

**polaroid**

# **POLAROID MICRO UV Flatbed Printer**

## **USER MANUAL**



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## Part 1: Pre-installation requirements

### 1.1 The Other devices needed:

- A desktop PC-type personal computer Suggested configuration:
  - ✓ OS: 64 bits, WINXP/WIN7/WIN8
  - ✓ Internal RAM memory 4GB or above
  - ✓ HDD of 250GB or larger
  - ✓ CPU: Intel(R) Core (TM) i5-2430M CPU @2.4GHz
  - ✓ Socket suitable for printer
- You should avoid to turn the power on and off frequently.
- Power cable for the printer: as required for your country local conditions: voltage: 220V/110V.

Warning: Do not use damaged power cables, which must be connected and reliable, fully meet the electricity load requirement.

### 1.2 Working environment requirements:

- The printer should be kept inside with stable temperature, usually 22°C (71°F), dust-free and away from sources of heat and vibration.
- Important note: No convection toward the printer. No electric fan or air conditioner can blow air onto the printer.
- Keep the printer stable, fix its wheels unless moving to another location.

### 1.3 The notes before switch the power on

Please ensure their ground wire is properly connected, positive and negative plugs should match. Keep the computer is far away from the sources of electromagnetic interference.

 Warning: The printer should not be damaged, listed or used as storage table for heavy objects.



## 2. Installation

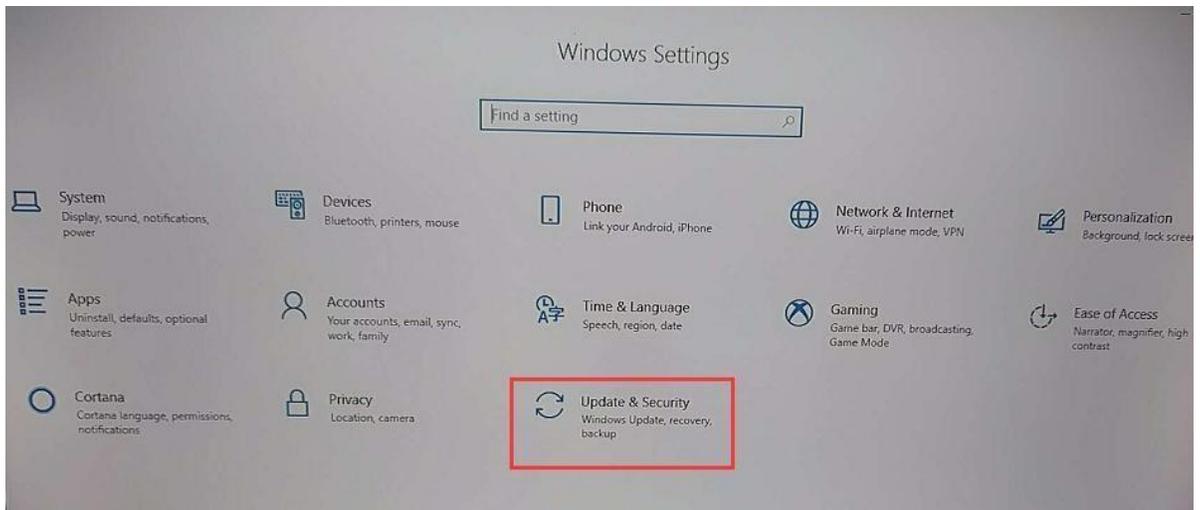
### 2.1 How to Disable Driver Signature enforcement Windows

10/Windows8

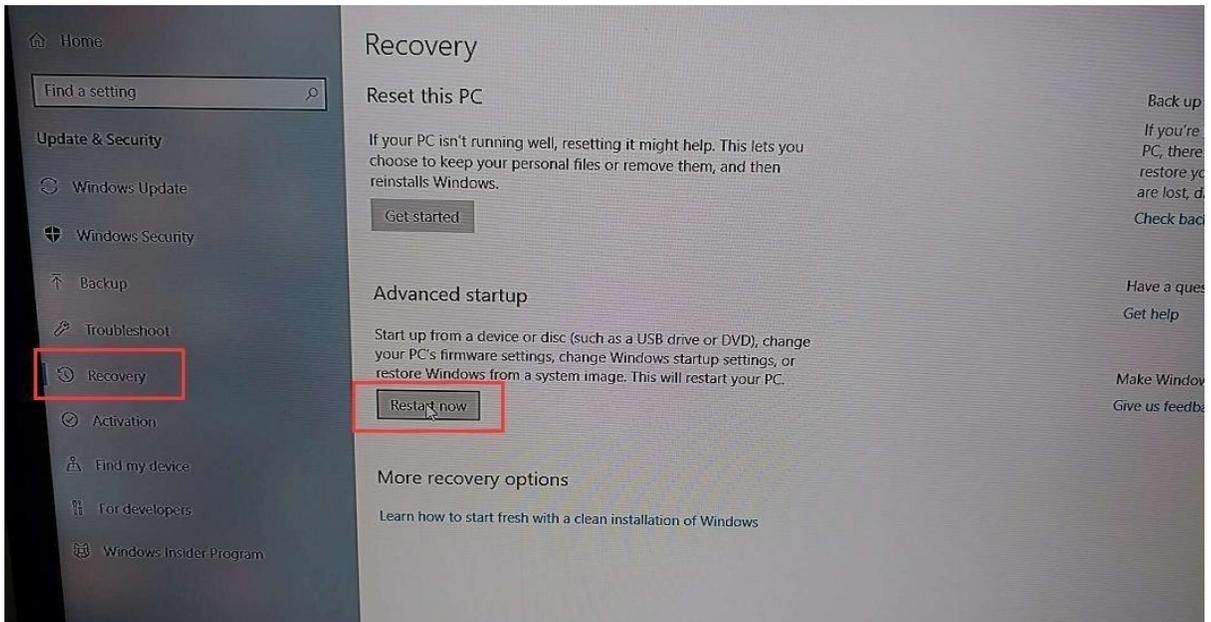
Step 1: "Setting"



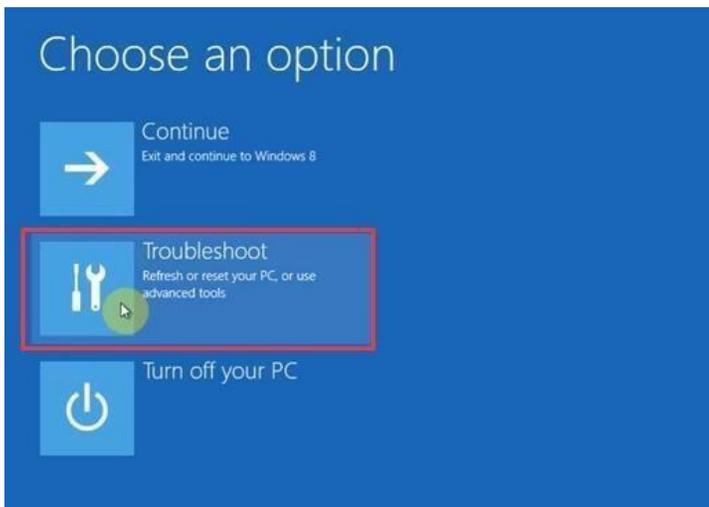
Step 2: "Update & Security"



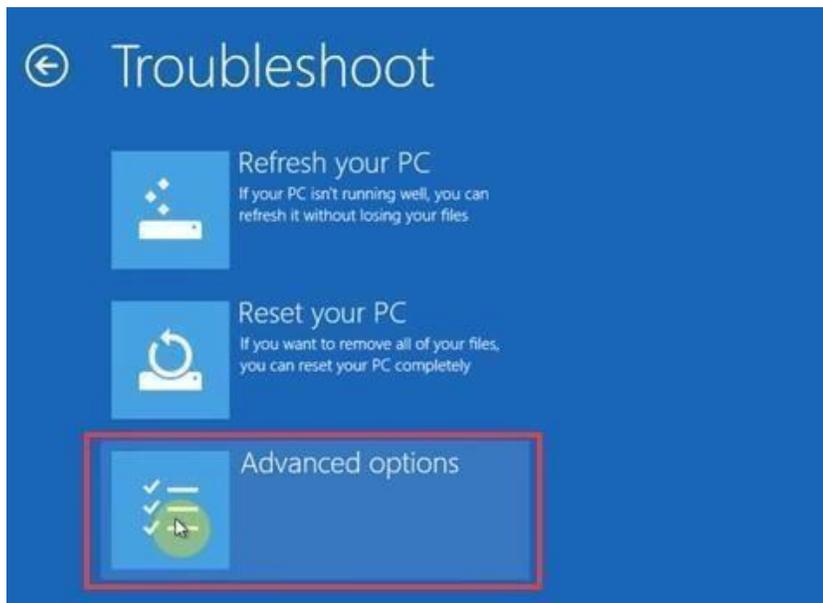
## Step 3: "Recovery"->"Restart now"



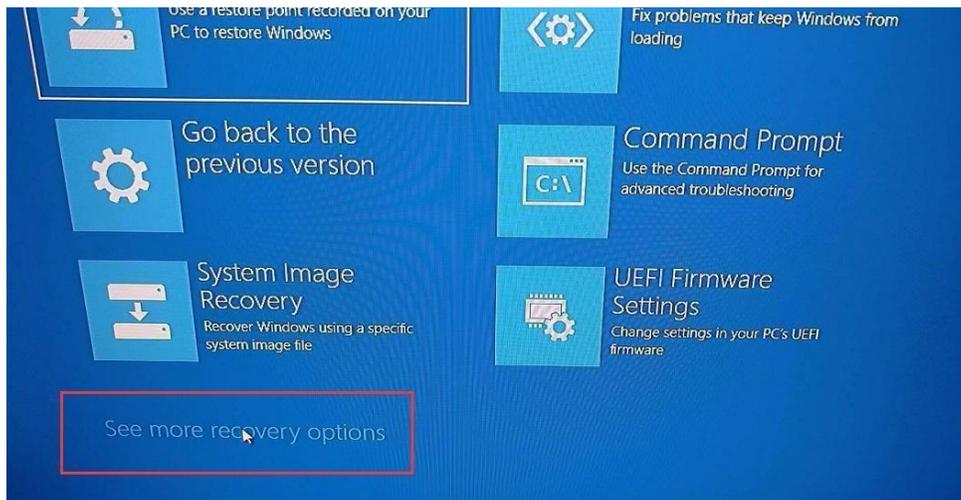
## Step 4: "Troubleshoot"



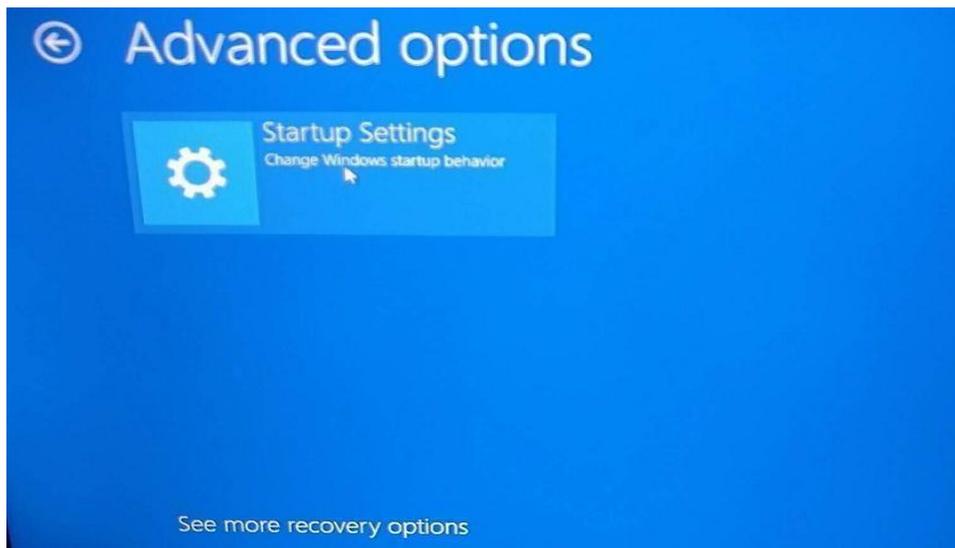
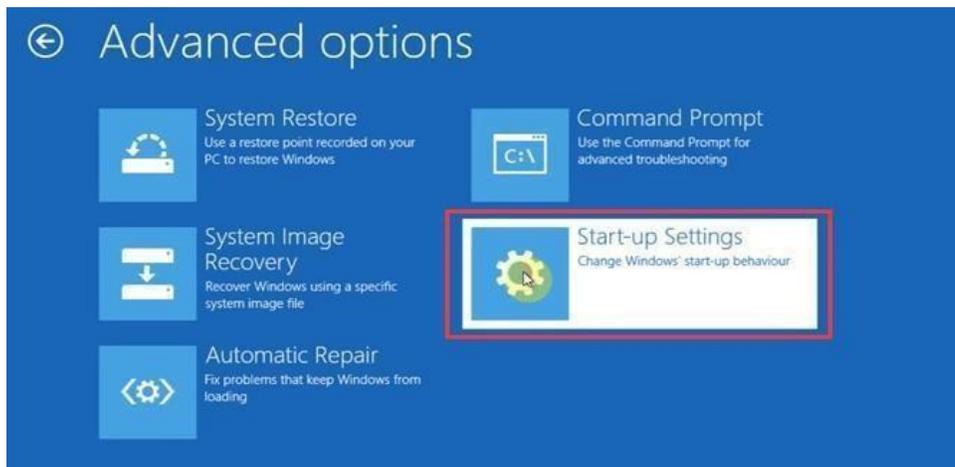
Step 5: "Advanced options"



Some system needs to click "see more recovery options"



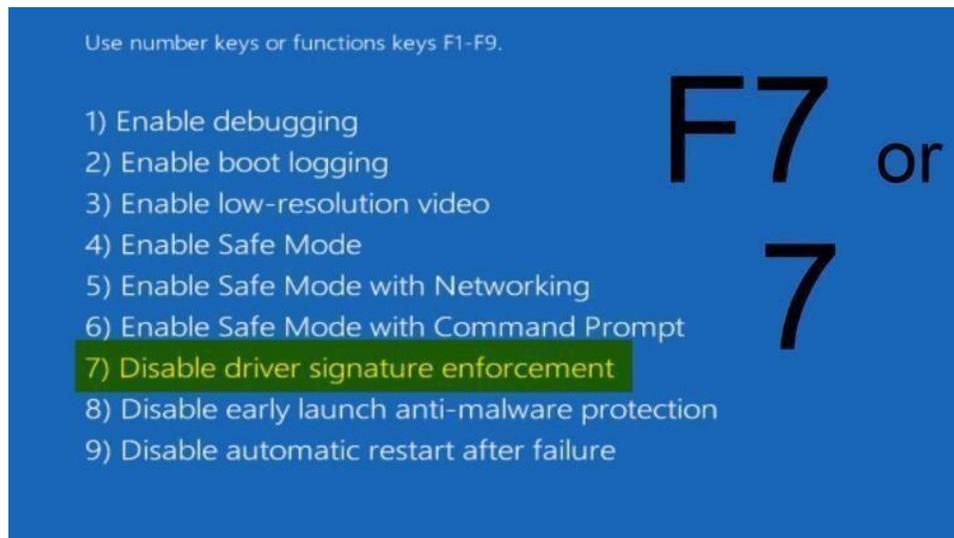
Step 6: "Startup settings"



Step 7: "restart"



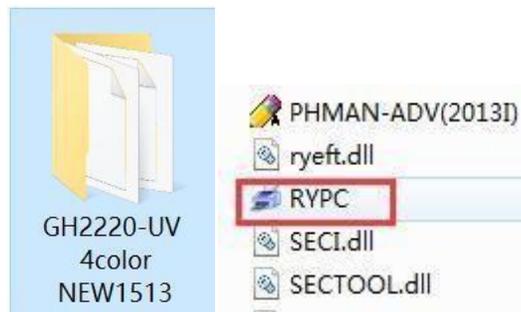
Step 8: press the "F7" or "7"



## 2.2 Software Installation

Open U Disk, Copy the USB drive contents to the computer's non-system disk,

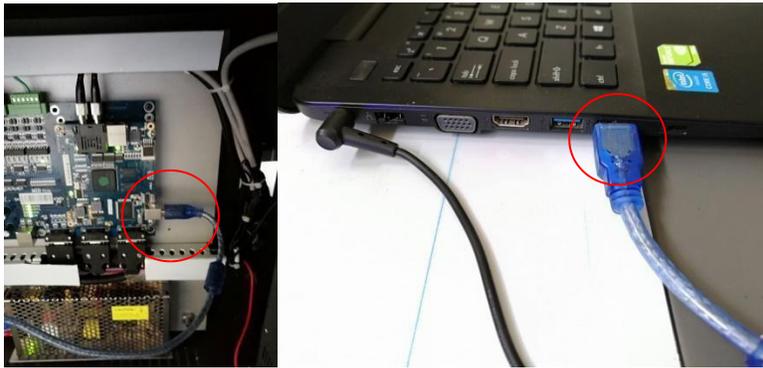
### 2.2.1 Print software application Installation



Open the Print software, find the RYPC application, and send it to the desktop shortcut

#### Printer driver installation

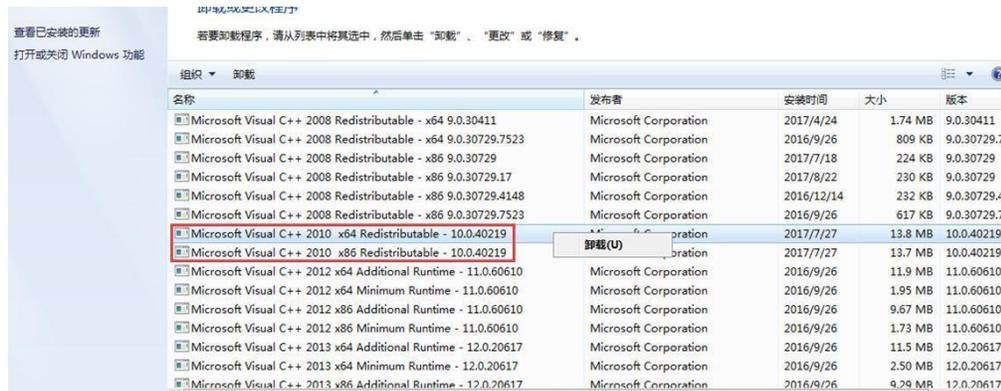
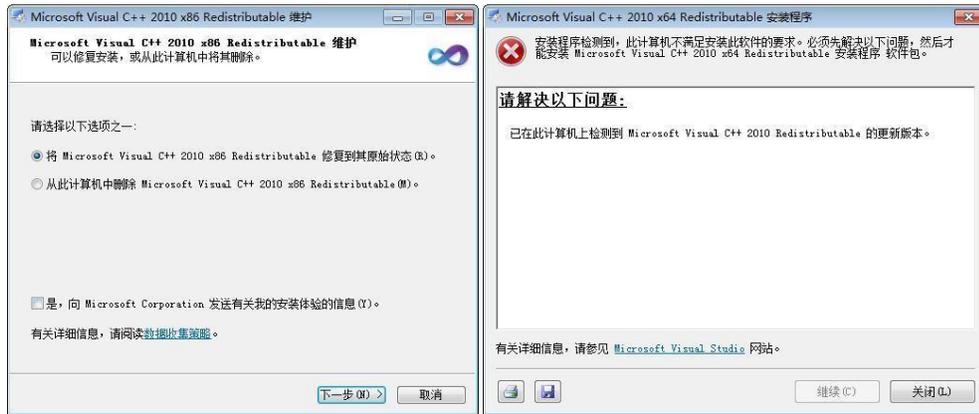
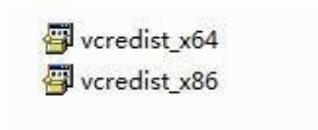
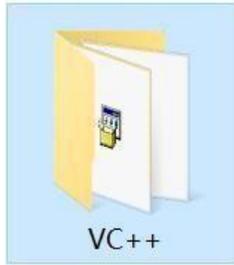
- 1 The printer driver may be installed automatically once you insert our USB key
- 2 Right-click My computer → Properties → Device Manager
- 3 Open Universal Serial Bus (USB) Controller, you can find the driver USB-Printer Controller if it is well-installed. But if you find the Driver with? (Question mark or exclamation mark), please double-click it for installation. Find the "Driver" in the print software, Select Window (64), update.



Doc	2016/4/29 10:19
Driver	2016/4/29 10:19
LogFile	2016/4/29 10:19
Medium	2016/4/29 10:19
MTYPE	2016/4/29 10:19
oem	2016/4/29 10:19



## 2.2.2 VC++ Installation

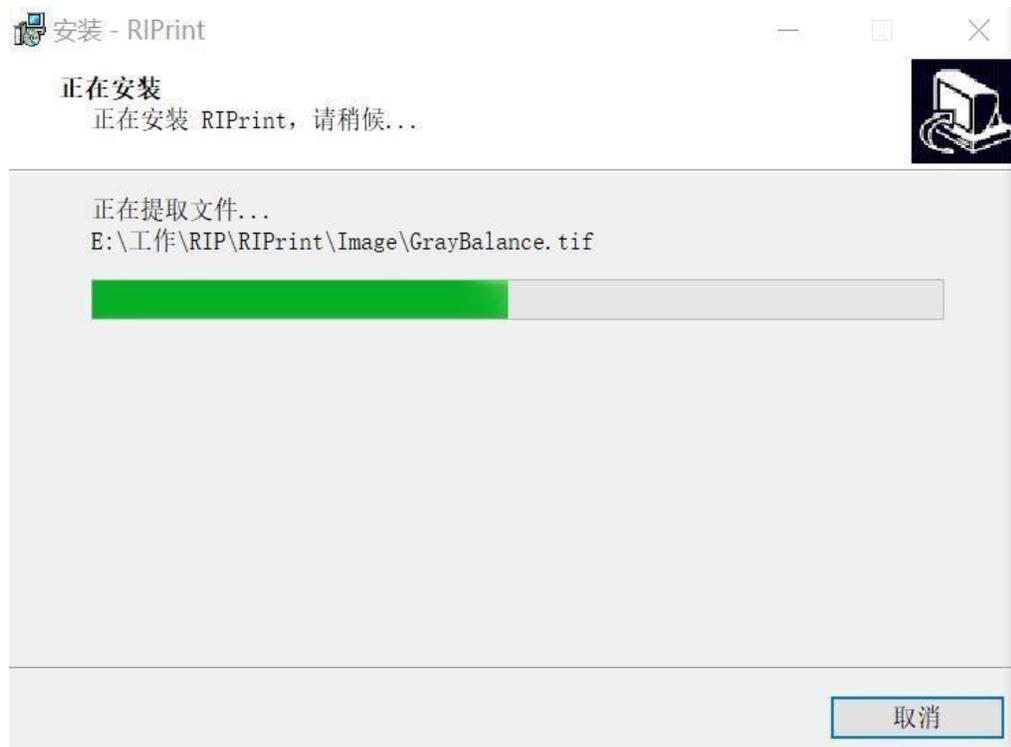
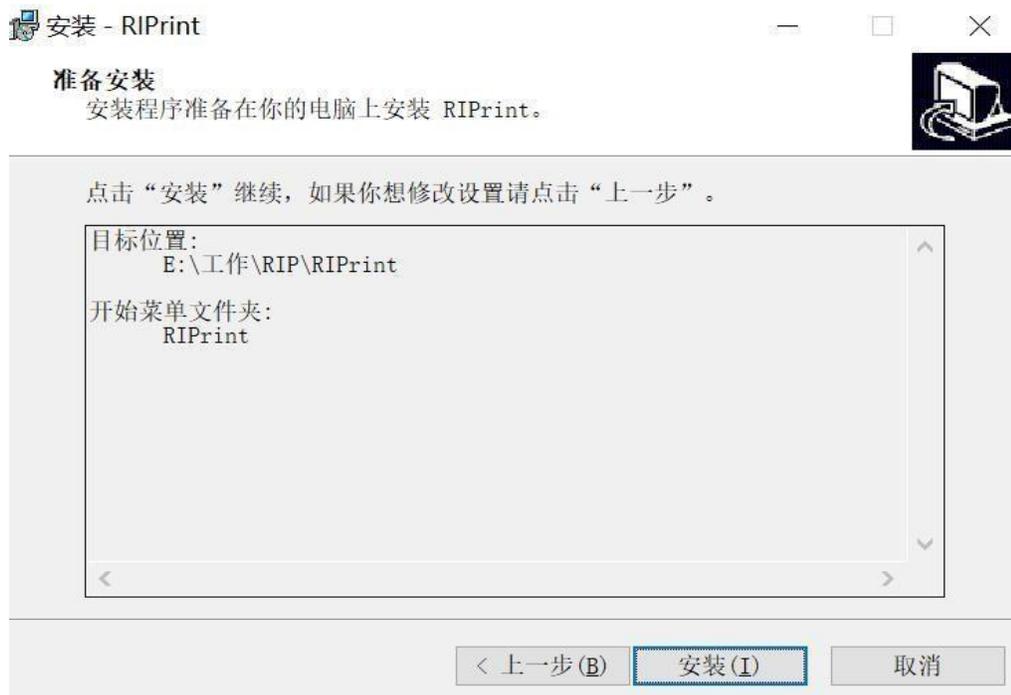


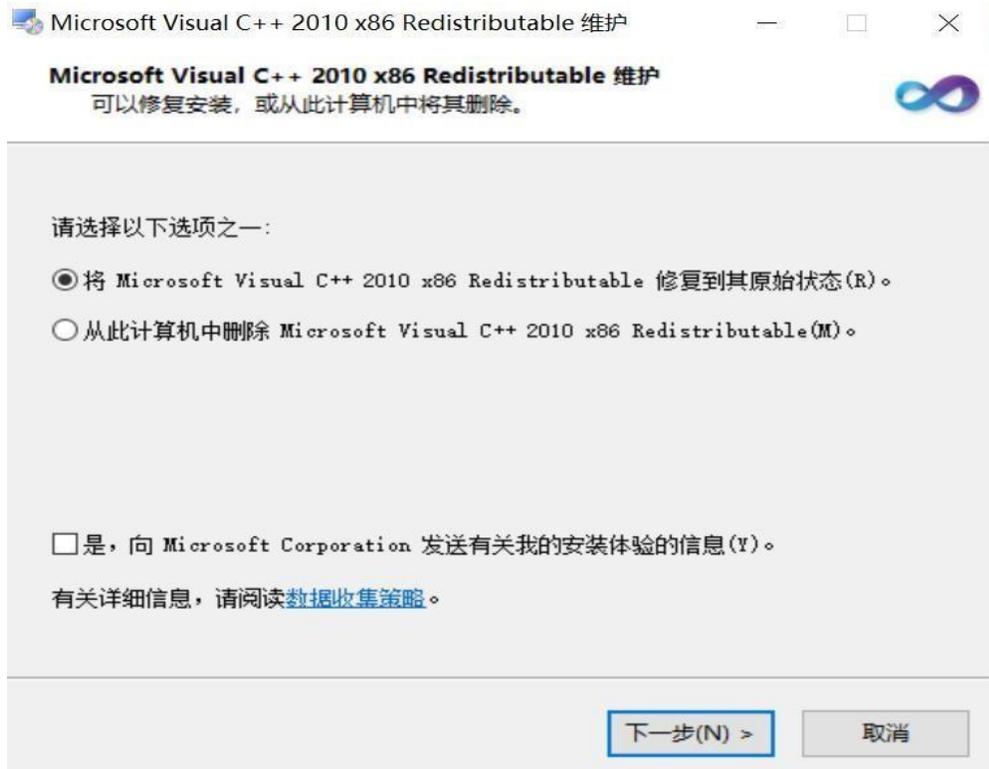
## 2.2.3 RIP Software Installation

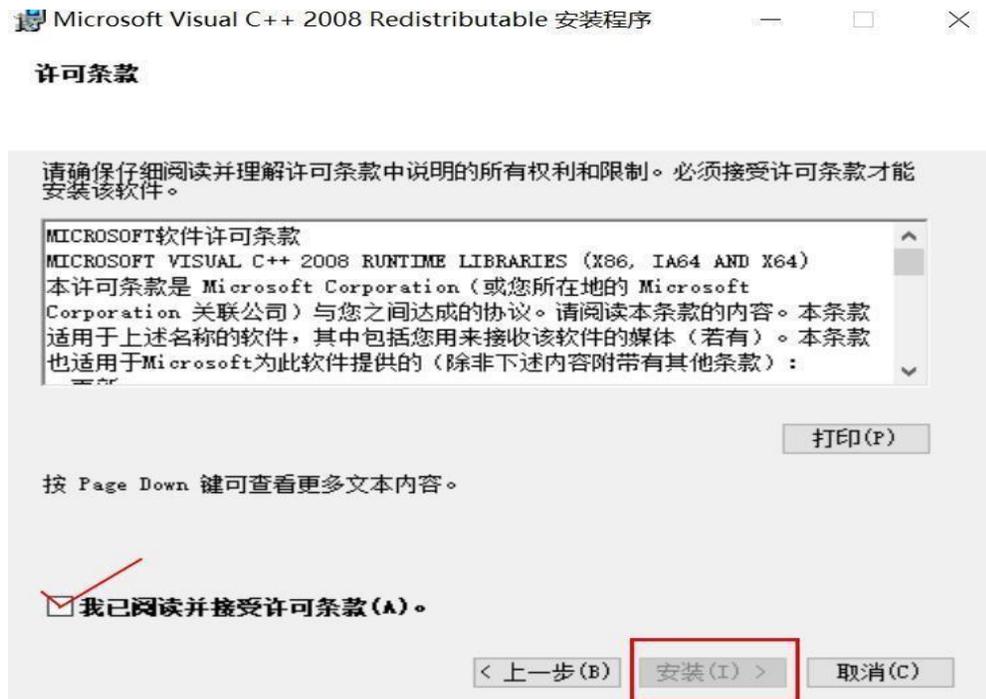
Double-click the installer to install the RIP software on a non-system disk in accordance with guidelines.







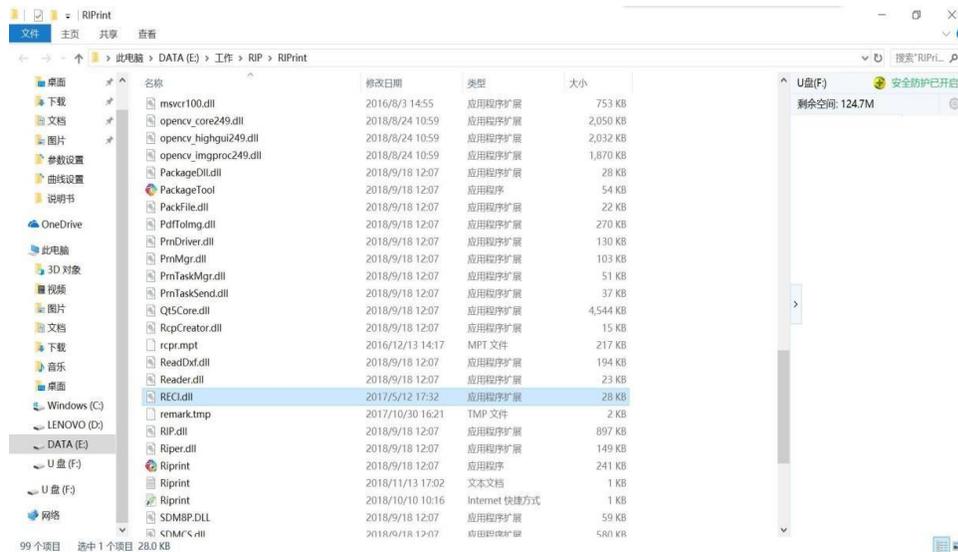






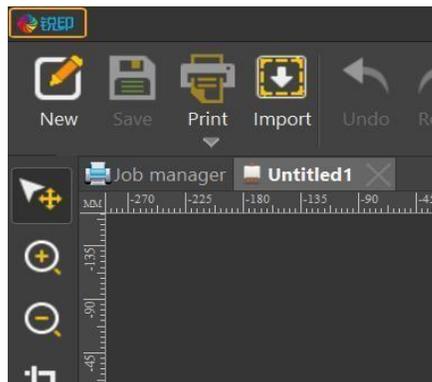
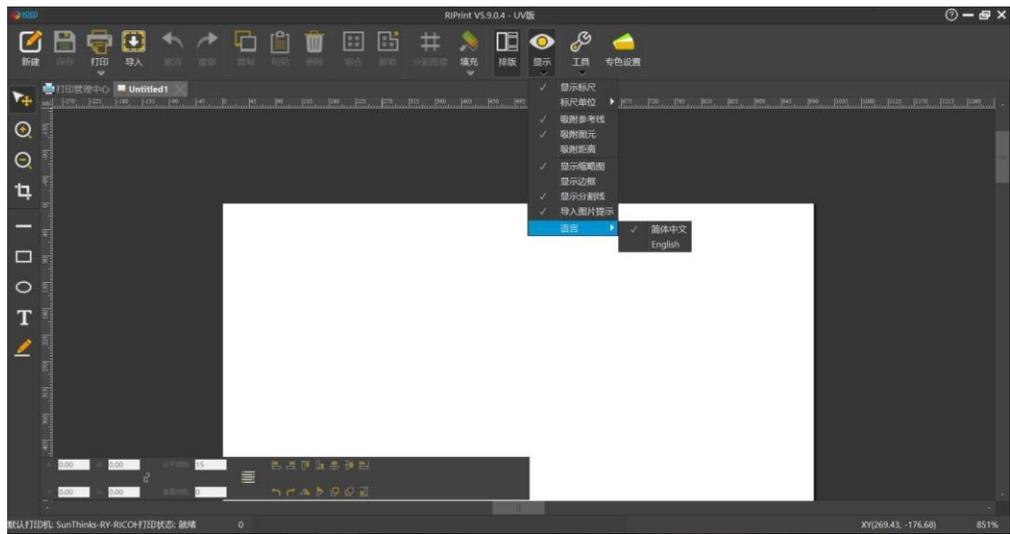
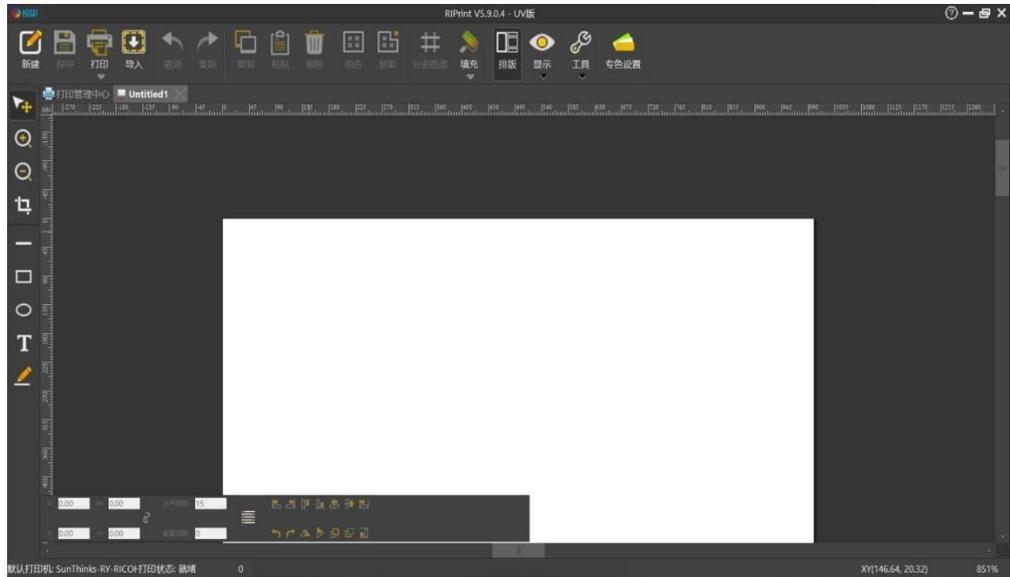
## Drive settings

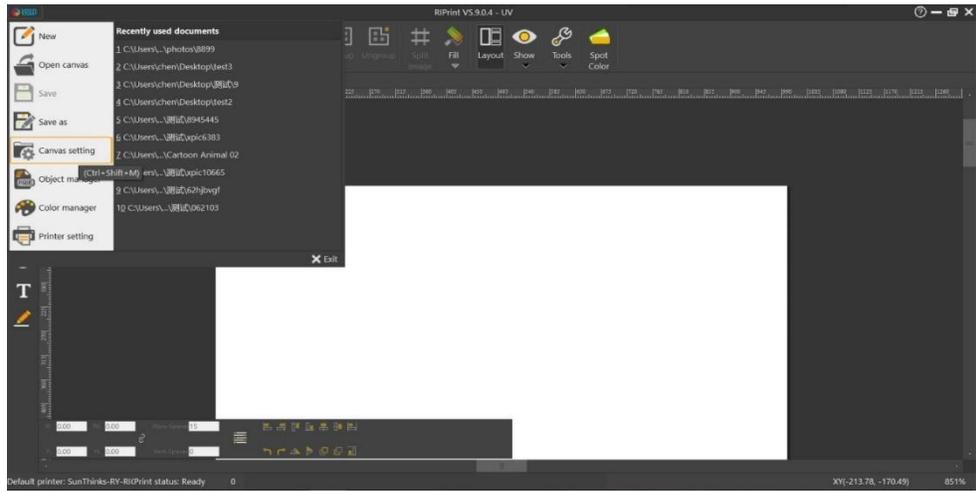
名称	修改日期	类型	大小
驱动程序	2018/9/19 15:31	文件夹	
RECL.dll	2017/5/12 17:32	应用程序扩展	28 KB
UMC-安装前必看锐印软件安装说明	2018/8/29 14:51	Adobe Acrobat Do...	333 KB



## 2.2.4 RIP Software operation instructions

Open RIP Software,





Canvas setting

Canvas size

Width:  m  \* Note: the printer is 2.60 m wide

Height:  m

Edge

Left:  mm   Same edge

Right:  mm

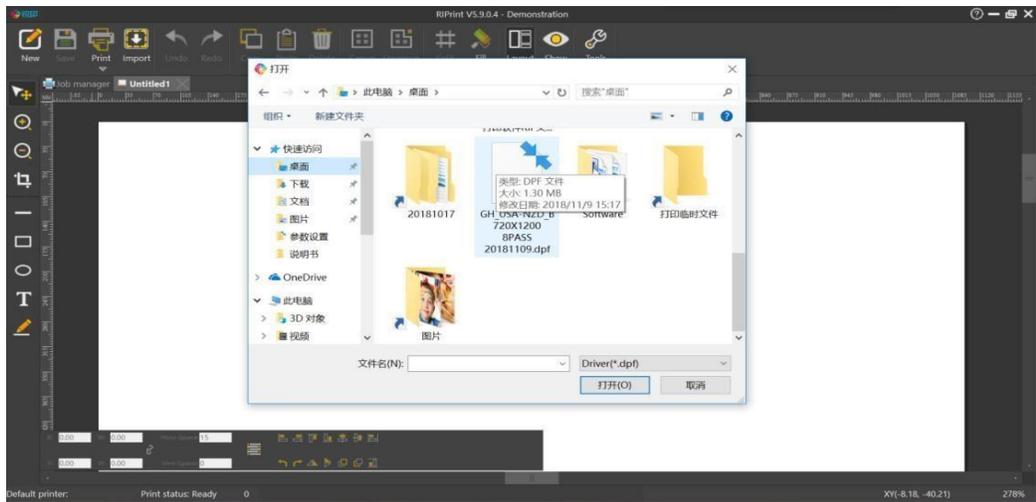
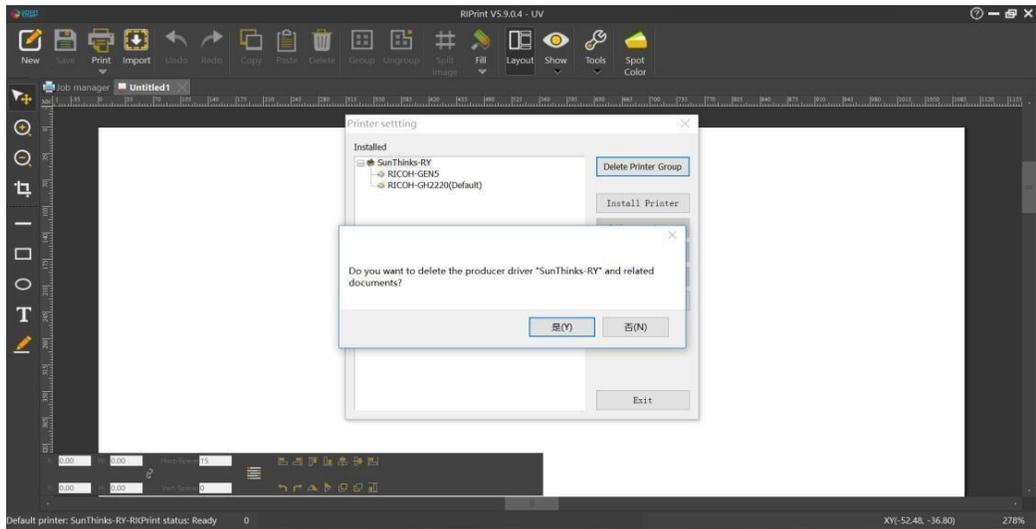
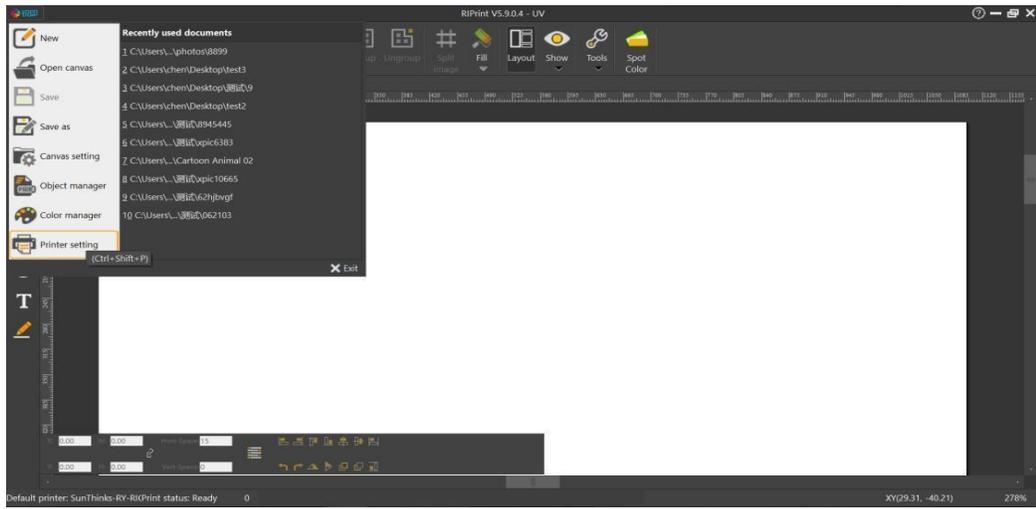
Top:  mm

Bottom:  mm

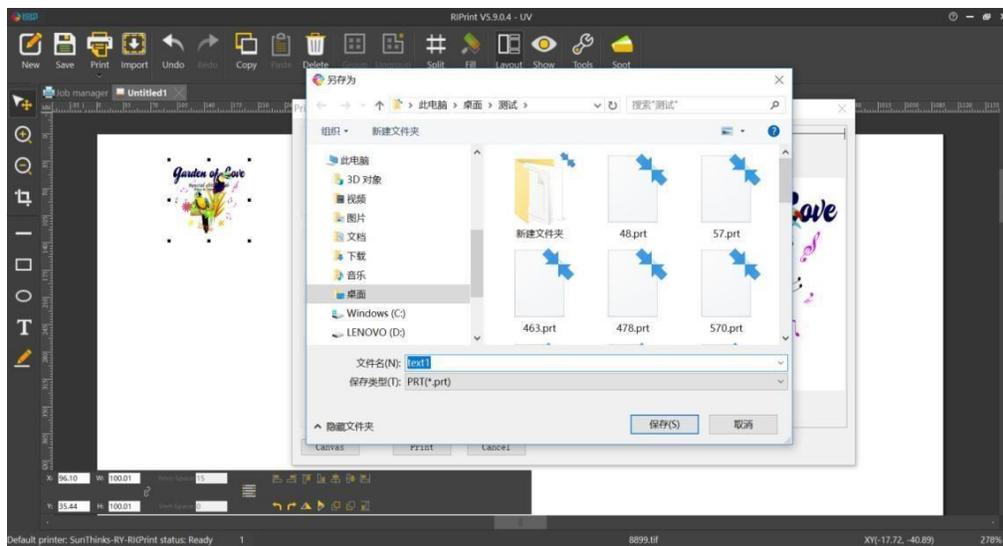
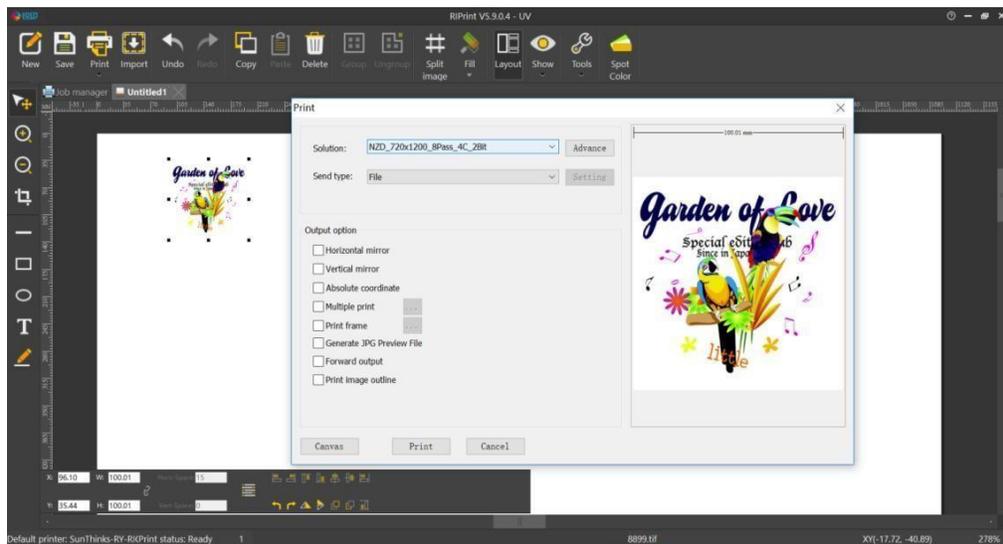
Ok Cancel



## ICC settings



Open the picture you want to print.



Click on the Print canvas to select the precision pass curve as required.

720\*1200 8pass

720\*900 6pass

720\*600 4pass

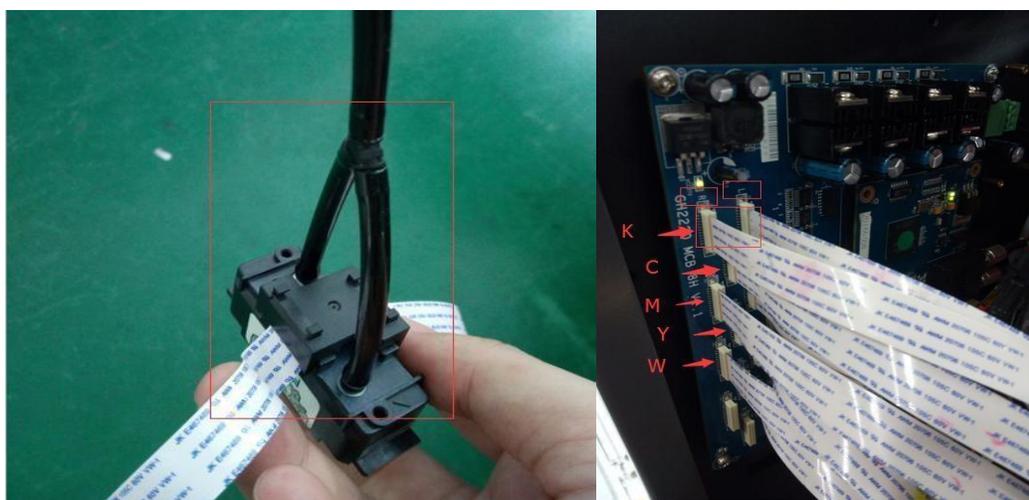
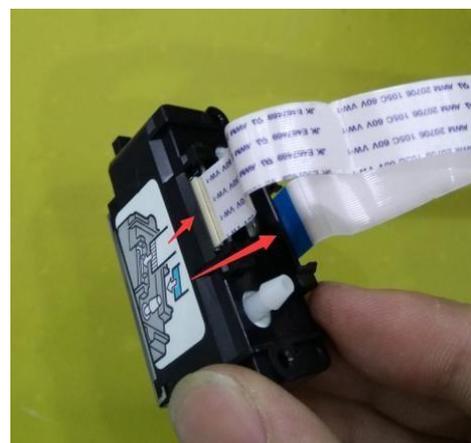
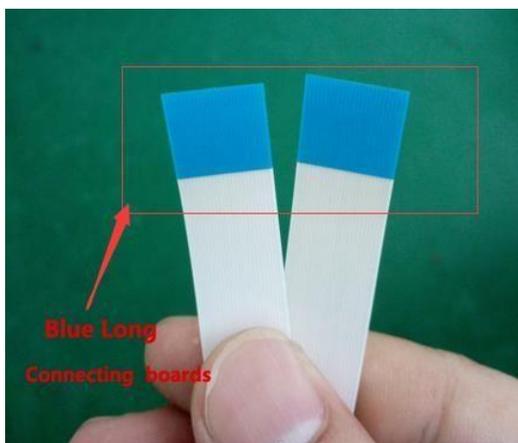
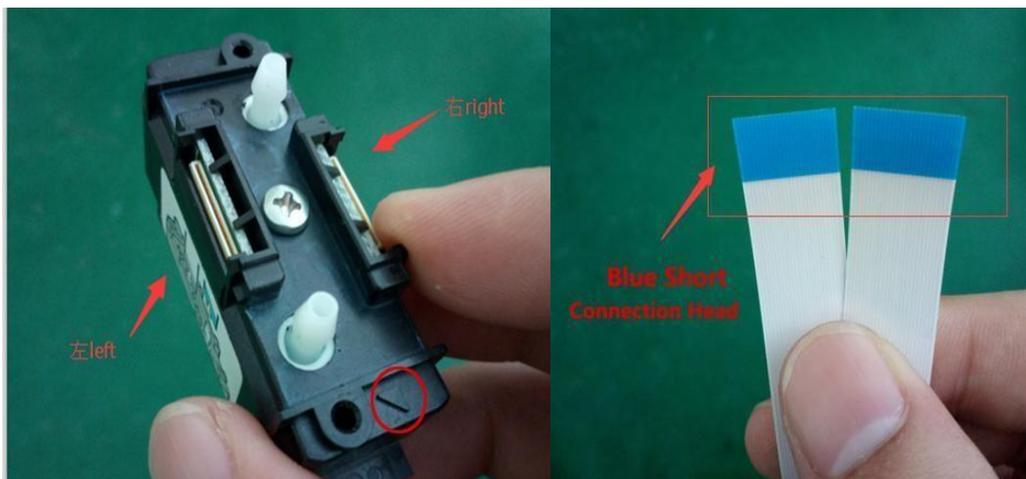
Create files in PRN format, open (RYPC) print software for printing.



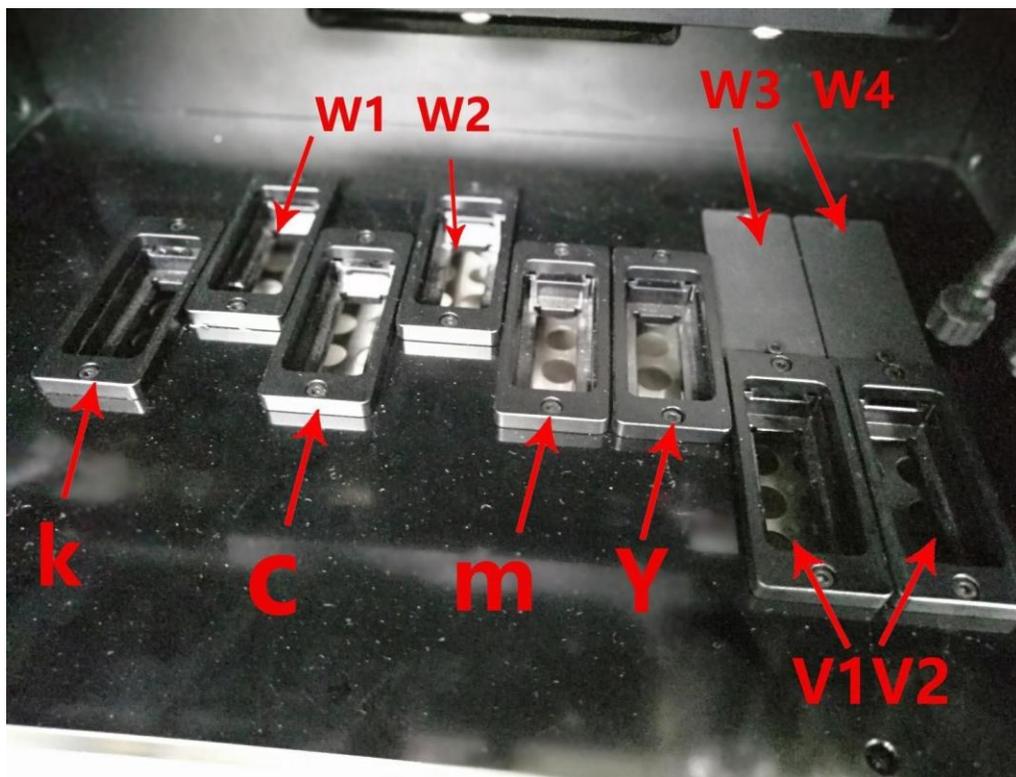
## 2.2.5 GH2220 head Installation

### 1. Installation and fixing

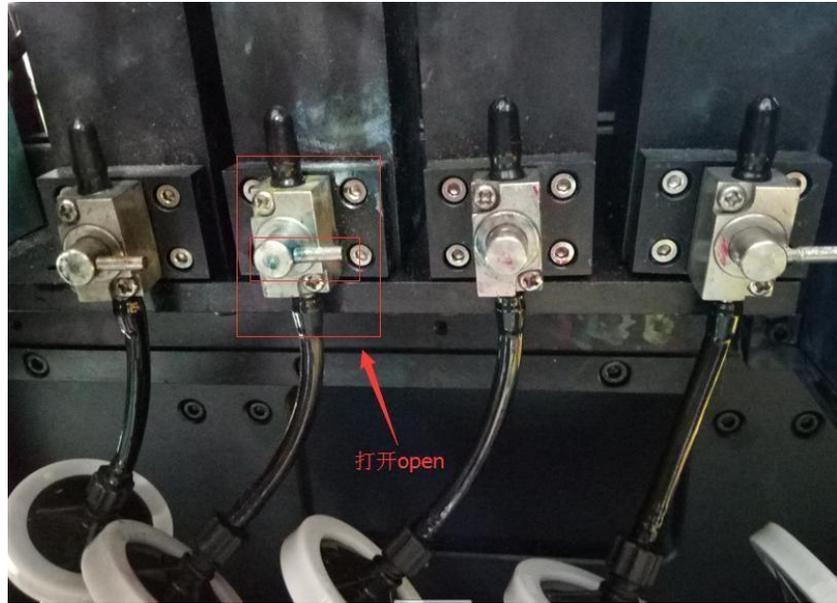
(1) Fixing head with Screws.



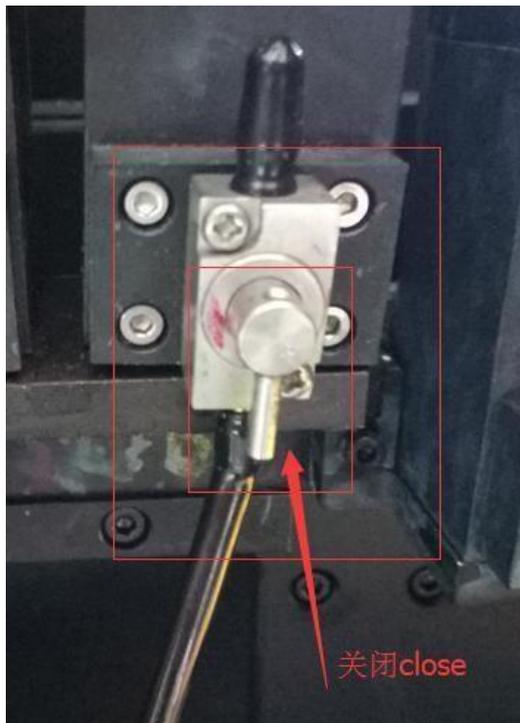
(2) Insert the nozzle line into the card slot in the head control Panel



(3) Installation completes to open the level two ink stack switch.



(4) The machine closes, will two level ink stack switch lay, closes two level ink stack, prevents the ink to flow out.

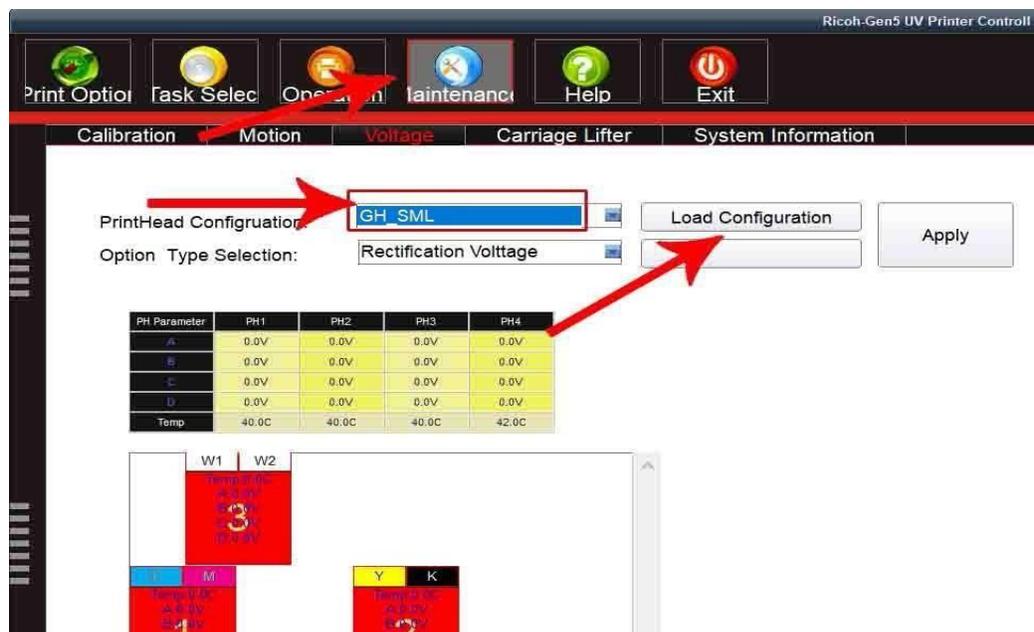
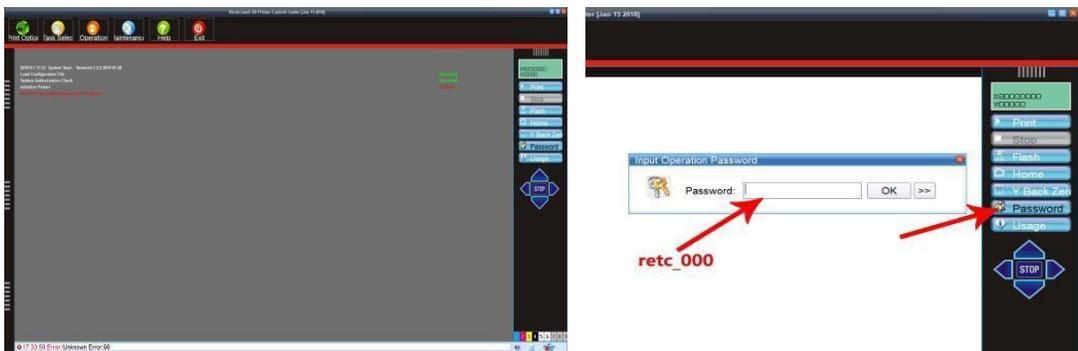


(5) Pour the corresponding color of ink to Ink tank, please shake up each ink bottle before pour ink.



## 2.2.6 Print Software Description

### 1. Waveform loading Open Software



Turn off software



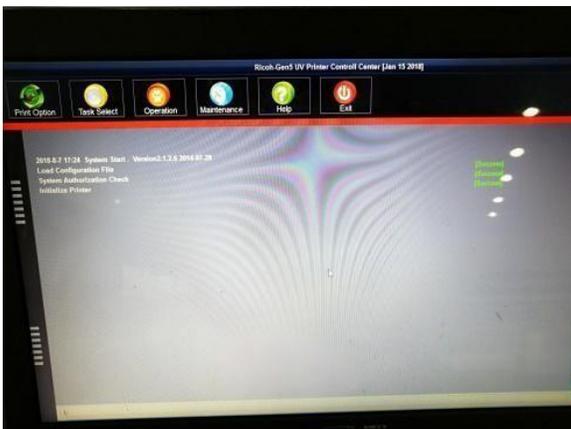
## 2. head Status

1. Turn on the machine power.
2. Machine and computer connect USB cable.
3. Open the Print software, normal initialization.
4. Wait for the machine to complete.
5. Press the Ink button.
6. Clean the ink on the head surface with dust-free cloth.
7. Adjust the height of carriage and material.
8. Set the location to print.
9. print status.
10. If the status is good, then continue your printing works.

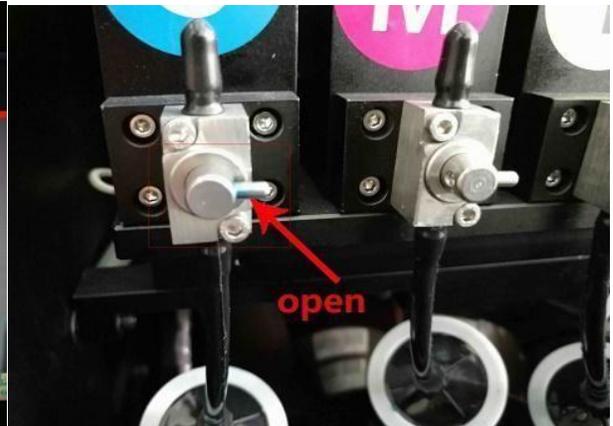
If the status is not good, please repeat the steps (5) to (9) above.

### Photos for references:

Initialization



Switch of Subtank



Ink Button



Ink on head surface



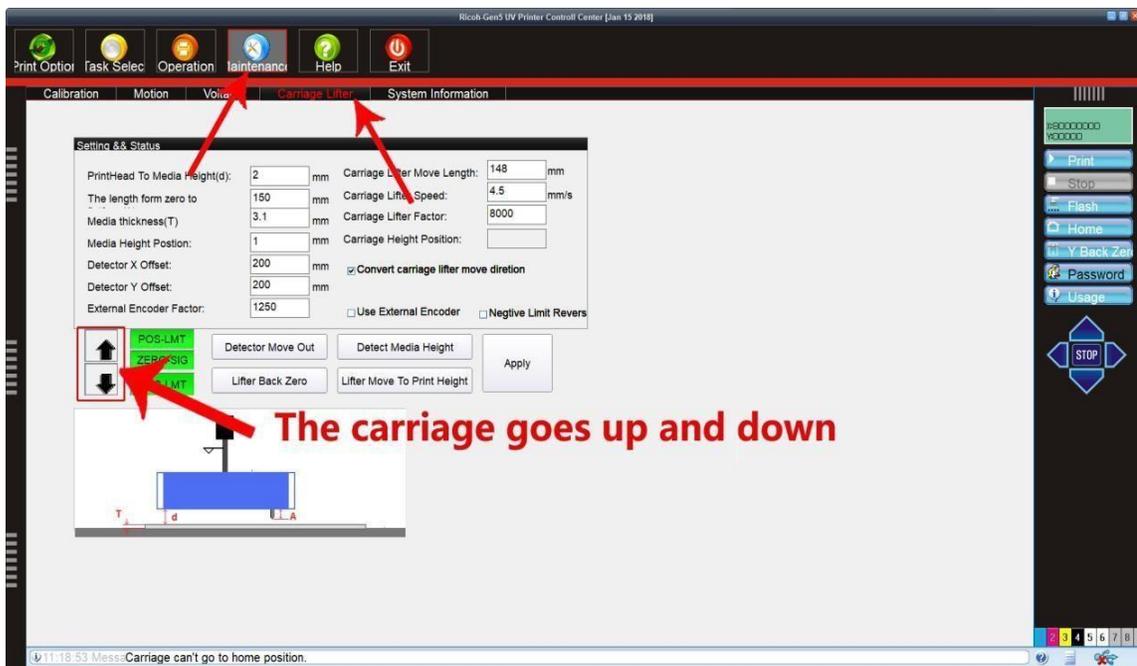
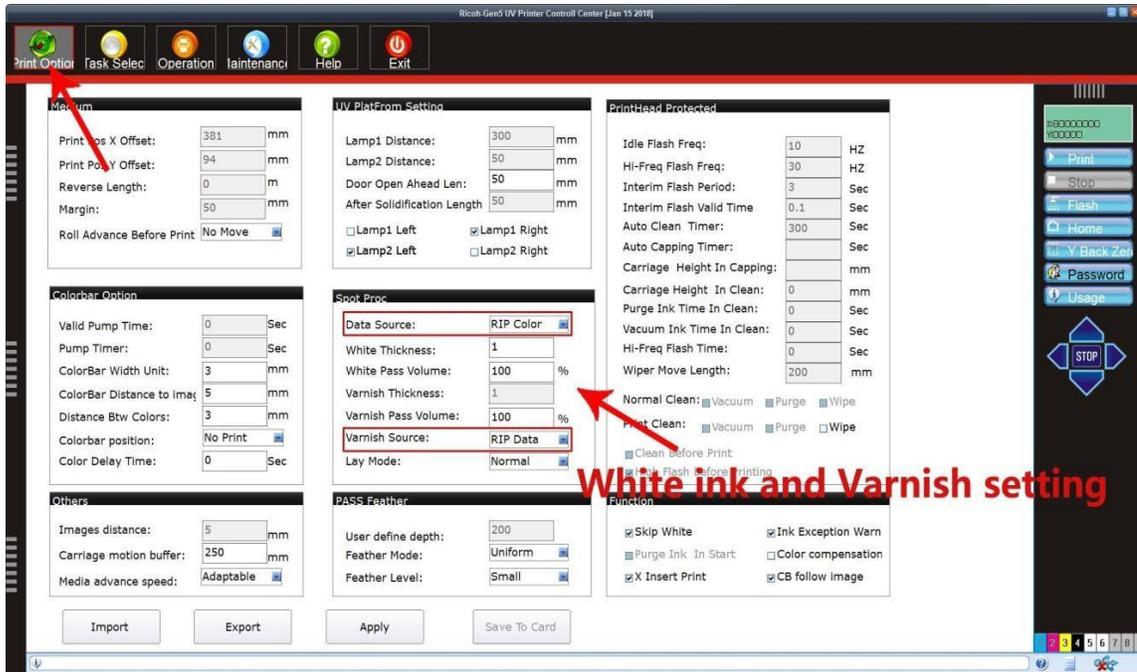
Anti-dust cloth

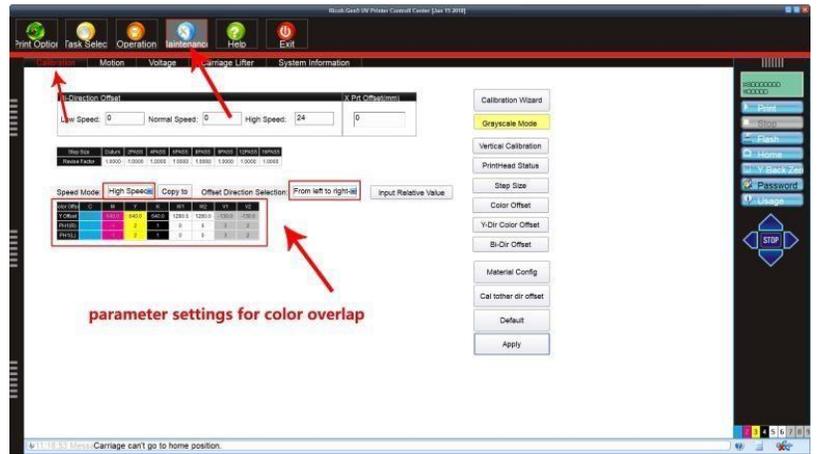


Print Status



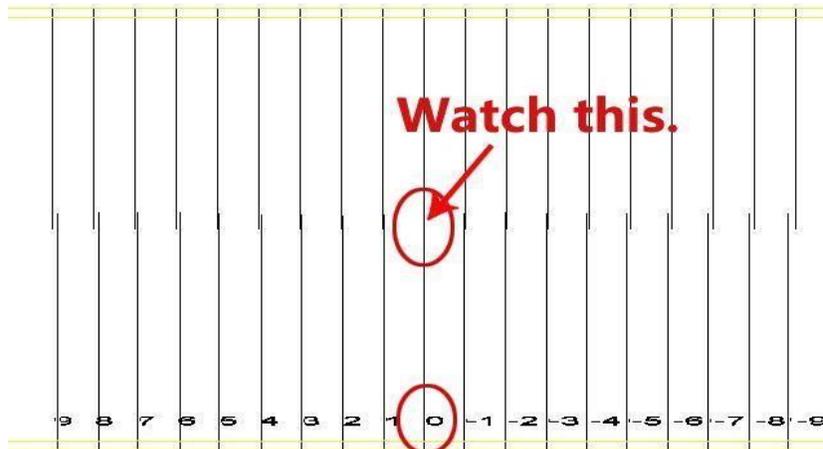
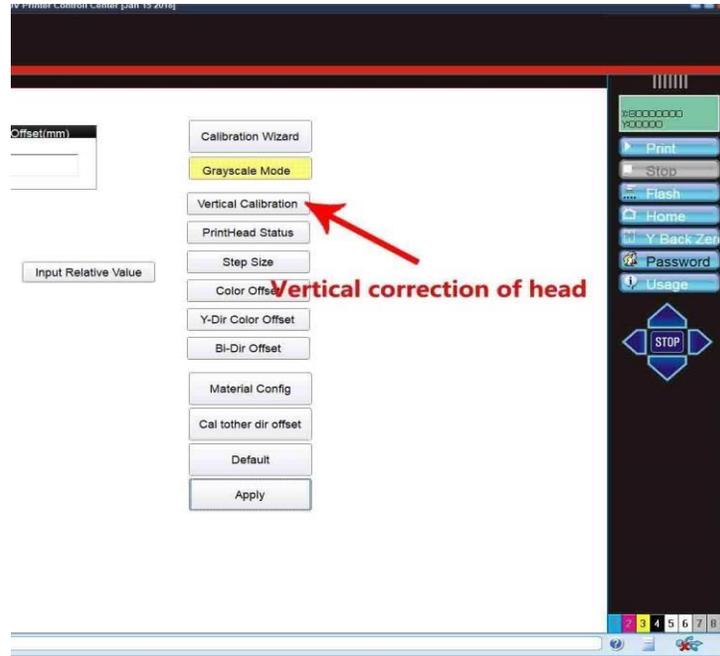
## 2.3 Print software parameter settings and print selection





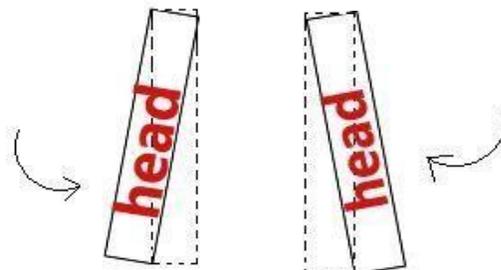
## 3 Deviation correction

### 3.1.1 Vertical correction of head



The machine will print as picture above.

You need to manually move the head to the printed test diagram as shown.



### 3.1.2 Color calibration of XY direction

Speed Mode:   Offset Direction Selection:

Color Offset	C	M	Y	K	W1	W2	V1	V2
Y Offset	640.0	640.0	640.0	1280.0	1280.0	-130.0	-130.0	
PH1(R)	4	0	0	0	0	0	0	
PH1(L)	4	0	0	0	0	0	0	

**Corrected value** (arrow pointing to M value in PH1(L) row)

- 
- 
- 
- 
- 
- 
- 
- 

After you change to the correct value, test again until two colors coincide in the position of the line number 0.

### 3.1.3 Bidirectional print calibration

Bi-Direction Offset  X Prt Offset(mm)

Low Speed:  Normal Speed:  High Speed:

Step Size	Datum	2PASS	4PASS	6PASS	8PASS	9PASS	12PASS	16PASS
Revised Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

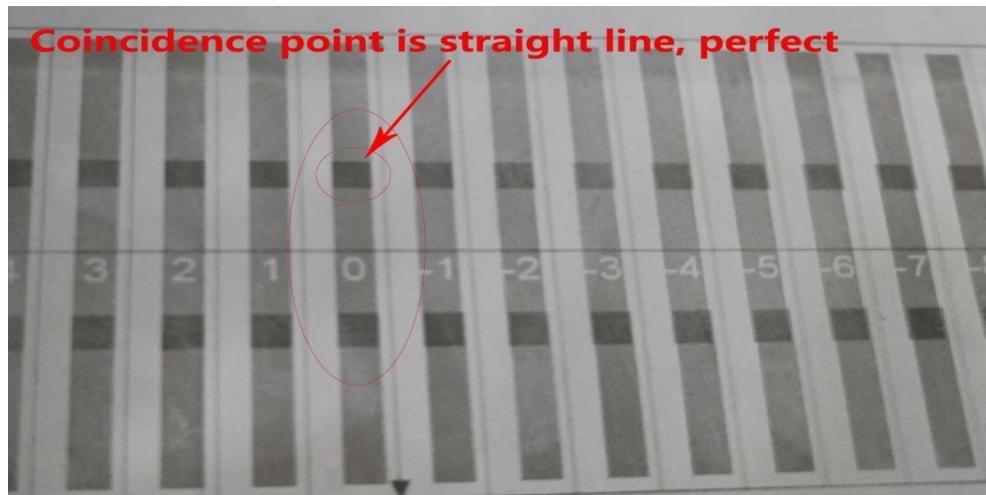
**Write deviation value** (arrow pointing to X Prt Offset field)

Speed Mode:   Offset Direction Selection:

Color Offset	C	M	Y	K	W1	W2	V1	V2
Y Offset	640.0	640.0	640.0	1280.0	1280.0	-130.0	-130.0	
PH1(R)	4	0	0	0	0	0	0	
PH1(L)	4	0	0	0	0	0	0	

**Print test** (arrow pointing to Bi-Dir Offset button)

- 
- 
- 
- 
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- 



## 4. Maintenance

After the completion of the daily work, remember to do maintenance.

### 4.1 Daily maintenance for color heads (CMYK+W)

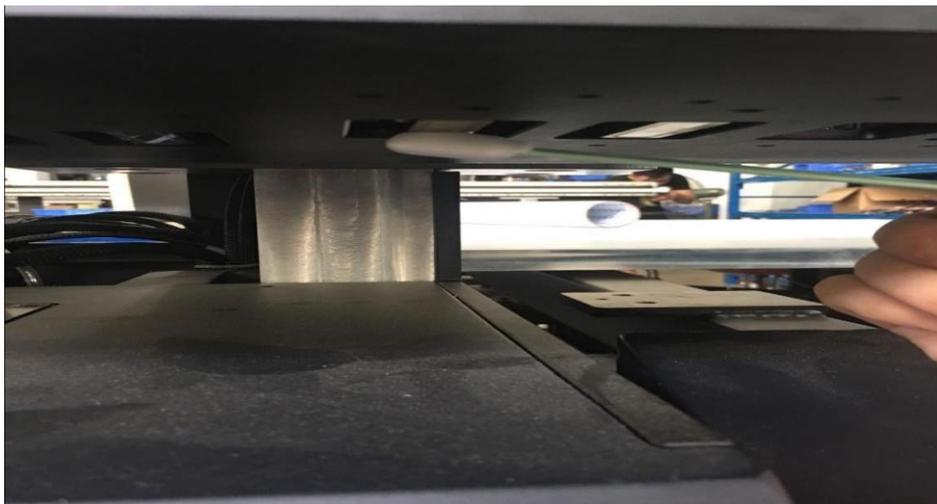
Step1. Close all subtanks;

Step2. Clean the head surface by dust-free cotton swab with cleaning liquid.

Step3. Down the printer carriage to the lowest position

Step4. Turn off power of the machine.

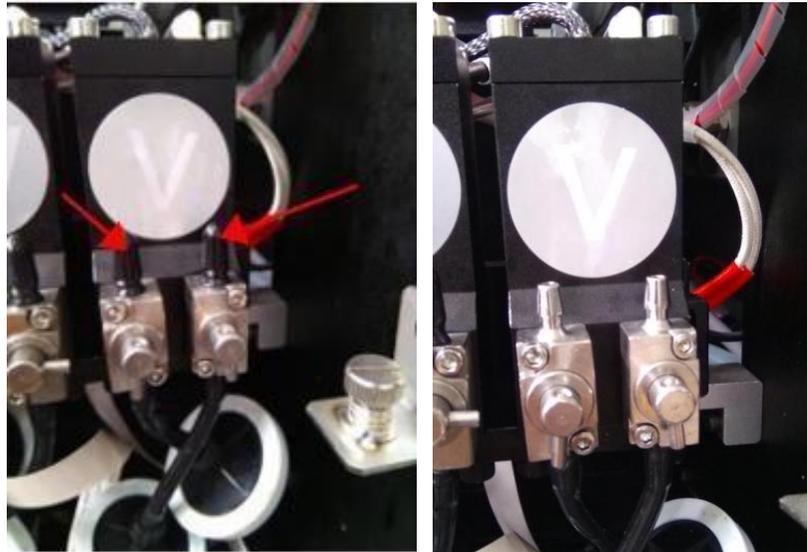
Step5. Cover the carriage with a black cloth to prevent the daily lights.



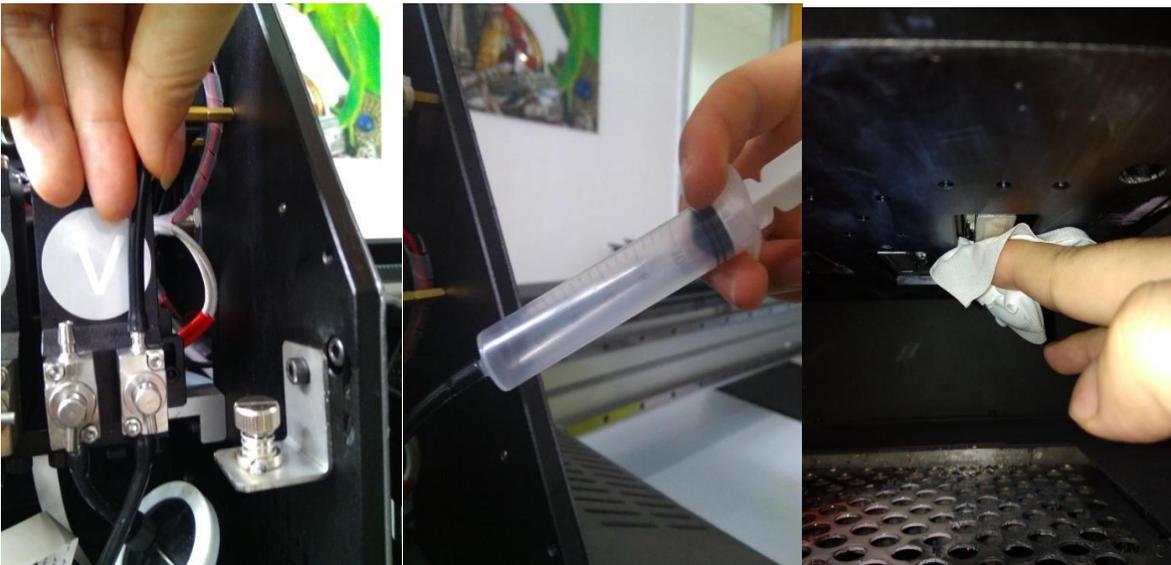
## 4.2 Daily maintenance for Varnish printing head

This step is special for varnish printing head. If your printer set up without varnish, please ignore it. Please do following steps to clean the varnish printing head after every daily work.

Step1: Close sub-tank, remove the black caps of sub-tank.

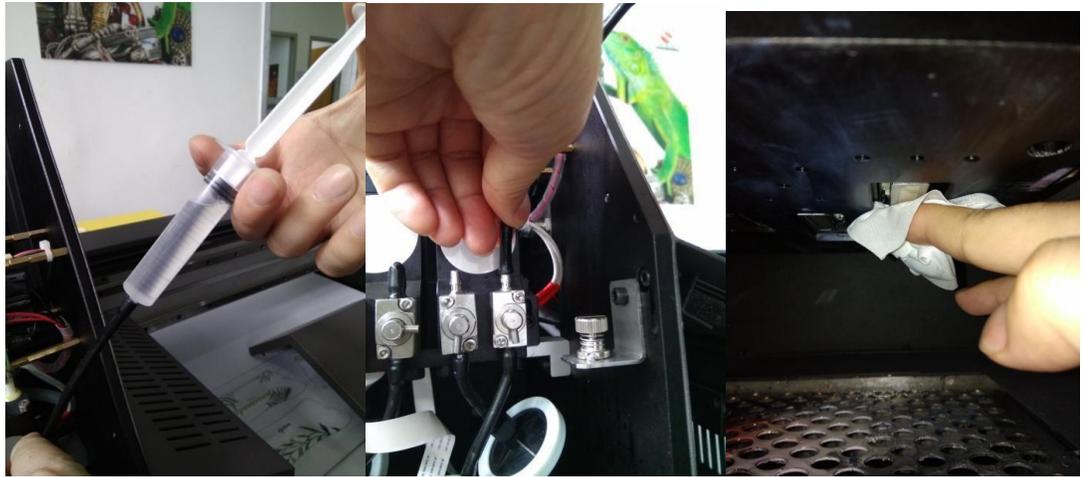


Step 2: Connect a 10ml syringe with tube, pump air twice. Then clean print head surface with anti-dust cloth.



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Step 3: Pump 10ml clean liquid with syringe, pump once only. Then clean print head surface with anti-dust cloth.



Step 4: repeat Step2.pump only air twice, then clean print head surface with anti-dust cloth.



Step5: plug the black caps, cleaning process for varnish printing head is finished.



## 5. Photoshop - white spot channel

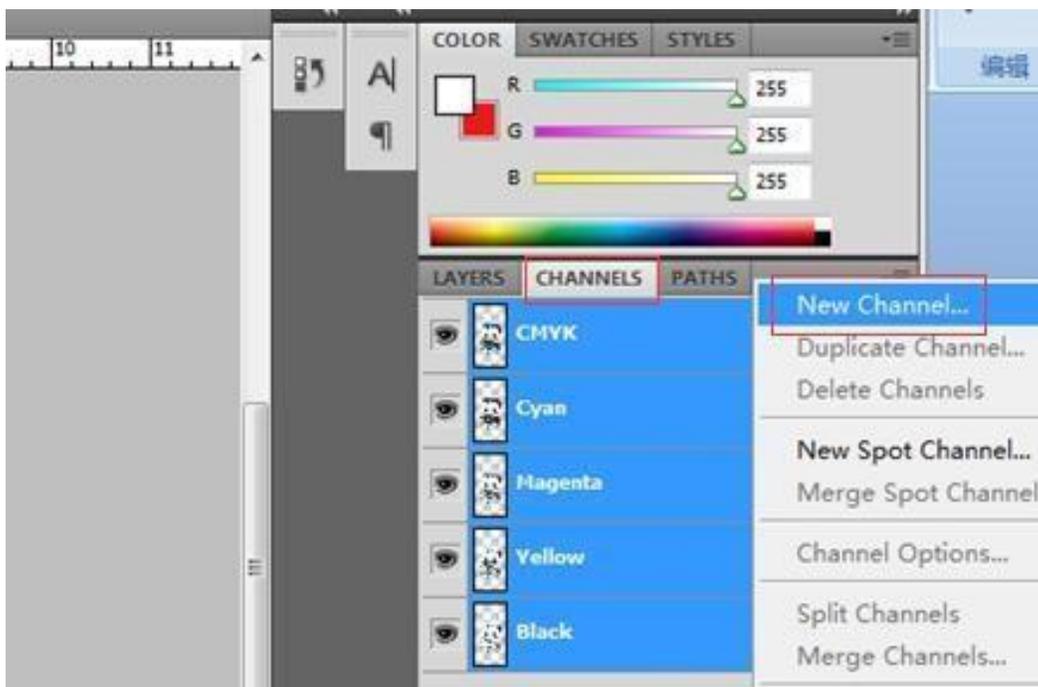
Open the picture.



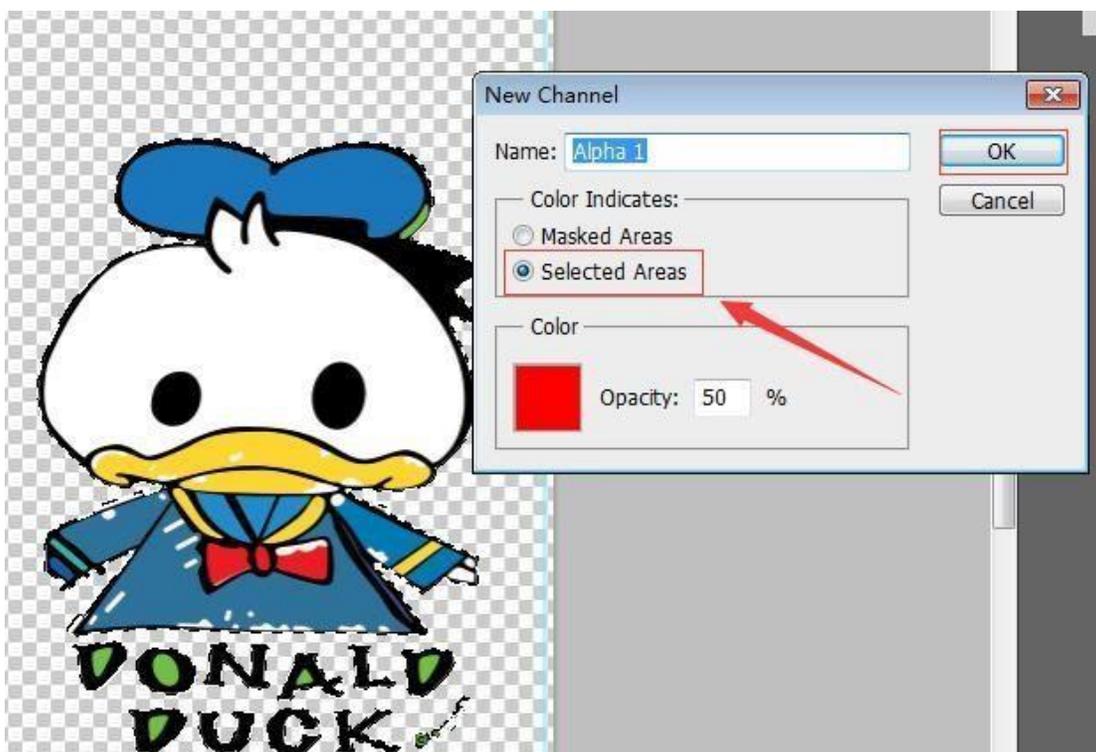
1. Selected image to do a part for the white ink (ctrl+ The left mouse button)



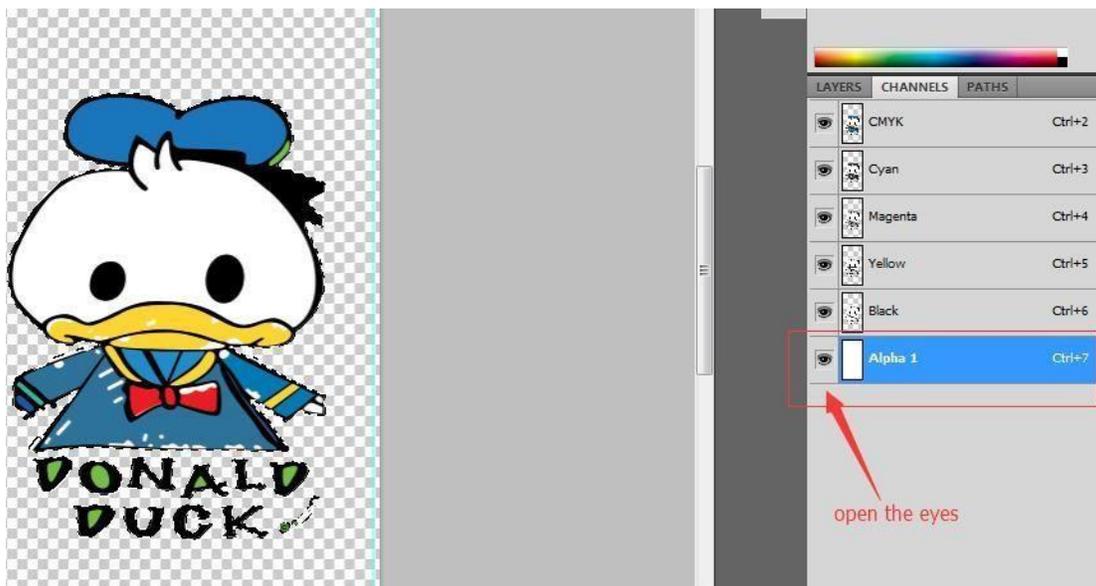
2. Make a new channel for white spot.



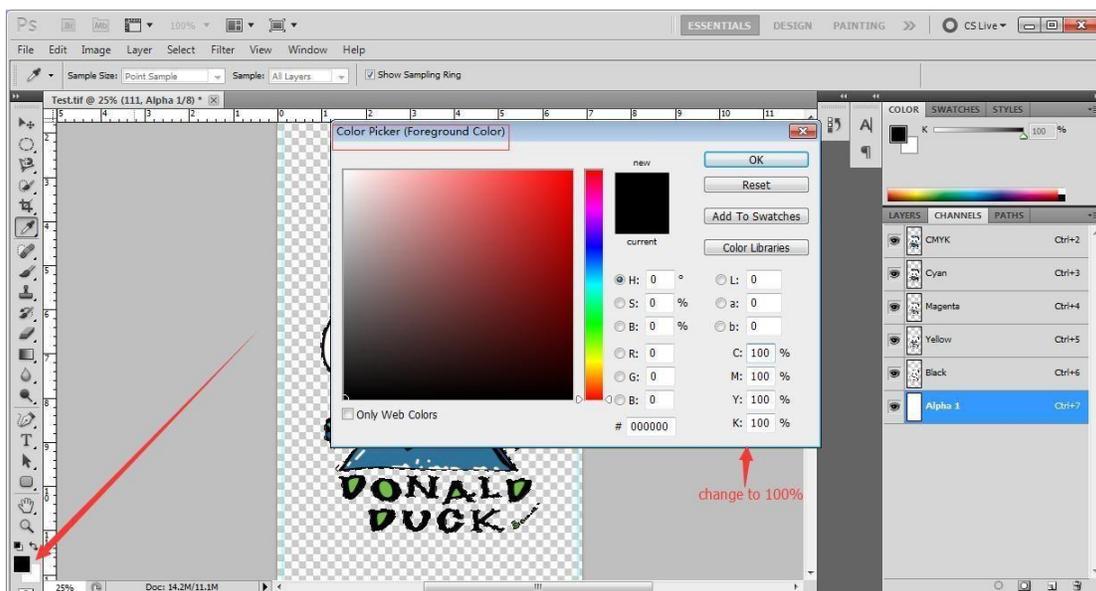
3. Selected Areas.



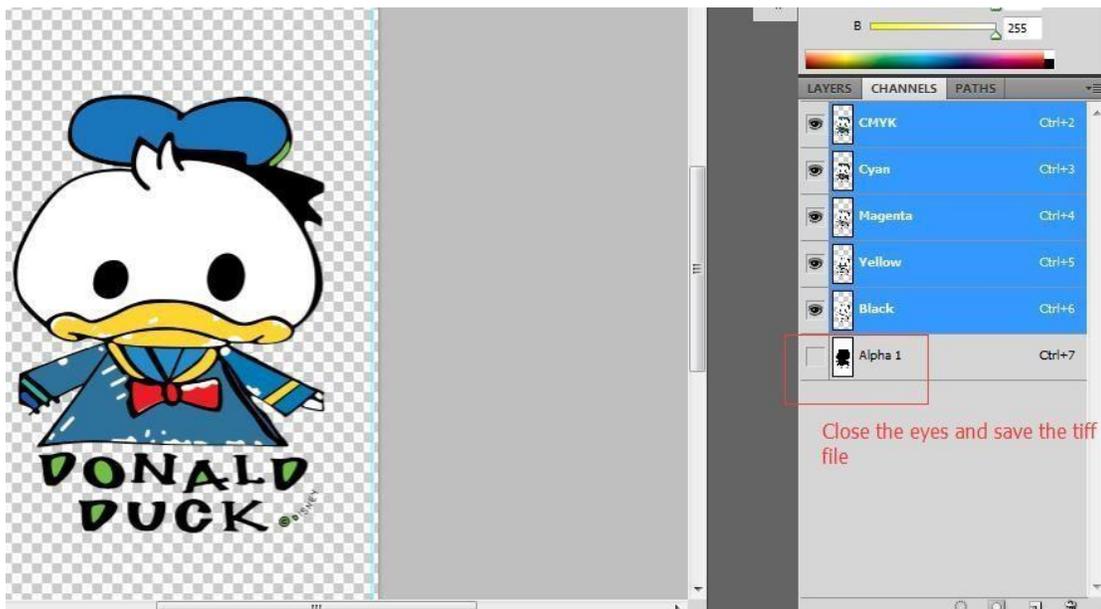
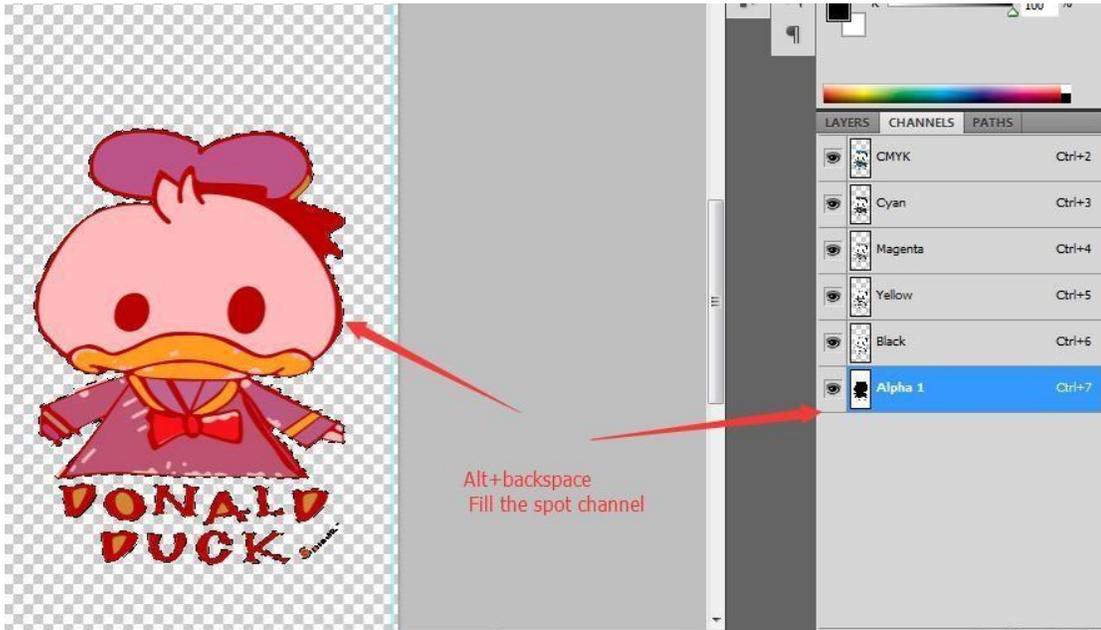
# polaroid



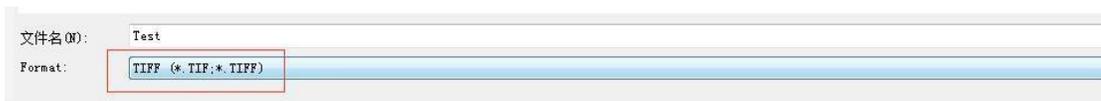
4. Fill the white spot channel (Alt+backspace)



# polaroid



5. Save the picture with tiff type



## 6. FAQ Technical Support

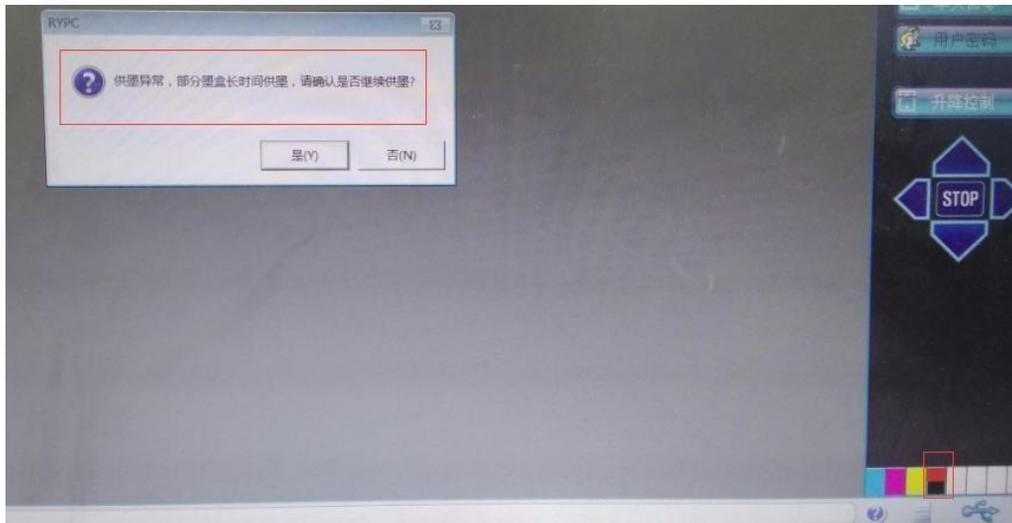
The Print software password:

Engineer Password : retc\_000 User password: 000000

### 6.1 If the carriage can be moved by hand once turn on the printer.

1. Check the emergency stop button (stop),
2. Check whether the server motors are powered on.
3. Make carriage to the middle of the platform (Move X by hand pull the belt for Y axis)
4. Check whether the collision system on both sides.
5. Check the carriage again, If it should be not moved by hand.

### 6.2 Lack of ink.

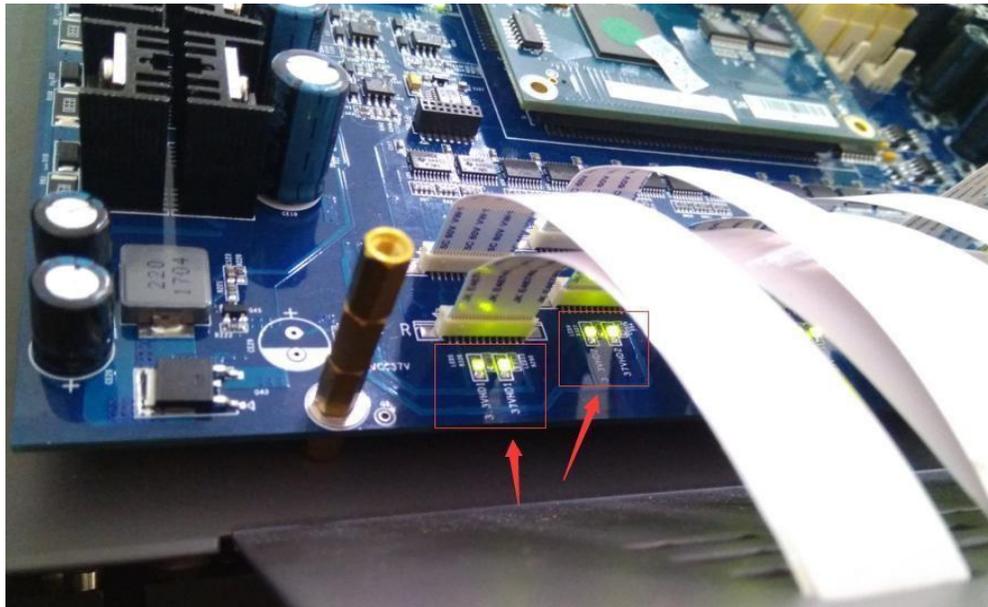
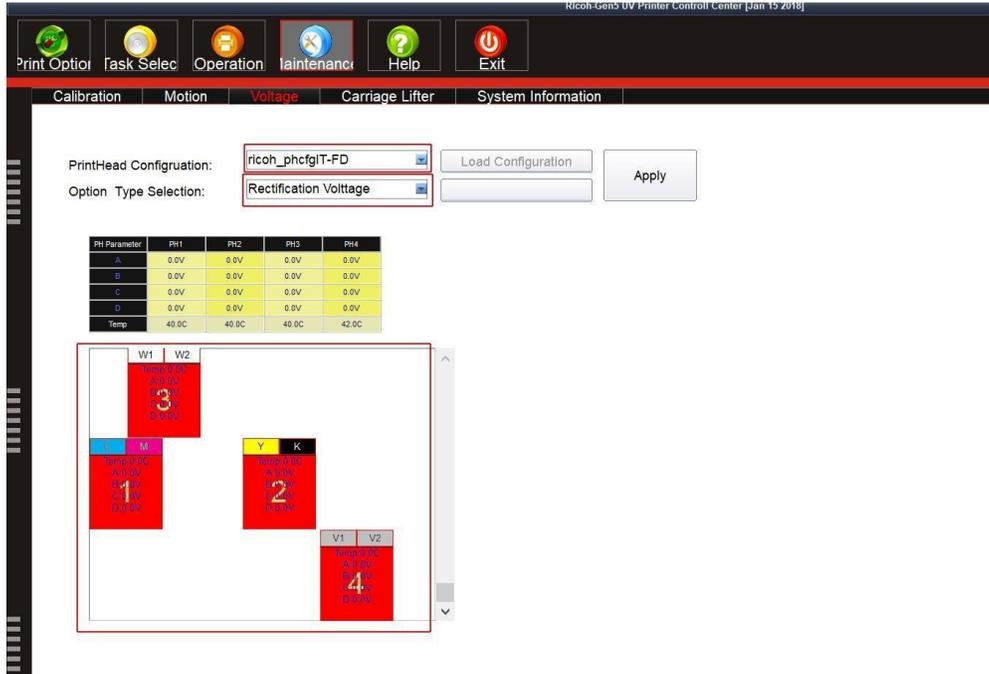


1. Check whether there is ink in the ink tank of the machine. If there is no ink, please add ink.
2. Check if ink pump is working, ink tube is not bend.
3. If there is no bending, but the pump is not working, need to replace the new pump.
4. If the pump can rotate without bending, observe whether the motor turns in and out ink direction correctly.

### 6.3 Print (Status) does not produce ink

1. Press ink after printing Status.
2. if no test strip, check the software nozzle voltage display.
3. If there is no voltage, check the head board LED voltage display lamp is normal light, if not, need to replace the head board.





#### 6.4 Head Test Status is not good.

1. repeatedly press ink with cloth wipe clean and then check the test diagram.
2. If the status is no improve by many times repeat (1) need to flush the head (Turn the ink off, Rinse the nozzle with the washing liquid).
3. If a heavy blockage/clogging, requires a new head to be replaced.



## **6.5 The head test chart has white ink, but no white ink when printing.**

1. When processing the picture without white ink spot color channel
2. RIP software does not choose White.
3. Print software does not choose White.

## **6.6 Print out the white ink anomaly, sparse.**

1. Press ink to print; Check if white ink stirring is open.
2. Appropriate increase or decrease of white ink correction voltage.

## **6.7 The standard and range of each nozzle voltage**

Color head voltage range for 14v-19v, white head for 12.5v-19v。

## **6.8 Print Flying Ink (spray ink)**

1. Adjust positive and negative pressure, increase the value of positive and negative pressure.
2. Adjust the nozzle voltage, appropriate increase or decrease the correction voltage;
3. loading the corresponding waveform

## **6.9 Pressure ink cannot be pressed out.**

1. Observe if the cartridge is open.
2. Check whether positive and negative pressure pump is normal work, if no power supply, check the power line is loose and so on; if the damage needs to replace the pressure pump.
3. If the air pressure pump is normal, check the pressure ink three-wire solenoid valve power is loose, solenoid valve is damaged

## **6.10 Power on the mobile cannot rise and fall.**

1. Check the head of the z-axis photoelectric switch is damaged.
2. Whether the photoelectric limit block is loose, whether the line contact is bad or disconnected.
3. Replace the z-axis photoelectric switch if the damage is damaged.

## **6.11 Power-on can rise and fall can not move around.**

1. Check whether the nose hit the left and right stroke protection switch, if you can push the nose is hit switch.
2. Check the head X-axis left limit photoelectric switch is damaged.

## **6.12 Power-on can rise and fall cannot move before and after.**

1. Check whether the nose is hit before and after the travel protection switch, if you can push the nose is hit switch.
2. Check the y-axis front limit photoelectric switch is damaged.
3. Restart the software.

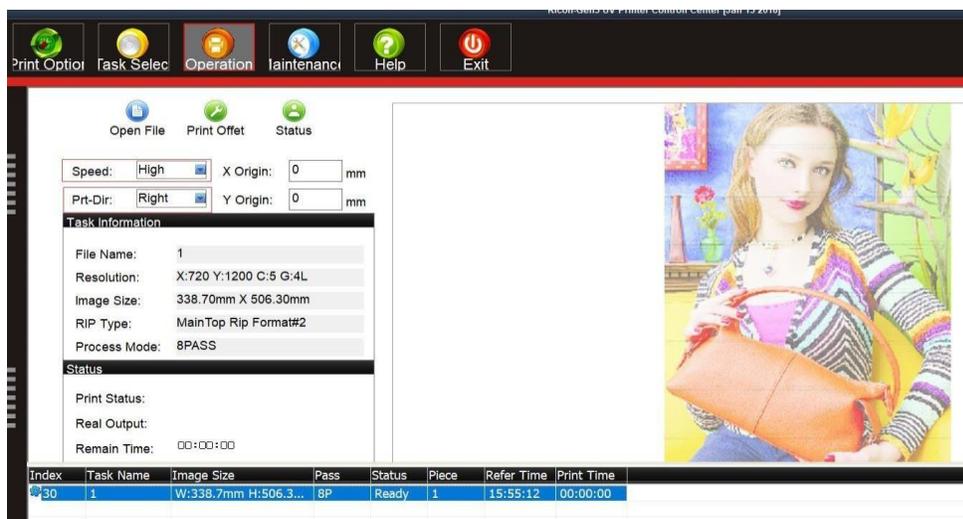
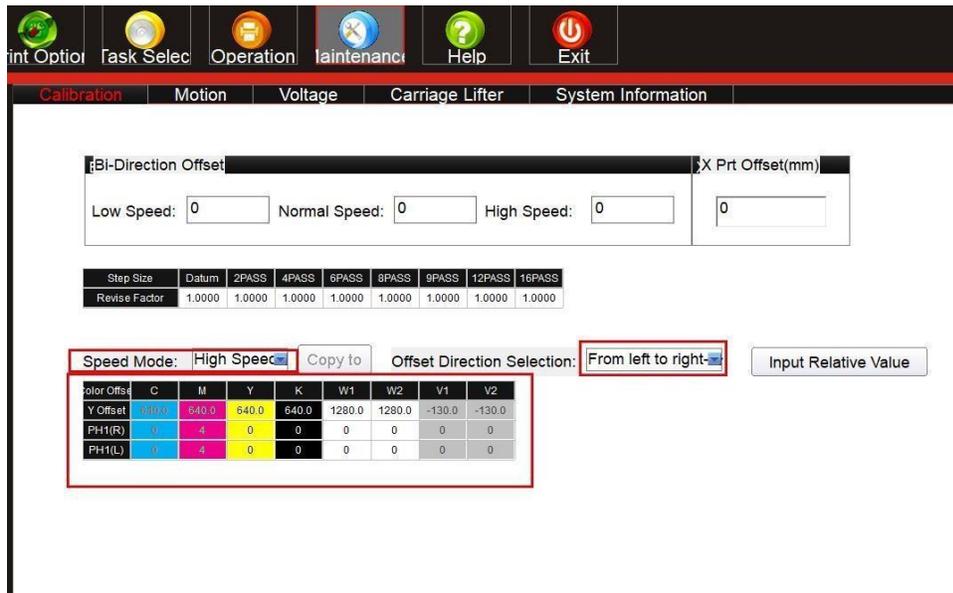


## 6.13 The nose cannot be reset to the original point.

1. Check whether the grating head and grating bar is normal, if the grating head crashed or damaged need to be replaced.
2. Check whether there is a foreign body in the grating bar, clean with alcohol.
3. The Joluang grid strip has scratches or damage, you need to replace the new grating bar.
4. Calculate the motion coefficient of x axis.

## 6.14 Blur Print Effect

1. Check print speed for normal printing speed



If the speed is correct, it needs to be renewed. (Color calibration of head XY direction)



## 6.15 The belt will beep during printing.

Rub a small amount of butter on the inside of the strap to evenly distribute the butter inside the belt.

## 6.16 Turn on the software does not show the connection device after power-on.

1. Check whether the USB cable is connected to the machine board and the computer USB connector.
2. Device Manager View printer driver (or reinstall Driver)

## 6.17 After printing the head surface has ink or accumulate ink.

Adjust negative pressure value.

## 6.18 Positive and negative pressure pump constantly beating.

It may be the joint of positive or negative pressure trachea or three-wire solenoid valve leakage, etc. check positive and negative pressure pipeline is otherwise damaged off.

## 7. How to adjust negative pressure value of positive and negative pressure pump

#Workable NP scope: - 2.5~- 3.2Kpa

Step (1): Open back cover of printer to find the negative pressure system.

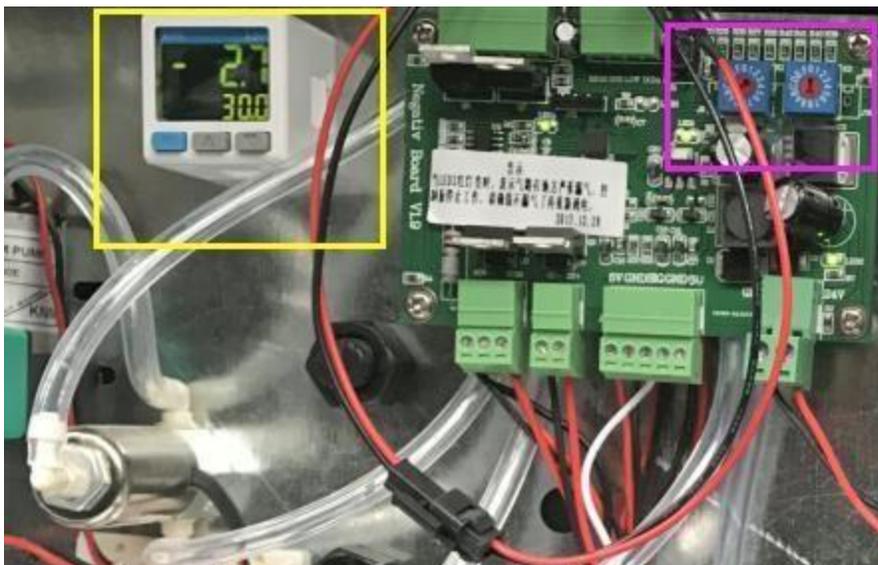


Step (2): Set value.

1. Current negative value (yellow mark frame)
2. Adjust knobs (pink mark frame)

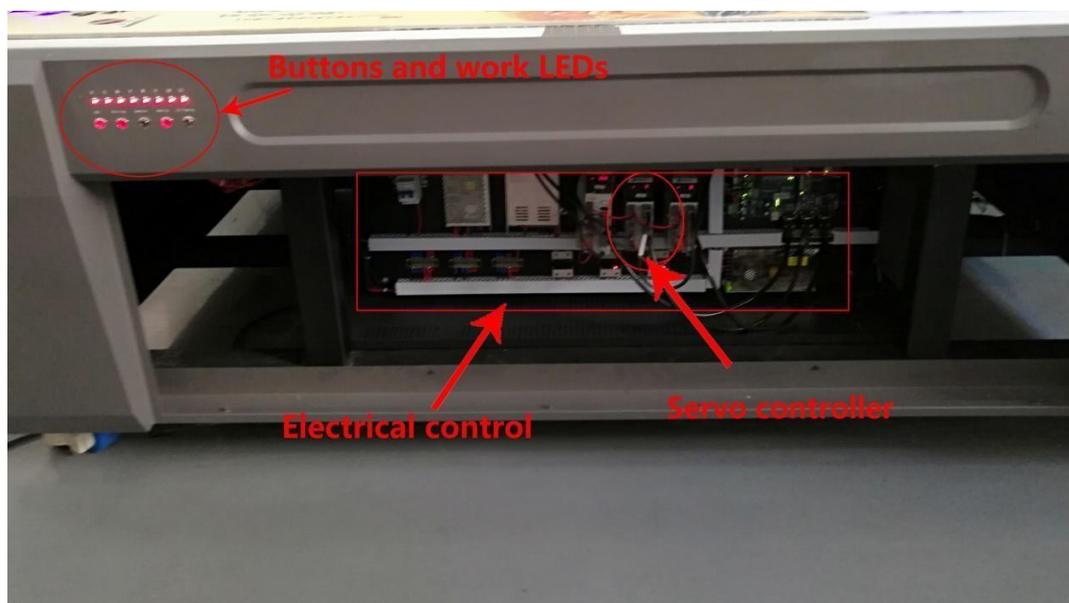
blue knob on left side is for adjusting units' digit, blue knob on right side is for adjusting decimal place.

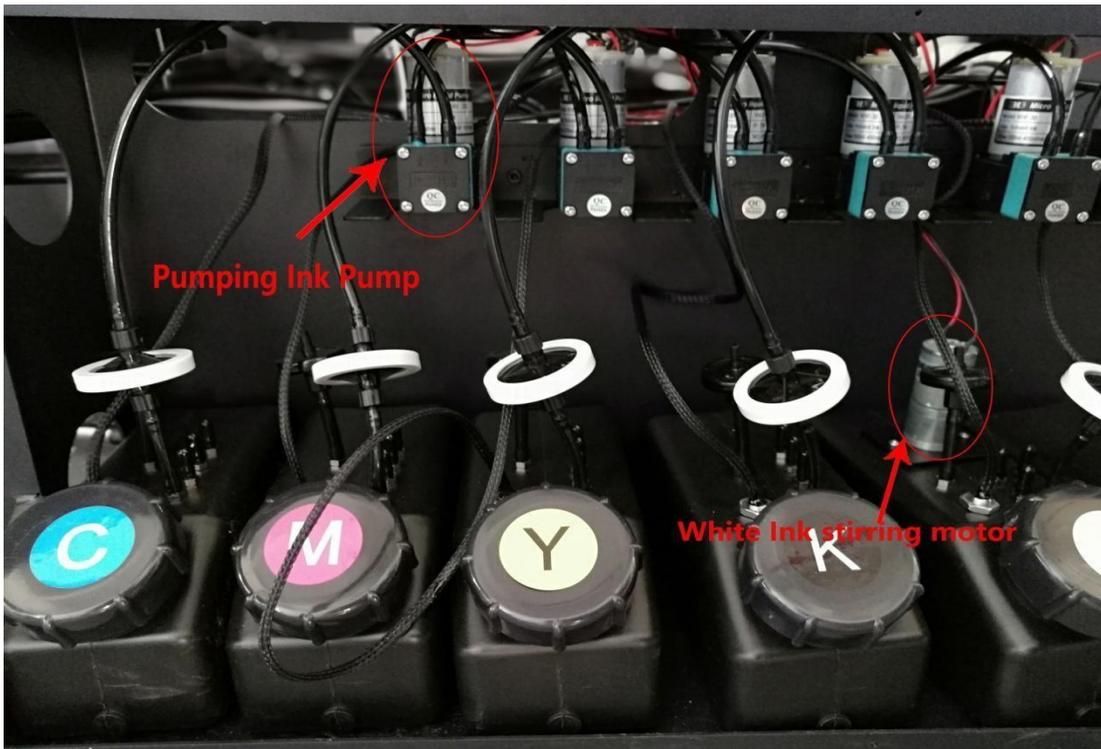
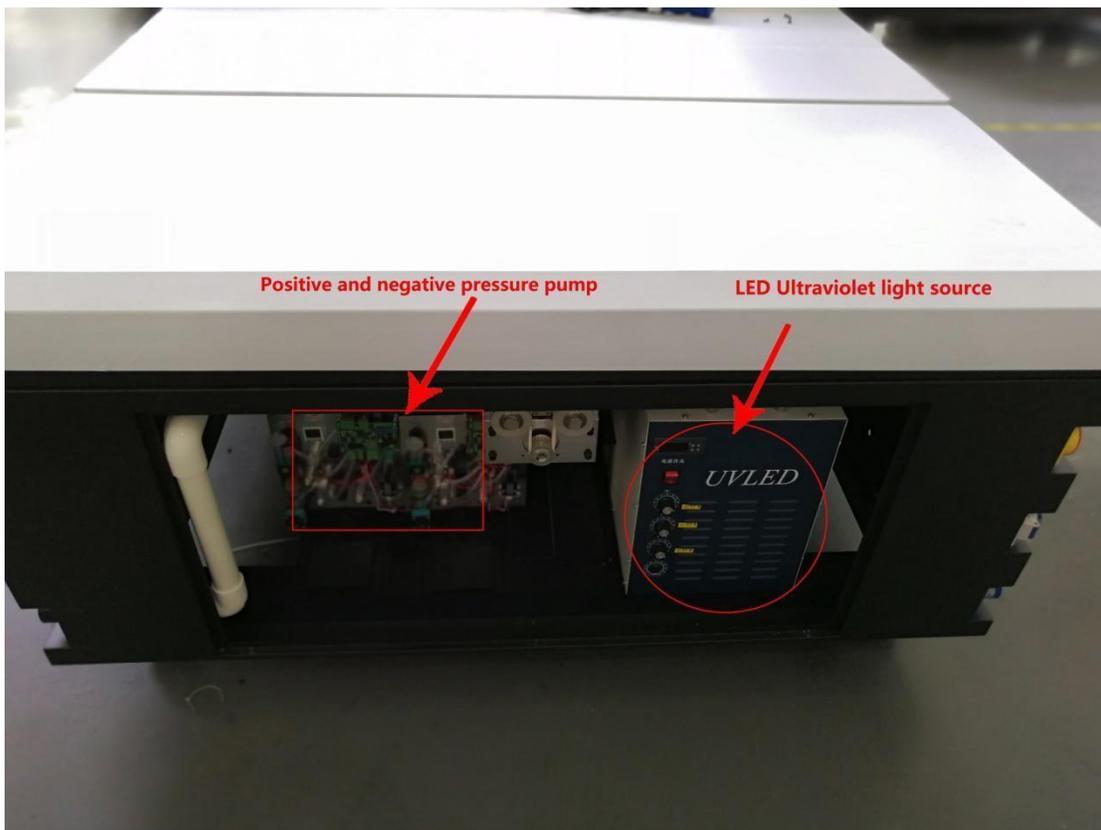


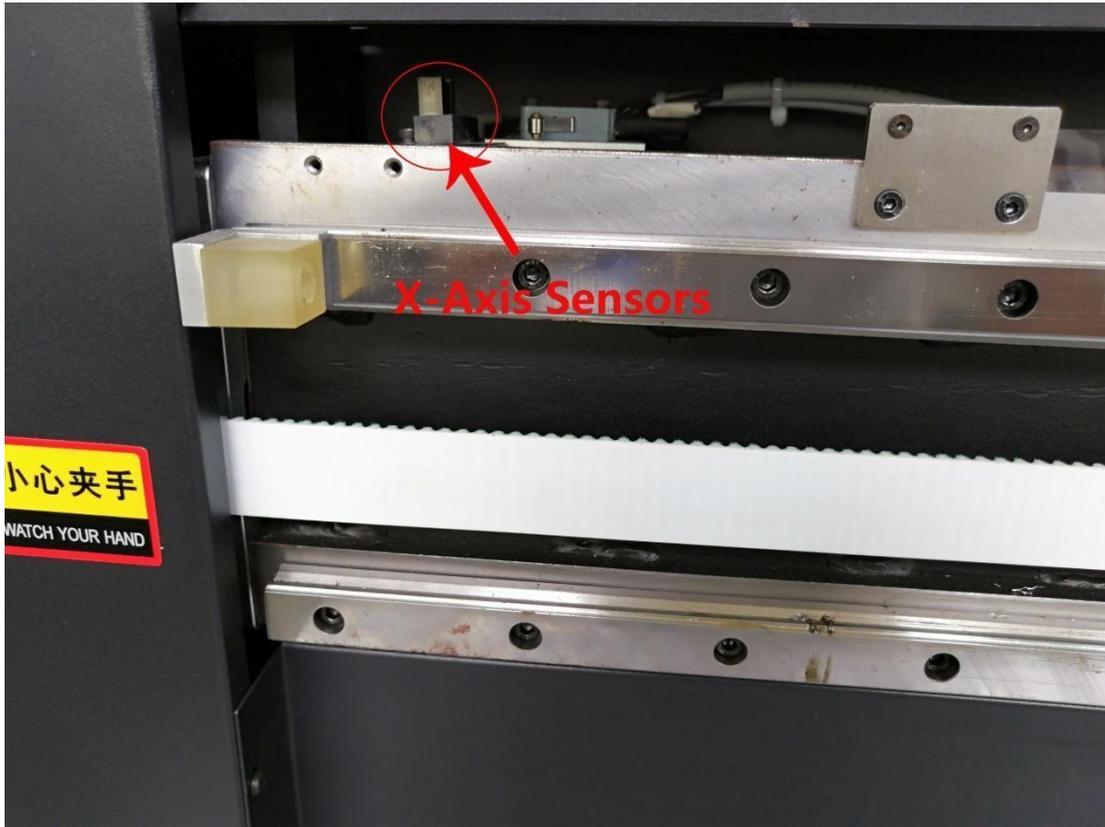


Attention: if your machine size is bigger than 1x1.3m, you will see two same negative pump systems. The left one is for varnish and white, right one is for other colors.

## 8. The location for main parts of the machine







# polaroid

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