



使用说明书

User Manual



全国服务电话：400-8316492

Directory

i. Introduction	3
ii. Function introduction of each part of the machine.....	5
iii. Software installation	8
iv. Introduction to the main interface window.....	14
1 main menu.....	15
2 files.....	16
3 print.....	17
3.1 open task list.....	18
3.2 historical task list.....	19
3.3 task attribute.....	19
4 set.....	20
5 calibration before printing.....	21
5.1 introduction to nozzle detection function.....	21
5.2 introduction to level detection function.....	22
5.3 introduction to vertical testing function.....	23
5.4 introduction to bidirectional quasi - function.....	23
5.5 introduction to horizontal pitch calibration of sprinkler heads.....	24
5.6 introduction to the longitudinal pitch calibration of sprinkler heads.....	25
5.7 introduction to two-way calibration function.....	25
5.8. Introduction to color register calibration function.....	26
6 Voltage window.....	27
7 senior.....	28
7.1 information.....	28
7.2 edge sharp edge.....	29
8 shortcut button.....	29
9 status bar.....	31
v. UltrPrint. Exe software instructions.....	32
1. Software installation.....	32
2. Software instructions.....	34
vi. Establishment of Photoshop spot color channel.....	40
vii. Common faults and troubleshooting.....	45
viii. Disassembly and cleaning of sprinkler head.....	48
(1) disassembly.....	48
(2) nozzle cleaning.....	49
ix. Instructions for daily maintenance.....	49

I.Introduction

1.1welcome

First of all, thank you very much for your support of this product. At the same time, congratulations to you for having an all-around printer with diversified printing media and broad application fields. We sincerely hope that you can have a universal printer without any fault, so before using this machine, please read this "operation instruction" carefully, and please pay special attention to the "hints", "notes" and "important matters" marked part on the instruction. For your convenience in future use, please keep this instruction manual properly.

Declaration: with the improvement of product performance, the following contents of this instruction manual are subject to change without notice. Without any permission of BYC company, no unit, institution or individual may copy any part of this manual, including modification and translation, otherwise the company will investigate its legal liability.

Any loss or personal injury caused by the operator's violation of any of the following terms shall be borne by the user

1. All losses caused by the operator's failure to operate the parts of "**warning**", "**attention**" and "**important matters**" emphasized in the operation instructions;
2. All losses and personal injuries caused by the operation of minors;
3. Loss and personal injury caused by improper equipment placement and falling off or side down;
4. Loss and personal injury caused by improper placement of consumables by operators;
5. Fire and personal injury caused by illegal power supply and circuit connection;
6. The product is not guaranteed to be compatible with all types of computers and operating systems.
- 7, please use BYC original special accessories, special ink, if the use of non-BYC accessories and special ink caused by printer failure is not within the scope of warranty;
8. Do not change the original parameter Settings of the printer without authorization, otherwise all losses caused by the printer shall be borne by the user;
9. Please do not add ink before the machine starts normally.

1.2 safety information

Safety notice: please read this instruction carefully and operate in strict accordance with the instruction to avoid equipment damage or personal injury. Any damage to the equipment caused by failure to follow the instructions is not covered by our warranty.

【!Warning: if these instructions are ignored, personal injury or equipment damage may result from incorrect operation. For better use of universal printers, be sure to heed these warnings.

【!】 Note that ignoring these instructions may result in personal injury or equipment damage due to incorrect operation. In order to operate and use the universal printer safely, please pay attention to these notes.

If these instructions are ignored, it may cause personal injury or equipment damage due to incorrect operation. In order to operate and use the universal printer safely, please pay attention to these important matters.

【!】 Warning - select printer placement

-
1. Avoid places where temperature and humidity are prone to drastic changes. Also, avoid direct sunlight, bright light or heat sources. Strong direct light may cause the printer sensor function is missing.
 2. Avoid places prone to dust contamination, electric shock and vibration.
 3. Leave enough space around the printer to ensure sufficient ventilation, and ensure that the printing platform can be used for normal access and lifting.
 4. Please place the printer on a stable workbench that is larger than the base of the printer.
 5. If the printer is placed at a tilt or at a certain Angle, it will not work properly.
 6. Place the printer closer to the power socket and make sure the power plug is easy to plug and unplug.
 7. Keep the printer away from magnets or devices with magnets.
 8. Best placed 10 ~ 25 °C temperature, humidity, the best control in 55% ~ 65% of the environment.

【 ! 】 Note - select power supply

1. Use only the power supply type described in the relevant parameters of this manual. Incorrect power supply voltage can cause fire or electric shock damage to the machine.
2. Use only the power cord that comes with the printer. Use of other power lines may cause fire or electric shock.
3. Do not use damaged power cord. Otherwise, machine damage or casualties will occur.
4. Do not plug the power cord with wet hands.

The plug must be fully inserted into the power outlet.

6. Ensure that the power socket connected to the printer has qualified ground wire configuration. If there is no qualified ground wire configuration in the user's area, please connect the ground wire manually.

【 ! 】 About the ink

Keep ink bottles out of reach of children.

If the ink gets on your skin, wash it thoroughly with soap and water. If ink gets into your eyes, rinse immediately with water and seek medical attention.

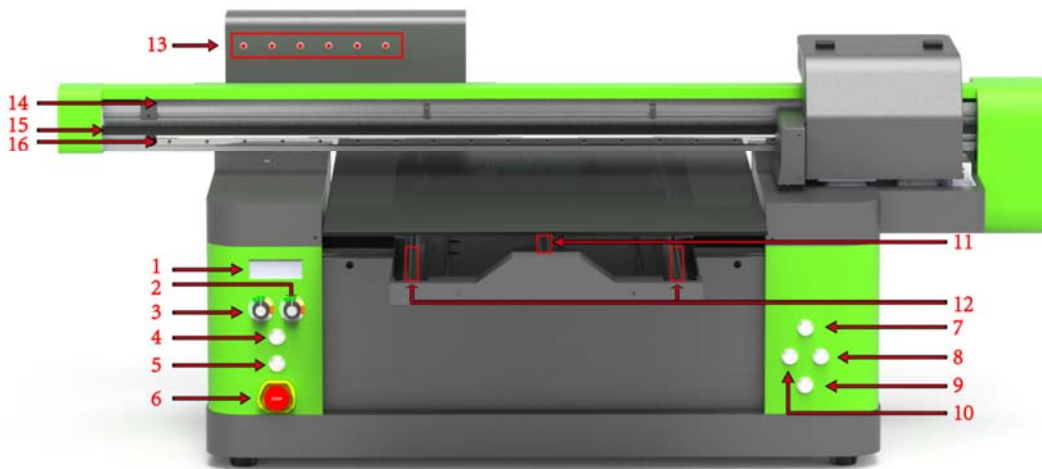
3. Color ink is recommended to be used up within 6 months after opening and white ink is recommended to be used up within 2 months. Shake evenly before use. Ink in the shadows, the best temperature control in 10 ~ 25 °C, and humidity control in 55% ~ 65% of the best clean place



Important - when using a printer

1. **Do** not reach into the printer or touch other moving parts while the printer is working.
Don't try to repair your printer without professional help.
3. Do not splash the liquid on the printer, especially on the circuit and signal transmission accessories.
4. When using the cable (data line) to connect the printer to the computer, make sure the interface is connected correctly.
5. Do not operate the printer when it is started up for self-check.
6. Please do not plug or unplug the cable (data line) of the printer in the startup state.

ii. Function introduction of each part of the machine



1. Display window, mainly to display the current state of the machine, when the display OFF is printer online failure, check whether the USB cable and the computer have a normal link, whether the USB cable is loose or damaged, whether the Print EXP software is open, whether the USB driver is installed properly, when the display Ready to prove that the printer online is normal, and other printing operations;
2. Adjust knob for UV lamp brightness of varnish
3. Adjust knob for ink UV lamp brightness
4. Power switch of UV lamp;
5. Power switch of the machine;
6. It is an emergency stop switch, which can be pressed when the machine encounters an emergency fault to ensure that the machine causes serious damage;
7. Workers' platform rising button;
8. Forward button of the working platform;
9. Working platform down button;
10. Back button of working platform;
- 11 Y axis screw, control Y axis walking, in order to ensure the quality of printing, should keep the guide rail lubrication.(note: use machine oil or kunlun grease instead of butter);
- 12.Y axis guide rail, the track that the platform moves forward and backward, in order to ensure the printing quality, should keep the guide rail lubrication.(note: use machine oil or kunlun grease instead of butter);
13. Is the ink indicator light. When one of the lights is on, it indicates that the ink needs to be added;

14. Raster bar, in order to ensure the printing accuracy, the raster bar should be cleaned regularly to ensure clean, too much dust or stained with ink should be cleaned in time;

15. The X-axis belt controls the X-axis walking. In order to ensure the printing accuracy, the X-axis belt should be kept tight and not too loose.

16. X axis guide rail, the track printed on the left and right side of the printing head. In order to ensure the printing quality, the guide rail should be kept lubricated.(note: use machine oil or kunlun grease instead of butter.)



17. Open the iron on the right side of the machine. The waste ink bottle should be checked regularly to see if it is full.

18.UV lamp water tank. Add coolant into this bottle (if there is no water, it can be replaced by pure water). If there is no water tank, please open the iron door on the right side of the machine.



19.Where ink is added,

20.Power jack;

21.Network cable connection hole, printer gigabit network cable from the hole, connected to the computer network hole;



22. Clean the scraper, there will be ink residue here after the computer cleaning, in order to ensure the quality of cleaning, need to clean after the end of each day after printing, with a clean cloth or paper towel wipe clean, if the ink becomes hard can use cleaning fluid to help clean.

23. Clean the ink absorption pad. There will be ink residue here after cleaning by the computer. Need to clean up after printing at the end of each day. (when the nozzle is shut down, it will be sealed with the ink absorption pad. If the ink absorption pad is damaged, the nozzle will come into contact with the air, and the nozzle will be blocked for a long time).

24. Here as the nozzle plate, print head protection will not be injured easily, the printer have ink residues after cleaning nozzle, much residual accumulation will encounter when print to print the object needs to clean up a 2-3 days, such as ink, and can use the auxiliary cleaning cleaning fluid, do not come into contact with the nozzle cleaning process, if you have access to the need to use a clean, dust-free cloth clean.

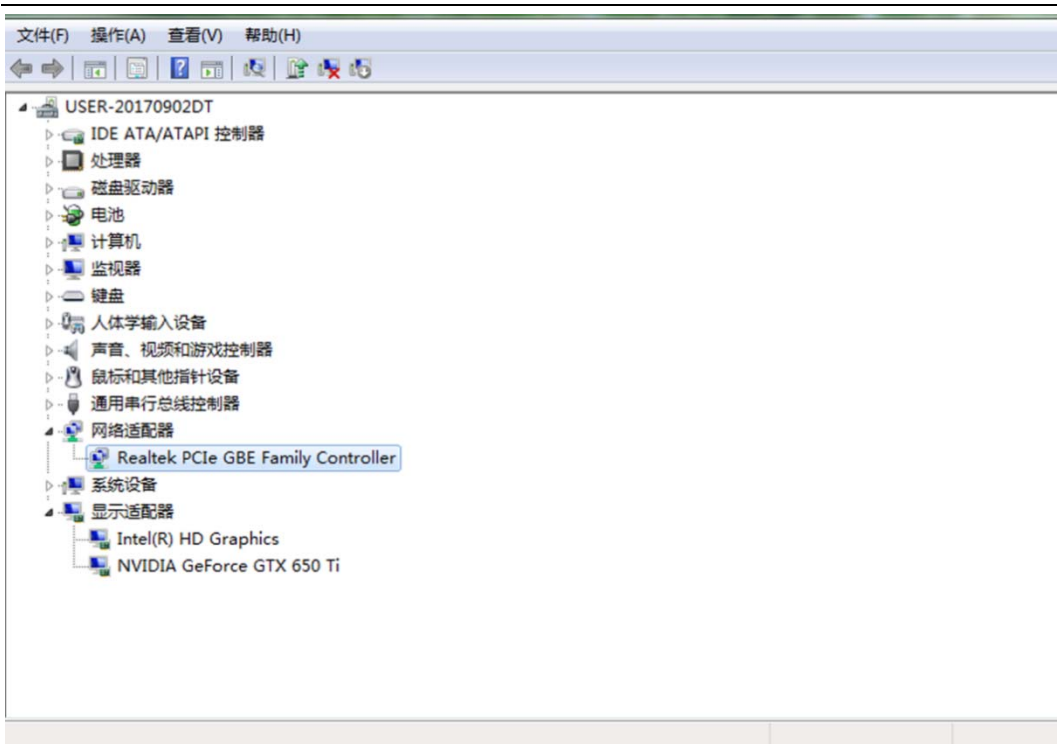
25. This is the printer nozzle, which is the core part of the printer and controls the ink jet of the printer. It cannot be directly touched here.

【 ! 】 Sprinkler head is consumable, is also fragile goods, once sold (or sold with the machine), there is no warranty, please understand!

iii. Software installation

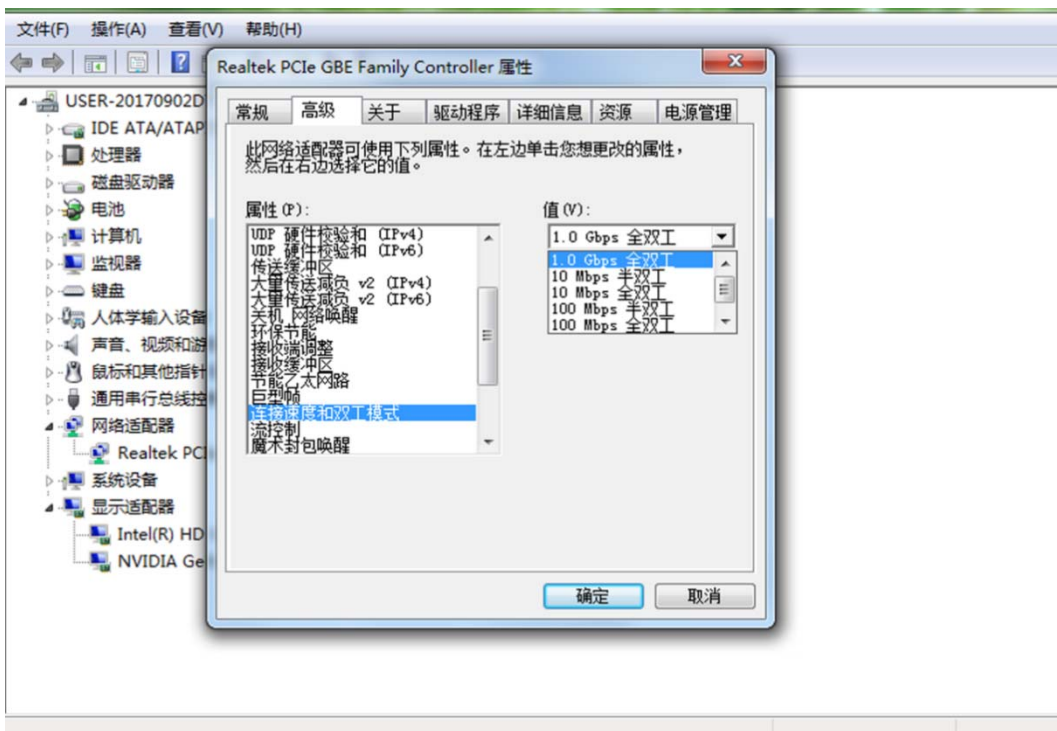
1. Check whether the computer is a gigabit network card, as shown in the figure below

Open the device manager, locate the network card under the network adapter, and double-click




Open it and go to advanced - properties - connection speed and duplex mode - change the value to 1.0Gbps full duplex (gigabit mode).

If you do not have this option your computer does not support gigabit transfers, you need to replace it with one that does



2. Install the Microsoft runtime required by the printer software

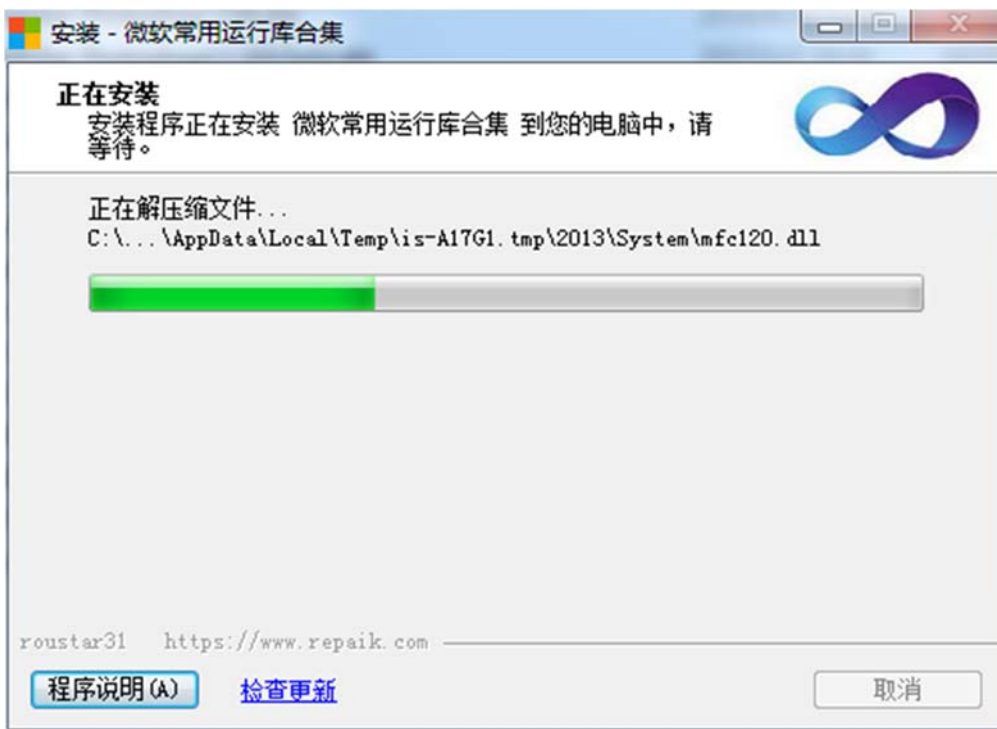
Find the attached card U disk, plug into the computer, find  MSVBCRT_AIO_2018.07.31_X86+X64.exe double-click installation;



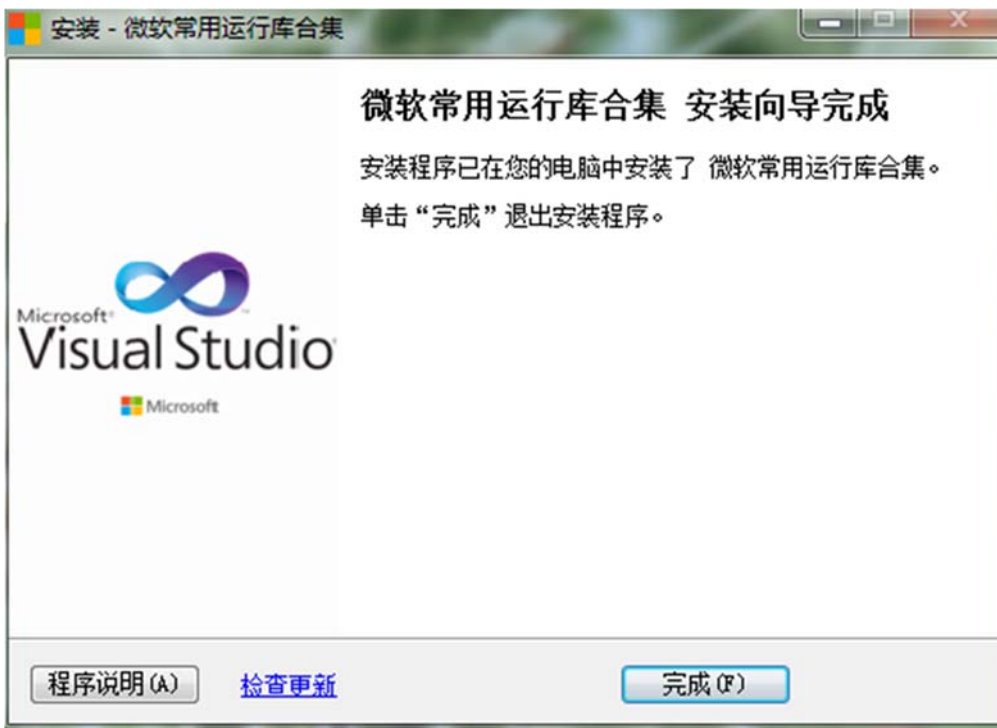
Click next



To install it all, click next



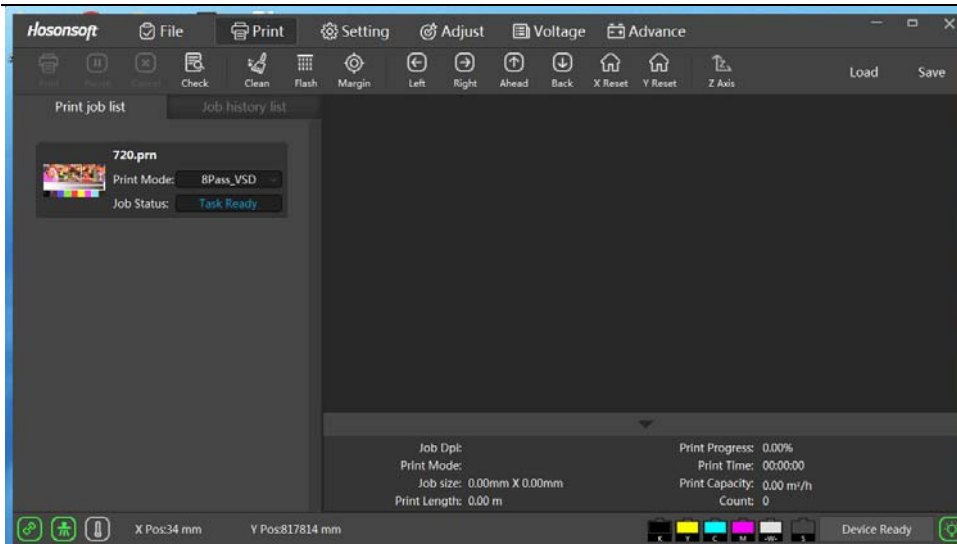
Restart the computer after the installation is complete



3.PrintEXP software installation

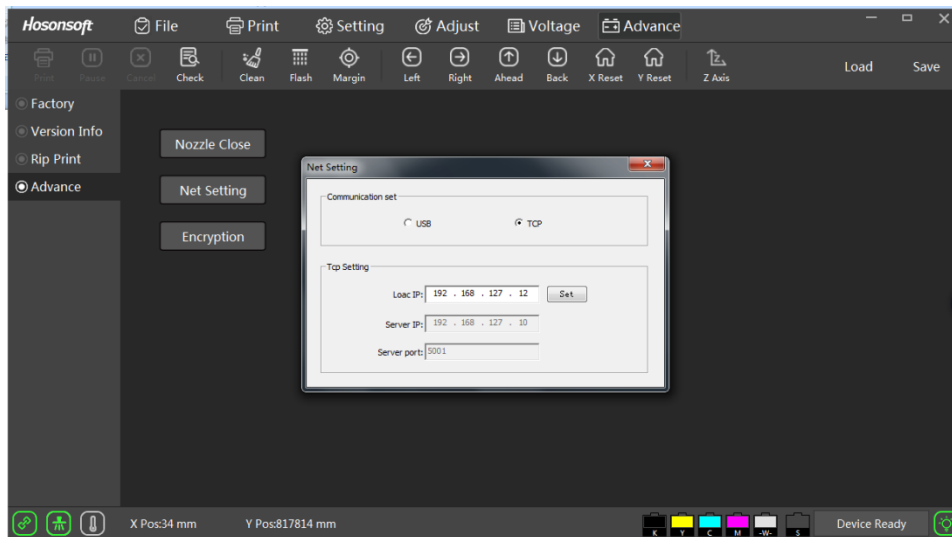
Find the software package  PrintExp_V5.5.2.2_20180710.rar 2018/8 on the usb drive , [After the extract](#)

find  PrintExp.exe double - click open



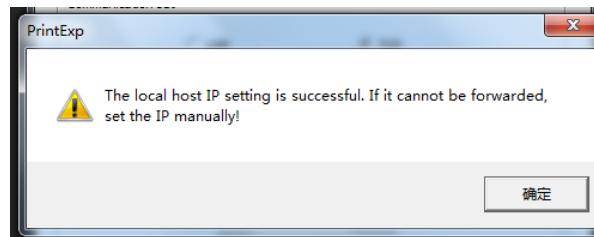
At this point you need to boot up the printer and connect the printer to the computer with a gigabit network cable

[Click advanced](#) - [advanced Settings](#) - [network Settings](#) - [click Settings](#)



At this point, the software will automatically set the connection between the computer IP and the printer (if there are anti-virus software prompts, please uninstall the anti-virus software, otherwise the subsequent use of the

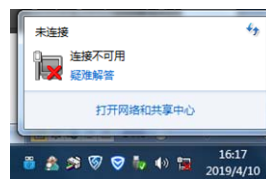
software will be unstable), and the setting will be prompted to succeed after the completion of the setting



Observe whether the connection icon in the lower left corner of the machine changes from red to green, which means that the connection to the printer is successful. If it is still red, the connection is not successful, so you need to manually set the connection IP.



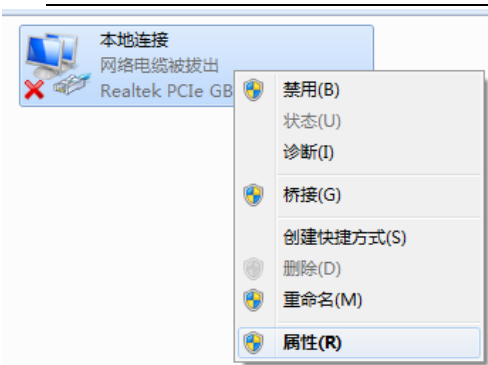
Click the network icon in the lower right corner of the computer desktop to show that the network connection is unavailable, and then click to open the network and sharing center



Click to change the adapter Settings。

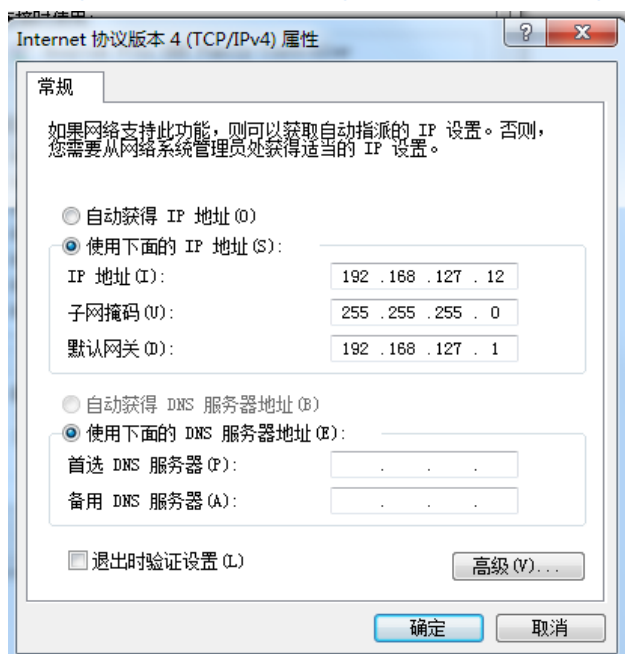


Find the local connection - right-click - property



To find Internet protocol version 4 (TCP/IPV4), click properties

Change the network Settings as shown in the figure below. Click ok to manually set the connection IP

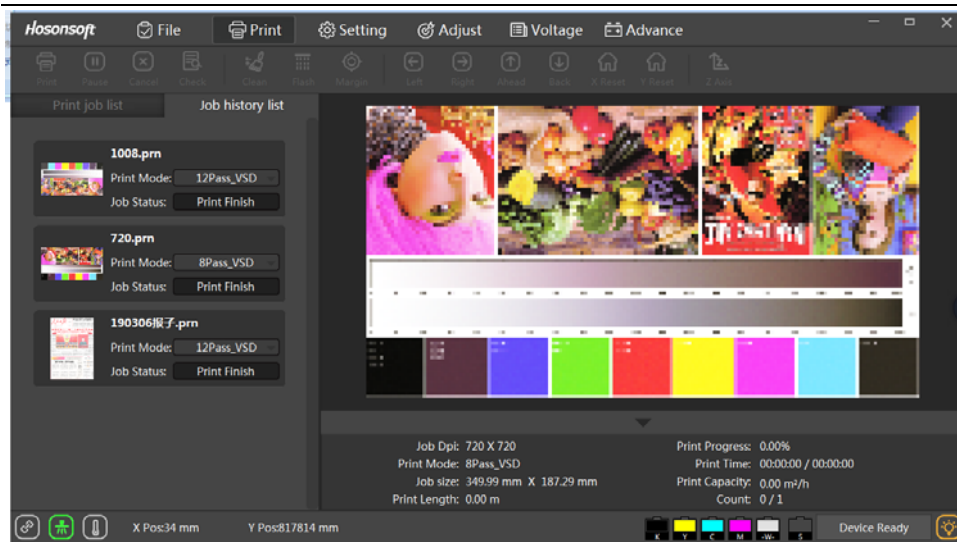


If the printer cannot be connected after setting up, check if the network cable is properly connected or if the computer is a gigabit network card

The above method is still unable to connect to the printer, you should try to replace the computer.

iv. Introduction to the main interface window of the software

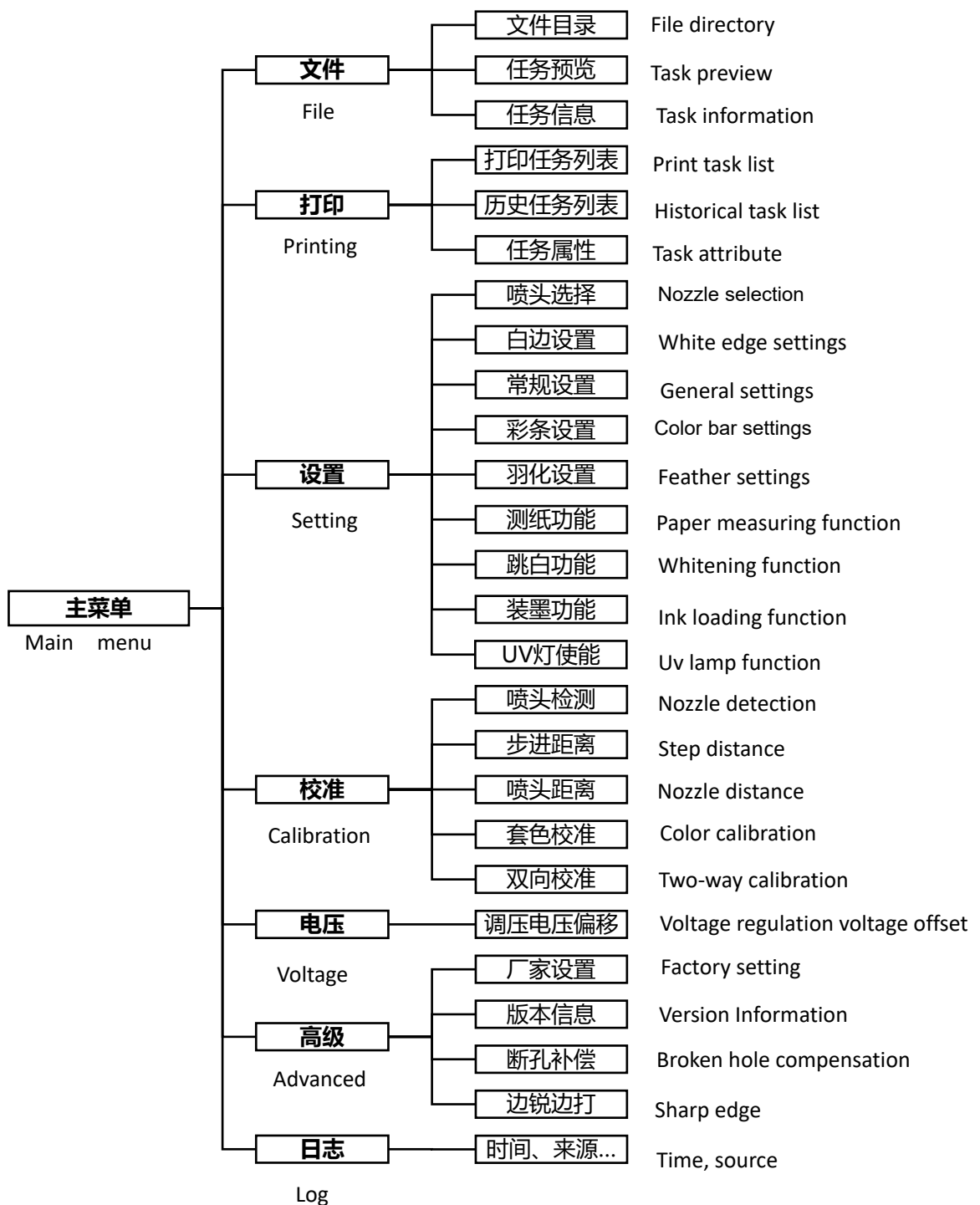
The main interface of Print Exp is as follows:



The main interface of Print Exp software mainly includes the main menu function area, shortcut button function area, printing list function area, task preview display function area, printing task information function area, status bar and other major parts, which are introduced as follows.

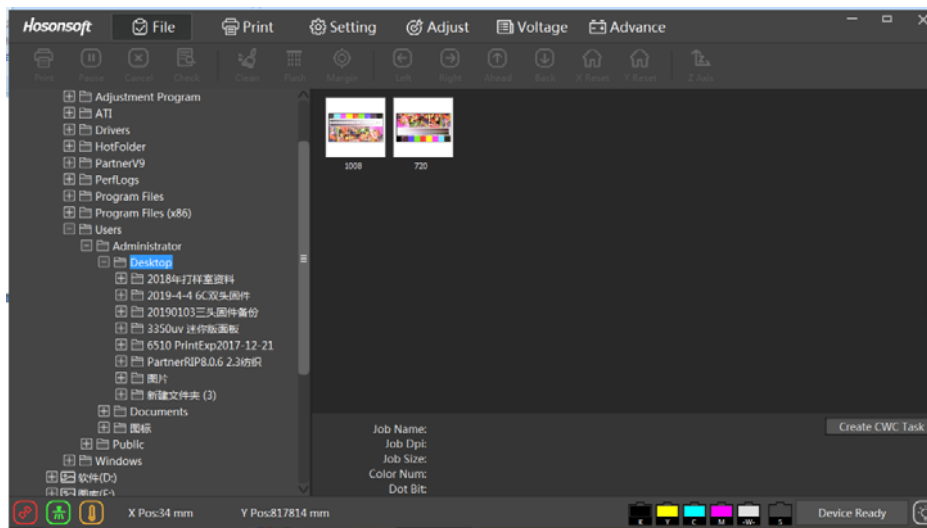
1 the main menu

The main menu tree is as follows:



2 files

Click the file in the menu bar to enter the file interface, which mainly includes the file directory window, the picture preview window, and the picture information display bar as shown below:



serial number	name	function declaration
1	File directory ribbon	Select the folder in which to store the printed files
2	Print file preview function area	Displays all print files under the specified print file
3	Print file information display function area	Displays the print information for the selected print file

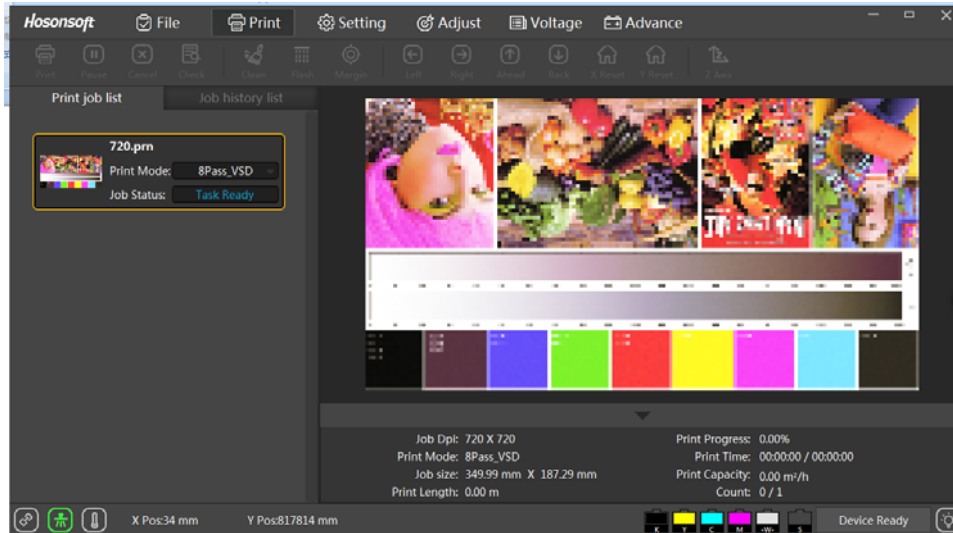
If you select the preview picture and right click, the following menu will pop up:

serial number	name	function declaration
1	preview	Regenerates a preview of the currently specified print file
2	Refresh the directory	Refreshes all printed files in the specified print file folder
3	delete	Delete print file
4	Print immediately	Add the current print file to the print task list and print it immediately

6	Open directory	Open the folder for the printed file
---	----------------	--------------------------------------

3 print

Click "print" in the menu bar to enter the printing interface, as shown below:

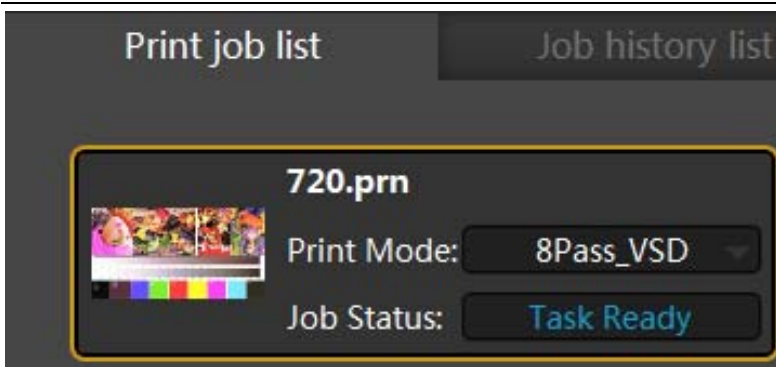


serial number	name	function declaration
1	Main menu function area	The area that displays the main function buttons of the system
2	Shortcut button function area	Area that displays frequently used command buttons
3	Task list function area	The area that displays all tasks currently being printed or to be printed
4	Task preview shows the function area	Area that displays a preview of the selected print task
5	Print task information function area	A region that displays all printed information for the current print task
6	The status bar	The area that displays the current working or connected state of the system

Printing interface includes printing task list window, history task list window, printing task preview window and printing information window; Select print task

A task in the list, right-click will pop up next menu. The diagram below:

3.1 Open Task List



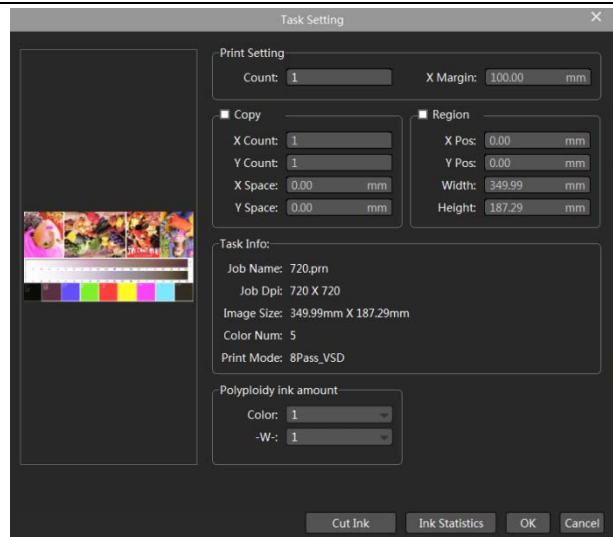
serial number	name	function declaration
1	Start printing	Perform print
2	Delete the task	Delete from the print task list
3	Wait for the print	Adds the current task to the queue to be printed
4	Cancel the task	Cancel print or cancel pending print status
5	Move to the top	Move the selected task to the top of the task list
6	Move up	Move the print task one bit forward
7	Move down	Move the print task back one bit
8	Move to the last	Move the selected task to the end of the task list
9	Empty the list	Clear all tasks from the print task list
10	Open directory	Open the folder where the printed files are located

3.2 History Task List

serial number	name	function declaration
1	Add print	Add the task to the print task list
2	Print	Add the task to the print task list and print it immediately
3	Delete the task	Delete the task from the history print list
4	Empty the list	Clear the tasks from the history print list
5	Open directory	Open the folder where the printed files are located

3.3 task attributes

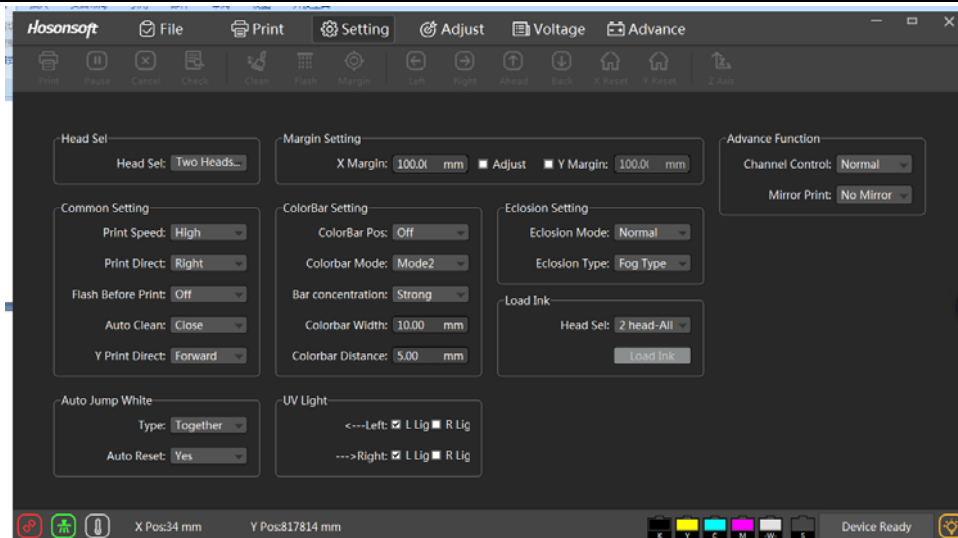
Double-click to print a task in the task list to enter the task properties window of the task, as shown below:



serial number	name	function declaration	serial number
1	Print setup	copies	Set the number of times the task will be printed repeatedly
2	Even the sun sets	Lateral picture number	Horizontal exposure
	Regional print	Longitudinal picture number	Longitudinal exposure
	The task properties	Horizontal spacing	Horizontal interconnection interval (mm)
	Print setup	The longitudinal spacing between the	Longitudinal exposure interval (mm)
3	Even the sun sets	X position	The starting printing position in the X direction of the print file
	Regional print	Y position	Start print position in Y direction in print file
	The task properties	The width of the	Print the width of the selected area in the print file
	Print setup	highly	Prints the height of the selected area in the print file
4	Even the sun sets		This includes the name of the task, the printing accuracy of the task, the size of the printing task, the number of colors of the printing task, and the number of passes for the printing task

4. set

Click the [Settings](#) in the menu bar to enter the setting interface, as shown below:

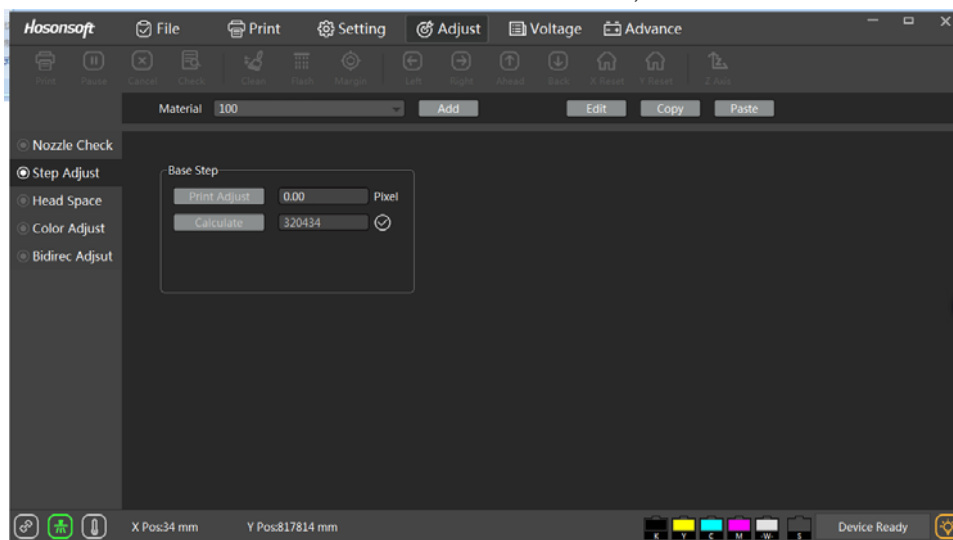


serial number	name		function declaration
1	Nozzle		Only under certain type of circumstances can the sprinkler head be selected and set
2	X white lace		Sets the starting position of the print
3	General setup Color bar set Feather set Nozzle selection	The printing speed	Set the printing speed to low, medium and high
		The print direction	Set the printing direction as left printing, right printing and two-way printing
		Prepress flash spray	Set prepress flash jet to open or close
		Automatic cleaning	Set automatic cleaning on or off
4	Xwhite lace General setup Color bar set Feather set Nozzle selection	Color bar position	You can set the color bar position as left color bar, right color bar, both sides of the color bar, close the color bar.
		Striped pattern	The difference between the two color patterns
		Striped concentration	Can be set color bar concentration as weak, medium, strong file
		Color bar width	The width of the color bar
		Striped distance	The space between the color bar and the printed image
5	X white lace	Feather	Feather range selection

		amplitude	
		Feather type	Feather type selection
6	With the ink function		Open and stop ink loading function
7	Function of test paper		Click "start test" to test the width of the printed paper
8	Jump white function	Step jump white	Enable skip white, press PASS for skip white
		Continuous jump white	Enable skip white, vertical skip white when continuous feed
		Jump off white	Turn off the skip function

5. Calibration before printing

Click the calibration in the menu bar to enter the calibration interface, as shown below:

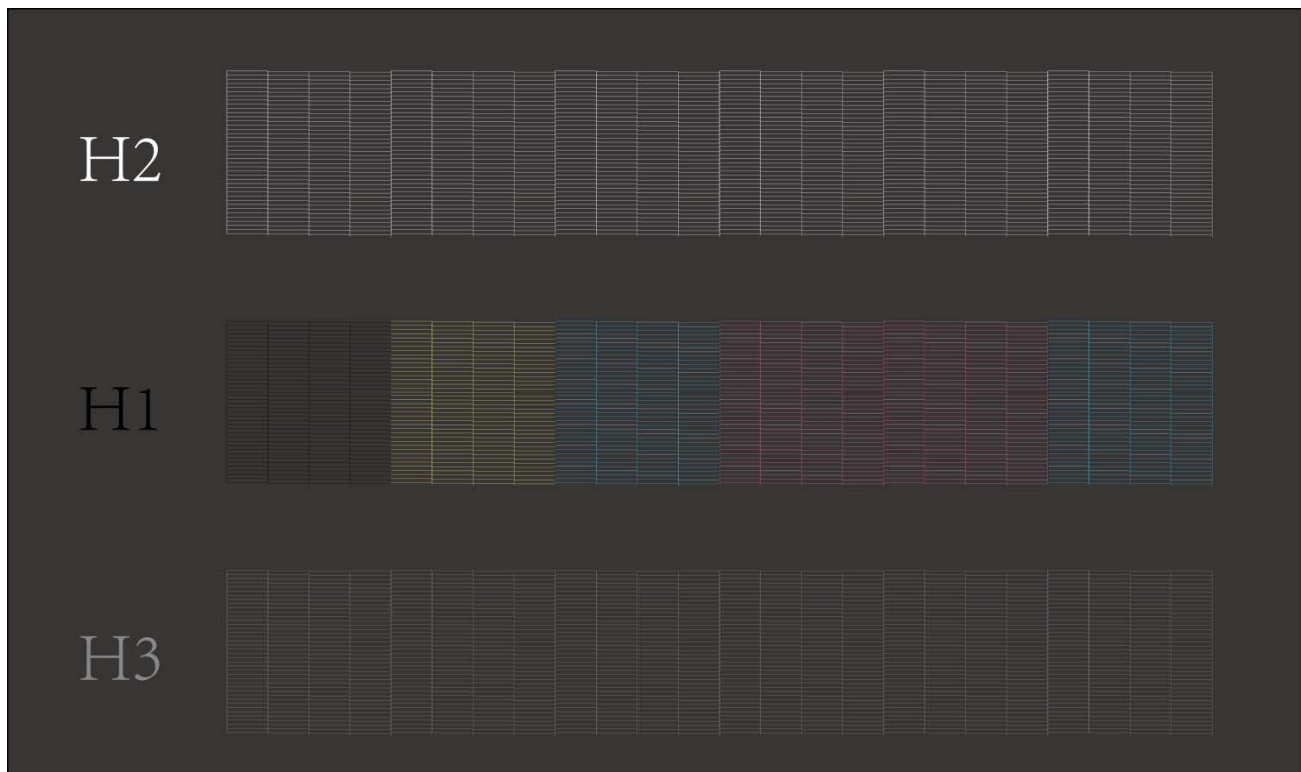


serial number	name		function declaration
1	Nozzle detection	Nozzle detection	Check whether the ink coming out from each nozzle hole is good
	The step calibration	Level detection	Check whether the whole nozzle plane is parallel to the horizontal plane
	Nozzle distance	The vertical testing	Check whether the sprinkler head is askew
2	Matching color		Calibrate benchmark step parameters and fine tune step parameters for different pass modes

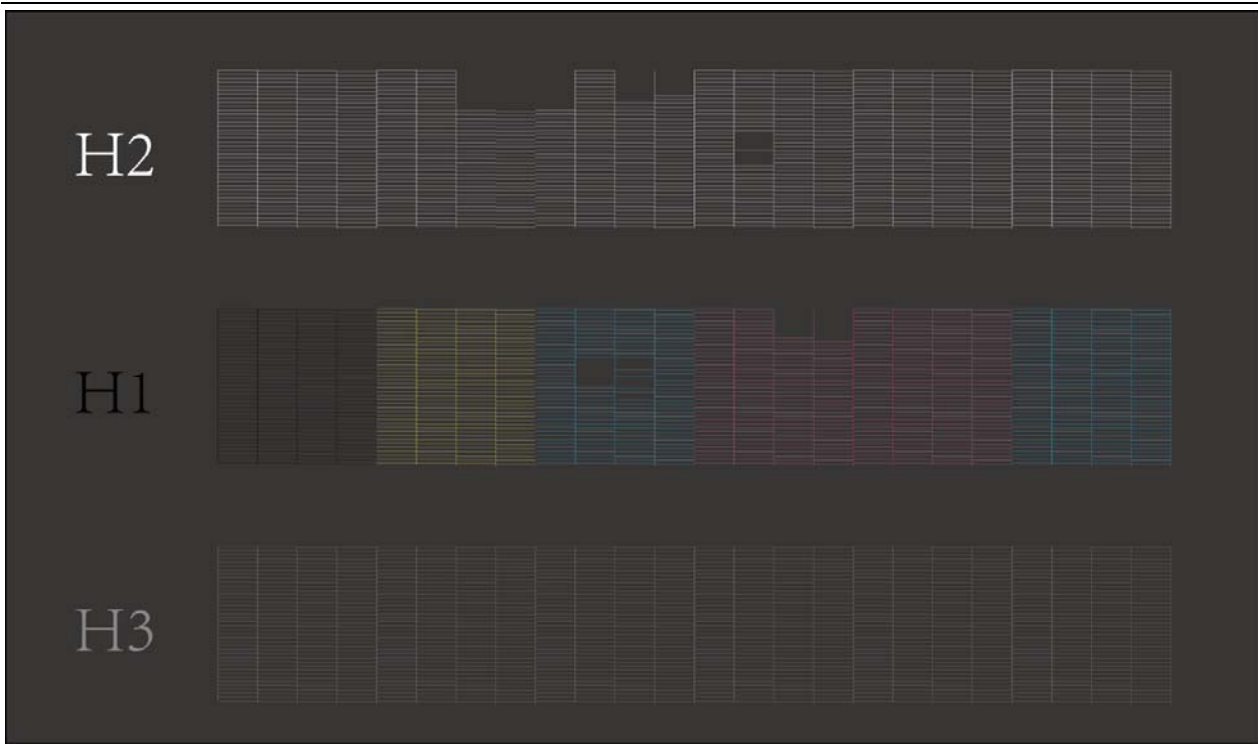
	calibration		
3	Two-way calibration	Calibration of sprinkler head horizontal spacing	Calibrate the horizontal spacing between sprinklers
	Nozzle detection	Calibration of nozzle longitudinal spacing	Calibrate the longitudinal spacing between sprinklers
4	The step calibration		Calibrate the longitudinal and horizontal positions of each nozzle channel
5	Nozzle distance		Calibration of bidirectional offset at different speeds for bidirectional printing

5.1 introduction to nozzle detection function

Click  (nozzle check) to get the nozzle detection pattern. The nozzle status of 6090uv printer is as follows:



Below state diagram of the case, there might be blocked, need to be cleaned, until the optimal nozzle ink jet, the corresponding nozzle cleaning, such as H1 sprinkler head bolt is cleaning the H1, continuous line or break line 1-5 root as normal does not need to be cleaned (nozzle in use after a period of time some nozzle clogging is normal phenomenon, such as the bolt is not much you can continue to use, the bolt is too much to consider manual cleaning nozzle or replace new nozzle)



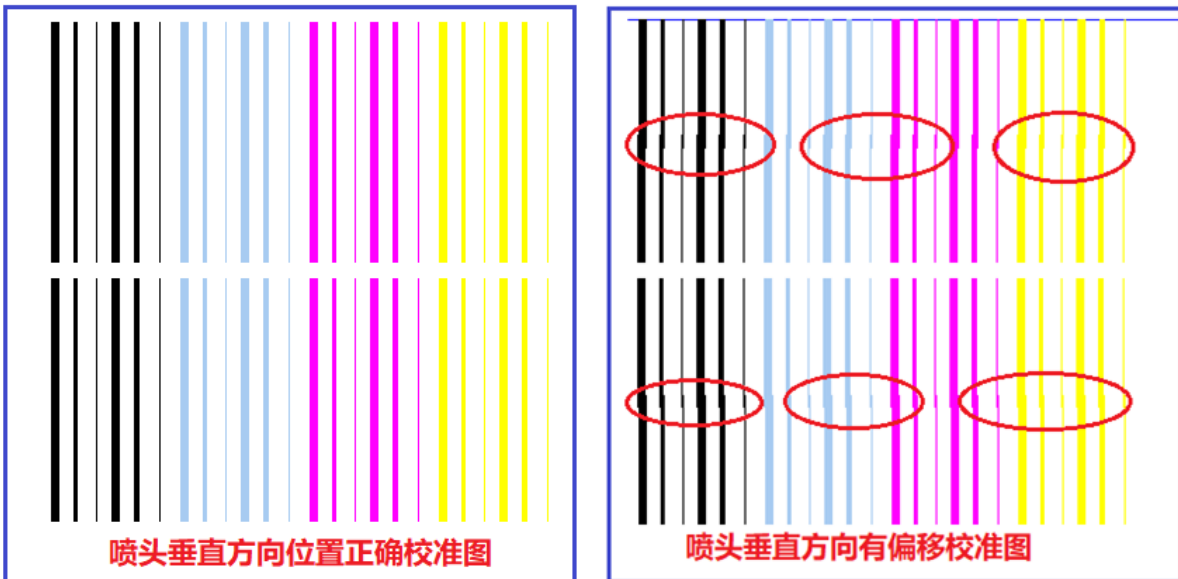
5.2 introduction to level detection functions

Click "level detection" and the system will print out the level detection pattern. The level detection diagram is as follows:



5.3 introduction to vertical detection function

Click "vertical detection", and the system will print the vertical detection pattern and the vertical detection diagram, as shown below:



(Correct position of the nozzle in the vertical) (Offset calibration chart in the vertical direction of the nozzle)

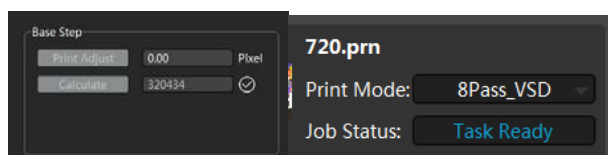
When the calibration diagram on the right side of the figure above appears, it is necessary to adjust the vertical direction of the nozzle until the vertical direction calibration diagram reaches the correct state.

5.4 introduction to bidirectional quasi - function

Click "print calibration diagram" under the reference step box, and the system will print. The calibration diagram is as follows:

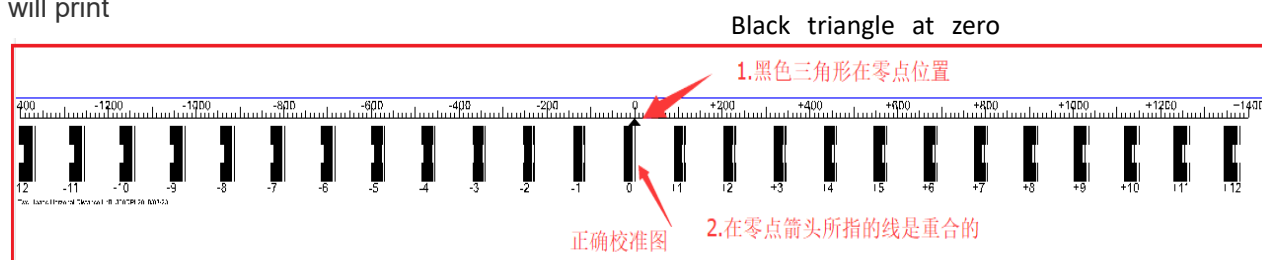
The figure above shows that the step has been calibrated, and the reference line and the scale line are completely coincident at 0. If the step is not calibrated, as shown in the figure below:

The above image needs to be adjusted. The adjustment window is as shown below. Enter the adjustment value, click "calculate", and re-print the calibration diagram until the reference line and the print line completely coincide at 0.



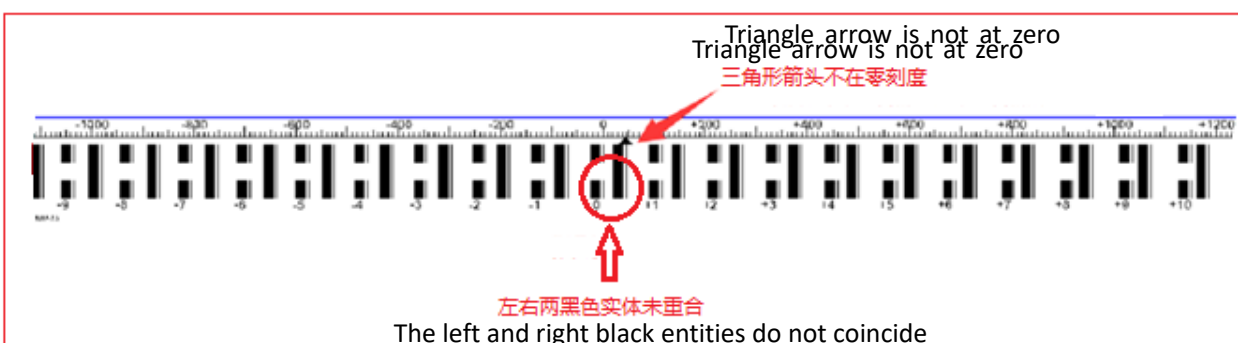
5.5 introduction to horizontal pitch calibration of sprinkler heads

Click "print left/right calibration" under the calibration box of horizontal spacing of sprinkler heads, and the system will print



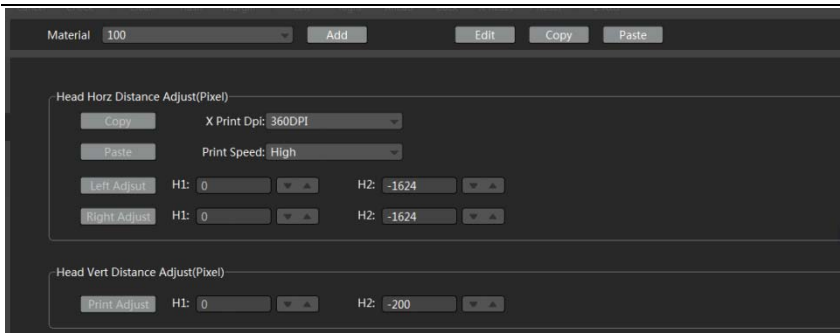
(Correct calibration chart) The lines pointed by the zero arrow are coincident

The figure above shows that the horizontal distance between sprinkler heads is normal. If the horizontal distance between sprinkler heads is not calibrated, the following figure will appear:



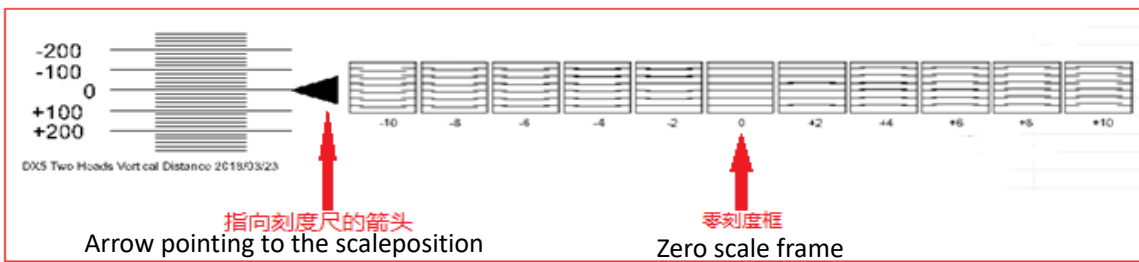
adjustment

value at the position of H2 in the figure below, the calibration figure will be reprinted until the scale line at 0 points to 0.

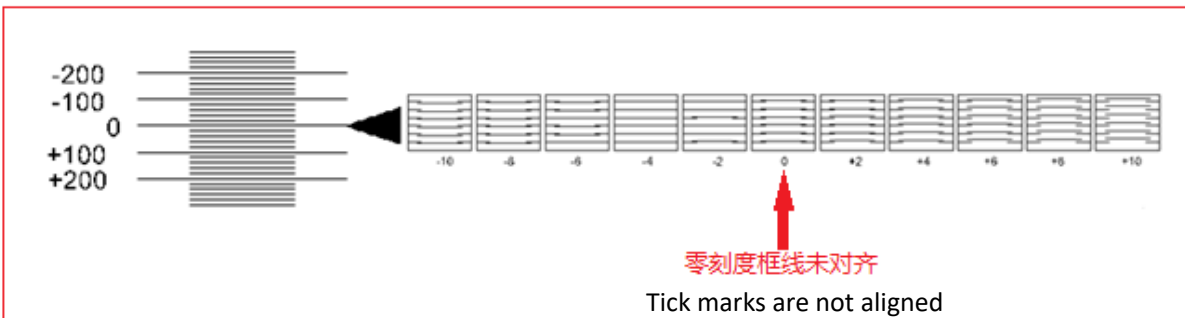


5.6 introduction to the longitudinal pitch calibration of sprinkler heads

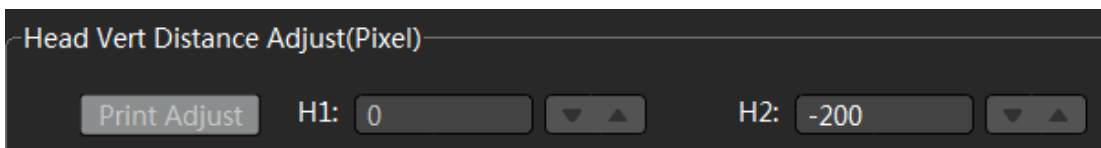
Click "print calibration chart" under the calibration box of nozzle longitudinal spacing, and the system will print



The above figure shows that the longitudinal distance between sprinkler heads is normal. All lines in the scale frame at 0 point are parallel. The left arrow points to the scale line at 0 point.

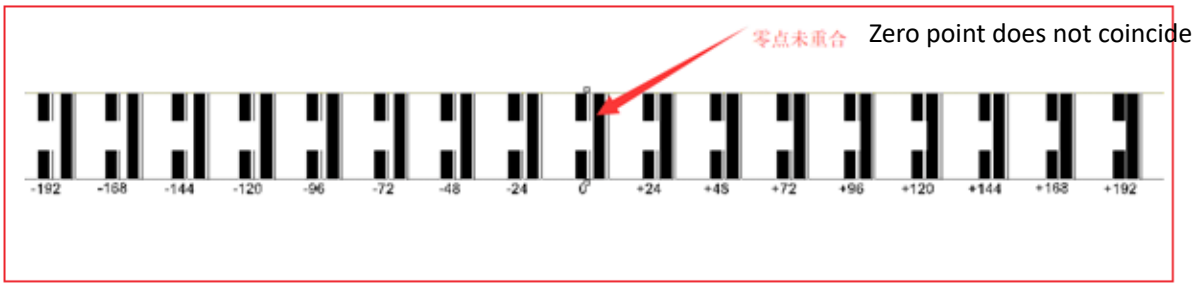


In the above figure, all lines in the scale frame at point 0 are not parallel. Instead, all lines in the scale frame at point -4 are parallel. Therefore, it is necessary to adjust.

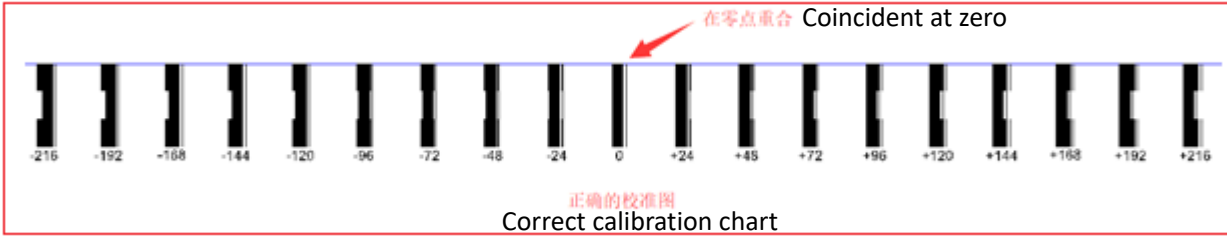


5.7 introduction to two-way calibration function

Click "print calibration chart" under the two-way calibration interface, and the system will print



The above is the calibration condition, and the non-calibration condition is as follows:



Please fill in the calibration value for recalibration, as shown below:

X Print Dpi: 360DPI

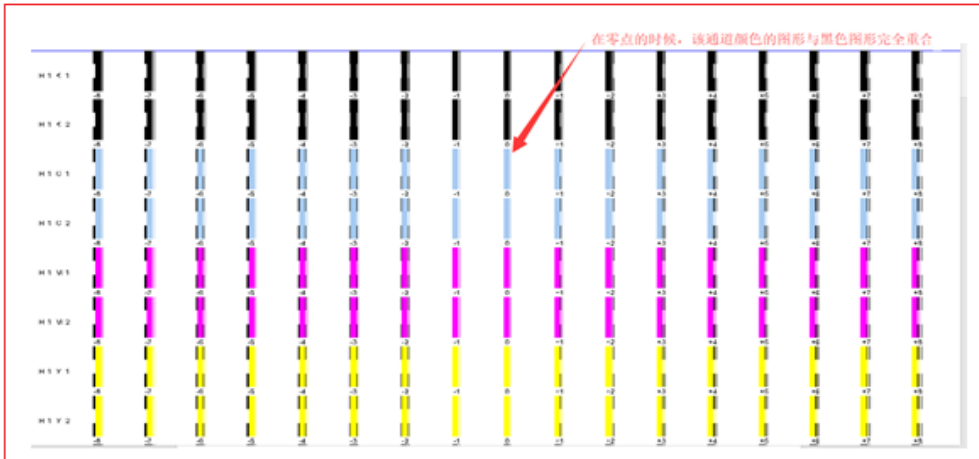
Print Speed: High

Bidirect Value: 9.50

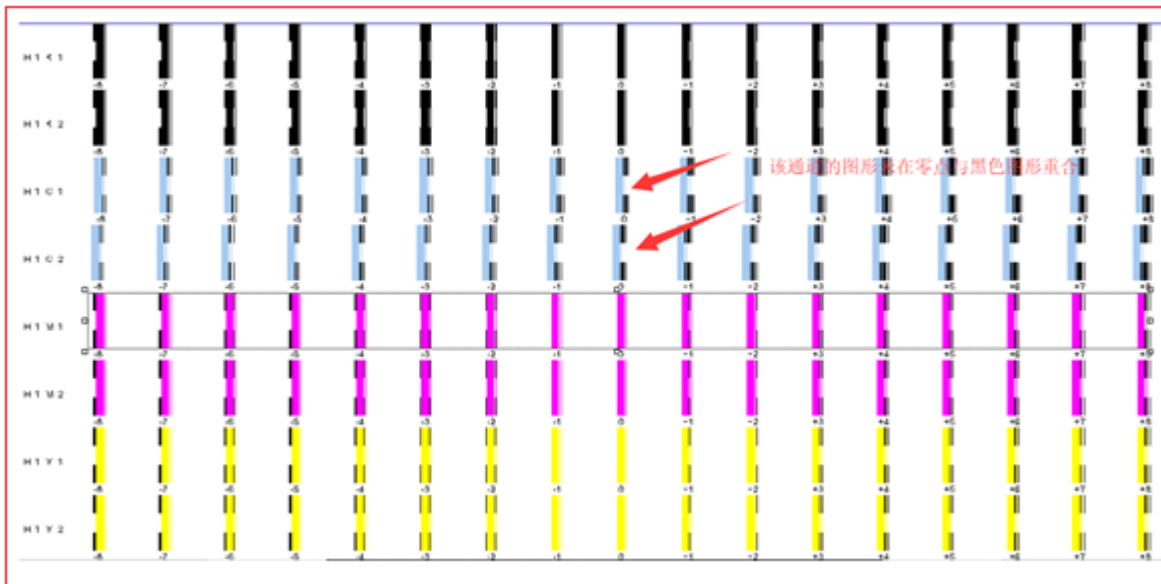
Print Adjust

5.8. Introduction to color register calibration function

Click "print left/right calibration diagram" under the color registration calibration interface, and the system will print



The figure above shows the calibrated condition, while the uncalibrated condition is as follows:



Please fill in the calibration value for recalibration, as shown below:

	CH0	CH1	CH2	CH3	CH4	CH5	CH6	CH7
G00	K0	Y0	C0	M0	M1	C1	Y1	K1
-->	0	0	0	0	0	0	0	0
<--	0	0	0	0	0	0	0	0
G01	-W-0	-W-1	-W-2	-W-3	-W-4	-W-5	-W-6	-W-7
-->	0	0	0	0	0	0	0	0
<--	0	0	0	0	0	0	0	0

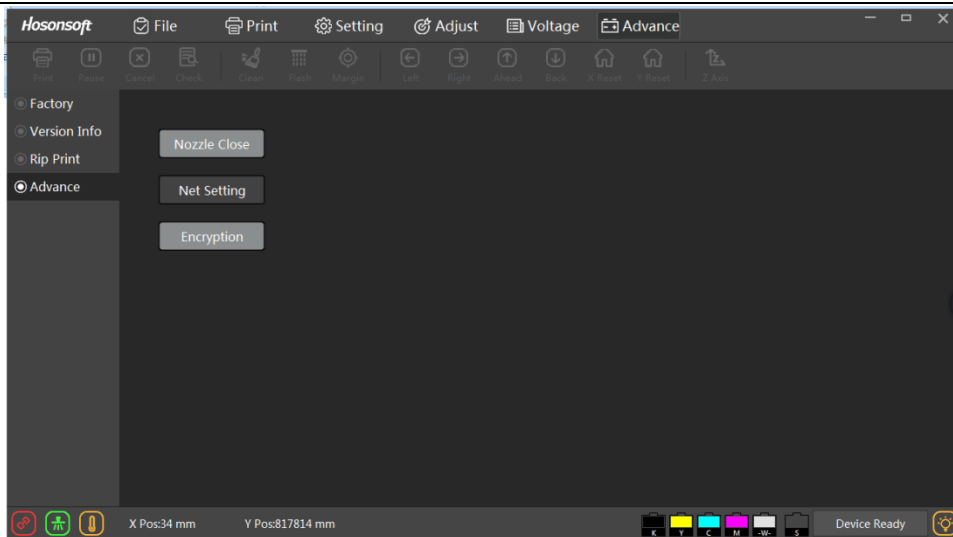
6 .voltage window

Click the main menu voltage will enter the voltage window, as shown in the figure below (it is not recommended to change the sprinkler head voltage privately, which may cause damage to the sprinkler head!!!)

serial number	name	function declaration
1	Voltage regulation offset	Sets the offset voltage for the specified nozzle channel
2	Refresh the voltage	Update the current nozzle channel voltage
3	Set the voltage	Save the current sprinkler head voltage offset
4	Nozzle temperature (read only)	Displays the specified nozzle temperature

7. senior

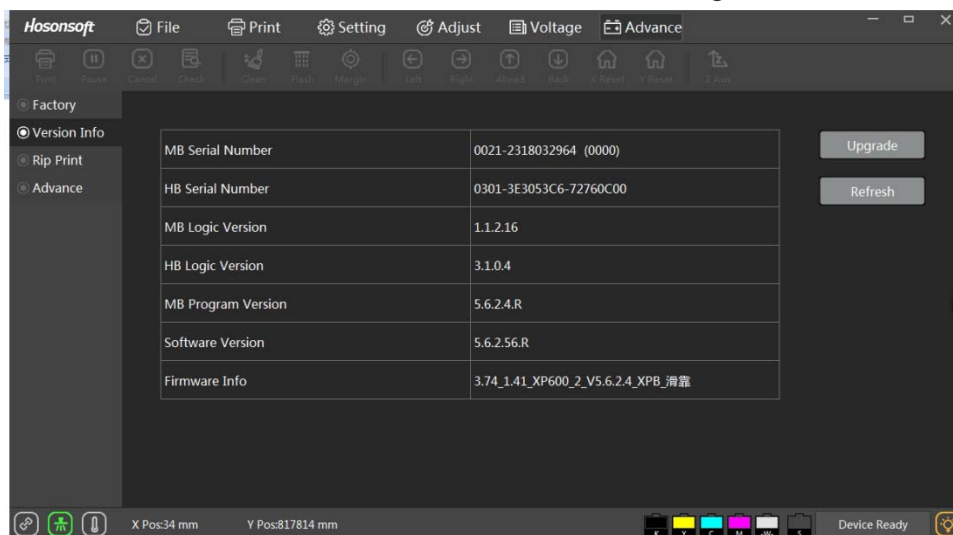
Click the main menu to enter the advanced interface, as shown below:



serial number	name	function declaration
1	Factory set up	Access to the manufacturer parameter setting interface
2	Version information	Display system board card version information
3	Rip while printing	Select the precision mode of edge RIP and printing
4	Advanced Settings	Broken hole compensation, network configuration, instalment authorization Settings

7.1 version information

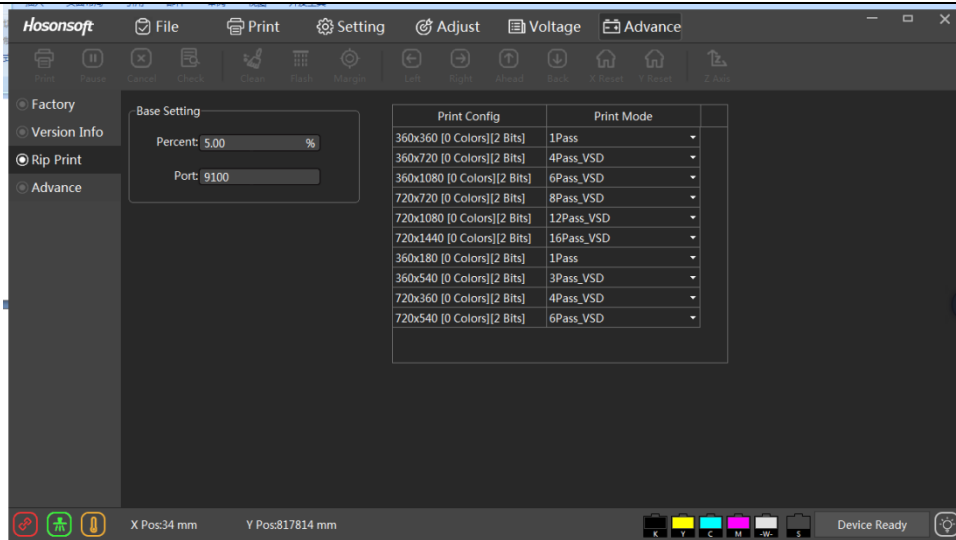
Click the version information in the advanced interface to enter the following interface:



Click "upgrade" to upgrade the logic of the main board, the logic of the spray car board and the main board program. After upgrading the program, power shall be re-powered after power failure. Click "refresh" to see whether the newly upgraded program has been updated.







7.2 sharpen while playing













Click the "edge sharpening" button in the advanced interface to enter the following interface:









serial number	name		function declaration
1	Basic setup	Buffer than	Represents RIP to the set value to start printing.
		The port number	The default is 9100
2	Basic setup	Determined by RIP software	The printing mode is determined by the RIP software in the case of printing with RIP
		Determined by the printing software	The printing mode is determined by the printing control software in the case of RIP and printing








8. shortcut button

Shortcut button	Function Description
	Start the print button to execute the print command
	Press the nozzle check button to print the nozzle status chart
	Pause/continue print button
	Cancel the print button and execute the end print command
	Press the nozzle cleaning button to execute the nozzle cleaning command
	Flash jet on/off button

	White edge positioning button
	Moisturizing off/on button
	Reset button
	X motor left shift button
	X motor right shift button
	Feed button
	Material return button
	Step to fine tune the reduce button
	Step fine tuning add button
	Two-way fine tuning and reduction buttons
	Two-way fine tuning add button
	Enter the height control panel button


9. status bar

Status bar	status icon description
	The network cable is normally connected
	The network cable is disconnected
	offline
	Open the flash spraying state
	Turn off the flash over state
	The system works normally

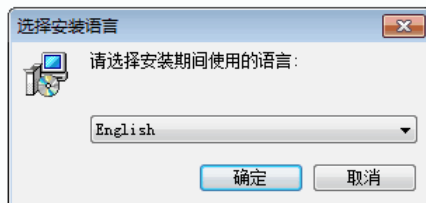
	System error status
	System warning status
	offline
	Nozzle temperature under normal condition
	Nozzle temperature abnormal state
	Nozzle temperature warning status
	offline

v. UltraPrint. Exe Print out software instructions

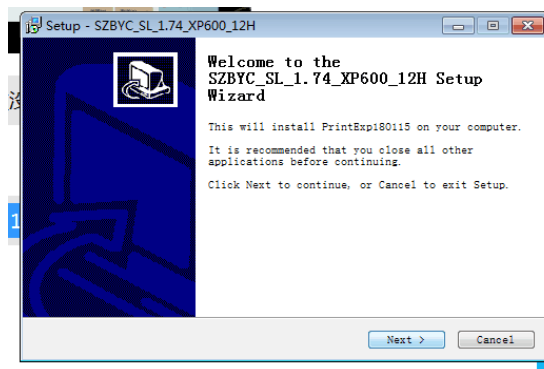
1. Software installation, as shown in the figure below (in order to facilitate the use of the software you received may be free of installation of the file package) :

 UltraPrint_EN_CN_4.6_BLD1001.exe

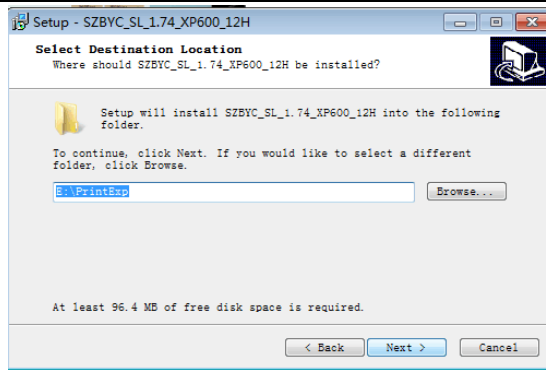
Double click on the setup file



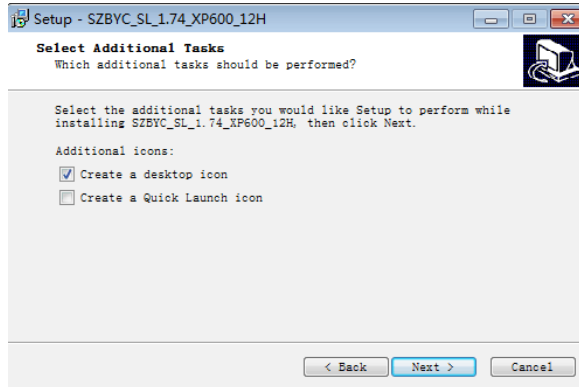
Choose the language to use



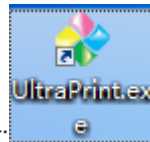
Click "next"



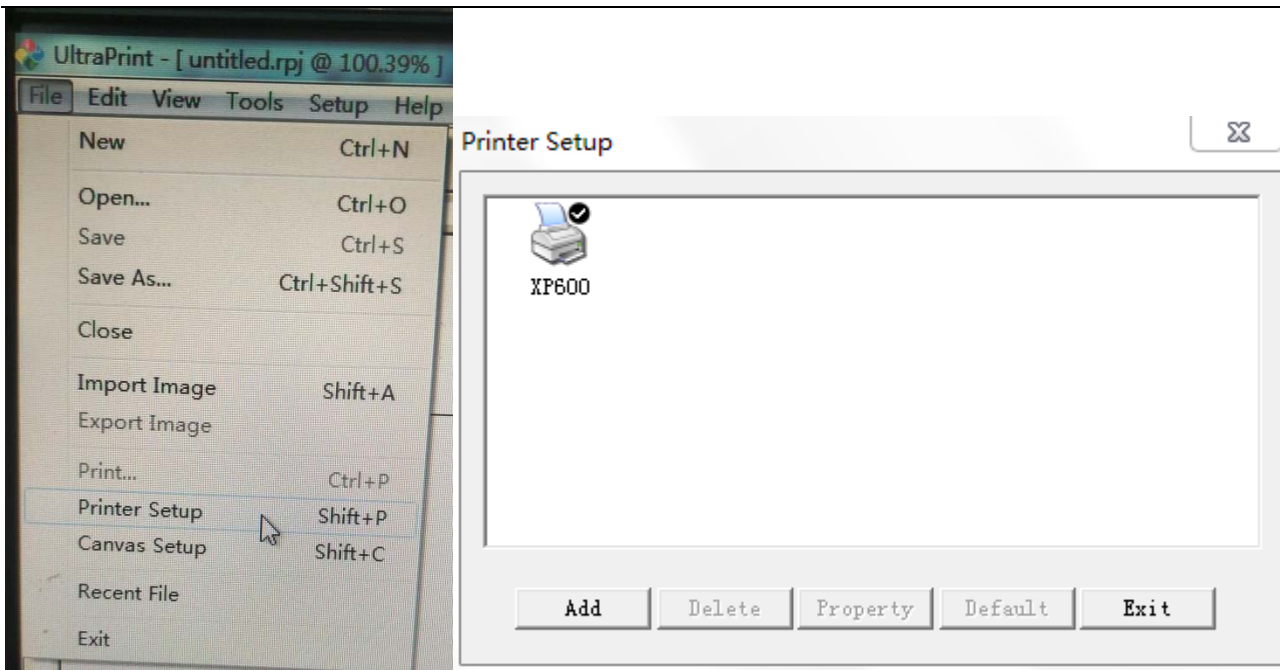
a Customizable installation path



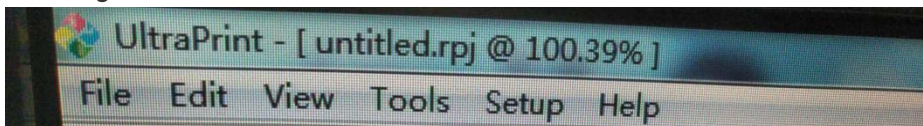
2. Instructions for use of the software are as follows:

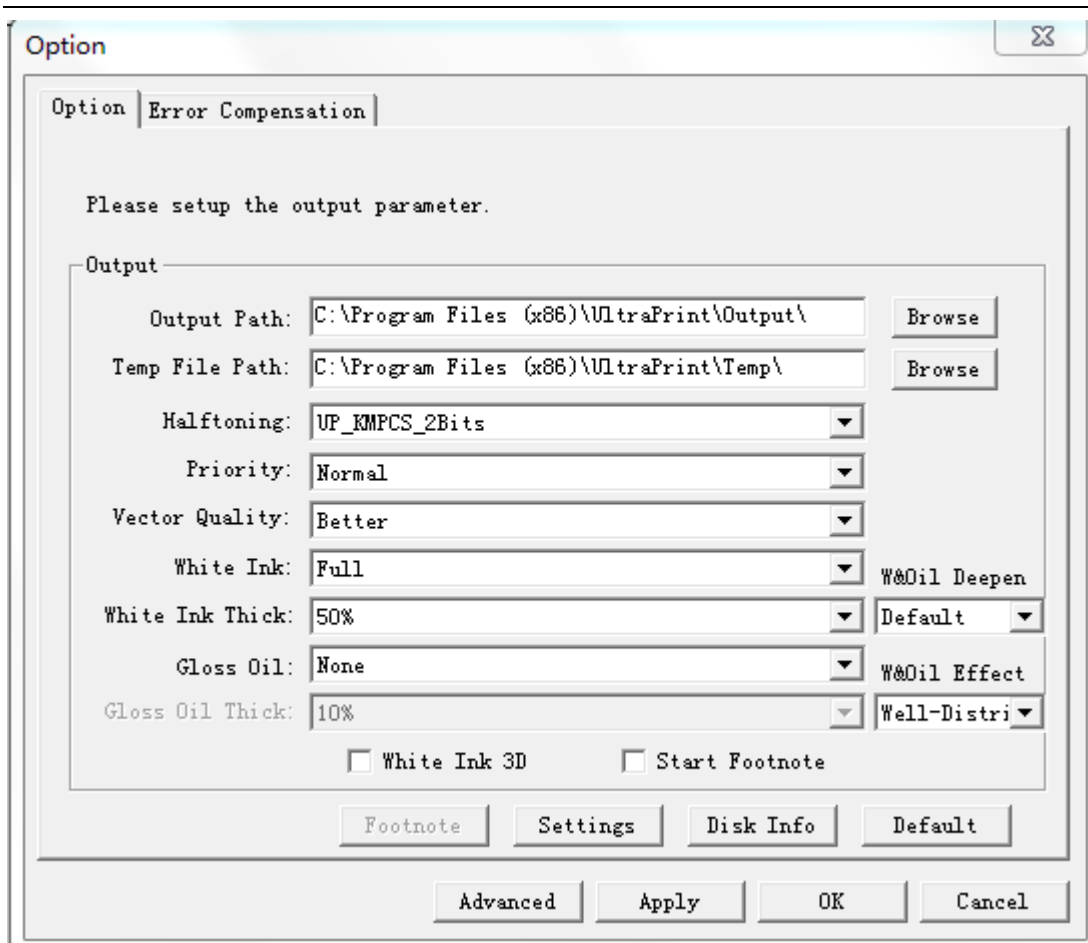


- ① Software open: double-click the icon to open sharp color;
- ② set printer: choose printer according to the model, 6060 (6A) choose DX5,6510(6B) choose TX800, 6090, 1290, 4050, 3350 choose XP600, and set as the default to print, otherwise it will not be able to print normally, as shown in the figure below:



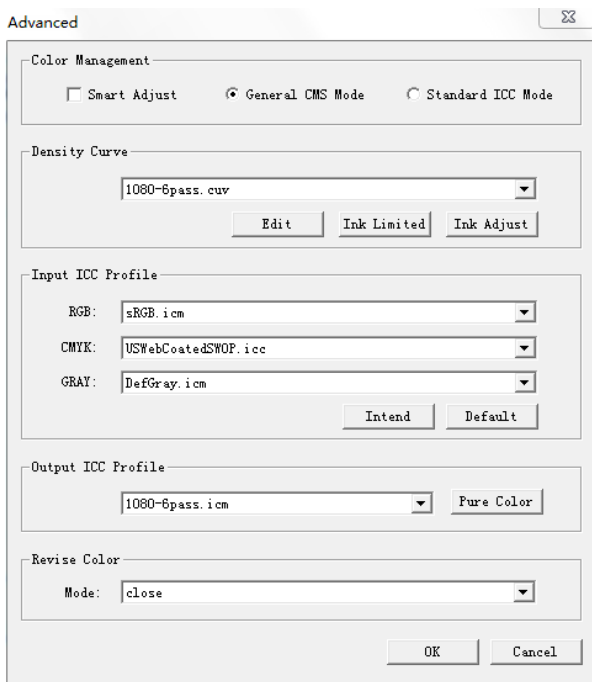
③ software output function setting: click "Settings" and "options" on the toolbar to set the sharp color, as shown in the figure below:





Related parameters of output can be set here:

- A. File output directory, specifying the location of the printed file, is only valid if the output port is the file port.
- B. Temporary file directory, which specifies the location of temporary files generated in the process of program processing. When the temporary files exit, the program will automatically delete them.
- C. screening method:Of the selection of image and network mode, 6060\6 a \ 4050\3350\6090\1290 choose 2 bit, 6510 (6 b) choose 1 bit (2 - to get points, printout when yan deep selects the big ink ink, selects a small part in light color ink and ink, and a 1 bit is a single point model, was always in a way, a more delicate than a single point in theory the changing point, but because TX800 nozzle orifice is 1.5 PL if ink is couldn't get on with the changing point, therefore can only use 1 bit single point ink type, actual printing effect with the 2 bit change point),
- D. Priority: select the priority of the printing process when printing out.
- E. By default, click this button, and the relevant setting items on the current option page will be restored to the default setting state.
- F. The red mark can adjust the concentration of spot color (i.e. white ink) established in Photoshop;
- G. Advanced options: select the advanced button with the following dialog box, as shown below:



After setting, click "apply" and then click "ok";

Description: when this option is mainly for printing curves (ICC) whether to choose color Settings, when choosing to print some common bitmap, such as the character photos scenery pictures, choose real mode, the deep light color too much more natural images, face color will be real fine, when print some big red, green, purple, this kind of monochromatic selects the general pattern, must through the increase the quantity of ink, so get the pattern color saturation will be much higher;

④curve add and use: specific as follows:

- A. Under the installation directory of ruicai, find the "" folder. In this folder, set up folders by type, such as XP600(4260\4050\3350\6060\6090\1290), and copy the line arized file (***.cuv) to the corresponding folder;
- B. find the "" folder in the installation directory of ruicai. In this folder, create a folder by type, such as XP600(4260\4050\3350), and copy the curve file (***.icm) pointed to the corresponding folder;
- C. Use of curves: according to the size of ink points in PrintEXP, the printing output precision in sharp color corresponds to the same ICC. The letter -b after the curve is the big point, while -m is the middle point.

⑤toolbar operation: as shown in the figure below:

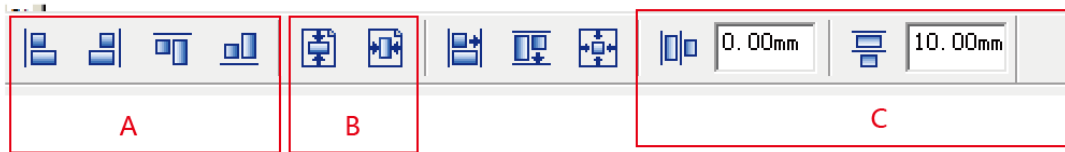


- A. Create A new canvas. The maximum support of this model is 60cm*90cm.
- B. Open the canvas, this option is hardly used;
- C. Save the canvas, this option is rarely used;
- D. Print the current drawing file;
- E. place image;
- F. Delete image;
- G. Forward and backward current operation steps;

H. Copy the current task to paste single object and multiple objects;

I. rotate the selected object;

J.K. zoom in and out on the current canvas;

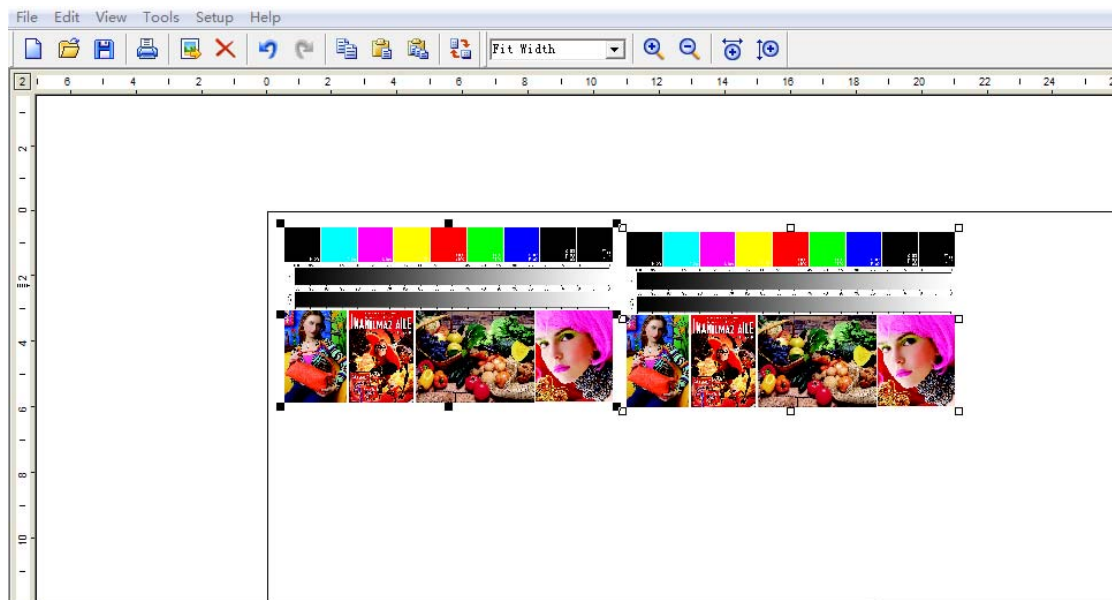


A. Multiple image alignment methods;

B. Picture center mode;

C. Multiple picture arrangement intervals;


⑥ Add pictures: click the "put image" button on the toolbar, open the picture to print, according to the actual requirements of the picture layout edit, as shown below:

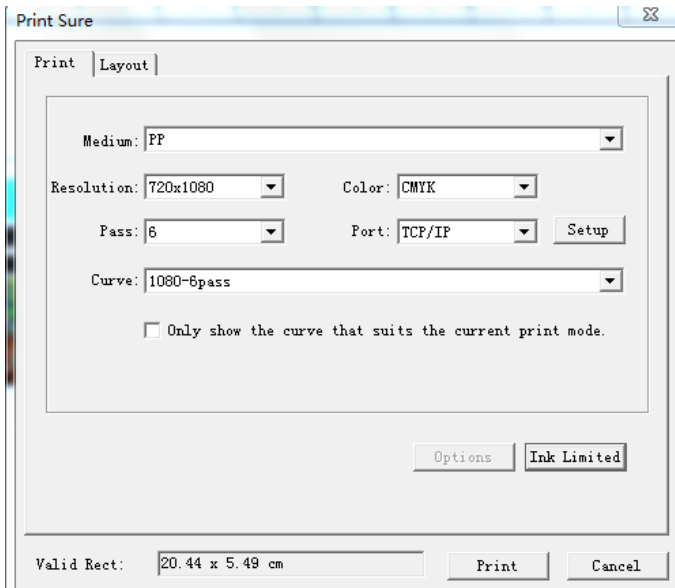


Description: the position of the picture printed on the machine platform is ultimately determined by the X and Y



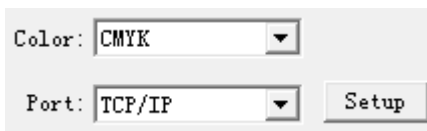
white edge distance of the control software, regardless of the position of the canvas where the sharp color is.

⑦ print output and Settings: click  or CTRL + p, and according to the actual demand for setting, the program will pop up a print confirmation dialog box, as shown below: as shown below:

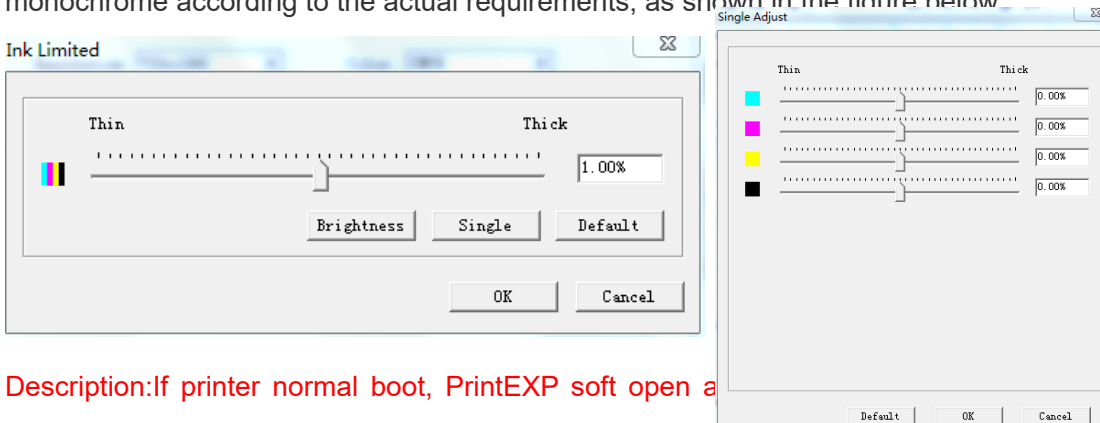


Curve description: FZ is white cloth curve of textile machine, FZ HB is black cloth curve of textile machine, UV tough is hard curve of UV printer, and UV soft is soft curve of UV printer.

3350\4260\4050 need to select CMYK 4-color mode, otherwise print error:



- A. **printing accuracy:** select the accuracy required for the current printing.
- B. **print PASS:** select the number of passes required for the current printing.
- C. **Printing color:** select the color mode required for the current printing.
- D. **Port:** if you want to print it as a FILE, select 'FILE'; if you want to print with RIP on the network, you can select the 'TCP/IP' option. If you want to send data directly to the printer side RIP printing, then you can directly select the 'Directsend' option.
- E. **Ink output adjustment:** when the color saturation of the printed picture is too deep and too shallow, the ink output can be added or subtraction to complete the adjustment. The setting can be divided into full color and monochrome according to the actual requirements, as shown in the figure below:

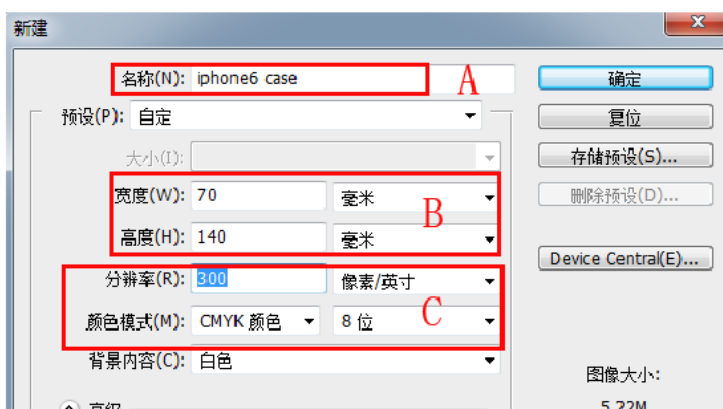


Description: If printer normal boot, PrintEXP soft open a is normal, choose the TCP/IP or Directsend immediately implement the printer to print, if choose the FILE will print output into the

picture. PRN document format, the accuracy and save the document will be stored color setting information and cannot be modified, so that no matter how often the information is not lost, the output of the PRN format FILE directly through PrintEXP software to open, print directly, there will be no document processing wait time, especially for larger files, This mode is recommended;

vi Establishment of positioning frame in Photoshop, establishment of spot color channel of printing pattern, white ink and polishing oil (for 3-head machine);

1. First, open Photoshop. Take the case of printing mobile phone case as an example, create a new document and set the parameters according to the items to be printed, as shown in the figure below:



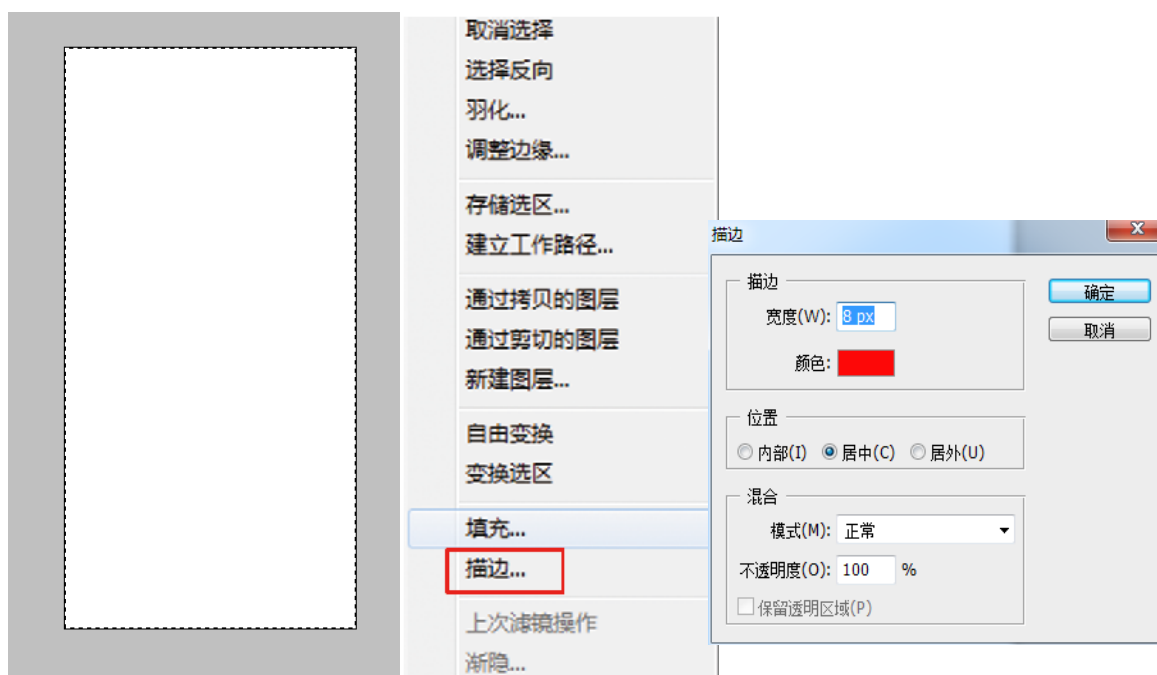
A. Set the name of the printed file;

B. Set according to the actual size of the object to be printed;

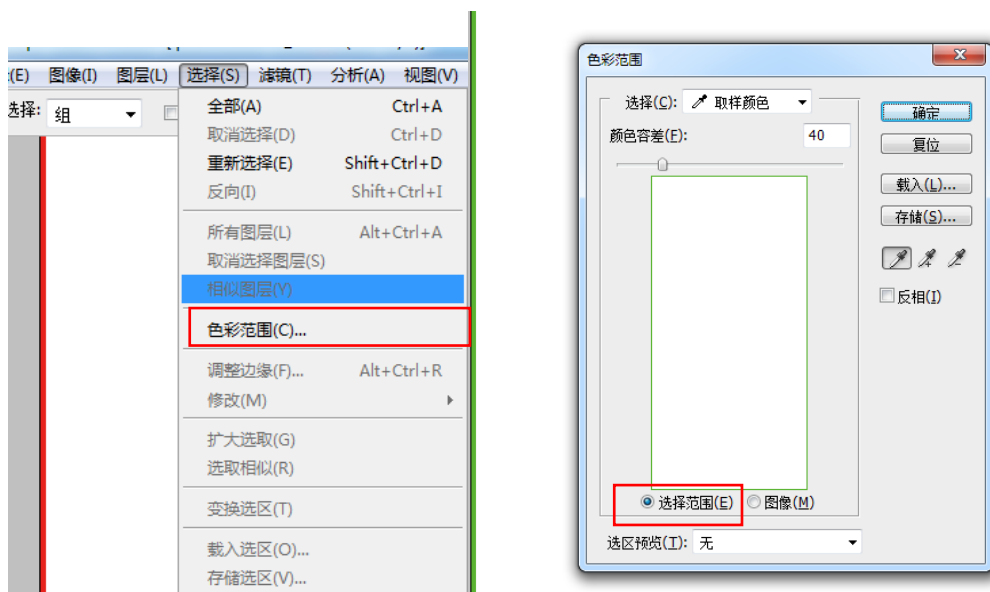
C. Set the resolution of the printed document, greater than or equal to 300 DPI,

Color mode: must be CMYK, no just established white ink varnish spot color channel, can not be identified;

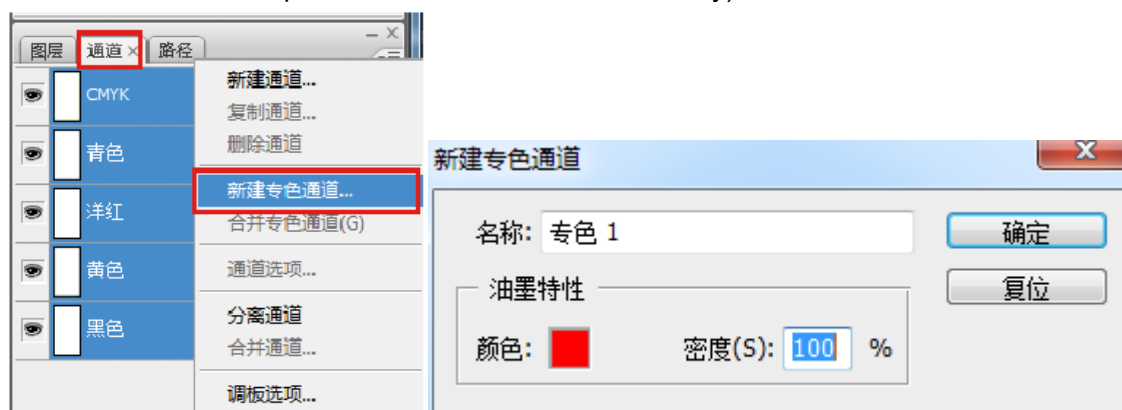
2. Make the positioning box, CTRL+A select the whole canvas, right click to select the stroke, as shown below:



3. Click "select" in the toolbar, select the color range, use the straw tool to absorb the green outer box just painted, and click the "ok" button, as shown below:



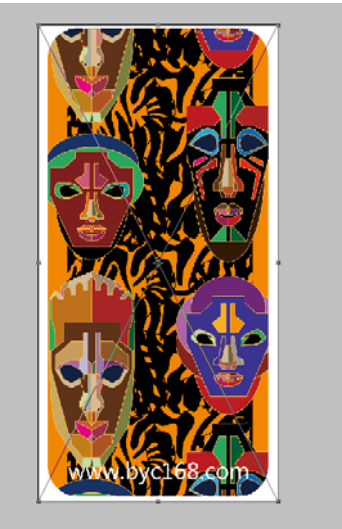
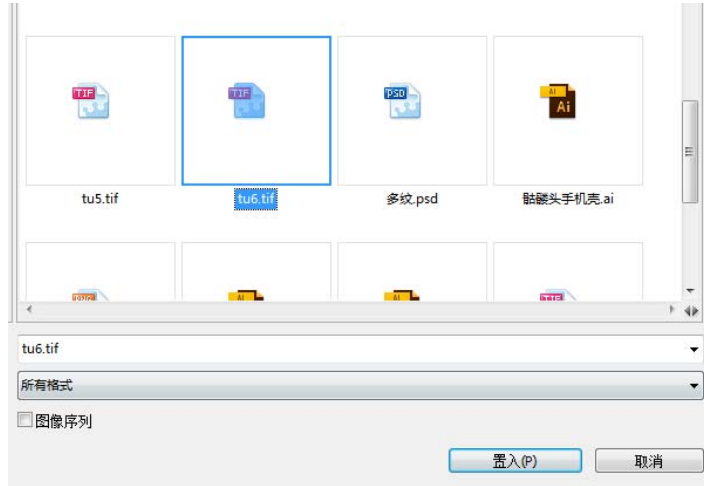
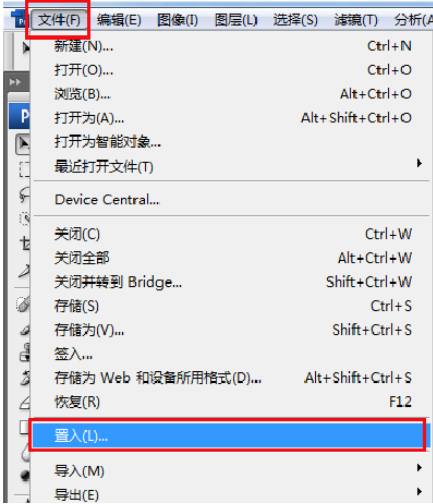
4. Select the channel window and set the white ink on the external frame (because the working platform is black, we need to make the white ink channel when making the positioning frame, otherwise the positioning frame will not be obvious on the platform and it is hard to see clearly).



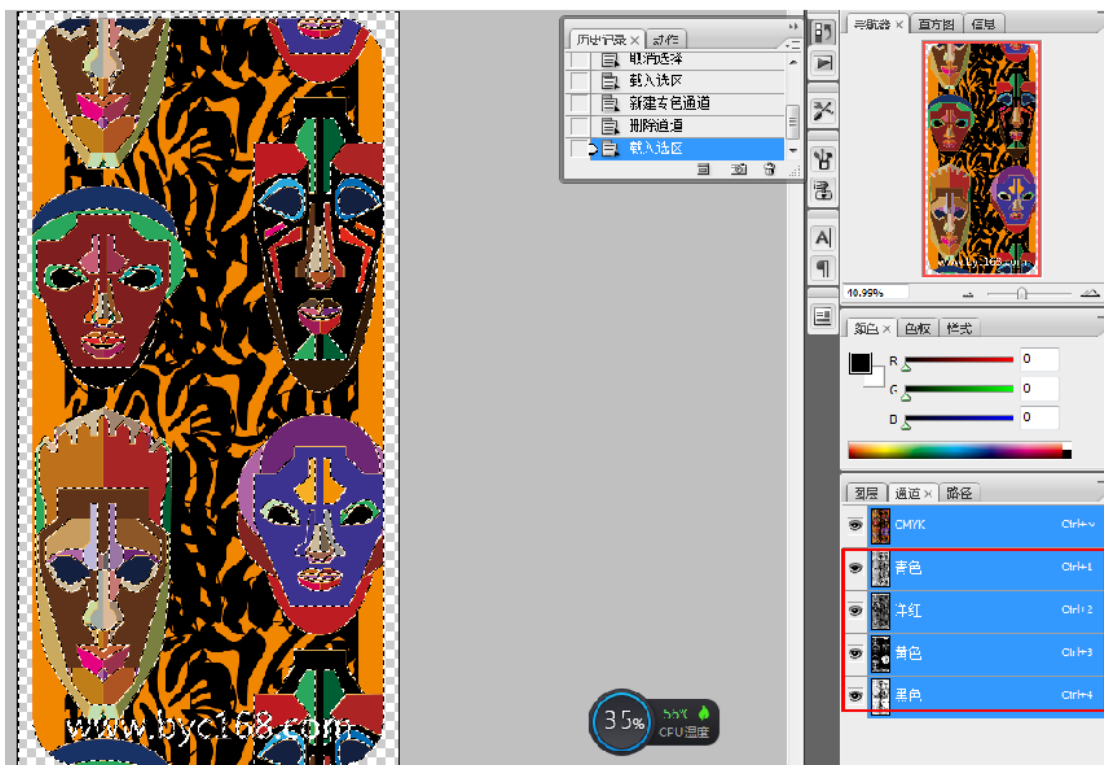
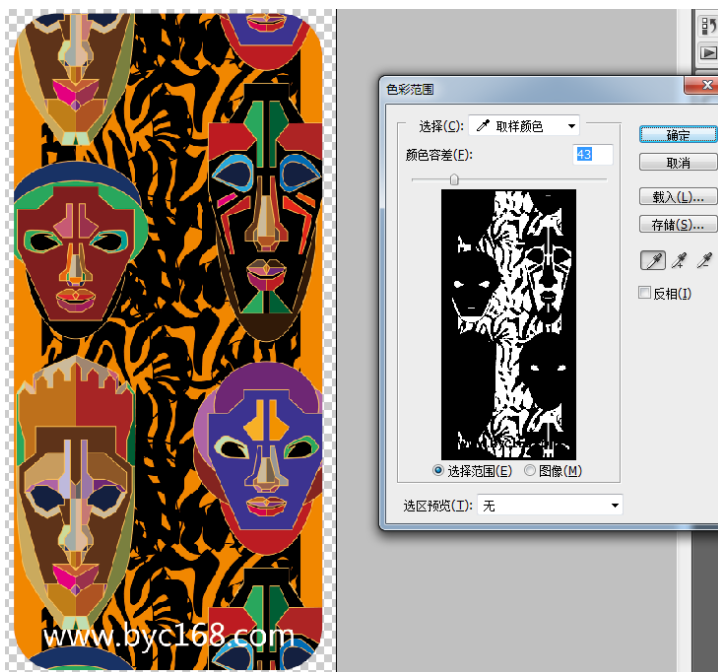
5. Save the positioning box in TIF format, as shown below:



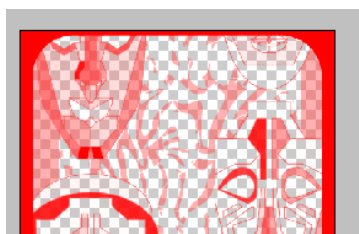
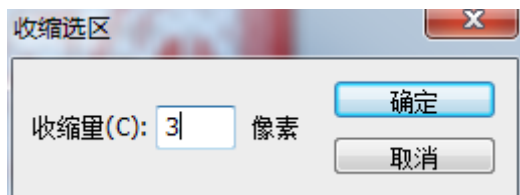
6. Refer to step 1 new canvas (here can be directly with the above location file, but just establish white ink channel must be deleted, because the double-headed machine supports only one color channel, 3 head machine support only two color channel, channel error occurs or print, can't normal printing), will be placing the canvas print designs and double-click, as shown in the figure below:

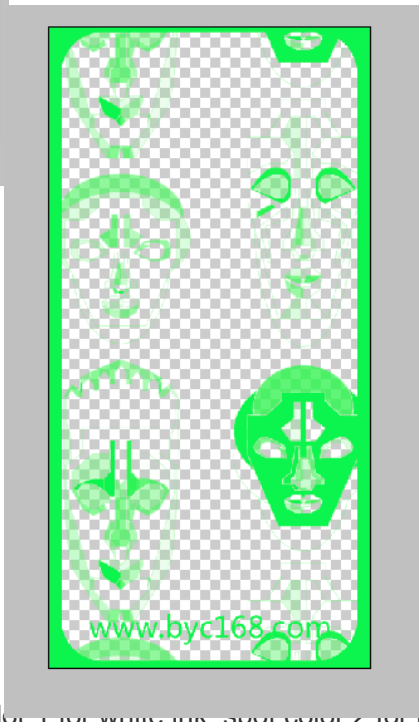
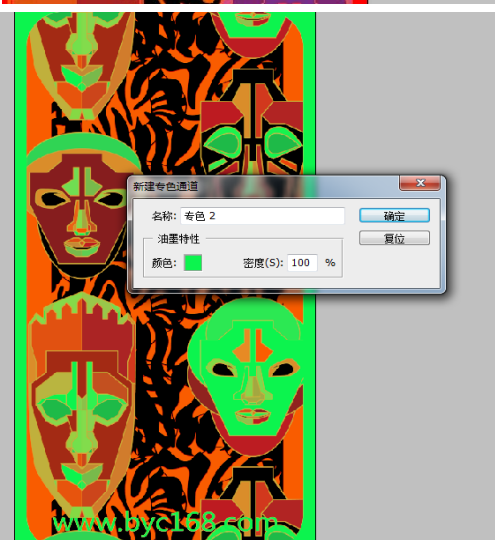
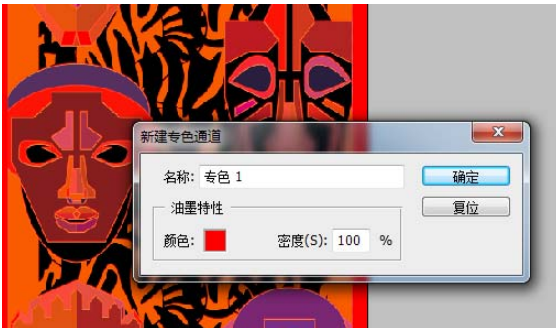


7. When using white ink and light oil channel, we must establish a print white ink and light oil color channel. If you want to print the color in that region, will choose the region to establish the color channel, there are many kinds of ways to build constituencies, such as the range of colors, CTRL + click on the icon color channel (this way do white ink or light oil thickness is changed in accordance with the color depth change), magic wand, marquee tool, the pen tool, and CTRL + click on the layer icon (this way do white ink or light oil thickness), the way is different, but the objective is to establish selection;



8. When set to build the color channel area, to accept to print the color of the area contraction, general 3 pixel resolution 300 dpi image file contraction, with a relatively small font when the document or line section, contraction pixels a tiny part of the conference and meet didn't, so they need to contract pixel value decreases, and the specific according to the actual situation and decide, if not contracting appear white leakage, in theory, because each nozzle is independent and tinted software calibration table place, is absolutely impossible to achieve, so the color must be smaller than colors, as shown in the figure below:



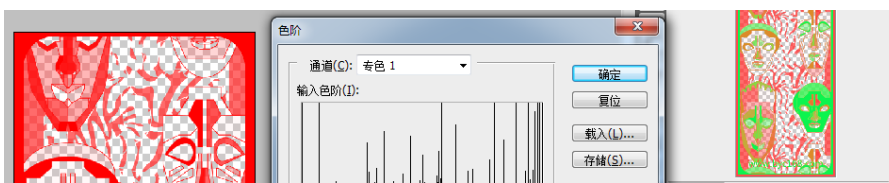


(Spot color 1 for white ink, spot color 2 for light oil);

Click the color to set the spot color area to show what color, will not print out the color;

Density this option is the thickness of spot color in theory, but in practice can not control the spot color concentration, can only be completed in the control software;

Note: the above technical secondary school 1 with red color display area to print white ink, the color 2 to display area to print in green light oil, white ink and light oil area can be set according to need any, can be the same or different, if need to adjust the white ink and the amount of spray ink colors can choose to change the channel, press Ctrl + L levels adjustment, as shown in the figure below:



9. After the establishment of spot color channel, save the file as TIF format and the color mode as CMYK, otherwise the established spot color channel is invalid;



In order to achieve the simultaneous printing of color ink and white ink varnish, the operation in Photoshop has been completed, and other drawing details should be explored by yourself. For the printing operation, please refer to the following instructions.

Vii. Common faults and troubleshooting

1. Double-click Print exp control software without response, indicating error;

In order to let the machine operator, faster machines, we are in the factory were carried out for each machine debugging, so don't need to install the software, unzip the file package can be used directly, but lack of some computer system runtime files, so there will be a normal operation of the software, so we need to manually install the runtime software, specific see the runtime software installation;

2. The printer cannot be connected to the printing software

Occasionally, customers may complain that the computer cannot be connected to the printer, and the computer plug in the USB interface software has no response. In terms of hardware troubleshooting, it may be that the driver is not installed or the driver is mistakenly deleted by the anti-virus software, and the driver can be removed by reinstalling the driver.

3. Open the machine and the software, and move the car. The software always shows that the position of the spraying car is 0

Open the machine and software, move the car, the car will move to the left will not stop, or the car position is 0.

Generally, this situation can be solved by the following methods:

A check whether the raster ruler is stuck in the middle of the raster decoder, or the raster decoder is too high to read;

B. If the configuration is normal, check whether the wiring of the raster decoder is on the right side (it may burn the decoder), and if the raster decoder has burned out, replace it and test it again;

C code c or not, if change the grating can take now to grating decoder on the normal use of the machine to test, see if you can read the grating value, if you can't read, that could be the board grating interface is broken, can be replaced the board test, but there is almost no this kind of situation, most of them are line didn't answer to.

4, UV printing machine appears obvious UV channel

Generally, there are only three reasons for this problem

(1) the machine step is not well calibrated, or the paper stepping error is large, this problem will also lead to serious UV channel;

(2) software feather is too low, it is recommended to print 8PASS feather at least 80%, or choose spray to strengthen A;

(3) drop too small, too little ink, UV lamp aging, will also lead to UV channel.

5. Print prompt reads data mapping file incorrectly or reads 1PASS data incorrectly

The main reasons are: (1) the format of the file itself, you can try to print the output to the file PRN format print,

(2) restart power and software;

(3) the computer data transmission is not stable, can be installed on the computer PCI USB3.0 adapter card.

6. The print prompt exceeds the number of printable channels, and the machine does not operate:

When you select white ink printing, only one spot color channel is allowed. If there are multiple spot color channels in the file, an error will occur, or there is no option to select white ink in sharp color. In general, we all choose spot color.

7. Obvious printing stripes, for the following reasons:

A. Ink shortage caused by nozzle blockage;

B. The setting value of feather spray is too small. If it is larger, it will be improved.

C printing accuracy is too low, improve the printing accuracy.

8. The reasons for the edge of printing patterns are as follows:

A. Spray the nozzle obliquely, replace the nozzle;

B the distance between the print object and the sprinkler head is too far;

C print object surface static too large, do in addition to static treatment;

D can try to replace the ink point, the larger the point, the greater the ink-jet strength (when you choose a larger point, the color will become darker and the picture quality will be rough, you can properly reduce the amount of ink to complement).

9. The printing machine does not work, or the pattern comes out with the effect of sharp color water and color bar:

The main reason is that the USB software lock is not inserted into the computer, the software lock is damaged, and the system does not have a lock driver;

Viii.Disassembly and cleaning of sprinkler head

(一) disassembly

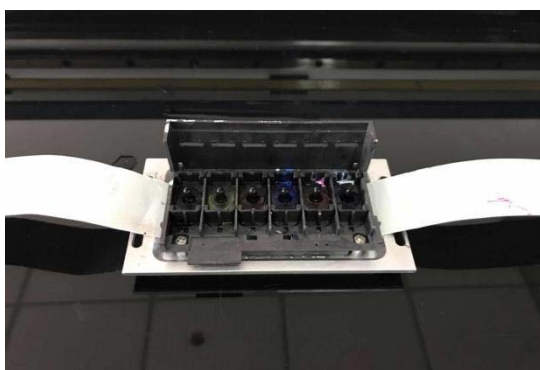
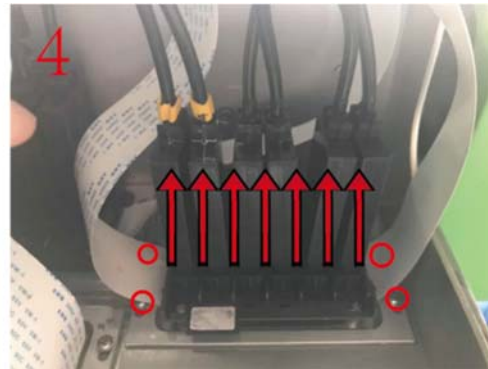
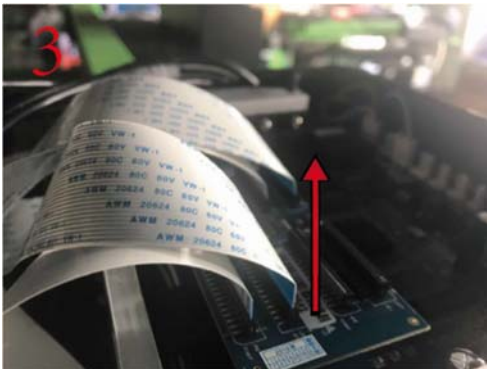
1. When the machine is power off, move the printer head to the middle and remove the screw on the right side of the head protection cover (remove the screw on the red ring in the picture).

2. Remove the left screw of the front protective cover (remove the red ring screw in the picture), and then remove the protective cover.



3. Remove the line connecting the sprinkler head according to the arrow direction in the figure.

4. Remove the fixing screw of sprinkler head that needs to be removed (remove the red ring screw in the picture). According to the direction of the arrow in the picture to remove the ink sac, with a bag, to prevent ink sac drip onto the nozzle.



(二) nozzle cleaning



Note: please strictly follow the following steps to clean the nozzle!(graphic on next page)

Sprinkler head is consumable, is also fragile goods, once sold (or sold with the machine), there is no warranty, please understand!

Warning: please be careful that the cleaning liquid and ink contact the skin directly. In case of contact, please wash with soap (or washing powder) immediately.

In case of contact with eyes, please rinse with water immediately and seek medical advice immediately if you feel unwell.

When cleaning the sprinkler head, please be careful of the ink and the cleaning liquid drops to the sprinkler head line and the sprinkler head and the sprinkler head bottom plate connection, if drops accidentally, should immediately clean, and dry with the blower cold air, and wait for complete evaporation before the machine, so as not to burn the sprinkler head and the main board!

1. Preparation tools: xp2000 nozzle, one new syringe, one hose, corresponding cleaning liquid (textile ink with textile cleaning liquid, UV ink with UV cleaning liquid, not mixed).

2. Connect the syringe to the hose

3. Connect the needle cylinder with the ink guide column on the nozzle and gently pull back. After pulling back 1ml, pause for a while to let the nozzle cushion for a while.

All 6 ink channels on the nozzle need to be pressed once. Wash the syringe after finishing.

4. gulping for air a needle tube, the guide on the cylinder and the nozzle ink column connection, gently press down cylinder, can see the nozzle surface of ink out, wipe with a clean paper towel or clean cloth, 1-2 cylinder pressure air repeatedly, until no longer ink flow, six ink channels need to press it again, to prevent the cleaning fluid mixed with the ink nozzle blockage.

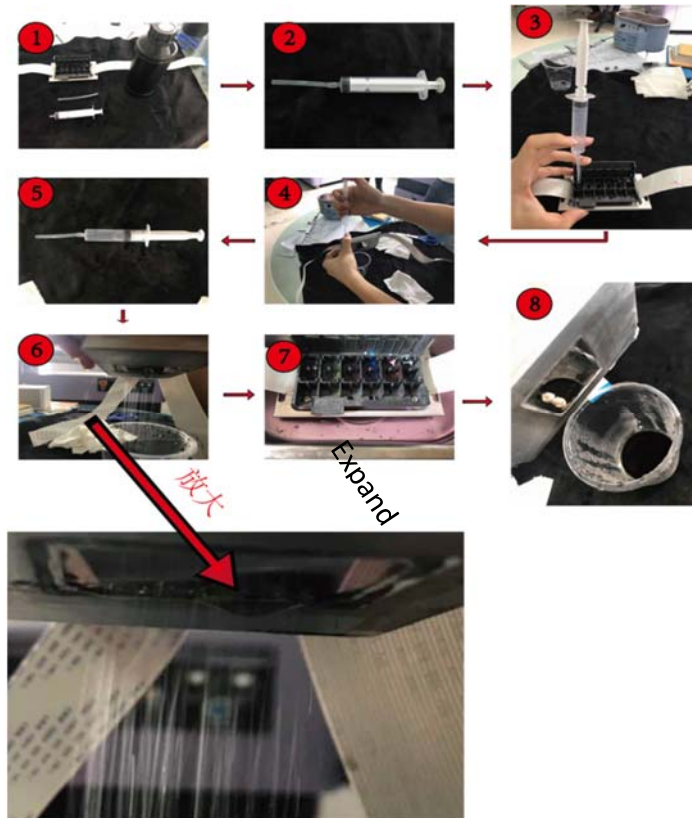
5. Suck a syringe cleaning fluid and connect it with the ink guide column on the nozzle.

6. Gently press down the syringe, you can see that the nozzle surface will have droplets of cleaning liquid flow out, continue to clean this strength, until the flow of cleaning liquid no longer have ink mixture, become pure and transparent. Slightly increase the intensity, out of the cleaning fluid will change from droplets into water column. If the nozzle out of the ink smooth, then out should be a row of neat and clear water column; If the sprinkler head is disconnected, part of the water column can be seen missing during cleaning; If the printing drawing, cleaning should be part of the line oblique spray (do not use strong cleaning, otherwise it will cause nozzle string ink, resulting in nozzle damage).

7. If the sprinkler head is broken and cannot be washed, you can try soaking. Find a container that can hold the sprinkler head, level off, and pour in the cleaning liquid. Soak for 15 minutes and rinse again. UV ink sprinkler head should not be soaked for a long time.

8. Suck the air of a syringe and connect it with the ink guide column on the nozzle, clean the cleaning hydraulic pressure inside the nozzle and repeat 2-5 times to prevent the nozzle from being blocked due to the mixing of cleaning liquid and ink.

9. Wipe the cleaning liquid and ink in the ink guide column and groove clean after cleaning to prevent ink and cleaning droplets from reaching the nozzle line and the connection between the nozzle and the nozzle bottom plate, thus damaging the nozzle.



Ix. Daily maintenance instructions

UV flat panel printer belongs to high-precision inkjet output equipment, some operators do not understand its performance and operating skills, it is easy to cause a variety of problems, leading to the reduction of the service life of the instrument, the production of enterprises to bring greater losses. Therefore, at ordinary times when the work, the daily maintenance of good printer is very important. So as operators, UV flat - panel printer should be how to carry out maintenance?

(I) environmental requirements

1. Indoor temperature requirements: UV printer to place in a cool, in the corner of the backlight, avoid heat and direct sunlight environment, suitable for indoor temperature is 19 °C ~ 32 °C , humidity is 25% ~ 70%.
2. Solid flat platform: ensure to place the printer work platform flat solid solid (here refers to the machine in normal working process of the work platform as a result of the movement of the machine weaving), UV flat-panel printer machine is very heavy, if put the machine in the working platform is not smooth, can cause the print platform tilted swing machine which affect the print effect.
3. Do not place sundries on the machine: especially drinks, cups and liquids are strictly prohibited to prevent liquid from entering the machine and causing circuit short circuit and burning circuit board, causing irreparable loss. Regularly wipe the dust on the machine surface with a cloth to prevent dust accumulation.
4. Avoid heavy pressure on the printing platform: it is forbidden to display heavy things on the platform, which may cause deformation or even rupture of the printing platform, thus affecting its normal use.

(ii) maintenance of sprinkler head

Nozzle is the core component of UV flat panel printer, but also the most expensive component, the maintenance and maintenance of nozzle is directly related to the service life of the nozzle and the quality of printing. The service

life of the nozzle will be greatly shortened due to the difference of ink quality and the failure of maintenance. In the process of normal use of the machine, please do not replace the ink at will, different manufacturers of ink components are not the same, mixed together with ink will occur chemical reaction so as to solidify and agglomerate, resulting in the nozzle blocked, the loss is not worth the gain, so in the replacement of different manufacturers of ink when you have to do a good job of nozzle scrapped preparation.

1. Sprinkler head keeps flashing: when the machine is in standby mode, please click the "reset icon" on the toolbar to let the word car stay in the flashing position and keep the sprinkler head unobstructed through ink flow flashing;(after starting up, the sprinkler head must be in the flash spraying position before it can flash spraying. Otherwise, it will not spray ink.)

2. Nozzle return seal: normal shutdown sequence, first turn off the control software, the ink cart moves to the right back to the ink pad, plays the role of sealing moisture nozzle, it is strictly prohibited to directly power off after the nozzle exposed outside, this will lead to ink drying, resulting in ink clotting blocking nozzle;

3. Head moisturizing and blocking: When machines to determine more than 7 days when not in use, it is recommended that you remove the nozzle, the nozzle with cleaning fluid in the ink and wash, and then injected into the shower nozzle moisturizing lotion, with clean cloth folded into square nozzle size of the metal surface, placed on the cloth to add a few moisturizing liquid in the nozzle surface further protect wet cloth (the best moisturizing liquid should not be too much above next to wet the cloth not to spill the best), then use plastic wrap or bag sealed to prevent moisture liquid volatilization, flush nozzle for every 15 days and to add moisture liquid, at the time of placing nozzle, metal spray hole surface must be down, it is forbidden to inversion;

(3) machine maintenance

1. Weekly cleaning and maintenance of X and Y axis guide rail and lifting gear and rack: clean X axis car guide rail and Y axis work platform with cloth, and add liquid lubricating oil;(do not add grease, because the grease is viscous, will produce resistance, thus affecting the transmission accuracy), the gear and rack of the transmission lifting and lowering with grease;

2. Check the UV lamp every day: see if there is ink or stains on the surface of quartz glass. If there is, even if it must be cleaned, wipe it away after soaking with organic solvent.

3. Check the UV lamp water tank every day: check whether the water level of the tank is up to standard: when the UV lamp works, it will generate heat, and the water used for cooling will be reduced gradually. Once there is not enough water in the water pipe to cool down, it will cause permanent damage to the UV lamp;

4. Prevent liquid splashing inside the machine: ink and cleaning liquid are highly corrosive, do not touch the electrical components and wires. If ink or cleaning liquid and other liquids are splashed accidentally, power off and wipe it off immediately.

5. Regularly clean up the accumulated ink on the platform: in order to fully cover the image of some products, the image will be larger than the product, and the excess ink will slowly accumulate too high after a long time, so as to scrape the nozzle and cause damage to the nozzle. Therefore, it is necessary to timely clean up the excess UV ink on the platform;

6. Clean raster bar every week: there are many scales on the raster. If the scale is covered with ink and dust for a long time, it will lead to printing fuzzy size deviation, which will affect the final printing effect.

7. Opened ink must be used in a timely manner: if not must be sealed, because this will cause the evaporation of ink or contact with the air and deterioration, causing nozzle blockage, and may affect the color fastness of the printed picture on the product.