NC-CylinderElf-III

使用说明书

在使用本机器之前，请仔细阅读本手册 并随时准备使用，以备将来参考。

目 录

Notice

Please read these instructions before using the machine

1. Machine should not be used by children or the disabled.If needed,please under the supervision;
2. Please use original supplier’ s spare parts and ink under instruction;
3. Make sure the power voltage is same as power cable and machine which shown on the Nameplate;
4. Only suitable to be used indoors and better suggest to have air conditioning inside the room to keep stable working temperature and humidity;
5. Dismantle the wooden case and the foot cup fixed frame and put it on a stable table before using;
6. Do not use the machine in a environment which has fire,dust and wetness;
7. Do not use the machine in a humid house;
8. Do not put sundries on the machine or the platform and surroundings;
9. Please keep a stable temperature in the working room,not suggest to use machine where environment over 30 degrees or below 15 degrees;
10. Do not use any broken cable to provide electricity;
11. If power supply is broken,please stop to using the machine;
12. Power off machine when you clean or fix machine;
13. Please use the machine according to local legal policy;
14. Make sure the head not touch anything before sending picture printing.Height sensor do not work when meets transparent materials;
15. When machine is working,eyes will feel sick if staring at the UV lamp for a long time,better suggest to wear ultraviolet-proof glasses;
16. When needed to move the machine,at least require 4 people to lift. Do not move the machine together with other parts. And remember to take take off the power charger when move the machine;
17. When adding ink, you may touch ink tube,ink bottle and ink cap and some parts,please protect in advance;

18. The table which used to put the machine should be make sure it’ s stability to place the machine and protect machine from shaking during working;

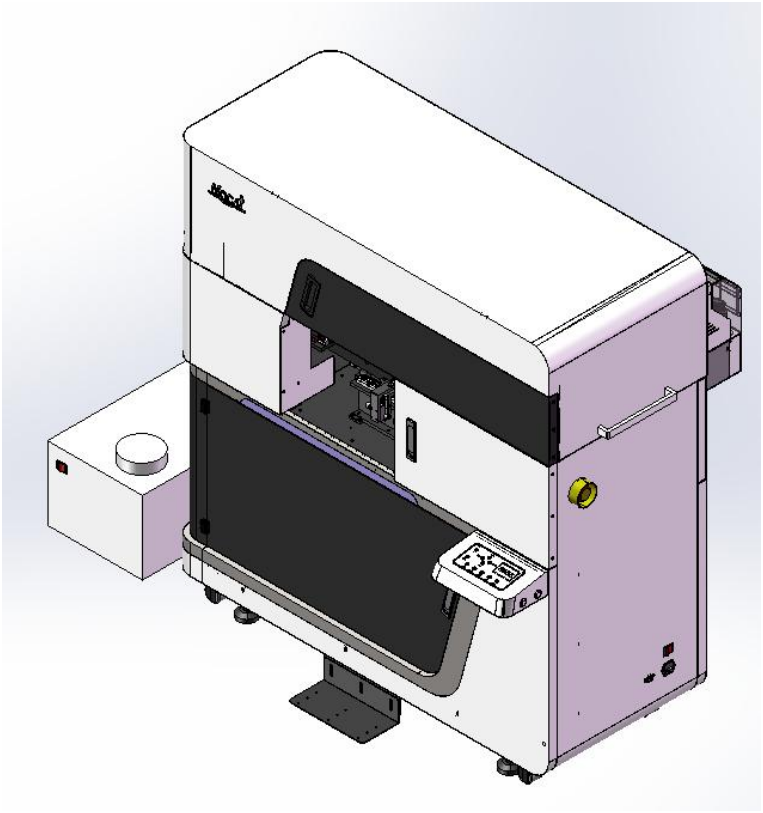
19. Not recommended to use UV LED lamp high load printing for a long working time;

20. Make sure machine is normally grounded;

21. Do not use the machine in thunderstorm day,avoid lightning strikes;

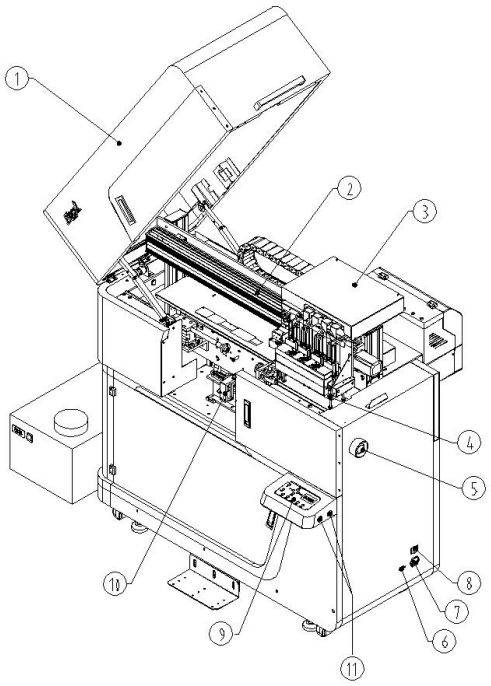
22. If your ink is not come from Nocai, after sale service will not be provided.

Machine introduction and graphics analysis



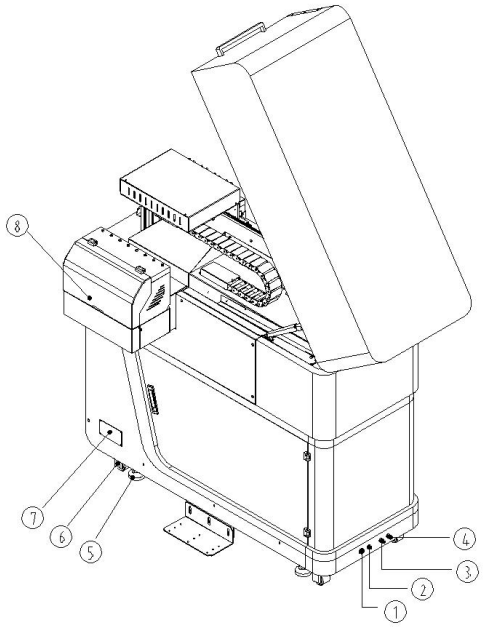
1.1Graphic analysis of the front and side of the machine

① Machine cover
② Beam
③ Printing cart
④ Ink station
⑤ Abrupt stop/Startup&Shutdown button



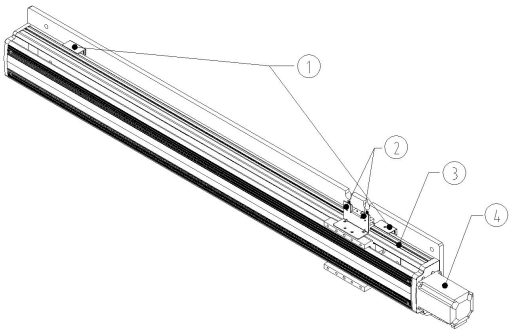
⑥ Optical fiber connector
⑦ Power supply connector
⑧ Switch of machine power
⑨ Keyboard panel
⑩ Printing jig module
⑪ Debug the central axis button

1.2 Graphic analysis of the side and back of the machine



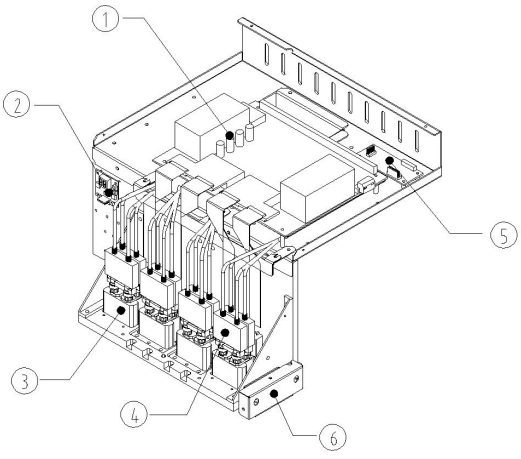
① UV lamp connector
② Connector of UV lamp cable
③ Water pipe connector
④ Water pipe connector
⑤ Footed glass
⑥ Footed wheel
⑦ Nameplate
⑧ Cartridge

1.3 Analysis of beam



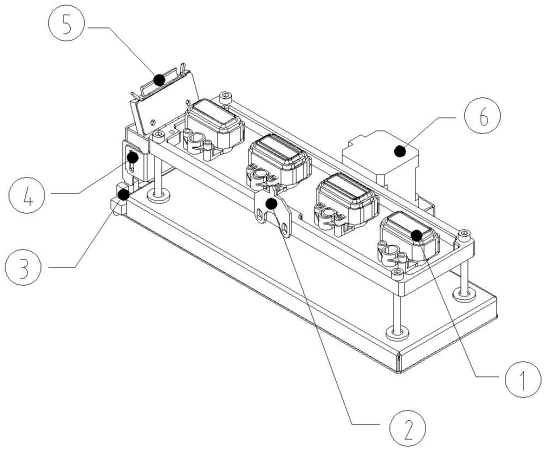
① Left and right limit seperation blade
② Left and right limit sensor
③ Rail module
④ X-axis servo motor

1.4 Analysis of cart of the machine

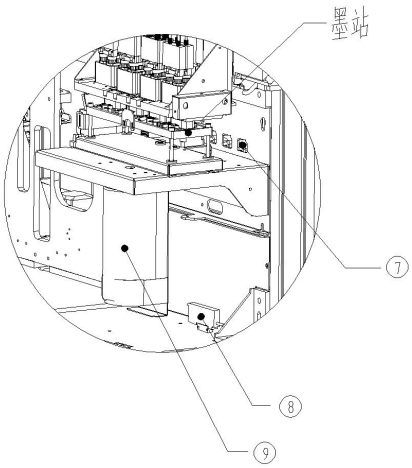


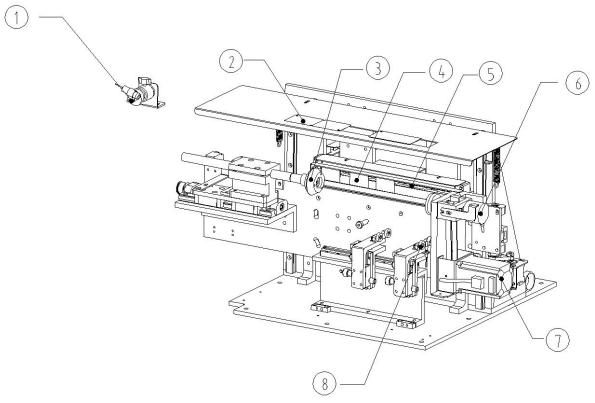
① Mainboard
② Temperature control board
③ Printhead
④ Damper
⑤ Differential signal interposer board
⑥ Ink cart anti-collision device

1.5 Ink station and optical amplifier

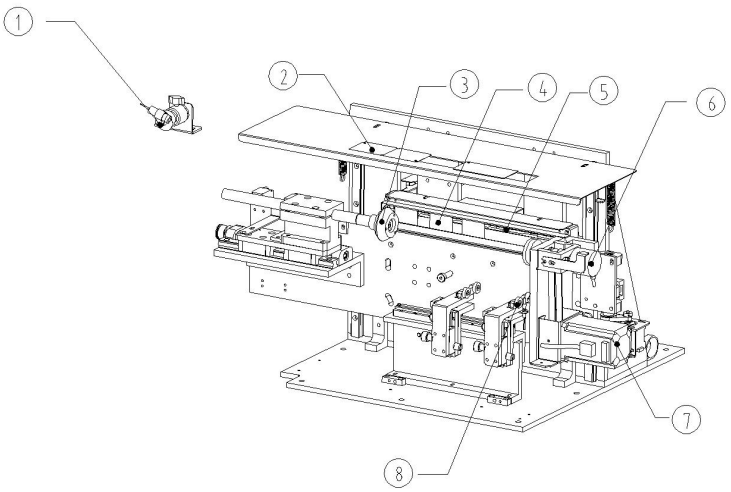


① Cap top
② Sheet metal for locking trolley
③ Lower station sensor of ink station
④ Adjustment sheet metal of ink station
⑤ Wiper
⑥ Motor of ink station
⑦ Ink pump
⑧ Optical amplifier
⑨ Waste bottle

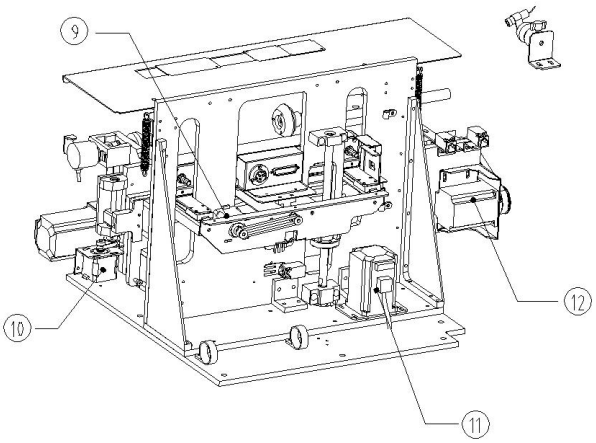




1.6 Load nad upload print module

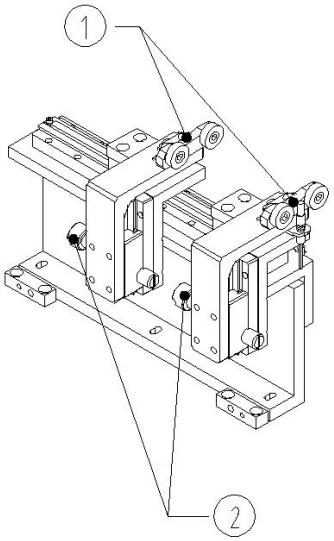


① Infrared-assisted positioning components
② Light shield 2 of UV lamp
③ Cylindrical left locating collet
④ Light shield 1 of UV lamp
⑤ Cylindrical right locating collet
⑥ Encoder
⑦ Workstation rotary motors
⑧ Base seat workstation positioning
⑨ Front and rear moving motors of UV lamp
⑩Adjust the degree of inclination of the station module manually
⑪ Workstation module lifting motor
⑫ Cylindrical left positioning collet motion motor

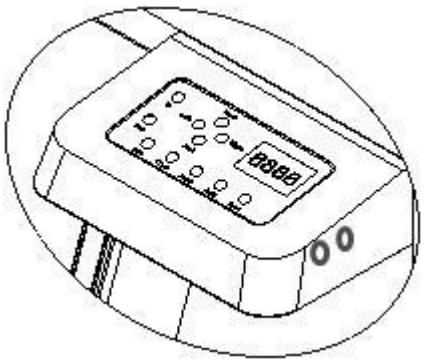


1.7 Printing station module

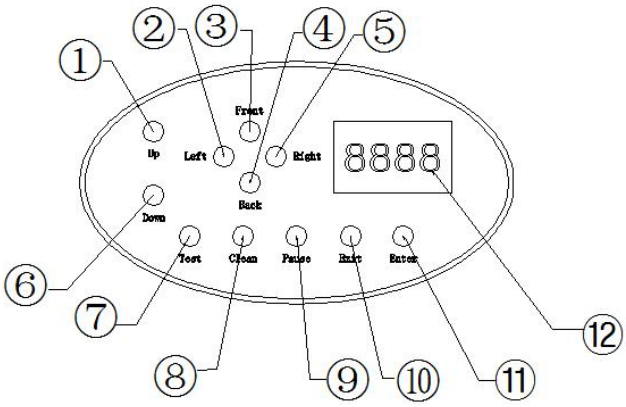
①Cylindrical pallets
②Cylindrical pallet trimming module



1.8 Graphic analysis of keyboard panel of the machine

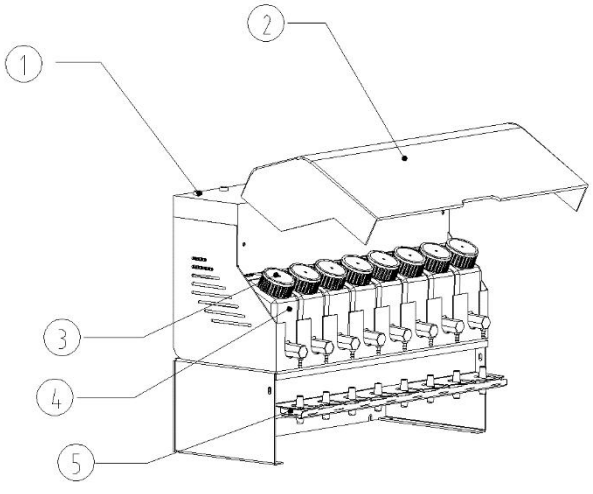


① UP: Undefined, and does not work
② Left shift key of cart
③ Front:Undefined, and does not work
④ Back: Undefined, and does not work
⑤ Right shift key of cart
⑥ Down: Undefined, and does not work
⑦ Repeat Print Confirmation Shortcut
⑧ Cleaning Shortcuts
⑨ Stop printing key
⑩ Exit key
⑪ Confirmation key
⑫ Display panel



1.9 Analysis of ink cartridge of the machine

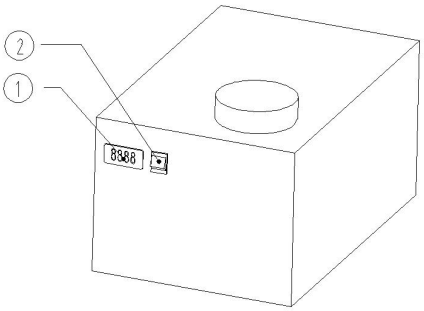
① Ink Alarm Indicator

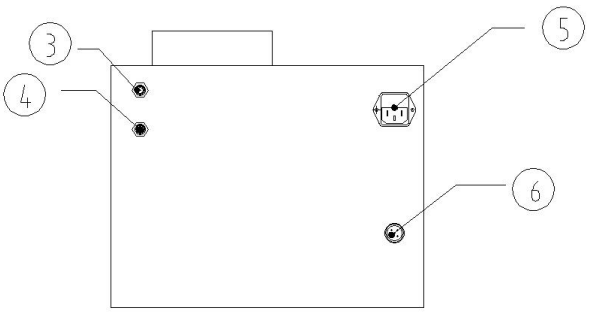


② Cartridge cover
③ Cover of cartridge storage
④ Cartridge storage
⑤ Cartridge valve (shown as open)
⑥ Ink filter

1.10 UV lamp cooler

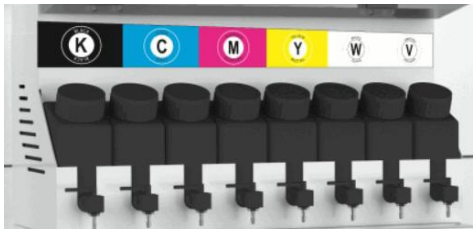
① Display panel for water temperature
② POWER button
③ Power Adjustment button
④ Power supply line connector
⑤ UV lamp control line
⑥ UV lamp line
⑦ UV lamp control line
⑧ Plug to water pipe
⑨ Plug to water pipe





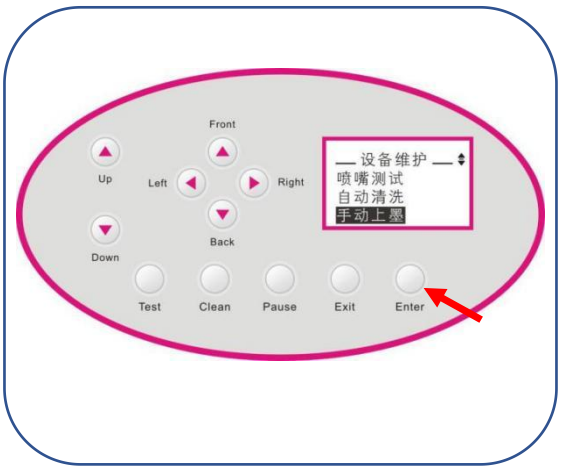
How to add ink

Follow the color tips to add the corresponding ink as following.

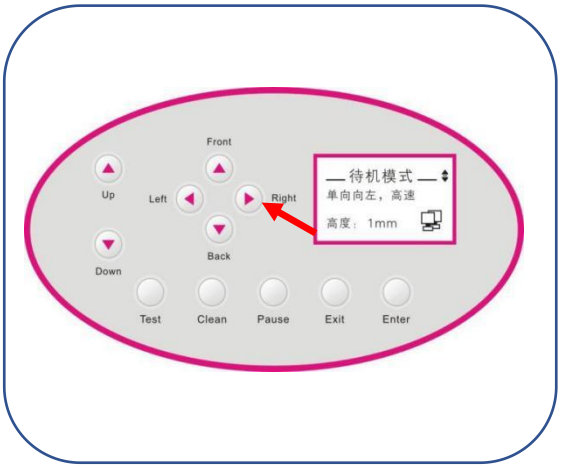


In order to prevent the ink from leaking out and contaminating the shell sheet metal when adding the ink, protective measures need to be taken. The bottle mouth can be wrapped with paper.

Then add ink manually, as is shown in the picture:



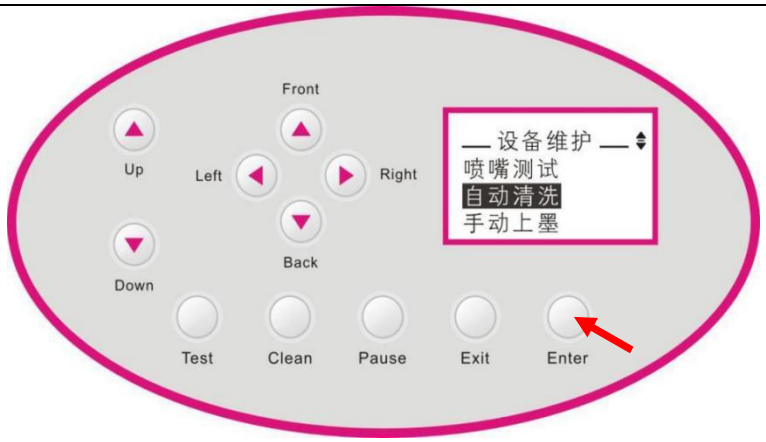
Click Right and enter machine maintenance



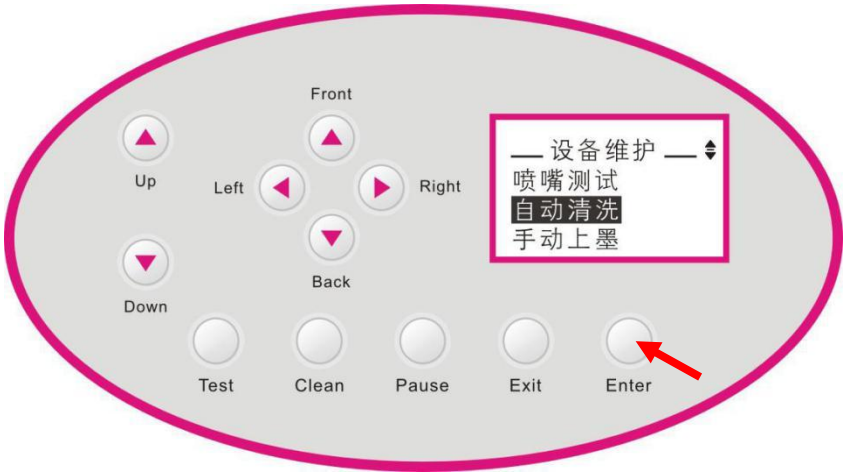
Find "Add ink manually" and click Enter to add ink

Press the Confirm button and the machine will start to pump ink. Check the waste ink bottle until the ink is pumped out to confirm that the ink path is clear, the ink storage is completed, as is shown in the picture:

Pay attention that the ink from waste ink bottle flow out of the ink tube smoothly, click the "Exit" button and ink-pumping will stop.

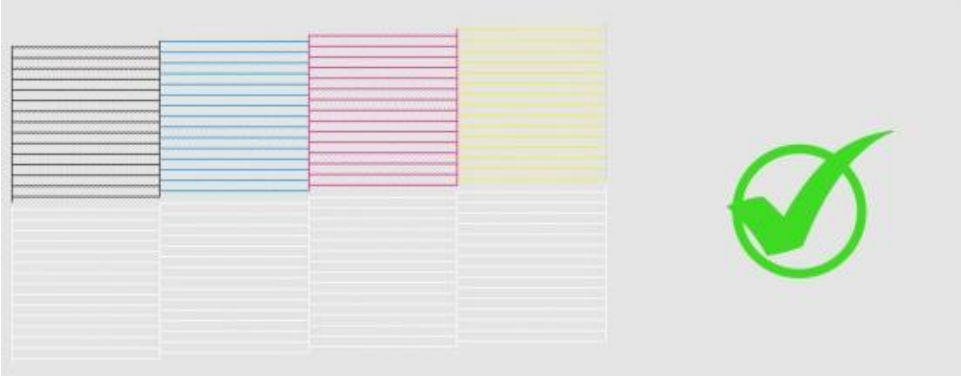


Then click “Automatic cleaning”, click on the “Enter” button, and the machine will clean the printhead automatically.



Refer to the following sampling operation as the following, place a bottle on the platform and click on the “Nozzle test” to print the test strip, if there is a lack of color or ink-suspension phenomenon, please continue to clean the printhead until the test strip are complete, ink installation is completed.

Reference:



If the test strip breaks, you need to “Clean automatically”

Normal test strip

The machine goes into standby and waits for installing the software.

Install and setup the driver

3.1Install the driver

3.11 Computer requirements

①System version：must be Win7, Win8, or Win10 on a 64-bit system.

Language: Chinese or English

CPU： i5 or above or equivalent；

Memory: 8GB or more；

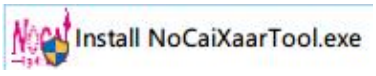
Hard disk: 250GB or more

②Computer must be equipped with Gigabit network card and gigabit network cable, only in this way the software can be normal online.

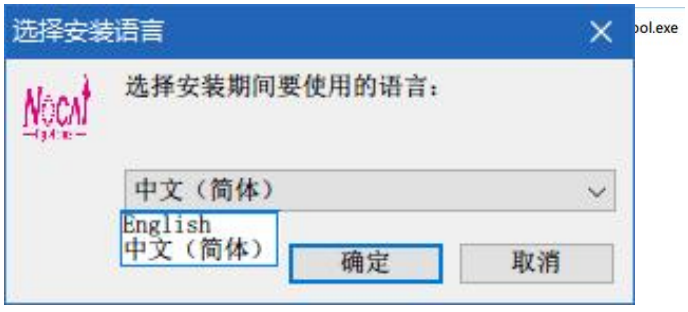
③IPv4 address of the computer is set to be obtained automatically. Not IPv6.

Operation:Find the two icons   ，click right button，choose【Open network and Internet setting】-click Change adaptor，double-click Local connection (or Ethernet)-click Attribute-cancel tick Inter protocol version 6（TCP/IP6）and tick Inter protocol version 4（TCP/IPv4）double-click and open it，-choose and obtain IP address automatically(O). Click OK to finish it.

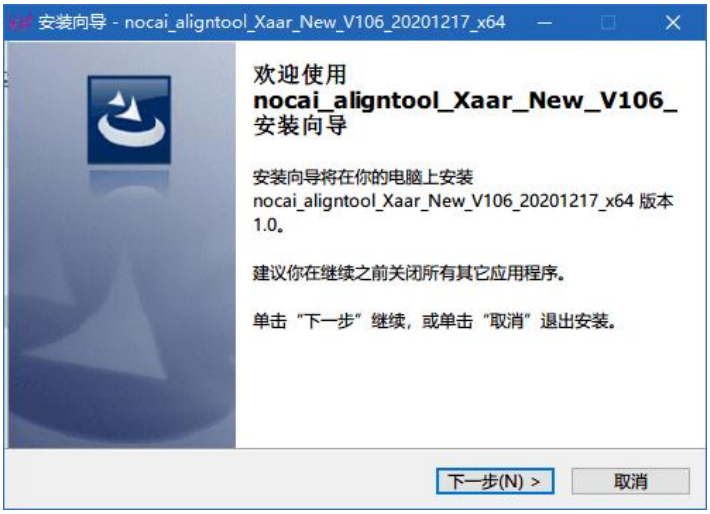
3.12 Install the driver

Open the file named Cylinder Elf II，you can download it from official website: www.happycolor.com.cn. Find the procedure and open Install NoCaiXaarTool.exe 

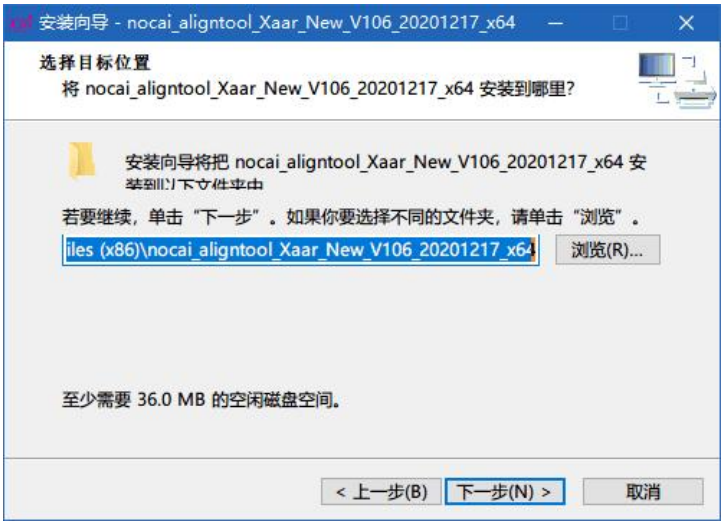
Click Right as the administrator, choose “Agree” “Next” “Install” in turn, just as the following:



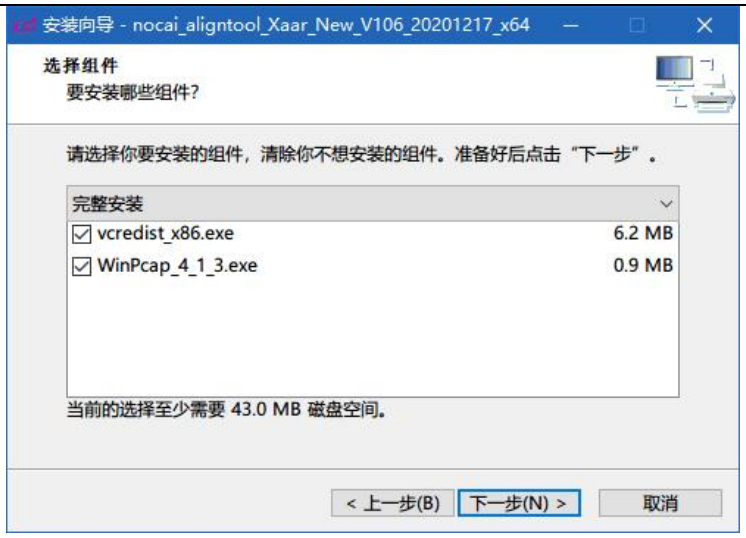
You can choose Chinese or English，click “OK”，it will appear such a pop-up window：



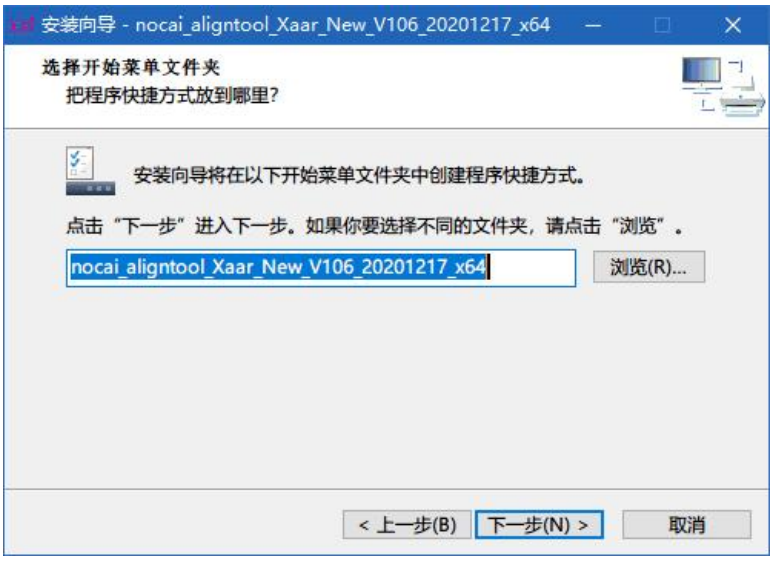
Click Next，the pop-up window is as follows：



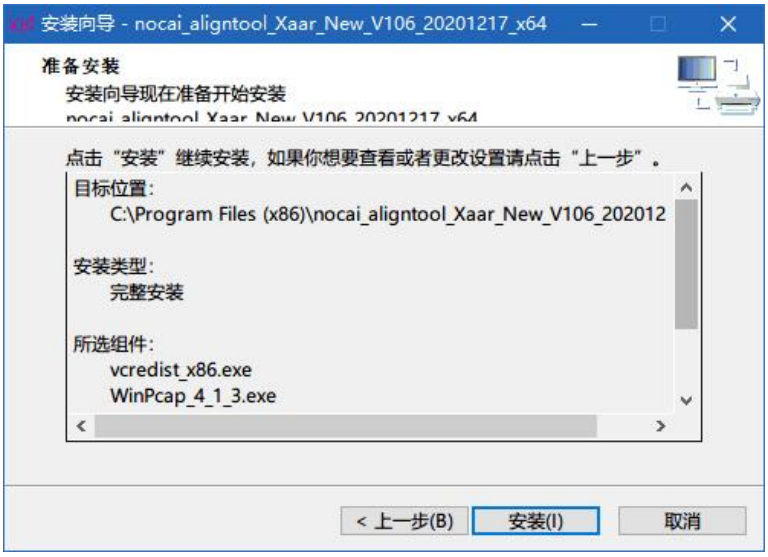
Click Next，the pop-up window is as follows：



Click Next，the pop-up window is as follows:

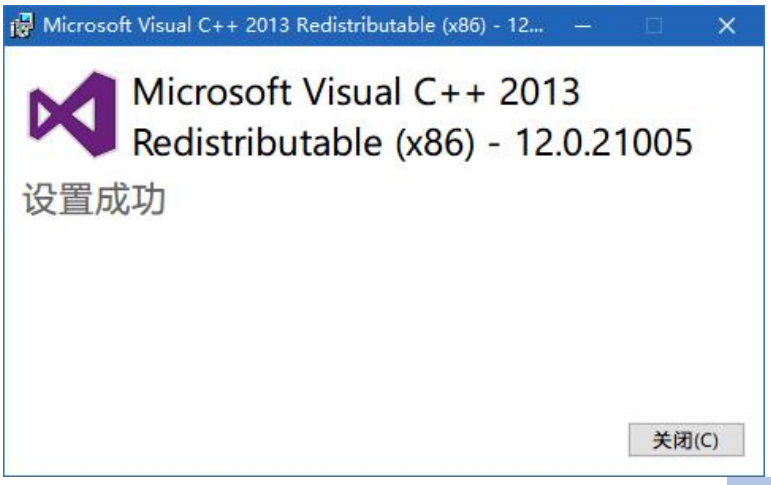


Click Next，the pop-up window is as follows:



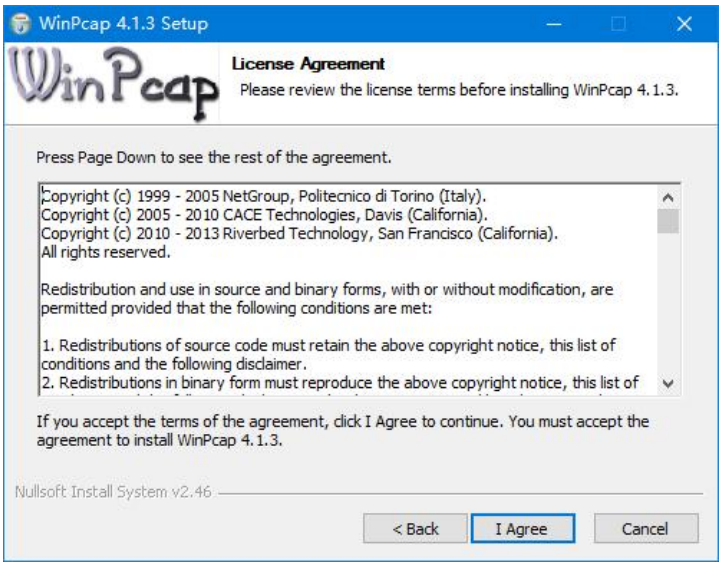
Click Next, the pop-up window is as follows:

Choose the "I accept the agreement", click Install, the pop-up window is as follows:

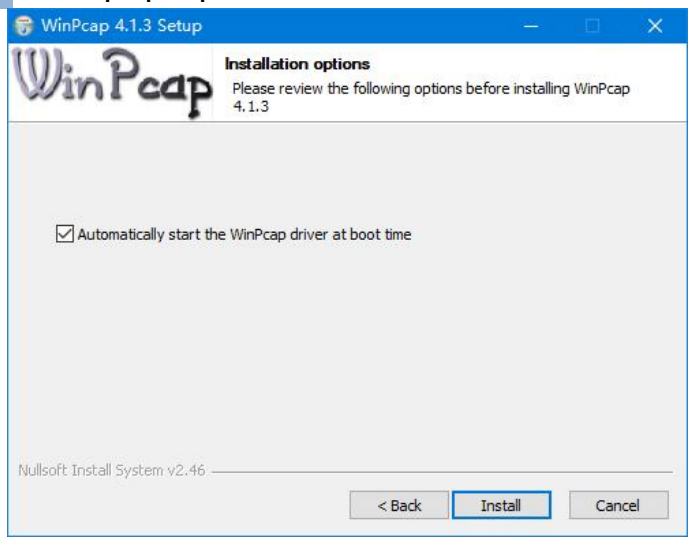


Pop-up Windows hint that the setting is successful, click Close.

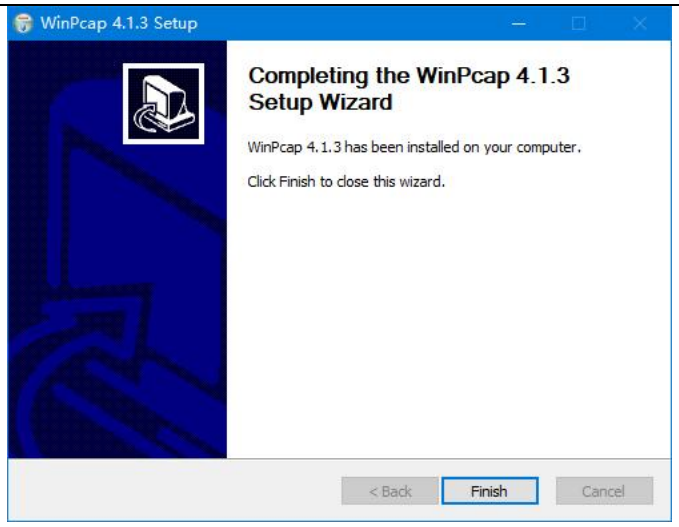
Click Next，the pop-up window is as follows：



Click I Agree，the pop-up window is as follows：



Click Install，the pop-up window is as follows：

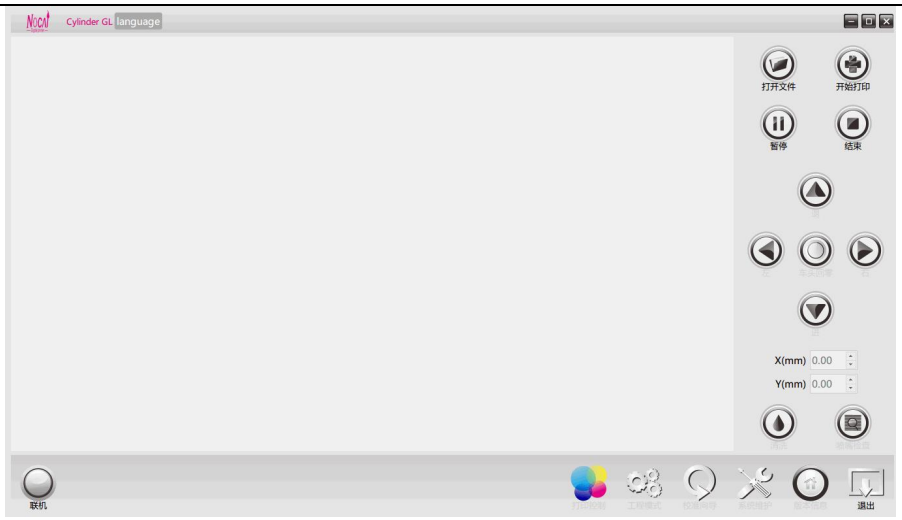


Click Finish，the pop-up window is as follows:

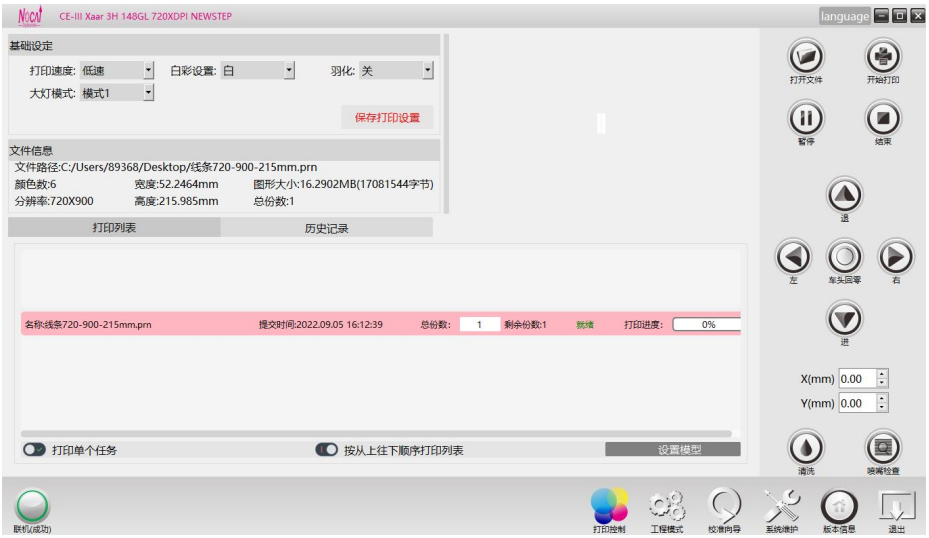
Click Ok，then there will be an icon like this 

. The software will start automatically, and the pop-up window will be as follows:

Choose the language displayed on the software and click OK, then the software will start and the pop-up window is as follows:



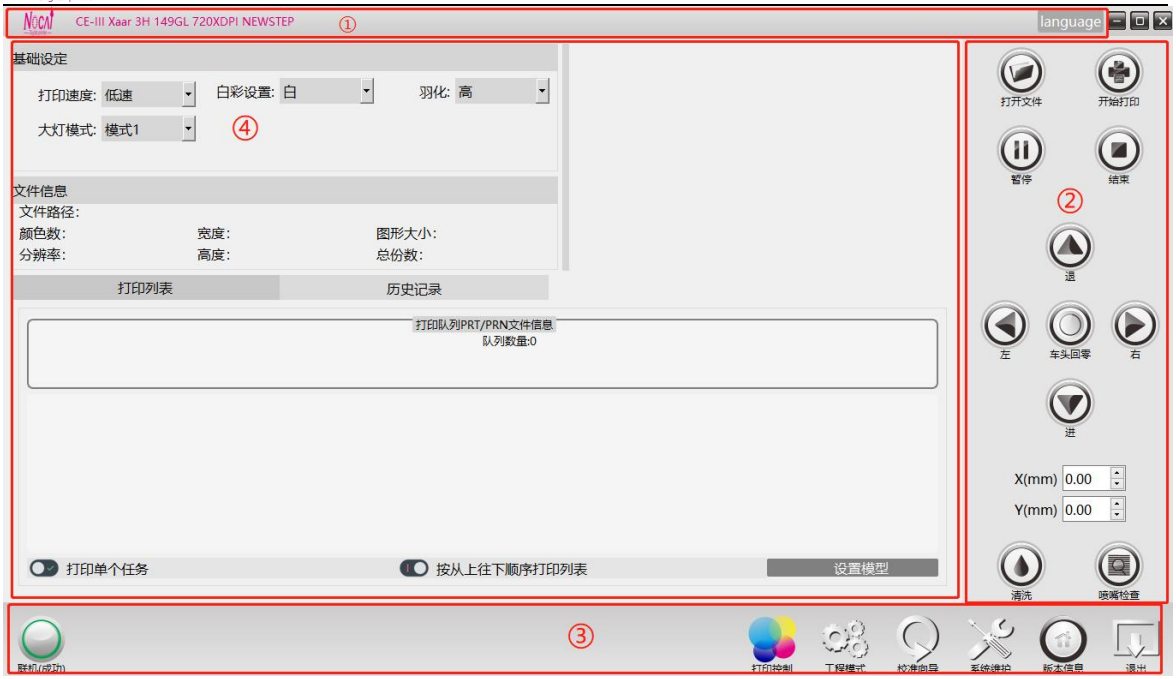
Click Online . Online（OK）, it means the driver is online, just as the following:



3.2 The setup and introduction of driver function

There are some details,the picture is as follows

The interface of the software is divided into four parts ①Title column、②Function Shortcut key、③Menu column、④Menu display area



3.21 ①Title column②Function shortcut key

①Title column: LOGO, driver name,【Language】Display language switching buttons、reduce or enlarge，close shortcut key.

②Function shortcut key:

Open the file: Add PRN\PRT file

Start to print: Choose PRN\PRT，and print it.

Pause :Click Pause during printing

End : Click End

Left : The cart move to the left

Right : The cart move to the right

Up : Undefined, does not work

Down : Undefined, does not work

Head to the origin: the cart moved to the ink station

X(mm) :Set the image, the white edge in the X-axis direction relative to the origin. The value cannot be greater than the perimeter of the round bottle (i.e., large diameter of the material * 3.14). (driver engineering mode →material parameter→large diameter of material)

Y(mm) : Set the image, offset white edge in the Y-axis direction relative to the origin. This parameter and the height of the material cannot be greater than the height of the material (driver engineering mode→

parameter→height) ， or it will be wrong.

Clean ：Clean and maintain specific printheads

Check the nozzle：Print test strips to check printhead status.

Menu column：it concludes these functions, such as printing control、engineering mode、calibration and guidance、system maintenance、version information and Exit. The details are as follows：

3.22 Printing control

The default print settings are shown in the picture：

The settings are as shown above:

Basic setting

Printing speed：You can choose *low-speed*、*standard*、*high-speed*、*high-precision*，we usually choose Standard;

White-color setting：You can choose：*white*、*color*、*white color*、*white color varnish*、*varnish*、*color varnish*. For example, if you select White, it will only print white ink; if you select Color, it will print color ink; and if you select White Color, it will print white color ink.

Feather ： You can chosoe close、low、middle、high；The higher the feathering, the better the quality of the accuracy, but the slower the speed

will be.

Bright light mode: *Mode 1 and Mode 2 can be selected*, the difference is that the light curing method is different when printing varnish. Mode 1 is the default printing mode, when printing varnish only light up the bright lamp, with the bright lamp curing varnish; While mode 2 printing varnish, with a small lamp curing varnish;

Print control will display on the upper right part of the area (blue area in the figure): preview image for adding a Prn\Prt file.

File information: Displays information of the added PRN file such as *file path, the number of colors, resolution, width, height, graphic size, total number of copies*, etc.

Printing list: Printing list: the list diaplays all the Prn\Prt file and other information such as the name、submission time、*total number (The number of print repetitions can be set randomly)* 、number of copies remained、printing progress, etc.

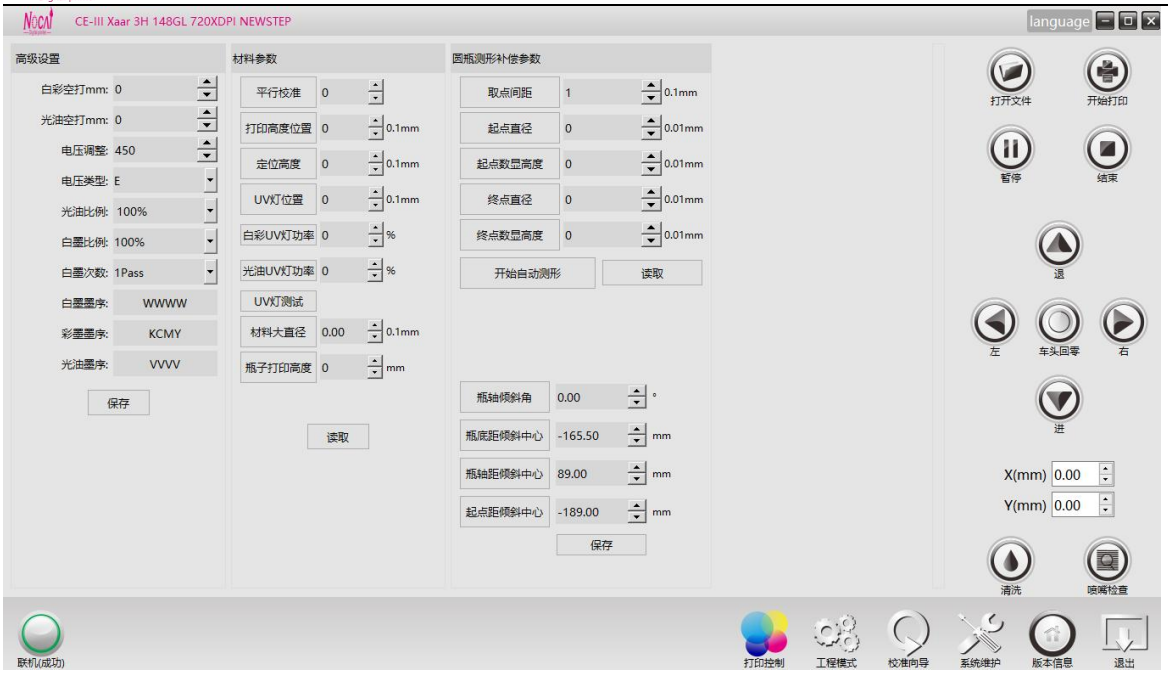
As shown in the figure, right-click the blank area, you can *add files, delete files, start printing, pause, continue printing, stop printing* and other quick operations on pop-up window.

Historical record: Display a record of job files that have been printed and completed.

Single task: Choose and print a single task.

Print from top to bottom: Check it, and when you click Start, the print list will start from top to bottom.

3.23Engineering mode



Advanced Settings

Empty-printing distance for white and color: If the ink is not dry when printing white and color, you can increase the value of the light to extend the time appropriately, the white and color ink can be shone dry.

Empty-printing distance for varnish: The ink is not dry when printing varnish, you can increase in the value of the light to extend the time appropriately, the varnish ink can be shone dry.

Voltage adjustment: 512. If needed, use the printer under the guidance.

Voltage type: Optional *S_0-3mm*、*A_3-7mm*、*B_6-8mm*、*C_8-9mm*、*D_9-13mm*,different types should correspond to different printing heights, such as printing range of S waveform is 0-3mm. The higher the height, the larger the ink spot, and the printing accuracy get worse. According to the situation when you choose to use. For example: when the vertical distance from the print material to the bottom of the printhead is 3mm, you can choose S.

Varnish ratio: Optional 10%、20%、30%、40%、50%、60%、70%、80%、90%、100% When the actual amount of varnish ink for printing is too much, you can reduce the amount of varnish by percentage.

White ink ratio: Optional 10%、20%、30%、40%、50%、60%、70%、80%、90%、100%. When the actual amount of white ink for printing is too much, you can set a different amount of white ink by percentage.

The time of white ink: You can choose 1Pass、2Pass、3Pass、4Pass、5Pass. 1Pass is the default and the amount of white ink printed is 1 time. 2 Pass is two times of default amount of ink. At the same time, the printing time is longer. When more white ink printing is required, you can choose it according to the actual situation.

Four ink channels of the printhead.

Order of white ink: Default: WWWW.

Order of color ink: Default: KCYM.

Order of varnish: Default: VVVV.

Function of closing ink channel: There are four ink channels of printhead. Change the letter of the ink sequence to N→Turn off the corresponding channel output. This function is used under the guidance of after-sales.

Material parameter→All functions are used while debugging the bottle change printing station and cannot be modified normally.This function is used under the guidance of after-sales. Please refer to the specific method when using.【Cylinder 、cone and special shape instructions of station debugging】

Parallel calibration: Default 3599. Unchangeable.

Print height and position: Unit: 0.1mm. Adjust the relative height of print surface and printhead.

Positioning height: Unit: 0.1mm. When the bottle is clamped, the positioning clamping height of the lifting mechanism.

UV lamp position: Unit: 0.1mm.

Power of White and color UV lamp: According to the actual printing effect, different percentages of brightness are determined, and the factory default parameter is 87%

Power of Varnish UV lamp: According to the actual printing effect, different percentages of brightness are determined, and the factory default parameter is 87%

Test of UV lamp: Light up the UV lamp seperately(check if the bottle shading is done properly);

Large diameter of material:: The largest diameter of material(Measure

the largest diameter when change different material)

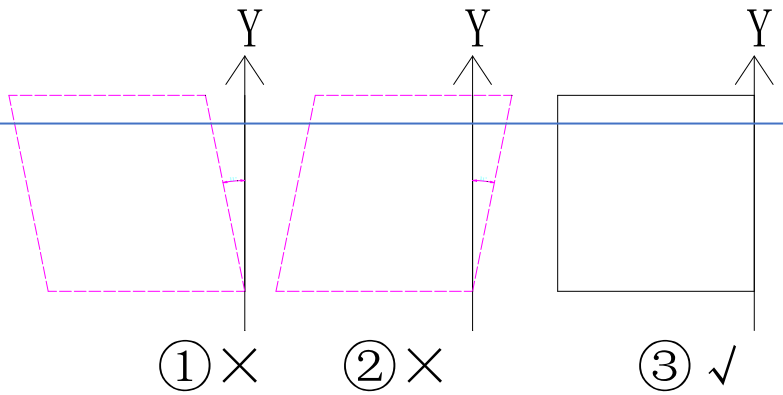
Print height of bottle: Not used yet

Speed calibration:: Focused on S mode, calibrate the direction and distance of Y axis.(Compare with the stepping calibration in normal mode)

If the step calibration is OK in normal mode, changing the value appropriately can solve the problem that the distance in the Y direction of the actual printed picture is different from the preset. When the actual printing distance in the Y direction is smaller than the preset distance, increase the value; When the actual printing distance in the Y direction is larger than the actual, increase the value; It is recommended to adjust it from -40 to 40.

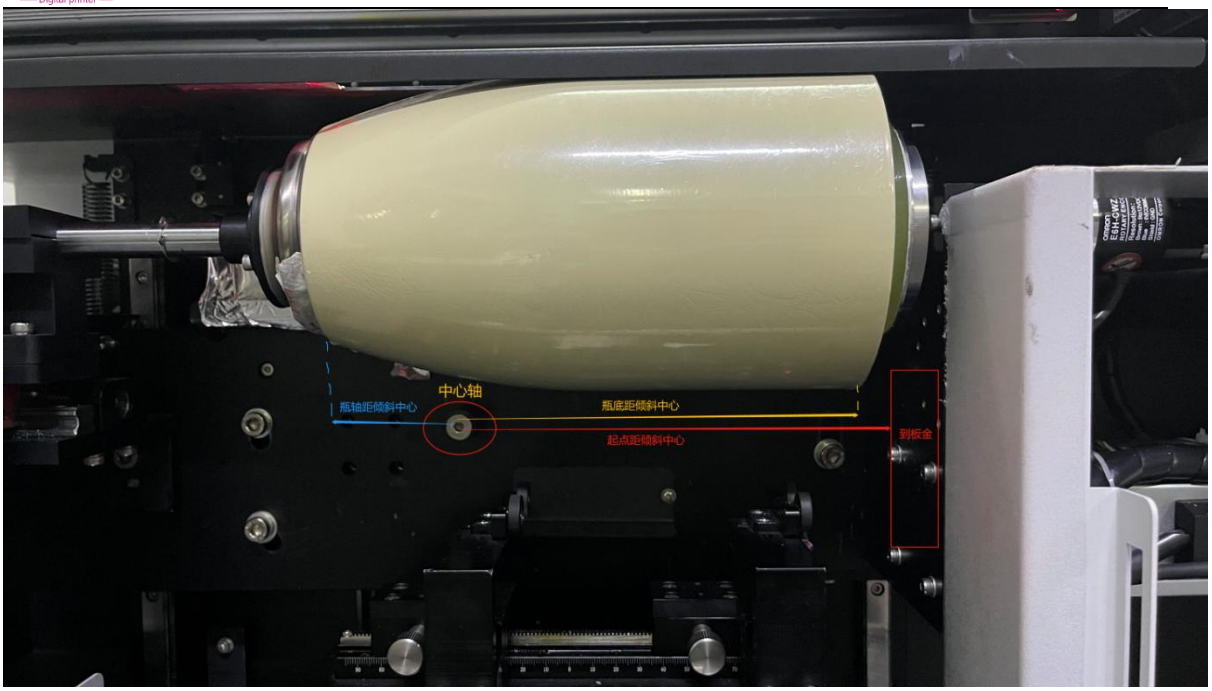
Perimeter of fine-tuning: For S-type printing, the tilt of the image to the Y direction and the direction of movement is corrected. It is recommended to adjust from -20 to +20.

If the step calibration is OK in normal mode, you can modify the value appropriately and adjust the picture to a rectangle when the printed rectangular picture is a parallelogram. As shown in the figure below:



The function of the compensation parameter→the round bottle test shape is used during automatic modeling, and does not need to be modified under normal conditions. Please use it under the after-sales training. For specific tips, please refer to the [Debugging Instructions for Round Bottles and Cone Stations] document.

Point spacing: the spacing of each piece of the test tool in the measurement state, the unit is 0.1mm, and the default value is 0.3mm (pay attention the maximum measurement point of the machine cannot exceed 1000 points)
Start Diameter: Measure the starting point diameter of the material.
Digital Height of Starting Point:The value displayed by the measuring tool at the starting point.
Endpoint Diameter:Measure the endpoint diameter of the material.
Endpoint Height: The value displayed on the measurement tool at the endpoint position.
Start to measure type automatically:Click to start measure automatically.
Read:Read the current value.
Inclination angle of bottle shaft: the bevel angle from the bottle to the center shaft. (Generally, the cylinder and special-shaped are 0 degrees, and the cone should be determined by the actual calculation value. The after-sales service personnel can provide the form.)
From inclination center to bottom of bottle: the distance from the bottom of the bottle to the center axis, this value can be measured with a rectangular ruler from the center axis to the bottom of the bottle.
From inclination axis to bottom of bottle: the distance from the mouth to the center axis, this value is fixed.
Starting point from the center of inclination: the distance from the starting point to the central axis, do not modify the value if the starting point of the machine is not changed.



3.24 Calibration and Guidance

Click Calibration and guidance, the software interface will be like this.

When you install or change the printhead, or the head is hit, calibrate the printer from the top to the bottom.

①Check the nozzle

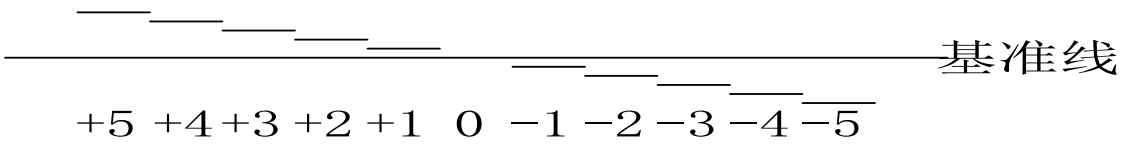
Click Next, enter the interface of checking the nozzle and operate it follow the prompts.

Ensure that the head is OK and click Next. The software will enter the interface of step calibration. Choose Step calibration automatically.

②Step calibration

The printer has been calibrated simply. Therefore, adjust it slightly.

The picture is as the following:

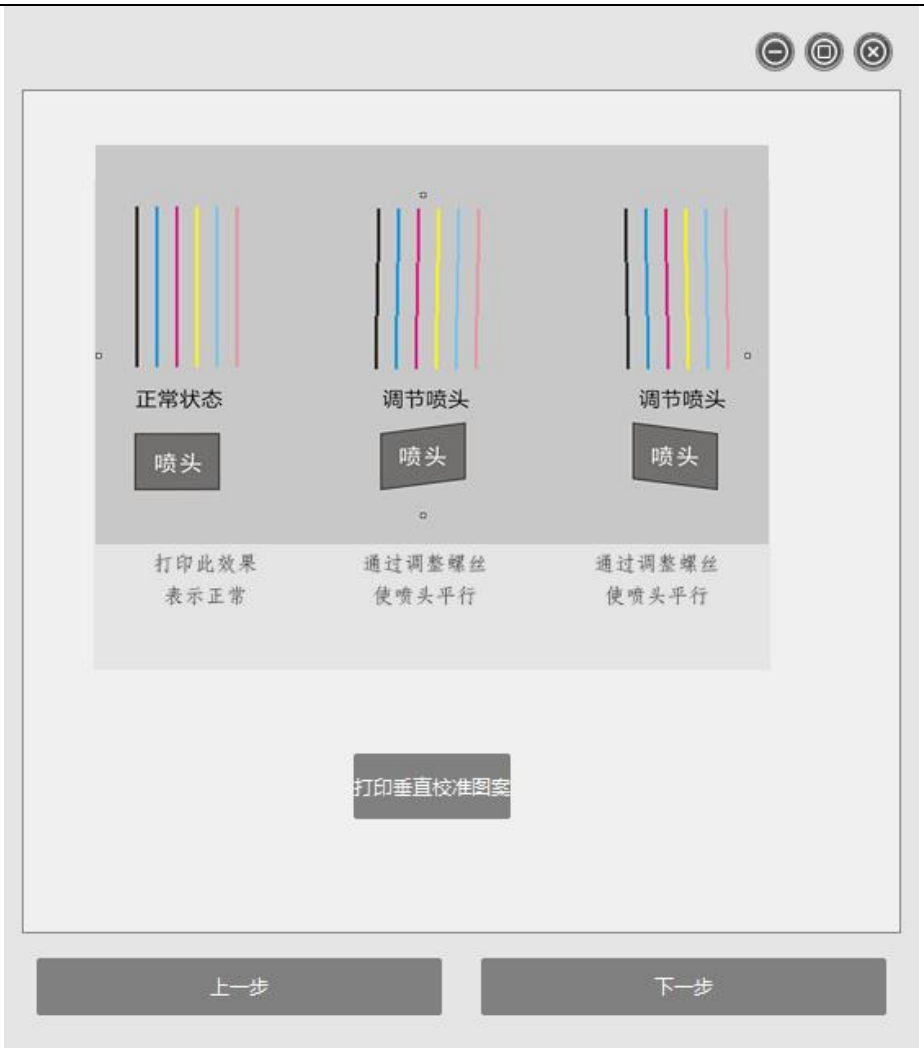


The final purpose: It is best to make the line corresponding to 0 coincide with the baseline.

After calibration, click Next. The software will enter the main interface of calibrating and choose Vertical calibration automatically.

③Vertical calibration

Click Next, and the software will enter the interface of Vertical calibration.

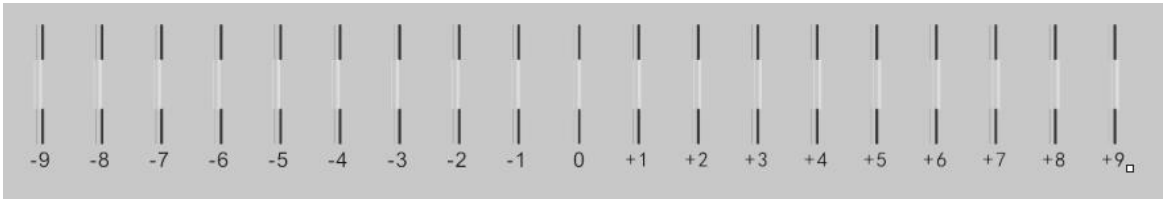


Click "Print vertical and calibration pattern". Adjust the white, color and varnish head and then click Next. The software will enter the main calibration interface and choose Horizontal spacing calibration for heads automatically.

④Horizontal spacing calibration for heads

Click Next and the software will enter the interface of Horizontal spacing calibration for heads.

The calibration graphic is as the following:



Look at the graphic to see how well the black and white lines coincide. For example, the "+3" black and white lines are the best to coincide, and the current horizontal spacing coefficient is increased by 3; If the "-3" black and white lines coincide best, the current horizontal spacing coefficient will be reduced by 3. Debug it several times until the black and white lines corresponding to the number "0" have the best degree of coincidence, which is a straight line.

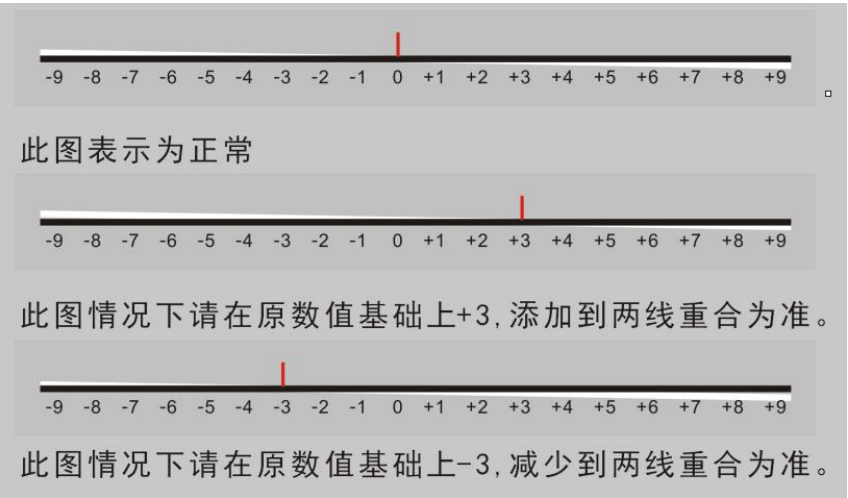
Click Save after debugging.

Click Next and the software will enter the interface of Vertical spacing calibration for heads.

⑤Vertical spacing calibration for heads

Click Next and the software will enter the interface of Vertical spacing calibration for heads.

The calibration graphic and calibration method are as the following:



Click Save after debugging. (Tip: based on varnish)

Click Next, and the software will choose Color Set Calibration.

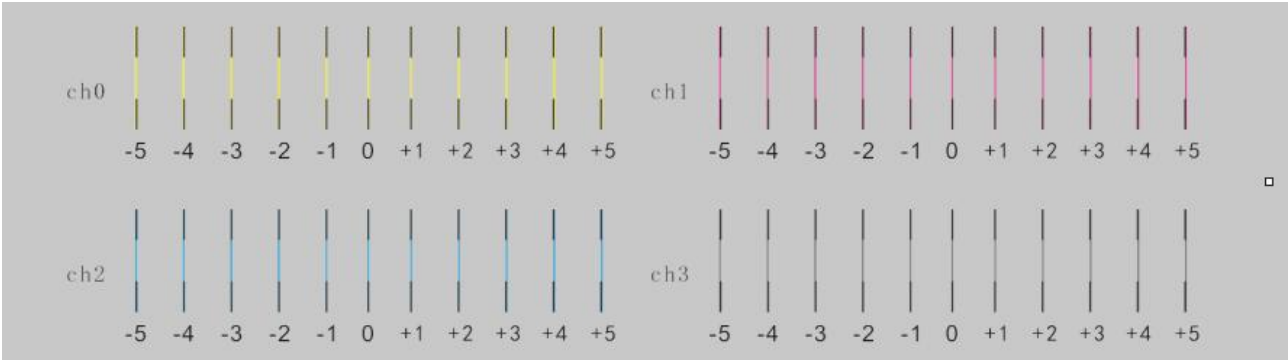
⑥Color Set Calibration

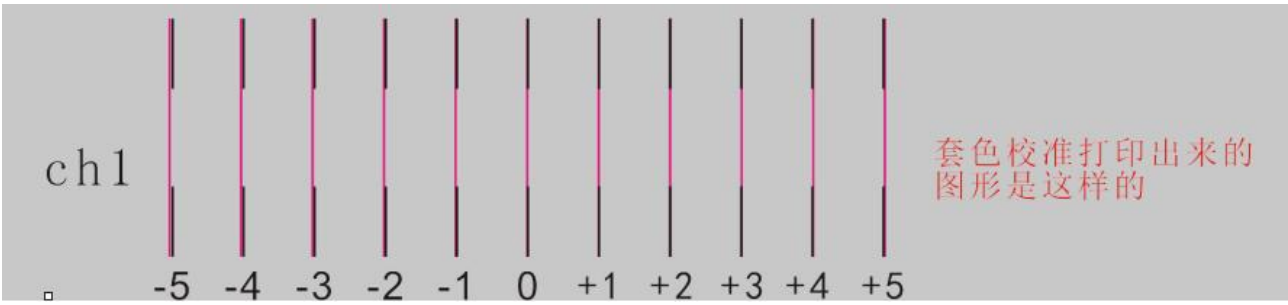
Click Next, and the software will choose Color Set Calibration.


左对齐
ch0 0
ch1 0
ch2 0
ch3 0
打印左对齐图案
彩
请注意，请先确保瓶子转动平稳再调试套色校准的参数。瓶子转动是否平稳
可根据打印出来的校准图案从上到下是否一致
上一步
下一步


左对齐
ch0 0
ch1 0
ch2 0
ch3 0
打印左对齐图案
白
请注意，请先确保瓶子转动平稳再调试套色校准的参数。瓶子转动是否平稳
可根据打印出来的校准图案从上到下是否一致
上一步
下一步

The calibration graphic is as the following:





Look at the calibration graphic to see how well the colored lines overlap with the black lines. Take CH1 red and black color registration as an

example: if the "+3" red and black lines coincide best, the current horizontal spacing coefficient is increased by 3; If the "-3" red and black lines coincide best, the current horizontal spacing coefficient will be reduced by 3. Debug it several times until the red and black lines corresponding to the number "0" have the best degree of coincidence, which is a straight line.

Click Save after debugging. Both the white head and the varnish should be calibrated like this.

The calibration process is now complete, and the calibration window can be closed.

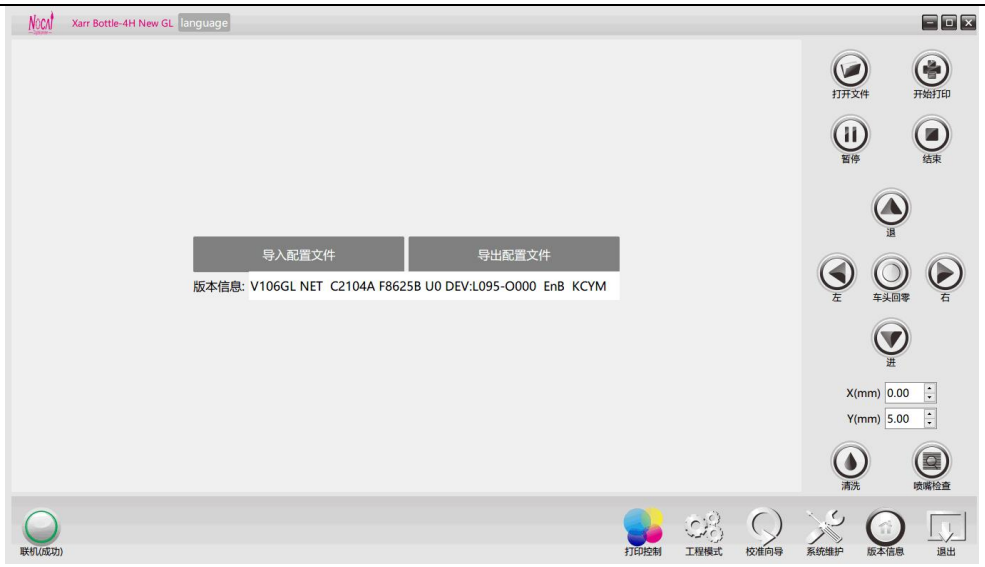
3.25 System maintenance

Click System Maintenance in the menu bar of the home page and the software enters the System Maintenance details page.

This interface is for common functions of system maintenance.

3.26 Version information

Click Version information in the menu bar of the home page and the software enters the Version information details interface.



Export configure file:Export the parameter settings in the on-line software to a file with a pfg suffix format for backup.

Import configure file:Import the parameter file from the previous file for backuping to recover the parameter.

Version information: Specific information of system version.

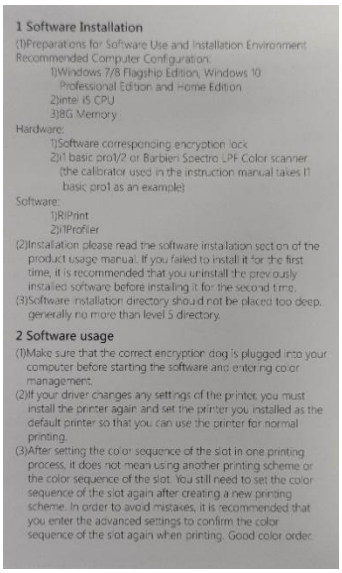
3.27Exit

Click Exit in the homepage and the software will be closed automatically.

RIIN RIIN Content

4.1 RIIN Hardware introduction

The front, back, and inside are shown below:



1 Software Installation

(1)Preparations for Software Use and Installation Environment

Recommended Computer Configuration:

1)Windows 7/8 Flagship Edition, Windows 10 Professional Edition and Home Edition

2)Intel i5 CPU

3)8G Memory

Hardware:

1)Software corresponding encryption lock

2)i1 basic pro1/2 or Barbieri Spectro LPF Color scanner (the calibrator used in the instruction manual takes i1 basic pro1 as an example)

Software:

1)RIPrint

2)i1Profiler

(2)Installation please read the software installation section of the product usage manual. If you failed to install it for the first time, it is recommended that you uninstall the previously installed software before installing it for the second time.

(3)Software installation directory should not be placed too deep, generally no more than level 5 directory.

2 Software usage

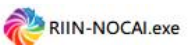
(1)Make sure that the correct encryption dog is plugged into your computer before starting the software and entering color management.

(2)If your driver changes any settings of the printer, you must install the printer again and set the printer you installed as the default printer so that you can use the printer for normal printing.

(3)After setting the color sequence of the slot in one printing process, it does not mean using another printing scheme or the color sequence of the slot. You still need to set the color sequence of the slot again after creating a new printing scheme. In order to avoid mistakes, it is recommended that you enter the advanced settings to confirm the color sequence of the slot again when printing. Good color order.

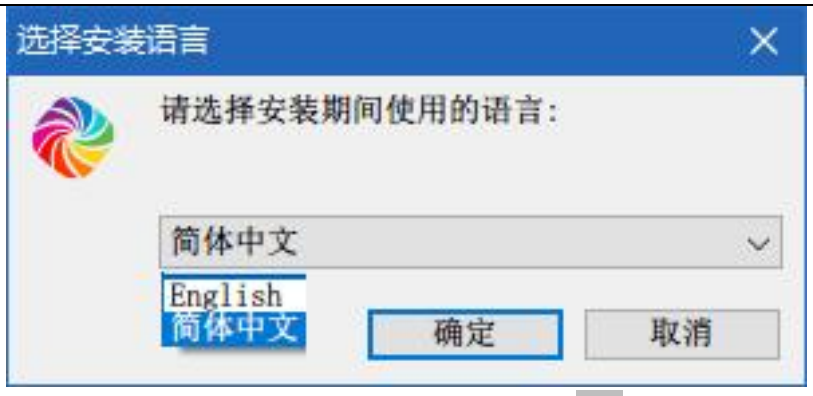
The blue one in the box is a USB with a specific ID; the silver one is a software installation USB.

4.2 RIIN install procedures

Open the software box and take out the USB and plug it into the USB port of the computer. And then open the file “The computer” and find this file RIIN-NOCAI.exe 

（You can get the latest version from the after-sales technician or download it from the website.www.happycolor.com.cn），just as the following:

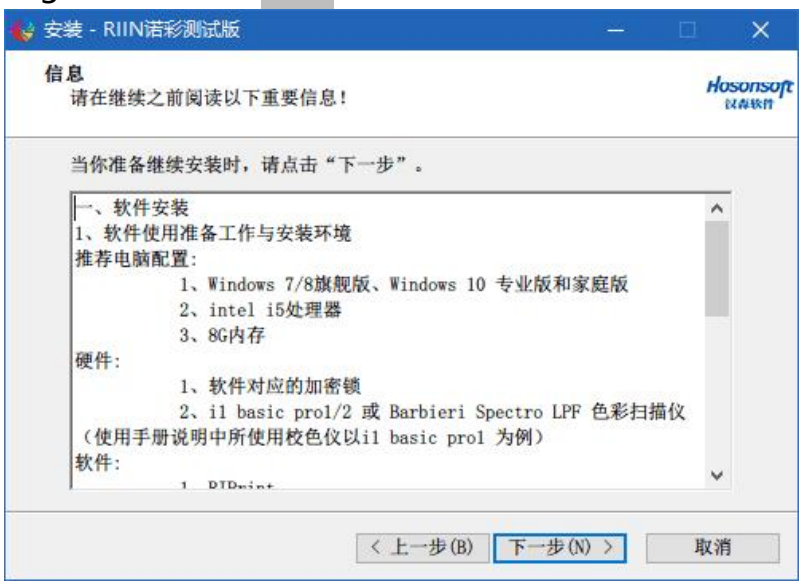
Pick the file up，click right，operate it as an administrator，just as the following:



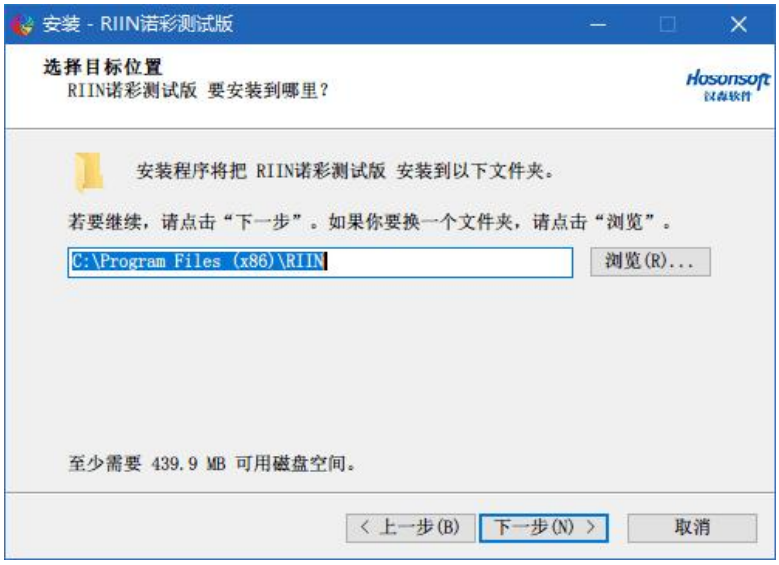
Choose language（English or Chinese), click OK, then the pop-up window is as follows:

Click Next, the pop-up window is as follows:

Choose I Agree and click Next, the pop-up window is as follows：

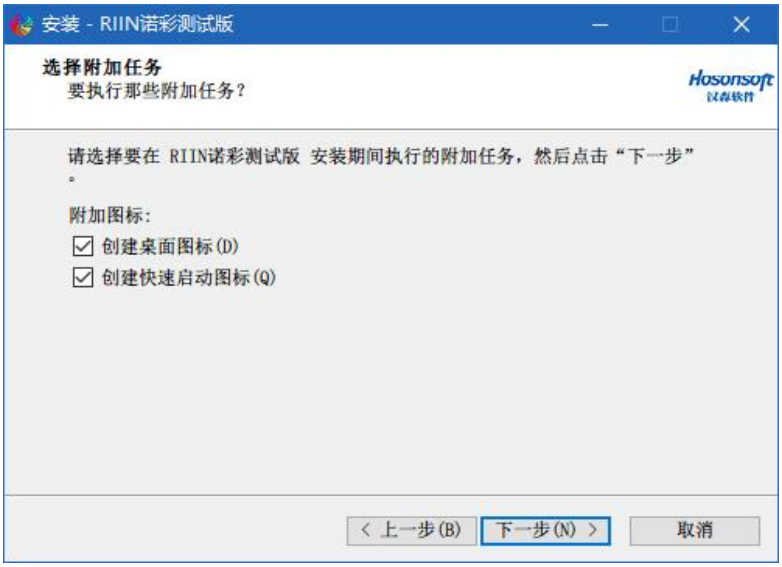


Click Next, the pop-up window is as follows：

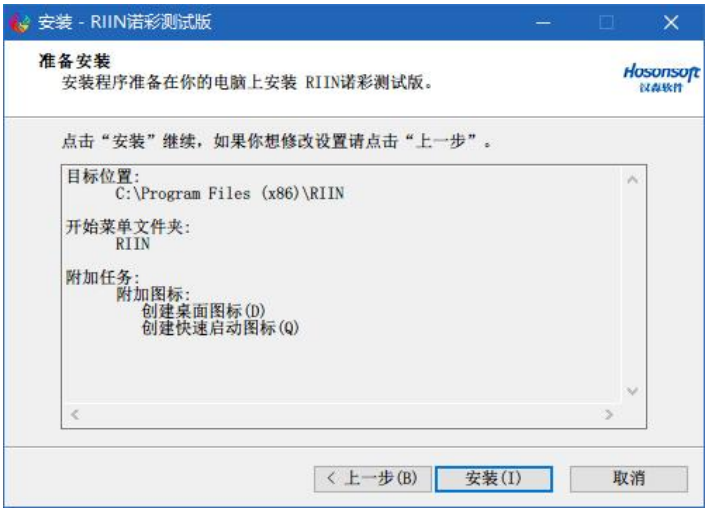


Click Next, the pop-up window is as follows：

Click Next, the pop-up window is as follows:

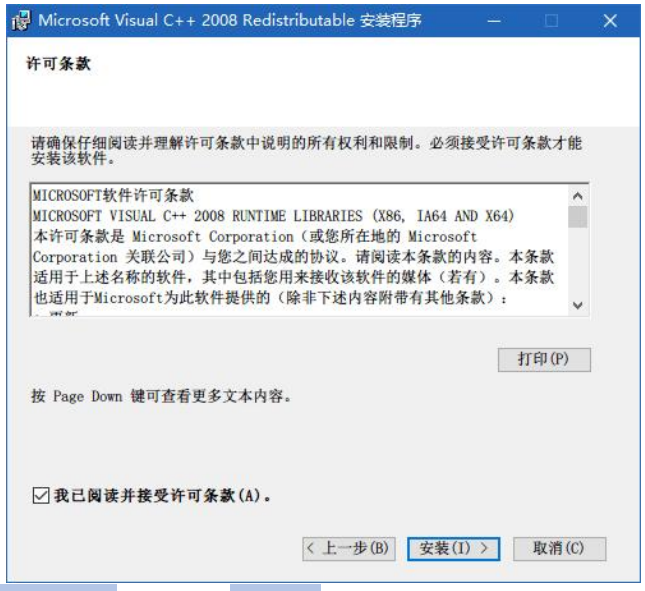


Click Next, the pop-up window is as follows:

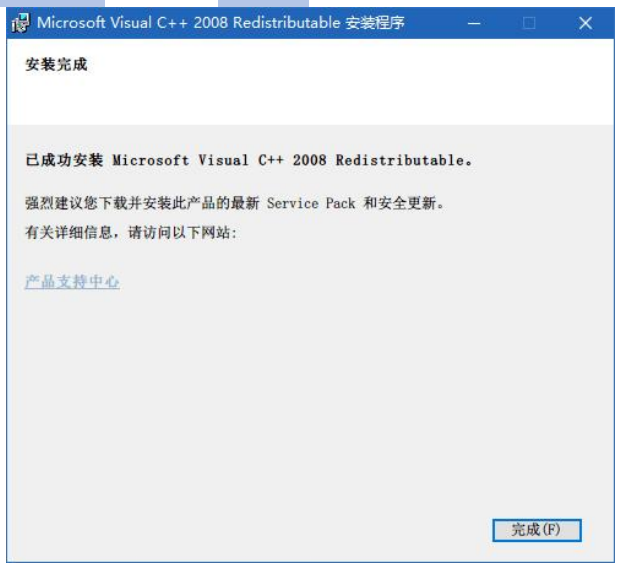


Click Install, the pop-up window is as follows:

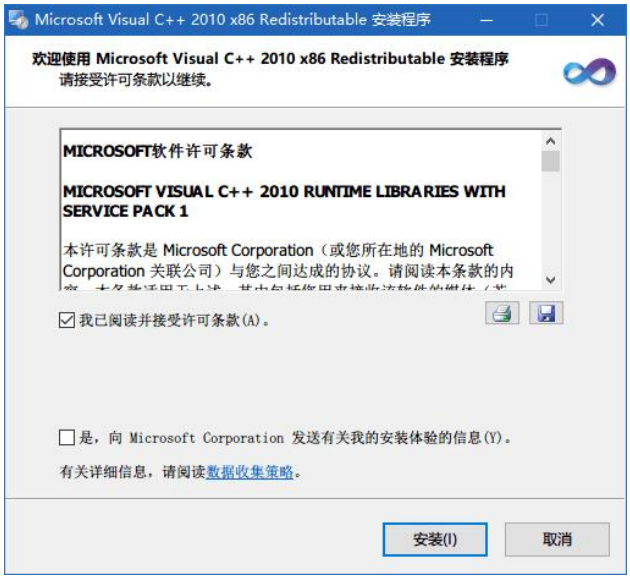
Click Next, the pop-up window is as follows:



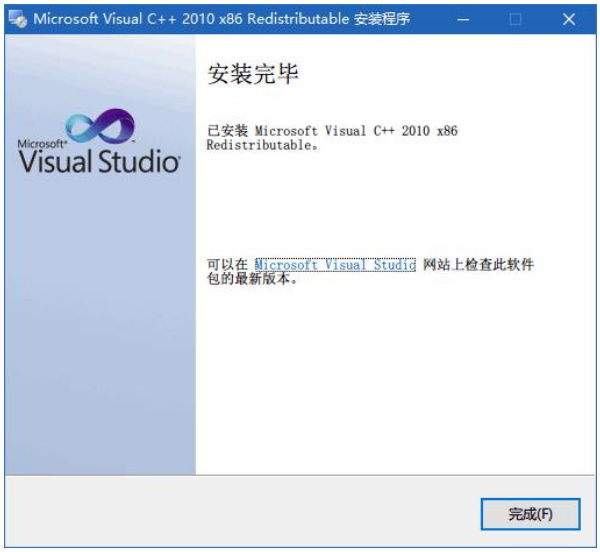
Check Agree and Accept，Click Install，the pop-up window is as follows:



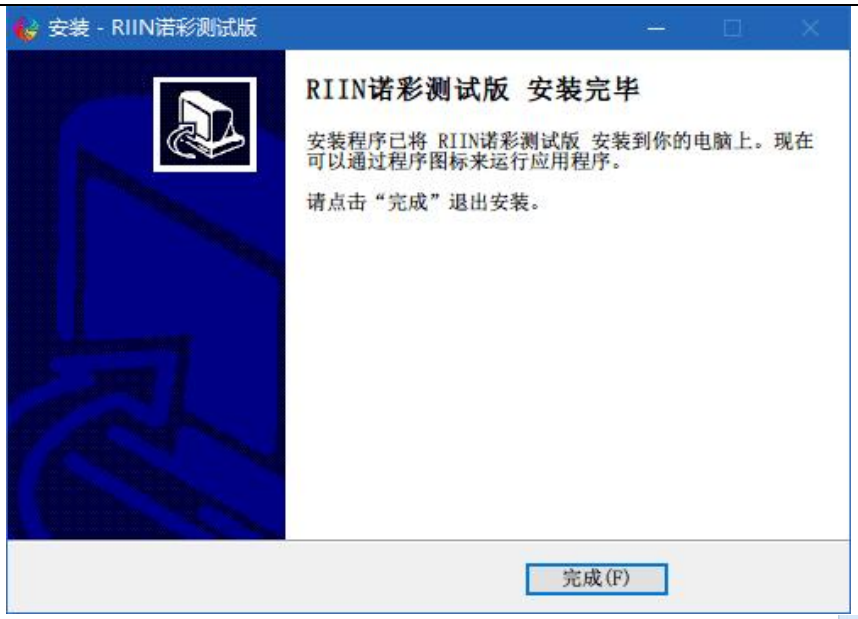
Click Ok, the pop-up window is as follows:



Check *Agree and Accept*, Click Install, the pop-up window is as follows:



Click Ok, the pop-up window is as follows:



Click Ok to complete the installation of the RIIN software. This is the startup icon on your desktop:

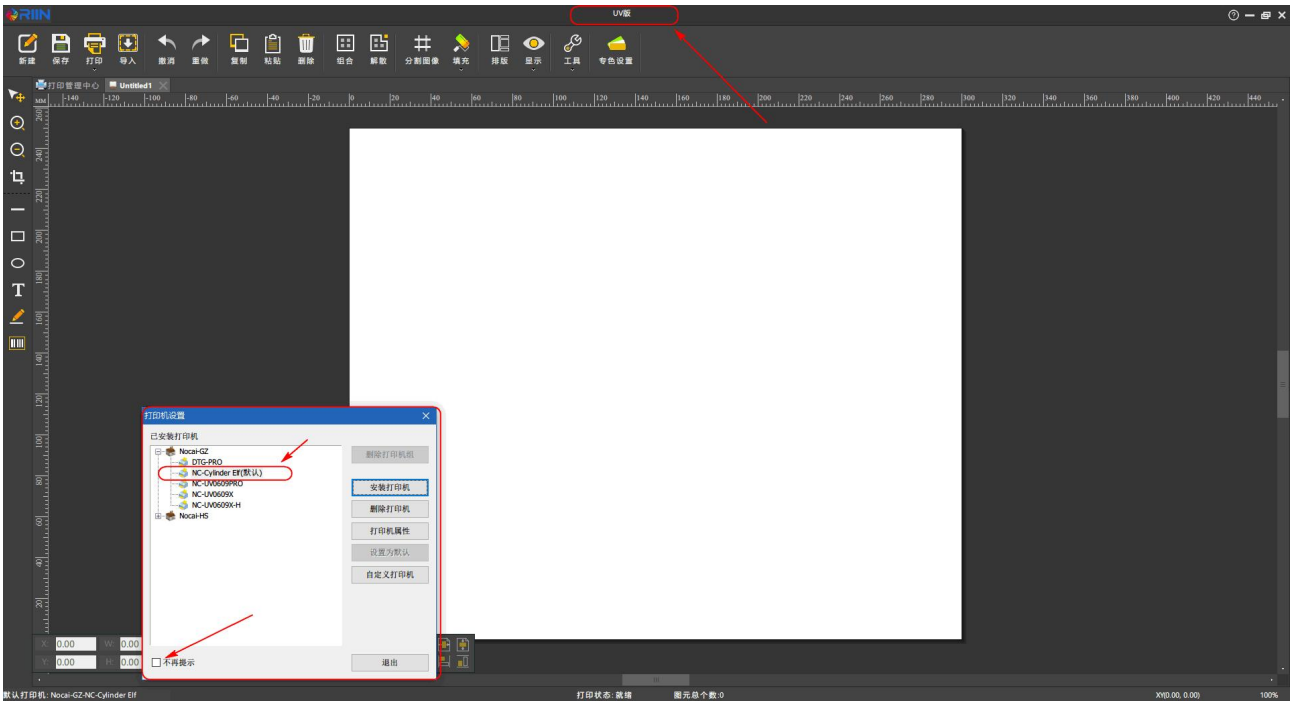
RIIN Content

Open the software, then it will pop-up the main page of the software, click 【F1】, if the computer has installed PDF reader before, it will pop up the software manual. Chinese interface will pop-up Chinese version, English interface will pop-up English version. There are detailed explanation of each function in the manual.

Shortcut key of maunal: F1. (Or click on the top right corner of the software-【？】(about)→【document F1】) The following is just a brief introduction to the use of printing process settings.

5.1 Setup of printer

Click RIIN.exe icon, click right, Operate as administrator. The software startup screen is as follows:



①Pop-up window at the left corner: Printer set option card, NC-Cylinder Elf, do not midify it, click【no more tips】, click Exit.

②When the default printer is not NC-Cylinder Elf, the printer can be set up as

follows: click left corner of the software【RIIN】icon→choose【printer management】→click【Nocai-GZ】→click【NC-Cylinder Elf】→click【Set as default】→→click【Exit】

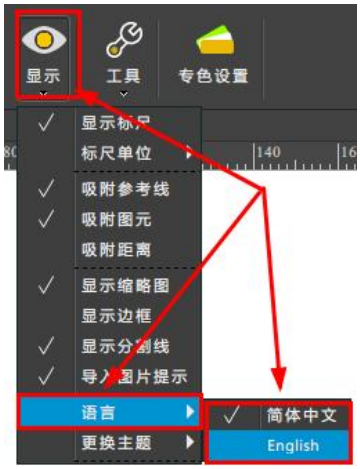
5.2 RIIN Recognize the dongle

①The USB is plugged into the computer, as shown in the figure at the right, and the lights go on and off at intervals, which indicating the operation is normal.

②Check the top center part of the software, the display of UV version means that the USB is recognized normally, the display of UV version (demo version) means that the computer is not plugged into the USB or the USB is not recognized normally.

5.3 RIIN Modify the Chinese and English interface

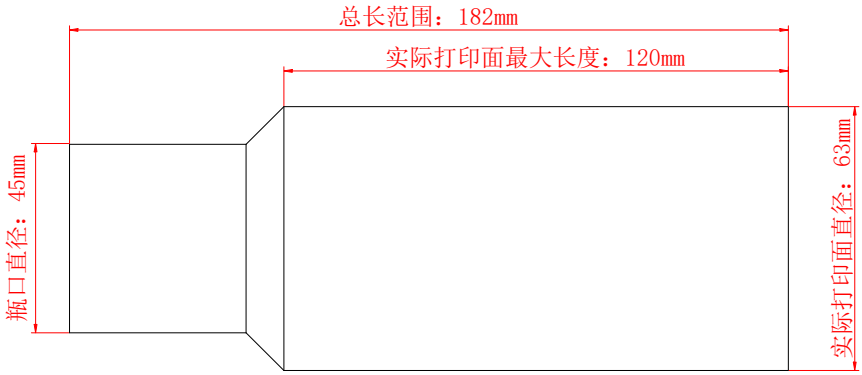
The software display changes between English and Chinese:



5.4 RIIN Introduction of operation procedures

The following introduces the printing process such as software canvas and coordinate origin settings, adding pictures, editing settings, white ink and varnish spot color settings, and output printing options.

Take the round bottle as an example:



Parameter	
The total length:	182mm
Practical length which can be printed:	120mm
Partial diameter:	63.10mm
Partial perimeter:	198.13mm
Difference in the diameter of the printed surface of the bottle:	≦0.2mm

5.41 Software canvas and coordinate origin settings

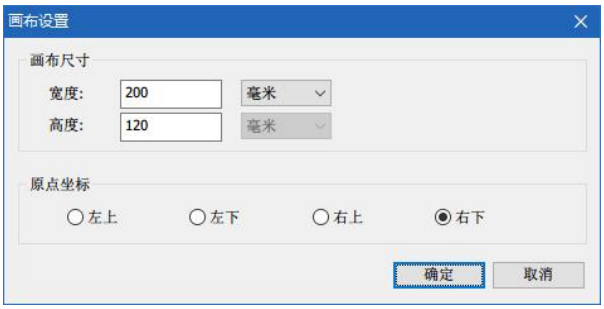
①Confirm the canvas size for printing this sample based on the **relevant parameters of the round bottle**:

Canvas width＞practical printing circumference of bottle =198.13mm; 200.00mm is set here depending on the situation.

Canvas height=Practical maximum printing length=120.00mm

Setting the canvas in this way can help to preview where and how the image will be printed out. Of course you can also make the canvas larger, just be careful when printing.

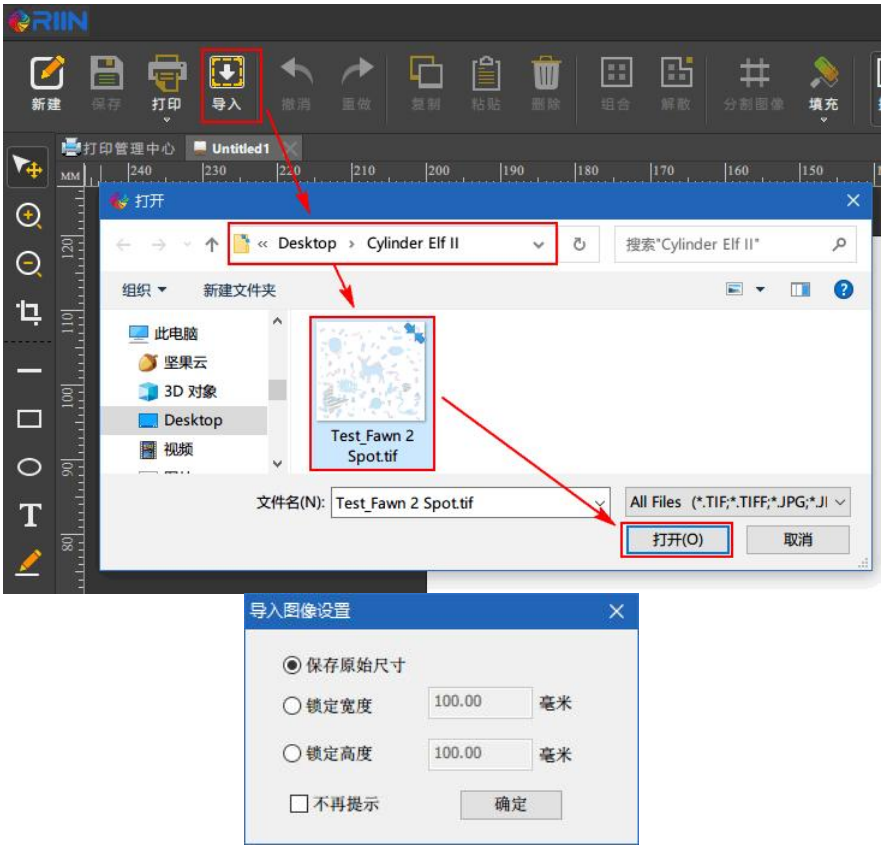
②Click【RIIN】icon→choose【canvas setting】, the pop-up window is as follows:



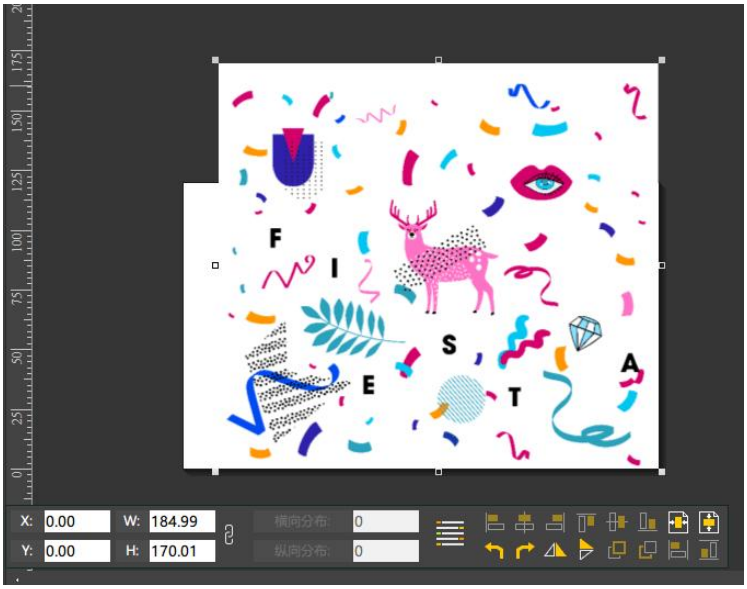
The unit: millimeters; the width: 200; the height: 120; for the original coordinate: right at the bottom. Click OK.

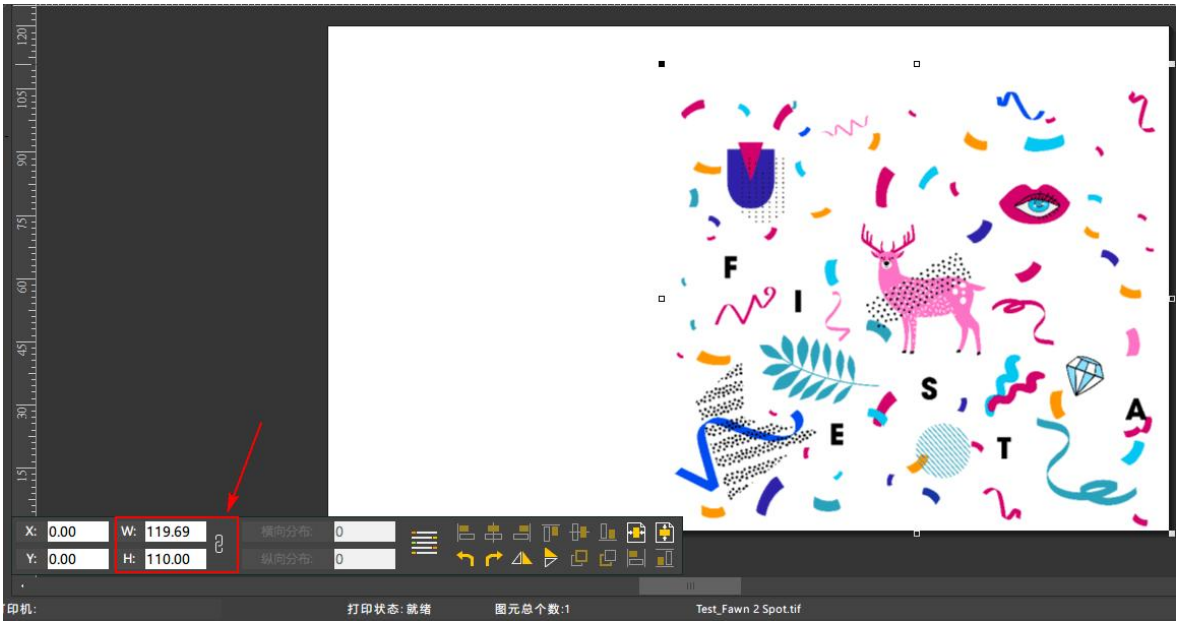
5.42 Add graphics

Click the 【Import】button in the menu column of the software, find the path to the file you want to print, click the picture and open to import. Click OK.

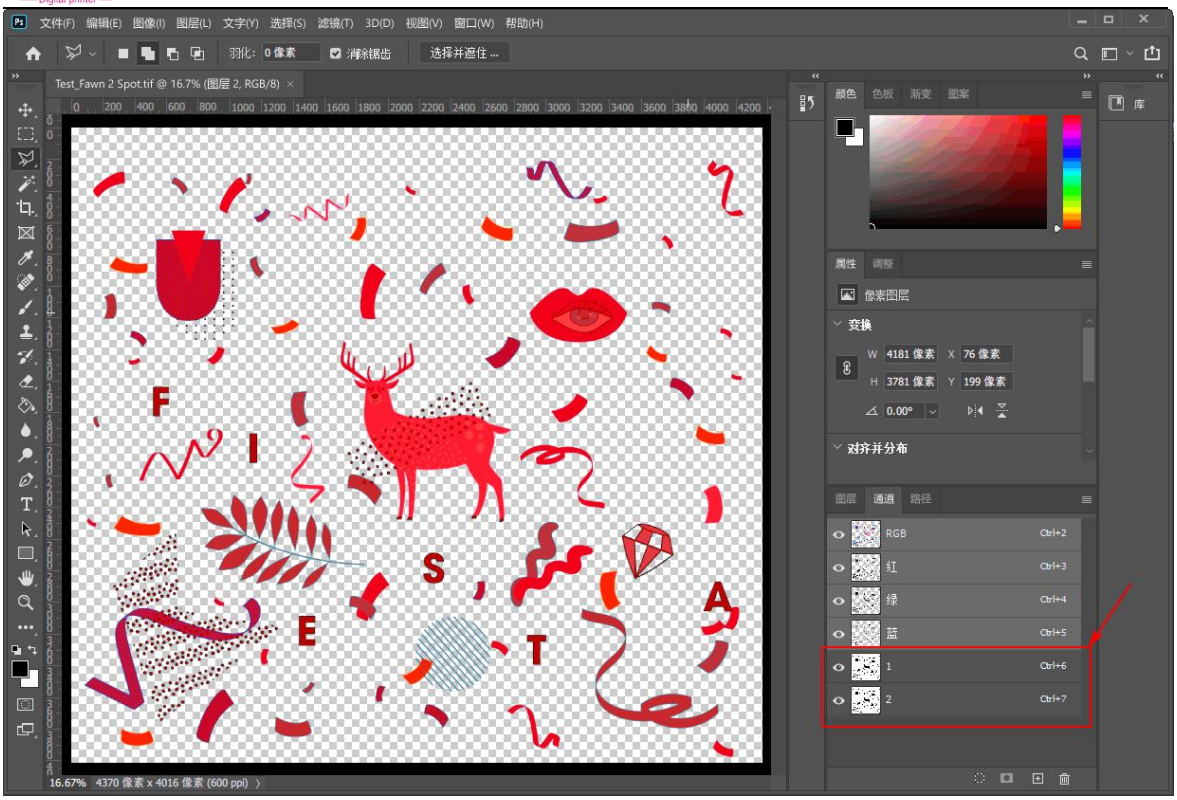


The image was imported successfully, but out of the canvas range, click the image, and then set H:110.00 as shown in the following figure, you can scale the image to a height of 110.00mm proportionally.





Note: The image named Test_Fawn 2 Spot.tif here is a TIFF format image with 2 spot colors created by PS. As shown below the first spot color named 1, the second spot color named 2.



5.43 Spot color setting

Click【Spot Color Settings】in the menu bar of the software, and set the detailed settings as shown below:

Start: Checking the box starts printing in the corresponding spot color, while leaving it unchecked does not start spot color printing.

Spot1 check white ink to enable white ink spot color printing; spot2 check varnish to enable varnish ink spot color printing; spot3 is not checked; spot4 is not checked.

Datasources: Choose the corresponding special spot color. Take white ink printing as an example (the same for varnish) to introduce the function:

Empty	No data, white ink printouts that don't come out.
Base color of image (same concentration)	Take the maximum concentration of image color as a reference, the same thickness of white ink is dispensed in the area of the colorful image. Transparent and pure white areas are not printed.
Base color of image (image intensity)	Print white ink according to the color of the picture, the deeper the color, the thicker the white ink; the lighter the color, the thinner the white ink; transparent and pure white areas are not printed.
Base color of image (Inverse image concentration)	Print white ink according to the color of the picture, the deeper the color, the thicker the white ink; the lighter the color, the thinner the white ink; transparent and pure white areas are not printed.
Spot color	Print white ink with spot color data from image production; Note: The current RIIP can print spot-color data, has now supported the export Tiff, PDF, AI and other mainstream formats of the image exported by PS; spot-color production and application please view the spot-color video tutorials;
Total	Printing 100% concentration of special colors (white ink or varnish) on the entire image

Import channel：Optional *spot color 1*、*spot color 2*、*spot color 3*、*spot color 4*。

Spot color 1→The 1st spot color data of the spot color data contained in the image

Spot color 2→The 2nd spot color data of the spot color data contained in the image

Spot color 3→The 3rd spot color data of the spot color data contained in the image.

Spot color 4→The 4th spot color data of the spot color data contained in the image.

In general, spot color 1 is chosen for white ink and spot color 2 for varnish.

Density：Increase or decrease the density of the spot color data on the current basis, adjustment range：-100% -- +100%。

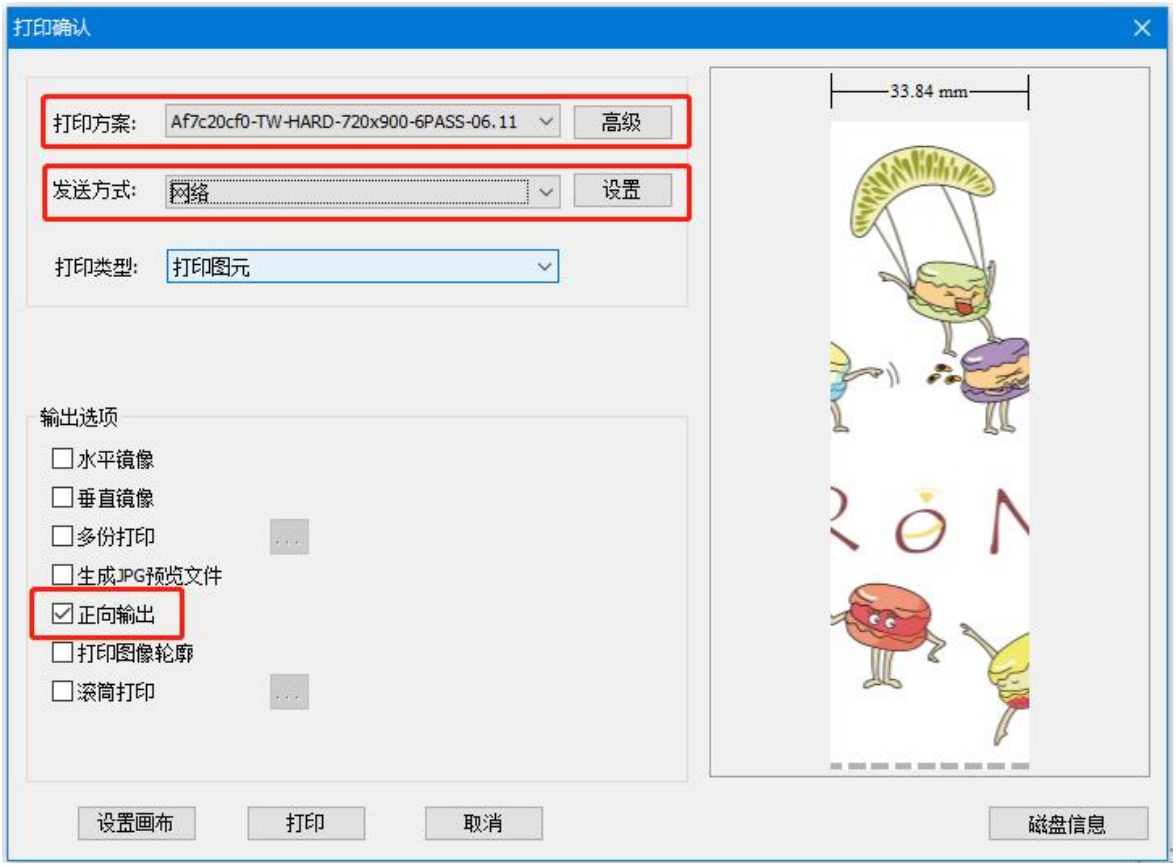
Effect： *Uniform mode*.

Zoom in and out: Spot color data prints shrink or enlarge. Adjustment range: -5 -- +5.

As shown in the figure above, the settings are completed, click 【Apply】, and choose to print white ink or varnish spot color data.

5.44 Option of output printing

Click the 【Print】 button in the menu column of the software, and the detailed settings are shown below:



Set up the software as shown above. If the machine and the online driver are linked normally, click the Print button and the machine will start to print.

Each function of this sueface is explained in detail below::

Printing method: Click ICC. There is 4、6、8Pass curve corresponding to S、A、B、C waveform. Please use it as required.

Delivery method:

File →Choose this mode and click Print. The software will generate a Prn file, which can be added to the online driver for printing.

Network →Click this mode and click Print. The software will read the print data directly to print automatically.

Printing type：Selects how the image is output. The default prints the image elements.

Printing picture：It's just to print the image itself, which is independent of the position of the image in the canvas.

Absolute coordinate (in coordinate geometry)：Print the portion of the image between the image and the canvas origin.

Printing canvas：Print out the entire canvas

Export option：

Forward export：Checked by default

Practical operation and procedures of Cylinder sampling

Taking the white bottle that comes with the machine as an example, the sampling process is as follows.

6.1 Measure the size of bottle, ensure size of graphics

Measure the bottle size with vernier calipers as shown below:

Parameter	
Total length:	182mm
Actual maximum length:	120mm
Partial diameter:	63.10mm
Partial circumference:	198.13mm
Diameter drop of printing surface:	≦0.2mm

6.2Modify parameters of driver

① Operate the panel and go into【Feed settings】:

Stand-by interface of the panel, click【Enter】→click【secondary function】, click【Enter】→click【Feed settings】click【Enter】interface of feeding settings, (Only in this mode can the【Large diameter of material】in the driver be modified)

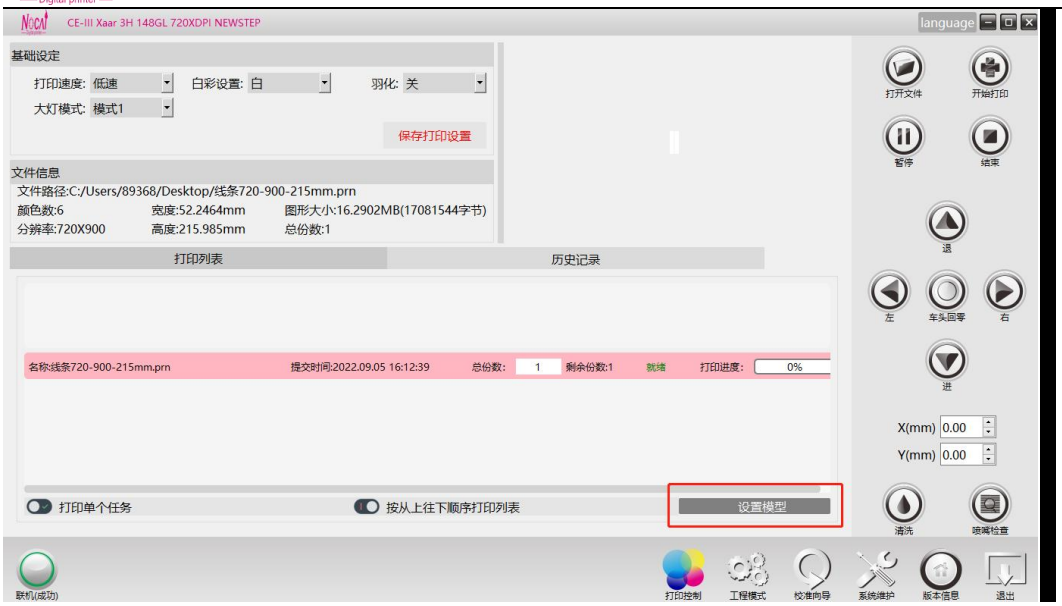
② After the driver online normal, click 【engineering mode】 - material parameters interface

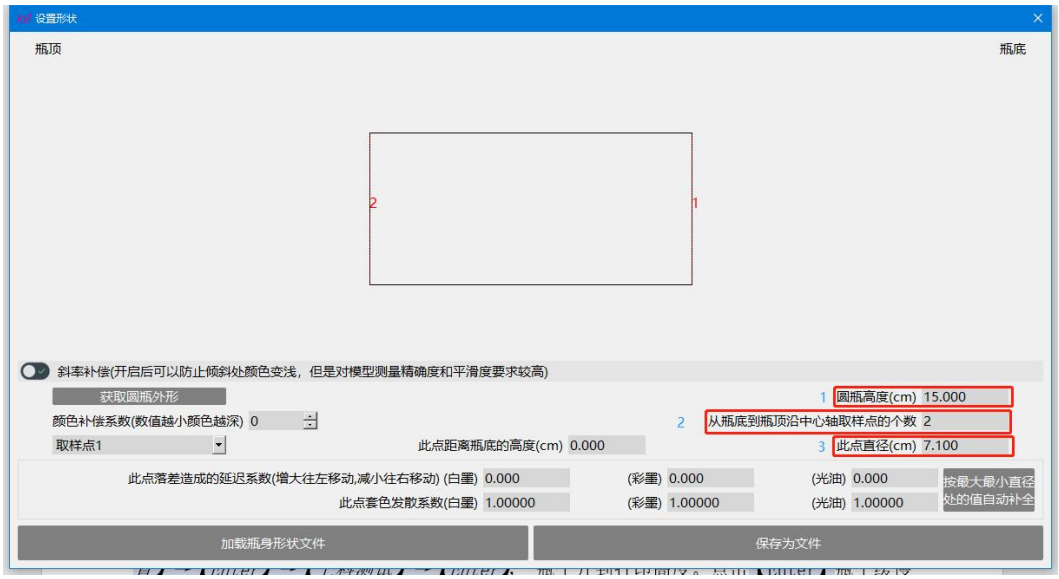
Large diameter of material：631.00

Click Large diameter of material, The machine feeding mechanism performs a reset action. Please pay attention to the machine.

③ Modeling in the driver. (There are different modeling processes for different materials 【round bottles, cones, shaped workstations】

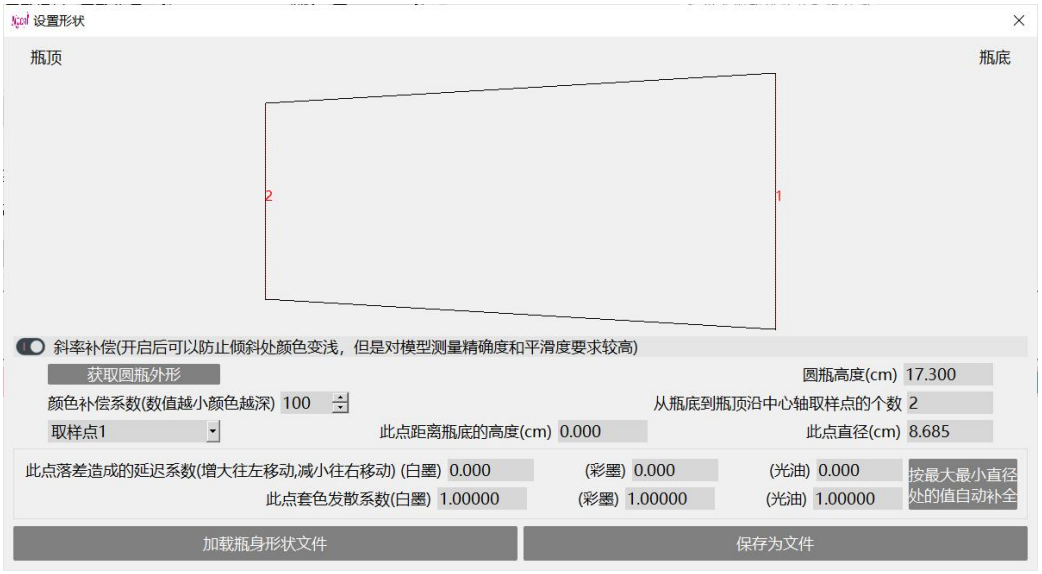
Control printing in the driver and click【Setting up the model】→ import【Measured values of materials】, click【blank area】→click 【top right corner X】The model has been built. (Refer to the modeling process for different materials, which can be made available for after-sales training.)

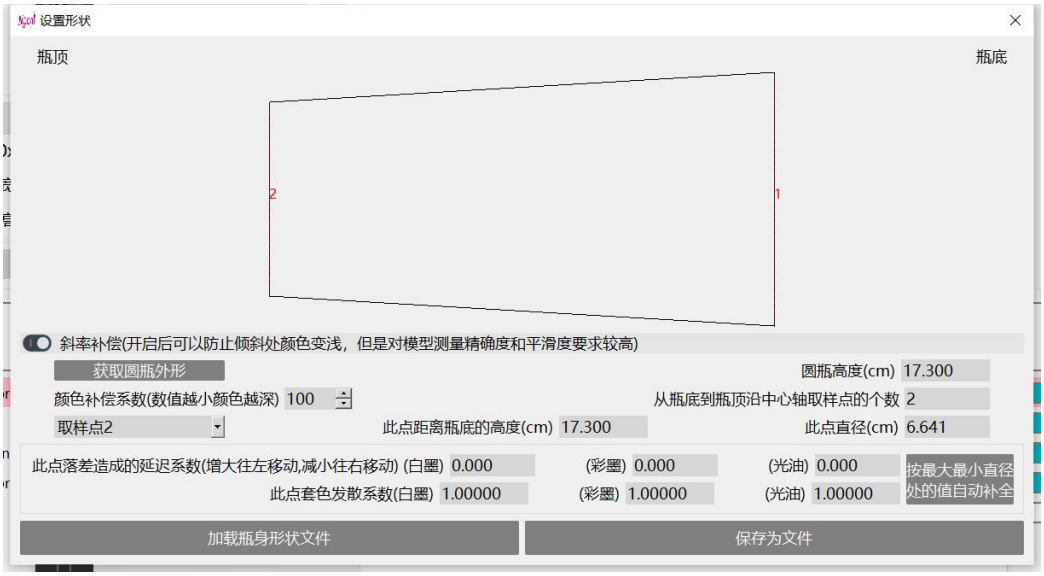

CE-III Xaar 3H 148GL 720XDPI NEWSTEP
language
基础设定
打印速度: 低速
白彩设置: 白
羽化: 关
大灯模式: 模式1
保存打印设置
文件信息
文件路径:C:/Users/89368/Desktop/线条720-900-215mm.prn
颜色数:6
宽度:52.2464mm
图形大小:16.2902MB(17081544字节)
分辨率:720X900
高度:215.985mm
总份数:1
打印列表
历史记录
名称:线条720-900-215mm.prn
提交时间:2022.09.05 16:12:39
总份数:
1
剩余份数:1
就绪
打印进度:
0%
打印单个任务
按从上往下顺序打印列表
设置模型
打开文件
开始打印
暂停
结束
退
左
车头回零
右
进
X(mm) 0.00
Y(mm) 0.00
清洗
喷嘴检查
联机(成功)
打印控制
工程模式
校准向导
系统维护
版本信息
退出


设置形状
瓶顶
瓶底
2
1
斜率补偿(开启后可以防止倾斜处颜色变浅，但是对模型测量精确度和平滑度要求较高)
获取圆瓶外形
颜色补偿系数(数值越小颜色越深) 0
取样点1
此点距离瓶底的高度(cm) 0.000
1 圆瓶高度(cm) 15.000
2 从瓶底到瓶顶沿中心轴取样点的个数 2
3 此点直径(cm) 7.100
此点落差造成的延迟系数(增大往左移动,减小往右移动) (白墨) 0.000
(彩墨) 0.000
(光油) 0.000
此点套色发散系数(白墨) 1.00000
(彩墨) 1.00000
(光油) 1.00000
按最大最小直径处的值自动补全
加载瓶身形状文件
保存为文件

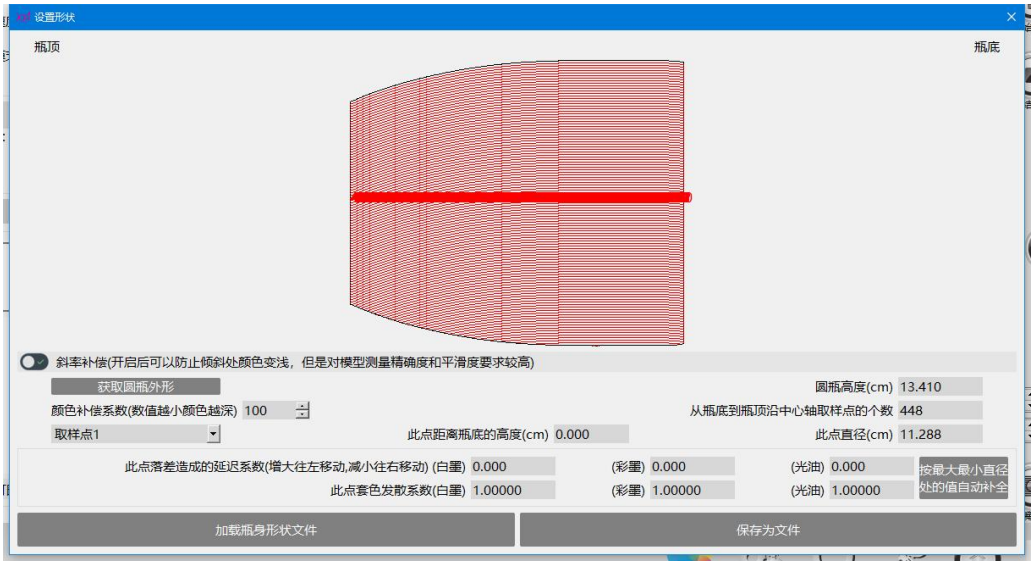

设置形状
瓶顶
瓶底
2
1
斜率补偿(开启后可以防止倾斜处颜色变浅，但是对模型测量精确度和平滑度要求较高)
获取圆瓶外形
颜色补偿系数(数值越小颜色越深) 0
取样点2
此点距离瓶底的高度(cm) 15.000
圆瓶高度(cm) 15.000
从瓶底到瓶顶沿中心轴取样点的个数 2
此点直径(cm) 7.100
此点落差造成的延迟系数(增大往左移动,减小往右移动) (白墨) 0.000
(彩墨) 0.000
(光油) 0.000
此点套色发散系数(白墨) 1.00000
(彩墨) 1.00000
(光油) 1.00000
按最大最小直径处的值自动补全
加载瓶身形状文件
保存为文件

Standard graphic for cone modeling





Standard graphic for special-shaped modeling



6.3 Adjust work location, ensure printing height, place the bottle

① Adjust work location

Replacing different round bottle to adjust stations, please refer to the detailed procedure 【debugging instructions of cylinder, cones, special-shaped workstations】 The machine has been tested in the factory and adjusted, you need to make sure that the bottle shaking is within a reasonable range.

Method: Putting the bottle into the work station, operate on the panel: standby mode, *【Enter】→【secondary function】→【feed setting】→【Enter】→【loading test】→【E nter】*, raise the bottle to printing height, click *【Enter】* the bottle moves gradually and you need to make sure that the bottle shaking is within a reasonable range.【If shaking sharply, please adjust and confirm again】。

②Confirm the printing height

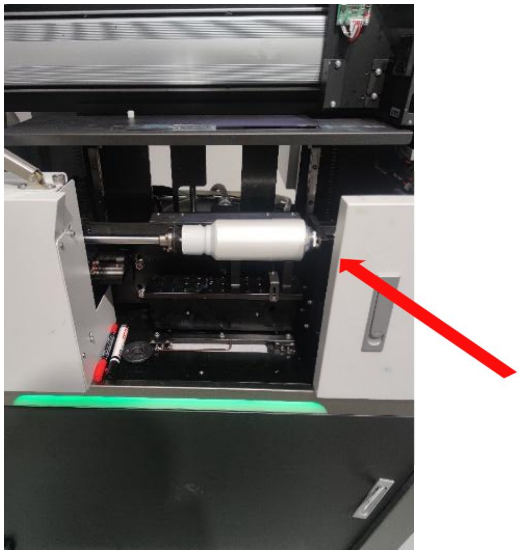
When the bottle is raised to print height, click【Left】, the cart will move to the left. Change the driver's location of printing height (the picture above) values properly. Adjust the height of the bottle up to 2-3mm from the nozzle surface. (driver *【engineering mode】-parameter of material-location of printing height*)

③Adjust UV lamp light barrier 1 and UV lamp light barrier 2

Move the light barrier on the UV surface appropriately to cover the part of the left side of the actual printed bottle that does not need to be illuminated (in order to prevent the UV light from hitting the printhead)

④Place the bottle

Once the machine is tuned up, place the bottles as shown below:



6.4 Turn on the lamp,RIIN setup the graphics, start printing

1.Confirm that the UV lamp water machine is normal.

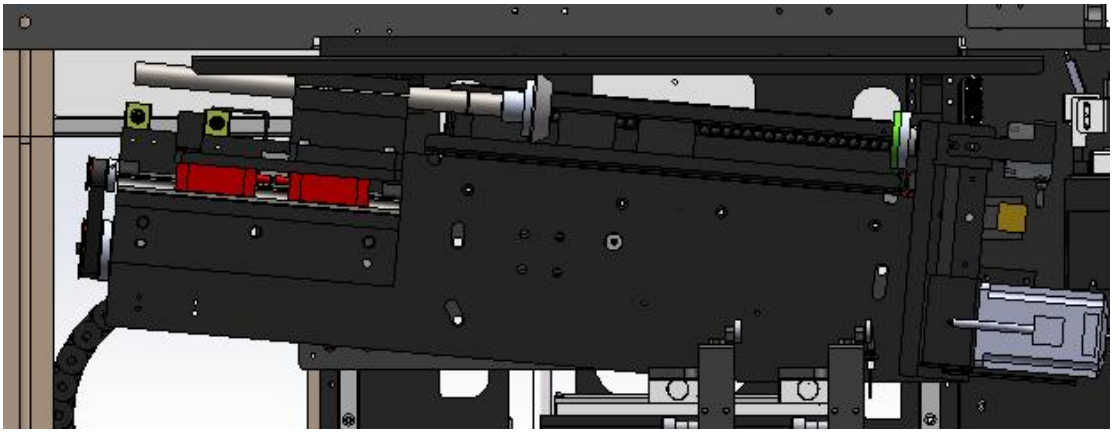
①Using UV light water machine, please connect the supporting control line with the machine normally, add the appropriate amount of pure water within the water machine test.

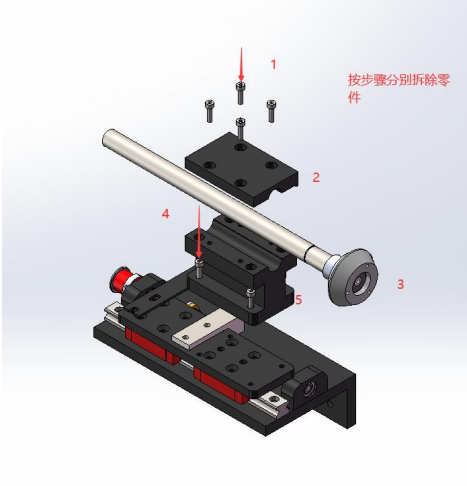
②Make sure the power supply is normal, click Power button

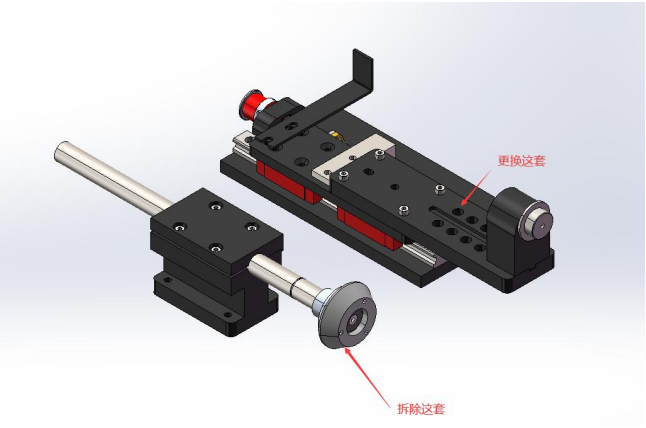
2.Please refer to【introduction of 4 RIIN sampling operation procedures】, after setup is completed, then click Send. The machine starts printing. When printing is completed, the bottle resets automatically.

The effect is shown below:

Pay attention that when the printing cone is too large, there will be a support shaft and fixed seat to hit the UV lamp light-blocking sheet metal, if this situation appears, change the clamping fixture, as shown below.




1
按步骤分别拆除零件
2
4
3
5


更换这套
拆除这套

Maintenance method and announcements of Cylinder sampling

7.1 Maintenance method of printhead

①There is a board chip inside the nozzle, which is directly inserted with the nozzle line. You need to pay attention to the nozzle line and nozzle contact parts, be sure to prevent ink dripping. Once the nozzle line parts and the nozzle has a watery contact, turn off the machine immediately, and removed for blow-drying.Only in this way can you test whether the test is burned or not, and remember not to use with a water boot, otherwise it will burn the nozzle and the nozzle board.

②Due to the nozzle plug and the printhead line is tightly connected. So after a long time there will be contact oxidation, damage, misalignment or contact another line, so when unplugging the nozzle line you need to pay attention to observe these problems carefully, and exclude or replace the nozzle line, otherwise it will result in the burnt out of the nozzle or nozzle board.

③When not using the machine you must do a good job of maintenance, adhere to the daily power-on once and test strip printing, test strip broken ink to be automatically cleaned to ensure that the test strip is normal. You can print a small picture, you have to use the cleaning fluid 3-5 drops of ink in the ink cap top when more than 3 days of vacation unattended. And then combine and seal the nozzle and the ink cap top,which will play a certain role in the protection of the ink cap top.

④When the ink is added to the cartridge, you'd better use the method of adding less diligently, the expiry of the ink is 3 months after opening.Otherwise it will produce deterioration, which will affect the printing effect and cause clogging of the printhead, it is recommended that the customer regularly carry out the uniform mixing of the ink and open the cartridge at the white ink mixing switch when using the machine.

⑤The height of the printhead from the material should be 2-3mm. Confirm the height timely in order to avoid printhead is damaged.

⑥Nozzle sheet metal of cart must be cleaned regularly to avoid effects on the nozzle.

⑦Avoid printing transparent or semi-transparent or other materials that can cause printhead clogging.

7.2 Ink station maintenance

Due to the combination of the nozzle and the cap top for ink extraction or cleaning, ink dripping will leak inside the ink station or on the sheet metal, so it must be

scrubbed regularly or in time with alcohol to keep the ink station clean.

7.3Rail maintenance

Machine guide rail contains cart guide rail. There is a basis of lubricant between guide rail and slider, please add it into the guide rail in a certain period of time, in order to avoid corrosion and astringency of the guide rail for lacking of oil. If you find that there is black oil in the guide rail, you need to use alcohol to wipe firstly and then add lubricant.

7.4Change the damper

3 months is recommended.

7.5Change the cap top

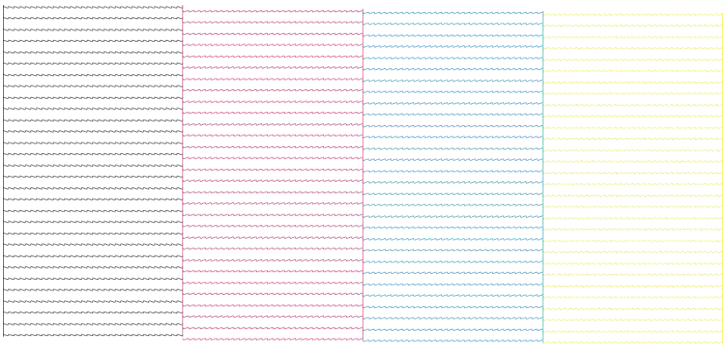
3 months is recommended.

7.6Maintenance of shell sheet metal

Keep the shell clean, if there is any droplet, please scrub it to avoid ink corrosion on the outer paint surface of the sheet metal.

Commom trouble shooting method

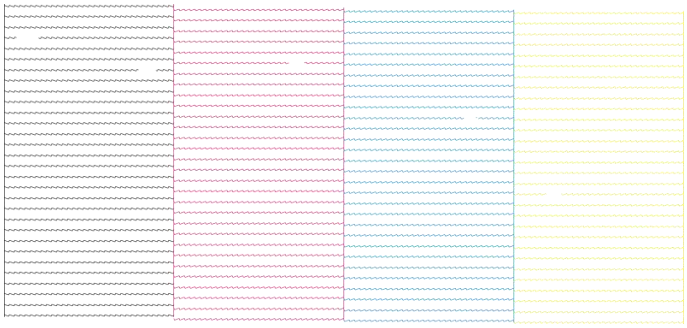
8.1 Common examples of ink-supply suspension problems



Common examples of ink-supply suspension problems

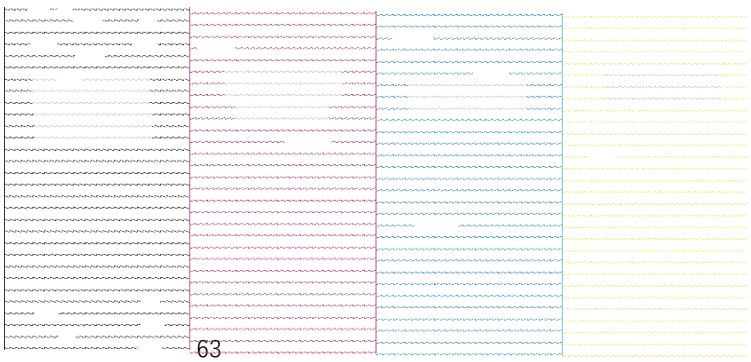
8.11 Test strips are all out

Explanation:It means the head is normal.



8.12 Partial ink-supply suspension problems

Note: The partial ink-supply suspension problem of the test strip is caused by the corrosion damage of the ink to the print head. You can choose automatic cleaning. If the automatic cleaning cannot solve the problem, you can continue to use it without affecting the print effect.



8.13 The ink-supply suspension problem of test strip is severely and partially

Solution:

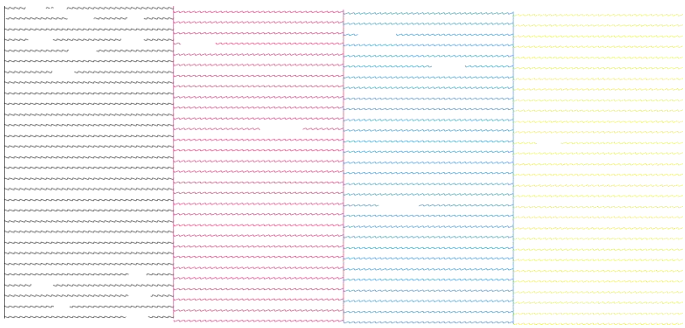
1. Extract the ink by syringe, check whether the ink can flow out normally, and eliminate the possibility of blockage and air leakage. If there is any problem, please replace the damper.

2. After replacing the damper, if it is still blocked, please check whether the ink tube and the cartridge head of the damper are blocked.

3. Clean the print head manually to ensure that the print head is not blocked.

Summary: The above problems are usually caused by damper and clogging of the nozzles. Please check them firstly.

8.14 Almost all of the test strips have the problem of ink-supply suspension



Solution:

1. Automatic cleaning, check whether the ink can be pumped, if the ink cannot be pumped normally, please replace a new cap top or re-adjust the position.

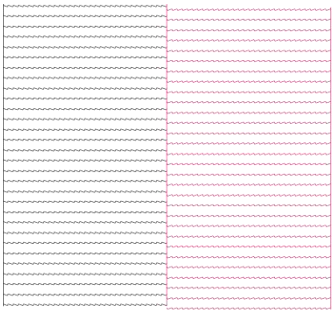
2. Check whether there is any ink residue on the surface of the nozzle. If there is

a single color ink droplet, please replace the corresponding damper. If there is a multi-color ink droplet, please check whether the scraper can scrape the nozzle mirror normally during the automatic cleaning process.

3. Clean the head maually, flush the nozzle by syringe, and check whether the nozzle is blocked.

Summary: The above-mentioned multi-color ink breakage problem is generally less likely to be blocked by the nozzle. Check in detail whether the scraping of the cap top and the nozzle are normal.

8.15 The test strip lacks a complete color



Solution

1. Use the syringe to draw the ink to ensure that the ink can flow out normally, and clean the nozzle manually to ensure that the nozzle is not blocked.
2. Check whether there are stains on the nozzle line connection interface of the nozzle. If so, please clean it and re-test or replace the nozzle.
3. Unplug and plug the nozzle wire to check whether the contacts of the nozzle wire are oxidized or damaged. If so, please replace the nozzle wire and plug it in again.

4. Replace the head board.

The above problem is that a single color is missing, and the general situation is that the nozzle voltage is not transmitted normally, which is always because of head board, head cable, and head. However, it cannot be ruled out that a single ink does not have a normal ink supply and the nozzle is blocked.

8.16 All test strips are blank

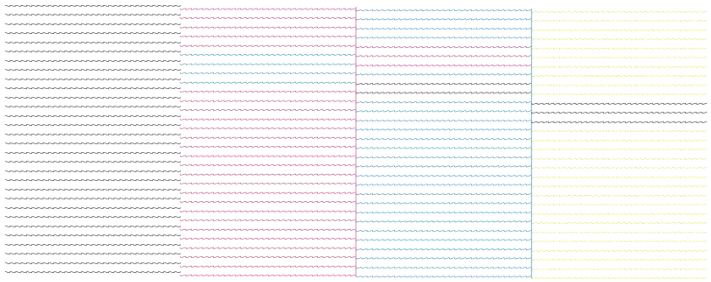
Solution:

1. Unplug and plug the head cable to check whether the contact point of the head cable is oxidized or damaged. If so, please replace the head cable and plug it in again.
2. Check whether there are stains on the connection part of the head cable. If so, please clean it up and re-test or replace the head.
3. Replace the head board.

Summary: The above problems are usually caused by the ink entering the nozzle outlet or the wrong operation after the customer replaces the print head, resulting in a short circuit of the nozzle, burning the head board or the nozzle, because the nozzle will damage the head board, but the head board will not damage the nozzle.

It is recommended to give priority to the replace the nozzle and the head cable.

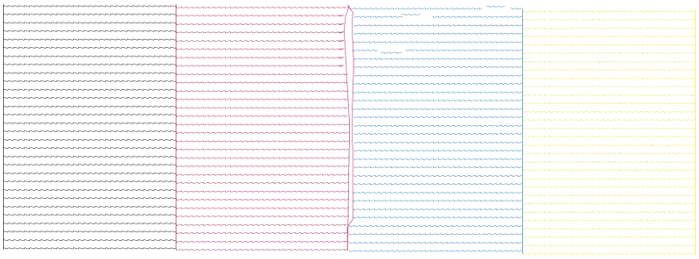
8.17 Color mixing: large area color mixing



Solution:

1. Please flush the ink firstly, then print a test strip to observe whether the color mixing situation improves or not. If not, please check whether there is ink residue on the surface of the nozzle. If there is a single color ink droplet, please replace the corresponding damper. If there is a multi-color ink droplet, please check whether the wiper can scrape the nozzle mirror normally during the automatic cleaning process.
2. Replace the nozzle.

Summary: When the above problem occurs, firstly check whether there is ink residue on the surface of the nozzle.



8.18 Flying ink of test strip

Solution:

1. Check whether the height of the nozzle is within 2-3mm from the printing medium.
2. The printing environment is within the range of 15℃~30℃.
3. Check whether the cap top can pump ink normally.
4. Stir the ink evenly, and pump more than 10ml of the ink from the damper by the syringe, and then clean the print head. If the problem cannot be solved, it is recommended to replace the ink.

Summary: If the above problems occur, and if there is no special change in the surrounding environment, it is generally caused by the ink precipitation caused by the machine being put on hold for a long time.

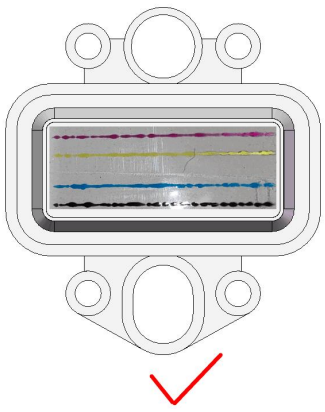
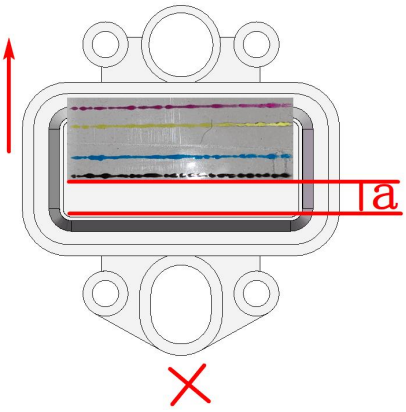
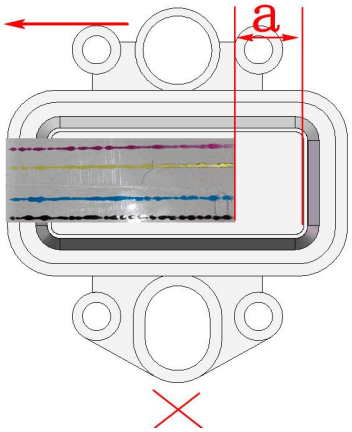
8.2 Cleaning without ink extraction/pump

Solution:

1. Check that the cap top and the print head are in the correct position, and the cap top can seal the print head. Take the color printhead as an example:

Turn on the [Alignment Test] function on the key board.

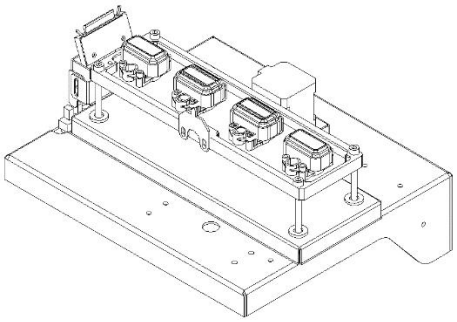
Key board - standby status, 【Enter】→【Set up the ink station】→【the height of sealing the head】→【Enter】→【Alignment Test】→【Place the paper】→the cartridge will move to the left to leave the cap tp and clean the cap top. Cut a transparent tape with 5*7cm and attach it directly above the cap top. Click【Enter】→The machine will flash directly above the cap top and move away again→Check the test strip above the cap top. As shown in the following: The position of the four color strips of KCMY on the cap top is normal.

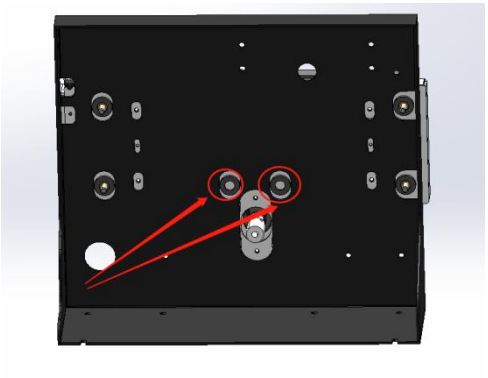
		
①Normal	②Abnormal The ink station moves a distance of a in the direction of the arrow	③Abnormal The ink station moves a distance of a in the direction of the arrow

As shown in the figure above, ① is in a normal state, and the flash spray strip is in the center state above the cap top. ②③ In these two typical abnormal problems, the printhead and the cap top are not aligned and sealed, which make it unable to pump ink and the test strip cannot be adjusted normally.

Solution:

For the abnormal situation ② (front and back adjustment), loosen the fixing screw of the ink station appropriately, and move the distance a in the direction of the arrow as a whole. **The method of adjusting the cap top before and after is shown in the figure below**





As shown in the figure above, loosen the fixing screws of the ink station (2 arrows) properly, and the cap top can be moved in the direction of the arrow (front and back) as a whole, and after the adjustment is completed, the screws can be tightened.

As for the abnormal situation ③ (Left and right adjustment), the methods are as follows:

Key board 【the height of sealing the head】→(Click LEFT, RIGHT to move the distance of a)→【Enter】→【Keep the origin of ink station】

Repeat several times until the test strip is centered above the cap top.

2. Observe and check the cap top still rises by 1mm after contact with the printhead.

Solution: Keyboard- 【the height of sealing the head】 (Click FRONT-BACK to adjust the height of ink station)→【Enter】→【Keep the height of sealing the head】

3. Pour the cleaning solution into the cap top, and clean to confirm whether the cleaning solution can be withdrawn, if not, replace the ink pump.

4. Check if the connection tube of cap top is off or blocked, reconnect or replace it.

5. The cap top is damaged or aged, please replace it.

8.3 Micro-adjustment of Y direction of the head

Summary: If the above problem occurs, it is because the machine has been used for a long time, the nozzle has been re-installed and a new cap top has been installed, resulting in deviation of the position of the nozzle. It is necessary to adjust the front, rear, left and right positions between the nozzle and the cap top. The specific deviation should be combined with the bottom of the printhead and the cap top. Clean it automatically after debugging. During the automatic cleaning process, there will be ink beads on the nozzle mirror before scraping, which means that the ink is drawn normally.

8.4 Error code

NO.	Notes	
1	PCVERSION_ERROR	PC driver version error
2	SURPLUS_SQUARE_LIMIT	Balance is less than a certain amount
3	A_ZERO_BALANCE	balance is zero
4	ZERO_SENSOR_ERR	Origin sensor error
5	PARA_INIT_ERR	parameter initialization error
6	CARRIER_STRIKE	car crash
7	PARATABLE_ID_ERROR	The parameter table ID does not match the registration ID
8	CAR_FACTOR_MIN_LIMIT	The cart gear ratio is too small
9	CAR_FACTOR_MAX_LIMIT	The cart gear ratio is too large
10	UI_PARA_INIT_ERR	UI parameter initialization error
11	WAVE_TABLE_EMPTR	Wavetable is empty
12	CARRIER_RE_ERR	cart reverse error

13	CARRIER_PRINT_STOP	print cart stop
14	CARRIER_POS_ERR	The position of the cart is wrong; the motor is reversed, the motor is abnormal, the phase of the grating AB is reversed, and the grating is abnormal
15	SF_MEASURE_DIST_LOW	Servo motor self-check distance is not enough
16	DRIVE_BOARD_OVER	Driver board alarm
17	UIPARAID_CARPARAID_ERR	UI parameter ID does not match car parameter ID
18	NETERR_REPEAT_IP	IP address conflict error
19	INK_TANK_INIT_ERR	Ink cartridge initialization error
20	INK_NUM_LIMIT	Ink level warning
21	INK_NUM_EMPTY	Cartridge ink level is zero
22		UI Parameter Table Beta
23	TIMES_LIMIT_NO_SUPPORT	Time limit is not supported
24	TIMES_LIMIT_READ_ERR	time limit read error
25	TIMES_LIMIT_USER_END	time limit expired
26	TIMES_ILLEGALLY_ALTERED	The time has been illegally modified
27	HEAD_TYPE_ERR	The type of nozzle in the parameter table is wrong; read the nozzle type of the FPGA and compare the nozzle type of the parameter table
28	Print head auto-detection error	Currently it is 5113 and I3200 printhead detection
29	UI reset exception error	Receive ui reset data during printing
104	Big car resistance	The grating signal is abnormal, the motor or motor signal is abnormal
105	cart reverse	The phase of grating AB is opposite, and the direction of motor is opposite
106	width exceeds	Check print starting point, picture width
107	Car zero sensor error	The car origin sensor signal is abnormal
108	Raster detection error	The grating signal is abnormal
109	SDR detection error	Repair
110	PC driver error	Misuse of PC printing tool
111	Insufficient number of squares	Insufficient number of registered squares
112	Ink station sensor error	Ink station sensor abnormality
113	Mainboard cart board communication error	Fiber cabling or programming problems
114	print square number as 0	Registered squares run out
115	Fiber cannot communicate	Abnormal fiber connection
116	Empty paper alarm	material used up
117	The parameter table ID does not match the registration ID	parameter exception error
118	Invalid parameter list	parameter exception error
119	There is no main program written on	Program exception

	the cart board	
120	Nozzle lift motor error	The head frame lift motor sensor is abnormal
121	paper feed limit	The platen limit sensor is abnormal
122	paper feed initialization error	The platen limit sensor is abnormal
123	anti-collision	Anti-collision trigger or missed
124	Anti-collision during initialization	Anti-collision trigger or missed
125	Ink spills	Check the safety bottle
126	The cart gear ratio is too small	Motor gear ratio is too small
127	The cart gear ratio is too large	Motor gear ratio is too large
128	Wrong type of cart print head	The motherboard (parameter table) and the cart board (FPGA) do not match; it can be canceled
129	The Gantry sensor pauses printing during printing	Infrared Gantry sensor detected foreign objects; fatal error, need to power off and restart
130	external ram error	Board error, repair
131	Position out of tolerance error when the cart stops	Abnormal motor or grating, abnormal motor power supply
132	Wrong position when the cart moves	Abnormal motor or grating, abnormal motor power supply
133	Multi-machine system startup abnormal error	The multi-machine system starts abnormally and cannot be detected
134	SDR startup detection is abnormal and cannot be detected	SDR detection is abnormal, restart the machine, if it fails for many times, please return it for repair
135	Ink station expansion board not connected	Check whether the ink station expansion board is properly connected
136	temperature alert	
137	Humidity Alarm	
138	FPGA reset timeout	Restart the machine, if it doesn't work for many times, please return it for repair
139	Failed to apply for external SRAM for 485 initialization	
140	485 communication failure in multi-machine system	
141	Multi-machine system printing exception	The slave swath number is greater than the master swath number
142	Main ink bottle is empty	
143	waste ink bottle full	
144	Rewinder expansion board is not connected	
145	Rewinding and unwinding expansion board running error	

146	Ink pump motor board not connected	
147	Slave has no network connection	Check the slave network cable connection
148	Master-slave 485 communication failure in multi-machine system	Check the master-slave motherboard connection cable
149	Time limit is not supported	
150	time limit read error	
151	time limit expired	
152	The time has been illegally modified	
153	Multi-machine system synchronization failed	
154	Print head auto-detection error	At present, the I3200 nozzle holder is detected, but the FPGA does not support I3200
155	Spreader stick has not fallen	
156	Slave self-check error	
157	sprinkler alarm	The internal temperature of the I3200 print head is too high
158	Nozzle Alarm 2	The internal temperature of the I3200 print head is too high
159	UV lamp sensor	Round bottle machine
160	Bottle clamp front sensor	Round bottle machine
161	Sensor after bottle clamping	Round bottle machine
162	Bottle lift sensor	Round bottle machine
163	Too much white	Round bottle machine
199	CPU exception error (the program runs away, access to the address is prohibited)	If the program is abnormal, please contact the after-sales service

8.5 RIIN Prompt Software UV (Demo Version)

1. Check whether the dongle light is on or not, if not, please replace the computer USB port or replace the dongle.

8.6 UV light is off

1. Measure the UV lamp is on or off.

2. Check whether the UV lamp power supply is powered on and whether there is voltage output. Replace the UV lamp power supply.

3. Check whether there is 24V voltage output during the printing process of the main board, if there is no output, replace the main board.

4. Replace the UV lamp.

8.7 Ink does not dry

All products are not dry:

1. Check whether the UV lamp lights up or not during printing. If it does not light up, please refer to the solution of UV light not lighting up.

2. Whether the UV light baffle 1 is in the proper position.

The edges of the product are not dry:

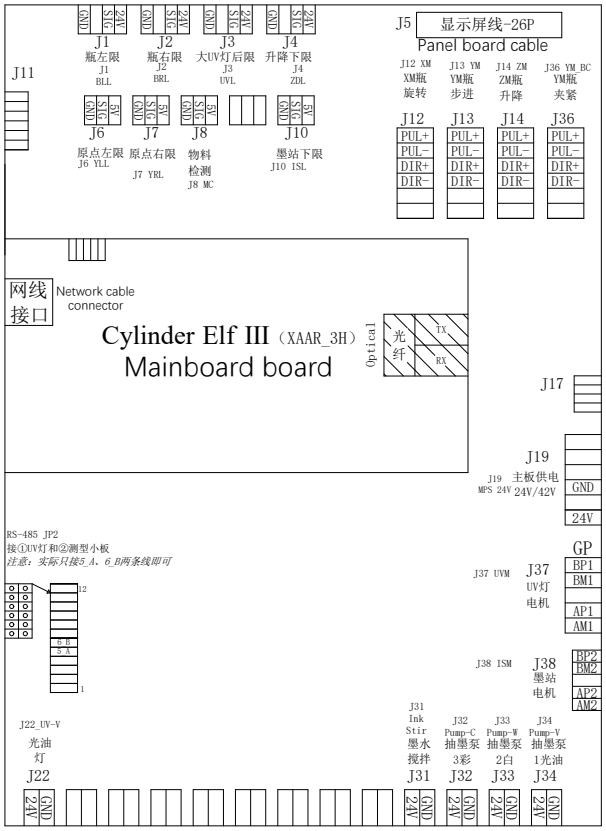
1. Whether the UV light baffle 1 is in the proper position.

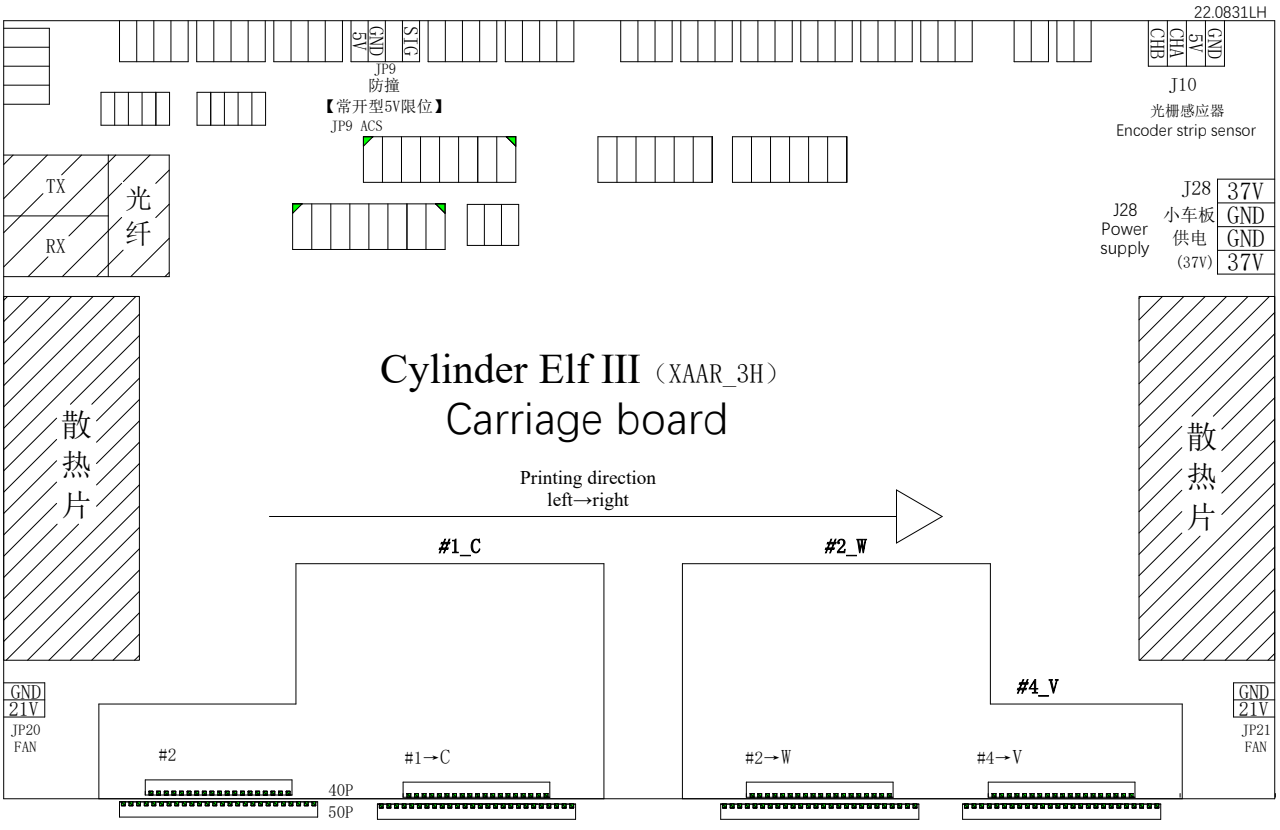
2. In the online driver【Engineer Mode】-【Advanced Settings】-increase the empty distance for printing white color and empty distance for printing varnish.

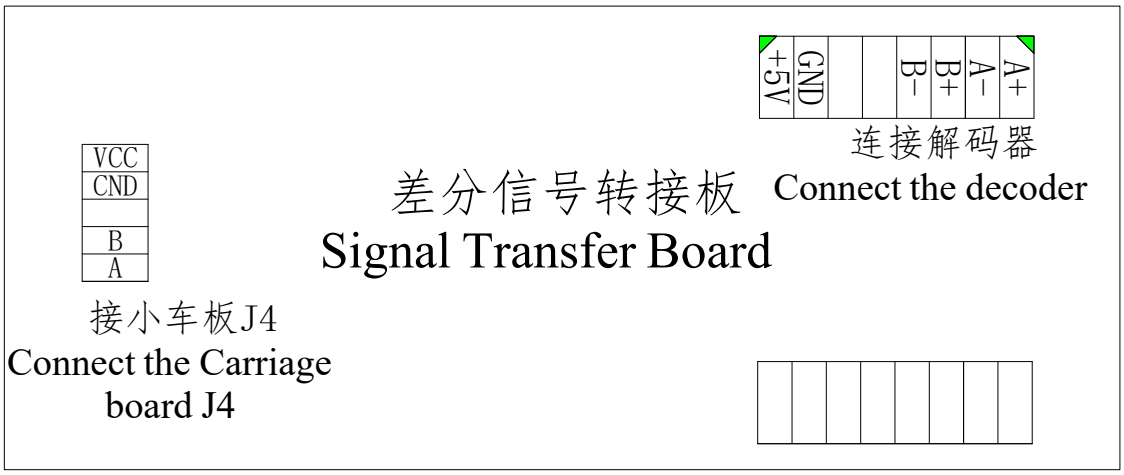
3. Confirm the version number of the device information (pull down the machine settings menu to find the device information).

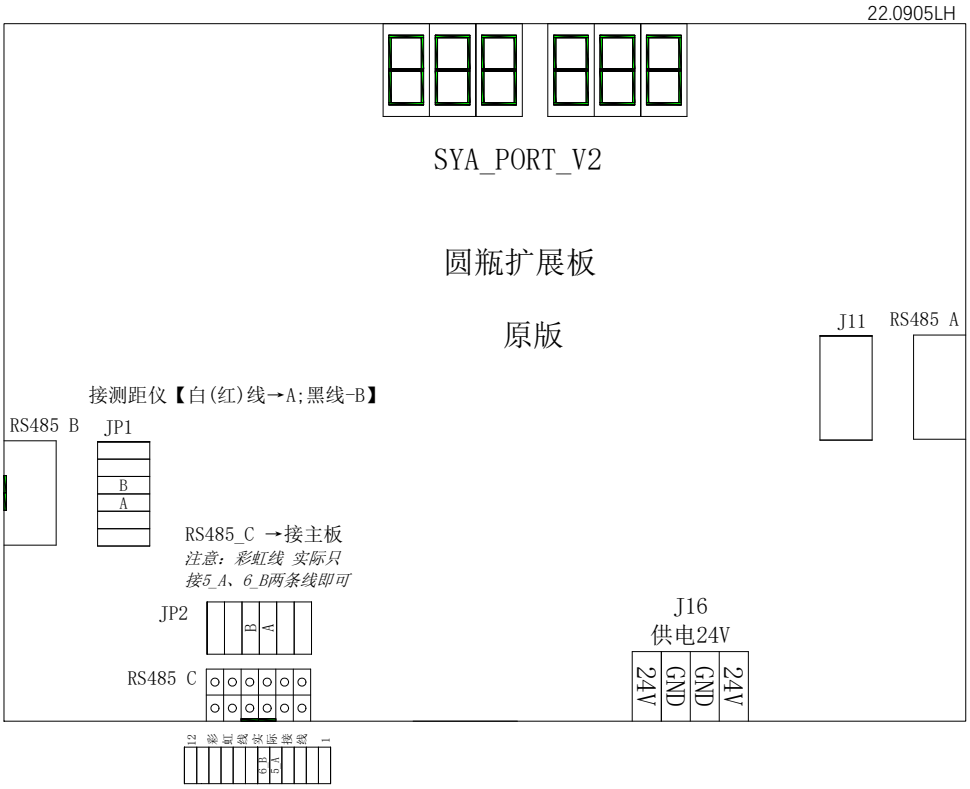
4. The manufacturer confirms the version number and upgrades the machine version.

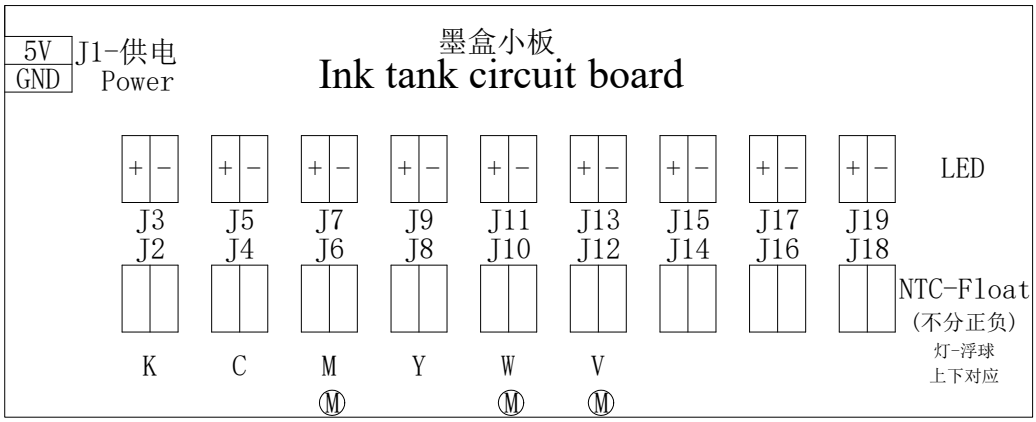
8.8 Introduction of board circuit

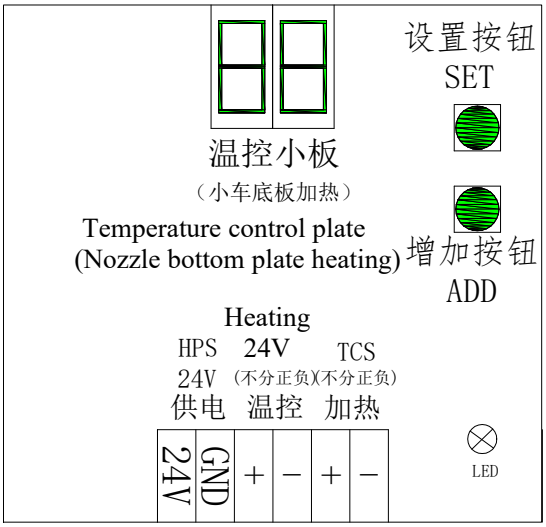

J1 瓶左限 J1 BLL
J2 瓶右限 J2 BRL
J3 大UV灯后限 J3 UVL
J4 升降下限 J4 ZDL
J5 显示屏线-26P
Panel board cable
J6 原点左限 J6 YLL
J7 原点右限 J7 YRL
J8 物料检测 J8 MC
J10 墨站下限 J10 ISL
J11
J12 XM 旋转
J13 YM 步进
J14 ZM 升降
J36 YM_BC 夹紧
网线接口 Network cable connector
Cylinder Elf III（XAAR_3H）
Mainboard board
Optical 光纤
J17
J19 主板供电 24V/42V
RS-485 JP2
接①UV灯和②测型小板
注意：实际只接5_A、6_B两条线即可
J37 UV灯电机
J38 墨站电机
J22 光油灯
J31 墨水搅拌
J32 3彩抽墨泵
J33 2白抽墨泵
J34 1光油抽墨泵


22.0831LH
JP9 防撞
【常开型5V限位】
JP9 ACS
J10 光栅感应器 Encoder strip sensor
TX 光纤 RX
J28 Power supply 小车板供电 (37V)
Cylinder Elf III（XAAR_3H）
Carriage board
Printing direction
left→right
#1_C
#2_W
#4_V
散热片
JP20 FAN
JP21 FAN
#2
#1→C
#2→W
#4→V
40P
50P


+5V
GND
B-
B+
A-
A+
连接解码器
Connect the decoder
VCC
CND
B
A
差分信号转接板
Signal Transfer Board
接小车板J4
Connect the Carriage board J4


22.0905LH
SYA_PORT_V2
圆瓶扩展板
原版
J11
RS485 A
接测距仪【白(红)线→A;黑线-B】
RS485 B
JP1
B
A
RS485_C →接主板
注意：彩虹线 实际只
接5_A、6_B两条线即可
JP2
RS485 C
J16
供电24V
24V
GND
GND
24V


5V
GND
J1-供电
Power
墨盒小板
Ink tank circuit board
J3
J2
J5
J4
J7
J6
J9
J8
J11
J10
J13
J12
J15
J14
J17
J16
J19
J18
LED
NTC-Float
(不分正负)
灯-浮球
上下对应
K
C
M
Y
W
V


设置按钮
SET
温控小板
（小车底板加热）
Temperature control plate
(Nozzle bottom plate heating)
增加按钮
ADD
Heating
HPS
24V
TCS
24V
（不分正负）(不分正负）
供电
温控
加热
24V
GND
+
−
+
−
LED