MIDI DTF

Product Installation and User Guide

More

Contents

Base Installation

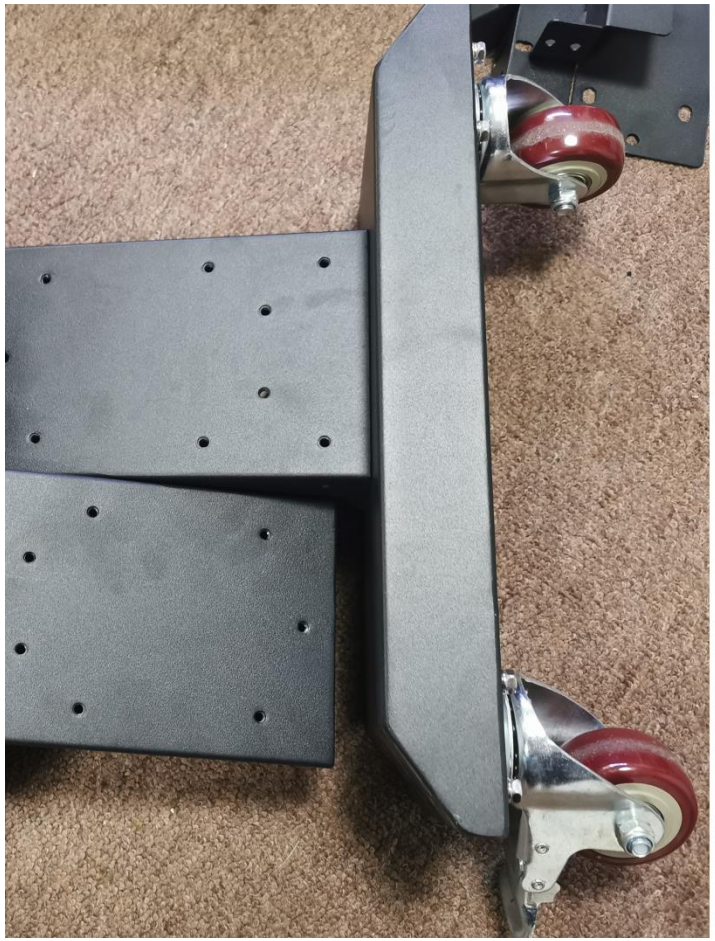
ONE

Tripod Installation

Count the quantities of iron parts

and the classification of screws

Tripod Installation



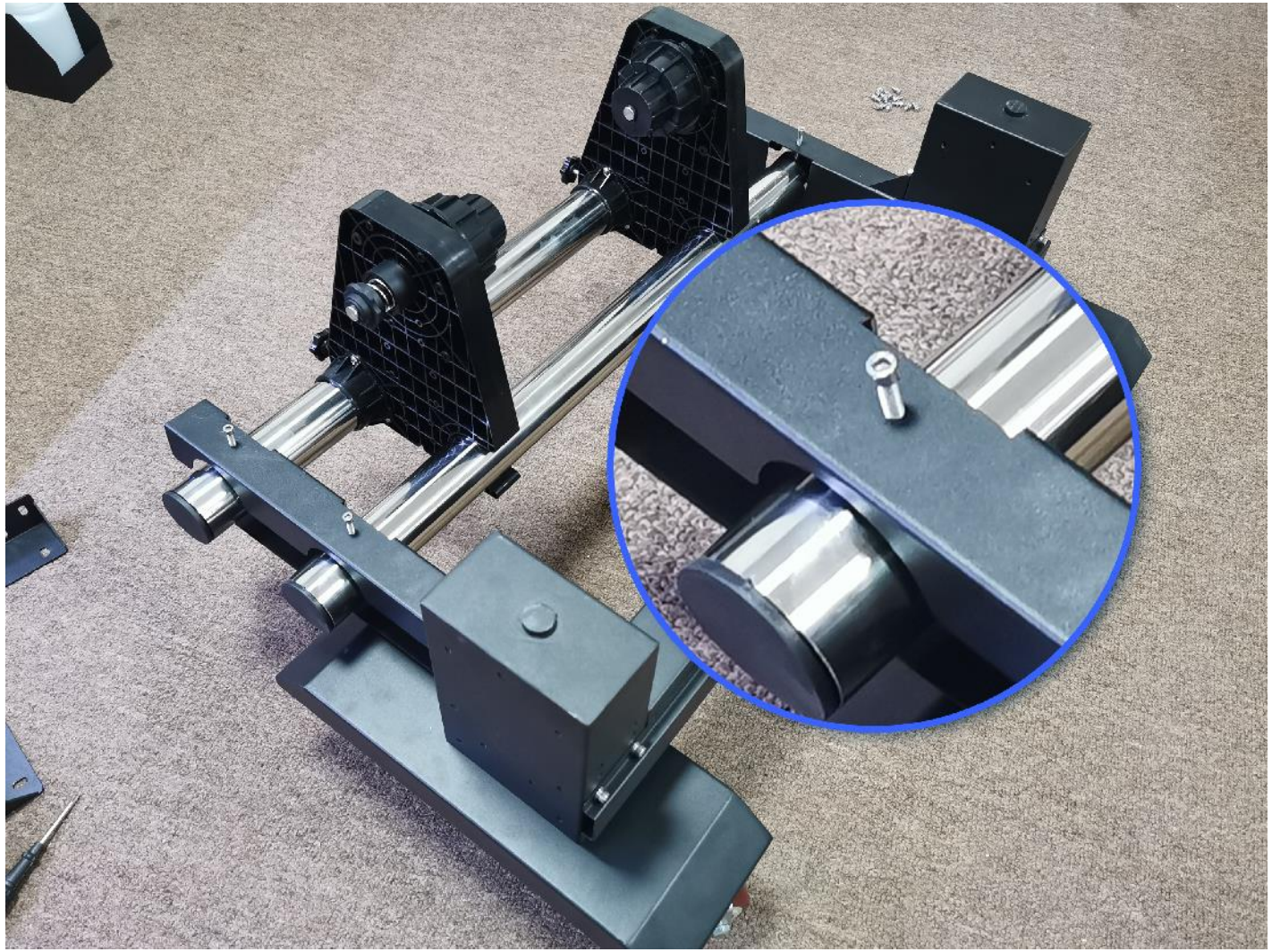
1. Fasten with No. 1 screw

Tripod Installation

1. Fasten with No. 1 screw

2. Note that the brake wheels on both sides are installed in the same direction

Tripod Installation

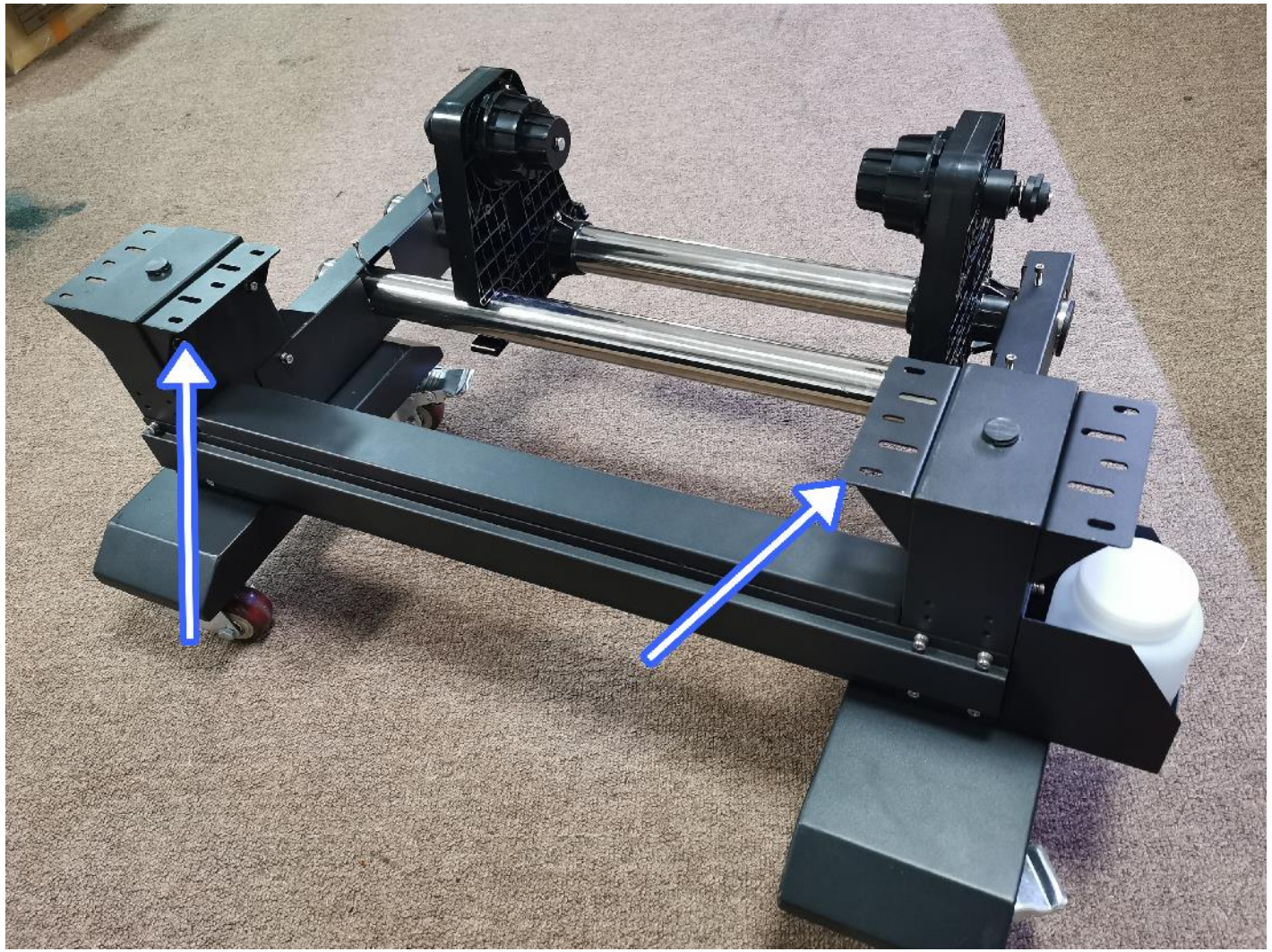


1. Fasten with No. 2 screws
2. Pay attention to the direction in which the roll feeder is installed

Tripod Installation

1. Fasten with No. 3 screws
2. Note the installation on the right side of the front of the machine

Tripod Installation



1. Fasten with No. 3 screws

2. Fasten the screws after lifting the printer on the shelf

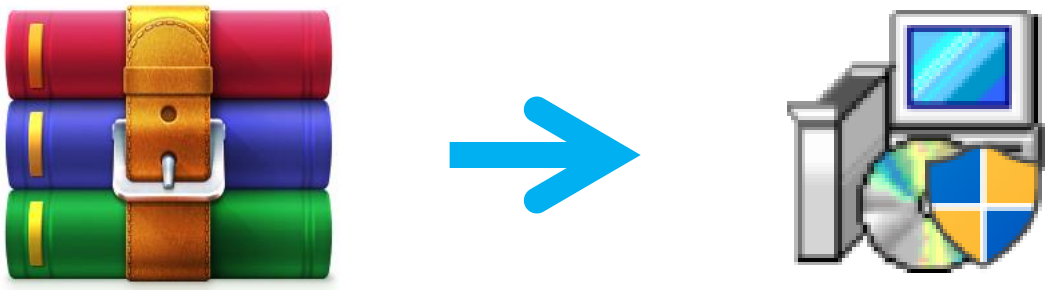
PART 02

Software Installation & Use

TWO

Software Installation & Use

PrintEngine



- Software installation: unzip the "installed file" from the "decompression package", open the "installed file" and install it
- Computer operating system supported by the software: Windows 7, Windows 10
- Operating system bit recommended: 64bit
- Recommendation: CPU Intel Core i5 or higher
  RAM 8G and above
  With USB3.0 interface

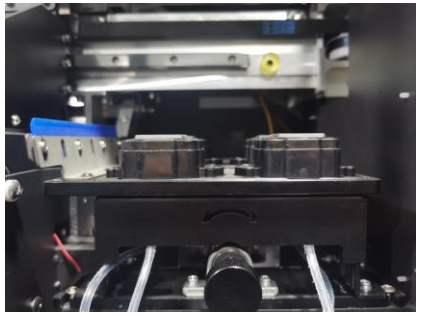
Note: The lower computer configuration will affect the printing transmission speed, resulting in slower printing speed

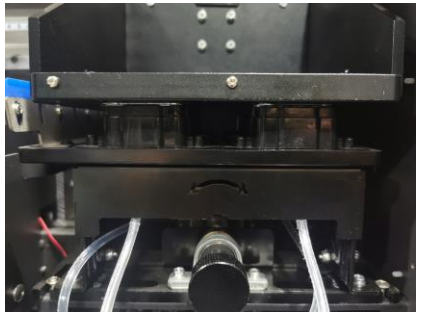
Software Usage

Windows (C:)

Please do not install the software in the Local Disk C

PrintExp

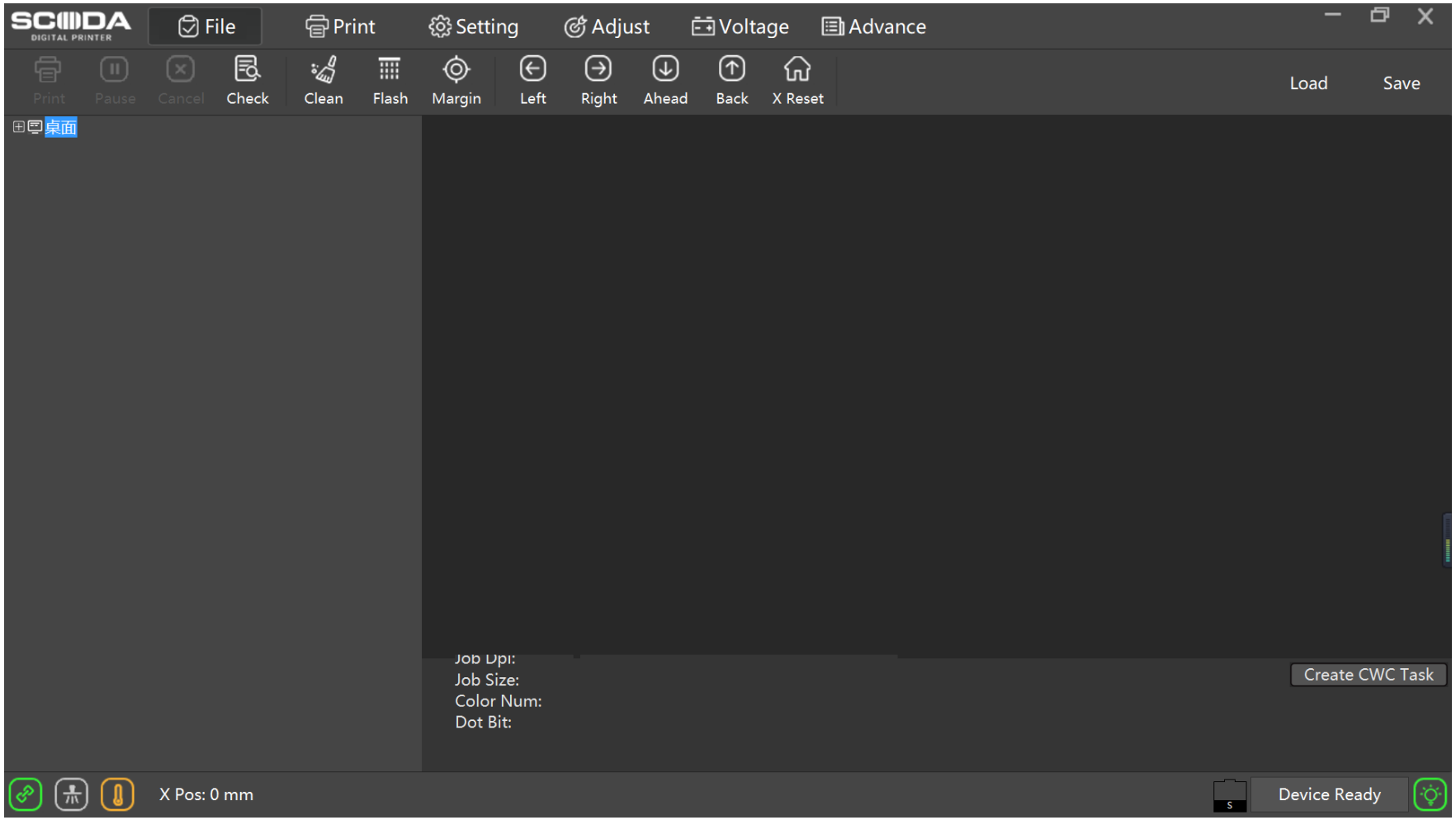




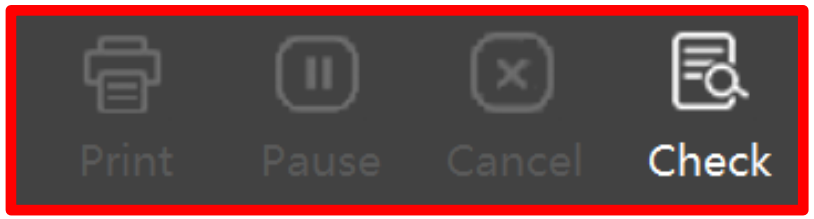
Normal Shutdown Process: Close the software —— Wait for the machine carriage reset to the homing position completely —— Turn off the printer

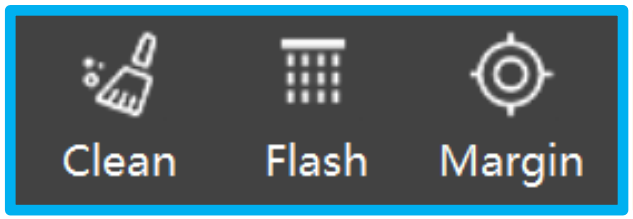
Software Usage

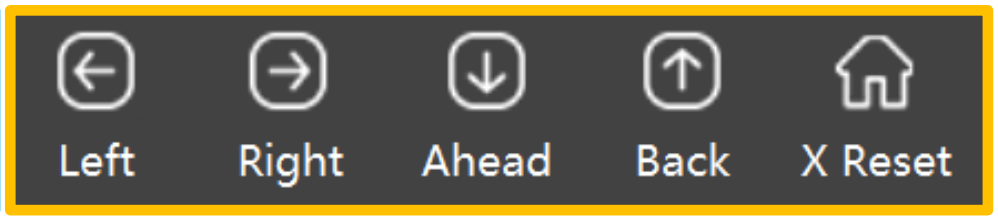
PrintExp Software Interface



Software usage

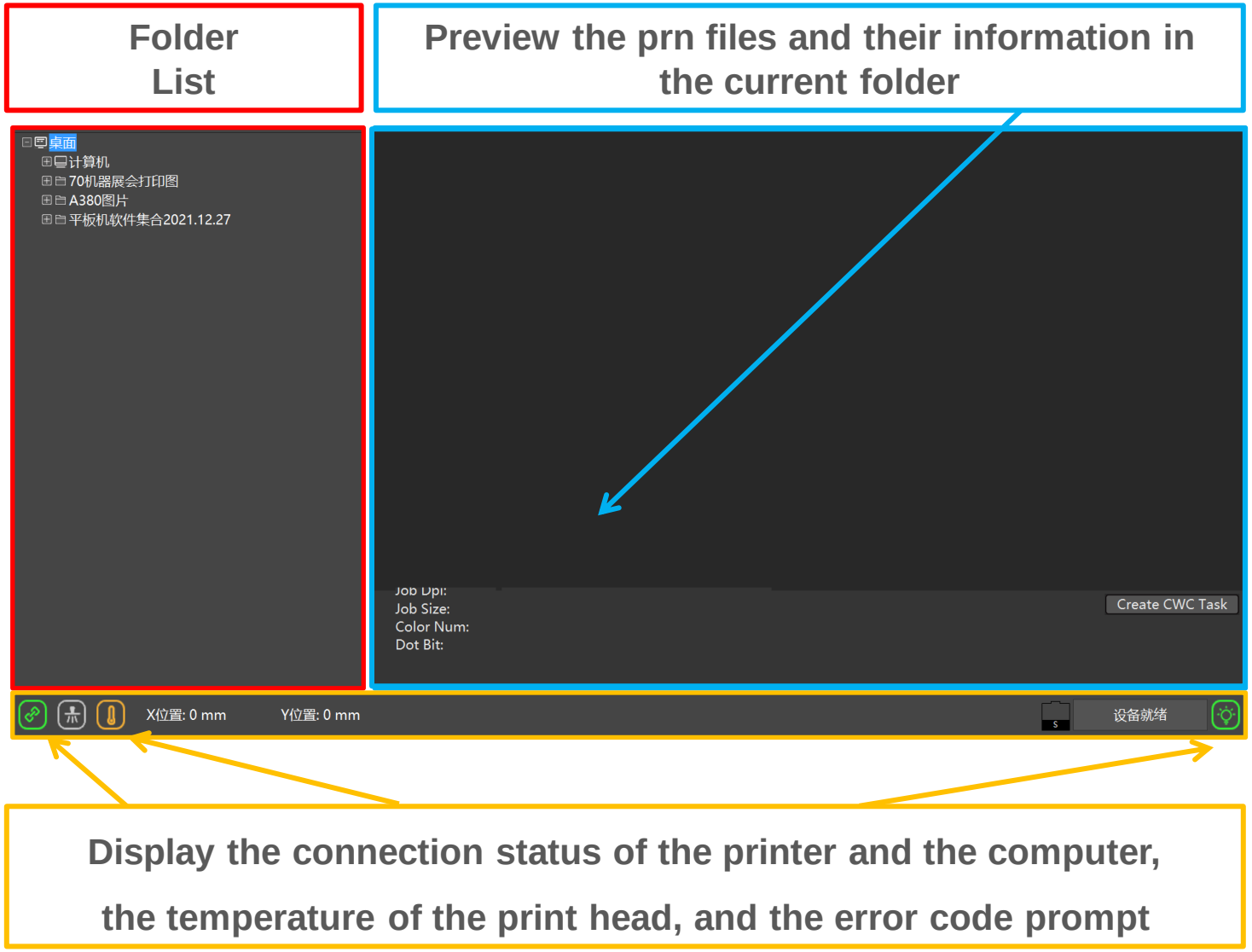




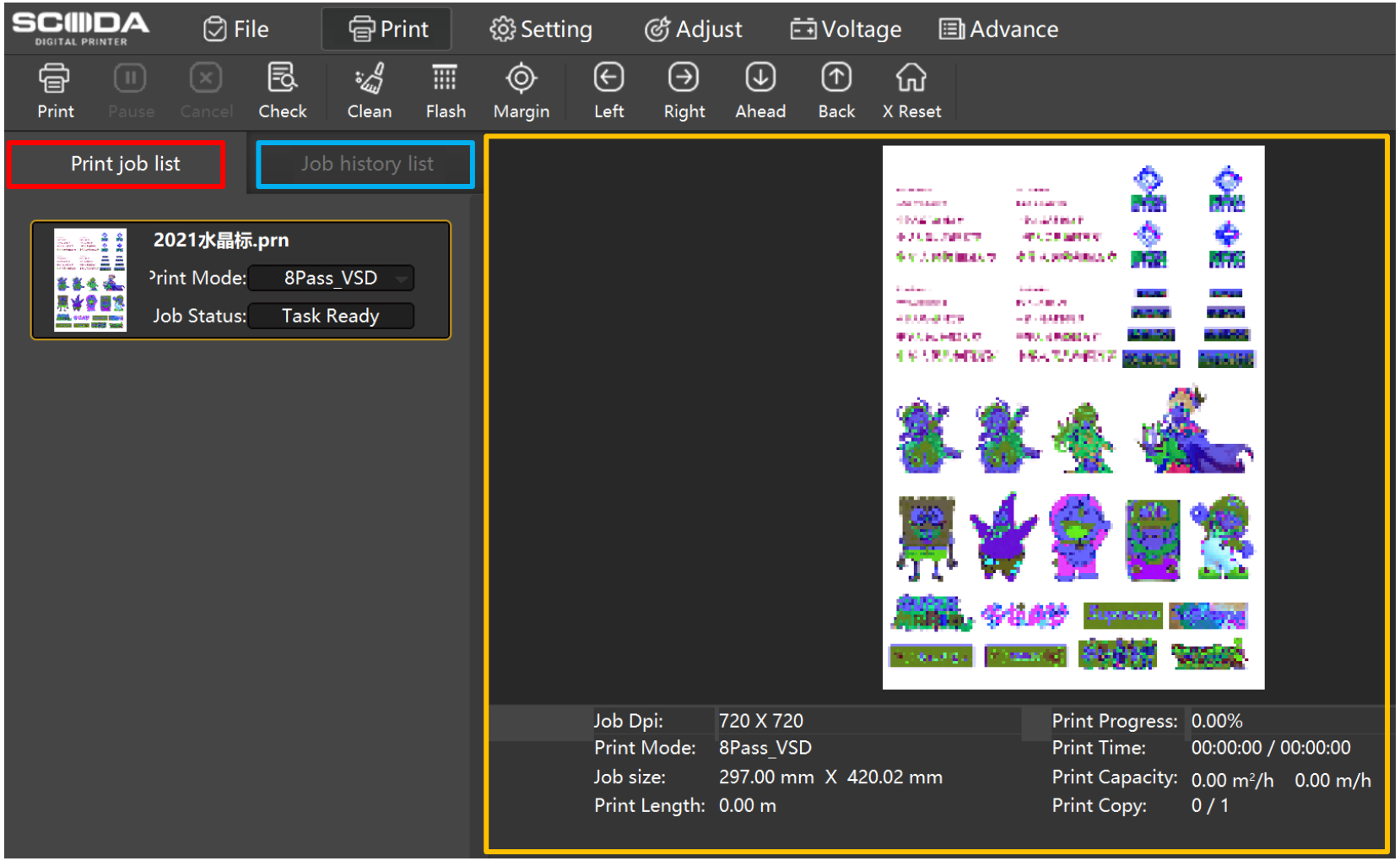


- **Print:** Print the selected task in the taskbar
- **Pause:** During printing, pause the current printing. After clicking "Pause", "Pause" becomes "Continue". Click "Continue" to continue printing unfinished tasks
- **Cancel:** During the printing process, terminate the current printing task
- **Check:** Print a test strip to check the current state of the Nozzle and the position of the initial print point
- **Clean:** According to the actual situation, single or all nozzles can be cleaned
- **Flash:** Flash jetting switch button, after clicking, the nozzle will inkjet
- **Margin:** Set the current position to X White Edge
- **Left / Right / Ahead / Back**
  Move the Nozzle trolley or consumables
- **X Reset:** After clicking, the Nozzle trolley returns to the origin place

Software Usage



Software Usage



Print Job List

You can observe the printing mode and printing status of the current task

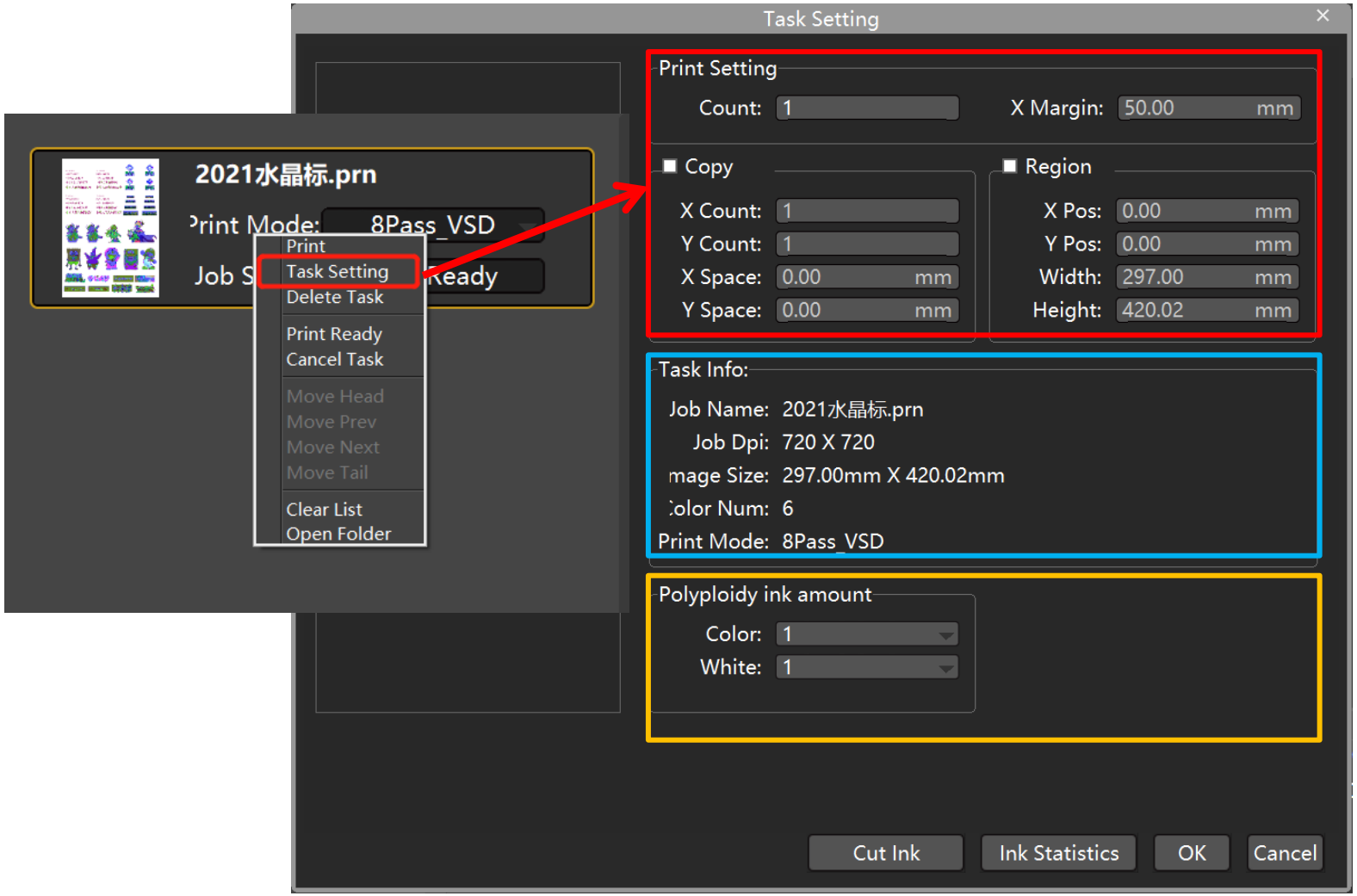
Job History List

After the print task is normally printed, it will be registered in the history task list. Double-click the task to return the task to the print task list.

Task Information

The currently selected print job preview and its information

Software Usage



- **Print Setting**

Control the number of copies of the print job

- **Copy**

After checking, you can adjust the number of vertical or horizontal prints for a single task

- **Region**

After checking, you can adjust the region to be printed

- **Task Info:**

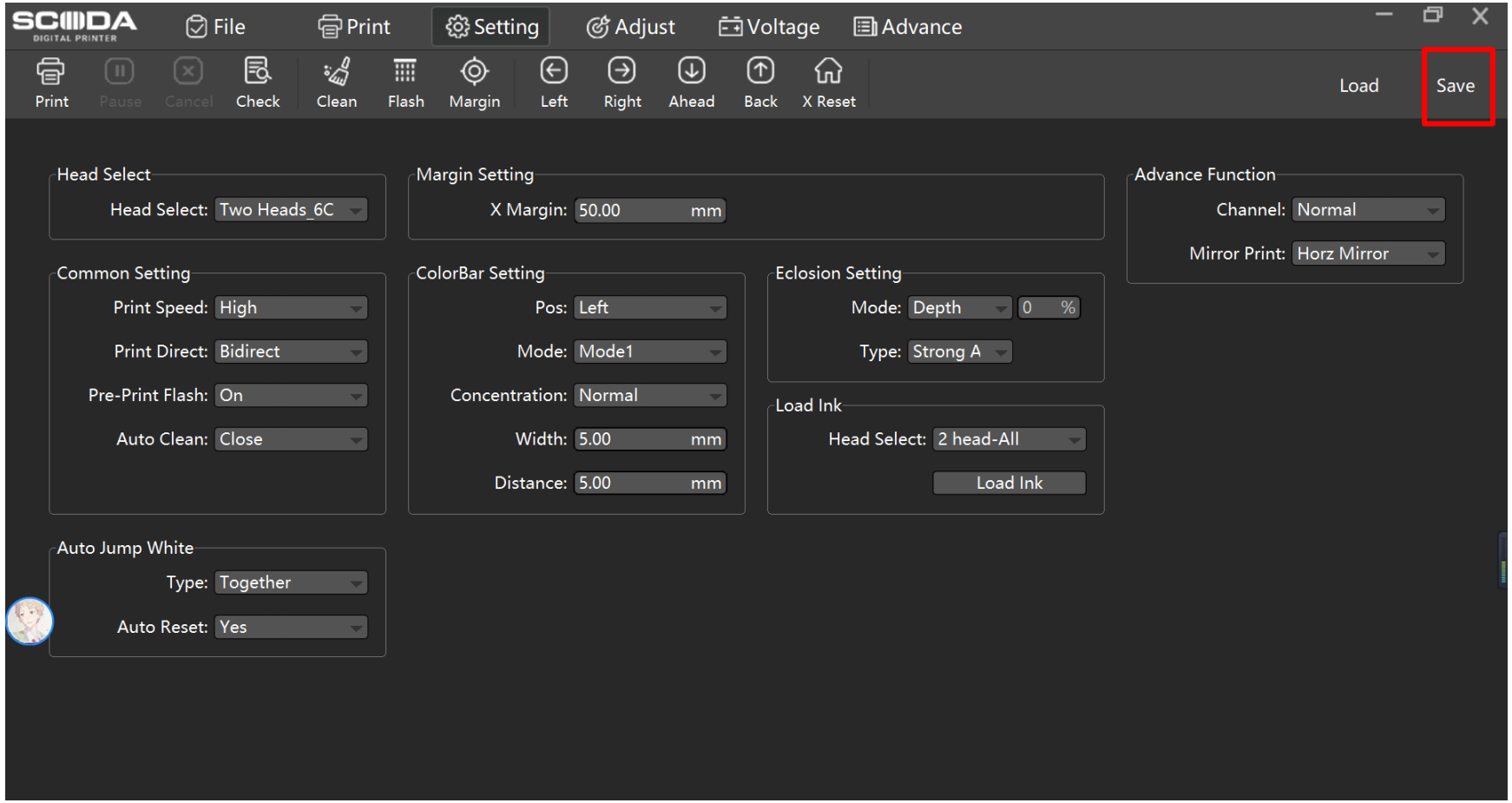
Display the basic information of the current task

- **Polyploidy ink amount**

Control the corresponding ink volume for multiple times of ink output, which will greatly affect the printing speed
Ink cutoff setting: can control the amount of ink for a single color

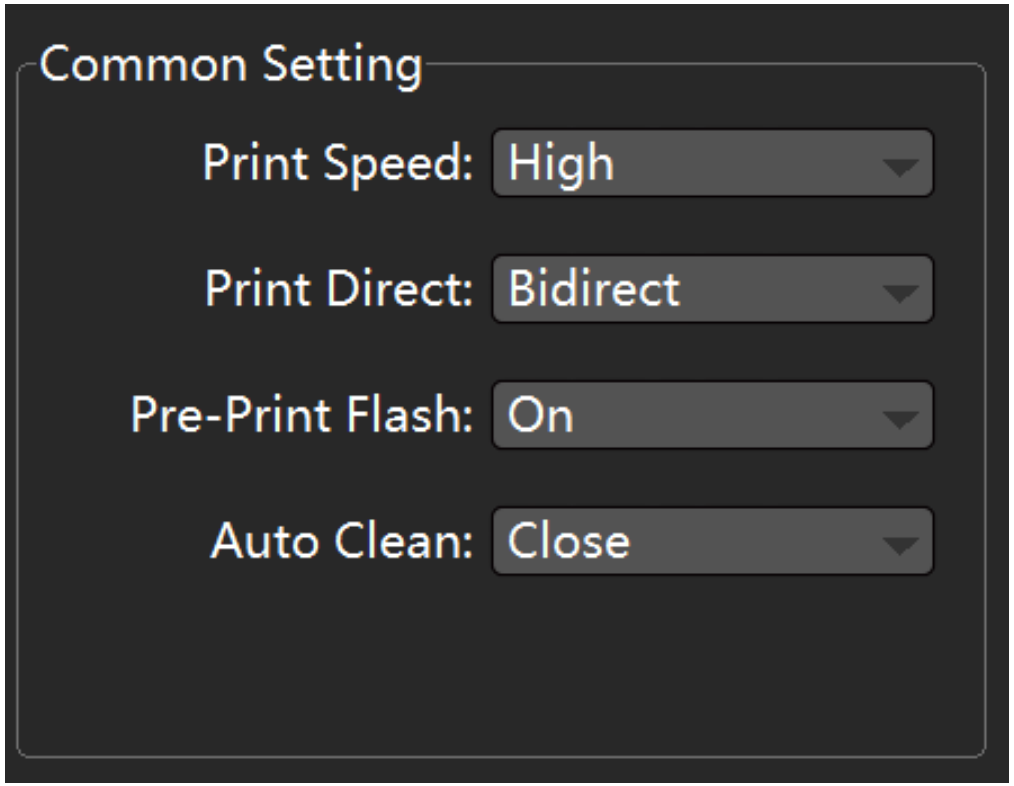
Software Usage

PrintExp Software Interface



After modifying any setting, you need to click the “Save” in the upper right corner to take effect

Software Usage



Common Setting

Printing Speed

Three gears: low, medium, high

Printing Direction

Total 3 printing directions. Left, right, bidirectional. Left and right are unidirectional printing, and the speed is the same.

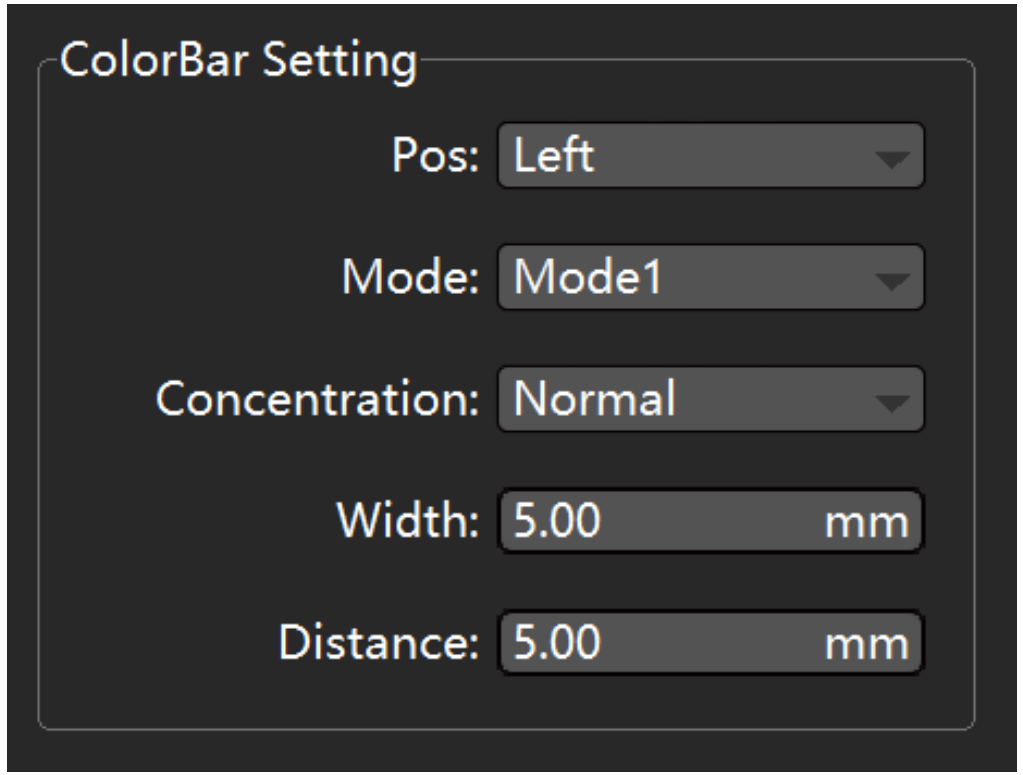
Flash Printing

ON or OFF: When turned on, the Nozzle will flash printing before formal work

Other Settings

The default setting is fine, some models have no other settings function

Software Usage



ColorBar Settings

ColorBar Pos

Total 4 options: OFF, Left, Right, Both Sides

ColorBar Mode

Total 3 modes: keep the first default mode is OK

ColorBar Concentration

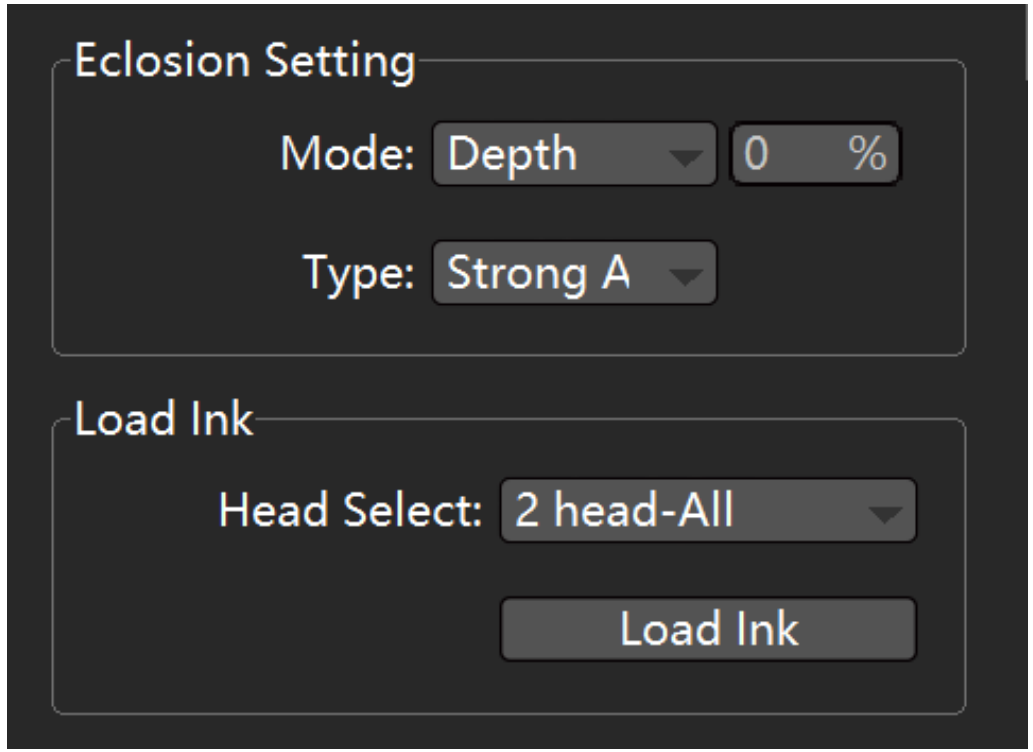
3 Gears in total: wake, medium, and strong to choose from.
Remain the weak density is OK

ColorBar Width And Distance

The colorbar width and distance from the printed picture can be adjusted

The function of the colorbar is to keep the color of each channel of the Nozzle in a working state and keep the channel unobstructed. It is recommended to turn on the color bar.

Software Usage



Eclosion Setting & Load Ink

Eclosion Mode

Generally, the normal eclosion is > 70%

Eclosion Type

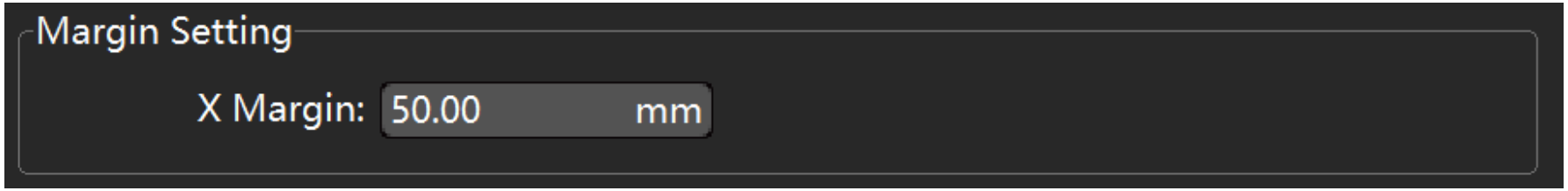
Adjust according to the state of the Nozzle. Generally, choosing the mist spray type is OK. When the state is poor, mist spray can be adjusted to strengthen A

Load Ink

You can select a specific Nozzle or all Nozzles for ink loading. Generally, the ink loading time does not exceed 10 seconds

Software Usage

Margin Setting



X Margin

Adjust the initial position of the X when there is a printing task

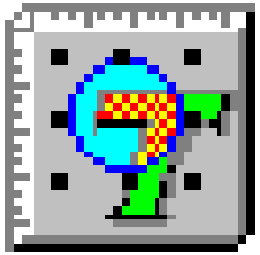
Y Margin

Adjust the initial position of the Y when there is a printing task. (Some models do not have this function)

Software Usage

Photoshop

To make the spot channel



Photoprint, RIPrint, Maintop

To sharpen the image

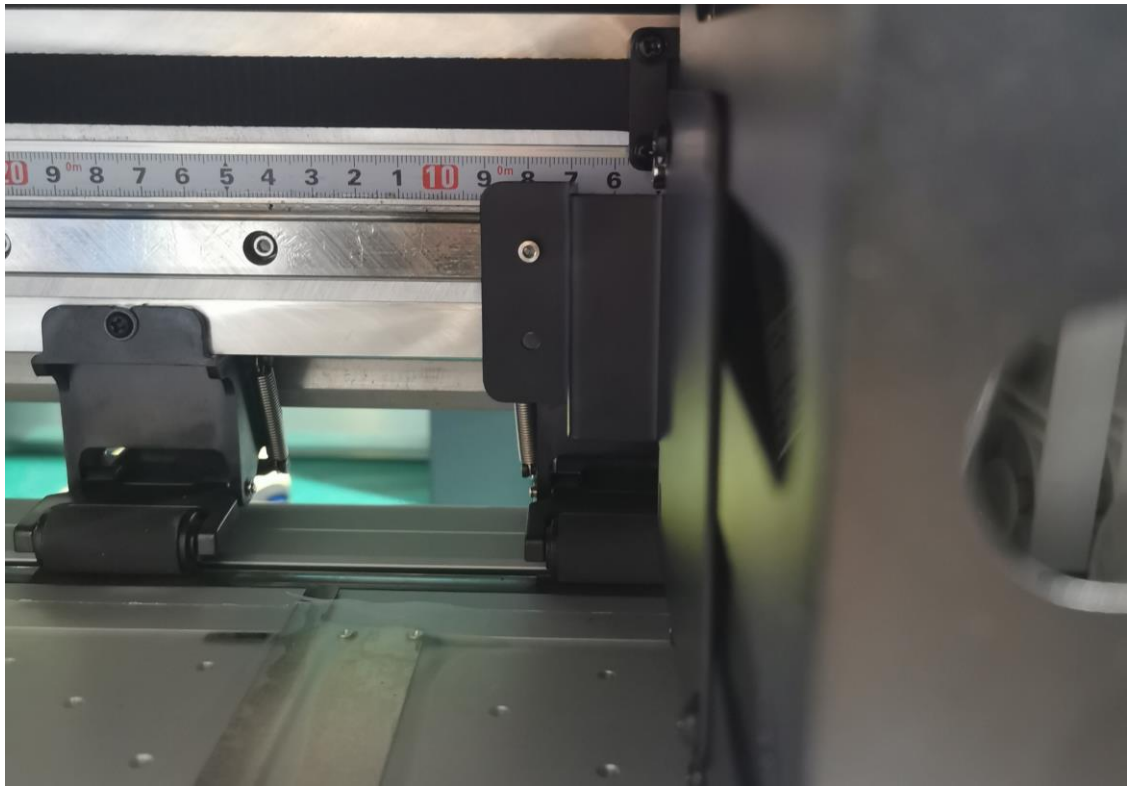
With Operating Video Included

PART 03

Machine Inspection

THREE

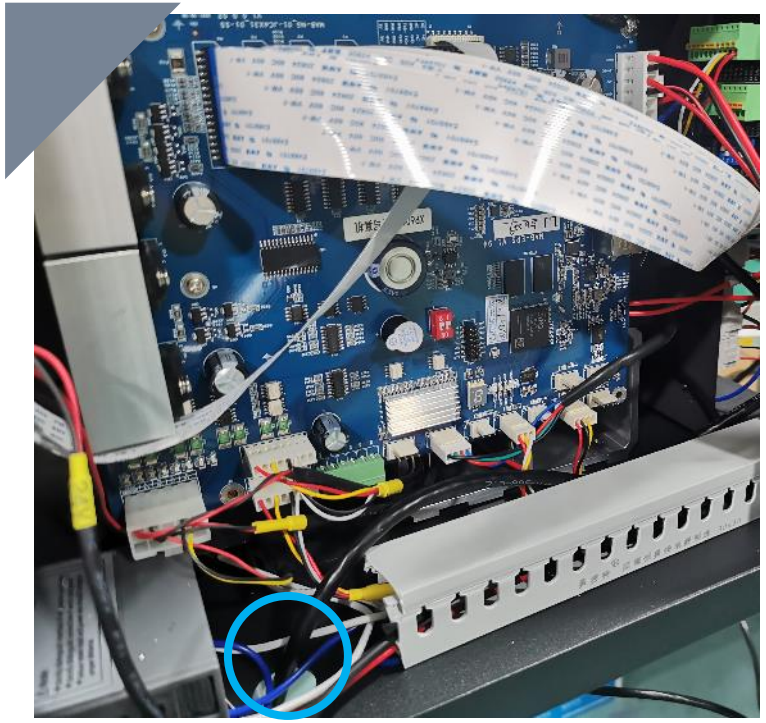
Machine Inspection



First, remove the fixing screws and fixing pieces of the sprinkler trolley and then re-tighten the removed guide rail screws.

Machine Inspection

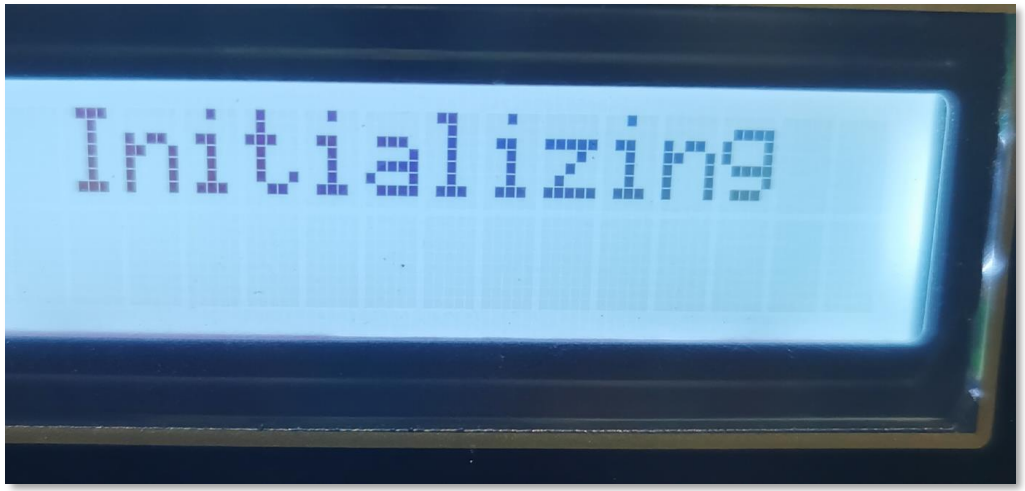
Remove the screws in the red circle in the picture below



Pass the blue circle marked network cable through any hole and connect it to the computer

Machine Inspection

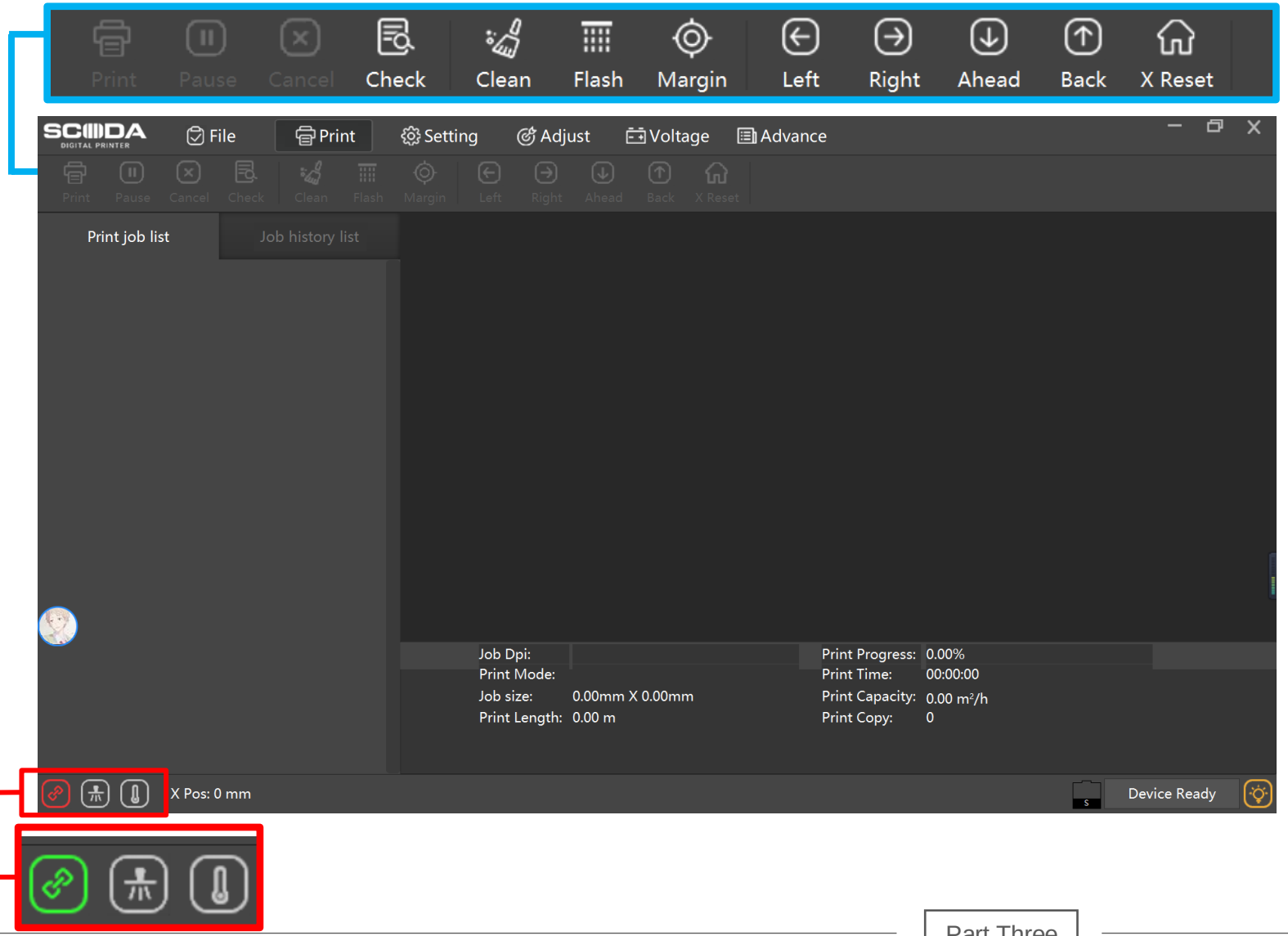
1. Connect the power supply
2. Twist the rotary switch
3. Waiting for machine self-test



Initializing: self-testing

Finish self-testing

Machine Inspection



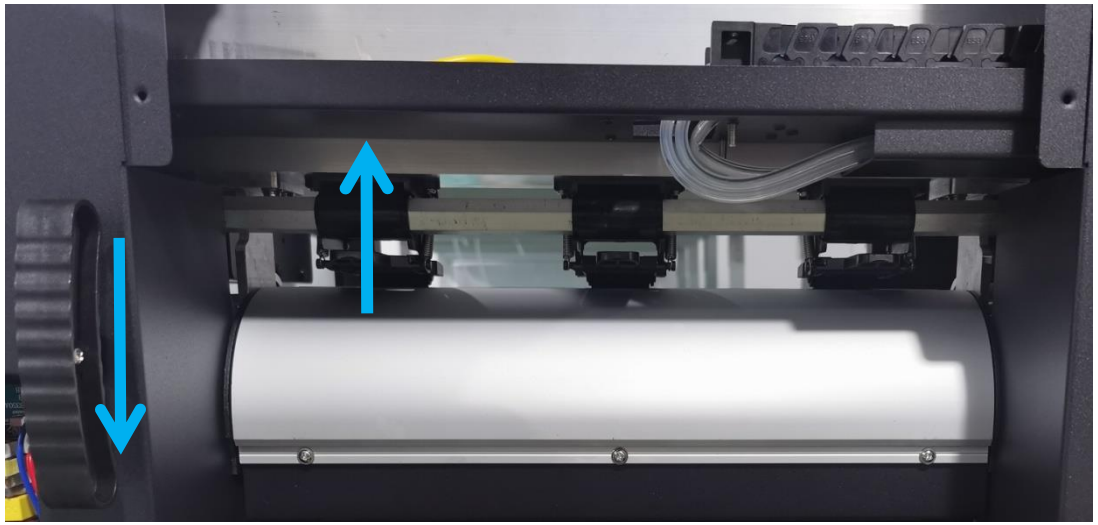
Software Self-testing Process

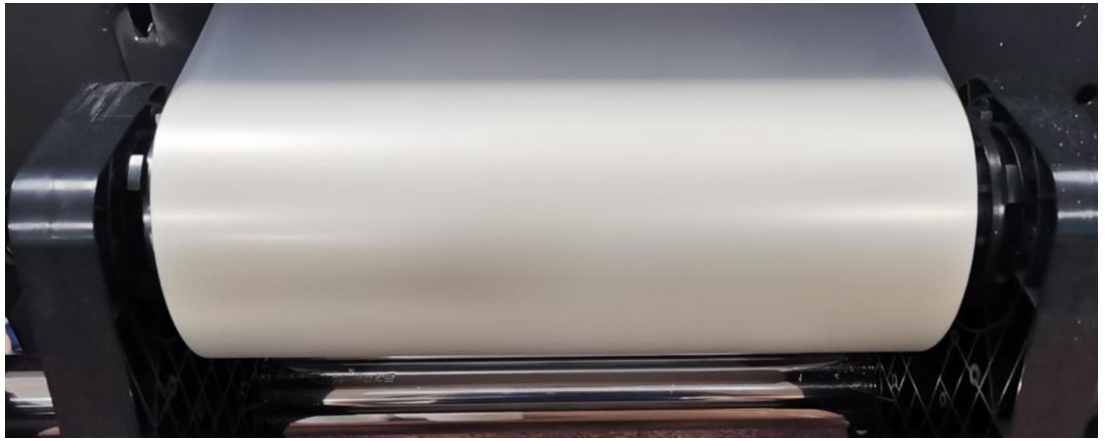
1. The button at the top of the software interface will change from "gray" to "white "
2. The "Link" in the lower-left corner of the software interface changes from flashing red to solid green

Machine Inspection

Consumables Installation

1. The consumables are installed on the roll feeder, do not tighten the bottom screw first

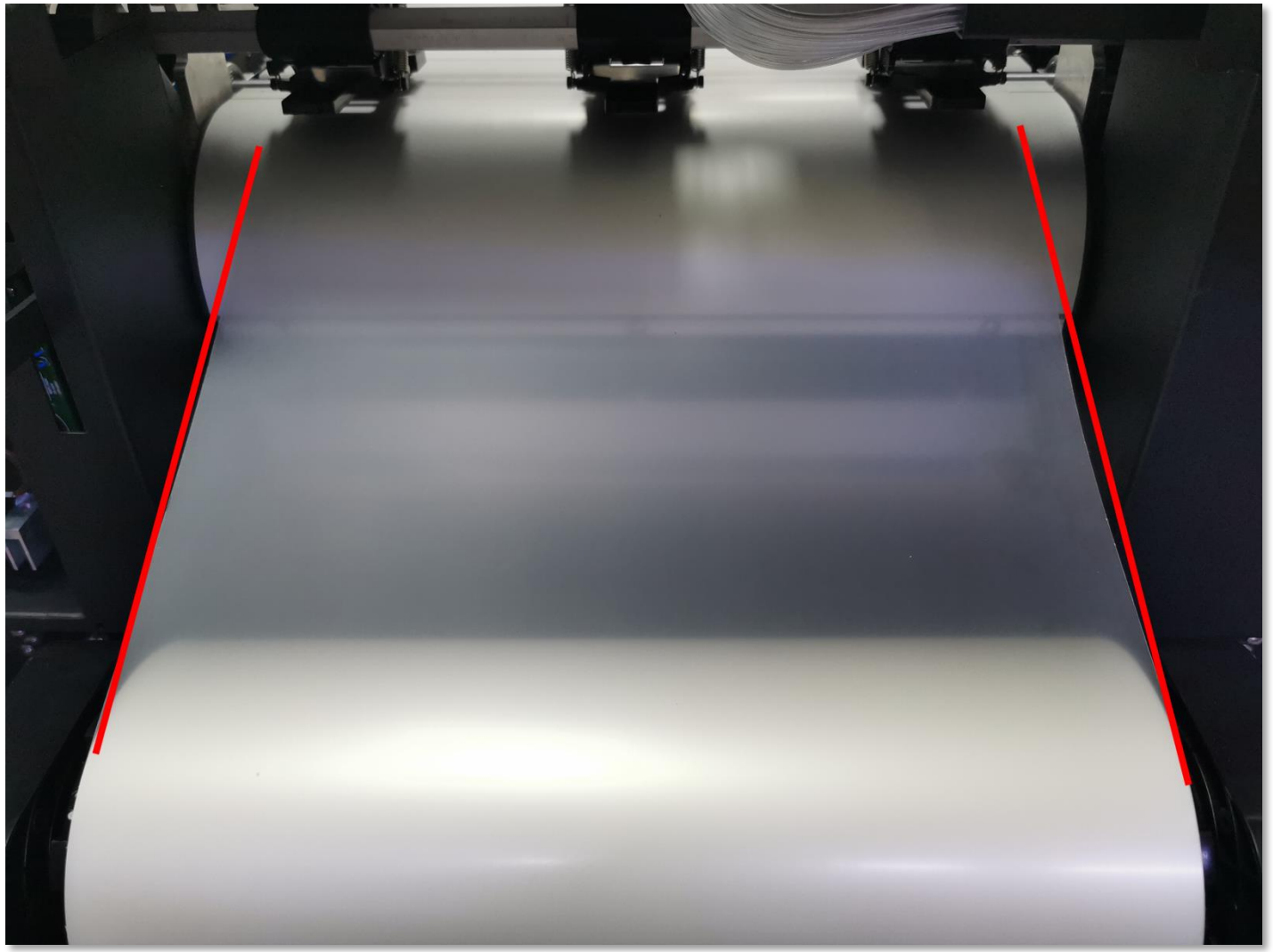




2. Pull down the handle, and the paper pressing roller will lift up at the same time
3. Stretch the consumables and pass under the paper pressing roller

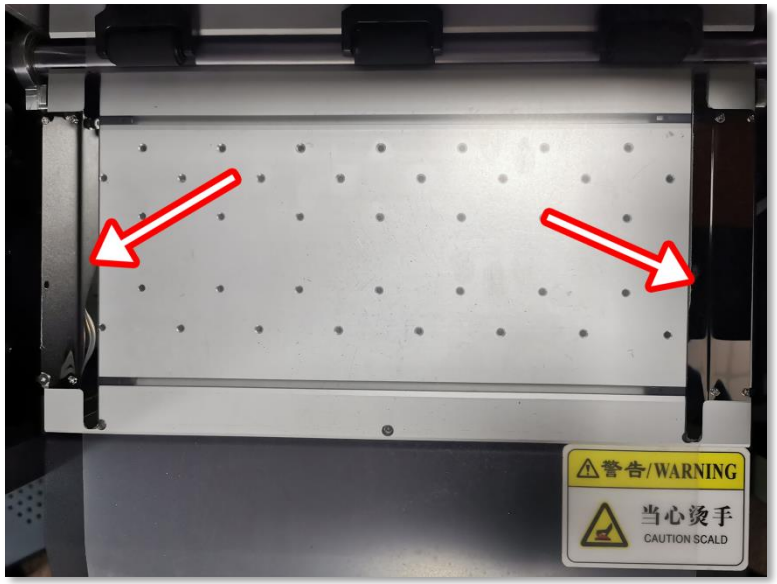
4. Adjust the roll feeder and tighten the screws under the roll feeder
5. If the consumables are not placed correctly, it will cause paper feeding problems; if the print head rubs against the consumables during printing, the consumables will feed more and more crookedly

Machine Inspection



1. Ensure that the consumables are straight when feeding

2. Press the consumables on the front of the machine with a paper pressing sheet



Machine Inspection

The Nozzle cannot be used after being scratched

After installing the Nozzle, please check carefully whether the distance between the Nozzle and the paper platen has reached a safe distance

After the consumables are installed, please also check them carefully.

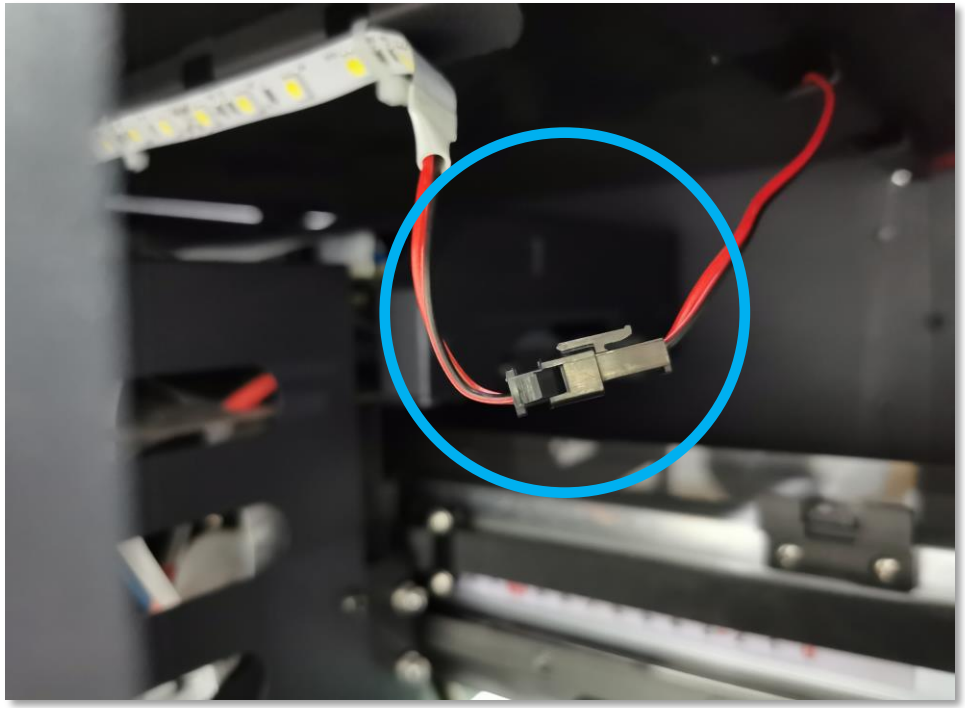
If the consumables are out of alignment, they will rub against the Nozzle and damage the Nozzle.

Machine Inspection

Before

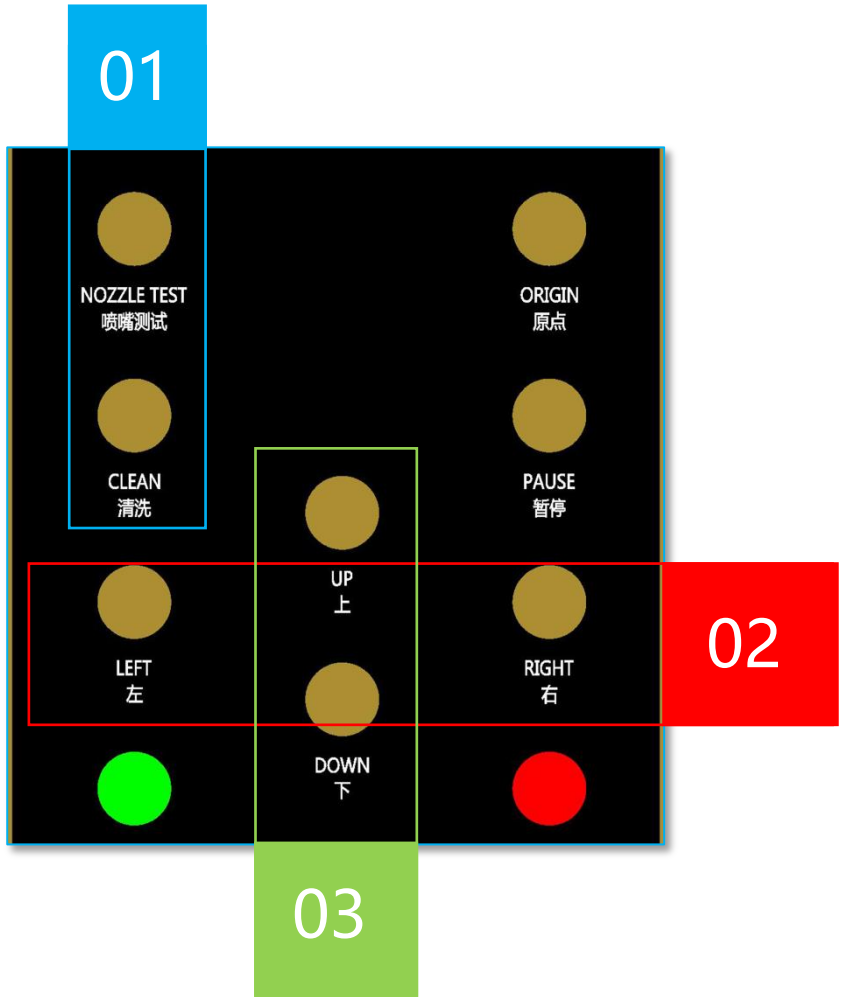
Before August 2021, the machine's LED light belt was integrated. When removing the top cover, the cable tie needs to be cut off

After



After August 2021, the machine's LED light belt is equipped with an interface, which is convenient to remove the top cover of the machine

Machine Inspection



Test Button Panel Function

Nozzle Testing & Cleaning

You need to connect to the computer and open the software before you can use it normally

Left, Right

Left: The print head bracket moves to the left
Right: The print head bracket moves to the right

Up, Down

Up: Unload paper
Down: feed paper

Machine Inspection

Temperature Control Keypad <Type 2>

Adjust Temperature

Press and hold <S>, release <S> when the interface is F1

Press <S> again, the interface is the temperature adjustment interface

Press and hold <S>+<↑> or <↓> to quickly adjust the temperature

Press and hold <S> single point <↑> or <↓> to fine-tune the temperature

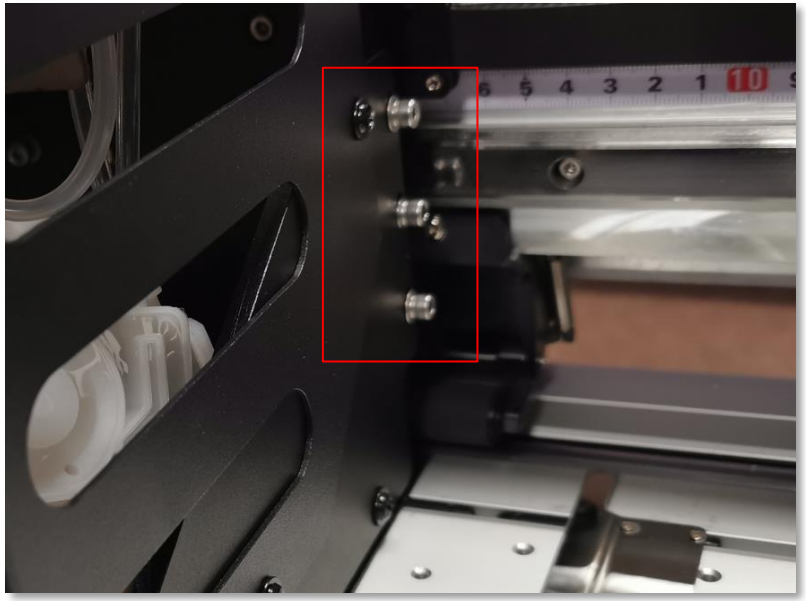
PART 04

Nozzle Installation

FOUR

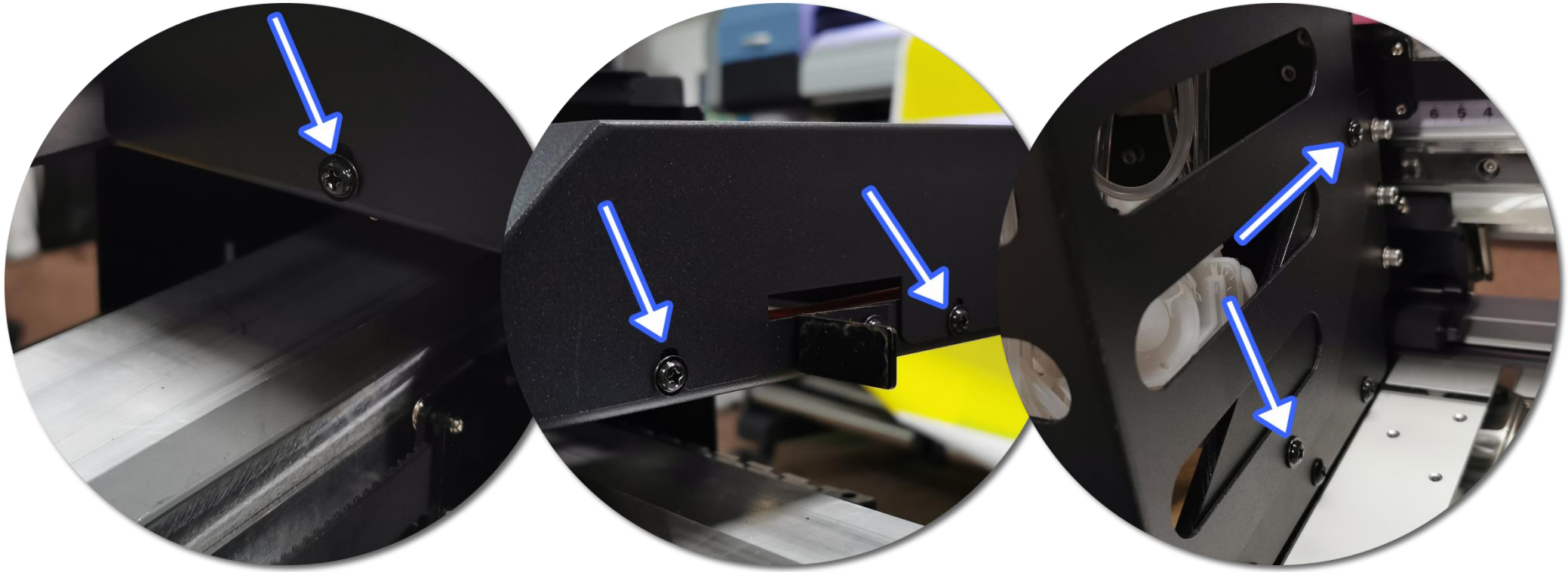
Nozzle Installation

1. Manually move the print head bracket to test whether it is scratched against the printing platform
2. If scratches occur, you need to loosen the left and right screws to adjust the height



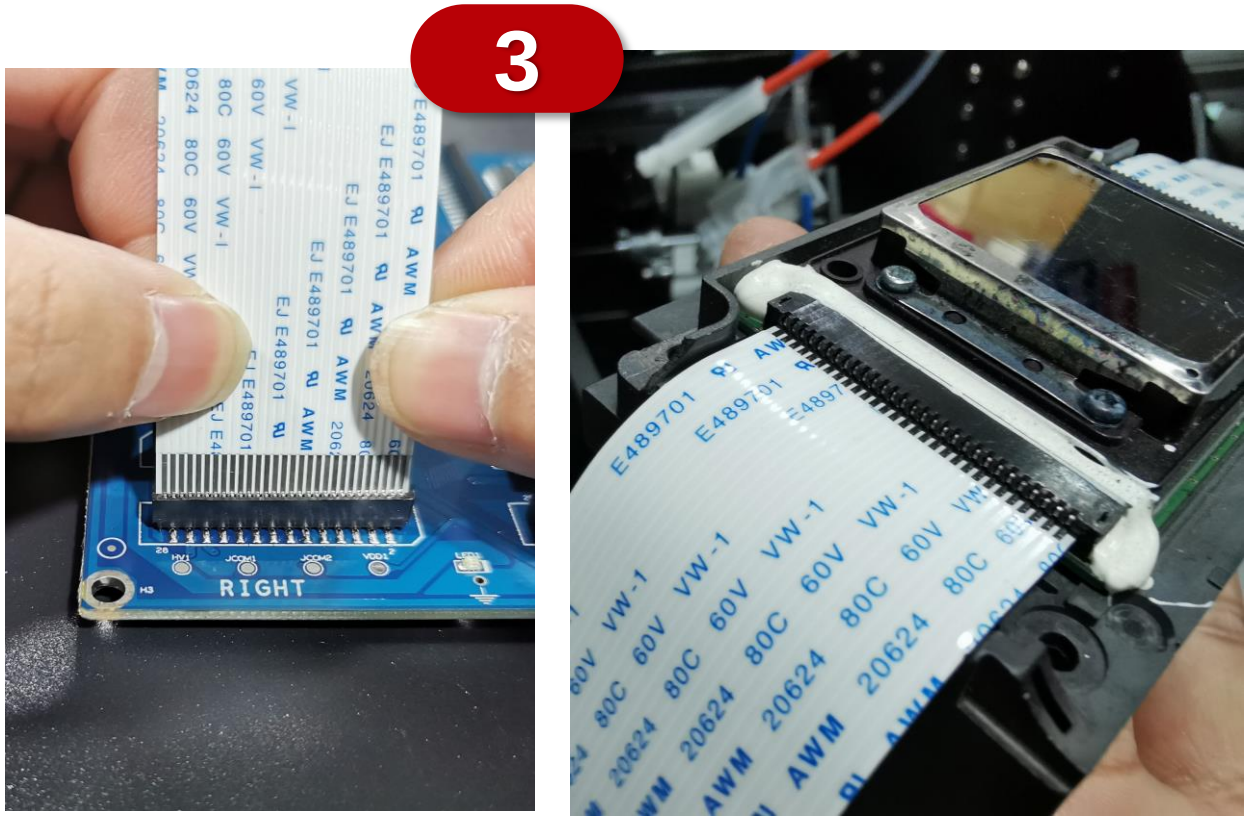
Nozzle Installation

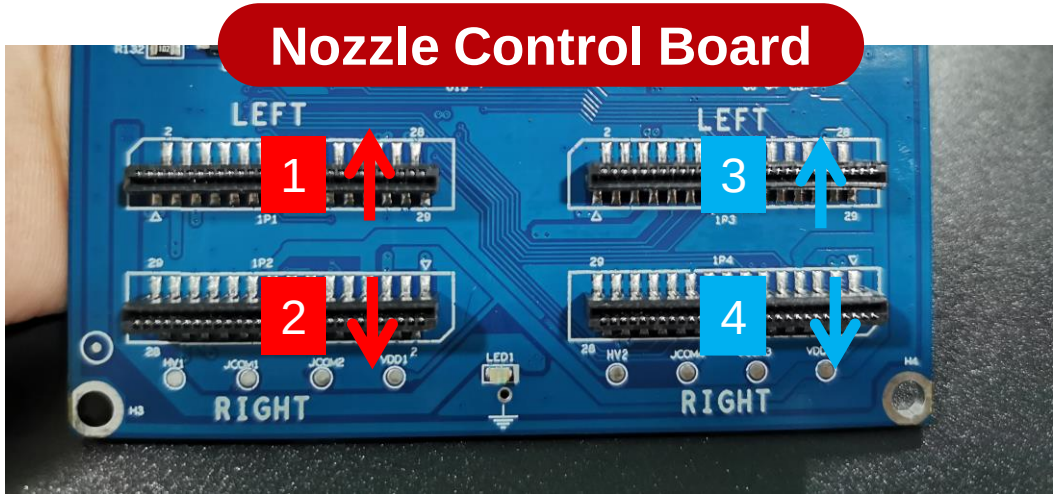
1. Power off the machine first
2. Loosen the screws on the left and right sides of the top cover
3. Remove the top cover

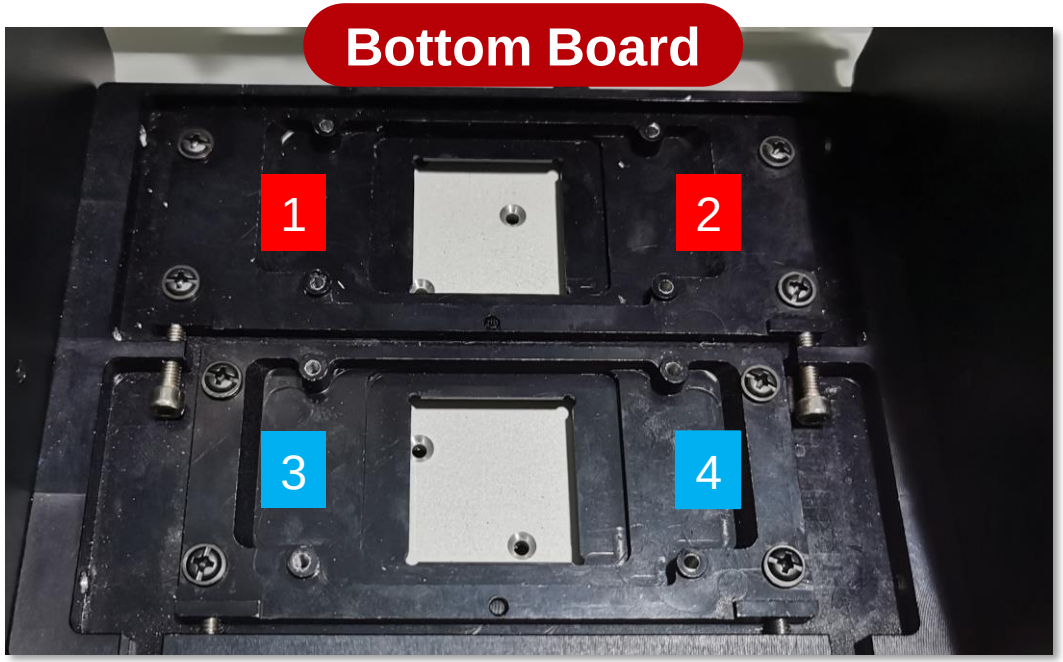


Nozzle Installation

1. 1 2 is CMYK ink nozzle, 1 is left and 2 is right
2. 3 4 is white ink nozzle, 3 is left and 4 is right
3. Pay attention to the method and direction of installing the cable

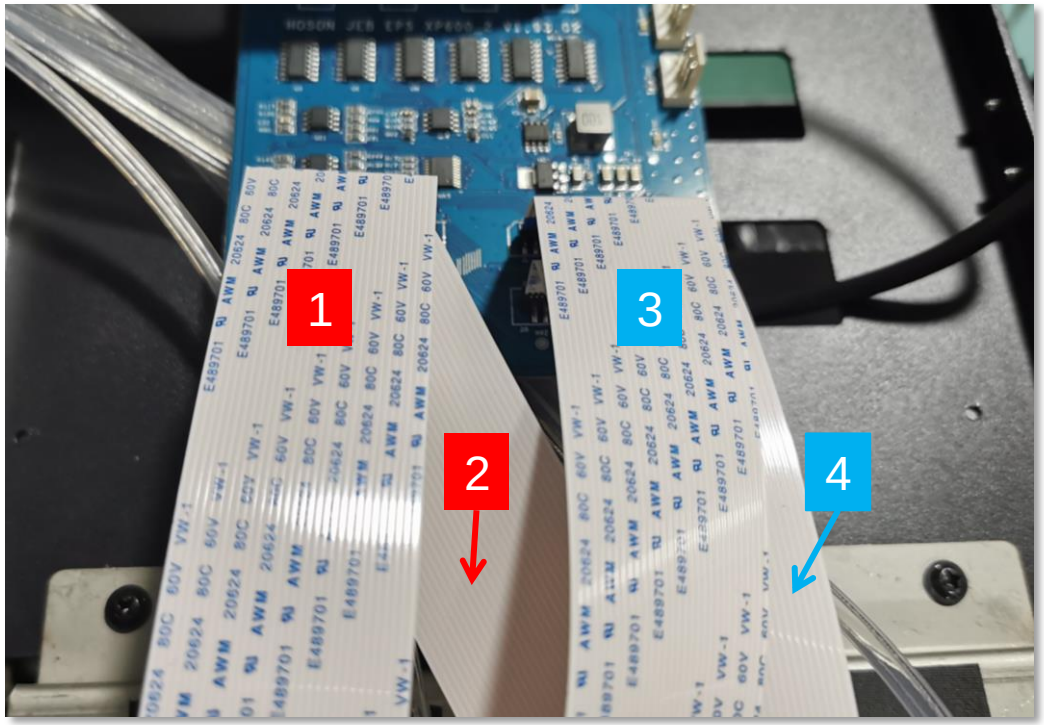


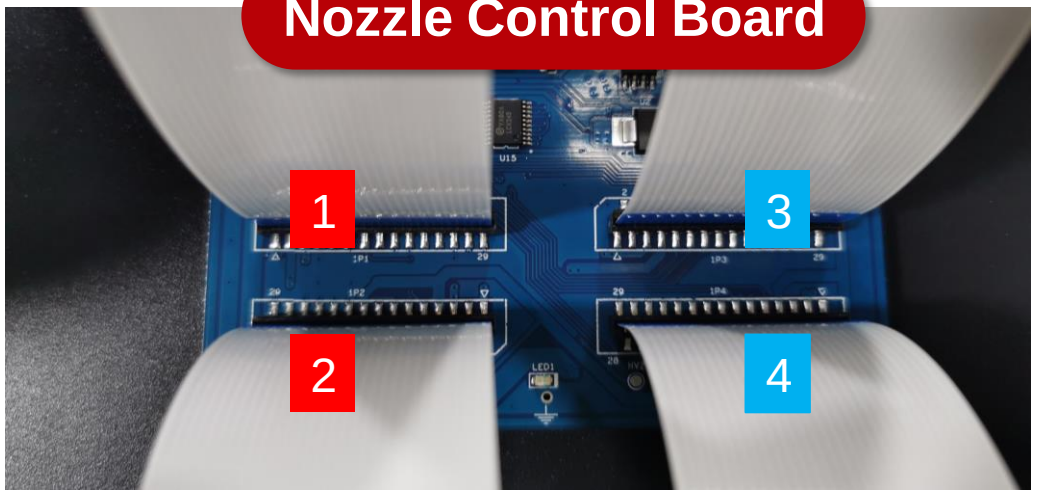


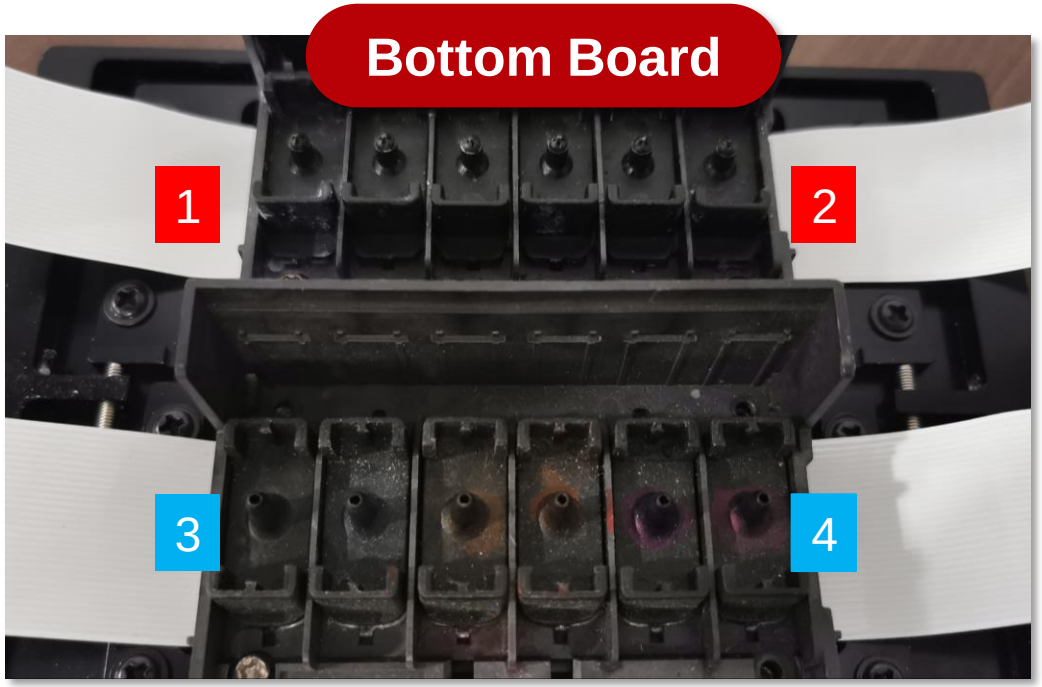


Nozzle Installation

1. First make sure whether the machine is powered off, do not operate with power
2. When installing the flex cables, you need to distinguish the front and back







Nozzle Installation

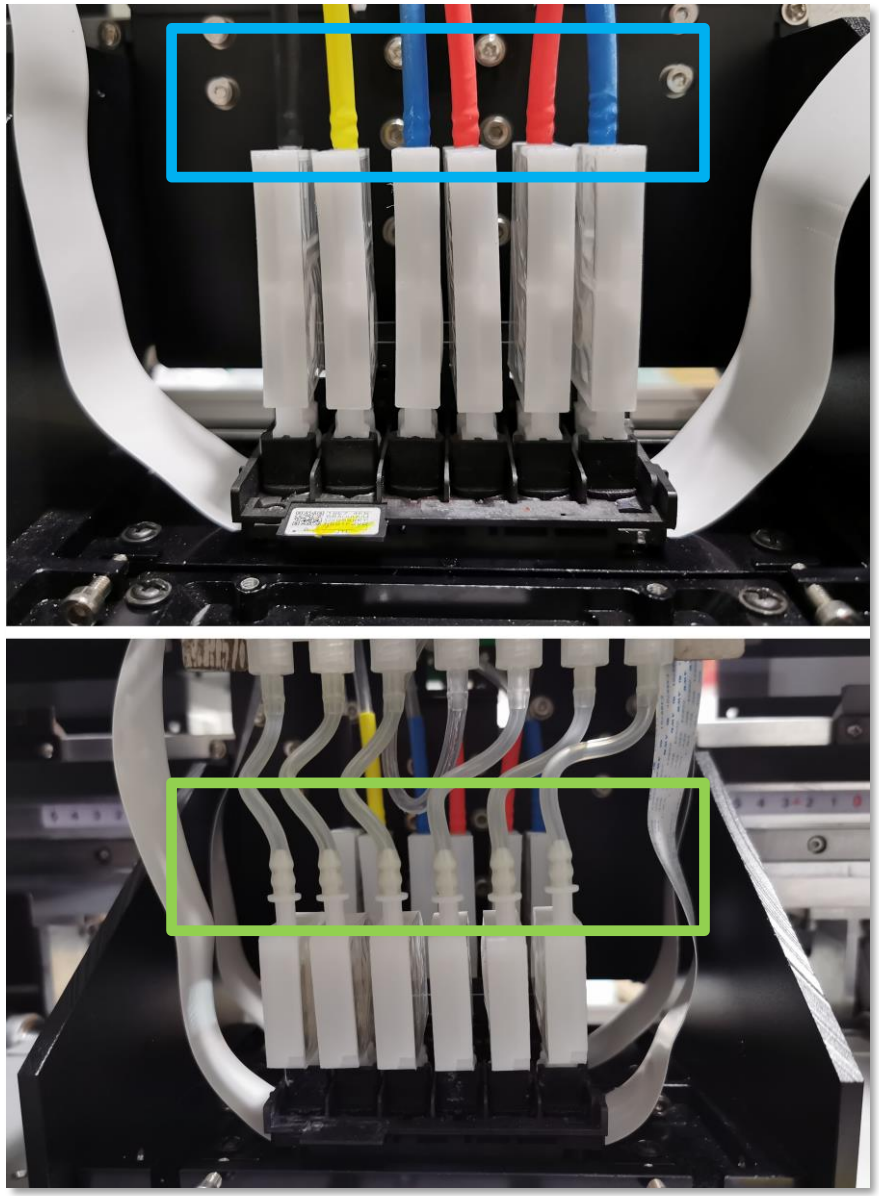
Ink Damper & Nozzle

CMYK Ink Nozzle

CMYK ink sequence: K,Y,C,M,M,C

White Ink Nozzle

White ink sequence: correspond in order



Nozzle Installation

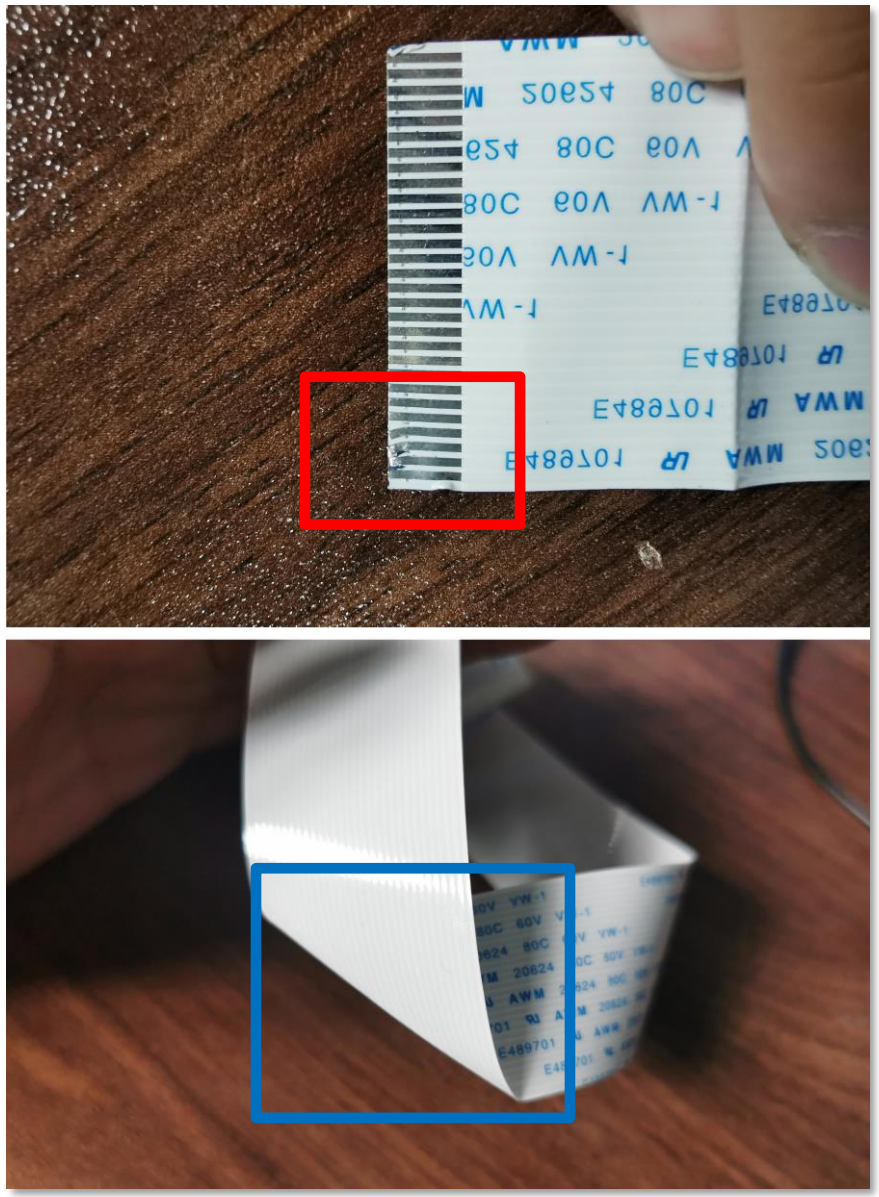
Precautions for Nozzle Cable Installation

Install the Cable

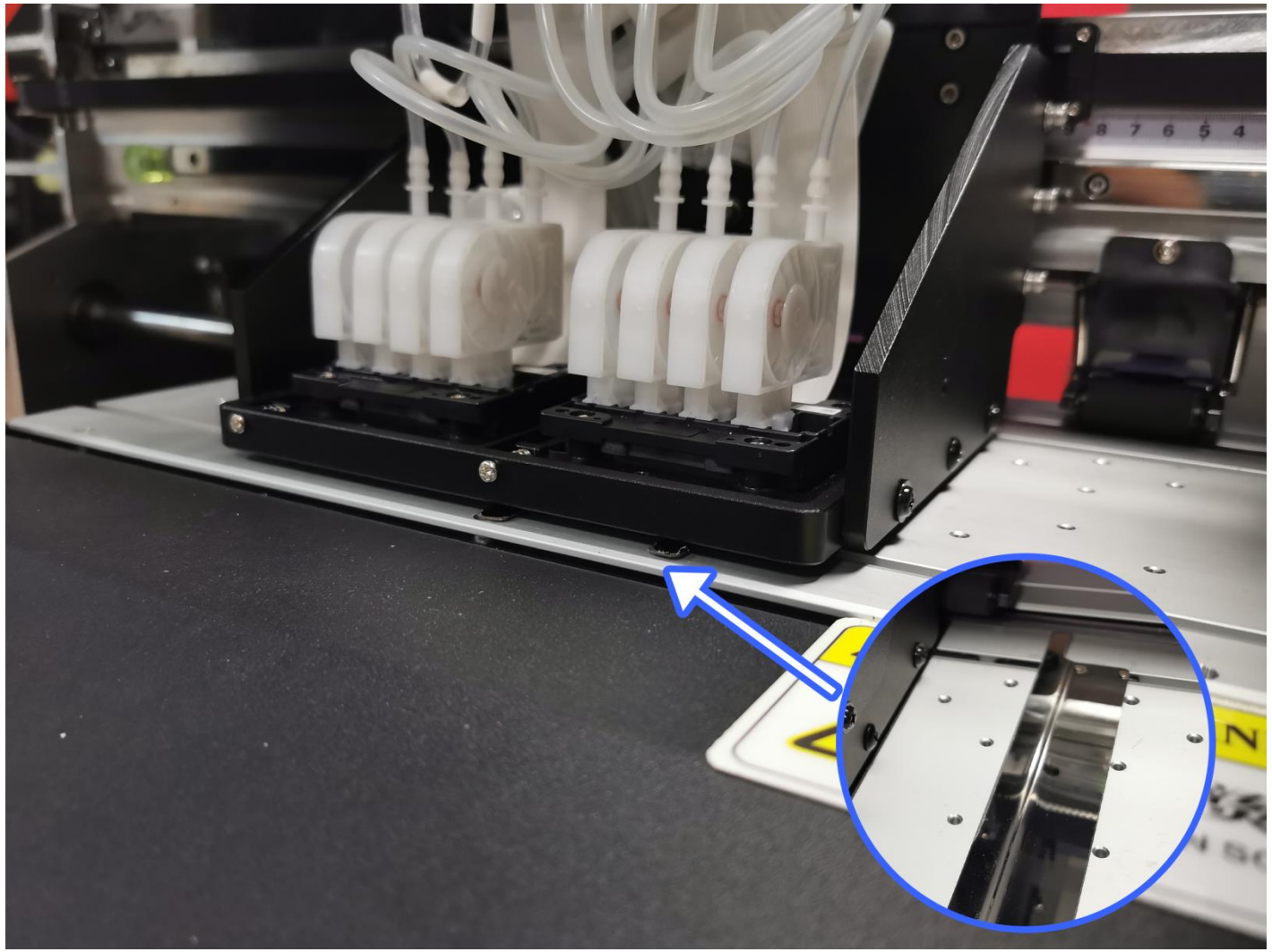
You need to be careful when installing the print head cable. Improper installation method may cause the print head power supply to overlap and cause the motherboard or the print head to burn out.

Folding Cable

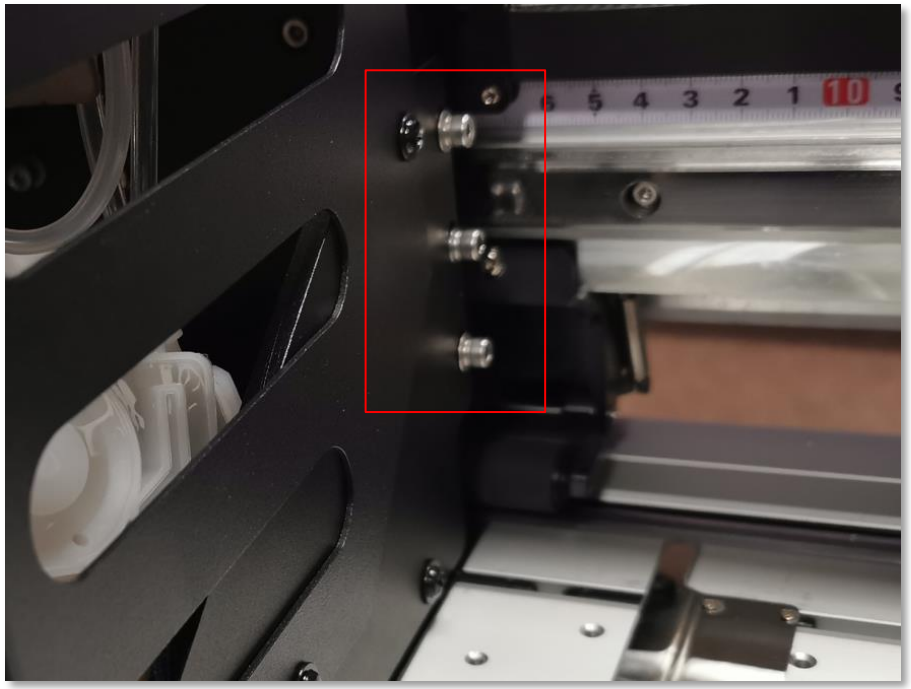
Folding the cable does not affect the normal use of the cable. If the cable is not arranged smoothly, you can fold it appropriately



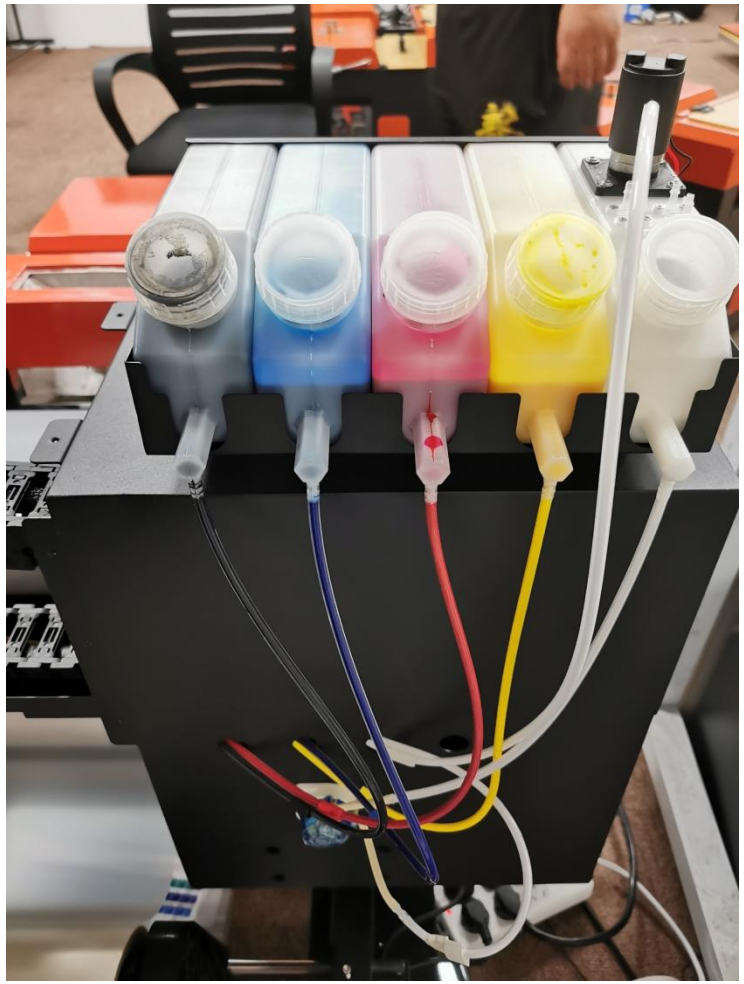
Nozzle Installation

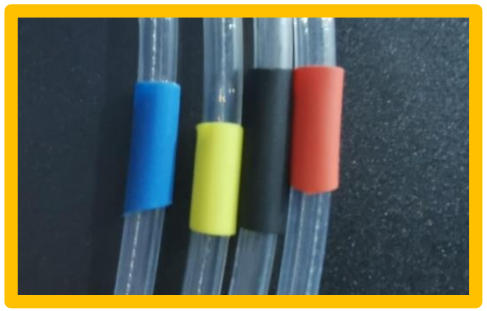


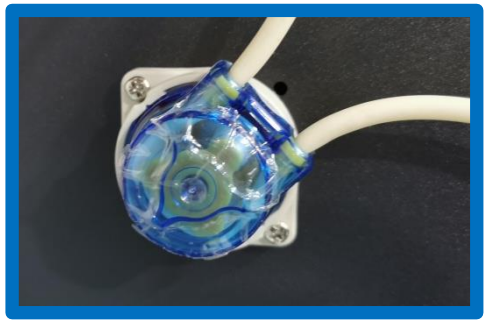
1. After installing the print heads and ink dampers, please move the print head bracket slowly to check whether the print head will scratch the paper pressing sheet
2. If scratches occur, you need to loosen the left and right screws to adjust the height



Nozzle Installation







Ink Cartridge & Ink Tube

CMYK Ink Tube & Ink Cartridge

There are marking tubes on the ink tubes

There are identification plates on the ink cartridges

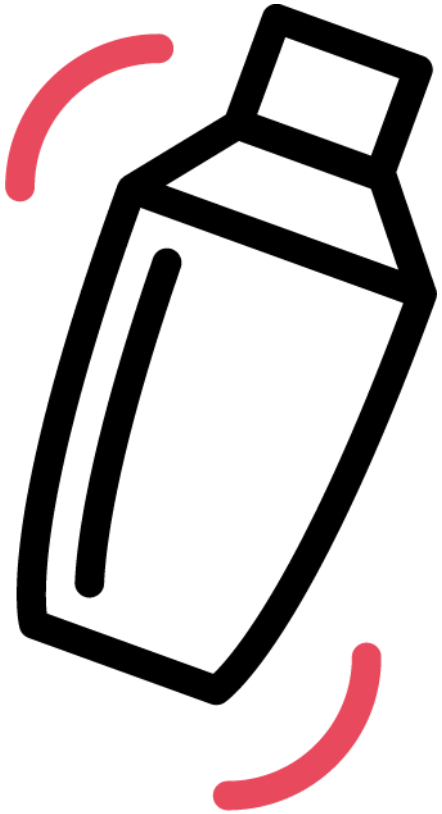
Insert the corresponding ink tubes into the lower interface of the corresponding ink cartridges

White Ink Tube & Ink Cartridge

1. There are 2 white ink tubes in total
   One is connected to the peristaltic pump, and this ink tube is connected to the interface below the white ink cartridge

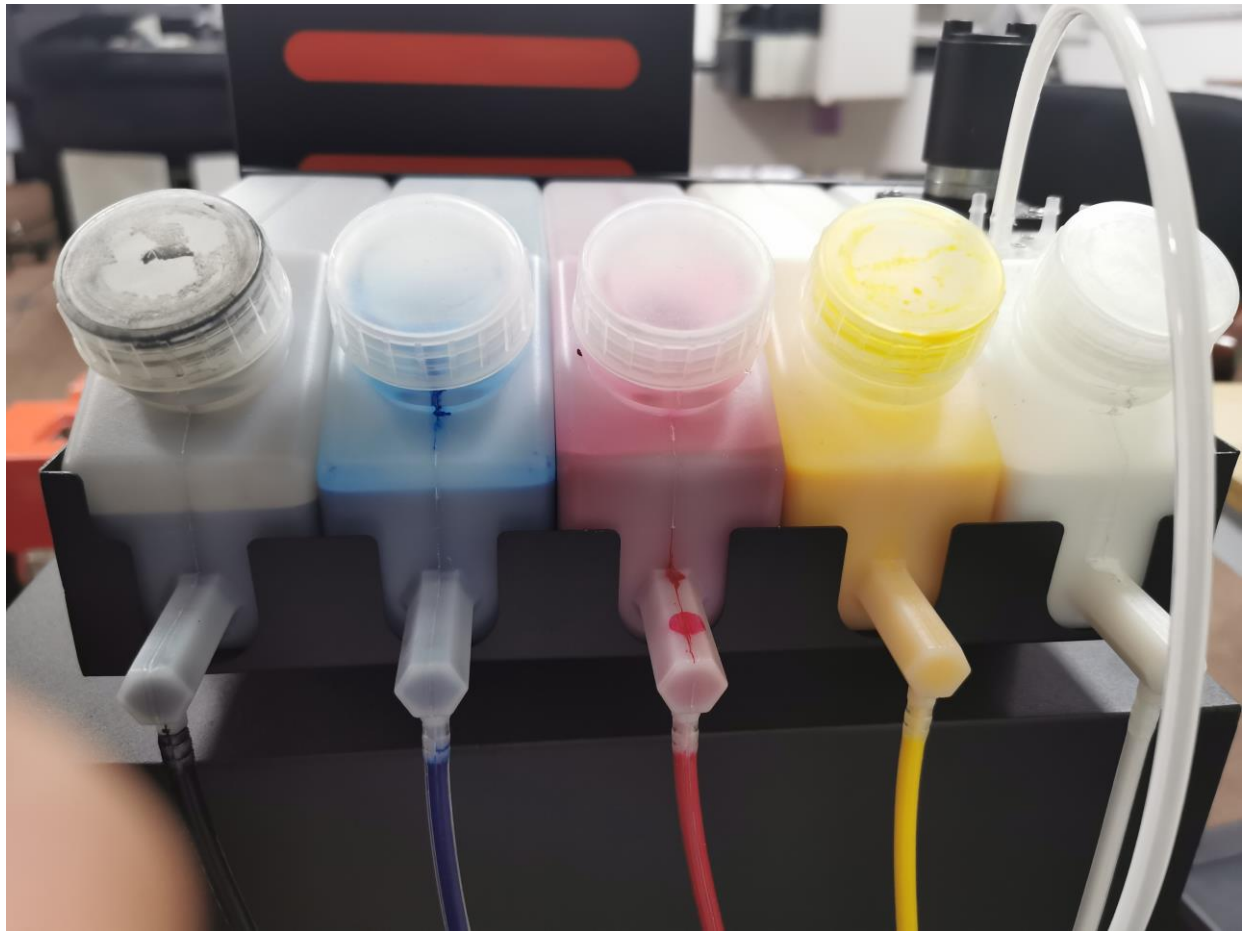
2. The other one is directly connected to the white ink splitter, this ink tube is connected to any interface above the white ink cartridge

Nozzle Installation



Since the white ink will cause precipitation if it is left standing for a long time, **please shake the white ink bottle for 5-10 seconds before pouring the white ink into the ink cartridge** to fully mix the white ink

Nozzle Installation

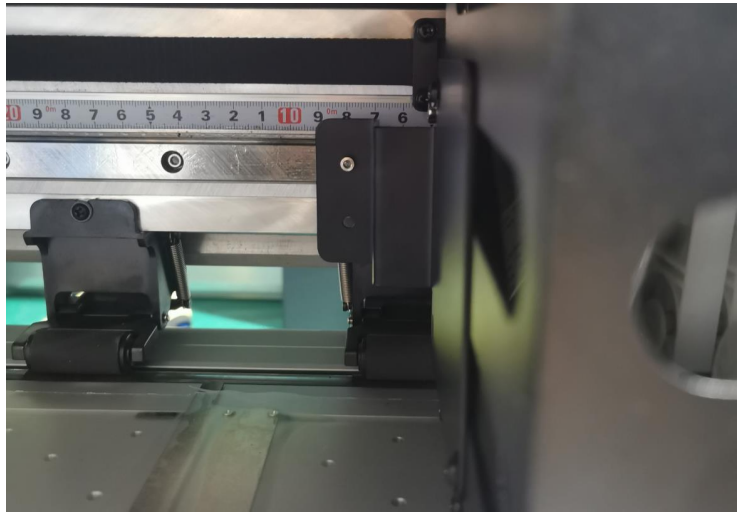


Ink Cartridges & Ink Tubes

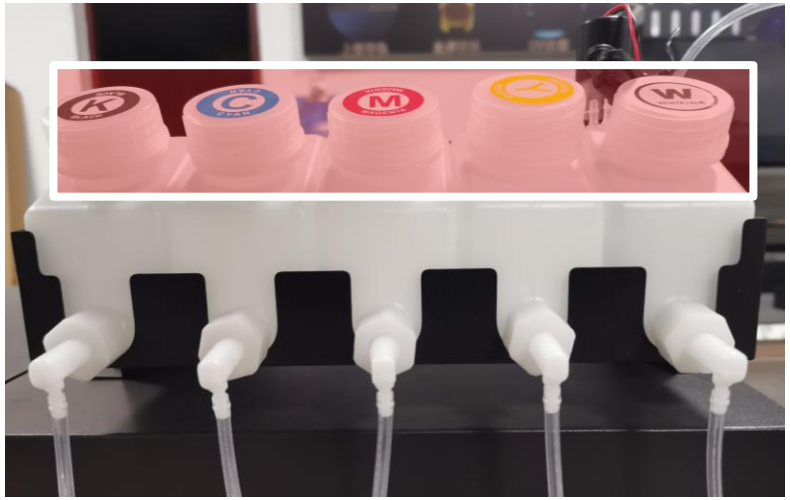
Precautions

Do not tighten the cover of the CMYK ink cartridge, just cover it lightly to ensure that there is air inflow, so that the print head can print CMYK ink smoothly.

Nozzle Installation



Lock the fixing pieces of the printhead bracket



Tighten the ink cartridge cover to prevent ink leakage

If the printer needs to be transported to other places after installation, please protect the print head trolley and ink cartridges first,And the print head should not be exposed to air for more than 12 hours

Nozzle Installation

Please add ink in time, it is not recommended to add ink after the ink is exhausted, especially the white ink cartridge

Nozzle Installation

The white ink is easy to be precipitated, the printhead is easy to be blocked if not print for a long time

So even if there is no printing task on the day, it's advised to clean the nozzle 1-2 times/day to ensure the printheads do not get blocked

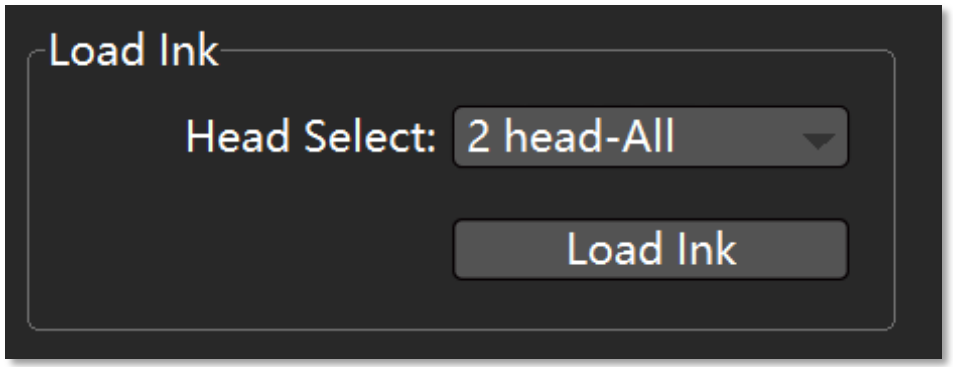
(The longest cleaning interval should not be more than 3 days！)

PART 05

Machine Calibration

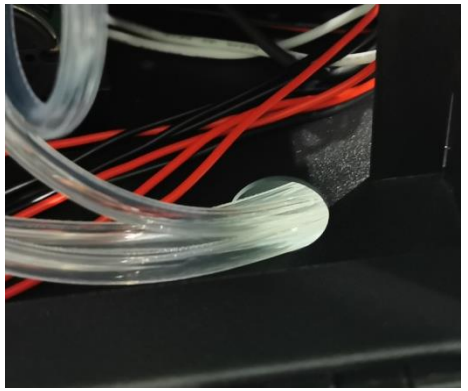
FIVE

Machine Calibration

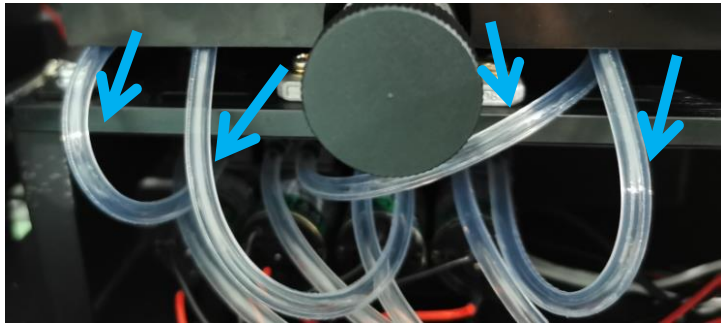


Install Ink

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



2. Then clicks “Load Ink" —— Head Select choose "all" (representing all nozzles) —— “Load Ink" —— Click "Stop" after the ink is drawn out from the ink pump

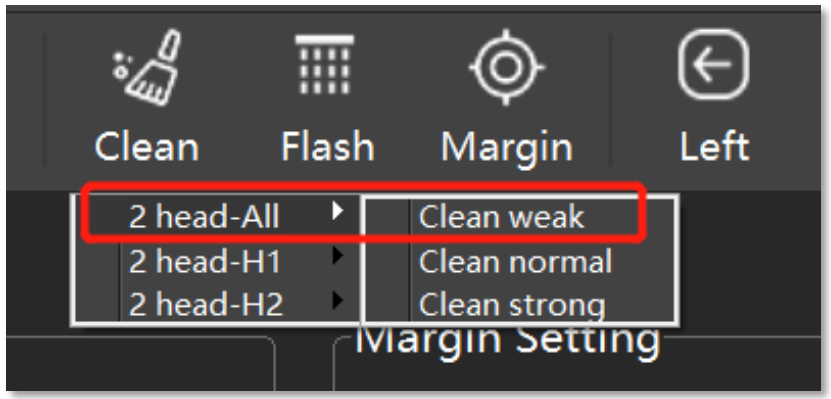


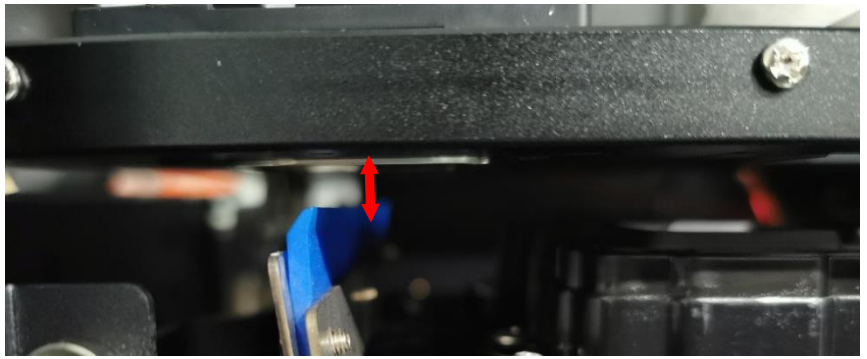
Machine Calibration

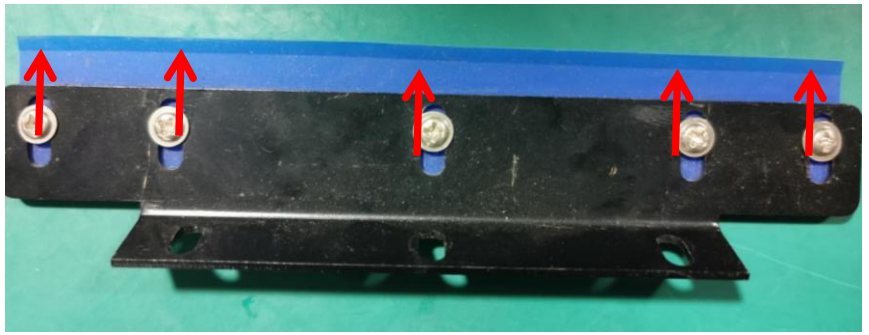
Cleaning

1. After ink installation is completed click “Main interface” —— “Clean”
2. During this period, you need to check whether the wiper wipes the ink on the nozzle. If the following conditions occur, the nozzle and the wiper are not in contact during cleaning, you need to adjust the height of the following wiper.

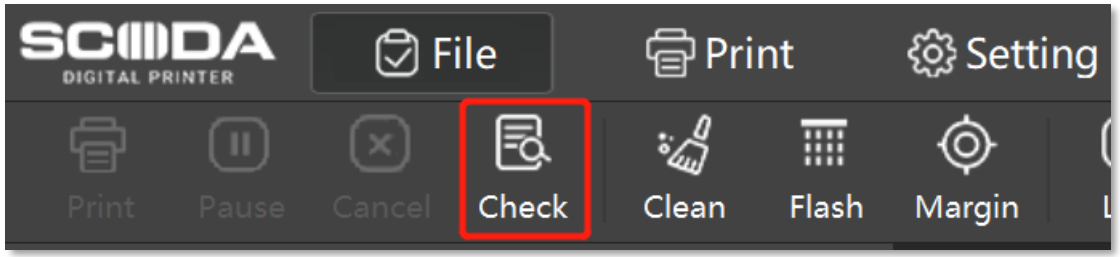
Software Cleaning & Code Testing Steps





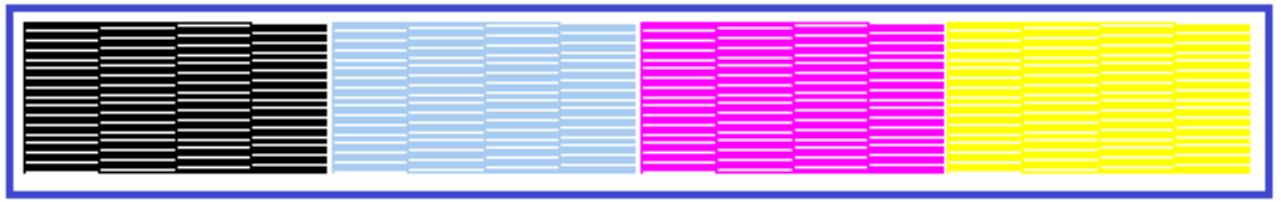


Machine Calibration



Testing Chart Printing

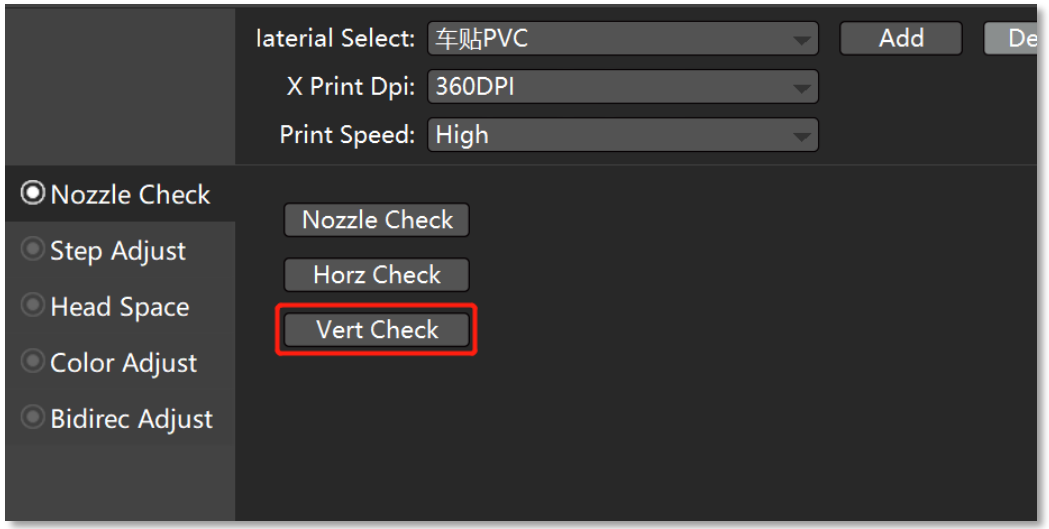
1. After cleaning, click “Check”
2. The testing chart will appear on the consumables, check the testing chart



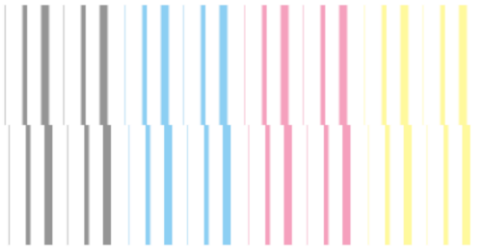
3. The above picture is a perfect state of the nozzle. If the ink is cut-off, the nozzle needs to be cleaned and try to ensure that the nozzle is in good condition

Machine Calibration

Vert Check



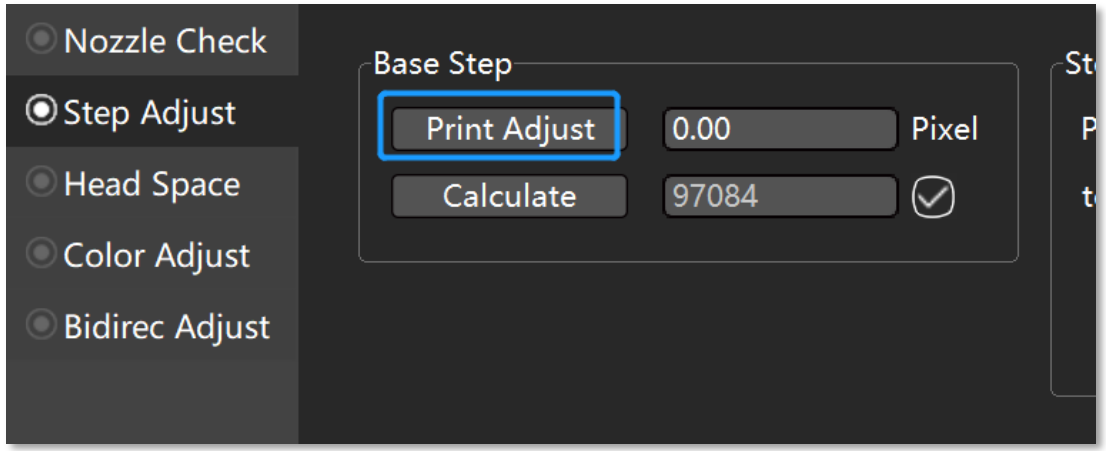
1. Click "Calibration" in the upper menu——click "Vert Check"
2. As shown in the figure below, the vertical calibration diagram shows that the print head has been tilted, and the base head of the print head needs to be adjusted. First, loosen the three screws, and then adjust the long screw in the lower-left corner. If the long screw is tightened, it will "pull to the left"; if the long screw is loosened, it will "push up-right".



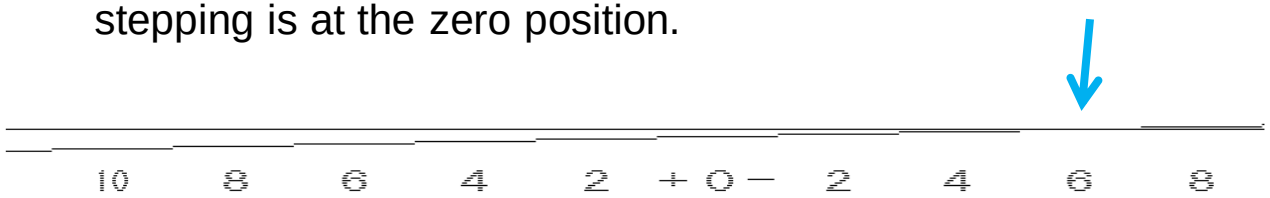
3. Until the nozzle prints the following picture vertically, this state means that the nozzle has been vertical.

Machine Calibration

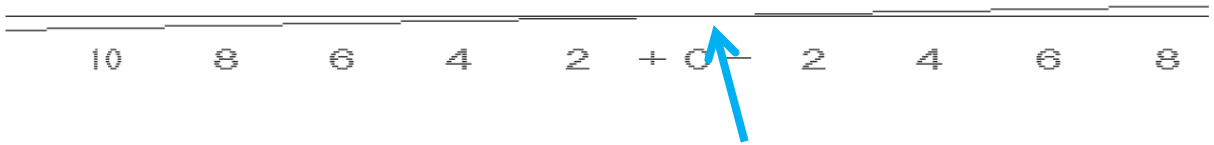
Base Step



1. Click "Calibration" in the upper menu——click "Base Step"
2. As shown in the figure below, the step is offset by "-6", you need to fill in "-6" in the "pix" edit box, click calculation, then click the "Apply" button to save, and then click "Base Step". Print another reference stepping calibration chart to confirm whether the stepping is at the zero position.

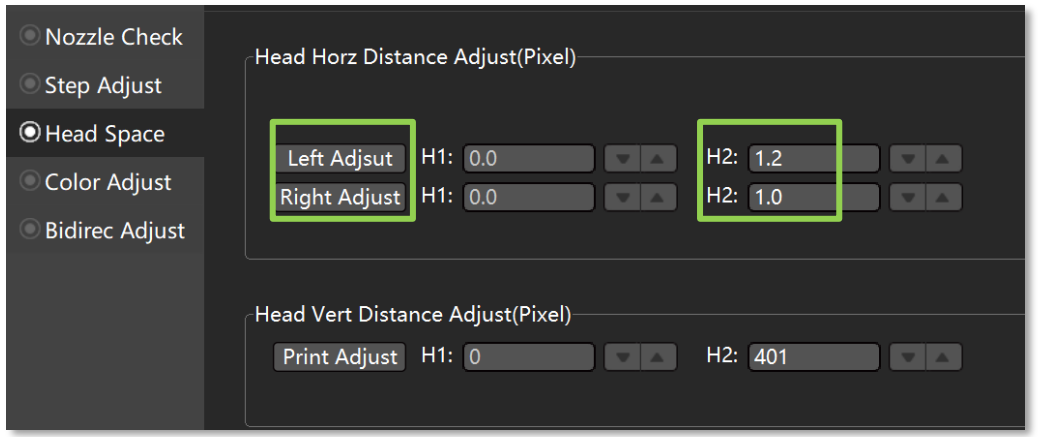


3. If it is not at the "0" point, add and subtract according to the printed calibration chart until the calibration reaches the "0" point.



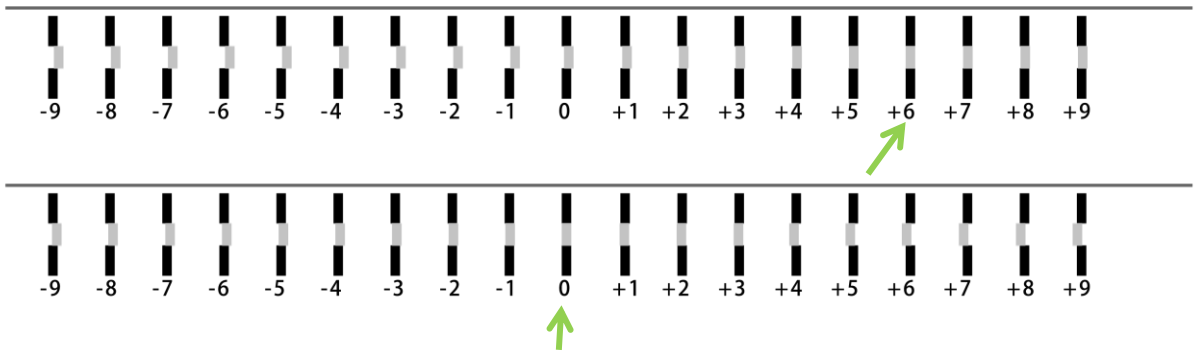
Machine Calibration

Left / Right Adjust



1. Click “Head Space" in the upper menu——click “Left / Right adjust”

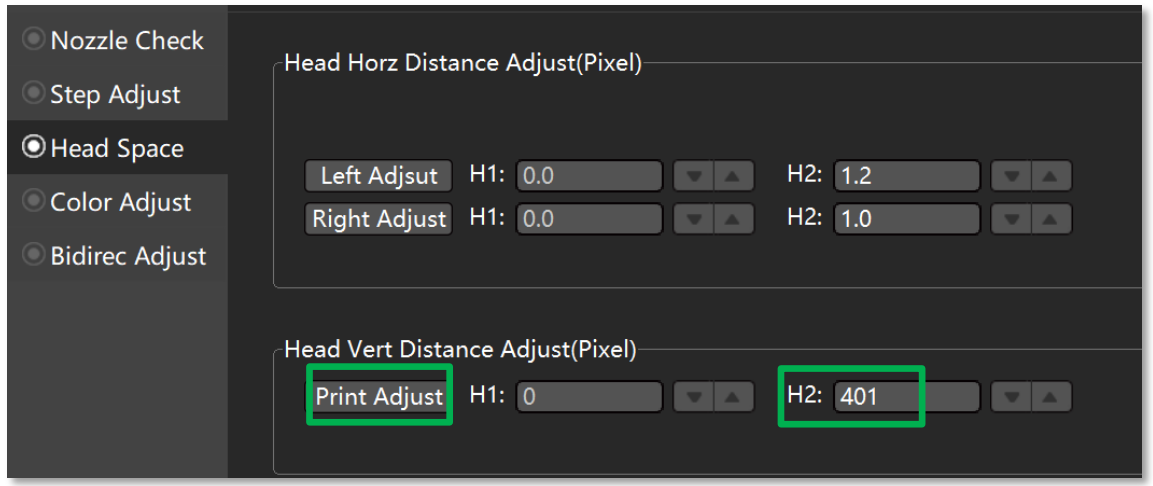
2. As shown in the figure below, the upper and lower "0" points have been aligned, so no adjustment is required.
If it is not at the "0" point, add and subtract in the corresponding color box according to the printed calibration chart until the calibration reaches the "0" point up and down.



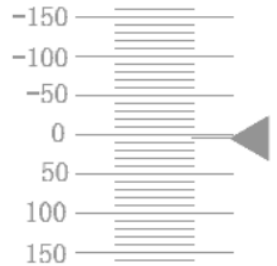
3. When modifying the horizontal calibration, take the No. 1 nozzle as the reference, and modify the No. 2 nozzle data sequentially without modifying the data of the No. 1 nozzle.

Machine Calibration

Longitudinal Calibration



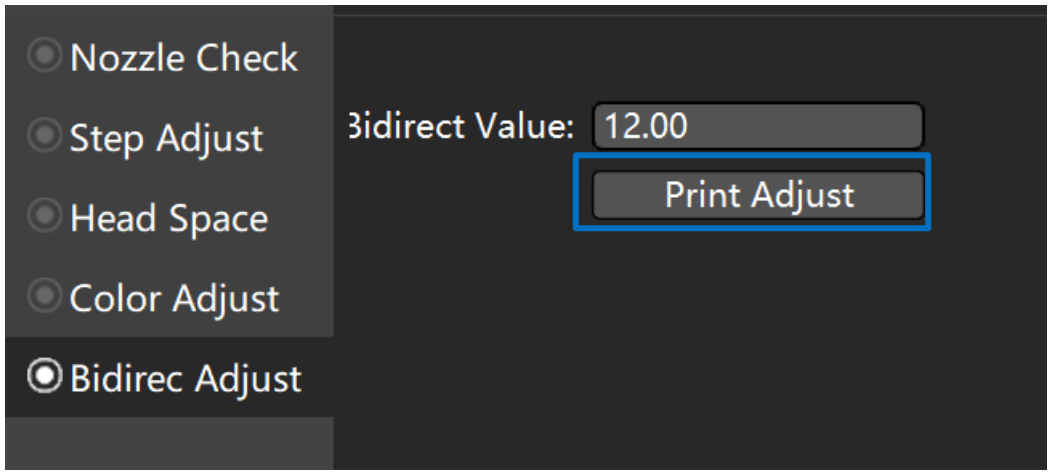
1. Click “Head Space" in the upper menu—— click “Print Adjust"
2. As shown in the figure below, the vertical offset is about "+2", you need to fill in the "original value + 2" in the "vertical offset" edit box, then click the "Apply" button to save, and then click "Vertical Calibration". Print a vertical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



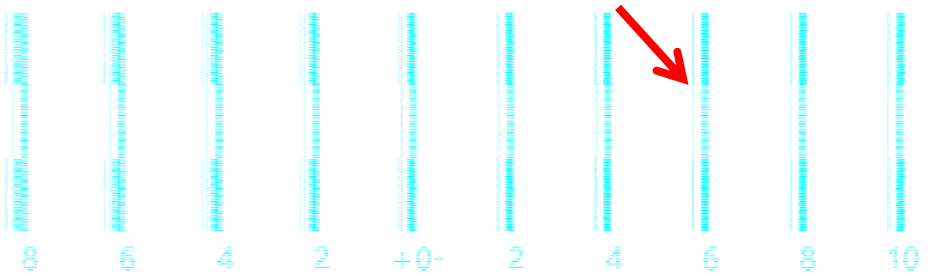
3. If it is not at the "0" point, add and subtract according to the printed calibration chart until the calibration reaches the "0" point.
4. When modifying the horizontal calibration, take the No. 1 nozzle as the reference, and modify the No. 2 nozzle data sequentially without modifying the data of the No. 1 nozzle.

Machine Calibration

Bidirec Adjust



1. Click "Calibration" in the upper menu——click “Print Adjust"
2. As shown in the figure below, the two-way offset is "-6", you need to fill in "-5" in the “Bidirec Value" edit box, then click the “Print Adjust" button to save. Print a two-way calibration chart to confirm whether the step is at the zero position.



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