SinoColor

1.8m & 3.2m UV Roll to Roll

User's Guide

非常感谢您购买此产品。

- 为确保正确和安全使用，并充分了解本产品的性能，请务必仔细阅读本手册完全存放在安全的地方。
- 禁止未经授权复制或转让本手册的全部或部分内容。
- 本手册的内容和本产品的规格如有变更，恕不另行通知。
- 本手册和产品已尽可能准备和测试。如果您发现任何印刷错误或错误，请通知我们。
- Sino Color Corp.对因使用此产品而可能发生的任何直接或间接损失或损害不承担任何责任

产品，无论本产品是否有任何失败。
- **Sino Color Corp.**对任何可能发生的任何直接或间接损失或损害不承担任何责任
使用此产品制作的文章。

Thanks for your support to Sinocolor Printer.
- Be sure to read carefully to ensure proper and safe use and to fully understand the performance of this product. This manual is completely stored in a safe place.
- Unauthorized reproduction or transfer of all or part of this manual is prohibited.
- The contents of this manual and the specifications of this product are subject to change without notice.
- This manual and product have been prepared and tested as much as possible. If you find any typographical errors, please inform us.
- Sinocolor Group. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

目录 Directory

一. USB驱动的安装 USB Driver Installation
二， 墨囊及喷头安装 Damper and Printhead Installation
2.1, 喷头安装墨囊的颜色顺序 Sequence of damper installation
2.2, 软件套色表墨序 Software color offset table ink sequence
2.3，喷头安装 Printhead Installation
三、软件介绍 Software Intrduction
3.1, 软件调试步骤Software Calibration
3.1-1, 校准齿轮比Gear ratio calibration
3.1-2 清洗设置 Cleaning Option Introduction
3.1-3, 垂直校准 Vertical Calibration
3.1-4, 水平较准 Horizontal Calibration
3.1-5, 步进较准 Step Calibration
3.1-6, 双向较准 Bi-Dir Calibration
四、打印 Print
4.1 载入打印文件 Upload the printing file
4. 2 开始打印 Start Print
五， 软件功能介绍 Introduction of The Function of Software
5.1 标题菜单栏 Title Menu
5.2, 参数设置界面 ‘’Parameter’’ Interface
5.3 软件校准 Maintenance
5.3-1 偏差校准 Bias calibration:
5.3-2 运动设置：Motion Settings:
5.3-3 清洗设置,电压设置 Cleaning option And Voltage Setting:
5.3-4 基础设置 Basic Settings:
六， 系统菜单 System menu:
七，常见故障处理 Frequent Trouble-Shooting

一. USB驱动的安装 USB Driver Installation

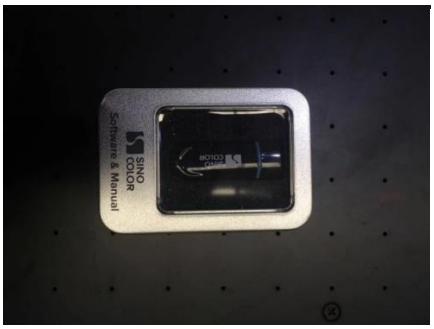
为什么要安装USB 驱动？Why need to install the USB Driver?

安装USB驱动是为了使电脑和机器能够连接并传输数据，如果没有安装USB驱动，我们在电脑里打开控制软件时，软件会不能和机器联机，不能使用。所以当我们准备使用电脑联机机器时，首先应该安装好USB驱动。
The USB Driver will help connect the computer and printer then transmit data.
If USB Driver is not installed, the software will show ‘’offline’’. And can not work.
So we need to install the USB Driver properly first.

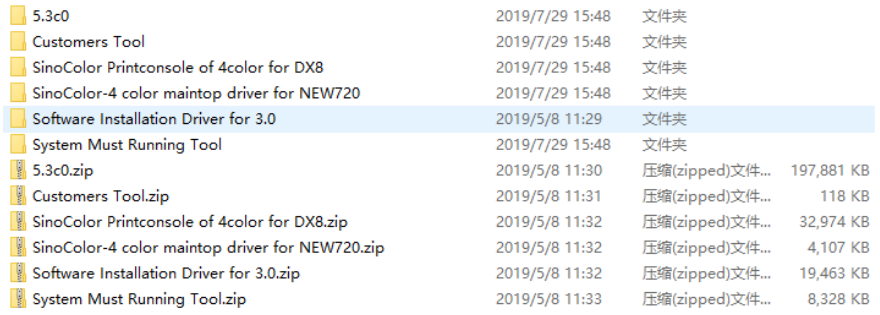
安装步骤Steps：

1. 给机器开通电源，打开电脑，并用USB线连接好机器和电脑。
Power-on the printer. Turn on your computer and use the USB Cable to connect printer and computer.

2. 用电脑打开我们公司配发的U盘，同时拷贝所以文件在电脑硬盘中（请勿拷贝在系统盘，如果只有一个盘请忽略。）请妥善保存此U盘备用。（注意：U盘内容会因不同机器内容有所不同）
Check the U Disk we sent together with your machine. Copy all the document into your PC. (Don’t copy it to the system disk. While if your PC has only one disk, please ignore).
The USB disk need to be properly kept.(The document for different model of printer will be different. So please don’t mix them)

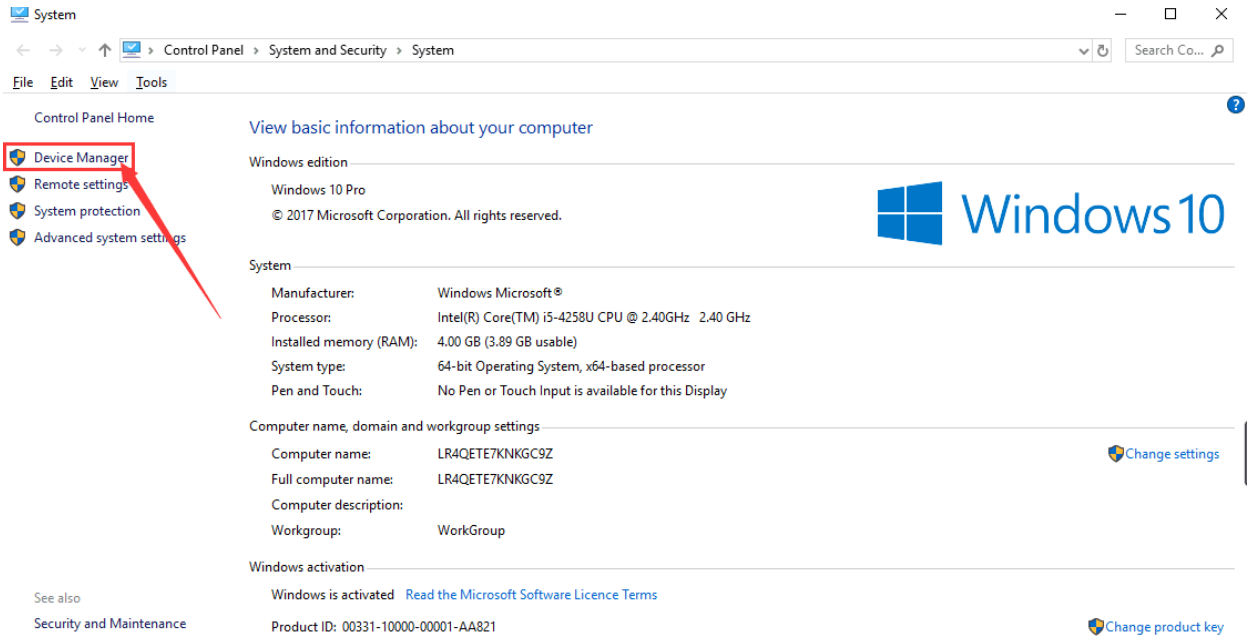


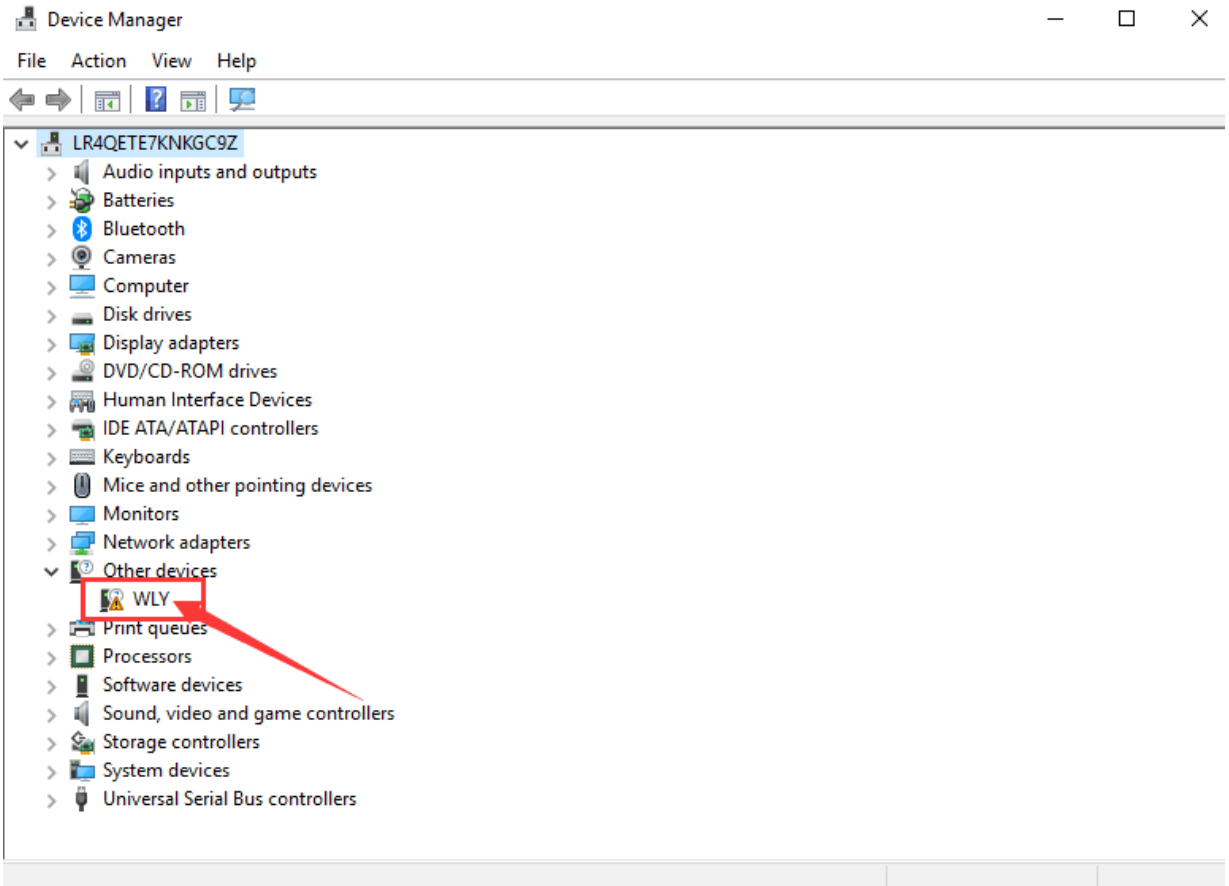
SinoColor USB Disk



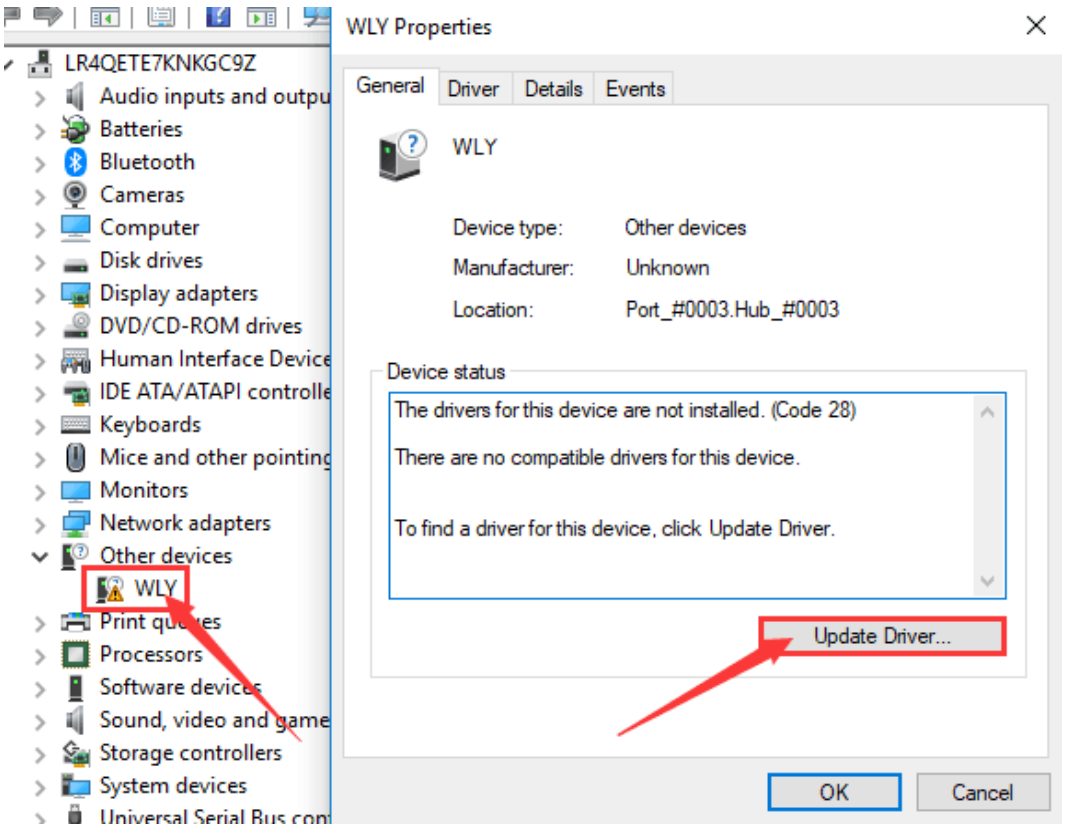
Documents Inside the USB Disk

3. 打开计算机的系统属性，选择“设备管理器”：
Keep the printer powered on. Check the computer system property (No matter you are using Win7 or Win 10. Only need to open the ‘’ Device Manager’’ in the system disk)

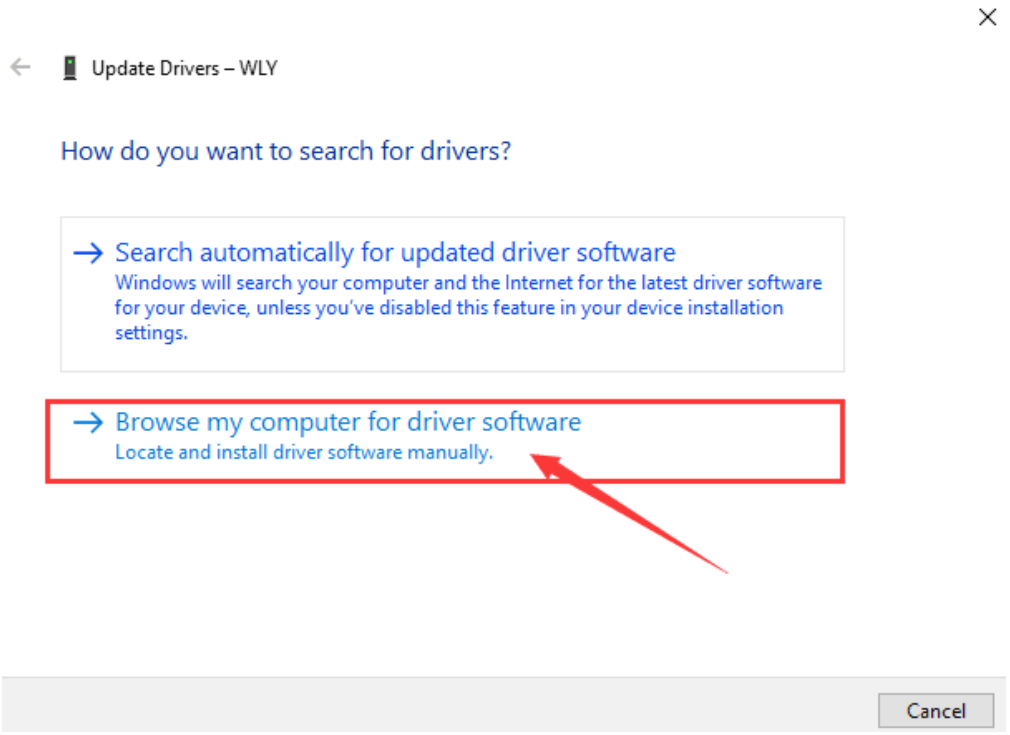




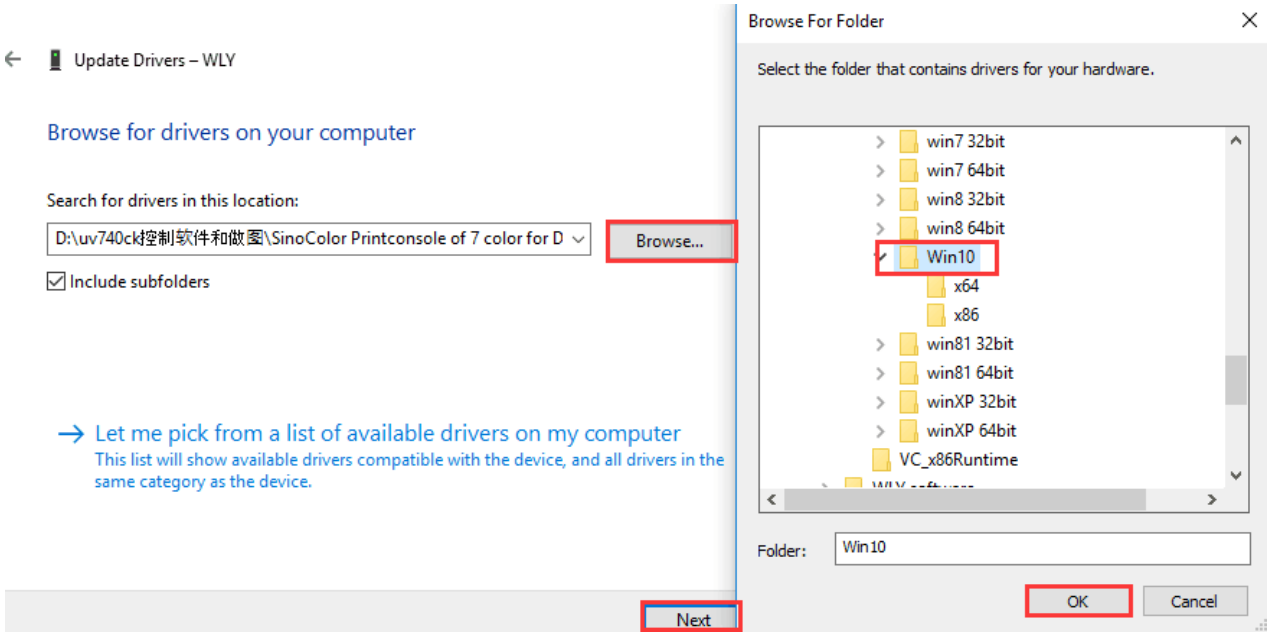
双击“WLY”此驱动,显示详细信息点击“Update Drive”：
You will find the driver ‘’WLY’’
Double click ‘’WLY’’, will appear its detail information. Left click ‘’Update Driver’’



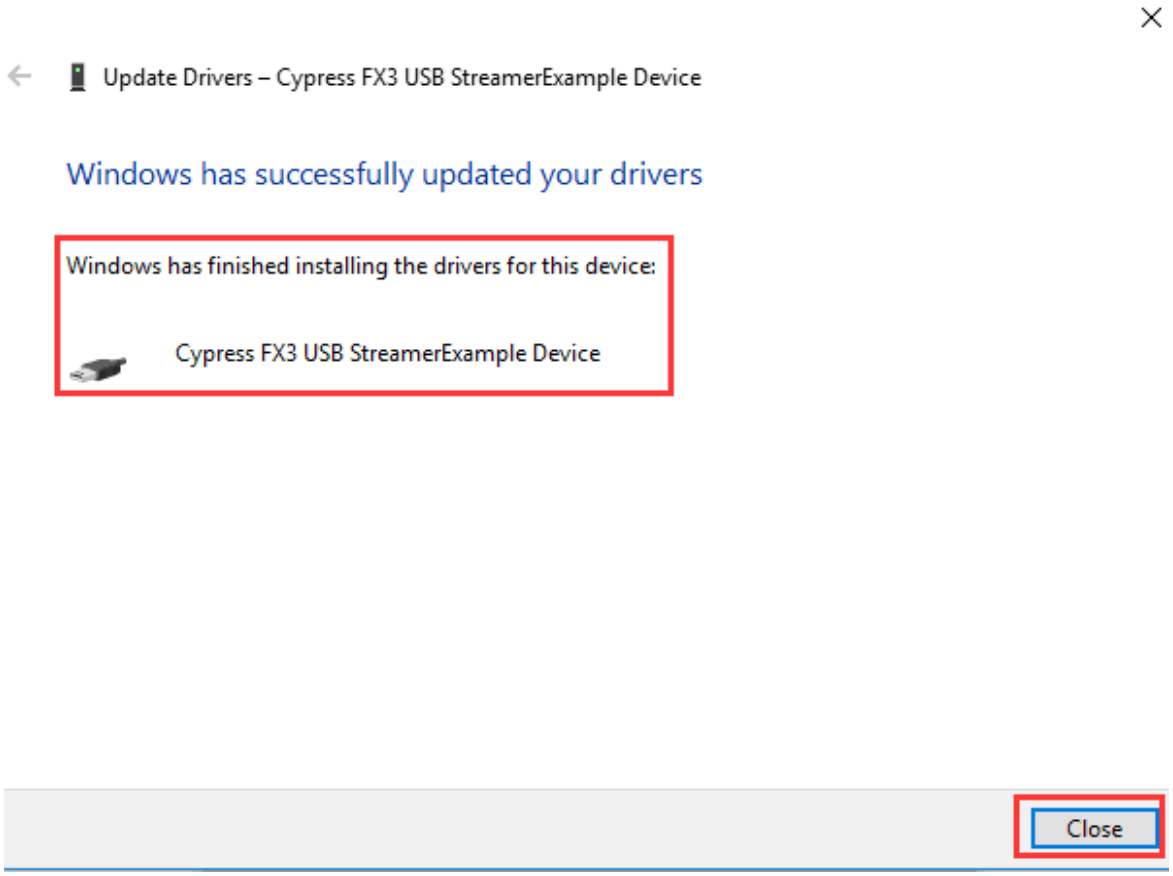
选择从电脑浏览
Choose “Browse my computer for drive software”:



点击“浏览”，选择我司控制软件里面的“Drive3.0 WIN10”点击“OK”，然后再次点击“下一步”（根据电脑系统的版本进行选择）：
Click ‘’Browse’’, And choose the document in our console software’’ Driver3.0’’- ‘’WIN10’’(Choose according to your computer system) Then click ‘’OK’’- ‘’Next’’



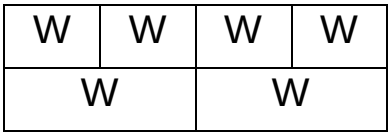
完成驱动安装。 点击关闭。
Driver installation finished. Close



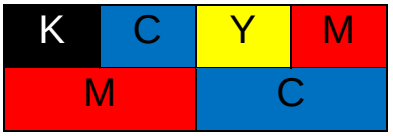
二、 墨囊及喷头安装 Damper and Printhead Installation

2.1, 喷头安装墨囊的颜色顺序 Sequence of damper installation

4色模式 4 color mode

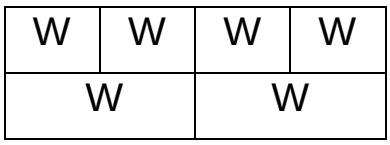


左头 Left Printhead

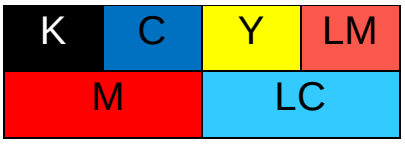


右头 Right Printhead

6色模式 6 color mode



左头 Left Printhead



右头 Right Printhead

2.2, 软件套色表墨序 Software color offset table ink sequence

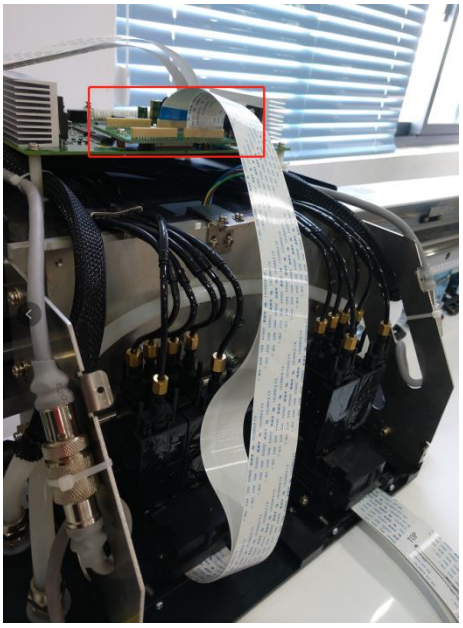
Set it in ‘’Maintenance’’- Basic_set’’- Color Offest

2.3，喷头安装 Printhead Installation

注意：UV机器的喷头线安装是左右交叉安装的，左喷头的线插在小车板上的右插口，右喷头的线插在小车板上的左插口，如下图。安装的时候要注意线的针脚和插口的针脚要接触良好。

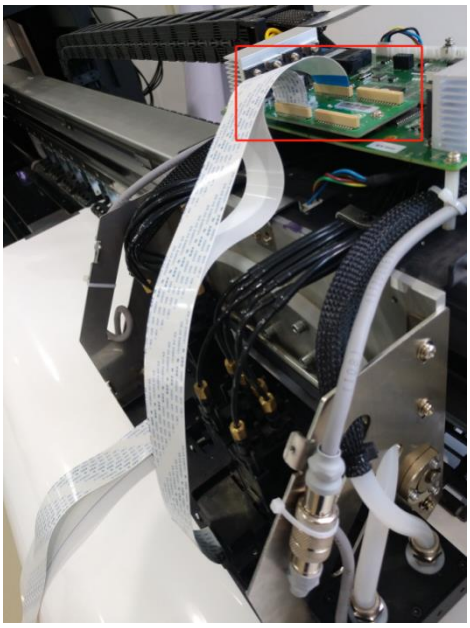
Note: The printhead cable of UV machine need to be cross installed. Insert the cables for left printhead into the right printhead convert card. Insert the cables for right printhead into the left printhead board convert card. Check photo below.

Please note, the pins of the cable must connect properly with the pins of the socket.



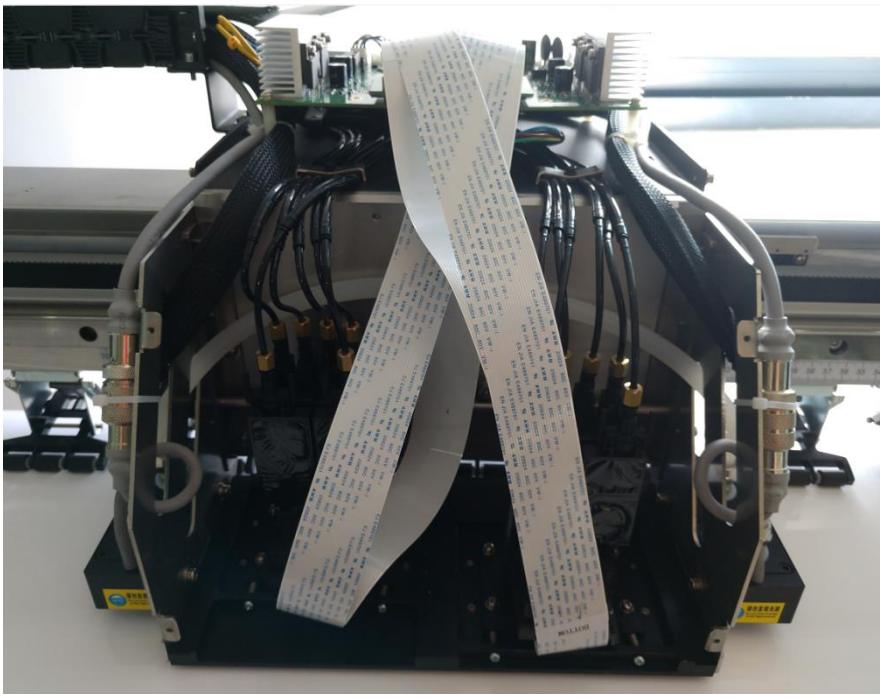
左喷头线的插法

Left printhead cables installation



右喷头线的插法

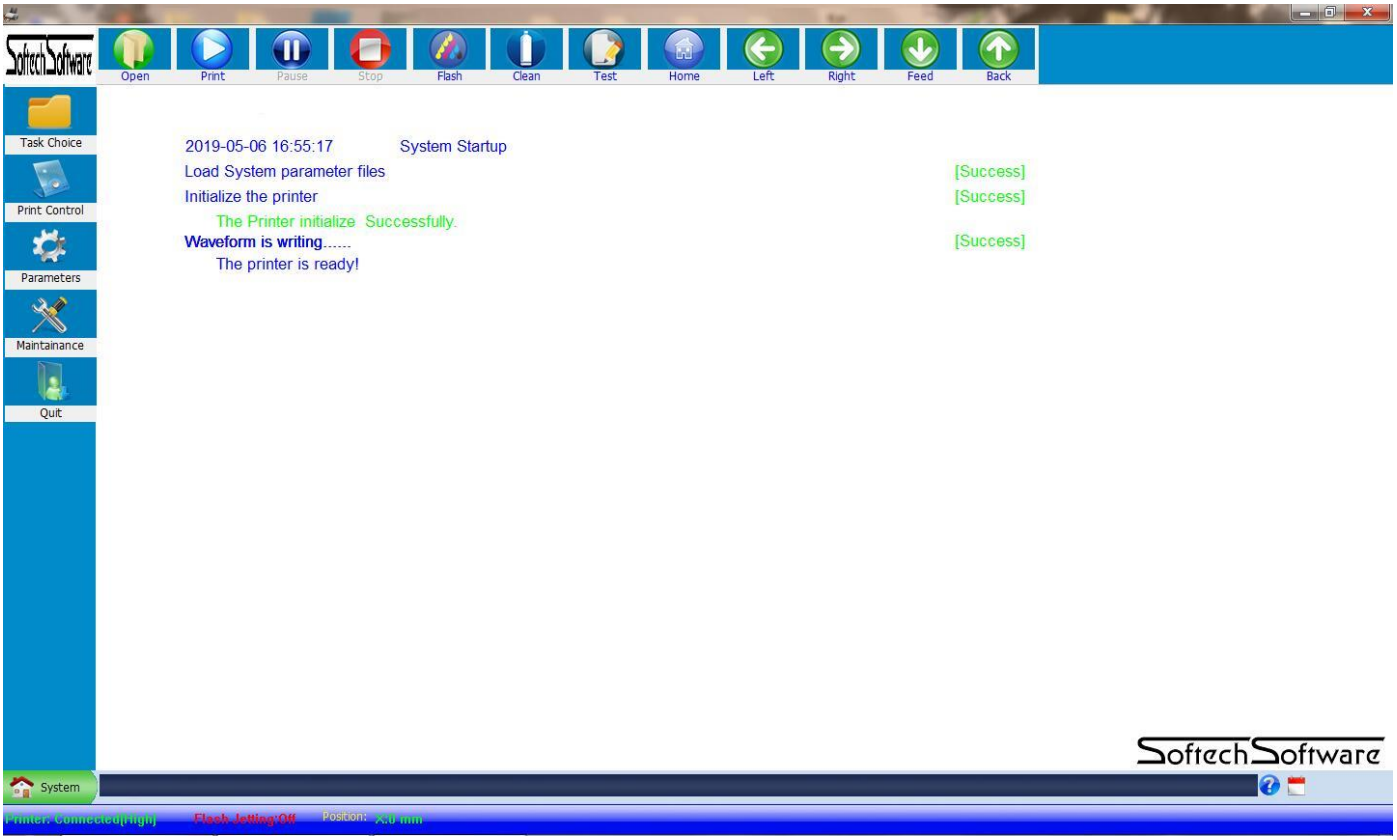
Right printhead cables installation



喷头安装完成 **Printhead Installation finished**

三、软件介绍 Software Intrduction

软件主界面 The main interface of the software



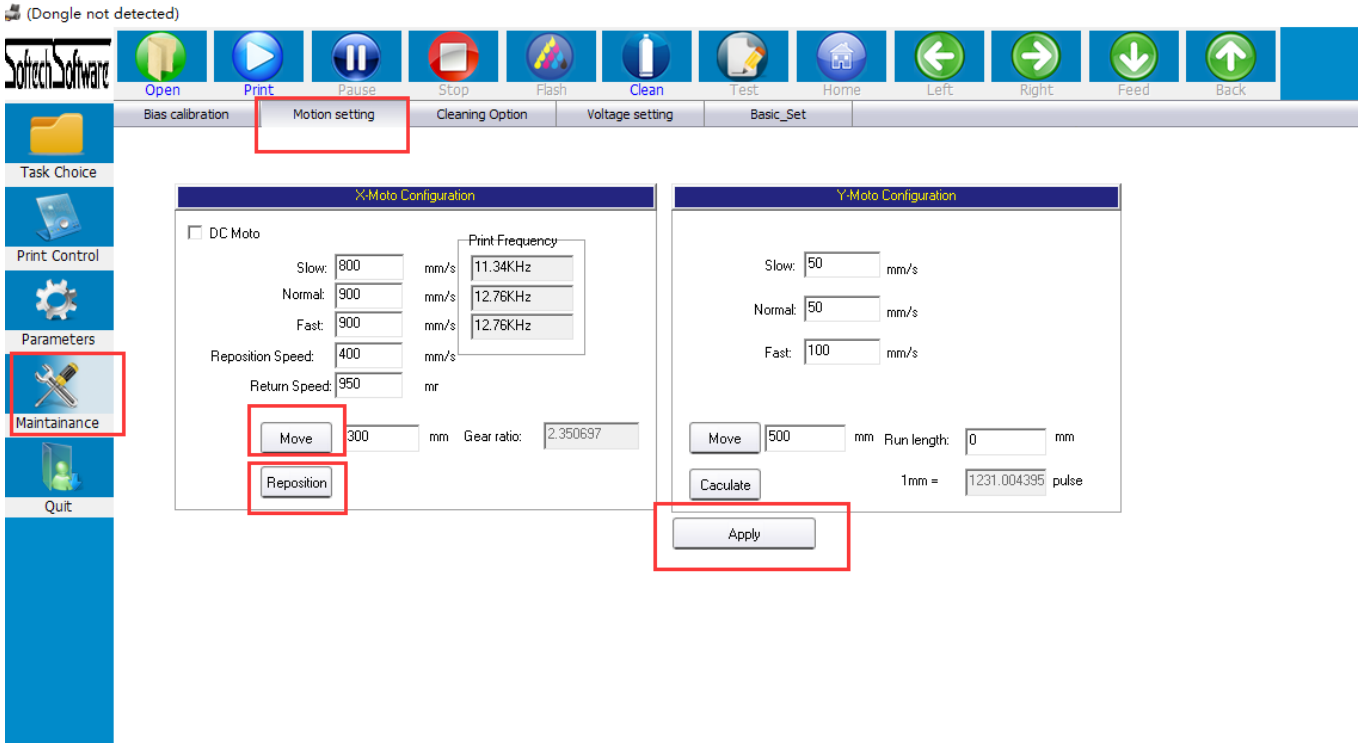
板卡初始化动作之后，通过 USB 数据线连接板卡跟电脑，插上加密狗，打开软件之后左下角打印机状态会显示高，如下图所示

After the board is initialized, connect the board to the computer via the USB cable and insert the dongle onto your PC. After opening the software, the printer will show ‘‘High’’ in the left bottom. Like below photo.

3.1，软件调试步

3.1-1，校准齿轮比Gear ratio calibration

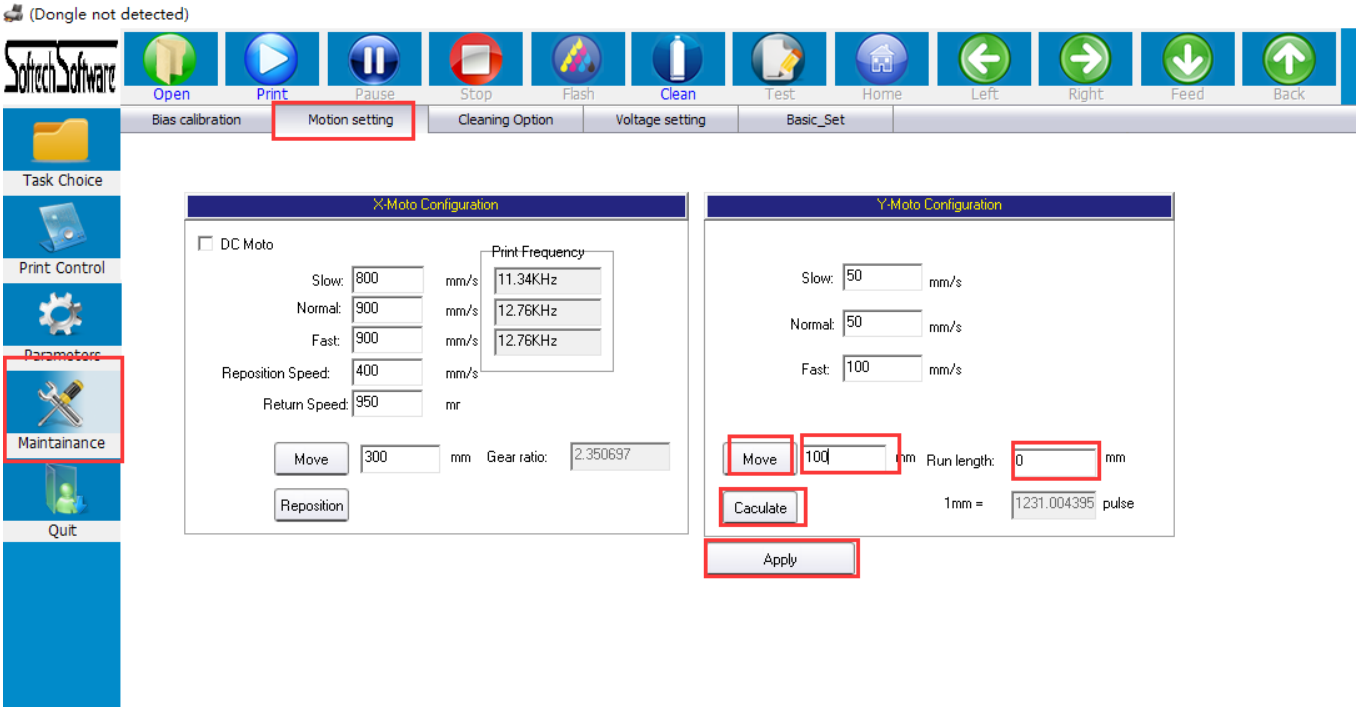
X 尺轮比 X-Gear ratio Calibration



点击’’系统维护’’，’’运动设置’’， 会看到如图所示界面，首先在移动后面填入一个较小值（300），点击移动，此时，小车移动停止后再点击复位,最后点击运用;再次重复设置一次并保存。

Click ‘’Maintenance’’, ‘’Motion Setting’’, you will see the interface as shown, first fill in a small value (300) behind the ‘’Move’’, click ‘’Move’’, then click the ‘’ Reposition’’ after the printhead carriage stop moving (You will see the data behind ‘’Gear Ratio changes), click ‘’Apply’’; repeat these steps again (The Gear Ratio Data will change again. After these two steps, the X-Gear Ratio will be done).

Y 尺轮比 Y-Gear ratio Calibration



首先在材料上做好标记， 原后再移动后面填入（100），点击移动，材料移动完成之后再次标记，用尺量出实际移动距离，填入走布长度框中，点击计算（注意，每次只能点击一次计算）。
第二次，填入 300，点击移动，量出实际走布长度，点击计算
第三次，填入 600，点击移动，量出实际走布长度，点击计算

First, make a mark on the material (Any position), then fill into the column behind ‘’Move’’ : 100, click ‘’Move’’. mark the material again after the material movement is finished, measure the actual moving distance with the ruler, fill in the length of the moving paper, fill into the column behind ‘’Run Length’’, click Calculate (Note: Each time You can only click once to calculate). Click Apply to save the data.

Second, fill in 300, click ‘’move’’, measure the actual length of the moving paper, fill in the data. click on the ‘’calculation’’. Click Apply to save the data.

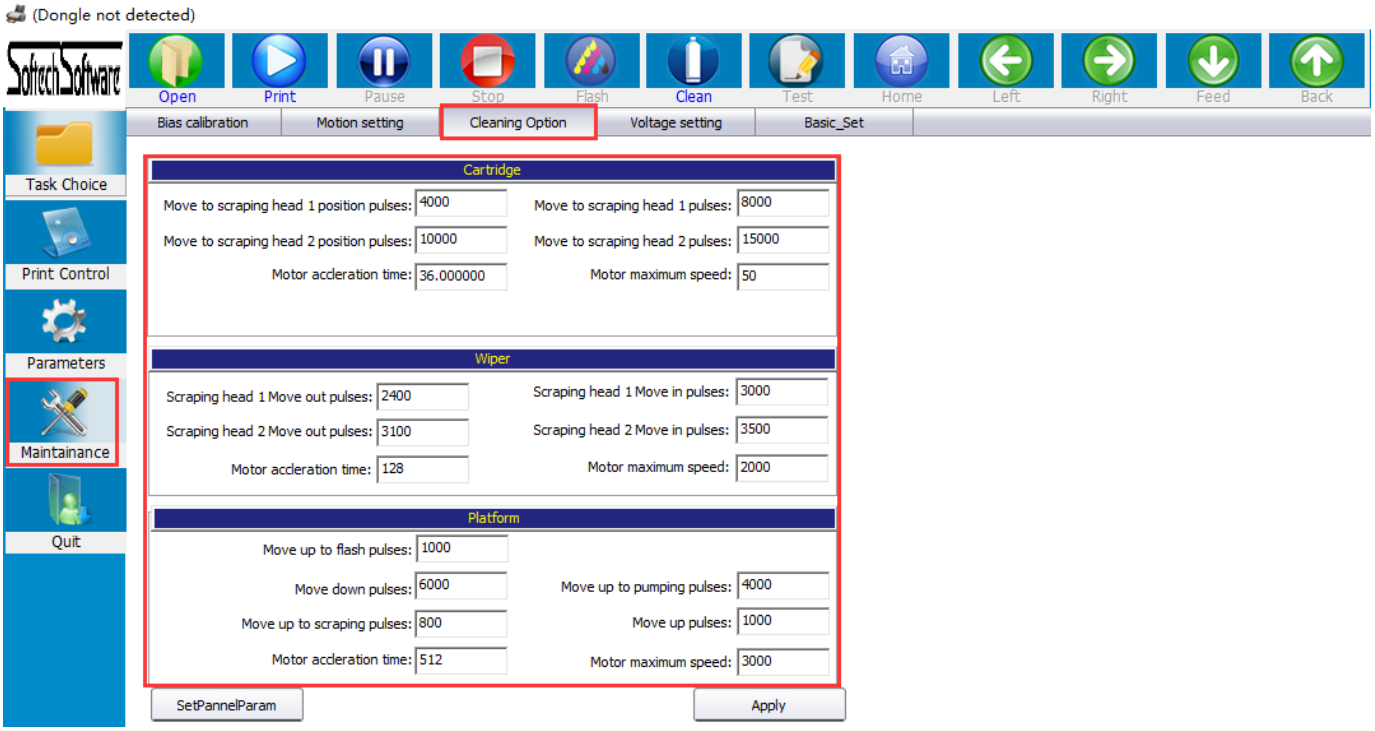
Third, fill in 600, click ‘’move’’, measure the actual length of the moving paper, fill in the data. click on the calculation. Click Apply to save the data.

注意： 完成齿轮比校准后， 一定要点击 ‘’ 应用 ‘’ 来保存数据。
Note: After finished calibrating the gear ratio, must click the ‘’Apply’’ button to save the data.

3. 1-2 清洗设置 Cleaning Option Introduction

Note: Below information only used to tell you how machine will do the cleaning.

Setting already done before delivery in factory. So no need to change any data inside. If need change, please contact the after-sale people.



清洗步骤 How it will do the Cleaning:

-After click ''Clean'' you will see the printer's action like below:

1、墨垫下降到下限位（平台下降的脉冲）The capping unit goes down.

2、墨垫上升到顶住喷头吸墨（平台吸墨的脉冲）The capping unit goes up to close the printhead surface .

3、墨泵开始抽墨 (抽墨时间通过工具可以设置) The ink pump starts to pump ink (the pump time can be setted)

4、抽墨之后等待一定时间，待墨垫内气压均衡，防止墨回吸（工具设置，时间保证 3 秒以上）Wait for a while after pumping, then the air pressure in the capping unit will be balanced. This will prevent the ink from sucking back (By tool setting, time more than 3 seconds)

5、墨垫下降到下限位（平台下降的脉冲控制）The capping unit goes down

6、墨泵抽掉墨垫内废墨the ink pump draws the waste ink in the capping unit.

7、小车左移到起始刮墨位（小车去刮片 1 位脉冲）The carriage moves to the left to the scratch ink position (Move to the scraper head 1 position pulses)

8、平台上升到刮墨高度（平台刮墨的脉冲）The platform rises to the scraping height (move up to scraping pulses)

9、刮片移除至喷头位，准备刮墨（出刮片 1 时脉冲）The wiper is remove to the head position, ready to scrape the ink (scraping head 1 move out pulses)

10、小车移动刮墨（小车去刮墨 1 位脉冲）The carriage moves to scrape the ink (Move to scarping head 1 pulses)

11、墨垫下降到下限位（平台下降的脉冲）The capping unit drops to the limit sensor (Move down pluses)

12、刮片复位（回刮片 1 时脉冲) The wiper goes back (scraping head 1 move in pulses)

13、小车复位car back

14、墨垫上升到闪喷位置（平台闪喷的脉冲）The capping unit rises to the flashing position (Move up to flush pulses)

15、喷头开始闪喷 The head starts to flash

16、墨泵开始抽墨垫内废墨 The ink pump starts to draw the waste ink in the capping unit

17、墨垫下降到下限位（平台下降的脉冲）The capping unit drops to the limit sensor (Move down pluses)

18、墨垫上升到待机高度（平台上升的脉冲）The capping unit rises to the standby height (Move up pulses)

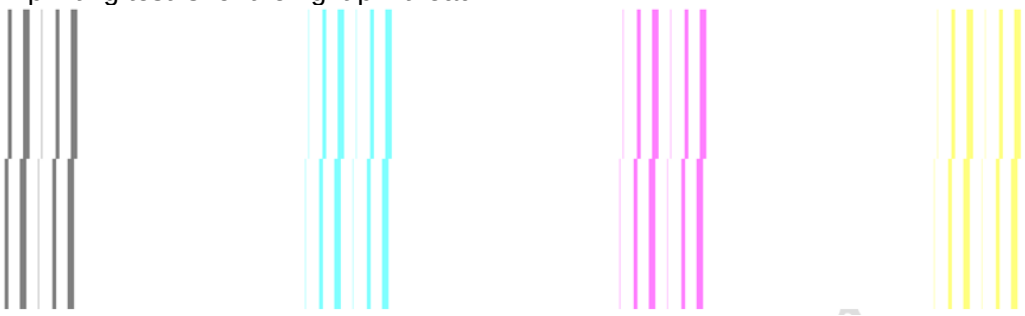
3. 1-3，垂直校准 Vertical Calibration

在软件主界面，单击打印校准图，下拉菜单中，选择打印 垂直校准图

On software home page, left click"Test", choose ''Vertical Calibration'' from the drop-down list.

打印的喷头垂直状态图如下图所示时：

You will get two CMYK printing test like below picture. The left CMYK printing test is for left printhead. The right CMYK printing test is for the right printhead.



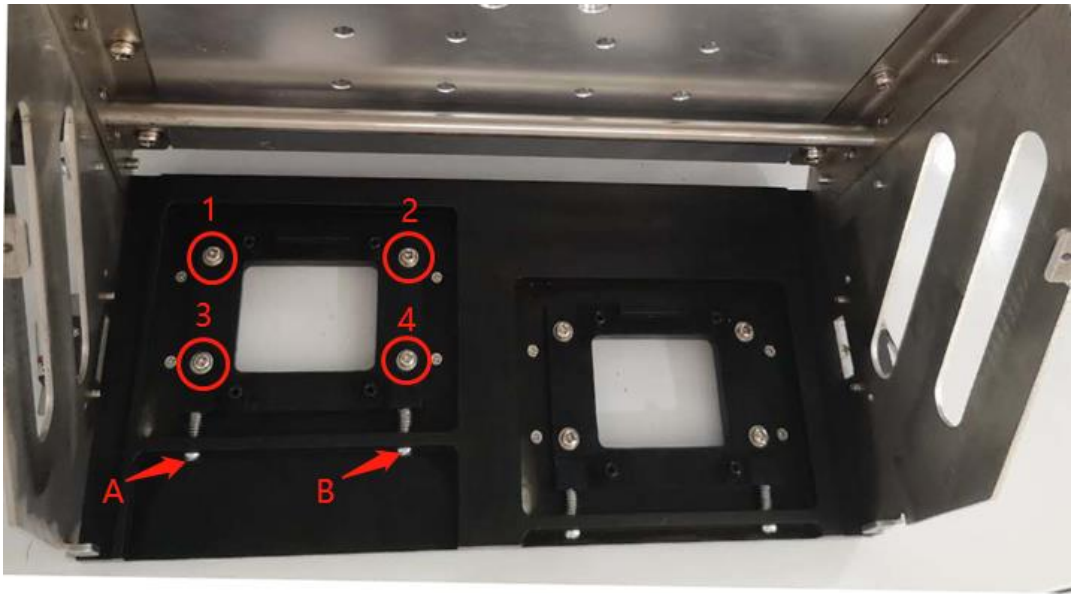
正确的垂直状态应该是上下两部分完全对齐，成一条直线。所以需要对喷头进行调整，上图所示情况应该是对喷头“左前推”、“右后拉”进行调整。

Correct vertical test should be : Top part and bottom part are perfectly aligned.

First see the vertical printing test of left printhead.

If the printing test same as above, need to adjust printhead vertical position. the printhead should be "pushed forward on the left" and "pulled backward on the right".

Steps:



Step 1: Loose the 1,2,3,4 screws **(Don’t remove. Just loose)**

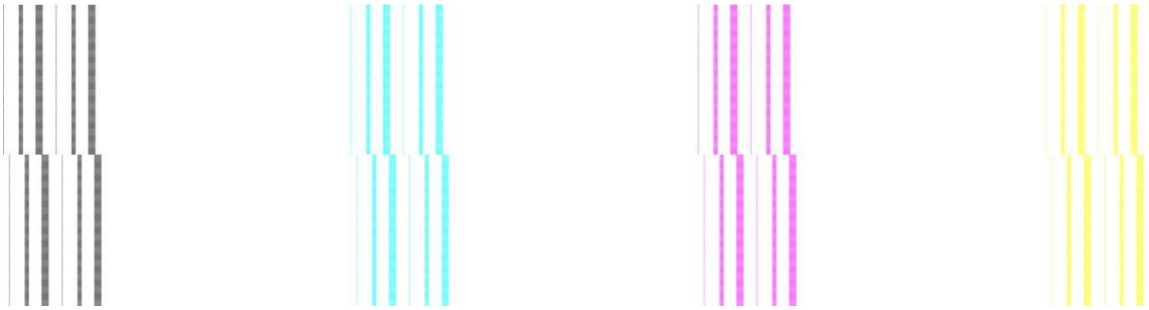
Step 2: turn the screw A counterclockwise a little（Then means left side of printhead will move forward）

Step 3: turn the screw B counterclockwise a little (This means pull the right side of this printhead back)

Step 4: **Fasten the 1, 2, 3, 4 screws.** Print a vertical calibration test again. If it still shows as above testing result, then do these steps again until the above and the bottom part are aligned like below picture.

注：喷头2的垂直校准步骤与喷头1的相同，同样分为螺丝1，2，3，4和螺丝A，B。

Note: The vertical calibration of right printhed is same as the way of left printhead: Adjust the Screws 1,2,3,4 and screws A, B.



如果是像下图这样左右错位，应该是对喷头“左后拉”、“右前推”进行调整。即松开1，2，3，4 ， 顺时针转动螺丝A（左后拉）或逆时针转动螺丝B（右前推）。

If it is left and right dislocation as above picture, the printhead should be "pulled backward on the left" and "pushed forward on the right".

Steps:

Step 1: Loose the 4 screws (Don’t remove. Just loose)

Step 2: turn the screw A clockwise （Then means pull the left side of printhead back）

Step 3: turn the screw B anticlockwise (This means move the right side of printhead forward)

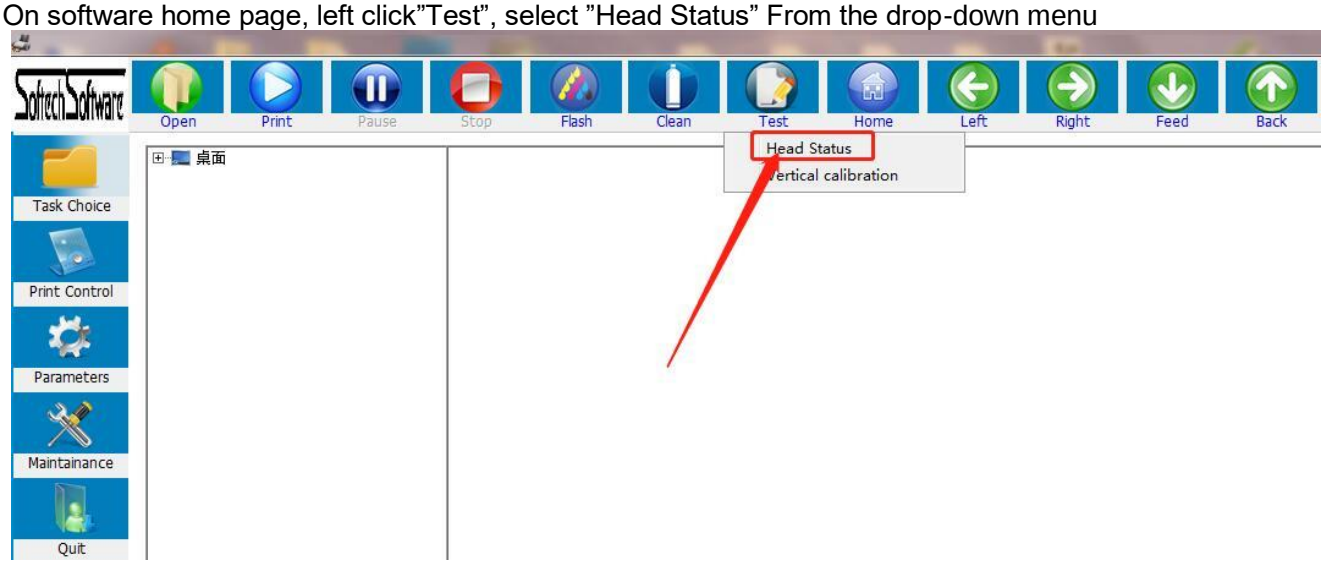
Step 4: **Fasten the 1, 2, 3, 4 screws.** Print a vertical calibration test again. If it still shows as above testing result, then do these steps again until the above and the bottom part are aligned.

After finished these, do same steps for the right printhead vertical calibration.

3.1-4, 水平较准 **Horizontal Calibration**

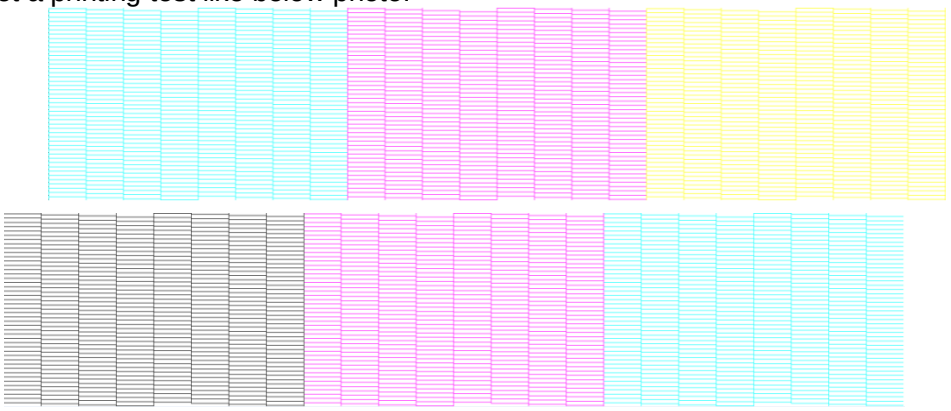
在软件主界面，单击打印校准图，下拉菜单中，选择打印 喷头状态图

On software home page, left click”Test”, select ”Head Status” From the drop-down menu



打印的喷头状态图如下所示：

Will get a printing test like below photo:

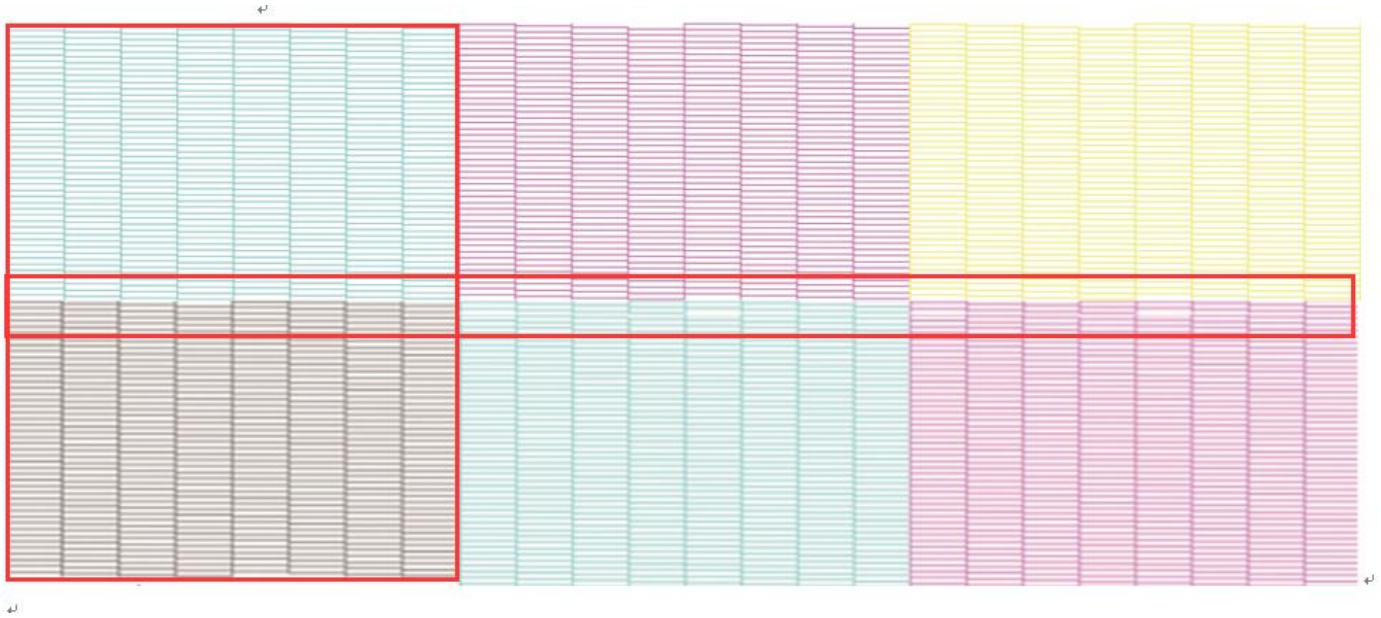


注：在没有校准双头水平和横向间距的时候，打出状态图如上图所示（上面为 喷头1 打印，下面为 喷头2 打印）。

Note: When calibration of the horizontal and horizontal spacing for 2 pieces printhead haven't been done, the testing result will be like above picture (the top one is printed by left printhead, and the bottom one is printed by right printhead).

此时可以看出喷头1和喷头2 打印出的状态图没有对齐并留有空隙，正确的喷头状态应该如下图所示，

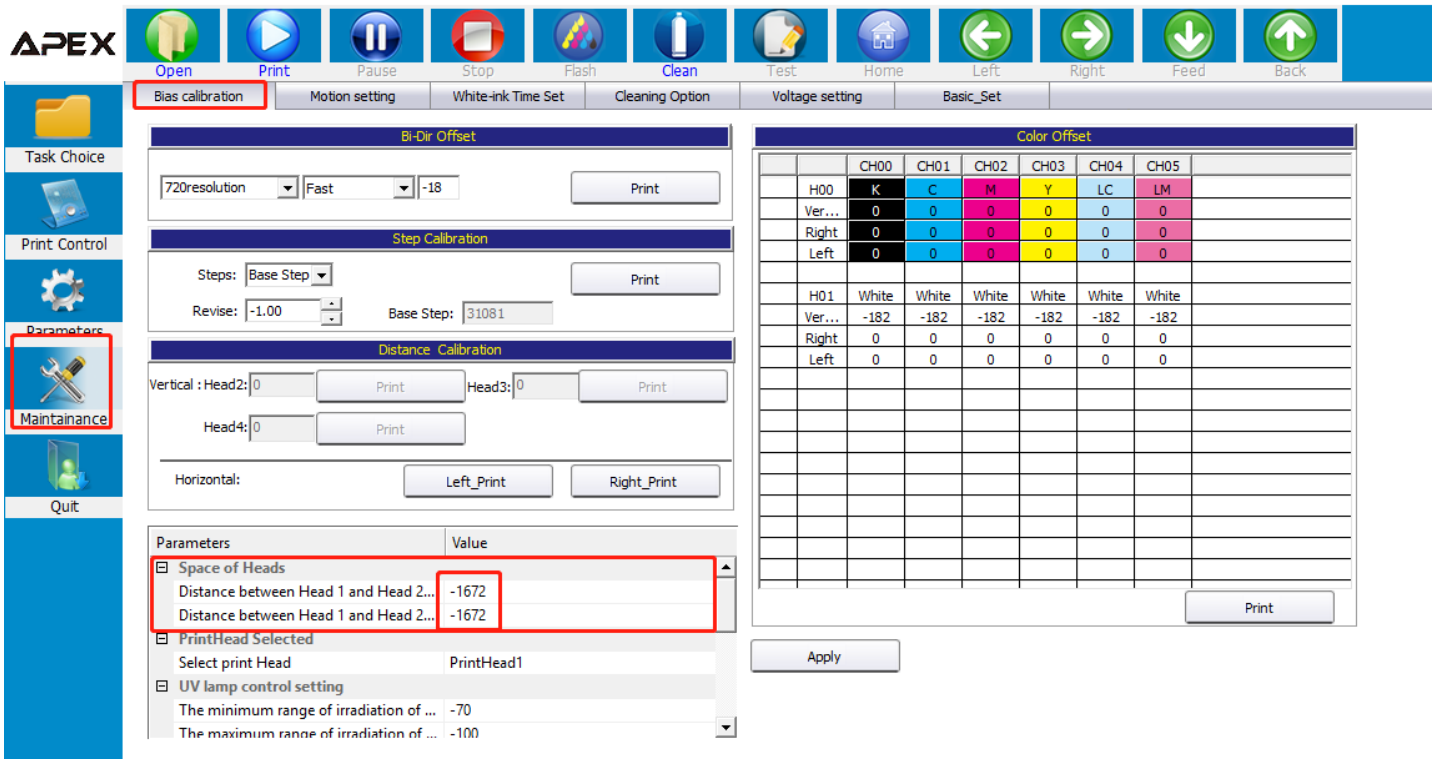
At this time, it can be saw that the state diagram printed by left printhead and right printhead is not aligned and has gaps. The correct state should be shown like below:



首先需要进行双头水平距离校准，使喷头状态上下对齐：调节双头间水平距离

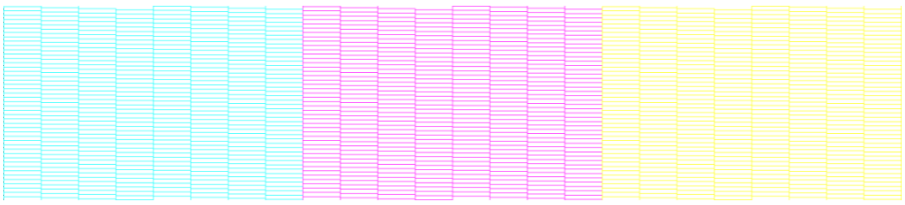
First, calibrate the horizontal distance between the two heads, make the above printing test and below printing test are aligned.

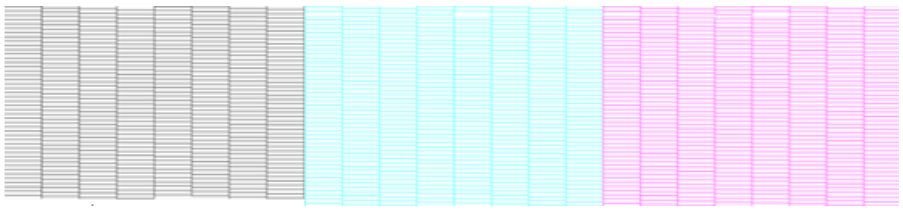
How to calibrate?



对图中所圈住的地方的数字进行加减（先以10为单位进行加减），点击Apply按钮保存设置，然后再次打印喷头状态图进行检查有无改善。重复这一操作，并适当加减合适的数字（不再局限于10），直到喷头1和喷头2的状态图能够上下对齐：

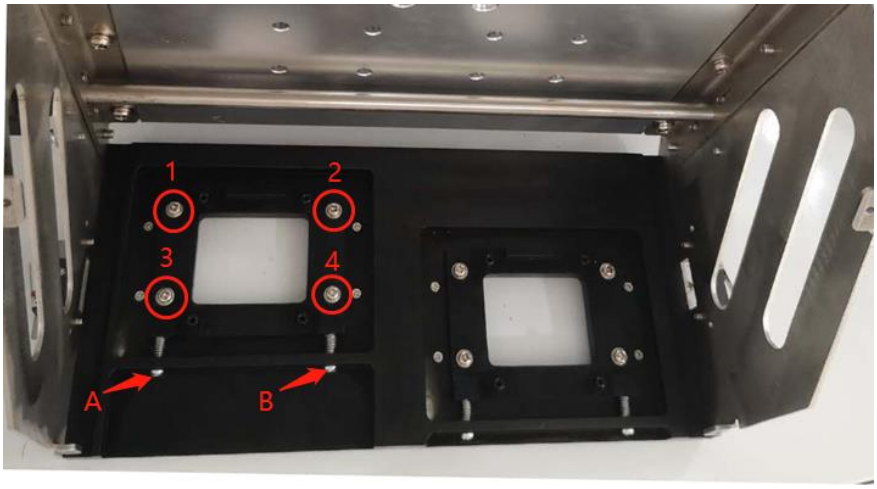
Add or subtract the figures circled in the picture (add or subtract in units of 10 first), click "Apply" button to save the settings. Then print the printhead status again to check whether there is any improvement. Repeat this operation, adding or subtracting the appropriate number (no longer limited to 10) until the state diagram of left printhead and right printhead can be aligned up and down:





其次需要进行双头纵向间距校准，使喷头状态上下部分中间没有空隙也没有重叠：调节喷头纵向相对位置

Second, Calibrating the longitudinal spacing between the two heads. Should be no gap or overlap between the upper and lower parts of the printing test. This is to adjust longitudinal relative position of printhead



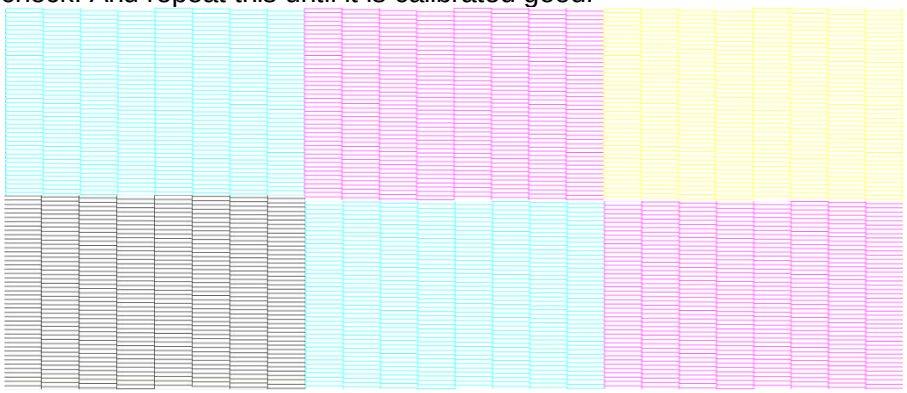
How to adjust?

喷头的纵向位置调节同样需要通过喷头1或喷头2 的1，2，3，4，A，B固定螺丝来调节，
如果上下测试条之间有空隙，拧松螺丝1，2，3，4 ，将螺丝A和B顺时针转动相同角度（这里一定要使A和B转动角度相同，否则会影响喷头的垂直状态），然后拧紧螺丝1，2，3，4 ， 再次打印喷头状态，检查上下两部分之间还有没有空隙。
如果上下是重叠， 则逆时针旋转螺丝A和螺丝B。打印喷头状态，然后重复这个动作直到上线之间既没有空隙也没有重叠。

Longitudinal position of printhead adjustment also need to be adjusted through the 1, 2, 3, 4, A, B screws.

If there is gap between the upper and lower part of printing test, loosen screw 1, 2, 3, 4. Turn screw A and B clockwise at the same angle (make sure A and B turn at the same Angle, otherwise the vertical state of printhead will be affected), then tighten screws 1,2,3,4, print the printhead state again, check whether there is any gap or overlap between the upper and lower parts.
Repeat the operation until the printhead is in good condition

If the upper part and lower part are overlapped. Then turn screw A and B counterclockwise. Print head state test and check. And repeat this until it is calibrated good.



- **调节过喷头纵向位置后，最好再打印垂直校准图检查一下，防止垂直状态有变动**

After adjusting the longitudinal position of printhead, it is better to print a vertical calibration test to check and prevent any change in the vertical state

注：双头纵向间距调节，属于物理调节，一般和喷头的垂直调节，同时进行。以其中一个喷头为基准，先调节好垂直之后固定不动，对另外一个喷头慢慢调节，最终把喷头纵向和垂直都调节好。

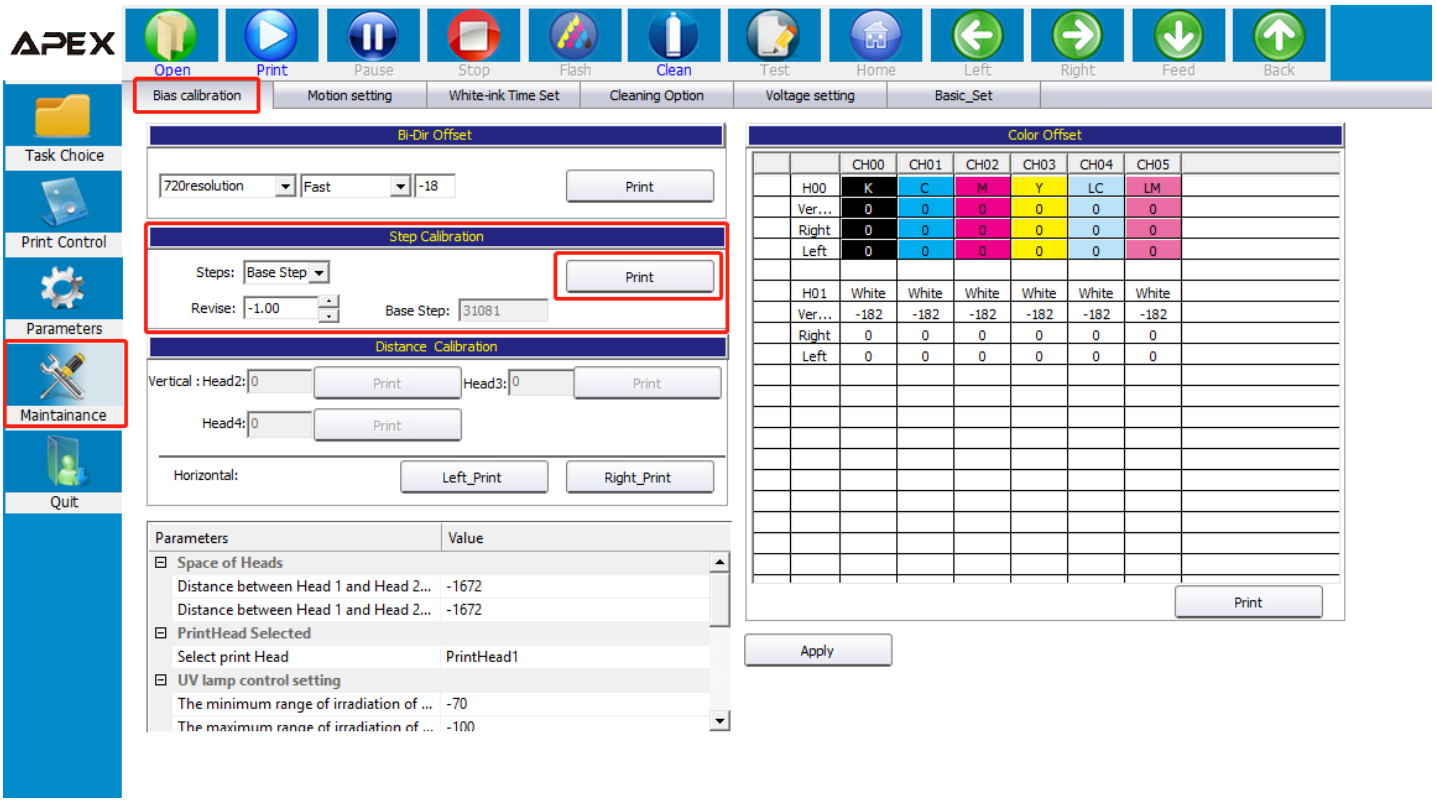
Note: Double head longitudinal space adjustment, belong to physical adjustment, in general, vertical adjustment and longitudinal space adjustment are operating at the same time. Take one printhead as

the reference, first adjust it vertically and then fix it. Then adjust the other printhead step by step. Finally adjust vertical and longitudinal well

3. 1-5, 步进较准 Step Calibration

在软件点击系统维护，选择偏差校准，步进调整，点击打印校准图，如下图所示：
步进选择 Base Step，点击Print，打印校准图，小车开始打图：

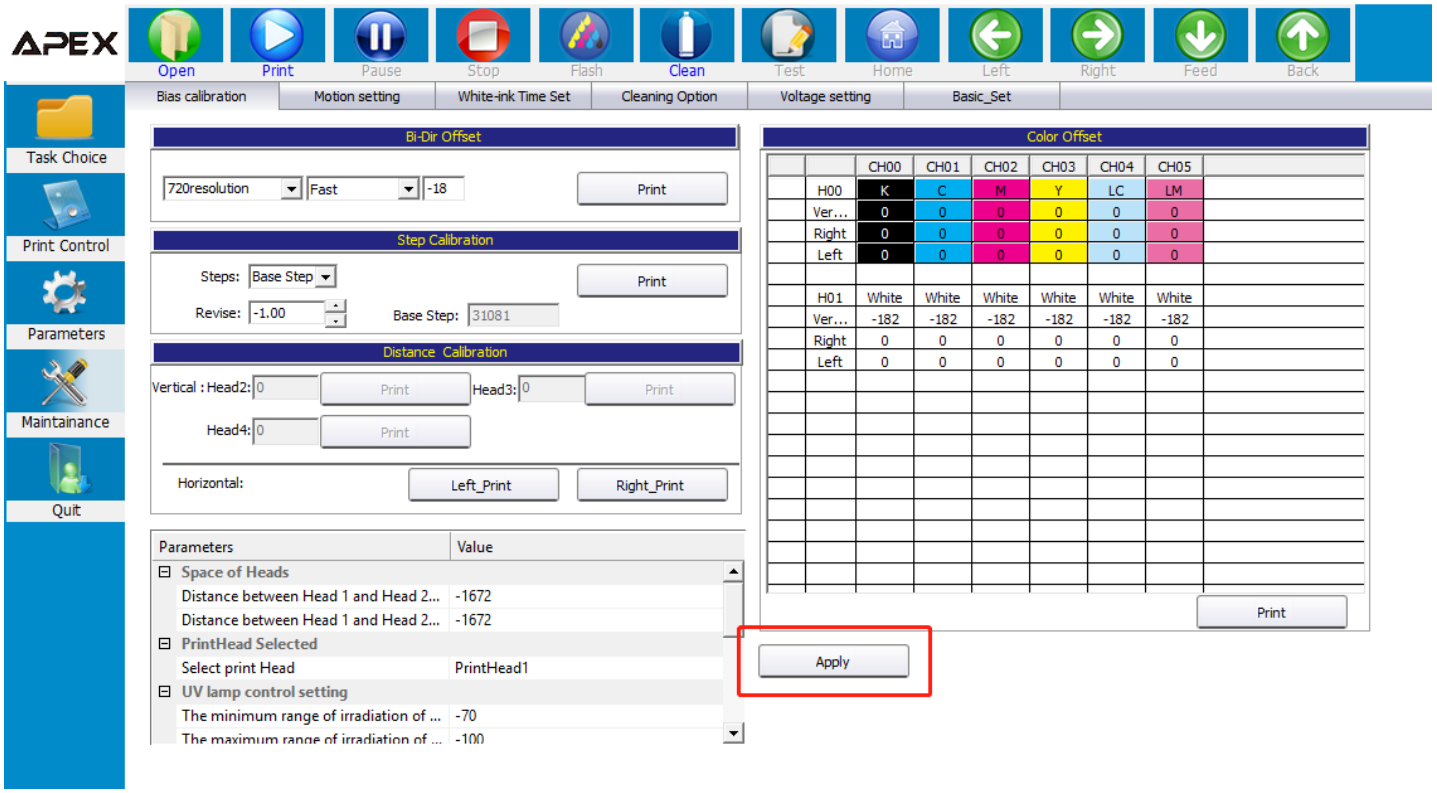
Click “Maintenance” on software, choose “Bias Calibration”—“Step Calibration”, choose “Base Step ” behind ‘’Step’’, then click” print”, as below picture show:



基准步进

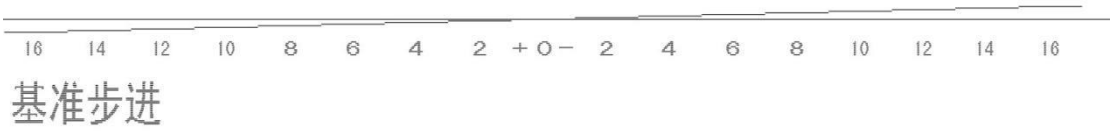
如上图所示，在 -6 的位置重叠，证明基础步进有- 6 的误差，此时需要将Revise栏中的数字加上 - 6（以图中为例，此时应将3改为-3），点击界面下方Apply保存应用

As above picture show: The two lines overlapped on -6 position, It proves that the basic step has an error of -6, so need to add -6 to the figure in” Revise” (As picture show,3-6= -3. So need to change 3 into -3), then click “Apply”



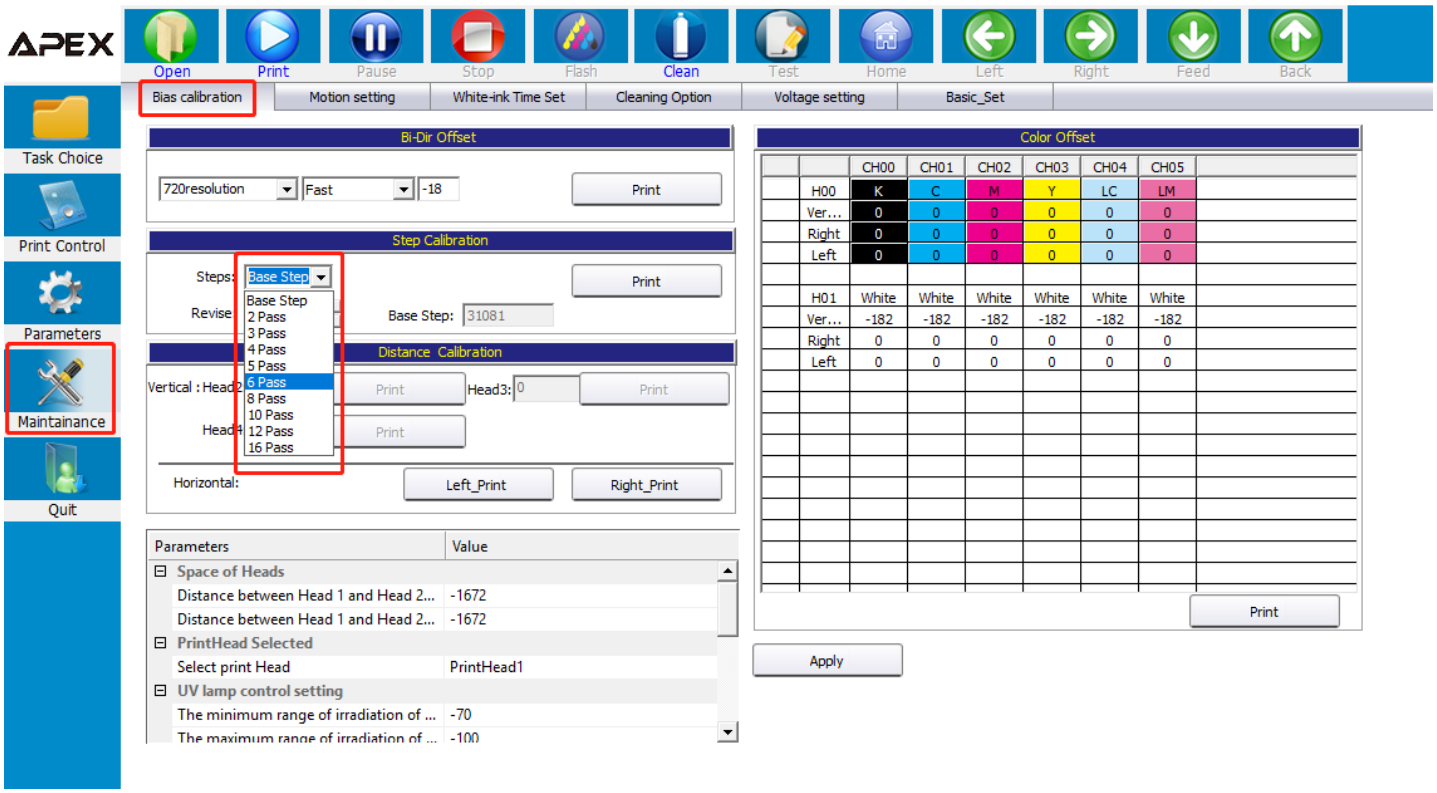
再次点击打印校准图，如下图：

Click “Print”again, printing effect as below show:



如果在 0 位置上重叠，则基准步进调整完毕，如果还不在 0 点位置重叠，继续调整参数，继续打印，直至每次都能在 0 位置重叠。

If Overlapped on 0 place, so basic step calibration is finished; If it’s not overlapped at 0 place, please go on adjusting the parameter and printing, unit It’s overlapped every time.



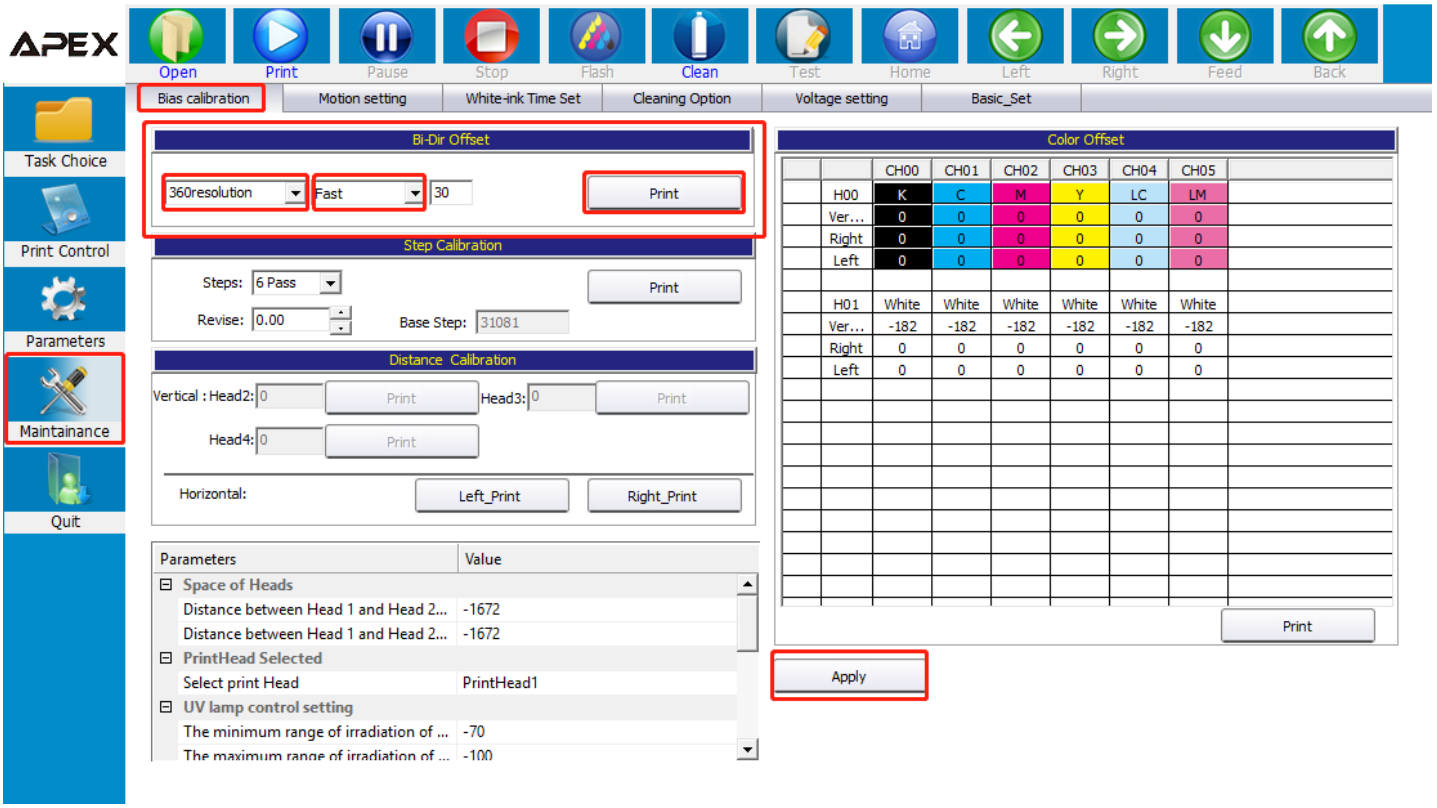
在步进选择中点开下拉菜单，可以对不同的Pass数进行步进校准，选择需要的Pass数后分别打印校准图进行校准，步骤与Base Step校准相同。

In the down menu of the column behind ‘’Step’’, can calibration for different Pass Numbers.
Just select the needed passes number, then doing calibration separately. Same way as Base Step calibration.

3. 1-6，双向较准 Bi-Dir Calibration

点击软件系统维护，偏差校准，如下图所示：

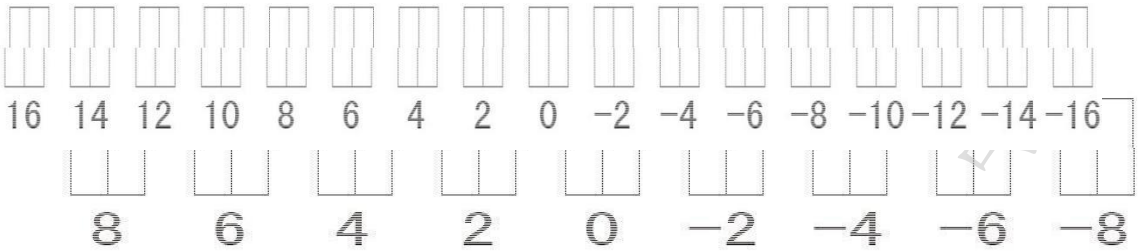
Click “Maintenance”—“Bias calibration”,check “Bi-Dir Offset”, as below picture show:



首先需要选择对应的精度。 默认都是 360 精度。选择好相应的速度。低、中、高速的双向值都需要调整，点击Print打印校准图。

下图在-6的位置上下是对齐的，说明慢速下，双向偏差-6，需要在后面调整框中加上-6，点击界面下方Apply保存应用。
再次点击打印校准图：
当在0位置对齐时，双向校准完成。

First, selecting the corresponding resolution, the default is 360 resolution.
Select the corresponding speed.
‘’slow, normal, fast’’ all need to be calibrated one by one.
Click "Print "to print the calibration diagram.
If it shows like below picture:
Above part and below part are aligned at -6 position, indicating that under slow speed, Bi-Dir error is -6, need to add -6 in the adjustment box. Click "Apply " at the bottom of the screen to save the data.
Click” Print “ again:
When it is aligned at ‘’0’’ position, the bi-direction calibration finished.



双向校准精度选择说明：

720X1440 4PASS 对应的双向校准为 360 精度，选择打 8 PASS 时，对应的为 180 精度； 720X2160 6PASS 360 精度双向，12PASS ，180 双向； 720X2880 8PASS 360 精度， 16PASS 180 精度

Information of bidirectional calibration resolution selection:
When you choose the printing resolution for one file,
If you choose to print 720x1440, 4 pass, then it corresponds to bi-direction calibration of 360 resolution here.
If you choose to print 720x1440, 8 pass, then it corresponds to 180 resolution here.
If you choose to print 720x2160, 6 pass, then it corresponds to 360 resolution here.
If you choose to print 720x2160, 12 pass, then it corresponds to 180 resolution here.
If you choose to print 720x2880, 8 pass, then it corresponds to 360 resolution here.
If you choose to print 720x2880, 16 pass, then it corresponds to 180 resolution here.

So here you must calibrate all these bi-direction: 180 resolution, 360 resolution, slow, normal, fast

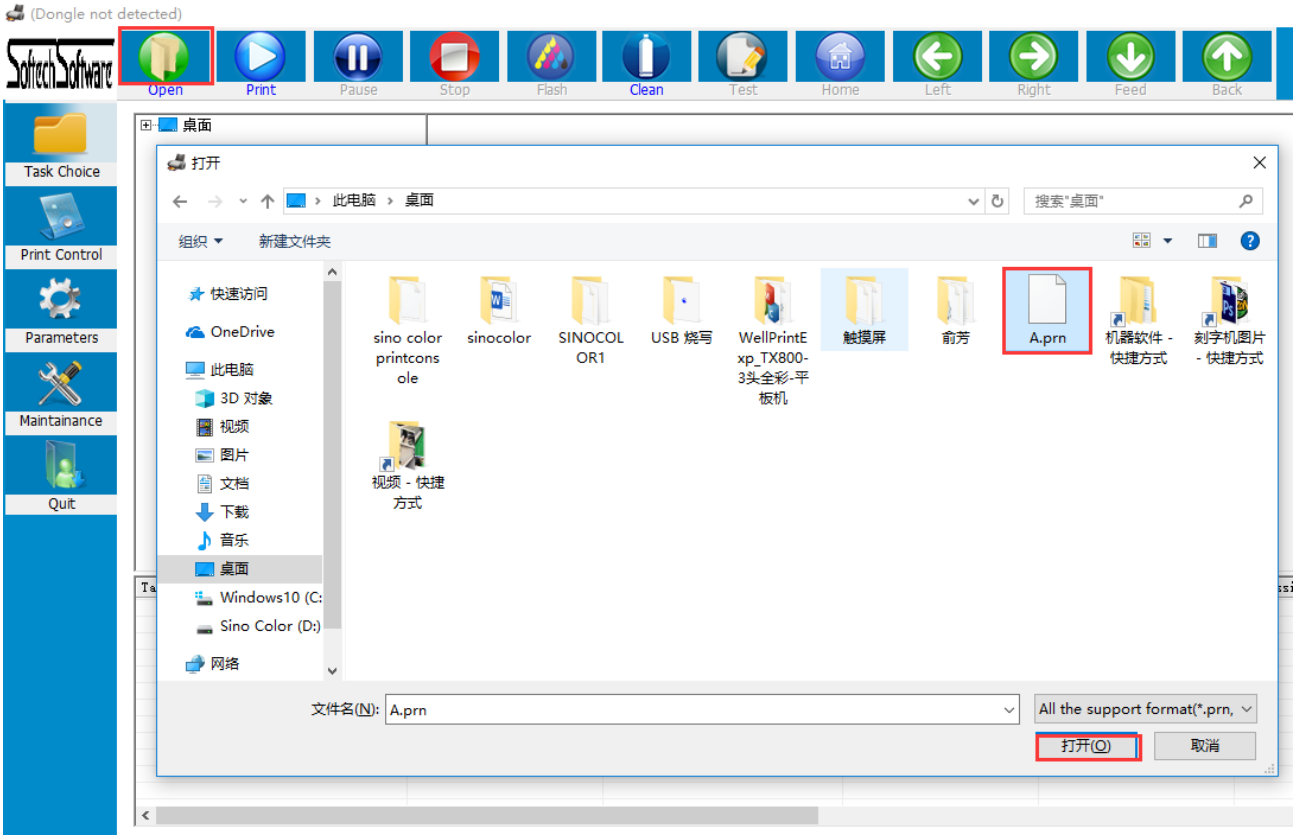
Otherwise the printing will have problem.

四、打印 Print

4.1 载入打印文件 Upload the printing file

载入打印文件有三种选择，第一种，点击主菜单栏的打开文件界面，根据路径找到 RIP 好的 PRN 文件，选中之后双击或者点击下方打开。

There are three options for loading the file. The first one is to click ‘’Open’’ in the main interface and find PRN file(after RIP well). Double click on it or click to open.



第二种，主菜单栏点击任务选择，找到存放 RIP 文件路径，双击需要打印的文件

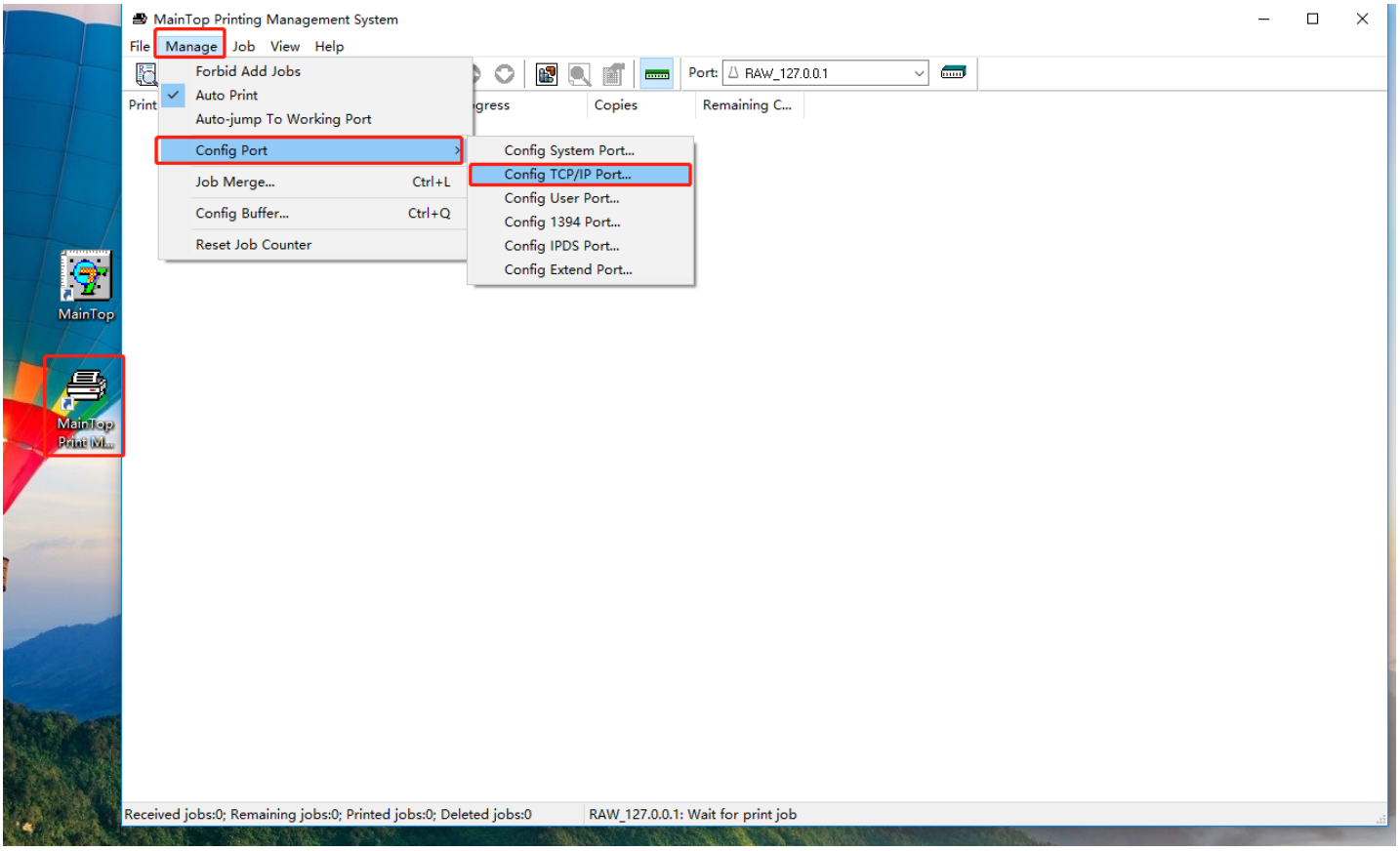
Second, click ‘’Task Choice’’ in the main menu, find the path to store the RIP file, and double-click the file to print.

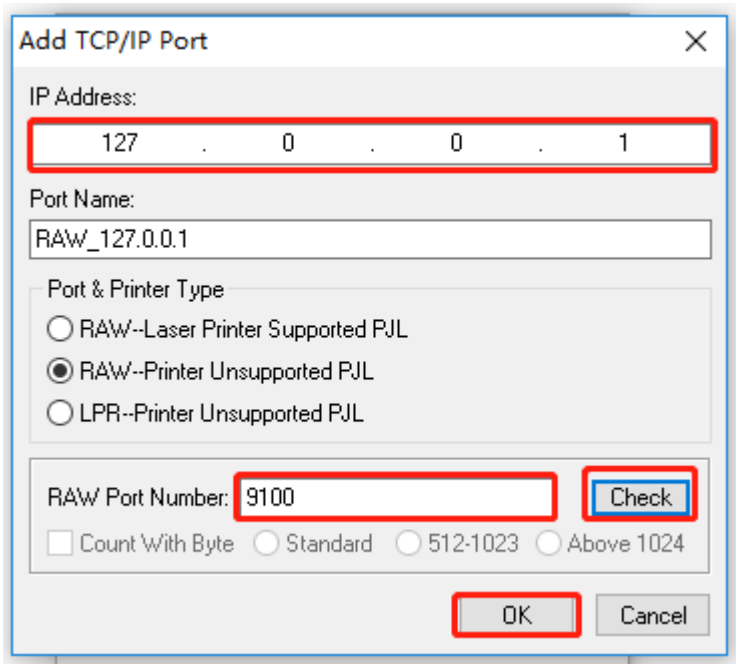
第三种， RIP 软件直接打印。

打开如下图示“MainTop Print Manager”设置端口“127.0.0.1”直接打印

Third, Print directly from the Rip Software.

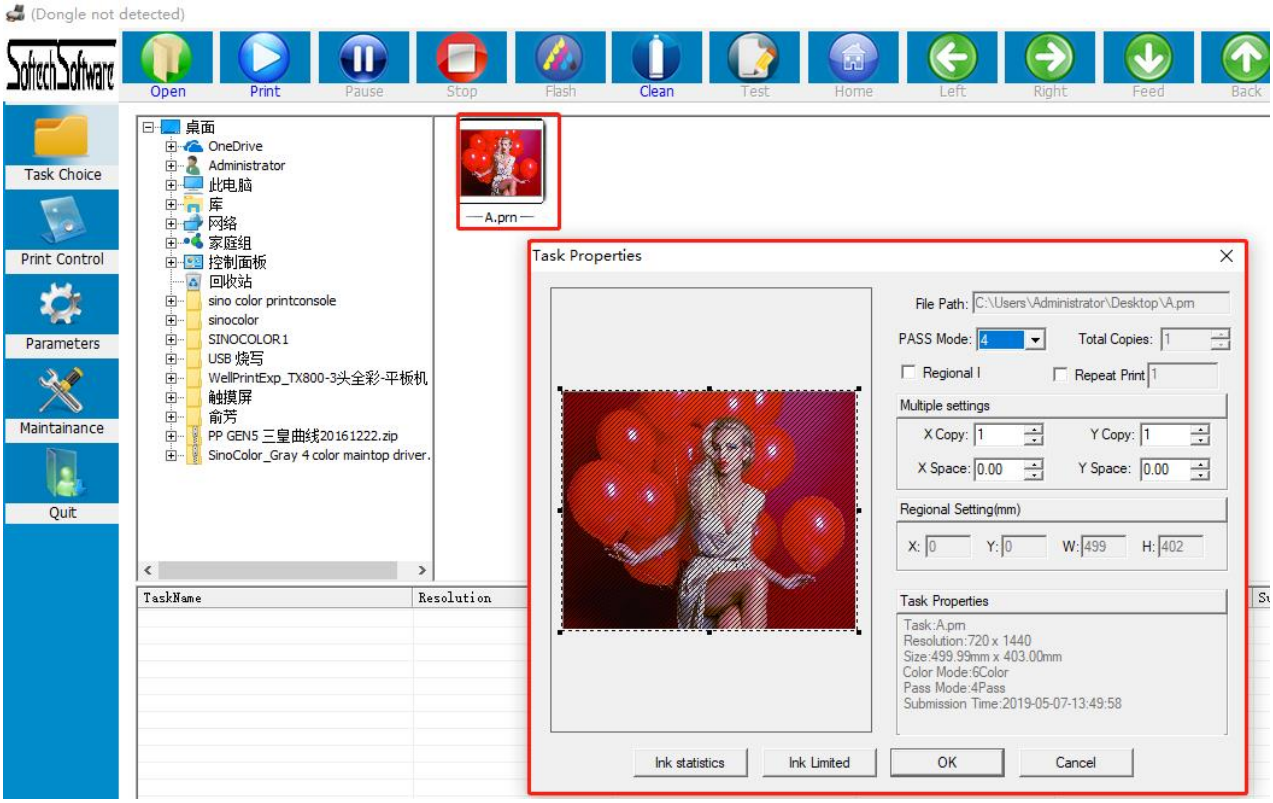
Open the "MainTop Print Manager" (If your printer is using Maintop Rip Software), setting port "127.0.0.1" as shown below to print directly


MainTop Printing Management System
File
Manage
Job
View
Help
Forbid Add Jobs
Auto Print
Auto-jump To Working Port
Config Port
Job Merge... Ctrl+L
Config Buffer... Ctrl+Q
Reset Job Counter
Config System Port...
Config TCP/IP Port...
Config User Port...
Config 1394 Port...
Config IPDS Port...
Config Extend Port...
Port: RAW_127.0.0.1
Print
Copies
Remaining C...
MainTop
MainTop Print M...
Received jobs:0; Remaining jobs:0; Printed jobs:0; Deleted jobs:0
RAW_127.0.0.1: Wait for print job


Add TCP/IP Port
IP Address:
127 . 0 . 0 . 1
Port Name:
RAW_127.0.0.1
Port & Printer Type
RAW--Laser Printer Supported PJL
RAW--Printer Unsupported PJL
LPR--Printer Unsupported PJL
RAW Port Number: 9100
Check
Count With Byte
Standard
512-1023
Above 1024
OK
Cancel

当双击要要打印任务时，会弹出任务属性框，如下图所示

When you double-click the task you want to print, will pop up task properties window like below:



任务属性 Function of Task properties：

重复打印，当勾选重复打印之后，每次打印完成，车头都会复位，然后再同一白边起始位置开始打印同一个任务。

多幅设置，可以设置横向幅数和纵向幅数，中间可以设置间隔，间隔的单位是 mm 毫米

区域打印，可以手动选取文件的一部分进行打印，当区域打印时，重复打印，和多幅设置无效

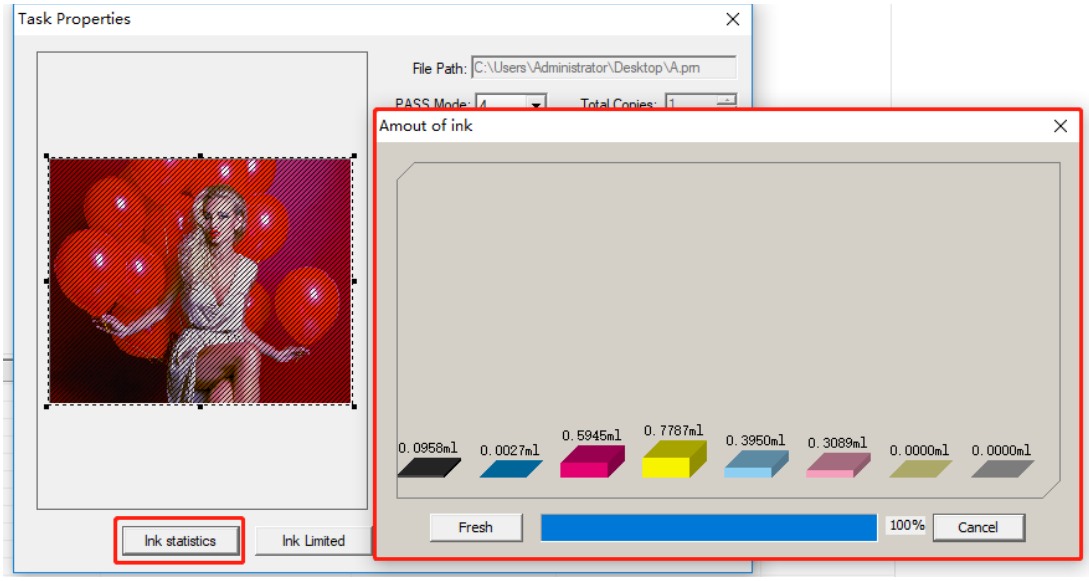
量统计： 表示当前 PRN 文件所需的墨量

Repeat Print: When the ‘’Repeat print ‘’ is chosen, each time when printing completed, the carriage will back to base point, and then start to print at the same starting point.

Multiple setting, you can set the X (X Direction) and Y (Y direction) data, the space of two design (X Space, and Y Space). The data for space is based on millimeter.

Regional printing, you can manually select to print part of the file. In this case, repeat print and multiple settings are invalid

Ink statistics: Indicates the amount of ink requested for the current PRN file. Please check below picture.

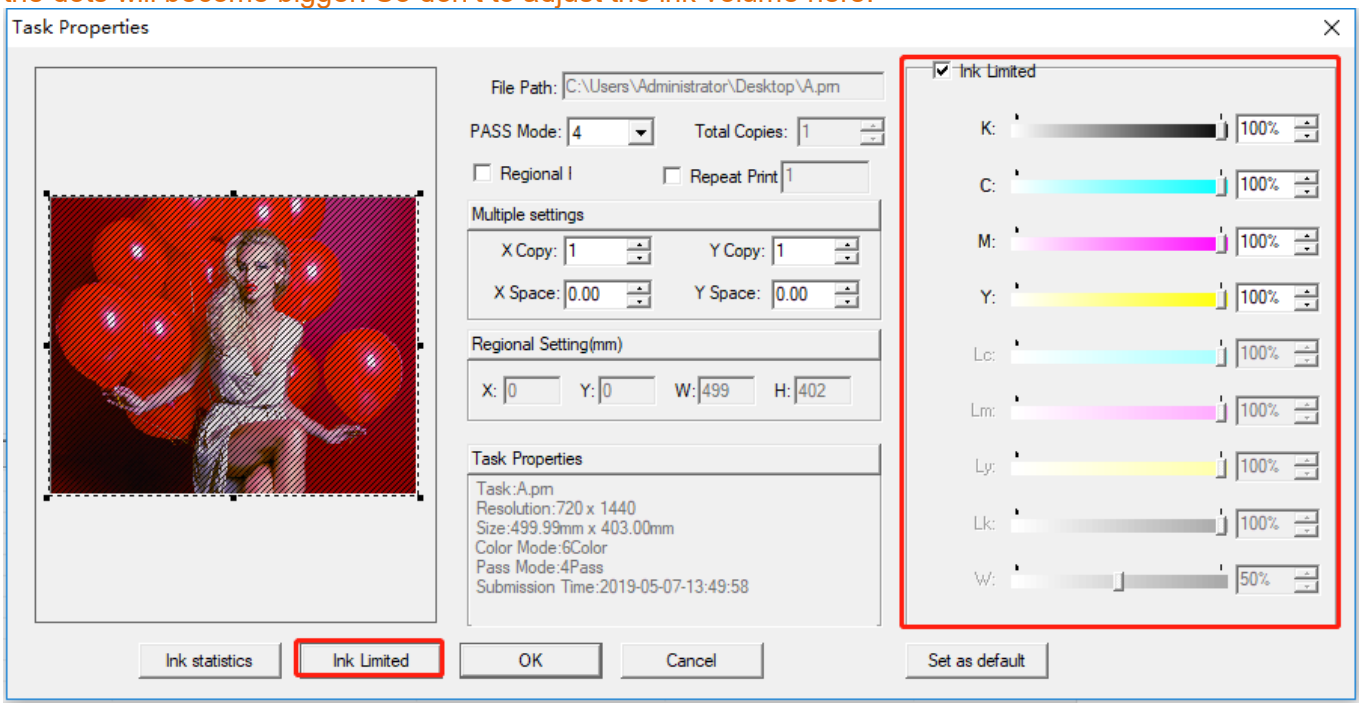

Task Properties
File Path:
C:\Users\Administrator\Desktop\A.pm
Ink statistics
Ink Limited
Amout of ink
0.0958ml
0.0027ml
0.5945ml
0.7787ml
0.3950ml
0.3089ml
0.0000ml
0.0000ml
Fresh
100%
Cancel

点击任务属性下面墨量控制，会出现如下图所示界面.

勾上墨量控制，可以对当前 PRN 文件 各墨量进行调节
注：当墨量截取之后，输出的图像精度会降低，点会变粗，一般不建议在此处调节墨量

When click ‘’Ink Limited’’ under the task properties, the interface shown as below.
If Tick Ink Limited, then can adjust the amount of ink in the current PRN file.

But please kindly note: If reduce the ink amount, the accuracy of the output image will decrease, and the dots will become bigger. So don’t to adjust the ink volume here.



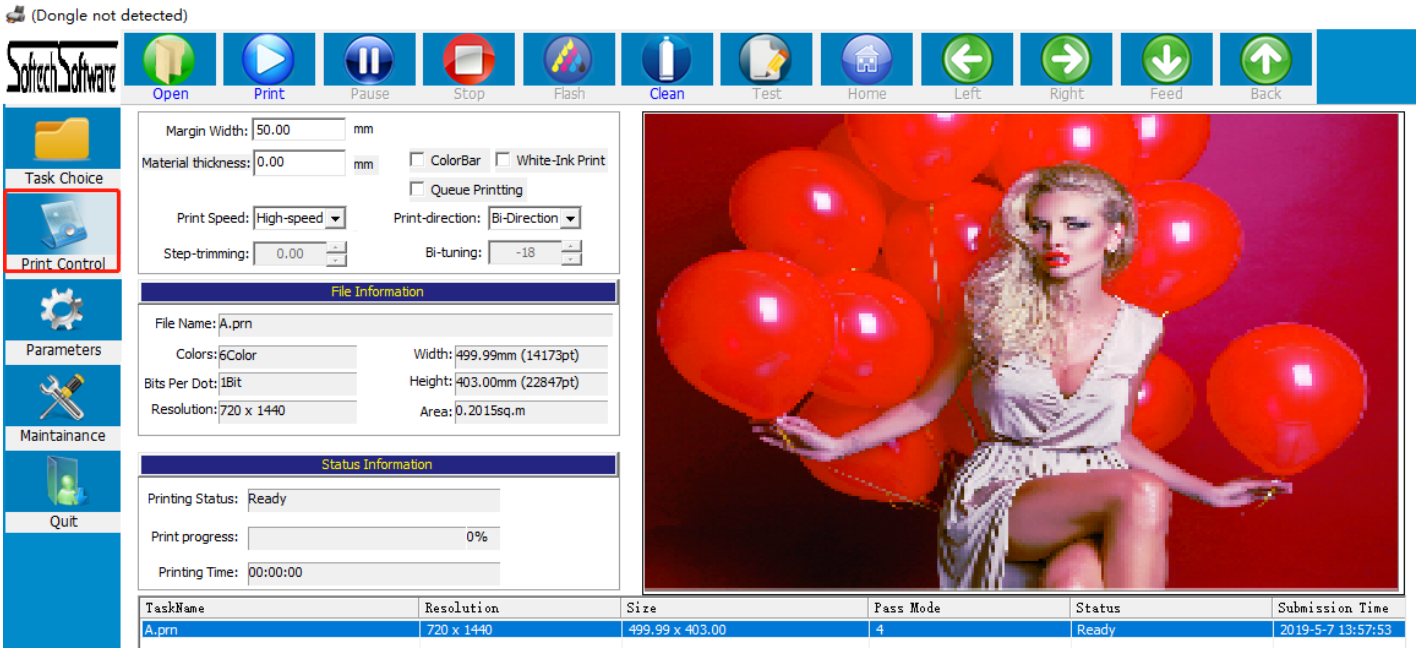
4. 2 开始打印 Start Print

打印:

当任务导入完成，可以点击软件“Print Control”，同时软件界面会显示当前PRN 任务的文件信息，例如设置起点打印位置“Margin Width”，查看颜色数量，面积等，如下图：

Print:

When the task uploaded, you can click “Print Control”, and the software interface will show the file information of the current PRN (The format of ripped art) task, for example, set the starting point position -“Margin Width”, and check the number of colors, Area size, etc., as shown below:



白边设置： 设置 PRN 文件 X 方向起始打印位置。

彩条打印：勾选彩条，彩条详细设置在参数设置界面，可以设置彩条宽度， 彩条到打印图片的距离，彩条只在图片左侧，右侧，或者在两侧都出

队列打印： 当同时导入多个 PRN 任务时，勾上队列打印，会连着打印完所有任务

车头速度：可以选择高、中、低速，具体速度在系统维护，运动设置界面可调

打印方向： 可以选择单向左，单向右，双向，选择双向打印时，要先调试好双向值

点击“print”即可打印任务。

Margin Width: Set the position to start printing in the X direction.

Color Bar: Tick the color bar, then will print with color bar. (Can find the setting of color bar inside ‘’Parameters’’).

Margin Width: Set the position to start printing in the X direction.

Color Bar: Tick the color bar, then will print with color bar. (Can find the setting of color bar inside ‘’Parameters’’).

Queue printing: When importing multiple PRN tasks at the same time, choose the queue print, it will print all the tasks one by one.

Print speed: high, medium and low speed can be selected. The exact speed can be adjusted in ‘’Maintenance’’-‘’Motion Setting’’.

Print direction: You can select ‘’to-left’’, ‘’to-right’’, and ‘’Bi-direction’’ printing. When selecting bidirectional printing, you must first finish the bi-direction printing calibration (Calibration it from "Maintenance"- Bias Calibration"- "Bi-Dir Offset")

Click "print" to print the task

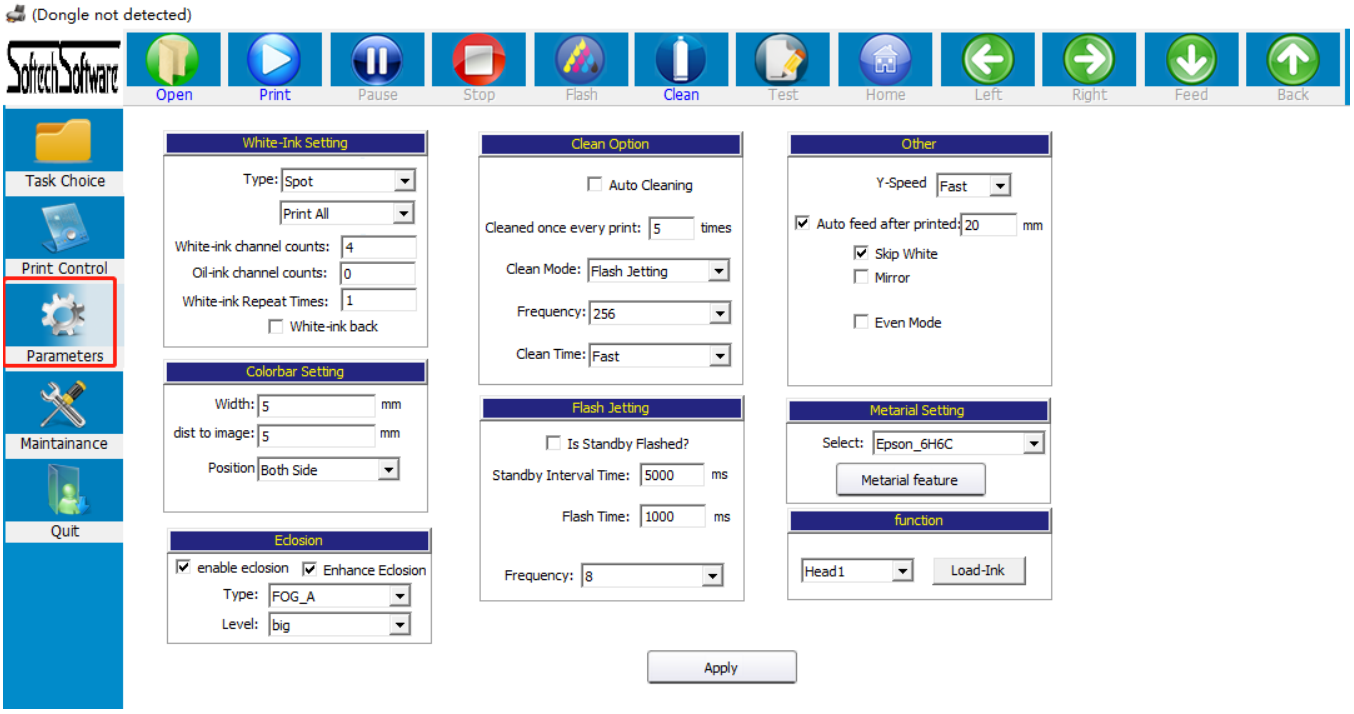
五，软件功能介绍 Introduction of The Function of Software

5.1 标题菜单栏 Title Menu

打开文件： 导入 RIP 好的 PRN 文件进行打印
打印：导入好 PRN 文件之后，选种文件，点击打印，开始打印当前任务
暂停：打印过程，暂停打印，小车复位，按钮此时变为 继续，点击继续，任务继续打印停止：停止当前打印任务
闪喷：打开或关闭喷头待机闪喷
清洗：当喷头状态不佳时，对喷头进行清洗打印校准图：打印喷头状态图，垂直状态图
车头回零：当车头不在原点时，可以让小车直接复位回到原点
左移：小车向左移动
右移：下车向右移动
进料：材料向前移动
退料：材料向后移动

Open: Import PRN file for printing
Print: After importing the PRN file, select the file and click Print to start printing the current task.
Pause: the printing process, pause printing, the car resets, the button changes to <continue> at this time, click continue, the task printing again
Stop: Stop printing for current printing task
Flash: turn on or off the nozzle standby flash
Clean: When the need is in poor condition, need cleaning.
Test: print nozzle status data, vertical state diagram
Home: when the front of the carriage is not at the origin, Click Home, the carriage can be directly reset to the original point.
Left: the carriage moves to the left
Right: the carriage moves to the right
Feed: material moves forward
Back: material moves backward

5.2，参数设置界面 ‘’Parameter’’ Interface



白墨设置：请保持出厂设置。
White ink setting: Please don’t change the parameter here. Keep it as factory setting.

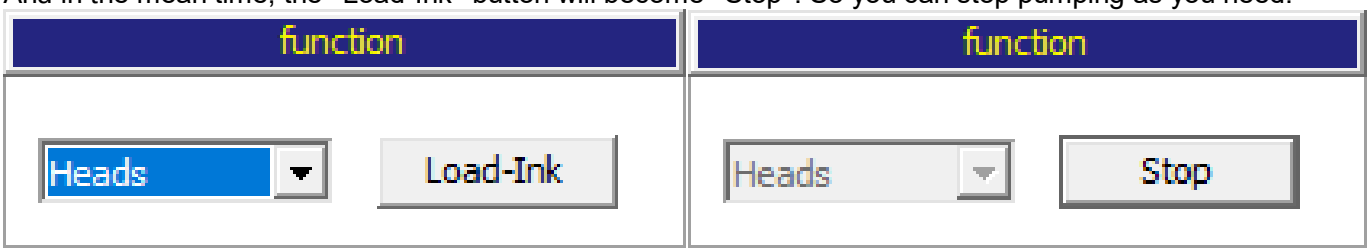
彩条设置：设置彩条的宽度，离图片距离，位置，左侧、右侧、或者两侧
Color setting: set the colorbar width, distance to image, position （left side, right side, or both sides）

边缘羽化：默认只需要勾上边缘羽化即可（请勿选择加强羽化），类型一般选择雾喷，幅度根据实际调整，幅度越大，速度越慢，效果越好。 加强羽化在打印色块，或者喷头状态较差时开启使用，开启加强羽化，打印速度会降低， 但效果会提升很多，可以根据打印出来效果实际调试
Eclosion: Usually only need tick ‘’enable eclosion‘’. Please don’t choose ‘’Enhance eclosion’’. That will generate problem.
The ‘’type‘’ generally chooses Fog.
‘’Fog’’ is common eclosion.
‘’Fog_A’’ is enhance eclosion.
The level is adjusted according to the actual situation. The larger level, the slower speed and the better effect. “Fog_A‘’ will be needed when printing solid color/pure color, or when the nozzle is in poor condition. Turn on the ‘’Fog_A’’, the printing speed will decrease, but the effect will be improved a lot, you can adjust just according your printing result.

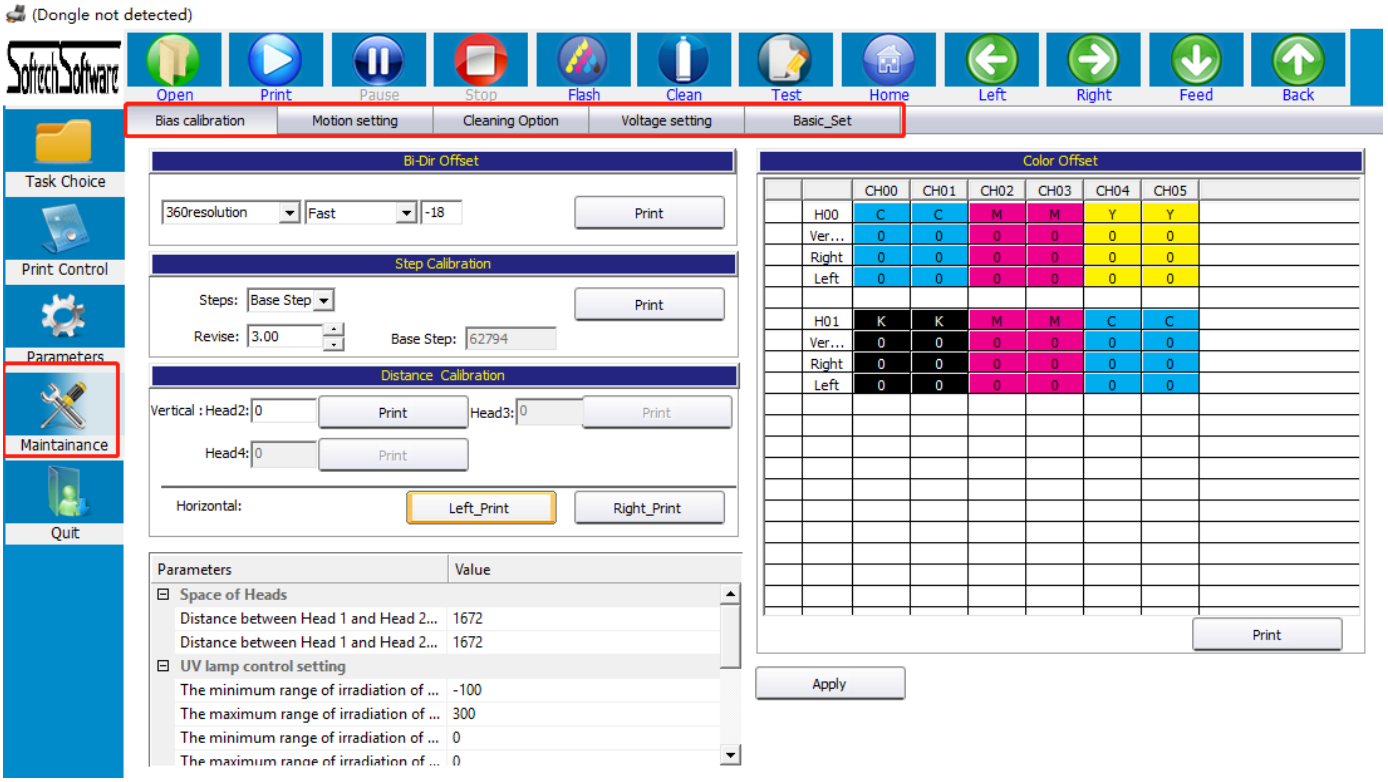
自动清洗 和闪喷 Clean Option and Flash jetting:
请勿修改， 保存出厂设置
Please don’t edit this part. Just keep factory settings.

装墨功能：可选：喷头 1、喷头 2 和 双头 。点击“装墨”按钮，系统控制墨盒上升到抽墨位置，墨泵开始工作对喷头进行抽墨，按钮显示变为“停止”，直至手动点击“停止”按钮，墨泵停止抽墨
Function- Load Ink:
You can choose Head 1, Head 2 and Heads.
Heads 1, means pump ink for left printhead.
Heads 2 means pump ink for right printhead.
Heads, means pump ink for both heads.

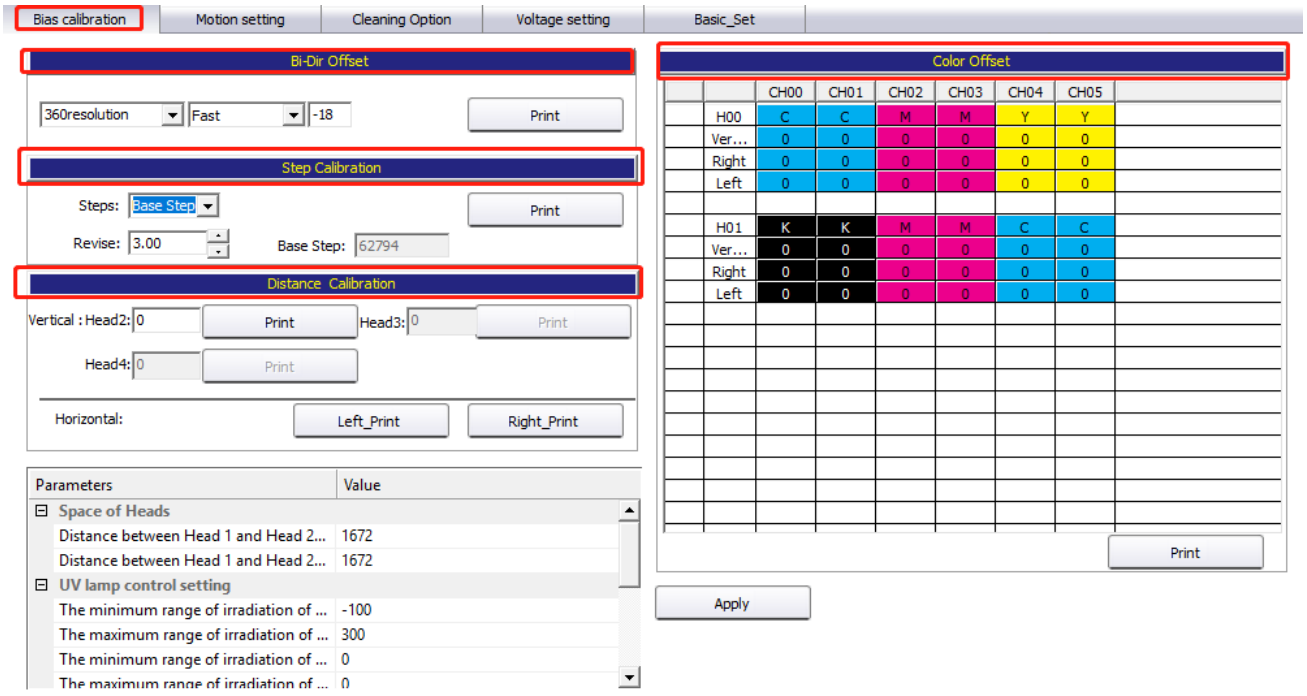
Then click the “Load-Ink” button, will start to pump ink.
And in the mean time, the ‘’Load-Ink’’ button will become ‘’Stop’’. So you can stop pumping as you need.



5.3 软件校准 Maintenance



5.3-1 偏差校准 Bias calibration:



双向校准：打印前需要对 180 精度，360 精度，低、中、高速分别打印校准图校准，在调试说明里对双向校准图

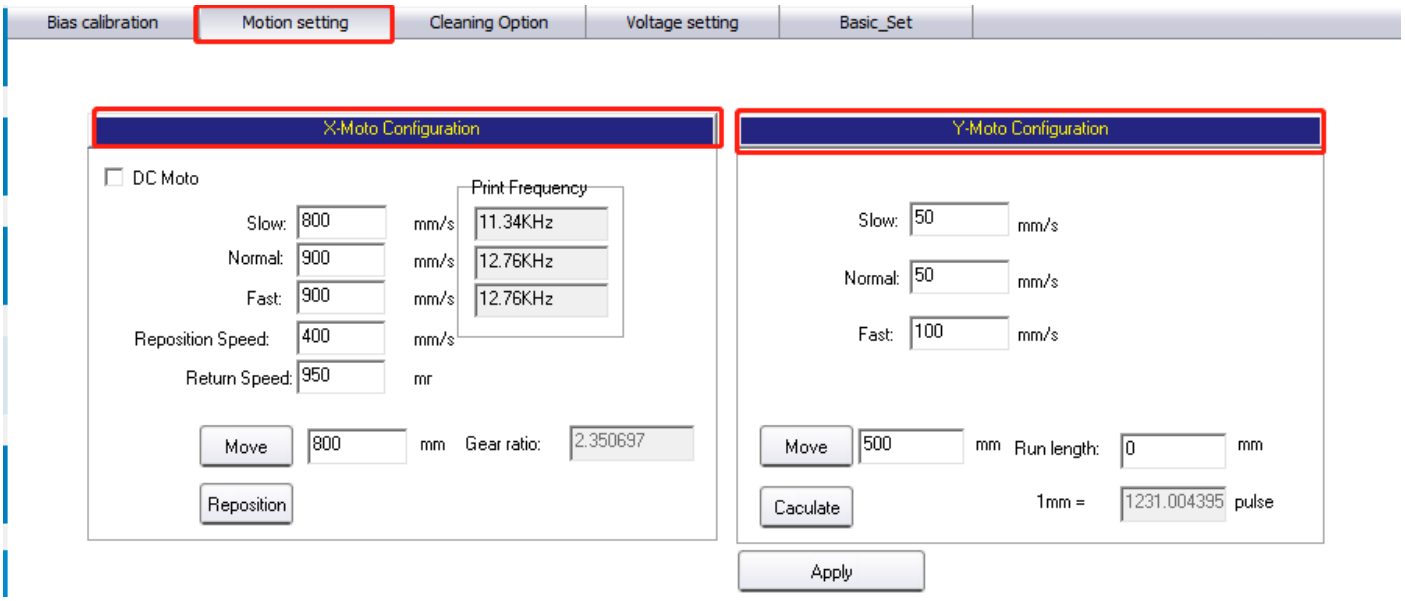
有详细的说明。
Bi-Dir calibration: Before printing, you need to do calibration for 180 ,360 resolution, low, normal and Fast speed. You can find detail introduction of bi-direction calibration in previous pages.

步进校准：打印前需要对“基础”和需要打印的步进进行校准
Step calibration: before printing, need Calibration of the “base step” and the steps that need to be printed

距离校准：分为横向距离和纵向距离校准
Distance calibration: Include vertical distance and horizontal distance calibration

颜色校准：对机器颜色进行配置和校准
Color Offset: Adjust the printer color. Please keep as factory settings. Otherwise the color will have problem

5.3-2 运动设置：Motion Settings:



电机设置（小车方向）X Motor configuration(carriage moving direction)：

打印控制界面的车头速度在此处设置，低、中速可以根据实际情况自己设置.
高速有一定速度限制，不能超过喷头的喷打频率，建议出厂默认设置。
复位速度 和单向会车速度建议保存出厂设置。
移动、复位：校准 X 齿轮比。

The ‘’Print speed’’ in ‘’ print control’’ interface is set here. The low and normal speed can be set according to the actual situation.

There is a certain limit at high speed, which can't exceed the printing frequency of the nozzle. The factory default setting is recommended.

Reposition speed and return speed: Please keep factory settings. Don’t edit it.

Move, reposition: Calibrate the X gear ratio.

Y 电机设置(走料方向） Y Motor configuration (feeding direction)::

低，中，高速，请保持出厂设置。
移动、计算，校准 Y 方向齿轮比时使用，详细在调试步骤中有说明。

The speed of the Y， please keep as factory settings and don’t edit them.

Move and Calculate Use them when calibrating the Y-direction gear ratio, the detail process has mentioned in test step.

注： 当前界面参数修改之后，都需要点击下方的应用按钮，否则修改参数无效

Note: After modifying the current interface parameters, you need to click Apply button below, otherwise the modification parameters are invalid

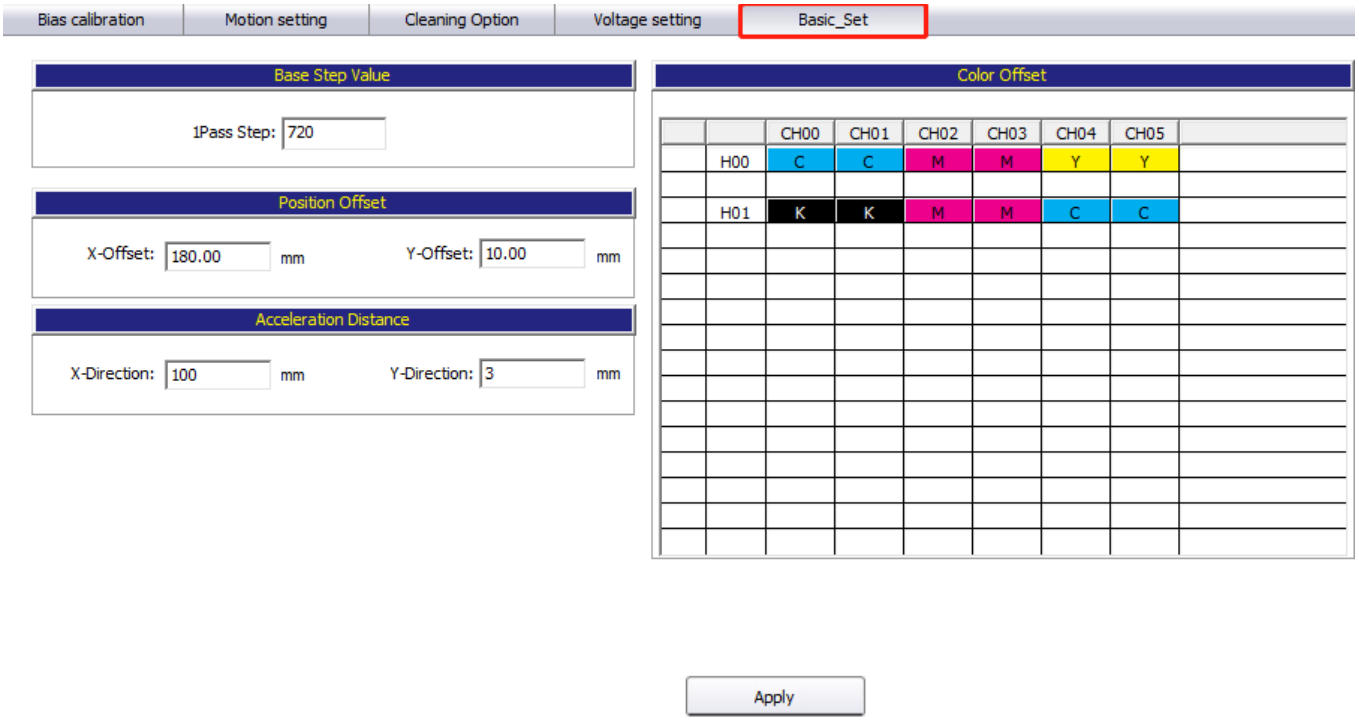
5.3-3 清洗设置, 电压设置 Cleaning option And Voltage Setting:

请保持出厂设置
Please keep factory settings and don't edit these.

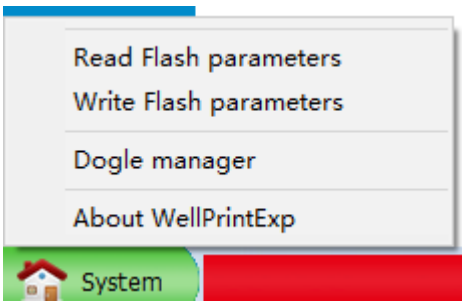
5.3-4 基础设置 Basic Settings:

本界面其他内容请保持出厂设置。

Please keep as factory settings.



六， 系统菜单 System menu:



读取闪存参数和写入闪存参数功能暂未开放。 请勿点击
Read Flash Parameters and Write Flash Parameters still not available. Please don't click.

加密狗管理，当使用分期加密狗时，到期需要写入密码才能继续使用
Dongle management, when using the staging dongle, you need to write a password to continue using it.

七，常见故障处理 Frequent Trouble-Shooting：

1、开机无动作 No action when booting

（1）、数据线连接有问题，检查光纤线顺序是否对应。（主板显示A）
（2）、检查电机信号线是否连接正确，线序是否正确，X,Y 电机信号线是否接反
（3）、检查电机驱动器是否正常
（4）、确认开机动作设置是否正确，重新导入参数或固件
（5）、检查板卡电源，观察 D71、D72、D74，D80 指示灯是否亮
(1) There is a problem with the cable connection. Check if the order of the fiber cables corresponds. (Main board display A)
(2) Check if the motor signal line is connected correctly, whether the X, Y motor signal line are reversed.
(3) Check if the motor driver is normal
(4) Confirm that the boot action settings are correct, re-import parameters or firmware
(5) Check the power of the board，whether the D71, D72, D74, D80 light are on.

2、开机 X 电机只向一个方向移动并不停止 After booting, X motor only moves to the left and doesn't stop.

（1）、电机信号线有问题，只接 3 根数据线、线路之间有短路， 信号线不通等
（2）、感应器坏掉，手动挡住感应器，确认限位感应器是否正常
（3）、板卡开机动作设置限位极性与实际使用极性不对应，（此时可以通过手动挡住感应器来判断， 如果挡住感应器动作正常，那肯定是设置极性反了）
（4）、电器驱动器故障，更换驱动器
(1) There is a problem with the motor signal line. Only 3 data cables are connected, there is a short circuit between the lines, and the signal lines are not connected.
(2), The sensor is broken, manually block the sensor, confirm whether the limit sensor is normal
(3), The board power-on action setting limit polarity does not correspond to the actual use polarity, (this can be judged by manually blocking the sensor, if the sensor is blocked, the polarity is reversed)
(4), Electrical drive failure, replace the drive

3、软件不联机 The software is offline

（1）、确认开机动作是否完成。
（2）、检查电脑是否识别到板卡驱动，如没有，需重新安装驱动

（3）、电脑是否插了加密狗，软件左上角是否显示未检测到加密狗，重新插拔加密狗
（4）、软件版本不对应，软件 USB 类型设置不对应
(1) Confirm whether the booting action is completed.
(2) Check if the computer recognizes the board driver. If not, reinstall the driver.
(3) Whether the computer has a dongle inserted, whether the dongle is not detected in the upper left corner of the software, and the dongle is re-plugged.
(4), The software version does not correspond, the software USB type setting does not correspond

4、软件联机之后小车一直左移 **After the software is online, the carriage has been shifted to the left.**

（1）、软件读取不到光栅值，软件左下角小车位置一直显示 0，检查光栅解码器是否正常，线路连接是否有问题
（2）、软件读取光栅值反，左下角小车位置一直显示 负 数，更改光栅极性，或者调换光栅解码器的A、B 线序
（3）、机器原点方向设置错误
(1), The software cannot read the encoder value, the carriage position in the lower left corner of the software is always displayed 0, check whether the encoder reader is normal, there is a problem with the cable connection.
(2), The software reads the encoder value inverse, the carriage position in the lower left corner always shows a negative number, change the grating polarity, or change the A, B line sequence of encoder reader.
(3), Machine origin direction setting error

5、喷头无闪喷 **Flash is not working**

（1）、板卡逻辑，软件版本，喷头类型不对应
（2）、检查喷头排线是否插好，16PI 数据排线是否插对
（3）、板卡损坏，换板卡测试， 哪个板卡
（5）、软件闪喷区域设置不对
(1), Board logic, software version, nozzle type does not correspond
(2) Check whether the nozzle cable is plugged in, and whether the 16PI data cable is plugged in.
(3), Board damage, board change test,
(5), The software flash spray area is set incorrectly

6、打印不了状态图 **Can not print nozzle test**

（1）、打印状态图无动作，软件内 PRN 文件不对，联系儒彩技术支持解决
（2）、软件提示 1 PASS 数据异常，软件版本和板卡不对应
（3）、提示 Y DPI 太小，软件配置文件不对应，状态图与软件设置不对，一般是单双头，喷头类型不对应等
（4）、软件提示数据交织错误，软件设置白墨通道数不对；二次解密软件版本不对。
(1), The print test has no action, the PRN file in the software is incorrect, contact the SinoColor technical support to solve
(2), Software prompt 1 PASS data is abnormal, the software version and the board do not correspond
(3), Prompt Y DPI is too small, the software configuration file does not correspond, the state diagram and software settings are wrong, generally single and double head, nozzle type does not correspond, etc.
(4), The software prompts data interleaving error, the software sets the number of white ink channels is incorrect; the secondary decryption software version is wrong.

7、喷头状态图缺列 **Some lines of nozzle test missing completely.**

（1）、检查喷头排线是否插好，重新插拔喷头数据线
（2）、软件系统维护，基础设置界面，通道是否关闭
（3）、检查软件墨序，是否按照本说明书说明装
（4）、多抽下墨，是否喷头没抽出来墨，清洗液冲下喷头，确认喷头是否堵塞
(1) Check whether the nozzle cable is plugged in, re-plug the nozzle data cable
(2), Software system maintenance, base settings interface, whether the channel is closed
(3) Check the software ink sequence, according to the instructions in this manual, especially the DX7 head, ensure the ink sequence of the flash, the adjacent two columns are the same color.
(4), Draw more ink, whether the head does not draw ink, the cleaning liquid washes off the nozzle, confirm whether the nozzle is blocked

8、打印喷头状态图乱喷 **Nozzle test error**

（1）、检查软件、板卡、喷头类型是否对应
（2）、重插喷头排线，检查下 29pi 长数据线，是否插好，是否有歪斜
（3）、更换一块喷头小板，更换喷头排线试试
（4）、更换喷头测试
(1) Check whether the software, board, and nozzle type correspond
(2), Re-insert the nozzle cable, check the next 29pi long data cable, whether it is plugged in, whether there is skew
(3), Replace a head board, try to replace the nozzle cable
(4), Replace head

9、打图断线 **Nozzle test not good. Seems many nozzles are not printing**

（1）、喷头缺针较多，清洗喷头，保证喷头最大可能的少缺针
（2）、打多 PASS，PASS 数越多，羽化越大，效果会有改善
（3）、开启加强羽化，会对拉丝现象有改善， 速度会有一定下降

(1), The head lacks more pins, cleaning the nozzle, to ensure that the head with max pins
(2), Print high PASS, the more PASS number, the greater the eclosion, the effect will be improved
(3), Open the enhance eclosion, will improve the drawing phenomenon, the speed will be reduced

10、打图深浅道，露白 **Print with ligh or dark color lines. White out**

（1）、检查喷头安装是否与平台水平，
（2）、步进，垂直、双向是否校准好
（3）、开启加强羽化，效果会有明显改善

(1) Check whether the head installation is level with the platform.
(2), Step, vertical, Bi-Dir calibration is good
(3), Open the enhance eclosion, the effect will be better

11、读取 1PASS 数据错误，写入数据量不相等，设置微喷状态错误**1PASS data error, the amount of written data is not equal, set the micro-injection status error**

（1）、USB 接口或数据线有问题，更换数据线或更换电脑接口尝试
（2）、16pi 长数据线有问题，重插，或者更换
（3）、小车打印速度超过喷头喷打频率，降低打印速度
（4）、更换板卡测试

(1) There is a problem with the USB interface or the data cable. Try replacing the data cable or replacing the computer interface.
(2), 16pi long data cable has a problem, re-plug, or replace
(3), The printing speed of the carriage exceeds the spraying frequency of the head, make the speed slower
(4), Replace the board

Shanghai Rucai high-quality and cost-effective printing equipment, Recruitment dealers around the country, excellent conditions, welcome to contact us

Tel: 021-52063365 Mobile: 18939965809 Contact: Mr. Cai
Address: No. 318, Majiazhai Road, Fengxian District, Shanghai