

HYL-E350UV

User manual



Thanks for buying and using WER flatbed printer. It's our great honor to cooperating with you.

※In order to ensure that you are properly and safely using the product based on a comprehensive understanding of the performance of this product, please be sure to read this manual and keep it well.

※It is forbidden to copy or distribute this manual in whole or in part.

※The contents of this manual and the parameters of this product are subject to change without notice.

※We have tried our best to compile this manual and tested this product. If you find any missing or wrong, please inform us.

※We are not responsible for any direct or indirect damage or loss caused by problems that may occur while using this product.

※We are not responsible for direct or indirect loss or damage caused by non-compliance with any of the terms of this product.

Statement

This is a Class A product that may cause radio interference in a living environment. In this case, the user may be required to take practical measures for their interference.

Thank you for purchasing this product!

This manual can help you understand and use this product quickly. Check out this manual and you can effectively solve the problems encountered during installation or use.

In order to ensure the normal use and keep the best performance of the equipment, please be sure to read through this manual and keep it properly.

The minimum requirements of PC's configuration

Recommended configuration of computer hardware and software that matches the device:

CPU:2.50GH
ZRAM:4.00GB
Mainboard: P321 - ES3G with 3pcs USB2.0 interface; Chipset: INTEL Software:
MICROSOFT WINDOWS XP PROFESSIONAL SP3 32BIT
MICROSOFT WINDOWS7 PROFESSIONAL SP1 64BIT
MICROSOFT WINDOWS8 PROFESSIONAL VL 64BIT

※Be sure to connect the ground wire before using the device!

※Equipment using AC 220 V AC power or 110v to 220v transformer;

※Requirements to operator:

- The ability to use and maintenance PC;
- Related knowledge for using and maintaining electronic and mechanical;
- Have a certain ability to communicate (can speak Mandarin or English);
- Knowledge and theory in color management;
- Knowledge of printing;
- Ability to solve problems and repair the product with telephone assistance;

Safety instructions

--Cannot be disassembled, repaired or modified, otherwise it will cause fire or damage caused by abnormal operation.

--Connect the machine with a ground wire, otherwise it may cause a shock hazard in the event of a mechanical failure.

--Do not use when it is in an abnormal state.

--Do not use the machine in an open flame, electric spark, static electricity or high temperature environment

for example, in a place close to a heat source. Also, do not put printed media in these environments. Or it may cause fire.

--Do not place ink cartridges, cleaning fluids, or waste ink in high temperatures or near open flames or heat sources.

--Do not place ink cartridges, cleaning fluids, or waste ink in the place that near bleach, chemicals, flammable or explosive materials etc. Or it may cause fire.

- --Keep ventilation in the work environment, otherwise it will be harmful to health or cause fire.

--Do not spill ink or cleaning fluid on your eyes or skin. Do not drink or smoke ink and cleaning fluid! Otherwise, it will seriously damage health.

--If ink or cleaning fluid splash on your eyes, wash immediately with clear water for at least 15 minutes. If your eyes continue to feel discomfort, please go to see a doctor immediately.

--Put the ink cartridge away from children. If the children eat ink or cleaning fluid accidentally, don't try to vomit it. Please go to see a doctor immediately.

--When temporarily storing the waste ink that flow out, please place it in a waste ink bottle or a sealed and durable container, such as a metal or polyethylene container. And tighten the cover to prevent the ink from leaking or evaporating, which will cause discomfort or fire.

--Do not pull out the power cord with wet hands or it will cause electric shock.

--Do not use damaged, loose power cords or plugs.

--Do not damage or modify the power cord, nor to excessively fold, twist, pull, wrap or pinch the power cord, or place heavy objects on it.

--Do not allow liquids, metal objects or combustible materials to enter the machine to avoid damaging the machine or causing a fire.

--Do not put your hands reach into the inside of the printing unit during operation, otherwise it will cause injury.

--The roll material must be installed in the position of the preset roller, otherwise the roll will fall and cause injury.

--The grounding wire should be made of mechanically strong single-strand copper wire or coiled wire. It is best to use copper wire with a diameter of 4mm or more.

--Connected to the underground about 3m deep, and irrigate surrounding earth with saline, it must be in contact with the earth's soil.

--The ground wire of the machine must be connected to the computer, in order to eliminate static interference between the computer and the device.

--The length of the ground wire is better controlled within 3-5 meters. If the equipment is at the upper level, it is also necessary to keep the equipment well grounded, or banded the ground wire.

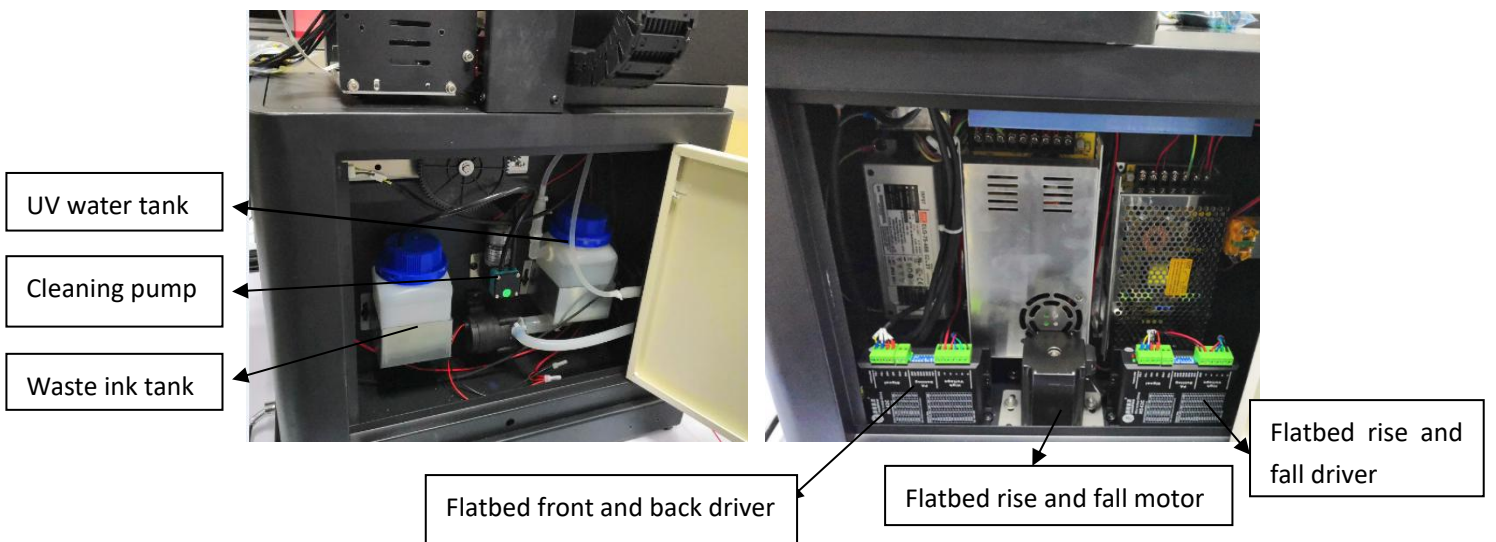
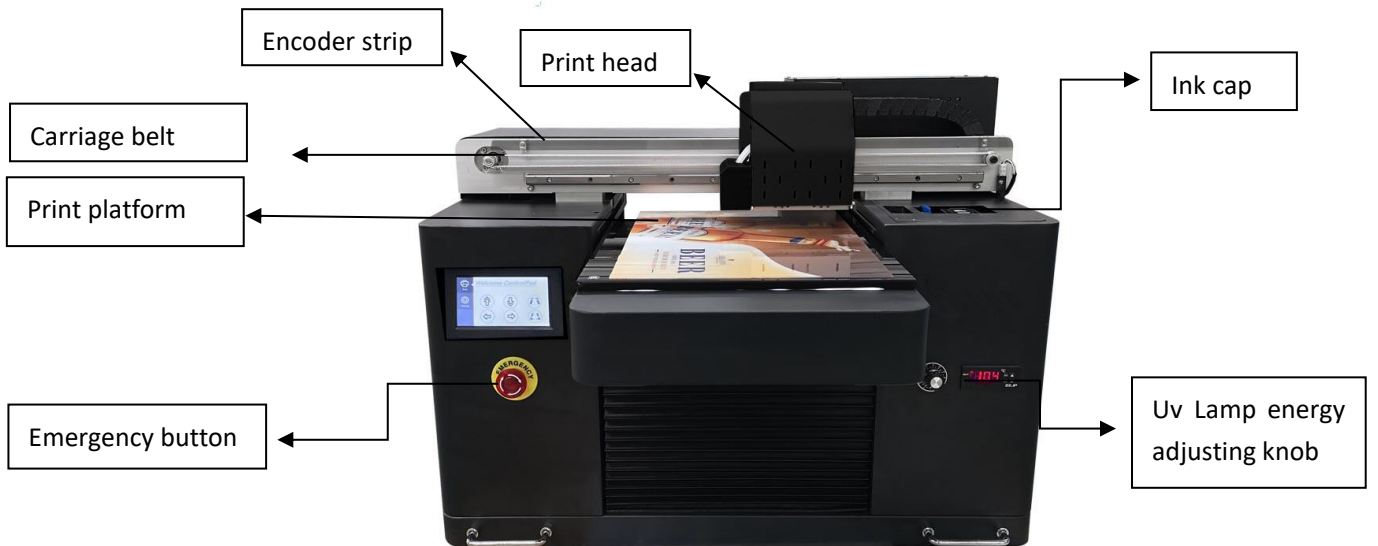
--The connect location cannot be shared with the ground wire of the building lightning rod

--Try to use the ground wire along as much as possible, do not share it with the high-voltage electrical appliance.

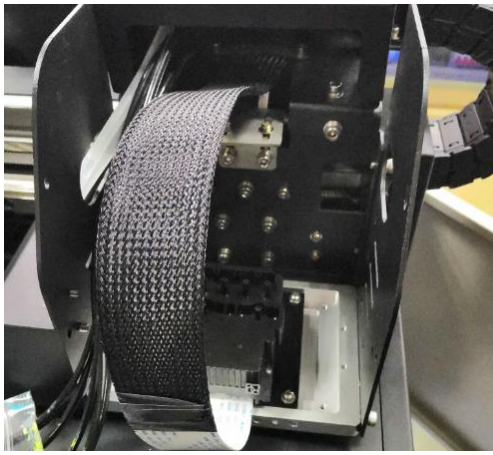
--Both ends of the wire should be welded on the wire pin, or tightened with bolts, do not loosen, otherwise it is easy to catch fire and damage the machine.

Chapter 1 Introduction to the machine

Machine introduction



Main Spareparts:



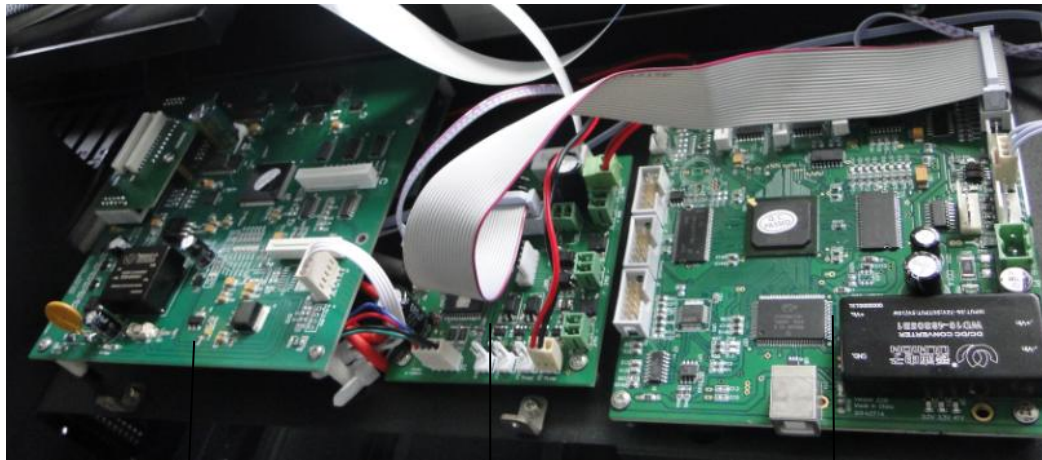
Print head



Ink tanks

Lack of ink alarm

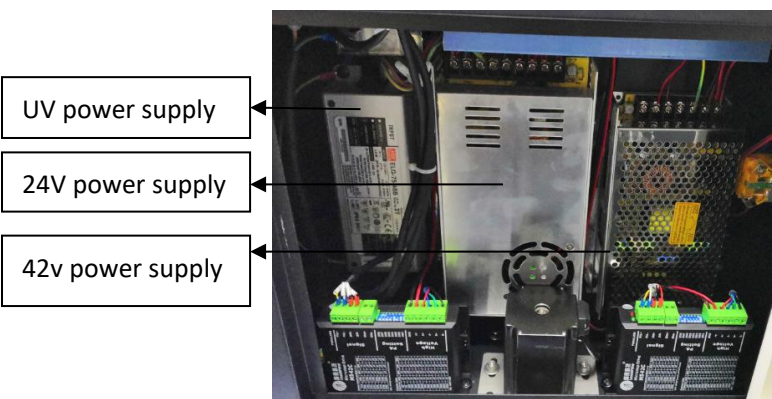
Follow the mark to fill ink



Head board

Driver board

Main board



UV power supply

24V power supply

42v power supply

Printer left side



Please connect the ground electrode before power on

Ground electrode

First time start the machine

Hello there! If you are turning on for the first time; please follow the steps below

If you have never know such a printer, be sure to read the relevant sections of this manual!

1 Check the package first. If there is any damage, please contact the relevant department.

2 Unpack the machine and check the related accessories.

2.1 Pay attention to safety during handling, and take it lightly; do not drop it at a high place.

2.2 Do not place items on the printing platform; including screws and tools.

2.3 Check the relevant accessories according to the packing list, whether they are complete or not.

3 Connect the ground wire:

3.1 The grounding wire shall be a single strand of copper wire or coiled wire with strong mechanical properties. Preferably copper wire, above 4mm in diameter (cross sectional area).

3.2 Connect it to 3m deep underground, and water salt water around it, so it must be in contact with the earth and soil.

3.3 The ground wire of the machine must be connected to the computer, in order to eliminate static interference between the computer and the device.

3.4 The length of the ground wire is better controlled within 3-5 meters. If the equipment is at the upper level, it is also necessary to keep the equipment well grounded, or bolder the ground wire.

3.5 The ground wire of the lightning conductor in the building shall not be shared with the ground wire of the high-voltage electrical appliances.

3.6 The ground wire on the device should be in the metal part of the fuselage closest to the motherboard.

3.7 Both ends of the wire should be welded on the wire pin, or tightened with bolts, do not loosen, otherwise it is easy to catch fire and damage the machine.

4 Organize the equipment installation site

4.1 Place the machine and computer; the computer is on the right side of the machine;

4.2 Leave enough space for the printed materials and printed images

4.3 Environmental requirements:

4.3.1 The working environment requires clean and dust-free, the temperature is constant from 20 °C to 25 °C; the air humidity is controlled between 45% and 75%.

4.3.2 The floor should be easy to clean and free of dust and static electricity.

4.3.3 Installation site level;

4.3.4 The ventilation of the environment makes it necessary to install an exhaust fan.

4.4 Power requirements:

4.4.1 The power supply uses 220v, 50 Hz single-phase AC, the maximum power consumption is 2000 W.

4.4.2 The power supply for the AC power supply must have a separate circuit breaker. The grounding of the circuit should be isolated from other equipment.

4.4.3 The power supply should be stable and constant, and the regulator device should be installed conditionally;

5 Visual inspection of the parts;

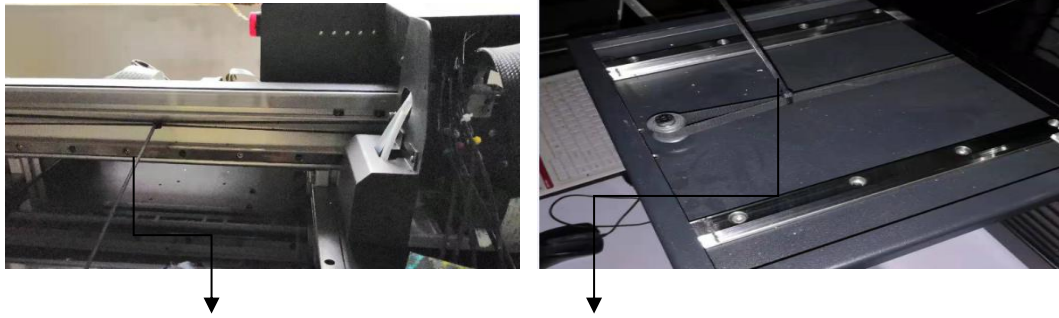
5.1 Manually push the guide line, visually check whether the origin sensor on the left side of the guide line can block normally; whether the wire connector is broken or damaged;

5.2 Visually check whether the wiring plugs are loose or not; (better take photos) for communication;

5.3 Visually inspect the ink supply tube, whether it is damage or not.

5.4 Visually check the raster strip and the raster decoder matching or not; the raster strip is installed between the working area of the raster decoder and does not rub against it.

5.5 Visually check if there is any unevenness between the printing platform and the trolley;



After unpacking, cut the carriage belt fix ribbon and flatbed belt first and then power on the machine.

6 Checking with power:

6.1 Connect the machine correctly AC220V power cord;

6.2 Power-on debugging, observe the boot initialization action;

6.2.1 Check that the raster strip and the raster decoder are connected;

6.2.2 Place the guide line in the middle of the platform before turning it on; (people face the machine)

6.2.3 Turn on the machine;

6.2.4 Observe the X-direction movement of the guide line: first move up and down, move to the right for a distance, and then move to the left until the origin sensor is blocked and stop.

6.2.5 The above is the initialization action of the boot; please pay attention to observe; after determining the normal, go to the next step.

7 Software installation and debugging

7.1.1 Open the software folder

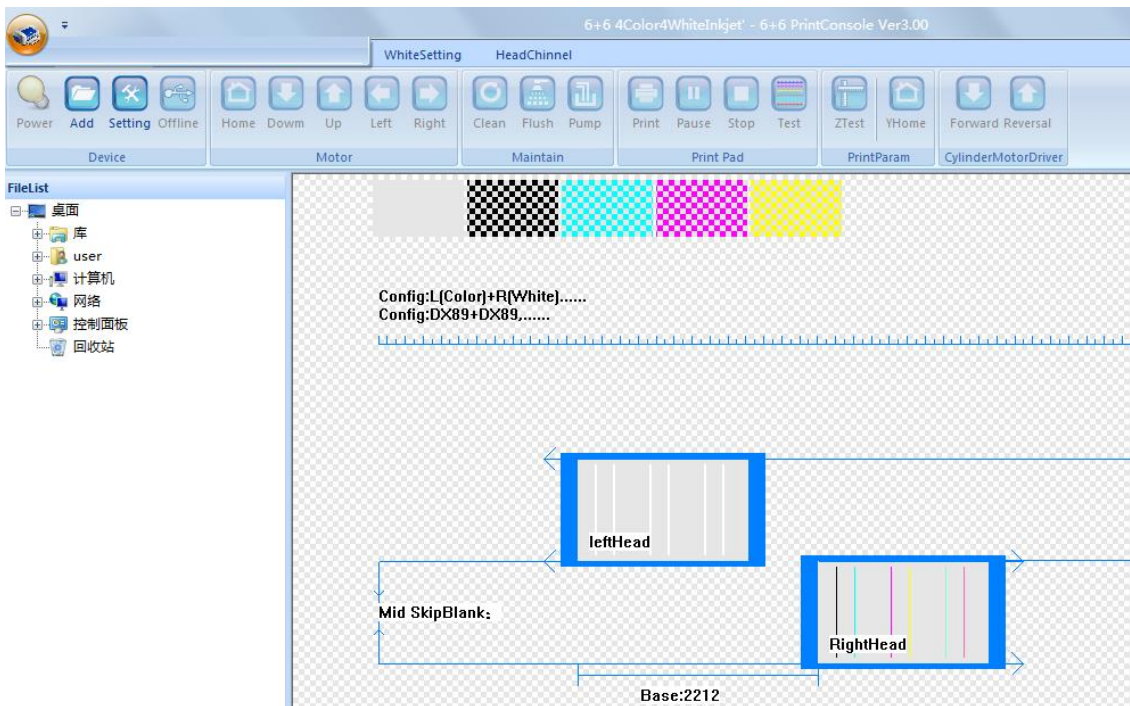
7.1.1.1 Install the software and USB driver to the computer, and install it by default according to the installation wizard;

7.1.1.2 About USB driver:

7.1.1.2.1 If the operating system is WIN7 64bit or WIN8 64bit; please install it in the software installation directory \USB Device\WIN7 x64.

7.1.1.2.2 When it is WINXP 32bit, the default installation is ok;

msvcr100d.dll	1.4 MB	546.2 KB	DLL 文件
msvcrt.dll	335.0 KB	171.6 KB	DLL 文件
msvcrt20.dll	248.0 KB	119.2 KB	DLL 文件
msvcrt40.dll	60.0 KB	15.4 KB	DLL 文件
MSVCRTD.DLL	376.1 KB	152.4 KB	DLL 文件
SiUSBXp.dll	88.0 KB	35.0 KB	DLL 文件
UV_IHWERprint.exe	3.4 MB	815.6 KB	应用程序
UV_IHWERprintE.exe	3.4 MB	814.8 KB	应用程序
WIN3500.prn	1.1 MB	5.2 KB	PRN 文件



driverfire	2018-09-05 11:03	文件夹
USB_64bitsDriver	2018-09-05 11:04	文件夹
USBDriver	2018-05-26 16:07	文件夹
UV_WINColor20180430	2018-09-05 11:04	文件夹



Open the computer device management, find the universal serial bus controller to see which USB does not have the driver file, click the update driver file to find the USB driver corresponding to the folder and wait for the installation to succeed.

Software operation instructions

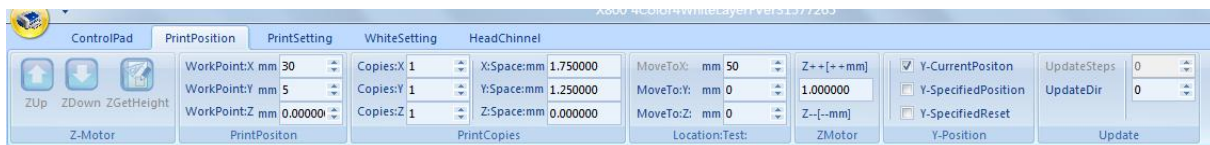
- 1、 Install the USB driver and install the driver in the package folder.
- 2、 Check that the line is connected correctly, the machine is powered on, and the power-on self-test action
 - ① The ink station rises and falls to find the origin → b X axis moves to find the origin → c Carriage moves back to the origin → d ink station lifts and sucks the nozzle.
 - ② Press up and down arrow to check print flatbed if can normally move on software.
 - ③ Press Z-up and Z-down arrow to check print flatbed if can move down and up on software.

Set to complete shutdown the machine and restart

Function area-main interface



- 1、 Online: The machine is powered on, and the online software operates the machine.
- 2、 Add: Add printable rip diagram
- 3、 setting: Enter the engineer mode debugging software (password: jinjin)
- 4、 The guide line moves left/back and forward/backward. If the paper feed action is clicked, the y motor direction is reversed, and the y motor logic can be changed in [Speed Setting].
- 5、 Home: remove the guide line point 'Home', whether the car returns to the original point
- 6、 clean: the machine automatically cleans the nozzle, pumping ink - scraping ink - flash jet - return
- 7、 Flush : when the nozzle shoots the color string color, can be sprayed to the nozzle inkjet
- 8、 pump: automatic nozzle mask
- 9、 Test: print out the test chart, check whether the nozzle is blocked, and the nozzle is broken.
- 10、 Y origin: Y-axis limited optocoupler, click Y origin machine Y direction automatic return



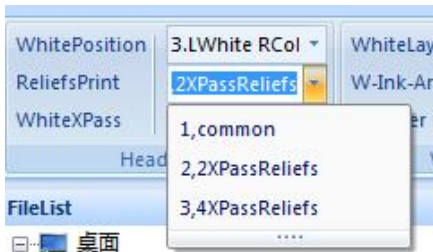
- 1、 work point XY: platform print starting point
- 2、 print XY copies: multiple copies of the same picture
- 3、 XY space: multiple copies of the same picture, the distance between the picture and the picture
- 4、 positioning control: machine positioning print starting point
- 5、 Z-axis side adjustment: update the Z-axis height during printing
- 6、 Y positioning mode: Y current position, the head stop position is directly printed; Y specifies the position Y to specify reset, Y returns to the origin before printing, and the front end retreats to the specified Y distance to start printing;
- 7、 Print update: During the printing process, the image is biased, and the value update can be directly changed during printing.



- 1、 choose the Heads Work number, velocity and To left To right or BI-Direction of working nozzle.
- 2、 color bar settings, on each side of the printed picture, it will have color bar of each color, to avoid long-term monochrome printing blocking nozzle holes.
- 3、 clean cleaning, we can set the printing PASS cycle, the guide line will automatically clean the flashing during the printing process, and continue printing after completion.
- 4、 feather setting: make printing more clear and delicate.

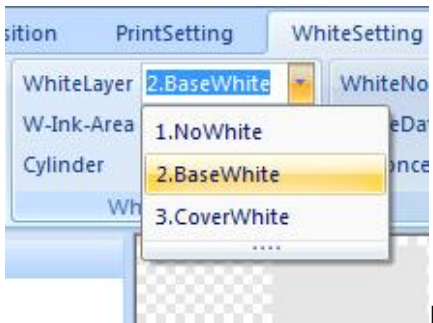


- 1、 Choose the working print head and ink according to the machine.



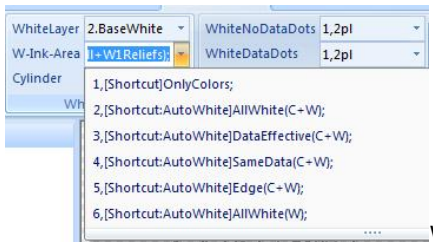
2、

Double printing: the printed image is more clearly.



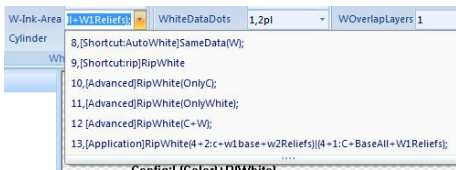
3、

No white: no white ink, only print color ink; Base white: first print white ink and then cover the color ink; cover white: first print the color ink and then cover the white ink



4、

White area selection: a: only print color ink: printing only color data part; b: full picture: (color + white): print the entire file size; c valid data (color + white): print both white and color on the data area;

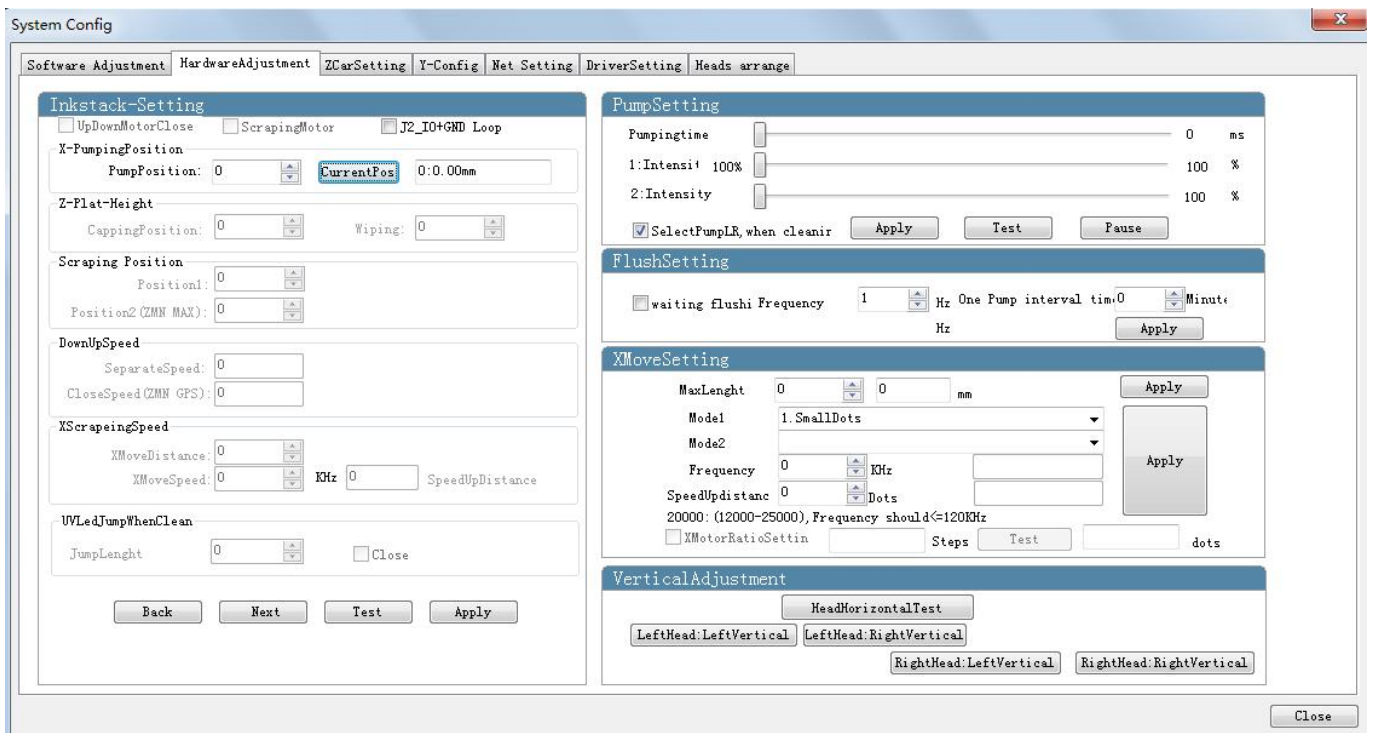


d : Rip spot color, create a spot color channel to print the embossed effect

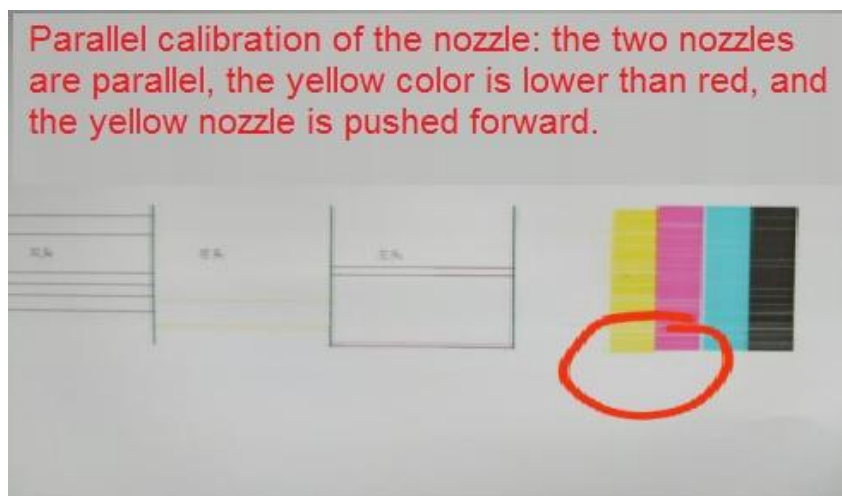


Cover white: cover white ink to print embossed thickness

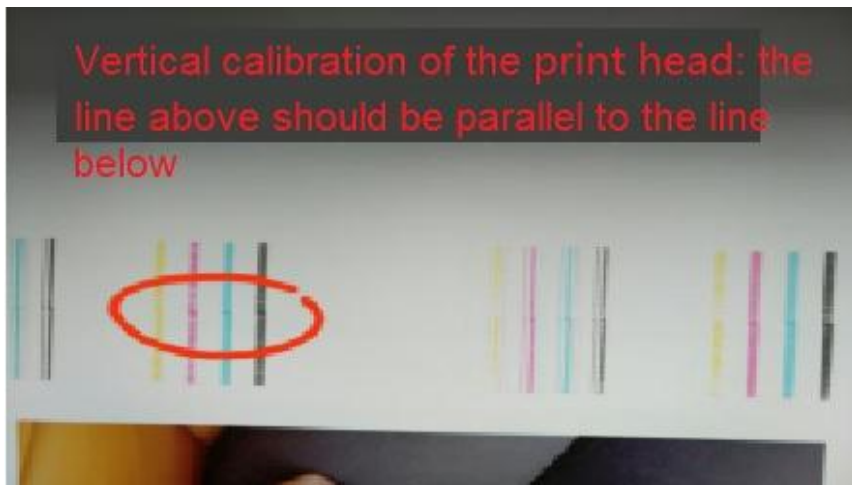
Mechanical Adjustment



1. Ink stack station adjustment: If there is any motor not used, select the check box.
2. Inking position: adjust the position of the left and right sides of the trolley to the position of the suction nozzle.
3. Ink cap station height: Ink cap top and print head height, the suction mouth should be in contact with the print head, the suction mouth against the print head.
4. Wiper height: the position of the blade, the height of the nozzle is greater than the height of the blade, the position of the blade should not be too high, scratch the nozzle.
5. Wiper scraping adjustment: there is a wiper motor adjustment, if not, no selected.
(Set the standby flash position, move the cart to the specified position, enter the current raster value, flash spray is specified here)
6. Ink collection settings: cleaning time custom, ink pump strength should be <20% (too high to easily suck the print head)
7. Length setting: X, printable length. Move x to the farthest distance to enter the raster value into the application
8. X automatically set the gear ratio, enter 2000 click Test, between 1200 ~ 2500, gear ratio setting is normal.
9. Parallel calibration of the print head: The left and right print lines should be parallel and overlapped. If there is any error, the position of the nozzle should be adjusted until there is no gap in the parallel.



10. Print head verticality calibration: calibration printing, the nozzle moves in the x direction with the paper y vertical.



- 11, Lifting or wiper moving speed: set Z detach, slow speed, head speed is fast (detach 15, the head status 20 or so)
- 12. Squeegee X speed: Set the squeegee stroke and squeegee speed. The smaller value, the slower.
- 13, X-axis motion settings: --- print speed settings

Select different printing modes, set speed, frequency, acceleration and deceleration, distance, different speed modes, head group spacing, color registration needs to be recalibrated.

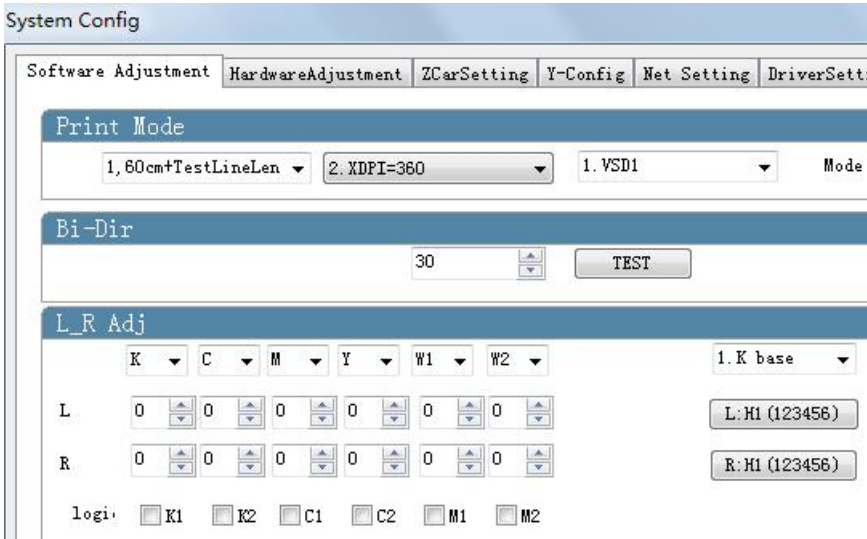
Cart head setting

- 1. Turn on the cart motor, find the position and return to zero: whether Y returns to the original point
 - a) X mobile Z-top: moving the car, the car automatically moves up to the highest point and then moves left and right
 - b) X mobile Z positioning print height: moving the car, the car rises to the z set height and then moves left and right
- 2, Gear ratio: set the pulse value, measure the two moving distances to fill in, save the application
- 3, Head height: flash spray height table height: platform height setting
- 4, The maximum stroke: z optocoupler position, to prevent the optocoupler from breaking the collision
- 5, UV light settings
 - Tail setting: the lamp is delayed after the printout is finished.
- 6. Turn on the light in advance: the light is turned on before the ink is printed.
- 7, "Parameter setting" according to the picture to measure the distance between the UV lamp and the print head

Software settings



1, The print mode select

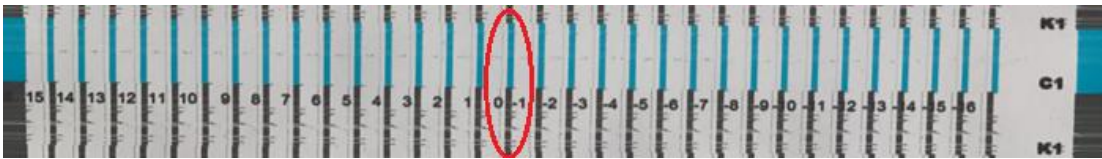


Bi-direction interval----1pass to the left and 2pass to the right coincide, with "0" as the origin, based on the first black, the color coincides without phantom.

Note: Calibrate the Bi-direction off white!

1, left and right head monochrome calibration (color): software K value is 0, test benchmark

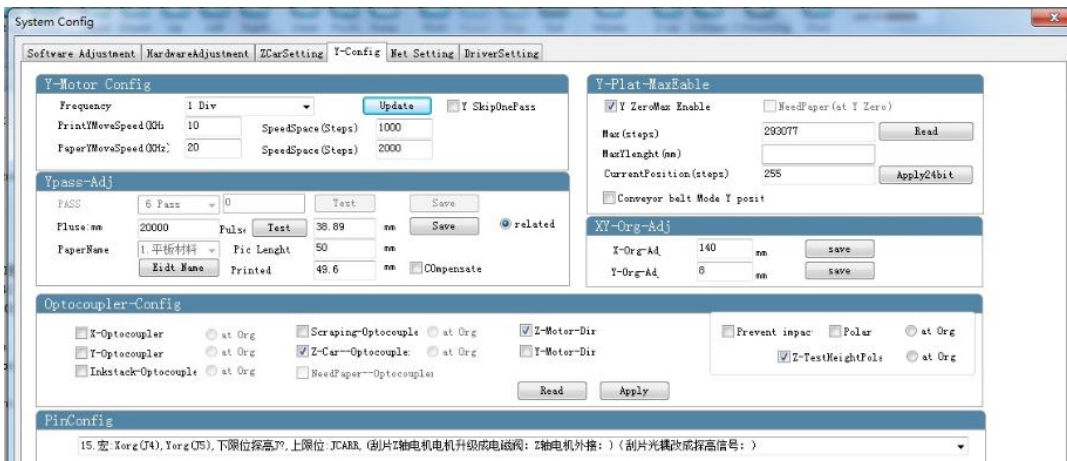
Test, adjust the color position according to the test strip, with the numerical color K1 as the reference, "0" is the origin, the color is aligned with black, the left value is increased, and the right value is decreased.



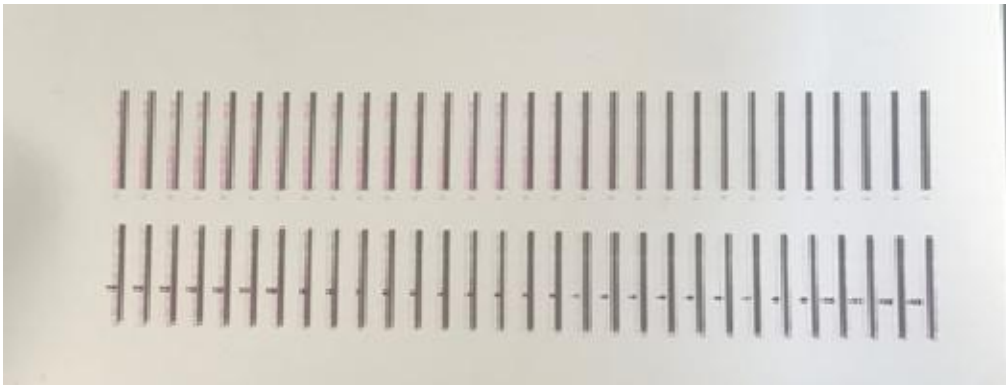
2. L_R Adj

The ink channel follow the ink damper order (KCMYWW).

Speed setting



1. Print paper feed frequency: adjust the step pulse strength. If print the test strip, as follows, the paper feed frequency is high and the frequency should be lowered.



2, step calibration:

Ypass-Adj					
PASS	6 Pass	0	Test	Save	
Pluse:mm	100000	Pulse	Test	52.08	mm <input checked="" type="radio"/> related
PaperName	1. 平板材料	Pic Lenght	0	mm	
	Eidt Name	Printed	0	mm	<input type="checkbox"/> IDC_CHECK_REBACK

a. Select the number of passes, positioning ratio: set 50,000 or 100,000 pulses, click the test than the print color block, measure the distance between the two color blocks A-B, and fill in back of the test ratio, save.



b. The paper step is corrected again, for example: drawing Y length 250, printing the actual size of the measurement printing is 249, check $\sqrt{\quad}$ compensation to correct again.

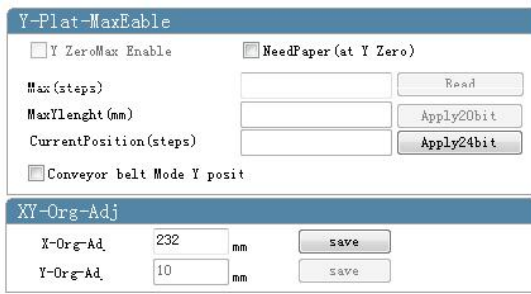
3, X, Y origin compensation: set the machine to print the origin position

4, Y pass delay calibration:

Step left delay: print to the left, time delay pauses to continue

Y-Pass-Delay	
Dots Sel	1. SmallDots
XDPI-Se	3. 720 XDPI
Velocity	2. MiddleSpeed
Pass-Se	6PASS
Delay ms	0 ms <input type="button" value="Save"/>

5, Y platform limit: check



6, Y maximum step: return the machine to the Y origin, move Y to the maximum length, fill the "current position" value into the "maximum size", use 24bit.

7. Select Pinconfig print mode: select according to your own wiring method, please do not change it at will.

All the above steps are not required by the non-professionals. The parameters can be directly printed before the machine is produced. The skilled person can debug the two-way, vertical nozzle, white color alignment and so on.

Instant printing

The Maintop print port, IP and software are the same.

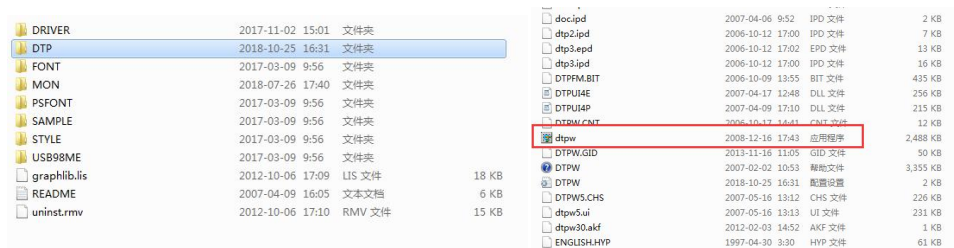
Drive setting (waveform)

The drive is the waveform, the difference between the different ink drives, the drive affects the inkjet, directly affects the printing effect, the point thickness waveform and the color effect.

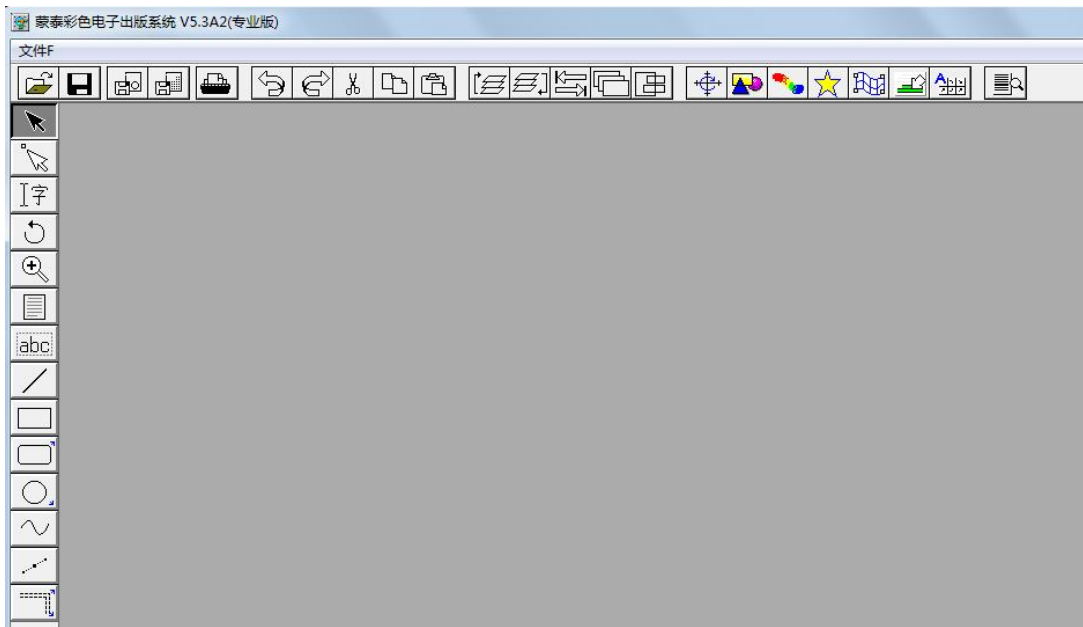
Print head staggered: the spacing is often 360. If there is overlap or separation between the 1pass prints, the nozzle spacing can be adjusted.

Maintop software operation

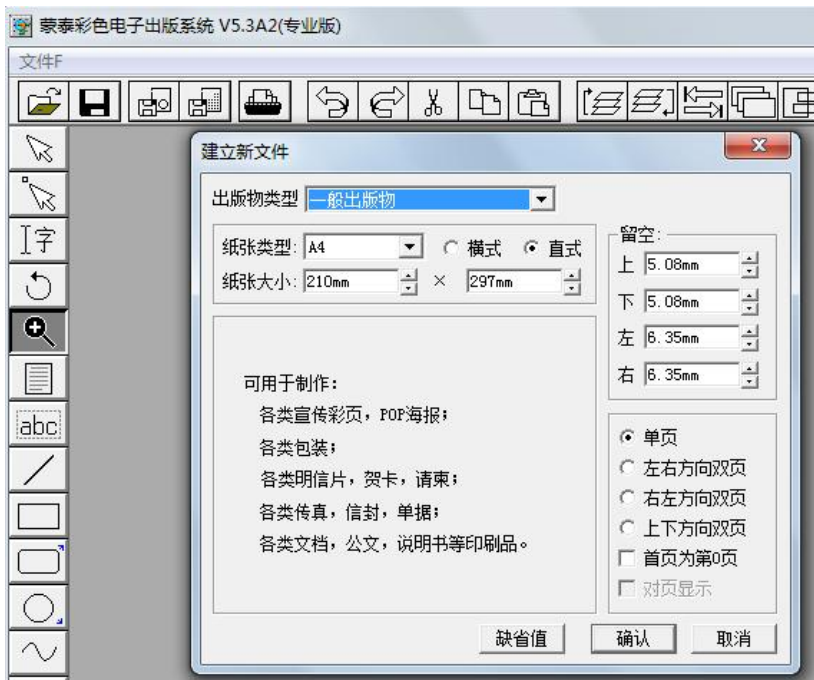
1. Put the Maintop 6.0 CD into your computer and open the CD to install it.\
2. After the installation is complete, find the maintop folder in the C disk and open it.



3. Double-click dtpw or send to the desktop shortcut, the desktop will display this software.



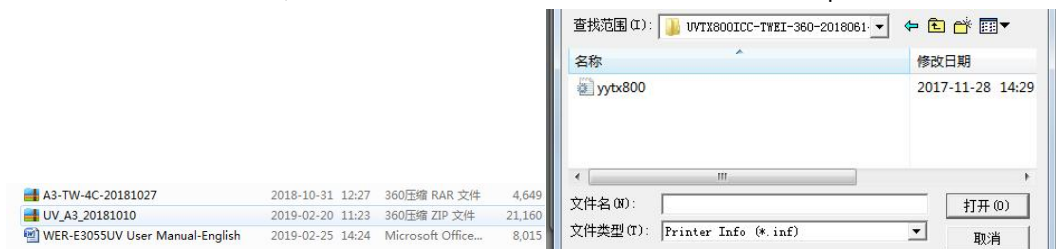
4. Open the file to create a new file Click OK



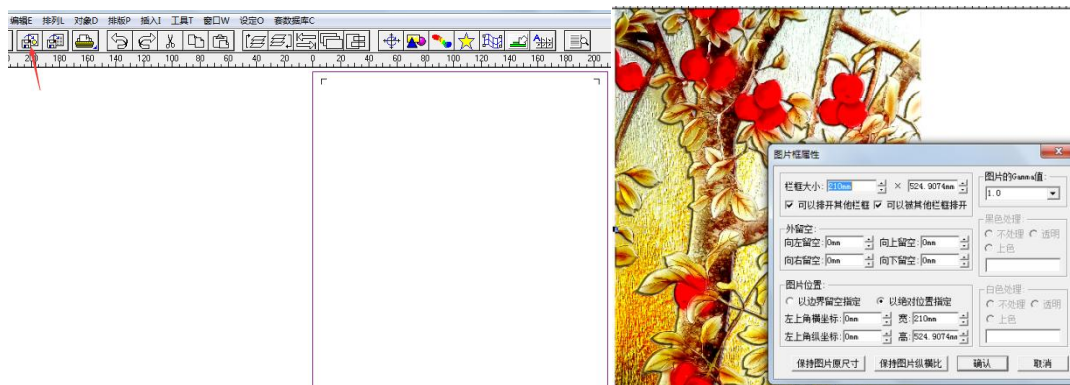
5. Click the file to find the printer settings and click install the Maintop printer



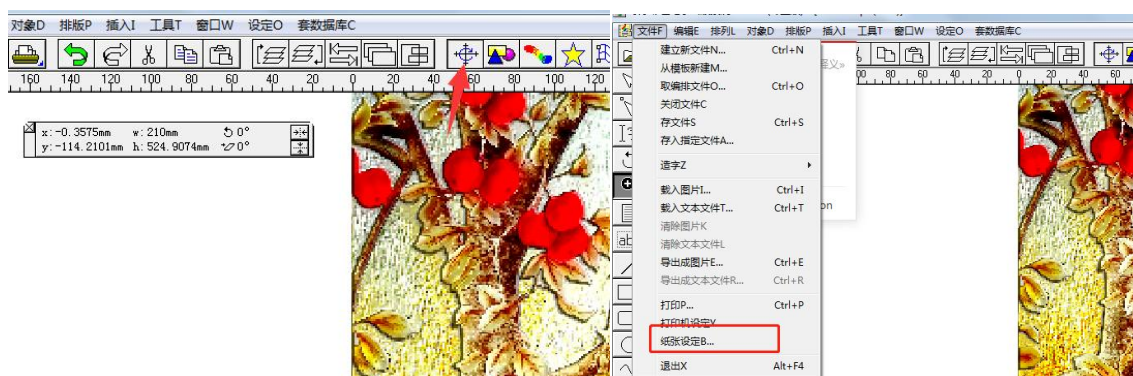
6. Click Customize Printer, find this file "A3-TW-4C-20181027" in the CD and open the installation.



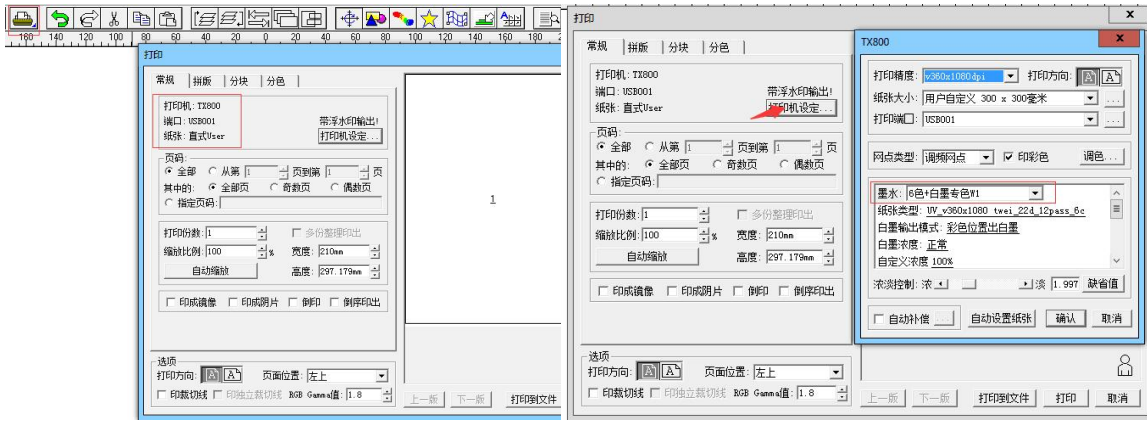
7. Load the picture: Select the picture, right click the mouse to display the picture box properties, change the size you want to print.



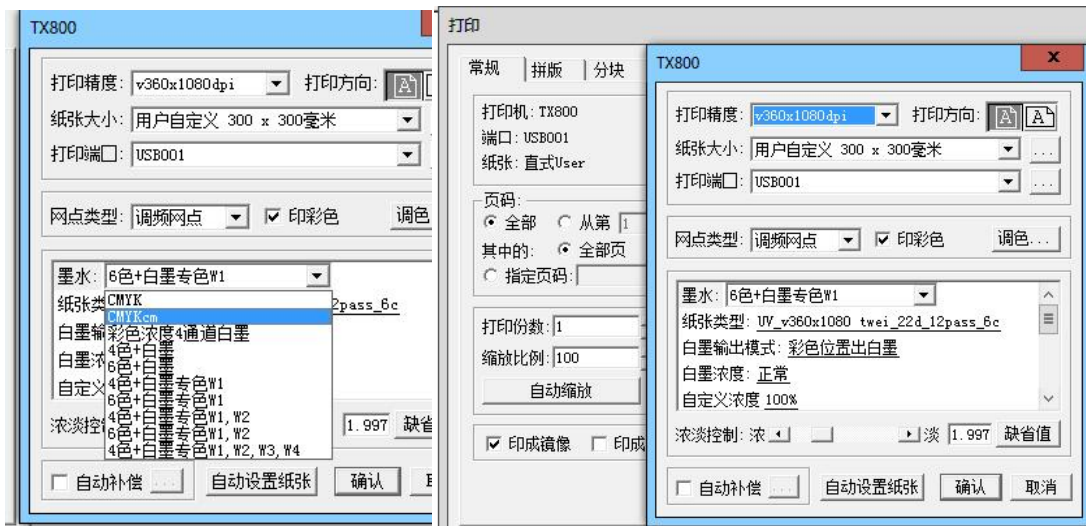
8. Picture size display, set the paper size and picture size the same.



9. Click the the print icon



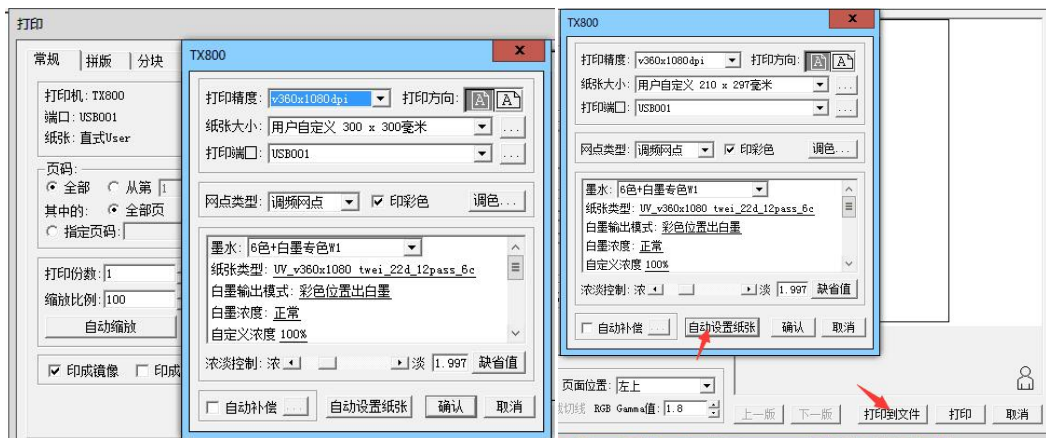
Check the printer name (TX800) port (USB001or file), paper (straight User) to enter the printer settings, change the print accuracy and paper type. The printing accuracy and the paper type curve should correspond, otherwise the printed color will have a color difference.



9.1, There are a lot of ink sequences in the ink list, generally according to the machine to choose a few colors: for example, the machine only uses KCMY+W

Then the ink selects CMYK or 4 colors + white ink, 4 colors + white ink spot color 1,2.

There are mainly conventional printing, only color, color + white bottom, color + white relief, mirror printing (white color). The mirror print montage settings are as follows:



Check "Mirror print", then click to automatically set the paper and print to the file.

10. The pictures made by Maintop should be saved to the folder of the hard disk. All the pictures will be saved to this folder for easy opening.

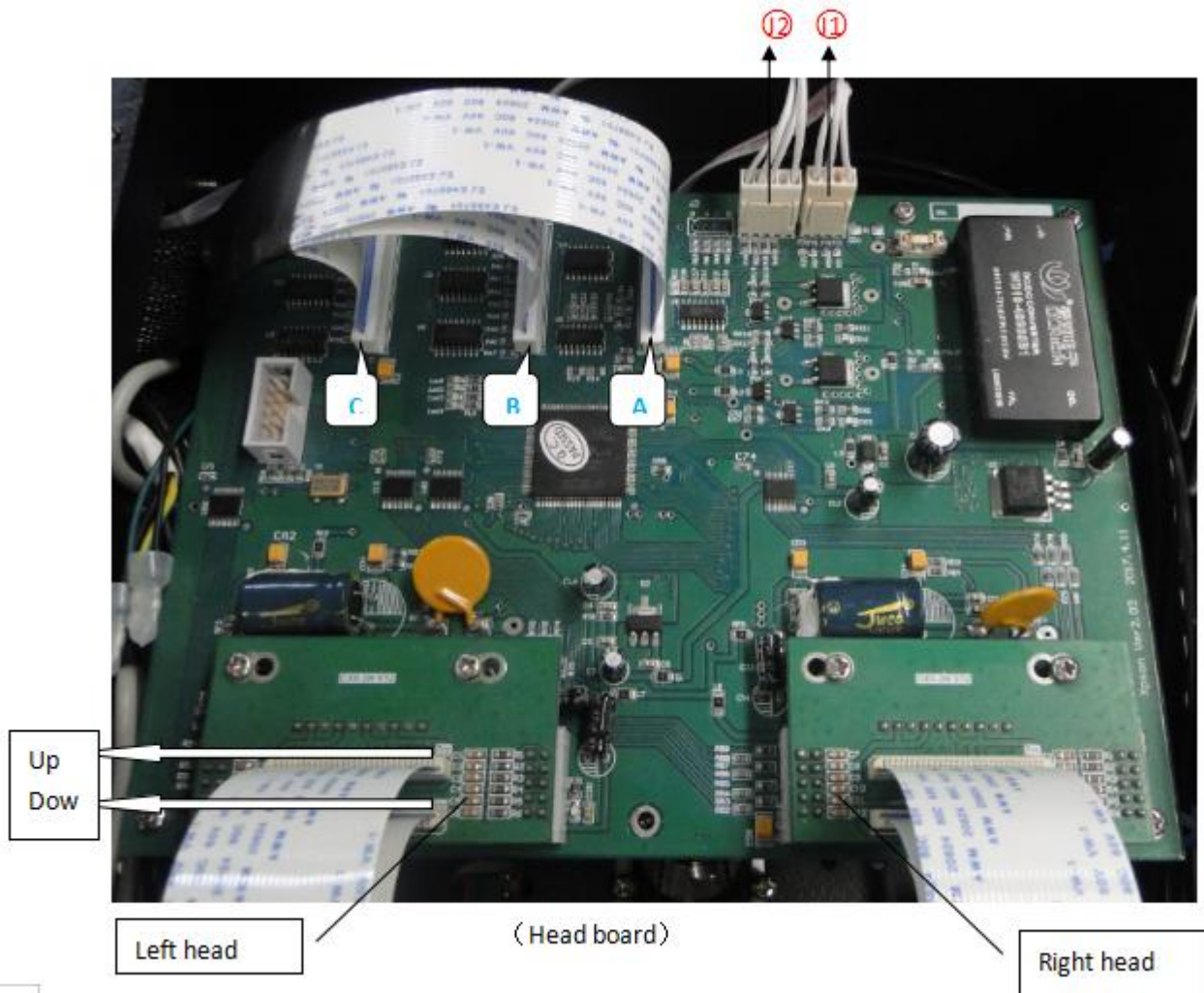
10.1 Open the printing software and load the rip picture. Set the X and Y axis printing start position and adjust the Z axis height (head height). How to adjust the height of the Z axis?



First, set the software Z-axis height to be greater than the material thickness, then press the left mouse button to move the nozzle holder out of the material to stop. Remove the surface of the altimeter placement material and the height sensor under the accessory bag. Click on the height measurement icon in the software and the nozzle holder will automatically drop until it stops after sensing the iron piece. Click OK, the height has been measured, click the moisturizing icon in the software to return the nozzle holder to the original position.

10.2 11. Later we will take a professional print video tutorial that will show you the basic printing steps. Please refer to the print operation video in the CD!

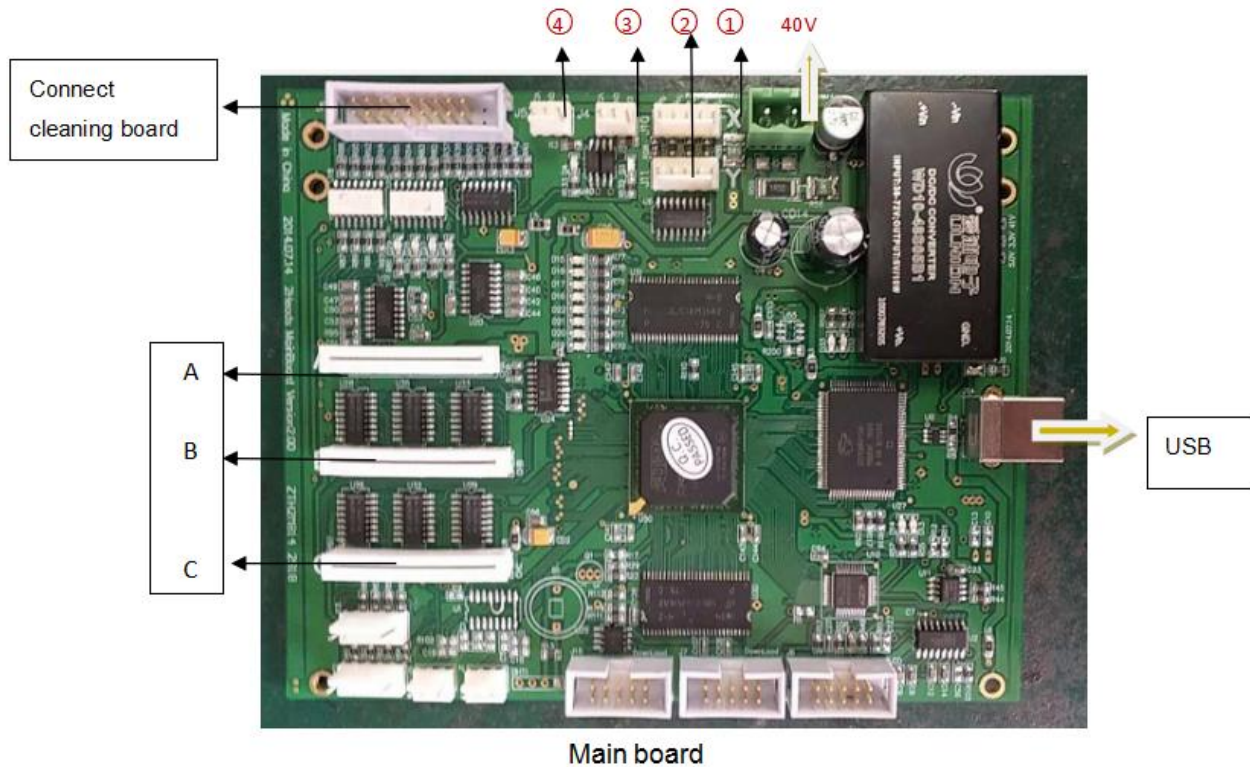
Board wiring diagram



1. A, B, C ----- connect the main board A, B, C, (A: 22 core same side flat line; B, C: 24 core another side flat line)
2. J1----- Connect the trolley lifting limit sensor J2----- connect the grating head (N pin hole empty)

3. Print head left and right (the metal surface of the print head is facing down, the upper flat line is on the flat line on the print head, down to the bottom, left to the top, right to the bottom)

Note: Do not insert the wrong model of the head adapter board, or insert the wrong line, otherwise, will burn the print head.



A, B, C ----- connect the car board A, B, C, (A: 22 core same side flat line; B, C: 24 core another side flat line)

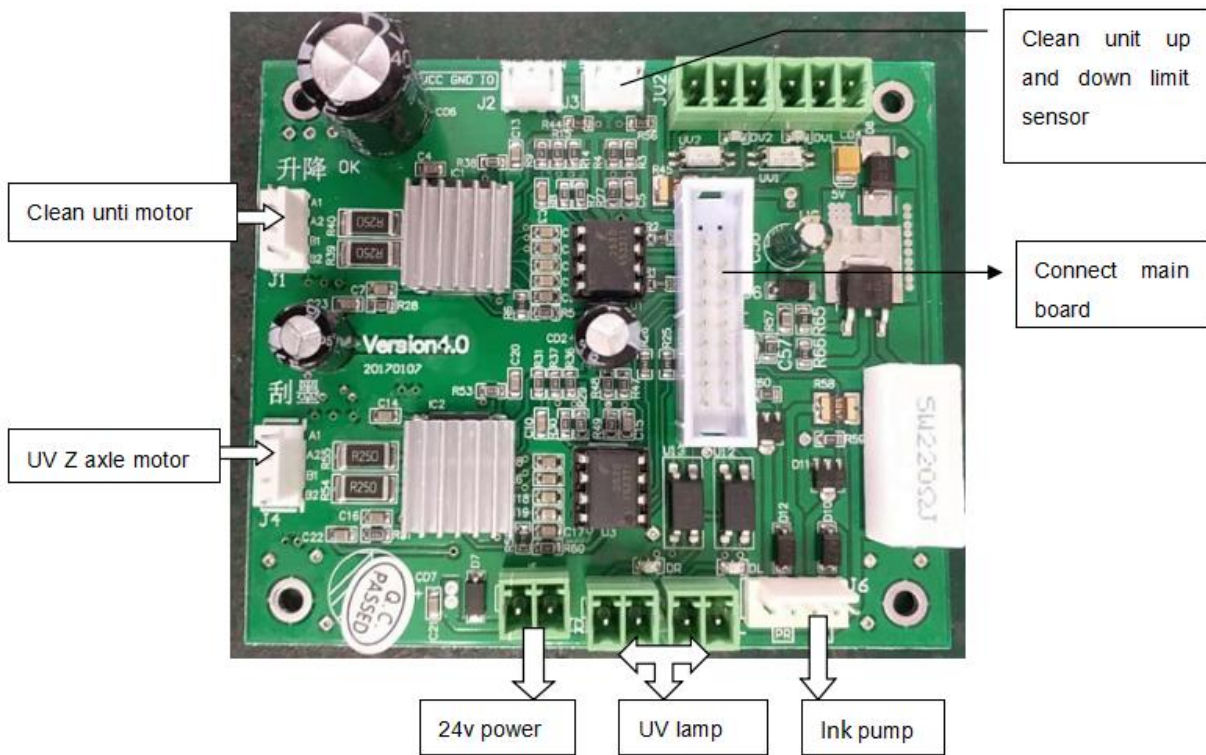
USB-----Connect the computer, do not use the USB tap.

P1-----Connect 40V power supply

① X-----carriage move right and left(5V) ② Y-----carriage move back and forth (5V) ③ J4-----X-axis limit

sensor ④ J5-----Y-axis limit sensor

PJ1-----Connect ink cap board PJ1



Cleaning unit control board

- ① JP1-----Connect the motherboard JP1
- ② J3-----Connect clean unit up and down limit sensor
- ③ J1-----Connect the ink cap cleaning motor, the motor is in groups of two,A1A2/B1B2
- ④ J4-----Connect the scraper motor or trolley lift motor Z-axis
- ⑤ Power-----24V
- ⑥ JR、JL-----Connect UV light, JL left, JR right
- ⑦ J6-----Connect ink pump