

# DTG ProII

Clothing digital direct injection printer  
Instruction manual



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Please read this manual before using the product.

Please keep this manual safe so that it can be accessed at any time when necessary.

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## Announcements for using safely




Thanks for choosing NOVI products.

Read the “Announcements for using safely” and instruction manual carefully.

### Safety-related markings and their meanings

This instruction manual and the logos and graphic symbols used in the product can help to use the product safely and correctly and to prevent injury or damage to you and others. The logo and signals are shown below.

#### Logo

 <b>Danger</b>	If the sign is ignored or used incorrectly, it can result in death or serious injury.
 <b>Warning</b>	If the sign is ignored or used incorrectly, it can result in death or serious injury.
 <b>Notice</b>	If the sign is ignored or used incorrectly, it can result in minor injury or moderate damage.
<b>((!))Important facts</b>	If the sign is ignored or used incorrectly, it can result in property loss.
<b>((!))Prompt</b>	Precautions and restrictions when using the machine.

#### Graphic symbols



. . . . .



The symbol means “Precautions to be taken”

The symbol in the graphic indicates what to watch out for. (The example on the left indicates that Be aware of injury.)



. . . . .



The symbol means “Prohibitions”.





. . . . .



The symbol means “Necessity”.

The symbol in the graphic indicates the indicated content. (The example on the left indicates grounding.)

### Safety announcements

 <b>Danger</b>	
	Touching high voltage areas can cause serious injury. Turn off the power and wait 5 minutes before removing the cover.

## **Warning**

### **Basic matters**



In order to prevent accidents and malfunction, do not modify the machine. We are not responsible for accidents or malfunctions caused by modifications.

Do not touch the power plug with wet hands. Otherwise it will result in electric shock.

### **Installation**



Do not place in a dusty place. If dust accumulates inside the machine, it may cause fire, electric shock or malfunction.



Please make it grounding. Incomplete grounding may result in electric shock and malfunction.



When securing the cord, do not bend the cord or squeeze it with a U-shaped nail forcefully. Otherwise it will lead to fire or electric shock.

### **Print**



Switch off the power supply and unplug it immediately when there is a foreign object enters the machine. Please contact the dealership or the professional technician. If you use it continuously, it will result in fire, electric shock or malfunction.



Do not allow the machine come into contact with liquid. Or It will lead to fire, electric shock and malfunction.



Switch off the power supply and unplug it immediately when there is liquid enters the machine. Please contact the dealership or the professional technician.



Do not use it when it is in an abnormal state such as smoking or having an peculiar smell. Otherwise it will cause fire, electric shock or malfunction. Please switch off the power supply and unplug it. Please contact the dealership or the professional technician.



Keep your fingers or body away from the rotating fan. Otherwise you may become involved and cause injury. Turn off the power before approaching.

## Notice

### Environment



Please use it in a well-ventilated area. A slight odor will be produced when printing material by thermal fixing.

### Install



A trained technician should set up or remove the machine.



The weight is 150 KG. Hold the machine in a correct manner when handling or setting it up. Otherwise it may result in injury if it is dropped.



When this machine is dropped, unplug it and contact the dealership where you purchased it or a trained technician. If you use it continuously, it will lead to fire, electric shock or degradation of printing quality.



Do not place it in a location subject to other mechanical vibrations. It may result in degradation of print quality or dropping of the machine, injury to persons, or malfunction of the machine.



Do not connect the power plug until setup is completed. If the power is connected by mistake, it may result in injury.



Do not sit on the machine or place heavy objects on the machine. Otherwise, you may lose your balance and fall and get injured.



**CAUTION** Do not touch the claws on the upper side mounting area of the back cover. Otherwise it may result in injury.

### Print



Use this machine only by personnel trained in safe operation.



Make sure there is enough space in front of the machine and do not place objects. Otherwise the hand may be pinched between the platen and the object, which may result in injury.



During work, hands should be kept away from the trolley and pinching between the powdering rotating shaft and each hood cover, which may result in injury.



Do not put your hand inside each cover during power-on. Do not touch the movable parts as this may cause injury.



If there is a malfunction of this machine, contact the dealership where you purchased the machine or a trained technician.

## Notice

### Maintenance



Be careful not to pinch your fingers when closing the front hood cover. If fingers are pinched, it may get injured.



Do not pinch your hand or fingers when installing or replacing the print head. Failure to do so may result in injury.



If the ink comes into contact with the eyes or skin, it may cause inflammation. Do not rub if it gets inside the eyes and flush with water immediately.



Do not drink fluids such as inks, fillers, cleaning fluids, pre-treatment agents, waste fluids, and so on. Otherwise, it may cause diarrhea and vomiting.



Also, avoid eye and skin contact with liquids such as inks, fillers, cleaning fluids, pretreatment agents, and waste liquids. Otherwise, it may cause inflammation. Do not rub if it gets into the eyes and flush with water immediately.



Please keep it out of reach of the children. When applying grease, please wear goggles and protective gloves to avoid eye or skin contact with the grease. Otherwise, it may cause inflammation. Do not drink grease, or it may cause diarrhea and vomiting. Please keep it out of reach of the children.



When replacing or installing spare parts, please use our original parts. We are not responsible for accidents or malfunctions caused by the use of non-original parts. Please replace and install the spare parts according to the instruction. If you operate with wrong procedures, you may become injured or malfunction.

## ((!)) Important facts

### Print



Do not move the platen by hand. Or it may result in serious malfunction of the machine.



Make sure there is enough space in front of the machine and do not place objects. Or it may cause the platen to be struck and broken.

## ((!)) Prompt



Use in an environment that is not affected by strong electrical noise such as power line noise or static noise. Strong electrical noise may cause the incorrect operation.



Use this machine in an environment where the power supply voltage fluctuates within  $\pm 10\%$  of the rated voltage. Excessive voltage fluctuations may cause the machine to malfunction.



Use this machine in an environment where the power supply capacity is greater than the power consumption of the machine. Insufficient power supply capacity may cause the machine to malfunction.



When thunder strikes, cut off the power and unplug the power supply. Otherwise it may cause the machine to malfunction.

The following warning label is displayed in the printer.

Please operate according to the warning label.

Also, if the label comes off or is illegible, contact the dealer from whom you purchased the machine.

1. 

喷头颜色示意图  
PRINT HEAD COLOR GUIDE

黑色 BLACK	青色 CYAN	红色 MAGENTA	白色 WHITE	黄色 YELLOW	白色 WHITE
-------------	------------	---------------	-------------	--------------	-------------
2. 
3. 
  - 打印过程中请勿在打印面板上放置杂物以及避免刮蹭到喷头！
  - Do not put the debris on printing plate during printing, to avoid damaging the printhead.
4. 
  - 横梁禁止抬压受力！
  - Do NOT Lift Up Or Press The Carriage Beam.
5. 
  - 打印前请拉开闪喷槽！
  - open the flash spray tank before printing
6. 
7. 
8. 
9. 
10. 
11. 

## 1. Before use

1

- 1-1. Required reading..... 1-4
- 1-2. Accompanying part..... 5
- 1-3. Other items should be prepared.....6

## 2. Name and function of each part

7

- 2-1. The right side.....7
- 2-2. Reverse side ..... 8
- 2-3. Front cover cover inside..... 9-12
- 2-4. Operation panel..... 13
- 2-5. Liquid crystal panel..... 14
- 2-6. Board definition..... 15-17

## 3. Menu list

18

- 3-1. The display page demonstrates the steps..... 19-25

## 4. Setup and preparation

26

- 4-1. Set up the printer..... 27
- 4-2. Printer power supply..... 28
  - 4-2-1. Power on.....28
  - 4-2-2. Cut off the power.....29
  - 4-2-3. Power failure and other short time can not be restored..... 29
- 4-3. Connect the printer and PC.....30
  - 4-3-1. Install the printer driver..... 30-34
  - 4-3-2. DTG ProII drive calibration screen analysis..... 35-48
  - 4-3-3. DevstudioRip8 Installation and use of RIP software..... 48-62
  - 4-3-4. Installation and use of the new DTG ProII machine..... 63-68

## 5. Basic printing

69

- 5-1. Basic printing process.....70
- 5-2. Work to do before you start printing..... 71-79

## 6. To ensure print quality/extend product life

80

- 6-1. Periodic execution.....81
  - 6-1-1. Add ink.....81
  - 6-1-2. Clean nozzle guard..... 82
  - 6-1-3. Replace the cleaning scraper..... 83

6-1-4.	Sweep suction cap.....	84
6-1-5.	Replace the cleaning blade.....	85
6-2.	Execute when needed.....	86
6-2-1.	Print nozzle check pattern (confirm print head).....	86
6-2-2.	Print head cleaning.....	87
6-2-3.	Clean the wagon board.....	88-89
6-3.	When not used for a long time.....	90
6-3-1.	If not used for a long time: within 2 weeks.....	90
6-3-2.	When not used for a long time: more than 2 weeks.....	90



# 1 Before use

## 1-1. Required reading

Before using the printer, please note the following points.

### Precautions for use

- The machine cannot be used by children or people with disabilities, please use it under supervision if necessary.
- Follow the instructions to use the original manufacturer's accessories and ink.
- Make sure the power supply voltage matches the power cord and machine nameplate voltage.
- For indoor use only, it is recommended to set up an air conditioner and humidifier in the room to obtain a stable working temperature and humidity.
- Before using the machine, remove the wooden case and foot-cup fixtures used for transportation and place the machine smoothly on a stable table.
- Do not use the machine in harsh environments such as flame, dust, moisture, etc.
- Never use the machine in a damp and leaky house.
- Do not place debris on the machine and platform, as well as around the machine.
- Temperature 20-28°C, humidity 40%-60%; Pay attention: If the temperature is lower than 15°C or higher than 28°C, the ink fluency will be insufficient and the ink will be easy to precipitate; When the humidity is lower than 40%, it is easy to produce static electricity and other interference, resulting in poor printing results, and when the humidity is higher than 60%, the moisture in the air is larger, which is easy to cause the printing adhesion to decrease.
- Do not use any damaged cables for power supply.
- If the power supply cable is damaged, stop using this machine.
- Please turn off the power supply before cleaning or repairing.
- Please use the machine in accordance with local laws and policies.
- Before sending the job, make sure that the printhead does not touch any objects and that the print height is appropriate.
- It needs at least 4 people to lift the machine, please do not move with other machine parts, pay attention to pull out the power supply plug and prevent ink from spilling the cartridge.
- When adding ink, parts such as ink tubes, ink bottles, and cap tops may come into contact with the ink, so please take precautions.
- The machine table must have a flat bottom surface and ensure that it can bear load, and it can not swing when working.
- Ground wire requirements: In order to prevent electrostatic interference, in the absence of industrial special ground wire, it is recommended to connect the ground wire: in the absence of ground wire, it is easy to lead to interference and unpredictable problems.
- Please avoid using this machine during thunderstorms to avoid lightning strikes.
- If your ink is not from NOVI, the machine will no longer be warranted.

## Product parameter

Device mode:	NV-DTG-Pro11
Printhead Model:	EPSON I3200
Number of Printheads:	3
Printing range:	450mm*600mm、406mm*457mm、371mm*421mm、356mm*406mm、254mm*305mm、178mm*203mm
Printing thickness:	0-30mm
Printing Accuracy:	720X1200dpi ( 4pass)
Printing speed:	1 min/graph
Printing method:	White, color
Print Orientation:	One-way: Bi-directional
Printing Software:	DevstudioRip8
Scope of Operational Guarantee:	Temperature: 10-30℃ Humidity: 35-65% (no condensation)
Print Guarantee Coverage:	Temperature: 18-30℃ Humidity: 45-65% (no condensation)
Display Resolution:	Not less than XGA(1024X768)
Ink Type:	Eco-friendly textile coatings, green water
Equipment Dimensions:	1900mm*1350mm*870mm (Length, width and height)
Equipment weight:	252kg

## (EPSON) I3200 Printhead parameters

- size: 69.11x59.46x35.598mm
- Weight: 82.2g
- Printing width: 34mm
- Number of nozzle rows: 4 colors x 2 columns = 8 columns
- Maximum number of colors supported: 4 colors (4 ink inlets)
- Number of effective nozzles: 3200
- Resolution: 300dpi for a single row
- Drive mode: thin film piezoelectric
- Spray direction: downward
- Minimum droplet: 3.8PL
- Applicable temperature: A1 (15-40° C)
- RH Humidity: 20%~80% RH
- Adaptation ink: water-based ink

## Maintenance

- Please maintain the printer regularly in order to confirm the printing quality/ prolong the life of products
- In order to maintain the original performance of the printer for a long period of time, it is recommended to use the original cleaning fluid specified by our company when cleaning around the print head, cap, and scraper. If commercial alcohol and cleaning fluid are used, it may cause the printhead to malfunction.
- The print head is a precision part, so do not remove it except for replacement. Otherwise it may cause the printhead to malfunction.

## When not in use

- If you do not use the printer for a long time, please pump the ink in the ink cartridge, wash the ink tube and ink sac with pure water, and seal it with plastic wrap after the nozzle is removed and cleaned.

## Disposal of waste

- Regarding left waste and waste ink, please dispose of them appropriately as aqueous waste liquid in accordance with the law. If you have any doubt, please consult the store where you purchased the product before disposing of it.

## Else

- When the printer is moved due to a change in layout. Please adjust the level by touching the top of the cover or the top of the platen so that the printer is level

## Software

### Software

You need to agree to the Software License Agreement before using this machine.

#### Software License Agreement

The Customer agrees to use the Software by complying with the terms and conditions set forth in the Software License Agreement. If the customer does not agree, the software cannot be used.

##### 1. Ownership

The rights relating to the Software and its reproductions belong to Novi Printing Equipment Co.Ltd. or the supplier. The Company does not transfer the copyrights relating to the Software to the Customer by this Agreement.

##### 2. Licensing of the implementation rights

2.1 The Company grants the Customer a non-exclusive right to use the Software.

2.2 Customers may not engage in the following behaviors.(1)Change all or part of the Software (2)Reverse engineering, decompiling, disassembling (3) Rent or lease the Software (4) Place this software in a downloadable state in a public place.

##### 3. No warranty

The Company makes no express or implied warranty to the Software, including warranties of defects, fitness for a particular purpose, whether use of the Software infringes the rights of third parties, and any other warranties.

##### 4. The restriction of responsibility

The Company shall not be liable for any direct or indirect damages arising out of or in connection with the Software.

##### 5. Termination of license

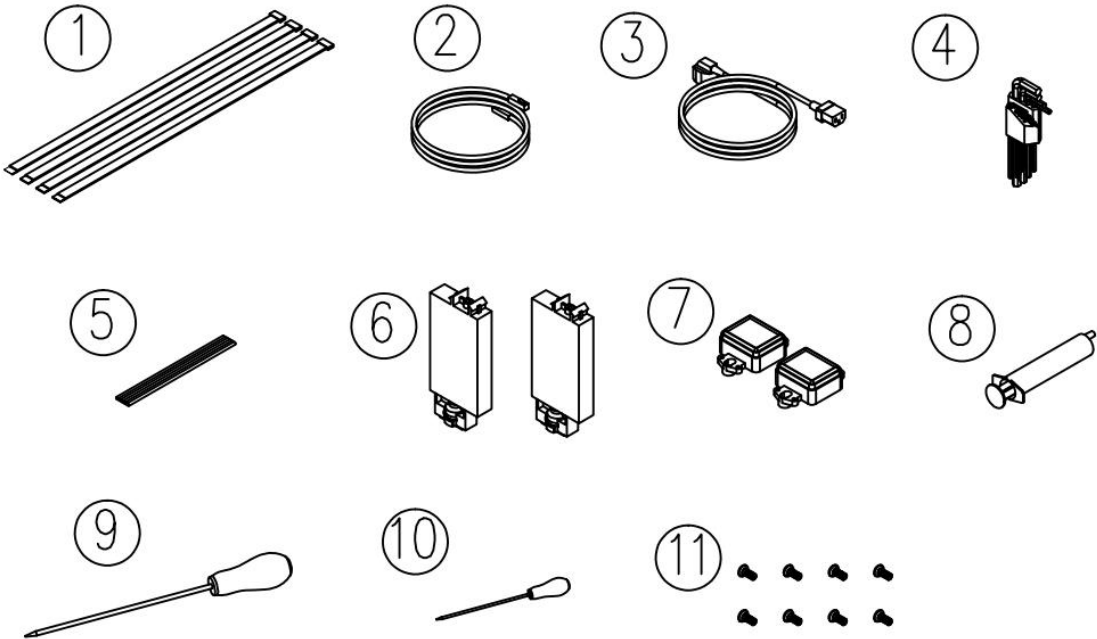
The Company may terminate this Agreement without prior notice if the Customer violates the conditions set forth herein.

##### 6. Governing law

This Agreement shall be governed by and construed in accordance with the laws of China.

1-2. Accessory parts

The attached parts are shown below. If parts are missing, consult the dealership where you purchased the machine.



X0126

No.	Name	Number	No.	Name	Number
1	Head cable	4	7	Cap top	1
2	Six cable	1			
3	Power cord	1	8	Syringe	1
4	Hexagonal wrench	1	9	Phillips screwdriver (large)	1
5	Ink tube	1	10	Phillips screwdriver (small)	1
6	Damper	2	11	Screw	Many

## 1-3. Other items to be prepared

### Items purchased from our dealerships

#### 【Reference】

- Ink
- Damper
- Cleaning fluid
- Pre-treatment fluid

### Else

- Ultra 6 Categories Gigabit Ethernet Cable

#### 【Note】

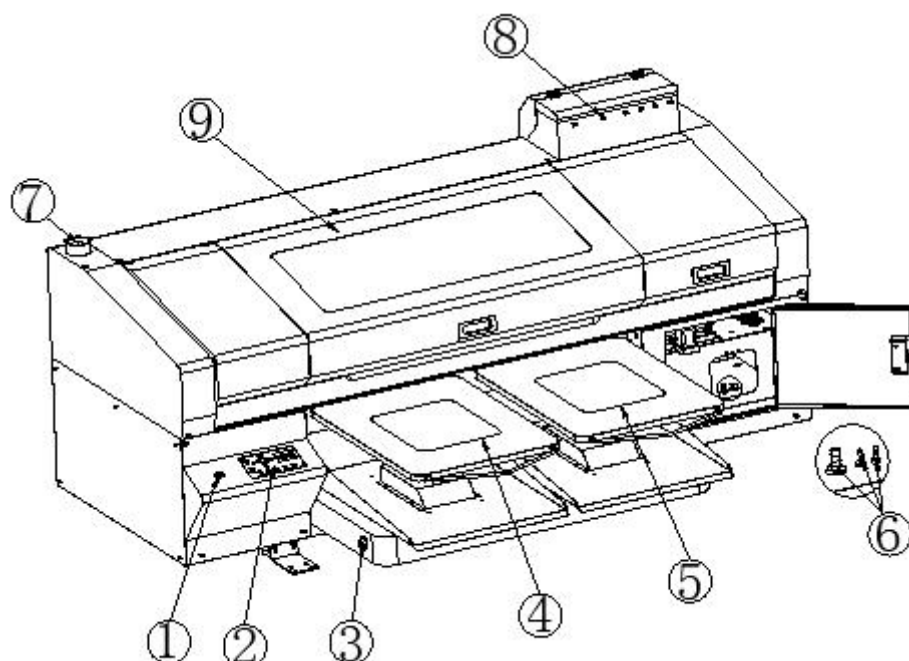
- If a cable other than the above is used, abnormal operation may appear. Do not use an extension cable.
- Press machine  
It needs to be able to cover the printing range using the platen size and be able to maintain performance at 150 ° C for more than 35 seconds.
- Peeling plate  
When fixing hot melt powder with a press machine, it is necessary to use a peeling plate in order to flatten the fixing surface and improve the peelability.
- Silicon Foam (Silicon Continuous Bubble Construction)  
Heat-resistant bubble pad. Use it when fixing with a pressurized iron.
- Rubber roller  
Used to remove threads or dirt on the surface from T-shirts.
- Drying machine  
It is used for drying clothes in the early stage and setting with drying ink in the later stage.
- Watering can/spray gun/spray machine  
Used for spraying pre-treatment liquid, so that the treatment liquid can be evenly distributed in the fabric
- doctor-bar  
You can scrape the treatment liquid sprayed on the fabric.

#### 【Reference】

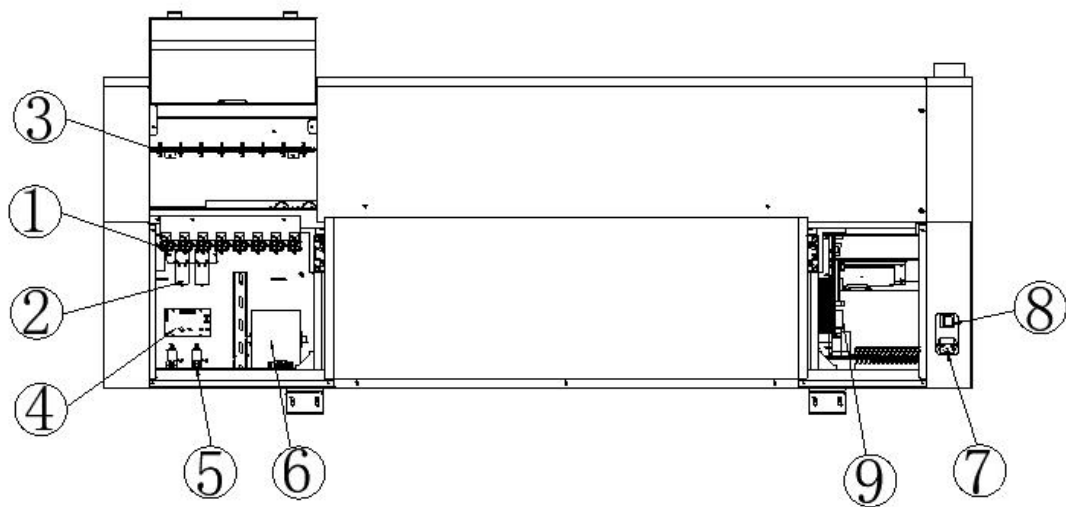
- For some fabrics, the fastness and effect of the hot stamping film after fixing need to be tested before making goods in bulk.
- Please perform a print test beforehand. Otherwise, the following phenomena may occur.
  - Stamping changes the color of the cloth substrate, and even if it is cleaned, the original color may not be restored.
  - The material may be deformed after the stamping film is fixed, so be careful.

## 2 Name and function of each part

### 2-1. Front



No.	Name	Function
1	Start button	printer start switch button
2	Operation panel	printer operation button
3	Print confirmation button	press the confirmation button to start printing after sending the print
4	Platen A(left)	T-shirt and other clothing that need to be printed are placed on the board 1
5	Platen B(right)	T-shirt and other clothing that need to be printed are placed on the plate 2
6	Connector	Waste ink removal interface
7	Emergency stop button	to be used in case of emergency
8	Ink indicator	ink level alarm prompt
9	Flip cover	Use in the case of machine maintenance, you need to confirm whether it is safe before opening

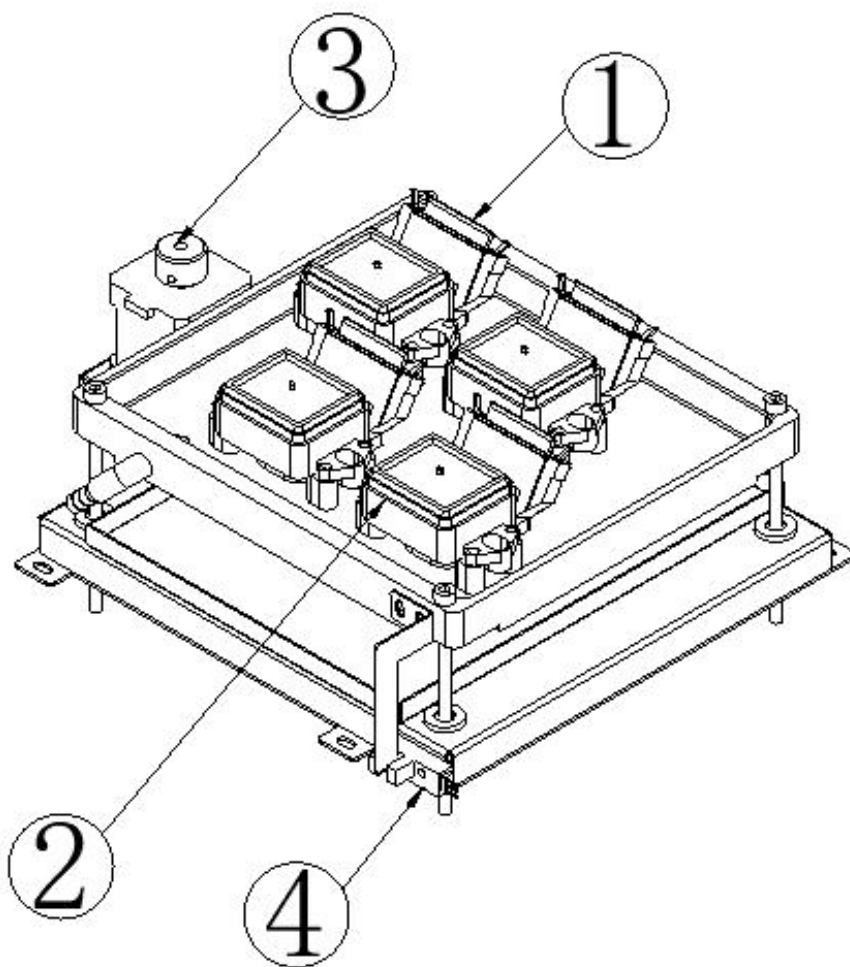


No.	Name	Function
1	Solenoid valve	ink supply solenoid valve
2	Suction Pump	Positive and Negative Pressure Control Pump
3	Filter	a filter that filters the ink
4	Positive and negative pressure control board	positive and negative pressure adjustment
5	Three-way solenoid valve	positive and negative pressure control valve
6	Negative pressure storage tank	a container for storing negative pressure
7	220V power connector	main power supply
8	Switch on and off	power switch
9	Printhead mainboard	control machine data processing and other functions



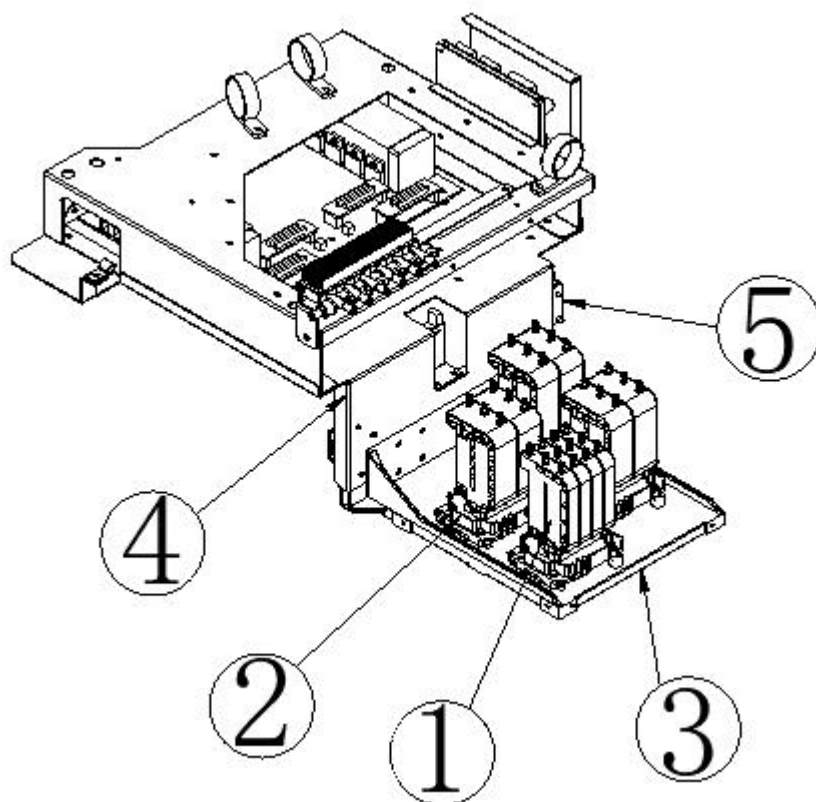
## 2-3. Inside of front cover (ink stack, trolley, bench)

(Ink stack example diagram)

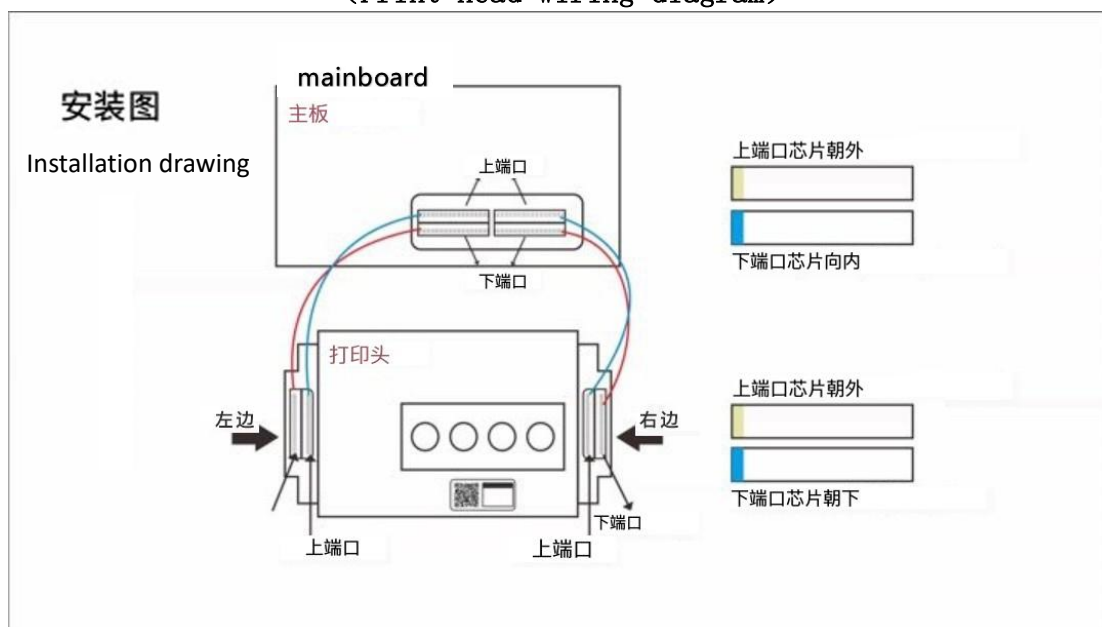


No.	Name	Function
1	Wiper	Clean the ink residue on the surface of the printhead, in order to prolong the service life of the printhead, please clean it regularly
2	Cap top	Print head ink extraction, moisturizing maintenance in order to prolong the service life of the print head, please clean it regularly
3	Ink station motor	control the lifting of the ink station system
4	Ink station sensor	ink station position controller

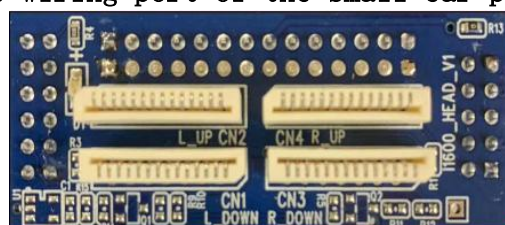
(Car sample drawing)



(Print head wiring diagram)



(The wiring port of the small car plate)

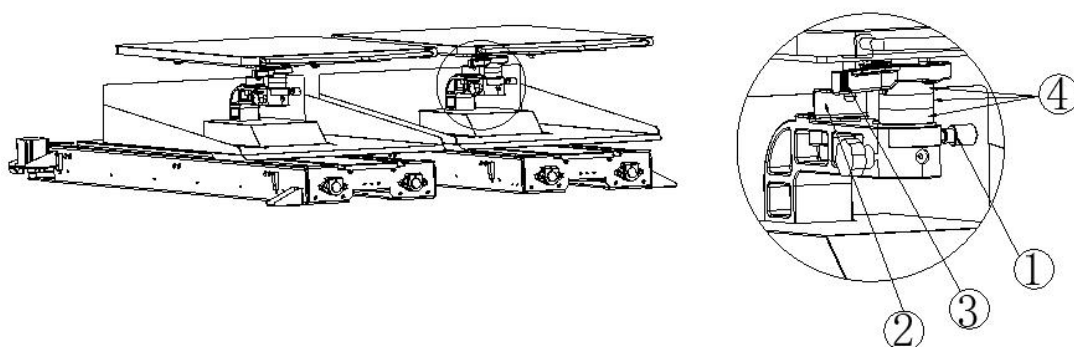


(Figure 6: Magnetic sensor (green chip) and magnetic sensor assembly line)



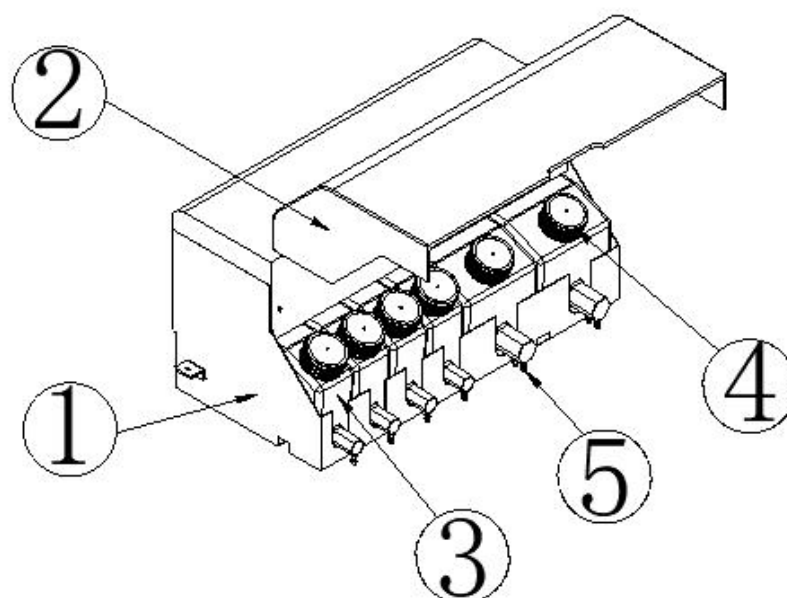
No.	Name	Function
1	Secondary cartridge	Ink supply system
2	Print head	Advanced ink nozzles, in order to ensure print quality, please maintain the print head regularly
3	Car bottom plate	Fixed print head position
4	Sheet metal for the nozzle plate	Used to fix the bottom plate of the car
5	Car sensor	Car position controller
Figure 6	Magnetic sensor	Induction ink level

(Table sample drawing)



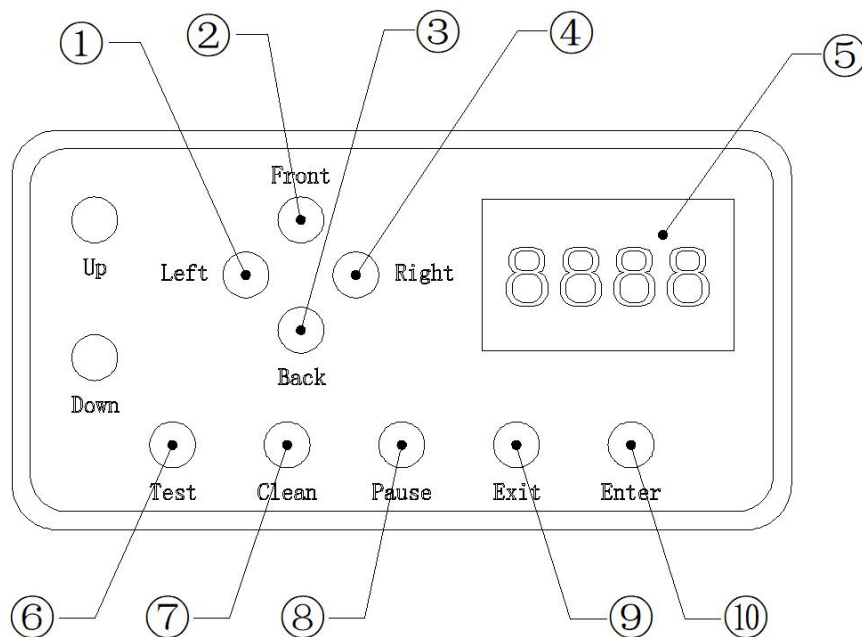
No.	Name	Function
1	Pressing plate fixing rod	fix the pressing plate, when installing/disassembling the pressing plate, when adjusting the height, please tighten or loosen
2	Pressing plate positioning plate	fix and maintain the direction of pressing plate
3	Pressure plate height adjustment rod	adjust the height of the pressure plate
4	Lifting bushing	change the quantity when the height of the pressure plate is reduced greatly

(Machine cartridge sample drawing)



No.	Name	Function
1	Bottom box	ink bottle placement box
2	Cartridge cover	cartridge cover
3	Ink bottle	the inside contains ink
4	Ink bottle cap	prevent the entry of foreign objects
5	Connector	ink tube joint

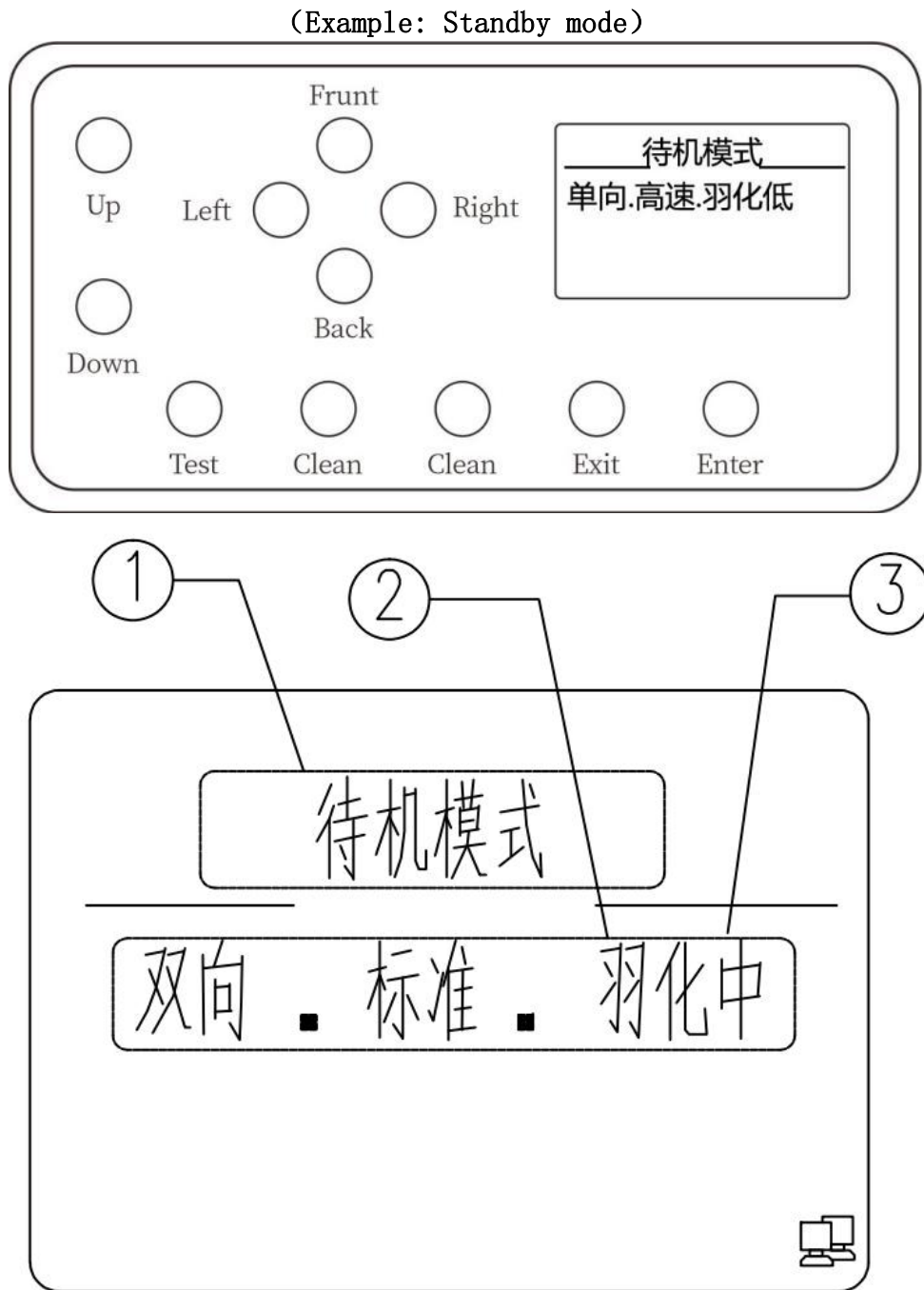
## 2-4. Operation panel



No.	Name	Function
1	Left	The cart moves to the left
2	Front	The platen moves back
3	Back	The platen moves front
4	Right	Shortcut key of machine maintenance/ The cart moves to the right
5	Display screen	display the printing state
6	Test	Test the nozzle
7	Clean	Clean the nozzle
8	Pause	Pause/Stop
9	Exit	Exit/Return
10	Enter	Menu/Enter

## 2-5. LCD panel

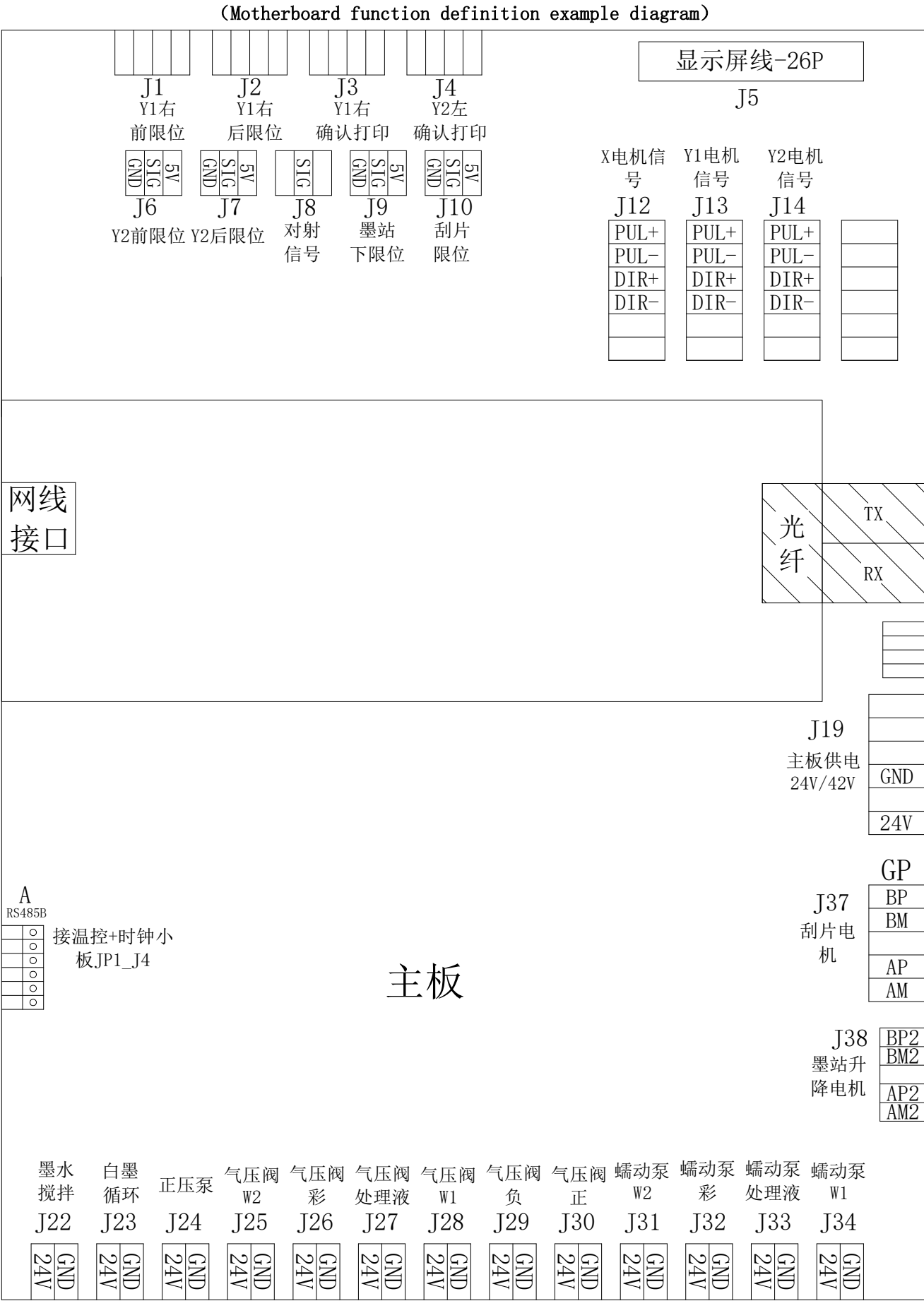
The following figure shows the state of the printer after receiving the print data. Displays the condition of the printer and the information required for printing.



X0037

No.	Name	Function
1	Standby mode	The device is running properly after startup
2	Standard	Display print speed set to standard
3	Feathers in progress	Show print Settings feathering
6	bidirectional	The printing direction is bidirectional

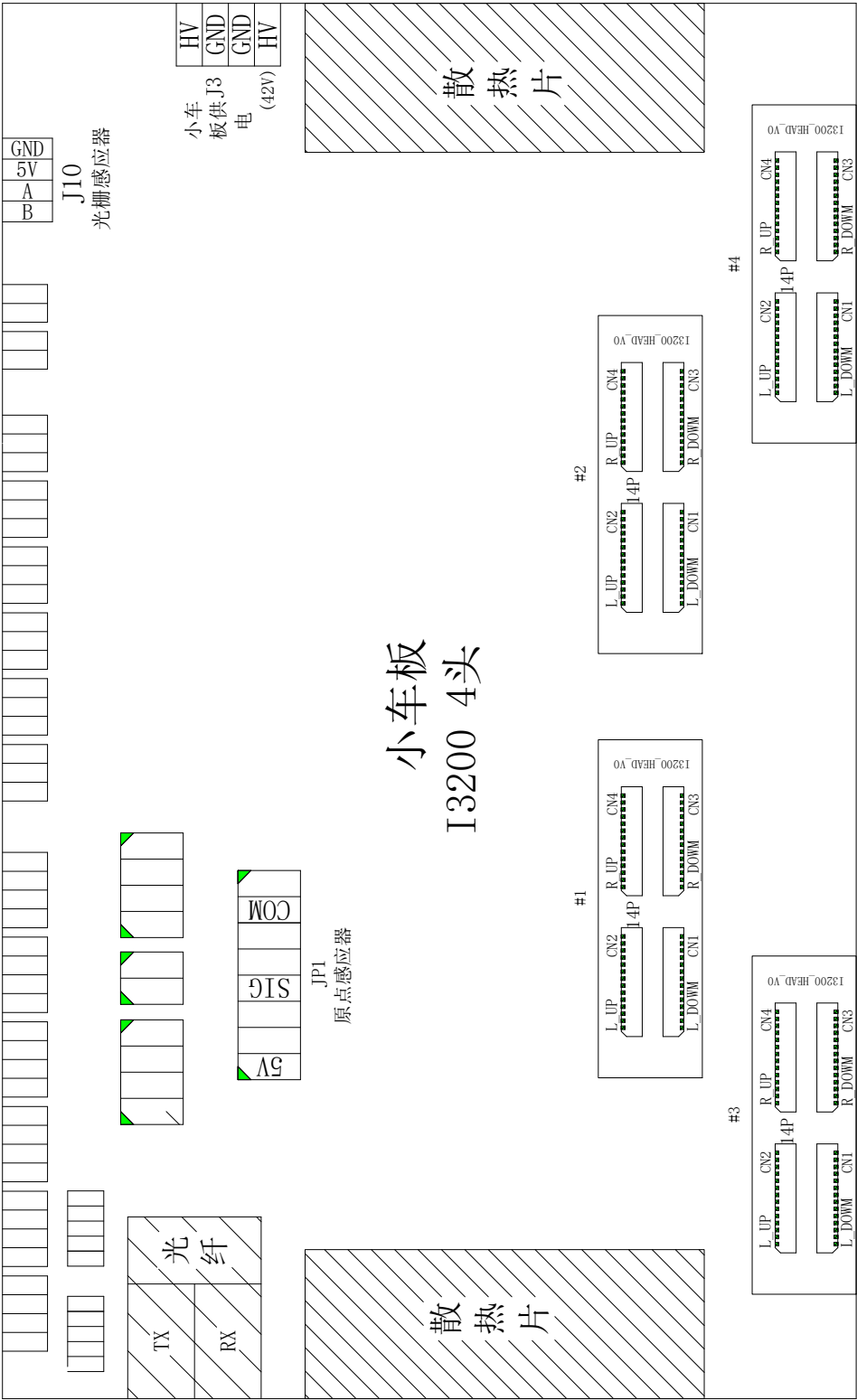
2-6. Board definition



No.	Name	Function
1	J1	Y1 right front limit (right plate)
2	J2	Y1 right rear limit (right plate)
3	J3	Y1 Right Confirm to Print (Right Plate Print Confirmation Button)
4	J4	Y2 Left Confirmation Print (Left Plate Print Confirmation Button)
5	J5	Display cable
6	J6	Y2 left front limit (left plate)
7	J7	Y2 left rear limit (left plate)
8	J8	Through-beam signal
9	J9	The lower limit of the ink station
10	J10	Wiper limit (this function has been removed for new boards)
11	J11	None
12	J12	X motor signal
13	J13	Y1 motor signal
14	J14	Y2 motor signal
15	J15	None
16	J16	None
17	J17	None
18	J18	None
19	J19	Mainboard power supply
20	J20	None
21	J21	None
22	J22	Ink stirring
23	J23	White ink circulation
24	J24	Positive pressure pump
25	J25	Pneumatic valve W2
26	J26	Pneumatic valve color
27	J27	Pneumatic valve treatment fluid (this function has been removed)
28	J28	Pneumatic valve W1
29	J29	Pneumatic valve negative
30	J30	Pneumatic valve positive
31	J31	Peristaltic pump W2
32	J32	Peristaltic pump color
33	J33	Peristaltic pump treatment fluid (this function has been removed)
34	J34	Peristaltic pump W1



(Sample drawing of small car plate/sprinkler plate/spray plate)



No.	Name	Function
1	JP1	JP1 origin sensor
2	J3	J3 trolley board power supply
3	J10	encoder sensor
4	Optical fiber (TX/RX)	
5	#1	White printhead W1
6	#2	None
7	#3	Color printhead KCMY
8	#4	White printhead W2

### 3 Menu

#### Operation of the display menu

Operation	Operation method
Enter	Click Enter under standby condition, change into the choice figure of function menu
Choose/Enter	pass ▲ _ ▼ , Toggle the displayed menu 。 press ► , Switch to the next menu。 Click Enter, Confirm the menu which is displaying
Reset level	Click Exit, return to the last menu display.
End	Click Exit after displaying the last menu, the menu ends and returns to standby.

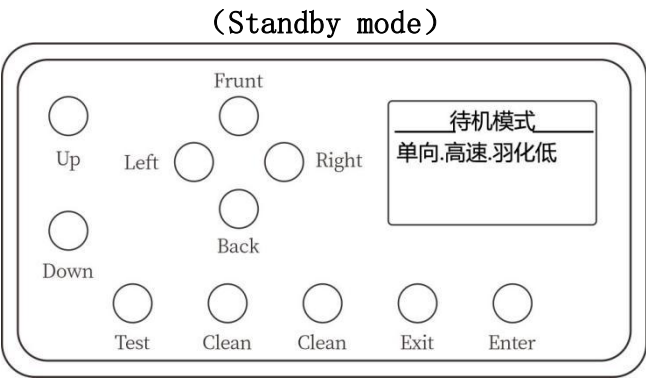
#### Menu list:

Setup menu	
Liquid crystal contrast	Adjust liquid crystal contrast
Standby automatic maintenance	Standby state Adjust the waiting time and the number of times the device flashes
Device address	Device network address (Engineer Mode)
Ink stack setting	Adjust ink stack, scraper, flash and other position modules (Engineer mode)
Flash setting	Interval Pass number to achieve flash spray function (frequency number)
Equipment maintenance	
Nozzle test	Print nozzle detection
Automatic cleaning	General printhead cleaning mode, select the cleaning type as needed
Manual inking	Ink-type cleaning, (used when the new machine is installed) is not recommended for daily use, and the ink loss is great
shaving	The blade separately removes ink from the nozzle surface
Ink flushing	Flash spray (used when nozzle detects mixed ink, may improve)
head	Nozzle head

Auxiliary function	
Ink stirring	ON Stirring time Off waiting time LV stirring force (adjusted on demand)
Carrier origin	Adjust the printing starting point of the X-axis Y-axis mechanical part
Suction setting	Suction air during printing (excess ink flies out during printing to improve the cleanliness of the equipment printing space)
Temperature and humidity	Ambient temperature and humidity status
Ink stack counterpoint	Adjust the auxiliary function of nozzle and ink pad alignment
White ink cycle	ON Cycle time Off waiting time LV stirring force (adjust as needed)
Ink pumping system	Ink Pumping Cleaning System (Engineer)
factory data reset	
factory data reset	Return to program initial state (for engineer use)
Device information	
Device information	Parameter comparison table
Language	
Language	Switch language



The display page demonstrates the steps



MENU

1、 Setup Menu

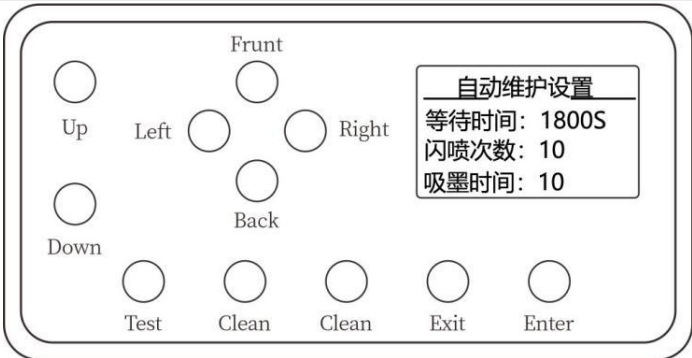
1.1、 LCD Contrast

1.2、 Auto Clean

Function: Flash spray maintenance when the nozzle is on standby for a long time

【legend】

•



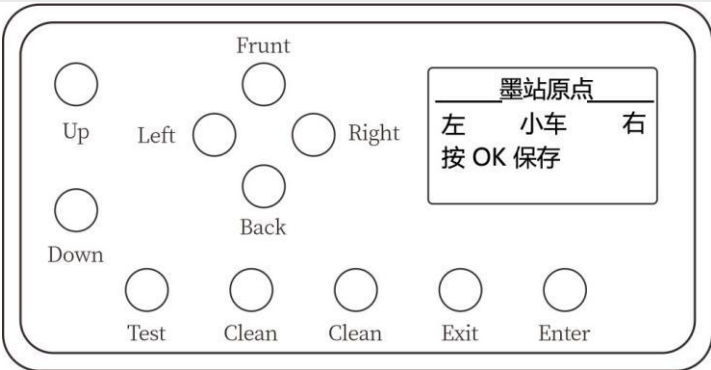
1.3、 Device Address

1.4、 Station Setup

1.4.1、 Ink station origin (function: head position of the print car reset)

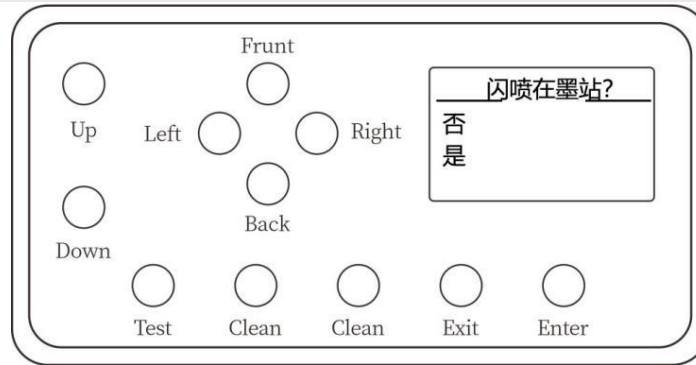
【legend】

•



1.4.2、Maintain the flash spray position (function: when standby, the position of the flash spray of the printhead is usually set above the cap top)

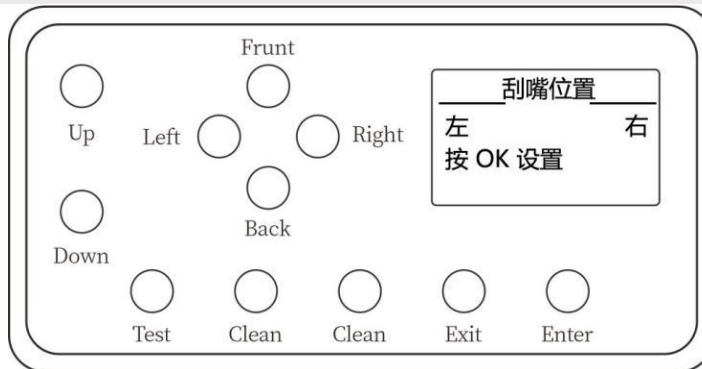
【legend】



1.4.3、Scraper position (function: used to align the position of the rubber wiper and nozzle to achieve the best cleaning effect))

Setting: The starting point of the wiper is set to 1; The end point of the wiper is set to 2; The scraping action is from left to right

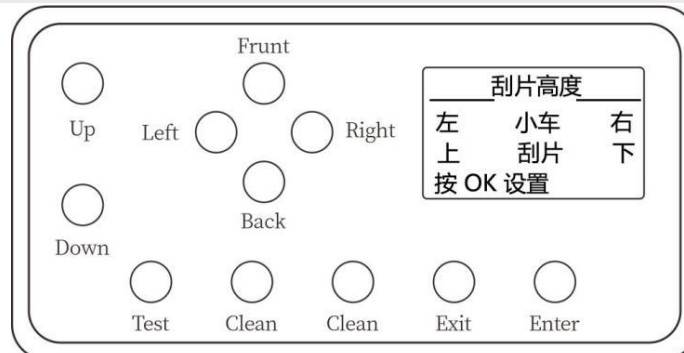
【legend】



1.4.4、Wiper positioning (function: the starting position and end position of the wiper operation, the old version is the motor wiper, the new version is the ink station wiper, and the adjustment method is different)

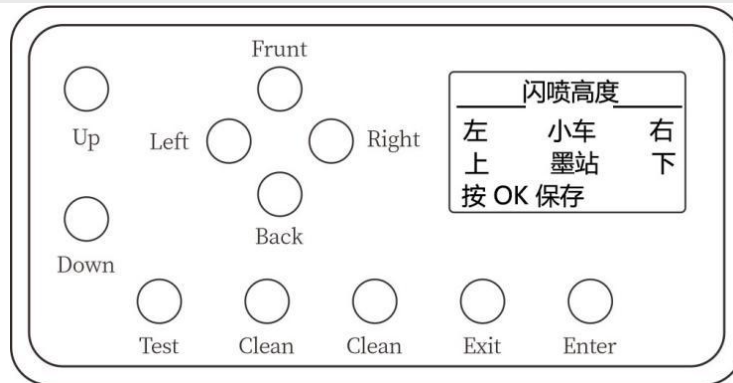
1.4.5、Wiper height (function: make the rubber wiper higher than the nozzle to achieve the cleaning effect, this function is limited to the new version of the ink station wiper)

【legend】



1.4.6、Flash height (Function: the height of the ink station when the nozzle flashes, that is, the distance between the ink pad and the nozzle)

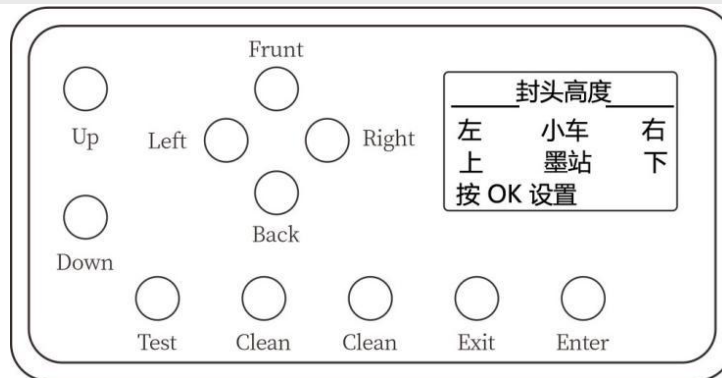
【legend】



1.4.7、Head height (function: when the printing trolley returns to the origin, the ink station rises to make the cap top fit in with the height of the nozzle)

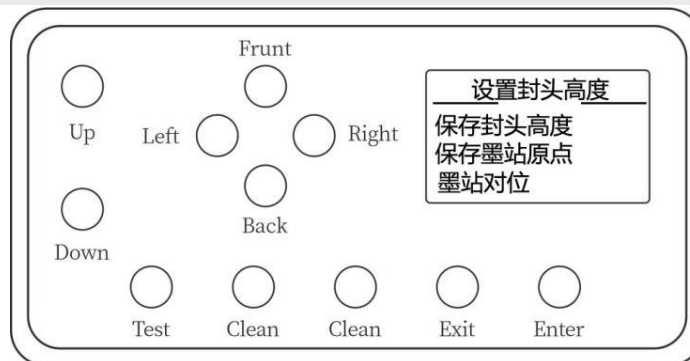
Settings: Left and Right Adjust the position of the trolley, Front and Back to lower the height of the ink station.

【legend】



Press the Enter key to set the head height, and select Save Head Height.

【legend】

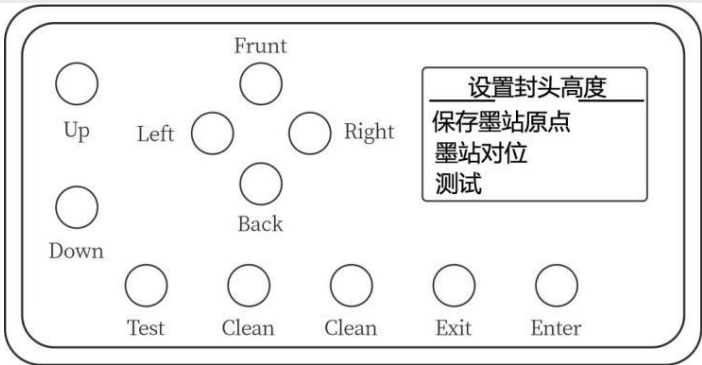




At the bottom can be a test, used to verify the action

【legend】

- 

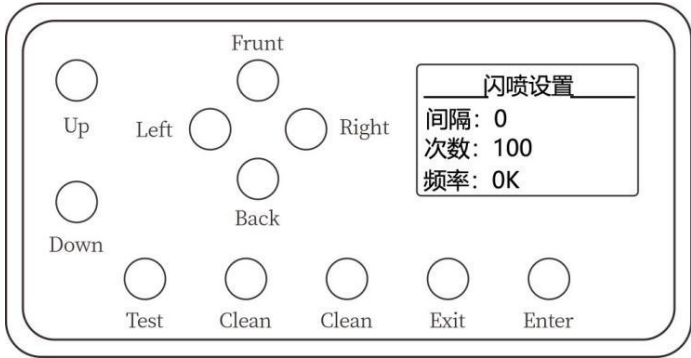


1.5、SPURT Freq

Function: The interval, number and frequency of flash spraying by the printhead

【legend】

- 



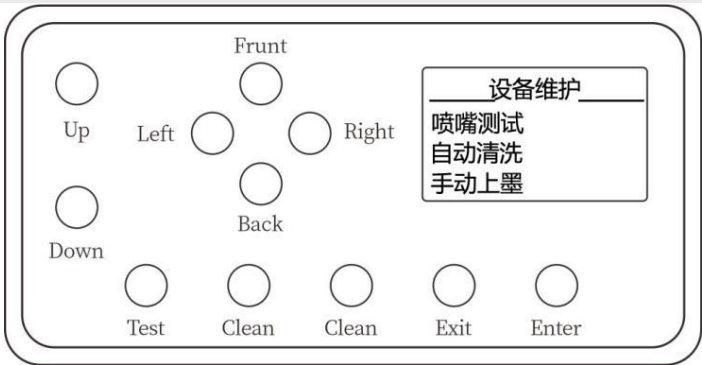
1、Maintenance

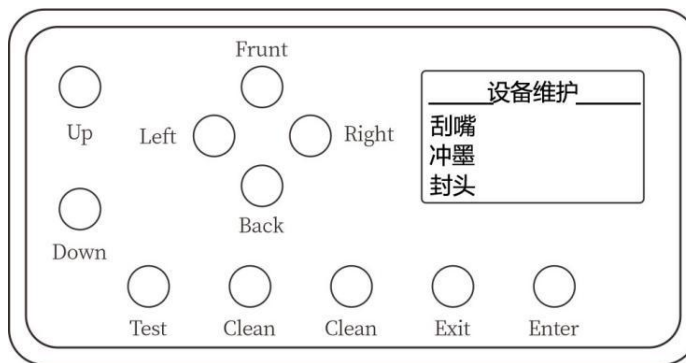
How to enter:

- 1. The Right on the Standby page goes to device maintenance directly
- 2. Settings menu

【legend】

- Next page





No.	Name	Function
1	Nozzle Test	Function: Detect whether the printhead is in good condition or not
2	Clean Nozzle	Function: The ink is pressed out through the negative pressure system, and the rubber wiper scrapes the ink to achieve the function of cleaning the nozzle.
3	Manual Pump	Function: Ink is extracted by means of a peristaltic pump. Ink is used on the nozzle when the new machine is install
4	Wipe Nozzle	Function: Only perform the scraping action of rubber wiper. Use after manual inking.
5	Flush	Function: Spray the ink from the mixing channel through flash spray. Use when mixing test strips.
6	Cap Head	

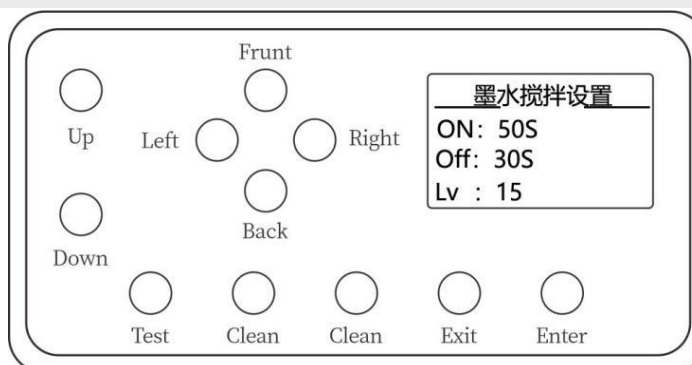
## 2、Auxiliary func

### 3.1、InkAgitate

Function: The motor of the main cartridge is stirred, and the stirring time is set on On, the interval time is set on Off, and the intensity is set on Lv.

#### 【legend】

- 



### 3.2、Start POS

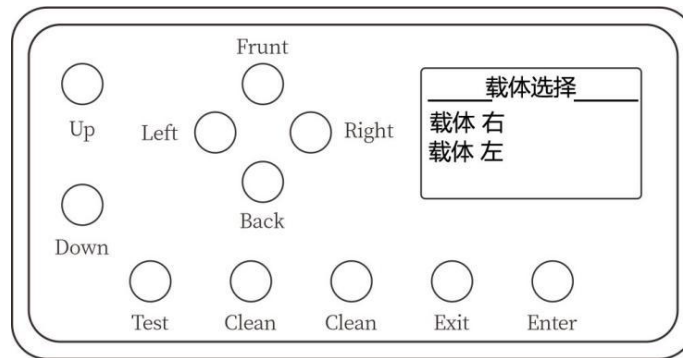
Function: The starting point of the picture, the X-axis (printing trolley) and the Y-axis (platen).

Reference standard: The left and right hands of the face image machine distinguish the left and right of the carrier.

Setting: When replacing other sizes of platens, reduce the proportion to the middle according to the size of the existing platen to get a reference value, and print a small square or rectangular pattern on the new platen after entering and saving, adding or subtracting. Keep trying until you get the correct value.

#### 【legend】

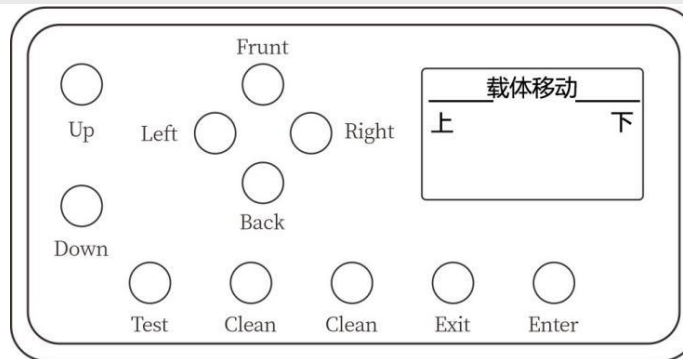
- Next page



Wait for entering the debugging interface.

#### 【legend】

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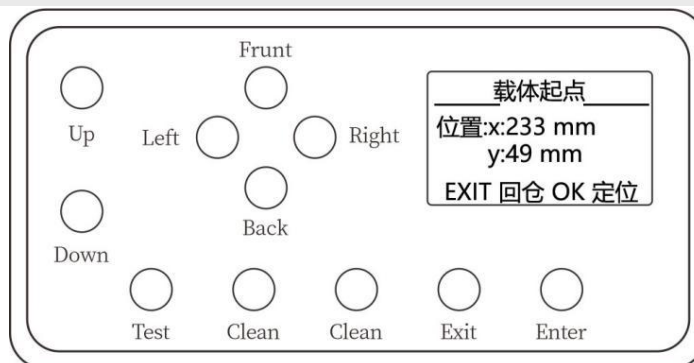


Settings: x is adjusted by Left and Right, and y is adjusted by Front and Back

After the parameter is changed, press the Enter key to save it, and press the Exit key to exit the debugging interface (the parameter will not be saved)

#### 【legend】

•



### 3.3、Test Cap Pos

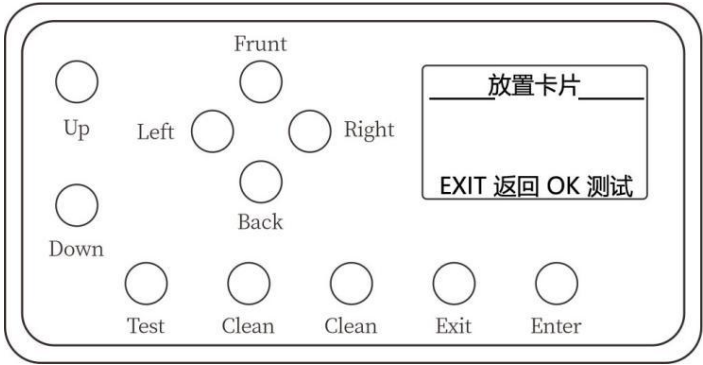
Function: Alignment of the position of the cap top and printhead by flashspraying.

Place a blank card above the cap top, press Test, and observe whether there is a position error between the flashspray test strip and the cap top after the flash spraying is completed. Then adjust the ink pumping manually, loosen the screws around the cap top to adjust.

#### 【legend】

• Next page



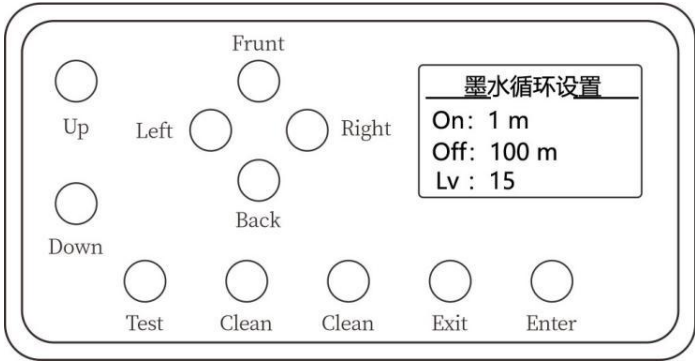


3.4、W Ink Round

Function: On: Cycle time,Off: Interval time,Lv: Circulation intensity.

【legend】

•



3.5、Sys Ink

Please install and use it according to the instructions.

## Warning



Do not place in a dusty place. If dust accumulates inside the machine, it may cause fire, electric shock or malfunction.



Please make it grounding. Incomplete grounding may result in electric shock and malfunction.



When securing the cord, do not bend the cord or squeeze it with a U-shaped nail forcefully. Otherwise it will lead to fire or electric shock.

## Notice



A trained technician should set up or remove the machine.



The weight is 330 KG. Hold the machine in a correct manner when handling or setting it up. Otherwise it may result in injury if it is dropped.



When this machine is dropped, unplug it and contact the dealership where you purchased it or a trained technician. If you use it continuously, it will lead to fire, electric shock or degradation of printing quality.



Do not place it in a unstable location, such as on a wobbly table or on a high shelf. It may result in degradation of print quality or dropping of the machine, injury to persons, or malfunction of the machine. In addition, the load capacity of the table on which the printer is placed should be 330 kg or more.



Do not place it in a location subject to the mechanism vibrations. It may result in degradation of print quality or dropping of the machine, injury to persons, or malfunction of the machine. Do not connect the power supply before the setting is completed. If the power switch is turned on by mistake, operation of the machine may result in injury.



Do not sit on the machine or place heavy objects on the machine. Otherwise, you may lose your balance and fall and get injured.



**CAUTION** Do not touch the claws on the upper side mounting area of the back cover. Otherwise it may result in injury.

## 4-1. Set up the printer

For unpacking operations and installation of accessories, please refer to the installation manual supplied with the machine.

The following points should be considered for the place of printer.

- Avoid direct sunlight and dust.
- 
- Size 2295 MM ×1574 MM ×972 MM(length, width and height). Weight 330 KG.
- 
- Do not use an extension cable.
- 
- Allow 100 centimeters or more of working space at the front, left and right sides of the printer. And 50 centimeters or more at the rear for back cover installation. Leave a space of 50 cm or more in the direction of the roof. In addition, a space of 100 cm or more in front of the exhaust port is required because paper is loaded from the rear.
- 
- The waste liquid pipe is placed under the right side of the table .
- 
- When setting up the printer, place a level on top of the cover or on top of the platen and make adjustments so that the machine is level.
- 
- Secure the table and the printer with fixing straps so that the machine does not fall off the table in the event of a disaster such as a major earthquake.

(Machine placement example diagram)



## 4-2. Power supply of printer

The printer also performs maintenance automatically such as white ink circulation during standby. Keep the printer powered on 24 hours a day.

### 【Reference】

Maintenance work to keep the print head in good condition is performed when the power of the machine is turned on and off.

Maintenance operations will increase ink consumption if the power is turned on and off frequently. It is recommended to keep the power on when using in order to decrease the ink consumption.

### 4-2-1. Switch on the power supply

Please refer to the Installation Manual for information on unpacking and operation after setup.

Please confirm the following steps before connect the cable.

- Whether the damper and printhead is installed correctly or not.
- Whether the ink tube is connected to the printhead correctly or not.
- Whether the waste tube inserted into the prepared waste ink collector properly or not.
- The power supply is 220V(The specific country is 110V)

(1) Connect the supplied power cord to the power cord plug of the machine.

(2) Please plug the power into the socket.

(3) Whether the printer is grounding or not.

(4) Turn on the printer with the body cover closed.

### 【Important facts】

- Do not disconnect the power supply while the printer is operating. Failure to do so may cause the printer to malfunction.
- Do not perform the startup operation without the ink tube connected to the print head properly. Otherwise it may cause the printer to malfunction.
- When the power is turned off for a long period of time, maintenance operations such as white ink circulation are performed for a maximum of about 5 minutes.

## 4-2-2.Switch off the power supply

Depending on how the power button is pressed, the power cutoff method is categorized into normal mode and emergency mode.

- Normal mode

Cut off the power after performing the pre-shutdown head sealing used to keep the print head in good condition.

- Emergency mode

Press the emergency stop button in emergency mode. In emergency mode, without performing the pre-shutdown cleaning used to keep the print head in good condition, turn off the power.

## Cutting off power in normal mode

Cutting off the power in the normal mode includes the following cases.

- When the front cover needs to be opened for maintenance of the printer.
- Remove the printer
- When cutting off the power supply in anticipation of a planned power outage.

(1) Please press the power button

Disconnect the power when the cleaning operation is completed before shutting down the machine.

**【Important】**

- Cut off power in emergency mode and does not perform shutdown moisturizing operations used to keep the print head in good condition.

## Cutting off power in emergency mode

Cut off the power

**【Important】**

- Do not perform shutdown cleaning operations used to keep the print head in good condition. Be sure to restart the printer and perform the print head moisturizing job after startup.

## 4-2-3.When it cannot be restored within a short period of time such as power outages

- (1) Open the front cover cap and move the word carriage to the right, stopping at the position where the right end of the carriage touches. The print head and the cover cap are in the same position.  
By rotating the ink stack lifting motor, the print head and the cap top overlap and seal to prevent the print head from drying out.
- (2) Open the front cover cap and move the word carriage to the right, stopping at the position where the right end of the carriage touches. The print head and the cover cap are in the same position.  
By rotating the ink stack lifting motor, the print head and the cap top overlap and seal to prevent the print head from drying out

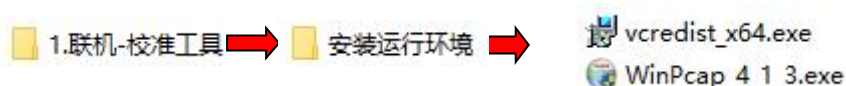
### 4-3.Connect printer and PC

#### 4-3-1.Install the driver software of printer

This chapter explains how to install the DTF-60 plus printer driver and how to connect the printer to the PC. Windows 10 and Windows 11 support the driver. Please confirm the operation of each step at the same time.

#### First step to install the operation environment:

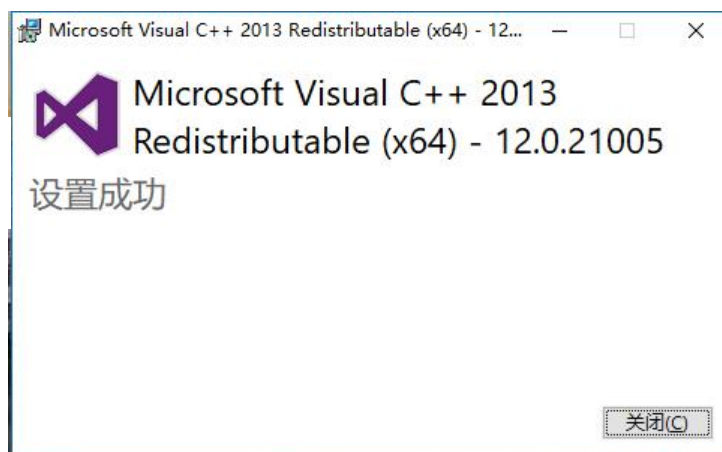
Open vcredist\_x64.exe and WinPcap\_4\_1\_3.exe on your PC




"I agree to the license Terms and Conditions" check and install



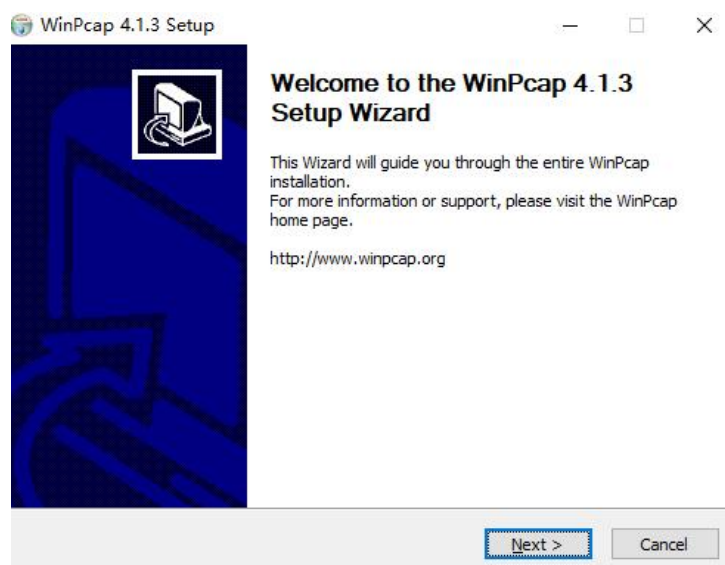
Click Close after installation



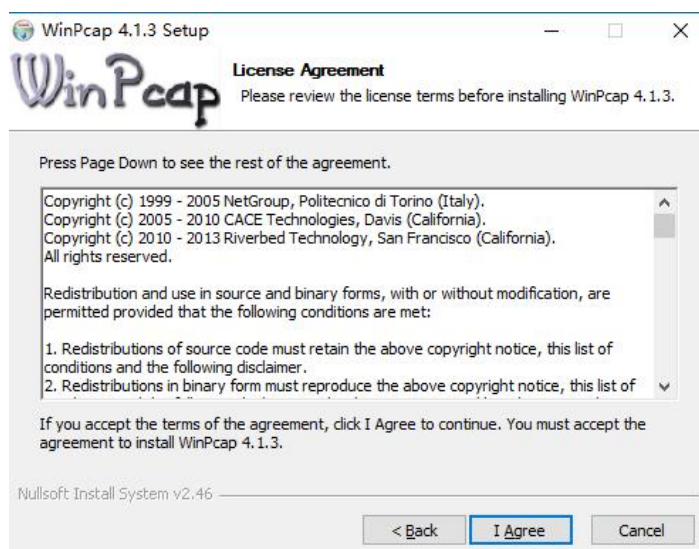
Then find  WinPcap\_4\_1\_3.exe Right-click and run as administrator  
Click OK as shown



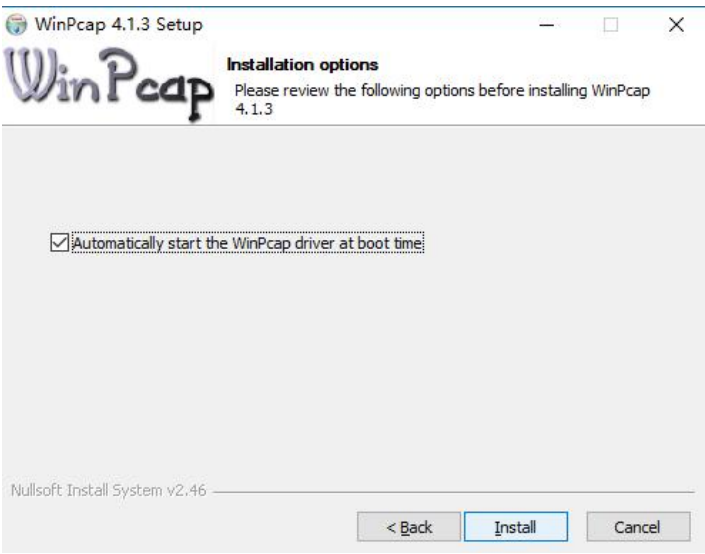
Click Next



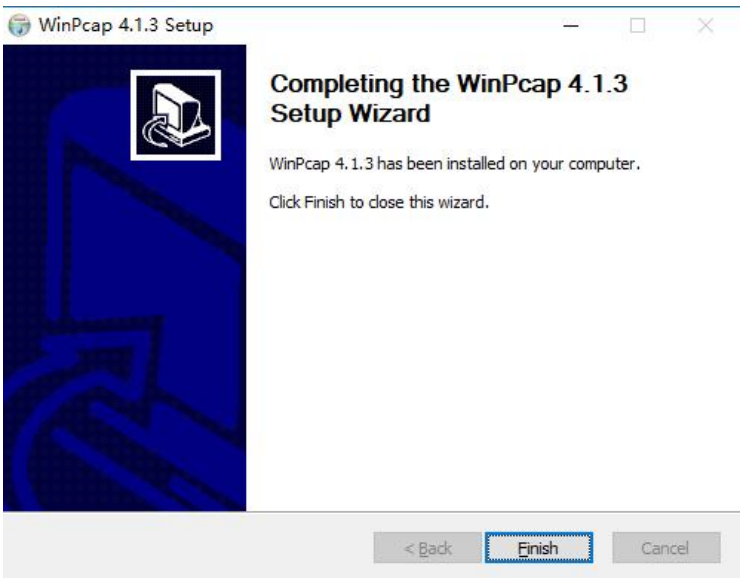
Click on I Agree



Click Install

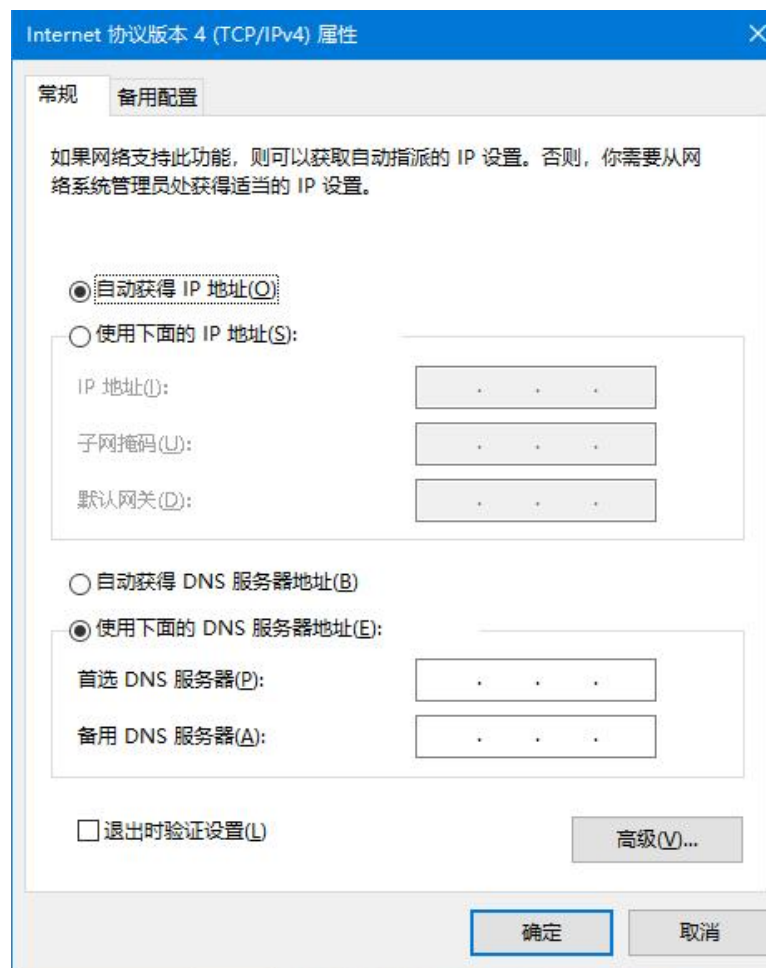
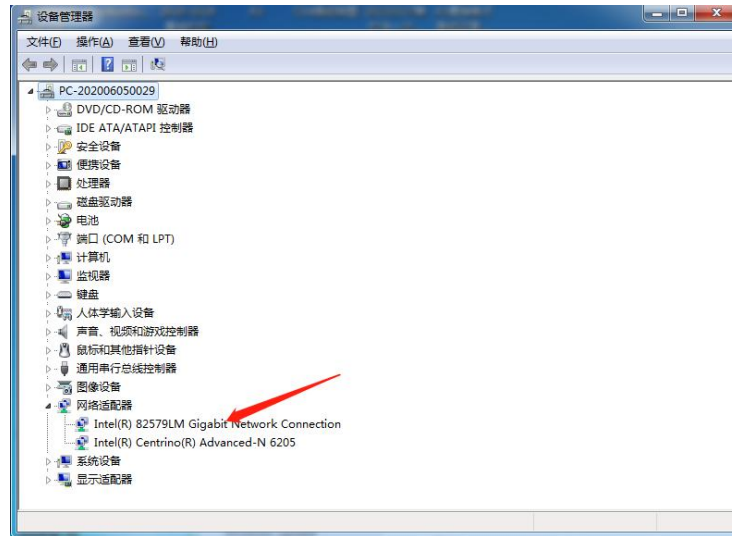


Click Finish to complete the installation





- (1) When connecting to a LAN, set the IP address of the printer.
- (2) A Gigabit NIC (Gigabit, GBE, 10/100/1000M, or RTL8196) is configured on a PC
- (3) IPV4 addresses are set to be automatically obtained (Legend)



This is the end of setting the driver link on the PC. To ensure the normal link of the device, follow the instructions

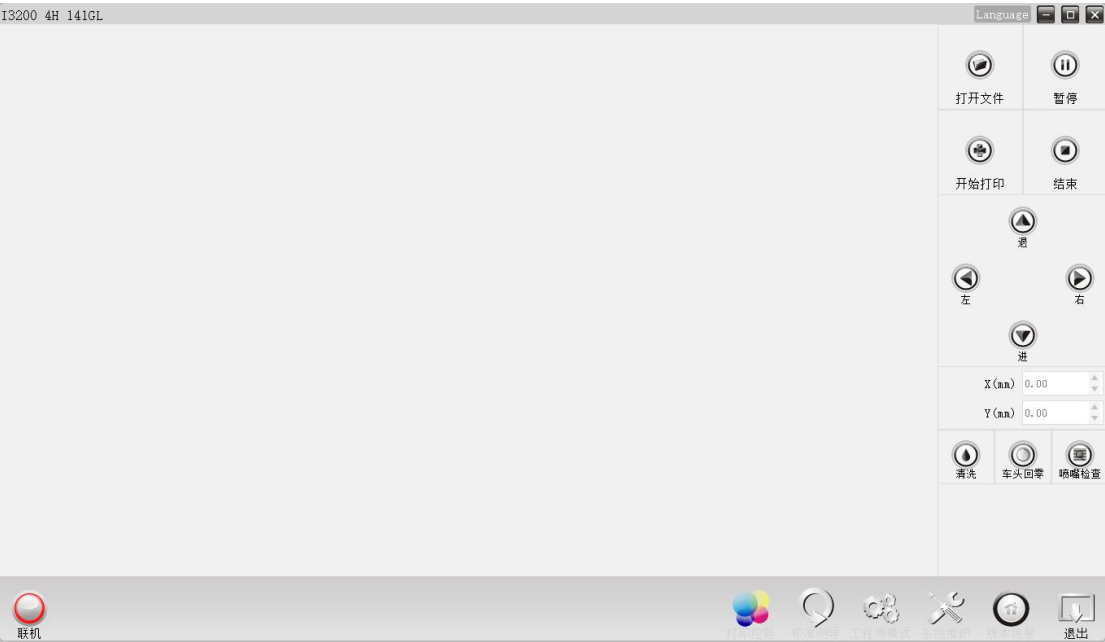
## The second step drives the link:

Use six types of network cable to connect the printer to the PC normally

Open the driver software (contact supplier service personnel to send)

Double-click the driver software as shown in the figure, and click the online button

(Example diagram of an offline page)



(Online success example diagram)



The system displays that the driver is connected successfully, and the driver is properly installed.

## 4-3-2.DTG Proll drive screen analysis

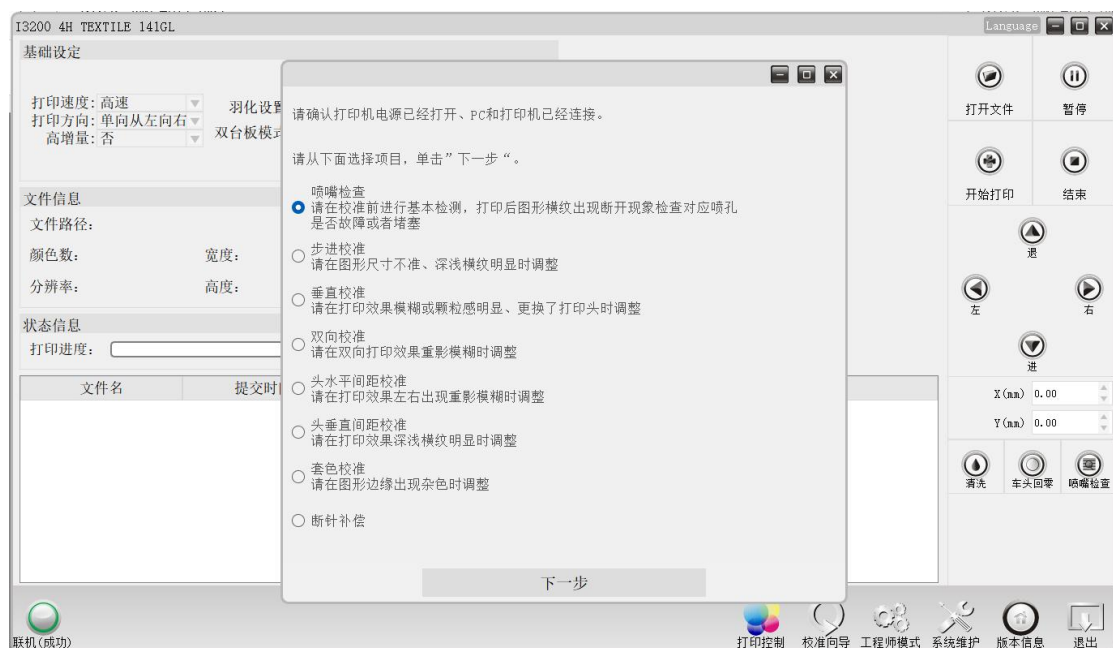


No.	Basic Settings - Name	Function
1	Printing speed	high speed (recommended), standard, low speed.
2	Printing direction	two-way (recommended), one-way from left to right, one-way from right to left.
3	High increment	On, Off. Note: This feature is No by default, and enabling it will affect the color.
4	Feather settings	High, Medium, Low (recommended). Note: Feathering is used to enhance transitions, and the higher it is, the slower the printing speed.
5	Double-plate mode	On, Off. When you select Yes, the two-platen in one selection mode is displayed. Note: If you select Yes in the double-platen mode, you can import two printing files, which can be printed on the left and right platen respectively, and you can choose the same file or different files. If you select "Yes" in the double-platen mode, you can combine the two plates and import a single file, which has the advantage of increasing the printing width.
6	White color setting	Is the color selected to print when printing, if only select a single white, the printing process will only print white, select a single color only print color, other Settings are the same as above
No.	File information - Name	Function
1	Color number	Picture information
2	Resolution	Picture information
3	breadth	Picture information
4	Altitude	Picture information
5	Figure size	Picture information
6	Total copies	Picture information
No.	Right control module - Name	Function
1	Open the file	Used to add a printed PRN file
2	Suspension	If the print job is paused in the middle of the process, the print can be resumed
3	Start printing	To send a print job, press the green button on the side of the platen to print after sending.
4	End	Terminate the print job directly
5	Forward and backward	Control the forward and backward of the right platen; Left and right: Control the left and right movement of the printing trolley.

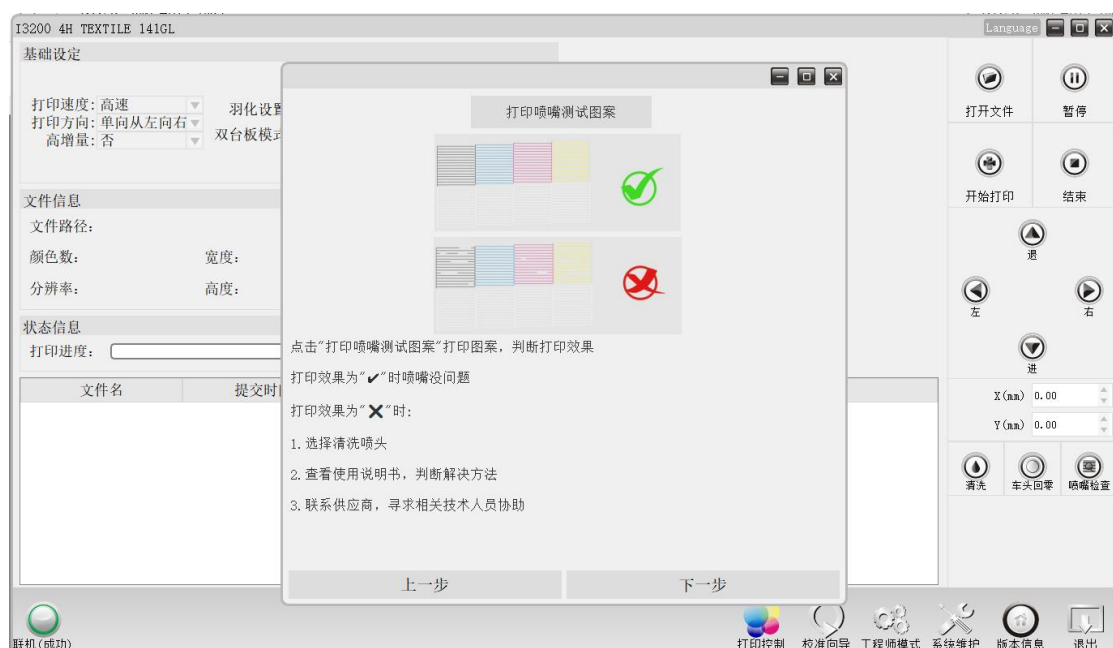
6	Left & Right	Control the left and right movement of the printing car
7	x (mm) y (mm)	Fine-tune the start point of the print.
8	Cleaning	automatic cleaning function.
9	The head of the cart returns to zero	the print trolley returns to the origin and seals the head.
10	Check the nozzle	print the test stripe, the test stripe pattern is different from the Test on the control panel, and the function is the same to observe the status of the nozzle.

## DTG ProII Calibration guidance

Purpose: For the parameter calibration of the machine



**Nozzle inspection** Function: Check whether the printhead is in good condition or not



Step calibration (please adjust when the size of the figure is inaccurate and the depth and shade of the horizontal lines are obvious; )

① Click "Print Step Fine-tuning Pattern" to print the calibration pattern (Figure 1), print the calibration graph to check the coincidence of the lines, for example, "+3" line coincidence is the highest, please add 3 to the original value in the "Fine-tuning Coefficient" box, if the graph shows the "-3" line with the highest coincidence degree, then subtract 3 from the original value, click the "Calculate" calibration coefficient on the right to be generated automatically. Finally click "Save".

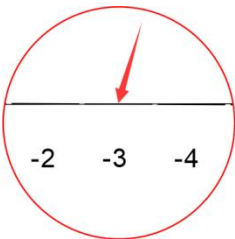
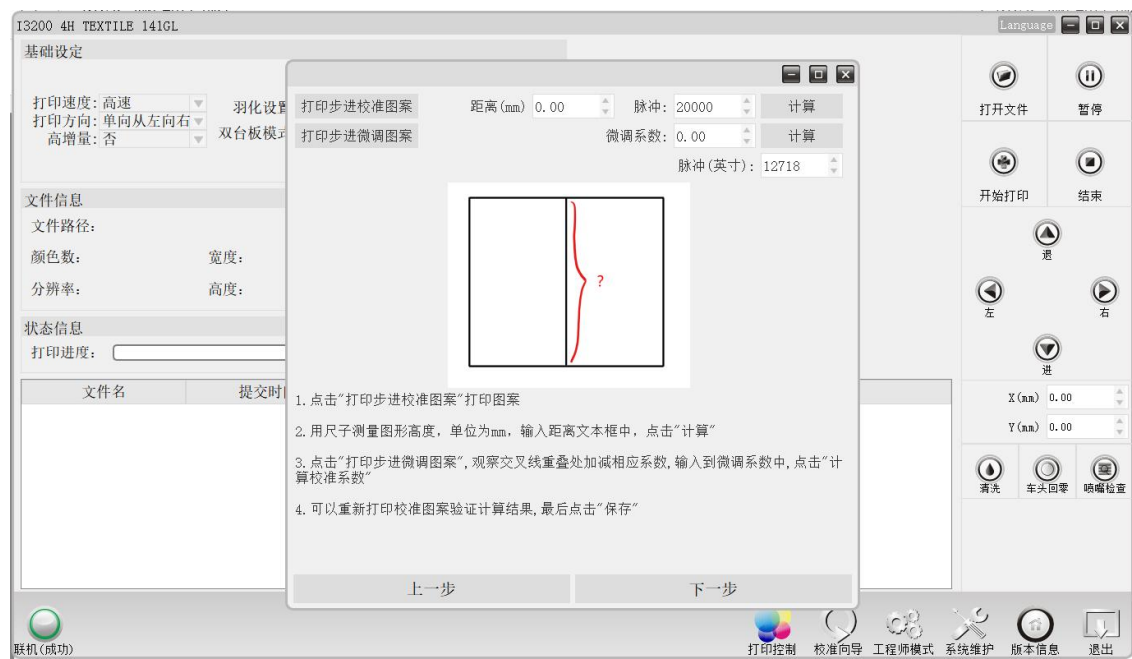
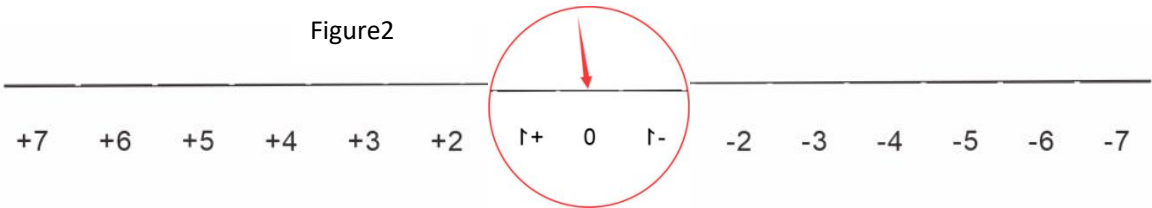


Figure 1

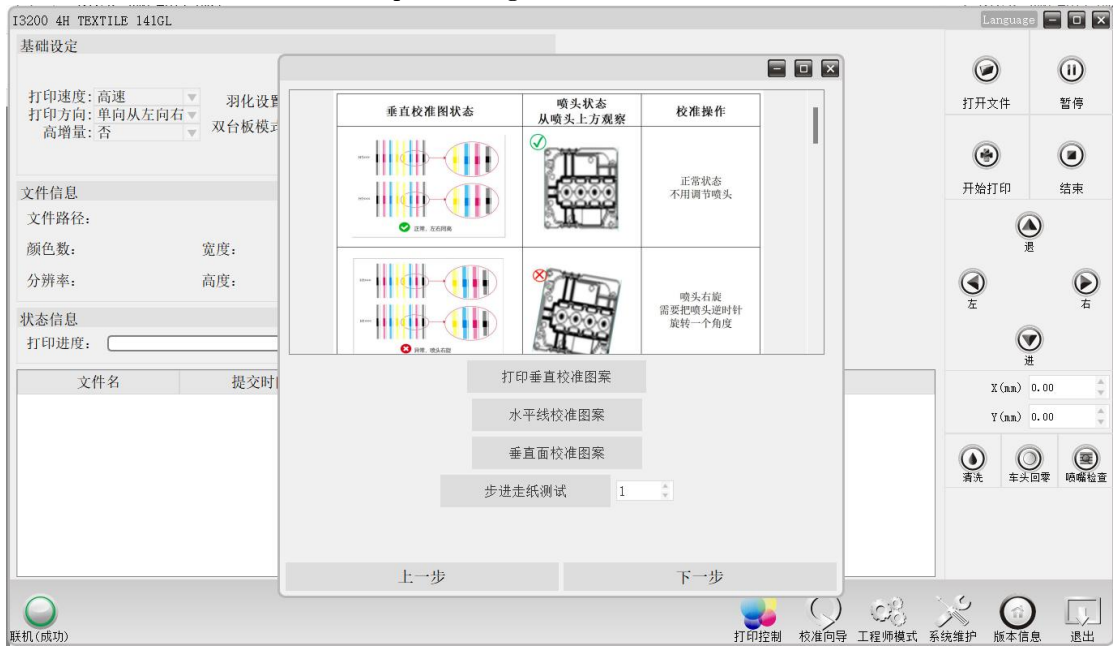


Figure2



Vertical calibration (please adjust when the printing effect is blurry or grainy, and the print head is replaced;)

Purpose: Calibrate the physical vertical position of the printhead. Click “Print Vertical Calibration Pattern” to send it for printing.



Schematic illustration of the vertical calibration pattern (Figure 1) :

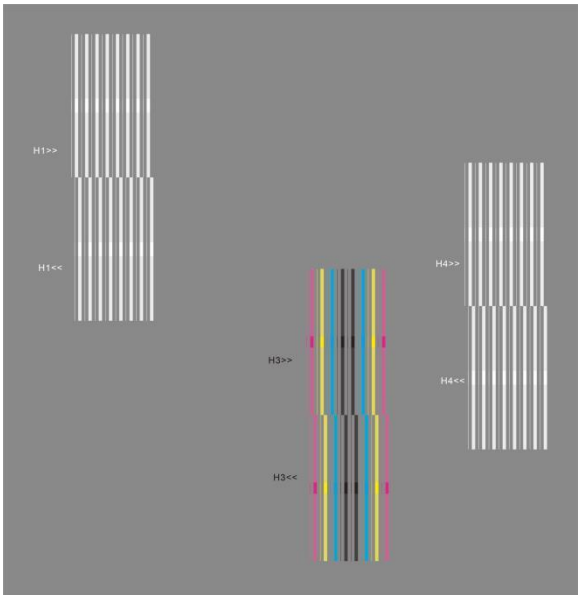
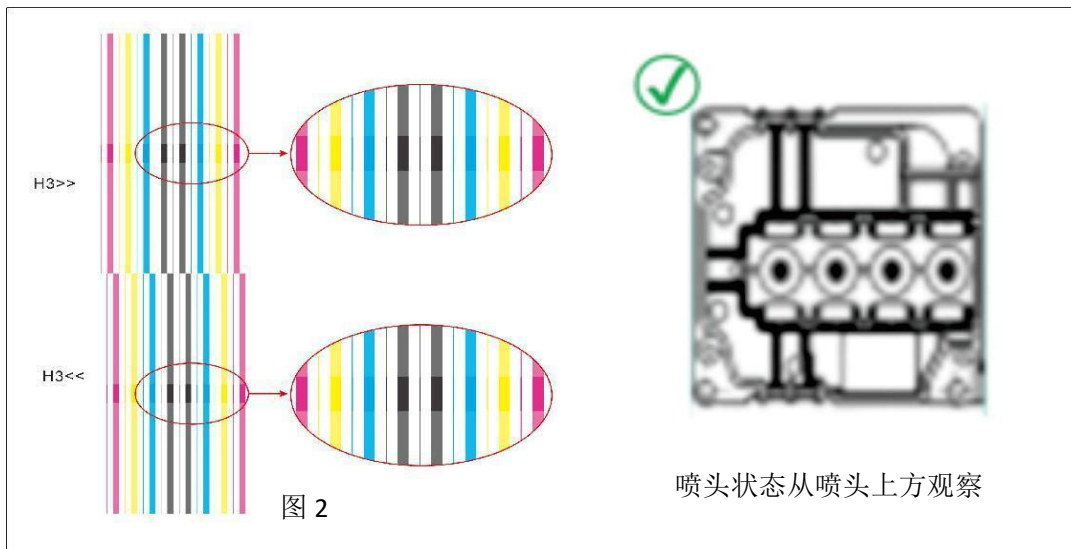
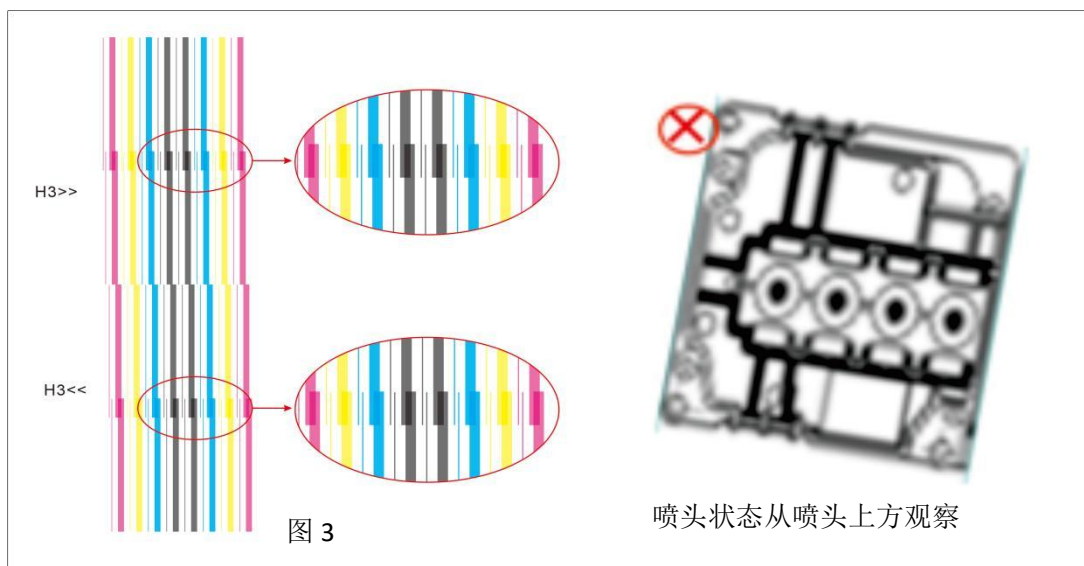


Figure1

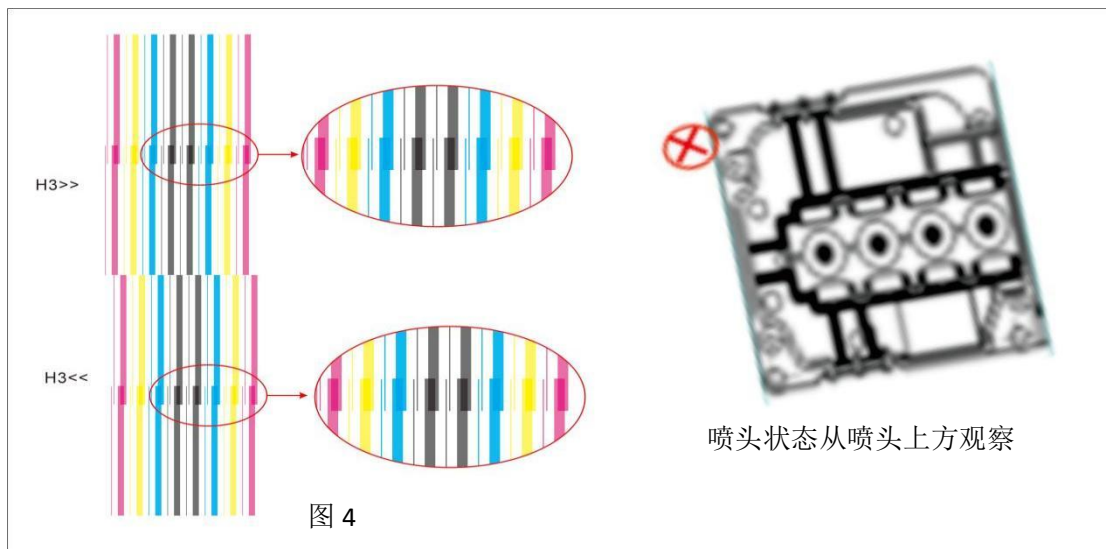
After printing the calibration graph, check the calibration pattern, and after printing the calibration graph, check the coincidence of the lines, such as (Fig. 2), it is normal and does not need to adjust the printhead.



If the printed calibration pattern appears as shown in (Fig. 3), it is necessary to loosen the screws of the nozzle and rotate the nozzle anticlockwise slightly to make it parallel



If the printed calibration pattern appears as shown in (Fig. 4), you need to loosen the screws of the nozzle and rotate the nozzle clockwise slightly to make it parallel.

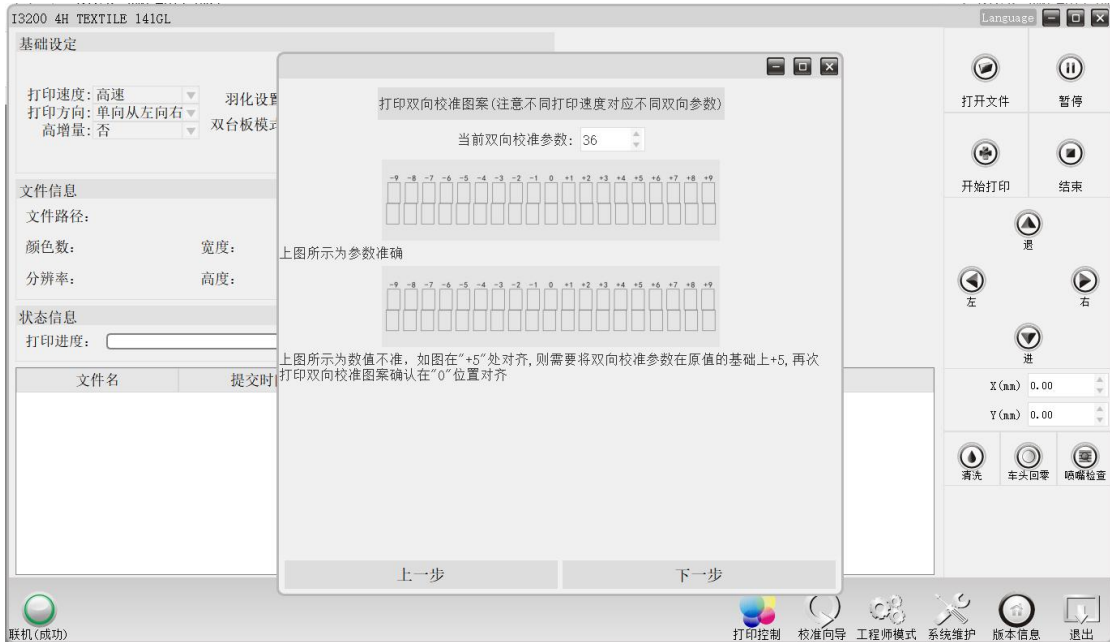




**Bidirectional calibration (Please adjust when the double print effect is blurred; )**

Function: Calibration when the printing direction is bidirectional, no calibration is required if one-way is used. Click to print the bidirectional calibration pattern to send to print. After modifying the value, please click to save.

Note: When using bidirectional printing, both the printing speed and the platen height should be recalibrated bidirectionally.

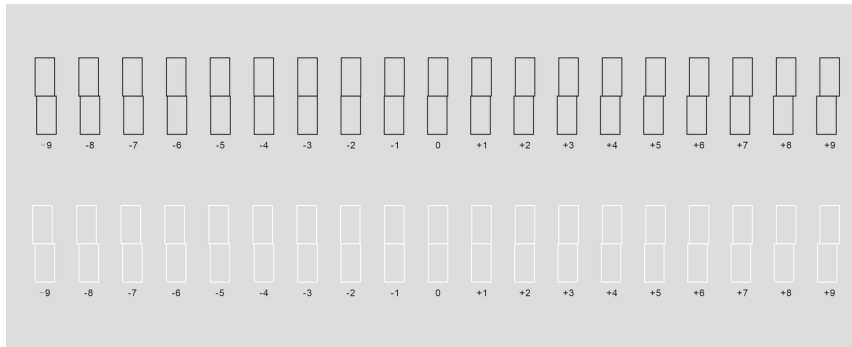


Click "Print bidirectional calibration pattern (note that different printing speed correspond to different bidirectional parameters)" to print the calibration pattern as shown in (Figure 7).



Figure7

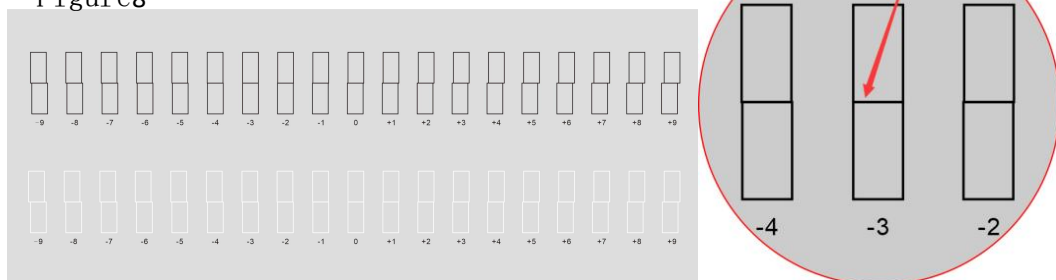




For example, if the graph is aligned at “-3”, you need to subtract 3 from the original value of the bidirectional calibration parameter, if the graph shows alignment at “+3”, then add 3 to the original value, and finally click “Save”.

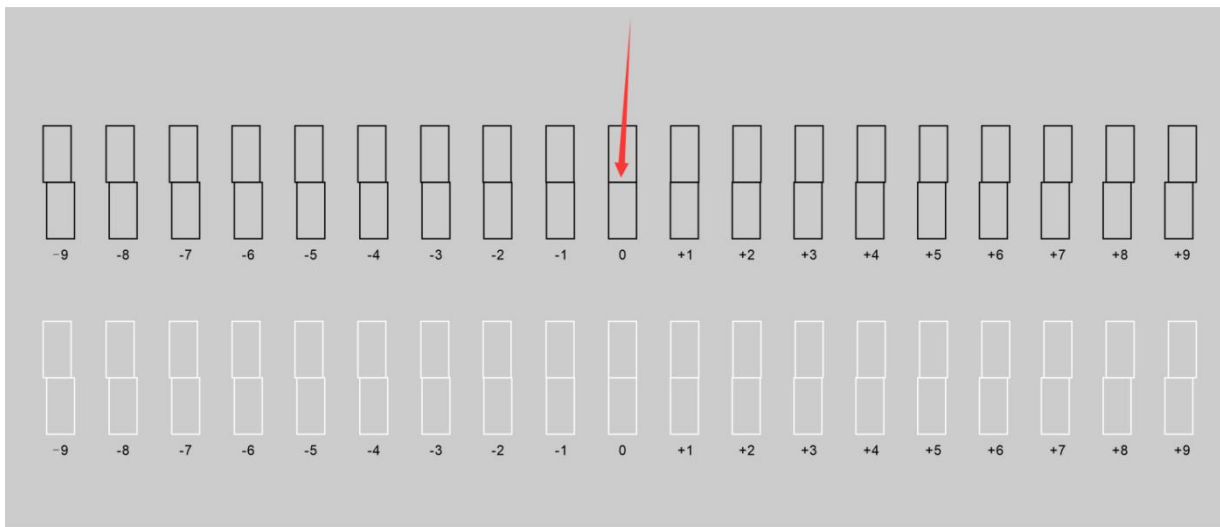


Figure8



Click “Print two-way calibration pattern (note that different printing speed correspond to different two-way parameters)” again to print the calibration pattern, and confirm that it is aligned at the “0” position, as shown in Figure 9.

Figure9

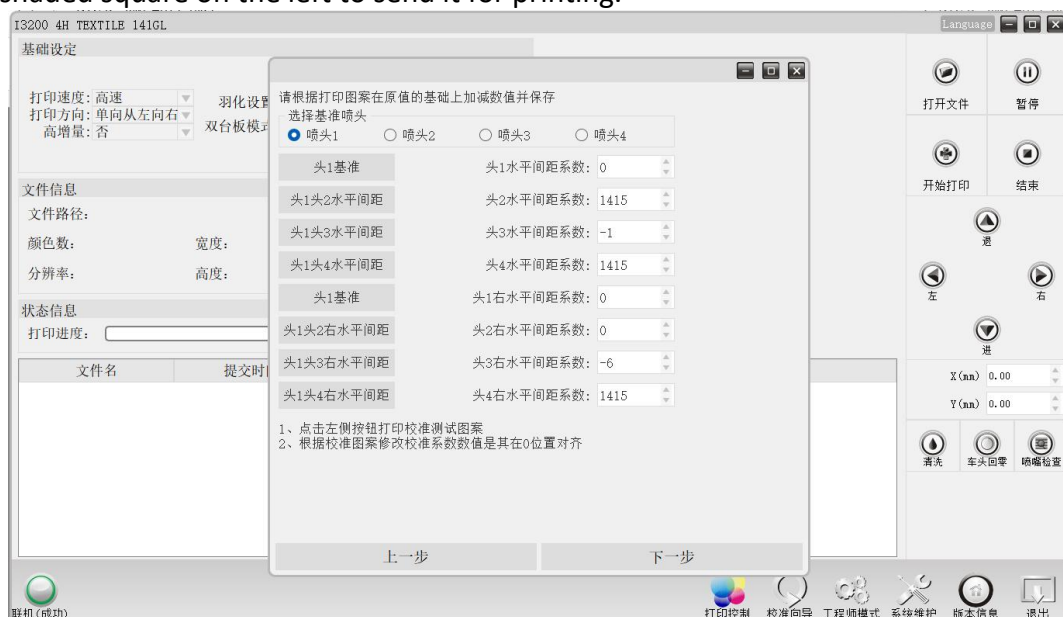


**Head horizontal spacing calibration** (please adjust when there is ghost blurring on the left and right of the printing effect;)

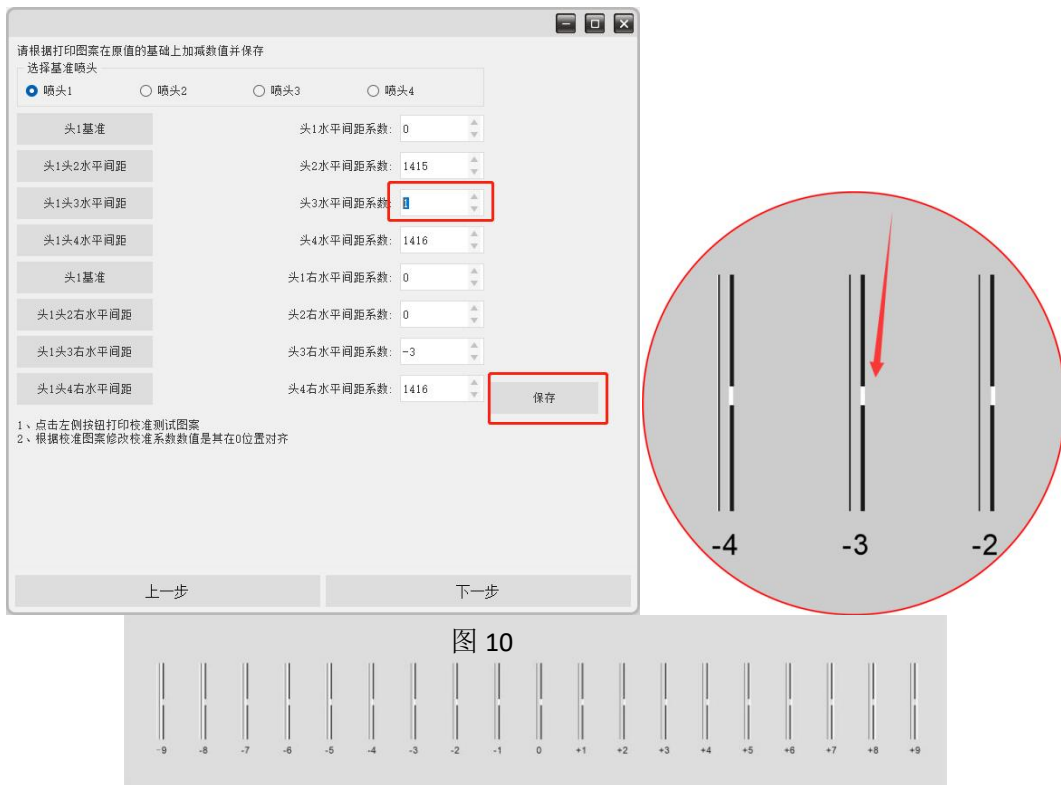
**Function:** Use a certain printhead as the printing reference to calibrate the spacing, that is, the left and right spacing coincide with each other.

**Note:** During calibration, the horizontal spacing of head 1 and 3, the horizontal spacing of head 1 and 4, the right horizontal spacing of head 1 and head 3, and the right horizontal spacing of head 1 and head 4 can be calibrated (head 2 is empty)

Click on the gray shaded square on the left to send it for printing.



After printing the calibration graph, check the coincidence of the white color lines (Figure 10), for example, the "+3" line has the highest degree of coexistence, please add 3 to the original value in the right border of the "head 3 horizontal spacing coefficient", if the graph shows the "-3" line with the highest degree of coexistence, then subtract 3 from the original value, and finally click "Save".



Note: Only calibrate the horizontal spacing of head 1 and head 3, horizontal spacing of head 1 and head 4 , right horizontal spacing of head 1 and head 3 , right horizontal spacing of head 1 and head 4 ; This is consistent with the calibration procedure of " Horizontal Spacing of Head 1 and Head 3".



Print the calibration pattern again, and modify the calibration coefficient value according to the calibration pattern so that it is aligned at the 0 position.

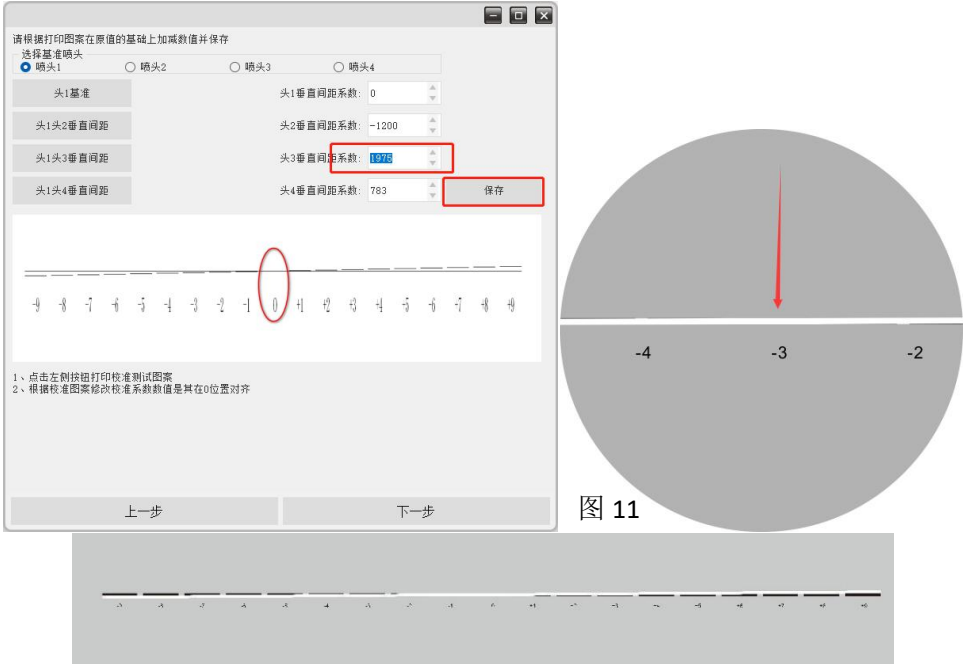
Head vertical spacing calibration (please adjust when the printing effect is obvious and the horizontal lines are obvious; )



Click "Vertical Spacing of Head 1 and Head 3 " to print the calibration pattern; Just calibrate "Printhead 1".



After printing the calibration graph, check the coincidence degree of the white color lines (Figure 11), for example, the "+3" line has the highest degree of coexistence, please add 3 to the original value in the right border of the "head 3 vertical spacing coefficient", if the graph shows the "-3" line with the highest degree of coincidence, then subtract 3 from the original value, and finally click "Save".



Note: Only calibration is required: vertical spacing of head 1 and head 3 , vertical spacing of head 1 and head 4; This is the same as the " vertical spacing of head 1 and head 3 " calibration procedure.



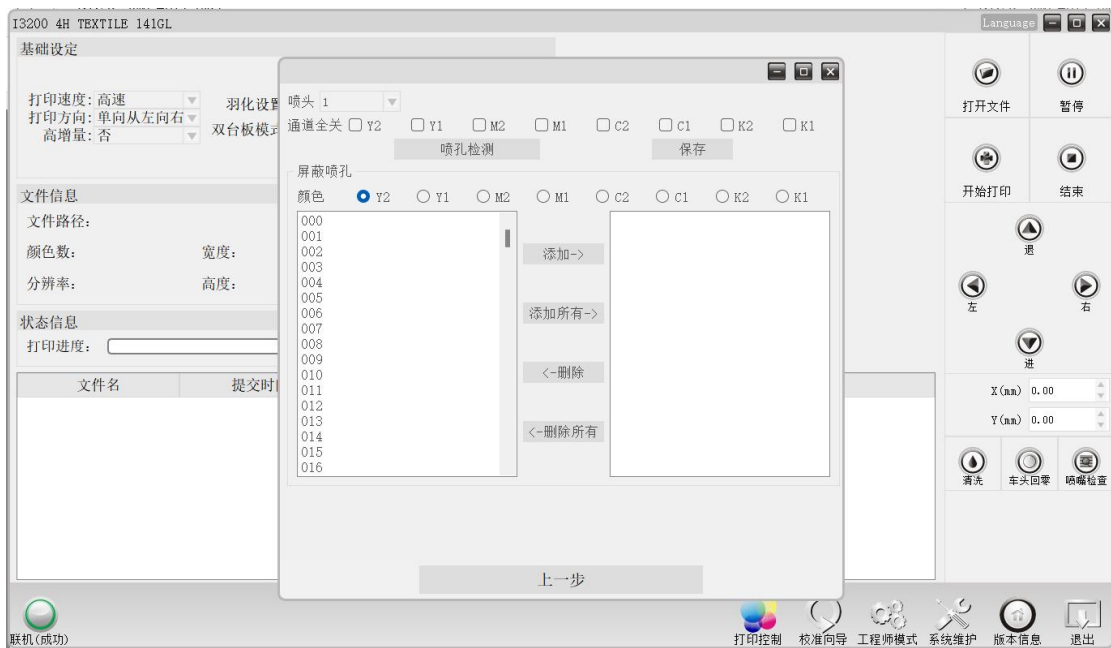
Print the calibration pattern again, and modify the calibration coefficient value according to the calibration pattern so that it is aligned at the 0 position.

Color set calibration Purpose: Calibrate color set;



Needle breakage compensation

Function



Engineer mode

Advanced settings

Voltage: Control how hard the printhead sprays ink

Voltage Type: waveform, the program that controls the procedure of ink jetting logic

Color ink sequence: the channel order of the jet ink (default is MYCKKCYM)

White Ink Sequence: The channel order of the ink jet(WWWWWWWW by default)

Treatment Liquid Ink Sequence: Channel order of ink jet(default is VVVVVVVVV)

White ink ratio: 10%~100% white ink output, this option is not fixed, make flexible and appropriate adjustments according to the actual situation. (If the amount of white ink is large, it will easily melt away, so it will be reduced.) The amount of white ink is small, the pattern is dull and not bright, so it increases)

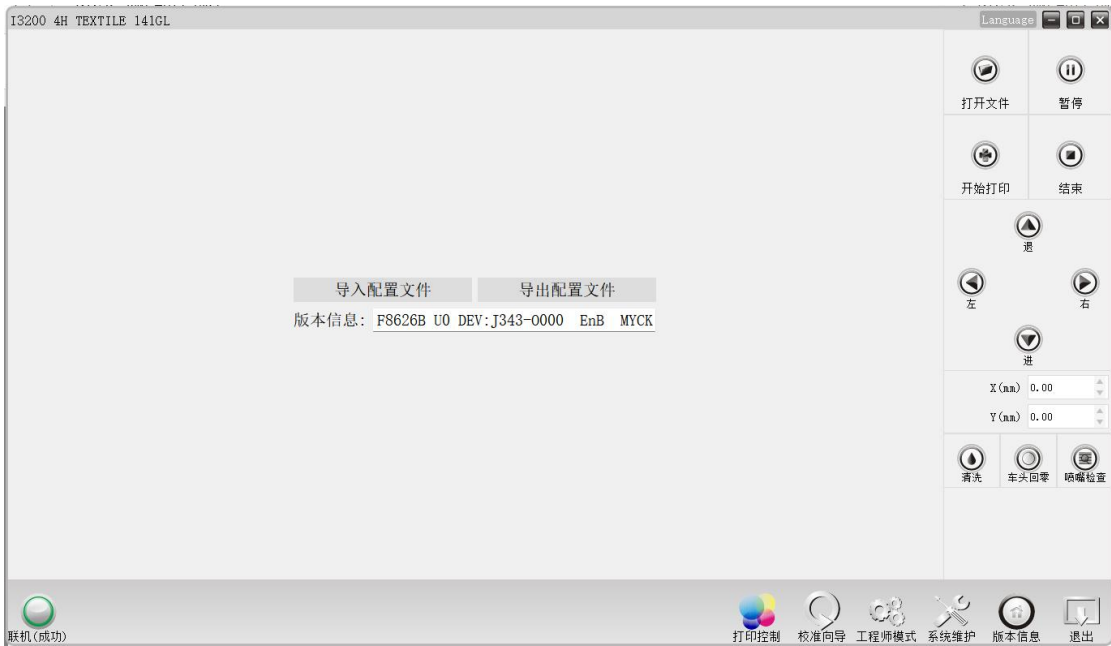


System maintenance Function: The control panel function is software, and related functions can be operated on the computer.



Version Information

Function: The upgrade will cause the existing calibration parameters to be confused, so you can export the configuration file before the upgrade, and then import the configuration file after the upgrade is completed. It can be used more efficiently.

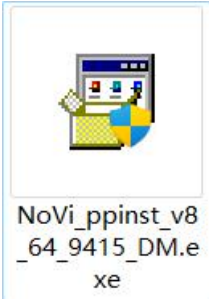


43-3.DevstudioRip8 RIP software installation and use

DevstudioRip Install

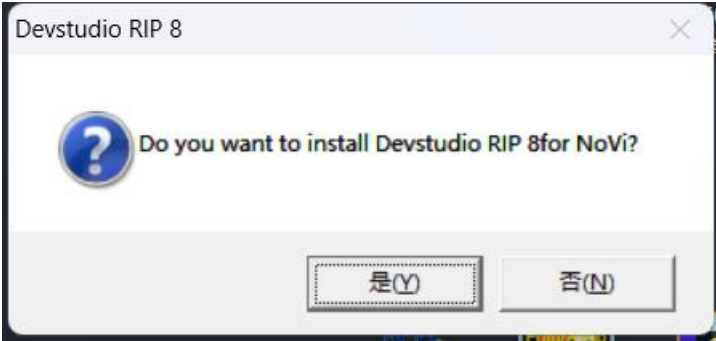
Step 1:Install the software

1. Software installation package

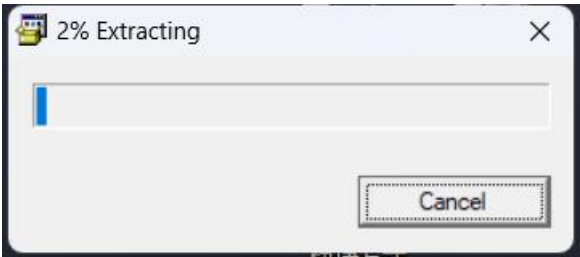




2.Double-click to open and select Yes to decompress



3.Wait for the extraction to complete



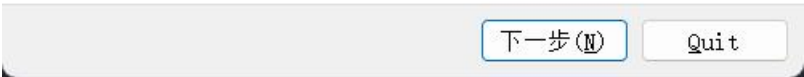
4.Go to the program installation screen and click Next



Devstudio RIP 8 安装程序

安装程序 - Devstudio RIP 8

欢迎使用 Devstudio RIP 8 安装向导。



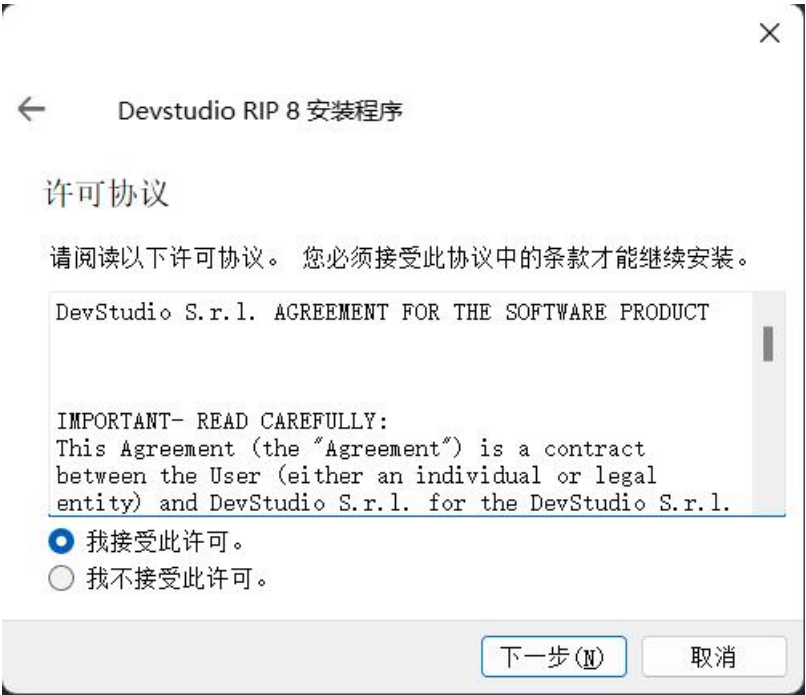
5. Select the installation path (generally recommended default) and click Next



6. Leave it in the default state and click Next.



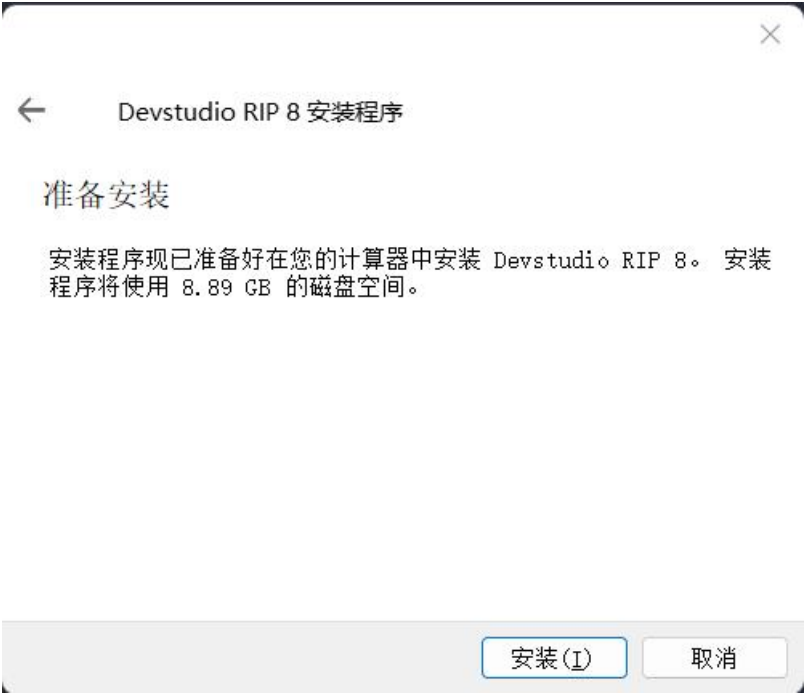
7. Select "I accept this permission" and click Next.



8. Just leave it in the default state and click Next.



9. When everything is ready, make sure there is enough space for installation. Click Install.



10. Wait for the installation to complete.



11. Click Completion (F) to exit the Devstudio RIP 8 guidance.

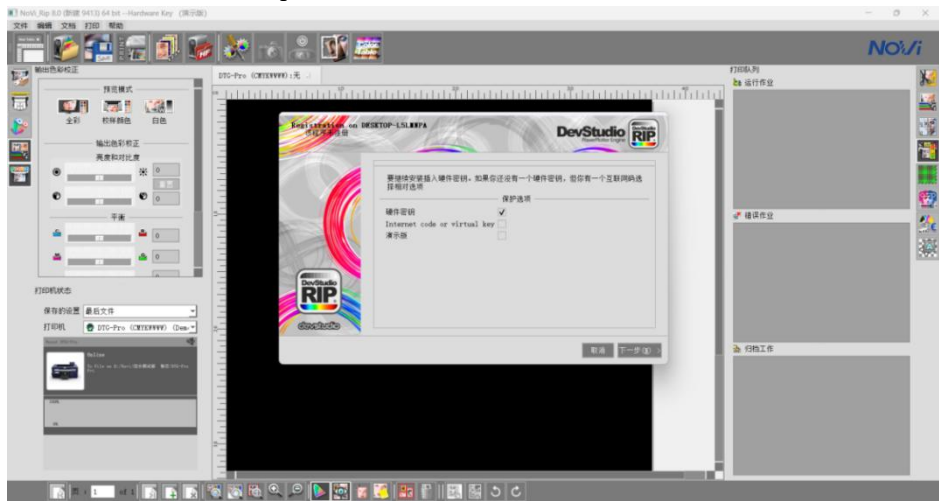


## Step 2: Registration of the dongle

1. Double-click to open the installed Devstudio Rip8



1.After the first installation, the dongle registration window will automatically pop up after the software is opened



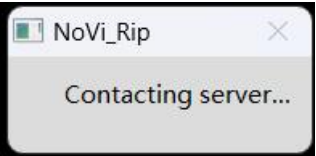
2. Check the hardware key in the registration window (requirement: the computer must be connected to the Internet) and click Next



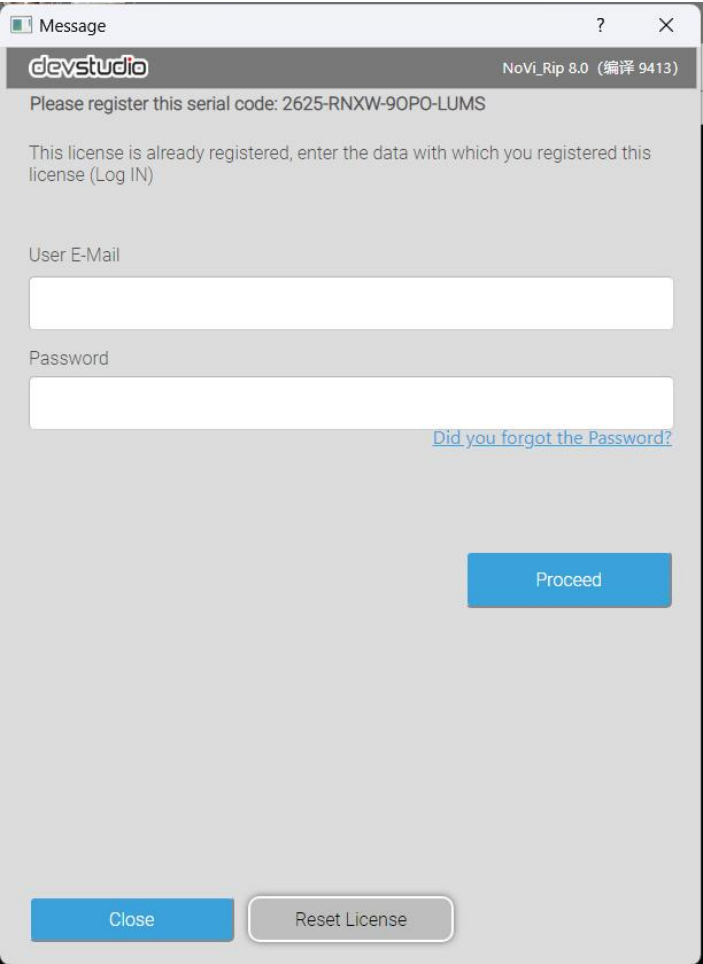
4.The software recognizes the dongle successfully, click Finish (if the computer can't recognize it, please go back to the previous step repeatedly or click Re-identify)



5.Wait for the window to jump to the registration interface

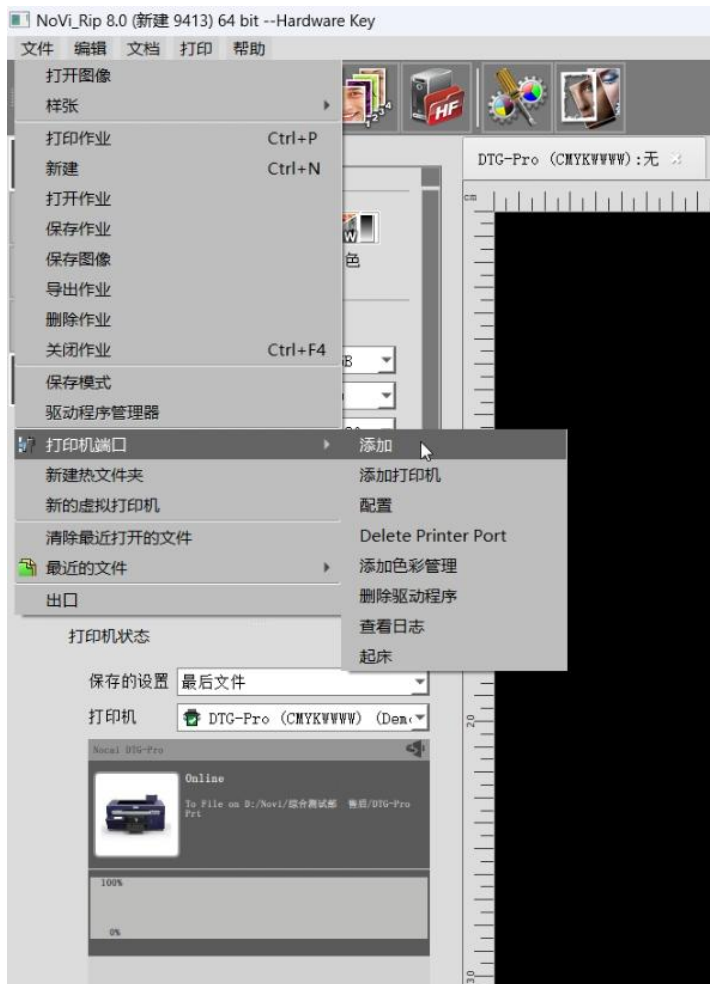


6.Enter the provided email address and password to register (please contact the technical staff to get the email address and password)



Step 3: Add the printer

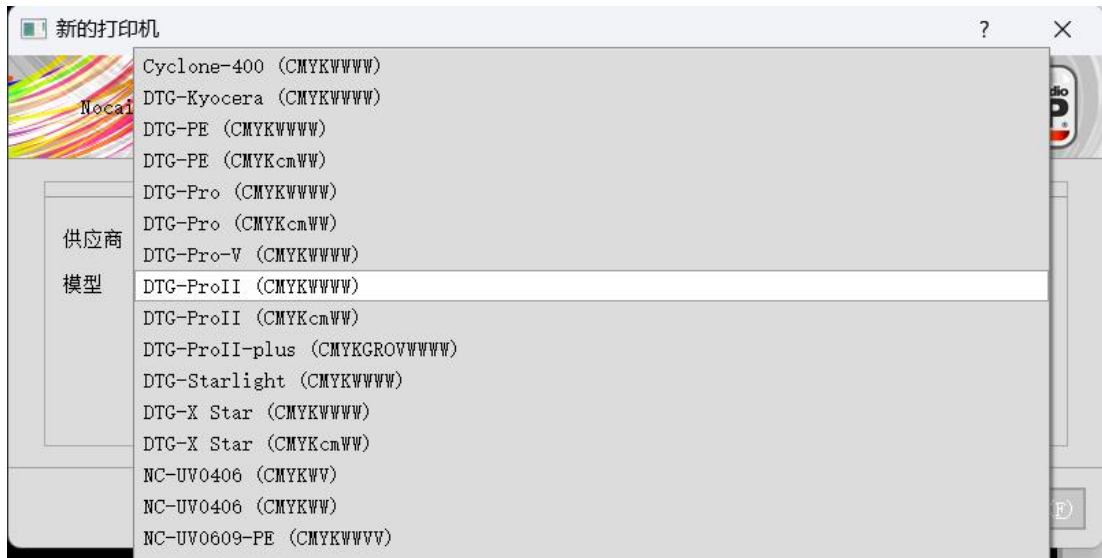
1.Click on File at the top left and select Printer Port – Add



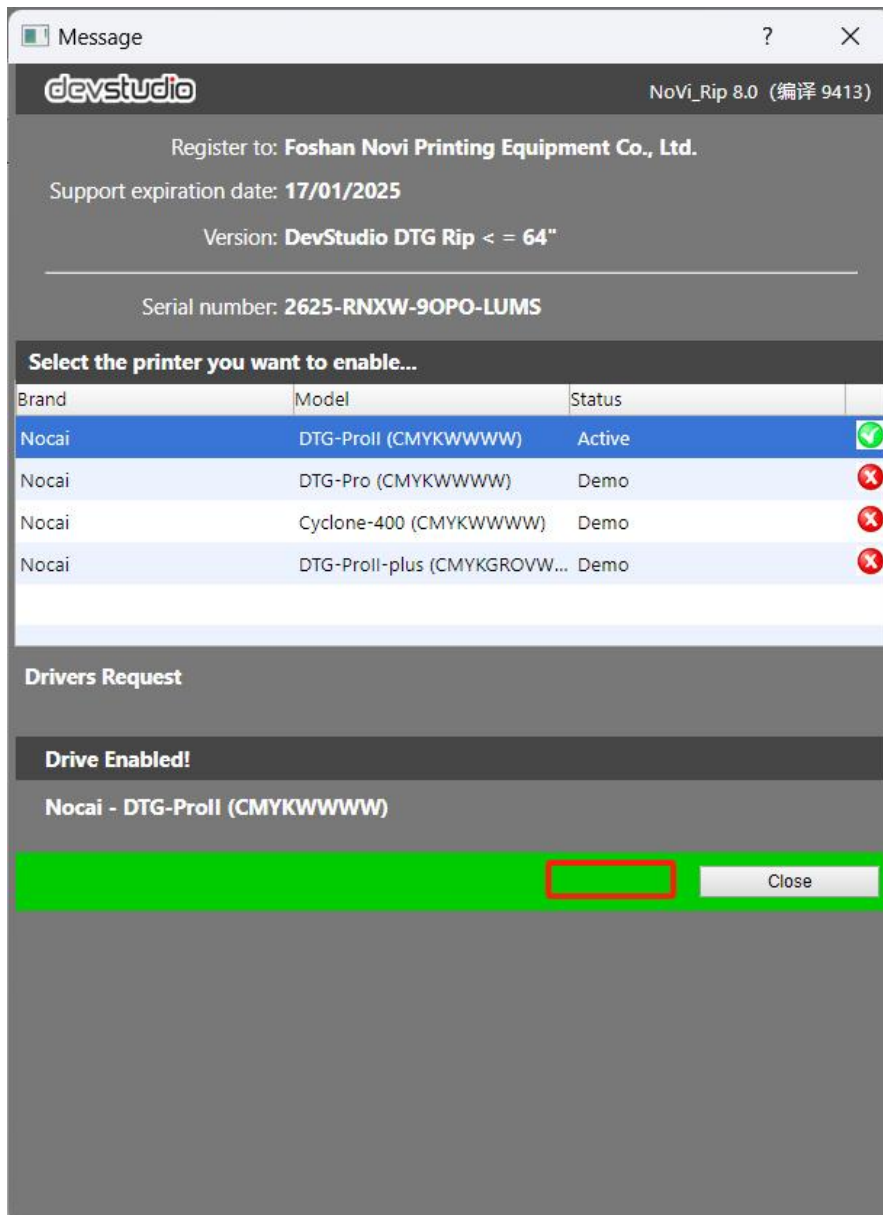
2. Click on the model in the new printer to select the corresponding model (note: the correct color sequence is: CMYKWWWW) A dongle can only add one printer, if you add the wrong one, it will not be available.







3. After adding the printer, the printer installation interface will pop up, click "" to install



4. After installation, observe the status of the printer, and change from (Demo) to blank, that is, the installation is successful



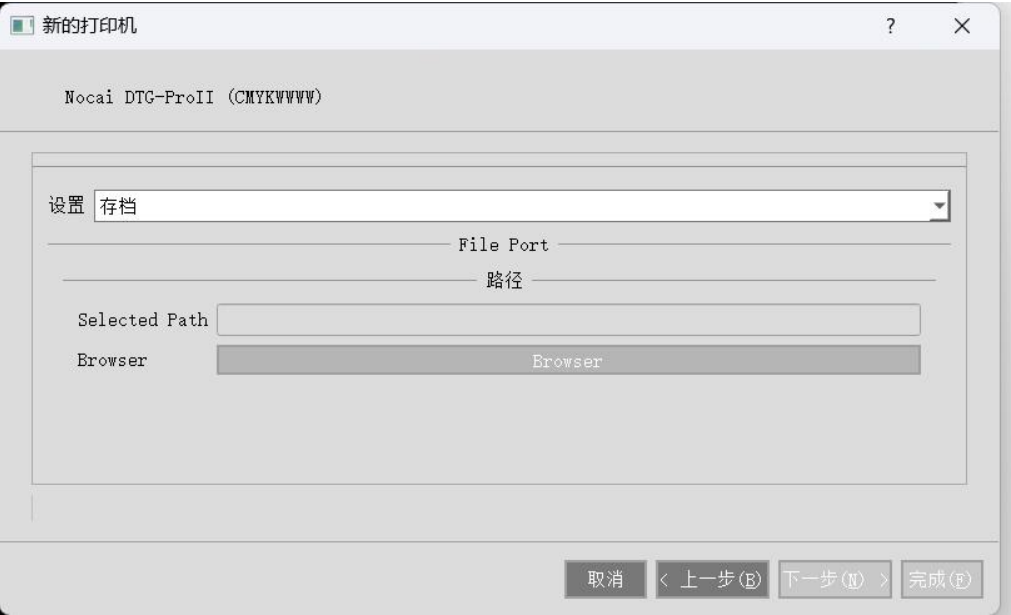
5. When the printer is installed, find the small speaker on the top right of Online in the printer status



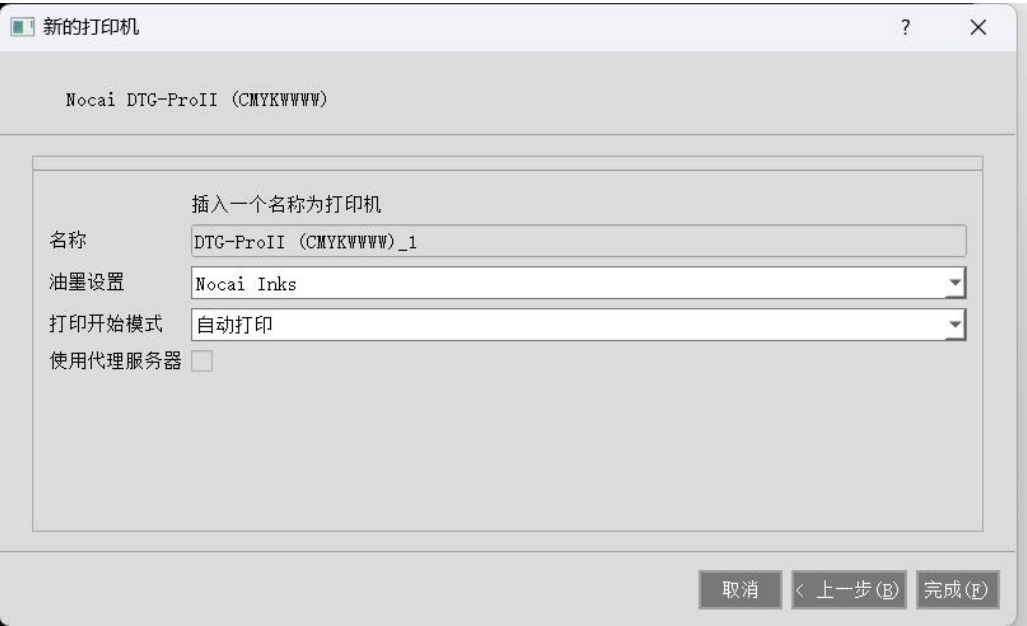
6. Select the configuration port (Note: there will be an automatic pop-up window when you install it for the first time)



7. Change the settings to archive, click Browser to select the storage path, create a new file (the storage path of prn print files) and click Next



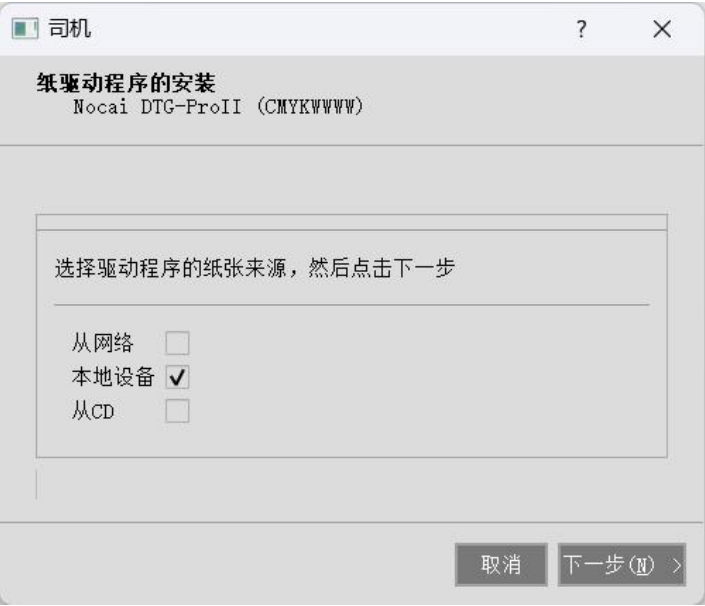
8. Leave it in its default state and click OK



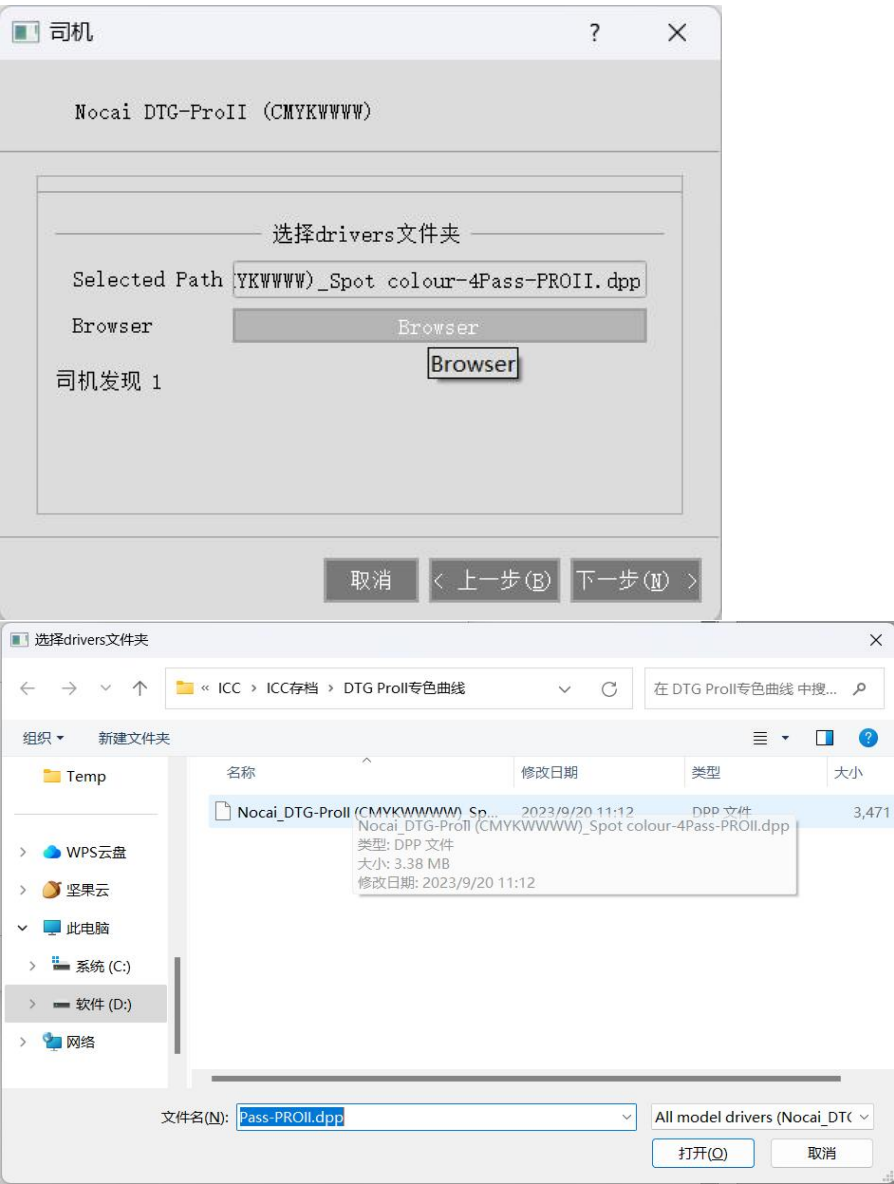
9. Select Update Driver. Update and Add ICC steps (Note: There will be an automatic pop-up window when you install it for the first time)



10. Select the local device and click Next



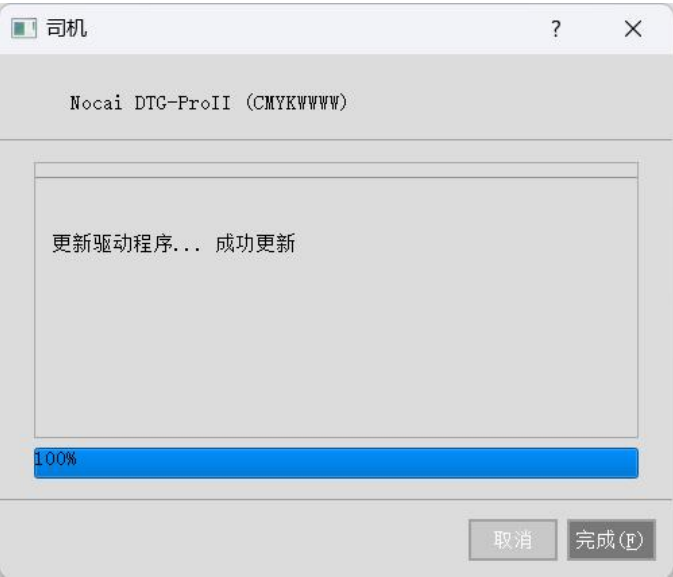
11. Click Browser, find the file where the ICC is stored and open one of them. Then click Next



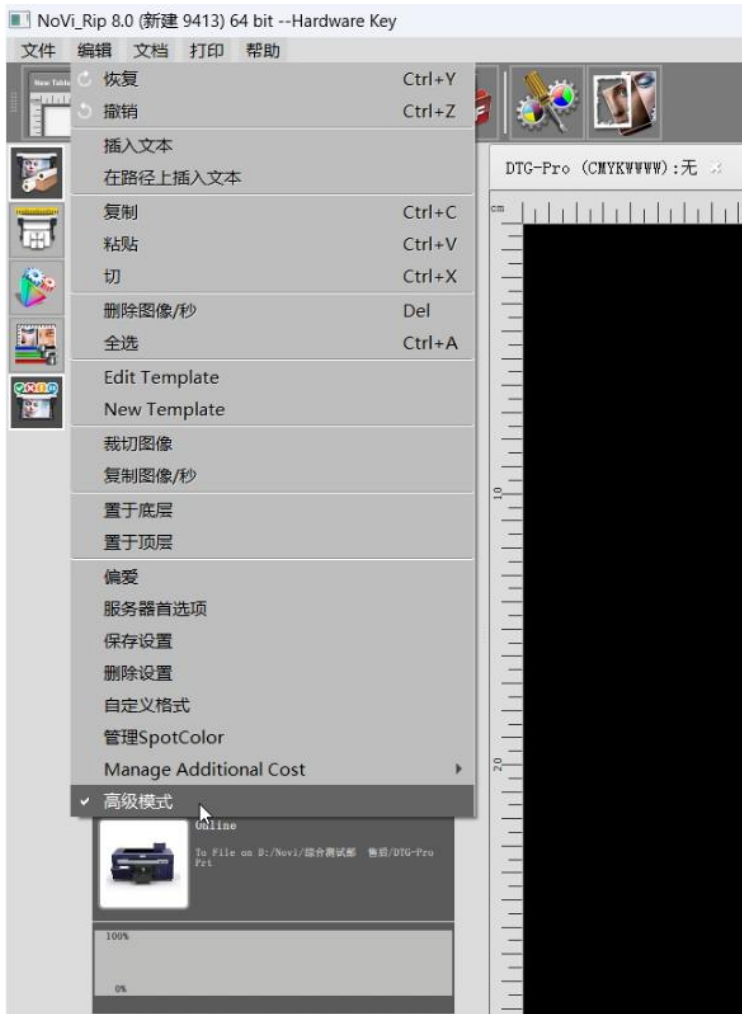
12. Click Select All and then click Next.



13. Wait for the update to complete and then click OK.



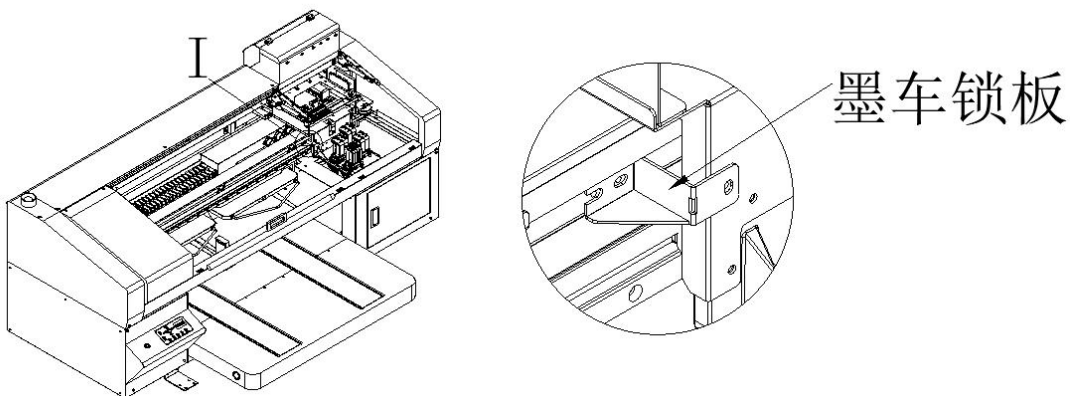
14. Click Edit in the menu column at the top left of the page, select Advanced Mode, and a checkmark appears in front of Advanced Mode to indicate that all installation steps have been completed.



## 43.4.DTG ProII Installation and use of new machines

### New machine installation procedure guide

(一) Remove the fixed sheet metal and guide rail protective film of the ink cart



Note: Before starting the machine, the ink cart must be disassembled to fix the sheet metal, otherwise it will trigger errors such as large resistance of the trolley, and it can not start normally.

Note: Tear off the plastic wrap on the rails.

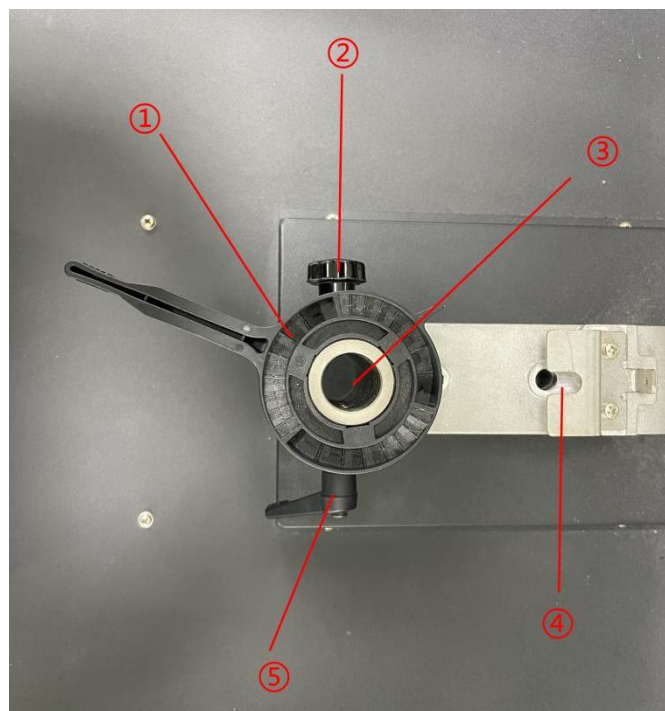
## (二)Install the left and right plates correctly

(1)Left and right discrimination: the left and right hands are used as reference standards when facing the machine;

There are left and right platform labels at the bottom of the platen, please pay attention to distinguish them when installing



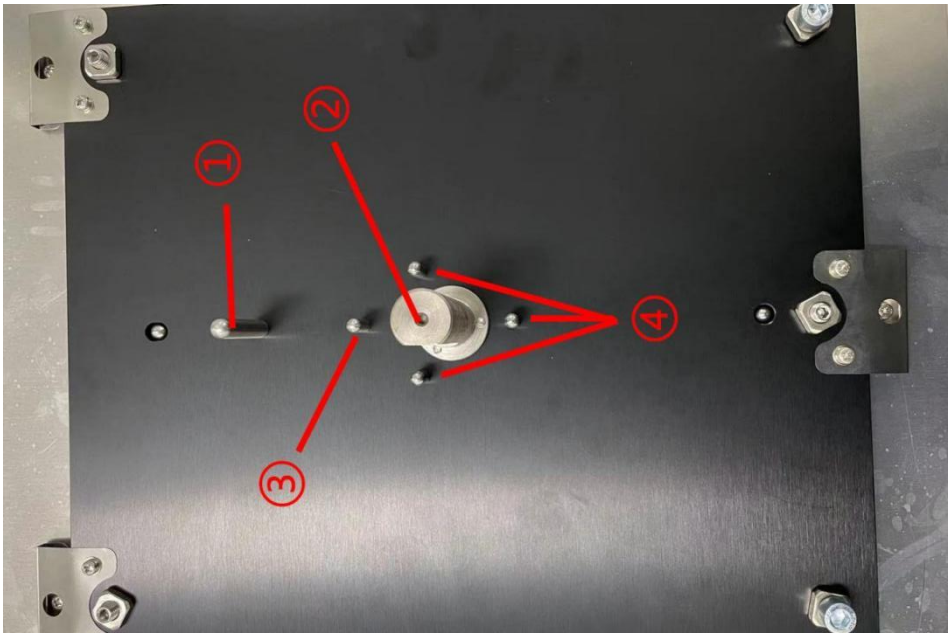
(2)Graphic analysis of the base of the platen:



No.	Name	Function
1	Rotating handle	used for lifting the platen
2	Plum blossom handle screw	fix the platen
3	Separate fixed ring	detachable when it is necessary to adjust the position sharply
5	Fixed hole for the position of the platen	to ensure that the platen will not be displaced left and right
6	Adjustable handle	fixed platen

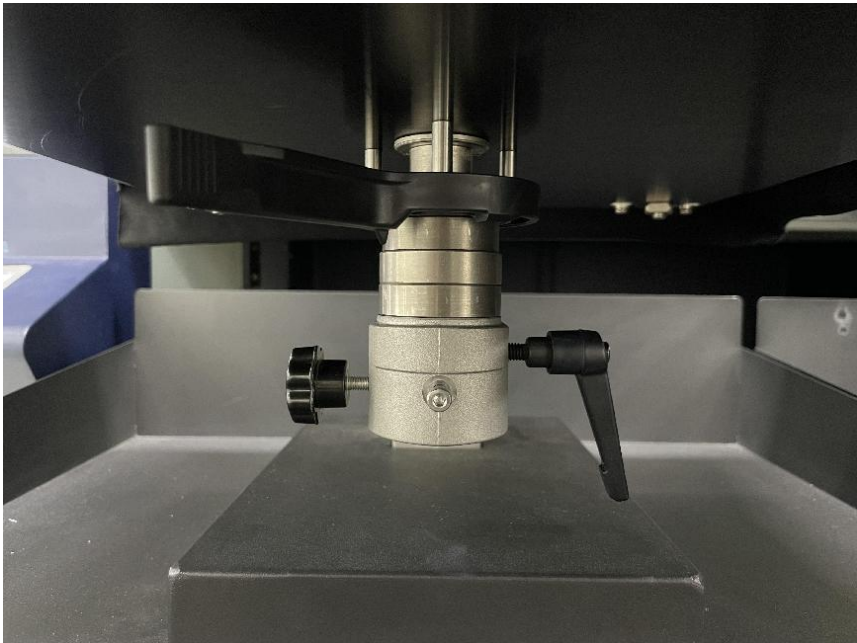


(3)Structural diagram of the platen



No.	Name	Function
1	Platform limit column	limit the platform offset
2	Platform positioning axis	fastening the platform
3	Lifting the limit column	
5	lifting column	

Example diagram of the completion of the installation





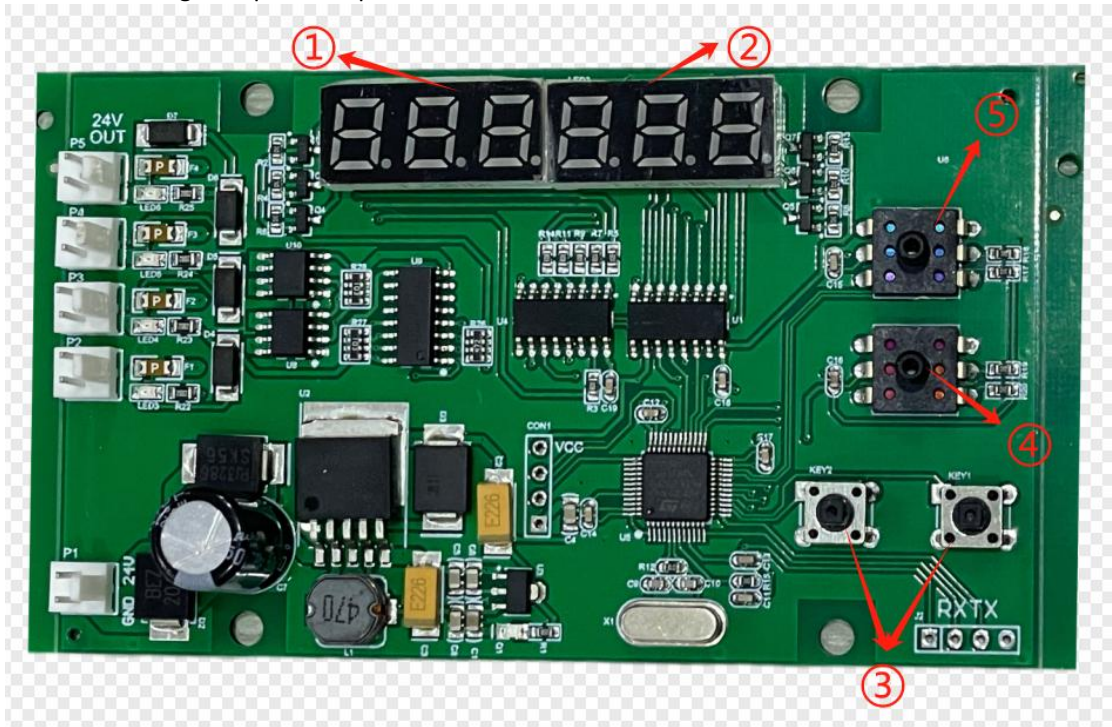
(三)Add color ink and white ink

Schematic diagram of the machine cartridge: Follow the schematic diagram above the cartridge to add the corresponding ink.  
Note: Shake the white ink evenly before adding it (white ink is easy to settle).



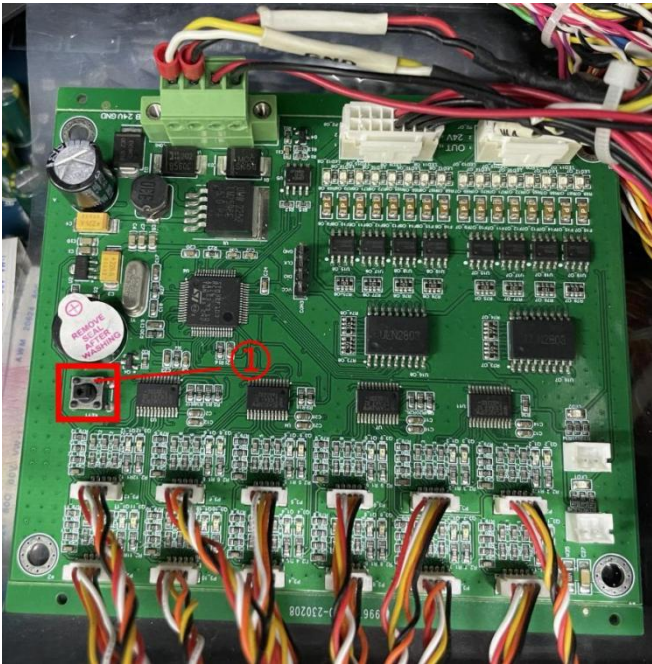
(四)Negative pressure control panel adjustment and ink supply timeout reset key

Diagram of the function of the negative pressure plate:



No.	Name	Function
1	Negative pressure display screen	normal state display format: -.0.0 (actual value)
2	Positive pressure display	normal state display format: .0.0 (no - sign in the front)
3	Button	Press at the same time to enter the adjustment mode, left button to select the adjustment position, right button to adjust the value
4	Positive pressure value reading hole	
5	Negative pressure value reading hole	

When installing, you can follow the factory settings  
Graphic analysis of the function of the ink supply plate:

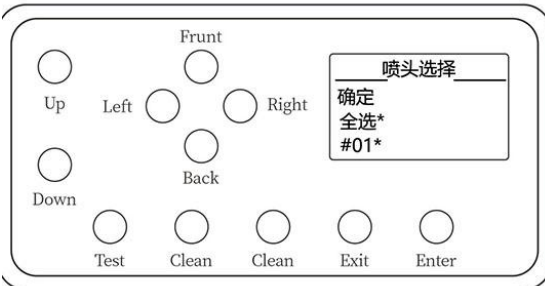
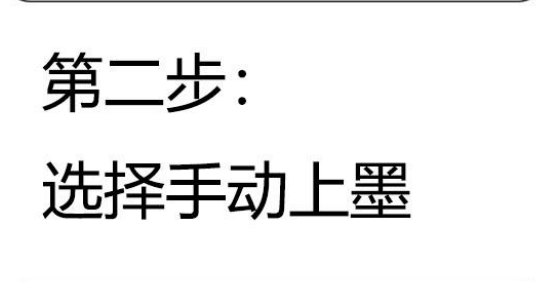
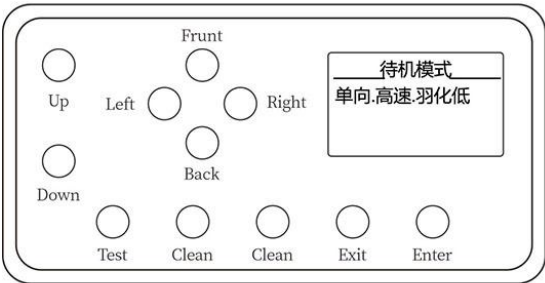


1、Reset button: the ink supply time is 3 minutes, the alarm will go off if the ink supply level of the secondary ink cartridge will not reach the specified position within this time. When the music alarm appears, press the reset button to resume the ink supply;

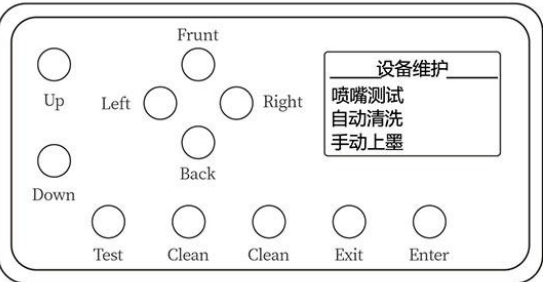
(五)Print the test strip

Test Strips:

Once the ink has been supplied to the secondary cartridge normally and everything is in order, go on to the following steps



第一步：  
按下Right  
进入设备维护页面

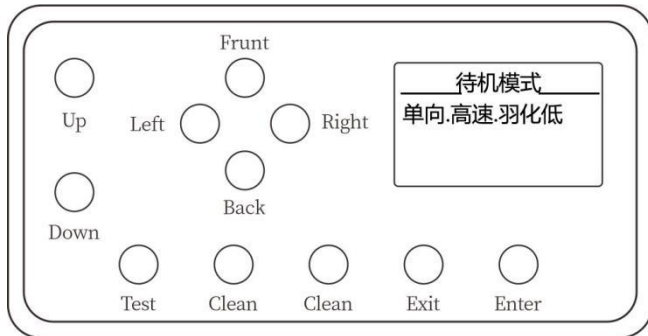


第三步：  
确定  
Enter

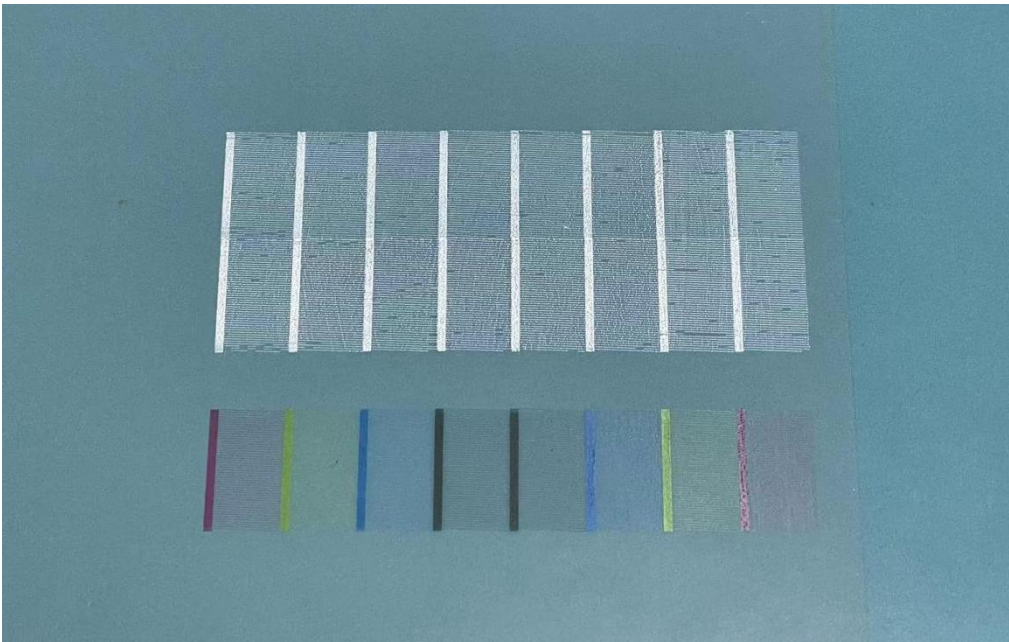
- ①As shown in the figure
- ②As shown in the figure
- ③As shown in the figure

Note: The manual inking time is controlled within 20 seconds, and the inking is reloaded after stopping. After inking, clean more than 3 times repeatedly, if the test strip is still missing, you can inking again manually, if the color printhead has color mixing, select the ink flushing - select 3 in the equipment maintenance interface, and carry out 10~20S ink flushing (print the test strip directly after completing the ink flushing);

Print the test strip - press the Test button to print the test strip (press it and wait for the test strip to be printed)



(Example diagram of the test stripe)



When the test bar is complete, it indicates that the machine is running normally.

## Warning



Once a foreign object enters the inside of the unit, the power should be cut off immediately, unplug the power plug, and contact the dealership or trained technician who purchased the unit. Such as If continued use, it may result in fire, electric shock or failure.



Do not put the unit in contact with liquids. Failure to do so may result in fire, electric shock or failure.



As soon as liquid enters the printer, disconnect the power immediately, unplug the power, and contact the outlet or trained technician who purchased the machine.



Do not use the device when it is smoking or has a peculiar smell. Failure to do so may result in fire, electric shock or failure.

Should immediately cut off the power supply, unplug the power plug, and Contact the dealership or trained technician who purchased the unit.



Keep your fingers or body away from the rotating fan. Otherwise you could get involved and get injured. Please turn off the power before approaching.

## Notice



This machine can only be used by personnel trained in safe operation.



Do not reach into the covers while the power is on. Do not touch moving parts, as this may result in injury.



Do not disassemble the ink bottle. If the ink comes into contact with the eyes or skin, it may cause inflammation. Do not rub when entering eyes. Rinse immediately with water. Do not disassemble the cartridge.



Do not drink ink, filler, cleaning solution, pre-treatment solution, waste liquid and other liquids. Otherwise, diarrhea and vomiting may result



In addition, avoid eye and skin contact with ink, filler, cleaning solution, pre-treatment solution, waste solution and other liquids. Otherwise it may cause inflammation. Do not rub when entering eyes. Rinse immediately with water.



Keep out of reach of children.

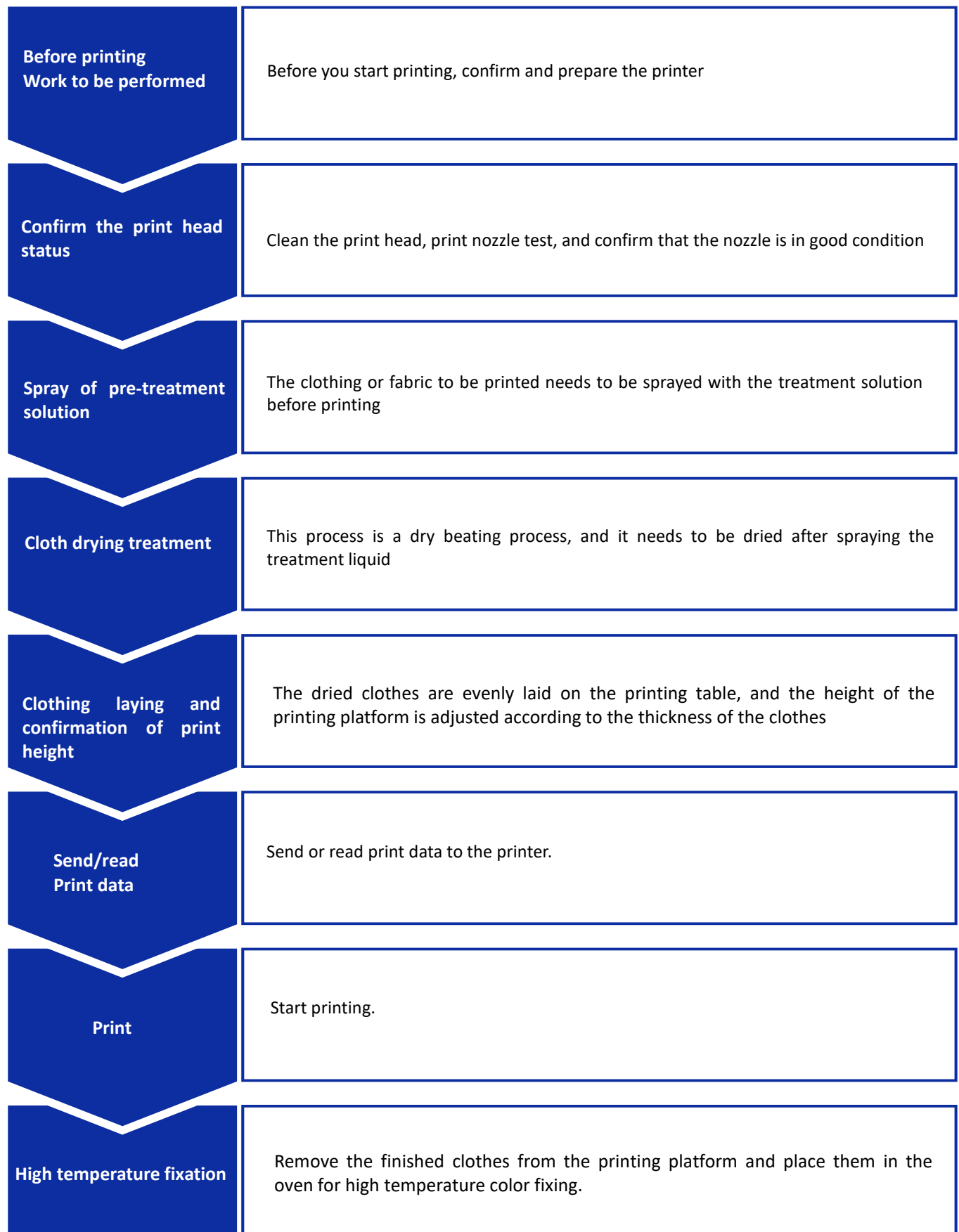
If the unit fails, contact the dealership or trained technician who purchased the unit.

Please ensure that there is sufficient space in front of the unit and do not place items. Otherwise, the pressure plate may be hit and damaged.



## 5-1. Basic printing process

The basic flow of the job before and after printing is explained.



## 5-2. Work to do before you start printing

### 5-2-1. Identify and dispose of waste ink

Confirm the amount of waste ink in the waste ink collector, and dump the accumulated waste ink when the storage exceeds 1/2.

(1) Identify waste ink collector and dump waste ink.

Place a tray, etc. under the tube pulled out from the waste ink collector to avoid the waste ink in the tube dripping onto the floor, etc

【备注】

- 请根据水性废液法令进行处理。

(2) Restore the waste ink collector and insert the tube.

### 5-2-2. Understanding and use of pretreatment fluid

【remark】

- Check to ensure the flow path of waste ink and that the tube is not bent.
- Insert the waste liquid tube into the waste ink collector about 4 to 5 cm.

#### (一) Classification of pretreatment fluid and how to use it

Classification of treatment fluid:



No.	Name	Function
1	High concentration White Cloth Treatment Solution (Blue bottle)	suitable for single-colored fabrics, which need to be mixed with water, and the ratio of water to water is listed as 1 (treatment fluid): 19 (water), white cloth and light-colored cloth are applicable
2	White Ink Dry Beating Solution (White bottle)	suitable for fabrics that need to be sprayed with white ink, and do not need to be used with water, use it directly (on black and other colored fabrics)

## (二) Spraying and drying of fabrics and color fixing

### Spray & Dry:

1、Sticky hair: The surface of the clothes need to be cleaned before spray treatment, so that the ink can better penetrate into the fabric when printing, and the color fixation effect is better;



Follow the texture of the fabric along the sticky hair, after cleaning, the treatment fluid can be penetrated better, and the ink can be adsorbed into the clothes better during the printing process, and it is not easy to fluff and fade.



2、Cloth spraying: use a spray gun or watering kettle and other tools that can atomize the liquid to spray the treatment liquid evenly on the surface of the cloth until it is wet;



Use a spray gun to spray the treatment fluid so that the cloth is sprayed with the treatment solution evenly



3、Wiper: After spraying the treatment liquid, scrape the erected hairs in one direction along the texture of the clothes (note that you can only scrape in one direction, not back and forth)



After spraying the treatment liquid, use the scraper to scrape along the grain in one direction to make the treatment fluid distributed evenly, and another function is to scrape the floating hair down to prevent too much floating hair from printing, which affects the printing effect.





The effect after scraping:



4、Drying: After the cloth sprayed with the treatment liquid is placed for half an hour (which can reduce the water trace effectively), use the oven or heat press to dry;

High temperature fixation:

After printing the pattern, it will be placed for 10~30 minutes for high temperature fixing, the recommended temperature: oven: black and color cloth 150 degrees for 5 minutes, white and light color (no white ink bottom) cloth 150 degrees for 3 minutes; Heat press machine: 150 degrees for black and colored fabrics for 3 minutes, white and light color (no white ink base) for 150 degrees for

2 minutes;

## How to make a print file with DevstudioRip8?

First of all, recognize the curves, what they are, and how to use them.

Application of curves: Choose a color similar to the cloth, when the curve of the same color is enabled, it will assimilate the same color as the background color in the picture, and the same color as the base color will not be played in the printing process, but the cloth color will be used instead, which cansave ink better .

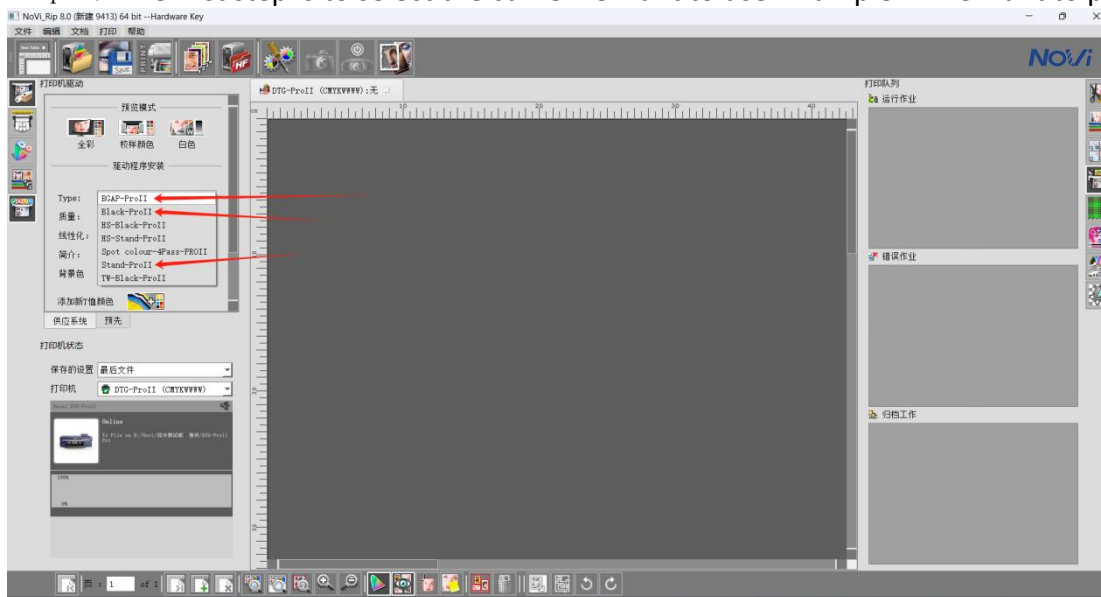
**BGAP**: Color base curve, the base color is a variety of different colors, suitable for the use of similar color fabrics.

**Black**: Black base curve, the base color is black, suitable for black and cloth with a color similar to black.

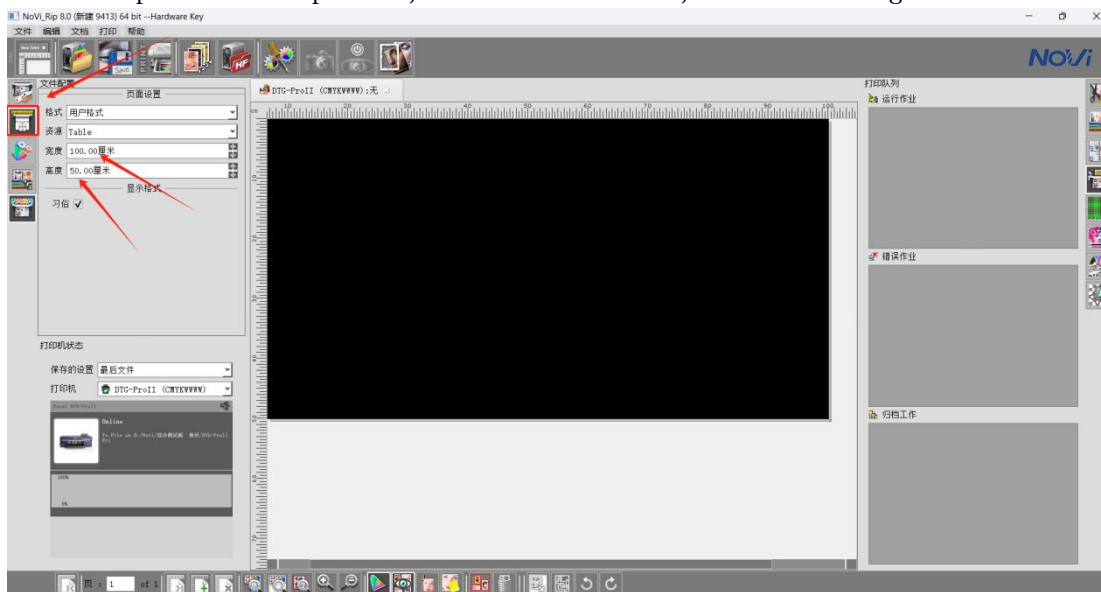
**Satnd**: White base curve, the base color is white, the background color of this curve will not print white ink, suitable for white and other light-colored fabrics.

## RIP diagram diagram

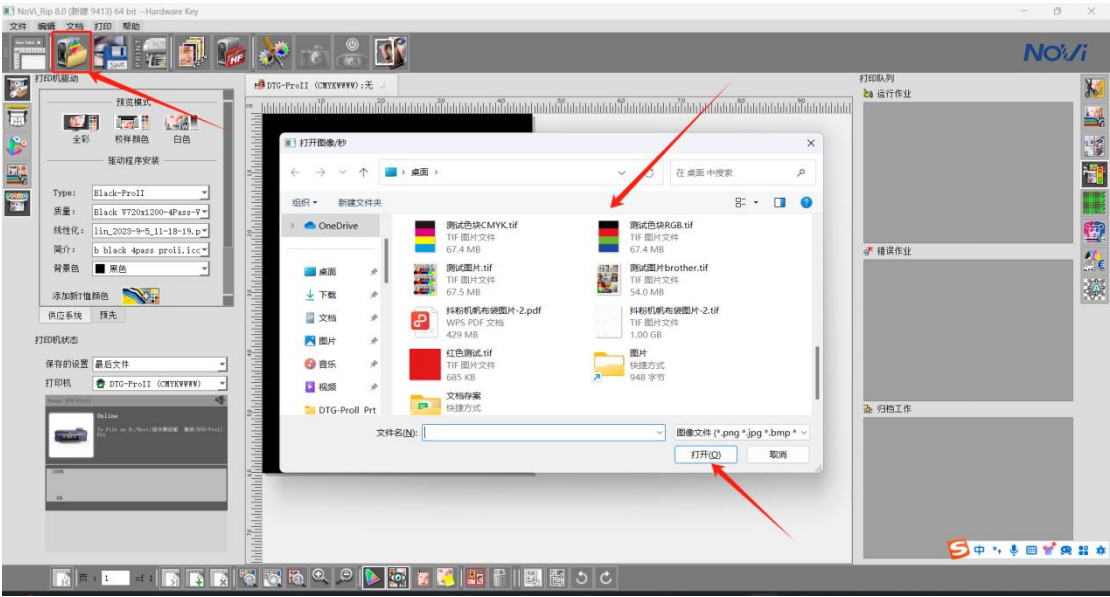
Step 1: The first step is to select the curve we want to use. Example: If we want to print Black, select black.



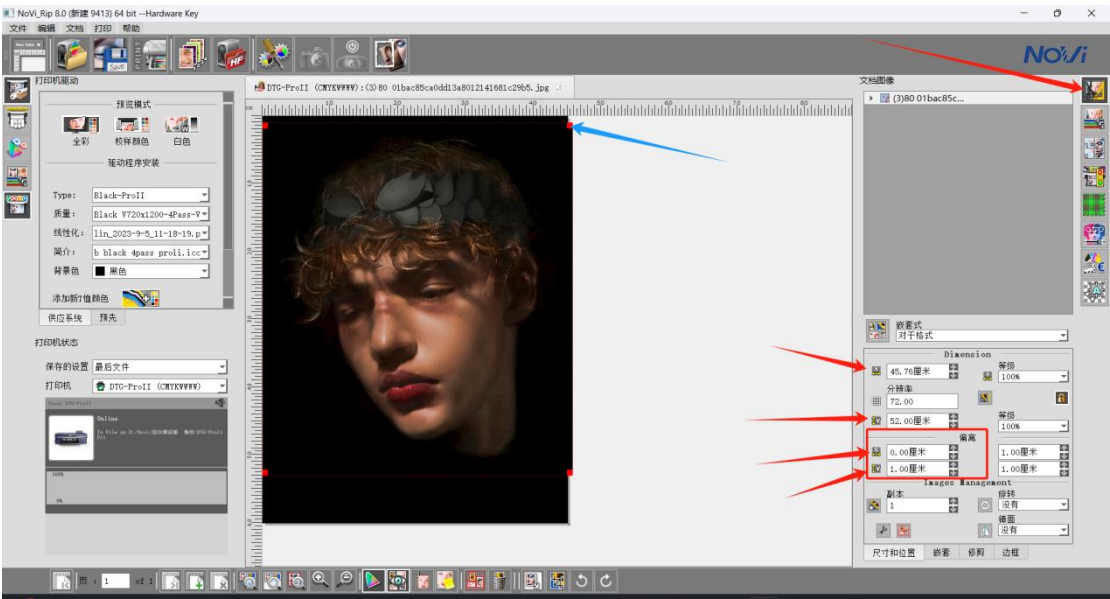
Step 2: The second step is to modify the size according to the size of the printed platen (note that the height cannot be locked, and the height must be re-entered when the curve is replaced), for example: 45\*60 platen, the width is 45, and the height is 60. Click Enter to save.



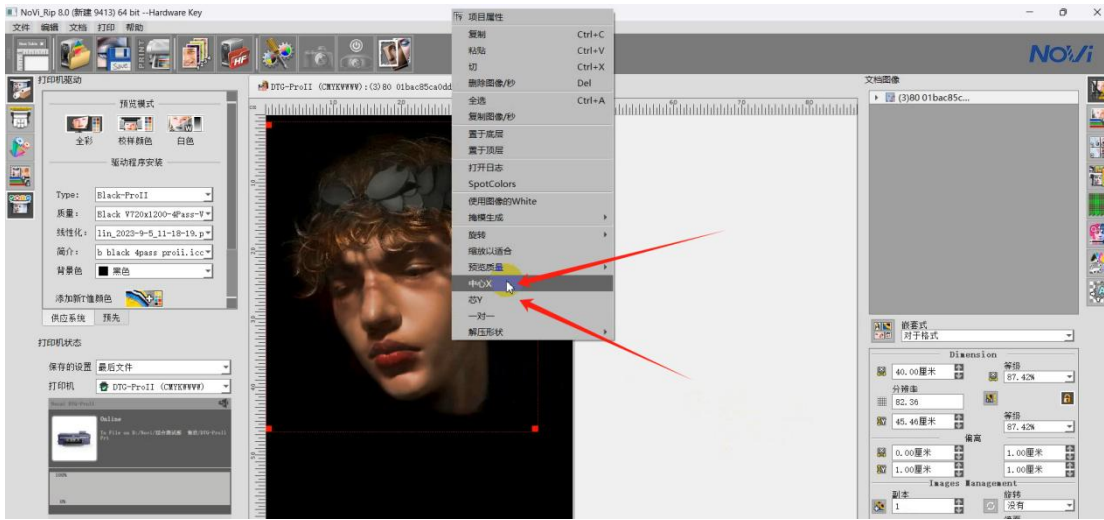
Step 3: Select Open Image in the menu column, select the image you want to print, and click Open to import it into the canvas.



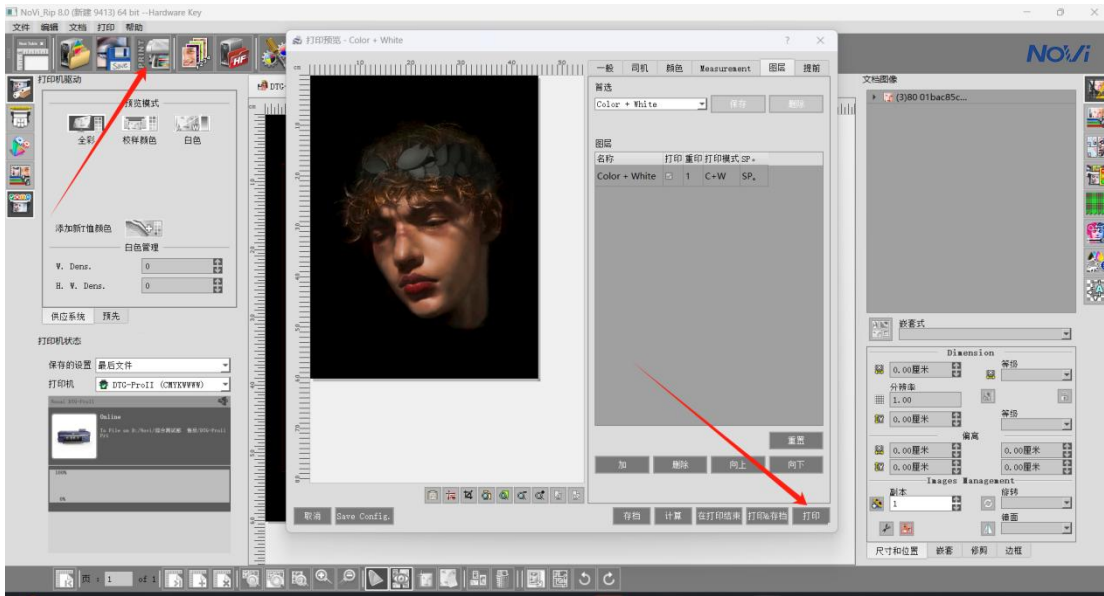
Step 4: Select the image, click on the document image on the right, X in Dimension is to adjust the width of the image, and Y is to adjust the height of the image (note: the image is scaled up and down in equal proportions). The X in the deviation is to adjust the horizontal distance of the image, and Y is to adjust the vertical distance of the image.



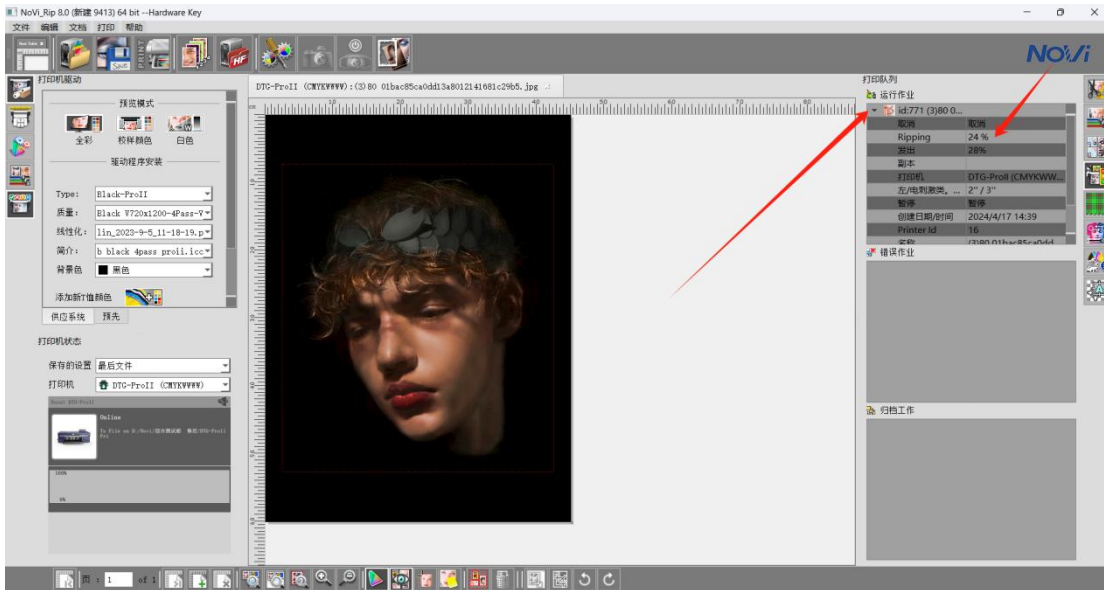
Step 5: After adjusting the size of the image, you can click right on the image, the center X is centered horizontally, and the core Y is centered vertically.



Step 6: Click the Print button at the top and continue to select Print at the bottom right of the pop-up window



Then you can see that the print file is being generated in the print queue on the right, and click the arrow to see the detailed output information

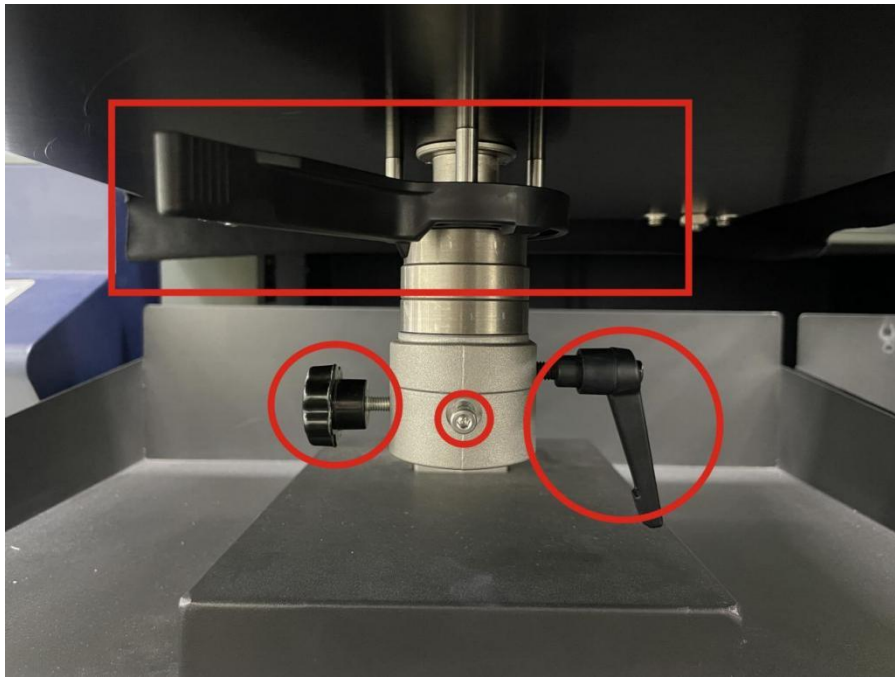




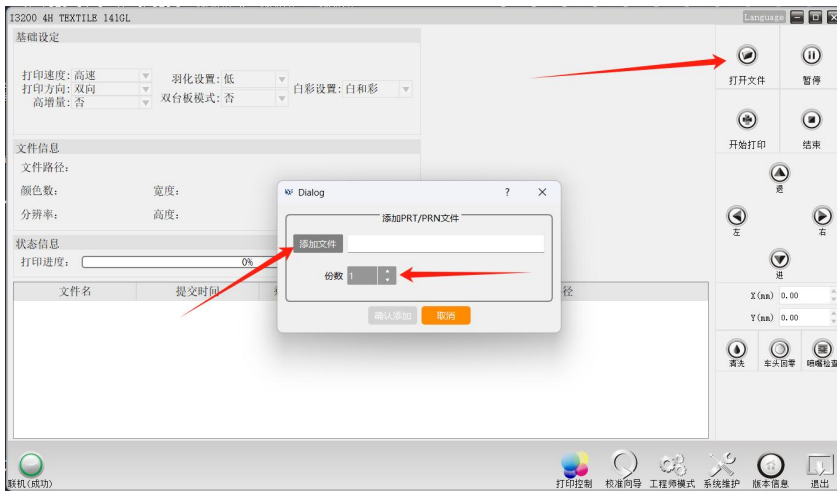
Step 7: Lay the clothes that need to be printed on the printing platform, put the clothes into the platform as on the right, and smooth the upturned part to ensure that the printing can start normally. (Note: The clothes need to be sprayed and dried before the clothes are laid and sent for printing, please see the previous treatment fluid for details)



If the clothing is thick, you can lower the height of the platen under the platform.  
Steps: First release the red circle and then twist the handle of the red square to the right. Twisting to the right is lowering, and twisting to the left is rising.



Step 8: Open the online driver and import the print file. Open the file – add the file – number of copies – confirm the addition.



Click Send to print, and then press the green Confirm button at the bottom of the side of the print plate.



There is a green print confirmation button on the left and right sides of the platform, and each time you send a print, you need to press it to print (Note: In the non-dual platen mode, you need to print the left platen, that is, press the left platen, and print the right platen, that is, press the right platen. In dual-platen and dual-plate mode, only one of the confirmation buttons needs to be pressed. )



Step 9: Remove the clothes from the printing platform and dry them, and the printing job is done, and you will also get the finished product you want.

High Temperature Drying Temperature Recommendation:

Oven: 130 °C for 5 min, 150 °C for 5 min. Choose different temperatures according to different fabrics to prevent carbonization after the fabric is dried at high temperatures.

Ironing machine: 140°C for 2 minutes, 150°C for 2 minutes. Choose different temperatures according to different fabrics to prevent damage to the fabrics after high temperature.

Afterword: When the printing is finished, please be careful when removing the garment to prevent the ink from sticking to other parts of the garment and causing waste.

If you need the relevant part of the instructional video, please contact the after-sales technician, thank you for your support.

**⚠ Danger**

触碰高电压部位可能导致重伤。切断电源，请等待 5 分钟之后拆下罩盖。

**⚠ Notice**

Be careful not to clamp your fingers when closing the front cover. If the finger is caught, it may result in injury.



If the ink comes into contact with the eyes or skin, it may cause inflammation. Do not rub when entering eyes. Rinse immediately with water.

Do not drink ink, filler, cleaning solution, pretreatment agent, waste liquid and other liquids. Otherwise, diarrhea and vomiting may result.

In addition, avoid eye and skin contact with ink, filler, cleaning solution, pretreatment agent, waste liquid and other liquids. Otherwise it may cause inflammation. Get in the eye

Do not rub. Rinse immediately with water. Keep out of reach of children.



When applying oil, wear safety goggles and protective gloves to prevent eyes or skin from coming into contact with oil. Otherwise it may cause inflammation.

In addition, do not eat fat. Otherwise, diarrhea and vomiting may result. Keep out of reach of children.



When replacing parts and installing spare parts, please use our original parts. The Company is not responsible for accidents or failures caused by the use of non-original parts.



Replace parts and install spare parts by following the steps in the manual. If you follow the wrong steps, injury or failure may result.

**((!)) Important matter**

Do not move the pressure plate with your hands. Otherwise, serious faults may occur on the machine.



Please ensure that there is sufficient space in front of the unit and do not place items. Otherwise, the pressure plate may be hit and damaged.

## 6-1-1.Add ink

When the device indicator light is on, add ink promptly.

### 【Important】

- In order to prolong the life of the printer and to utilize the performance of the printer fully, it is recommended to use the ink specified by our company.
- Follow the color prompts to add ink
- A small amount of ink needs to be left in the cartridge in order to protect the printer as well as ensure print quality. Please pay attention
- Pay attention to the protective measures when adding ink to avoid ink overflow and pollution of the machine sheet metal.



### 【Reference】

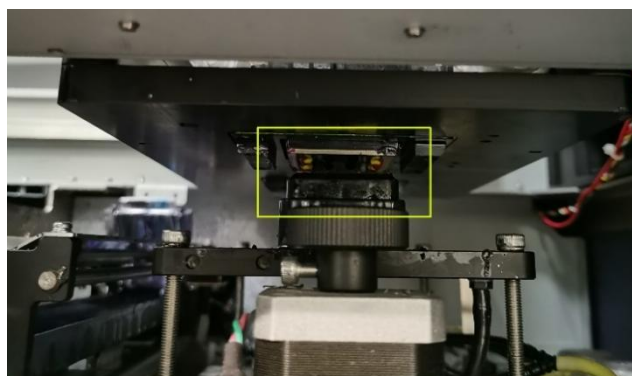
- Ink may pollute the bottom of the cartridge.

Add ink, wait about 5 minutes to inking manually, the machine ink supply is completed normally when the damper is filled with ink.



### Automatical cleaning

The machine started to perform automatic cleaning and ink droplets appeared on the surface of the printhead as shown below





## 6-1-2. Clean the protective board for nozzle

(1) Fill the cleaning cup with an appropriate amount of cleaning solution.

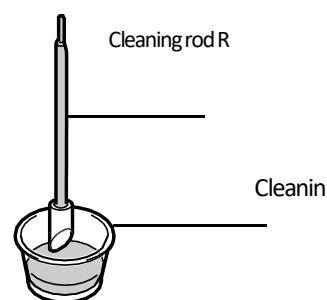
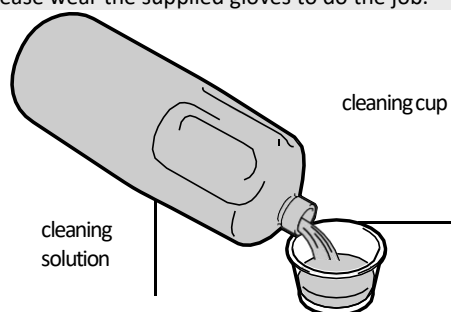
(2) Dip the cleaning solution with a new cleaning rod R.

### 【Important】

- Use a new cleaning rod when you start sweeping.
- Do not touch the top of the cleaning rod with your hands. Otherwise, sebum adheres to the scraper and may cause abnormalities.
- Other liquids (water, etc.) may damage the print head, so do not use it.
- Do not pour the cleaning solution from the cleaning cup back into the cleaning solution bottle.

### 【Note】

- Please wear the supplied gloves to do the job.



X0051

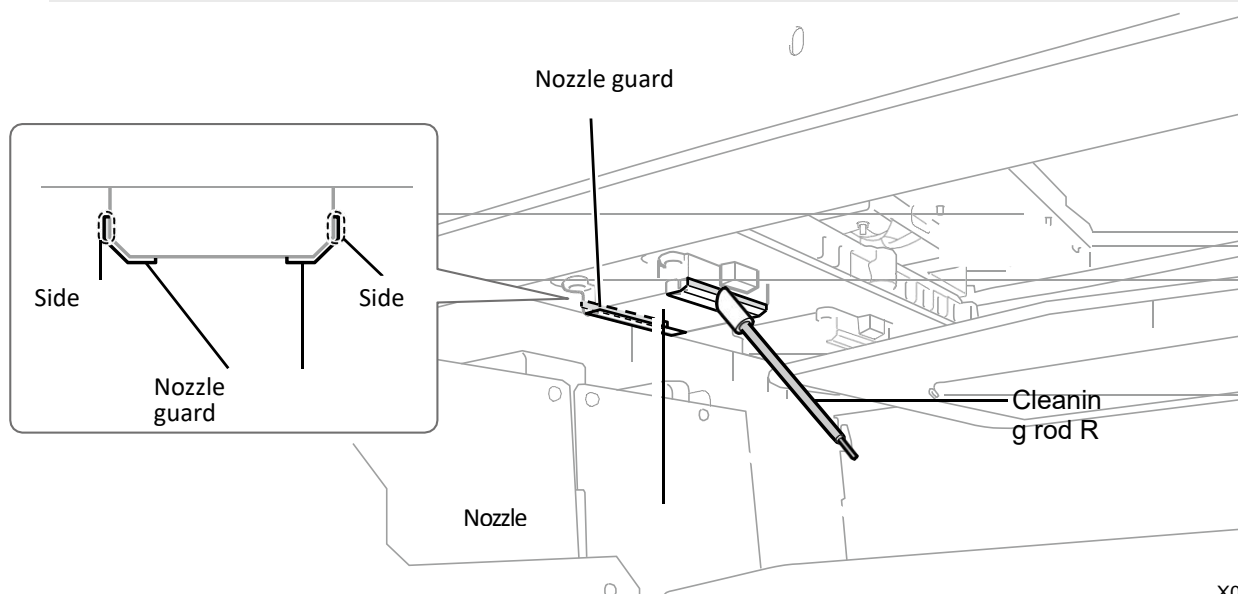
(3) Use a cleaning rod to wipe the sides of the nozzle guard.

### 【Important】

- Do not touch the nozzle interface and the horizontal and beveled surfaces of the nozzle guard.

### 【参考】

- Move the word cart by hand to a position where it can be easily swept.



X0060

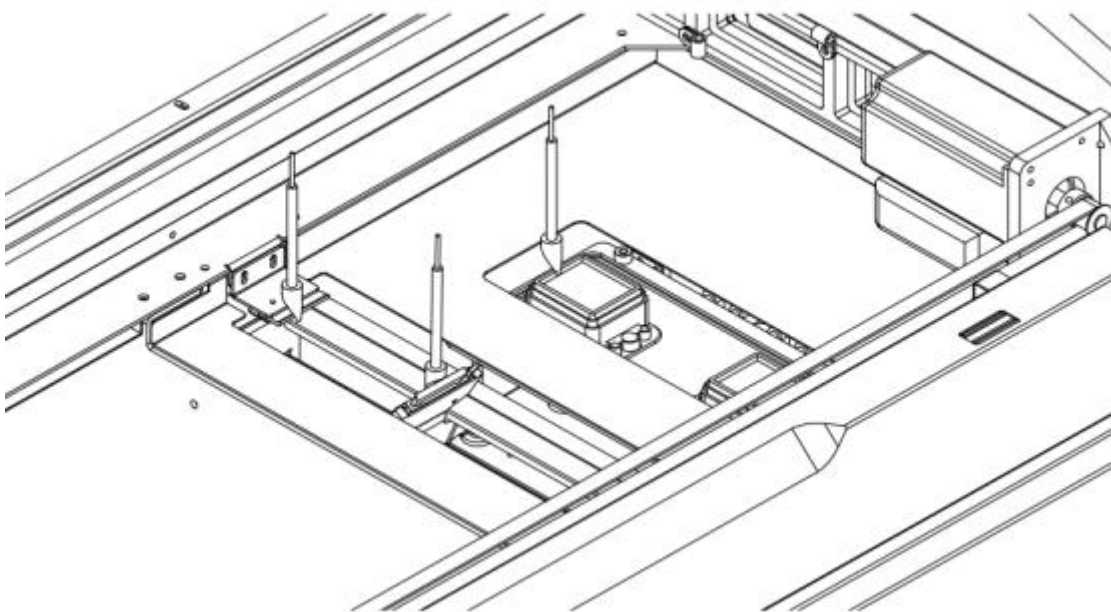
### 6-1-3. Change the cleaning scraper

- (1) Use a cleaning rod to wipe the surface of the scraper and the gap between the protruding part and the scraper.

**【Important】**

- Do not touch the top of the cleaning rod with your hands. Otherwise, sebum adheres to the scraper and may cause abnormalities.
- Please rinse the cleaning rod used to clean the nozzle guard with a cleaning cup before use. Color ink and white ink must be used separately.

- (2) Use the clean side of a cleaning rod to wipe the inside of the scraper.



X0052

- (3) Rinse the cleaning rod with a cleaning cup and use it later when cleaning the exhaust cap.

**【Important】**

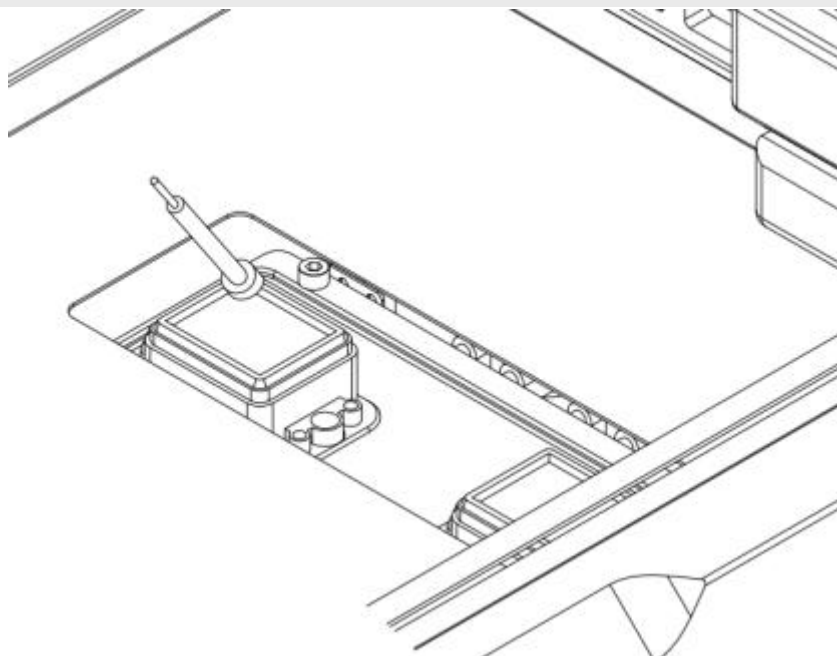
- Cleaning rods for white and colored inks must be used separately.

## 6-1-4. Sweeping suction caps

- (1) Wipe the rubber part of the suction cap in parallel with the side part of the end of the cleaning rod.

**【Important】**

- Do not touch the sponge of the white side suction cap. Otherwise it may cause the sponge to fall off.
- Do not touch the top of the cleaning rod with your hands. Otherwise, sebum adheres to the scraper and may cause abnormalities.
- Rinse the cleaning rod used for nozzle guard, scraper cleaning, and exhaust cap cleaning with a cleaning cup before use. Color ink and white ink must be used separately.



X0053

- (2) When the ink block floats up, please pick it up with tweezers to remove it.

**【Important】**



- Do not clamp the rubber part. Otherwise damage may result in a loss of airtightness and the print head does not eject ink.

- (3) Replace the cleaning rod, rinse the cleaning cup, and clean the nozzle guard of the color side print head.

**【Important】**

- The cleaning rod R for white ink and the cleaning rod R for colored ink must be used separately.
- Throw away the cleaning rod after using.

Sweeping status

Before sweeping	After sweeping
 <p>Suction cap rubber part</p>	 <p>Suction cap rubber part</p>

X0162

## 6-1-5 Change the cleaning wiper

Replace the cleaning scraper, check the dirty condition inside the printer. If the inside of the printer (guide shaft of word cart, roller guide, carriage roller) is dirty, clean it.

Prepare cleaning rods, cups, gloves, cleaning solution and grease.

### 【Important】

- Do not touch the top of the cleaning rod with your hands. Otherwise, sebum adheres to the nozzle and may cause abnormalities.

Cut off the power supply according to the information

### 【Important】

- Finish the job within 20 minutes in order to prevent the ink in the print head from drying out.

Power on

### 【Note】

- Please dispose of the waste generated by cleaning in accordance with the ordinance.

### 【Reference】

- Performs print head cleaning that prevents ink from drying out.
- Since the cup will be used again, please rinse it with a clean cleaning solution and keep it.

打印头清洗

### 【Note】

Please clean the printhead in order to prevent the ink from drying out.

打印喷嘴检查图案。

### 【Reference】

- Check the graphic of printing nozzle (confirm the printhead)

## 6-2. Implentation matters when necessary

### 6-2-1. Print the graphic of nozzle(confirm the printhead)

If the print nozzle checks the pattern, the print quality can be confirmed. It is recommended that this operation must be performed to confirm printing effect before starting printing.

- (1) Install the printing film, setting the height to the right position.

**【Reference】**

- If you need to observe the status of white ink, it is recommended that the transparent and black PVC film are used.

- (2) Choose [Nozzle test] in the menu.

The printing starts


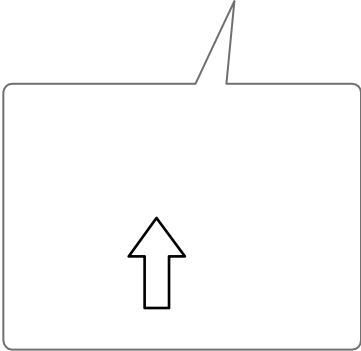
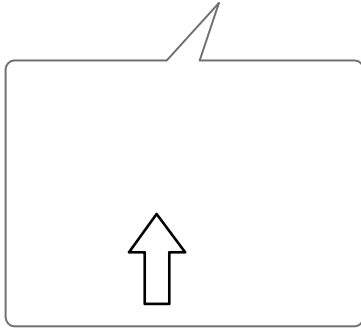
- (3) Judge the printing effect of the nozzles on both sides, and when there is a nozzle that does not spray ink, clean the corresponding print head.

**【Important】**

- When the lines of the print effect are interrupted, there may be a problem of no ink jet. Clean the corresponding print head.
- Even the lines of the white side printing effect are thin, the quality is not affected because multiple nozzles spray white ink at the same position.

**【Reference】**

- Please refer to the 7-2-2. Clean the printhead.

Color side	White side
<p>Ink breakage has occurred in the portion indicated by the arrow in the photograph below.</p> <p>For example :</p>  	<p>The following photographs show a non-ink-jet phenomenon in the part indicated by the arrow.</p> <p>For example:</p> 

## 6-2-2.Cleaning the printhead

When there are flying white ink or missed prints on the prints, it may be resolved by cleaning print head.

### Press the button of cleaning

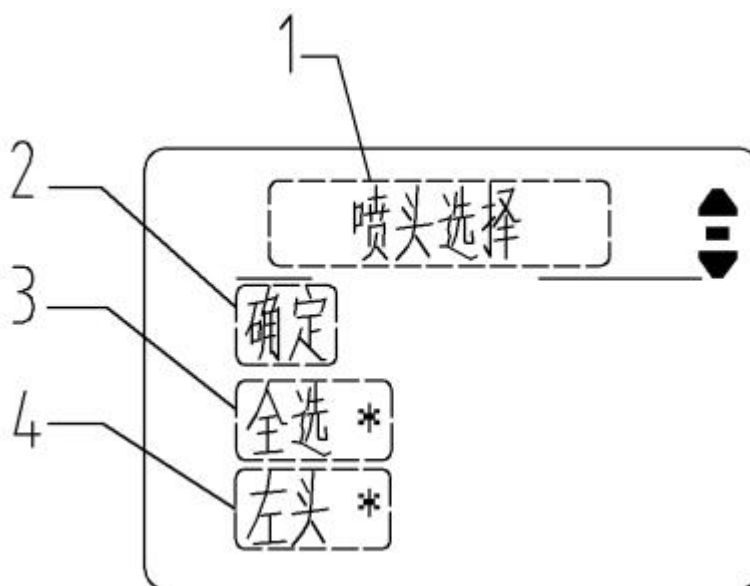
(1) Clean。 While the printer is in standby mode, press Clean on the operation panel.

(2) Through ▲\_ ▼ Choose the printhead need to be cleaned, click Enter 。

Performs a general cleaning of the selected print head.

#### 【Reference】

- Cleaning operations cannot be canceled in the middle of the process.
- Click Exit to return to the standby interface.



### 6-2-3.Cleaning the word carriage board

Perform sweeping operation when ink is dirty on the character plate.

**【Reference】**

- You can use a cleaning rod that has already been used once

(1) Prepare the included parts cleaning rod cleaning cup, gloves, and cleaning solution.

**【Important】**

- Do not touch the top of the cleaning rod with your hands. Otherwise, sebum adheres to the nozzle and may cause abnormalities.

(3) Click Left and the word cart moves to the left

**【Important】**

- If other errors or messages are displayed on the operation panel or warning screen, follow the messages to solve the problem and then clean.

(3) Cut off power supply according to the information

**【Important】**

- Please finish the work within 20 minutes in order to prevent the ink from drying.

(4) Fill the cleaning cup with an appropriate amount of cleaning solution.

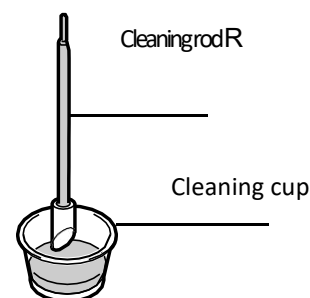
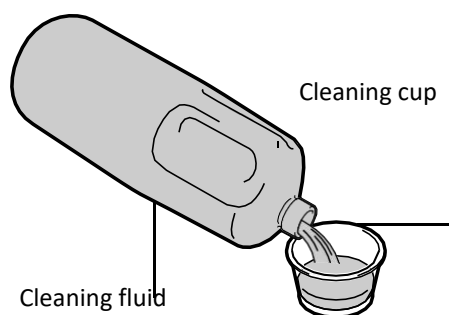
(5) Dip the cleaning solution with a cleaning rod.

**【Important】**

- When using a cleaning rod that has already been used once, it should only be used to clean the letter carriage plate.
- Other liquids (water, etc.) may damage the print head, so do not use it.
- Do not pour the cleaning solution from the cleaning cup back into the cleaning solution bottle.

**【Note】**

- Please wear the supplied gloves when working.



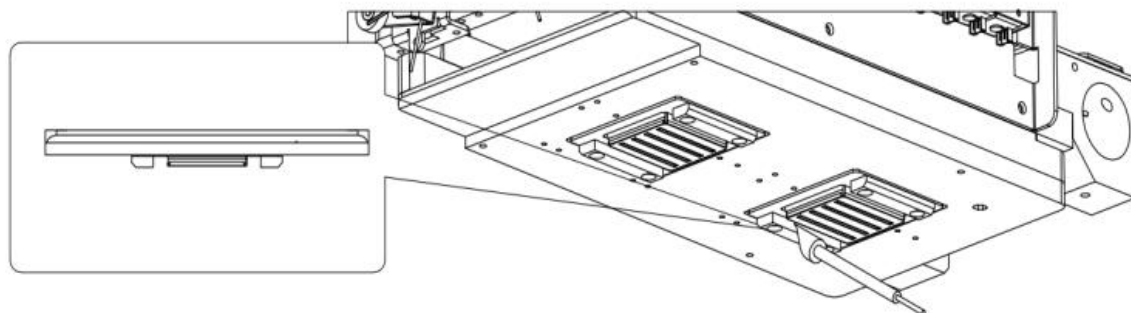
- (6) Use a cleaning rod to wipe ink stains from the word carriage plate on the left side of the print head.

**【 Important 】**

- Do not touch the interface of nozzle

**【 Reference 】**

- Remove the word cart to a easy sweeping position by hand.



**【 Important 】**

- Throw away the cleaning rod after use.

- (7) Clean the word carriage plate on the left side of the print head on the other side in the same way

- (8) Powe

**【 Note 】**

- Please dispose of the waste generated by cleaning in accordance with the ordinance.

**【 Reference 】**

- Cleaning the printhead that prevents ink from drying out.
- Since the cleaning cup will be used again, please rinse it with a clean cleaning solution and store it.



### 6-3. Do not use it for a long time

When the printer is not used for a long period of time, respond according to the period of non-use and the condition.

#### 【Important】

- Do not cut off the power supply, otherwise it may cause malfunction.
- If you are unable to maintain energization, contact the dealership in advance.

#### 【Note】

- When an error occurs on , follow the instructions on the screen.
- Clean the nozzle guard and scraper when not in use for more than 2 weeks. Clean the nozzle guard, scraper, and suction cover.

#### 6-3-1.Do not use it for a long time:within 2 weeks

It can be used normally by performing the following maintenance.

- (1) Confirm the amount of waste ink in the waste ink collector, and if the accumulated amount is more than 1/2, pour out the accumulated waste ink.

#### 【Reference】

- Confirm and dispose of the waste ink timely

- (2) Stir the white ink.

#### 【Reference】

- Stir the white ink

- (3) Check the graphic according to the need.

#### 【Reference】

Check the graphic of nozzle.

#### 6-3-2.Do not use it for a long time:more than 2 weeks

Perform the following maintenance every 2 weeks.

- (1) Confirm the amount of waste ink in the waste ink collector, and if the accumulated amount is more than 1/2, pour out the accumulated waste ink.

#### 【Reference】

- Confirm and dispose of the waste ink timely

- (2) Stir the white ink.

#### 【Reference】

Stir the white ink.

- (3) Check the graphic of nozzle and confirm the printing effect

#### 【Reference】

- Check the graphic of nozzle(confirm the printhead)

- (4) When ink is not injected, clean the print head, print the nozzle again to check the pattern and confirm the effect.

#### 【Reference】

- Clean the printhead.

Please solve the malfunction referring to the following.

Error code	Instructions	Elimination method
16	Driver board alarm	1, unplug the small adapter of the board card to check the board itself is normal. 2. Check whether the wiring is normal. 3, power supply 42V check. 4. Replace.
104	Heavy drag	1, the grating signal is abnormal, 2, the motor or motor signal is abnormal (the new machine checks whether the left side of the car is removed)
106	Outwidth	1, check the print starting point, 2, picture width (first check whether the software canvas size is wrong)
112	Lift ink station sensor error	Lifting ink station sensor abnormal (contact after-sales technician)
115	Optical fiber cannot communicate	The optical fiber connection is abnormal. (Check whether the optical fiber is inserted correctly. Switch optical fibers and try to power on.)
There is no	Negative pressure machine ink reflux	When the ink reflux should be timely press the emergency stop or disconnect the main switching power supply, and then contact the after-sales technical personnel
There is no	White test strip light color	1. Shake well when pouring white ink. 2. Use a clean stick to stir the main white ink cartridge behind the machine
There is no	A constant musical alarm	1. Check whether the main ink cartridge is out of ink. 2. Check whether the level of the secondary ink cartridge is too high or too low, press the reset key of the ink supply panel normally (if the alarm sound cannot be eliminated, please contact after-sales technicians)
There is no	Constant pumping sound	1, check whether the negative pressure pipeline has entered the ink, if so, please turn off the power immediately. 2. Contact after-sales technicians to troubleshoot the problem.
There is no	First pass does not print ink	1, check whether the humidity is too low, it is recommended to buy a humidifier. 2. Whether the status of the nozzle test strip is complete. 3, the above can not be solved, please contact after-sales technical personnel.

## The printing data can not be sent from PC

Reason	Solution
Was a different printer selected?	Confirm the name of printer from the printing menu.
Was the LAN connected?	Confirm the connection of LAN cable.
Is it an out-of-specification PC or OS being used?	Confirm the working environment of PC.
Is it an out-of-specification network or cable being used?	Other objects that should be prepared, please use network cables that meet specifications
Is noise occurring between the printer and the PC?	Unplug the LAN cable and connect it after 5 seconds. If the problem is not solved, cut off the power supply temporarily and restart it after 5 seconds.
Is the PC functioning normally?	Please restart the PC.
Is there another USB device connected to the PC?	Confirm the operation of the printer after removing the other USB devices and restarting the PC.
Is the LAN cable not working well?	Please adopt other cables.
Whether the driver is online	Whether the driver is connect.

## Printing does not start even if the print button is pressed

Reason	Solution
Is an error message displayed?	Eliminate the wrong reason and print again.
Have you entered the menu screen or are you performing a maintenance operation from the menu?	Please exit the menu. Or please wait until the maintenance operation is finished.
Is it during automatic print head cleaning?	Please wait for the end of printhead cleaning.
Is it during the white ink circulation?	Please wait for the end of white ink circulation.
Does the room temperature qualify?	PC operating environment, adjust room temperature or clicks ignored on button screen
Whether the printer has not received data, or is receiving data	Please send print data to the printer. Or wait until the print data reception is completed.

## Error after printing startup.

Reason	Solution
Is an error message displayed?	Confirm the wrong content and restart the printer. If the error is not eliminated, contact the dealership where you purchased the machine.

## Printer not powered on

Reason	Solution
Is the power cord connected?	Make sure the power cord is connected.
Test 220V plug board and power cord	Confirm whether it is normal power supply

## Light printing color

Reason	Solution
Are the settings of the image editing application appropriate, or is the image in CMYK mode?	Check the ICC setting of Future Rip software.
Are the printing conditions appropriate, or is the image data not saturated sufficiently?	Replace the printed clothes and check whether the image data is normal
Is there ink in the cartridge?	Add ink timely.
Does the nozzle spray ink?	Check the nozzle and confirm the status of nozzle, clean the printhead.

## Stripe on the product

Reason	Solution
Does the nozzle spray ink?	Click Clean on the printing panel, or click [clean the printhead] on the menu.
Is the spray out time appropriate?	Readjust the vertical calibration. The setting value may not be appropriate after replacing the print head and the platen, or changing the platen height.
Is the platen feed appropriate?	Adjust the platen step calibration and adjust the platen feed. After replacing the print head and the platen, the setting value may not be appropriate.

## Blurry image edges    Ghosting of text or lines    Serious graininess

Reason	Solution
Is the print height of printhead too high?	Adjust the carriage height adjustment lever to lower the print height
Is the dual-direction calibration appropriate?	Readjust the dual-direction calibration. The setting value may not be appropriate after replacing the print head and the platen, or changing the platen height.
Is the image enlarged on the printer setup screen?	If an image with low resolution is enlarged on the printer setup screen, printing may occur with blurred and angular images. Confirm the resolution of the image by enlarging the pattern data on the image editing application.

## Gradual printing ink-breakage

Reason	Solution
The temperatures are warm and very dry, does the nozzle surface dry out easily?	Increase the frequency of flushing, or increase the humidity of the environment

If an error code other than the above is displayed, or if it does not improve according to the solution, please contact the distributor from which you purchased the unit.