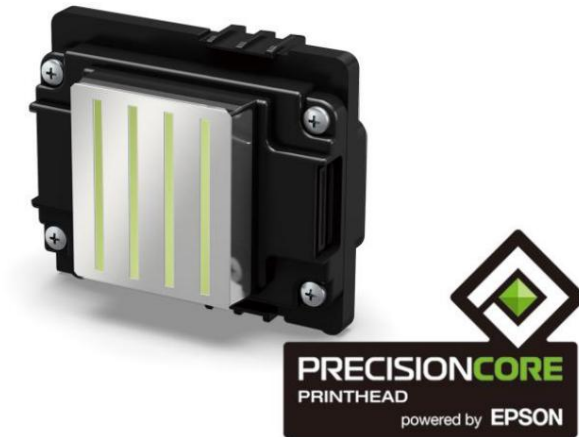


Galaxy Epson I3200 Software Manual



6th April 2022

Version: v1.0

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1: Computer configuration requirements

1) Basic configuration requirements:

- CPU: Intel(R) Core(TM) I5-4590@3.50GHz or higher
- Memory: 8GB or higher
- Hard disk: 1TB or higher (using NTFS format) (Recommended Western Digital Black Disk)
- Mother board: USB 3.0 connection equipped
- Configure the NIC: Configure the gigabit NIC
- Operating System: Microsoft Windows 7 64-bit Ultimate or Microsoft Windows 10 Professional

Note: It is recommended that users set up two hard disk partitions, one of which is the main hard disk C: (200Gb) mainly stores application software. The other hard disk mainly stores image files and the like.

2: Installation process

- 1ÿ Move the packing box to the working site and avoid strong shaking.
- 2ÿ Disassemble the wooden packing box from top to bottom. Check whether the parts are complete or not according to the packing list.
- 3ÿ Use a forklift to move the printer to the mounting platform, avoiding collisions or shaking with force.
- 4ÿ After the machine is placed, adjust the level of the machine first.
- 5ÿ Remove the parts of the fixed spray car and install other related parts on the machine.
- 6ÿ Push the spray car from the far left end of the machine to the far right of the machine. Check for abnormalities in the spray car and other components during the movement, and whether the belt and grating sensors are properly installed.
- 7ÿ Grounding the printer. The ground + neutral voltage should not be greater than 0.3V and the grounding resistance should be less than 3ÿ.
- 8ÿ Connect the network cable to the computer and printer, and check that the other power cables and data cables are properly plugged in.
- 9ÿ Install the print control software on the computer.
- 10ÿ Move the spray car to the middle of the platform, turn it on and the sprayer will automatically rest. Place your hand at the emergency stop switch to prevent an emergency stop when an emergency occurs, to avoid damage to machine parts.
- 11ÿ Rip a picture file for analog printing to detect if other functions of the printer are working properly.
- 12ÿ Install the print head, ink, connect the ink inlet tube connecting to the ink to the special cleaning flush, use the automatic cleaning function, and rinse the print head with the special cleaning flush.
- 13ÿ Load ink bottle, and use auto clean function to suck the ink from the ink bottle to print head.
- 14ÿ Print the nozzle check, observe the inkjet status of the print head, and retain the status

for future reference.

15. Nozzle debugging.

16. Start printing.

3: Characteristics

• Print-head: 2 nozzles (Epson I3200);

• Resolution: 360dpi;

• Color: 4 colors;

• Print mode: 2,3,4,6,8 Pass;

• Output mode: File or TCP/IP (printed while Rip);

• Output preview: You can generate a bmp thumbnail file from the prn/prt file and preview it.

• Print-head work: It is free to enable/disable the ink discharge of each row of nozzles;

• Smart printing: automatic whitening function;

• Multiple prints: can be set to print multiple frames in succession, or several different images to print continuously;

• Automatic flashing: It can set the spray to return to the original flash in the printing, which is conducive to stable printing.

• Standby flashing: Prevents the nozzle from plugging in the non-printing state;

• Color strip: prevent the nozzle from solidifying, monitor the status of the nozzle, and set the distance and width between the screen and the color strip;

Parameter adjustment: the nozzle step parameters can be adjusted during printing;

• Printing direction: one-way to the left, one-way to the right, two-way;

• Feathering: used to blur the edge of the pass;

• Cleaning system: automatic cleaning of the nozzle without the need to borrow external tools (syringes) to clean;

• Control panel: used with the control panel for easy operation;

• Chinese/English interface: convenient for your use.

4: Print Control Software Description

First, the printing software overview

PrintExp software is a control software for printing with a printer, which is user-friendly and easy to operate. Mainly used for printer control, printer calibration, program upgrade and update, import and export of parameters, save parameters to the board. In order to enable users to quickly and comprehensively understand the printing software, familiar with the various functional operations, precautions and possible problems, the following is an introduction to the classification of printing software.

Second, the software starts and online

1 Start print control software

The PrintExp software can be opened directly. First find the PrintExp software folder, 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 making a network connection, first check the computer's network card for a

Gigabit NIC to connect properly. The difference between a 100M NIC and a Gigabit NIC is:
Gigabit NIC contain 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, check the network adapter to judge, as shown below is the 100M network card:



2.2 Network settings

For the first time, you must set the network connection parameters to connect to the machine. Connect the TCP/IP network cable for network settings.

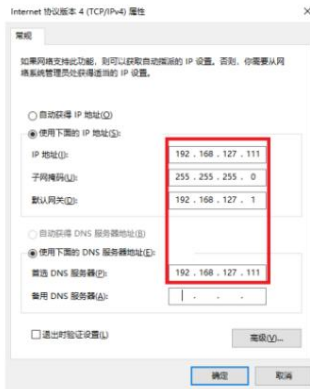
Connection setting method: Advanced menu → Network settings, you can see the network settings window at this time, as shown below:



Server IP and server port settings have been fixed, no need to set up, just set the local IP, as shown above, enter **192.168.127.11** in the local IP position (note that the most three digits can be 1-255 range except 10 Any number in the number can be), click "Settings", that is, the setting is completed, to see if the network connection can be connected normally, if still can not connect, you can use the following methods:
Go to Control Panel → Network and Internet → View Network Status and Tasks → Change Adapter Settings → Click Ethernet or Local Area Connection → Properties to display the following window:



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



Enter the same address, 192.168.127.11, in the red box above and click OK to complete. Go back to the main interface window, you can see that the first icon in the lower left corner of the main interface is displayed in green to indicate that it is connected. If it is still red, it means that it is not online. You can unplug the network cable and try again to see if it is online. If you still can't connect, you should check if the network cable is good.

Third, the steps before the new board is used

For a new set of boards and software, the steps before using:

- 1 Set the IP address: The specific setting method can be seen in the "Software Online Settings" in the above "Software Online and Start-up".
- 2 Motor gear ratio calibration: Detailed description is given in the following section "Factory Settings"
- 3 Cleaning the nozzle: Ensure that all nozzles of the nozzle can be inked normally
- 4 Calibration: Detailed description is given in the following section "Calibration"
- 5 Drawing settings: In the following chapter "Edge sharp side hit" has a detailed introduction

Fourth, the software main interface window introduction

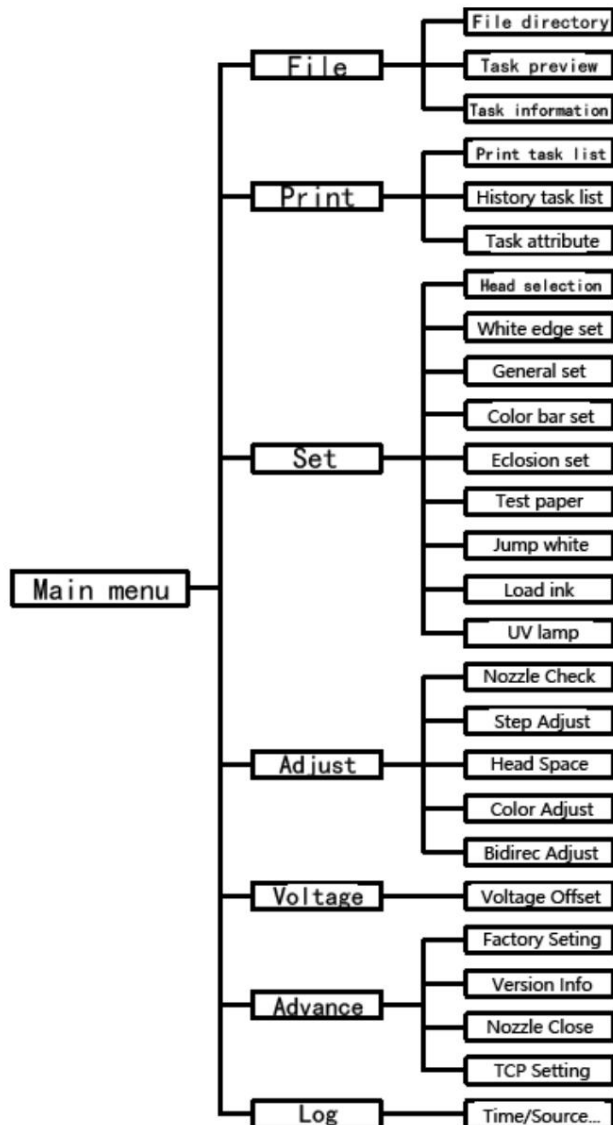
The main interface of PrintExp software is as follows:



The main interface of PrintExp software mainly includes main menu function area, shortcut button function area, print list function area, task preview image display function area, print task information function area, status bar, etc. .

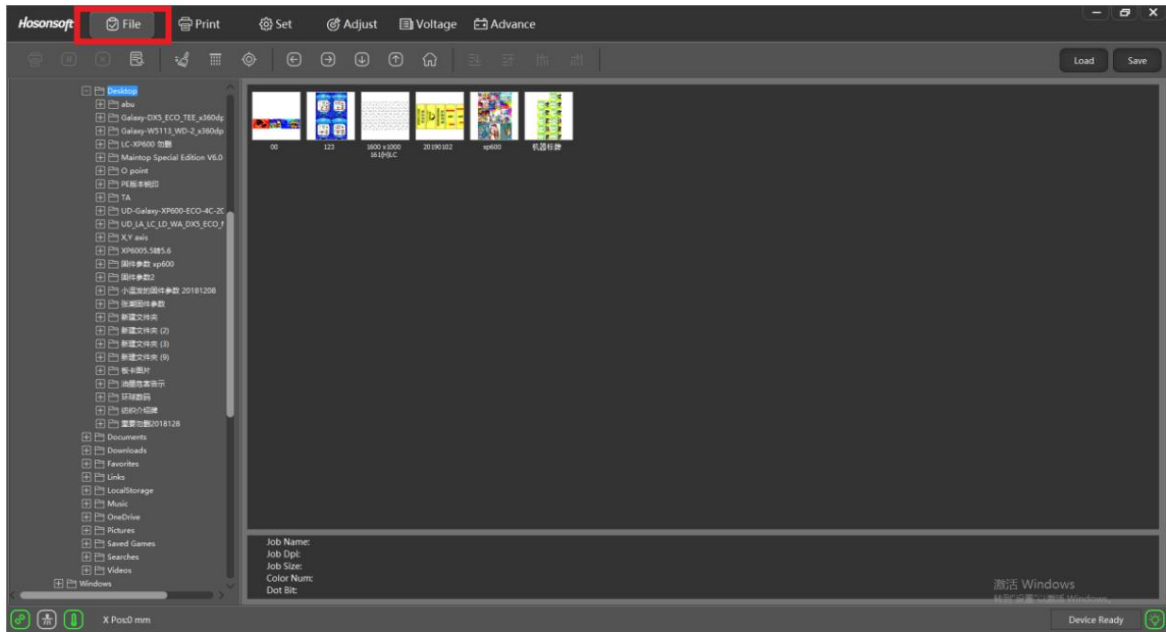
1 Main menu

The menu tree of the main menu is as follows:



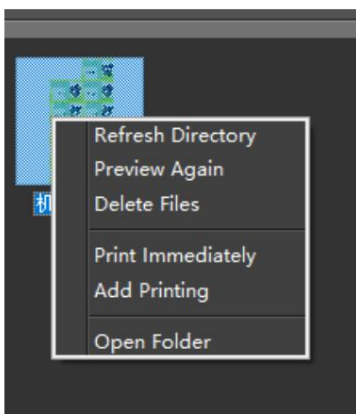
2 File

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



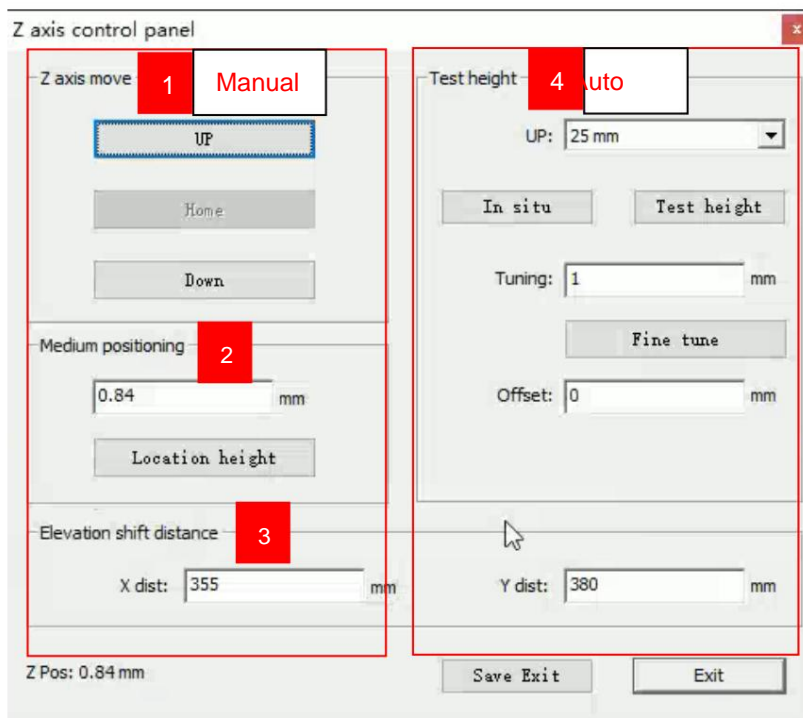
Serial number	Name	Function Description
1	File directory ribbon	Select the storage folder of the print file
2	Print file preview ribbon	Display all print files under the specified print file
3	Print file information display ribbon	Display print information of the selected print file

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



Serial number	Name	Function Description
1	Re-preview	Regenerate a preview of the currently specified print file
2	Refresh directory	Refresh all print files in the specified print file folder
3	Delete Files	Delete print file
4	Print now	Add the current print file to the print job list and execute the print immediately
5	Add print	Add the selected print file to the print job list
6	Open Directory	Open the folder corresponding to the print file

3 Z interface is as follows:



No.	Name	Function Description
1	Z axis move (Manual) Control	Control Z axis movement "Up, Home & Down"
2	Medium positioning	Measure the height of the printing object and put the values, and select "Location height" it will move up/down.
3	Elevation shift distance	Move to the specified position with the offset value for height measurement. When XY is greater than 0, XY moves to the specified position to measure the height. When Y = 0, it will not move Y for height measurement
4	Test height (Automatic)	In situ: Home position: Platform will go down, carriage will moving on the platform. Test height: carriage's probe will jump put and platform will moving up, when the probe touched the printing object, platform still stopped.

Flow of height measurement:

- a) Moves platform down at Z axis
- b) According to the position of the material, use different modes to reach the specified position
- c) Probe reach out
- d) Platform move up at Z axis
- e) When the probe touches the object and bounces back, a fine adjustment window pops up to confirm the height measurement position
- f) It will perform Z offset movement according to the height measurement

Spot Color interface is shown below:




Function description: Software can process on the original channel data of the PRN file.

Specific functions:

- A) Enable/Disable White & Varnish Channel.
- B) Ink amount of White ink & Varnish
- C) Full coverage: White/ Varnish will appear in full images.
- D) RIP: If the imaged created Spot Channel and ripped by rip software, white/varnish will appear in spot area.
- F) Image: "Image ink: white/varnish only appeared in color area. Identical ink: white/varnish will appear no color area.

Status bar function description:

Status bar icon	Function description
	Normal connection
	Disconnected state
	Flashing on
	Flashing off
	Normal temperature
	Temperature warning status
	Abnormal temperature
	Ink status, lack of ink detection, safety bottle detection
	Ink supply reset: When ink supply overtime ,Click it to supply ink automatically
	Working status display
	System operating normally
	System warning
	System error

Loading parameters: Loading parameters from the board to the software

Save parameters: Save the parameters from the software to the mainboard

X position: Display the current X position

Y position: Displays the current Y position

4 Print

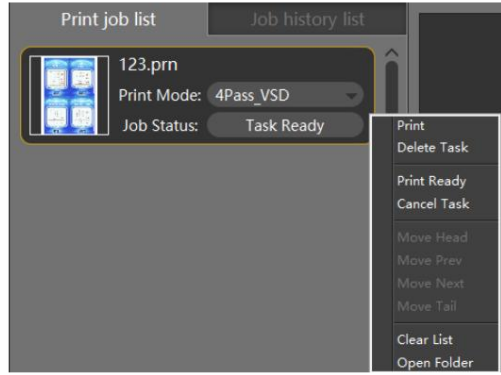
Click Print in the menu bar to enter the print interface, as shown below:



Serial number	Name	Function Description
1	Main menu ribbon	The area where the main function buttons of the system are displayed
2	Shortcut button ribbon	Display the area of frequently used command buttons
3	Task list ribbon	Shows the current area of all tasks that are being printed or to be printed
4	Task preview showing the ribbon	The area showing the preview of the selected print job
5	Print task information ribbon	The area showing all the print information of the current print job
6	Status Bar	The area that displays the current working state or connection status of the system

The print interface includes a print task list window, a history task list window, a print task preview window, and a print information window; selecting a task in the print task list, right clicking will bring up the lower menu. As shown below:

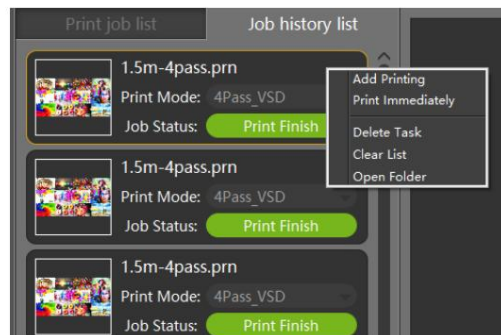
4.1 Open task list



right-click,

Seri	name	Function Description
1	Start printing	Perform printing
2	Delete task	Remove from print job list
3	Waiting for	Add the current task to printing the queue to be printed
4	Cancel task	Cancel printing or cancel waiting for printing status
5	Move to the front	Move the selected task to the top of the task list
6	Move up	Move the print job forward one bit
7	Move down	Move the print job back one bit
8	Move to the end	Move the selected task to the end of the task list
9	clear the list	Empty all tasks in the print task list
10	open Directory	Open the file where the print file is located

4.2 Historical task list



right-click,

Serial number	Name	Function Description
1	Add print	Add a task to the print task list

2	Print now	Add a task to the print task list and print immediately
3	Delete task	Remove a task from the history print list
4	Clear the list	Clear tasks from the history print list
5	Open Directory Open	the folder where the print file is located

4.3 Task attribute

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

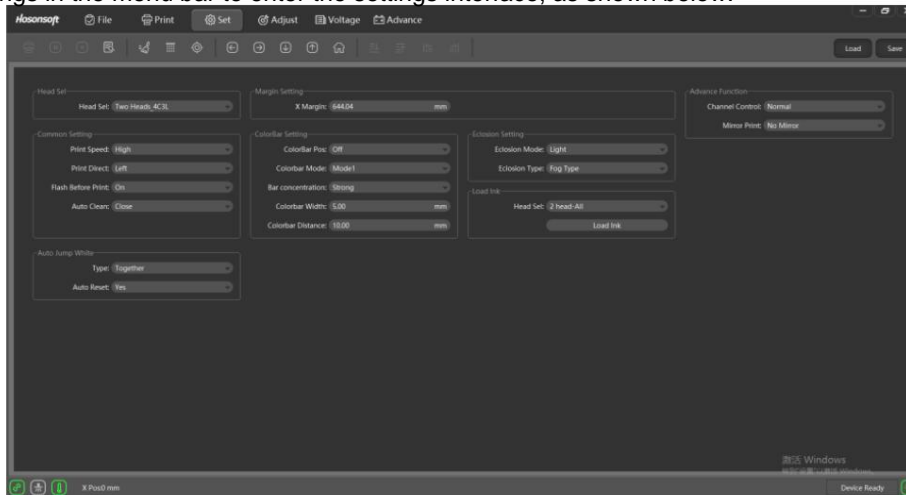


Serial number	Name		Function Description
1	Printing settings	Number of copies	Set the number of times the task is repeated for printing.
2	Continuous setting	Horizontal number	Horizontal continuous drying
		Longitudinal amplitude	Longitudinal continuous drying
		Lateral spacing	Horizontal continuous drying interval (mm units)
		Vertical	Longitudinal continuous drying spacing interval (mm units)
3	Area printing	x position	The starting print position in the x direction of the print file
		y position	The print position in the y direction in the print file
		width	Print width of the selected area in the print file

		height	Print height of the selected area in the print file
4	Task attribute		Includes the name of the task, the printing accuracy of the task, the size of the printing task, the number of color printing tasks, the pass number of the printing tasks

5 Set

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

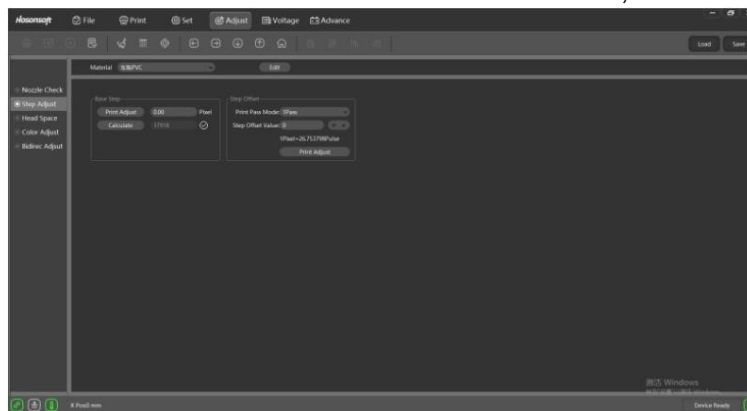


Series I number	Name		Function Description
1	Nozzle selection		In the case of a specific model, the nozzle selection setting is available.
2	x white border		Set the starting position of printing
3	General settings	printing speed	Set the print speed to low speed, medium speed, high speed
		Printing direction	Set the print direction to print to the left, print to the right, print in both directions
		Prepress Flash	Set pre-press flash or open pre-flash
		Automatic cleaning	Set automatic cleaning on or automatic cleaning off
4	Color bar setting	Color bar position	You can set the color bar position to the color bar on the left side, the color bar on the right side, and the

			color bar on both sides to close the color bar.
		Color strip mode	The difference between the two color bar modes
		Color bar concentration	Can set the color bar concentration to weak, medium, strong
		Color bar width	Color strip width
		Color strip distance	Blank spacing between color bars and printed images
5	Feather setting	Feathering amplitude	Feathering range selection
		Feather type	Feather type selection
6	Ink loading function		Open the ink loading and stop the ink filling function
7	Whitening function	Stepping white	Enable whitening, press pass when jumping vertically
		Continuous white jump	Enable whitening, continuous skipping when jumping vertically
		Turn off white	Turn off the whiteout function

6 Calibration

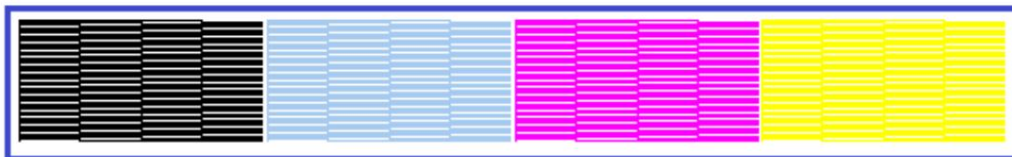
Click Calibration in the menu bar to enter the calibration interface, as shown below:



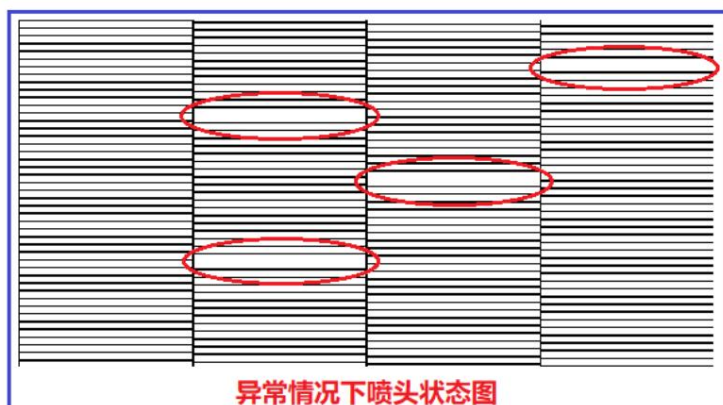
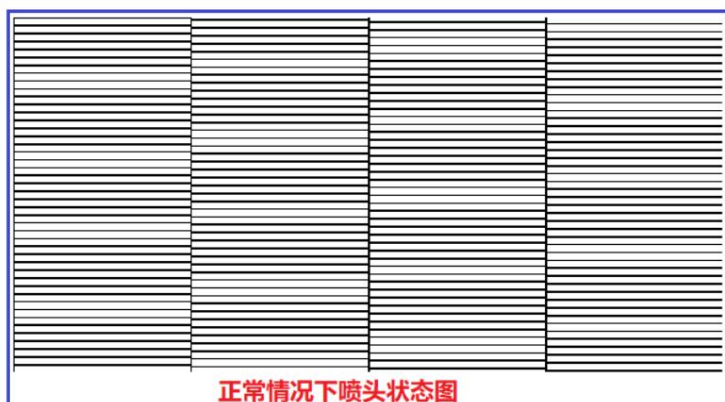
Serial number	Name		Function Description
1	Nozzle detection	Nozzle detection	Check if the nozzles of the nozzles are in good ink.
		Level detection	Check that the entire nozzle plane of the nozzle is parallel to the horizontal plane
		Vertical detection	Check if the nozzle is tilted left and right
2	Step calibration		Calibration step parameters and fine-tuning step parameters for different pass modes
3	Nozzle distance	Nozzle horizontal spacing calibration	Align the horizontal spacing between the nozzles
		Longitudinal spacing calibration of the nozzle	Align the longitudinal spacing between the nozzles (default 360, calibration chart deviation, physical calibration nozzle 2)
4	Color calibration		Calibrate the longitudinal and horizontal position of each channel of the printhead
5	Two-way calibration		Calibrate bidirectional offsets for bidirectional printing at different speeds

6.1 Nozzle detection function introduction

Click "Nozzle Detection", the system will print out the nozzle detection pattern, such as the nozzle state diagram of the Epson 4720 paper machine, as shown below:



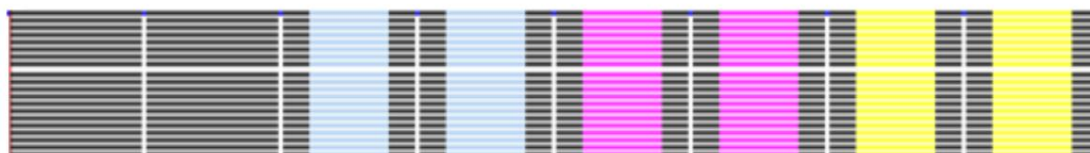
Partially enlarge the normal and abnormal conditions of the black state diagram, as shown below:



The state diagram in the above picture may be blocked and needs to be cleaned until The nozzle status is optimal.

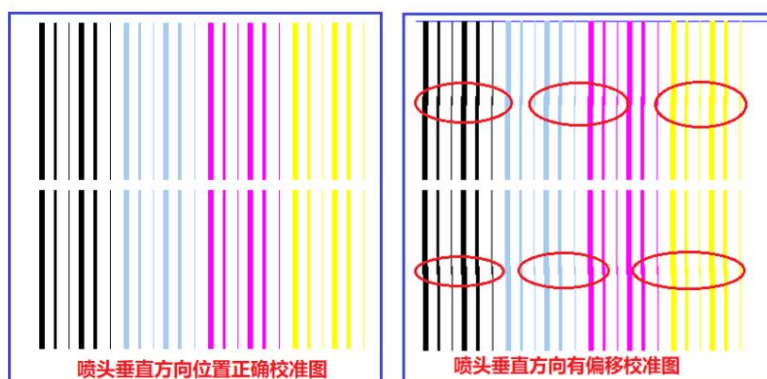
6.2 Introduction to horizontal detection function

Click "Level Detection", the system will print out the horizontal detection pattern, such as the horizontal detection chart of the Epson 4720 paper machine, as shown below:



6.3 Vertical detection function introduction

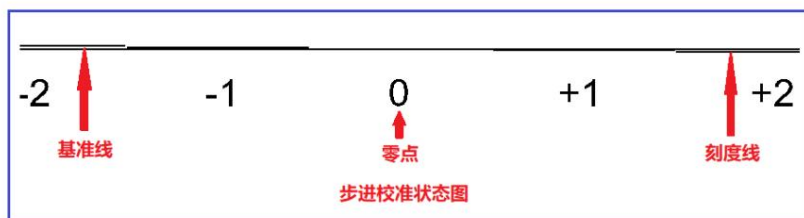
Click "Vertical Detection", the system will print a vertical detection pattern, such as the vertical detection chart of the Epson 4720 paper machine, as shown below:



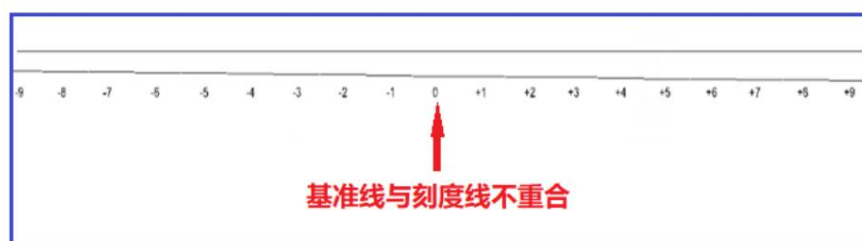
The calibration chart on the right side of the figure above needs to be adjusted vertically in the vertical direction until the vertical calibration chart is in the correct state.

6.4 Step calibration function introduction

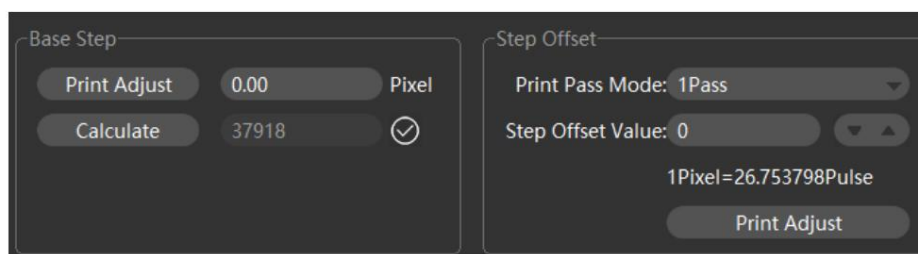
Click "Print Calibration Chart" under the reference step box and the system will print. For example, the step calibration of the Epson 4720 paper machine is as follows:



The figure above shows that the step is calibrated, and the reference line and the tick mark are completely coincident at 0 o'clock. If the step is not calibrated, the following situation will appear:

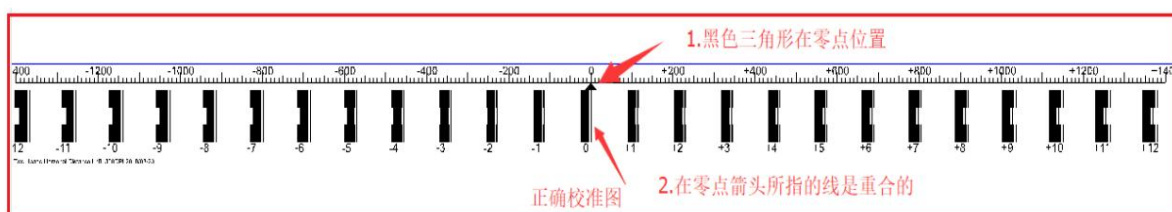


The above picture needs to be adjusted. Adjust the window as shown below, input the adjustment value, click Calculate, and reprint the calibration chart until the baseline and the print line completely coincides at 0.

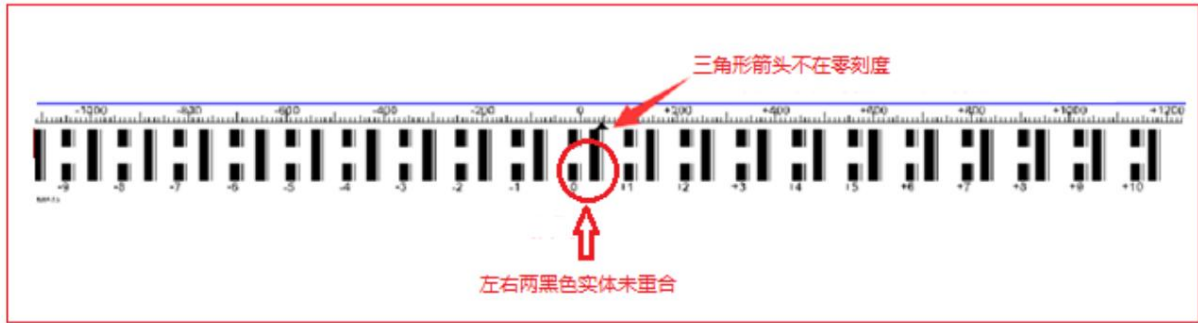


6.5 Introduction to nozzle horizontal spacing calibration

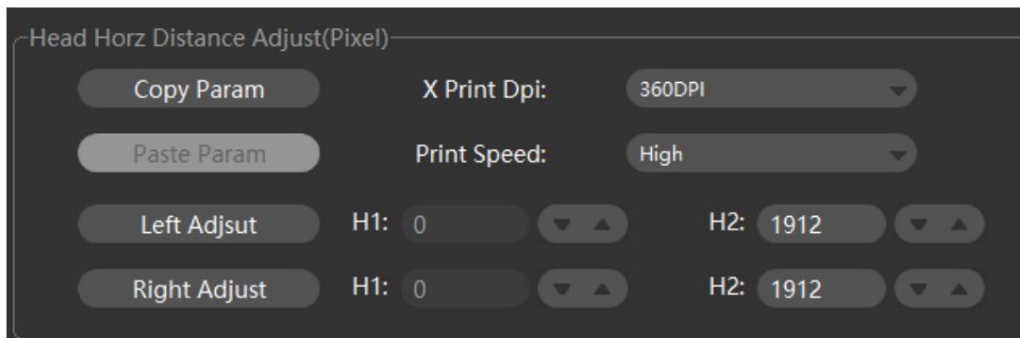
Click "Print left/right calibration chart" under the horizontal spacing calibration box of the nozzle, the system will print



The above figure shows that the horizontal distance between the nozzles is normal, and when the horizontal spacing of the nozzles is not calibrated, the following picture will appear:

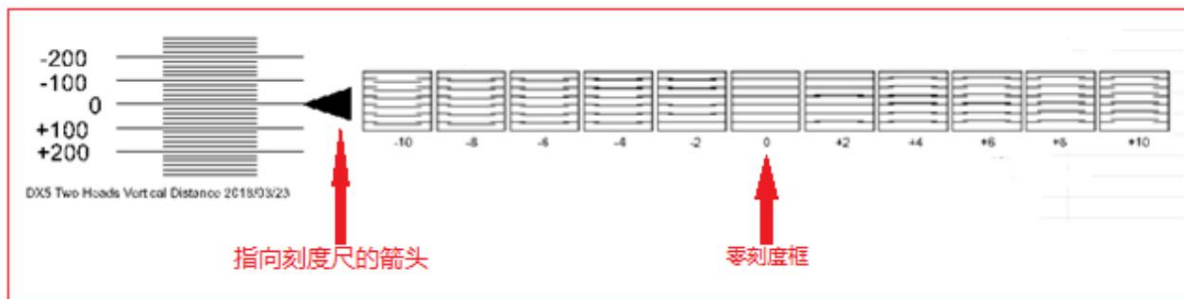


The above picture needs to be adjusted. Adjust the window as shown below. After inputting the adjustment value in the position H2 in the figure below, reprint the calibration chart until the 0 mark is pointing to 0 point.

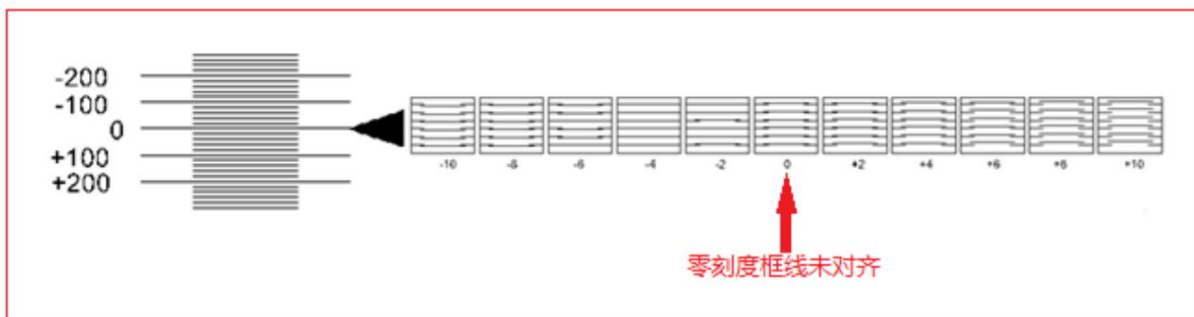


6.6 Introduction to longitudinal spacing calibration of nozzles

Click "Print Calibration Chart" under the vertical spacing calibration box of the nozzle, the system will print.



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

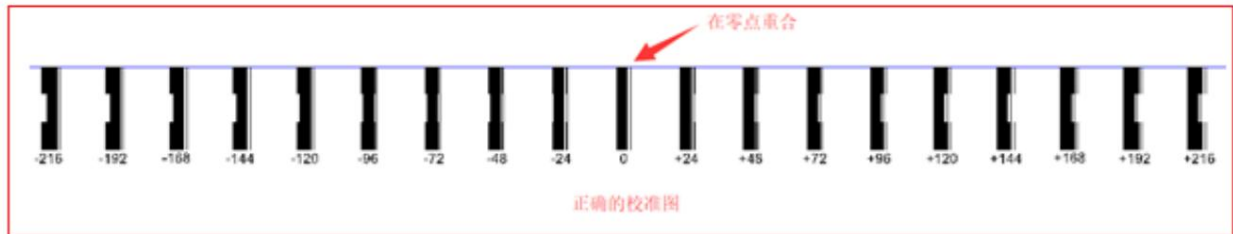


All the lines in the 0-point scale box are not parallel, but all the lines in the -4 scale frame are parallel, adjust the physical position of the nozzle 2, and then re-calibrate until

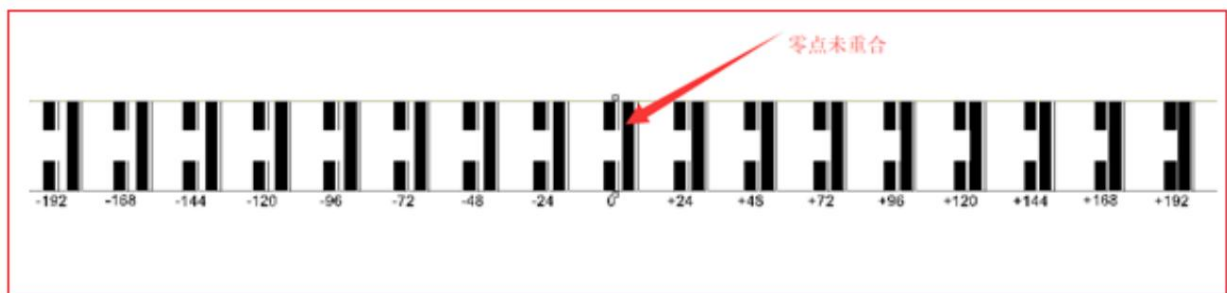
all the lines in the 0-point scale frame are parallel, adjust the window. As shown below:

6.7 Bidirectional calibration function introduction

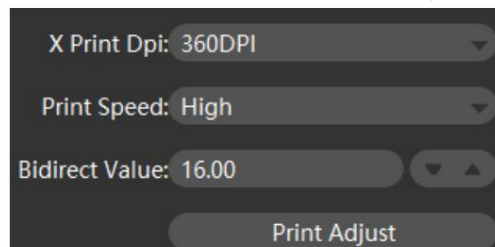
Click "Print Calibration Chart" under the bidirectional calibration interface, the system will print



The figure above shows the calibration. The uncalibrated situation is as follows:

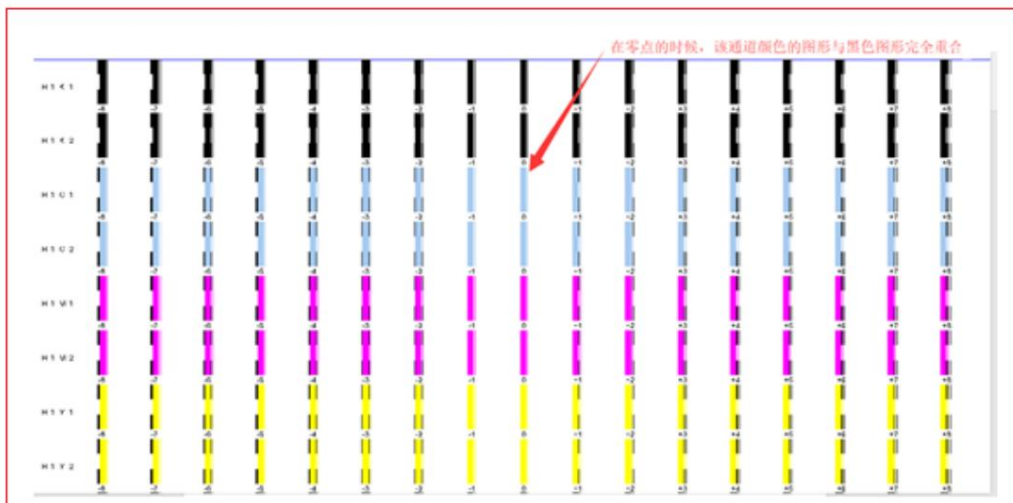


The calibration value must be filled in and re-calibrated, as shown below:

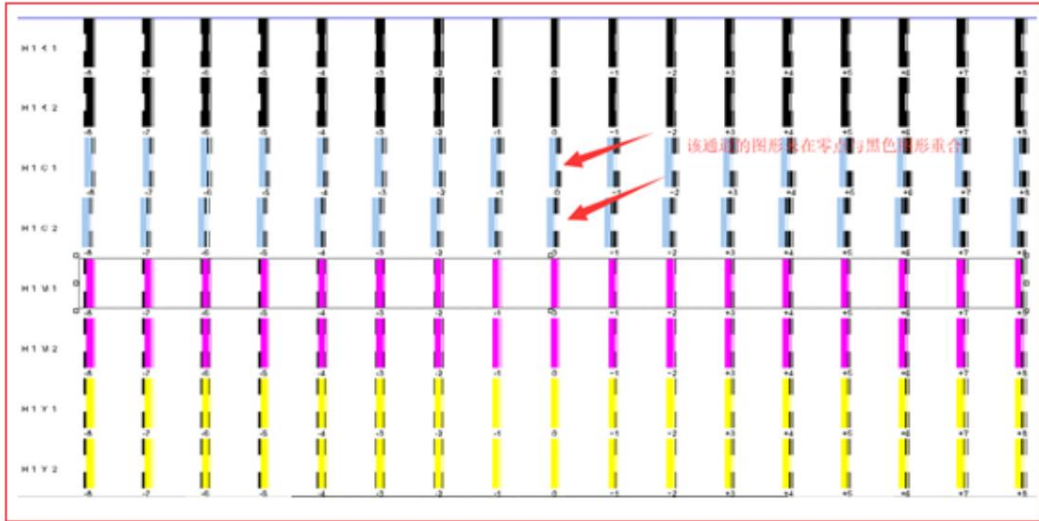


6.8 Introduction to color calibration function

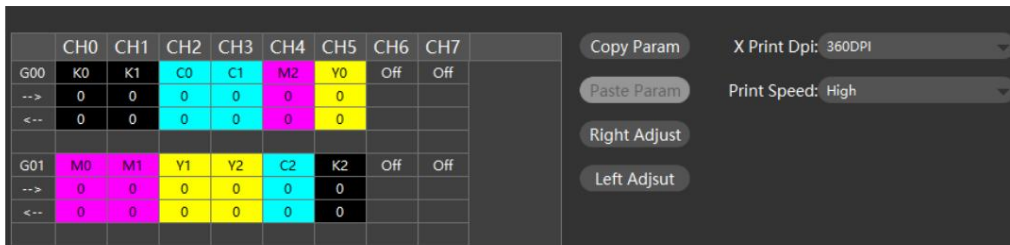
Click "Print left/right calibration chart" under the color calibration interface, the system will print



The figure above shows the calibration. The uncalibrated situation is as follows:

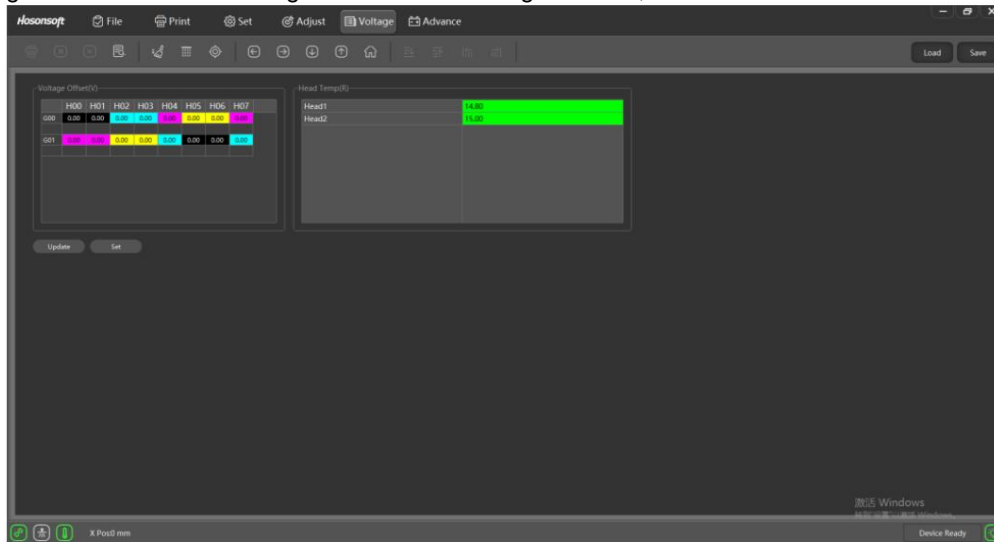


The calibration value must be filled in and re-calibrated, as shown below:



7 Voltage

Clicking on the main menu voltage will enter the voltage window, as shown below:

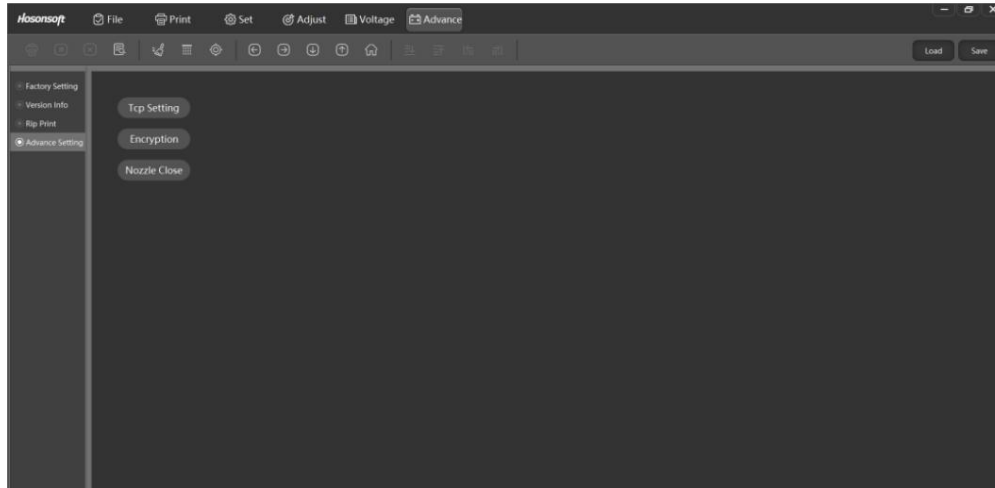


Serial number	name	Function Description
1	Voltage regulation voltage offset	Set the offset voltage of the specified nozzle channel
2	Refresh voltage	Update current nozzle channel voltage value

3	Setting voltage	Save the current nozzle voltage offset value
4	Nozzle temperature (read only)	Display specified nozzle temperature

8 Advanced

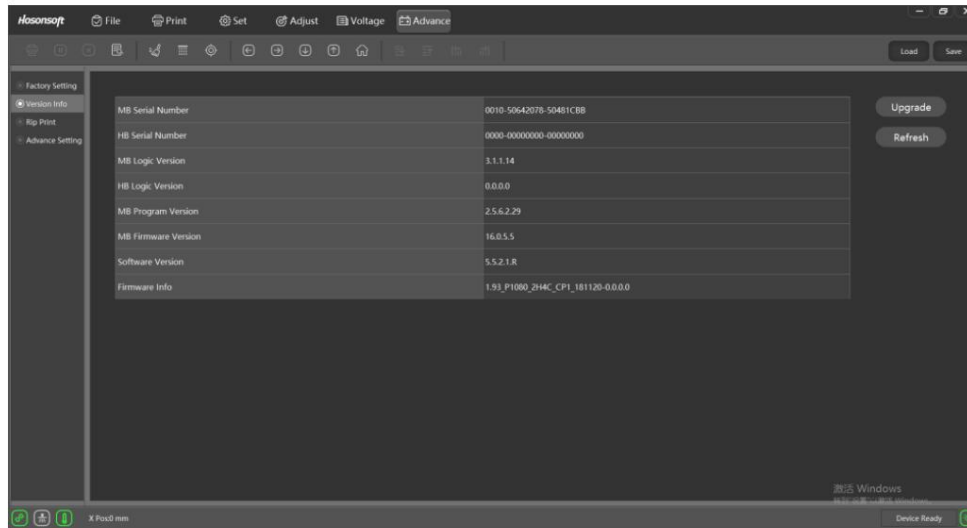
Click on the main menu Advanced to enter the advanced interface, as shown below:



Serial number	name	Function Description
1	Factory setting	Enter the entrance of the manufacturer parameter setting interface
2	Version Information	Display system board related version information
3	Print on the edge of the Rip	Select the precision mode for printing on the edge rip
4	advanced settings	Broken hole compensation, network configuration, setup of installation authorization

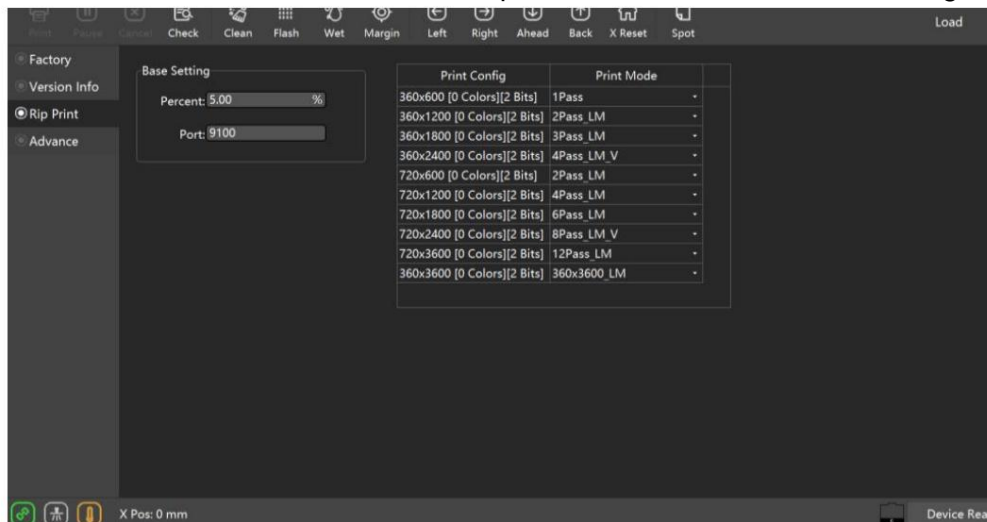
8.1 Version Information

Click the version information in the advanced interface and enter the following interface:



8.2 Rip Print

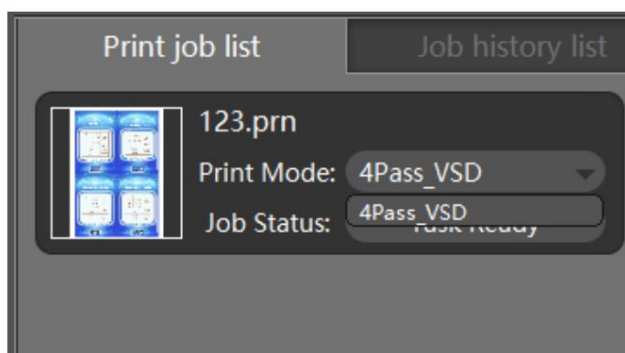
In the advanced interface, click the Rip Print button to enter the following interface:



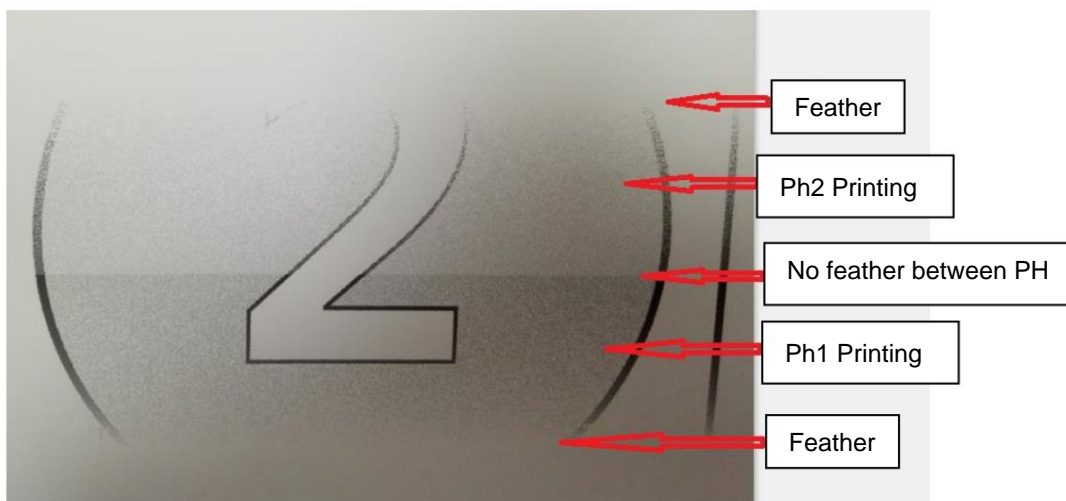
Serial number	name		Function Description
1	basic settings	Buffer ratio	Indicates that rip to the set value starts printing.
		The port number	The default is 9100
2	Print mode	Determined by rip software	Print mode in case of rip edge printing determined by rip software
		Determined by the printing software	The print mode in the case of printing while rip is determined by the print control software

How to print the software to set the print mode:

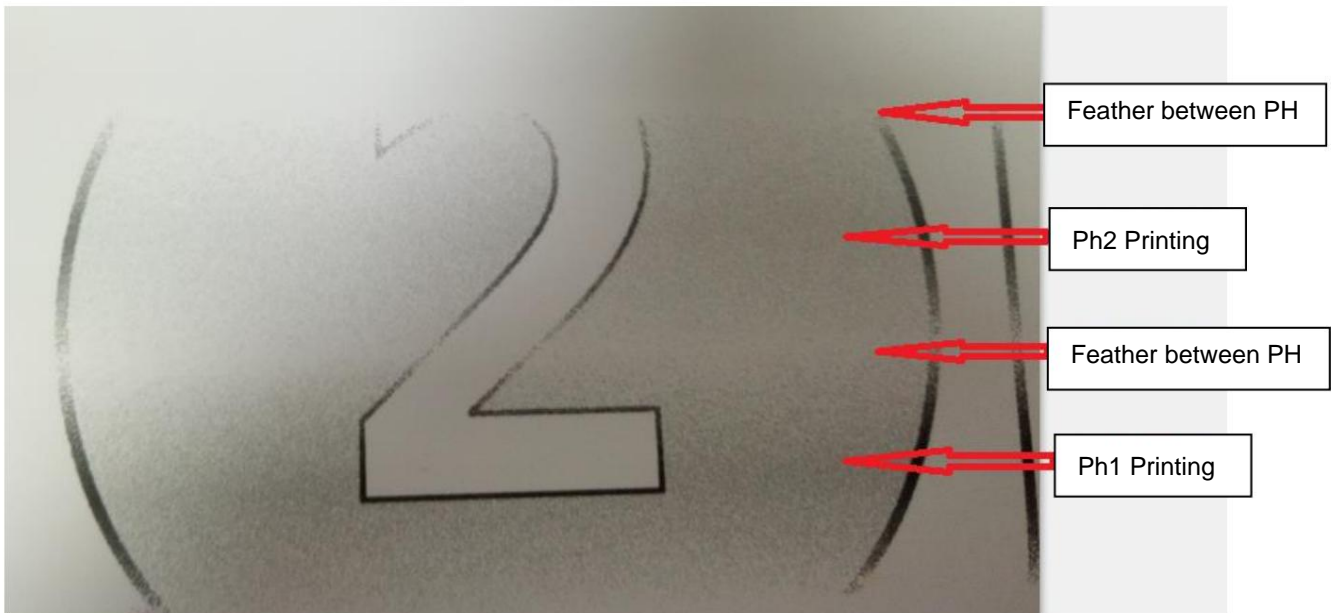
Open the printing software, add the print task to the print list, click the print mode drop-down list of the print task, you can select different print modes, as shown below:



Serial number	Name	Function Description
1	VSD_L	The normal mode is printed at a large point, and 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	Horizontal fusion large dot printing, the effect is as follows Figure 7-3-2
5	VSD_L_V	Longitudinal fusion large dot printing, the effect is as follows Figure 7-3-2



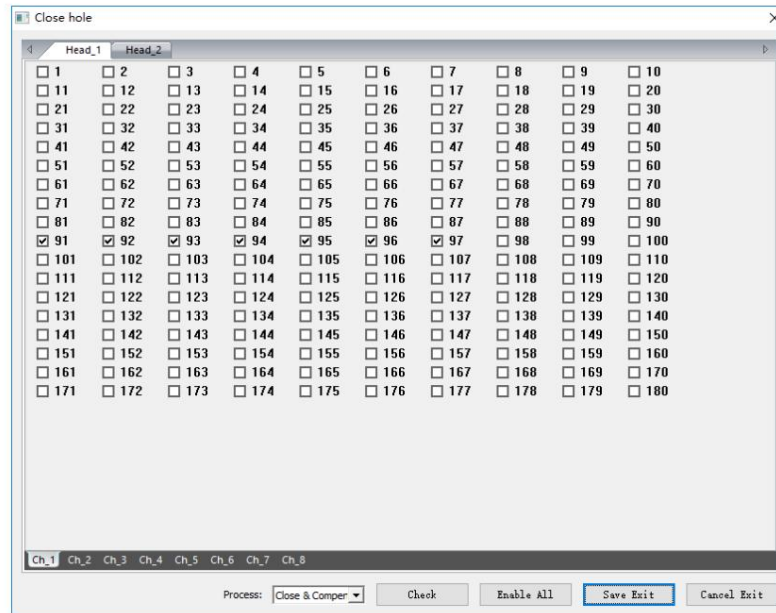
Normal mode Figure 7-3-1



Lateral fusion Figure 7-3-2

8.3 Broken Hole Compensation

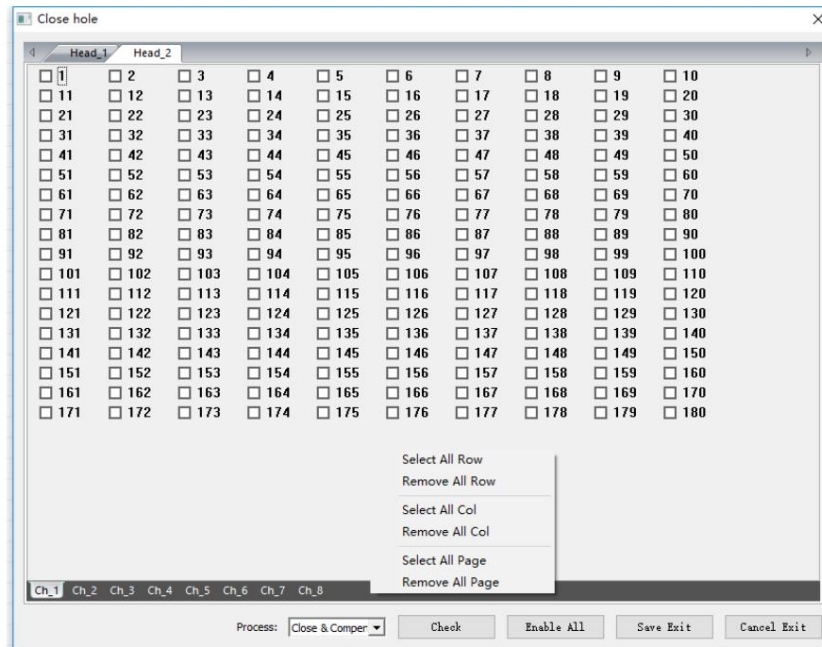
In the advanced settings menu, click the broken hole compensation button to enter the following interface:



Serial number	Name	Function Description
1	Broken hole treatment	Broken hole treatment mode selection
2	Broken hole detection	Detecting the state of the broken hole of each nozzle of the nozzle
3	Enable orifices	all All nozzle opening/closing options for the nozzle

4	Save exit	Save the current settings and exit the break settings
5	Cancel exit	The current setting is not saved, and the break hole setting state is directly exited.

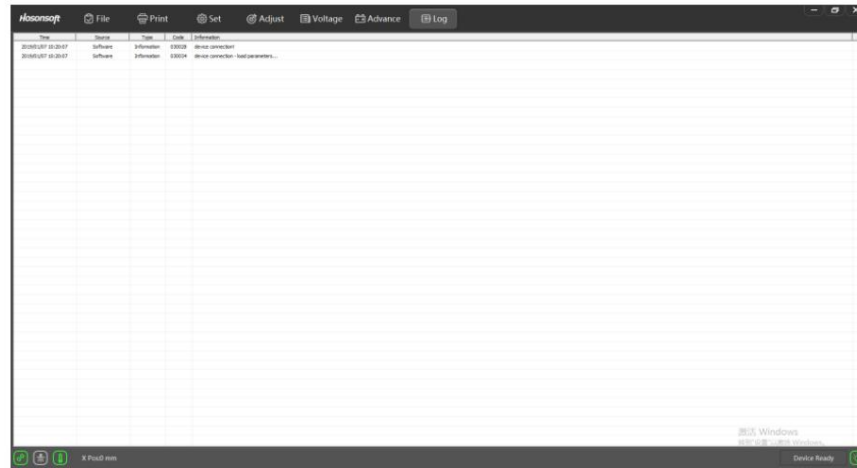
Pressing the right mouse button on the nozzle setting interface will pop up a drop-down menu, as shown below:



Serial number	Name	Function Description
1	Full selection	Achieve the entire line and choose at the same time
2	The whole line is not selected	Defeating the entire line at the same time
3	Full selection	Realize the entire column and choose at the same time
4	The whole column is not selected	Implementing the entire column is deselected at the same time
5	Full page selection	Realize the entire page and choose at the same time
6	The whole page is not selected	Deselect the entire page at the same time











9 Log









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













Through this window, you can see the current operation, especially when there is an error or a fault, you can know which type of error information is generated by viewing the debugging information, so that the error is solved in a targeted manner.




10 Shortcut buttons

Shortcut	Function Description
	Start the print button and execute the print command
	Nozzle check button, execute print head state diagram
	Pause/resume print button
	Cancel the print button and execute the end print command
	Nozzle cleaning button, perform nozzle cleaning command
	Flash spray on/off button
	White edge positioning button
	Moisturizing off/on button
	reset button
	x motor left shift button

	x motor right shift button
	Feed button
	Return button
	Step fine adjustment reduction button
	Step fine adjustment button
	Two-way fine-tuning reduction button
	Two-way fine adjustment increase button
	Enter the altimetry control panel button

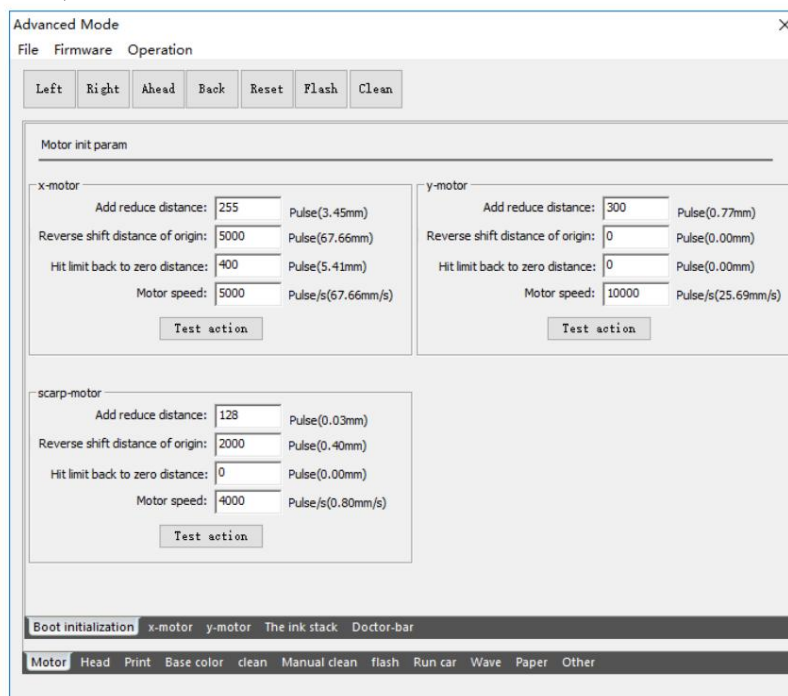
11 Status Bar

Status	Status icon description
	Network cable normal connection status
	Network cable disconnection status
	Offline status
	Turn on the flashing state
	Turn off the flashing state
	The system is working properly
	System error status
	System warning status
	Offline status
	Nozzle temperature normal

	Nozzle temperature abnormal state
	Nozzle temperature warning status
	Offline status

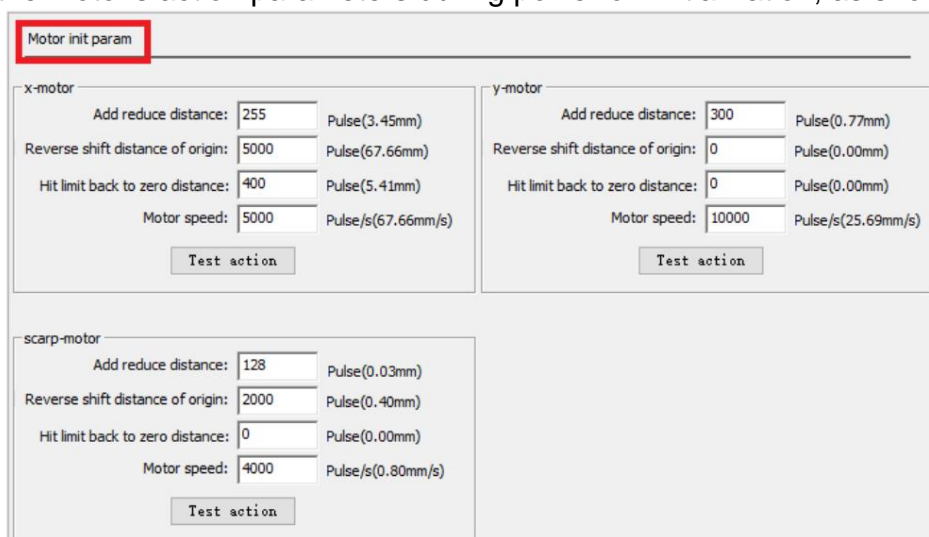
Five, the factory model

Click the factory settings in the advanced interface, enter the password directly (111111), enter the factory mode, as shown below:



12 Boot initialization

Perform the motor's action parameters during power-on initialization, as shown below:



The parameters of x motor, y motor and blade motor are the same. Take x motor as an example, see the following table:

Serial number	Name	Function Description
1	Acceleration speed	Acceleration speed
2	Origin reverse moving distance	The distance the motor moves away from the origin
3	Zero distance after hitting the limit	The distance that the motor moves in the direction of the origin and moves backwards after hitting the stopper
4	Motor moving speed	Motor moving speed

13 X motor

The settings of the x motor parameters are as follows:

X motor param

Gear ratio

Target move: mm

Gear ratio:

Trip param

Positive max distance: Pulse(3579.08mm)

Negative max distance: Pulse(0.00mm)

Sport param

Add reduce distance: Pulse(99.94mm)

Reset speed: mm/s

Routine move speed: mm/s

Print speed run: mm/s

Print speed(slow): %

Print speed(mid): %

Print speed(fast): %

Raster test

Current position: Raster

Offset distance: Raster

Locat party:

Serial number	Name	Function Description
1	Gear ratio calibration	Calibrate the gear ratio of the x motor
2	Stroke parameter	The maximum range of motion that can be moved in the x direction
3	Acceleration speed	Acceleration speed
4	Reset speed	Speed of trolley movement during reset
5	Regular moving speed	The speed of the car when moving manually in the manual mode
6	Print empty running speed	The speed of movement when the car is running back when printing in one direction

7	printing speed	The maximum jetting frequency corresponds to the proportion of speed, and the ratio of different speeds is different.
8	Grating test	The grating test mainly has two functions: one is to confirm whether the accuracy of the grating is accurate by comparing the set offset distance with the raster value reported in real time; in addition, determining whether the direction of the grating is correct
9	Pulse positioning	The system locates the current position of the trolley by pulse
10	Grating positioning	The system locates the current position of the cart through the grating

14 Y motor

Y motor param

Gear ratio

Target move: mm Move

Fact move: mm Calc

Gear ratio:

Trip param

Positive max distance: Confirm

Negative max distance: Confirm

Sport param

Add reduce distance: <input type="text" value="3000"/> Pulse(7.71mm)	Orientation direction of Y axis: <input type="text" value="Pulse position"/>
Routine paper feed speed: <input type="text" value="70"/> mm/s	
Print speed(slow): <input type="text" value="50"/> mm/s	
Print speed(mid): <input type="text" value="60"/> mm/s	
Print speed(fast): <input type="text" value="70"/> mm/s	

Double Y error max: mm

Serial number	Name Function	Description
1	Gear ratio calibration	Calibrate the gear ratio of the y motor
2	Stroke parameter	The maximum range of motion of the motor in the Y direction
3	Acceleration speed	The motor accelerates from a stopped state to a constant speed or from a constant speed to a moving distance of 0
4	Convention I feed speed	The speed at which the Y motor moves at a constant speed during manual feed/return movement
5	printing speed	The maximum jetting frequency corresponds to the proportion of speed, and the ratio of different speeds is different.

15 Ink stack

The ink stack param

Motor trip distance set

Positive max distance: Pulse

Negative max distance: Pulse

The ink stack param

Add reduce distance: Pulse

The ink stack speed: Pulse/s

Moisture the ink stack height: Pulse

Flash the ink stack height: Pulse

Scarp the ink stack height: Pulse

Limit the ink stack check height: Pulse

Serial number	Name	Function Description
1	Motor stroke setting	The maximum range of motion of the ink stack
2	Acceleration speed	Acceleration speed
3	Ink stack movement speed	Speed of ink stack movement
4	Moisturizing ink stack height	The height of the ink stack when in a moisturizing state
5	Flash inkjet stack height	The height of the ink stack when in a flashing state
6	Scrapper stack height	The height of the ink stack when in a moisturizing state
7	Limit detection ink stack height	When entering the limit detection, the height of the ink stack (the height is as small as possible, but it must be ensured to leave the limit position)

16 Scarp

Motor Trip param

Positive max distance: Pulse

Negative max distance: Pulse

Scarp param

Add reduce distance: Pulse

Scarp car run speed: Pulse/s

Scarp run speed: Pulse/s

Scarp place

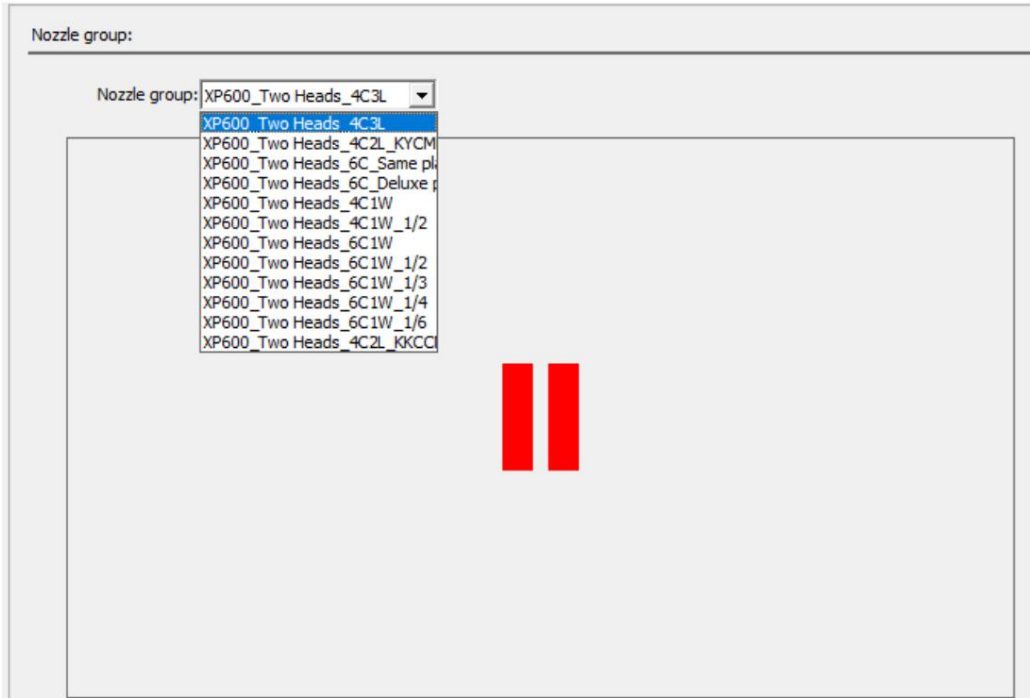
Scarp place: Pulse

Scarp start place: Pulse

Scarp end place: Pulse

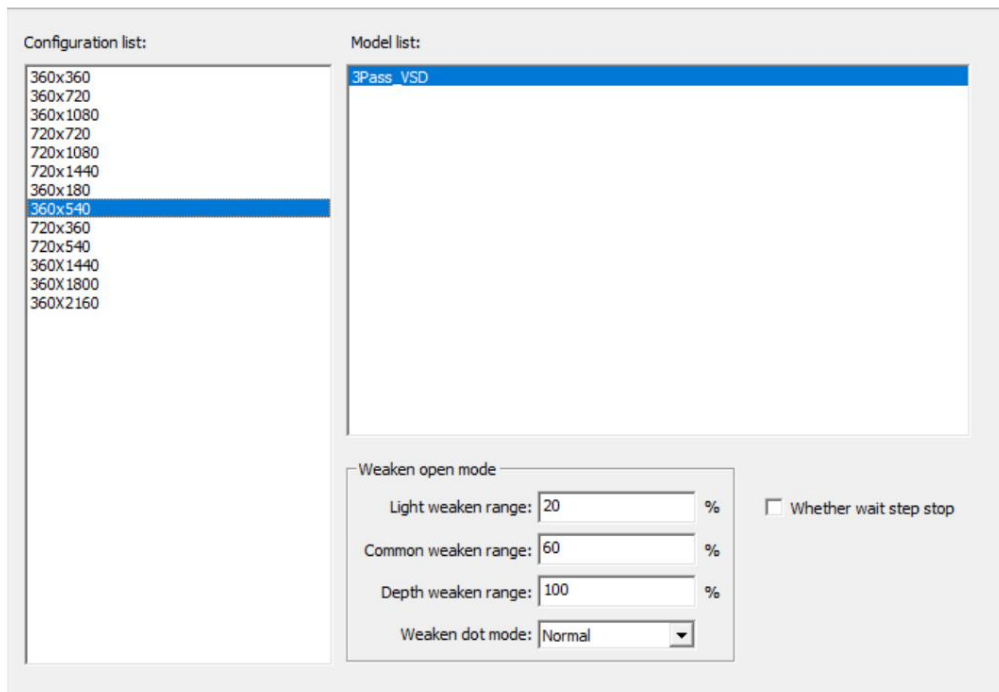
Serial number	Name	Function Description
1	Motor stroke parameter	Blade motor maximum stroke parameter setting
2	Blade parameter setting	Blade motor acceleration/deceleration distance parameter and motion speed parameter setting
3	Scratch start position	The starting position of the trolley when the scraper scrapes the nozzle
4	Scratch end position	End position of the trolley when the wiper scrapes the nozzle

17 Nozzle combination



Show a variety of different arrangements of multiple nozzles.

18 Print mode



Serial number	Name	Function Description
1	Configuration list	Currently configured nozzle all precision list
2	Mode list	List of print modes for each precision
3	Feather mode setting	Feather amplitude setting and feathering point mode selection

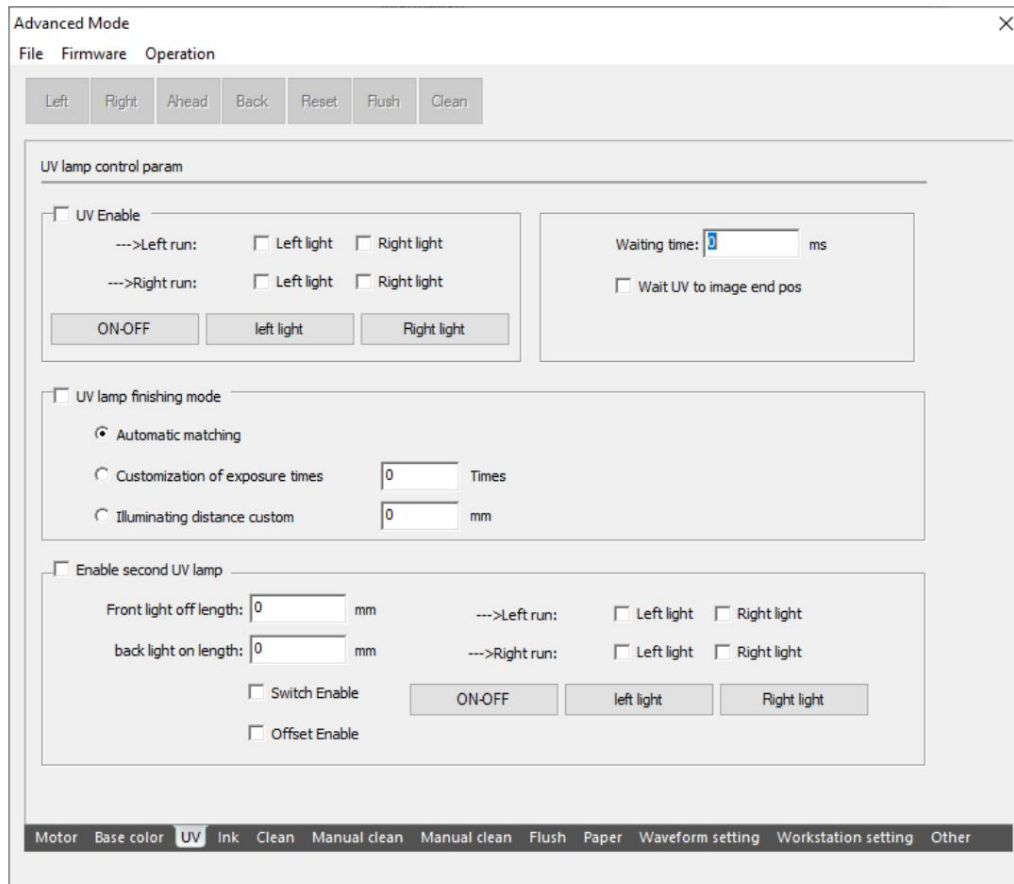
19 Base color

Base adjust param(Note: take the maximum physical grating as reference)									Left adjust	Right adjust
	H00	H01	H02	H03	H04	H05	H06	H07		
G00	K0	K1	C0	C1	M2	Y0	Close	Close		
-->	0	64	248	312	496	560	0	0		
<--	0	64	248	312	496	560	0	0		
G01	M0	M1	Y1	Y2	C2	K2	Close	Close		
-->	0	64	248	312	496	560	0	0		
<--	0	64	248	312	496	560	0	0		

The color value here is used to fill the internal color shift of the nozzle.

20 UV Lamp

The interface is shown below:



No.	Name	Function Description
1	UV Enable	Select how the UV lamp is turned on during printing By pressing "Left light" and "Right light", it can test if UV lamp are functioning properly.
2	Waiting time	Setting the delay time
3	UV lamp finishing mode	1. The number of additional pass is automatically matched according to the printing mode. For example, if printing 4PASS, carriage will move 4 extra pass to cure the ink at the last passes.

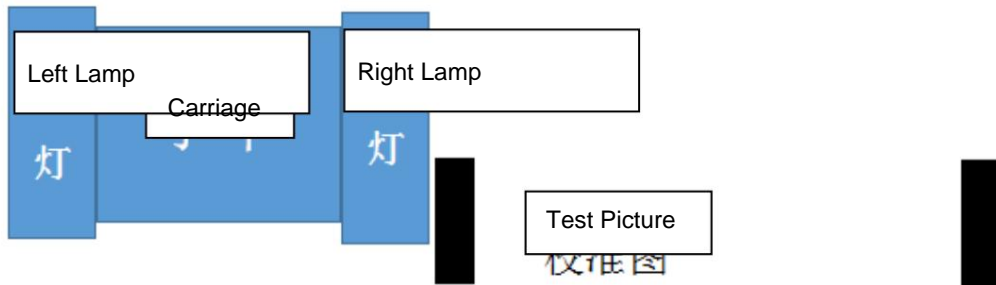
		<p>2. The number of additional pass is defined by how many passed is input.</p> <p>3. Customize the moving distance. Set the moving distance after printing, which is used generally in varnish mode</p>
4	Enable a second UV lamp	Support two sets of UV lamps, control the order of the lamps, the left and right switches of the UV lamps are consistent

Instruction for switch position adjustment, click switch position adjustment.

The following interface will be shown:

Step 1: print the test picture, click the "Confirm" button after printing

Step 2: Calibrate the position of the left and right UV lamp. Set the position by moving the carriage to the proper position, and then press the confirm. For example, the following image shows the left offset of the right lamp. Finish the setting of four positions of the left and right UV lamp.



Step 3: Click the "Print test chart" to check if the position setting is proper or not

21 Automatic cleaning

Clean

Clean mode:

Clean mode: ▾

Nozzle group: ▾

Clean reset time: PASS

Print before flash

Flash frequency: ▾ Hz

Flash times: Times

Single flash time: ms

Flash space time: ms

Printing flash

Flash frequency: ▾ Hz

Flash times: Times

Single flash time: ms

Flash space time: ms

Serial number	Name	Function Description
1	Cleaning mode	Automatic cleaning on/off selection
2	Nozzle combination	Selection of combined cleaning between different nozzles
3	Cleaning interval	When flash printing is started during printing, a flash is performed after each set number of passes.
4	Flashing frequency	Number of times the nozzle ejects per second
5	Flashing times	Stop flashing after how many flash cycles are continuously performed
6	Single flash time	One flash cycle, continuous flashing time
7	Flash interval Two flashing intervals	

22 Manual cleaning

Clean manual

Pumping ink param Clean weal

Pumping ink times: Times

Pumping ink take time: ms

Wait time pumping ink finish: ms

Pumping useless ink time: ms

Flash param

Flash frequency: Hz

Flash times: Times

Single flash time: ms

Flash space time: ms

Slip displacement parameter of flicker

X move speed: mm/s

X move distance: mm

Serial number	Name Function	Description
1	Number of inks	How many times in the manual cleaning process
2	Ink time	The duration of each ink draw
3	Rest time after pumping	After the ink is completed, wait for the set time before proceeding to the next operation.
4	Waste time	Start the time of pumping the waste ink motor
5	Car removal speed	Movement speed when the trolley moves to the specified position when sliding by flashing
6	Car removal distance	Flashing position when sliding flash

23 Automatic flashing

Auto Flash param

Flash

Auto Flash frequency: Hz

Single flash time: ms

Flash space time: ms

Auto pump ink enable:

Auto pump waste ink: Times

Auto pump waste ink: ms

Manul flash

Flash frequency: Hz

Flash times: Times

Single flash time: ms

Flash space time: ms

Serial number	Name Function	Description
1	Automatic flashing frequency	Number of inkjets per second during automatic flashing
2	Single flash time	One flash cycle, continuous flashing time

3	Flash interval Interval between two flashes	
4	Automatic waste ink cycle	During the automatic flashing process, the ink is discharged after the number of flashing settings.
5	Waste time Time to start the waste ink motor	

24 Running Machine

Run machine

X start: Pulse(0.00mm)

X car max distance: Pulse(3382.88mm)

Single run paper distance: mm

Max run paper distance: mm

Scarp move position: Pulse

Serial number	Name	Function Description
1	Starting position of the car	The starting position of the car when running the machine
2	Car maximum position	End position of the car when running the machine
3	One-way paper distance	The car moves back and forth, the distance in the y direction
4	Maximum paper distance	This running machine, the total distance of the paper in the y direction

25 Paper skip

Print before / after printing mode

Paper before print mode:

Paper after print mode:

Print before / after printing mode

Print before the paper length: mm

Print before the back paper length: mm

Print after the paper length: mm

Print after the back paper length: mm

Print before/after PASS paper mode

Front and back PASS paper:

Check paper

Enable check paper before print

Reverse print

Reverse printing

Serial number	Name	Function Description
1	Paper feed mode before printing	Paper feed method before printing
2	Print after paper mode Paper selection after printing	
3	Print forward paper distance	Start printing after setting the distance first.
	Print back paper distance	Start printing after setting the distance first.
4	Paper feed distance after printing	The print job is completed, and then the paper is set to a distance before printing stops.
	Print back paper distance	The print job is completed, and then the paper is set to the distance before printing stops.
8	Fine adjustment of the left/right margin of the paper	Fine-tune the distance between the drawing and the edge of the paper
9	Paper detection	Turn on/off paper or out of paper detection
10	Paper sensor offset	Horizontal distance between the paper sensor sensor and the raster decoder
11	Paper non-detection area	The sensor paper detects the distance from the probe to the paper start mark

26 Other

offset

X white edge start: mm

X white edge location: mm

Color potency set

Color potency weak: %

Color potency middle: %

Color poyency strong: %

Raster set

X raster precision: DPI

Wave

Default wave:

Broken line

Print over pause time: ms

Pause after auto recovery time: ms

Check lack ink

Check display no ink

No ink can print

No ink can warn

Check

Start Y axis white edge position(when print calibration chart)

channel control

channel control

Serial number	Name	Function Description
1	x white edge start offset	The distance from the print head to the printed material
2	x white edge positioning	White edge positioning error setting, its calculation formula: white edge positioning value - white edge

	offset	positioning offset = white edge value + white edge starting offset
3	Raster setting	Set the accuracy of the raster (accuracy after four-way)
4	Color bar concentration	Color bar concentration of different grades, the ratio setting is different
5	Waveform	Print waveform selection
6	Timeout pause time in printing	Dropped in printing reaches the set time and enters the print pause
7	Automatic recovery time after pause	After the pause, the network cable is detected to be connected and the printer automatically resumes printing.
8	Insufficient ink detection	Select the action to be taken when the ink is missing
9	Moisturizing	Turn on/off moisturizing function

Nine: maintenance of the machine

9.1 Basic cleaning:

Press the cleaning button on the main interface of the software, which is divided into two modes: normal and depth. The general is for 5 seconds and the depth is 30 seconds. It is generally cleaned using the normal mode. As shown below:

9.2 Cleaning steps after the nozzle is used for a period of time after a partial needle or clogging phenomenon

1. One end of the ink bag is inserted into the ink and disconnected from the ink feeding tube. At this time, the ink inlet end of the ink bag is connected to the atmosphere, and the cleaning button is pressed at the main interface of the software to select the normal mode, and the ink in the ink bag is first drawn out. (This operation is done twice)
2. Connect the ink bag to the ink end and connect it to the special cleaning solution through the extension tube. Click the cleaning button and clean it together with the ink bag and the nozzle. (This operation is performed three times)
3. Take out the extension tube and let it connect to the atmosphere. Click the cleaning button to discharge the cleaning liquid in the ink bag as much as possible, and reconnect the ink inlet tube for inking.

9.3 Daily maintenance

1) Be sure to print the nozzle status map before shutting down to ensure that the status of the nozzle is normal.

2) Turn off the software, the car automatically returns to the moisturizing position, then turn off the power and keep the car in the moisturizing position.

3) Before starting the machine, wipe the ink pad and the blade with a clean cotton swab dampened with a special cleaning solution to prevent the ink from drying out and remaining on it.

9.4 Short-term shutdown maintenance (3-7 days)

1) Disconnect the ink bag from the ink inlet end and the ink inlet tube. At this time, the ink inlet end of the ink bag is connected to the atmosphere. Press the cleaning button on the main interface of the software to select the normal mode to extract the ink in the ink bag first. (This operation is done twice)

- 2) Connect the ink bag to the ink end and connect it to the special cleaning solution through the extension tube. Click the cleaning button and clean it together with the ink bag and the nozzle.(This operation is performed three times)
- 3) Take out the extension tube and let it connect to the atmosphere. Click the cleaning button to discharge the cleaning solution in the ink bag as much as possible.Seal the pipe with a plug and push the spray car back to the original moisturizing position.

9.5 Long-term shutdown maintenance (more than one week)

- 1) Be sure to print the print-head status map before shutting down to ensure that the print head is in the optimal ink discharge state.
- 2) Disconnect the ink bag from the ink inlet end and the ink inlet tube to allow the ink to automatically return to the ink cartridge.

Ten: The solution to common problems

10.1 After the power is turned on, the car is reset to normal.Open the PrintExp control software, prompting that the initialization software failed or the model is incorrect:

Check if the network cable is in good contact or damaged, and the driver is installed properly.Reinstall the PrintExp software.

10.2 After the power is turned on, the spray car does not automatically reset:

Check the digital control tube of the nozzle control board and the main board. If the Link indicator is on, check if the fiber connection is correct. Check whether the horizontal motor drive signal line and code line are correctly connected. Reprogram the motherboard firmware.

10.3 After the machine is turned on, the reverse motion of the spray car:

Check the signal cable of the transverse motor driver and correctly connect the coded line; re-program the motherboard firmware.

10.4 Misplacement during printing:

Check the mechanical part, whether the motor timing belt and gear are loose or worn, whether there is any tooth skipping phenomenon; whether the motor grating code disc is damaged; Check if the grating is dirty, scratched or incorrectly installed; Check if the grating decoder is dirty Things or damage, reading and losing pulses after a long time of work.(Please stay away from interference sources such as strong magnetic fields and voltage fluctuations; add noise filters to improve the computer and inkjet printer power supply)

10.5 Garbled or crashed during printing:

Check whether the fiber is intact; check whether the flat wire of the nozzle is intact; check the signal of the motherboard db to the servo driver for poor contact and damage; check whether the USB data cable is in good contact or damaged, replace the USB interface of the computer; check whether the computer is in good condition. Ground to standard.

10.6 Broken ink during printing:

Check if the ink bag leaks, causing the ink to flow back; check if fine particles and other substances adhere to the surface of the nozzle; check if the ambient temperature is too high;

10.7 Printing does not produce ink:

Check if the card is properly energized, and the flat wire of the nozzle is properly connected; check if the ink bag has ink; whether the fiber is intact.

10.8 Water ripple appears on the printed image:

At this point, stop printing immediately and completely clean the spray rail.If the problem persists, please ask the local agent to send a professional technician to repair.