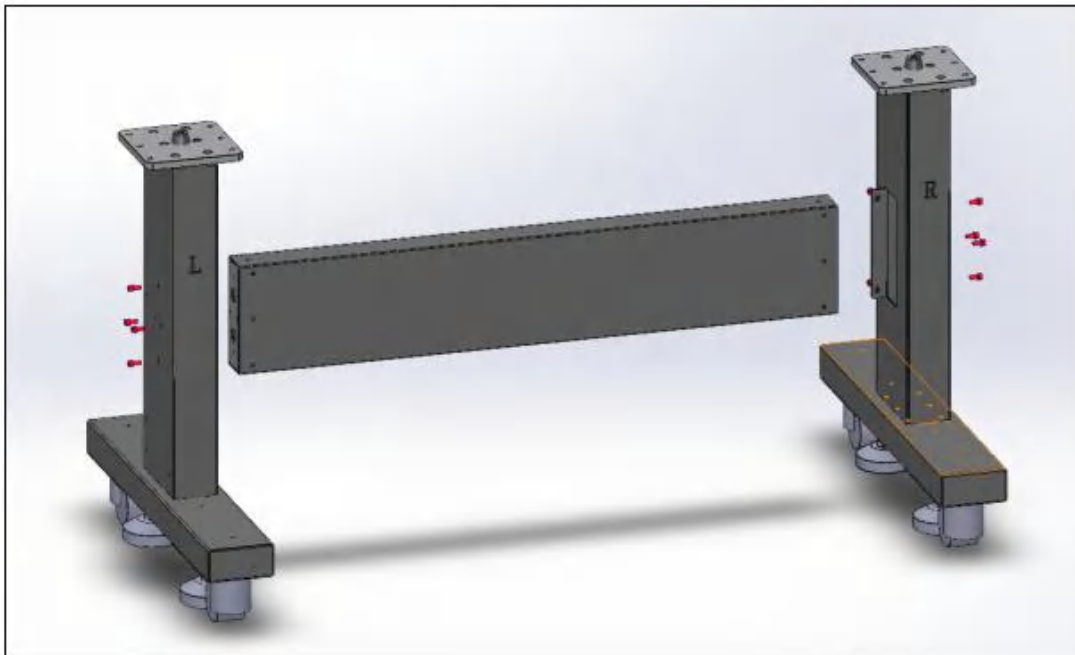
The equipment arrives in a split frame and needs to be unpacked and assembled on site. The assembly diagram is as follows.



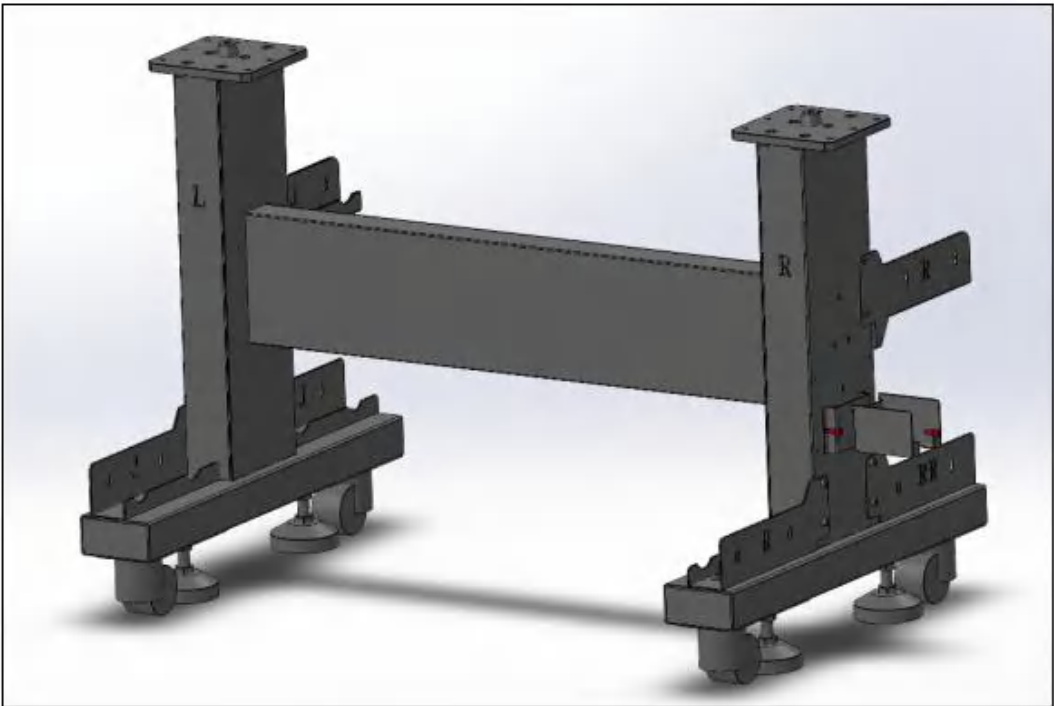
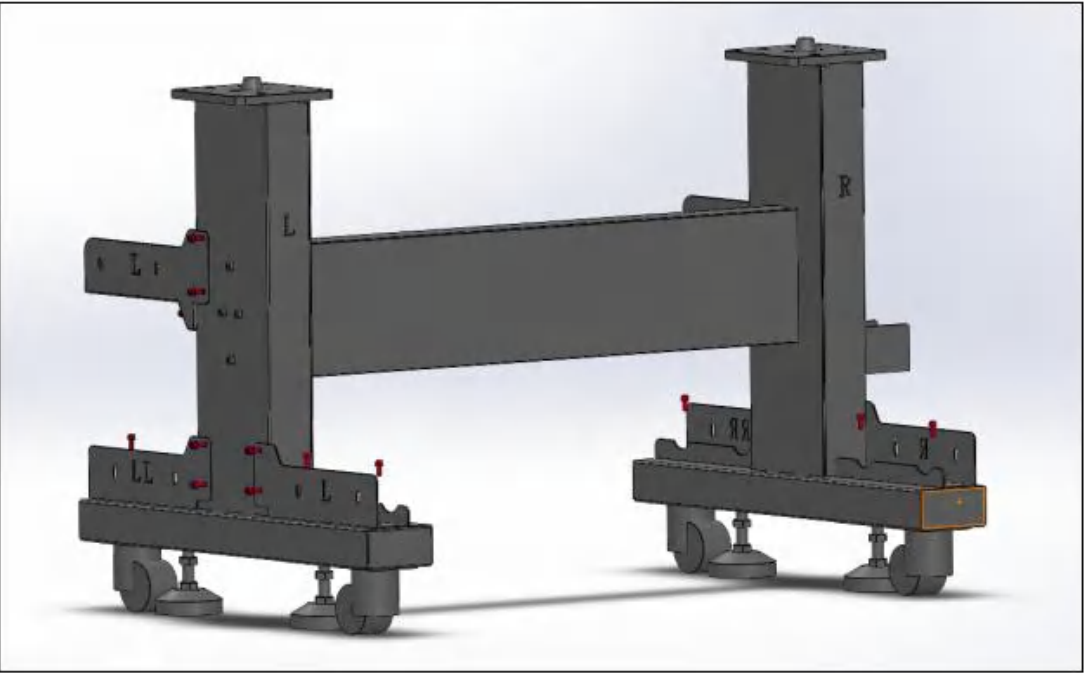
1. Assemble the <horizontal leg assembly> and <left vertical leg> into one piece in the correct direction and connect them with 6 M6x16 screws.



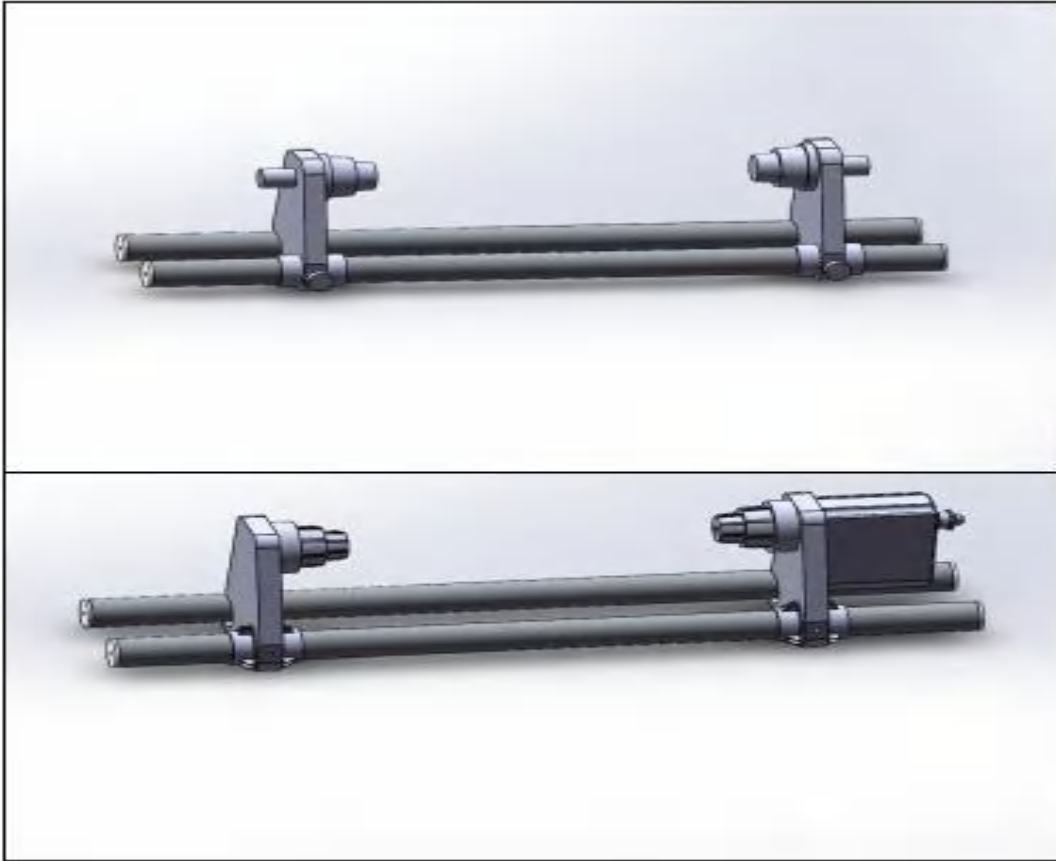
2. Assemble the right leg in the same way.



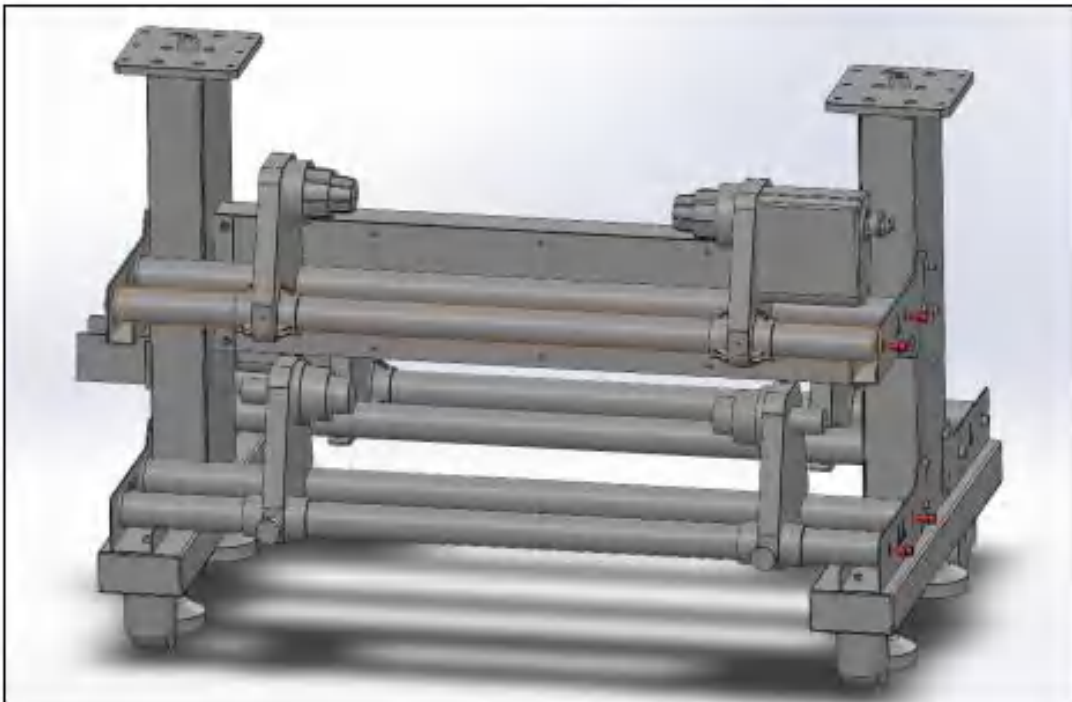
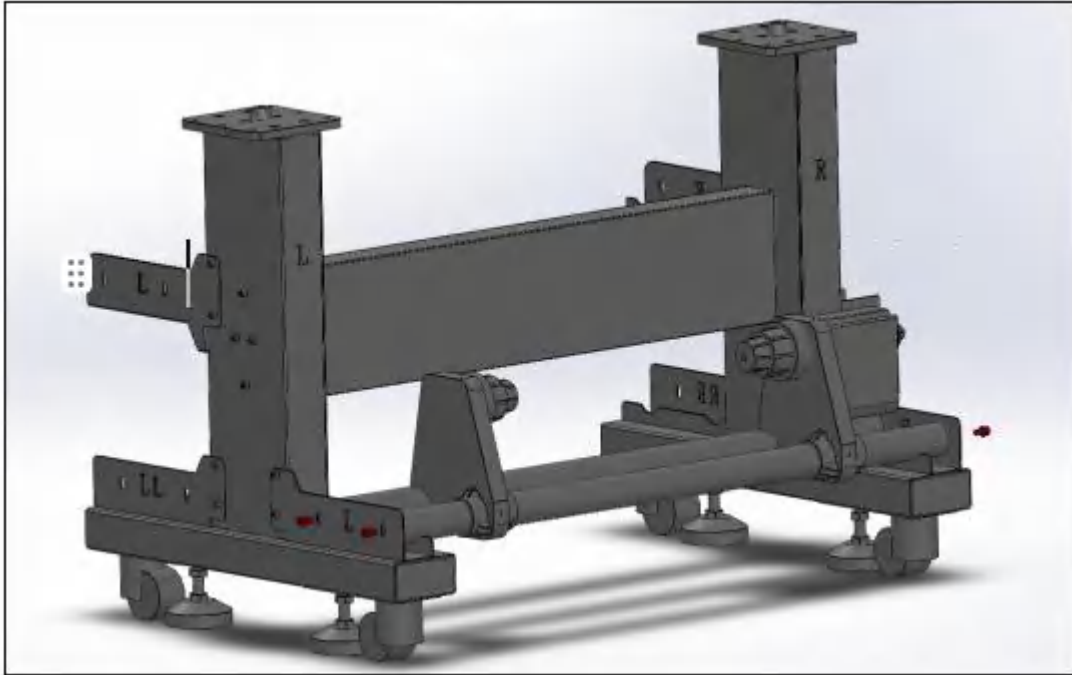
3. Insert the <vertical leg crossbeam> into the slots on the machine legs on both sides in the correct direction, and connect them with 8 M6x16 screws on both sides and the rear.



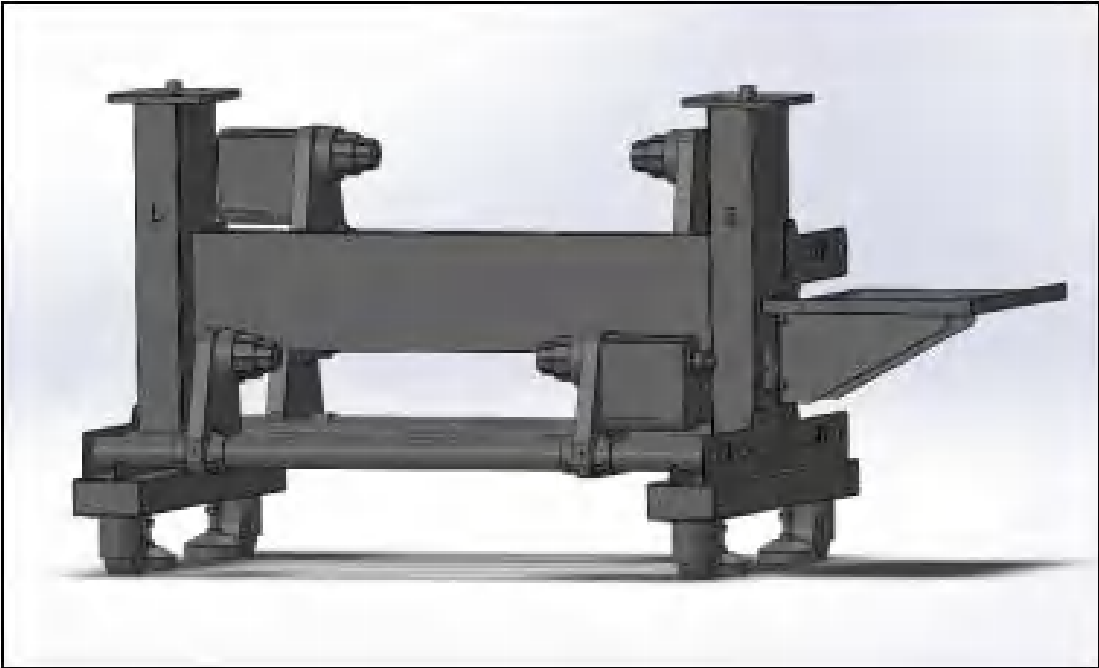
4. Install the paper collector bracket, paper feeder bracket, and rear paper collector bracket on the assembled machine legs, and connect them with M6x16 screws. Pay attention to the markings on the parts and determine the correct installation position. Install the <waste ink barrel fixing frame> and <waste ink barrel bracket> on the right machine leg with screws, a total of 25 screws.

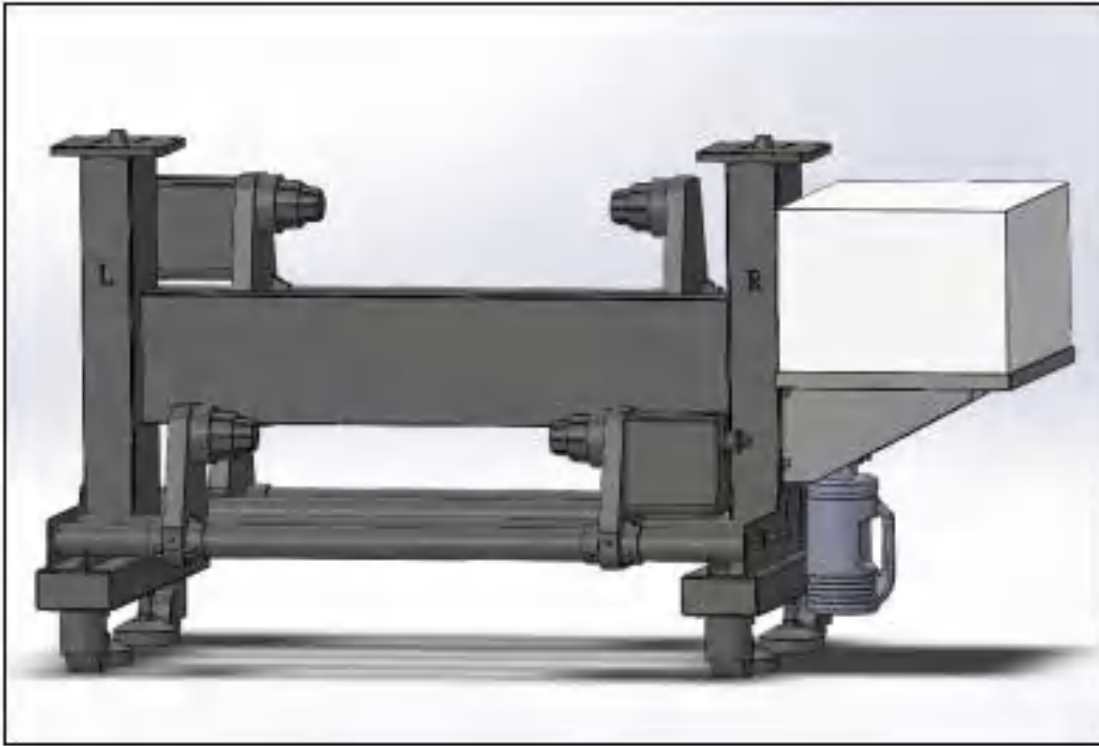


5. The above picture uses <stainless steel tube>, <paper feeder (left)>, and <paper feeder (right)> to assemble into a paper feed assembly. The below picture uses <stainless steel tube>, <paper receiver left>, and <paper receiver right (with motor)> to assemble into a paper collection assembly. There are two sets of paper collection assemblies.

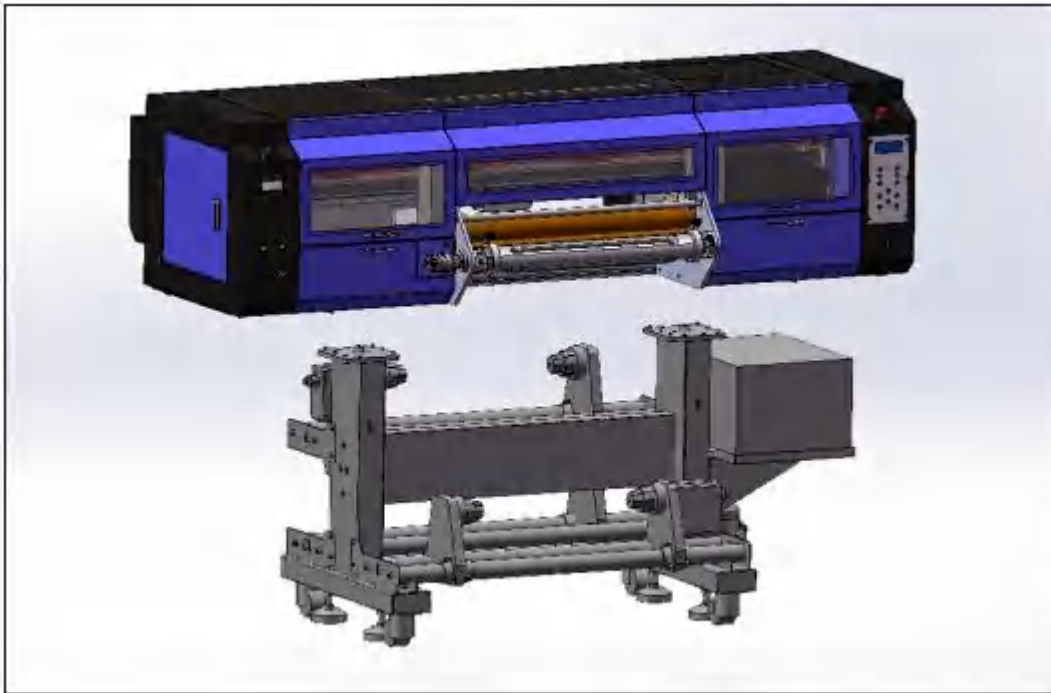


6. Place the paper collection assembly and paper placement assembly on the paper collection bracket in the correct direction, and connect them on the left and right sides with M8x20 screws, a total of 12 screws.

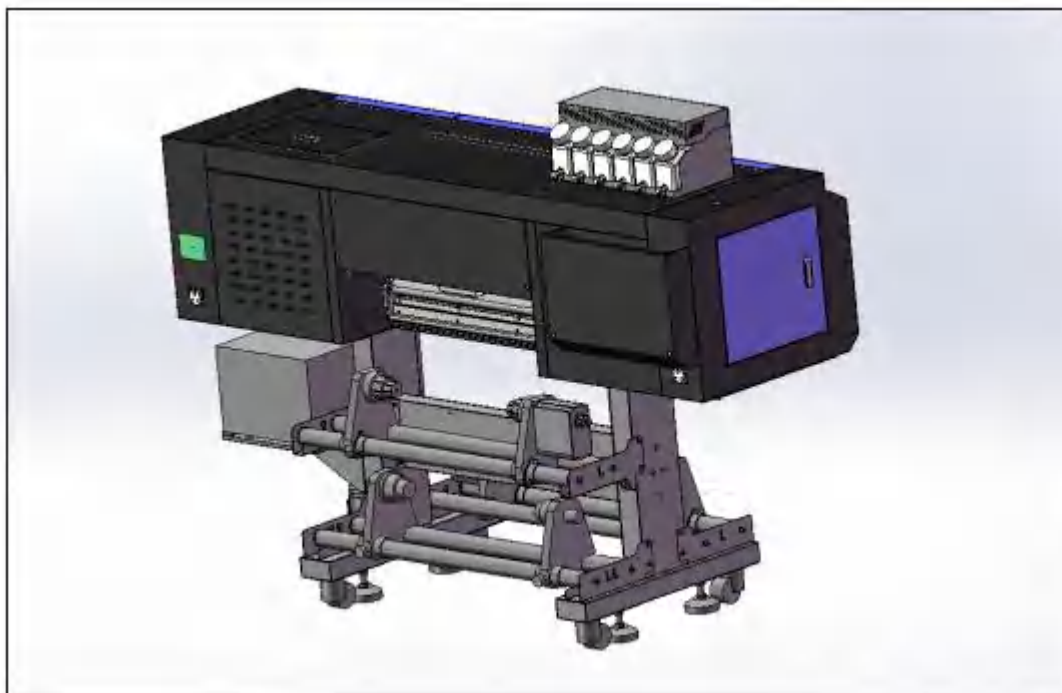




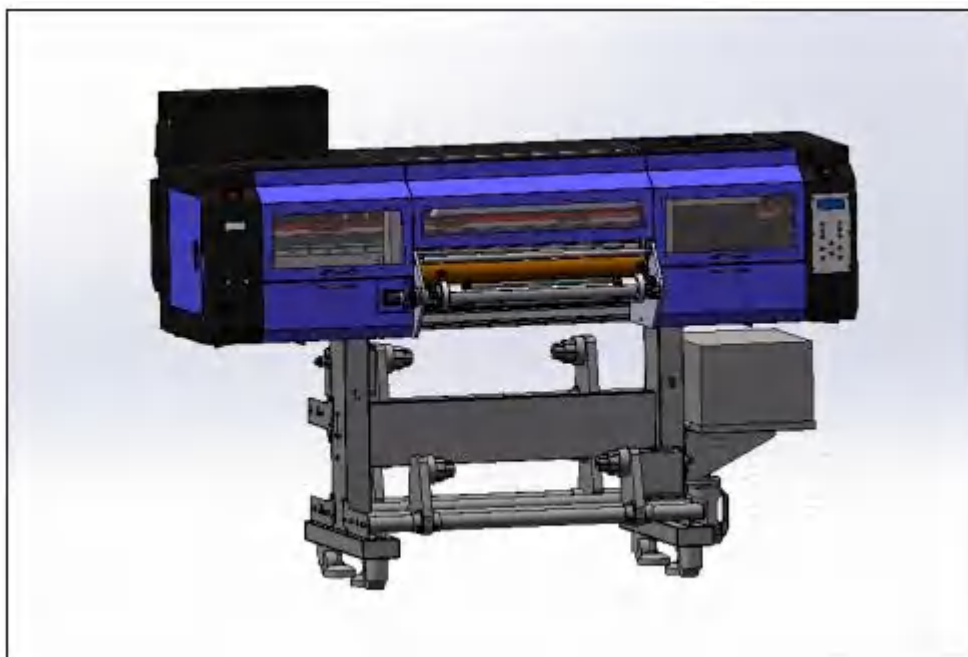
7. Install the <water tank fixing bracket> on the right machine leg with 4 M6x16 screws. And install the <waste ink bottle>.



8. Assemble the <main body> onto the machine legs in the correct direction and connect them with 12 M6x16 screws from the bottom.

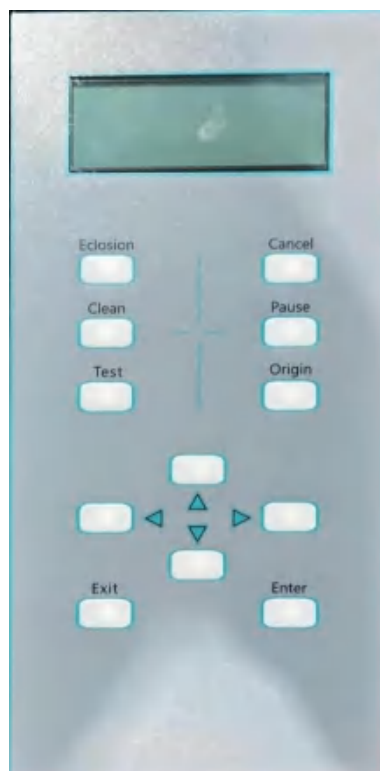


9. Install the ink tank assembly on the main body with M4x10 cross flat head screws. The body installation is complete.



10. Front view after the machine is installed

LCD panel button description



Eclosion-----Feathering settings

Cleaning/-----Automatic cleaning

Test/-----Print test image

Cancel/-----Cancel printing

Pause/-----Pause printing

Origin-----Set the current position as the origin

Up-----Print media rewind

Down-----Media advance

Left-----The nozzle carriage moves to the left

Right-----The nozzle carriage moves to the right

Exit-----Menu Back

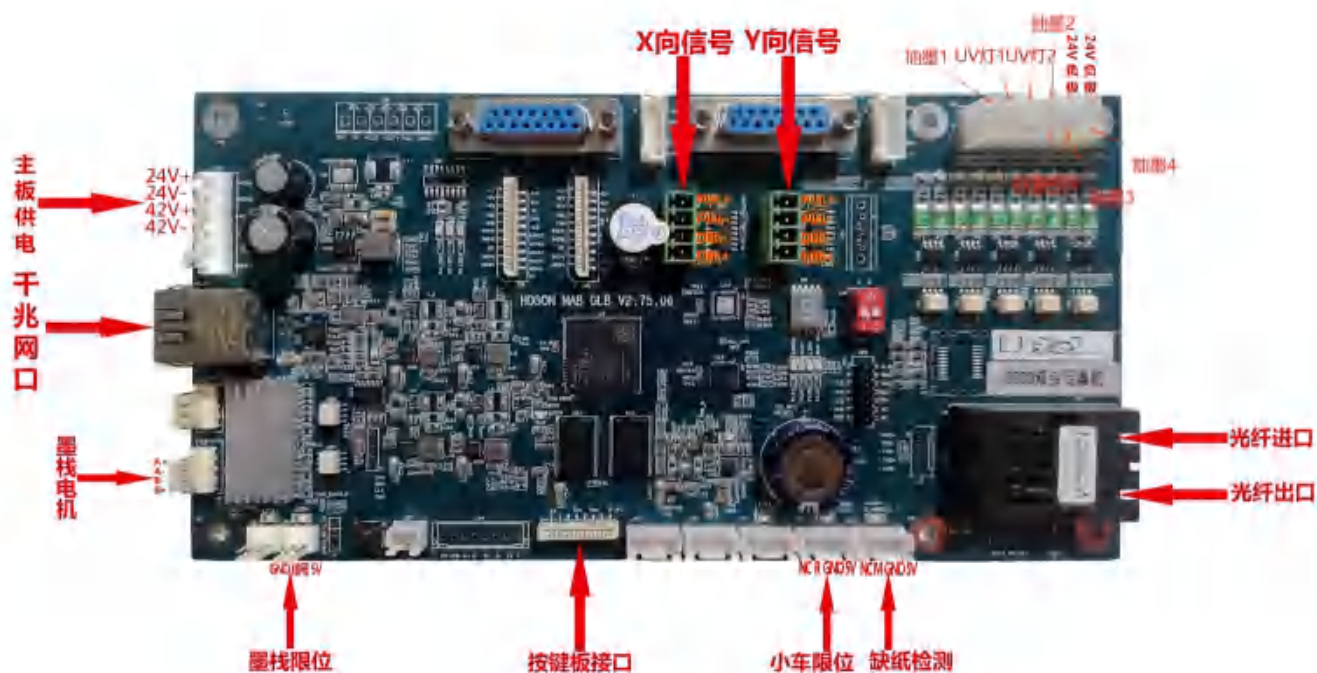
Confirm/Enter-----Menu confirmation, OK function key

(Different machines have different Keyboard Appearance, everything is based on the entity)

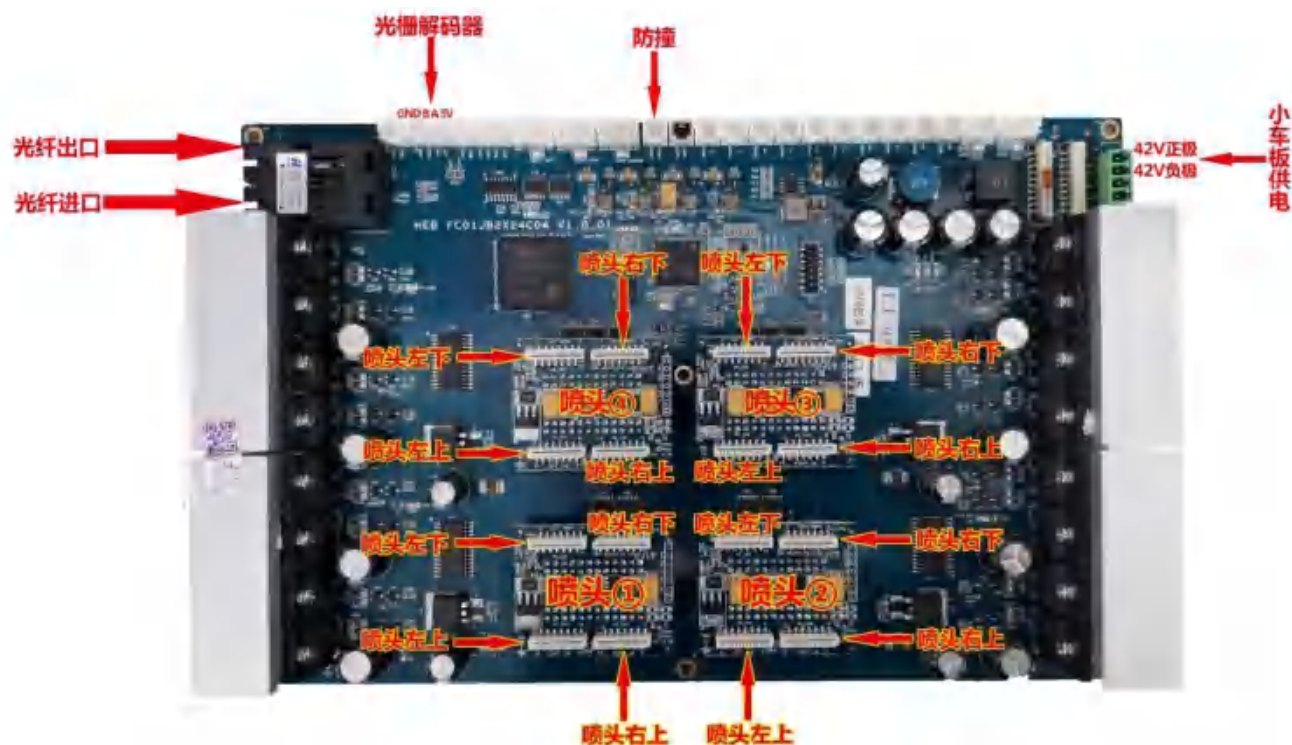


3.Board Description

Motherboard Port Description



Carriage Board Port Description



Note:

- Hot plugging of all interfaces on the motherboard is prohibited and must be done with the power off.
- The motherboard power supply is divided into DC24V and DC42V. Please check whether it is the corresponding pin when connecting.
- Avoid 180° bends when inserting optical fibers

Chapter 4 Operating Software Description

PC terminal settings and control software settings

1. Printing software overview

PrintExp software is a control software for printer printing. It has a friendly interface, is easy to operate, and meets the needs of customers in a hierarchical manner. It is mainly used for printer control, printer calibration, program upgrades, parameter import and export, and saving parameters to the board. In order to enable users to quickly and comprehensively understand the printing software, and to be familiar with the various functional operations, precautions, and possible problems, the following is an introduction to the printing software by category.

2. Software startup and connection

1 Start the print control software

The PrintExp software can be opened and used directly. First find the folder where the PrintExp software is placed, open the folder, find the PrintExp.exe application, and double-click the program to start the PrintExp software.

2 Software online settings

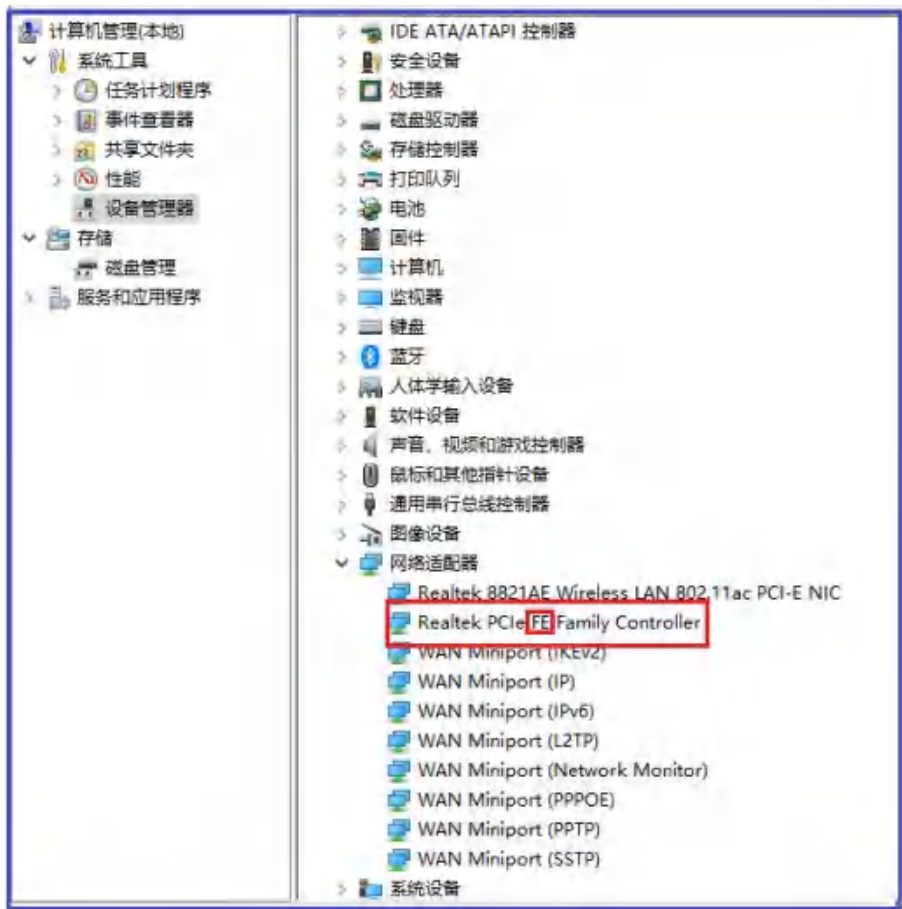
2.1 Gigabit network card judgment

Before connecting to the Internet, you must first check the computer's network card. A Gigabit network card is required to connect normally. The difference between a 100M network card and a Gigabit network card is:

Gigabit network cards have these characters: Gigabit, GBE, 10/100/1000M, RTL8169.

The 100M network card contains these characters: Fast Ethernet, 10/100, FE.

Enter the computer device manager and check the network adapter to determine the problem. The following figure shows a 100M network card:



2.2 Network Settings

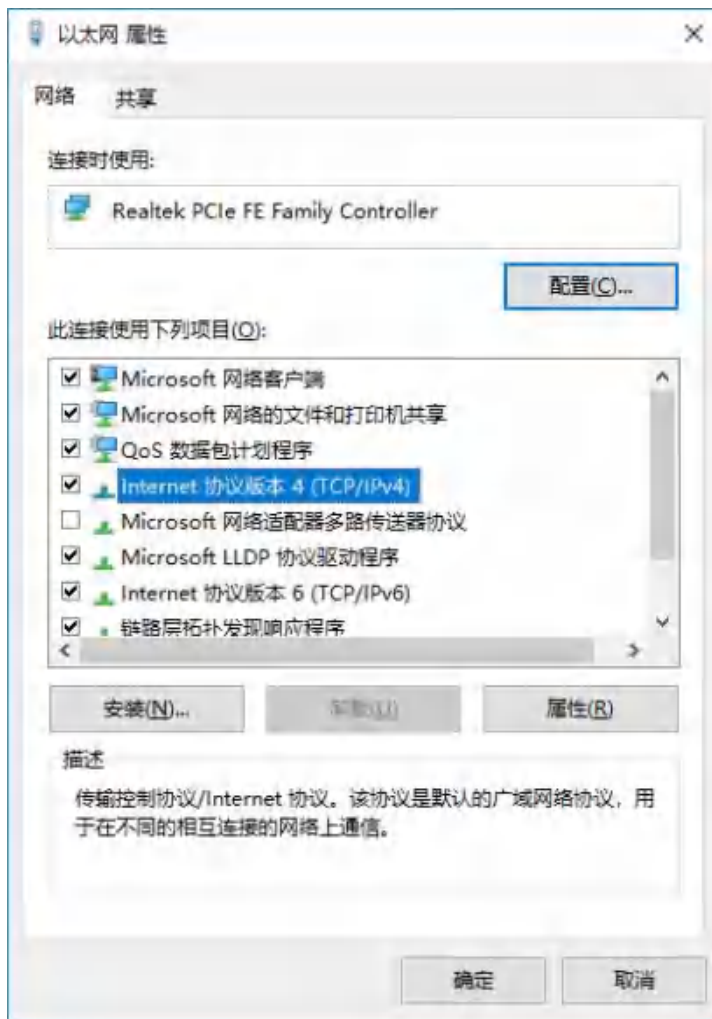
For the first use, you must set the network connection parameters before you can connect to the computer. Connect the TCP/IP network cable to set up the network.

How to set up the connection: Advanced menu → Network settings, you can see the network settings window, as shown below:



The server IP and server port settings are fixed and do not need to be set again. Just set the local IP. As shown in the figure above, enter 192.168.127.111 in the local IP position (note that the last three digits 111 can be any number in the range of 1-255 except 10), click "Set", and the setting is completed. Check whether the network connection can be connected normally. If it still cannot connect to the machine, you can use the following method:

Go to Control Panel → Network and Internet → View network status and tasks → Change adapter settings → Click Ethernet or Local Area Connection → Properties and the following window will appear:



Double-click the highlighted bar in the above image to enter the following window:



Enter the same address in the red box in the above picture, click OK, and it is done. Go back to the main interface window, and you can see that the first icon in the lower left corner of the main interface is green, indicating that it is connected. If it is still red, it means it is not online. You can unplug and plug the network cable once to try again to see if it is online. If it still cannot be connected, check whether the network cable is in good condition.

3. Operation steps before using the new machine

For a brand new machine, the following steps should be followed before use:

1 Setting IPaddress

For specific setting methods, see "Software Online Settings" in the above "Software Online and Startup"

2 Cleaning the nozzle

Ensure that all nozzles of the printhead can produce ink normally

3 calibration

The following chapter "Calibration" provides detailed information.

4 Image settings

The following chapter "Sharpening while striking" has a detailed introduction

4. Software main interface window introduction

The main interface of PrintExp software is as follows:



The main interface of PrintExp software mainly includes the main menu function area, shortcut button function area, print list function area, task preview display function area, print task information function area, status bar and other parts. The following introduces these parts respectively.

Main Menu

The menu tree of the main menu is as follows:



1 document

Click File in the menu bar to enter the file interface, which mainly includes the file directory window, image preview window, and image information display bar as shown below:



Serial number	name	Functional Description
1	File Directory Function Area	Select the folder where the print files will be stored
2	Print file preview ribbon	Display all print files under the specified print file
3	Print file information display function area	Displays the print information of the selected print file

If you select the preview image and right-click, a menu list will pop up as shown below:



Serial number	name	Functional Description
1	Name sort	Sort thumbnails by name
2	Time Sorting	Sort thumbnails by editing time
3	Re-preview	Regenerate the preview image of the currently specified print file
4	Refresh Catalog	Refresh all print files in the specified print file folder
5	Deleting Files	Deleting a print file
6	Print now	Add the current print file to the print task list and print it immediately
7	Add Print	Add the selected print file to the print task list
8	Open Directory	Open the folder corresponding to the print file

2 Print

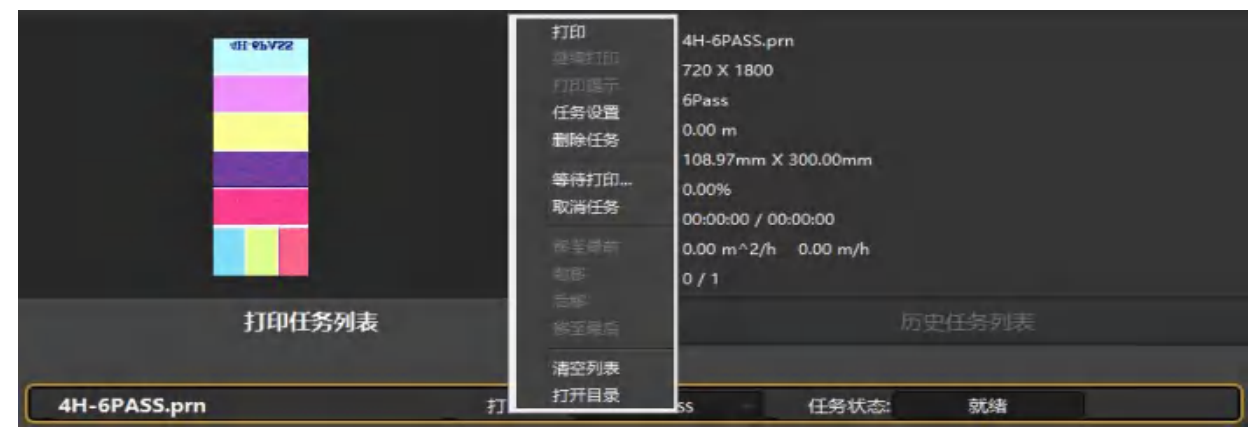
Click Print in the menu bar to enter the print interface, as shown below:



Serial number	name	Functional Description
1	Main menu function area	The area that displays the system's main function buttons
2	Shortcut button ribbon	An area that displays frequently used command buttons
3	Task List Ribbon	An area that displays all tasks currently being printed or waiting to be printed
4	Historical mission area	Shows the area that has been printed
5	Task preview shows the ribbon	The area that displays the preview of the selected print job
6	Print task information ribbon	The area that displays all printing information of the current print task
7	Status Bar	The area that displays the current working status or connection status of the system

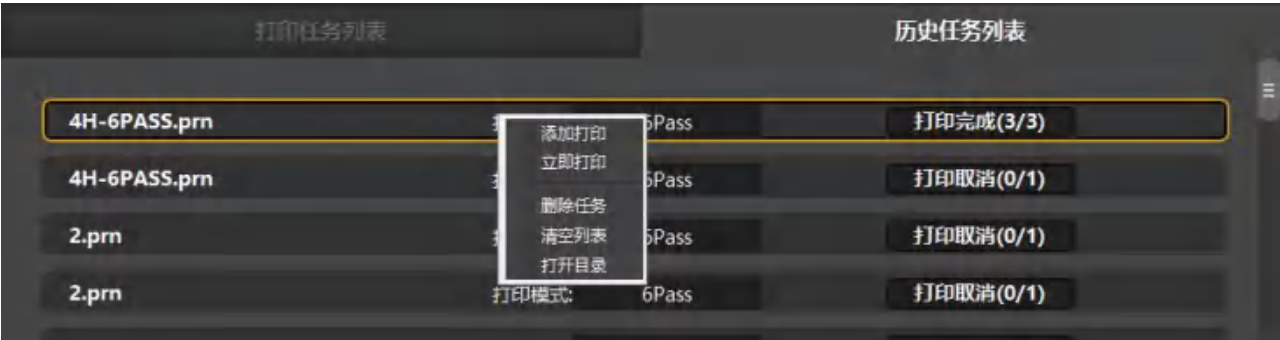
The print interface includes the print task list window, the history task list window, the print task preview window and the print information window; select a task in the print task list, right-click and a lower-level menu will pop up. As shown below:

2.1 Open Task List



Serial	name	Functional Description
1	start	Execute Print
2	Continue	Continue printing in paused state
3	Printing Tips	Display the number of copies when printing multiple copies
4	Task Settings	Set task printing parameters
5	Deleting a task	Remove from print job list
6	Waiting to print	Add the current task to the print queue
7	Cancel a task	Cancel printing or cancel waiting to print status
8	Move to front	Move the selected task to the front of the task list
9	Move forward	Move the print job forward one position
10	Move Back	Move the print job one position back
11	Move to the	Move the selected task to the end of the task list
12	Clear list	Clear all tasks in the print task list
13	Open Directory	Open the folder where the print file is located

2.2 Historical Task List



Serial	name	Functional Description
1	Add Print	Add a task to the print task list
2	Print now	Add the task to the print task list and print it immediately
3	Deleting a task	Delete the task from the print history list
4	Clear list	Clear all tasks in the history print list
5	Open Directory	Open the folder where the print file is located

2.3 Task attributes

Double-click a task in the print task list to enter the task properties window of the task, as shown below:



Serial number	name		Functional Description
1	Print Settings	Number of copies	Set the number of times the task is repeated
2	Step-by-step settings	Horizontal width	Horizontal continuous exposure
		Vertical width	Vertical continuous exposure
		Horizontal spacing	Horizontal step-by-step interval (mm)
		Vertical spacing	Vertical continuous exposure interval (in millimeters)
3	Area Printing	X Position	The starting printing position in the X direction of the print file
		Y Position	The starting printing position in the Y direction of the print file
		width	Print the selected area in the document
		high	Print height of the selected area in the print file
4	Mission Information		Including the task name, task printing accuracy, print task size, print task color number, print task pass number
5	Multiple ink volume		Set the ink volume multiples for white ink and color ink
6	Ink cut-off settings		Set the percentage of normal ink output or reduce the ink output
7	Ink volume statistics		Count the individual ink volume of a single task and the total ink volume and ink cost of a single task

3 set up

Click Settings in the menu bar to enter the settings interface, as shown below:



Serial number	name		Functional Description
1	Nozzle Selection		The two-head machine cannot be selected, and the four-head machine can choose one-three or two-four heads
2	X White Edge		Set the starting position for printing
3	General settings	Print speed	Set the print speed to low, medium, or high
		Printing direction	Set the printing direction to left printing, right printing, bidirectional printing

		Pre-press flash printing	Set prepress flash on or off
		Automatic cleaning	Set automatic cleaning off, flash cleaning, weak cleaning, medium cleaning, strong cleaning
4	Color Bar Settings	Color bar position	The color bar position can be set to left color bar, right color bar, both color bars, or turn off color bars.
		Color Bar Mode	Three modes: moisturizing, conditioning, moisturizing + conditioning
		Color bar density	The color bar density can be set to weak, medium, or strong
		Color bar width	Width of the color bar
		Color bar distance	White space between color bars and printed image
5	Feather settings	Feathering Range	Feathering range selection
		Feather type	Feathering form selection
6	Ink filling function		Start and stop ink loading function
7	Advanced Features	Channel Control	Set the nozzle to output all, only white, or only color

		Mirror Printing	Mirror printing or non-mirror printing
8	Automatic white jump	Skip mode	Turn off white jump, continuous white jump, step white jump
		Automatic reset	Yes or No Automatic Return
		speed	Automatic reset speed
		Waiting time	Waiting reset time
9	Automatic cleaning in standby mode		Automatic cleaning time when the machine is turned on and not printing

4. Calibration

Click Calibration in the menu bar to enter the calibration interface, as shown below:



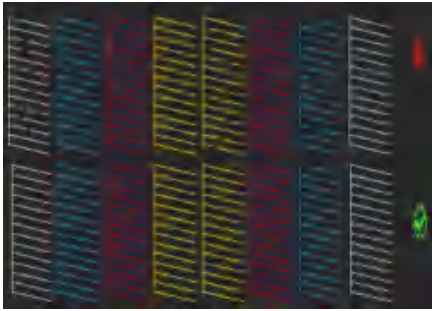
Serial numb er	name		Functional Description
1	Printhead detection	Nozzle detection	Check whether the ink is flowing out of each nozzle of the print head properly.
		Vertical detection	Check whether the nozzle is tilted left or right
		Tilt left and right	Check whether the left and right planes of the nozzle are parallel to the horizontal plane
		Tilt forward and backward	Check whether the front and rear planes of the nozzle are parallel to the horizontal plane
2	Step		Calibrate the reference step parameters and fine-tune

	calibration		the step parameters for different pass modes
3	Nozzle distance	Printhead horizontal spacing calibration	Calibrate the horizontal spacing between printheads
		Nozzle longitudinal spacing calibration	Calibrate the vertical spacing between nozzles
4	Color calibration		Calibrate the vertical and horizontal position of each channel of the printhead
5	Bidirectional calibration		Calibrate bidirectional offset at different bidirectional printing speeds

3.1 Nozzle detection function introduction

Click "Nozzle Detection" and the system will print out a nozzle detection pattern, such as the nozzle

status diagram of I3200A1, as shown below:



The state diagram for the above situation is:

Maybe there is a blockage and it needs to be cleaned until the nozzles can spray ink at their best.

3.2 Vertical Detection Function Introduction

Click "Vertical Detection" and the system will print out a vertical detection pattern, such as I3200A1

Nozzle status diagram, as shown below:



When the calibration diagram on the right side of the above picture appears, you need to adjust the vertical direction of the printhead until the vertical calibration diagram reaches the correct state..

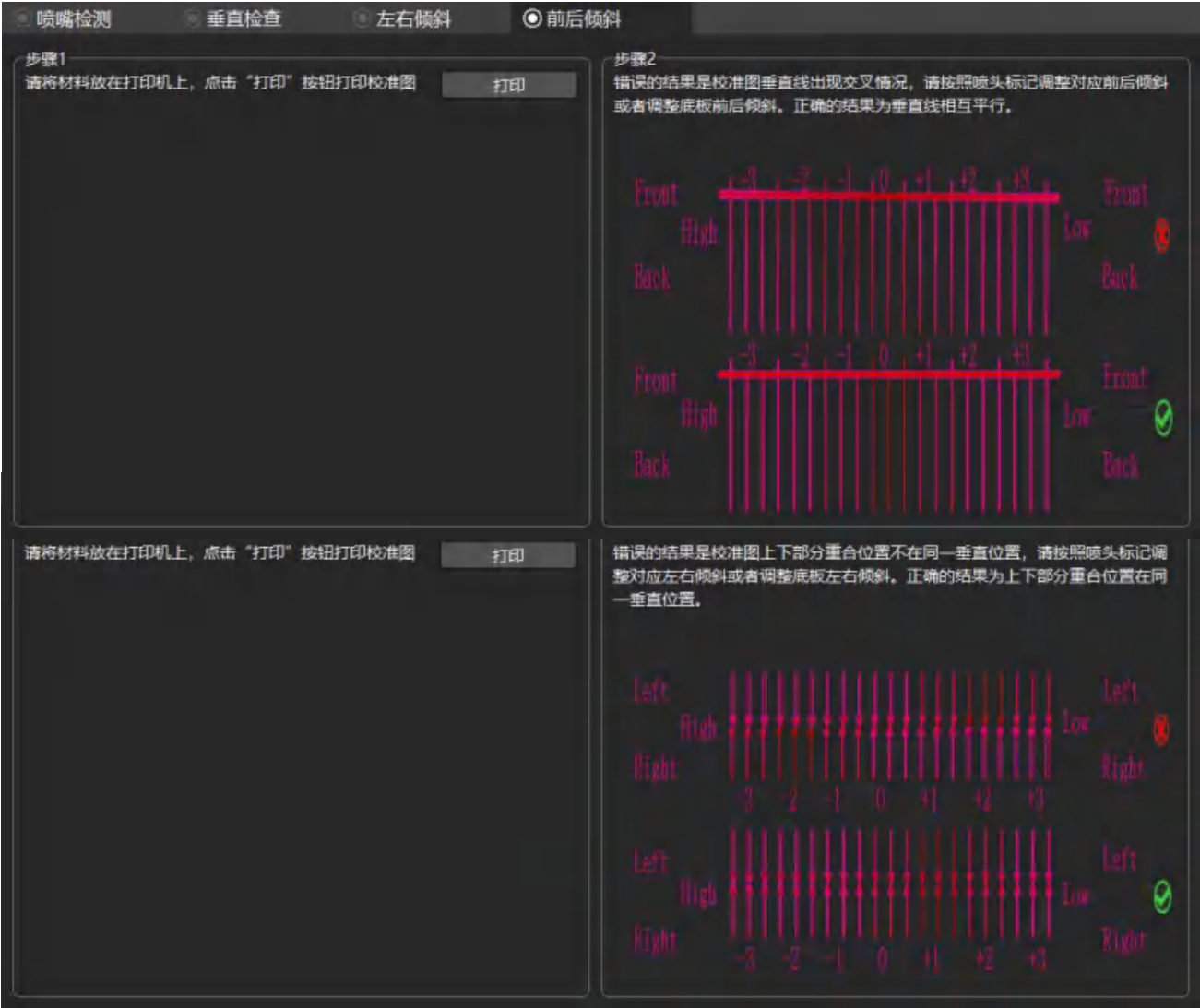
3.3 Tilt left and right

Click "Left and Right Tilt", the system will print out left and right tilt patterns, such as the nozzle status

diagram of I3200A1, as shown below: The correct result is that the upper and lower parts overlap at the same vertical position. If not, it proves that the left and right sides of the nozzle are at the same horizontal position.

3.4 Tilt forward and backward

Click "Front and Back Tilt", the system will print out the front and back tilt pattern, such as the nozzle status diagram of I3200A1, as shown below:



The correct result is that the vertical lines are parallel to each other.

3.5 Step Calibration Function Introduction

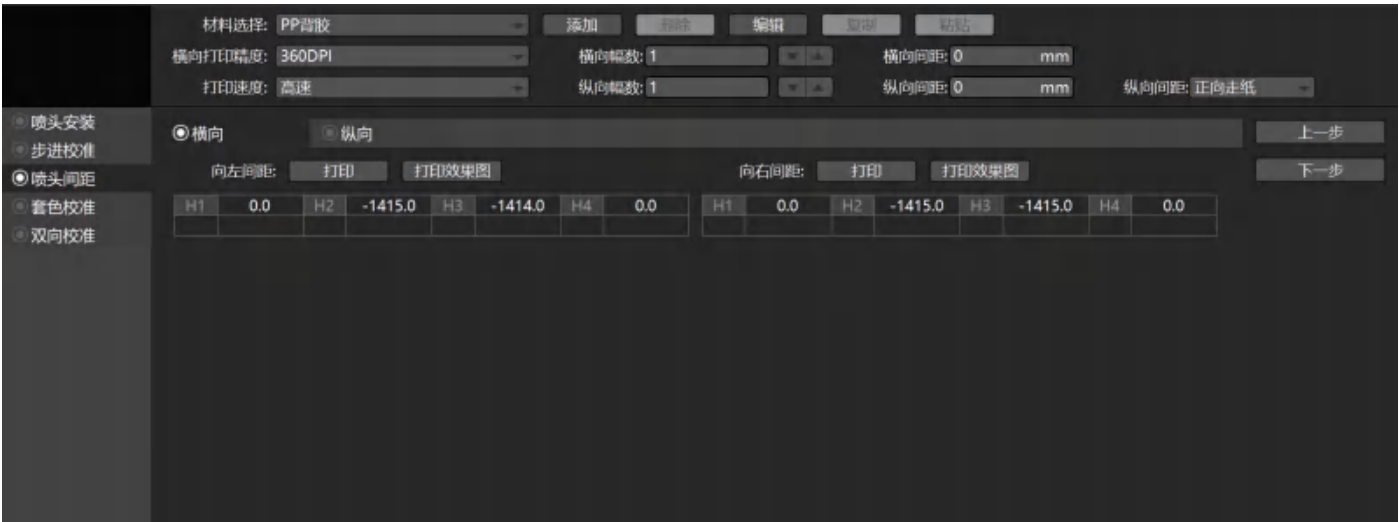
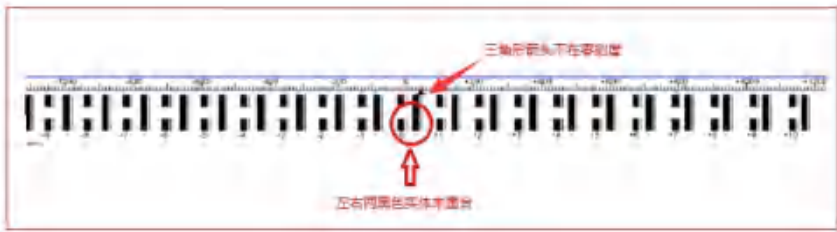
Click "Print Calibration Chart" under the Reference Step Box, and the system will print it. For example, the step calibration chart of EPSON DX5 printer is as follows:



The correct calibration reference line and the scale line completely coincide with each other at the 0 point.

3.6 Introduction to printhead lateral spacing calibration

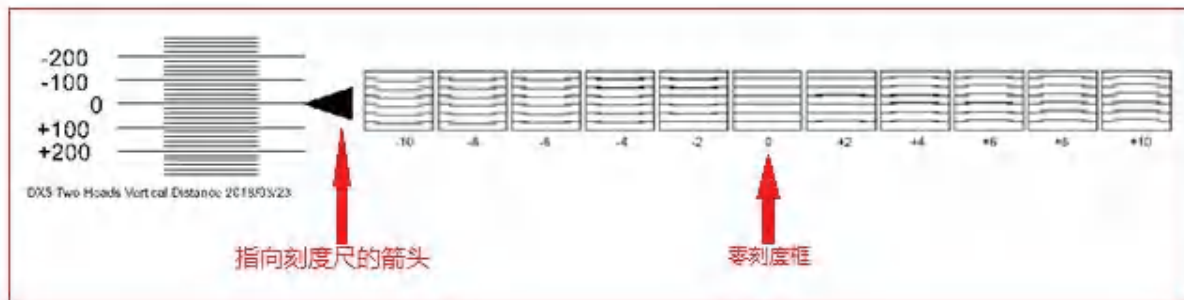
Click "Print Left/Right Calibration Chart" under the Print Head Horizontal Spacing Calibration box and set the calibration parameters according to the calibration chart.



The final debugging is correct so that the calibration line and the reference line coincide at position 0.

3.7 Introduction to Printhead Longitudinal Spacing Calibration

Click "Print Calibration Chart" under the Print Head Vertical Spacing Calibration box, and the system will print

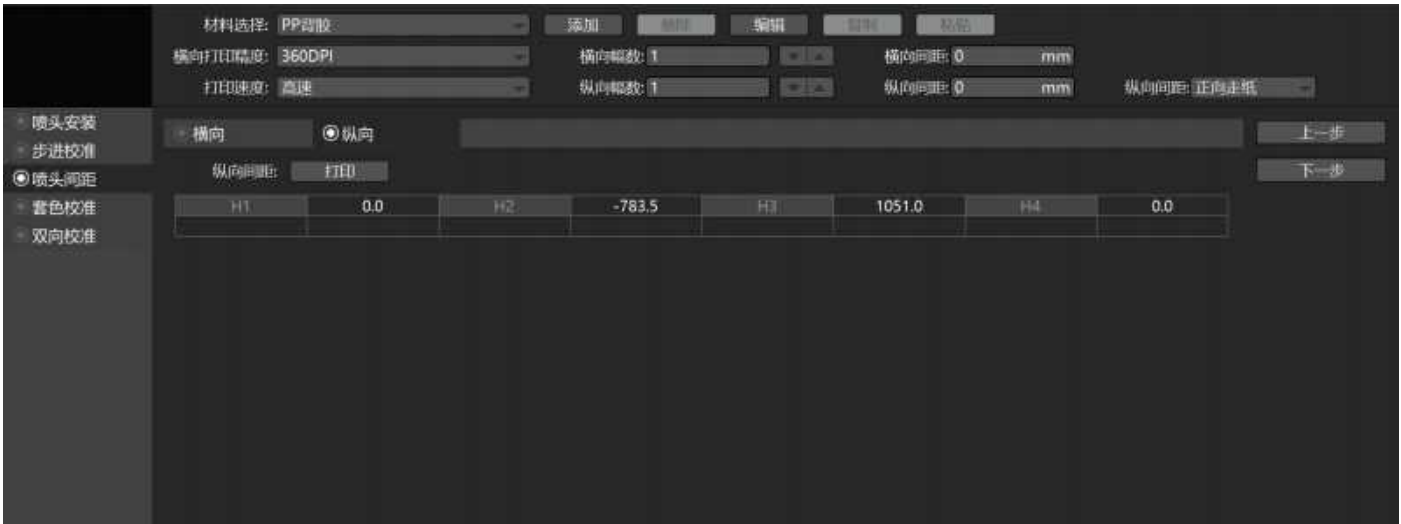


The above picture shows that the longitudinal distance between the nozzles is normal. All the lines in the 0-point scale frame are parallel, and the arrow on the left points to the 0-point scale line. If the longitudinal distance is not calibrated, the following picture will appear:



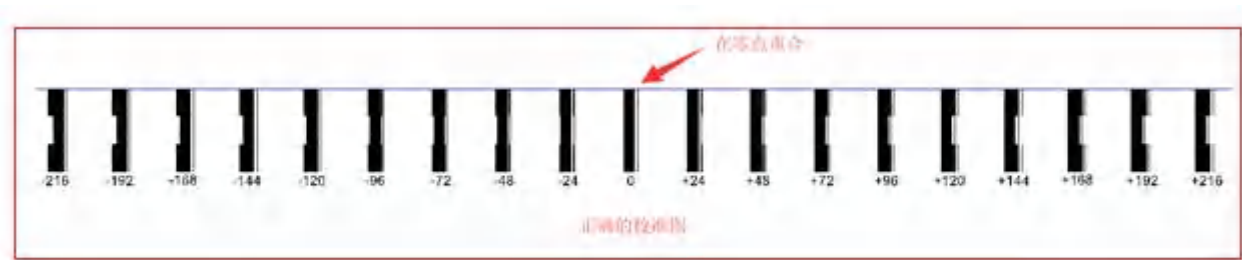
In the above figure, all the lines in the 0-point scale frame are not parallel, but all the lines in the -4-point scale frame are parallel, so adjustment is required. Subtract 4 from the original calibration value and recalibrate until all the lines in the 0-point scale frame are parallel.

The adjustment window is as follows:

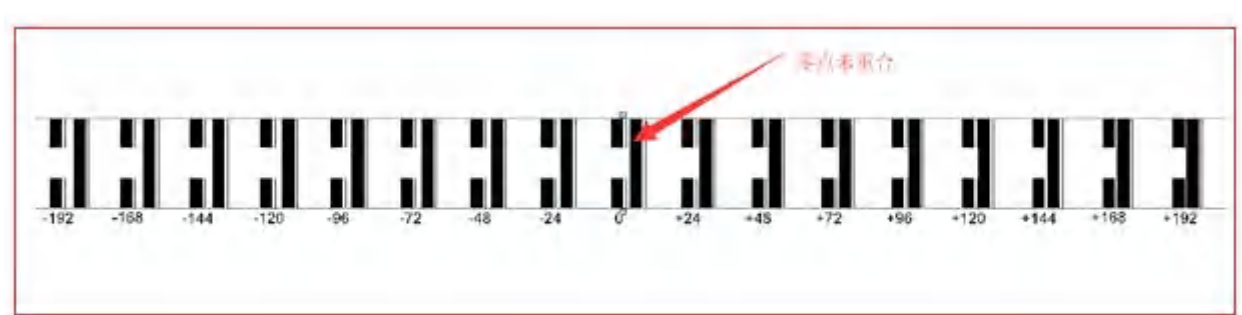


3.8 Bidirectional calibration function introduction

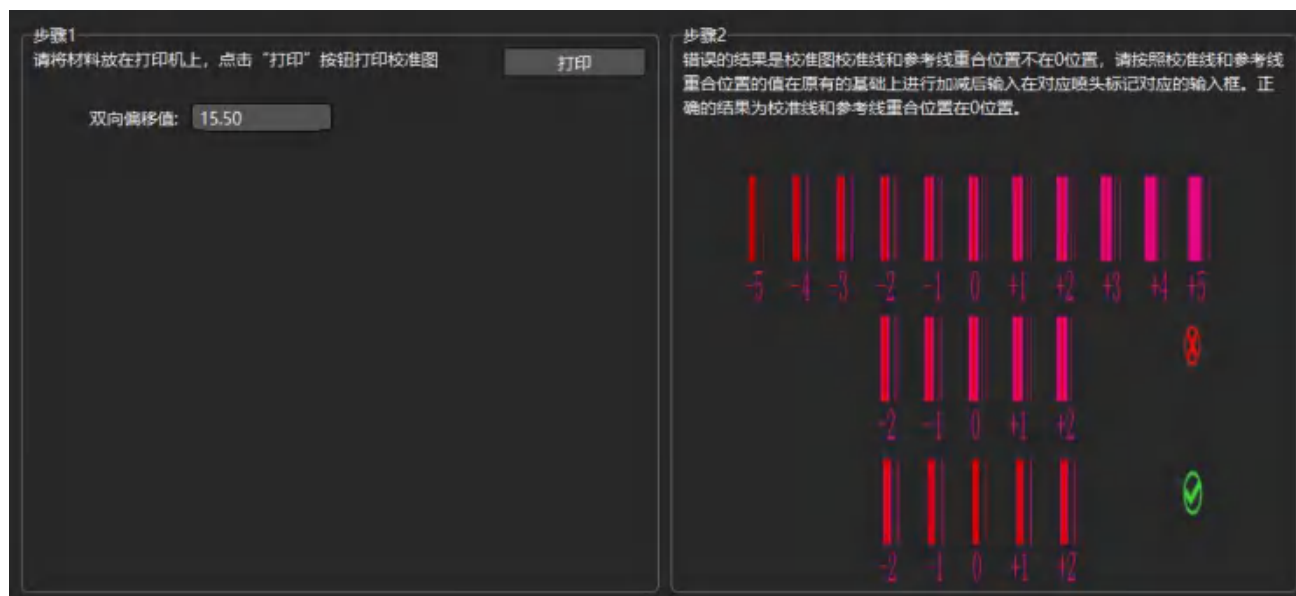
Click "Print Calibration Chart" in the Bidirectional Calibration interface and the system will print



The above picture shows the calibration situation, and the uncalibrated situation is shown below:

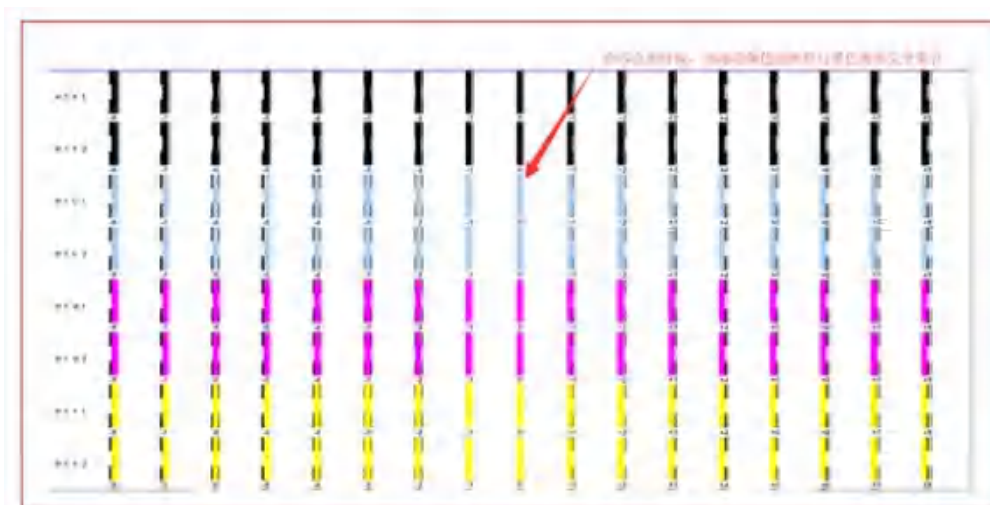


You need to fill in the calibration value and recalibrate, as shown below:

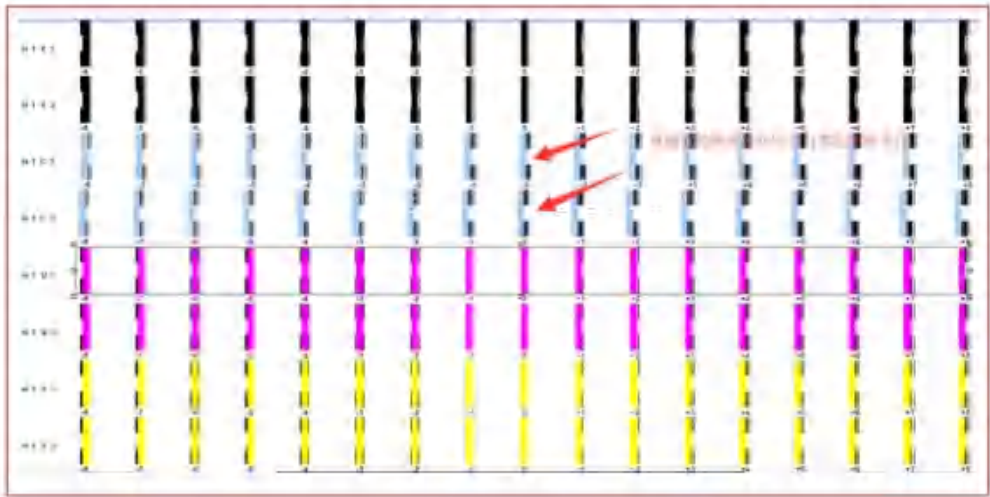


3.9 Color calibration function introduction

Click "Print Left/Right Calibration Chart" in the color calibration interface, and the system will print



The above picture shows the calibrated situation, and the uncalibrated situation is shown below:



You need to fill in the calibration value and recalibrate, as shown below:



4 Voltage Window

Click the voltage in the main menu to enter the voltage window, as shown below:



Serial	name	Functional Description
1	Regulated voltage offset	Set the offset voltage of the specified nozzle channel
2	Refresh voltage	Update the current nozzle channel voltage value
3	Setting Voltage	Save the current nozzle voltage offset value
4	Nozzle temperature (read only)	Displays the specified nozzle temperature

5. Advanced

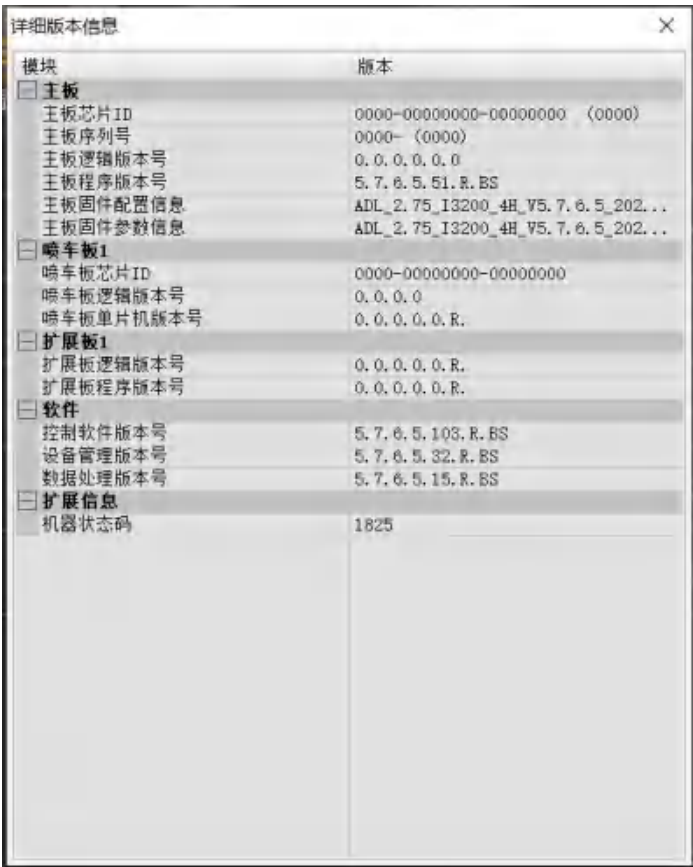
Click the main menu Advanced to enter the advanced interface, as shown below:



Serial	name	Functional Description
1	Factory settings	Entrance to the factory parameter setting interface
2	Version Information	Display system board related version information
3	Print with sharp edges	Basic settings and selection of the precision mode for printing while RIPing
4	Advanced Settings	Communication settings, installment encryption, switching color sequence, broken hole compensation, equipment maintenance, printing statistics, statistical information, printing history, printing mode, sharp picture color sequence, powder shaking machine interface.

5.1 Version Information

Click Version Information on the Advanced Interface to enter the interface as shown below:

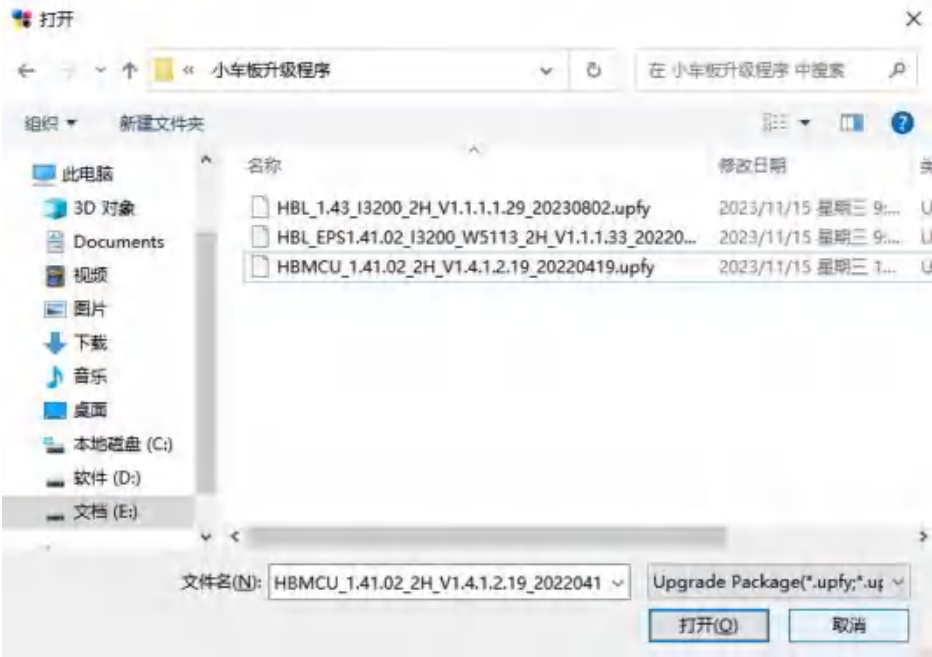


主板序列号	0000-00000000-00000000 (0000)
主板程序版本号	5.7.6.5.51.R.BS
控制软件版本号	5.7.6.5.103.R.BS
固件配置信息	ADL_2.75_I3200_4H_V5.7.6.5_20231025
固件参数信息	ADL_2.75_I3200_4H_V5.7.6.5_20231025

4.1 upgrade

You can upgrade the mainboard logic, spray board logic, mainboard program, and MCU program respectively. After upgrading the program, you must power off and then power on again, click refresh, and check whether the newly upgraded program has been updated. The upgrade method is as follows:

Click the "Upgrade" button in the above picture, and the following window will pop up:



Select the program to be upgraded, and then click the "Open" button to enter the upgrade window. Click "OK" to enter the upgrade. After the upgrade is completed, it will prompt whether the upgrade is successful. If the upgrade is successful, power on again, and then check the version information to confirm that it has been upgraded.

4.2 Sharp while hitting

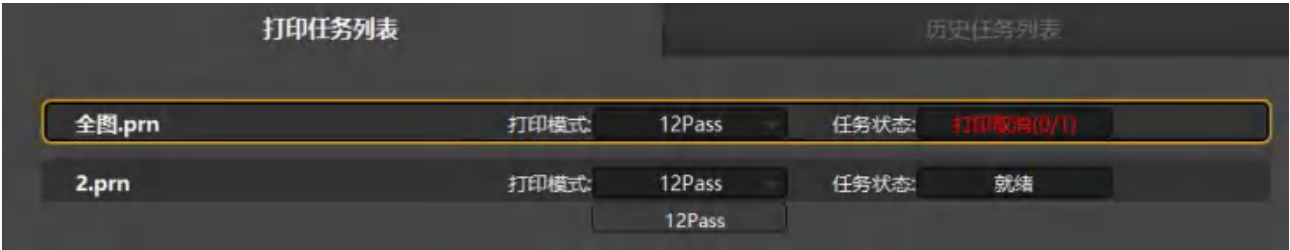
In the advanced interface, click the "Sharpen while printing" button to enter the following interface:



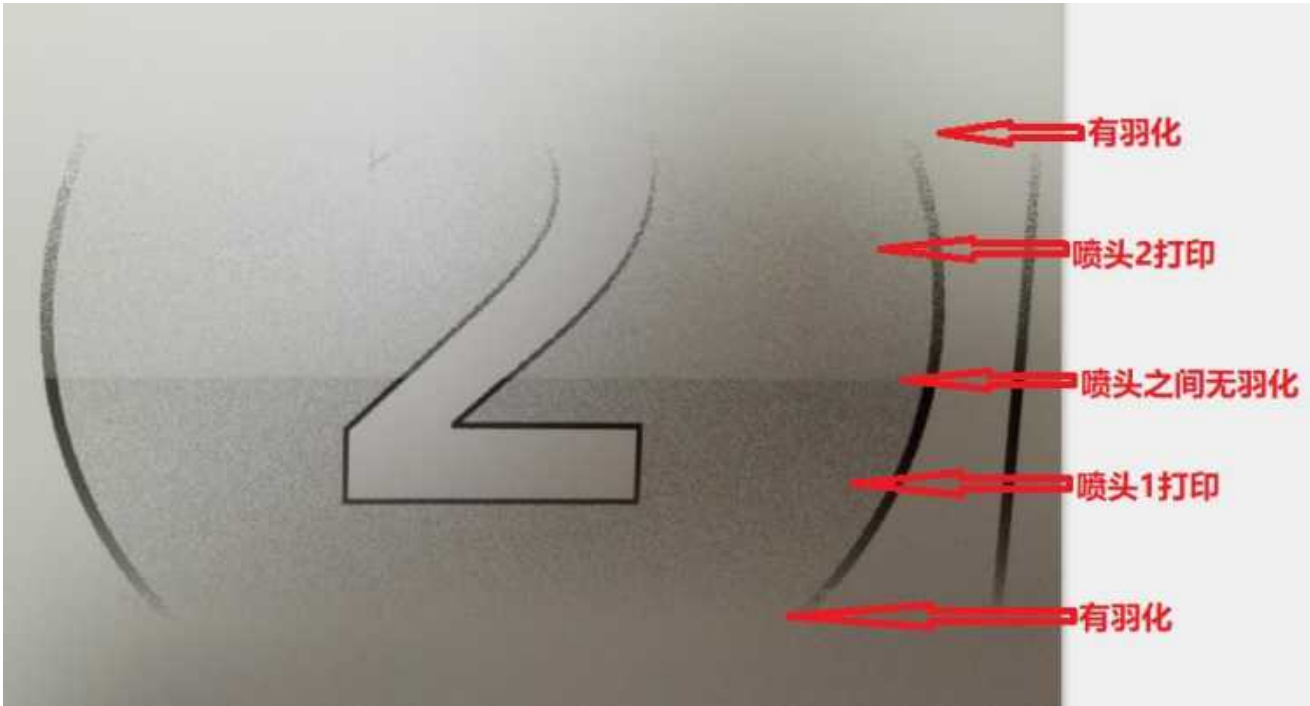
Serial number	name		Functional Description
1	Basic Settings	Buffer ratio	Indicates RIP to the set valuePrinting starts.
		Port Number	The default is 9100
2	Print Mode	By RIPSoftware confirmation	By RIP softwareDecideWhile RIPPrint mode in printing situation
		Determined by printing software	By PrintControl software determinesWhile RIPPrint mode in printing situation

- How to set the printing mode in the printing software: The default printing mode of the dual-head machine cannot be changed

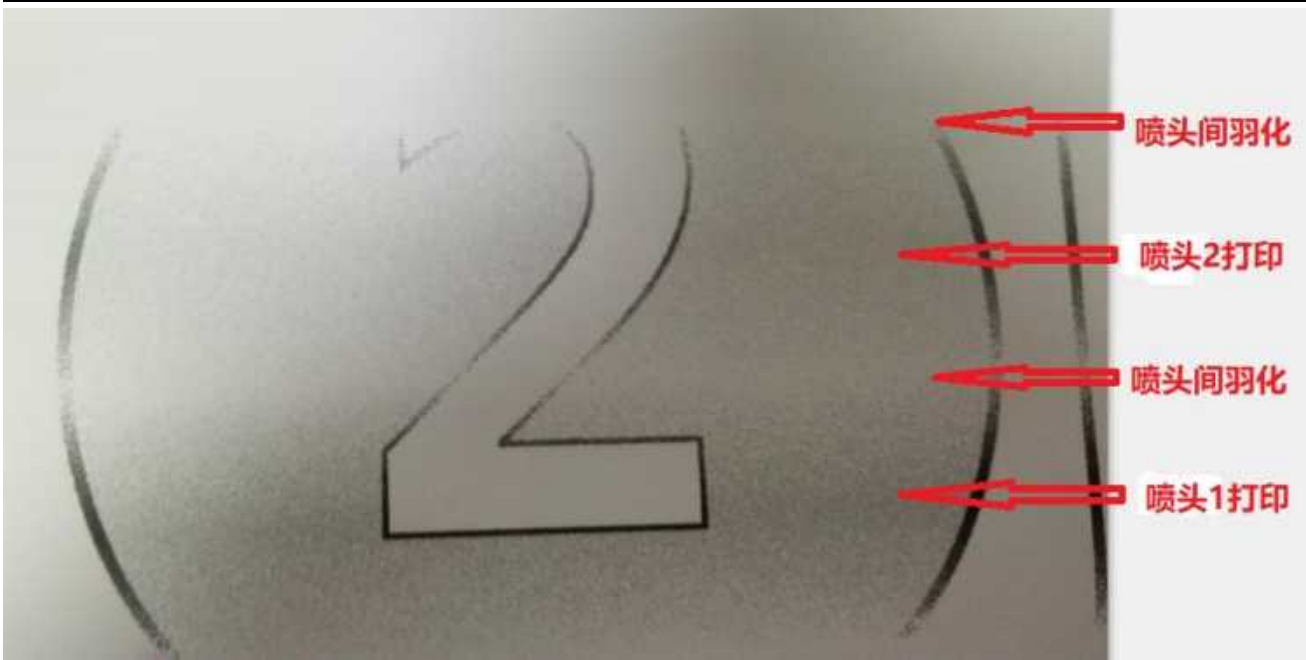
Open the printing software, add the print task to the print list, click the "Print Mode" drop-down list of the print task, and select different print modes, as shown below:



Serial	name	Functional Description
1	VSD_L	Normal mode large point printing, the effect is as shown in Figure 7-3-1
2	VSD_M	Normal mode midpoint printing
3	VSD_EXT1	Normal mode extension point printing
4	VSD_L_H	Horizontally fused large dots printing, the effect is as shown in Figure 7-3-2
5	VSD_L_V	Vertical fusion large dot printing, the effect is as shown in Figure 7-3-2



Normal mode diagram7-3-1



Horizontal fusion Figure 7-3-2

- Monte RipHow to set the print mode in software

4.3 Communication Settings

通信设置

通信设置

☐ USB通信

☒ TCP通信

TCP设置

Ethernet: 以太网

本地主机IP: 192 . 168 . 127 . 111

服务器IP: 192 . 168 . 127 . 10

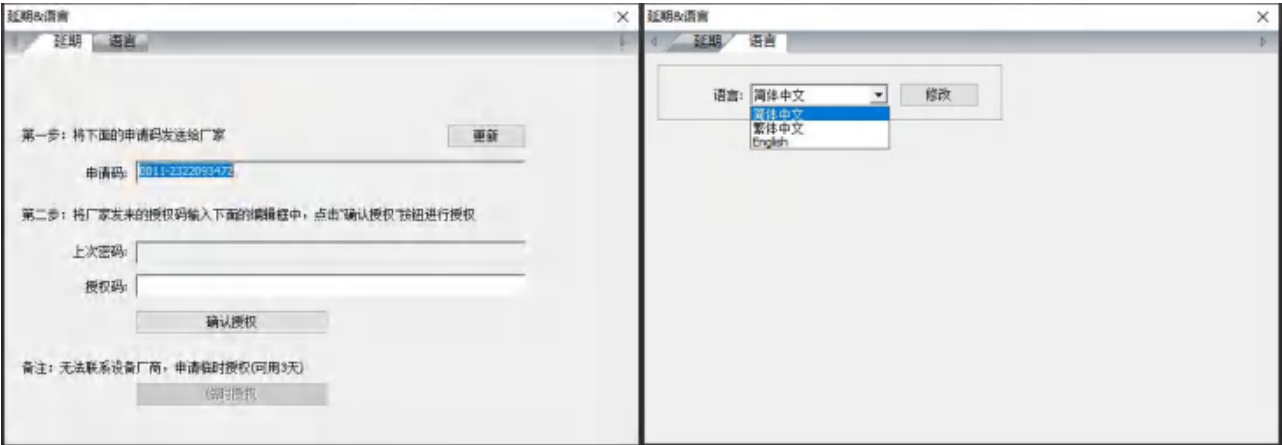
服务器端口: 5001

设置

取消

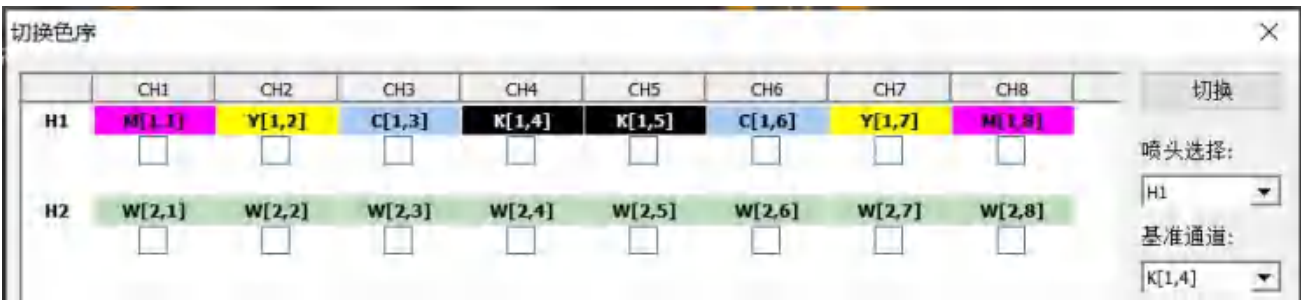
4.4 Installment encryption

According to needs, if you need to encrypt the machine, you need to provide an application code to the company to apply for an authorization code. If you need to change the software interface language, you can choose from three languages: Simplified Chinese, Traditional Chinese, and English in the language bar.



4.5 Switch color order

Select the two colors you want to change and switch them to quickly switch color channels.

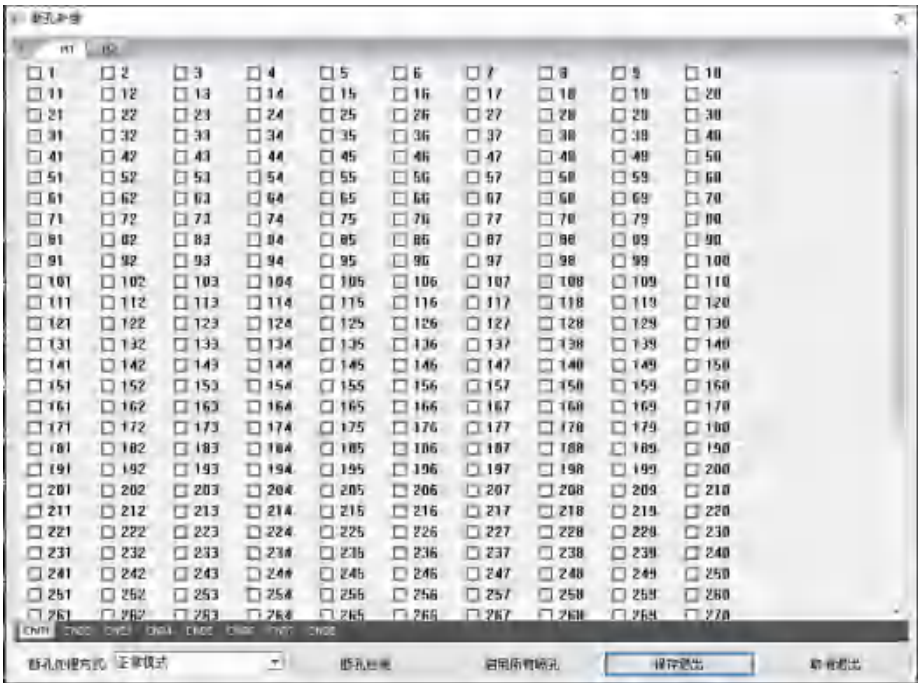


The color marked in the picture is the color corresponding to the ink sac



4.6 Break hole compensation

In the Advanced Settings menu, click the Broken Hole Compensation button to enter the following interface:



Serial number	name	Functional Description
1	Break hole treatment method	Normal mode, Close nozzle only, Close and compensate
2	Broken hole detection	Detect the broken hole status of each column of nozzles

3	Enable all vents	All nozzles of the nozzle can be enabled or disabled.
4	Save and exit	Save the current settings and exit the broken hole setting state
5	Cancel Exit	Do not save the current settings and exit the broken hole setting state directly

Press the right button of the mouse in the nozzle setting interface to pop up a drop-down menu, as shown below:



Serial number	name	Functional Description
1	Select the entire row	Select the entire row at the same time
2	Unselect the entire row	Deselect the entire row at the same time

3	Select all rows	Select the entire column at the same time
4	Unselect the entire column	Deselect the entire column at the same time
5	Select all pages	Select the entire page at the same time
6	Uncheck the entire page	Deselect the entire page at the same time

4.7 Equipment maintenance

Statistics of equipment maintenance information for easy inspection and reminder of maintenance time

[illegible]

4.8 Print Statistics

Statistics of printing area, printing time and ink consumption

[illegible]

4.9 Statistics

Statistics on equipment usage and basic equipment information

统计信息

类型	值
基础信息	
厂家名称	
设备名称	
设备编号	
首次启动时间	2000/0/0
启动次数	0 次
打印信息	
总面积	0.00 m²
最近30天	0.00 m²
最近60天	0.00 m²
总时间	0 秒
总PASS数	0
总打印米数	0.00 m
X总移动距离	0.00 m
墨水信息—总计(打印, 闪喷)	
K	0.00 (0.00, 0.00) ml
C	0.00 (0.00, 0.00) ml
M	0.00 (0.00, 0.00) ml
Y	0.00 (0.00, 0.00) ml
W	0.00 (0.00, 0.00) ml
R	0.00 (0.00, 0.00) ml
G	0.00 (0.00, 0.00) ml
B	0.00 (0.00, 0.00) ml
O	0.00 (0.00, 0.00) ml
W	0.00 (0.00, 0.00) ml

刷新

退出

4.10History Printing

Detailed information about the printed content

打印历史

打印日期	任务名称	打印模式	打印尺寸	打印幅数	面积(m ²)	速度	份数	羽化幅度	打印速度	耗时(m)
2023-11-15 14:09:41	236.ppt	8Pass	0.18/0.18	1/1	0.048	100.0%	1		360x2400	84375
2023-11-15 14:06:20	1.ppt	8Pass	0.03/0.18	0/1	0.048	17.8%	1		360x2400	13782
2023-11-15 11:33:56	44.ppt	8Pass	0.20/0.40	0/1	0.160	48.8%	1		360x2400	64532
2023-11-15 10:34:55	44.ppt	8Pass	0.40/0.40	1/1	0.160	100.0%	1		360x2400	147750
2023-11-15 09:10:31	33.ppt	8Pass	0.54/0.54	1/1	0.218	100.0%	1		360x2400	207841
2023-11-14 15:27:55	44.ppt	8Pass	0.40/0.40	1/1	0.160	100.0%	1		360x2400	146922
2023-11-14 15:18:31	33.ppt	8Pass	0.54/0.54	1/1	0.218	100.0%	1		360x2400	210546
2023-11-14 15:14:51	2022.ppt	8Pass	0.55/0.58	1/1	0.336	100.0%	1		360x2400	198734
2023-11-14 14:05:26	~section0.ppt		0.07/0.18	0/1	0.048	35.4%	1		360x2400	29000
2023-11-14 14:04:11	~section0.ppt		0.00/0.18	0/1	0.048	0.0%	1		360x2400	0
2023-11-14 13:58:18	12.ppt	8Pass	0.15/0.18	1/1	0.048	100.0%	1		360x2400	83829
2023-11-14 13:58:18	1.ppt	8Pass	0.02/0.18	0/1	0.048	8.5%	1		360x2400	6219
2023-11-14 13:11:55	W1-9色块.ppt	12Pass	0.31/0.31	1/1	0.184	100.0%	1		720x1800	251703
2023-11-14 13:09:50	11.ppt	8Pass	0.10/0.10	1/1	0.038	100.0%	1		360x2400	60000
2023-11-14 13:43:09	1.ppt	8Pass	0.19/0.19	1/1	0.048	100.0%	1		360x2400	83891
2023-11-14 11:42:46	1.ppt	8Pass	0.00/0.19	0/1	0.048	0.0%	1		360x2400	0
2023-11-14 11:40:41	1.ppt	8Pass	0.13/0.19	0/1	0.048	69.8%	1		360x2400	39781
2023-11-14 11:39:57	1.ppt	8Pass	0.12/0.18	0/1	0.048	82.0%	1		360x2400	37671
2023-11-14 11:35:01	1.ppt	8Pass	0.18/0.18	1/1	0.048	100.0%	1		360x2400	95562
2023-11-14 11:31:38	1.ppt	8Pass	0.14/0.19	0/1	0.048	72.0%	1		360x2400	81328
2023-11-14 11:21:23	1.ppt	8Pass	0.14/0.19	0/1	0.048	74.0%	1		360x2400	57828
2023-11-14 11:19:36	1.ppt	8Pass	0.19/0.19	1/1	0.048	100.0%	1		360x2400	67123
2023-11-14 11:11:32	1.ppt	8Pass	0.19/0.19	1/1	0.048	100.0%	1		360x2400	67218
2023-11-14 11:06:27	1.ppt	8Pass	0.11/0.19	0/1	0.048	55.8%	1		360x2400	65172
2023-11-14 11:02:36	1.ppt	8Pass	0.18/0.19	1/1	0.048	100.0%	1		360x2400	80853
2023-11-14 11:00:58	1.ppt	8Pass	0.10/0.19	0/1	0.048	52.1%	1		360x2400	60797
2023-11-14 10:55:37	1.ppt	8Pass	0.19/0.19	1/1	0.048	100.0%	1		360x2400	81234

OK

4.11 Print Mode

Check the printing accuracy within the printing mode and set the feathering range and feathering mode

打印模式

配置列表:

- 360x600
- 360x1200
- 360x1800
- 360x2400
- 720x600
- 720x1200
- 720x1800
- 720x2400
- 720x3600
- 360x3600
- 360x300

模式列表:

- 1PASS

羽化开放模式

轻度羽化幅度: 30 %

普通羽化幅度: 60 %

深度羽化幅度: 100 %

超强羽化幅度: 120 %

羽化点模式: 正常模式

浅墨量微调: K 0

中墨量微调: K 0

深墨量微调: K 0

第一次使能: K 禁用

第二次使能: K 禁用

☐ 等待步进停止

确认 取消

4.12 Fan machine interface

When the powder shaking machine display screen is not used, the interface for communicating with the powder shaking machine needs to open this dialog box separately after powering on to take effect. After debugging the parameters, you need to click the set button to take effect.

抖粉机界面

×

工作模式

自动

走膜方向

正向

冷却风机

开启

撒粉方向

反向

吸风

100%

撒粉速度

4

抖粉速度

5

走膜速度

1

烘干加热设定温度

130

烘干实际温度

前导板加热设定温度

80

前导板实际温度

光电开关超时标记

待机烘干温度

100

支持温度合法判断

☒

设置

确认

取消

Serial number	name	Functional Description
1	Working Mode	As long as it is divided into automatic, manual, pause, (when online and the powder shaker interface is closed, after clicking print, no matter what mode the working mode is set to, it will automatically switch to automatic mode until the dialog box of the powder shaker interface is opened and the default is stopped)
2	Mold moving direction	Control the belt motor to rotate in true or reverse direction
3	Cooling fan	The cooling fan in front of the powder shaking machine is mainly used to quickly cool the melted powder.
4	Powder sprinkling direction	The powder spreading direction mainly has forward and reverse rotation, as long as it is used for brush roller
5	Suction	The air suction is divided into three gears: 50% and 100% closed, which respectively control the front air suction, front and rear air

		suction, and close the air suction
6	Powder spreading speed	The powder spreading speed is divided into 1-9 gears, from low to high, indicating the speed of powder spreading.
7	Speed of shaking fans	The powder shaking speed is divided into 1-9 gears, from low to high, indicating the speed of the powder shaking motor rotation.
8	Mold moving speed	The film-feeding speed is divided into 1-9 gears, from low to high, indicating the film-feeding speed.
9	Drying heating setting temperature	Main heating drying setting temperature
10	Actual drying temperature	Main heating drying actual temperature
11	Front guide plate heating setting temperature	Front guide plate set temperature
12	Actual temperature of front guide plate	Actual measured temperature of the front guide plate
13	Photoelectric switch timeout mark	No display means the powder machine and heat press machine are not connected, display means the connection is successful
14	Standby drying temperature	When not printing, the drying heating setting temperature will drop to the standby drying temperature
15	Support temperature	Determine whether the powder shaking machine temperature has reached the standby drying temperature. If the temperature is not

	legality judgment	high enough, an error message will be displayed and no printing will be performed.
--	-------------------	--

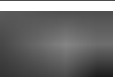
5 Log Click the log button in the lower right corner of the printing software to enter the log window, as shown below:



This window allows you to see the current operation. In particular, when an error or failure occurs, you can view the debugging information to find out what type of error information is generated, so that you can solve the error in a targeted manner.

6 Shortcut Buttons

Shortcut	Functional Description
	Open the print file in the specified folder
	Start the print button and execute the print command
	Pause/resume printing button
	Cancel print button to execute the end print command

	Printhead check button to print the printhead status diagram
	Nozzle cleaning button, executes the nozzle cleaning command
	Moisture off/on button
	White border positioning button
	Set Spot Color Button
	X-direction reset button
	X motor left button
	X motor right move button
	Feed button
	Return button
	Step fine adjustment decrease button
	Step fine adjustment increase button
	Two-way fine-adjustment decrease button
	Two-way fine-tuning increase button

7 Status Bar

Status bar	Status Icon Description
	The network cable is connected normally
	Network cable disconnection status
	Offline status
	Start flash spraying
	Close flashing state
	System working normally

	System error status
	System warning status
	Offline status
	Nozzle temperature is normal
	Abnormal nozzle temperature
	Printhead temperature warning status
	Offline status

5. Manufacturer Mode

In the advanced interface, click Factory Settings and directly enter the password 111111 to enter the factory mode. Press ctrl+F12 and enter 222222, as shown below:



1.Advanced Mode Main Content

The main contents of the advanced mode are shown in the menu tree below:



2. Boot initialization

The motor action parameters when executing power-on initialization are as shown below:

马达初始化参数

X马达

加减速距离: 256 脉冲(2.04毫米)

原点反向移动距离: 2050 脉冲(16.36毫米)

撞限位后回零距离: 2050 脉冲(16.36毫米)

马达移动速度: 5000 脉冲/秒(39.91毫米/秒)

测试动作

Y马达

加减速距离: 400 脉冲(2.91毫米)

原点反向移动距离: 0 脉冲(0.00毫米)

撞限位后回零距离: 0 脉冲(0.00毫米)

马达移动速度: 800 脉冲/秒(5.81毫米/秒)

测试动作

刮片马达

加减速距离: 300 脉冲(0.06毫米)

原点反向移动距离: 0 脉冲(0.00毫米)

撞限位后回零距离: 0 脉冲(0.00毫米)

马达移动速度: 0 脉冲/秒(0.00毫米/秒)

测试动作

The parameters of the X motor, Y motor, and scraper motor are the same. Take the X motor as an example, see the table below:

Seri al num ber	name	Functional Description
1	Acceleration and deceleration distance	Acceleration and deceleration distance
2	Distance of reverse movement of origin	The distance the motor moves away from the origin
3	Return to zero distance after hitting the limit	The distance the motor moves in the direction of the origin and hits the limiter before moving in the opposite direction

No.70Pages101Page

The settings of X motor parameters are as follows:

Serial number	name	Functional Description
1	Gear ratio setting	Calibrate the gear ratio of the X motor
2	Travel parameters	The maximum range of movement of the car in the X direction
3	Acceleration and deceleration	Acceleration and deceleration distance

	distance	
4	Reset speed	The speed of the car during the reset process
5	Normal movement speed	When the car moves left and right manually, the speed of the car is
6	Print idle speed	When printing in one direction, the speed of the carriage when it returns
7	Print speed	The maximum spraying frequency corresponds to the speed ratio, and different speed levels have different ratios.
8	Grating test	The grating test has two main functions: first, by comparing the set offset distance with the real-time reported grating value, confirm whether the grating accuracy is accurate; second, determine whether the grating direction is correct.
9	Pulse Positioning	The system uses pulses to locate the current position of the car
10	Grating positioning	The system locates the current position of the car through the grating

4.Y Motor

The settings of the Y motor parameters are as follows:

Y马达参数

齿轮比设置

目标移动值:100毫米

移动

实际移动值:100毫米

计算

齿轮比设置:137.663349412727

行程参数

正向最远距离:不限制

确认行程

自动测量

反向最远距离:不限制

确认行程

运动参数

加减速距离:8毫米(1101脉冲)

复位速度:50毫米/秒

常规走料速度:80毫米/秒

打印速度(慢):50毫米/秒

打印速度(中):60毫米/秒

打印速度(快):110毫米/秒

Y轴定位方式:脉冲定位

双Y最大误差:5毫米

步进后等待时间:0毫秒

5. Ink Stack

Serial number	name	Functional Description
1	Gear ratio calibration	Calibrate the gear ratio of the Y motor
2	Travel parameters	The maximum range of the Y-axis motor movement
3	Acceleration and deceleration distance	The distance the motor moves from a stop state to a constant speed state or from a constant speed state to 0
4	Normal feeding speed	Y motor moving speed in non-printing state

No.73Pages101Page

5	Normal feeding speed	The speed of the Y motor moving at a constant speed during manual feeding/returning
6	Print speed	The maximum spraying frequency corresponds to the speed ratio, and different speed levels have different ratios.

墨栈参数

马达行程设置

正向最远距离: 不限制 脉冲 确认行程

反向最远距离: 不限制 脉冲 确认行程

墨栈参数

墨栈类型: 升降式

加减速距离: 200 脉冲

墨栈运动速度: 8000 脉冲/秒

保湿墨栈高度: 12000 脉冲 确认行程

抽墨墨栈高度: 12000 脉冲 确认行程

闪喷墨栈高度: 7000 脉冲 确认行程

刮墨墨栈高度: 4000 脉冲 确认行程

Seri al num ber	name	Functional Description
1	Motor stroke setting	The maximum range of ink stack movement
2	Ink stack type	Choose the working form of ink stack
3	Acceleration and deceleration distance	Acceleration and deceleration movement distance
4	Ink stack	The fastest speed of ink stack movement

	movement speed	
5	Moisturizing ink stack height	When in moisturizing state, the height of the ink stack
6	Ink stack height	When in the cleaning and ink extraction state, the height of the ink stack
7	Flash inkjet stack height	In flash printing state, the height of the ink stack
8	Ink scraping stack height	When in moisturizing state, the height of the ink stack

6. Scraper

刮片参数

马达行程参数

正向最远距离: 不限制

脉冲

确认行程

反向最远距离: 不限制

脉冲

确认行程

刮片参数

刮片类型: 固定大刮片

加减速距离: 300 脉冲

刮墨小车运动速度: 60 毫米/秒

刮墨片运动速度: 20000 脉冲/秒

刮墨位置

喷头1

刮片位置: 0 脉冲 确认行程

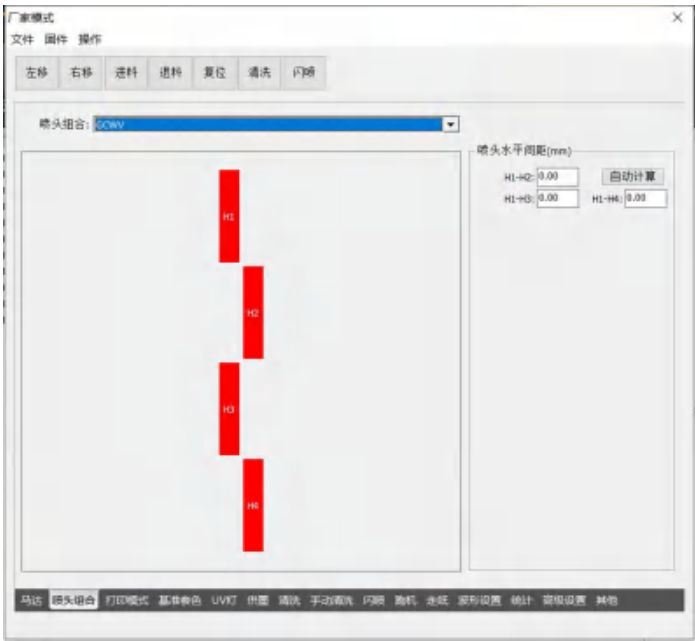
刮墨开始位置: 60 毫米 确认行程

刮墨结束位置: 180 毫米 确认行程

刮片回零

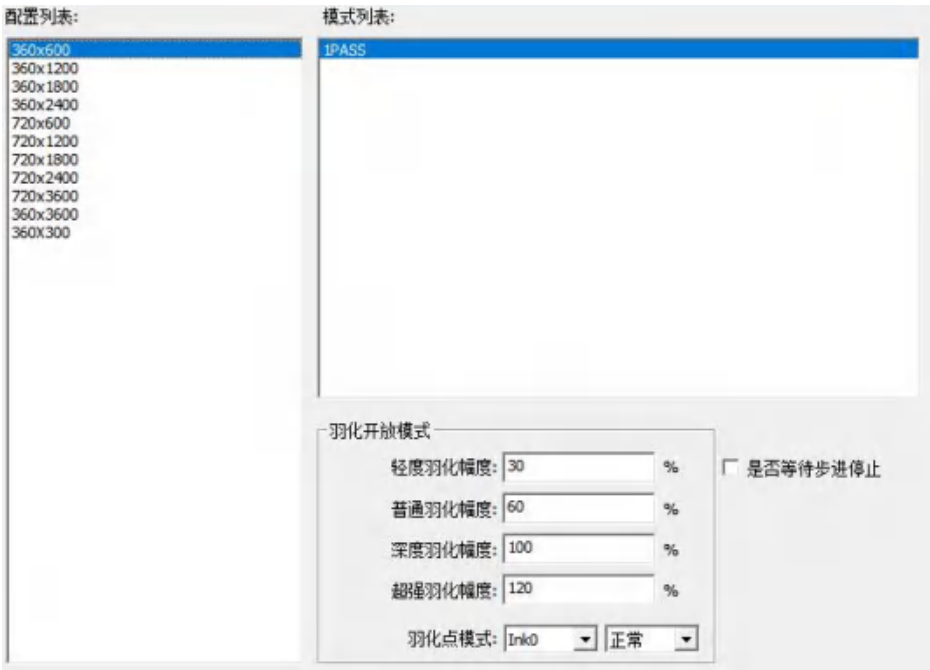
Serial number	name	Functional Description
1	Motor stroke parameters	Setting of the maximum stroke parameters of the scraper motor
2	Scraper parameter settings	Setting of acceleration and deceleration distance parameters and movement speed parameters of scraper motor
3	Scraping start position	The starting position of the trolley when the scraper scrapes the nozzle
4	Scraping end position	The end position of the trolley when the scraper scrapes the nozzle

7. Nozzle combination



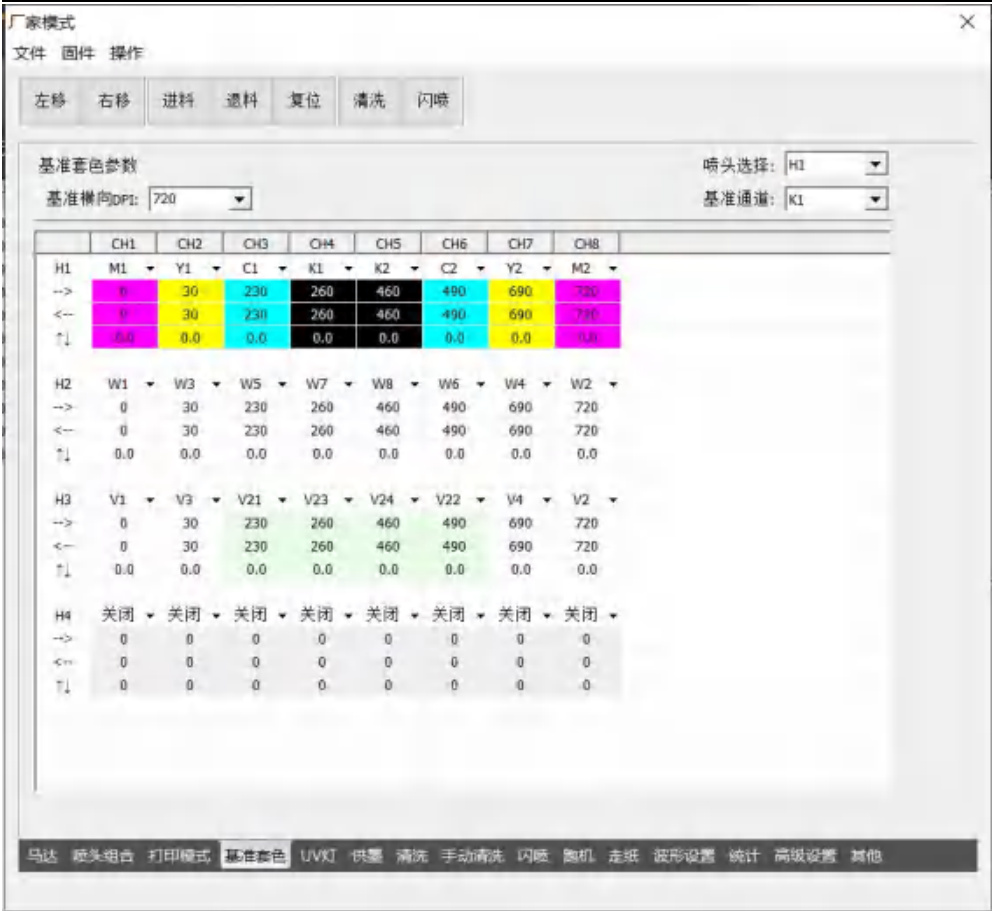
Shows various arrangements of multiple sprinkler heads.

8. Print Mode



Serial number	name	Functional Description
1	Configuration List	List of all precisions of the currently configured nozzles
2	Mode List	List of printing modes corresponding to each precision
3	Feather mode settings	Feathering amplitude setting and feathering point mode selection

9. Base color



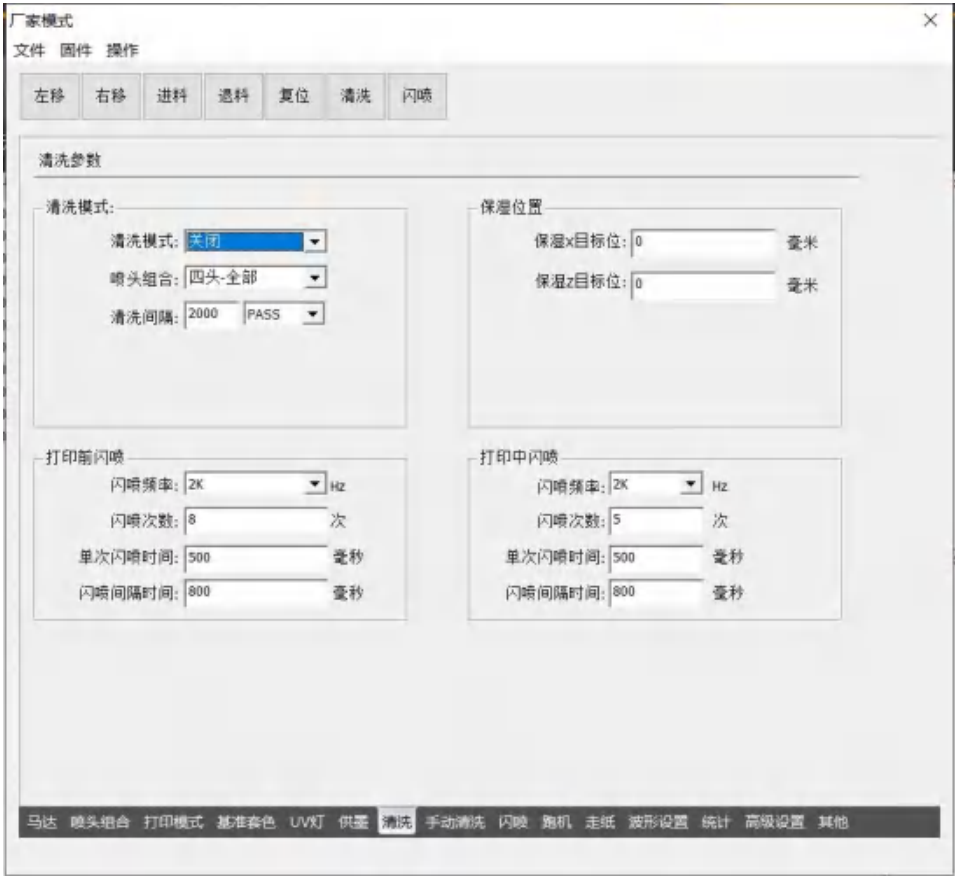
The color value here is used to fill in the color offset inside the print head. Customers are prohibited from changing it without permission.

10. Ink supply



Serial number	name	Functional Description
1	Automatic ink supply	Enable or disable automatic ink supply
2	Parallel ink supply	Time for multiple channels to supply ink simultaneously
3	Circulating ink supply	Set various parameters of ink circulation
4	White ink circulation	Set the working parameters of white ink circulation and white ink stirring

11. Cleaning



Serial number	name	Functional Description
1	Cleaning mode	Choice of automatic cleaning, off, flash cleaning, weak cleaning, medium cleaning, strong cleaning
2	Nozzle combination	Selection of combined cleaning between different nozzles
3	Cleaning interval	When flash printing is turned on, flash printing will be performed after each set number of passes are printed.
4	Flash spray frequency	The number of times the printhead sprays ink per second
5	Flash spray times	How many consecutive flash spray cycles will stop flash spraying?
6	Single flash spray time	One flash spray cycle, the duration of flash spray
7	Flash spray interval time	The interval between two flash sprays
8	Moisturizing position	Target position when hydration is enabled
9	Flashing during printing	Same as flash before printing

12. Manual cleaning

厂家模式

文件 固件 操作

左移

右移

进料

退料

复位

清洗

闪喷

手动清洗参数

抽墨参数

清洗弱

抽墨次数:

1

次

抽墨时间:

280

毫秒

抽墨后静止时间:

10000

毫秒

抽废墨时间:

5000

毫秒

闪喷参数

闪喷频率:

2K

Hz

闪喷次数:

20

次

单次闪喷时间:

500

毫秒

闪喷间隔时间:

800

毫秒

滑臺式闪喷位移动参数

小车移出速度:

20

毫米/秒

小车移动距离:

20

毫米

确认行程

马达

喷头组合

打印模式

基准套色

UV灯

供墨

清洗

手动清洗

闪喷

跑机

走纸

波形设置

统计

高级设置

其他

Serial numb er	name	Functional Description
1	Ink pumping times	How many times to draw ink during manual cleaning?
2	Ink extraction time	Duration of each ink draw
3	Static time after ink extraction	Wait for the set time after ink extraction is completed before proceeding to the next operation
4	Waste ink	The time to start the waste ink pump motor to pump ink

	extraction time	
5	Car moving out speed	When sliding flash spraying, the speed of the trolley when it moves to the specified position
6	The distance the car moves out	When sliding flash spraying, the flash spraying position
7	Flash spray parameters	Parameter setting for flash spray after cleaning

13. Flash spray

闪喷参数

闪喷

闪喷频率: 2K Hz

单次闪喷时间: 500 毫秒

闪喷间隔时间: 800 毫秒

自动抽废墨使能: 禁用

自动抽废墨周期: 30 次

抽废墨时间: 2000 毫秒

启用闪喷槽

闪喷槽左侧位置: 140 毫米

闪喷槽右侧位置: 0 毫米

闪喷槽宽度: 5 毫米

闪喷槽周期: 1

连续闪喷Pass数: 0

首Pass索引: 0

手动闪喷

闪喷频率: 2K Hz

闪喷次数: 10 次

单次闪喷时间: 500 毫秒

闪喷间隔时间: 800 毫秒

保湿时闪喷

☐ 保湿时开启闪喷

Serial numb er	name	Functional Description
1	Flash spray frequency	During the flash printing process, the number of times the print head sprays ink per second
2	Single flash spray time	One flash spray cycle, the duration of flash spray
3	Flash spray interval time	The interval between two flash sprays
4	Automatic waste ink extraction function	Turn on or activate the automatic waste ink extraction function
5	Automatic waste ink extraction cycle	During the automatic flash printing process, the waste ink is extracted once after the set number of flash printings.
6	Waste ink extraction time	Time to start the waste ink pump motor

13. Treadmill

跑机参数

小车开始位置:

200

毫米(25054脉冲)

小车最大位置:

1100

毫米(137799脉冲)

小车速度:

1000

毫米/秒(125271脉冲/秒)

单向走纸距离:

6

毫米

最大走纸距离:

120

毫米

刮片移出位置:

0

脉冲

确认行程

确认行程

确认行程

开始跑机

停止

Serial numb er	name	Functional Description
1	Car starting position	The starting position of the trolley when running on the treadmill
2	Maximum position of the car	The final position of the trolley when running on the treadmill
3	Car speed	Car running speed
4	One-way paper feeding distance	The distance the carriage moves in one round trip is the distance the paper moves in the Y direction.
5	Maximum paper feeding	The total distance of paper moving in the Y direction during this run

	distance	
6	Scraper out of position	The distance the scraper moves from the scraper origin during treadmill running

14. Paper Feed

打印前/后走纸模式:

打印前走纸模式: 不走纸

打印后走纸模式: 不走纸

打印前/后走纸模式:

打印前进纸距离: 50 毫米

打印后退纸距离: 50 毫米

打印后进纸距离: 50 毫米

打印后退纸距离: 50 毫米

打印前/后PASS数走纸模式

前后PASS数走纸: 正常走纸模式

☐ 打印完烘干

总走纸距离: 0 毫米

每PASS等待时间: 0 毫秒

☐ 回退

纸张检测

☐ 打印时缺纸检测

检测有效PASS数: 1

☐ 测纸

测纸传感器偏移: 30 毫米

测纸非检测区域: 100 毫米

纸张左边距微调: 0 毫米

纸张右边距微调: 0 毫米

测纸宽度: 0 毫米

☐ 清空X白边

其他

☐ 启用反向打印功能

☐ 多份打印打印前提示

☐ 最后Pass走纸

Serial number	name	Functional Description
1	Paper feeding mode before printing	Paper feeding mode selection before printing
2	Paper feeding mode after printing	Paper feeding mode selection after printing
3	Paper distance before printing	Feed the paper a set distance before printing begins

4	Paper ejection distance before printing	Eject the paper a set distance before starting printing
5	Paper feeding distance after printing	After the printing task is completed, the printing will stop after feeding the paper to the set distance.
6	Paper retraction distance after printing	After the printing task is completed, the paper will be retracted to a set distance before the printing stops.
7	Front and rear PASS number paper feeding	Selection of paper feeding method before and after printing
8	Drying after printing	The distance of paper after printing is completed and the waiting time for each PASS
9	Paper detection	Turn on/off paper detection or paper out detection and detection time
10	Paper sensor offset	Horizontal distance between the paper sensor probe and the grating decoder
11	Paper non-detection area	The distance from the paper sensor to the paper start mark
12	Fine-tune the left margin of paper	Fine-tune the distance between the image and the edge of the paper
13	Fine-tune the right margin of paper	Fine-tune the distance between the image and the edge of the paper
14	Test width	Maximum moving distance of the carriage

		when detecting paper
15	Enable reverse printing	Function for reverse printing on flatbed printers
16	Tips before printing multiple copies	Before printing multiple copies, prompt whether to turn the printing function on or off
17	Final PASS paper	Whether to turn on or off paper feeding after printing is completed

15. Waveform settings

波形设置

波形文件选择

波形文件:

应用

版本:

作者:

备注:

波形

默认波形:

Default7

当前波形信息

波形文件: ADL抖粉机3200专用-波形

版本: 2.3

作者:

备注:

Serial numb er	name	Functional Description
1	Wave file selection	Select the waveform file that has been added
2	Current	Details of the wave file currently in use

	waveform information	
3	Default Waveform	Waveforms in the same waveform file, select waveforms based on waveform information or print status

16. Statistics: Picoliters per ink dot (not enabled)

每点毫升数

小点: 1000000000 皮升

中点: 1000000000 皮升

大点: 1000000000 皮升

清除统计信息

17. Advanced Settings

☐ 底板加热

最小加热温度: 20 °C

停止加热温度: 30 °C

温度波动: 0 °C

选择检测温度: 传感器温度

☐ 检测外部输入信号

检测有效时间 5 毫秒

显示调试日志

☐ 打印调试日志

Serial numb er	name	Functional Description
1	Bottom plate heating	Parameter settings for the trolley bottom plate heating (not enabled)
2	Show debug log	Statistics of printing information for each PASS (printing speed

		will be slower after opening)
3	Detect external input signal	Set the temperature sensor reading time

18. other

偏移设置

X白边起始偏移: 150 毫米

X白边定位偏移: -45 毫米

光栅设置

X物理光栅: 720 精度

报警器设置

警报类型: 防撞

是否启用报警: 禁用

响铃时间: 2000

每秒警报次数: 3

功能开关

☐ 显示缺墨状态

☐ 开启激光测试功能

☒ 启用缺墨状态下打印

☐ 开启风扇开关功能

☐ 显示打印精度

☐ 检测测高器信号

☒ 启用通道控制

☐ 启用PLC

☒ 启用保墨

☐ 显示关闭通道

☐ 开启彩条等高

彩条浓度设置

彩条浓度弱: 20 %

彩条浓度中: 40 %

彩条浓度强: 50 %

断线续打

打印中超时暂停时间: 30000 毫秒

暂停后自动恢复时间: 1200000 毫秒

校准

套色细分类型: 禁用

喷头间羽化模式

羽化模式: 开关模式

功能参数

马达加速曲线比例: 10 (10-100)

缺墨检测时间: 0 毫秒

位置单位: 毫米

Serial number	name	Functional Description
1	X white edge start offset	Distance from print head to printing material
2	X white edge positioning offset	White edge positioning error setting, its calculation formula: white edge positioning value - white edge positioning offset = white edge value + white edge

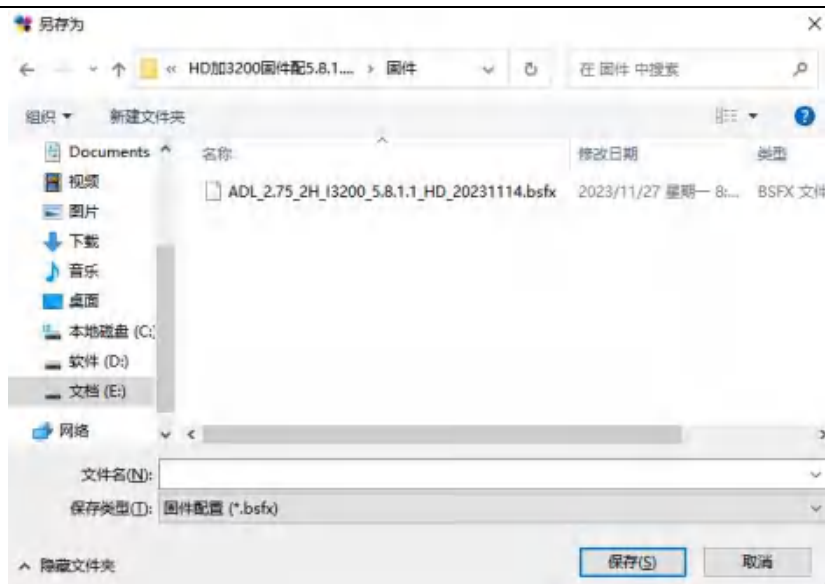
		starting offset
3	Raster settings	Set the resolution of the raster (four-wayThe accuracy after)
4	Alarm settings	Enable or disable alarm options and alarm types
5	Indicates low ink status	
6	Enable printing in low ink state	
7	Display printing accuracy	
8	Checking the altimeter signal	
9	Enable Channel Control	
10	Enable moisturizing	
11	Enable laser detection	
12	Turn on the fan switch function	
13	Enable PLC	
14	Show closed channels	
15	Enable color bar height	
16	Color bar density	The density and proportion of different color bars are set differently.
17	Timeout pause time	When the printer is disconnected for a set time,

	during printing	printing will be paused.
18	Automatically resume time after pause	After pausing, the network cable is detected to be restored within the set time, and printing is automatically resumed
19	Color subdivision type	Select the color subdivision method, normally select Disable
20	Feather Mode	The type of feathering when feathering is turned on
twenty one	Motor acceleration curve ratio	Motor motion parameter ratio
twenty two	Ink shortage detection time	Select the time to check when ink is low
twenty three	Position Unit	mm or pulse

19. Import/Export Firmware

20.1 Import firmware configuration

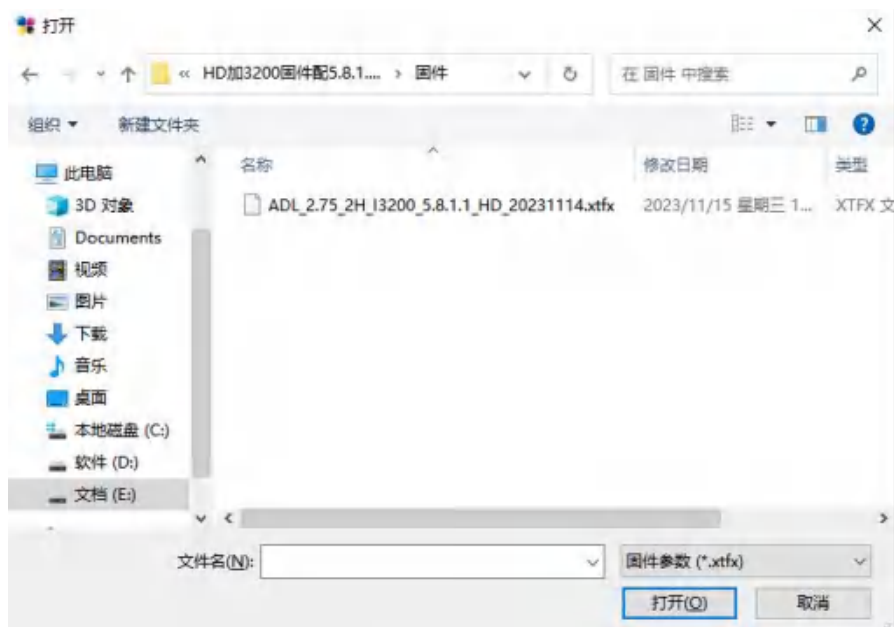
Click "Firmware Menu" to pop up a drop-down menu list, select "Import Firmware Configuration" to select the firmware configuration to be imported, and note that the suffix is .bsf, as shown below:

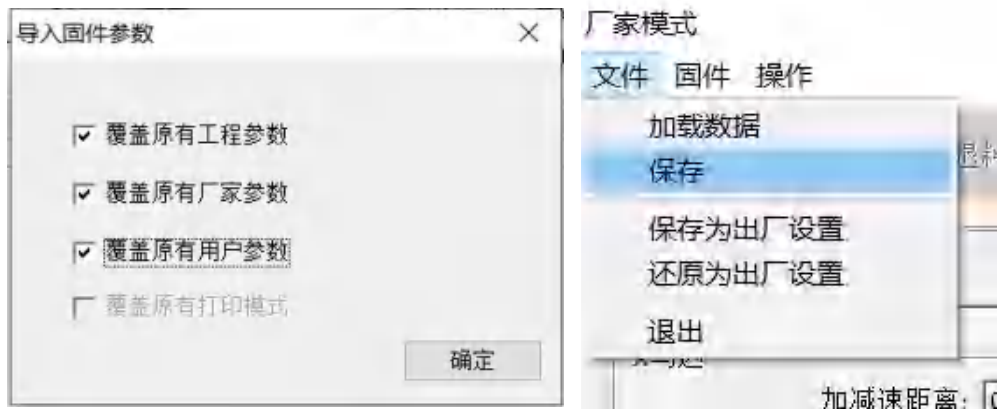


Click "Open" to enter the firmware configuration import state. You should not do anything at this time. After a while, it will prompt "Import successful". At the same time, check the debugging information and prompt "Loading FlashSuccess" means the import was successful.

20.2 Import firmware parameters

Click "Firmware Menu" to pop up a drop-down menu list, select "Import Firmware Configuration" to select the firmware configuration to be imported, and note that the suffix is .xtf, as shown below:





Click "Open" and a dialog box will pop up. Check the first three items in the dialog box to overwrite the original project parameters, overwrite the original factory parameters, and overwrite the original user parameters. After clicking OK, the firmware configuration will be imported. No operation should be performed at this time. Later, it will prompt "Import Successful". At the same time, check the debugging information. The prompt "Loading Parameters Successful" indicates that the import has been successful. After the import is successful, you need to find the Save option in the file option in the upper left corner and save it.

20.3 Export firmware configuration

Click "Firmware Menu" to pop up a drop-down menu list, select "Export Firmware Configuration", save it in the specified directory, and note that the suffix is .bsf, as shown below:

名称	修改日期	类型	大小
 ADL_2.75_I3200_4H_V5.7.6.5_202310...	2023/12/6 星期三 9:26	BSFX 文件	1,652

Click "Open" to enter the state of exporting firmware configuration. You should not do anything at this time. It will prompt "Export successful" later.

20.4 Export firmware parameters

Click "Firmware Menu" to pop up a drop-down menu list, select "Export Firmware Parameters", save it in the specified directory, and note that the suffix is .xtf, click "Open" to enter the state of exporting firmware parameters. You should not do anything at this time. It will prompt "Export successful" later.

名称	修改日期	类型	大小
 ADL_2.75_I3200_4H_V5.7.6.5_202310...	2023/12/6 星期三 9:02	XTFX 文件	446

Chapter 5 Equipment Maintenance and Troubleshooting

1.Note:

- 1. Before the UV machine is put into production, it should be equipped with voltage stabilizers and other related voltage control equipment to improve the stability and long-term operation of the machine.
- 2. Before starting the machine, check whether the ground wire is well grounded and whether the switches of all power supplies are in good condition.
- 3. The staff operating the machine should remember that before printing, they must check whether the printing height is set, whether the nozzle is cleaned, and whether the nozzle test is done.
- 4. Be careful in the preparation before printing, and the material size and plate size should correspond.
- 5. When a serious malfunction occurs to the UV machine, please notify the manufacturer or dealer in time and do not open the chassis by yourself to prevent accidents.
- 6. The ink nozzle of the UV machine must not be cleaned with water, as this will directly cause crystals on the surface of the ink nozzle.

2.Common printing errors and solutions of control software

Common faults	Fault Description	Workaround
Failed to open file	Possible 1. The file does not exist Possibility 2. The file is occupied	1. Confirm whether the file exists 2. Confirm whether the file is opened
System initialization action failed	Possible 1. The firmware is incorrectly configured or damaged Possibility 2. The firmware parameters are	1. Please check whether the connection between each motherboard is normal

	incorrect or damaged Possibility 3. The connection between the main board and the spray car board is not normal Possibility 4. Limit switch failure or abnormal wiring Possibility 5. Abnormal motor or servo movement Possibility 6. The movement speed is too slow, resulting in timeout.	2. Please check whether each mainboard is powered on normally.
Failed to calibrate X gear ratio	Possible 1. X-axis motor or driver failure. Possible 2. The X-axis movement speed is too slow, resulting in movement timeout	Check if the X motor or driver fails.
The current operation failed	1. Other actions are being executed 2. Under the current system status, this action is prohibited	Need to wait for other action commands to complete
Printing failed, the printing width exceeds the maximum stroke	Possible 1. Print width exceeds the maximum stroke Possibility 2. Raster abnormality	1. Check whether the white edge or width exceeds the maximum travel of the equipment 2. Check if there is any abnormality in the grating reading
System initialization is not completed	Possible 1. System initialization is not completed	1. Confirm whether the motherboard is operating normally

	Possibility 2. The motherboard is not functioning properly Possibility 3. The firmware configuration and firmware parameters are incorrect or damaged	2. Confirm whether the system initialization action is normal 3. Re-import the correct firmware configuration file and firmware parameter file
Device disconnection	Possible 1. The device is powered off Possible 2. The printing software is not connected to the device Possibility 3. Computer network card/network port/network cable is abnormal	1. If the software does not connect after changing, you can try to change it to the original software. 2. Check the computer network port or replace the network cable
Printing failed, execution of PASS pre-printing action failed	Possible 1. The firmware configuration and firmware parameters are incorrect or damaged Possibility 2. The connection between the main board and the spray car board is not normal Possibility 3. Limit switch failure or abnormal wiring Possibility 4. Abnormal motor or servo movement Possibility 5. The movement speed is too slow, resulting in timeout.	1. Please import the correct firmware configuration and parameters. 2. Please check the wiring in the error description. 3. Please check whether the motor or servo is moving abnormally 4. Please check whether the mainboard program and the spray car board logic version match from the software version information

	Possibility 6. The mainboard program does not match the spray board logic	
--	---	--

3. Equipment maintenance list and equipment maintenance details:

Serial	Maintenance items	Daily	Weekly	Monthly	Annual
1	Ambient temperature 20°C-30°C Ambient humidity 40%-60%	●			
2	The machine printing platform is clean, free of debris and dust	●			
3	Clean the ink stack, ink nozzle and ink scraper	●			
4	Nozzle maintenance, power on/off nozzle test status	●			
5	examineLightThe gate and the reader are clean and dust-free		●		
6	Check the ink path and circuit of the drag chain to see if the ink tube is damaged.		●		
7	Device sensor check		●		
8	Clean the grease and dust on the transmission belt		●		
9	Cleaning car, platform, Machine dust		●		
10	Apply lubricating grease to moving parts			●	
11	Motor drive parts maintenance			●	
12	Regular replacement of ink sac, ink nozzle and filter			●	
13	Regular calibration of equipment level			●	
14	Equipment fastener inspection				●

Maintenance items before and after printing

- Check the status of the printhead before printing: print the printhead test strip, and use

automatic or filling cleaning methods to make the printhead status normal;

- Check the status of the printhead after printing: print the printhead test strip, and use automatic or filling cleaning methods to make the printhead status normal.

1. Daily inspection and maintenance items

- Maintain a clean working environment: clean the workplace, make it tidy and dust-free;
- Maintain working environment temperature and humidity: temperature 20°C~30°C, humidity 40%~60%;
- Keep the machine clean and hygienic: ① Clean the chassis and frame: remove debris, dust, ink stains and other contaminants from the machine base, crossbeam frame, and ink supply box; ②) Clean the dust, ink stains and other debris on the equipment; ③ Clean the platform surface: wipe off the surface ink stains and debris; 4) Clean the nozzle scraper: scrub with cleaning fluid to remove the accumulated ink and dried dirt on its surface; 6) Clean the surface of the ink stack: scrub the surface of the ink nozzle and the surrounding ink with distilled water or cleaning fluid to remove the dried accumulated ink and foreign matter; ⑥ Remove waste ink: Check whether the waste ink guide groove and waste ink pipe of the ink stack are blocked, and dump the waste ink in the waste ink barrel in time.
- Check the ink level in the ink bottle and add ink in time to prevent the ink from running out and causing the nozzle to break; ※Note: Please pay attention to the shelf life of the ink
- Moisturize the printhead before shutting down: After confirming that the printhead is in good condition, move the printhead to the top of the ink stack and put the ink nozzle in the normal moisturizing position.

Weekly maintenance content

- Clean the grating: Check for oil, dust and other contaminants. If necessary, wipe it with non-woven cloth when the power is off.

- Guide rails and sliders: Check whether there is any abnormal sound when the nozzle carriage moves, clean the foreign matter on the guide rail edge and evenly apply grease on the surface for lubrication

2. Monthly maintenance items

- Check the ink pump and ink tube for wear and replace if necessary;
- Check the ink nozzle and ink bag for damage and leakage, and replace them if necessary; · Check the filter for blockage, and clean or replace it in time.

3. Quarterly maintenance items

- Clean the main ink supply bottle and replace it if necessary; · Check the ink nozzle and ink bag for damage and leakage, and replace them if necessary;

- Clean the ink supply system pipeline: Check the wear of the ink supply pipeline (especially the pipeline inside the drag chain), and replace it if necessary;

- Replace the filter: Replace when necessary;

- Inspect the overall circuit: Check whether the lines and connectors are loose or damaged, and tighten or repair them in time.

4. Maintenance items before decommissioning

- Within 3 days of non-use: ① Check the status of the printhead: print the printhead self-test test strip to ensure that the printhead is in good condition and keep the shutdown test strip; 2) Cut off the power supply and clean the entire machine.

- Maintenance items when out of use for more than 3 days: ① Check the status of the nozzle: print the nozzle self-test test strip to ensure that the nozzle is in good condition and keep the shutdown test strip; ② Add an appropriate amount of nozzle moisturizing liquid (matching the ink) to the ink suction nozzle, align the nozzle with the ink suction nozzle, ensure good contact between the ink suction nozzle

and the nozzle, and avoid long-term contact between the nozzle surface and the air to dry the nozzle surface; ③ Clean the moving parts, and apply lubricating oil to the bearings and guide rails; ④ Cut off the power supply and clean the entire machine.