6090 UV Flatbed Printer

Product Installation And Operation Instructions

More

Catalogue

01 Machine Check

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03 Print-head Installation

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PART 01

Machine Check

ONE

Machine Check

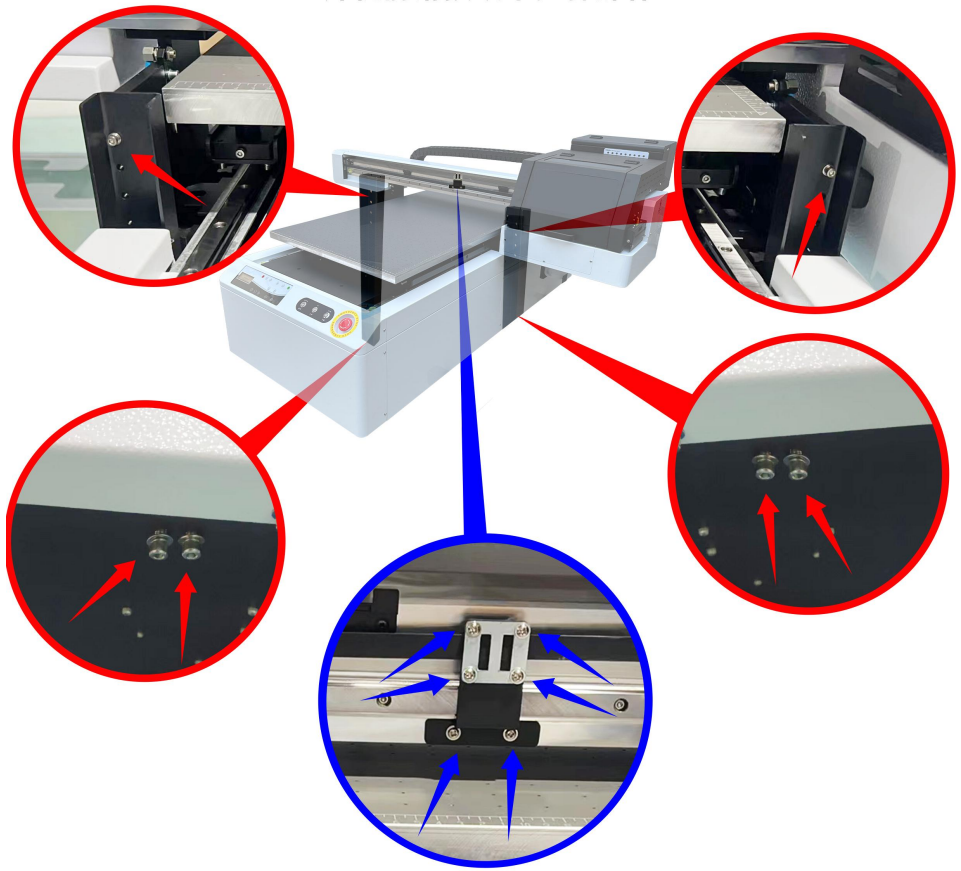
Model	6090
Print Width	600*900mm
Print Interface	GigE Vision
Operating System	XP/Win7/10
Rated Power	250±5%W

Cooling System	Air-Cooled	Water-Cooled ✓
Flatbed Height	0-120mm	
Temperature	15~30℃	
Optional voltage	110/220V	
Suction platform	Yes	

Machine Check

Remove The Fixed Iron

1. Perform operations according to the picture on the right



Machine Check

Preliminary Check

1. Check whether the platform is balanced
2. Slowly push the print-head carriage to the center of the flatbed
3. Check whether the bottom of the carriage and the flatbed are balanced

*If the carriage does not move, it means that there are still fixed iron parts that have not been removed.

1

2

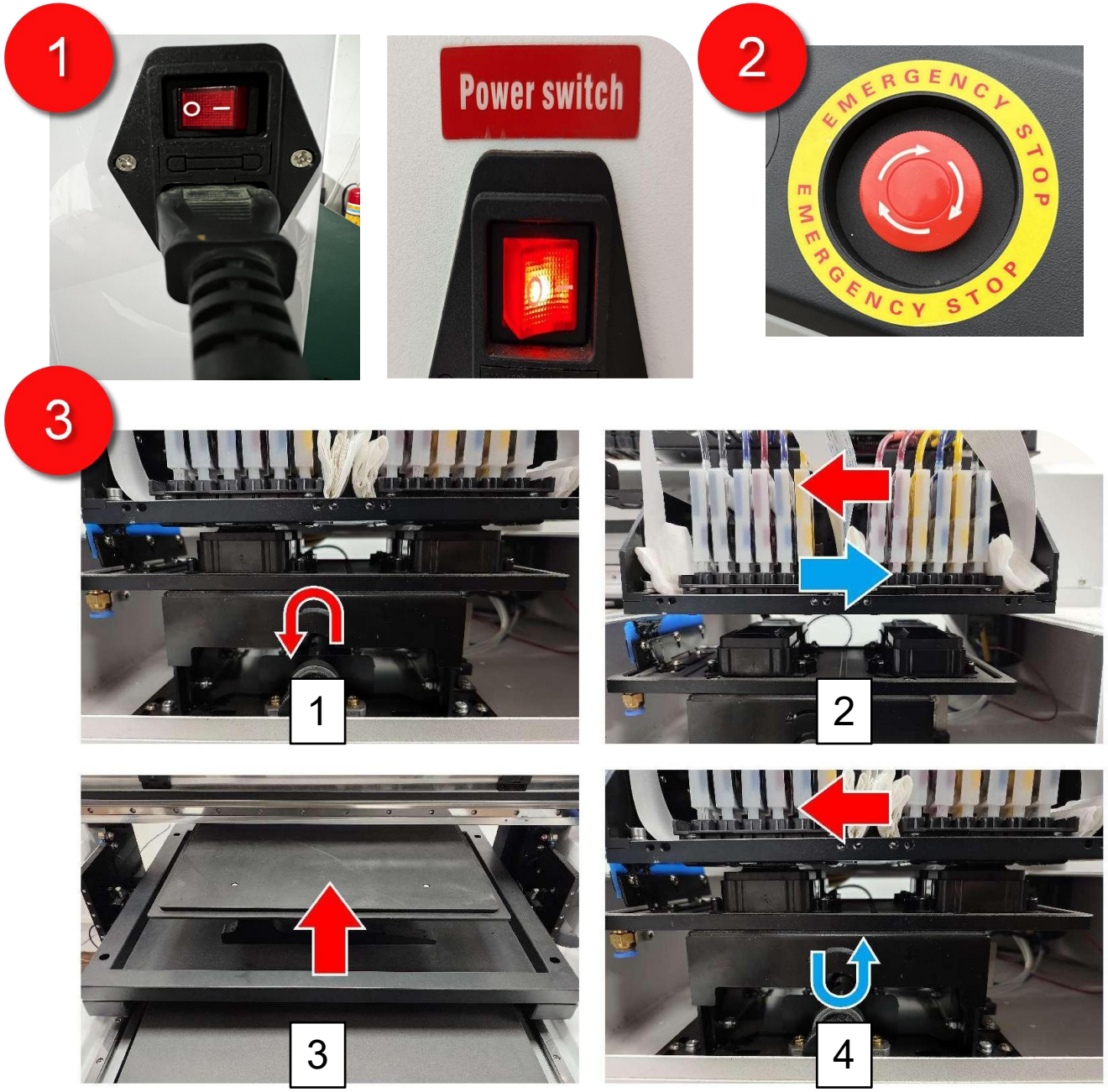
3

Machine Check

Connect The Power Supply

1. Plug in the power cord, turn on the switch
2. Turn the emergency stop button clockwise
3. Check whether the self-test action of the printer is normal

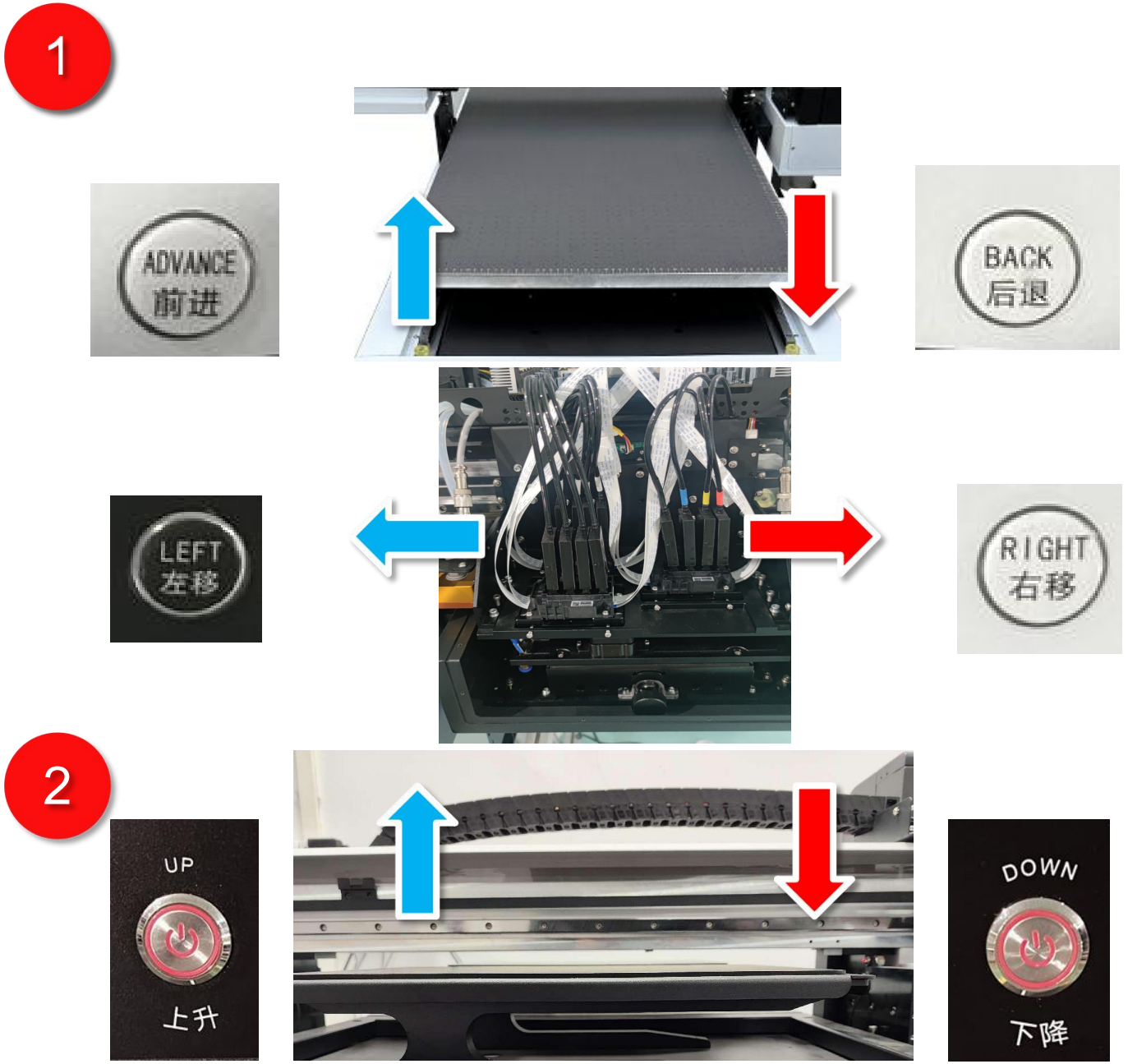
* There will be a beep after turning on the machine, it is the ink cartridge shortage alarm, which is normal



Machine Check

Button Check

1. Press the ADVANCE/ BACK/ LEFT/RIGHT direction button to check whether the corresponding action is performed
2. Press the UP/DOWN button to check whether the corresponding action is performed

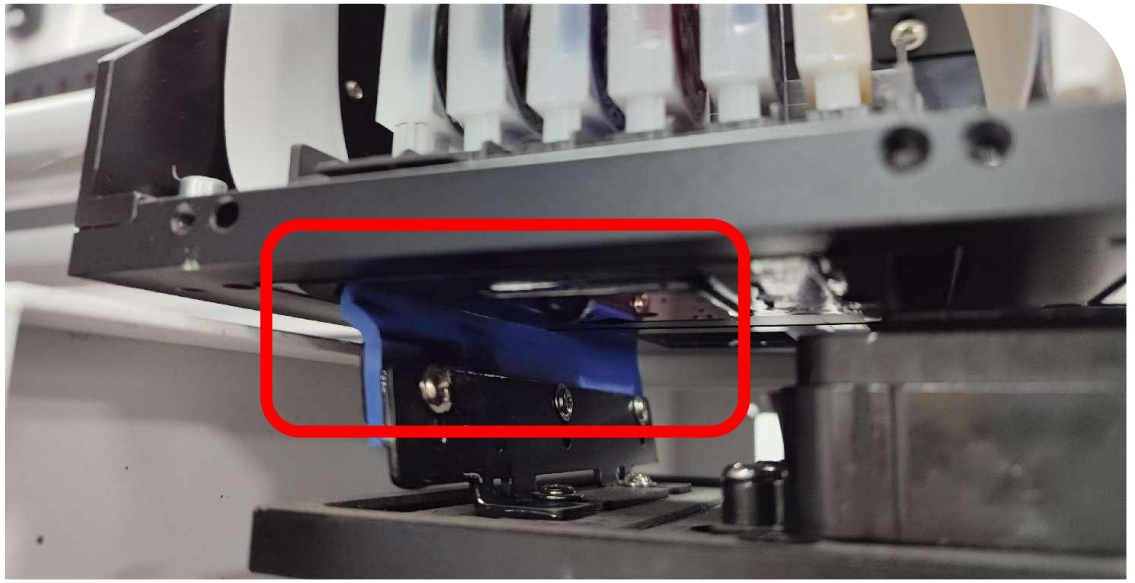


Machine Check

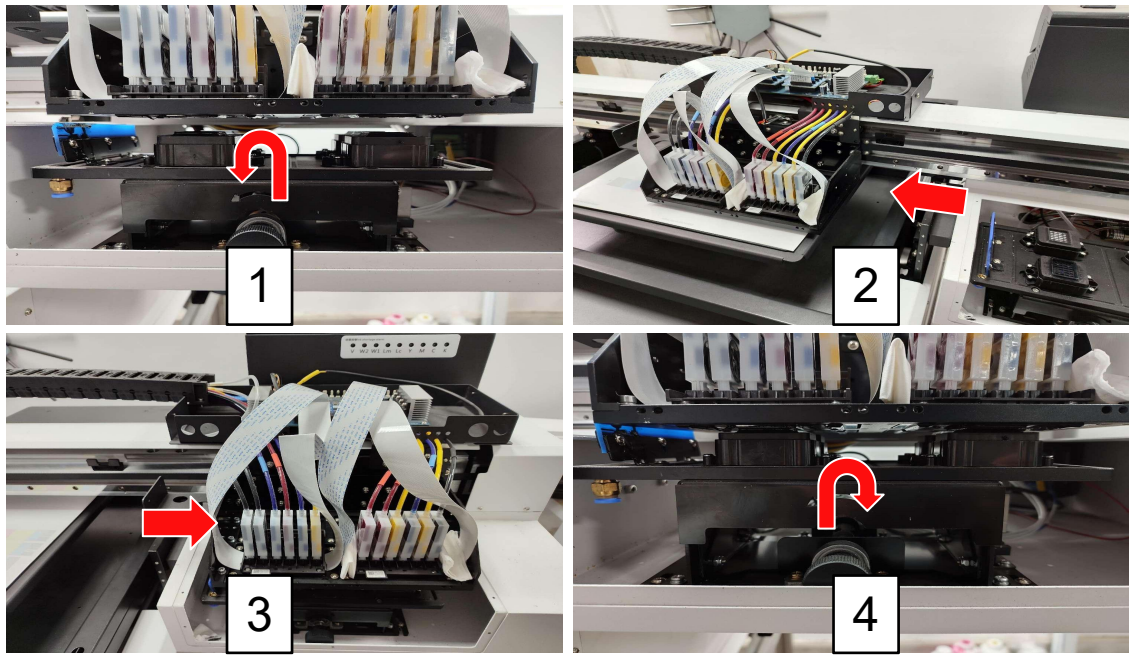
Software Functional Testing

1. Click the software cleaning function to check whether the cleaning action and the height of the squeegee are normal
2. Click on the software detection function to check whether print-head carriage moves normally

1



2



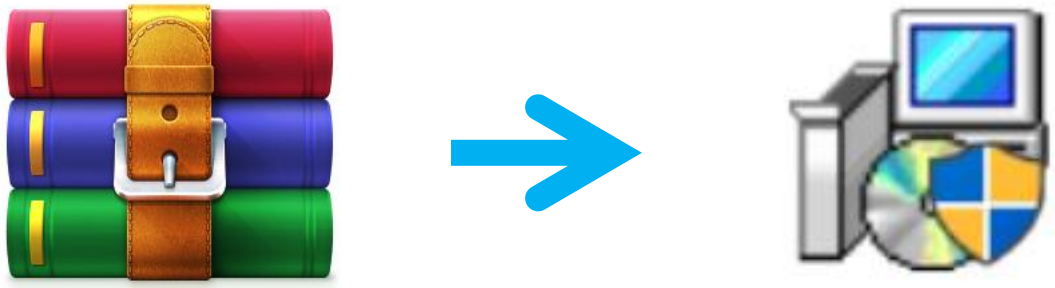
PART 02

Software Use

TWO

Software Use

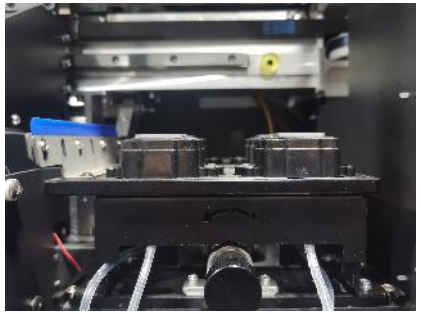
PrintExp

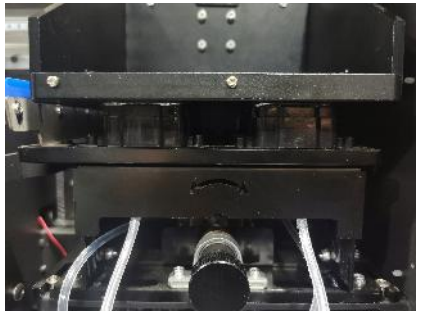


- Software installation: Unzip the "installation file" from the "unzip package", open the "installation file" and install it
- Computer operating systems supported by the software: Windows 7, Windows 10.
- The number of bits of the operating system is recommended to be 64bit
- Recommended: CPU Intel Core i5 or higher
  Memory 8G and above
  Must have a Gigabit Ethernet port

Software Use

Do not install the software on the C-drive





Normal shutdown process:

Close the software —— Wait for the carriage to complete homing —— Turn off the printer

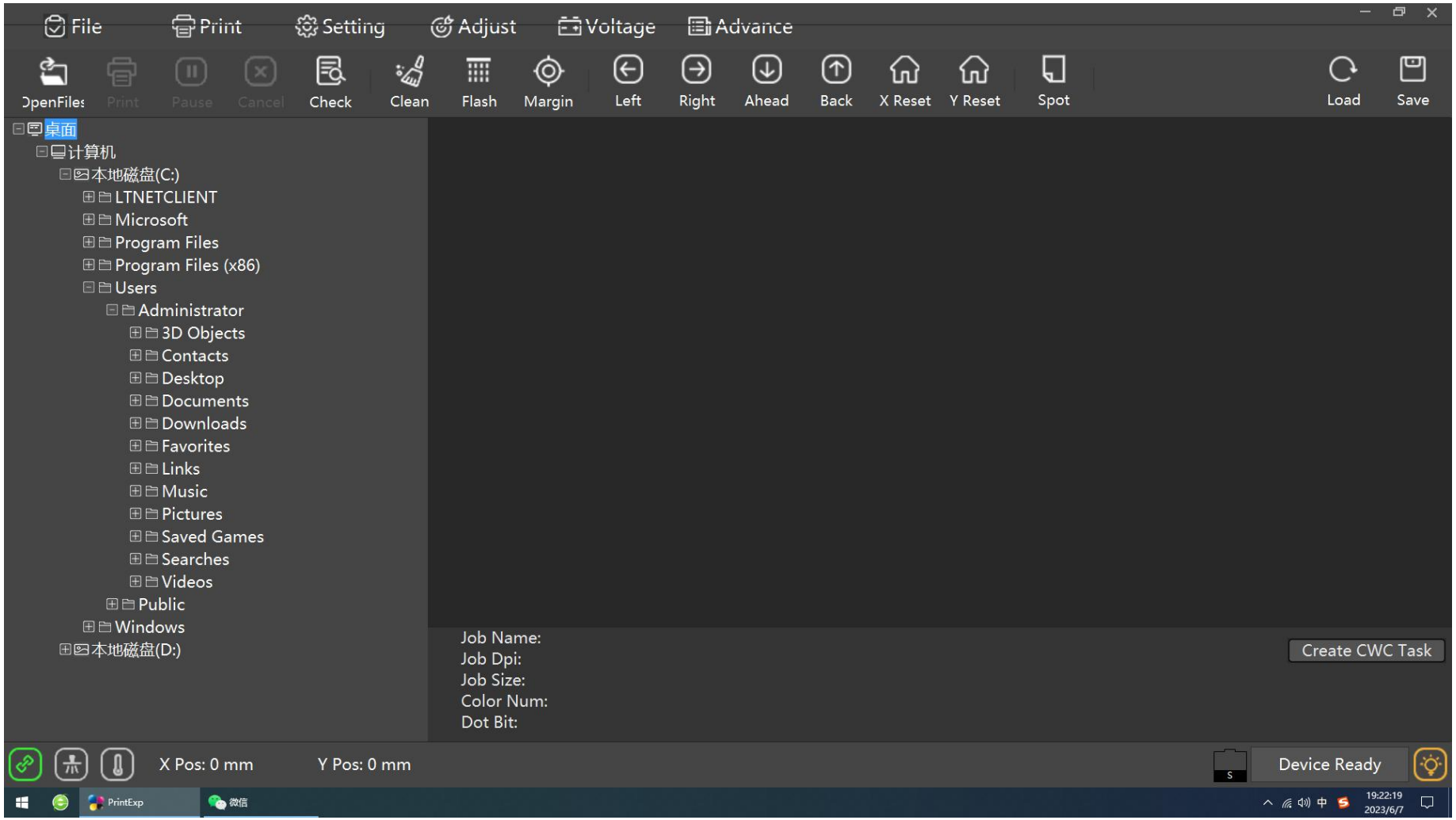
Software Use

*Modify Ipv4

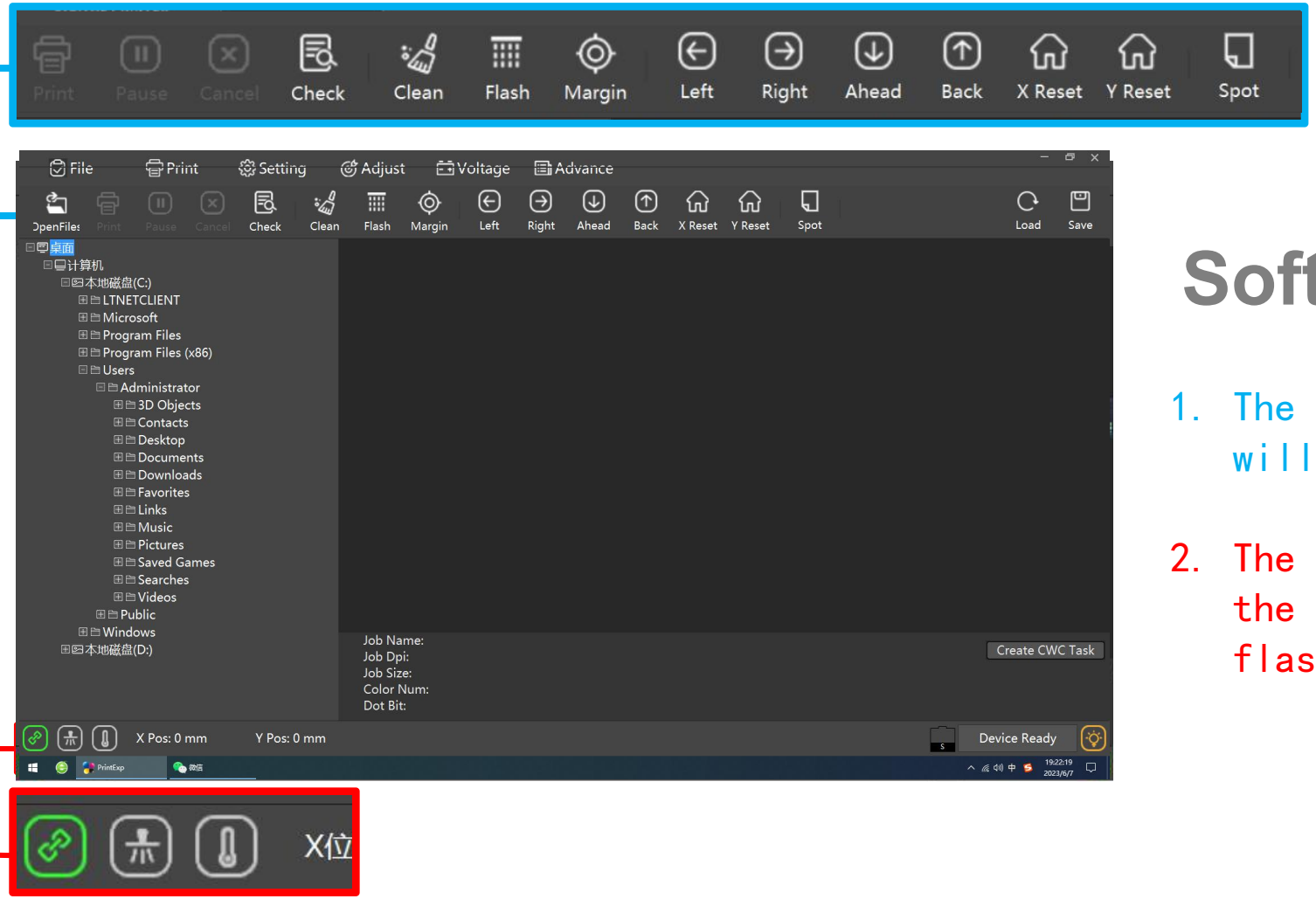
1. After the printer is connected to the computer through a network cable, open the "Change Adapter Settings" in the Network and Sharing Center
2. Find the corresponding Ethernet, right-click properties, find "Internet Protocol Version 4" and double-click
3. Modify the IP as shown in the figure below, click OK after the modification is complete

Software Use

PrintExp file interface



Software Use

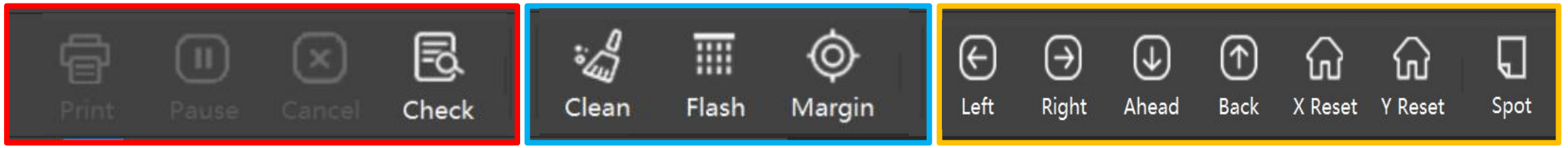


Software self-test process

1. The button above the software interface will change from "gray" to "white"

2. The "Link" in the lower left corner of the software interface changes from flashing red to solid green

Software Use

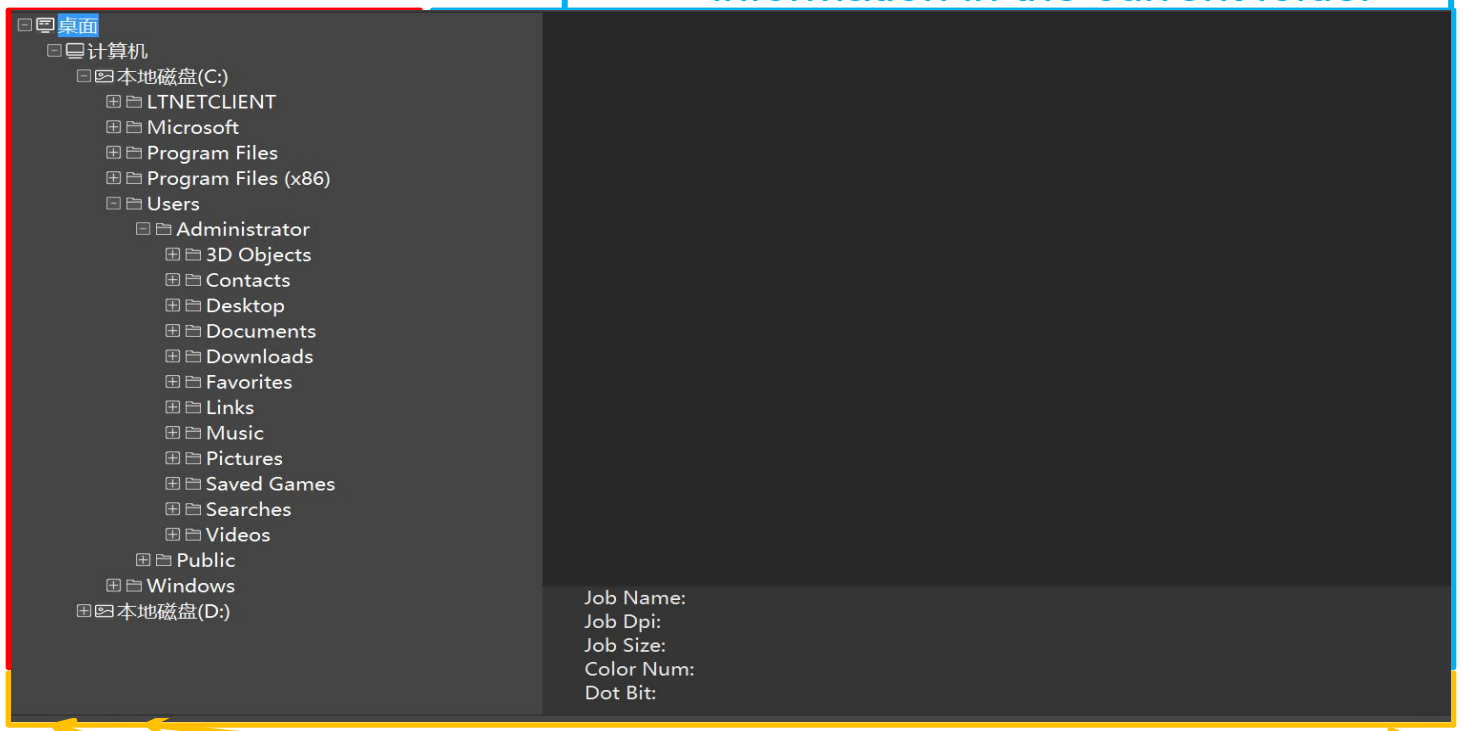


- Print: print the task selected in the taskbar
- Pause: During the printing process, pause the current printing; after clicking "Pause", "Pause" will become "Continue";
  Click "Continue" to continue printing unfinished tasks
- Cancel: During the printing process, terminate the current printing task
- Detection: Print test strips to observe the current state of the nozzle and the position of the initial print point
- Cleaning: According to the actual situation, one or all nozzles can be cleaned
- Flash spray: flash spray switch button, the nozzle will spray ink after clicking
- White border: set the current position to X white border
- Move: move the nozzle trolley or consumables
- X reset: After clicking, the nozzle car returns to the origin

Software Use

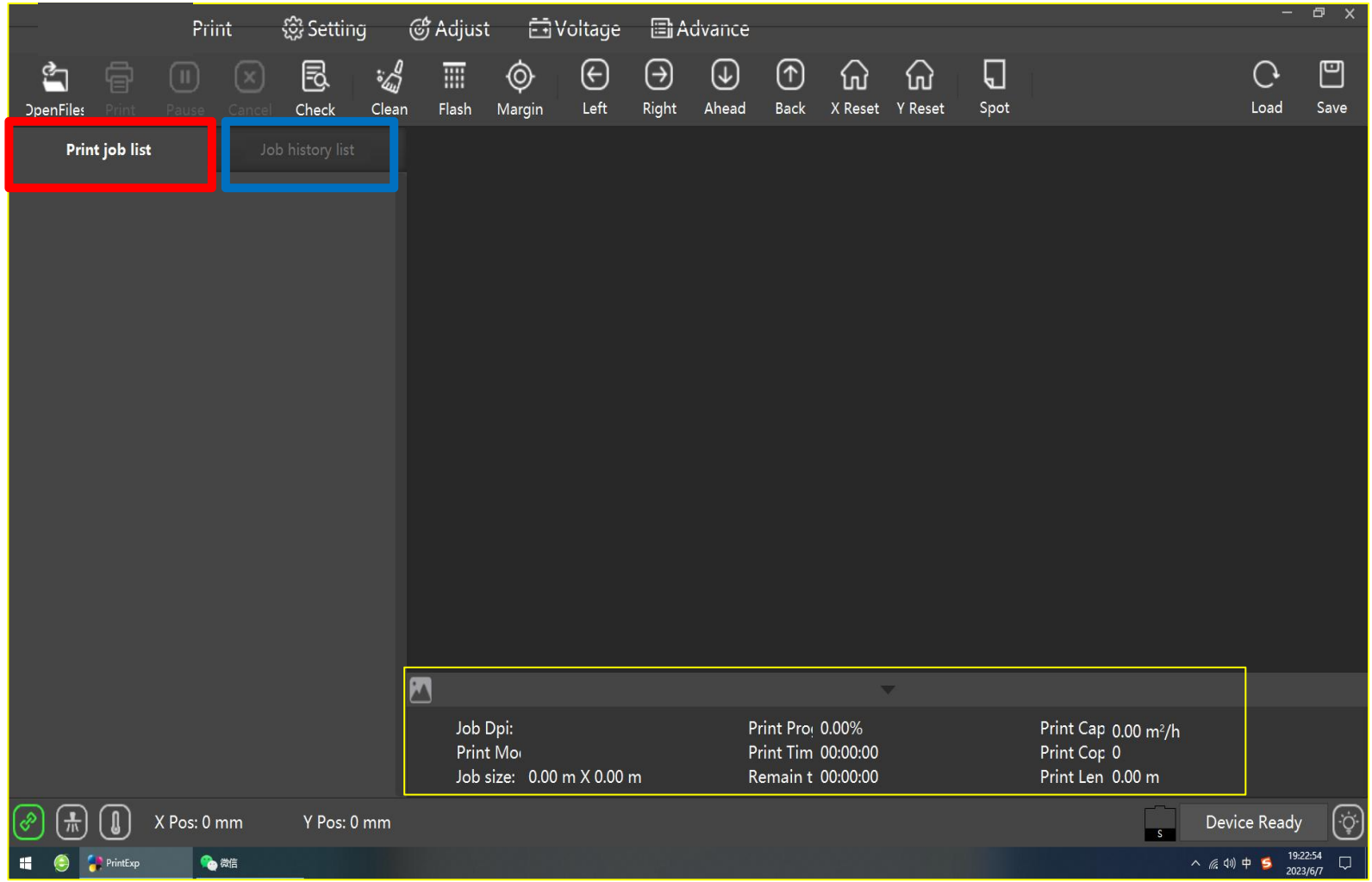
◆ file list

◆ Preview the prn files and their information in the current folder



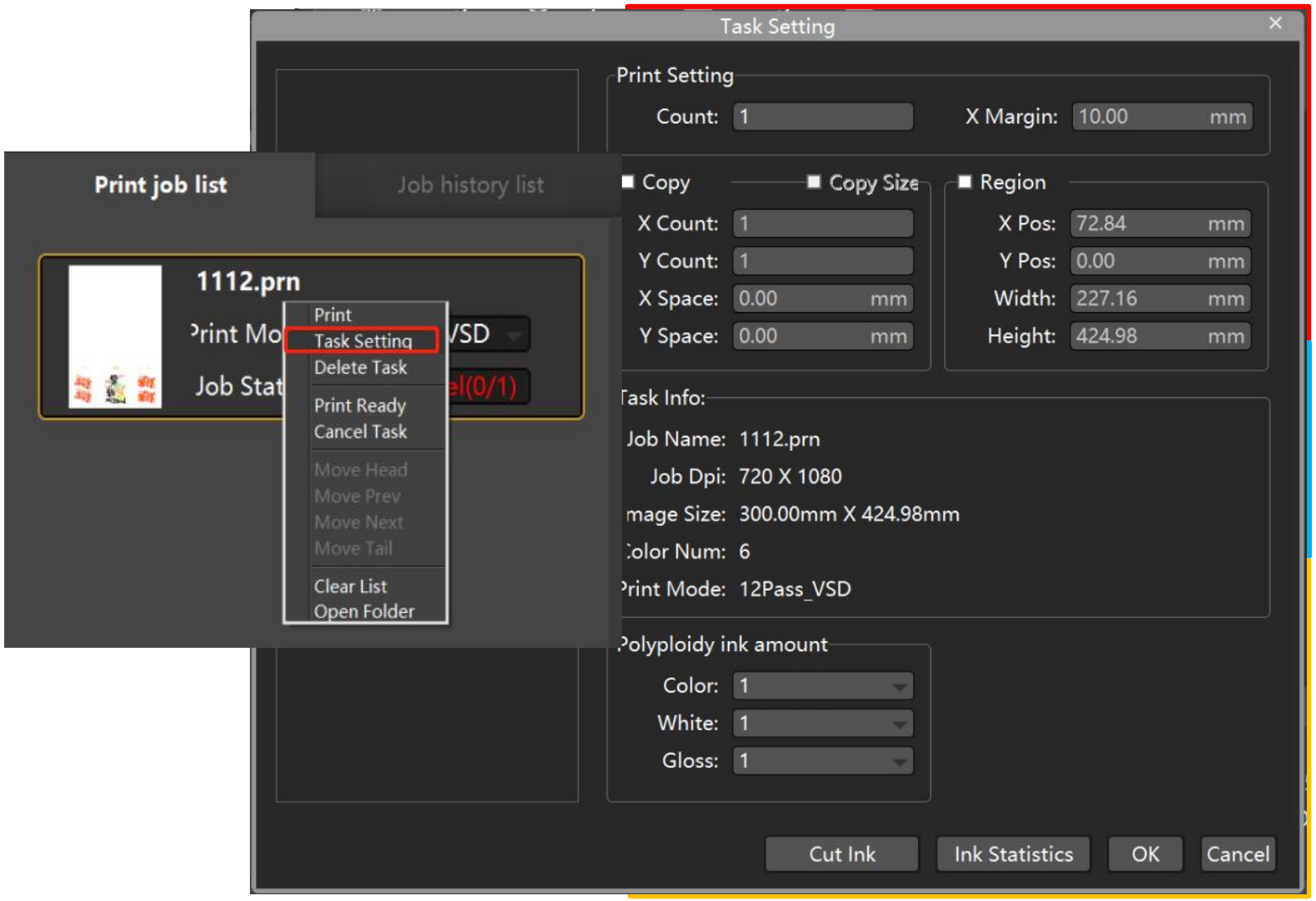
◆ 显示打印机和电脑连接状态、喷头温度、错误代码提示处

Software Use



- Print task list: print task list, you can observe the printing mode and printing status of the current task
- Historical task list: After the print task is printed normally, it will be stored in the historical task list. Double-click the task to return the task to the print task list.
- Task information: the currently selected print task preview and its information

Software Use

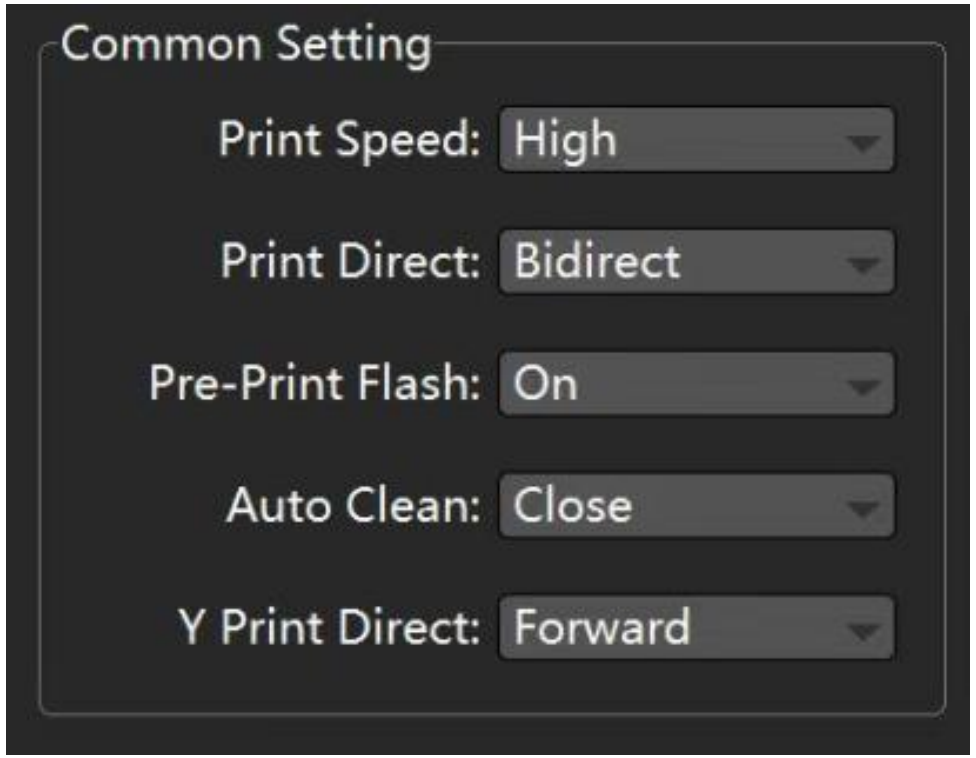


- Print Settings: Control the number of copies of a print job
- Step-by-step printing: After checking, you can adjust the number of vertical or horizontal prints for a single task
- Area printing: After checking, you can adjust the area to be printed

- Print information: display the basic information of the current task

- Multiple ink volume: Control the corresponding ink volume to perform multiple ink output, which will greatly affect the printing speed
- Ink cut-off setting: can control the ink volume of a single color

Software Use



General Settings

Printing Speed

A total of three gears: low speed, medium speed, high speed

Printing Direction

A total of three printing directions: left, right, and bidirectional, among which left to right is unidirectional printing, and the speed is the same

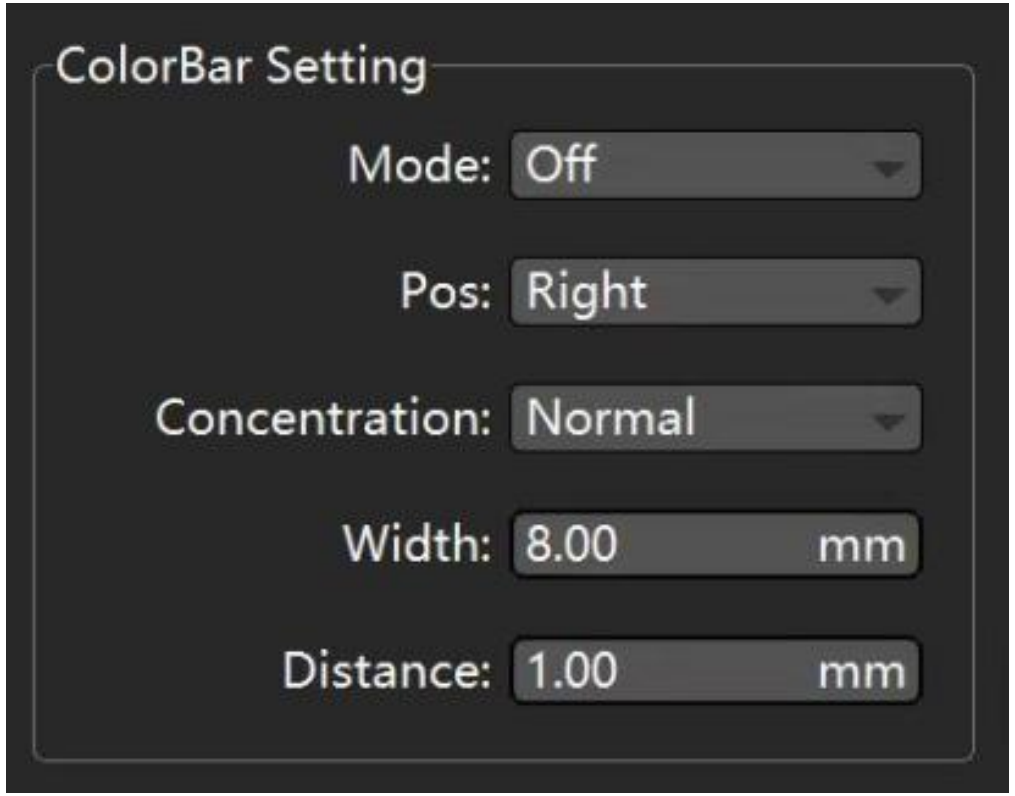
Prepress Flash

On or Off: After it is on, the print head will perform a flash printing before the printing task

Other Settings

The default is enough, some models do not contain other setting functions

Software Use



Color Bar Settings

color bar position

There are four options in total: Off, Left, Right, Both

color bar mode

There are three modes in total: the default one is fine

Color Bar Density

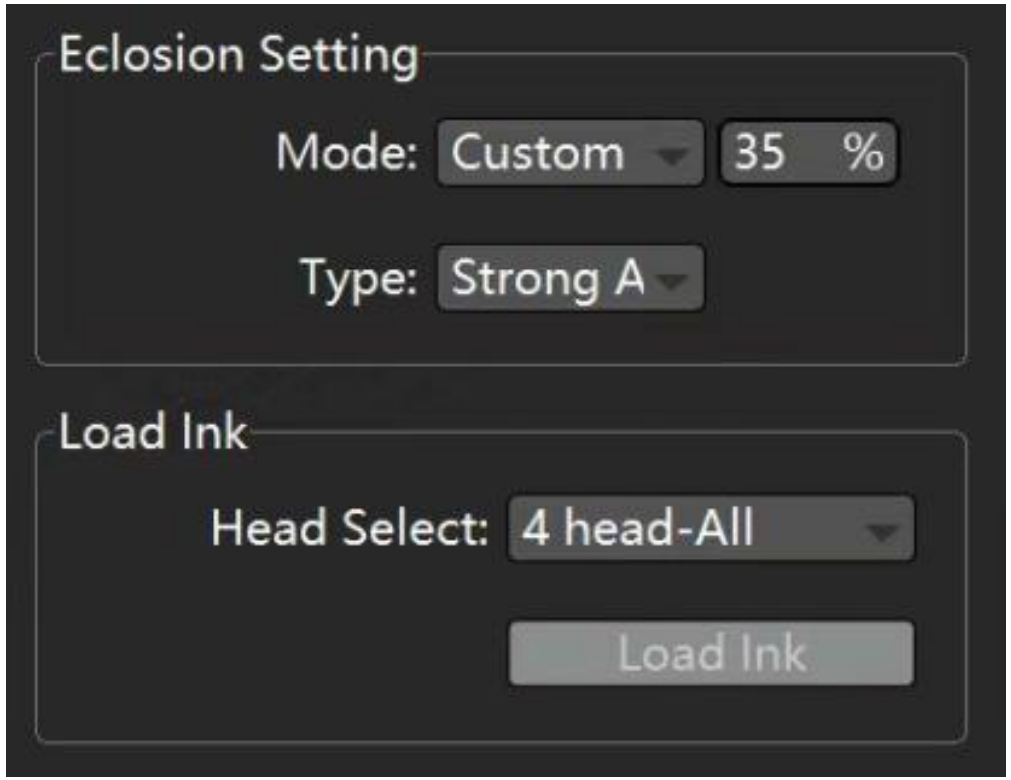
There are a total of three gears: weak, medium and strong, just select the weak concentration

Color bar width and distance

The width of the color bar and the distance from the printed picture can be adjusted

*The function of the color bar is to keep the color of each channel of the nozzle in working condition, so as to keep the channel unobstructed. It is recommended to turn on the color bar

Software Use



Eclosion Setting & Load Ink

Mode

Generally set normal feathering or custom more than 70%

Type

Adjust according to the state of the nozzle, generally use mist spray, and use mist spray to strengthen A when the state is poor

Load Ink

You can choose a specific nozzle or all the nozzles for ink loading, and generally the ink loading time does not exceed 10 seconds

Software Use

White Edge Setting

X

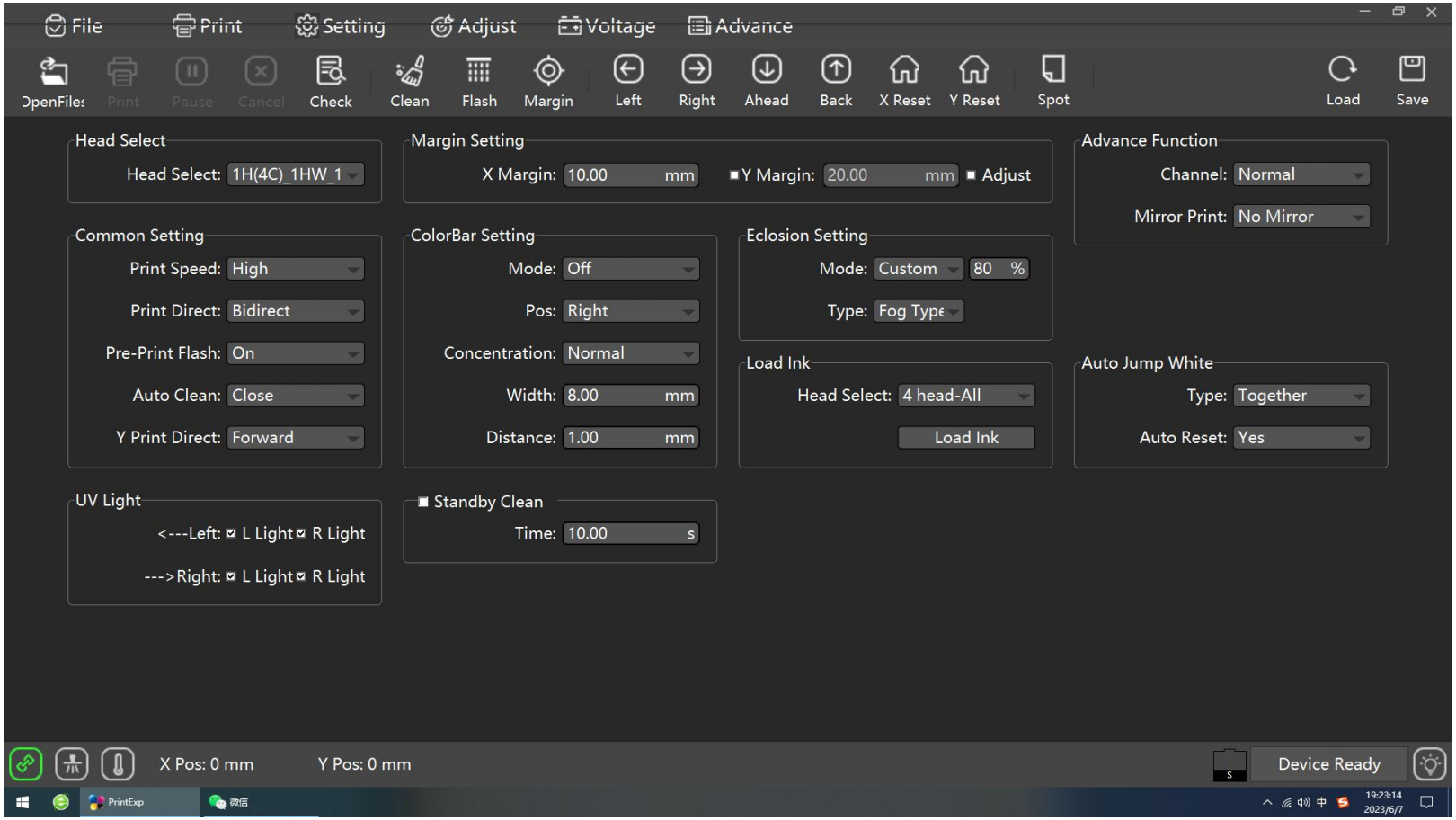
Adjust the initial position of X when printing tasks

Y

Adjust the initial position of Y when printing tasks, some models do not have this function

Software Use

PrintExp Setting



* After modifying any settings, you need to click the save parameter in the upper right corner to take effect

Software Use

Photoshop
Make Spot Colors

Photoprint、RIPrint、Maintop

◆ * With video operation

PART 03

Print-head Installation

THREE

Print-head Installation

Add The Corresponding Ink To The Ink Cartridge

W=white ink V=Varnish

1. Just fill it up to half the cartridge
2. Shake the white ink before pouring it into the ink cartridge

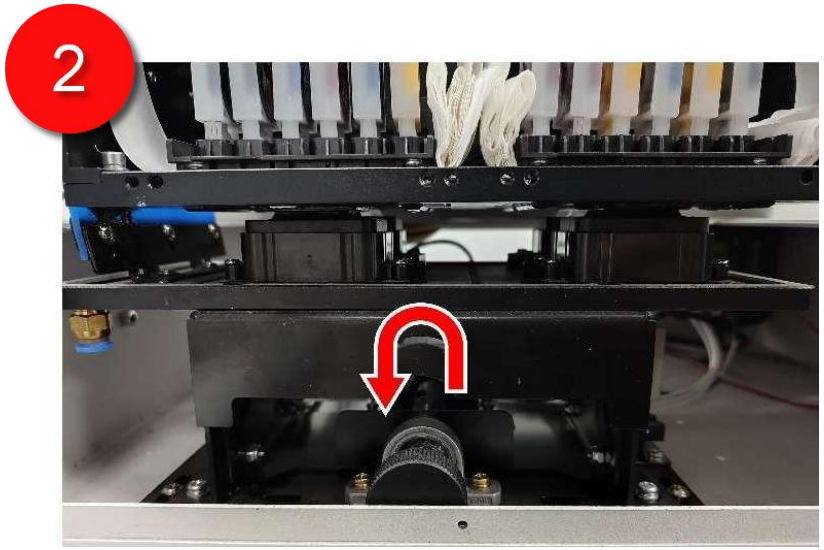
* With video operation

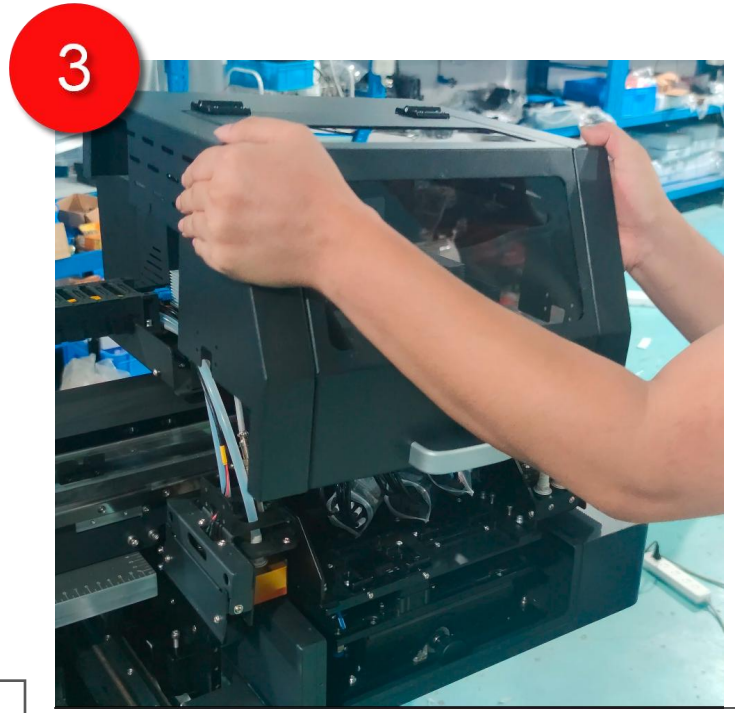
Print-head Installation

Preparations Before Installation

1. turn off the printer
2. Manually lower the ink stack
3. Remove the carriage cover

* With video operation





Print-head Installation

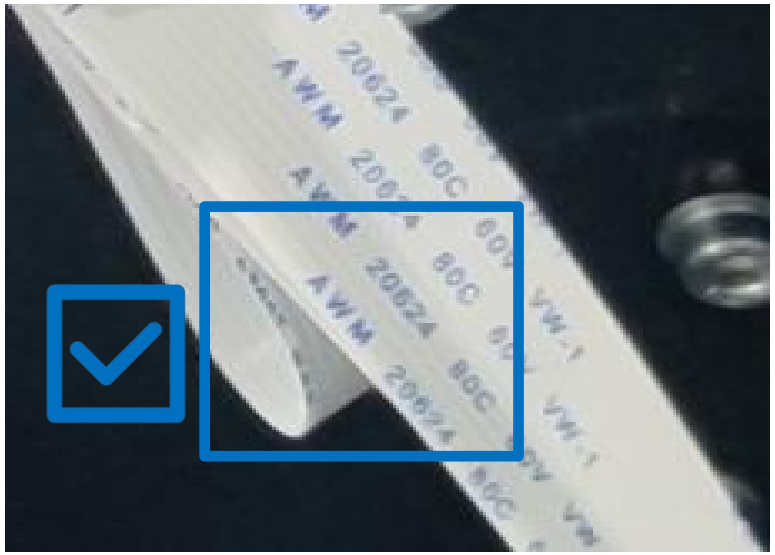
Cable Precautions

Install cable

You need to be careful when installing the printhead cable. Improper installation methods may cause the power supply of the printhead to be overlapped together, causing the main board or the printhead to burn out.

Folding cable

Folding the cable does not affect the normal use of the cable. If the cable is not smooth, you can fold it properly



Print-head Installation

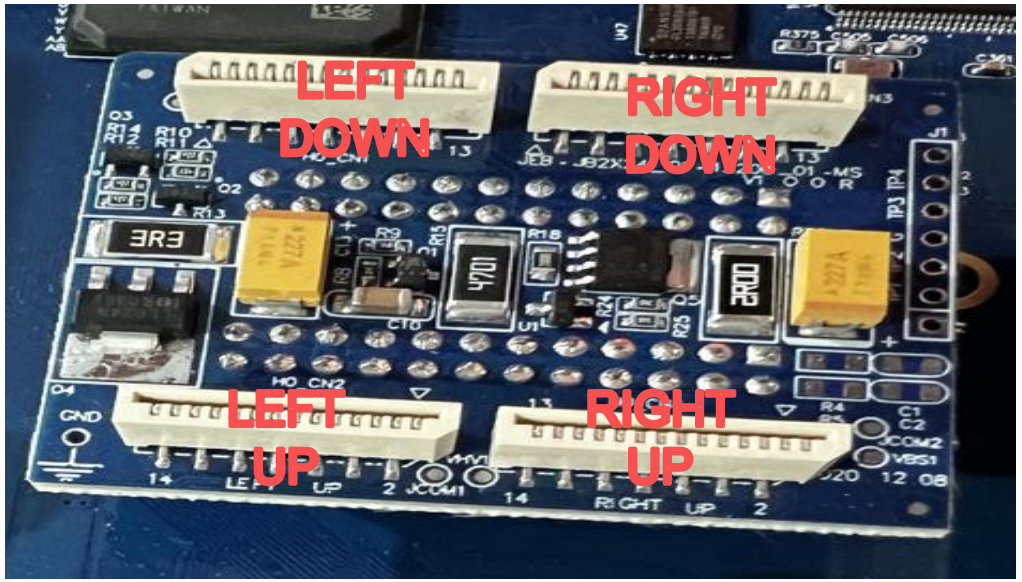
Interface Considerations

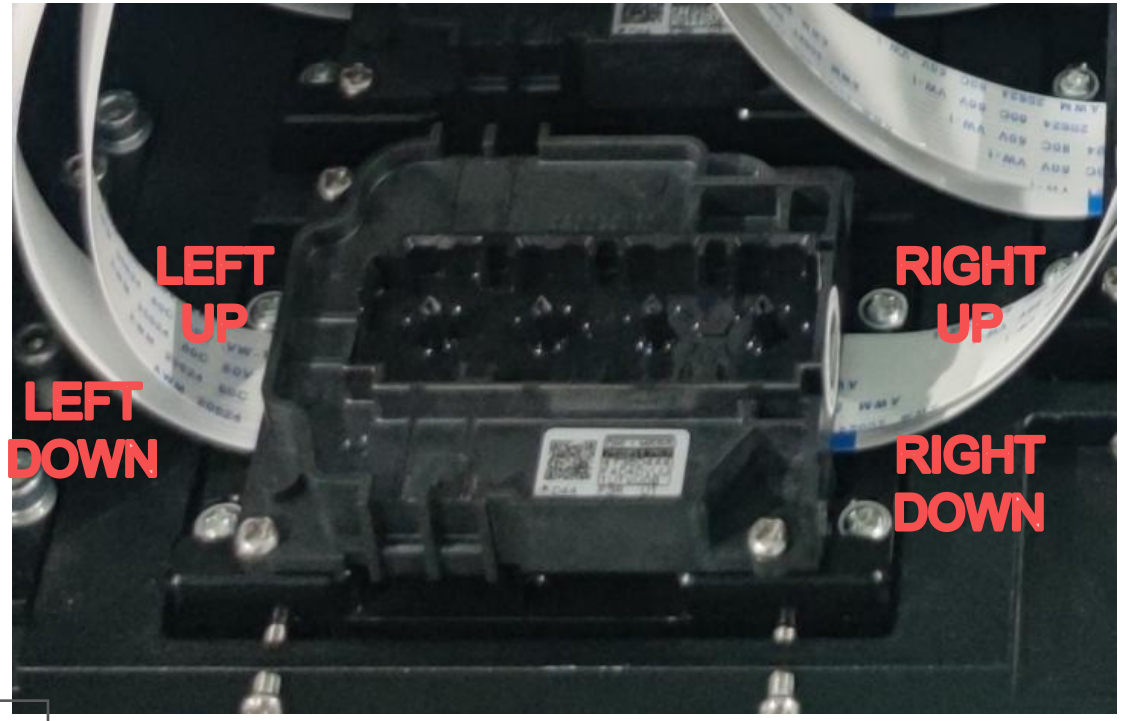
board interface

The board interface is divided into up, down, left, and right directions, and there are left upper/lower interfaces or right upper/lower interfaces indicating the connection of the nozzle

print head interface

Face up to the print head (as shown on the right), the left side is the LEFT UP/DOWN position corresponding to the connection board, and the right side is the RIGHT UP/DOWN position corresponding to the connection board.





Print-head Installation

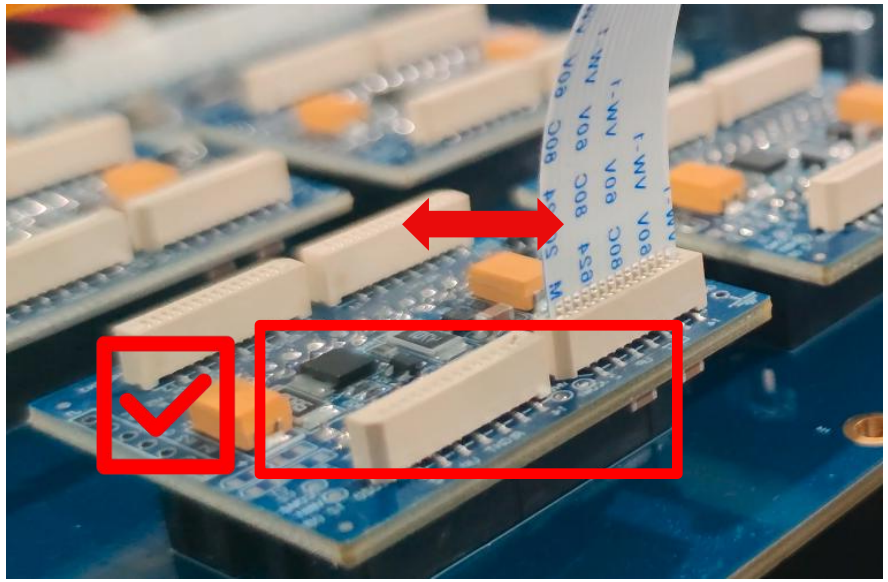
Cable Precautions

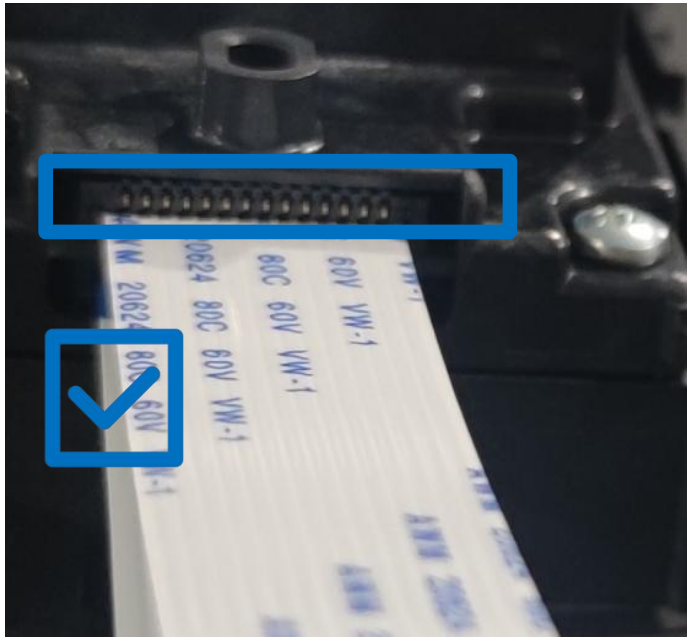
Cable Precautions

Grasp the cable port with both hands, and press down on both sides of the board interface at the same time. After installation, check whether the exposed pin length of the cable is consistent.

Print head cable

Pinch the port and push it against the nozzle interface. After installation, check whether the exposed pin length of the cable is consistent.





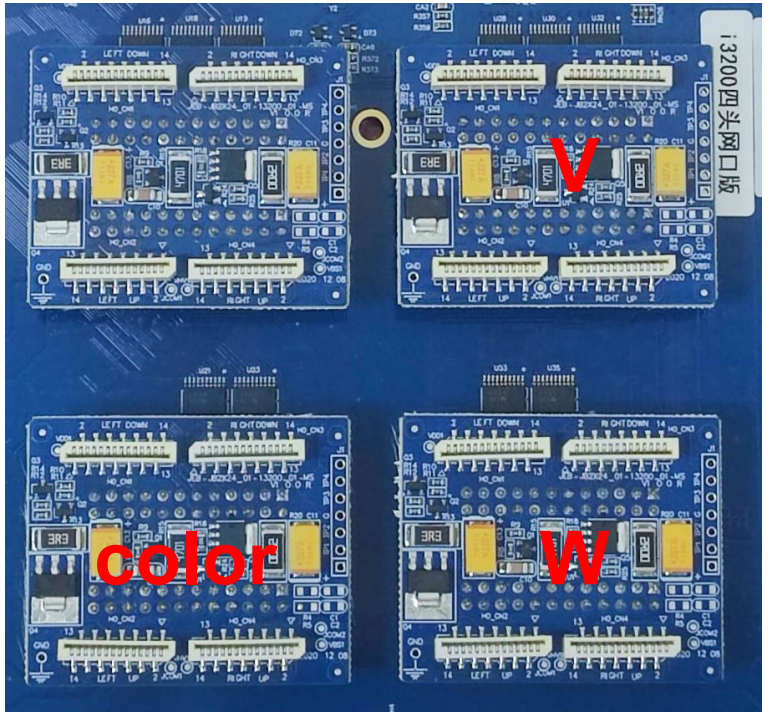
Print-head Installation

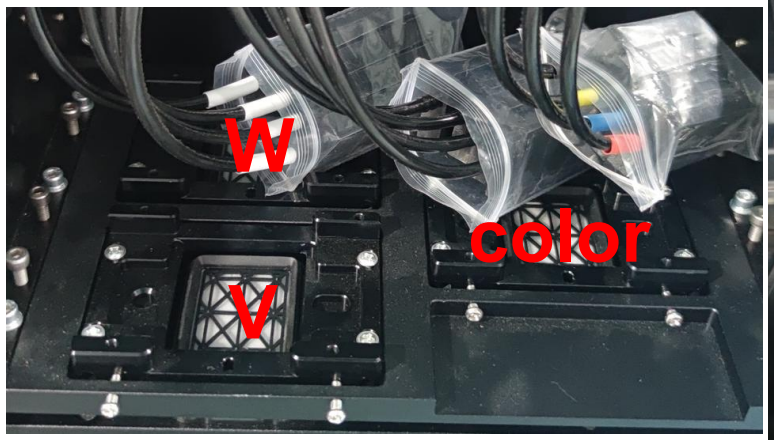
6090 3-heads Connection

1. W+CMYK+V solution for 3-heads i3200

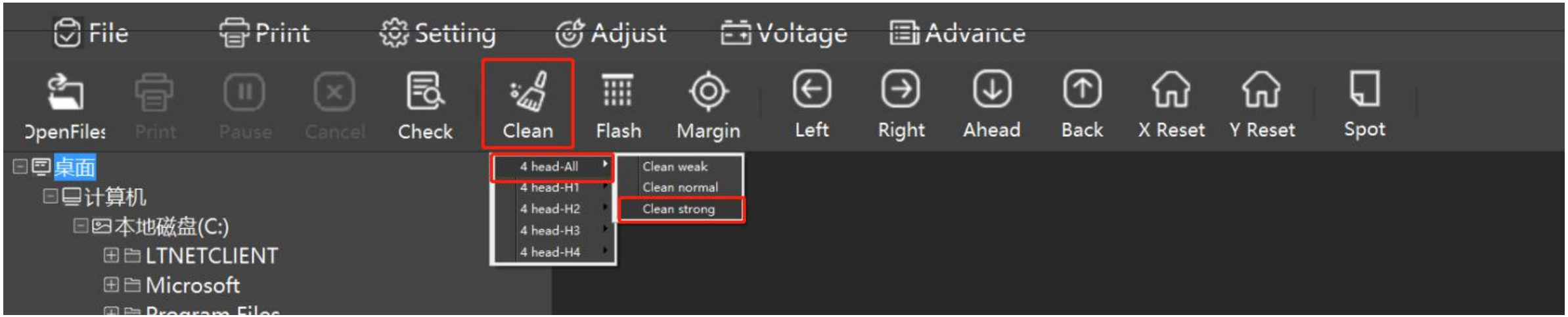
1. Pay attention to the installation location and installation method

*Make sure the printer is powered off before installing the print head cable





Print-head Installation



Due to the characteristics of white ink, if the printer does not print for a long time, the print head will be easily blocked. Even if there is no printing task on the day, the print head should be cleaned 1-2 times to ensure that the print head will not be blocked. The longest time should not exceed 3 days

PART 04

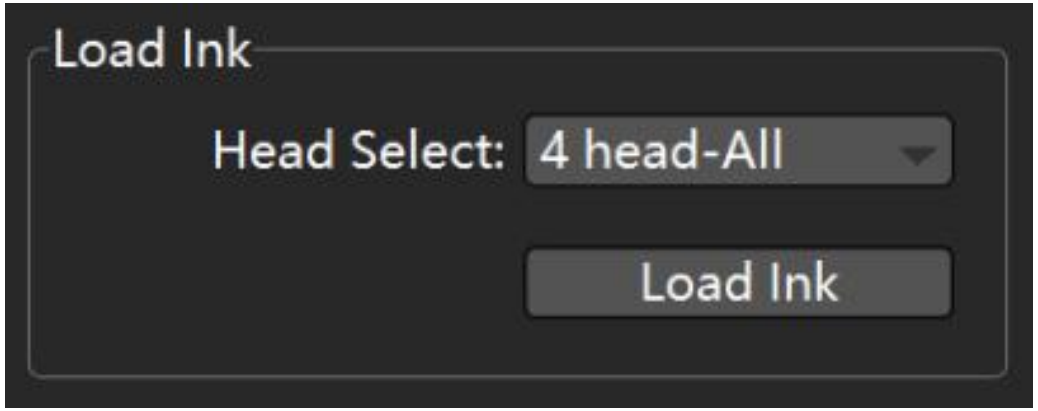
Machine Calibration

FOUR

Machine Calibration

Machine calibration

Load Ink



1. After the power-on self-test is completed, connect the ink outlet tube of the ink pump to the waste ink bottle.

2. Then click "Settings" in the software - click to select "All" (representing all nozzles) - "Ink Filling" - wait for waste ink to flow out of the waste ink tank and click "Stop".

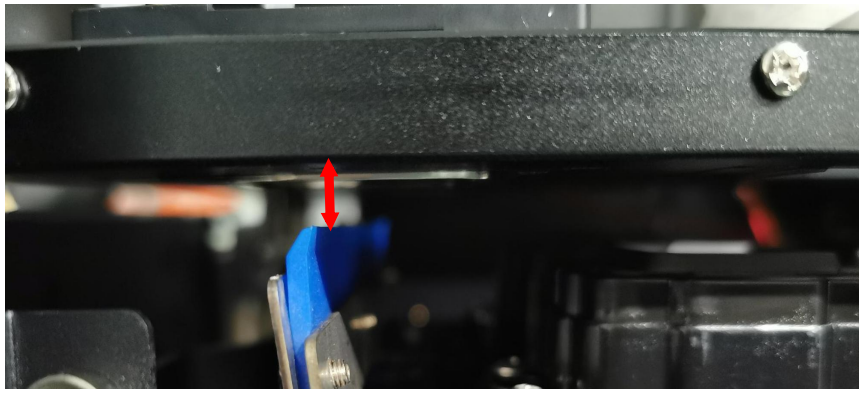
Machine Calibration

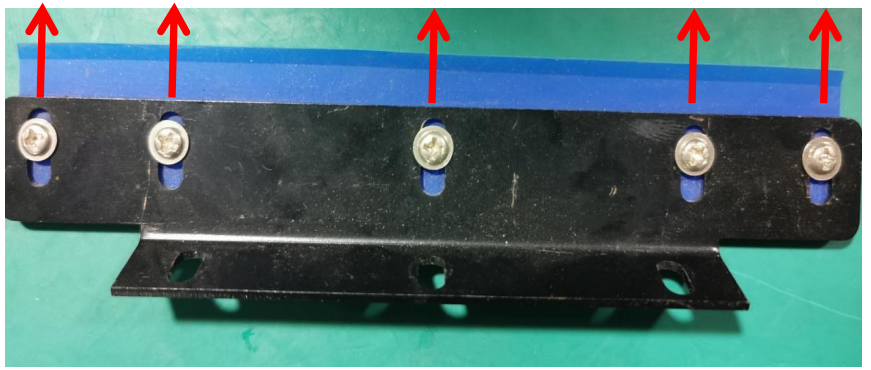
Machine calibration

Software Cleaning and Test Strip Procedure

Clean

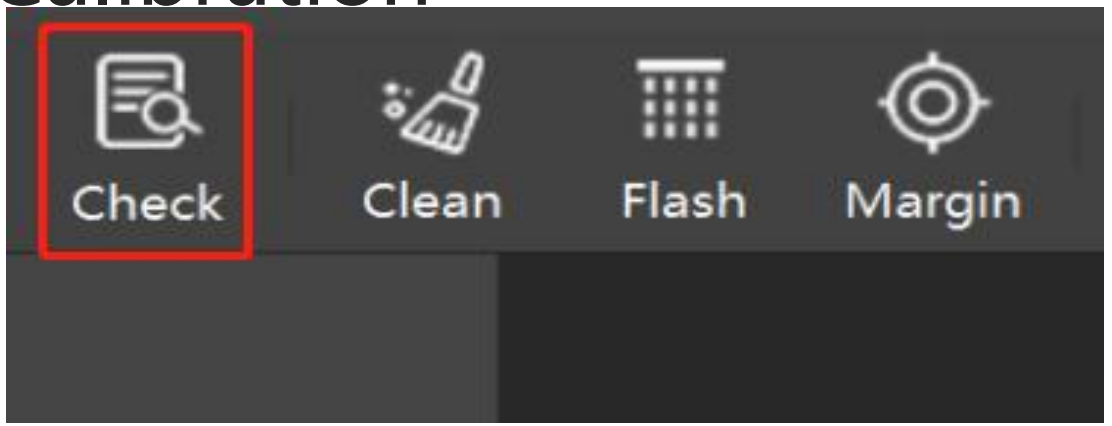
1. After the ink loading is complete, click the button "cleaning" - all cleaning_weak
2. During the period, it is necessary to check whether the scraper wipes off the ink on the nozzle. If the following situations occur, the nozzle and the scraper are not in contact during cleaning, and the height of the scraper needs to be adjusted.





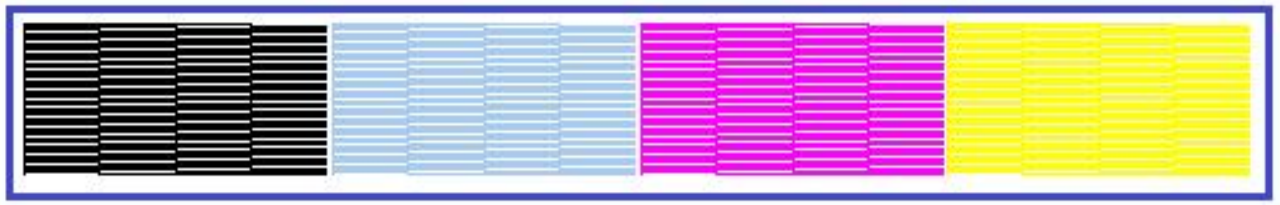
Machine Calibration

Machine calibration



Test Strip

1. After the cleaning is complete, click "Detect"
2. A test pattern will appear on the consumable, check the test pattern

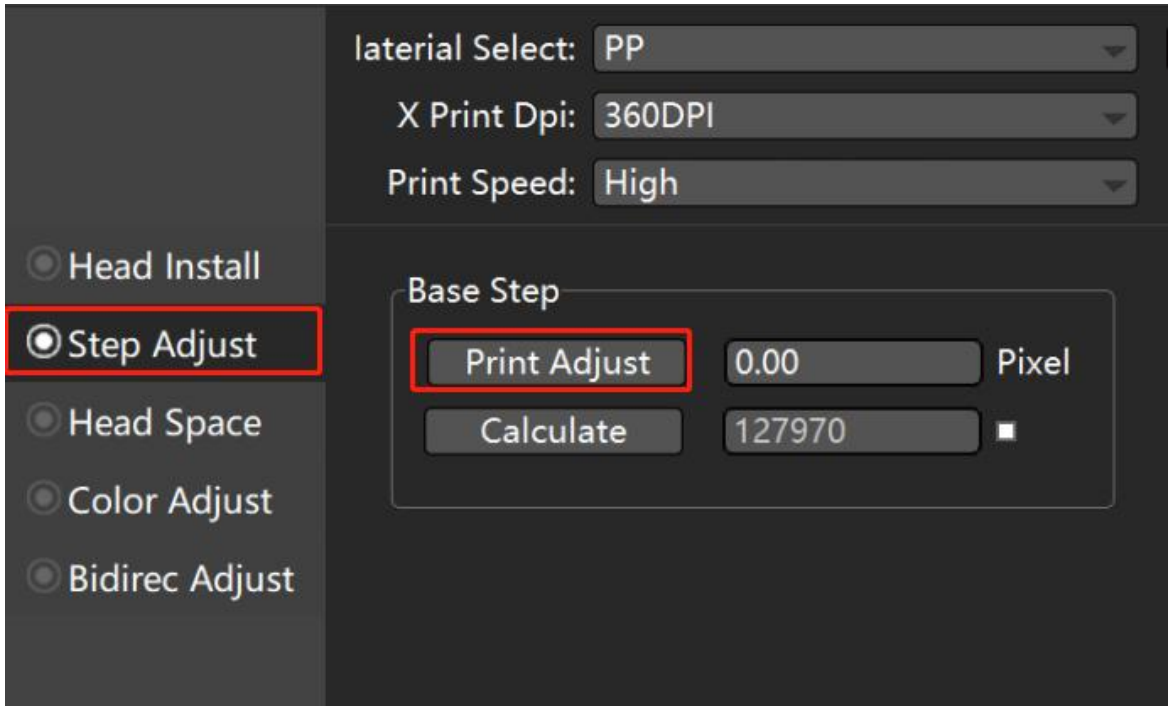


3. The picture above is the perfect state of the print head. If there is a broken needle, the print head needs to be cleaned to ensure that the print head is in good condition.

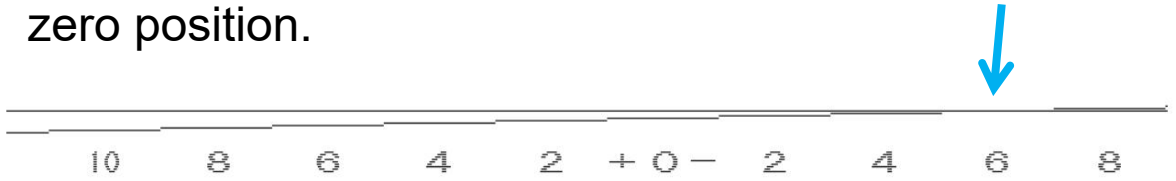
Machine Calibration

Machine calibration

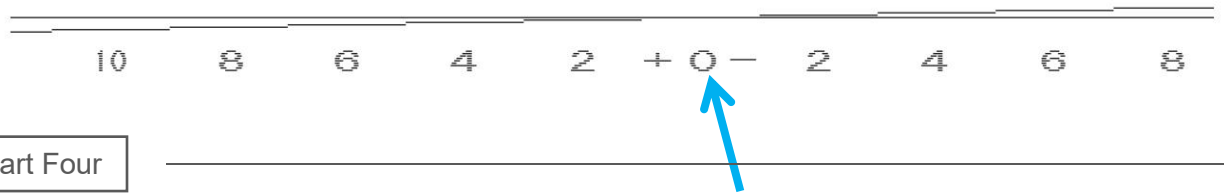
Step Adjust



1. Click "Step Calibration" - Click "Print"
2. As shown in the figure below, the step is offset by "-6", you need to fill in "-6" in the edit box, then click Calculate, then click the "Parameter Save" button to save, and then print a reference step calibration diagram to confirm Whether the step is already at the zero position.

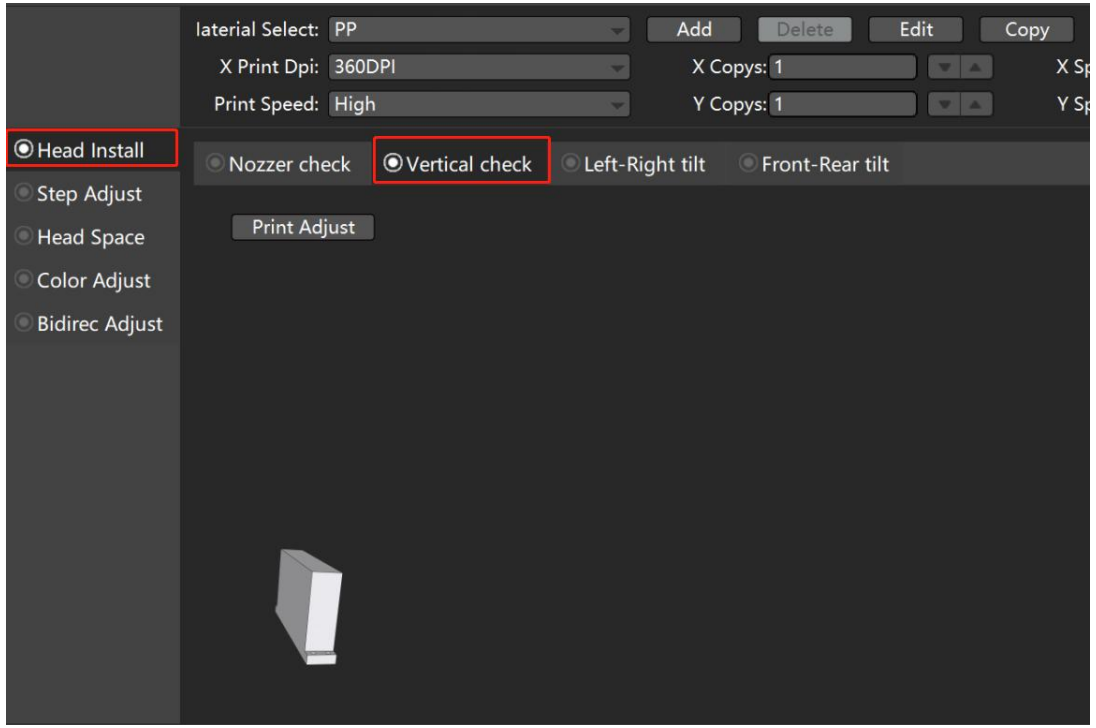


3. If it is not at the "0" point, add or subtract according to the printed calibration chart until the calibration reaches the "0" point



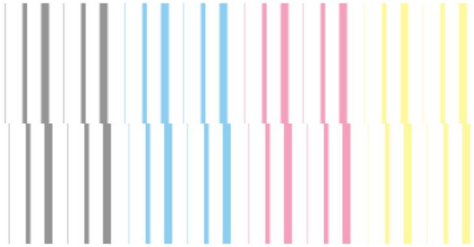
Machine Calibration

Machine calibration



Vertical Check

1. Click "Nozzle Check" - click "Vertical Check"
2. As shown in the figure below, the vertical calibration diagram shows that the print head has been tilted. It is necessary to adjust the base of the print head. First, loosen the three screws, and then adjust the long screw in the lower left corner. Pine is to "push up to the right"



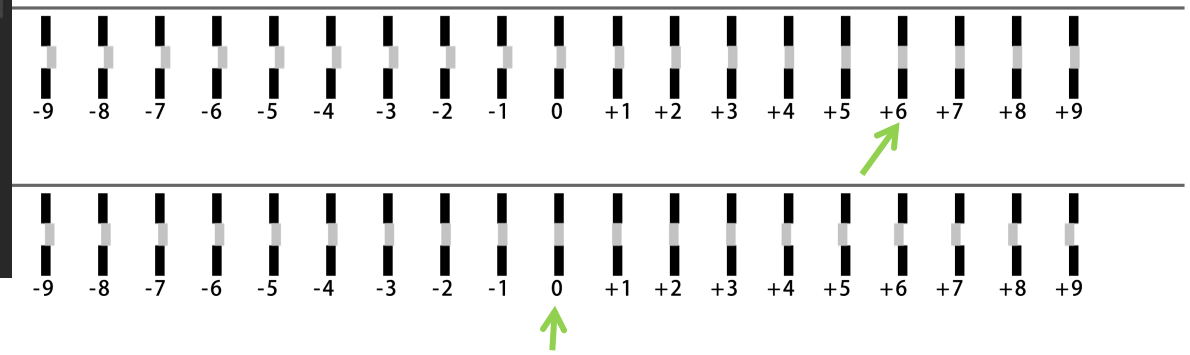
3. Until the print head prints the image below vertically, this state means that the print head is vertical

Machine Calibration

Machine calibration

Left/right Calibration

1. Click "Head Spacing" - click "Left/Right Calibration"
2. As shown in the figure below, the upper and lower 0 points have been aligned, so no adjustment is required. If it is not at the "0" point, then add and subtract in the corresponding color box according to the printed calibration chart until the calibration reaches the "0" point both up and down

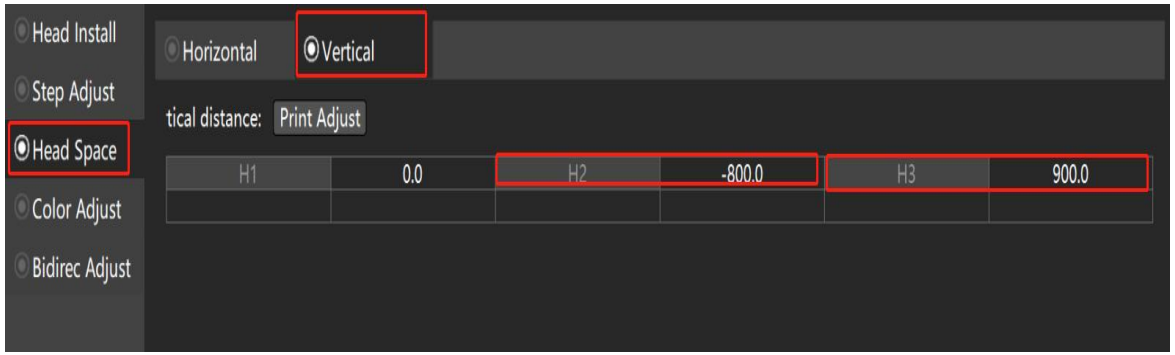


3. When modifying the horizontal calibration, the No. 1 Head is used as the benchmark, and the data of No. 2/No. 3 Head are modified sequentially without modifying the data of No. 1 Head

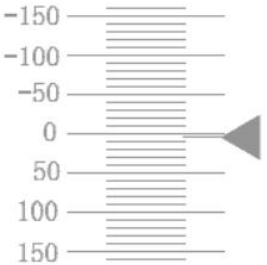
Machine Calibration

Machine calibration

Vertical Check



1. Click on "Head Spacing" - Click on "Print"
2. As shown in the figure below, the longitudinal offset is about "+2", you need to fill in the "original value + 2" in the vertical calibration "H2" edit box, and then click the "Apply" button to save, and then click "Vertical Calibration", and then Print a vertical calibration chart to confirm whether the step is at the zero position.

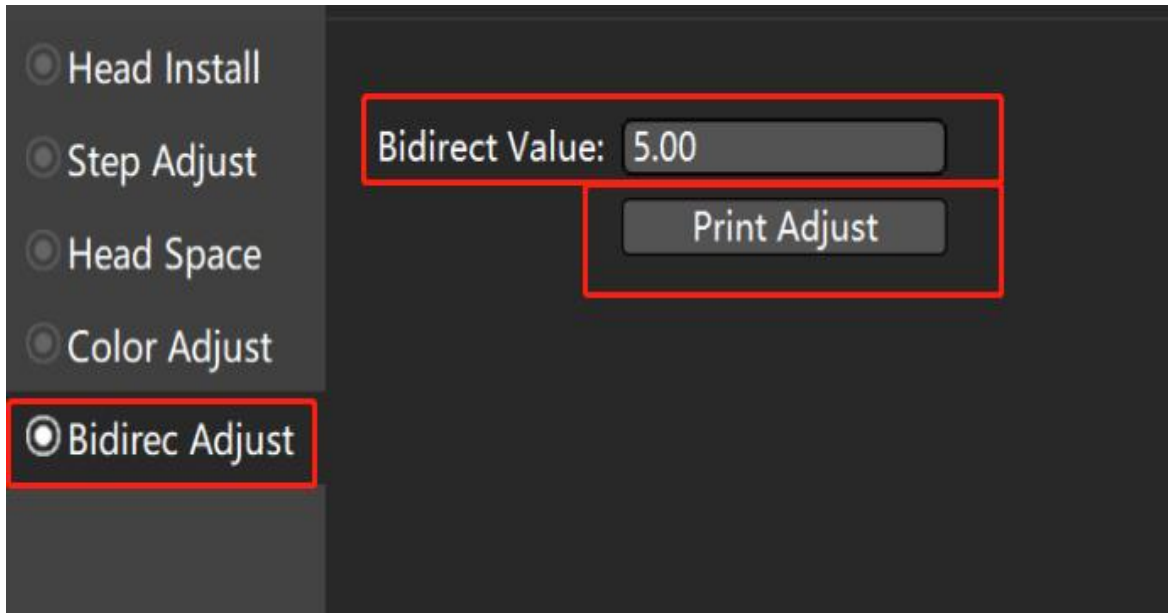


3. If it is not at the "0" point, add or subtract according to the printed calibration chart until the calibration reaches the "0" point
4. When modifying the longitudinal calibration, the No. 1 head is used as the benchmark, and the data of the No. 2 head is modified sequentially without modifying the data of the No. 1 head

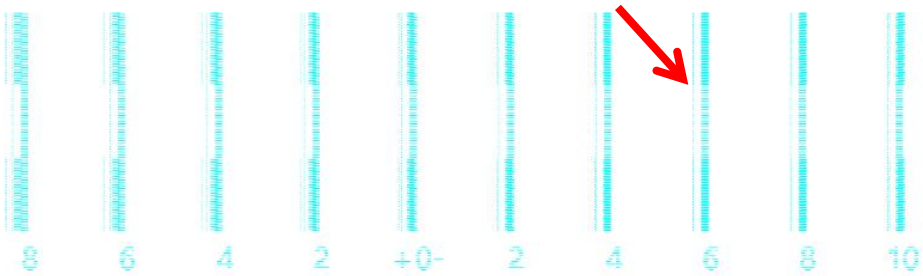
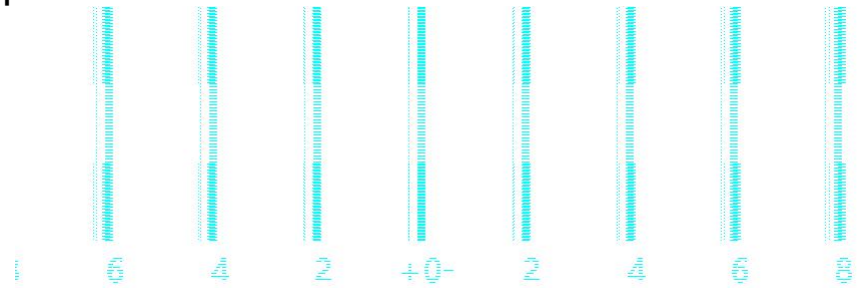
Machine Calibration

Machine calibration

Bidirec Adjust



1. Click "Bidirec Adjust" - Click "Print"
2. As shown in the figure below, if the two-way offset is "-6", you need to fill in "5" in the edit box, then click "Save Parameters", and then print a two-way calibration diagram to confirm whether the step is at the zero position.



3. If it is not at the "0" point, add or subtract according to the printed calibration chart until the calibration reaches the "0" point