



GENESIS UVDTF

A2 UV printer instruction manual



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1. Product Introduction

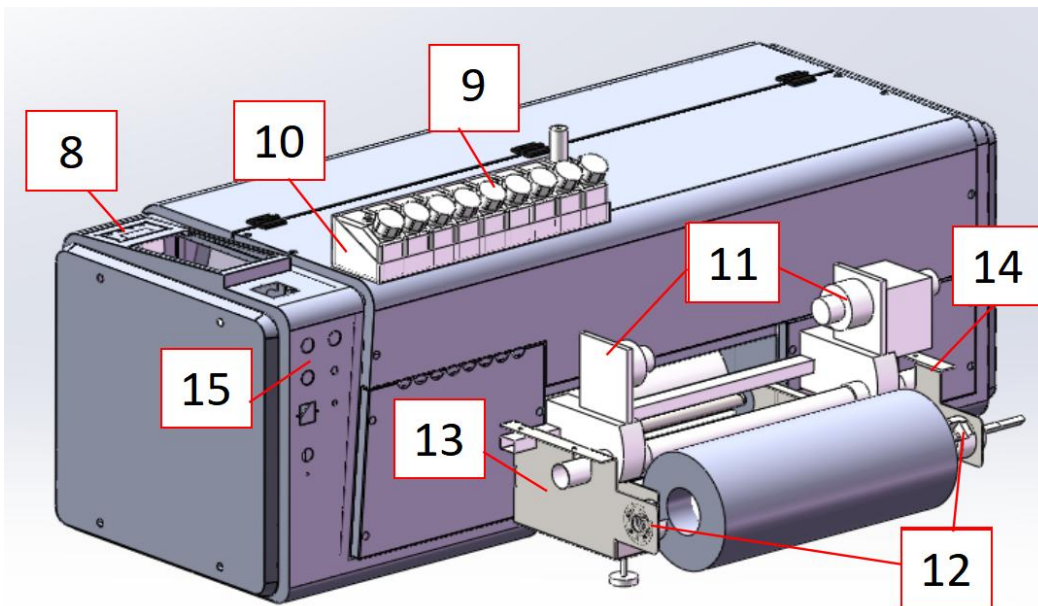
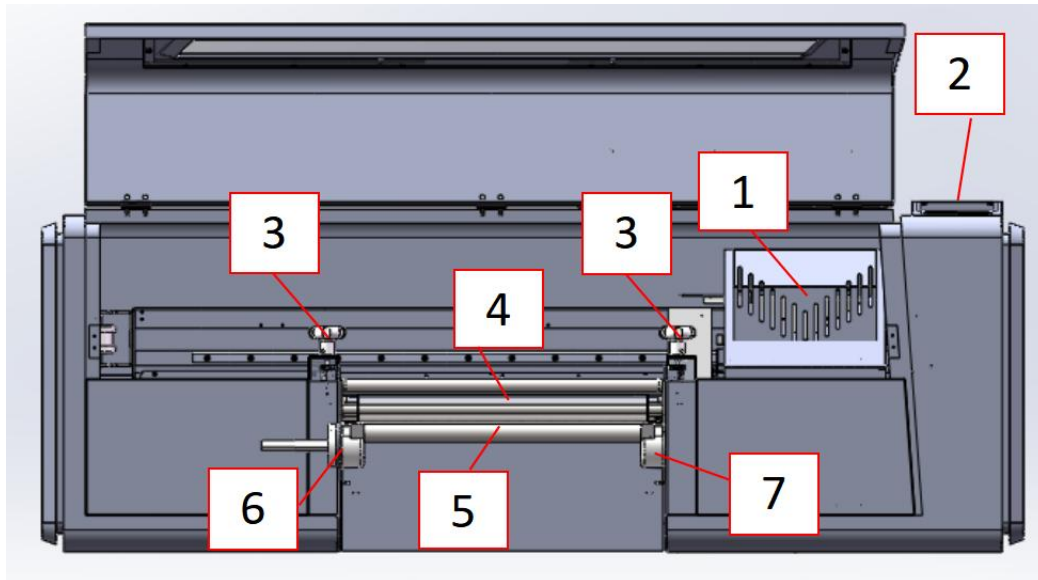
A2 UV label machine, small size, convenient operation, simple process, no plate making, no waste discharge, good gloss, friction resistance, can achieve one printing, and meet the requirements of batch processing and customization. It is suitable for a wide range of applications and is the best choice for individuals, small and medium-sized enterprises.

2. Model specification

Model Type	GENESIS UVDTF
Print head	XP600
Resolution	1080DPI 1440DPI
Speed	High Photo: 2 m ² /h Fine Photo: 2 .5m ² /h
Color control	ICC color profile with adjust function
Print Width	420 mm
Ink	UV
Operation Environment	Temperature 25° C~28° C, Humidity 50%-70%
Power	50HZ/60HZ 220V 10A
System	Windows7 or Above
Applicable materials	Plastic、Glass、Ceramics、Paper、Metal、Wood etc.
Image format	PNG,Tiff, Jpeg, Eps, Pdf
Printer size	Machine size: 1350 X 500 X 580mm(LXWXH)
	Packing size: 1700 X 810 X 840mm(LXWXH)
Printer weight	Net weight: 100 KG Gross weight: 142 KG

3. Product show and rack installation

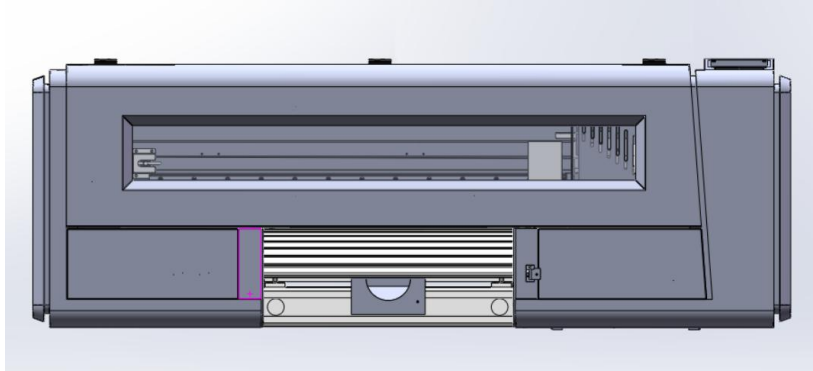
3.1 Printer Parts



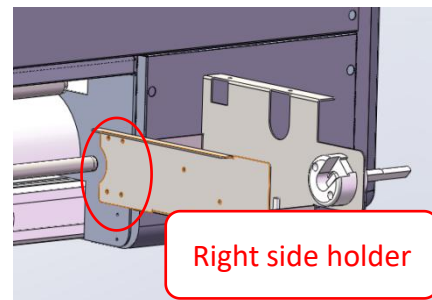
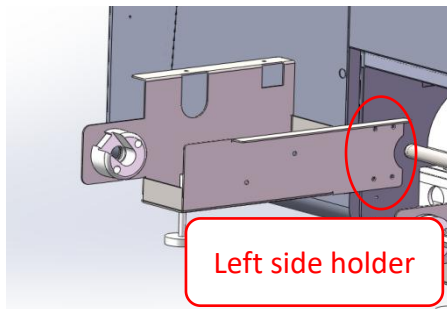
01 Carriage ink stack assembly	02 Control panel	03 Rubber Roller Lifting Handle	04 Laminating rubber roller (heating)
05 Stepping rubber roller	06 B film holder left	07 B film holder right	08 Rubber Roller Heating Controller
09 Ink tank Rewinding tray	10 Ink tank holder	11 A film rewinding tray	12 A film discharging tray
13 A film holder left	14 A film holder right	15 Switch panel	16

3.2 ROLLER RACK INSTALL

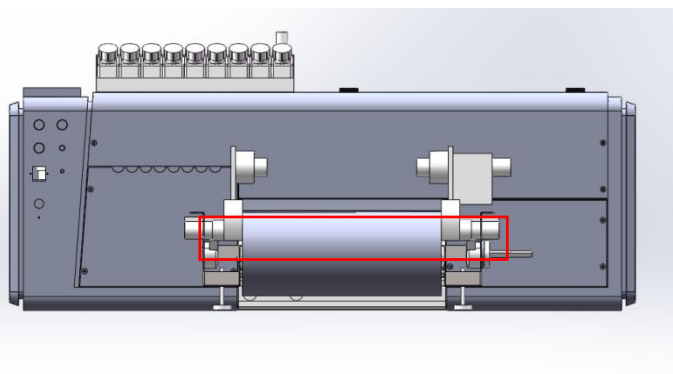
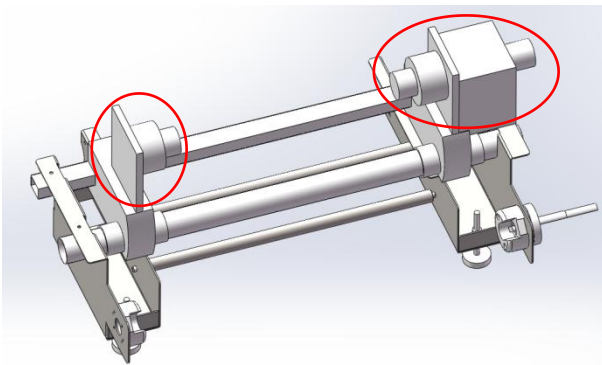
Step 1: Open the packaging box of the machine, remove the cushion foam block and protective film, take out all the accessories and check whether the host and accessories are damaged and whether the appearance is worn. Note: Random accessories, check carefully to prevent them from being lost!



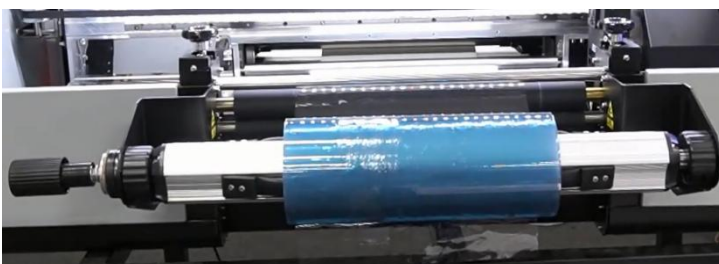
Step 2: Install the feeding holder , install the left and right feeding holder separately, and fix them with screws. as the picture shows:



Step 3: Install the A film left and right tearing motor and pipe, install the A film feeding steel pipe , as the picture shows:



Step 4: Install covered holder, fixed left and right holder with screws. as the picture shows:



4. Software installation and setup


4.1 Computer configuration requirements

Computer configuration requirements:

1. Computer system: Windows7 Ultimate 64-bit computer system.
2. CPU configuration: use i5 or above i5 CPU.
3. Memory stick: 8G or above.
4. Network card and network cable requirements: Gigabit or above network card must be used, and the network cable needs to be super Category 6 or above to support dry-mega communication network cable.
5. Hard disk configuration: It is recommended to use a 120G solid state hard disk as the system disk, and then add a mechanical hard disk as a secondary disk as needed.

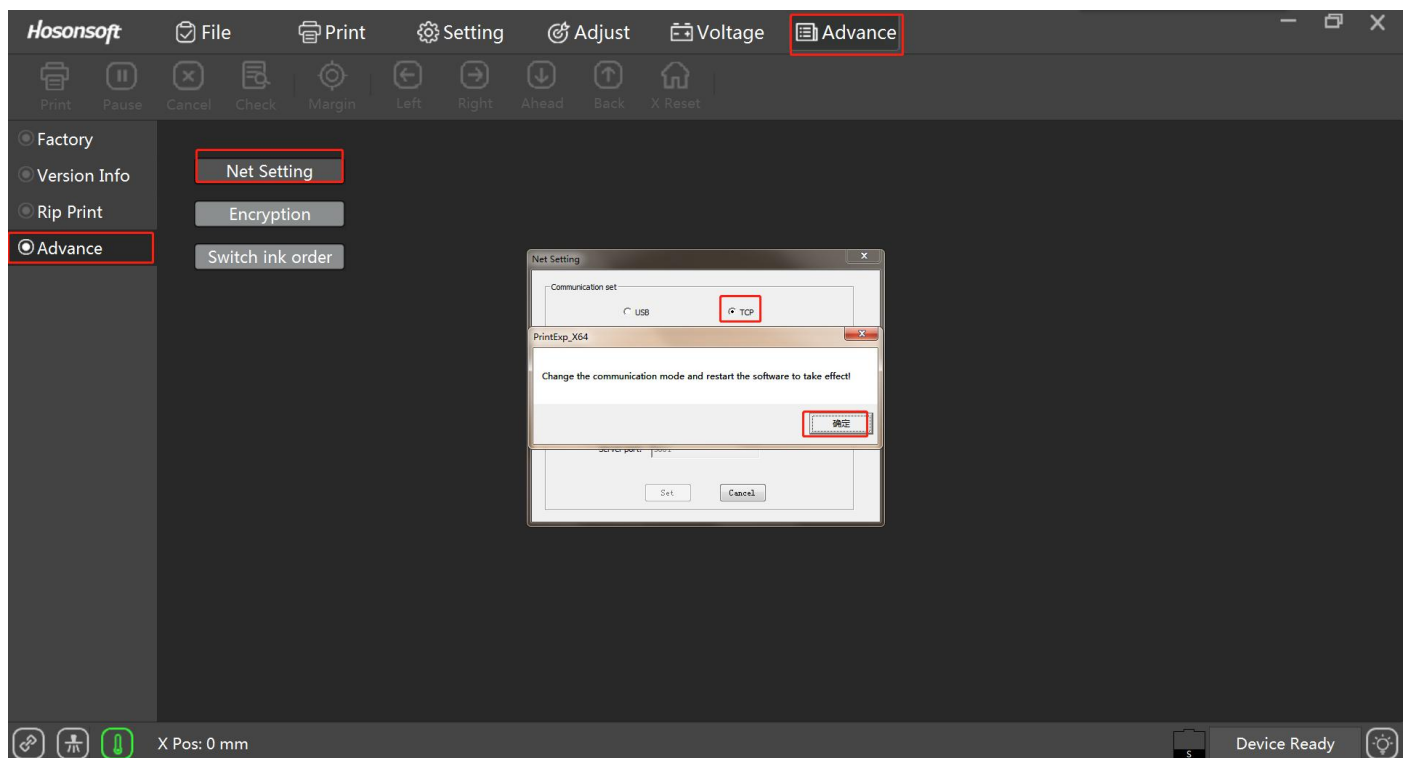
4.2 Installation of printing software

4.2.1 Printing software installation

Open the CD or USB to find  `PrintExp_X64_V5.7.6.5.14_BS_20201207.rar` Compress the software package and unzip the file.



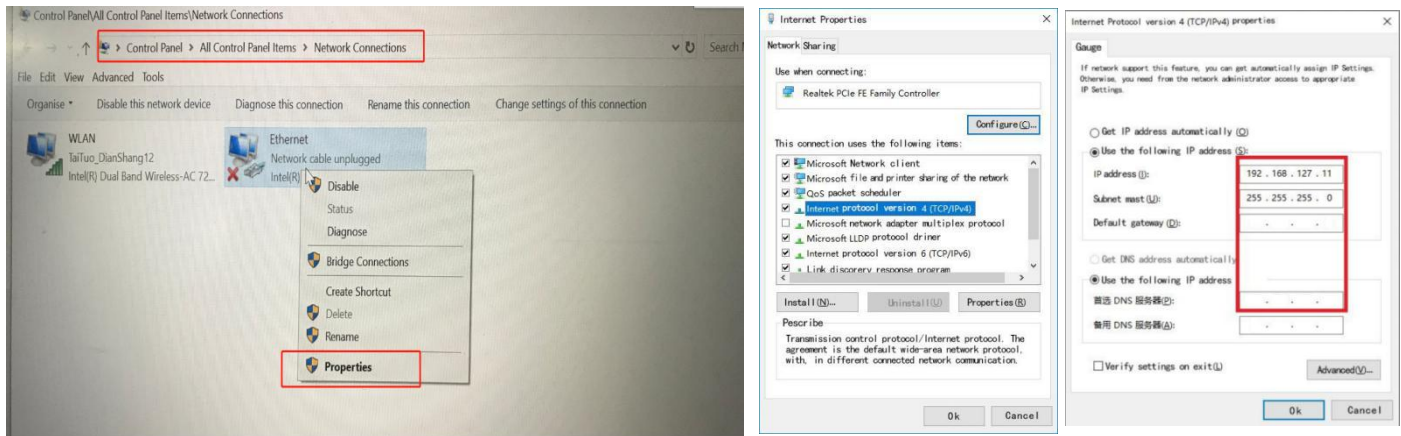
Open and enter the folder to find the software icon , Double-click to run the software directly.



Check the communication set of the software, change it to "TCP", and then restart the software.

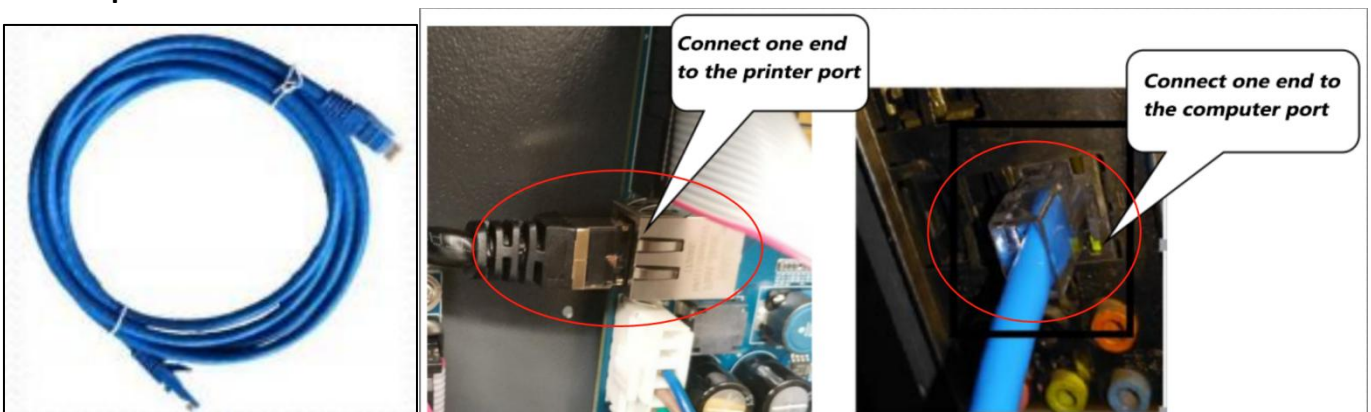
4.2.2 IP address set

Open the desktop computer, find the control panel to enter, and then select the network and sharing center. Find the corresponding LAN port, click Local Area Connection, select Properties—Internet Protocol Version 4, and then click OK. Click to use the following IP address, set the IP address to 192.168.127.11, and the subnet mask to 255.255.255.0, and then click OK. (Note: IP address 192.168.127.X, the last digit of X must be between 11 and 254.)



4.2.3 Connect Gigabit Network Cable

We will equip the machine with a gigabit network cable. Then we connect one end of the gigabit network cable to the network port of the printer motherboard, and the other end to the network port of the computer host.



4.3 RIP software installation

4.3.1 Activation of RIP software

Instructions for activation of RIP software:

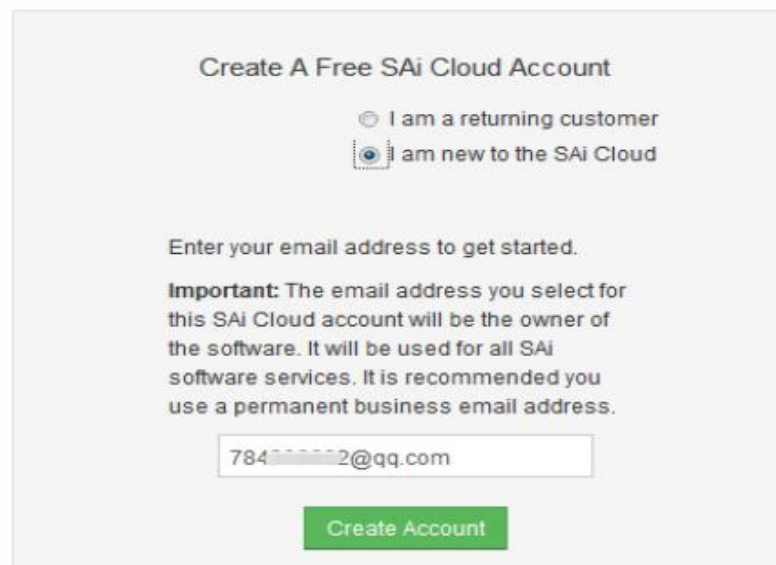
Start the browser and enter the activation website in the browser <https://www.saicloud.com> press enter and enter the activation code box on the software box label after entering the webpage.

1. Install and activate software on an online computer

1. Launch your browser and type <https://www.saicloud.com> in address bar and press enter, then input your activation code, then click **Activate**, activation code can be found in the code label in software package.



2. In login section, click **I am new to the SAi Cloud** and input your email address, then click **Create Account**, an email will be sent to your mailbox.



Select I am a new user, enter the email address and create an account, a confirmation email will be sent to the mailbox. Enter the mailbox, click the link in the email, enter the account password and other registration information to complete the account registration.

3. Check your mailbox and click website link in the email then complete the information fields.

The image shows two side-by-side screenshots. The left screenshot is a 'Create Account' form with the following fields: Email (pre-filled with '19403853@saicloud.com'), Password (with a note 'Password must be at least 8 characters'), Retype Password, Name, Company Name, Country (dropdown), Time Zone (dropdown), Address Line 1, Address Line 2, City, State/Province, and Zip/Postal. A red box highlights the 'Create Account' button at the bottom. The right screenshot is a 'Terms and Conditions' dialog box. It contains the text: 'User Agreement', 'IMPORTANT—READ CAREFULLY:', 'This Account User's Agreement is a legal contract between You (defined below) and SA International Inc.', and a paragraph stating that by using the SAI Cloud account, the user agrees to the terms. It also includes 'Article I. Defined Terms:' with three numbered items. At the bottom, there are two buttons: 'I Accept the Terms and Conditions' (highlighted with a red box) and 'Decline'.

Step 2. Add Software to your SAI Cloud Account

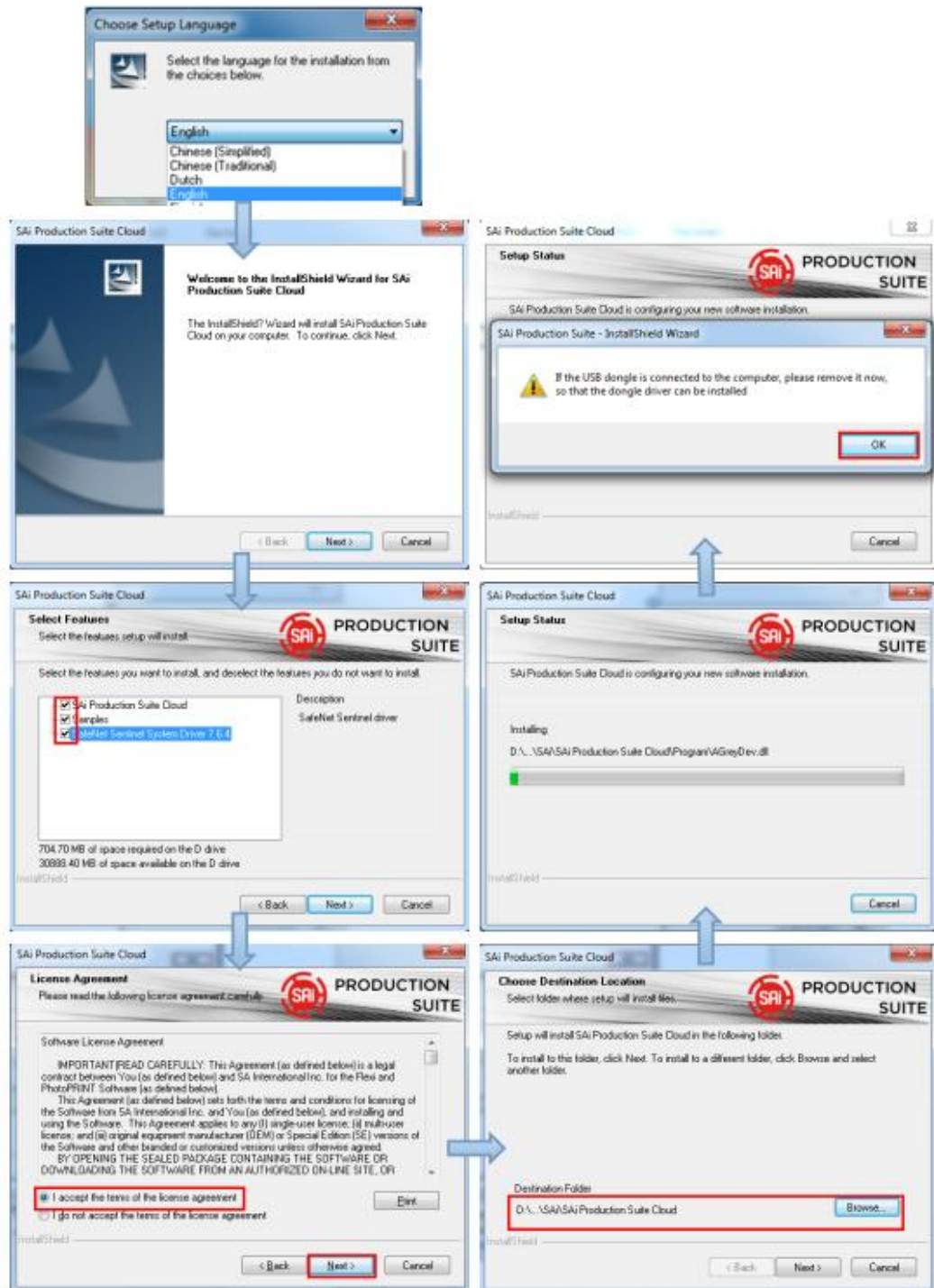
The image shows a dialog box titled 'Add To SAI Cloud Account'. Below the title, it says 'This software license will be added to your SAI Cloud Account.' At the bottom, there is a green button labeled 'Activate Now' which is highlighted with a red box.

Click Activate Now, click the Download License button to download the license file

4.3.2 RIP software installation

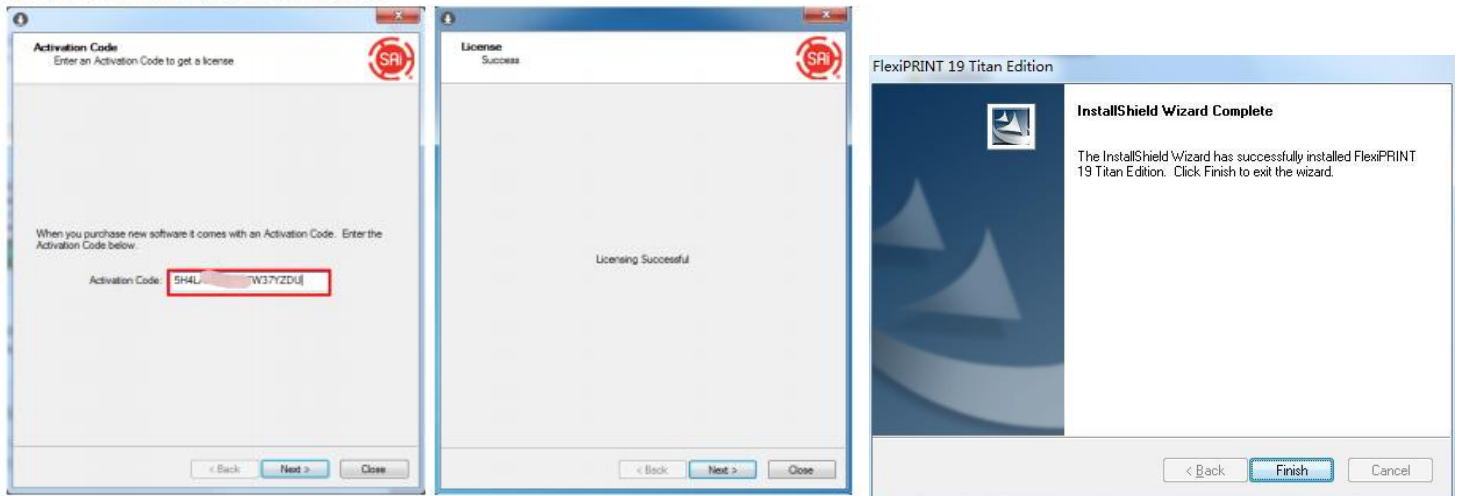
Put the installation CD into the CD-ROM drive or open the USB disk, open the Autorun executable file in the directory, select the installation language, accept the software license agreement and set the software installation directory.

4. Insert installation disk. It will be auto-played. If not, open **Autorun** in disk. Then install software step by step by following the wizard.



When installing to the pop-up license dialog box, If the currently installed computer cannot be connected to the Internet, directly import the previously downloaded license file.
If the current computer can access the Internet, you can enter the activation code to complete the licensing process or click "Get Authorization from Website" to import the license file.

5. Paste your code into activation code field.



Finally, after the completion dialog box pops up, the software installation is completed.

4.3.3 RIP software setup and use

1.Driver file replacement

First open the software installation location disk folder, find the path of the driver folder: \Program Files (x86)\SAI\FlexiPRINT 19 Titan Edition\OutputDrivers, copy and paste all the new driver files into the "OutputDrivers" folder (copy and replace).



2.Add device

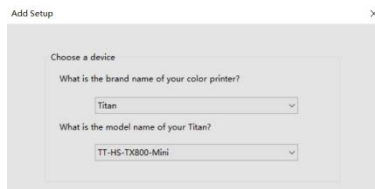
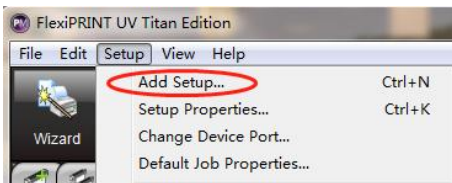


Run icon , Open the software, click "Settings" in the menu bar-"Add Device"

The printer brand: Titan

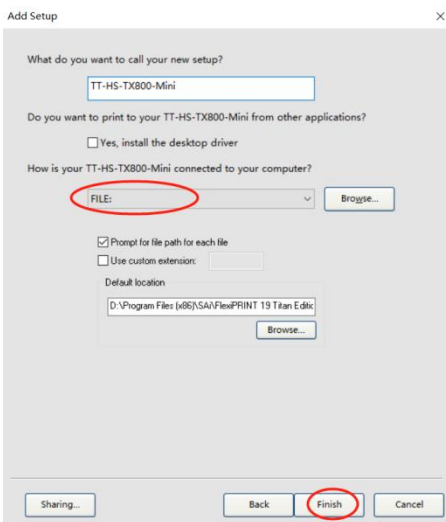
The printer model: TT-HS-TX800-Mini .

Then click "Next"



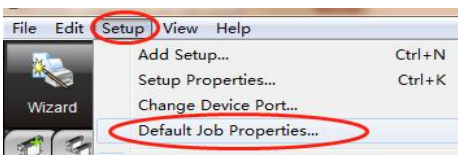
How to connect to a computer: FILE:

After confirming, click Done.

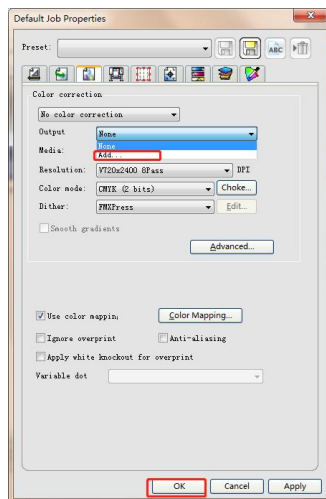


3.Manually add ICC files

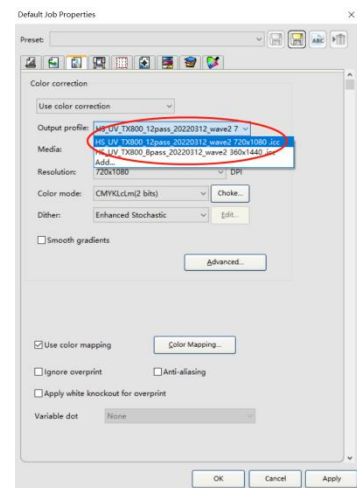
Click "Setup" in the menu bar-"Default Job Properties..."



Select "Color Management"->"Output Configuration File"->"Add", select the corresponding ICC configuration file, and then add the ICC.

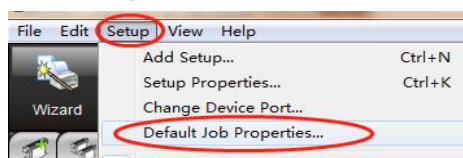


HS_UV_TX800_8pass_20220312_wave2 360x1440 .icc
HS_UV_TX800_12pass_20220312_wave2 720x1080 .icc



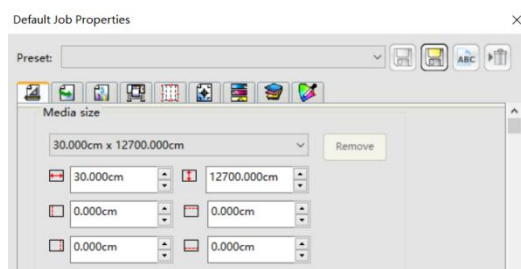
4. Set the default job properties

Click "Setup" in the menu bar-"Default Job Properties..."

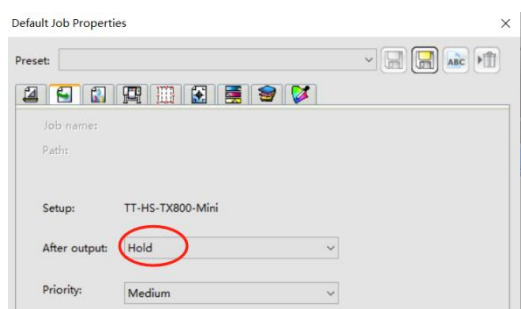


Some general default job properties are set as follows:

[Layout]: The media size and width are set according to the width of the printing film, and the height is the default value.



[Workflow]: After outputting, set to Hold.

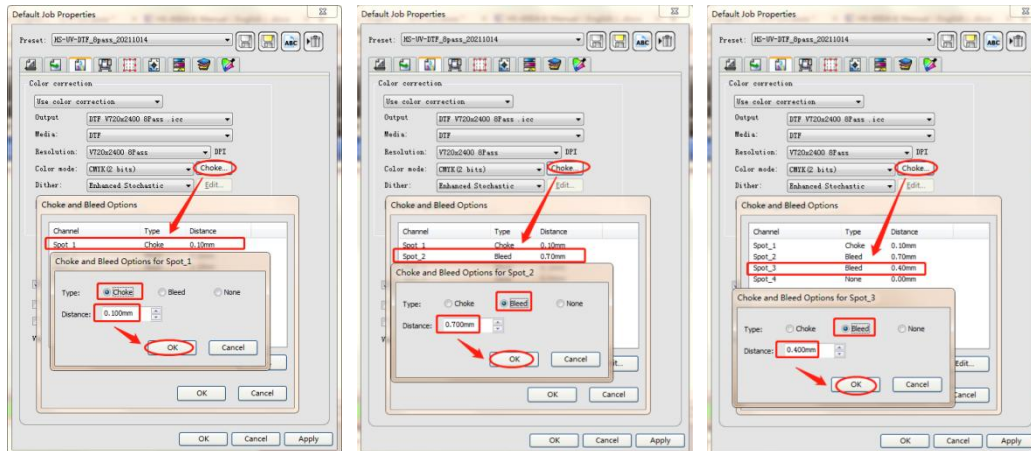


[Color Management]: Choose a different preset mode on the preset, and the color correction will be changed to a different curve accordingly.

White spot color choke function: choke---spot 1---Type: choke, distance: 0.1mm (modified according to different needs)

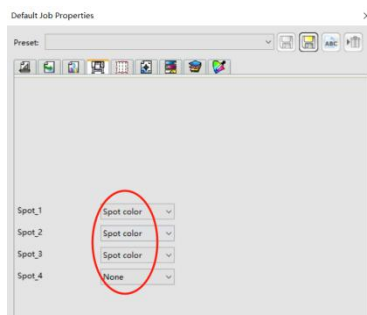
Varnish spot color bleed function: choke--spot 2 --- Type: Bleed, distance: 0.3mm (modified according to different needs)

Glue spot color bleed function: choke--spot 3 --- Type: Bleed, distance: 0.4mm (modified according to different needs)

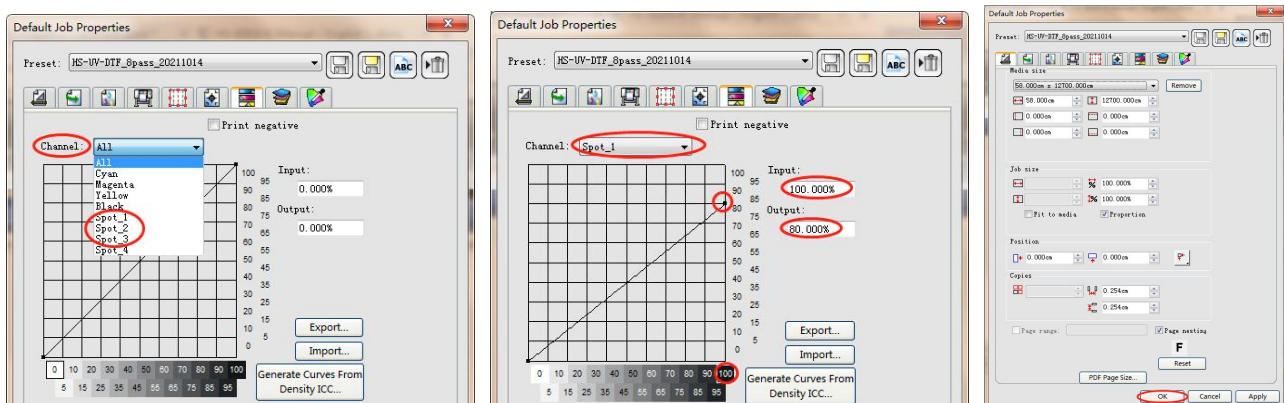


Spot_1: White spot
Spot_2: Varnish spot
Spot_3: Glue spot

[Printer Options]: Spot color ink options: select all spot colors.

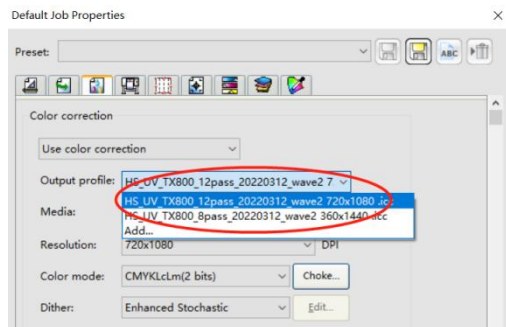


[Color adjustment]: Channel: spot color 123. (Adjust white ink, glue, varnish output ink volume) Spot color input: 100%; output: X% (X is adjusted between 1-100). Finally, after setting all the parameters, click "OK" to save the settings.

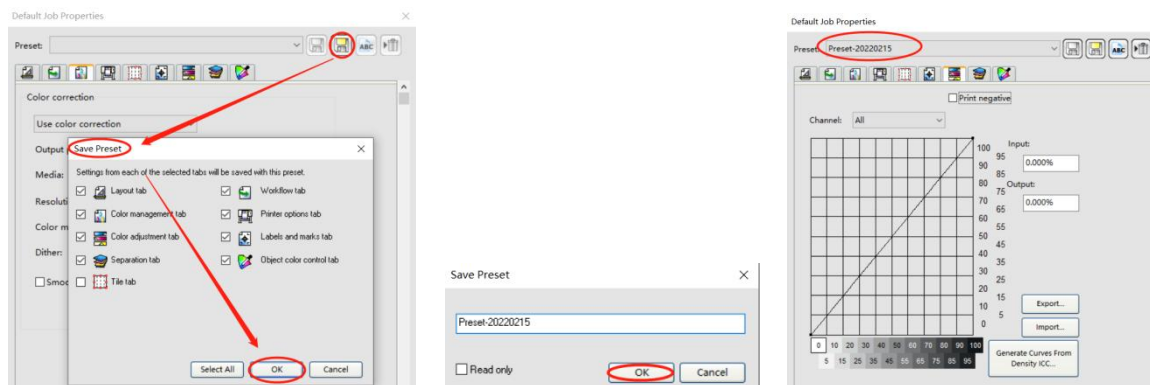


5. Save a preset name and set it as the default job attribute.

Customers can adjust the parameters according to their own needs and choose the corresponding ICC profile.



Set different settings on the preset, which can be saved as different names.



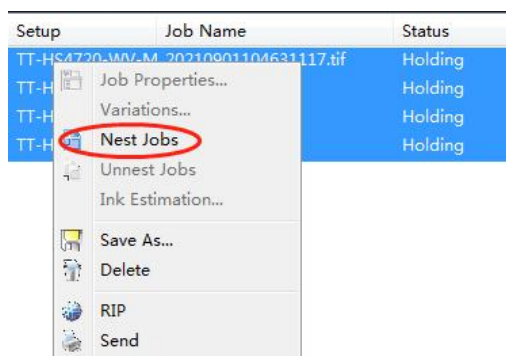
Finally, after all parameters are set, click "OK" to save the settings.

Add assignment RIP picture

Open the "Job" icon on the main interface of the software, and directly add the print image file that needs to be processed (TIF format file is generally used)

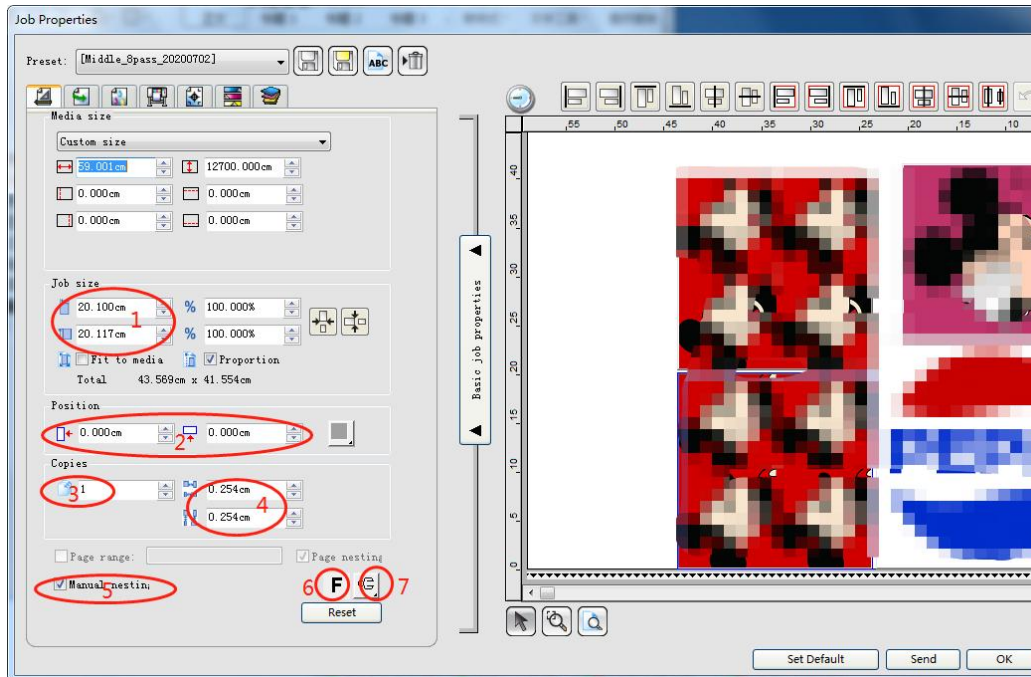


Nest Jobs: When there are multiple pictures that need to be printed together, after adding multiple pictures, select the picture that needs to be typeset together, and then right-click the mouse to select "Nest Jobs".



Job attributes:

1. Job size, you can scale the picture size according to your needs; (to check manual nesting)
2. Position, the distance setting from picture to page edge and header; (to check manual nesting)
3. Copies, you can copy multiple pictures and typeset at the same time according to your needs;
4. Spacing, when multiple pictures are typeset, set the horizontal and vertical spacing of pictures;
5. Manual nesting, you can manually adjust the position of the picture after checking;
6. Mirror, image output and printing; (to cancel manual nesting)
7. Rotate ,choose the direction of the image rotation according to your needs. (To check manual nesting)



4.4 Machine power detection

1. Power safety

Note: For the safety of people and machines, be sure to connect the ground wire!

Use a digital multimeter to measure whether the power supply voltage is normal, and the range of live and neutral measurement values: 210-240VAC (the multimeter is set to 750V AC gear).




2. Power on the machine and check the reset of the trolley

First check whether the various parts of the machine are normal, and then remove the fixed parts of the carriage.

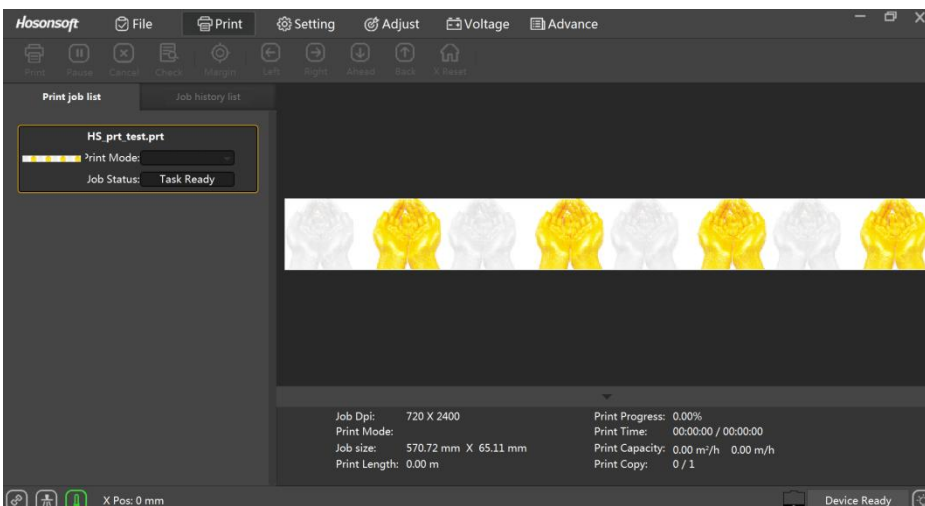
When the machine is not powered on, pull the trolley back and forth with your hand to see if it is smooth, and then find the power cord in the machine accessories, one end is connected to the 220V power supply, and the other end is plugged into the machine's power socket. Turn on the power switch of the machine, and the machine will be reset.



3. Action test

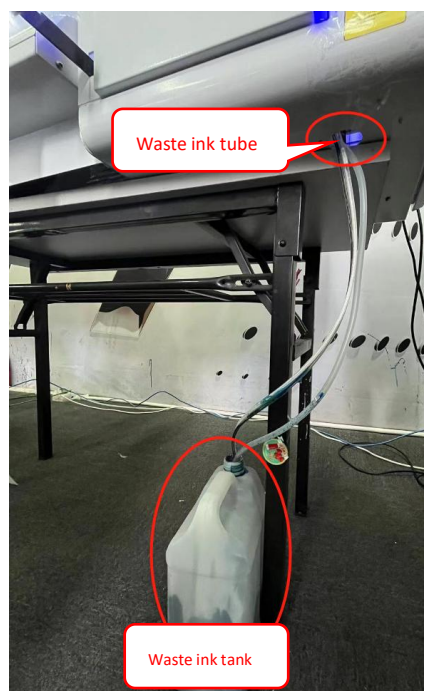
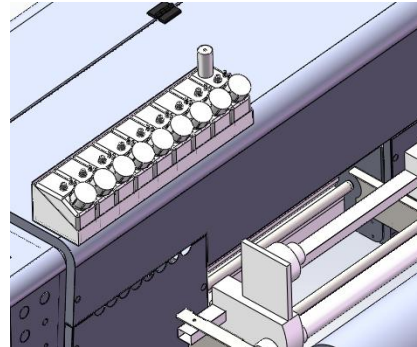
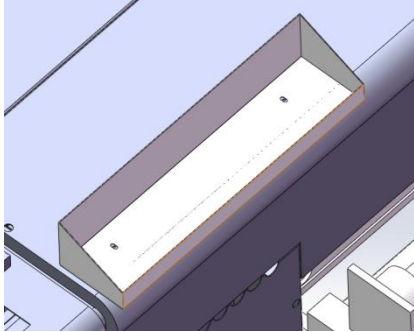
After the machine is powered on, the car will first self-check after it is normal. Double click to open  the control software, the machine and the printing software are connected normally.

In the control software interface, use the mouse to control the left and right of the trolley and whether it runs normally before and after the stepping. Click Clean to confirm whether the ink absorption and squeegee height of the ink stack is normal. **First use RIP software to make a file, import the print file and click print, let the machine simulate printing to check whether the printing is normal, and then power off to install the print head after it runs normally.**

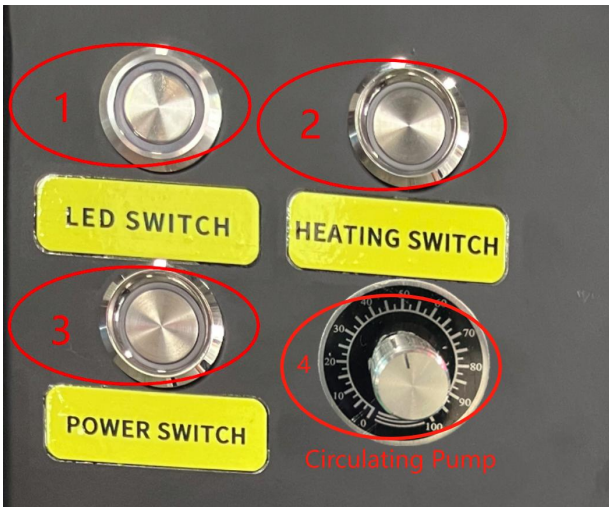


4.4.1 Ink tank installation

1. Install and fix the screws on the main ink tank bracket, then put the ink tanks in order, and connect the corresponding color ink tanks and the corresponding marked ink tubes.
2. The ink tank of white ink is connected to the power cord of the white ink stirring motor.
3. Install the battery in the liquid level alarm buzzer of each ink tank, insert the connection terminal, and finally add the corresponding color ink into the corresponding ink tank.



4.4.2 Button settings and instructions



①: Printer table lighting

②: Rubber roller heater switch

③: Printer power supply switch

④: White ink circulation pump speed adjustment knob (Usually set up 40-50%)



⑤: Rubber roller heating temperature setting and regulator

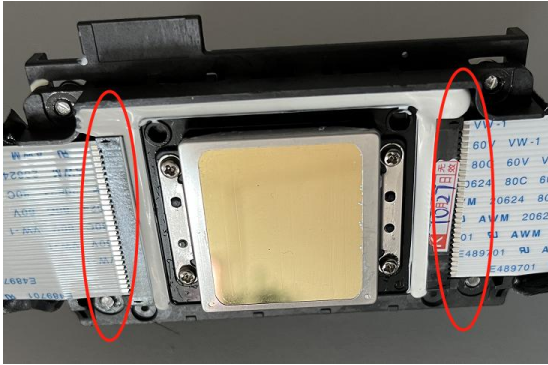
(Usually the heating temperature is set at 40-60°C)

4.5 Print head installation position and cable connection

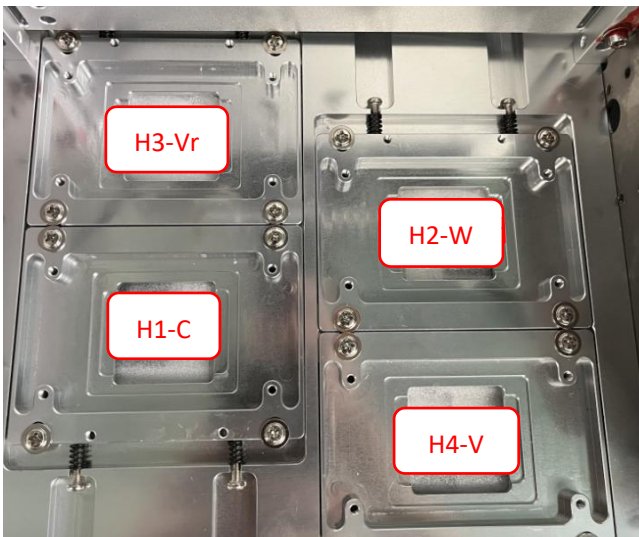
4.5.1 Print head installation

1. Cable installation, the print head cable is one 29P cable on the left and right. (Note: Be careful when plugging in to avoid damaging the printhead or cables!)

After the cable is plugged in, the cable interface is sealed with tape to prevent foreign objects or ink from entering the cable interface.

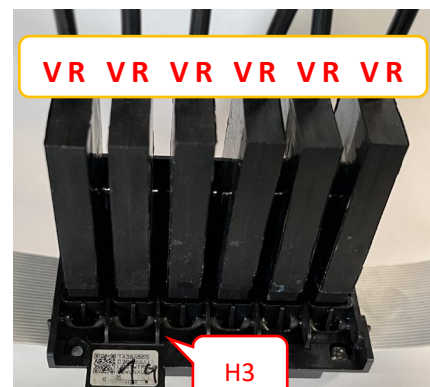
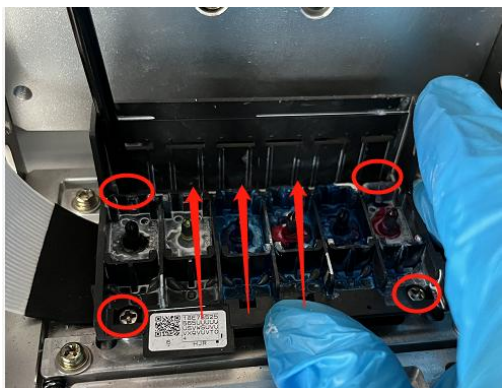


H1-C: color, H2-W: white, H3-Vr: glue, H4-V: varnish.



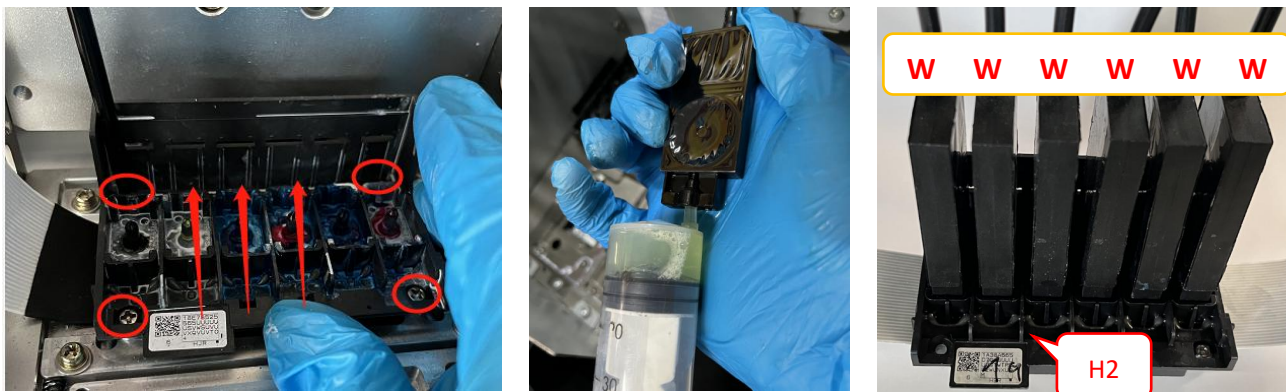
2. Print head installation (H3 glue print head)

Put the print head to the left and back, close to the bottom plate, and install and fix it. (Note: do not fix the print head mounting screws too hard) The print head and the damper are connected, and the ink sequence is set: first connect the damper to the corresponding ink tube, and then use a syringe to pump the ink from the ink tube to the damper. It is better to draw about 20ML of ink from each ink tube! Then connect the damper to the print head in sequence.



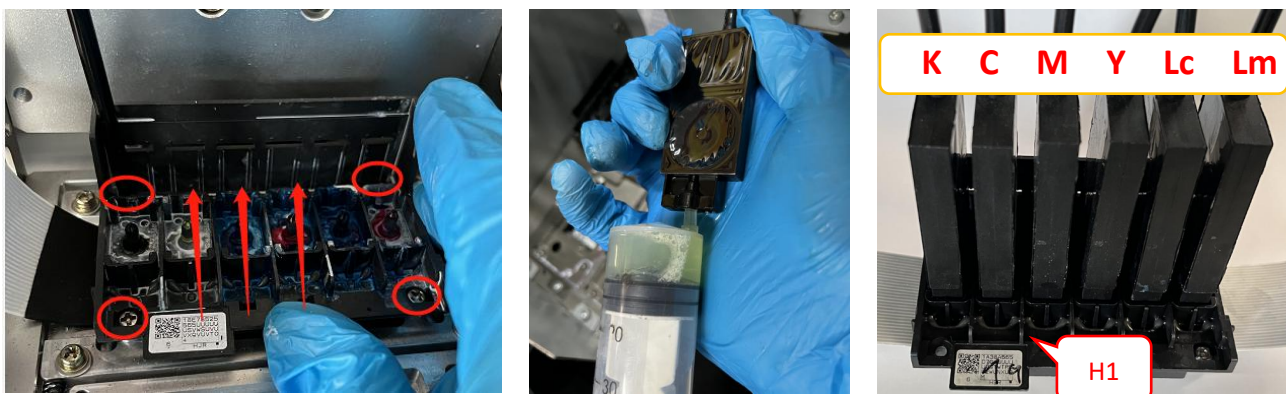
3. Print head installation (H2 white print head)

Put the print head to the left and back, close to the bottom plate, and install and fix it. **(Note: do not fix the print head mounting screws too hard)** The print head and the damper are connected, and the ink sequence is set: first connect the damper to the corresponding ink tube, and then use a syringe to pump the ink from the ink tube to the damper. It is better to draw about 20ML of ink from each ink tube! Then connect the damper to the print head in sequence.



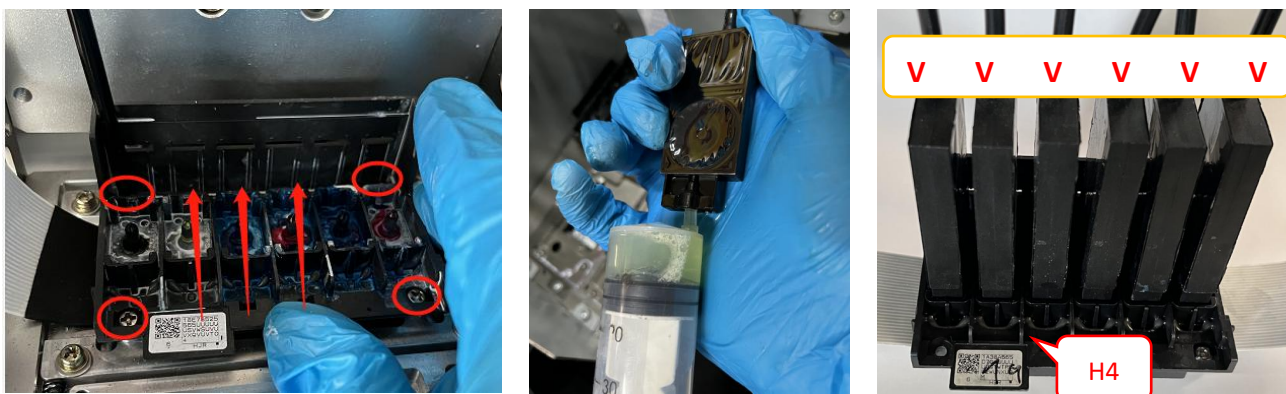
4. Print head installation (H1 color print head)

Put the print head to the left and back, close to the bottom plate, and install and fix it. **(Note: do not fix the print head mounting screws too hard)** The print head and the damper are connected, and the ink sequence is set: first connect the damper to the corresponding ink tube, and then use a syringe to pump the ink from the ink tube to the damper. It is better to draw about 20ML of ink from each ink tube! Then connect the damper to the print head in order, from left to right: K C M Y Lc Lm .



5. Print head installation (H4 varnish print head)

Put the print head to the left and back, close to the bottom plate, and install and fix it. **(Note: do not fix the print head mounting screws too hard)** The print head and the damper are connected, and the ink sequence is set: first connect the damper to the corresponding ink tube, and then use a syringe to pump the ink from the ink tube to the damper. It is better to draw about 20ML of ink from each ink tube! Then connect the damper to the print head in sequence.

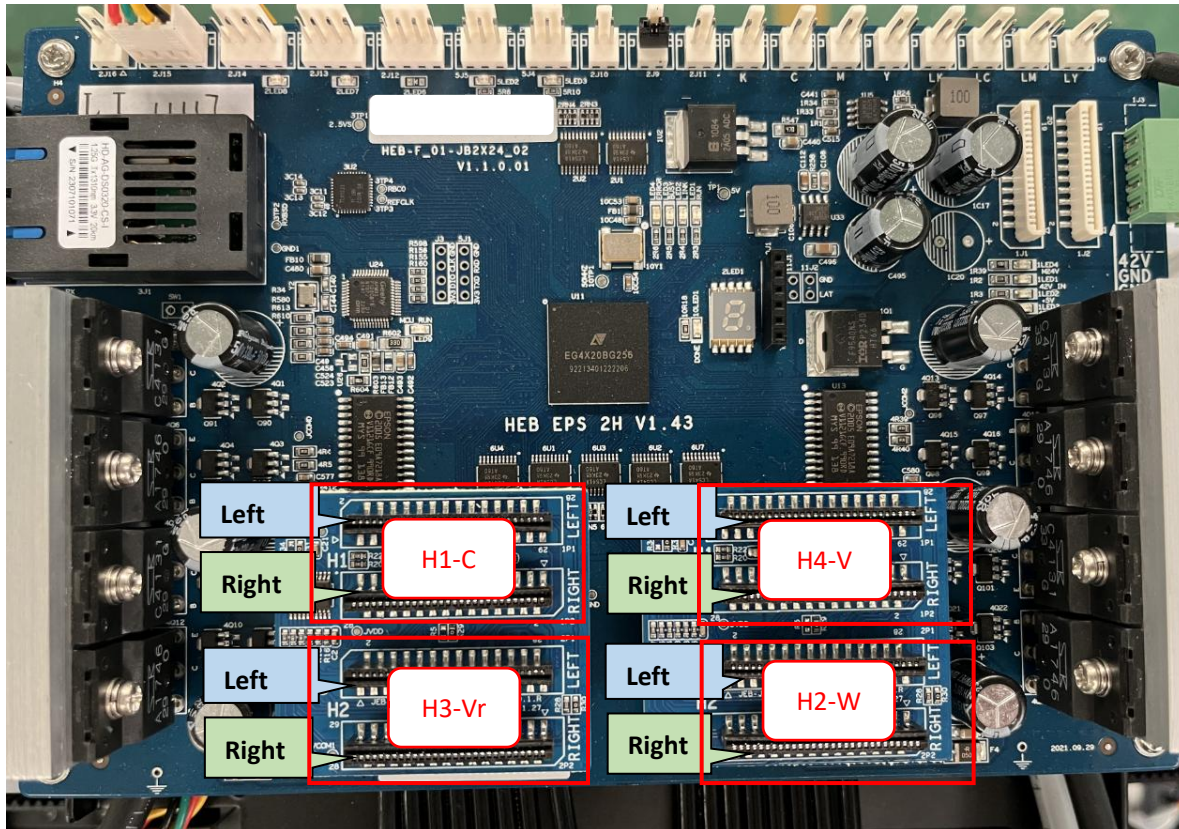


4.5.2 Print head data cable connection adapter board

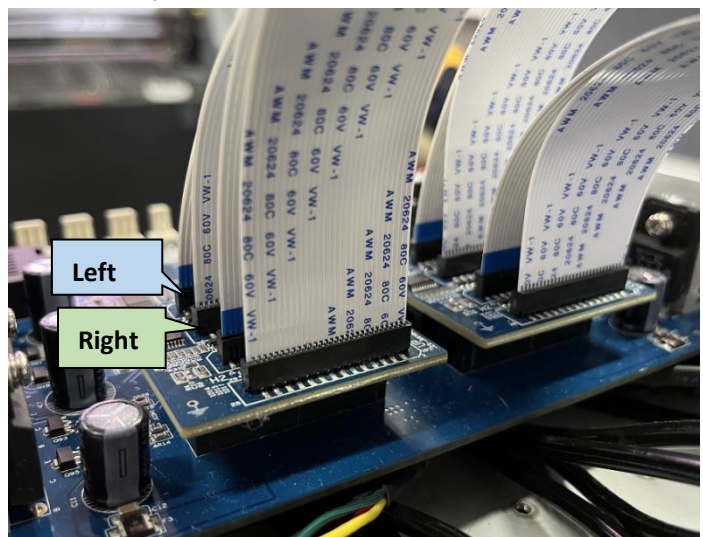
The connection sequence of the data cable corresponds to the markings on the head board and the print head in turn

(Note: Plug and unplug the print head data cable must be operated with the power turned off.)

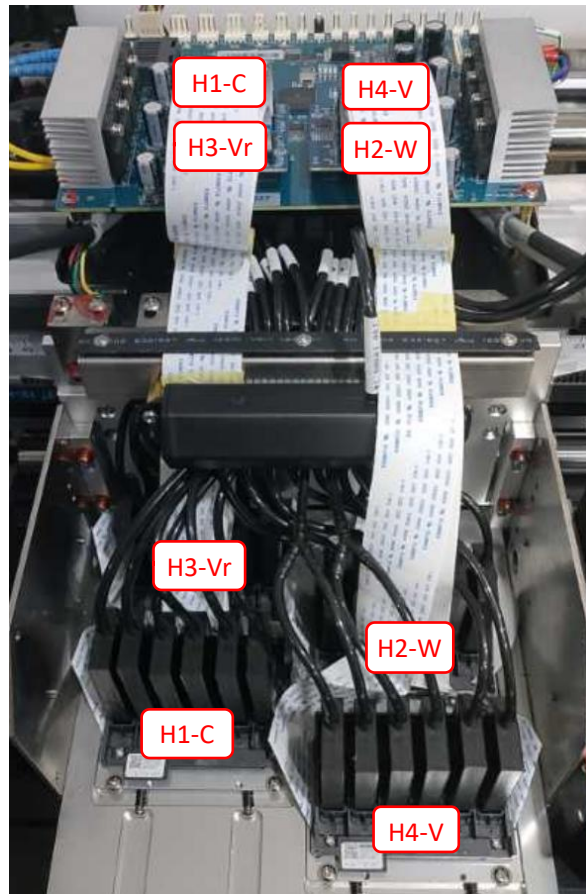
H1-C: color, H2-W: white, H3-Vr: glue, H4-V: varnish.



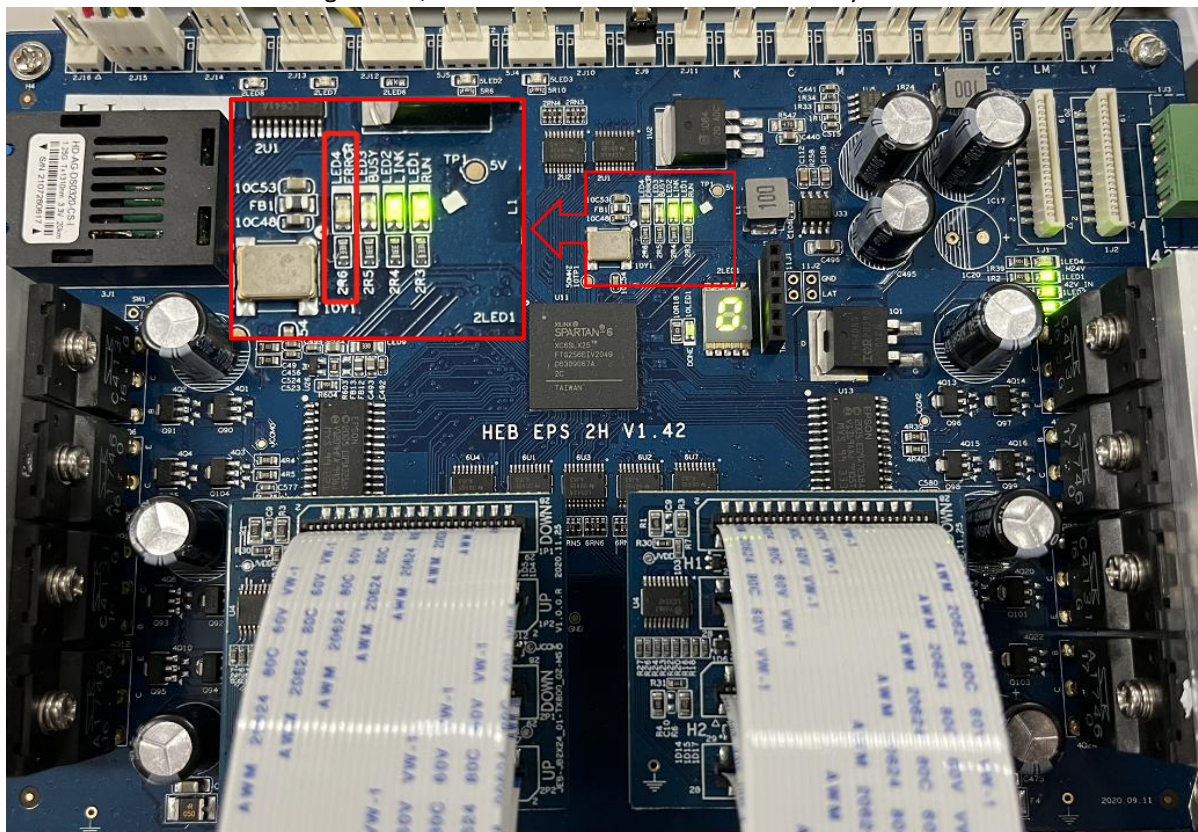
Insert the print head cable into the adapter board in sequence according to the indication.



Tidy up the cables:



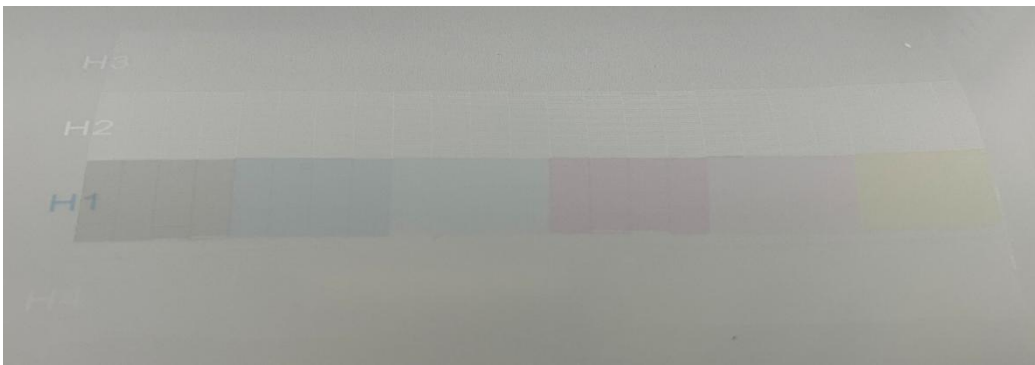
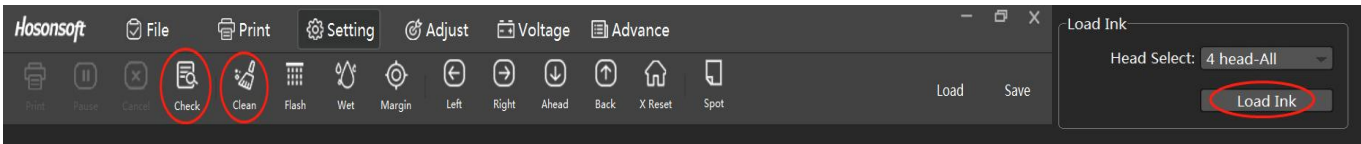
After confirming that the data cable of the print head is connected correctly, turn it on and observe whether the "ERROR" light on the head board is on. If the light is on, it is abnormal. Power off immediately and check.



4.6 Debug before printing

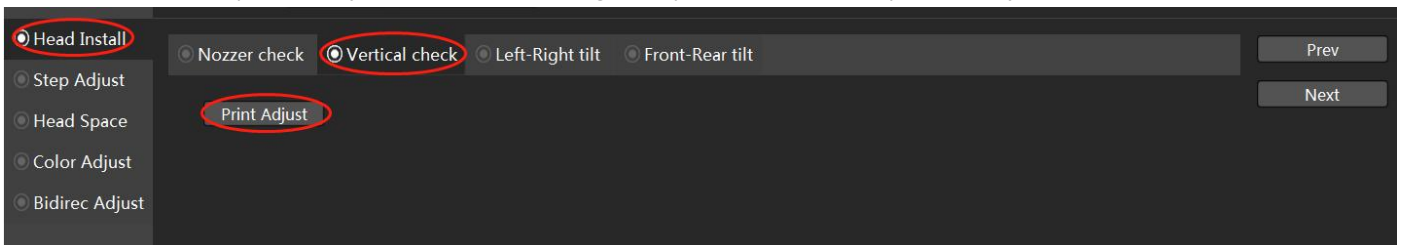
4.6.1 Print nozzle test

Connect the machine to the power supply and enter the printing software interface. (Note: the ink stack should be close to the nozzle after the machine self-check is completed) Click the “Load ink” icon to confirm that ink is flowing out of the waste ink tube, and click the fill ink icon again to cancel. Click the “Clean” icon again. After cleaning is complete, confirm that the platform is free of obstacles, load the material, click the “Check” icon, print the nozzle test, and confirm that the print head is in good condition. (Use clear print film first, because the color is lighter).

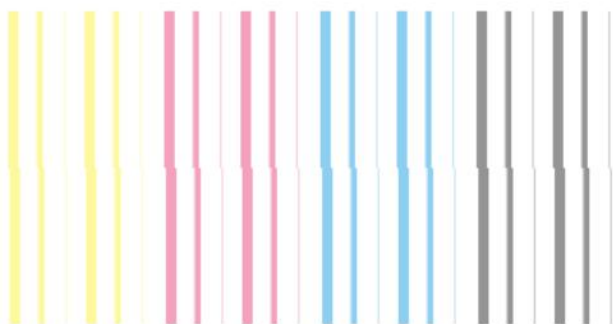


4.6.2 Vertical alignment of the print head

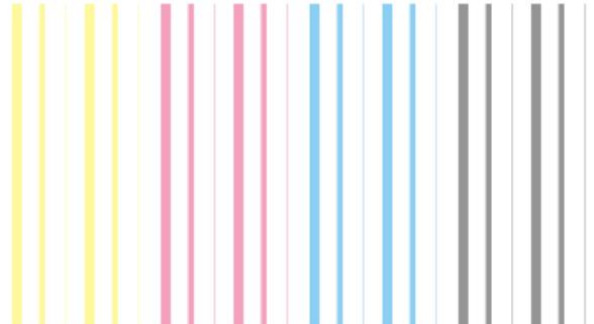
Enter the software option “Adjust” interface and align the print head vertically “Print Adjust”.



For vertical calibration, the vertical direction of the test chart required to be printed is a straight line. The vertical calibration chart below shows that the print head has been tilted and needs to be calibrated.



If there is a deviation, loosen the fixing screw of the print head and adjust the position of the print head. You can "push the print head up to the left". Then Print Adjust again, reach to form a line.



4.6.3 Step calibration

Step calibration, Print Adjust.

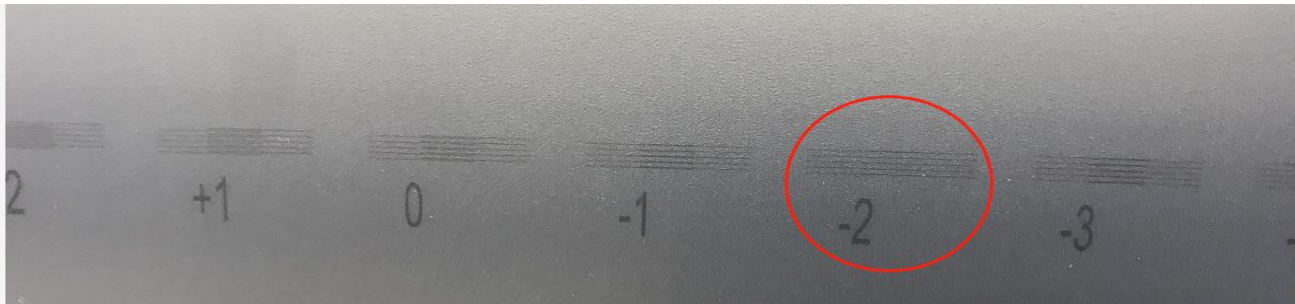
Head Install
● Step Adjust
Head Space
Color Adjust
Bidirec Adjust

Base Step
Print Adjust 0.00 Pixel
Calculate 12135 ✓

Step Offset
Print Pass Mode: 1Pass
Step Offset Value: 0
1Pixel=5.137416Pulse
Print Adjust

Prev
Next

The calibration chart is at the value -2, and the lines completely overlap.



So enter the value -2 in the corresponding input box, and then click Calculate.

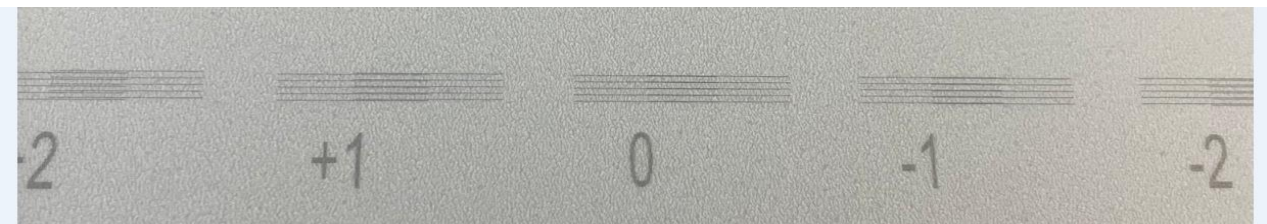
Head Install
● Step Adjust
Head Space
Color Adjust
Bidirec Adjust

Base Step
Print Adjust 0.00 -2 Pixel
Calculate 12135 ✓

Step Offset
Print Pass Mode: 1Pass
Step Offset Value: 0
1Pixel=5.137416Pulse
Print Adjust

Prev
Next

Print Adjust again and confirm that the line at the value 0 is the most uniform. Need to click the "Save" button in the upper right corner.



4.6.4 Calibration of nozzle horizontal space

Calibration of the horizontal distance between the print heads, Print Adjust.

● Head Install
● Step Adjust
● **Head Space**
● Color Adjust
● Bidirec Adjust

☒ Horizontal ☐ Vertical

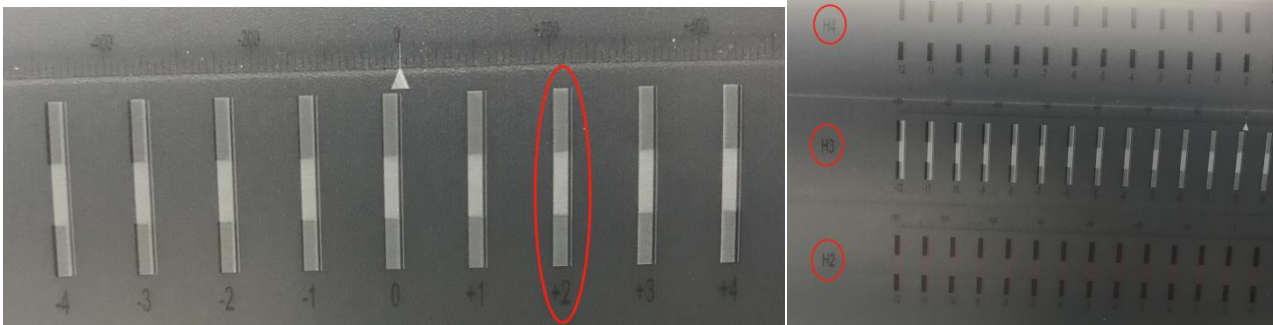
Left distance: **Print Adjust** Print Verify Right distance: Print Adjust Print Verify

H1	0	H2	1485	H3	-8	H4	1484

H1	0	H2	1486	H3	-7	H4	1484

Prev Next

The calibration chart is at the value +2, and the lines completely overlap.



In the corresponding print head, increase or decrease the corresponding value in the input box of the corresponding printing direction.

● Head Install
● Step Adjust
● **Head Space**
● Color Adjust
● Bidirec Adjust

☒ Horizontal ☐ Vertical

Left distance: Print Adjust Print Verify Right distance: Print Adjust Print Verify

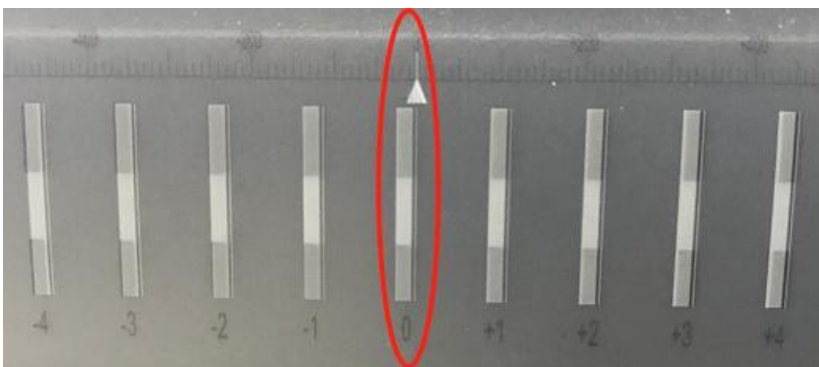
H1	0	H2	1485	H3	-8 -6	H4	1484

H1	0	H2	1486	H3	-7	H4	1484

(-8) + 2 = -6

Prev Next

Print Adjust again and confirm that the line at the value 0 is the most uniform. Need to click the "Save" button in the upper right corner.



Then calibrate the direction to the right, the steps are the same as above.

4.6.5 Nozzle vertical space calibration

Calibration of vertical spacing between nozzles. Print Adjust.

Head Install

Step Adjust

Head Space

Color Adjust

Bidirec Adjust

Horizontal

Vertical

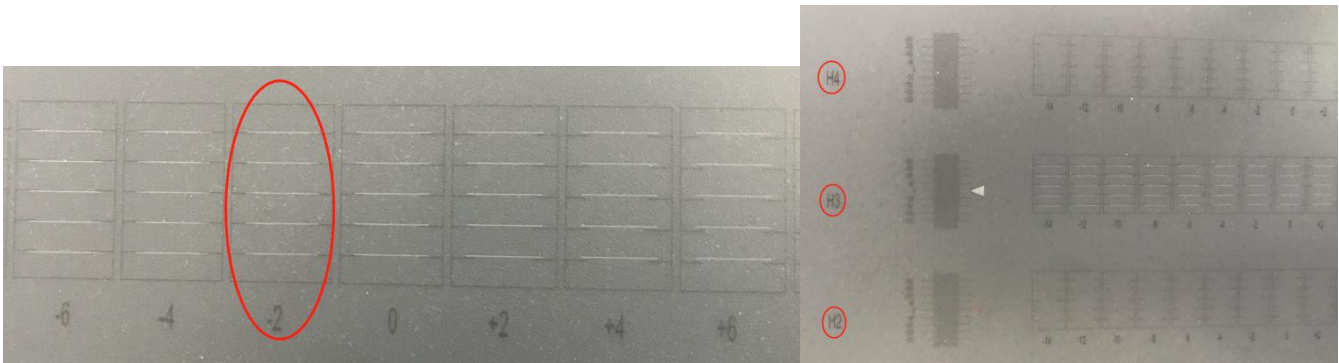
Print Adjust

Prev

Next

H1	0	H2	770	H3	1950	H4	2721

The calibration chart is at the value -2, and the lines completely overlap.



In the corresponding print head, increase or decrease the corresponding value in the input box of the corresponding printing direction.

Head Install

Step Adjust

Head Space

Color Adjust

Bidirec Adjust

Horizontal

Vertical

Print Adjust

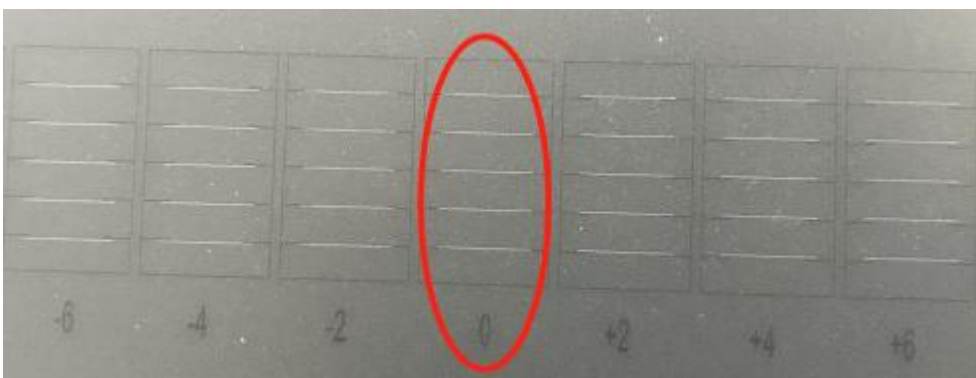
Prev

Next

H1	0	H2	770	H3	1950 1948	H4	2721

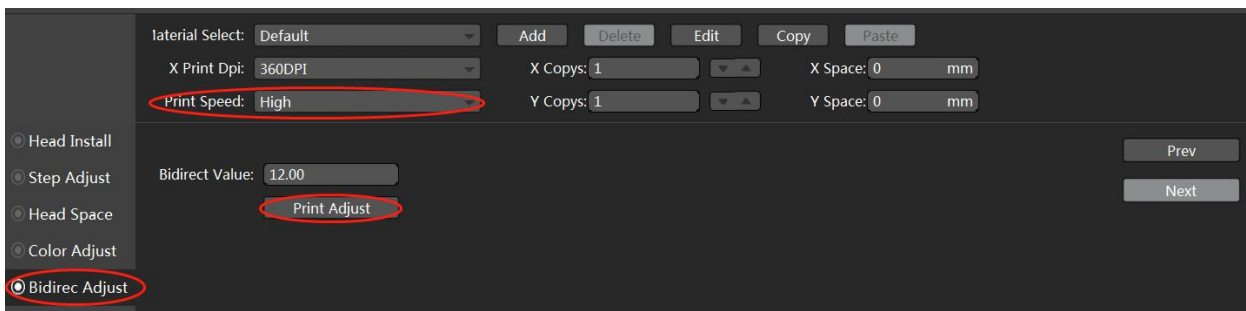
1950-2=1948

Print Adjust again and confirm that the line at the value 0 is the most uniform. Need to click the "Save" button in the upper right corner.

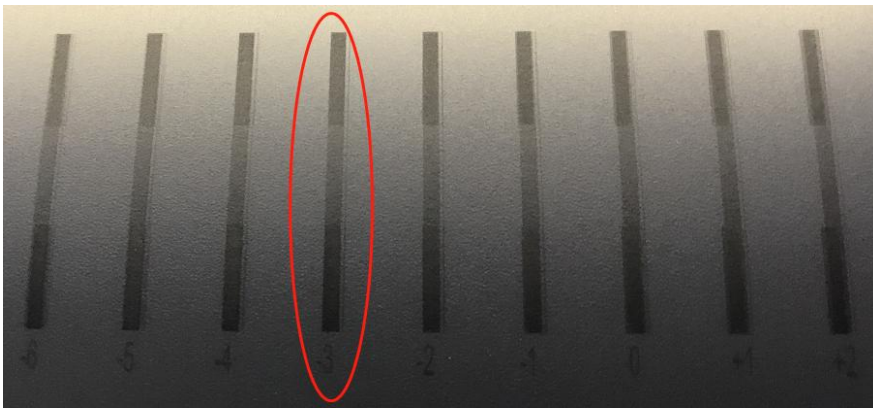


4.6.6 Bidirectional printing calibration

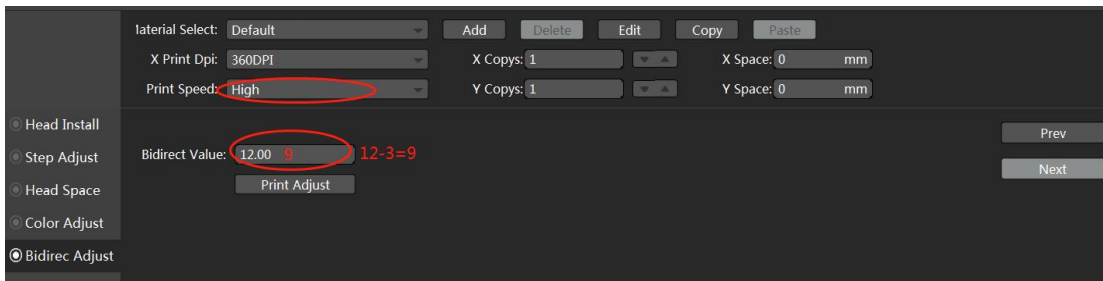
Finally, perform bidirectional printing calibration, Print Adjust.



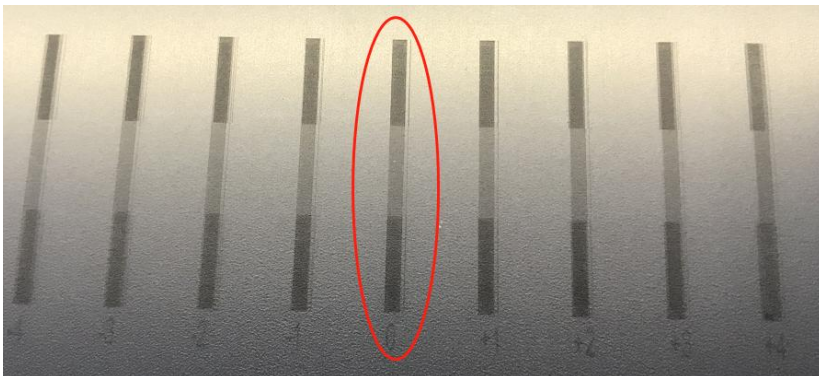
The calibration chart is at the value -3, and the lines completely overlap.



Select the corresponding printing speed, and increase or decrease the corresponding value according to the calibration chart.



Print Adjust again and confirm that the line at the value 0 is the most uniform. Need to click the "Save" button in the upper right corner.



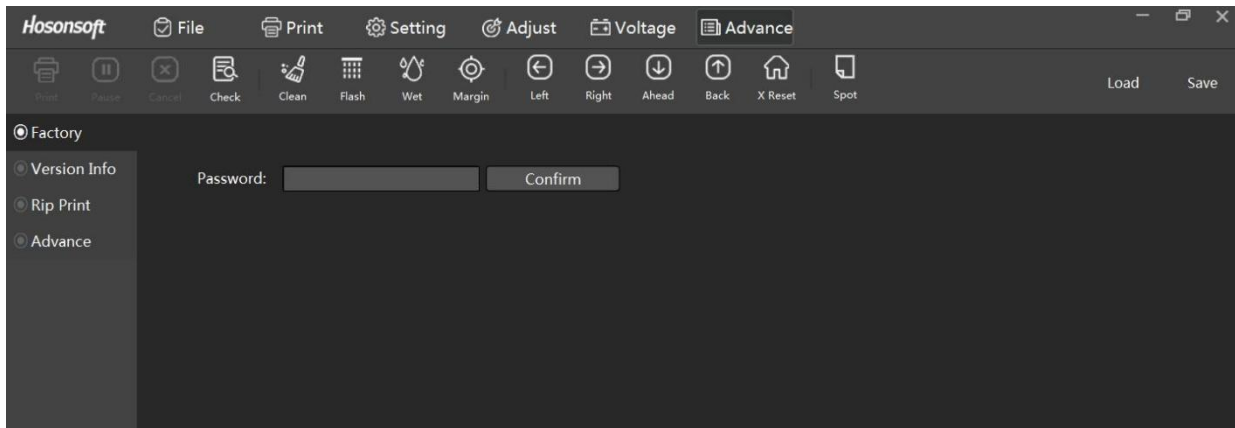
Finally, switch to different speeds to calibrate the two-way printing values and save them separately.

4.6.7 Background factory settings

Password:

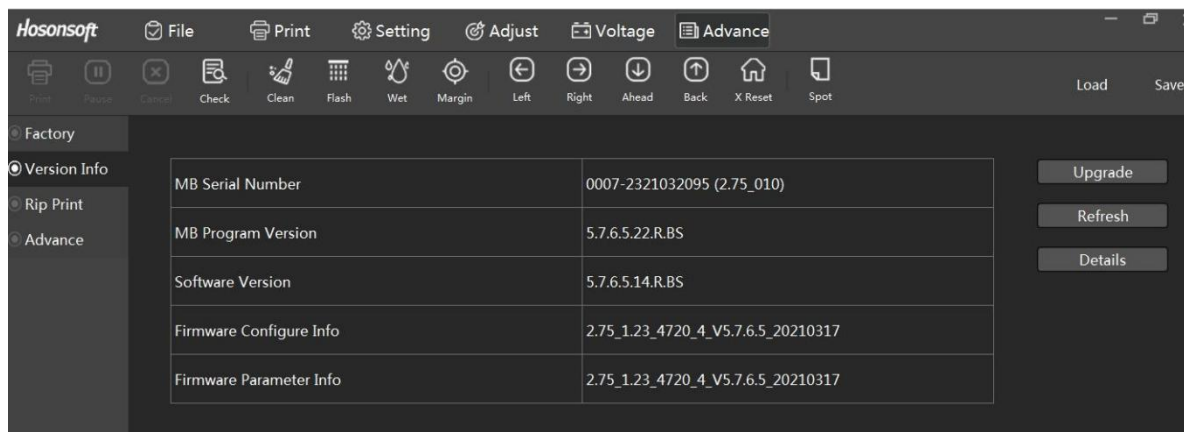
generally model:111111

Factory model:Ctrl+F12 into factory model,then enter password:222222



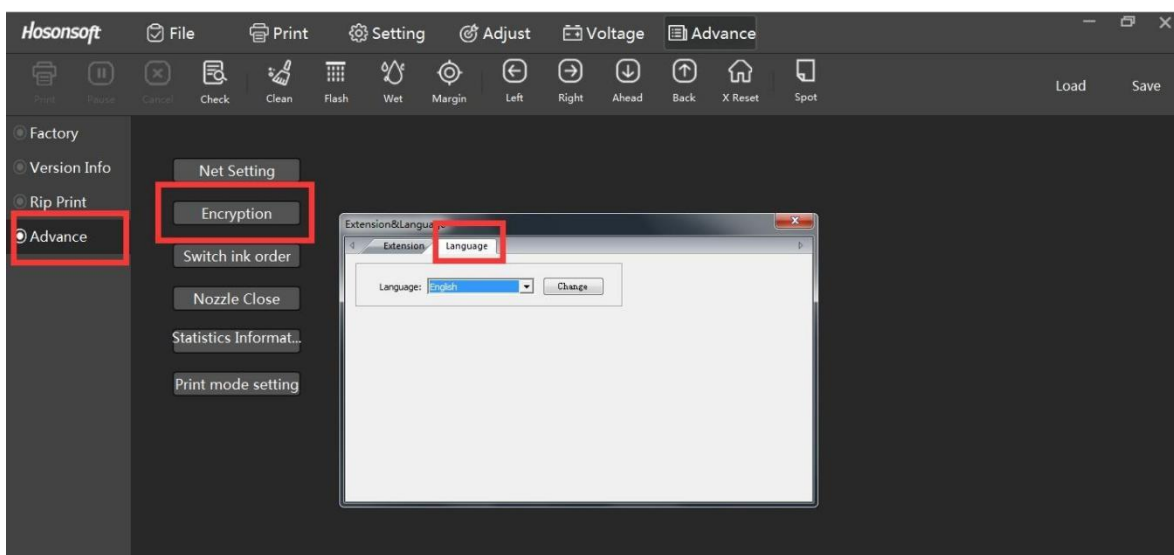
Version information

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



Change key panel language

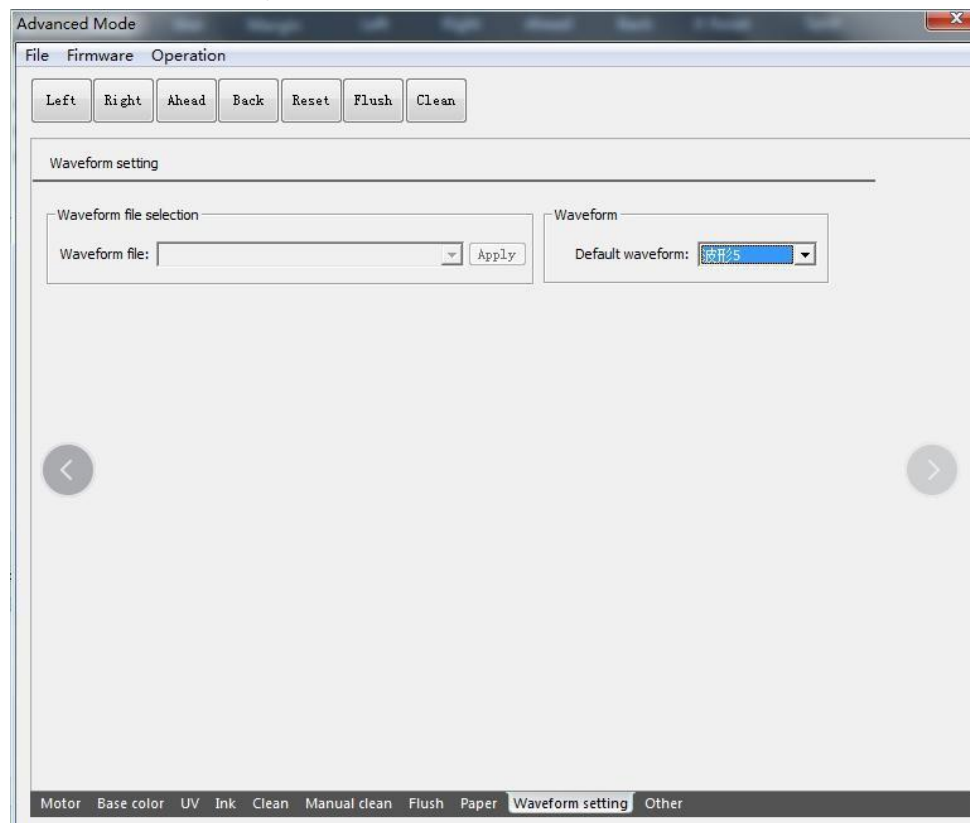
Select advance-encryption-language.as shown below.









Change waveform












Advance-enter password Into factory model

Select waveform setting ,default waveform.





Shortcut button

Shortcut	Function description
	Printing start button to execute the print command
	print head check button to execute print head printing state
	Printing pause/resume button
	Printing cancel button to execute the end printing command
	print head cleaning button to execute print head 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
	Stepping fine adjustment reduction button
	Stepping fine adjustment increase button
	Two-way fine adjustment reduction button
	Two-way fine adjustment increase button

Status bar

Status bar icon	Description
	Network cable normal connection
	Network cable disconnection

	Offline
	Turn on the flash spray
	Turn off the flash spray
	System functions normally
	System error
	System warning
	Offline
	Normal print head temperature
	Abnormal print head temperature
	print head temperature warning
	Offline

5. Precautions for printing equipment

5.1 Recommendations for the process requirements of the film-passing machine

1. Pressure: 0.6MPa
2. The film is passed twice: The first time the film is cold-pressed at room temperature
The second 35 °C temperature pressing through the film
3. Film speed: 3-5CM/S

5.1 Maintenance of printing equipment

1. After starting the machine, the nozzle must be cleaned.
2. Print a test strip once for each switch on and off.
3. Close the software before shutting down and check whether the car is reset.
4. The machine must be maintained once a week.

Notes for users using Epson lift ink stack:

Do not manually push the trolley to move before the machine is turned on, it will damage the ink stack structure and scratch the print head.

The ink stack is a precision mechanism, and should not be deformed by external force.

The lubricating level of the ink stack screw and positioning tip will decrease after a period of application, and the user should add lubricating oil regularly. (Butter, recommend 3 and check once)

Once the front, back, left and right positioning of the ink stack is adjusted, the position cannot be adjusted at will or the origin of the machine can be changed.

Precautions for machine repair and maintenance:

The ambient temperature was kept at room temperature (15-30°C).

Switch on and off the machine once each test strip, if there is a disconnection, deal with it in time.

The machine must be maintained once a week, cleaning dust, refueling the rails, etc.

The ink sac must be replaced every three months to avoid clogging of the nozzle.

Do not plug or unplug any line on the machine with power on, otherwise it will cause damage to the main board and the nozzle.

The machine must be connected to the ground wire, otherwise the ink will fly, or the individual ink dots of the print head will be damaged.

Do not use a knife to manually cut the paper on the machine, which will cause the machine to scratch and affect the appearance.

Tips:

The nozzle must pay attention to sealing and moisturizing.

The machinery and equipment should be regularly maintained and maintained.

In case of holidays, the machinery and equipment should be well maintained.

If you have any questions, you can contact the relevant personnel at any time. And I wish your company a prosperous development and abundant financial resources.