GTRSH

热升华直喷设备使用手册

THERMAL SUBLIMATION PRINTER USER MANUAL

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型号定义 Model definition

- 品牌划分：G高通/K卡库
- 产品代数：12/13/14
- 序列间隔：-
- 幅宽基数：18/22/32
- 喷头数量：04/06/08
- 起始双喷：S
- 起始旗帜：Q
- 起始纺织：F
- 起始广告：U
- 结尾定义一机几用：1-2-3
- 4-5位结尾颜色：C
- 4-5位结尾数字：4/8颜色数量

非常感谢您选择购买本公司产品 Thank you very much for choosing to buy our products

- 为了确保全面了解本产品性能和正确安全的使用，请务必读完本手册并将其妥善保管。
- 说明书内容和产品参数有改动，概不通知。
- 我司已尽力编辑本手册并严格检测本产品，如果您发现任何错误，请告知我司，我司将万分感谢。
- 以下介绍对于安全操作非常重要，请务必严格遵守。

- To ensure full understanding of the performance and safe use, read this manual and keep it properly.
- Any changes to the contents of the instructions and product parameters are not notified.
- We have tried our best to edit this manual and strictly test this product. If you find any mistakes, please inform us. We will thank you very much.
- The following description is very important for safe operation and is strictly observed.

安全指导及设备接线 Safety guidance and equipment wiring

- 为了确保了解本公司产品性能和正确安全的使用，请务必读完在使用。
- 以下条目对于安全操作非常重要，请务必严格遵守。
- 如果设备放置在平滑台面上，请确保使用地脚，以免设备工作时移动；
- 请勿在易挥发的溶剂(酒精或稀释剂)附近安装设备。
- 挥发性溶剂与电子部件接触，可能会引起火灾和设备短路。
- 设备安装前解锁皮带固定架,6-16平方纯铜国标线，独立断路器,安装继电器式10000W稳压器。
- 设备在运作的时候,不要触摸任何金属部件及打印喷头。

- To ensure an understanding of the performance and correct and safe use of our company's products, please be sure to read them thoroughly before use.
- The following items are very important for safe operation and must be strictly followed.
- If the device is placed on a smooth surface, please make sure to use a foot to prevent it from moving during operation;
- Do not install equipment near volatile solvents (alcohol or diluents).
- Volatile solvents in contact with electronic components may cause fires and equipment short circuits.
- Unlock the belt fixing bracket before equipment installation, 6-16 square meter pure copper national standard line, independent circuit breaker, and install a relay type 10000W voltage regulator.
- When the device is in operation, do not touch any metal parts or printing heads.

初始步：电脑准备 Initial step: computer preparation

①系统：WIN7/10 64位 ②CPU:I7 10代 ③主板：正品华硕
④网卡：千兆网接口 ⑤内存：金士顿16GB ⑥硬盘：固态1T ⑦C盘分区：500G ⑧千兆光纤

① System: WIN7/10 64 bit ② CPU: I7 10th generation ③ Main board: Genuine Asus
④ Network card: Gigabit network interface ⑤ Memory: Kingston 16GB ⑥ Hard disk: Solid state 1T
⑦ C disk partition: 500G ⑧ Gigabit fiber optic

注意事项：PC配置低会造成,打印间歇停顿。
Attention: Low PC configuration can cause intermittent printing pauses.

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第一步：连接地线 Step 1: Connect the ground wire

- 连接地线请注意如下要点;
- 适合连接的地线位置
- 电源接地端
- 完好的地桩接地端"1.5米铜线连接"
- 禁止连接的接地位置
- 水管
- 煤气管
- 电话线和导闪电线

- Please pay attention to the following points when connecting the ground wire;
- Suitable location for connecting ground wires
- Power grounding terminal
- Intact grounding terminal of the pile "connected with 1.5 meters of copper wire"
- Grounding position prohibited from connection
- Water pipes
- Gas pipe
- Telephone lines and lightning conductors

注意事项：正确连接地线,否则导致电器元件损坏。

Attention: Connect the ground wire correctly, otherwise it may cause damage to the electrical components.

第二步：接入电源 Step 2: Connect the power supply

- 接入电源请注意如下要点;
- 准备独立220V电源
- 安装2P/100A，剩余电流动作断路器
- 型号仅供参考NXBLE-63 2P C63 30mA 6kA
- 要求国标纯铜6^2-16^2电缆线
- 检查设备开关；是否全部断开
- 电源接入；左侧220V 右侧0V
- 打印系统独立电源,安装接触式稳压器10000W
- 再次；检查地线/喷车皮带锁

- Please pay attention to the following points when connecting to the power supply;
- Prepare an independent 220V power supply
- Install 2P/100A residual current operated circuit breaker
- The model is for reference only NXBLE-63 2P C63 30mA 6kA
- Requirements for National Standard Pure Copper 6^2- sixteen ^{2} Cable
- Check the equipment switches; Are all disconnected
- Power supply connection; Left 220V, right 0V
- Independent power supply for printing system, installation of contact voltage regulator 10000W
- Once again; Check the ground wire/spray truck belt lock

注意事项：设备每日工作结束关闭"总电源"剩余电流动作断路器。

Attention: After the daily operation of the equipment, turn off the "main power" residual current operated circuit breaker.

INSTALLATION AND COMMISSIONING

单面打印机
安装调试

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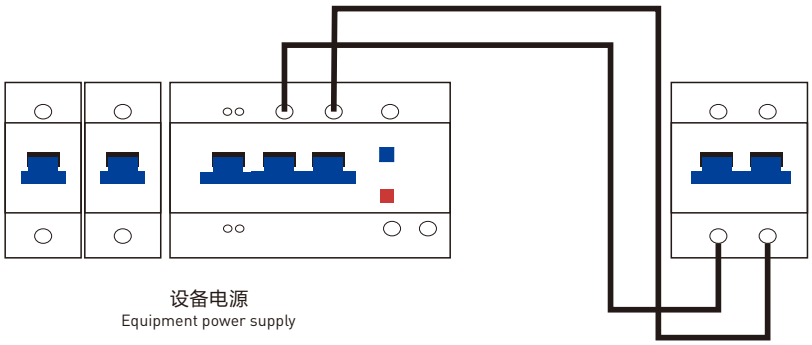
1.设备接电 Equipment power connection

设备烘干显色接电 如图所示设备右侧门打开配电柜内有对应的电闸接线位置。机头电源插孔在设备后方（三孔插座）电源线请用随机配件内所带的进行接电。设备地线接好后可以进行通电检查。

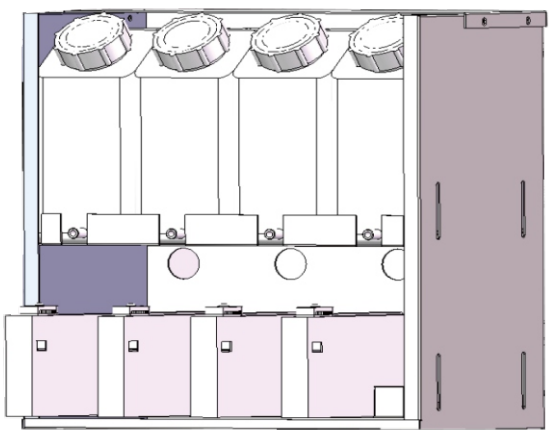
The drying and color display of the equipment are connected to the power as shown in the figure. The right side door of the equipment is opened, and there is a corresponding switch wiring position in the distribution cabinet. The power socket of the machine head is located at the rear of the device (three hole socket). Please use the power cord included in the accompanying accessories for power connection. After the equipment ground wire is connected, power on inspection can be carried out.



2.墨盒组装 Ink cartridge assembly

墨泵后面有一个平滑的表面有4个螺丝孔为安装墨盒位置，整体墨盒共分两层，上面一层为一级墨盒（简称加墨处）；下层为二级墨盒打印供墨处。墨盒组装注意一定要将连接位置4颗螺丝完全拧紧以免发生墨盒架固定不紧导致墨水洒落现象。

There is a smooth surface behind the ink pump with 4 screw holes for installing the ink cartridge. The overall ink cartridge is divided into two layers, with the upper layer being the first level ink cartridge (referred to as the ink adding area); The lower layer is the ink supply area for the secondary ink cartridge printing. When assembling the ink cartridge, it is important to fully tighten the four screws at the connection position to avoid ink splashing due to loose fixation of the ink cartridge holder.



3.软件安装 Software installation

高通官网：www.gtrsh.com-下载中心-登录账号-下载对应的打印软件和蒙泰（曲线内置）。
软件解压码：gtrsh
打印软件解压-安装WinPcap_4_1_3.exe此驱动-打开打印控制软件AT.MainAppForm.exe确认软件可以打开。
蒙泰解压-安装SETUP.EXE-加密狗插电脑上-蒙泰打印管理器-管理-设定TCP-IP端口-添加端口-IP地址：127.0.0.1-检测会出现9100。
蒙泰-文件-打印机设定-安装蒙泰打印机-GT...此为蒙泰曲线。建立文件-打印-打印机设定-端口选择127.0.0.1，纸张pass数上下对应否则曲线不生效。

Qualcomm official website: www.gtrsh.com - Download Center - Login Account - Download the corresponding printing software and Montage (built-in curve).
Software decompression code: gtrsh
Print Software Decompression - Install WinPcap_ 4_ 1_ 3. exe This driver - Open the print control software AT.MainAppForm.exe to confirm that the software can be opened.
Montai Decompression - Install SETUP.EXE - Plug the dongle into the computer - Montai Print Manager - Management - Set TCP IP Port - Add Port - IP Address: 127.0.0.1-9100 will appear during the detection.
Montai - File - Printer Settings - Install Montai Printers - GT... This is the Montai curve. Create File - Print - Printer Settings - Port Selection 127.0.0.1, Paper
If the number of Zhang passes corresponds up and down, the curve will not take effect.

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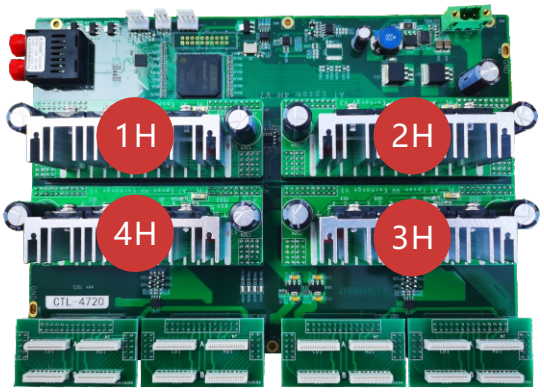
4.喷车板插线顺序 Spray board wiring sequence

下图和文字标注仅供参考；插线后请先勿通电与技术人员确认车板顺序是否正确；解密卡及喷头插线方式仅供参考。

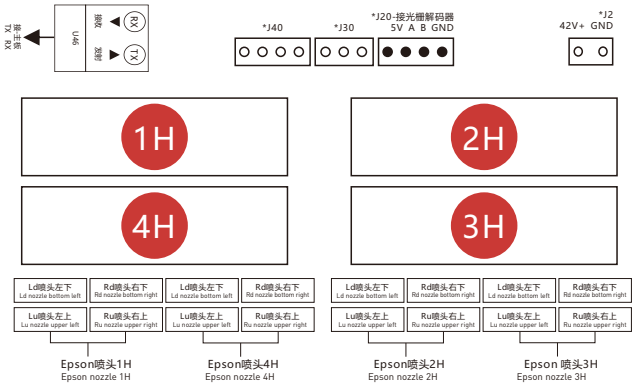
The following figure and text annotations are for reference only; After inserting the cable, please do not power on and confirm with the technical personnel whether the order of the vehicle board is correct; The decryption card and nozzle insertion method are for reference only.

小车板 Nozzle motherboard



Epson喷头1H Epson nozzle 1H　Epson喷头4H Epson nozzle 4H　Epson喷头2H Epson nozzle 2H　Epson 喷头3H Epson nozzle 3H

车板详细注解 Note on the details of the noble motherboard



此图仅供参考；请仔细确认位置是否正确
This figure is for reference only; Please carefully confirm if the position is correct

--**车板插线方式(转接板为16芯)**:LU喷头左上
--Car board wiring method (adapter board with 16 cores): LU nozzle upper left

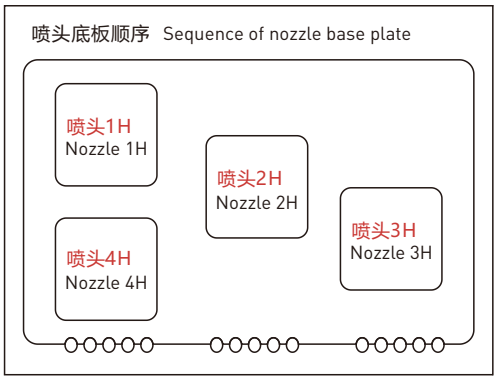
Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

--**车板插线方式**(转接板为14芯):LU喷头左上
--Car board wiring method (adapter board with 14 cores): LU nozzle upper left

Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

--**颜色顺序**：粉M 黄Y 蓝C 黑K
--Color order: pink, M　yellow, Y　blue, C　black, K

喷头底板顺序 Sequence of nozzle base plate



5.调速器、温控表、开关使用方法 Usage of speed regulators, temperature control meters, and switches

速度调节
Speed adjustment

点击SET后
温度闪烁
按上下箭头调节温度
调节后按SET确认

After clicking on SET
Temperature flicker
Press the up and down arrows
to adjust the temperature
Press SET to confirm after adjustment

调速开关 关闭状态等于0
The closed state of the speed control switch is equal to 0

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6.调节喷车高低 Adjust the height of the spray car

喷头距离布面为2.5mm以内，喷头距离过高会导致喷头打印在画面上不实边缘发虚，调节喷车高低时请注意检查4个喷头距离布面是否为完全平行状态，如不是请将底板调节至4个喷头距离布面高度一样状态。

The distance between the nozzle and the cloth surface is within 2.5mm. If the nozzle distance is too high, it will cause the nozzle to print on the screen with false edges. When adjusting the height of the spray truck, please pay attention to checking whether the four nozzles are completely parallel to the cloth surface. If not, please adjust the bottom plate to the same height as the four nozzles from the cloth surface.

喷车底板平行螺丝

第一步检查此螺母是否为拧紧状态（拧紧进行第二步）
第三步将此螺母慢慢旋转调至合适的高度后，拧紧螺丝，在拧紧螺母。
Step 1: is to check if the nut is tightened (proceed to the second step when tightening)
Step 3: Slowly rotate the nut to the appropriate height and tighten the screw Thread, tighten the nut.

第二步左右位置各有两颗螺丝将此螺丝松开一点
Step 2: There are two screws on the left and right positions, loosen this screw a little bit

7. 墨栈参数调节 Ink stack parameter adjustment

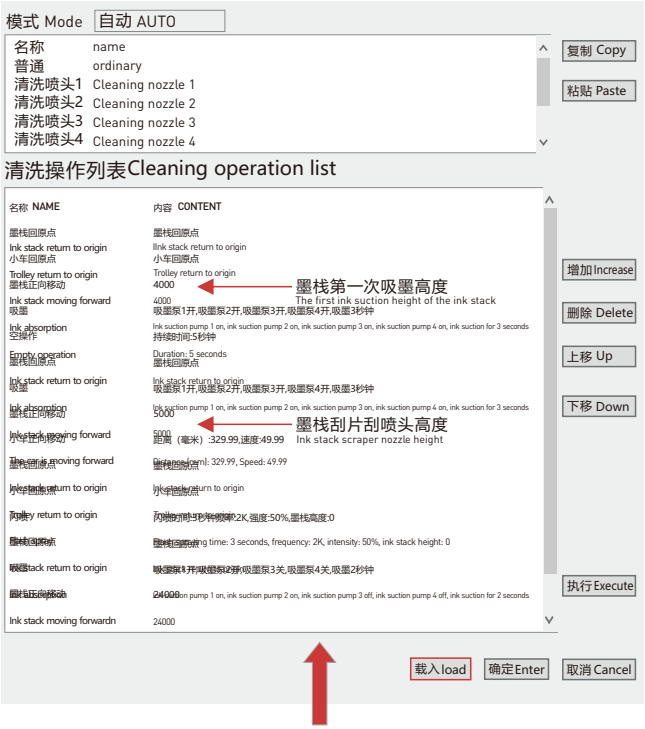
①清洗喷头时注意喷头与墨栈帽之间是否完全吻合，如吻合则无需手动调节如不吻合调节墨栈。
②下图软件打开方式：软件AT.Pcs.AssistTools.exe-清洗配置即可看到下图页面
③墨栈和喷头吻合但清洗时第一次喷头与墨栈之间高度不吻合，调节第一个墨栈正向移动参数（过低增加；过高减少）。
④墨栈和喷头吻合但清洗时刮墨高度过低，调节第二个墨栈正向移动参数（过低增加；过高减少）。
⑤墨栈和喷头吻合但清洗后打印第一次出现黑道。将墨栈仔细与喷头对好如还出现；频率、时间、强度、高度可适当增加点。

① When cleaning the nozzle, pay attention to whether there is a complete match between the nozzle and the ink stack cap. If there is a match, there is no need to manually adjust the ink stack if it does not match.
② The software opening method shown in the following figure: software AT.Pcs.AssistTools.exe - clean the configuration to see the following page
③ If the ink stack and nozzle match, but the height between the first nozzle and the ink stack does not match during cleaning, adjust the forward movement parameter of the first ink stack (increasing if it is too low; decreasing if it is too high).
④ The ink stack matches the nozzle, but the scraping height is too low during cleaning. Adjust the second ink stack forward movement parameter (increase if it is too low; decrease if it is too high).
⑤ The ink stack and nozzle match, but black spots appear for the first time when printing after cleaning. Carefully align the ink stack with the nozzle as if it still appears; Frequency, time, intensity, and height can be increased appropriately.

配置工具 Configuration Tools

提供参考
Provide reference

配置工具 Configuration Tools



现有产品
Existing products

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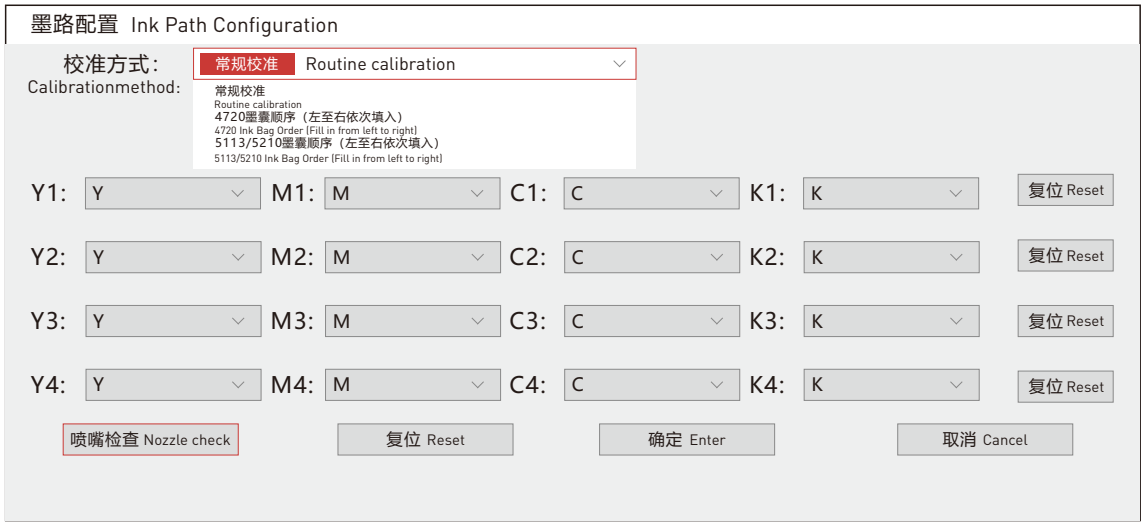
8.墨序校准 Calibration of ink sequence

AT.Pcs.AssistTools.exe-墨路配置-校准方式箭头-常规校准-对应的喷头（4720与3200是一个）按照从左到右顺序依次填入墨管内颜色，单击确定。

AT.Pcs.AssistTools.exe - Ink Path Configuration - Calibration Method Arrow - General Calibration - Corresponds to the nozzle (4720 and 3200 are the same), fill in the colors inside the ink tube in order from left to right, and click OK.



9.步进校准 Step-by-step calibration

AT.MainAppForm.exe-校准-步进校准-粗调-脉冲（脉冲20000请不要更改）-打印;用格尺测量打印出来的两条横线的内间距，填入“距离（mm）”中，点击[应用]。

AT. MainAppForm. exe Calibration Step Calibration Coarse Pulse (pulse 20000 please do not change) Print; Measure the inner distance between the two printed horizontal lines with a ruler, fill in the "Distance (mm)" field, and click [Apply].

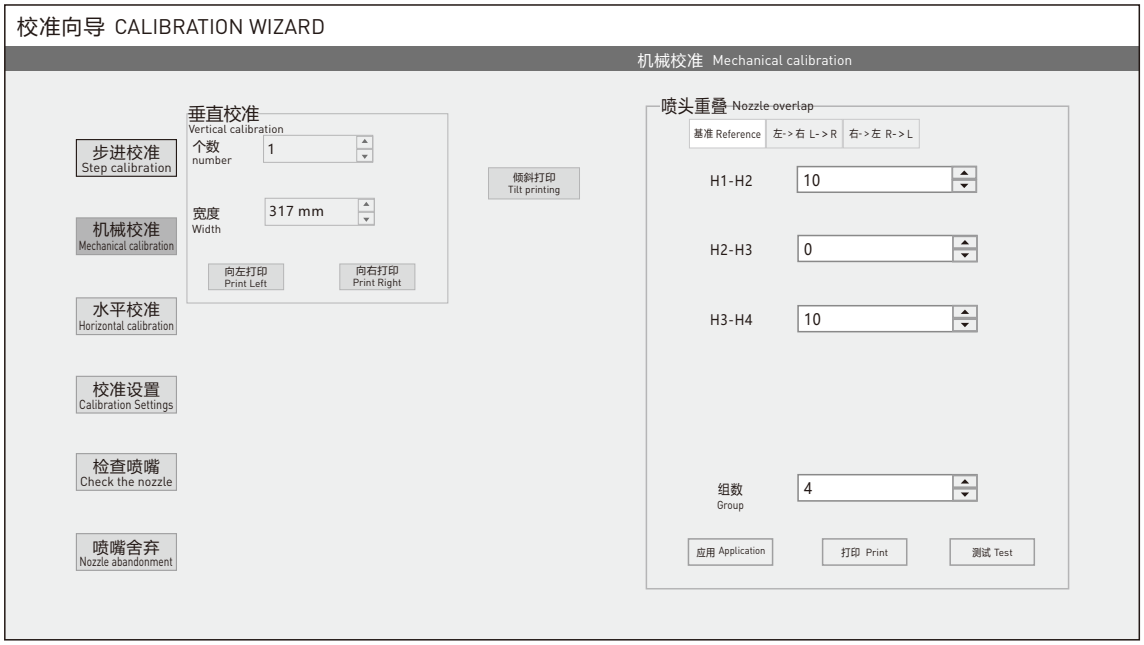
起始线 Start line

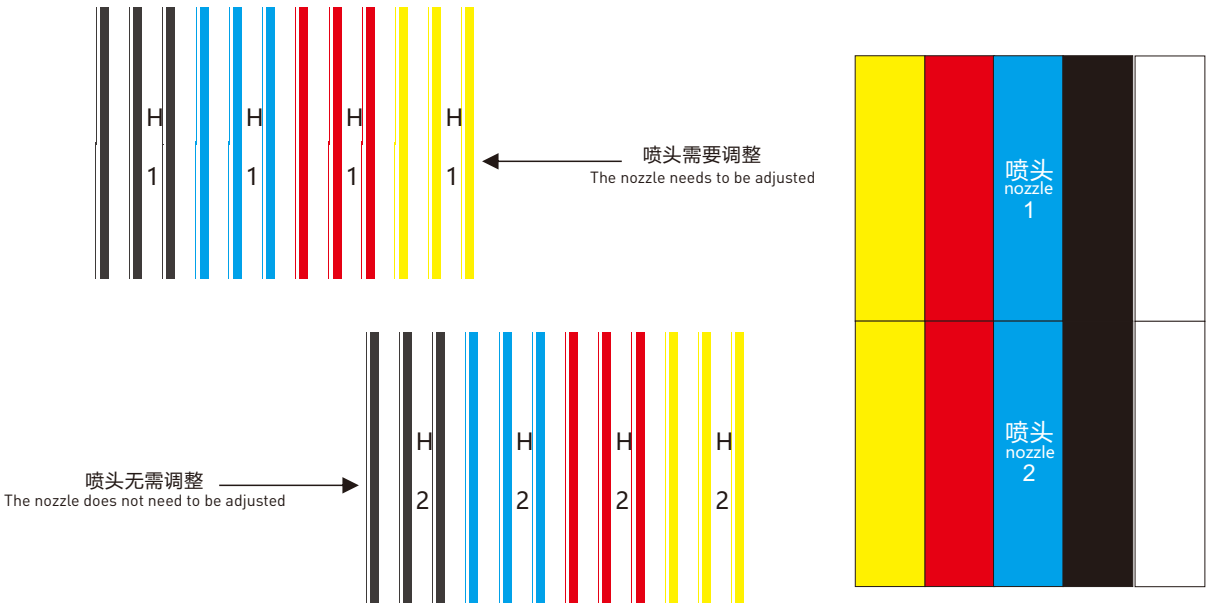
终止线 Finishing line

10.喷头垂直校准 Vertical calibration of nozzle

AT.MainAppForm.exe-校准-机械校准-向左打印；观察打印出的喷头状态是否垂直，如下图喷头1不垂直需要轻微旋转喷头，喷头2是直的则不需要调整；调整后向左和向右打印下看下打出来的喷头状态是否垂直，如果向左和向右的不一致请检查喷头底板前后的倾斜度。

AT. MainAppForm. exe - Calibration - Mechanical Calibration - Left Print; Observe whether the printed nozzle state is vertical, as shown in the figure below. If nozzle 1 is not vertical, slightly rotate the nozzle, and if nozzle 2 is straight, no adjustment is required; After adjustment, print to the left and right to check if the printed nozzle status is vertical. If there is a discrepancy between the left and right, please check the inclination of the nozzle base plate before and after.





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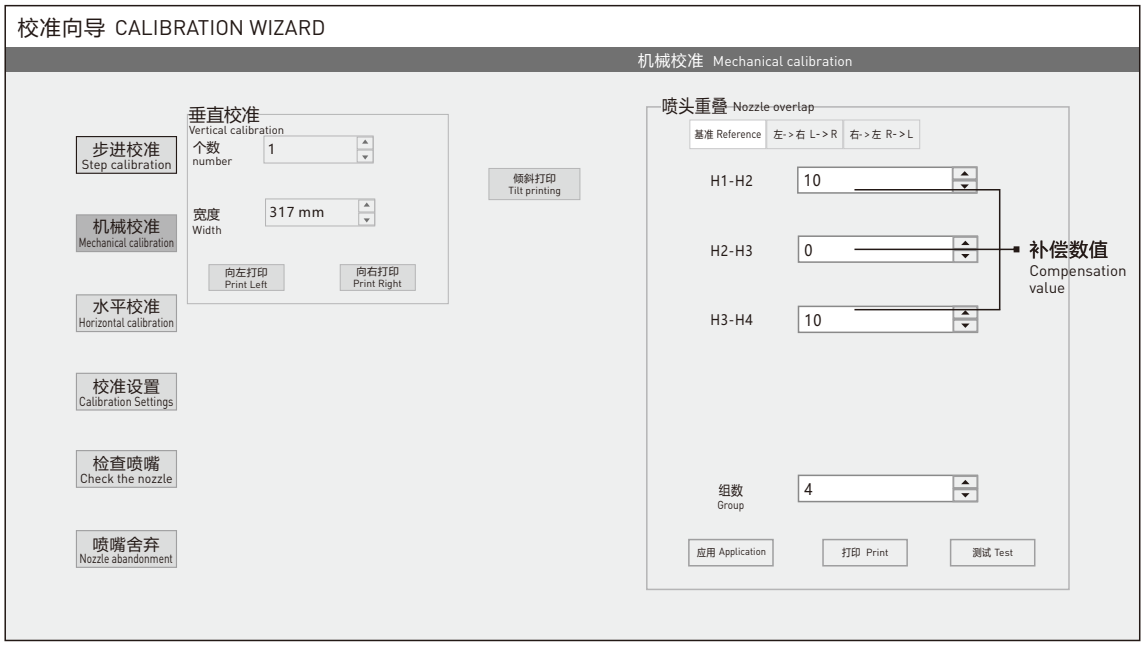
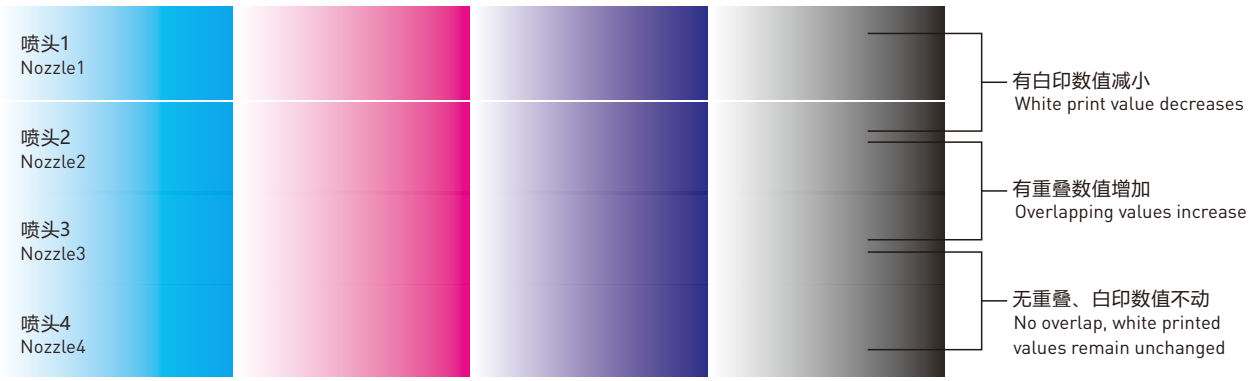
11.喷头重叠校准 Nozzle overlap calibration

AT.MainAppForm.exe-机械校准-右侧-基准-测试 观察打印出的是否没重叠和白印，如下图所示内容根据喷头之间重叠与白印来调试补偿数值（补偿数值最低为0不能为负数）,如补偿数值为0还有白印请物理调整喷头间距；调整后点击蒙泰做纯色图打印1pass根据1pass实际打印喷头之间距离调整喷头之间的补偿数值如没有重叠与白印则无需调整。

AT. MainAppForm. exe - Mechanical calibration - Right side - Reference - Test and observe whether there is no overlap or white print printed, as shown in the following figure. Adjust the compensation value based on the overlap and white print between the nozzles (the minimum compensation value is 0 and cannot be negative). If the compensation value is 0 and there is still white print, please adjust the nozzle spacing by physics; After adjustment, click on Montai to create a solid color image and print a 1-pass. Adjust the compensation value between the nozzles based on the actual distance between the printing nozzles. If there is no overlap or white printing, there is no need to adjust it.

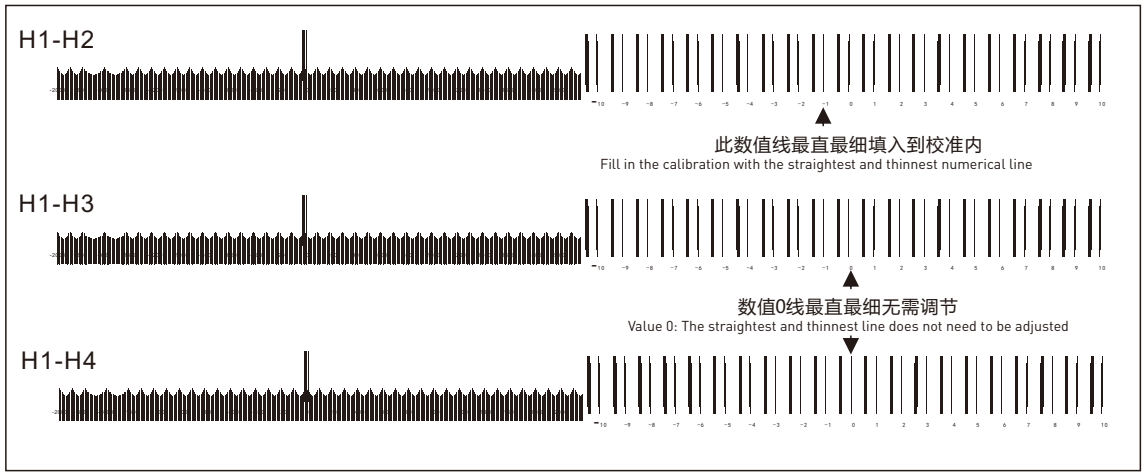




12.水平校准 Horizontal calibration

AT.MainAppForm.exe-校准-水平校准-[左-›右]-检查观察数值0上面所打印的直线都垂直并且中间线最细，如下图所示喷头1-喷头2之间-1最直最细，则在喷头1-喷头2之间数值填入-1点击应用。调整所有喷头之间数值后在点检查观察是否所有喷头之间数值0线段是最细的。如是则进行校准右-›左；校准方法同左-›右。

AT. MainAppForm. exe - Calibration - Horizontal Calibration - [Left→Right] - Check and observe that the lines printed on top of the value 0 are vertical and the middle line is the thinnest. As shown in the figure below, the values between nozzle 1 and nozzle 2 are -1, the straightest and thinnest. Then fill in the values between nozzle 1 and nozzle 2 with -1 and click Apply. After adjusting the values between all nozzles, check at the point to see if the 0 line segment between all nozzles is the thinnest. If so, calibrate right→left; The calibration method is the same as left→right.



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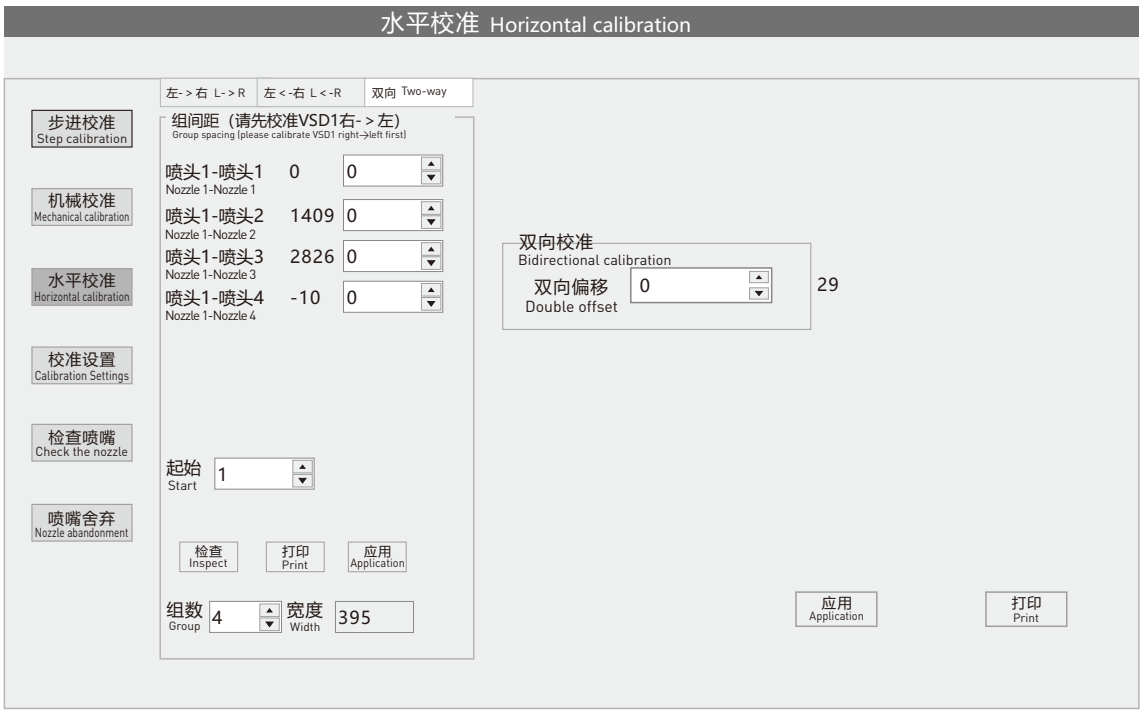
13.双向校准 Bidirectional calibration

AT.MainAppForm.exe-校准-水平校准-双向-打印观察数值0是否最直最细，如下图所示数值10最直最细,填入10,点击应用在检查是否数值0是最直最细的。

AT. MainAppForm. exe - Calibration - Horizontal Calibration - Bidirectional - Print to observe if the value 0 is the straightest and thinnest, as shown in the figure below. Fill in the value 10 and click Apply to check if the value 0 is the straightest and thinnest.



此图案中10对齐了，
将此值填入到校准内
10 in this pattern is aligned,
fill this value in the calibration

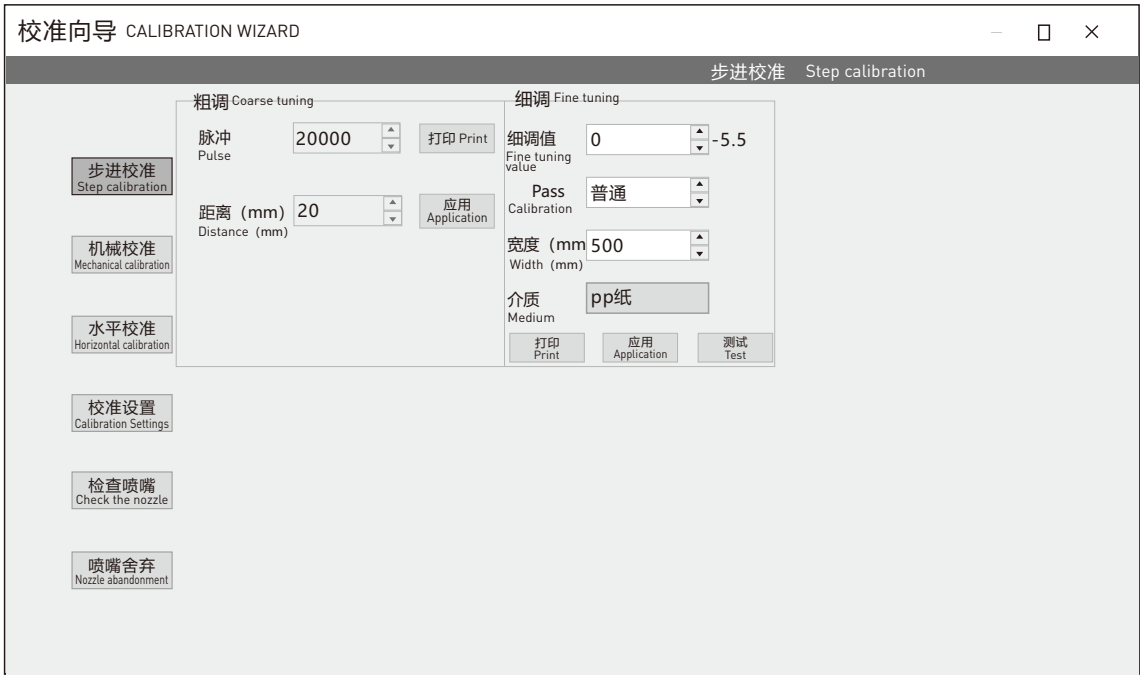
继续打印，直到输出的图案中"0"是对齐的，如下图所示
Continue printing until "0" in the output pattern is aligned, as shown in the following figure

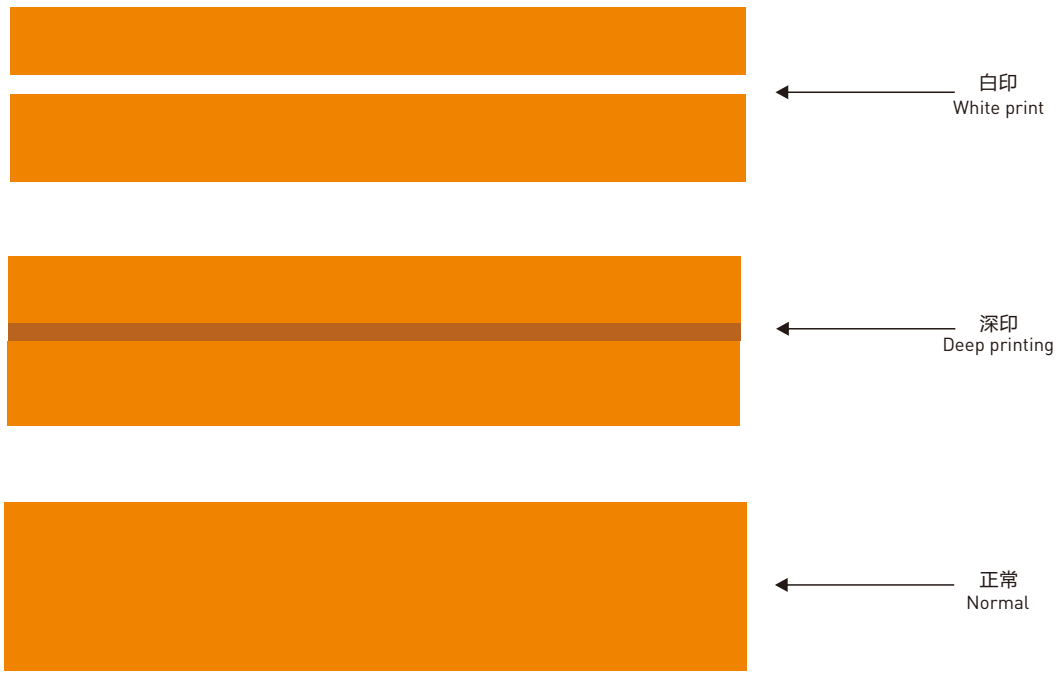
此图案中0对齐了
0 is aligned in this pattern

14.步进校准 Step-by-step calibration

AT.MainAppForm.exe软件-界面羽化改成无。蒙泰Rip纯色图打印1pass观察出现深印还是白印。校准-步进校准细调值（根据实际打印画面深印+白印-）1pass为大概的细调，调整过后羽化无蒙泰Rip纯色图打印2pass观察出现深印还是白印。校准-步进校准细调值（根据实际打印画面深印+白印-）调整过后把羽化开成弱进项打印画面。

AT.MainAppForm.exe software - interface feathering changed to none. Observe if there is a deep print or a white print when printing the Montai Rip solid color image for 1 pass. Calibration - Step by step calibration fine tuning value (based on the actual printed image, deep printing+white printing -) 1 pass is the approximate fine tuning, and after adjustment, the feathered Mattel Rip solid color image is printed for 2 passes to observe whether there is deep printing or white printing. After adjusting the calibration step by step calibration fine tuning value (based on the actual printing image deep printing+white printing), the feather will be turned into a weak input printing image.





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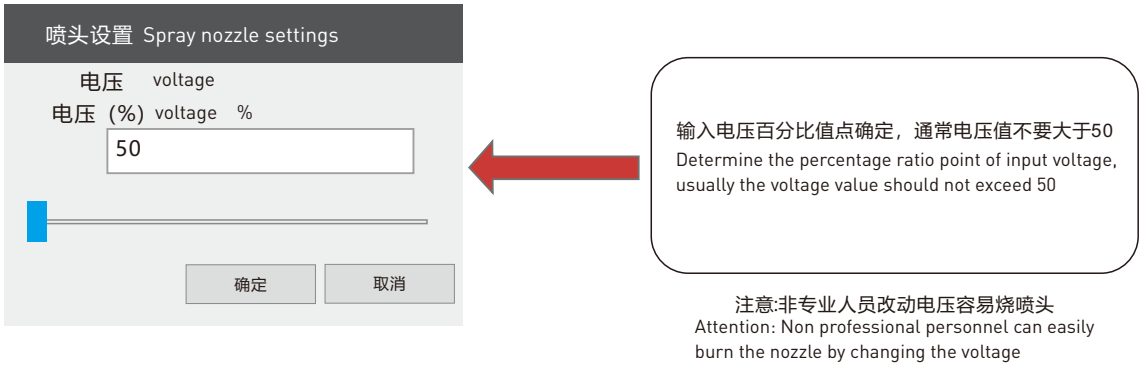
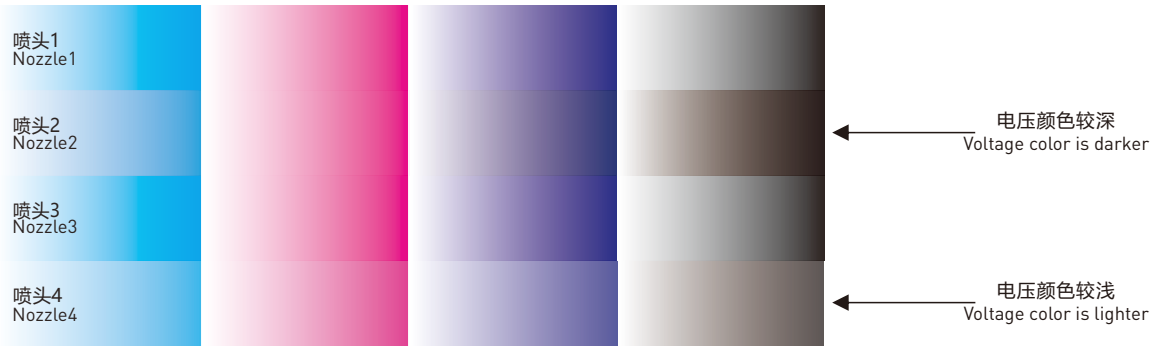
15.电压校准 Voltage calibration

AT.MainAppForm.exe-校准-喷头设置-电压校准建议数值为50；如果4个喷头颜色深浅不一样可以进行单独调电压（校准-校准设置）。整体电压调节高低以1头为准（EPSON 3200原装喷头无单独调节电压项）。

The recommended value for AT. MainAppForm. exe calibration nozzle settings voltage calibration is 50; If the color depth of the four nozzles is different, separate voltage adjustment can be performed (calibration calibration settings). The overall voltage adjustment is based on one nozzle (EPSON 3200 original nozzle does not have a separate voltage adjustment option).



注意:非专业人员改动电压容易烧喷头
Attention: Non professional personnel can easily burn the nozzle by changing the voltage



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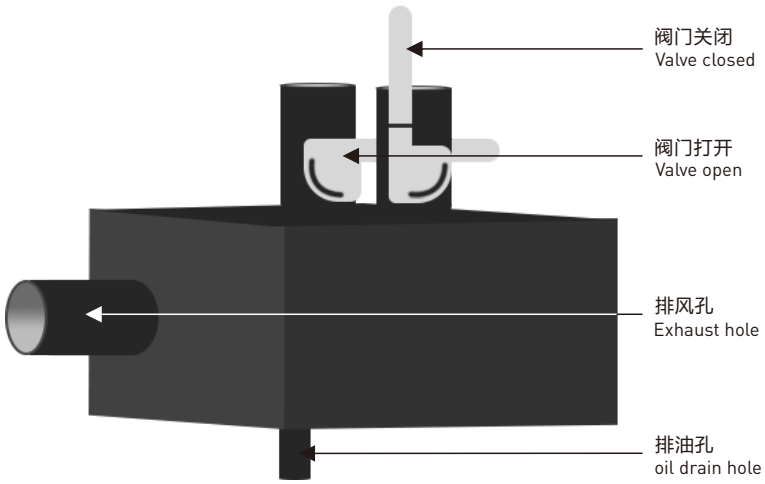
16.阀门介绍 Valve Introduction

下图微型过滤装置位置在设备左侧门打开；请仔细检查阀门是否为排烟全开排飞墨为全闭状态。排风孔正常为全开状态；排油孔正常为关闭状态，为保证画面正常输出不受影响建议每天排放油一次。

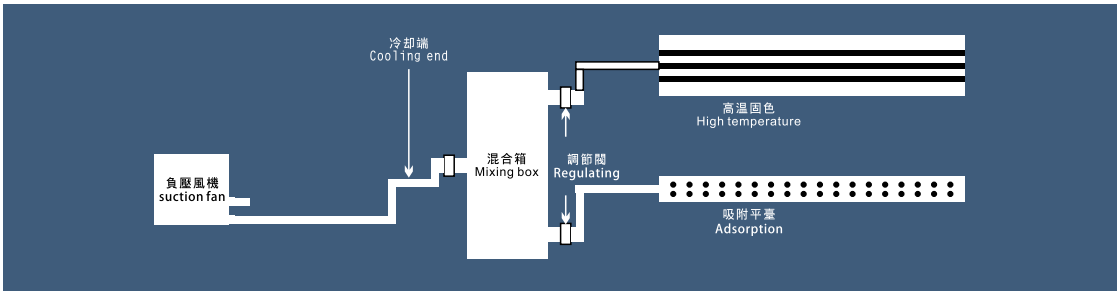
The position of the micro filtration device in the figure below is when the door on the left side of the equipment is opened; Please carefully check if the valve is fully open for smoke exhaust and fully closed for ink discharge. The exhaust hole is normally fully open; The oil drain hole is normally closed, and it is recommended to drain the oil once a day to ensure the normal output of the screen is not affected.



17.排烟接法 Smoke exhaust connection method

设备上排烟孔接风机吸风处，排风处温度过高请接一根管排放至无人路过区域。

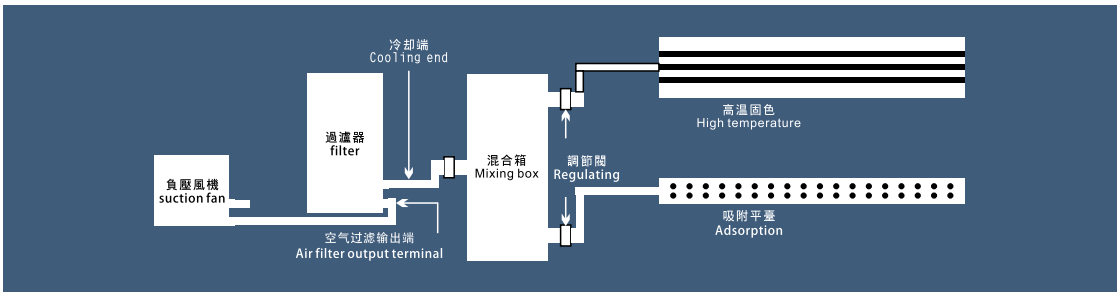
The smoke exhaust hole on the equipment is connected to the suction area of the fan. If the temperature at the exhaust area is too high, please connect a pipe to discharge it to an area where no one is passing by.



18. 排烟接法（包含过滤器）Smoke exhaust connection method (including filter)

设备上排烟孔接过滤器进风口；过滤器出风口接风机吸风处，风机排风处温度过高建议接一根管排放至无人路过区域。

Connect the smoke exhaust hole on the equipment to the filter air inlet; The air outlet of the filter is connected to the suction area of the fan, and it is recommended to connect a pipe and discharge it to an unmanned area if the temperature at the exhaust area of the fan is too high.



INSTALLATION AND COMMISSIONING

双面打印机
安装调试

热升华直喷设备使用手册
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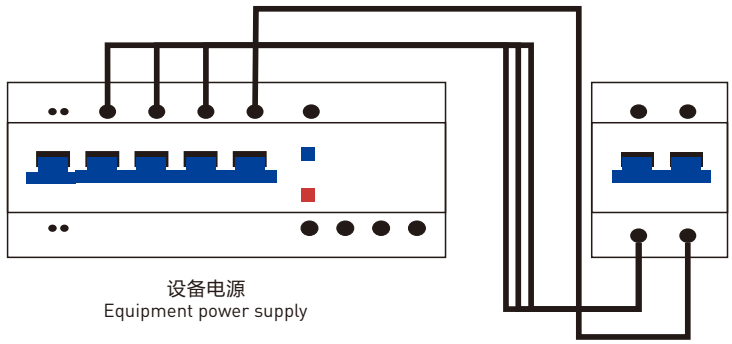
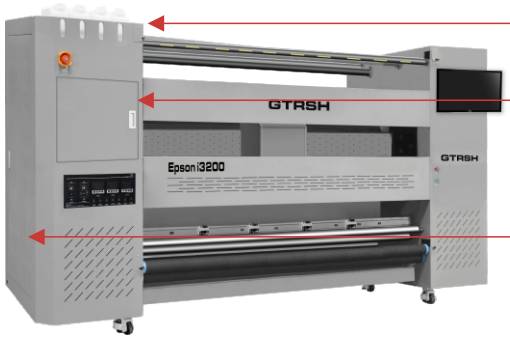
1.设备接线 Equipment wiring

设备烘干显色接电 如图所示设备左侧门打开配电柜内有对应的电闸接线位置。机头电源插孔在设备左侧配电柜右侧位置（三孔插座）电源线请用随机配件内所带的进行接电。设备电接好后请联系技术人员确认下是否正确。

The drying and color display of the equipment are connected to the power as shown in the figure. The left side door of the equipment is opened, and there is a corresponding switch wiring position in the distribution cabinet. The power socket of the machine head is located on the right side of the power distribution cabinet on the left side of the equipment (three hole socket). Please use the power cord included in the accompanying accessories for power connection. After the equipment is electrically connected, please contact the technical personnel to confirm if it is correct.



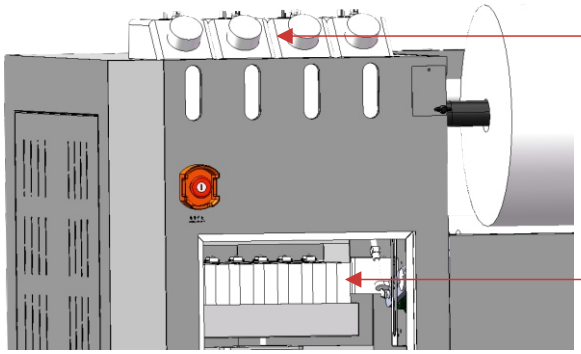
2.墨壶位置、废墨壶位置 Ink pot position and waste ink pot position



打开此处为一级墨盒（大墨盒）位置；
Open here for the position of the first level ink cartridge (large ink cartridge);

打开此处为二级墨盒（供墨盒）位置；
Open here for the location of the secondary ink cartridge (supply ink cartridge);

打开背面此门为内有放置废墨壶位置；
Open the door on the back for the position where the waste ink can be placed inside;



一级墨盒（大墨盒）
First level ink cartridge (large ink cartridge)

二级墨盒（供墨盒）
Secondary ink cartridge (for ink cartridges)

3.软件安装 Software installation

高通官网：www.gtrsh.com-下载中心-登录账号-下载对应的打印软件和蒙泰（曲线内置）。
软件解压码：gtrsh
打印软件解压-安装WinPcap_4_1_3.exe此驱动-打开打印控制软件AT.MainAppForm.exe确认软件可以打开。
蒙泰解压-安装SETUP.EXE-加密狗插电脑上-蒙泰打印管理器-管理-设定TCP-IP端口-添加端口-IP地址：127.0.0.1-检测会出现9100。
蒙泰-文件-打印机设定-安装蒙泰打印机-GT...此为蒙泰曲线。建立文件-打印-打印机设定-端口选择127.0.0.1，纸张pass数上下对应否则曲线不生效。

Qualcomm official website: www.gtrsh.com - Download Center - Login Account - Download the corresponding printing software and Montage (built-in curve).
Software decompression code: gtrsh
Print Software Decompression - Install WinPcap_ 4_ 1_ 3. exe This driver - Open the print control software AT.MainAppForm.exe to confirm that the software can be opened.
Montai Decompression - Install SETUP.EXE - Plug the dongle into the computer - Montai Print Manager - Management - Set TCP IP Port - Add Port - IP Address: 127.0.0.1-9100 will appear during the detection.
Montai - File - Printer Settings - Install Montai Printers - GT... This is the Montai curve. Create File - Print - Printer Settings - Port Selection 127.0.0.1, Paper
If the number of Zhang passes corresponds up and down, the curve will not take effect.

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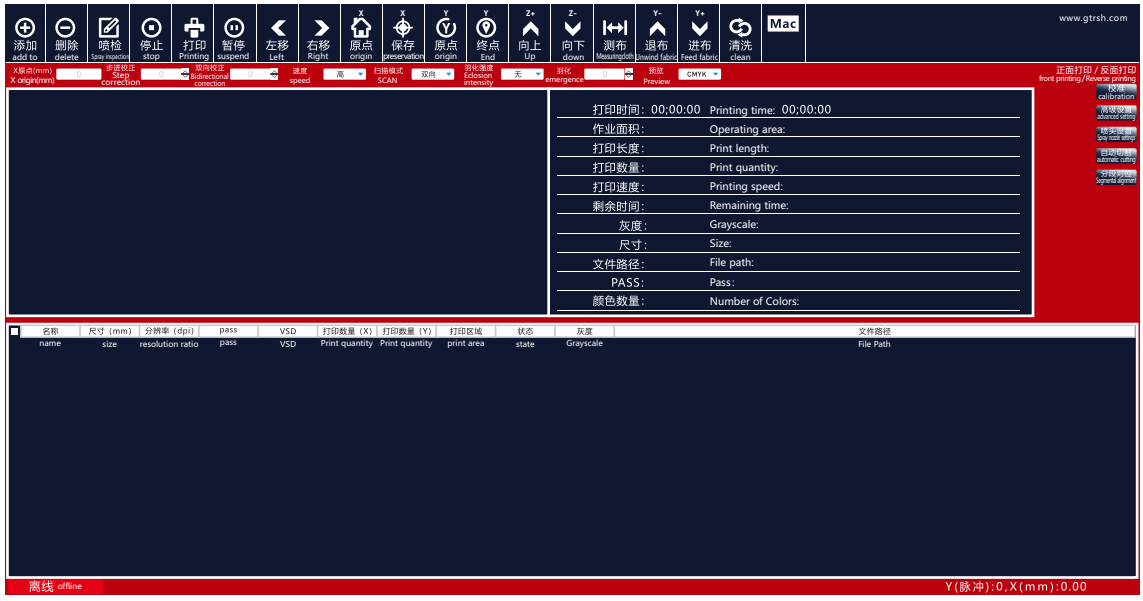
4.自动上料下料操作：Automatic loading and unloading operation:

软件控制升降 Z向上；Z向下； 控制面板右侧按钮控制下料下料长按上升按钮12秒自动上升；取消自动上升在按下上升按钮。 长按上升按钮12秒自动下降；取消自动下降在按下下降按钮 。

Software control for lifting and lowering Z-up; Z down; The button on the right side of the control panel controls the automatic rise of the material by pressing the up button for 12 seconds; Cancel automatic ascent by pressing the ascent button. Press and hold the up button for 12 seconds to automatically lower; Cancel automatic descent by pressing the descent button.

请不要一同操作 会造成报错等现象。
Please do not operate together, which may cause errors and other phenomena.



5.电脑开机重启接线操作：Computer startup, restart, and wiring operation

设备右侧电脑机箱门位置上方设有两个按钮;一个为电脑重启 另一个为电源开关按钮;POWER SW为电源开关按钮,RESET SW为重启按钮。 将两条线接在对应的电脑主板位置上可以控制电脑电源。

There are two buttons located above the computer case door on the right side of the device; One is the computer restart button and the other is the power switch button; POWER SW is the power switch button, and RESET SW is the restart button. Connecting two wires to the corresponding computer motherboard position can control the computer power supply.

POWER SW

电源开关

RESET SW

重启

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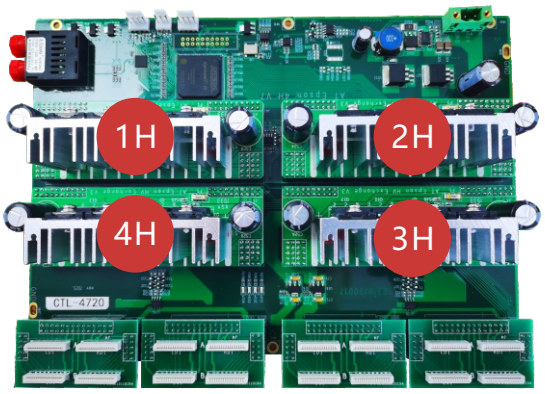
6.喷车板插线顺序 Wire insertion sequence of spray plate

下图和文字标注仅供参考；插线后请先勿通电与技术人员确认此标注车板顺序是否正确。

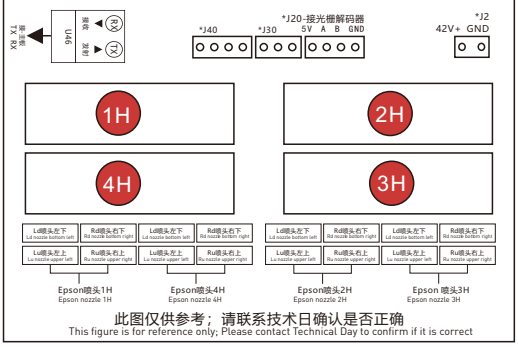
The following figure and text annotations are for reference only; After inserting the cable, please do not turn on the power and confirm with the technical personnel whether the order of the marked vehicle plates is correct.

小车板 Nozzle motherboard



Epson喷头1H Epson nozzle 1H　Epson喷头4H Epson nozzle 4H　Epson喷头2H Epson nozzle 2H　Epson 喷头3H Epson nozzle 3H

车板详细注解 Note on the details of the noble motherboard



此图仅供参考；请联系技术日确认是否正确
This figure is for reference only; Please contact Technical Day to confirm if it is correct

--**车板插线方式(转接板为16芯)**:LU喷头左上
--Car board wiring method (adapter board with 16 cores): LU nozzle upper left

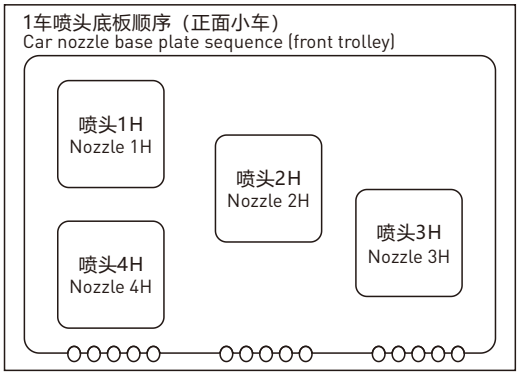
Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

--**车板插线方式**(转接板为14芯):LU喷头左上
--Car board wiring method (adapter board with 14 cores): LU nozzle upper left

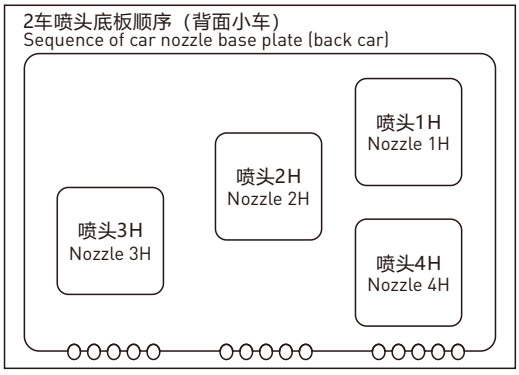
Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

--**颜色顺序**：粉M 黄Y 蓝C 黑K
--Color order: pink, M　yellow, Y　blue, C　black, K

1车喷头底板顺序（正面小车）
Car nozzle base plate sequence (front trolley)



2车喷头底板顺序（背面小车）
Sequence of car nozzle base plate (back car)



7.调速器、温控表、开关使用方法 Usage of speed regulators, temperature gauges, and switches

速度调节
Speed adjustment

点击SET后
温度闪烁
按上下箭头调节温度
调节后按SET确认
After clicking on SET
Temperature flicker
Press the up and down arrows
to adjust the temperature
Press SET to confirm after adjustment

调速开关 关闭状态等于0
The closed state of the speed
control switch is equal to 0

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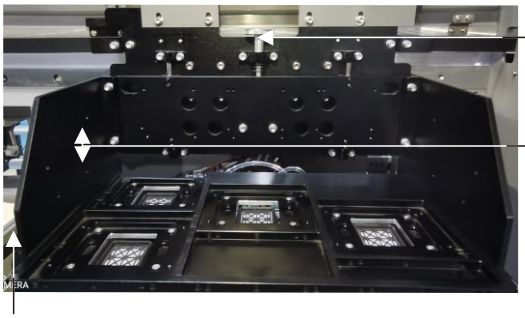
8.调节喷车高低 Adjust the height of the spray truck

调节喷车高低必须注意前后喷车高度必须一致；喷头距离布面为2.5mm以内，喷头距离过高会导致喷头打印在画面上不实边缘发虚，调节喷车高低时请注意检查4个喷头距离布面是否为完全平行状态,如不是请将底板调节至4个喷头距离布面高度一样状态。

When adjusting the height of the spray truck, it must be noted that the height of the front and rear spray trucks must be consistent; The distance between the nozzle and the cloth surface is within 2.5mm. If the nozzle distance is too high, it will cause the nozzle to print on the screen with false edges. When adjusting the height of the spray truck, please pay attention to checking whether the four nozzles are completely parallel to the cloth surface. If not, please adjust the base plate to four nozzle distancesThe state of being at the same height from the fabric surface.



第一步检查此螺母是否为拧紧状态（拧紧进行第二步）
第三步将此螺母慢慢旋转调至合适的高度后，拧紧螺丝，在拧紧螺母。
Step 1: is to check if the nut is tightened (proceed to the second step when tightening)
Step 3: Slowly rotate the nut to the appropriate height and tighten the screw Thread, tighten the nut.

第二步左右位置各有两颗螺丝将此螺丝松开一点
Step 2: There are two screws on the left and right positions, loosen this screw a little bit

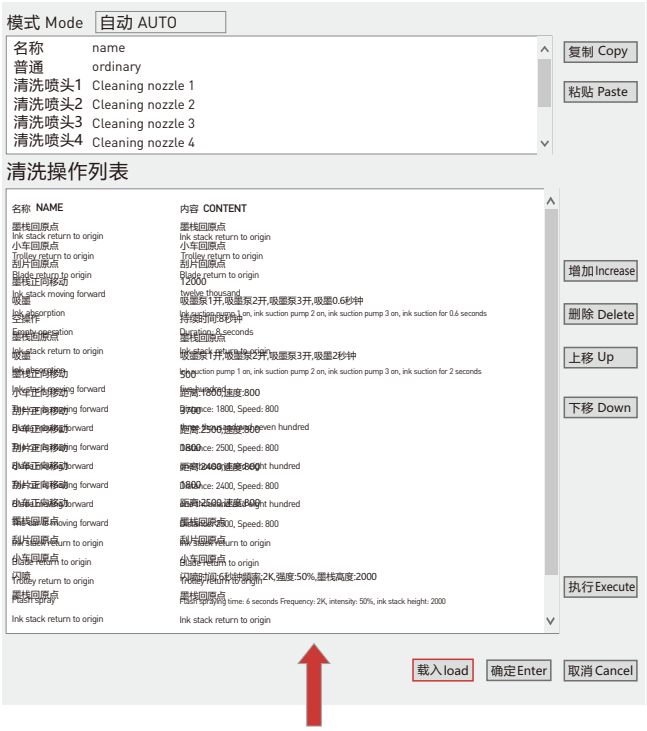
喷车底板平行螺丝

9.墨栈参数调节 Ink stack parameter adjustment

①清洗喷头时注意喷头与墨栈帽之间是否完全吻合，如吻合则无需手动调节如不吻合调节墨栈。
②下图软件打开方式：软件AT.Pcs.AssistTools.exe-清洗配置即可看到下图页面
③墨栈和喷头吻合但清洗时第一次喷头与墨栈之间高度不吻合，调节第一个墨栈正向移动参数（过低增加；过高减少）。
④墨栈和喷头吻合但清洗时刮墨高度过低，调节第二个墨栈正向移动参数（过低增加；过高减少）。
⑤墨栈和喷头吻合但清洗后打印第一次出现黑道。将墨栈仔细与喷头对好如还出现；频率、时间、强度、高度可适当增加点。

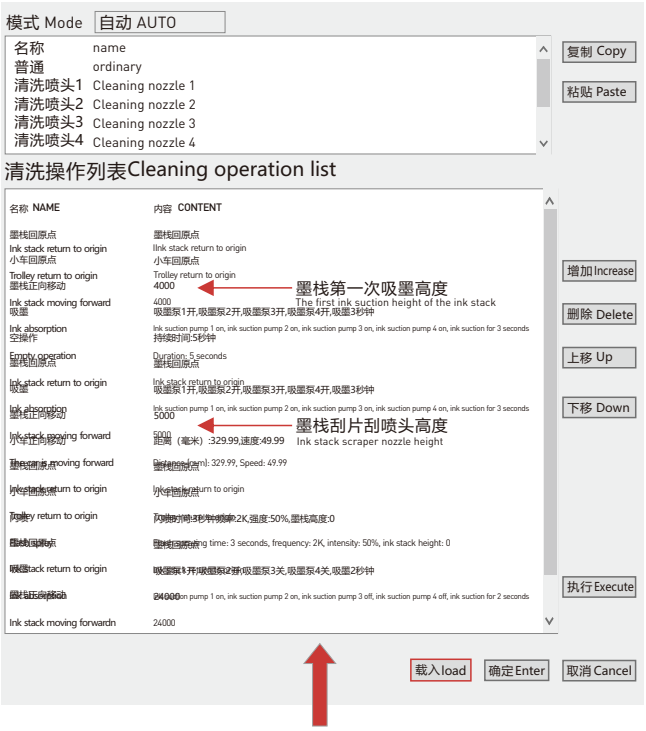
When cleaning the nozzle, pay attention to whether there is a complete match between the nozzle and the ink stack cap. If there is a match, there is no need to manually adjust the ink stack if it does not match.
The software opening method shown in the following figure: software AT.Pcs.AssistTools.exe - clean the configuration to see the following page
If the ink stack and nozzle match, but the height between the first nozzle and the ink stack does not match during cleaning, adjust the forward movement parameter of the first ink stack (increasing if it is too low; decreasing if it is too high).
The ink stack matches the nozzle, but the scraping height is too low during cleaning. Adjust the second ink stack forward movement parameter (increase if it is too low; decrease if it is too high).
The ink stack and nozzle match, but black spots appear for the first time when printing after cleaning. Carefully align the ink stack with the nozzle as if it still appears; Frequency, time, intensity, and height can be increased appropriately.

配置工具 Configuration Tools



提供参考
Provide reference

配置工具 Configuration Tools

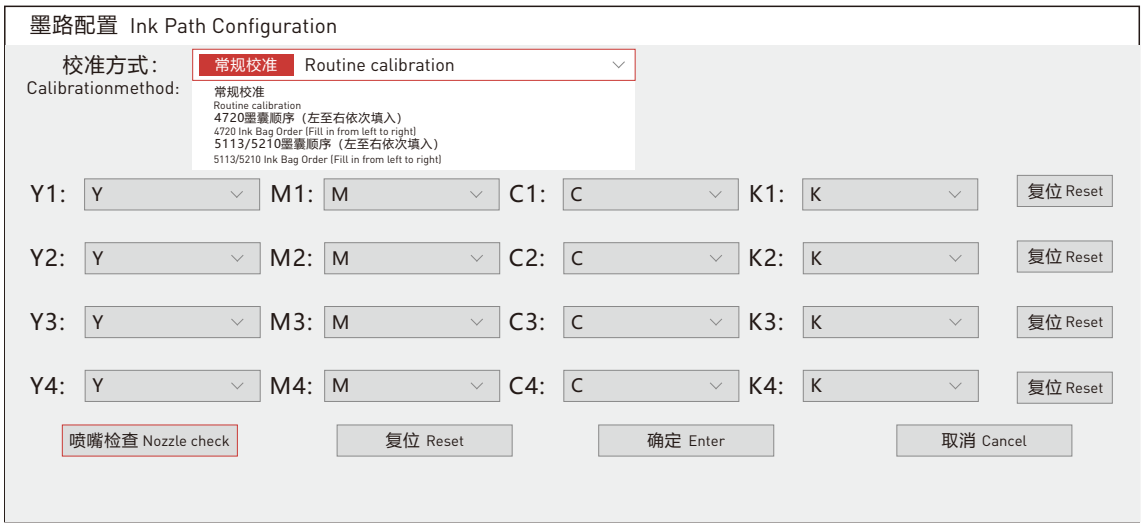


现有产品
Existing products

10.墨序校准 Ink sequence calibration

AT.Pcs.AssistTools.exe-墨路配置-校准方式箭头-常规校准-对应的喷头（4720与3200是一个）按照从左到右顺序依次填入墨管内颜色，单击确定。

AT.Pcs.AssistTools.exe - Ink Path Configuration - Calibration Method Arrow - General Calibration - Corresponds to the nozzle (4720 and 3200 are the same), fill in the colors inside the ink tube in order from left to right, and click OK.



11.步进校准 Step calibration

AT.MainAppForm.exe-校准-步进校准-粗调-脉冲（脉冲20000请不要更改）-打印;用格尺测量打印出来的两条横线的内间距，填入"距离（mm）"中，点击[应用]。

AT. MainAppForm. exe Calibration Step Calibration Coarse Pulse (pulse 20000 please do not change) Print; Measure the inner distance between the two printed horizontal lines with a ruler, fill in the "Distance (mm)" field, and click [Apply].

起始线
Start line

终止线
Finishing line

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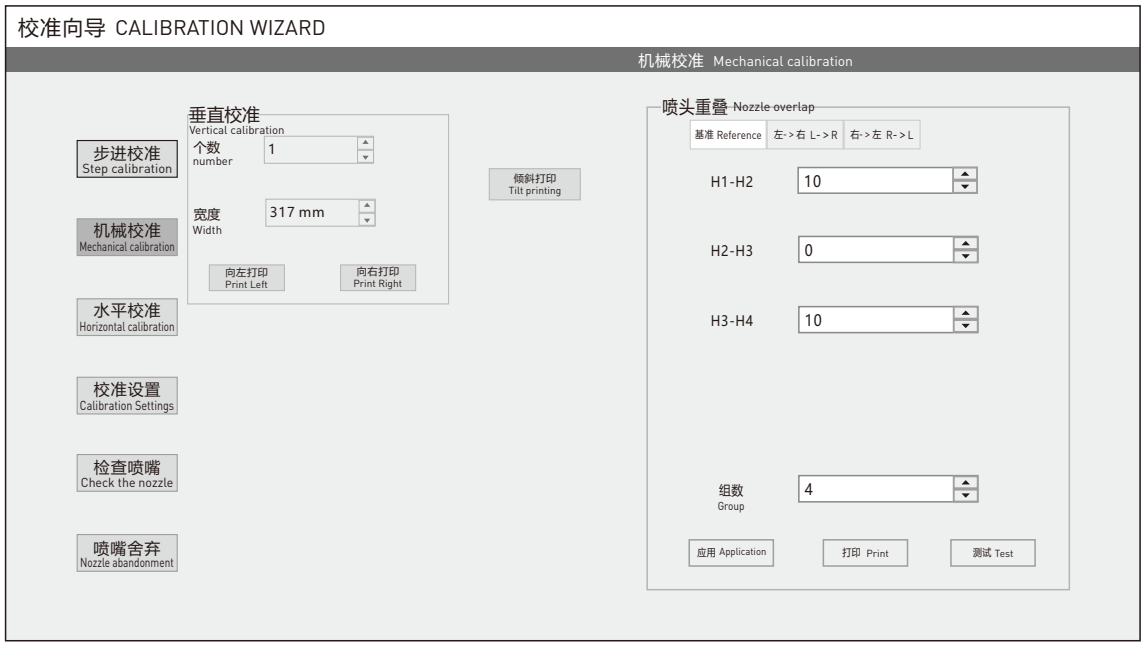
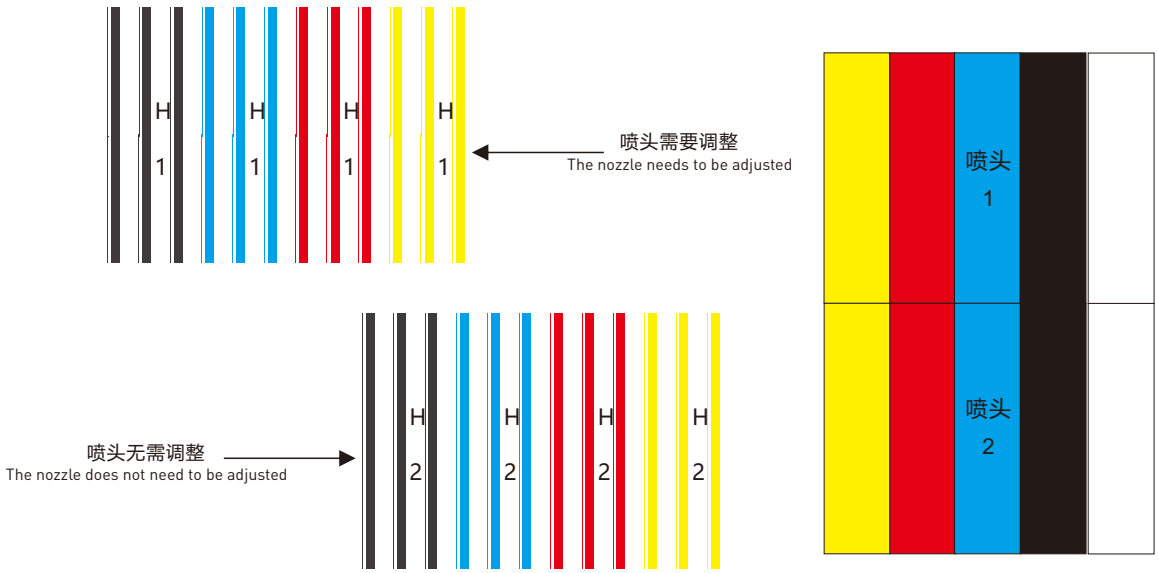
12.喷头垂直校准 Vertical calibration of nozzle

校准-机械校准-向左打印；观察打印出的喷头状态是否垂直，如下图喷头1不垂直需要轻微旋转喷头，喷头2是直的则不需要调整；调整后向左和向右打印下看下打出来的喷头状态是否垂直，如果向左和向右的不一致请检查喷头底板前后的倾斜度。

AT. MainAppForm. exe - Calibration - Mechanical Calibration - Left Print; Observe whether the printed nozzle state is vertical, as shown in the figure below. If nozzle 1 is not vertical, slightly rotate the nozzle, and if nozzle 2 is straight, no adjustment is required; After adjustment, print to the left and right to check if the printed nozzle status is vertical. If there is a discrepancy between the left and right, please check the inclination of the nozzle base plate before and after.





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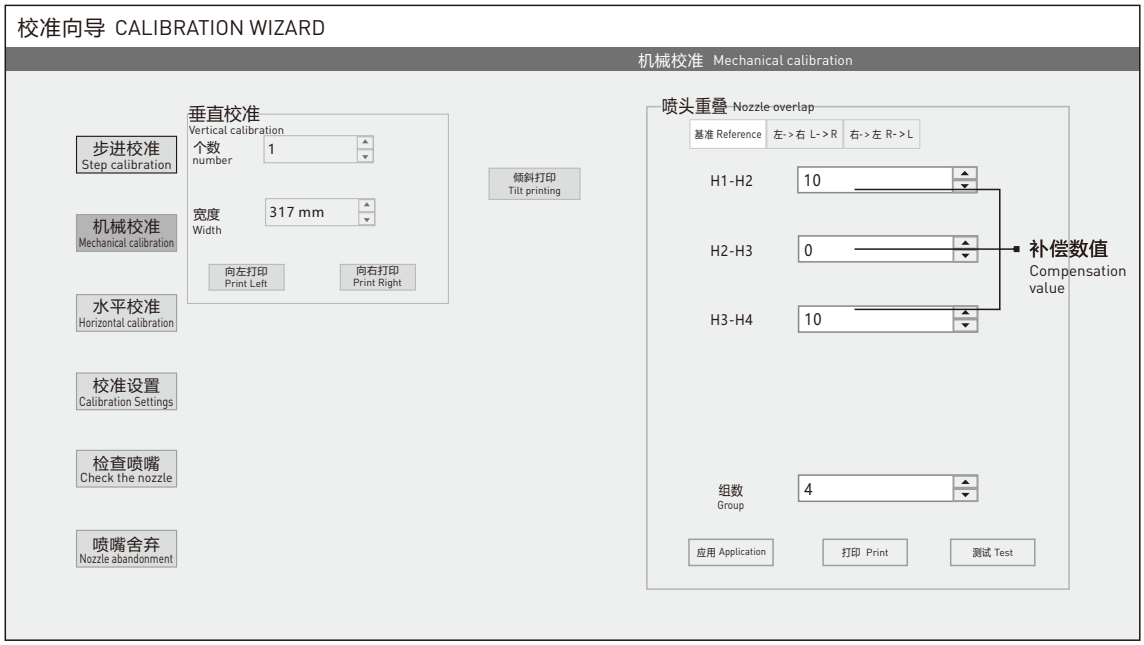
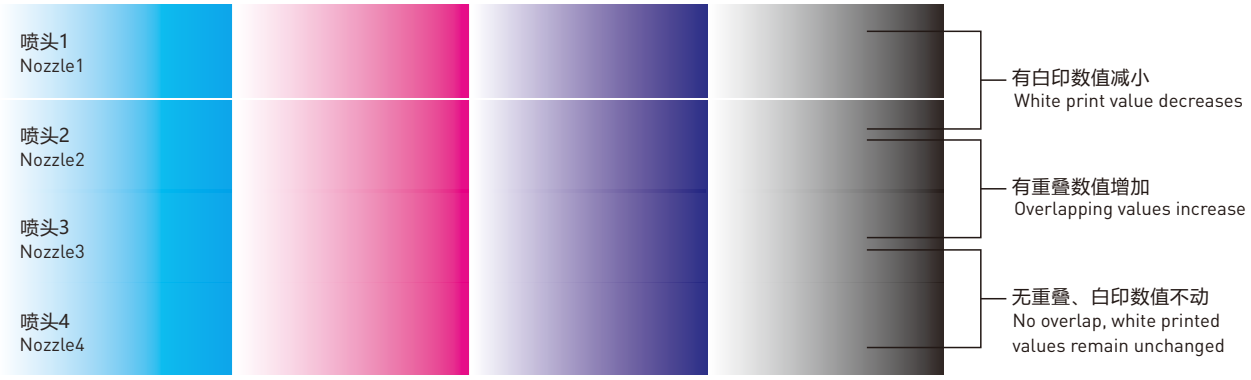
13.喷头重叠校准 Nozzle overlap calibration

机械校准-右侧-基准-测试 观察打印出的是否没重叠和白印，如下图所示内容根据喷头之间重叠与白印来调试补偿数值（补偿数值最低为0不能为负数），如补偿数值为0还有白印请物理调整喷头间距；调整后点击蒙泰做纯色图打印1pass根据1pass实际打印喷头之间距离调整喷头之间的补偿数值如没有重叠与白印则无需调整。

AT. MainAppForm. exe - Mechanical calibration - Right side - Reference - Test and observe whether there is no overlap or white print printed, as shown in the following figure. Adjust the compensation value based on the overlap and white print between the nozzles (the minimum compensation value is 0 and cannot be negative). If the compensation value is 0 and there is still white print, please adjust the nozzle spacing by physics; After adjustment, click on Montai to create a solid color image and print a 1-pass. Adjust the compensation value between the nozzles based on the actual distance between the printing nozzles. If there is no overlap or white printing, there is no need to adjust it.





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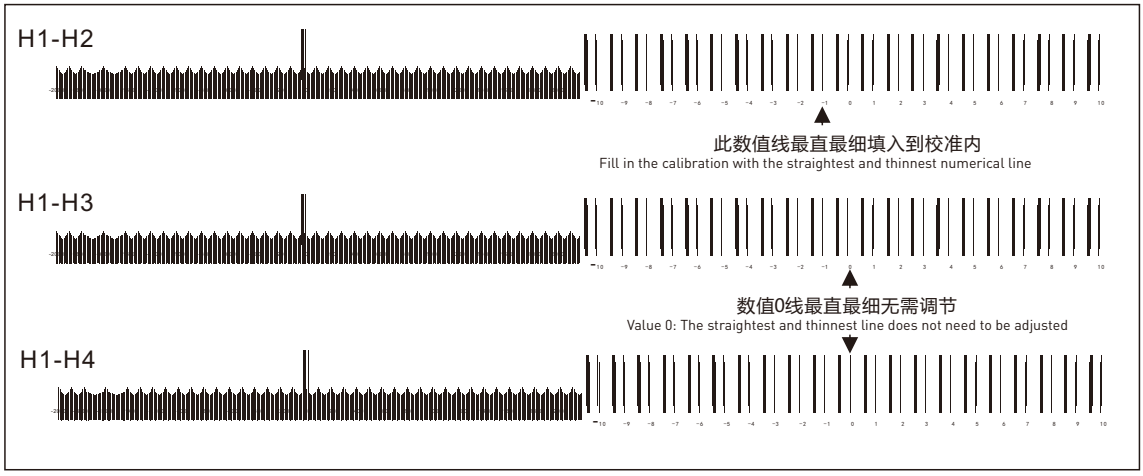
14.水平校准 Horizontal calibration

校准-水平校准-[左-›右]-检查观察数值0上面所打印的直线都垂直并且中间线最细，如下图所示喷头1-喷头2之间-1最直最细，则在喷头1-喷头2之间数值填入-1点击应用。调整所有喷头之间数值后在点检查观察是否所有喷头之间数值0线段是最细的。如是则进行校准右-›左；校准方法同左-›右。

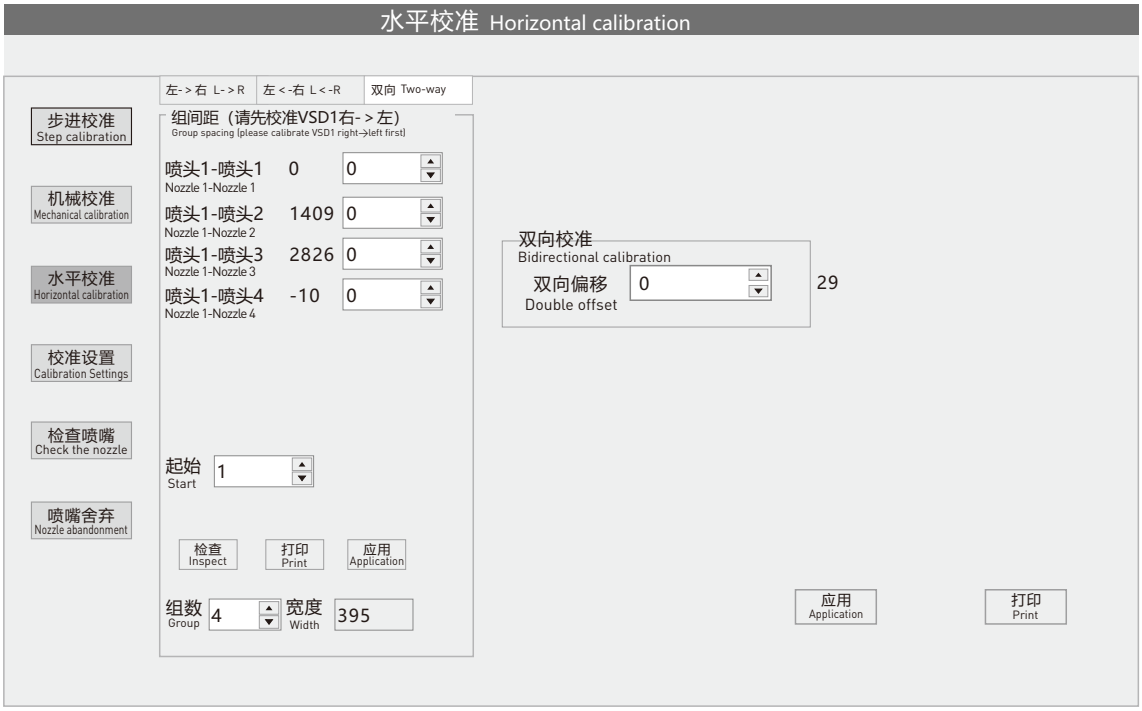
AT. MainAppForm. exe - Calibration - Horizontal Calibration - [Left→Right] - Check and observe that the lines printed on top of the value 0 are vertical and the middle line is the thinnest. As shown in the figure below, the values between nozzle 1 and nozzle 2 are -1, the straightest and thinnest. Then fill in the values between nozzle 1 and nozzle 2 with -1 and click Apply. After adjusting the values between all nozzles, check at the point to see if the 0 line segment between all nozzles is the thinnest. If so, calibrate right→left; The calibration method is the same as left→right.



15.双向校准 Bidirectional calibration

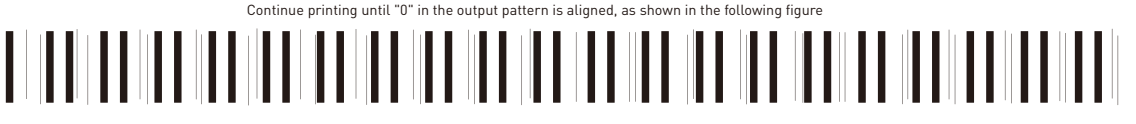
校准-水平校准-双向-打印观察数值0是否最直最细，如下图所示数值10最直最细,填入10,点击应用在检查是否数值0是最直最细的。

AT. MainAppForm. exe - Calibration - Horizontal Calibration - Bidirectional - Print to observe if the value 0 is the straightest and thinnest, as shown in the figure below. Fill in the value 10 and click Apply to check if the value 0 is the straightest and thinnest.



此图案中10对齐了，
将此值填入到校准内
10 in this pattern is aligned,
fill this value in the calibration

继续打印，直到输出的图案中"0"是对齐的，如下图所示
Continue printing until "0" in the output pattern is aligned, as shown in the following figure



此图案中0对齐了
0 is aligned in this pattern

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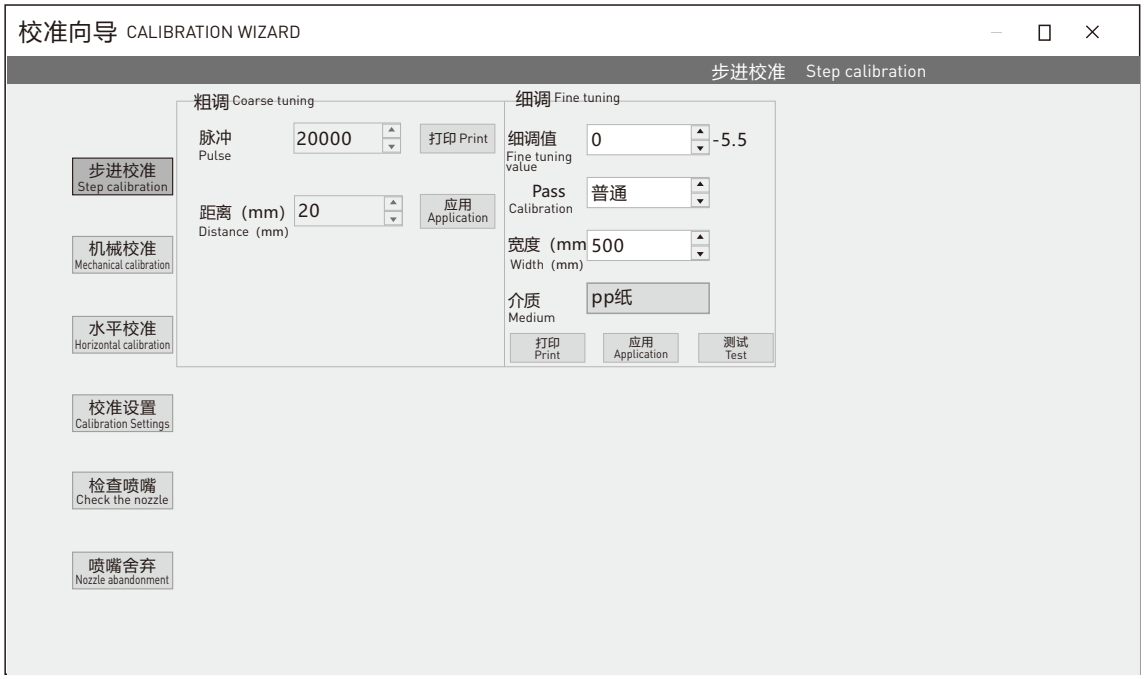
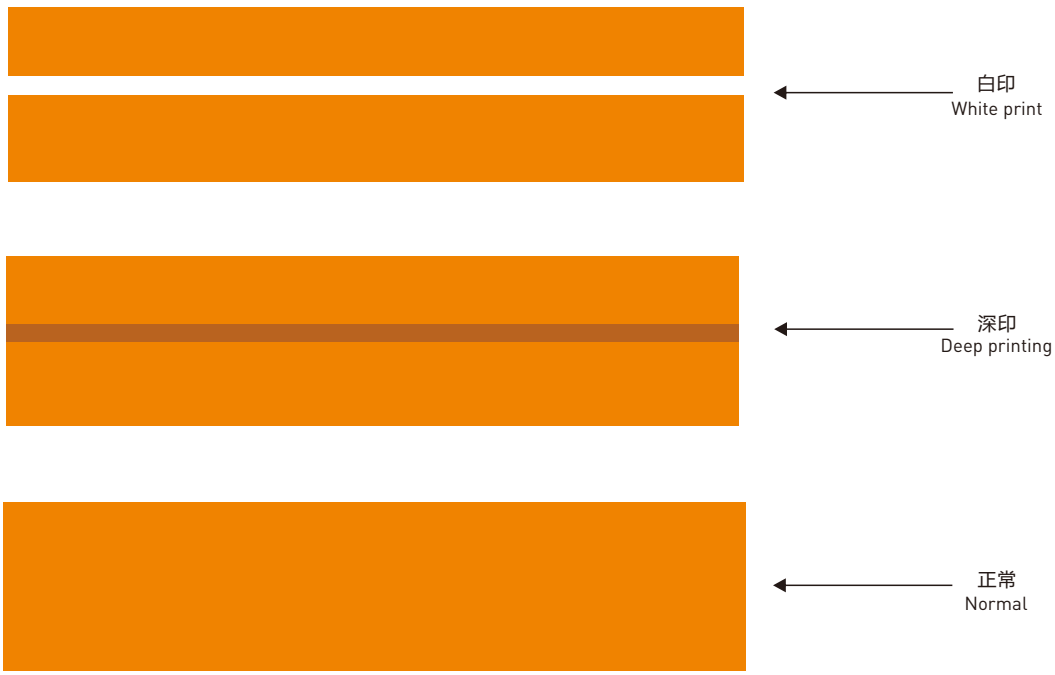
16.步进校准 Step calibration

AT.MainAppForm.exe软件-界面羽化改成无。蒙泰Rip纯色图打印1pass观察出现深印还是白印。校准-步进校准细调值（根据实际打印画面深印+白印-）1pass为大概的细调，调整过后羽化无蒙泰Rip纯色图打印2pass观察出现深印还是白印。校准-步进校准细调值（根据实际打印画面深印+白印-）调整过后把羽化开成弱进项打印画面。以正面小车步进为准两款软件步进细调值必须完全一样否则会出现报错现象。

AT.MainAppForm.exe software - interface feathering changed to none. Observe if there is a deep print or a white print when printing the Montai Rip solid color image for 1 pass. Calibration - Step by step calibration fine tuning value (based on the actual printed image, deep printing+white printing -) 1 pass is the approximate fine tuning, and after adjustment, the feathered Mattel Rip solid color image is printed for 2 passes to observe whether there is deep printing or white printing. After adjusting the calibration step by step calibration fine tuning value (based on the actual printing image deep printing+white printing), the feather will be turned into a weak input printing image.





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接下来为重点部分请看完后在进行调试,明确同步原理后进行调试
Next for the key part, please read after debugging, clear the principle of synchronization after debugging

打印画面2米/旗帜布（75g）
1.——打印网格图案至2车/下车（校准X轴双向）
2.——注意（1车/上车）线（在）以2车/下车为正面（后方）
3.——注意（2车/下车）线（在）以2车/下车为正面（前方）
两条线平行　做为调试参考（间距控制在两侧最宽为5mm）
注意两侧是调节大梁水平关键点位不能偏差。

Printing screen 2 meters/banner cloth (75g)
1. - Print grid pattern to 2 cars/vehicles (calibrate X-axis bidirectional)
2. - Pay attention to the front (rear) of the (1 car/getting on) line (at) with 2 cars/getting off)
3. - Pay attention to the front of the line (in front of) with 2 cars/getting off
Two parallel lines are used as a reference for debugging, and the spacing is controlled at a maximum width of 5mm on both sides
Note that the key points for adjusting the horizontal position of the main beam on both sides must not deviate.

1车/上车—测量线（用2车导轨反1车背面线）正面左侧数值：334 正面中间数值： 335 正面右侧
数值：336
证明1车—2车布料距离左侧小（334）中间与右侧（335）大
结论：大梁不在一个平行度

1 car/boarding - measurement line (using 2 car rails to reverse 1 car back line) Front left value: 334 Front middle value: 335 Front
Right side of the face
Value: 336
Prove that the fabric distance between vehicle 1 and vehicle 2 is 334 smaller on the left side, and 335 larger in the middle and on the right side
Conclusion: The main beam is not at the same parallelism

两侧线间距决定大梁平行
2车/下—线向前为基础点
1-2车间距
左侧：3mm
中间：4mm
右侧：4mm

The distance between the lines on both sides determines the parallelism of the main beam
2 vehicles/off line forward as the basic point
1-2 car spacing
Left side: 3mm
Middle: 4mm
Right side: 4mm

注意：永远保持2车/下车（线）向前，1车/上车线向后调节（水平调整完成且不超过30丝/道-50丝/道）以后在重合两条线（Y轴精确度1.01为1mm零1丝/道）
100丝/道=1mm/毫米

Note: Always keep 2 cars/getting off (line) forward, 1 car/getting on line backward adjustment (the horizontal adjustment is completed and does not exceed 30 wires/track - 50 wires/track), and then overlap two lines (the accuracy of Y axis 1.01 is 1mm zero 1 wire/track)
100 wires/channel=1mm/mm

1车/上车正面右侧大梁向后
1车/上车正面左侧大梁向后
结论：间距变小相反方向（1车线向前走了）

1 car/front right side beam of the upper car to the rear
1 car/front left side beam of the upper car towards the rear
Conclusion: The spacing decreases and the opposite direction is reversed (1 car line is moving forward)

2车/下车正面右侧大梁向前
2车/下车正面左侧大梁向前
结论：间距变小相反方向（2车线向后走了）

2 cars/getting off, front right side beam forward
2 cars/getting off, front left side beam forward
Conclusion: The spacing has decreased in the opposite direction (the 2-car line has moved backwards)

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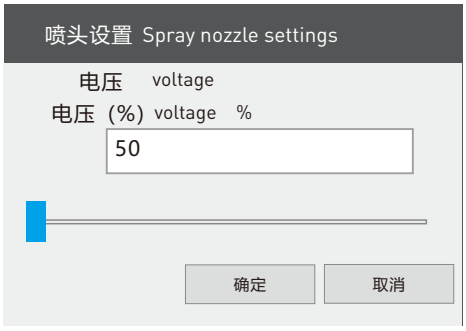
17.电压校准 Voltage calibration

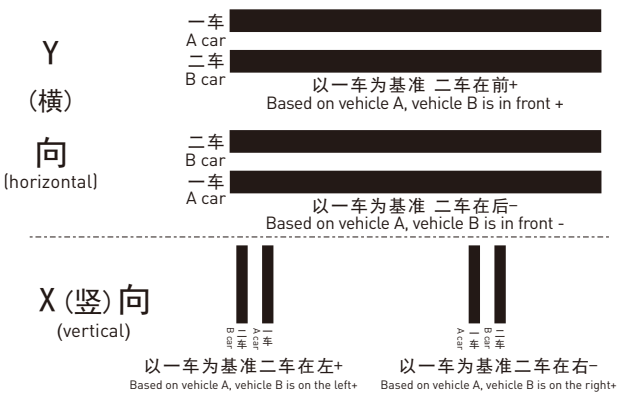
校准-喷头设置-电压校准建议数值为50；整体电压调节高低以1头为准。
The recommended value for calibration nozzle settings voltage calibration is 50; The overall voltage regulation is based on 1 head.

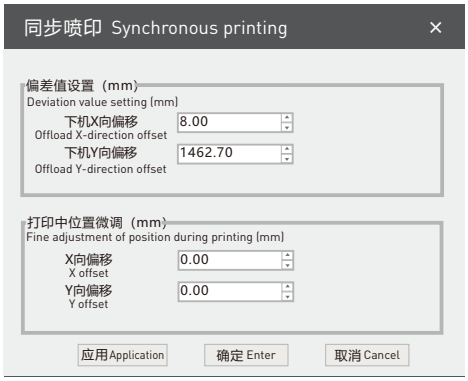


输入电压百分比值点确定，通常电压值不要大于50
Determine the percentage ratio point of input voltage, usually the voltage value should not exceed 50

注意:非专业人员改动电压容易烧喷头
Attention: Non professional personnel can easily burn the nozzle by changing the voltage

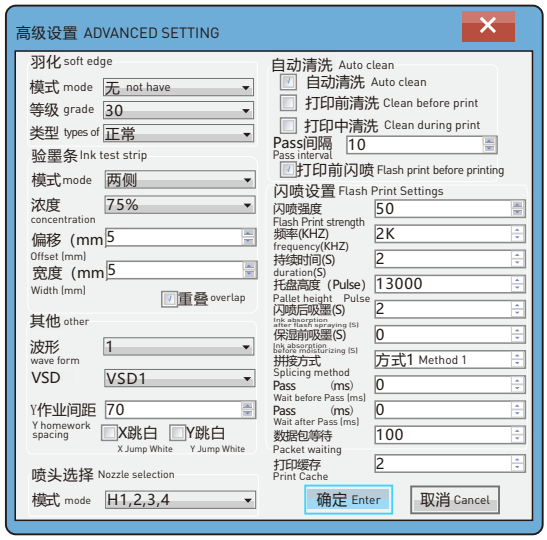
18.同步设置 Synchronization Settings





19.羽化模式 Soft Edge Mode

高级设置-羽化；模式和类型可随意更改羽化等级必须在30或以上。
Advanced Settings - Soft Edges; The mode and type can be freely changed. The feathering level must be 30 or above.



20.温度设定 Temperature setting

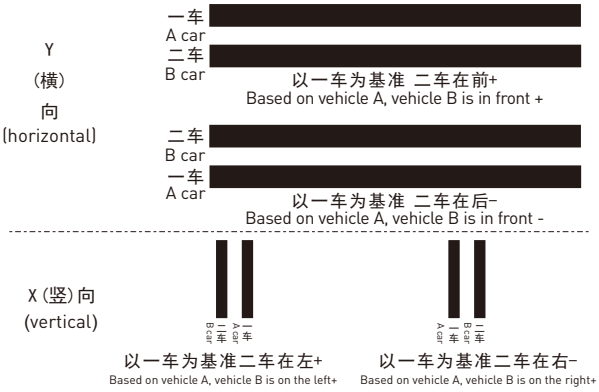
双面打印夹黑布温度设定辅助加热温度设定200 主加热温度设定190;温度调节参考序号（5）调速器、温控表、开关使用方法

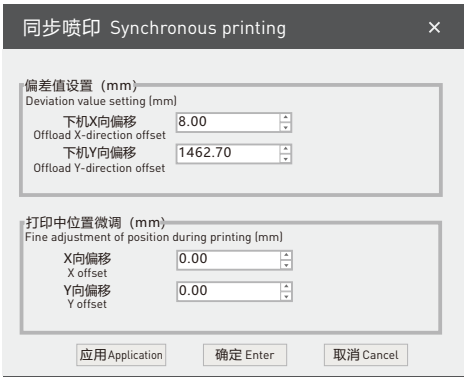
Double sided printing clip black cloth temperature setting auxiliary heating temperature setting 200 main heating temperature setting 190; Temperature regulation reference number (5) Governor, temperature control table, and switch usage method

21.同步微调设置 Synchronous fine tuning settings

每次打印长度、宽度不同需要在打印图前加上网格图以此来确认对位是否完全准确如不准确参考下面图进行微调；微调数值打印结束后自动消失不会保存进入数值内。

Each time the printing length and width are different, a grid image needs to be added before the printing image to confirm whether the alignment is completely accurate. If not, refer to the following figure for fine tuning; The fine tuning values will automatically disappear after printing and will not be saved into the values.





INSTALLATION AND COMMISSIONING

EMAT八头八色打印机安装调试

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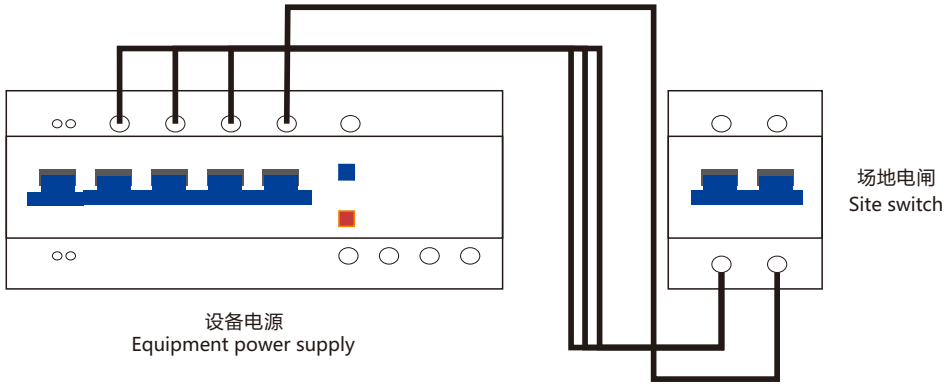
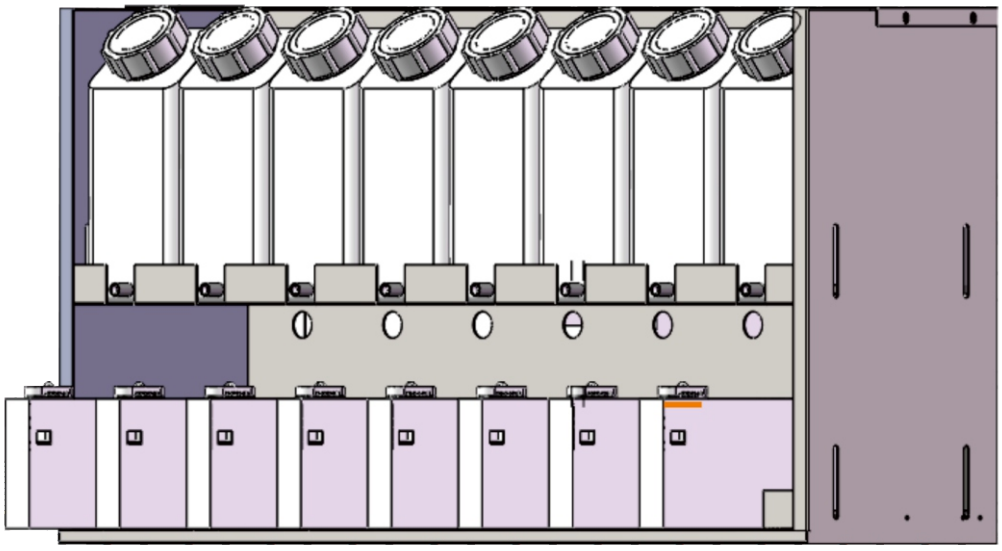
1.设备接线 Equipment wiring

设备烘干显色接电 如图所示设备左侧门打开配电柜内有对应的电闸接线位置。机头电源插孔在设备左侧配电柜右侧位置（三孔插座）电源线请用随机配件内所带的进行接电。设备电接好后请联系技术人员确认下是否正确。

Equipment drying color connection, as shown in the left door of the equipment to open the distribution cabinet has the corresponding switch wiring position. The power supply Jack in the left side of the equipment on the right side of the distribution cabinet (three-hole socket) power cord please use the one in the random accessories for power connection. After the equipment is connected, please contact the technician to confirmwhether it is correct.



2.墨壶位置、废墨壶位置 The position of ink pot and waste ink pot



3.软件安装 Software installation

高通官网：www.gtrsh.com-下载中心-登录账号-下载对应的打印软件和蒙泰（曲线内置）。
软件解压码：gtrsh
打印软件解压-安装WinPcap_4_1_3.exe此驱动-打开打印控制软件AT.MainAppForm.exe确认软件可以打开。
蒙泰解压-安装SETUP.EXE-加密狗插电脑上-蒙泰打印管理器-管理-设定TCP-IP端口-添加端口-IP地址：127.0.0.1-检测会出现9100。
蒙泰-文件-打印机设定-安装蒙泰打印机-GT...此为蒙泰曲线。建立文件-打印-打印机设定-端口选择127.0.0.1，纸张pass数上下对应否则曲线不生效。

Qualcomm official website: www.gtrsh.com - Download Center - Login Account - Download the corresponding printing software and Montage (built-in curve).
Software decompression code: gtrsh
Print Software Decompression - Install WinPcap_ 4_ 1_ 3. exe This driver - Open the print control software AT.MainAppForm.exe to confirm that the software can be opened.
Montai Decompression - Install SETUP.EXE - Plug the dongle into the computer - Montai Print Manager - Management - Set TCP IP Port - Add Port - IP Address: 127.0.0.1-9100 will appear during the detection.
Montai - File - Printer Settings - Install Montai Printers - GT... This is the Montai curve. Create File - Print - Printer Settings - Port Selection 127.0.0.1, Paper
If the number of Zhang passes corresponds up and down, the curve will not take effect.

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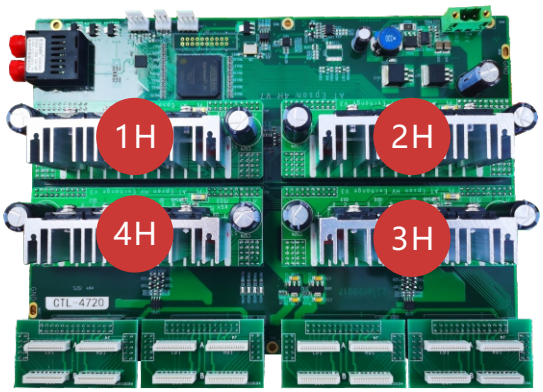
4.喷车板插线顺序 Spray board wiring sequence

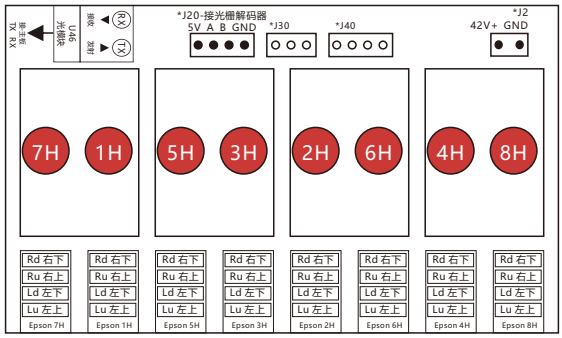
下图和文字标注仅供参考；插线后请先勿通电与技术人员确认此标注车板顺序是否正确。
The following picture and text mark is for reference only; please do not power up after plug-in and the technical staff to confirm this mark plate sequence is correct.

小车板 Nozzle motherboard



Epson喷头1H Epson nozzle 1H | Epson喷头4H Epson nozzle 4H | Epson喷头2H Epson nozzle 2H | Epson 喷头3H Epson nozzle 3H

车板详细注解 Note on the details of the noble motherboard



此图仅供参考；请联系技术人员确认是否正确
This figure is for reference only; Please contact the technical personnel to confirm if it is correct

--**车板插线方式(转接板为16芯)**:
--Car board wiring method (adapter board with 16 cores):

Lu喷头左上	LU nozzle upper left
Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

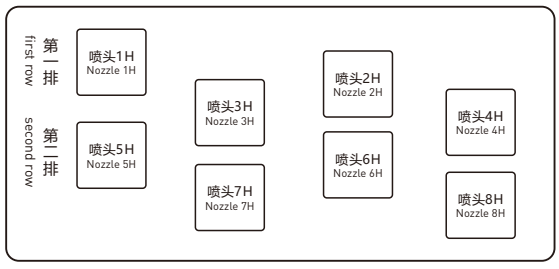
--**车板插线方式**(转接板为16芯):
--Car board wiring method (adapter board with 14 cores):

Lu喷头左上	LU nozzle upper left
Ld喷头左下	Ld nozzle bottom left
Ru喷头右上	Ru nozzle upper right
Rd喷头右下	Rd nozzle bottom right

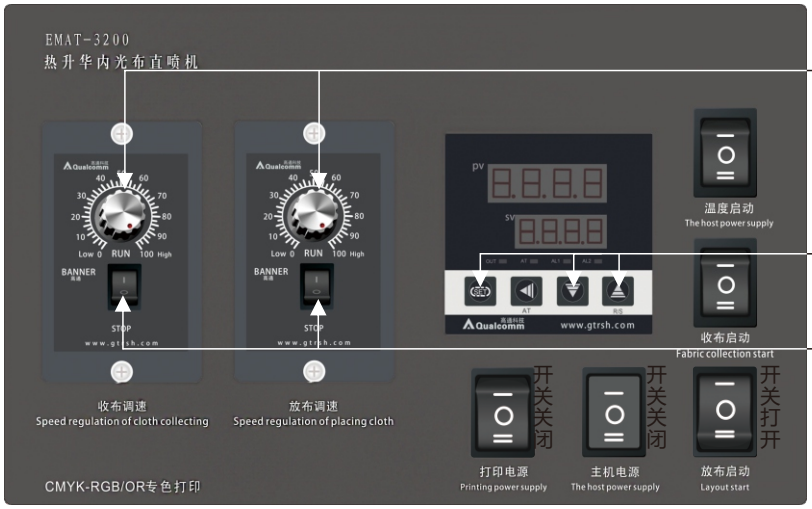
--14芯转接板为中文标注
--The 14 core adapter board is labeled in Chinese

--颜色顺序：第一排每个头粉M 黄Y 天蓝C 黑K
第二排每个头大红R 绿G 宝蓝B 橙Or
--Color order: First row, each head pink M yellow Y sky blue C black KEach head in the second row is bright red, R green, G royal blue, B orange, or

喷头底板顺序 Sequence of nozzle base plate



5.调速器、温控表、开关使用方法 Speed governor, temperature control meter, switch usage



速度调节
Speed adjustment

点击SET后
温度闪烁
按上下箭头调节温度
调节后按SET确认
After clicking on SET
Temperature flicker
Press the up and down arrows
to adjust the temperature
Press SET to confirm after adjustment

调速开关 关闭状态等于0
The closed state of the speed
control switch is equal to 0

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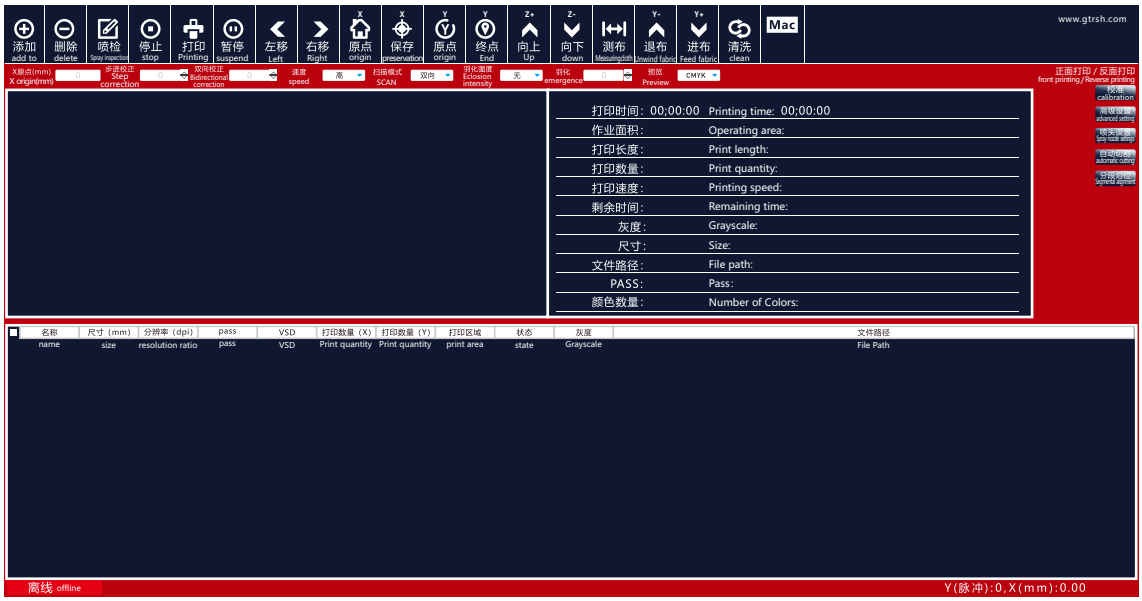
6.调节喷车高低 Adjust the height of the spray truck

喷头距离布面为2.5mm以内，喷头距离过高会导致喷头打印在画面上不实边缘发虚，检查8个喷头距离布面是否为完全平行状态,如不是请将底板调节至4个喷头距离布面高度一样状态。 8头8色喷车为软件控制喷头距离，可升可降根据实际所打印布料去进行调解高低。Z轴向上向下为进行调节高度调好 将距离填入Z原点内。

The distance between the nozzle and the cloth surface is within 2.5mm. If the nozzle distance is too high, it will cause the nozzle to print on the screen with false edges. Check if the 8 nozzles are completely parallel to the cloth surface. If not, adjust the bottom plate to the same height as the 4 nozzles from the cloth surface. The 8-head and 8-color spray truck uses software to control the distance between the spray heads, which can be adjusted according to the actual printed fabric. Adjust the height up and down along the Z-axis and fill the distance into the Z-origin.



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7.墨栈参数调节 Ink stack parameter adjustment

①清洗喷头时注意喷头与墨栈帽之间是否完全吻合，如吻合则无需手动调节如不吻合调节墨栈。
②下图软件打开方式：软件AT.Pcs.AssistTools.exe-清洗配置即可看到下图页面
③墨栈和喷头吻合但清洗时第一次喷头与墨栈之间高度不吻合，调节第一个墨栈正向移动参数（过低增加 过高减少）。
④墨栈和喷头吻合但清洗时刮墨高度过低，调节第二个墨栈正向移动参数（过低增加 过高减少）。
⑤墨栈和喷头吻合但清洗后打印第一次出现黑道。将墨栈仔细与喷头对好，如还出现频率、时间、强度、高度可适当增加一点。

① When cleaning the nozzle, pay attention to whether there is a complete match between the nozzle and the ink stack cap. If there is a match, there is no need to manually adjust the ink stack if it does not match.

② The software opening method shown in the following figure: software AT.Pcs.AssistTools.exe - clean the configuration to see the following page

③ If the ink stack and nozzle match, but the height between the first nozzle and the ink stack does not match during cleaning, adjust the forward movement parameter of the first ink stack (increase too low, decrease too high).

④ The ink stack matches the nozzle, but the scraping height is too low during cleaning. Adjust the forward movement parameter of the second ink stack (increase if it is too low, decrease if it is too high).

⑤ The ink stack and nozzle match, but black spots appear for the first time when printing after cleaning. Carefully align the ink stack with the nozzle, and increase the frequency, time, intensity, and height appropriately.

配置工具 Configuration Tools

提供参考
Provide reference

配置工具 Configuration Tools

现有产品
Existing products

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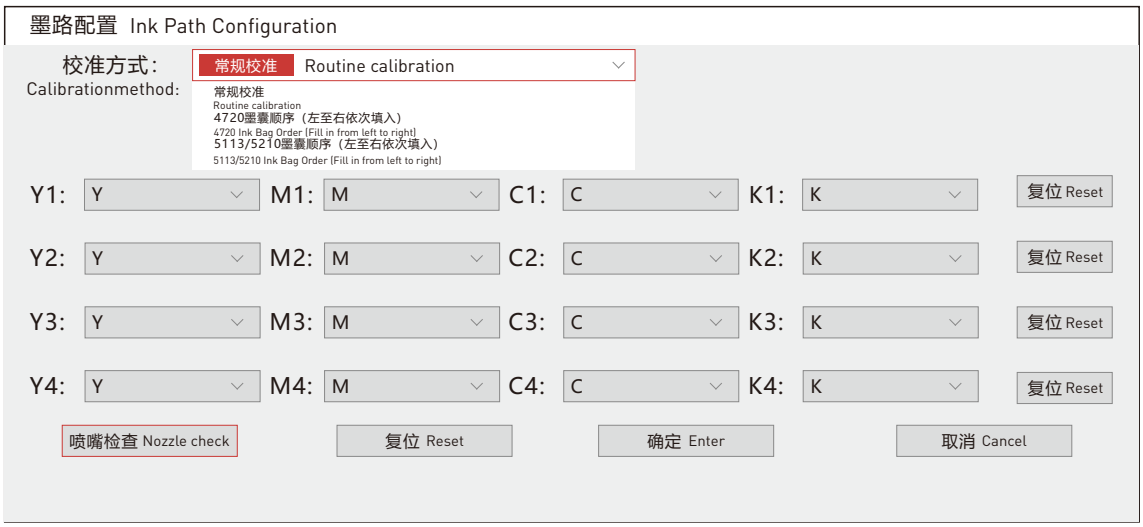
8.墨序校准 Ink sequence calibration

AT.Pcs.AssistTools.exe-墨路配置-校准方式箭头-常规校准-对应的喷头（4720与3200是一个）按照从左到右顺序依次填入墨管内颜色，单击确定。

AT.Pcs.AssistTools.exe - Ink Path Configuration - Calibration Method Arrow - General Calibration - Corresponds to the nozzle (4720 and 3200 are the same), fill in the colors inside the ink tube in order from left to right, and click OK.



9.步进校准 Step calibration

AT.MainAppForm.exe-校准-步进校准-粗调-脉冲（脉冲20000请不要更改）-打印;用格尺测量打印出来的两条横线的内间距，填入“距离（mm）”中，点击[应用]。

AT. MainAppForm. exe Calibration Step Calibration Coarse Pulse (pulse 20000 please do not change) Print; Measure the inner distance between the two printed horizontal lines with a ruler, fill in the "Distance (mm)" field, and click [Apply].

起始线
Start line

终止线
Finishing line

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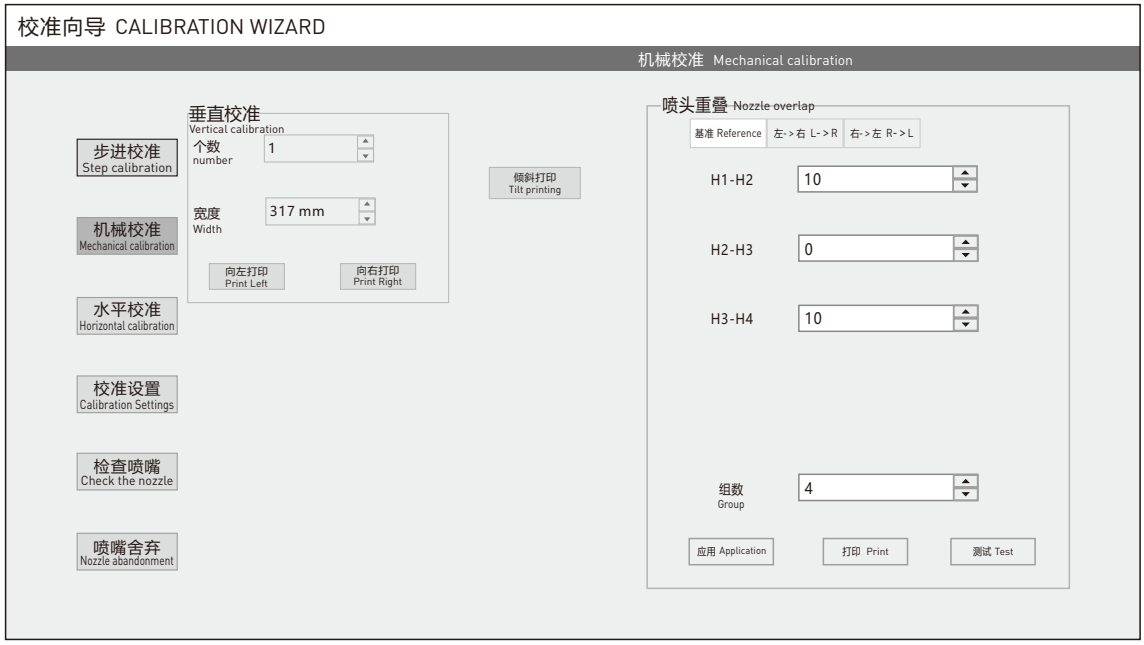
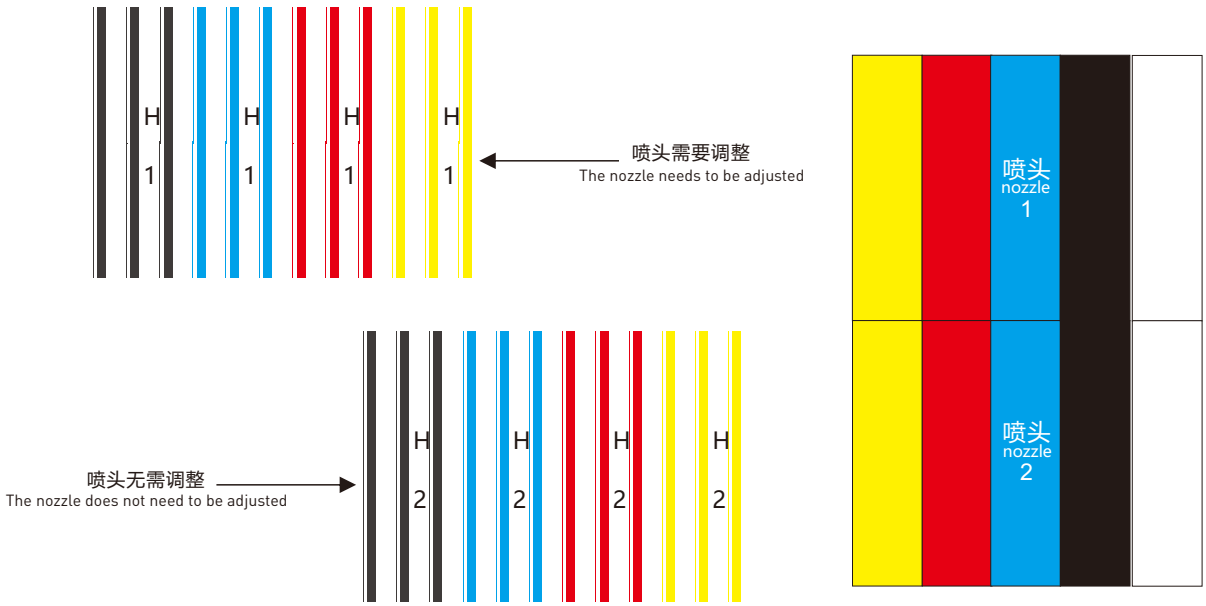
10.喷头垂直校准 Vertical calibration of nozzle

校准-机械校准-向左打印；观察打印出的喷头状态是否垂直，如下图喷头1不垂直需要轻微旋转喷头，喷头2是直的则不需要调整；调整后向左和向右打印下看下打出来的喷头状态是否垂直，如果向左和向右的不一致请检查喷头底板前后的倾斜度。

AT. MainAppForm. exe - Calibration - Mechanical Calibration - Left Print; Observe whether the printed nozzle state is vertical, as shown in the figure below. If nozzle 1 is not vertical, slightly rotate the nozzle, and if nozzle 2 is straight, no adjustment is required; After adjustment, print to the left and right to check if the printed nozzle status is vertical. If there is a discrepancy between the left and right, please check the inclination of the nozzle base plate before and after.





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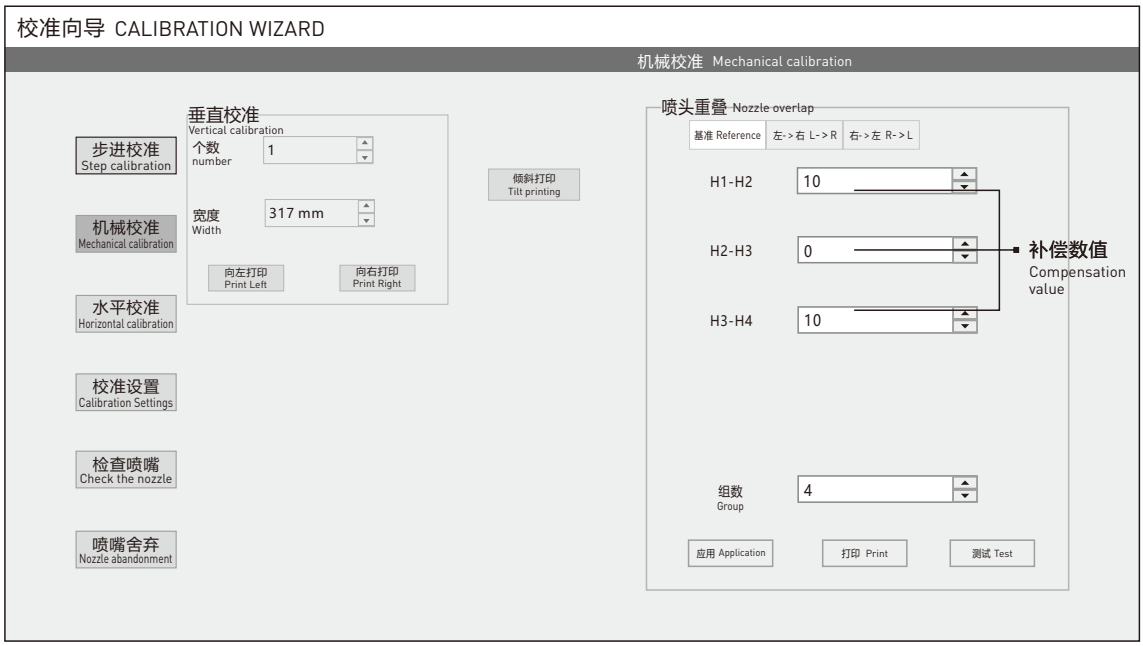
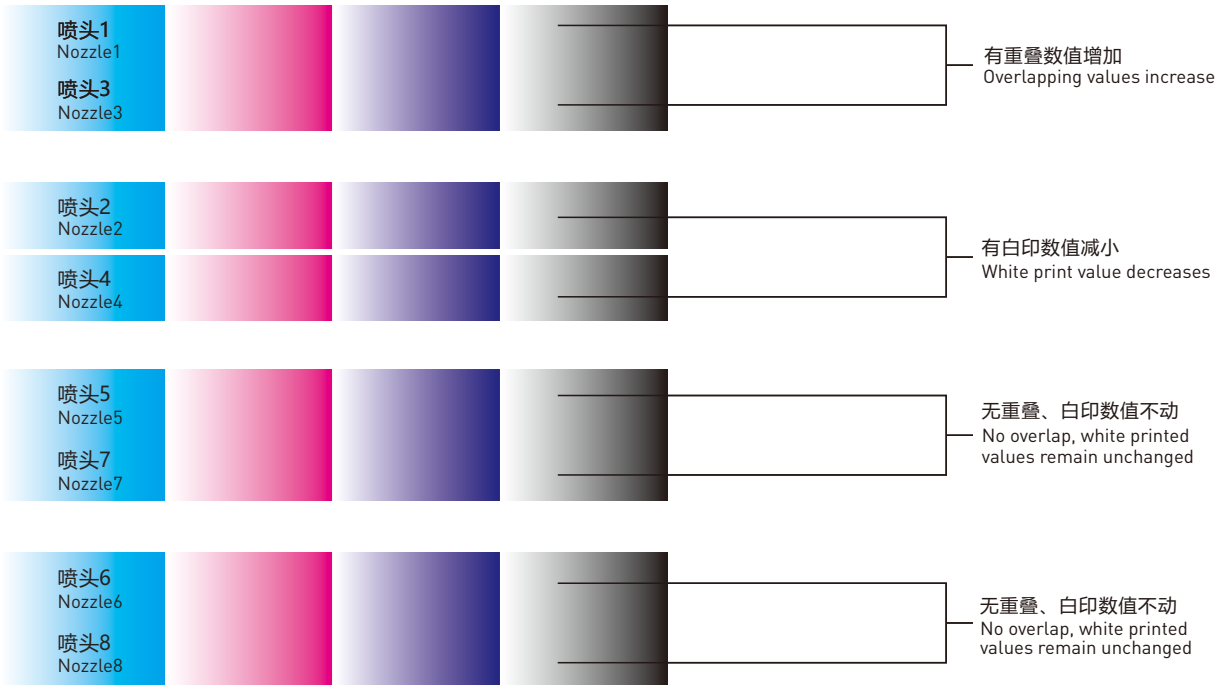
11. 喷头重叠校准 nozzle overlap calibration

机械校准-右侧-基准-测试会打印出下图所示内容根据喷头之间重叠与白印来调试补偿数值（补偿数值最低为0不能为负数）。

Mechanical calibration - right side - benchmark - test will print the content shown in the following figure to adjust the compensation value based on the overlap and white print between the nozzles (the minimum compensation value is 0 and cannot be negative).





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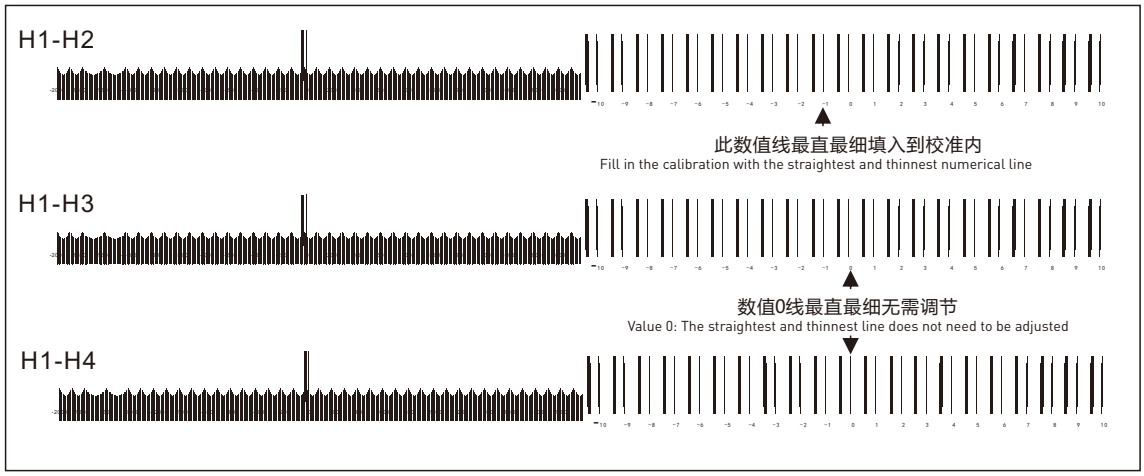
12.水平校准 Horizontal calibration

校准-水平校准-[左-›右]-检查观察数值0上面所打印的直线都垂直并且中间线最细，如下图所示喷头1-喷头2之间-1最直最细，则在喷头1-喷头2之间数值填入-1点击应用。调整所有喷头之间数值后在点检查观察是否所有喷头之间数值0线段是最细的。如是则进行校准右-›左；校准方法同左-›右。

Calibration - Horizontal Calibration - [Left→Right] - Check that the lines printed on the observation value 0 are vertical and the middle line is the thinnest. As shown in the figure below, the values between nozzle 1 and nozzle 2 are -1, the straightest and thinnest. Then fill in the values between nozzle 1 and nozzle 2 with -1 and click Apply. After adjusting the values between all nozzles, check at the point to see if the 0 line segment between all nozzles is the thinnest. If so, calibrate right→left; The calibration method is the same as left→right.



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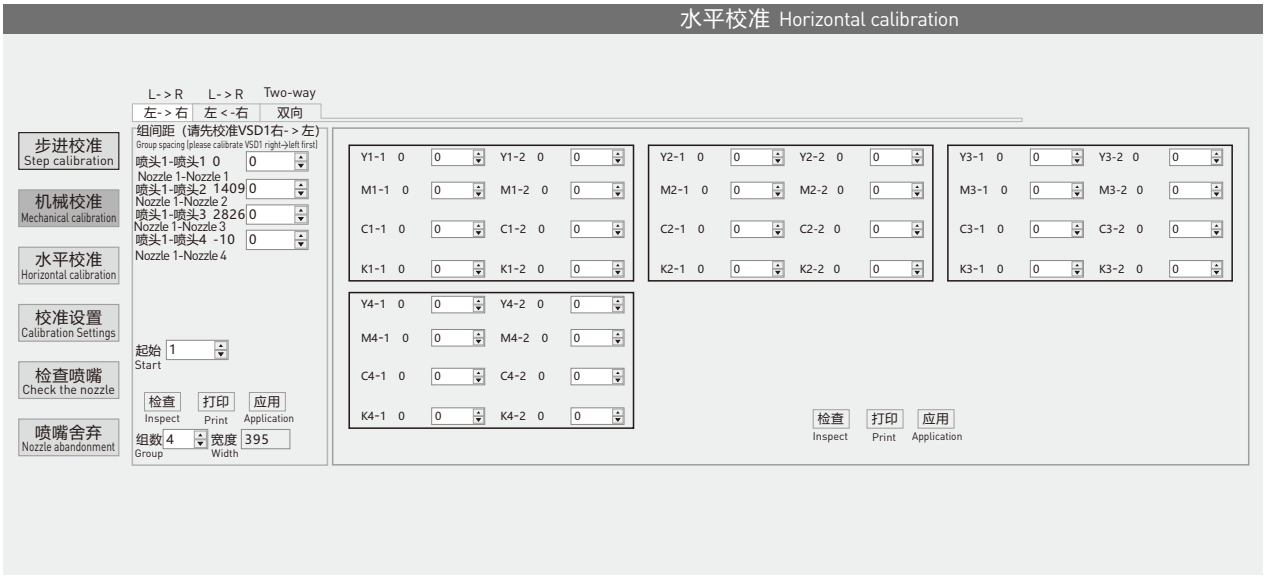
13.套色 Coloring

校准-水平校准-左-›右；右侧红色圈栏目内打印 打印出如图2所示内容找出每一个数值最直的最细的线将这个线下面的数值填入至调色栏对应的位置处后电机应用，在次点击打印；观察是否所有数值0位置都是最直且最细的线。如是则进行校准右-›左；校准方法同左-›右。

Calibration - Horizontal Calibration - Left -→Right; Print the content in the red circle column on the right as shown in Figure 2. Find the straightest and thinnest line for each value, fill in the value below this line at the corresponding position in the color bar, and then apply it to the motor. Click on the next button to print; Observe whether all values at position 0 are the straightest and thinnest lines. If so, calibrate right→left; The calibration method is the same as left→right.



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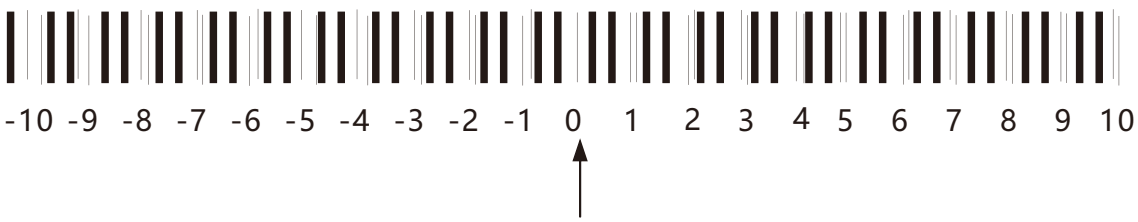
14.双向校准 Bidirectional calibration

校准-水平校准-双向-打印观察数值0是否最直最细，如下图所示数值10最直最细,填入10,点击应用在检查是否数值0是最直最细的。

Calibrate - Horizontal Calibrate - Bidirectional - Print and observe if the value 0 is the straightest and thinnest, as shown in the figure below. Fill in the value 10 and click Apply to check if the value 0 is the straightest and thinnest.

此图案中10对齐了，
将此值填入到校准内
10 in this pattern is aligned,
fill this value in the calibration

继续打印，直到输出的图案中"0"是对齐的，如下图所示
Continue printing until "0" in the output pattern is aligned, as shown in the following figure



此图案中0对齐了
0 is aligned in this pattern

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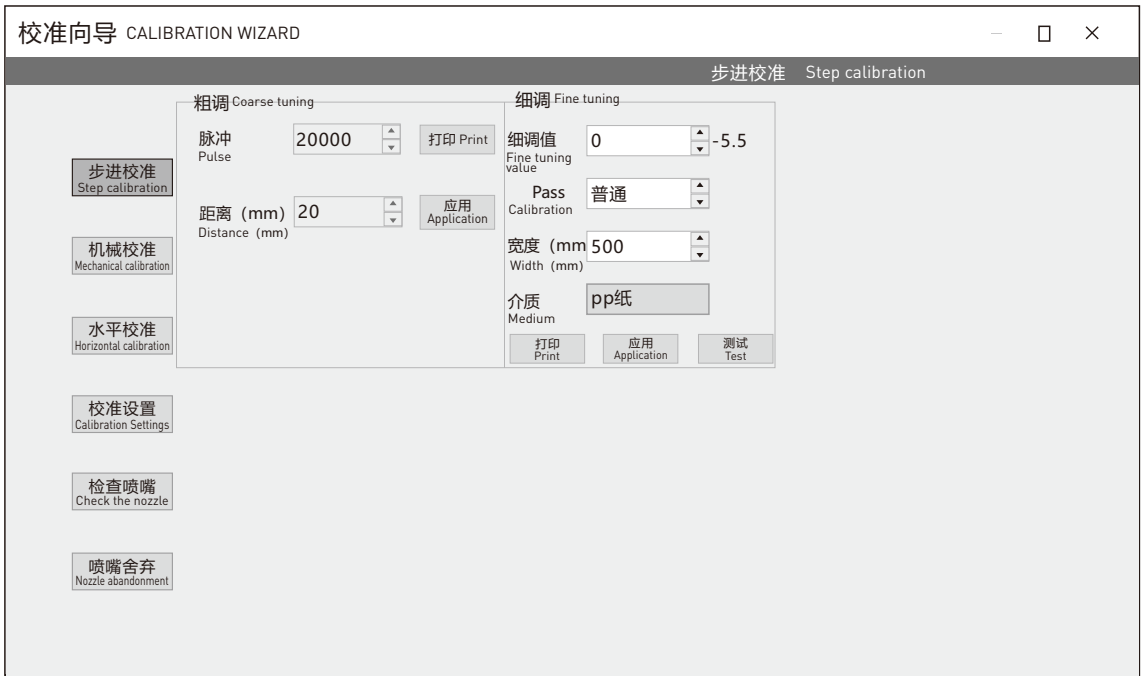
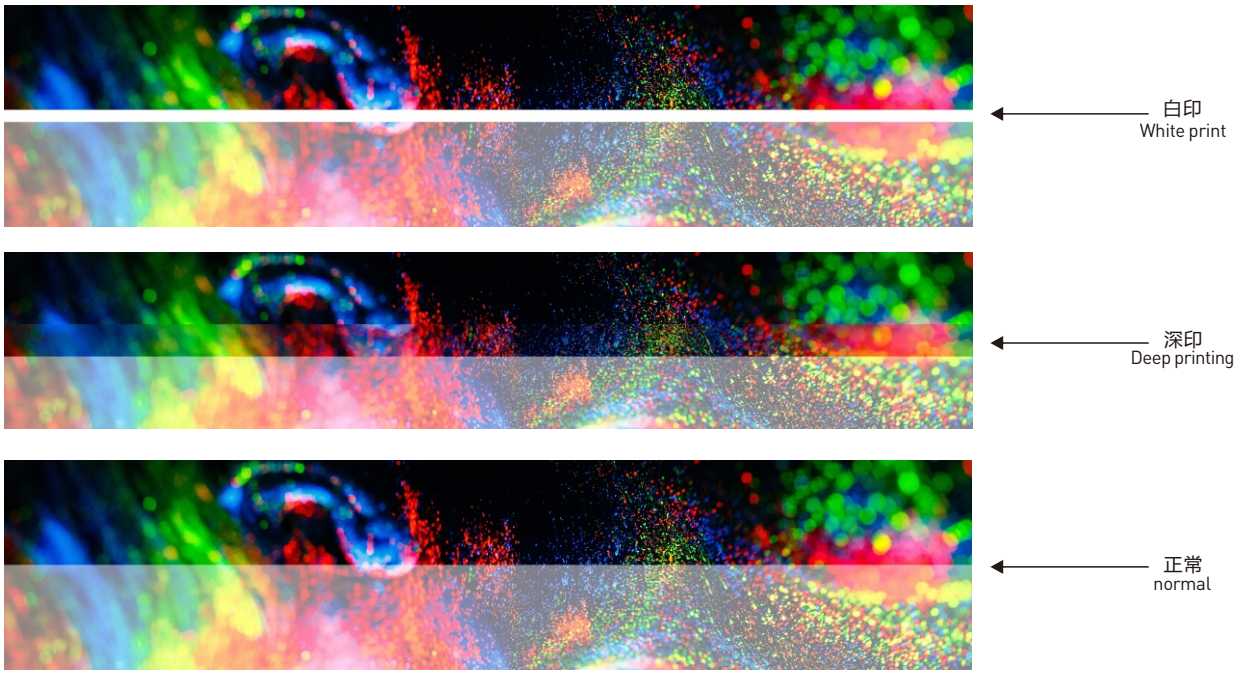
15.步进校准 Step calibration

打开AT.MainAppForm.exe软件，界面羽化改成无。蒙泰rip纯色图打印1pass观察出现深印还是白印校准-步进校准细调值（根据实际打印画面深印+白印-）1pass为大概的细调，调整过后羽化无蒙泰rip纯色图打印2pass观察出现深印还是白印 校准-步进校准细调值（根据实际打印画面深印+白印-）调整过后把羽化开成弱进项打印画面。

Open the AT.MainAppForm.exe software and change the interface feathering to None. Observe whether there is deep printing or white printing in the printing process of the Montage Rip solid color map. Step by step calibration and fine tuning value (based on the actual printing image of deep printing and white printing). Step by step calibration and fine tuning value (based on the actual printing image of deep printing and white printing). Step by step calibration and fine tuning value (based on the actual printing image of deep printing and white printing). Step by step calibration and fine tuning value (based on the actual printing image of deep printing and white printing). After adjustment, turn the feather into a weak input printing image.





图为打印2pass 前半段为2pass 打印后半为2pass 只打印1pass状态

The picture shows printing the first half of the 2 pass as 2 passes, and printing the second half as 2 passes, only printing the 1 pass status

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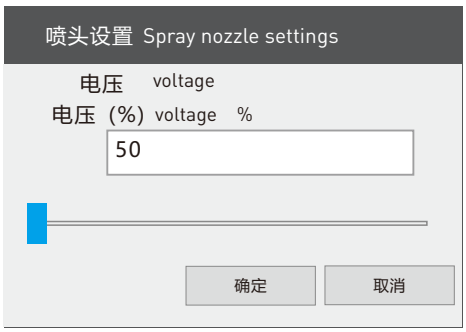
16.电压校准 Voltage calibration

喷头设置电压校准建议数值为50；整体电压调节高低以1头为准。

The recommended voltage calibration value for nozzle setting is 50; The overall voltage regulation is based on 1 head.



输入电压百分比值点确定，通常电压值不要大于50

Determine the percentage ratio point of input voltage, usually the voltage value should not exceed 50

注意:非专业人员改动电压容易烧喷头

Attention: Non professional personnel can easily burn the nozzle by changing the voltage

GADGET CHAPTER

小工具篇章

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1.齿轮比设置 Gear ratio setting

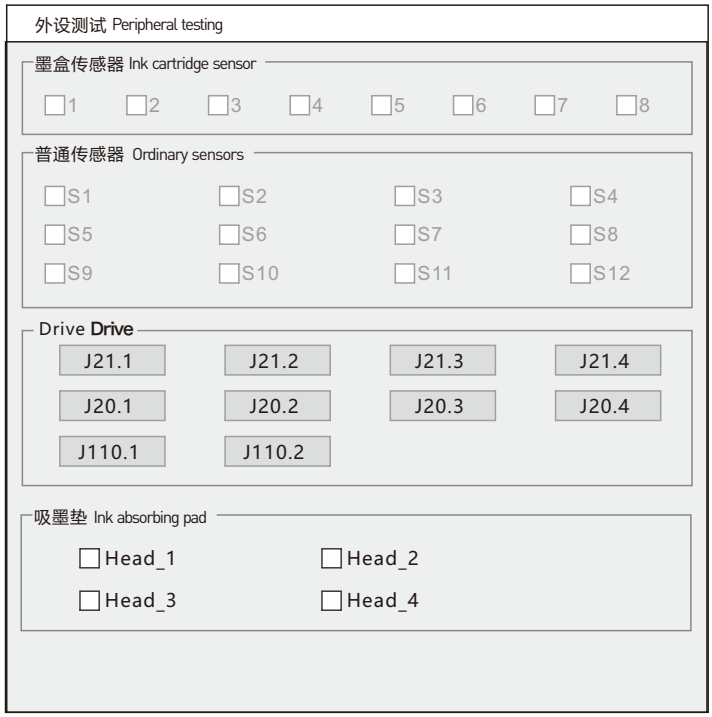
AT.MainAppForm.exe-小车归位-获取原点初始位置-测量平台宽度（注意平台上不要有任何东西防止剐蹭喷头）测量完成-确定小车会回原点位置-工具-运动测试-移动，小车停止后-获取（X）重复两次移动获取；两次获取数值偏差低于50-设置齿轮比，小车停止移动齿轮比设置成功-确定-获取-移动，小车停止移动-获取（X）重复两移动获取，两次获取数值偏差低于50点击设置齿轮比。

AT. MainAppForm. exe - Trolley homing - Obtain the initial position of the origin - Measure the width of the platform (note that there is nothing on the platform to prevent scratching the nozzle) - Measure completion - Confirm that the trolley will return to the origin position - Tools - Motion testing - Move, after the trolley stops - Obtain (X) Repeat the movement twice to obtain; If the deviation between the two obtained values is less than 50- set the gear ratio, the car stops moving. The gear ratio is set successfully - confirm - obtain - move, and the car stops moving - obtain (X). Repeat the two obtained values, and if the deviation between the two obtained values is less than 50, click to set the gear ratio.

2. 喷头填充 Spray nozzle filling

AT.MainAppForm.exe-工具-外设测试-吸墨垫-勾选Head-哪个则会一直填充哪个喷头点确定后或取消勾选停止填充 填充前确认好喷头与墨栈处于吻合状态。

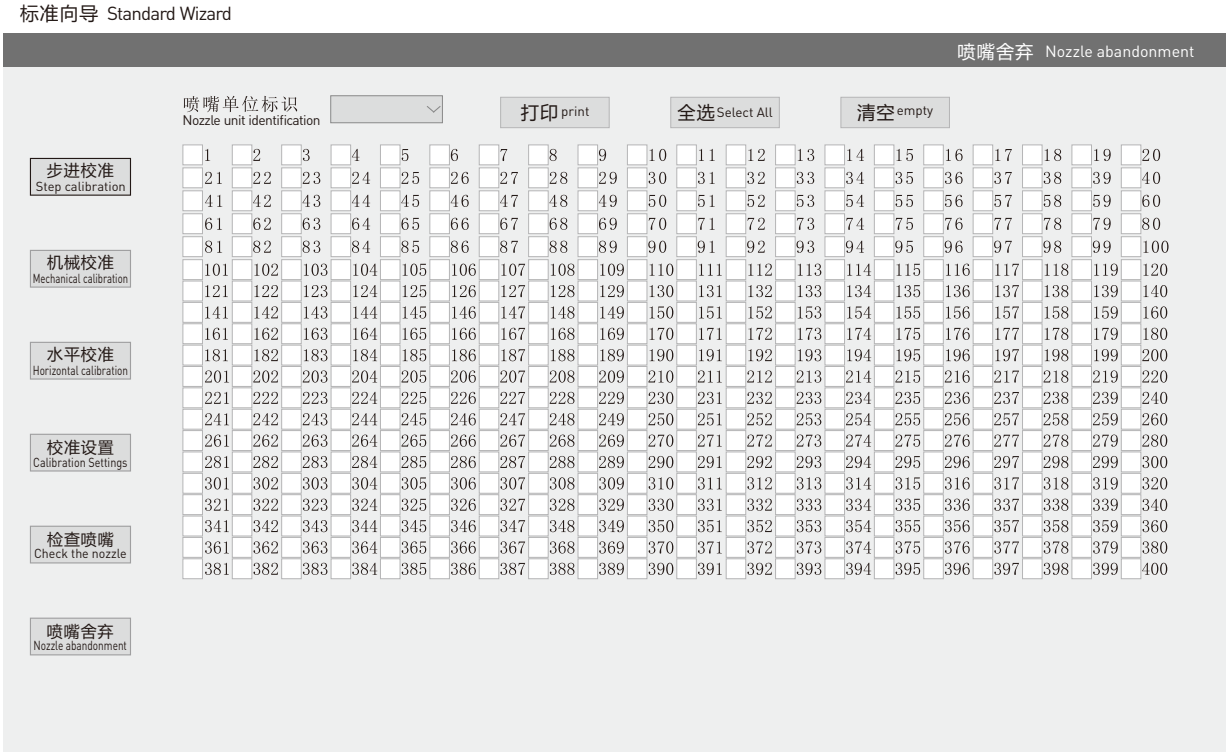
AT. MainAppForm. exe Tools Peripheral Testing Ink Absorbing Pad Check Head which nozzle will continue to be filled. After confirming or unchecking Stop Filling, confirm that the nozzle and ink stack are in a matching state.



3.喷嘴舍弃 nozzle abandonment

AT.MainAppForm.exe-校准-喷嘴舍弃-喷嘴单位识别选择对应的进行打印观察是哪个孔不出选择对应的喷嘴号勾上对应的喷孔，喷孔就会关闭；点击清空，会打开所有的喷孔。

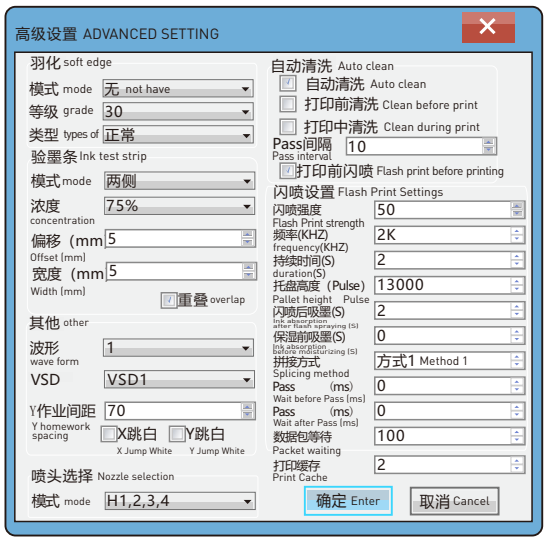
AT. MainAppForm. exe - Calibration - Nozzle Abandonment - Nozzle Unit Identification - Select the corresponding hole for printing and observe which hole does not appear. Select the corresponding nozzle number and tick the corresponding nozzle hole to close it; Click Clear to open all spray holes.



4. 关闭喷头 Turn off the nozzle

AT.MainAppForm.exe-高级设置-喷头选择（左下角）可以选择几个头打印输出 选择后点确认 建议关闭喷头后重新开机以免打印出现错误数据。

AT. MainAppForm. exe - Advanced Settings - Jet Selection (bottom left corner) You can select several heads to print and output. After selecting, click OK. It is recommended to turn off the nozzle and restart it to avoid printing incorrect data.



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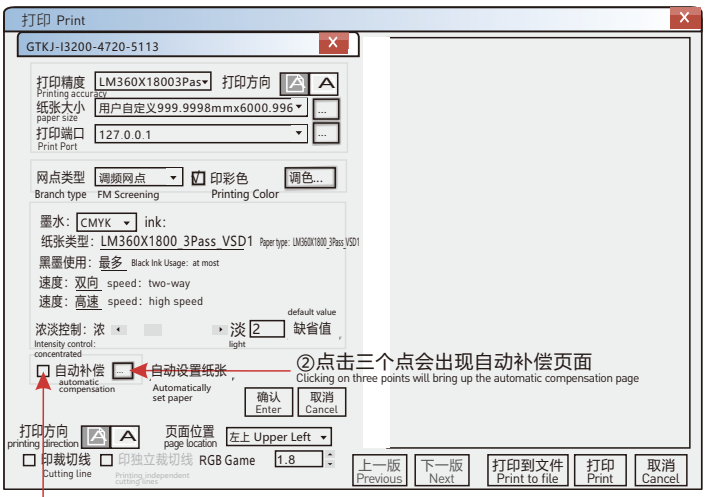
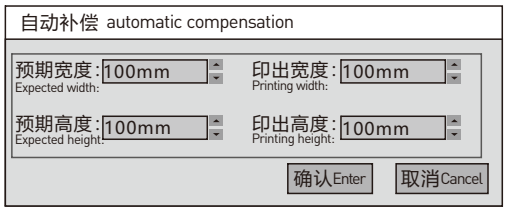
5.打印缩尺 Print scale

蒙泰中打开自动补偿后打印尺寸填入预期内实际出现的尺寸填进印出中点击确定。
After turning on automatic compensation in Mengtai, fill in the expected actual size and click OK in the print output.

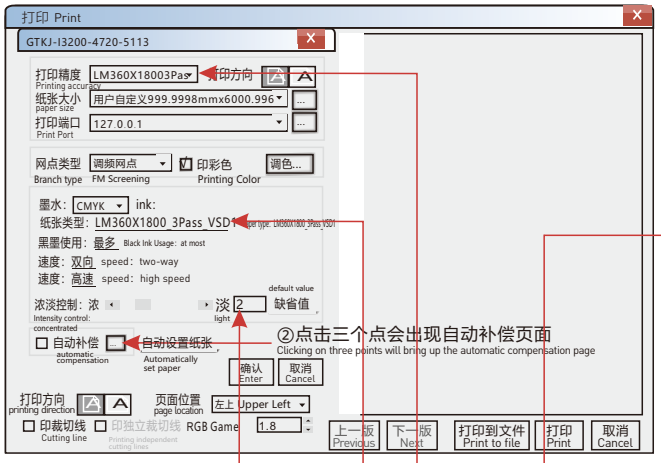


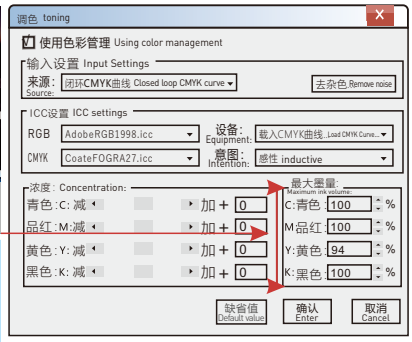


6.打印色彩 Printing colors

打印精度与纸张类型必须一样曲线生效如打印精度与纸张类型不一样曲线不生效有可能会造成偏色的现象调色中针对最大墨量调节降低单一颜色也会造成偏色建议四色一起降低。2pass与3pass之间重叠次数不同墨量是不一样的温度调节±10度左右会保证颜色输出更好 2pass墨量与3pass墨量之间建议调整成不一样 墨量过大会导致晕墨等现象。

The printing accuracy and paper type must be the same. If the printing accuracy and paper type are not the same, the curve may not be effective, which may cause color deviation. When adjusting the maximum ink volume in color matching, reducing a single color can also cause color deviation. It is recommended to reduce the color deviation of all four colors together. Different overlap times between 2Pass and 3Pass require different ink levels. Adjusting the temperature to around ± 10 degrees will ensure better color output. It is recommended to adjust the ink levels between 2Pass and 3Pass to different levels, which can lead to inking and other phenomena.





曲线生效时禁止更改（调色）项目
单项≥3可以微调
整体（CMYK）同时调整不会偏色
Prohibit changing (color palette) items when the curve is in effect
Single item ↗ 3 can be fine tuned
Simultaneously adjusting the overall (CMYK) without color deviation

说明：
Explain:
国际标准Adobe公司ICC
CMYK/RGB
International Standard Adobe ICC
CMYK/RGB
特殊色彩使用photoshop转换成RGB
色彩鲜亮
Convert special colors to RGB using Photoshop
Bright colors
黑、绿、蓝、红全新标准
New standards for black, green, blue, and red
2pass 3pass 4pass
打印速度不同温度（±10℃）
2pass 3pass 4pass
Printing speed at different temperatures (± 10)

7.设备定期检查 Regular inspection of equipment

日检 Daily inspection	检查大墨盒中墨水量，建议墨水的最佳液位在1/2到2/3之间；防止墨水打空 Check the ink level in the large ink cartridge, and it is recommended that the optimal ink level be between 1/2 and 2/3; Prevent ink from being emptied
	检查废墨桶，必要时进行清理;防止废墨溢出； Check the waste ink bucket and clean it if necessary; Prevent the overflow of waste ink;
	检查墨垫的状态，若有大量废墨堆积时进行清洗或更换;防止喷头清洗不干净； Check the condition of the ink pad, and if there is a large amount of waste ink accumulation, clean or replace it; Prevent the nozzle from not being cleaned thoroughly;
	检查刮片是否有废墨堆积，及时清理刮片，保持刮片整洁;防止积存过多； Check if there is any accumulation of waste ink on the scraper blades, clean them in a timely manner, and keep them clean and tidy; Prevent excessive accumulation;
	检查排油阀门是否每天打开排放油污；防止布面出现油污； Check whether the oil drain valve is opened every day to discharge oil stains; Prevent oil stains on the fabric surface;
	检查墨管夹是否夹住状态；防止喷头流墨； Check if the ink pipe clamp is clamped properly; Prevent ink flow from the nozzle;

月检 monthly inspection	检查电源插座和USB接口是否有松动； Check if the power socket and USB interface are loose;
	检查X(伺服电机)电机皮带的松紧度是否合适，适当调整皮带的张力; Check the tightness of the X (servo motor) motor belt and adjust the tension of the belt appropriately;
	检查小车上皮带张力是否合适，适当调整皮带张力; Check if the belt tension on the trolley is appropriate and adjust the belt tension appropriately;
	检查光栅传感器与光栅之间是否有灰尘，光栅是否被污染，及时清理光栅和传感器之间的异物; Check whether there is dust between the grating sensor and the grating, whether the grating is contaminated, and promptly clean any foreign objects between the grating and the sensor;
	检查导轨是否有异响，导轨上抹适量的润滑脂并清理导轨上的灰尘 Check if there is any abnormal noise on the guide rail, apply an appropriate amount of lubricating grease on the guide rail, and clean the dust on the guide rail
	检查Y轴步进电机与胶辊处的联轴器上方螺丝是否有松动现象 Check if the screws above the coupling between the Y-axis stepper motor and the rubber roller are loose

半年检 Half year inspection	对整体电路进行检查，看是否有松动或断开，并及时修理;检查拖链里的管路和电线的磨损程度，必要时进行更换 Check the overall circuit for looseness or disconnection, and repair it in a timely manner; Check the wear of the pipelines and wires in the drag chain and replace them if necessary

8.高通官网 Qualcomm. Com

Qualcomm Official Website

WWW.GTRSH.COM

官网内包含全系产品、打印软件、Rip软件、升级包、安装教程、保修查询、经销商查询等功能定期更新。

The official website includes regular updates for all series of products, printing software, Rip software, upgrade packages, installation tutorials, warranty inquiries, dealer inquiries, and other functions.

热升华直喷设备使用手册
THERMAL SUBLIMATION PRINTER USER MANUAL

产品质检报告单

板卡编号			读取编号			装配标记		
	钣金 /机械	是否检验		电路/检查	是否检验		电器 /测试	是否检验
1	①左	中	右 ① L	C	R	√	1	③ 触摸屏安装接线 ③ Touch screen installation wiring	√	1	③ 烤箱升温测试 ③ Oven heating test	√
2	① 方管梁	上胶固定螺丝 ① Square tube beam	gluing fixing screw	√	2	③ 温控器	热探接线 Temperature controller	thermal detection wiring	√	2	③ 传感器测试 Sensor testing	√
3	② 特氟龙管 2134	高温轴承 ② Teflon tube 2134	high-temperature bearing	√	3	③ 调速器	收放接线 Governor	Retrieving and Releasing Wiring	√	3	③ 收方运动测试 Receiver exercise test	√
4	① 安装加热管灯罩	灯罩托板 ① Install the heating tube lampshade	lampshade bracket	√	4	③ 船型开关	接线 Ship type switch	wiring	√	4	③ 分切刀测试 Cutting knife test	√
5	① 安装 - 胶皮减震柱 ① Installation - Rubber shock absorber column			√	5	③ 加热管与 SSR接线 Heating tube and SSR wiring			√	5	③ 左右色差测试 Left and right color difference test	√
6	② 平行杆 /方梁上胶螺丝打紧 ② Tighten the adhesive screws on the parallelrod/square beam			√	6	③ 接近开关	收放接线 Proximity switch	retraction and release wiring	√	6	③ 光栅支架与位置 Grating bracket and position	√
7	① 安装加热管固定	打胶 ① Installation of heating pipe fixation	gluing	√	7	① 保温套管检查 Insulation sleeve inspection			√	7	③ 胶辊电机脉冲10000 Rubber roller motor pulse 10000	√
8	① 光栅支架	向上安装 Grating bracket	upward installation	√	8	打印机调试部分 Printer debugging section			√	8	③ 扫描电机 1· 2· 3· 4·NO Scanning motor 1.2 3. 4. NO	√
9	② 原点支架安装 Installation of origin bracket			√	9	③ 42·36·24V电源接线 42. 36. 24V power supply wiring			√	9	③ 手动测试胶辊传动 Manual testing of rubber roller transmission	√
10	② 同步轮安装 Installation of synchronous wheel			√	10	③ 主板	驱动板接线 Main board	driver board wiring	√	10	③ 墨泵 1· 2· 3· 4测试 Ink pump 1.2 3.4 Testing	√
11	② 扫描电机与宝塔轮安装 Installation of scanning motor and pagoda wheel			√	11	③ 车板接线	原点接线 Car board wiring	Origin wiring	√	11	③ 光电传感器是否 Is the photoelectric sensor	√
12	② 传动皮带与喷车连接 Connection between transmission belt and spray truck			√	12	③ 墨泵电机接线 Ink pump motor wiring			√	12	③ 齿轮比设置 ±10以内 Gear ratio setting within ± 10	√
13	② 坦克链与支架安装 Tank chain and bracket installation			√	13	③ 墨栈限位接线 Ink stack limit wiring			√	13	③ 平台宽度 / 纸张设置 Platform width/paper settings	√
14	① 光纤	墨管	电源线 Fiber optic	Ink tube	Power cord	√	14	③ 光栅解码器接线 Raster decoder wiring		√	14	③ 2米宽度打印测试 2 meter width printing test	√
15	① 收布胶辊	放布杆	挡片 Cloth receiving roller	Cloth releasing rod	Blocking plate	√	15	③ X扫描电机接线 X-scan motor wiring		√	15	③ 参数写入 Parameter writing	√
16	② 安装放布电机 Installing the cloth laying motor			√	16	③ Y胶辊电机接线 Y rubber roller motor wiring			√	16	③ 维护栈参数调整 Maintain stack parameter adjustment	√
17	热探 ② 加热管固定 Thermal exploration Heating tube fixation			√	17	③ 所有线路万能表检测 Universal meter detection for all lines			√	17	加密设置 Encryption settings	√
18	② 加热管电源线安装 Installation of heating tube power cord			√	18	以下为开机前检查 The following are pre startup checks			√	18		
19	② 驱动胶辊电机	屏蔽线 Drive rubber roller motor	shielded wire	√	19	③ 喷车与平台成 ∠ 90° 垫玻璃 Spray car and platform forming a angle of 90 ° with glass cushion			√	19		
20	① 胶辊与轴联轴器 / 螺丝固定 Rubber roller and shaft coupling/screw fixation			√	20	③ 喷头距离布面 5mm The distance between the nozzle and the cloth surface is 5mm			√	20		
21	② 安装接近开关	调整位置 Install proximity switch	Adjust position	√	21	③ 喷头与墨垫水平 ≤ 2mm Horizontal distance between nozzle and ink pad ≤ 2mm			√	21		
22	② 内外所有电路板安装 Installation of all internal and external circuit boards			√	22	③ 检查 - 平衡杆放 Inspection - Balance Bar Placement			√	22		
23	② 墨栈固定 Ink stack fixation			√	23	③ 检查 - 平衡杆收 ③ Inspection - Balance Bar Retraction			√	23		
24	② 穿引布条	封烤箱门 Thread the fabric strip	Seal the oven door	√	24	③ 检查 - 收布胶辊 ③ Inspection - fabric receiving roller			√	24		
25	② 安装护板 左	中 Install the left	middle guard board	√	25	③ 检查 - 放布铝杆 ③ Inspection - Placing Aluminum Rods			√	25		
26	② 安装切刀	位置调整 Installation of cutter	position adjustment	√	26	③ 检查 - 平行杆水平 ③ Inspection - Parallel Rod Horizontal			√	26		
27	① 吸墨关	吸烟开	方盒 Ink suction off	Smoking on	Square box	√	27	重要位置 strategic location				
28	② 安装下平行杆弹簧	白钢 Install the lower parallel rod spring	white steel	√	28	① L - 大梁左侧 基础面与铝支撑架 〃 数值： Value of "foundation surface and aluminum support frame" on the left side of L-beam:						
29	① 调试完成安装所有护板罩 After debugging, install all protective covers			√	29	① L - 大梁右侧 基础面与铝支撑架 〃 数值： Value of "foundation surface and aluminum support frame" on the right side of L-beam:						
30	① 光栅 · 光解 · 弹簧 · 胶 · 位置 Grating Photolysis Spring. Glue position			√	30	① R - 左侧 胶辊与基础面 〃 数值： R-Left side "rubber roller and foundation surface" value:						
31	① 清理打蜡 Cleaning and waxing			√	31	① R - 右侧 胶辊与基础面 〃 数值： R-Right side "rubber roller and foundation surface" value:						
32	② 导轨安装	向下 ± 0· 5mm Guide rail installation	downwards ± 0 5mm	√	32							
33	② 大梁安装	 Beam installation		√	33							
34	② 所有螺丝松紧长度复查 Recheck the tightness length of all screws			√	34							
35	② 所有螺丝平弹垫复查 All screws, flat spring pads, re checked			√	35							

主板编号同等于设备识别码每台一组请您注意保存
The motherboard number is the same as the device identification code, one set per unit. Please pay attention to saving it

钣金其他审核：检验 01
Other reviews of sheet metal

机械螺丝审核：检验 02
Mechanical screw review

电器调试审核：检验 03
Electrical debugging review

CERTIFICATE

ATTESTATIONCERTIFICATE OFELECTROMAGNETIC COMPATIBILITYANDLOWVOLTAGEDIRECTIVES

Technicalfileofthecompanymentionedbelowhasbeenobservedandaudithasbeen completedsuccessfully.

2014/30/EU Electromagnetic Compatibility Directive and 2014/35/EULowVoltageDirectiveshavebeentakenasreferencesfortheseprocesses

CompanyName	: **Shenyang Qualcomm Technology Co., Ltd.**
CompanyAddress	: Room G4026, No. 1005 airport Road, Shenyang Area, China (Liaoning) Pilot Free Trade Zone, Liaoning Province, China
ManufacturerName	: **Shenyang Qualcomm Technology Co., Ltd.**
ManufacturerAddress	: 32HeyangRoad,SujiatunDistrict,ShenyangCity,Liaoning Province, China
RelatedDirectivesandAnnex	: **2014/35/EU Low Voltage Directive** **2014/30/EU Electromagnetic Compatibility Directive**
RelatedStandards	: **EN 60204-1:2018; EN 61000-6-4:2019; EN 61000-6-2:2019**
ProductName	: **Heat Sublimation Direct Jet**
ReportNoandDate	:TCF-03-2020203-LVD+EMC
ProductB rand/Model/Type	: G352150,G5/S2150,G37/S2150,G35/S1800,IETM,EMAT, FR, FLR, EVE
CertificateNumber	: **M.2020.206.C60179**
InitialAssessmentDate	: 10.11.2020
RegistrationDate	: 11.11.2020
ReissueDate/No	: -
ExpiryDate	:10.11.2025

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