XF-702E User Manual

2-head DTF white ink Printer

I3200-A1-2H

6PASS:13m²/h
8PASS:10m²/h

Reliable & Professional Printing Machine's Supplier Since 2010

- Thank you for purchasing this product
- Please read this manual carefully before use
- Please keep this book properly

Catalogue

1. Product Introduction

Dear Sir/Madam:

Thank you for choosing our products, we are a highly professional and reliable supplier of DTF printer. DTF printer is an advanced technology product that has developed rapidly in recent years. In order to help our users better operate the machine and ensure its normal operation, this manual will provide detailed instructions on how to use, maintain and precautions of the DTF printer. Please read this manual carefully before using the machine and follow the guideline for proper operation. If you have any questions, please contact our technical engineers for guidance. This equipment is suitable for temperature of 20 ~ 35℃/68 ~ 95℉ and humidity levels of 35 ~ 70%RH, which can improve production efficiency and product quality.

This manual is only the product usage instructions. If there are any upgrades to the machine, we will not notify separately. If you have any good suggestions for this product, please provide feedback to the agent so that we can get the information in time and make better improvements to the machine.

Thank you!

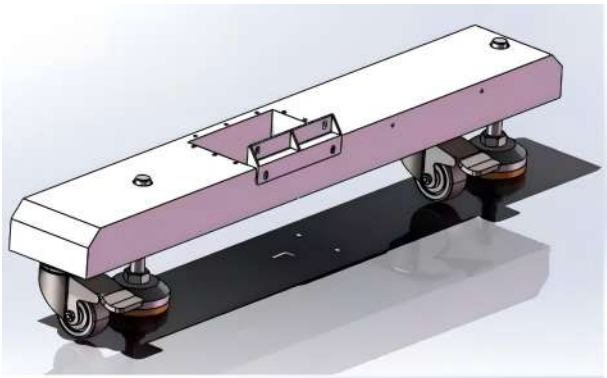
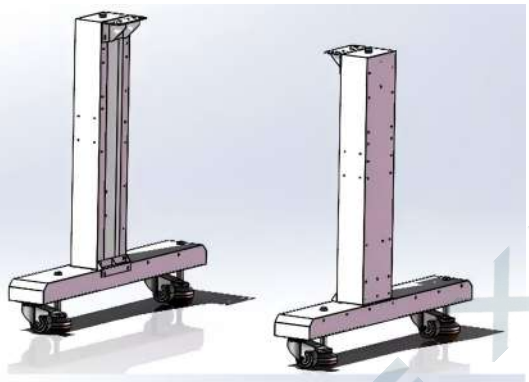
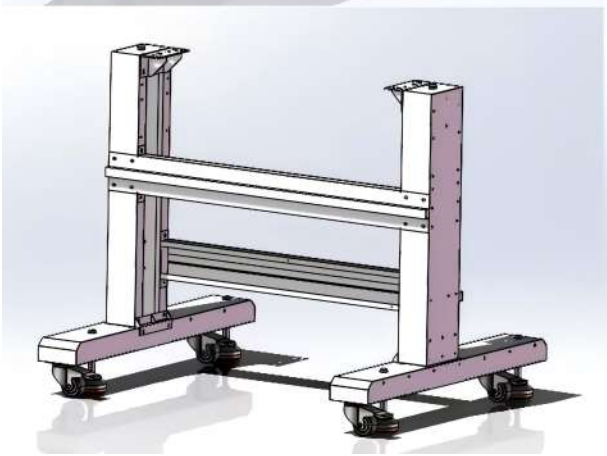
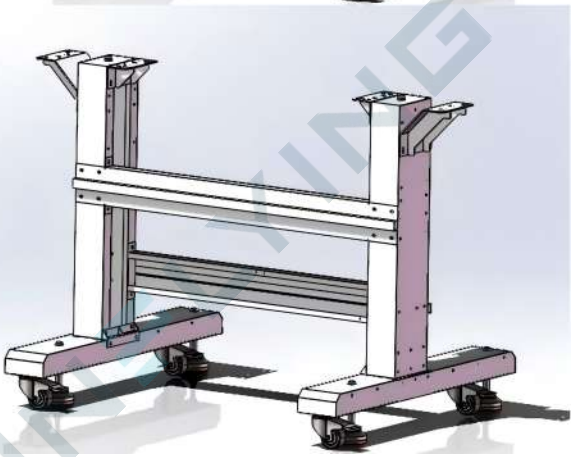
2. Model Specifications

Specification	Details
Model	XF-702E
Printhead Type & Quantity	Epson I3200-A1 × 2
Printing Resolution	6 Pass: 720 × 1800 dpi ｜ 8 Pass: 720 × 2400 dpi
Printing Speed	6 Pass: 13 m²/h ｜ 8 Pass: 10 m²/h
Print Width	24" (60 cm)
Media Type	DTF Pet Film
RIP Software	Standard: RIIN | Optional: Maintop, Photoprint
Operating Temperature / Humidity	Temperature: 20–35 °C | Humidity: 35–70%
Power / Voltage / Current	0.8 kW; 220 V / 110 V; 5 A / 10 A; 50 Hz / 60 Hz
Machine Dimensions (L×W×H)	1700 mm × 850 mm × 1350 mm
Package Dimensions (L×W×H)	1800 mm × 880 mm × 680 mm
Weight	Net: 158 kg | Gross: 194 kg

3. Product Display

3.1 Stand Assembly

First, assemble a single stand: attach the wheels and foot cups to the base and tighten the screws, then secure the support column to the base using the fixing hardware. After assembling both stands, connect them with the crossbeam to complete the stand assembly. (Images are for reference only.)

3.2 Machine Overview

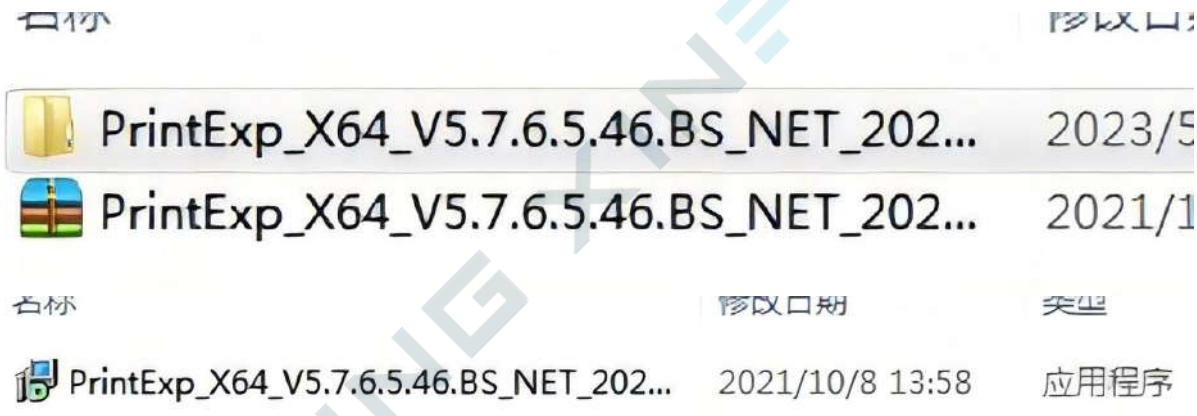
1: Ink Alarm	**2: Emergency Stop**	**3: Control Panel**	**4: White Ink Circulation**	**5: Temp Control Panel**	**6: Main Power Switch**
7: Waste Ink Bottle	8: Moisture Bottle	9: Paper Pressure Bar	10: Electric Lever	11: Heating Platform	12: Ink Supply Container
13: Circulation Filter	14: Power Outlet	15: Paper Pinch Roller	16: Paper Holder	17: Leakage Protector	18: Ethernet Port

4. Software Installation and Network Setup

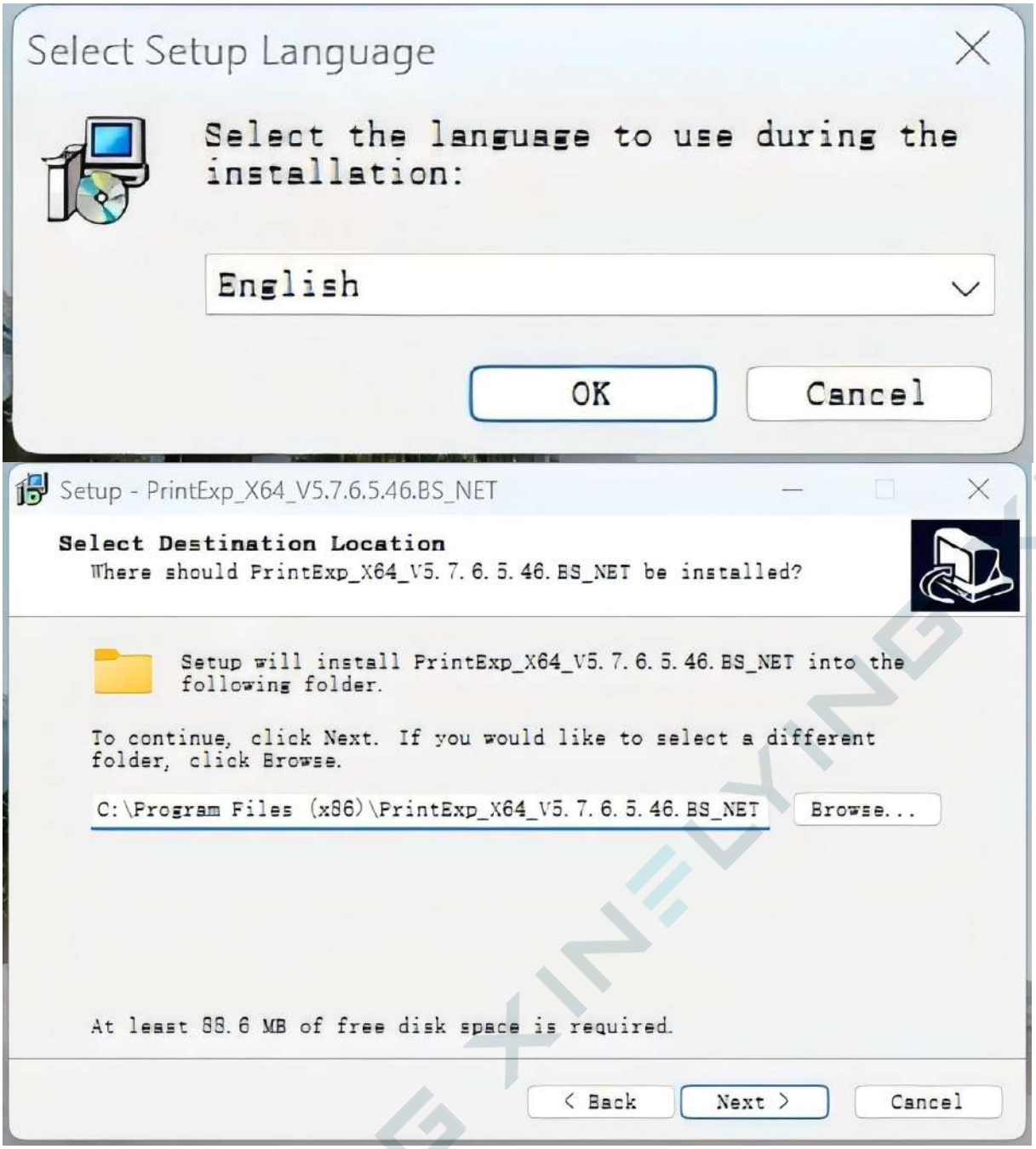
4.1 Printexp. Software Installation

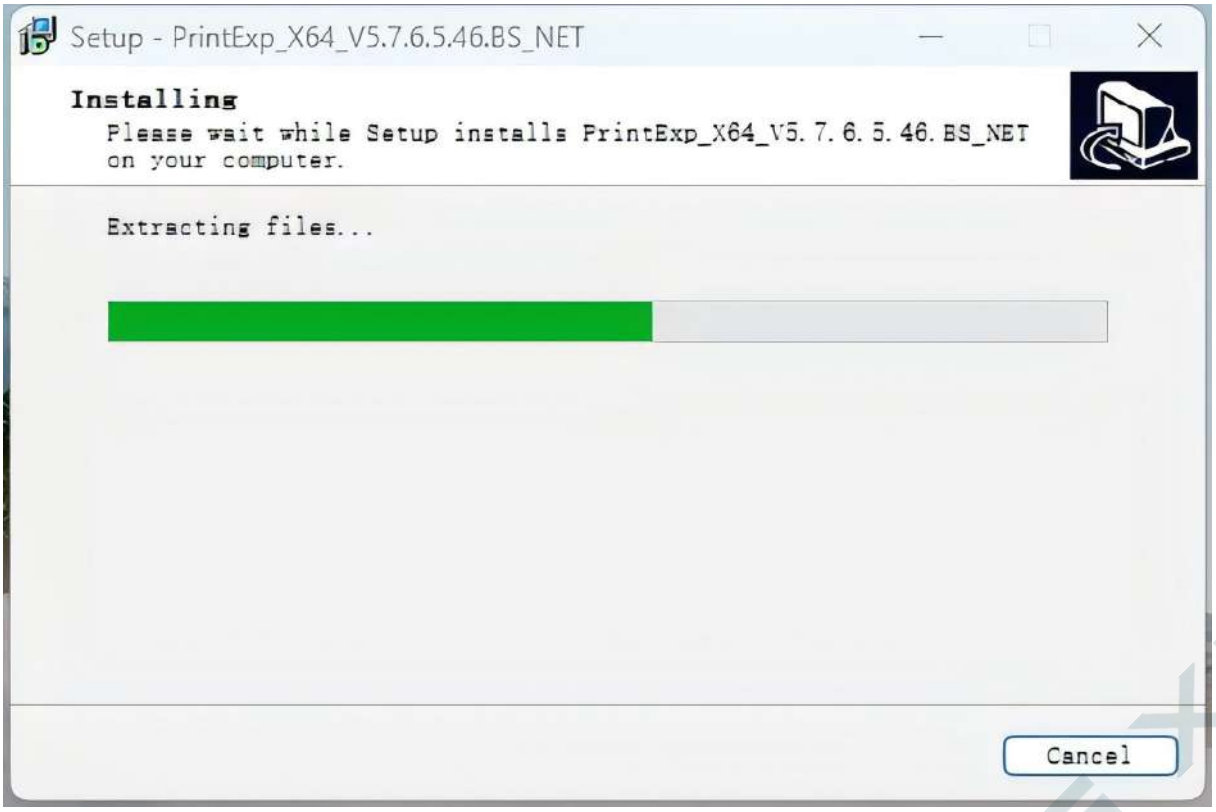
4.1.1 Software Installation

2.Extract the installation package and locate the setup file.

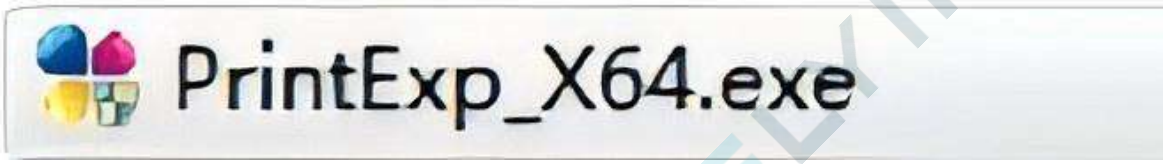


2. Select the language and set the installation path.





3. Create a desktop shortcut.



4.1.2 Print Software Network IP Setup

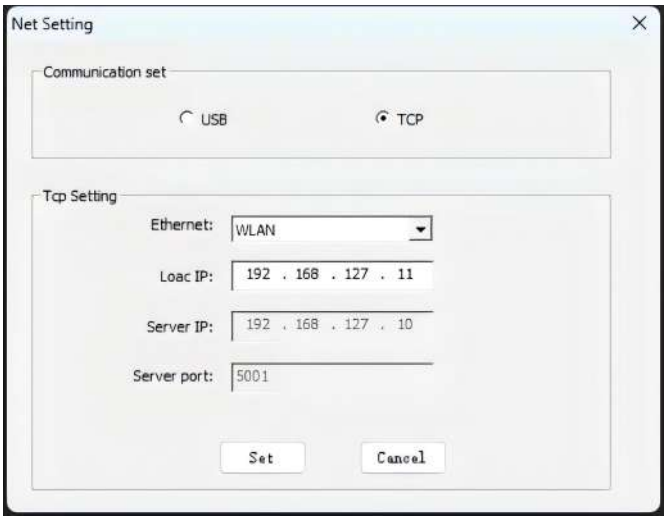
Before performing network connection, first verify that the computer’ s Network Interface Card (NIC) is a Gigabit card, because a 100 Mbps card will not work properly.

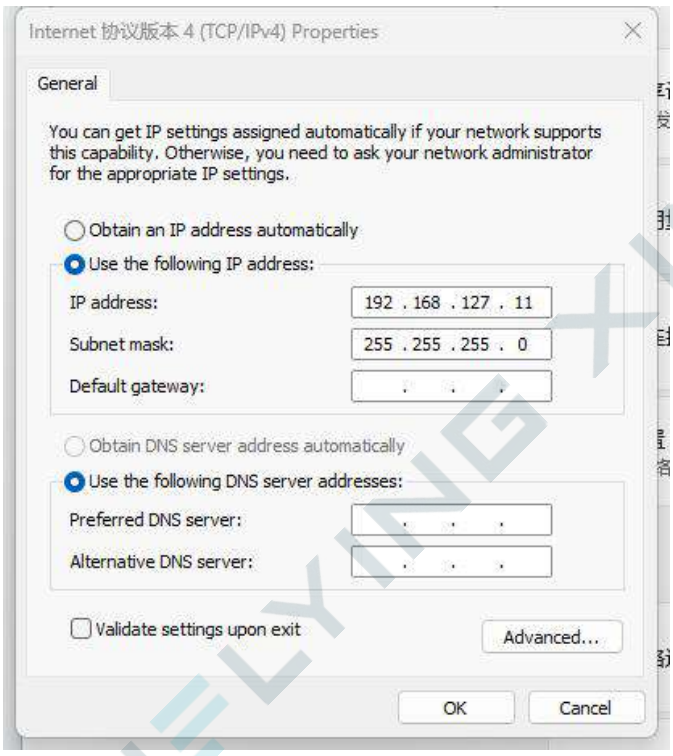
Gigabit NIC identifiers: Gigabit, GBE, 10/100/1000M, RTL8169.

100 Mbps NIC identifiers: Fast Ethernet, 10/100, FE. Or Go to Device Manager → Network Adapters to check.

The control software version must match the board version. After installing the control software and RIP software per the installer instructions, proceed with IP configuration for network connection:

Open software → Advanced Settings → Communication Settings → TCP Communication → Enter local host IP: 192.168.127.11 → Control Panel → Network and Internet → Network Connections → Right-click "Properties" → TCP/IPv4 → Click "Properties" → Check "Use the following IP address" → Set IP address to 192.168.127.11.





4.1.3 RIP Software Installation (Maintop)

The RIP software commonly used for DTF printers includes Maintop, RIIN, and Photoprint(Flexi). This section uses Maintop as an example to demonstrate the installation process.

1. Extract the installation package and locate the setup file.

2. Set the installation path and wait for installation to complete.

3. Complete the installation and create a desktop shortcut.

4.1.4 RIP Software IP Setup and Driver Configuration

Maintop setup: Open software → Maintop Print Management System → Manage → Set Port → Set TCP/IP Port → Add Port → Enter IP address "127.0.0.1" → Detect → After detection is complete, the port is configured.

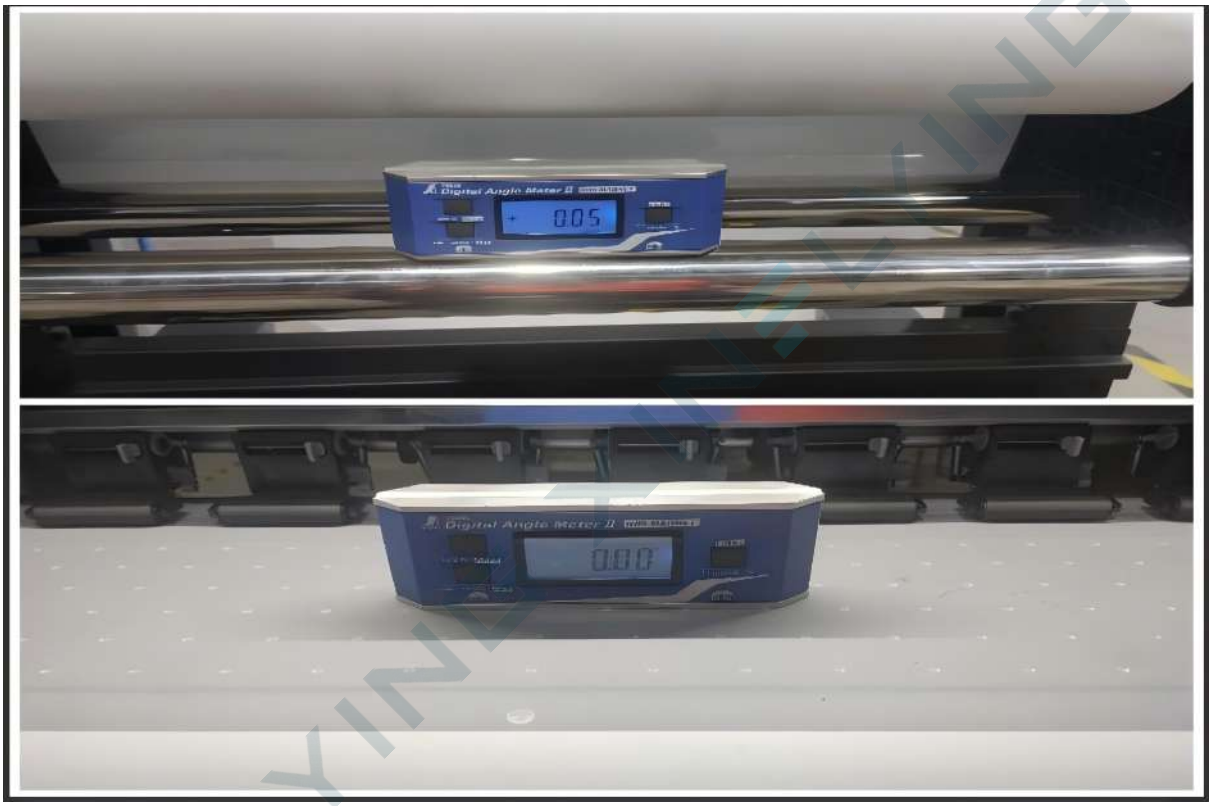
Adding curve profile: Open Maintop → File → Printer Setup → Install Maintop Printer → Select the curve to add → Set as default printer.

5. Machine Installation and Pre-Print Calibration

5.1 Machine Installation

5.1.1 Leveling the Machine

Secure the foot cups. Use a spirit level to calibrate the steel tubes and print platform. The ideal deviation should be within ±0.1 to prevent material misalignment.



5.1.2 Ink Tube Connection

Connect the inner tube above the pump to the top port of the white ink cartridge. Connect the tubes from the upper secondary ink cartridge and the remaining color tubes to the corresponding bottom ports of the ink cartridges according to the color labels on the tubes. Make sure to install the clips when connecting. (Images are for reference only.)

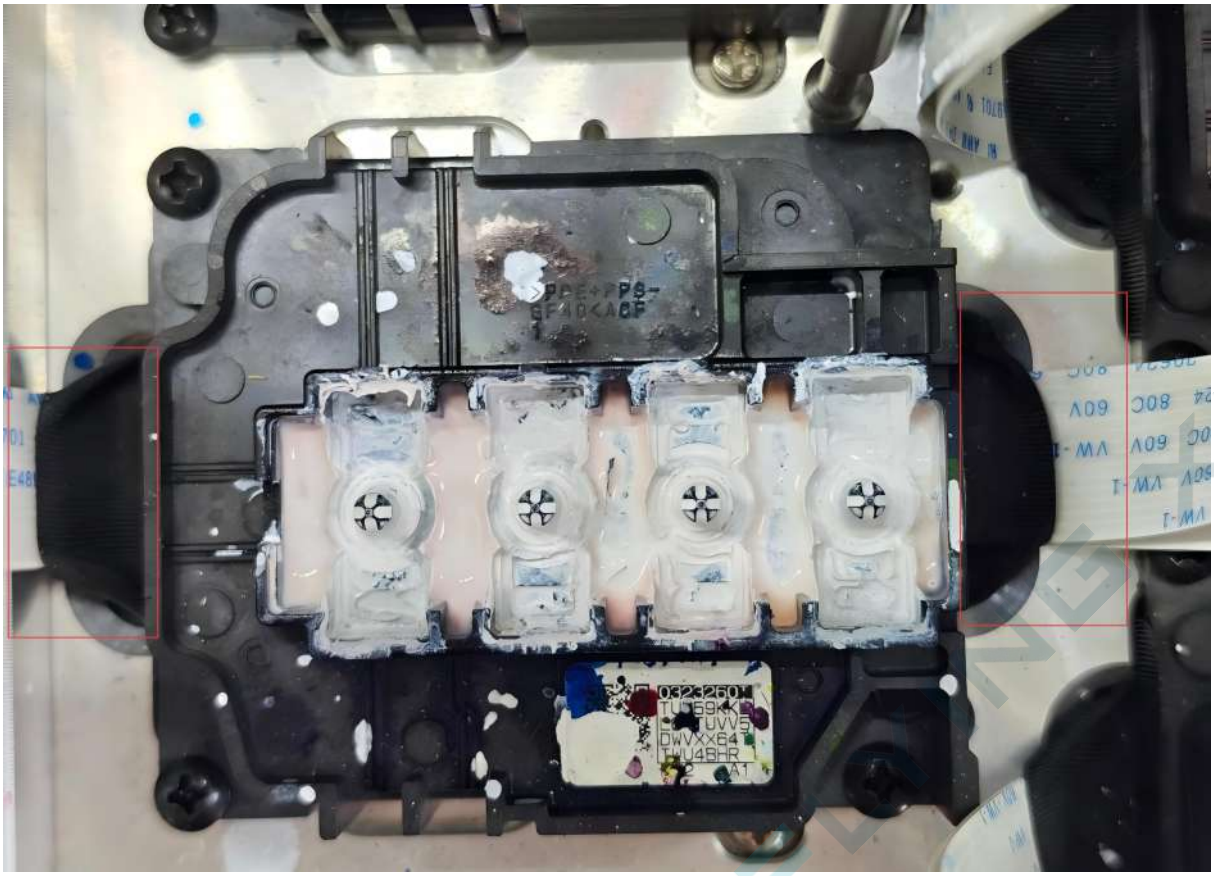
Note:

1. Do NOT fill ink before the ink tubes and dampers are properly connected.

2. The black unconnected buckle in the figure is incorrect.

5.1.3 Printhead Installation

Take out the printhead and connect the printhead cable. Use the dedicated waterproof tape to secure the cable to the printhead. Gently align the printhead with the mounting holes and tighten the screws until they are just snug.



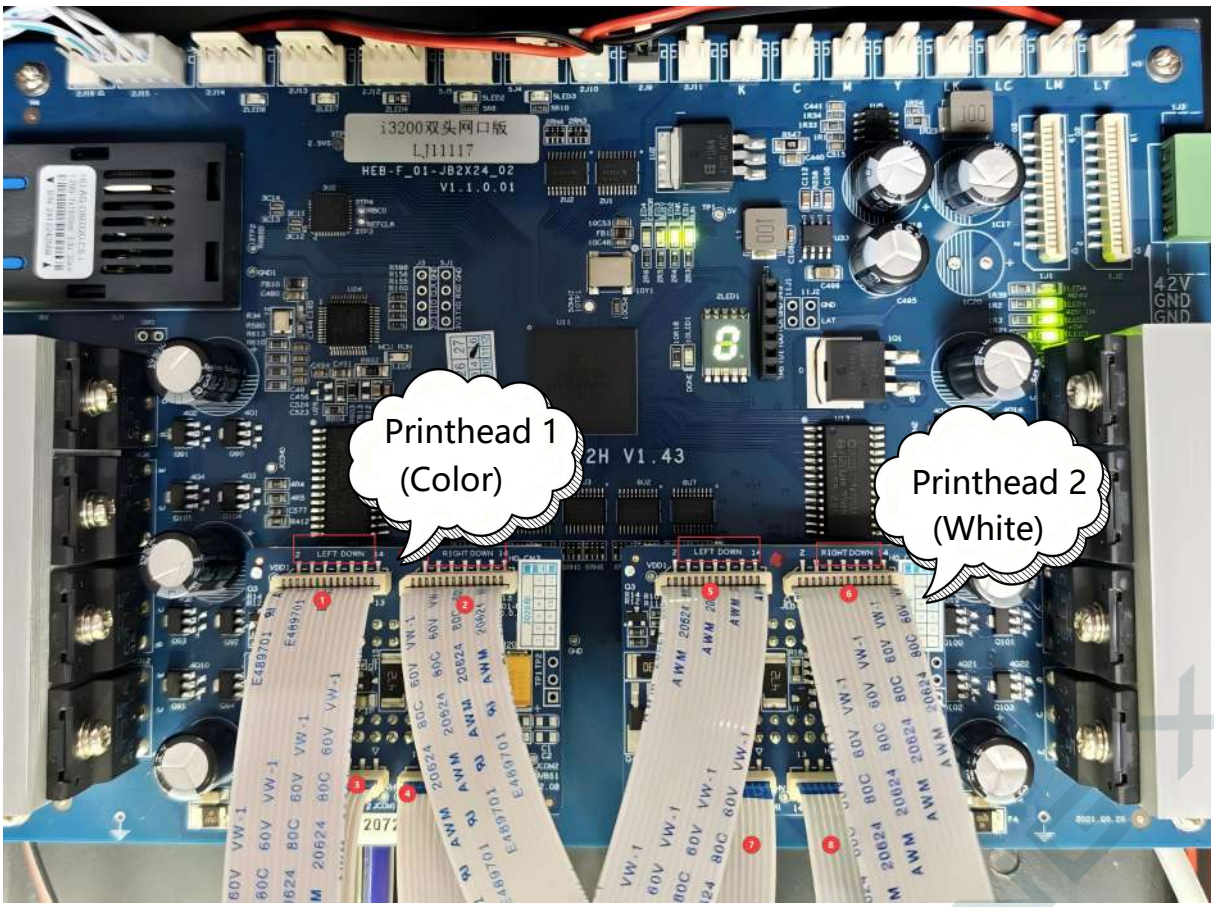
Notes:

1. Align and insert the cable with appropriate force. Do not use excessive force or bend the cable during insertion. Ensure it is not inserted in the wrong direction.

2. When connecting the cable, check that the metal part of the cable is not bent or broken.

3. Do not scratch the bottom of the printhead to avoid damage. Do not touch the bottom of the printhead, as it is extremely fragile.

4. Tighten the printhead screws properly — do not over-tighten to prevent damage to the screw holes and the printhead.

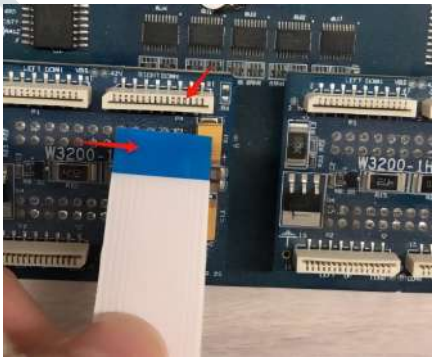


Note: Headboard sample image is for reference only.

①⑤: Left Down ②⑥: Right Down

③⑦: Left UP ④⑧: Right UP

Correct (metal part to metal part)



Incorrect

5.1.4 Damper Installation

Take out the ink damper for the color printhead, install the ink damper in KCMY order (Black, Cyan, Magenta, Yellow). White ink sacs have no specific order. After adding ink, use a syringe to draw ink into the damper then align the damper with the printhead and insert them with appropriate force.

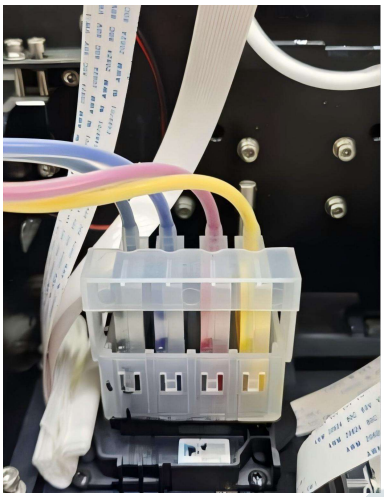
① Shake the ink bottle vigorously before adding ink to prevent settling. Pour the ink into the corresponding color cartridge.

② Hold the damper only by its sides, as the center is very fragile.

③ When installing or removing damper, put dust-free cloths or paper towels on both sides of the printhead to prevent ink leakage that could damage the printhead and circuit board.

④ Turn the damper upside down and use a syringe to firmly draw ink into the damper. When ink appears in the syringe, the damper is full. Return the damper to its original position.

⑤ Ensure the damper is fully seated to prevent ink leakage.



Note: Damper sample image is for reference only.

5.1.5 Power-On Check

Ensure the machine enclosure is properly grounded. If the power supply has a ground terminal, it must also be connected. Failure to ground the machine may damage the circuit board and printhead, and the manufacturer will not provide warranty coverage for such damage.

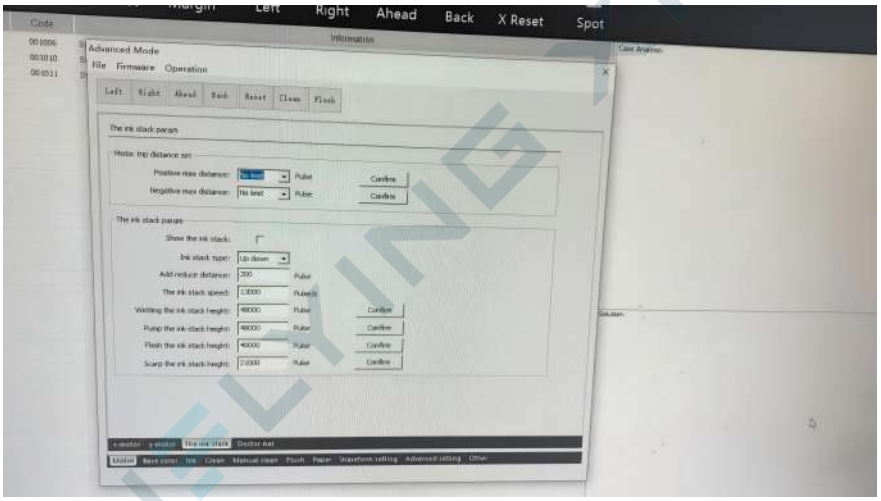
Connect each printhead to the corresponding headboard one-to-one. Keep your hand on the emergency stop button, then power on the machine and observe for any abnormalities. (If with issue, you must press the emergency stop within 2 seconds to check whether any cables are reversed, misaligned, or if any metal connectors are bent or broken.)

5.2 Pre-Print Calibration

5.2.1 Ink Stack and Cleaning Parameter Confirmation

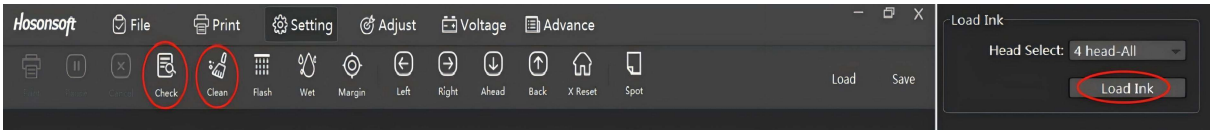
Open software → Advanced Settings → Factory Mode → Enter password: 111111 → Align the ink stack, printhead, and ink stack positions.

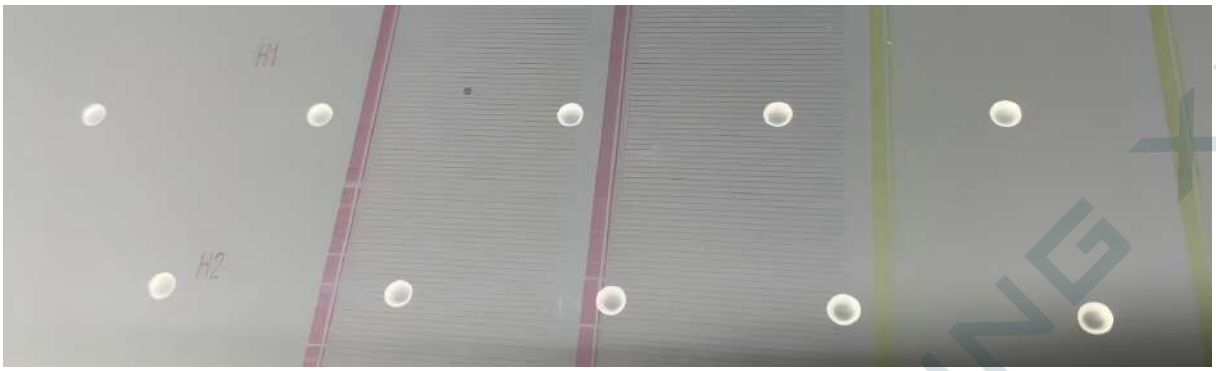
Confirm the ink pumping height (should match the moisture height). Lower the ink stack 1 mm from the printhead. Confirm the flash spray height: the ink stack should be in full contact with the printhead. Confirm the wiper blade is 0.2 mm above the contact position. Click “Move Left” and slowly move the carriage; observe whether the printhead catches the paper pressure strip. Adjust the carriage height to be 0.2 mm above the platform. Check that the printhead cables are not being snagged and organize the cables.



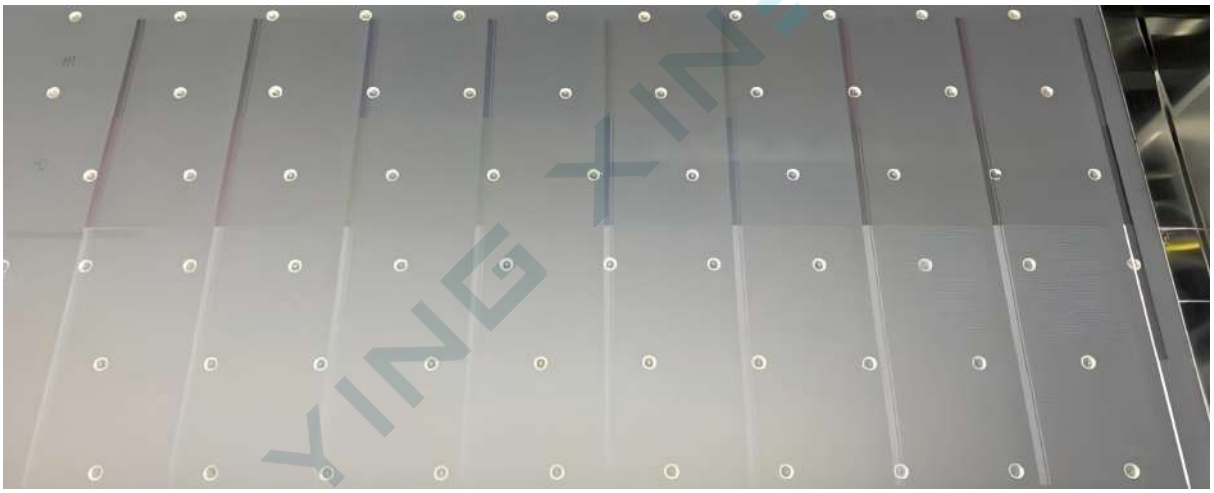
5.2.2 Printhead Status Check

Load ink for 15 seconds and confirm that ink is flowing out of the waste ink tube, then stay still for 1-2 minutes, and then click the clean icon “WEAK CLEAN”. After the cleaning is complete, confirm that the platform is free of obstacles, then print a nozzle test. Then you observe the ink out of the printhead, if there is no ink or ink missing on the test strip, “WEAK CLEAN” again. If there is no improvement after cleaning for 2-3 times, Needs to contact our technicians.





Test Strip with problem (ink not come out 100%, and all color not show in single line)



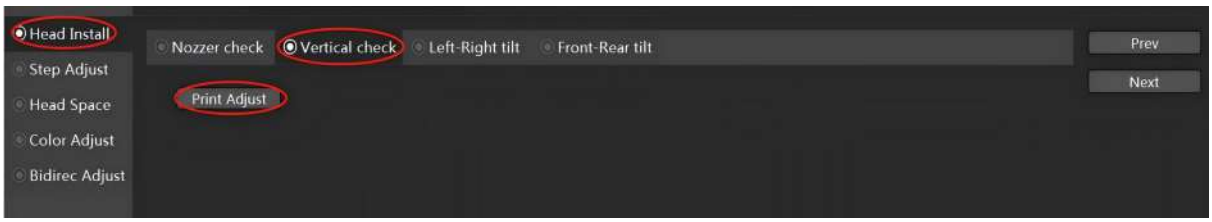
Normal Test Strip (all ink come out 100% and all color show in single line)

5.2.3 Vertical Calibration

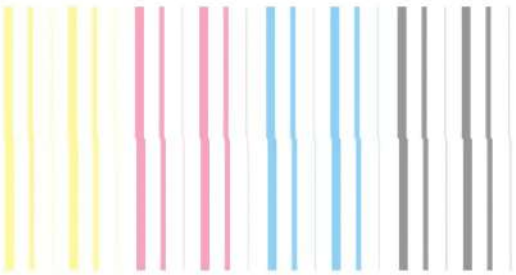
Slightly loosen the four adjustment block screws on the printhead. Print the vertical calibration pattern. Adjust the physical position of the printhead according to the calibration image (each printhead has two screws that apply force in opposite directions: clockwise and counterclockwise) so that the two vertical lines on the left side of the pattern overlap. Use a magnifier to check the four images on the right for color deviation, making the dots on the left and right sides the same size. For reference, use the three lines on the left and right of a single color as fixed positions, and adjust the two lines to be parallel in the middle of the three lines.

The figure below shows a properly calibrated vertical calibration chart and a red chromatic aberration chart.

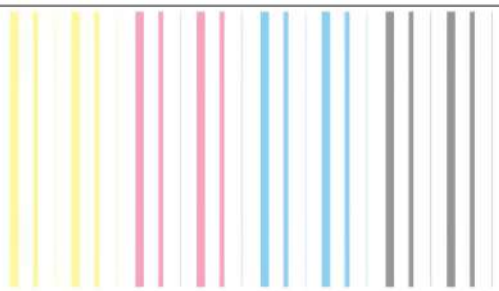
"The figure below shows Head ① is misaligned vertically — the left side is too low. Push it up by turning the adjustment screw counterclockwise. First, loosen the fixing screw on the adjustment block."



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.



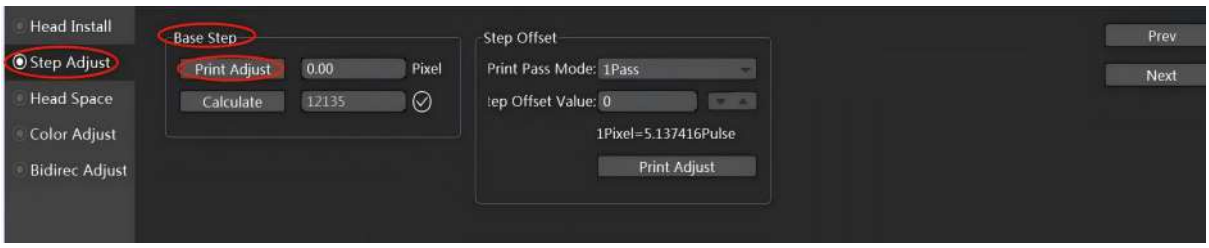
If there is a deviation, loosen the fixing screw of the print head and adjust the position of the print head. You can "push the print head up to the left". Then Print Adjust again, reach to form a line.



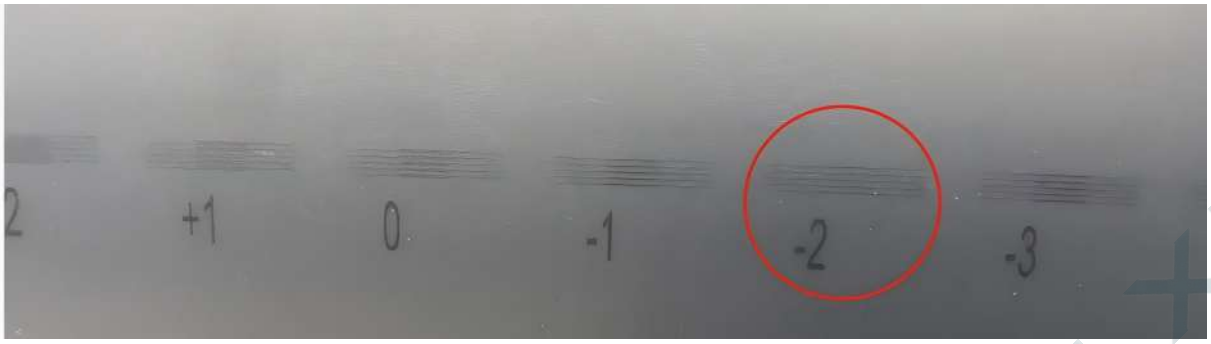
Enter the software option " Adjust" interface and align the printhead vertically "Print Adjust".

5.2.4 Step Calibration

Print the calibration pattern. Observe at which scale value the reference line completely overlaps with the calibration line, enter the adjustment value, click Calculate, and reprint the calibration pattern. Repeat until the reference line and the printed line overlap exactly at the 0 point.



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

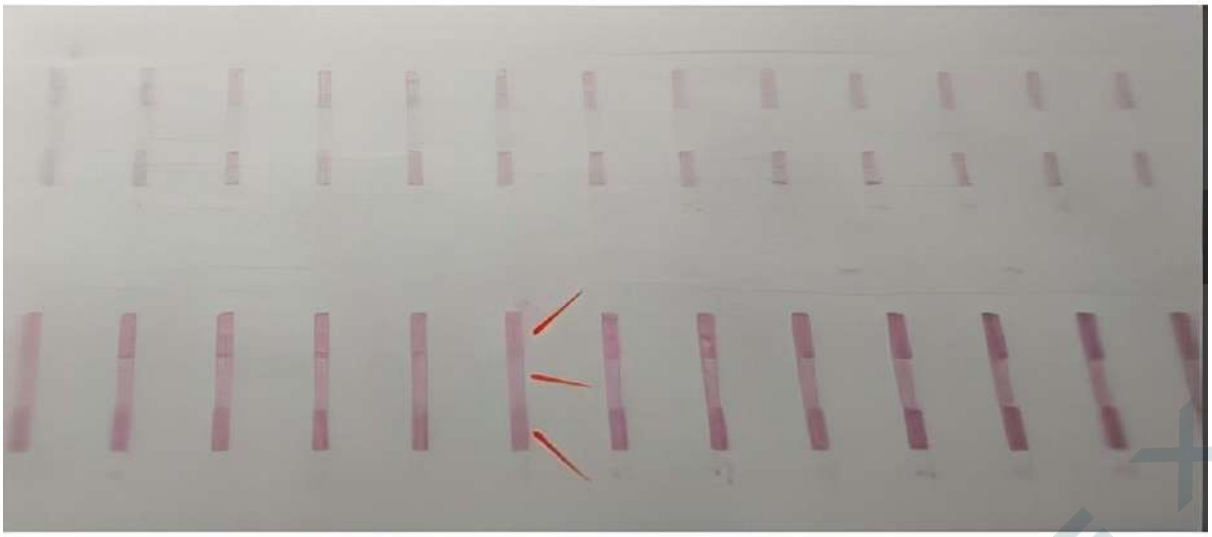


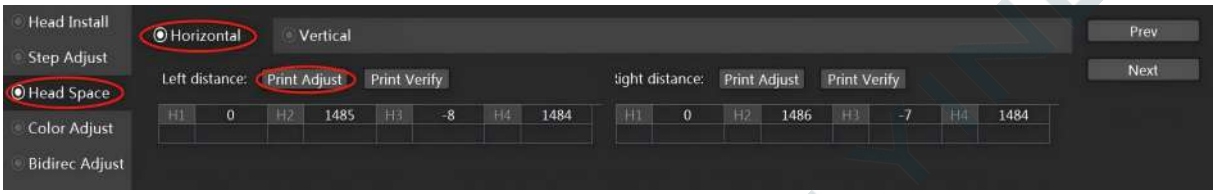
So enter the value -2 in the corresponding input box, and then click Calculate.

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.

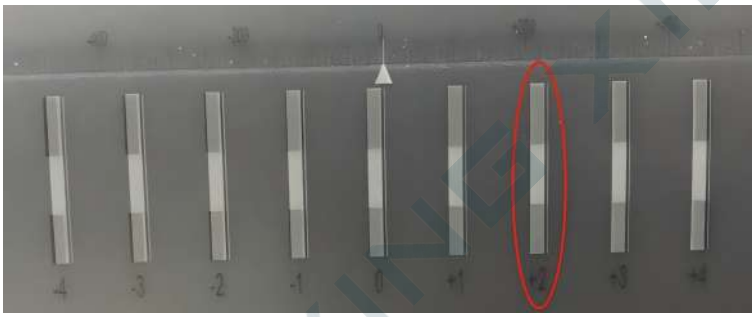
5.2.5 Spacing Calibration

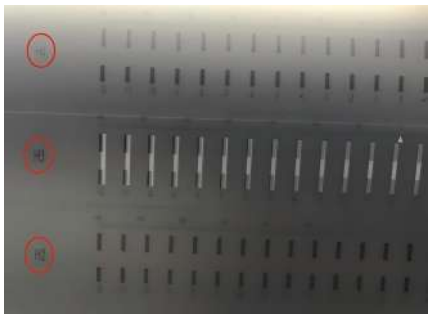
Print the left/right spacing calibration pattern. Observe at which value the center line overlaps with the upper and lower lines. Adjust the value up or down until the reference line and the printed line overlap exactly at the 0 point.



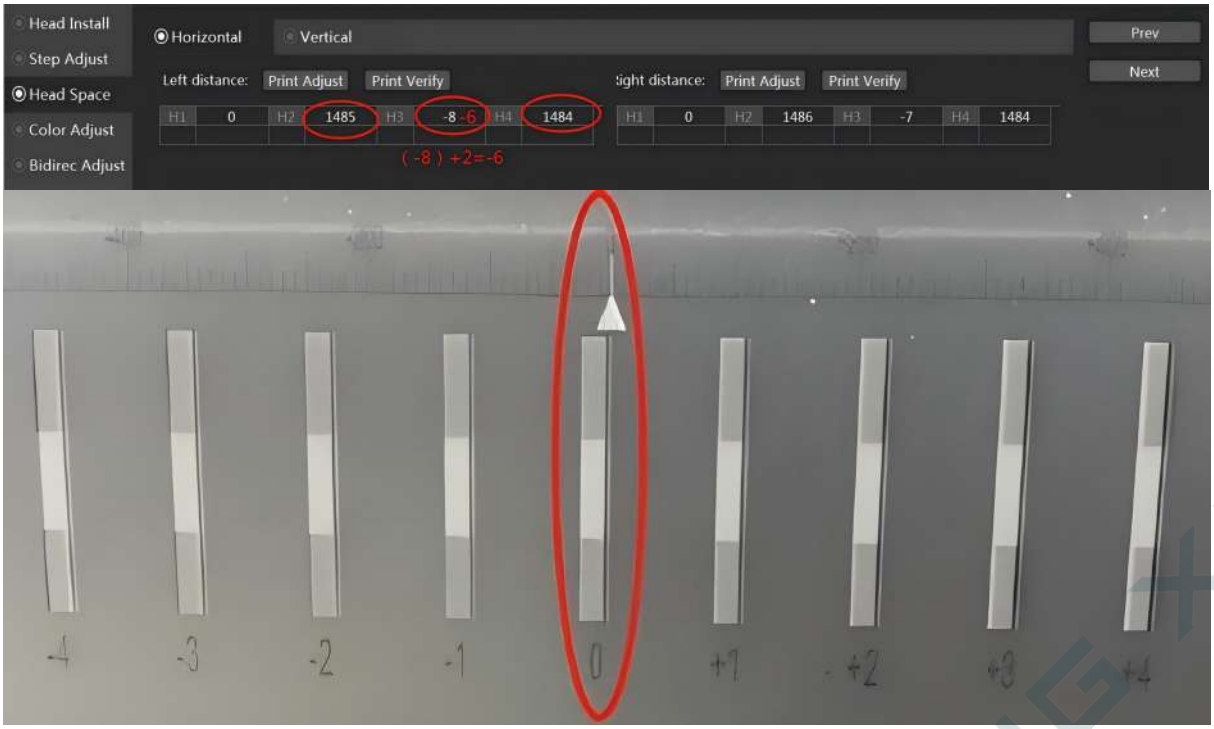


The calibration chart is at the value +2, and the lines completely overlap.



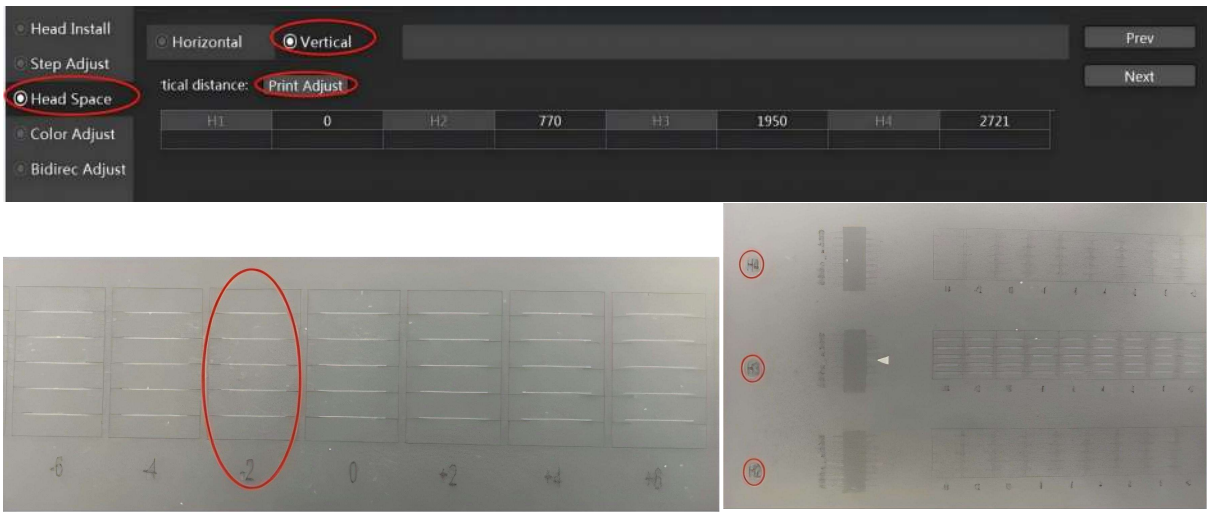


In the corresponding print head, increase or decrease the corresponding value in the input box of the corresponding printing direction.



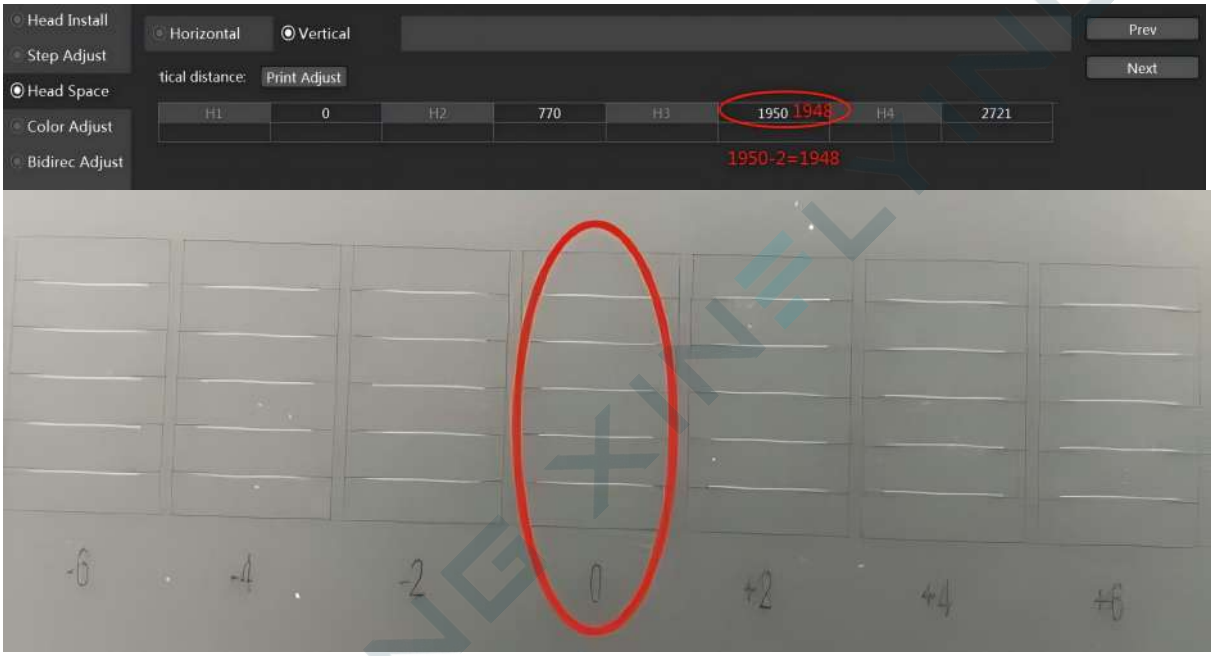
Print Adjust again and confirm that the line at the value 0 is the most uniform. Need to click the "Save" button in the upper right corner. Then calibrate the direction to the right, the steps are the same as above.

Print the vertical spacing calibration pattern. Observe at which value the center line overlaps with the left and right lines. Adjust until the reference line and the printed line overlap exactly at the 0 point.



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

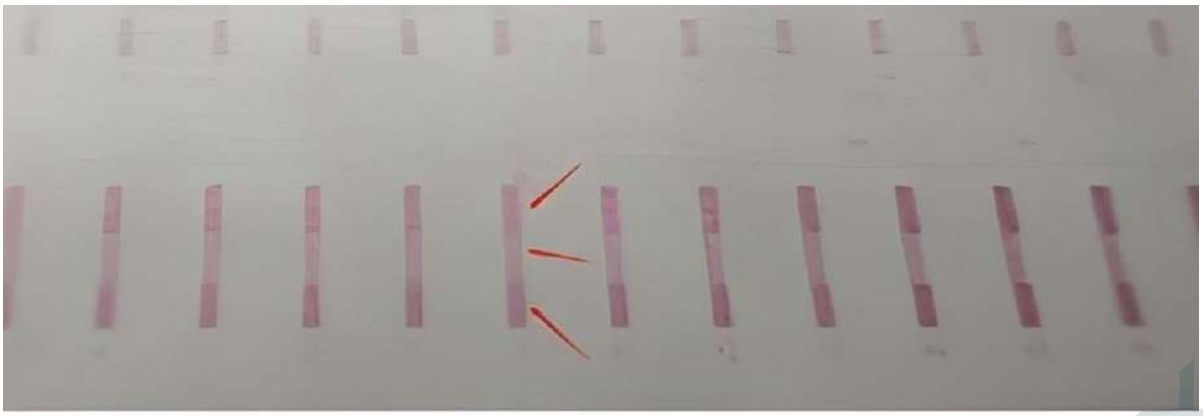
In the corresponding print head, increase or decrease the corresponding value in the input box of the corresponding printing direction.



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.

5.2.6 Bi-directional Calibration

Print the bi-directional calibration pattern. Observe whether the center line overlaps with the upper and lower lines in the pattern. Modify the value below the overlapping image, save, and reprint for verification. Repeat until the reference line and the printed line overlap exactly at the 0 point.



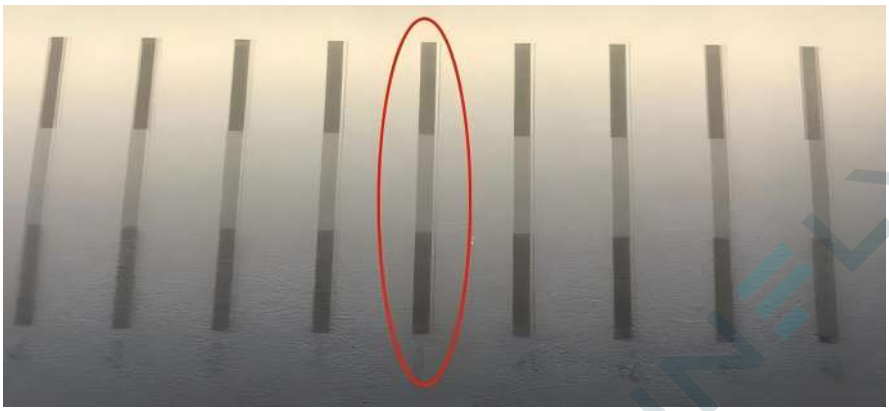
Finally, perform bidirectional printing calibration,Print Adjust.

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

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

(3) 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.

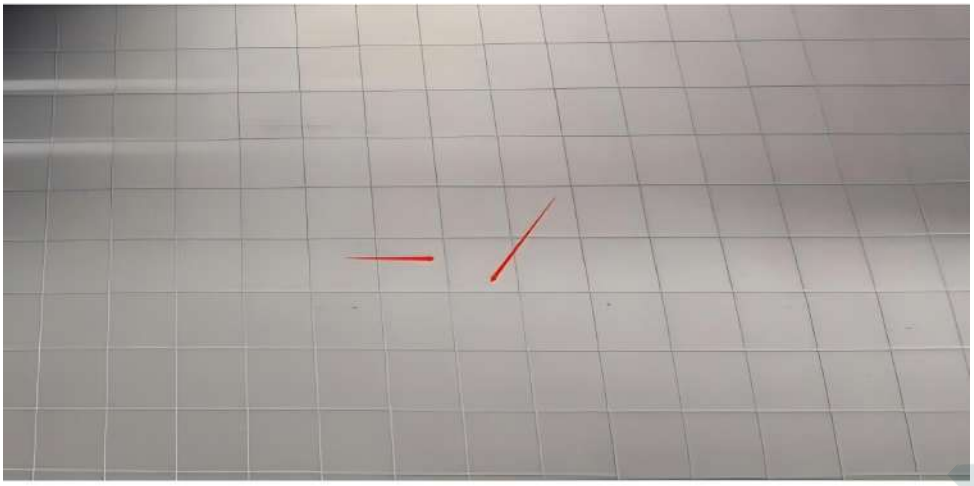
(4) Finally, switch to different speeds to calibrate the two-way printing values and save them separately.



Note: Horizontal, vertical, and bi-directional calibration values are reference values only. Final confirmation requires a grid test for fine-tuning.

Grid Test

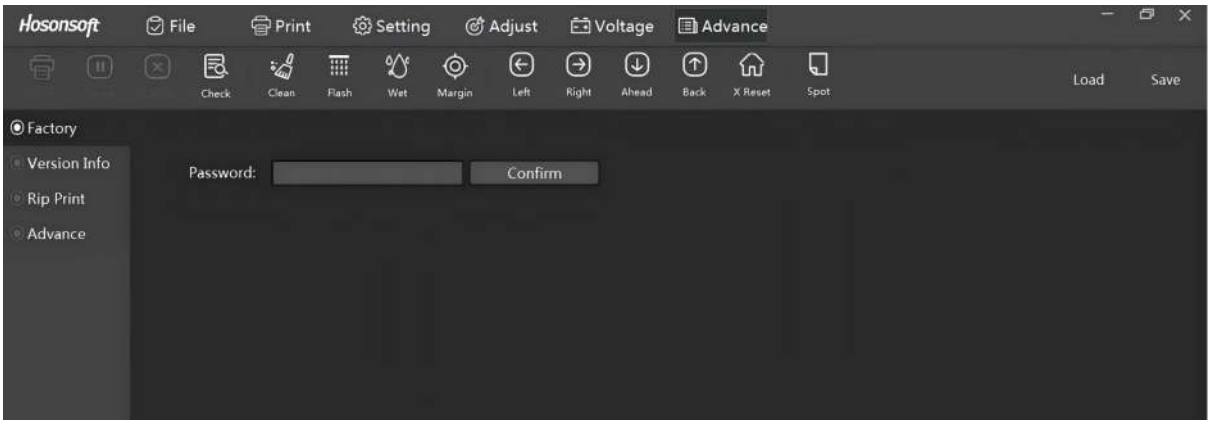
Create a fine-line grid in Maintop with 10 mm spacing. Disable feathering or set it to low. Set printing to left-direction only. Print the grid and observe the offset of all lines. Adjust the left-direction and vertical calibration values. After the left direction is calibrated, switch to right-direction printing and repeat. After right direction is calibrated, switch to bi-directional printing and repeat. The final result should show horizontal and vertical lines overlapping perfectly.



If black horizontal lines protrude, this can be resolved by adjusting the vertical calibration parameter.

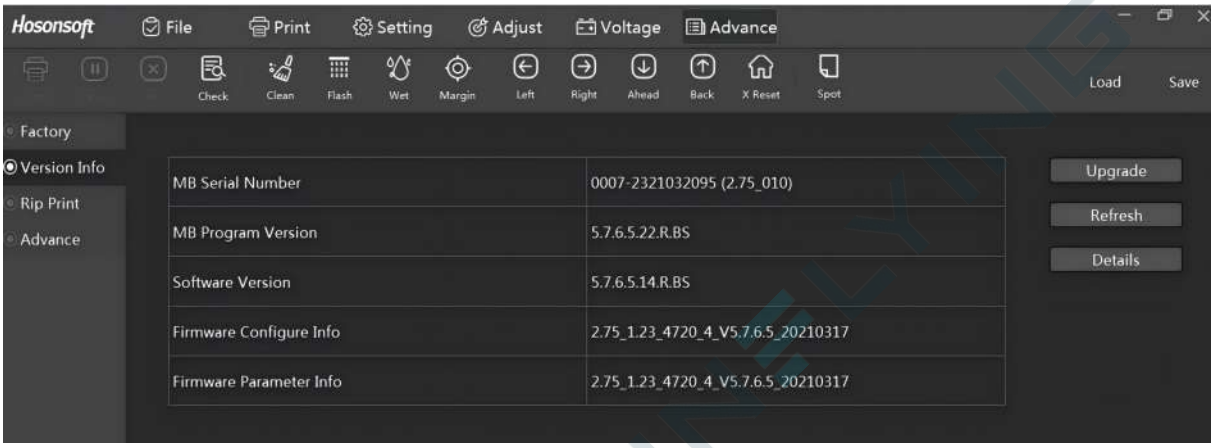
5.2.6 Background factory settings

Password-Generally model: 111111 ; Factory model: Ctrl+F12 into factory model,then enter password: 222222

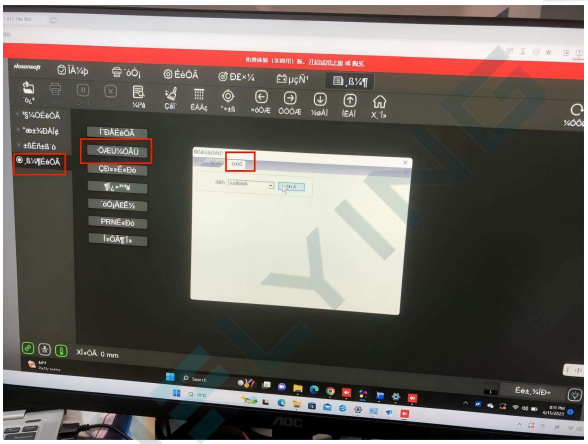


5.2.7 Version information

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



Change language: Select advance-encryption-language



6. Precautions & Maintenance

6.1 Precautions for printing equipment

To ensure proper operation and extend the lifespan of the printer, it is essential to operate the machine in an environment that strictly conforms to the required standards. The following environmental requirements must be met:

Temperature and humidity – The printing room 20–35°C (68–95°F), humidity: 35–70% RH.

Power supply and grounding – Must quipped with a voltage regulator or UPS (voltage fluctuation ≤ ±5V) and the printer must be properly connected to an earth ground.

6.2 Maintenance of The Printer(According to our maintenance manual)

(1)Check the status of the print head when starting up and shutting down the machine.

(2)Close the software before shutting down and check whether the carriage is reset well.

(3)Follow the maintenance manual we sent to perform daily maintenance on the printer.

(4)Keep a distance of 10cm between the printer and the powder shaker.

(5)Do not touch the heated printer platform.

6.3 Regarding the holiday maintenance:

For 1-2 weeks maintenance:

1.If there is someone at the printing room, you can just print the nozzle test everyday, which is perfect for the printer's maintenance, and there is no need to do the follow steps.

2.If there is no one at the printing room. You need to check whether the print head is normal, print the nozzle test strip firstly, if there is ink missing(The ink came out that is

not good, the nozzle test is not complete), it is need to Weak Clean first to ensure that the nozzle test is complete. Check the print head to ensure it is in good condition, and then follow these steps:

Method Without Moisturizer: (Simple operation, but there is a certain risk of print head clogging if the machine is not used for a long time)

(1)The print head should be soaked in moisturizing liquid contact us for the video.

(2)The print head must be sealed and moisturized.It means that the print head must be aligned and closed with the ink pad to seal and moisturize the print head. Otherwise, the print head will be clogged.

(3)Use ink tube clips to clamp all ink tubes

(4)Tighten all ink cartridge cover.

(5)Clean up the waste ink

(6)Seal the hot melt powder and printing film to prevent moisture

(7)DO NOT let your printer and shaker with dust, please take good measures to prevent dust from the machine.

Moisturizer Method: (for >2 weeks of inactivity), Complicated operation, but it can reduce the risk of printhead clogging if the machine is not used for a long time)

1.Pour the remaining ink into a clean and empty cartridge to prevent ink precipitation. Advice: It is best to use up the ink in the ink tank on the printer in advance..

2.Clean the ink tubes and dampers. Firstly, take out the damper, use a syringe to draw out the ink in the dampers and ink tubes, then rinse the ink cartridges and ink tubes with pure water/distilled water. (And we will send the video to you, for showing how to clean, just watch the front part)!!

3. Use a syringe with small hose to flush the print head with pure water. Make sure there is no ink inside the print head. Then use a syringe with sleeve hose to slowly inject the moisturizer into each channel of the print head. The force should not be too strong. (During the operation, place tissue or dust-free cloth on both sides of the print head to prevent liquid from flowing into contact with the head and cables, because it will burn the heads)

4. Tighten all ink cartridge cover.

5. Clean up the waste ink.

6. Seal the hot melt powder and printing film to prevent moisture.

7. DO NOT let your printer and shaker with dust, you can use a cloth to cover them.

If you have any questions, please feel free to contact us.

When you back to use the printer, if you inject the moisturizing liquid into the printheads, you need to use pure water to flush out the moisturizing liquid that in the printheads, make sure there is no moisturizing liquid in the printheads then you can suck ink and load ink.