

DIY

WHY NANODIY?
WE CREATE
SYSTEMS 4YOU

RIP SOFTWARE
DTF SYSTEM

UV FLATBED
HEAT PRESSES

NANO

DTF PRINTER USER MANUAL



www.nano-diy.com

Foreword

Dear customer:

Thanks for your purchase of NANODIY DTF printers,this operation manual is describing the operations and maintenance of 4th generation of Nanodiy DTF printers. Please read it carefully and understand them thoroughly to use.

This operation manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact us if you have any inquiry.

Contents

Foreword 1

Contents 2

Before Use 3

 I. Warning 3

 II. Caution 9

Names of Parts and Functions 10

 I. Front Side of the Machine 10

 II. Top View of the Machine 11

 III. Rear Side of the Machine 12

 IV. Internal Structure of Carriage 13

Control Panel 14

Printer Installation 15

 I. Install the Stand and Feeding System 15

 II. Install the Ink Tank Support 16

 III. Install the Print Head 16

 IV. Install the PET film 19

 V. Caution 19

Printer Calibration 20

 I. Printing Software 20

 II. Software Start and Online 20

 III. Operation Steps Before the New Board Card IsUsed 24

 IV. Introduction of Main Interface Window of the Software 25

Maintenance 47

 I. Printer Maintenance Instruction 47

 II. Vulnerable Part Replacement Cycle 51

 III. Additional Notes 51

BEFORE USE

Before Use

 Warning

1.1 Symbols

Symbols are used in this Operation Manual for safe operation and for prevention of damage to the machines. The indicated sign is different depending on the content of caution. Symbols and their meanings are given below. Please follow these instructions as you read this manual.

1.2 Examples of Symbols

	Failure to observe the instructions given with this symbol can result in death or serious injuries to personnel. Be sure to read it carefully and use it properly.
	Failure to observe the instructions given with this symbol can result in injuries to personnel or damage to property.
	The symbol " " indicates that the instructions must be observed as strictly as the CAUTION instructions (including DANGER and WARNING instructions). A sign representing a precaution (the sign shown at left warns of hazardous voltage) is shown in the triangle.
	The symbol " " indicates that the action shown is prohibited. A sign representing a prohibited action is shown in or around the circle.
	The symbol " " indicates that the action shown must be taken without fail or the instructions must be observed without fail. A sign representing a particular instruction (the sign shown at left instructs to unplug the cable from the wall outlet) is shown in the circle.

1.3 Warning for Use

BEFORE USE

	
	• The set of power cables provided with this machine is for use with this machine only. It cannot be used with other electrical devices. Do not use any power cables other than the ones provided with the machine. It may cause a fire or electric shock. • Do not damage, break or work upon the power cable. If a heavy material is placed on the power cable, or if it is heated or pulled, the power cable may be damaged, resulting in fire or electric shocks. • Avoid use in humid places. Also, do not pour water on the unit. It may cause a fire, electric shock, or malfunction. • Use of the machine under an abnormal condition where it produces smoke or strange smell can result in fire or electric shocks. Be sure to turn off the power switch immediately and unplug the cable from the power outlet. Check first that the machine no longer produces smoke, and then contact your distributor or our sales office for repair. • Never disassemble or modify your machine by yourself. It may cause an electric shock or malfunction. • Do not use extension cables. It may cause a fire or electric shock. • Keep the power plug prong clear of any foreign object such as a piece of metal. It may cause a fire or electric shock. • Do not use multi-outlet extension. It may cause a fire or electric shock. • If the power cable is damaged or the core wire is exposed or broken, order a new cable to replace it. Using it as it is may cause a fire or electric shock. • Do not handle the power plug with wet hands. It may cause an electric shock. • Grasp by holding the plug itself when removing the power plug from power outlet. Do not pull the power cable. The cable may be damaged, resulting in a fire or electric shock. • Do not use a voltage other than the displayed. It may cause a fire or electric shock. • Do not use a power frequency other than the indicated. It may cause a fire or electric shock. • If a foreign object such as metal, water, or liquid enters this machine, turn it off immediately. After that, be sure to remove the power plug from the outlet and contact your service representative. Using it as it is may cause a fire or electric shock. • If ink leaks, turn off the main power switch, disconnect the power plug, and contact your local distributor, our sales office, or call center. • Make sure that dust and dirt do not adhere to the heater on the media transport surface. It may cause a fire or electric shock.

BEFORE USE

	Keep children away from this machine.
	Do not use fire in the place where the machine is used.
	- Do not use a flammable spray or solvent inside or around the machine. It may cause a fire or electric shock due to ignition. - Do not place containers or small metal objects containing vases, flower pots, cups, cosmetics, medicines, water, etc. on or near the machine. If it spills or gets inside, it may cause a fire or electric shock.

1.4 Precautions in Use

	
Handling of the power cable	
	- Connect to a socket-outlet with determinate polarity. - For the Inlet, be sure to supply power from the outlet of the same voltage. - Be sure to connect it to a power outlet near the machine so that it can be easily removed. - Unplug the cable from the power outlet and clean the blade of the plug and the surrounding area, at least once a year. If dust accumulates, it may cause a fire. - Do not use a voltage other than the displayed. - Check the voltage of the power outlet and the capacity of the circuit breaker before you plug the power cable. Plug each power cable to different outlet that has independent circuit breaker. If you plug more than one power cable to power outlets that share the same circuit breaker, the power may be cut off by the breaker.
Power supply	
	- Leave the breaker turned on at all times. - Do not turn off the main power switch on the right side.
Be careful with the movable parts	
	- Keep fingers and other parts of the body away from dangerous moving parts. - Do not touch the rolling grit roller; otherwise, you may hurt your fingers or tear off your finger nails. - Keep your head and hands away from any moving parts during operation; otherwise, you may get your hair caught in the machine or get injuries. - Wear proper clothes. (Do not wear loose-fit clothes or accessories). Bind a long hair.
Caution with heater	

BEFORE USE

	- Do not spill liquid on the Media Transfer Surface as this may cause failure of the heater or firing. - Do not touch Media Transfer Surface heaters with a bare hand while the heater is hot; otherwise, you can get burned.
Handling of ink	
	- Keep ink away from fire. Also, be sure that the room is well ventilated when using or handling ink. - Immediately wipe off any ink, maintenance washing liquid, waste ink, or other liquid used with the product that contacts your skin. Wash using soap and rinse with plenty of water. - If ink, maintenance washing liquid, waste ink, or any other liquid used in the product comes into contact with your eyes, rinse immediately with plenty of clean water. Rinse for at least 15 minutes. If you wear contact lenses and they can be easily removed, remove after rinsing for at least 15 minutes with clean water. Be sure to rinse the undersides of your eyelids. Failure to rinse off liquid may result in blindness or impaired vision. If your eyes become irritated or painful, seek medical attention immediately. - If ink, maintenance washing liquid, waste ink, or any other liquid used in the product enters your mouth or is swallowed, gargle with water immediately. Do not induce vomiting. Seek medical attention promptly. Inducing vomiting may cause liquid to enter the airway. - If a large amount of vapor is inhaled, move to a well-ventilated area, keep warm, and rest in a posture that allows easy breathing. If the condition does not improve, seek medical attention promptly
Notes When Handling the Main Unit	
	- Do not use in poorly ventilated or sealed rooms. - Provide sufficient ventilation when using.

1.5 Caution and Notes

	
Clump lever	
Do not raise the clamp lever during printing.	
Periodic replacement parts	
Some parts of this machine must be replaced with a new one regularly. In order to use the machine for a long time, you could subscribe to annual maintenance spare parts from your sales.	
Notes on maintenance	
- Use in a room with as little dust as possible. - Dust can also cause ink drops to fall from the head to the media during printing. In this case, clean around the head. - Clean the capping station and wiper frequently (removal of dust and waste ink).	

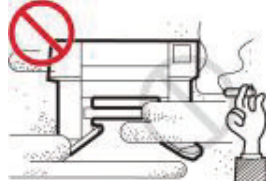
BEFORE USE

Keep the front cover closed even when not printing. Dust may accumulate on the head nozzles.
Handling of ink cartridges
- Safety is evaluated by our recommended ink. Please use our recommended ink for safe use. - If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it. - Open the ink cartridge just before installation. If the ink is left open for a long time, normal printing performance may not be ensured. - Make sure to store ink cartridges in a cool and dark place. - Keep ink cartridges and waste ink tank out of reach of children. - Be sure to thoroughly consume the ink cartridge within 1 months after opening it. If it has passed for a long time after opening, the print quality would be poor. - Do not hit the ink cartridge strongly or shake it violently. Inks may leak from the cartridge. - Make sure that shaking the white cartridge several times with the stirrer before printing.
Handling of media
- Use recommended media. Use our recommended media to print with stable and high image quality. - Do not use curled media. In addition to causing media jams, it also affects the image quality. Also, use media with tight curls after removing the curls. If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside. - Be careful to dusts on the edge face of the media. Some rolls have dusts contained in the package gathered on the edge surface of the roll. If you use as it is, the drawing quality may be degraded due to nozzle missing or ink drops. Be sure to set the roll after removing dusts adhering on the edge face of the roll. - Set the heater temperature according to the characteristics of the media. (Heater-equipped machine) - Do not leave the media on for a long time with the heater ON. (Heater-equipped machine)
Protection of media from dust
Store media in a bag. Wiping off dust accumulated on media will adversely affect the media due to static electricity.

1.6 Caution in Installation

	
A place exposed to direct sunlight	On an inclined surface

BEFORE USE

	
A place that vibrates	A place exposed to direct air flow from an air conditioner or the like.
	
A place where temperature or humidity varies significantly	Around a place where fire is used
 - Use the machine under the following environmental conditions: - Operating environment: 20 to 30 °C (68 to 86 °F) 35 to 65 % (Rh)	
	

BEFORE USE

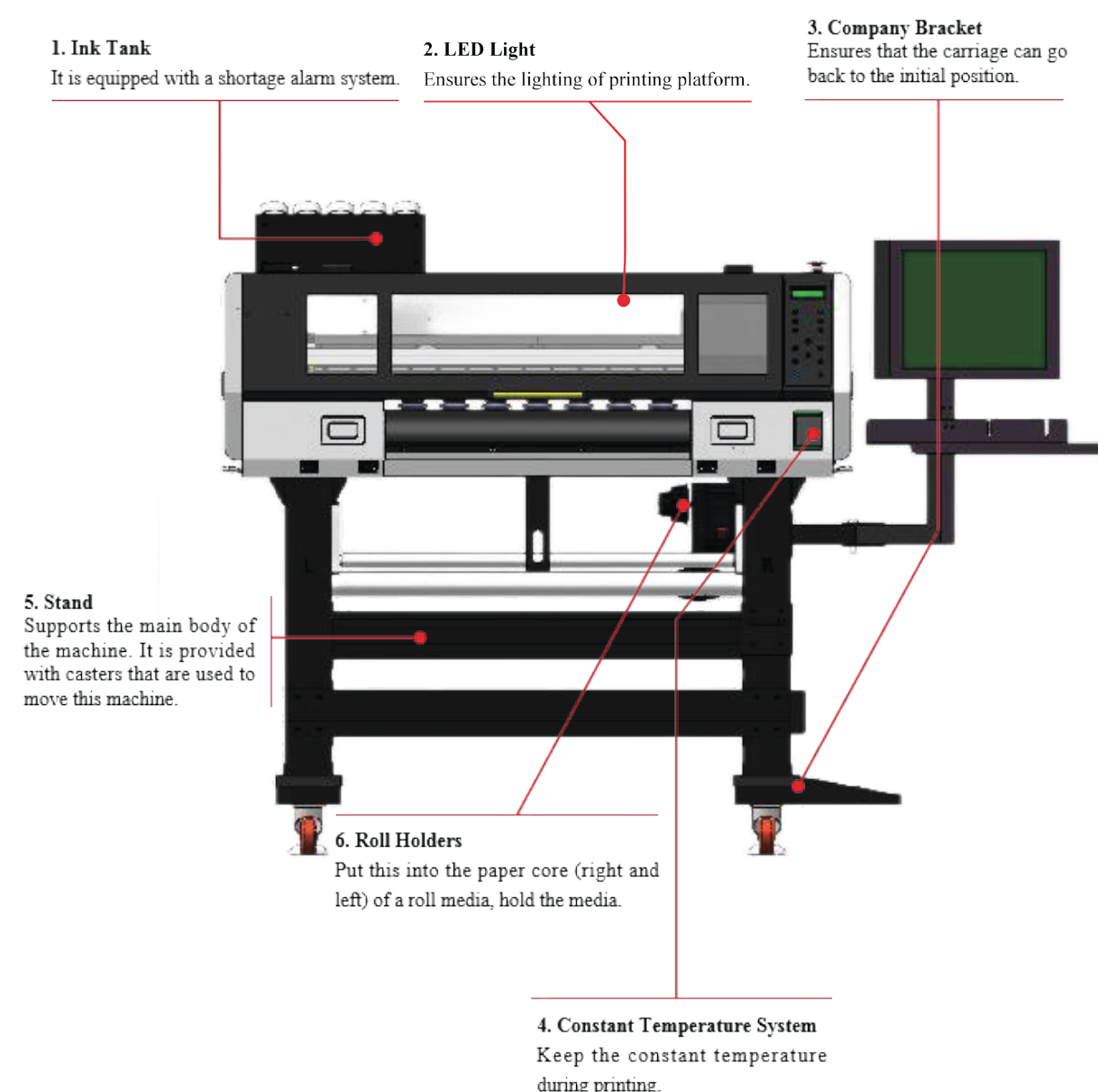
II. Caution

1. Use original manufacturer's accessories and ink following the instruction.
2. Make sure the voltage and cable of power supply is consistent with the machine nameplate.
3. The machine can only be used in indoors, it is recommended to set up air conditioning to get stable working temperature and humidity.
4. Please remove the wooden cases and machine fixings used for transportation and place the machine on a stable table before use it.
5. Do not use the machine in harsh environments such as flame, dust and humidity.
6. Do not use the machine in wet environment.
7. Do not place sundries around the machine.
8. Keep a stable working temperature, do not use the machine above 30°C or below 15°C.
9. Do not use any damaged cables for power supply.
10. If the cable of power supply is damaged, stop using the machine.
11. Turn off the machine before the surface dusting and cleaning.
12. Use the machine in accordance with local laws and policies.
13. Make sure that the nozzle does not touch any objects before starting print job.
14. Pull out the power supply plug before moving the machine.
15. Take protection when adding ink.
16. Please ensure that the machine is properly grounded.
17. Do not use the machine in thunderstorm days avoid lightning strike.
18. If you don't use original ink, our company will not be responsible for the losses caused.

NAMES OF PARTS AND FUNCTIONS

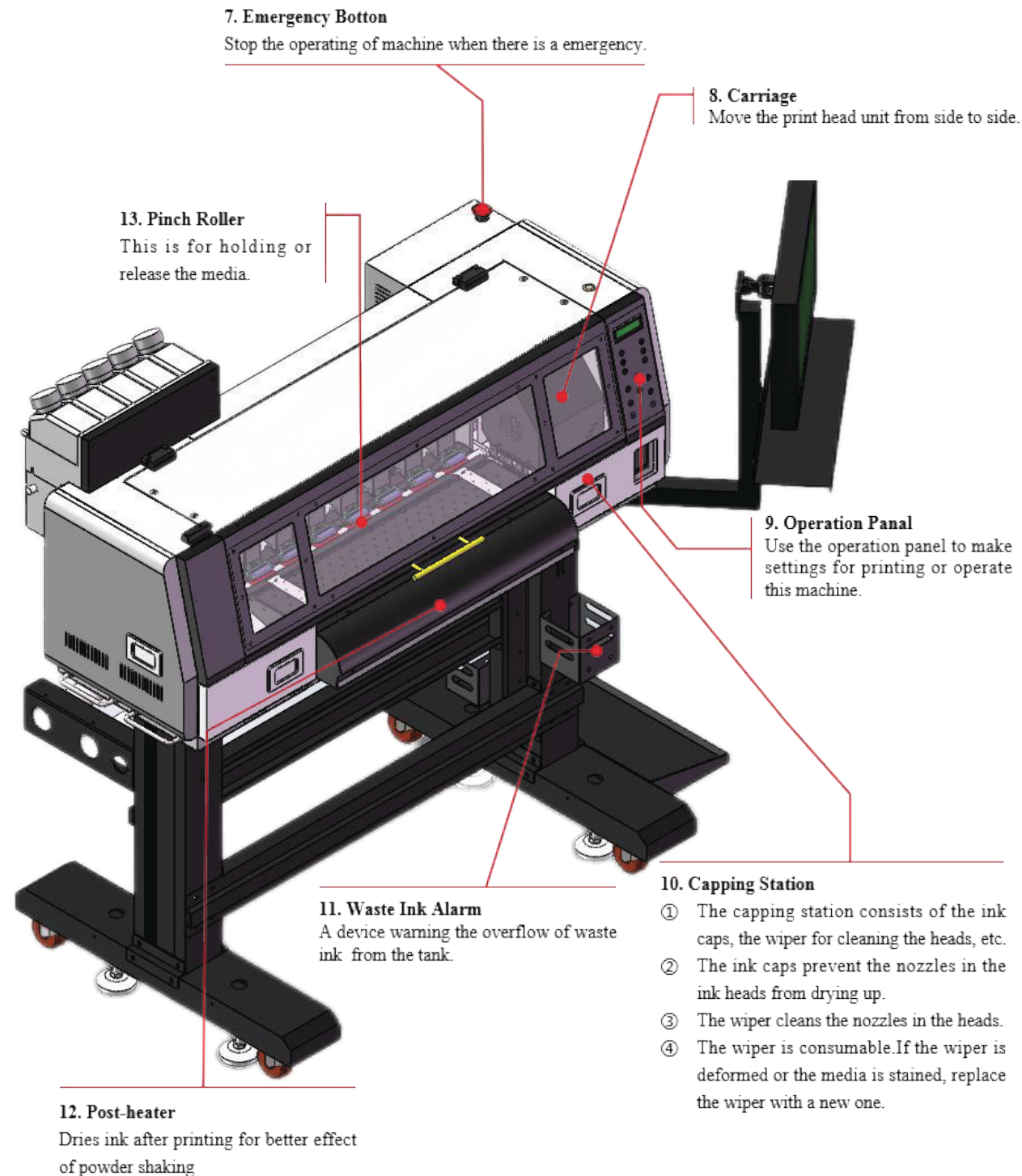
Names of Parts and Functions

I. Front Side of the Machine



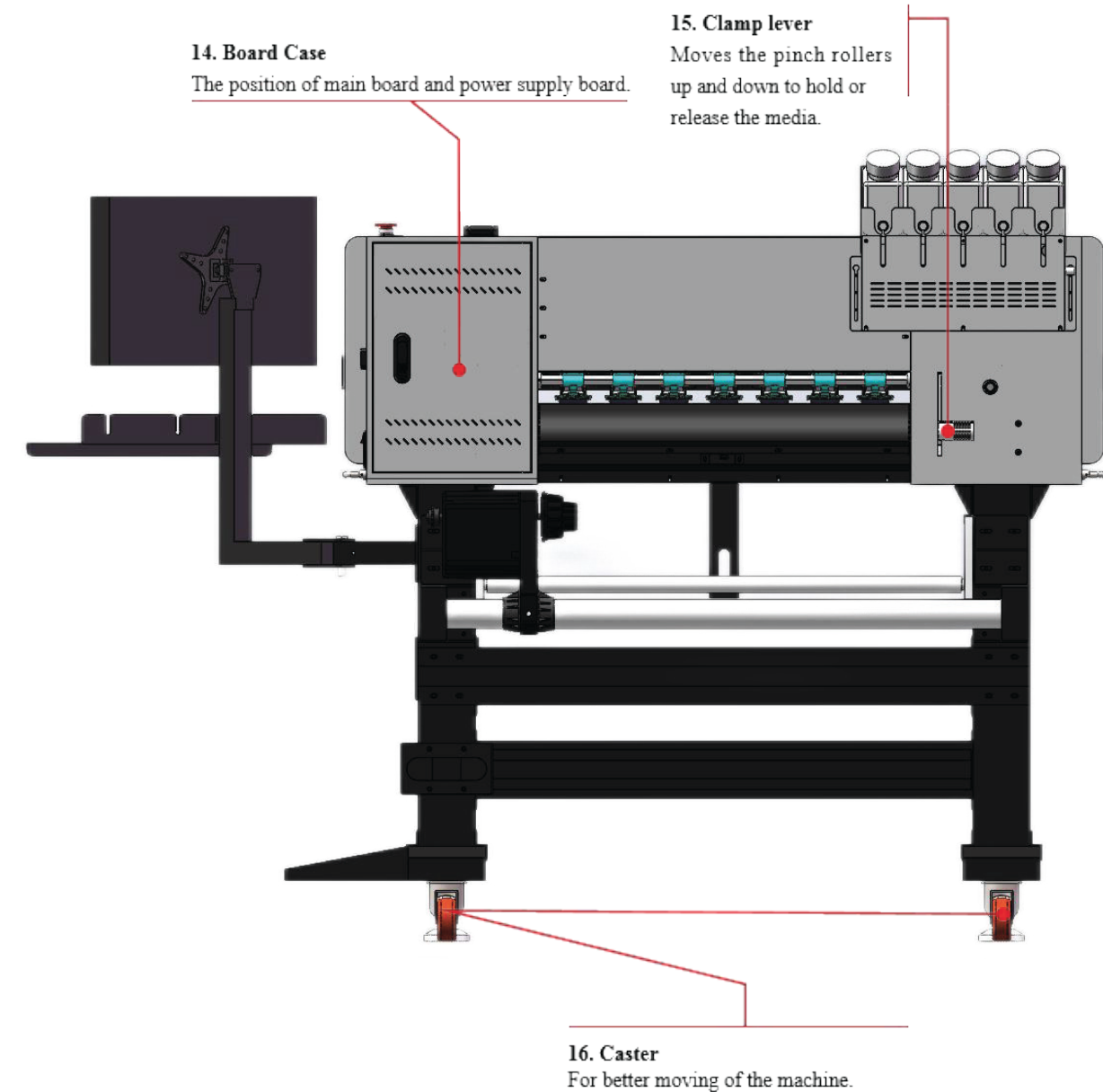
NAMES OF PARTS AND FUNCTIONS

II. Top View of the Machine



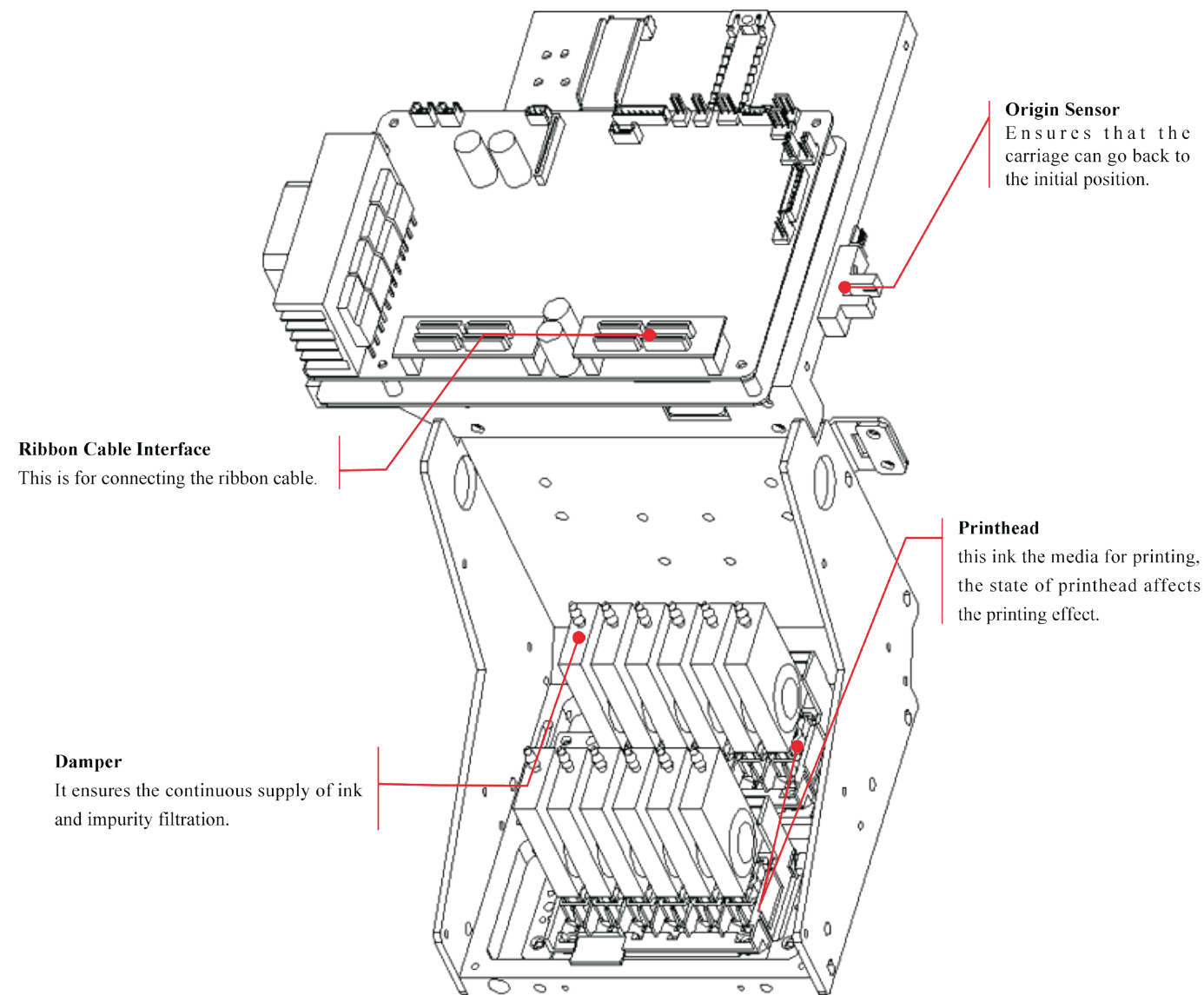
NAMES OF PARTS AND FUNCTIONS

III. Rear Side of the Machine



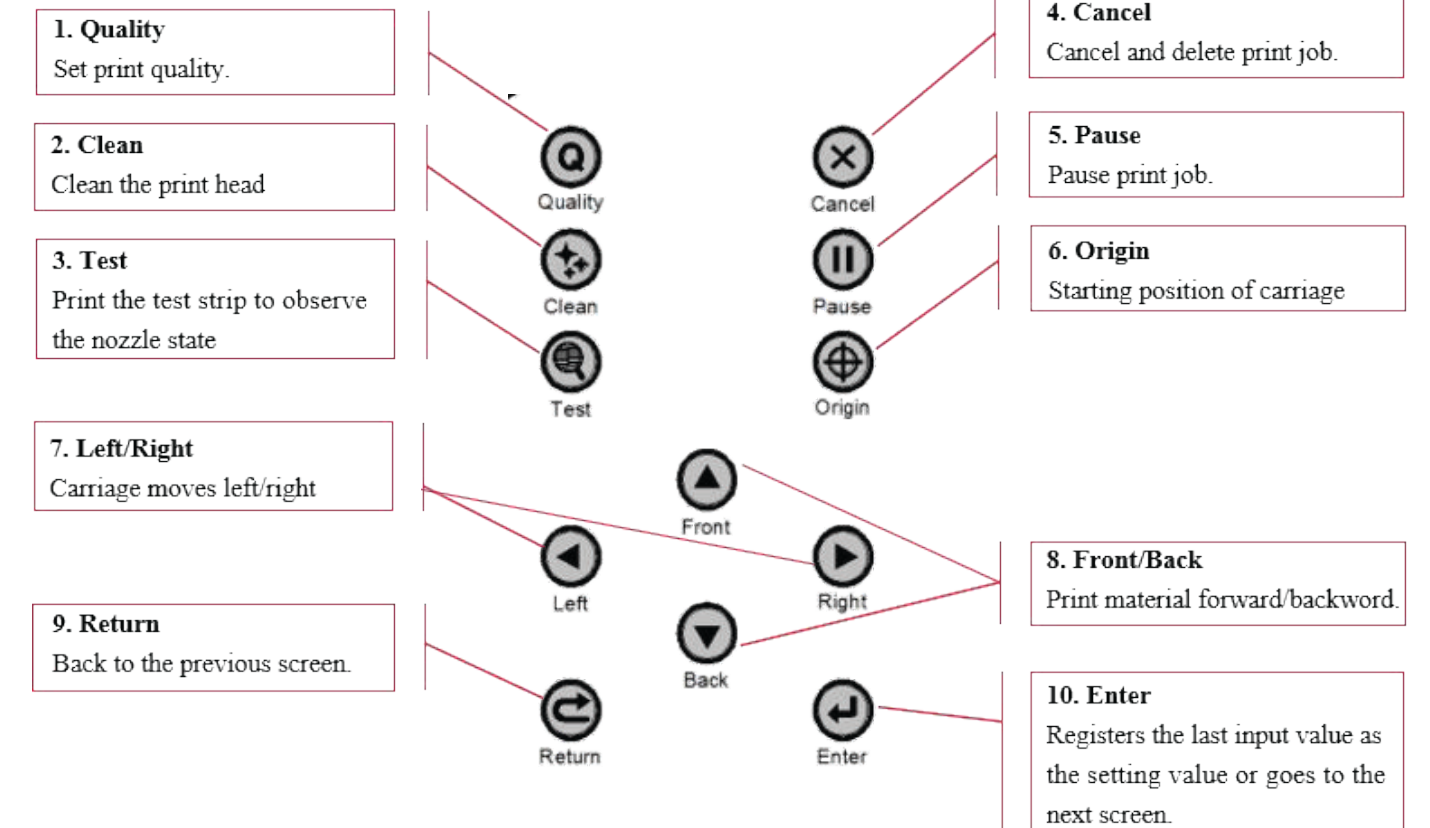
NAMES OF PARTS AND FUNCTIONS

IV. Internal Structure of Carriage



CONTROL PANEL

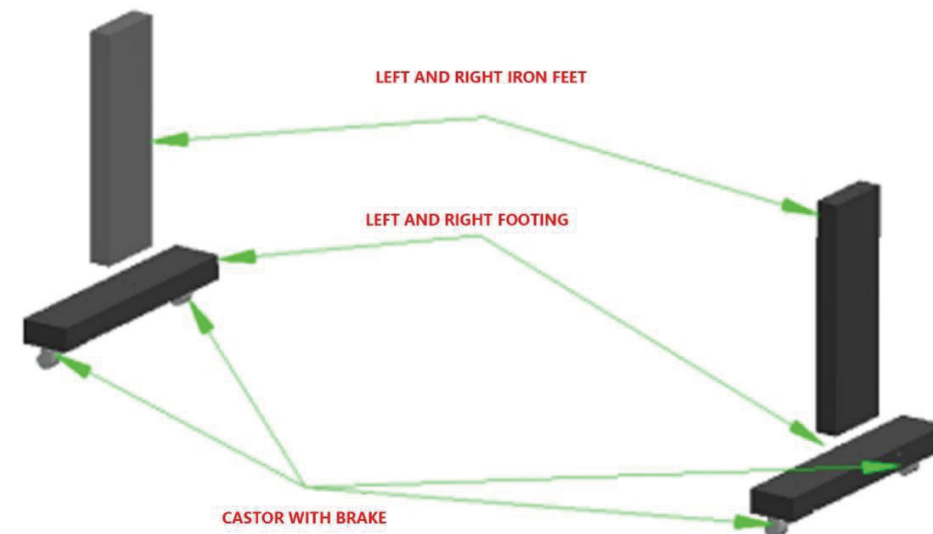
Control Panel



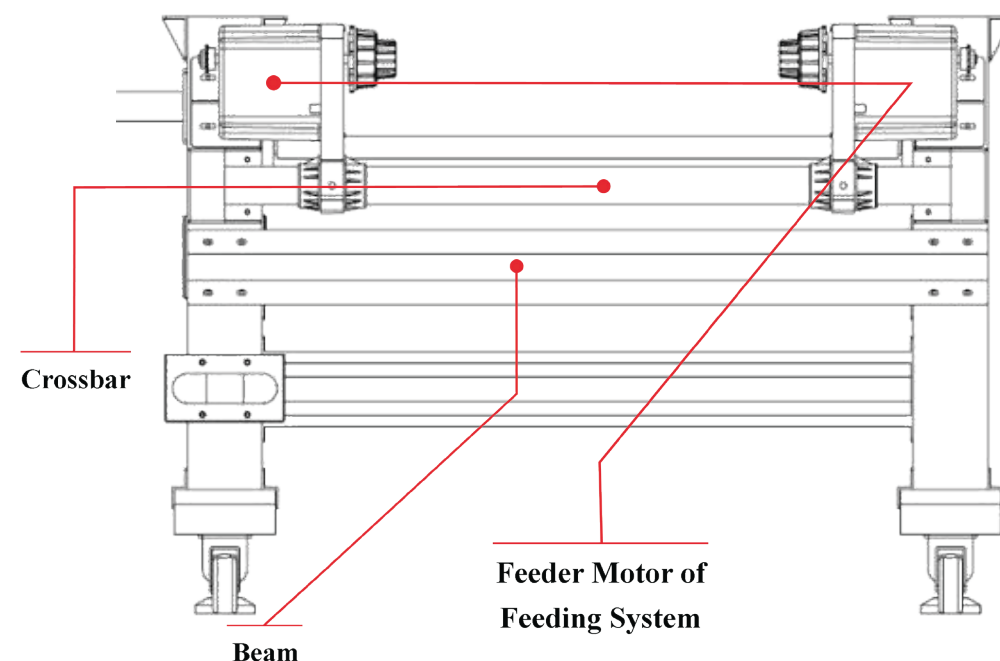
Printer Installation

I. Install the Stand and Feeding System

(1) Install the feet and secure them with inner hexagonal bolts:



(2) Install beam and crossbar, secure with hexagonal bolts; Then fix the feeder motor on the crossbar:



II. Install the Ink Tank Support

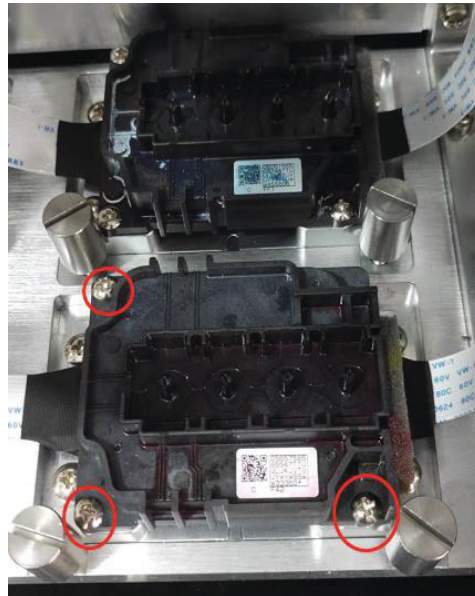


III. Install the Print Head

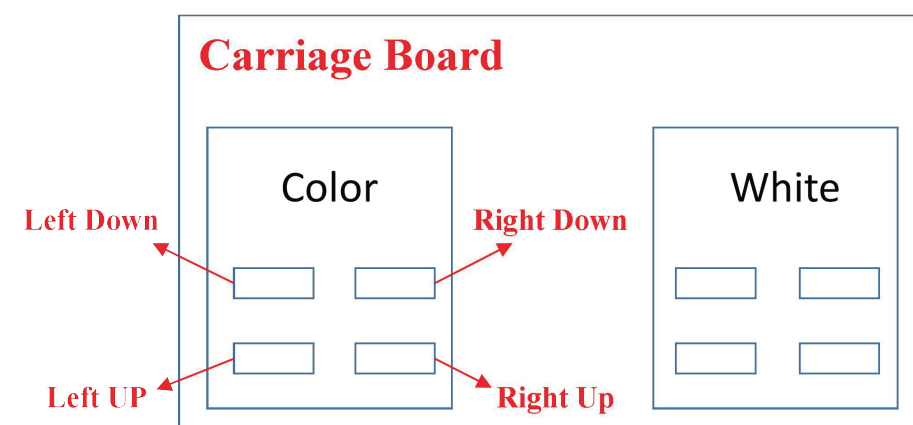
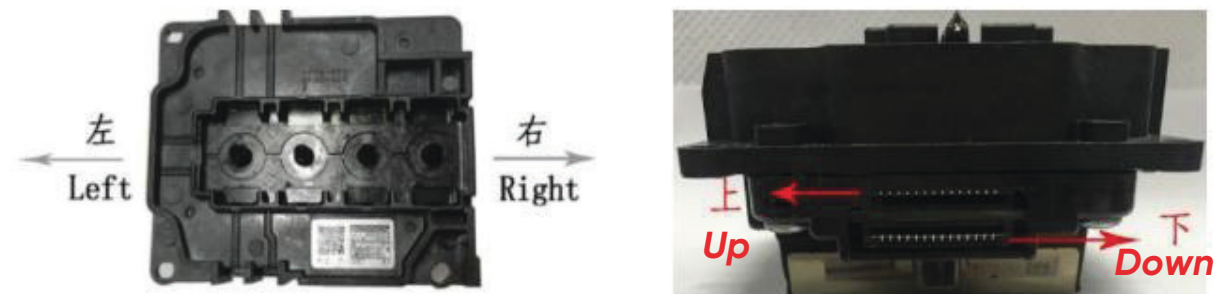
➤ Connecting the print head and the head board on the carriage is a really important step, we need to be careful with all the things here, if the connection is wrong, the print head may be burnt. Please install under the guidance of technician.

(1) Plug one end of the flat cable to the print head and fix the print head on the carriage with screws.

PRINTER INSTALLATION

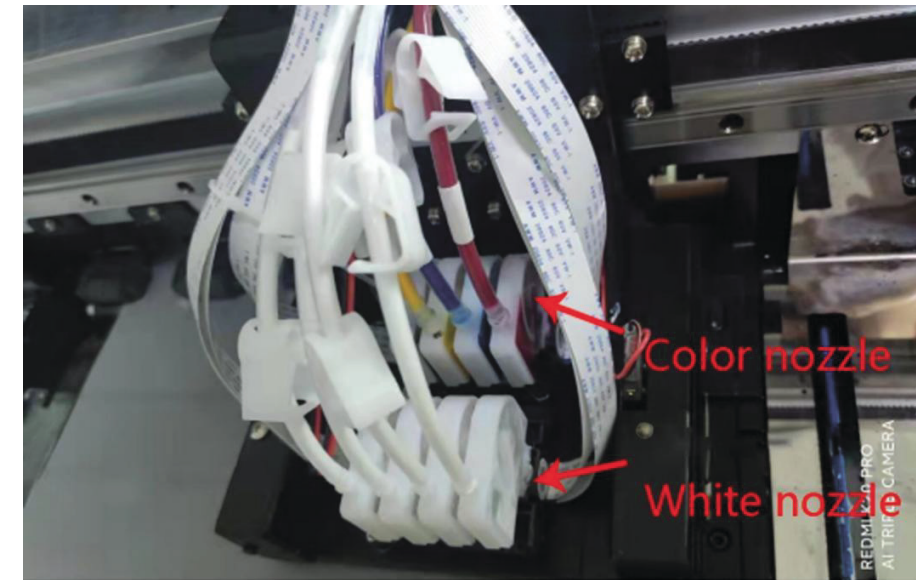


(2) plug the other end of the flat cable to the carriage board as picture below:



(3) Settle the dampers in the print heads.

PRINTER INSTALLATION



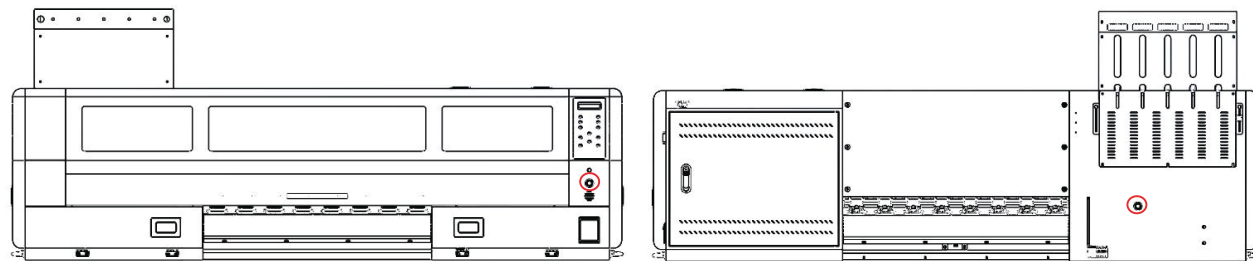
(4) Pure ink into the ink tank



PRINTER INSTALLATION

IV. Install the PET film

(1) press the button to lift up the pinch rollers.



(2) Put roll holders into the paper core (right and left) of a roll media to hold the media.

(3) Pull the media through the printer to the printing platform.

(4) Lower the pinch rollers, press the back key ("▼") to release the media until the media is close to pre-heater.

(5) Press the clean key (🌀) to clean the printhead

(6) After the cleaning, press the test key (🗨️) to check if the machine works normally.

V. Caution

- **Do not turn on the machine before the technician check and confirm it is ready for work!**

PRINTER CALIBRATION

Printer Calibration

I. Printing Software

Developed by Hosonsoft, PrintExp software is a kind of control software that works with printer. The features of user-friendly interface and simple operation meet the needs of end users and manufacturers. It is mainly used for printer control, printer calibration, program upgrade and update, import and export of parameters, saving of parameters to the board. In order to let users quickly and comprehensively understand the printing software, get familiar with the various functional operations, precautions and possible problems, the following is an introduction of the different kinds of printing software.

II. Software Start and Online

2.1 Start Print Control Software

The PrintExp software can be used directly. First find the PrintExp software folder, open the folder, find the PrintExp.exe application, and double-click the program to start the PrintExp software.

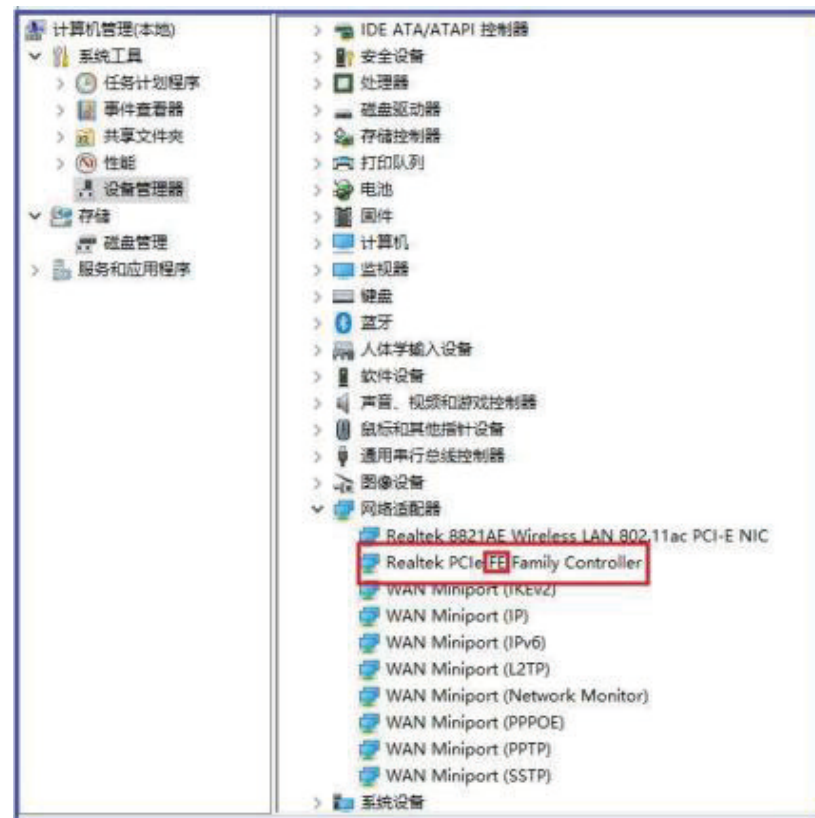
2.2 Software Online Settings

(1) Gigabit NIC judgment

Before network connection, first ensure that the computer's NIC is Gigabit NIC for normal connection. The difference between a 100M NIC and a Gigabit NIC is:

PRINTER CALIBRATION

Gigabit NIC contains these characters: Gigabit, GBE, 10/100/1000M,
RTL8169. 100M NIC contains these characters: Fast Ethernet, 10/100, FE.
Enter the computer device manager, check the network adapter to make a
judgment. The picture shown below is the 100M
NIC:



(2) Network settings

For the first time, you must set the network connection parameters to
connect to the network and connect TCP/IP network cable for network
setup.

Network setting method: Advanced menu → Network settings, you can see
the network settings window at this time, as shown below:

PRINTER CALIBRATION



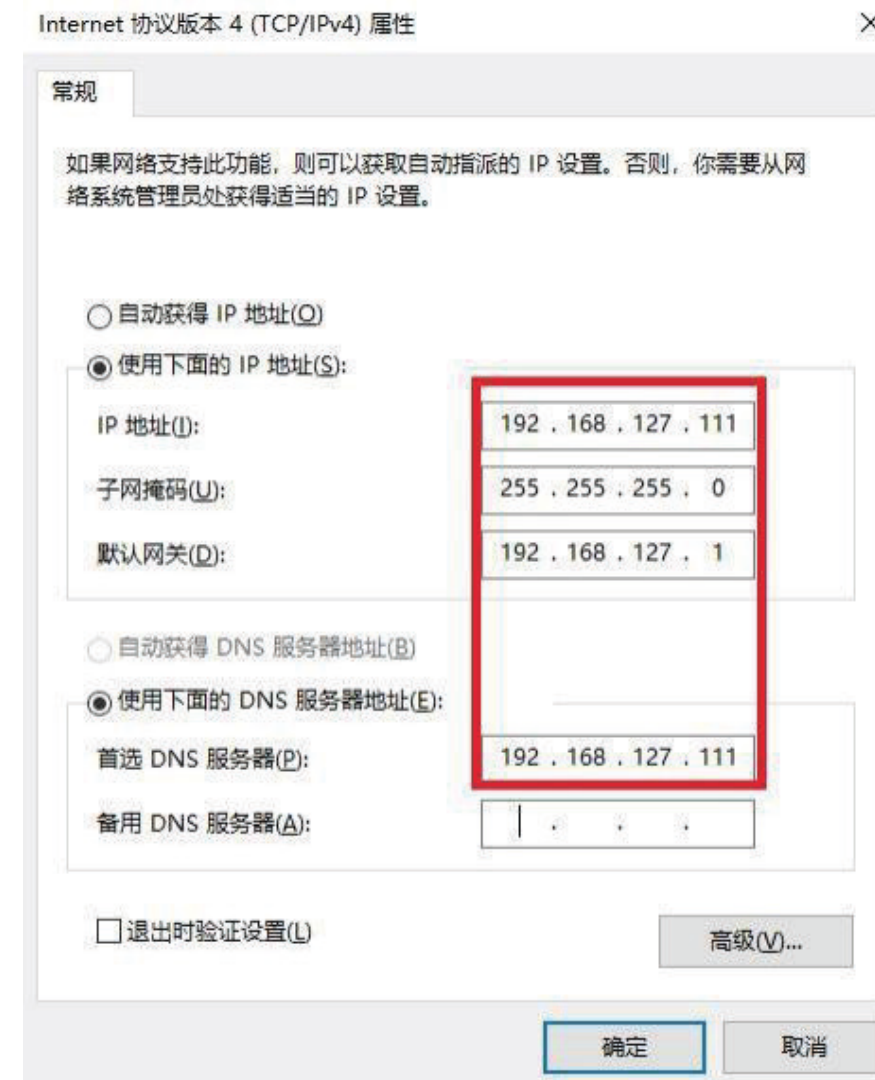
As the server IP and server port settings have been fixed, you only need to
set the local IP. As shown above, enter 192.168.127.111 in the local IP address
(note that the first three digits can be any number within 1-255 except
for 10), click "settings" to complete the setting, check if the network is
accessible. If it still cannot connect, you can address with the following
methods:

Go to control panel → network and internet → view network status and tasks
→ change adapter settings → click Ethernet or local area connection →
attributes to display the following window:

PRINTER CALIBRATION



Double-click the highlight bar in the above image to enter the following window:



Enter the same address in the red box above and click OK to complete. Go back to the main interface window, check the first icon at the lower left corner of the main interface displayed in green to indicate that it is connected. If it is still red, it means that it is not online. You can unplug the network cable and try again to see if it is online. If you still cannot connect, check if the network cable is in good condition.

III. Operation Steps Before the New Board Card Is Used

For a new set of board cards and software, the steps before using:

PRINTER CALIBRATION

PRINTER CALIBRATION

(1) Set the IP address

The specific setting method can be seen in the "Software Online Settings" in "Software Online and Start" above.

(2) Motor gear ratio calibration

It is described in the following section "Factory Settings" in detail

(3) Clean print head

Ensure that all orifices of the print head can be inked normally

(4) Calibration

In the following section, "Calibration" is described in detail

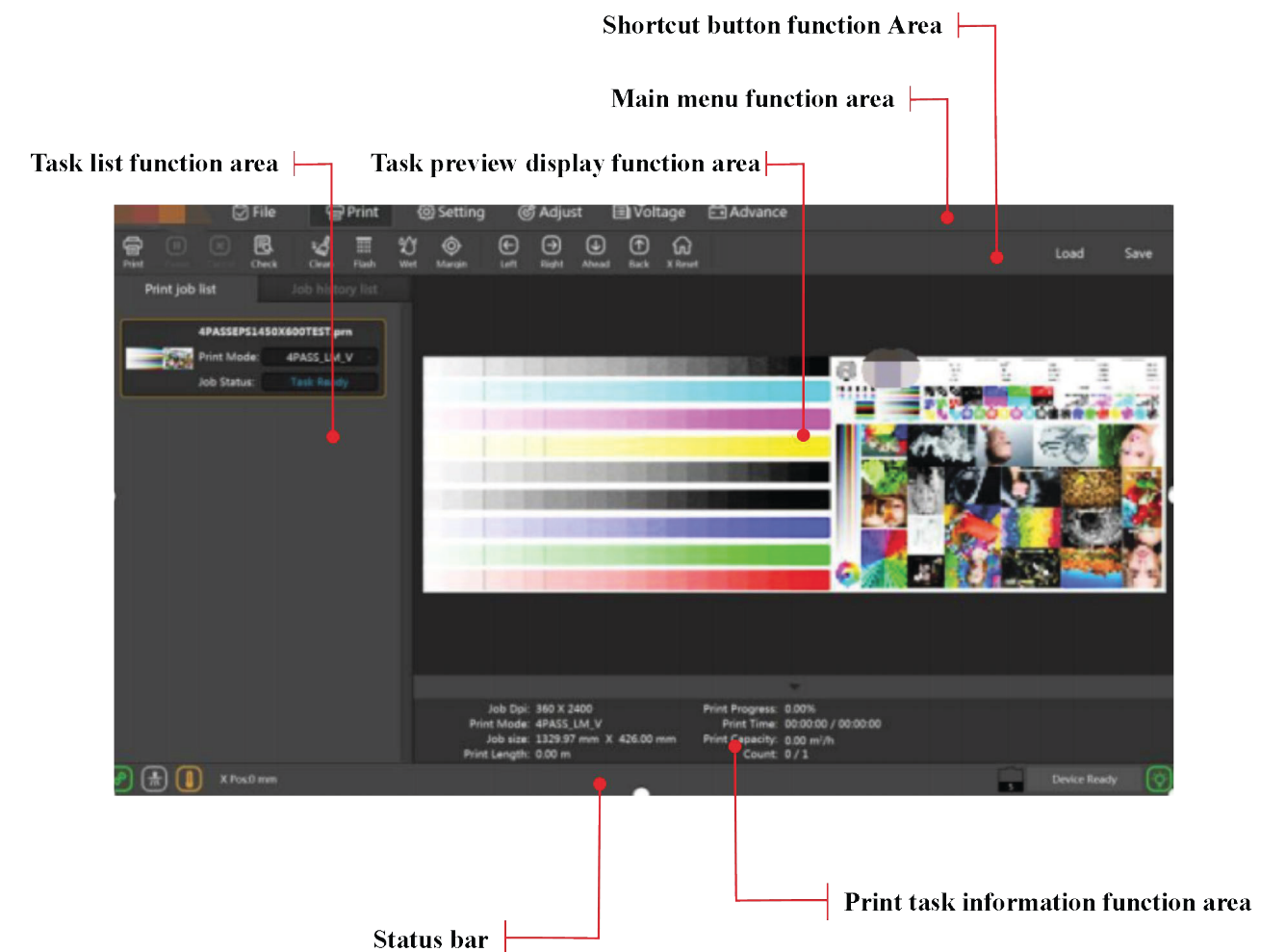
(5) Drawing printing settings

In the following section, "sharpen and print" is described in detail.

IV.Introduction of Main Interface Window of the Software

The main interface of PrintExp software is as follows:

PRINTER CALIBRATION



PRINTER CALIBRATION

The main interface of PrintExp software mainly includes main menu function area, shortcut button function area, print list function area, task preview image display function area, print task information function area, status bar, etc., which are introduced in the following parts.

4.1 Main Menu

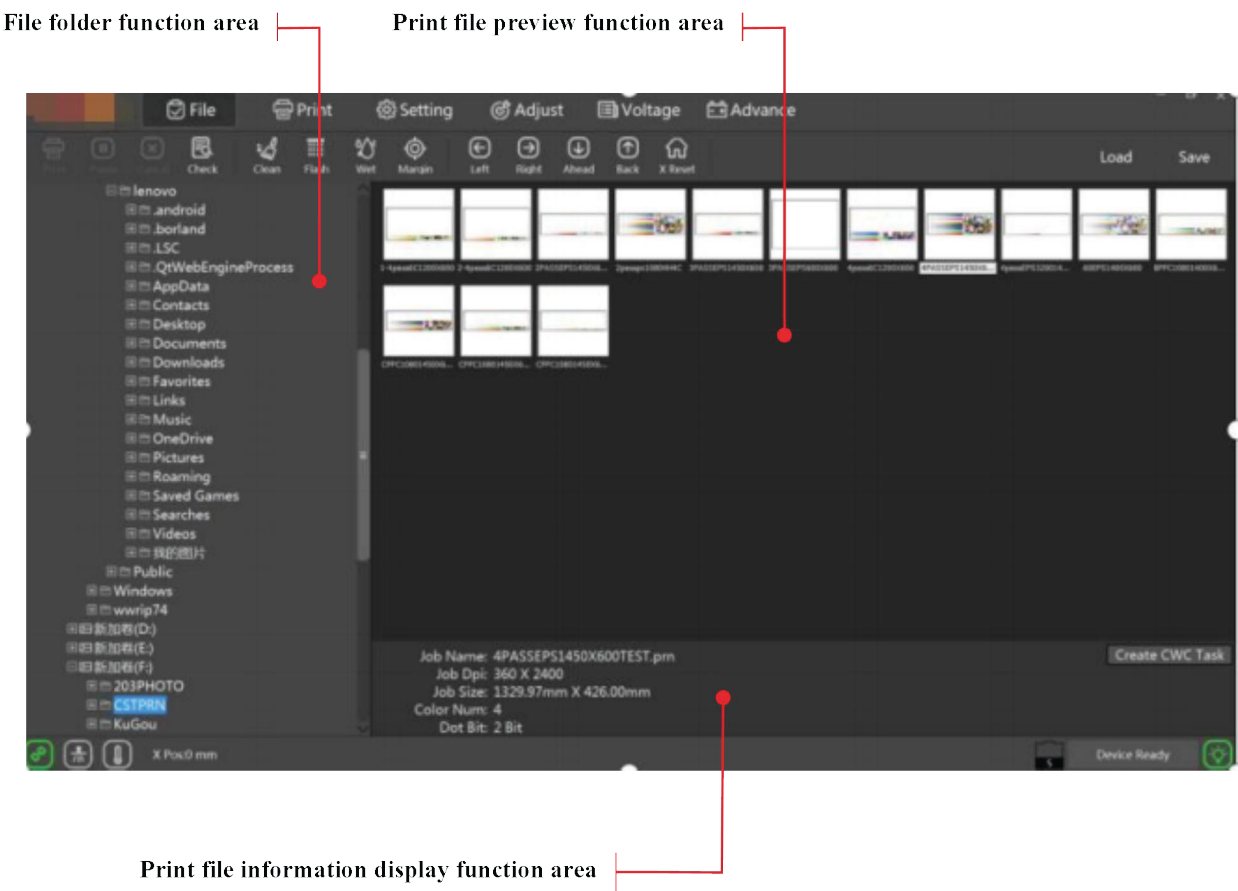
The menu tree of main menu is as follows:



4.2 Flies

PRINTER CALIBRATION

Click the file in the menu bar to enter the file interface. The interface mainly includes the file directory window, the image preview window, and the picture information display bar is shown below:

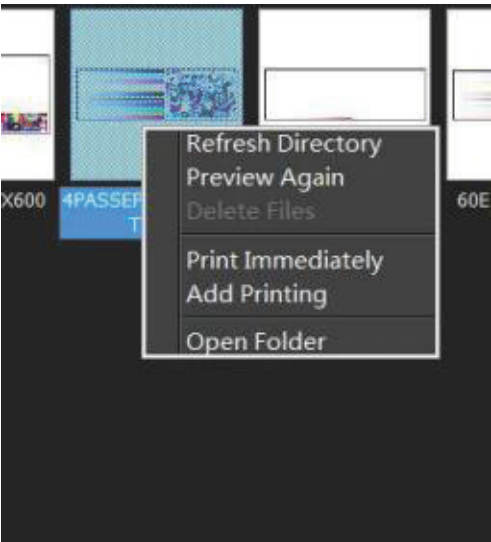


PRINTER CALIBRATION



NO.	Name	Function description
1	File folder function area	Select the folder where the print files are stored.
2	Print file preview function area	Display all print files under the specified print file folder.
3	Print file information display function area	Display print information of the selected print file.

If you select the preview image and right click, the menu list will pop up as shown below:

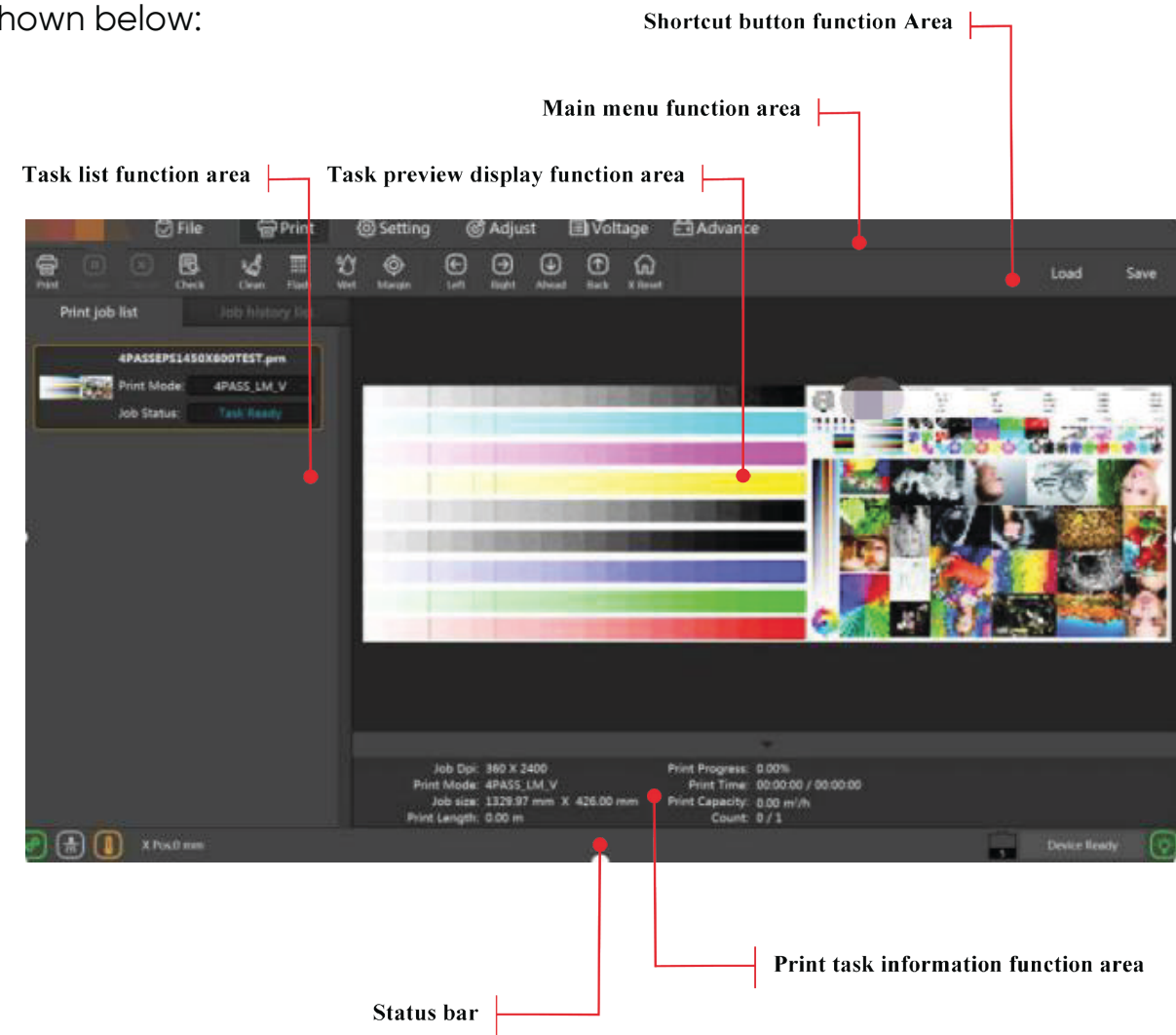


PRINTER CALIBRATION

NO.	Name	Function description
1	Refresh directory	Refresh all the print files in the specified print file folder.
2	Preview again	Re-generate a preview of the currently specified print file.
3	Delete files	Delete print files.
4	Print immediately	Add the current print file to the print task list and print immediately.
5	Add printing	Add the selected print file to the print task list.
6	Open folder	Open the folder corresponding to the print file.

4.3 Print

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



PRINTER CALIBRATION

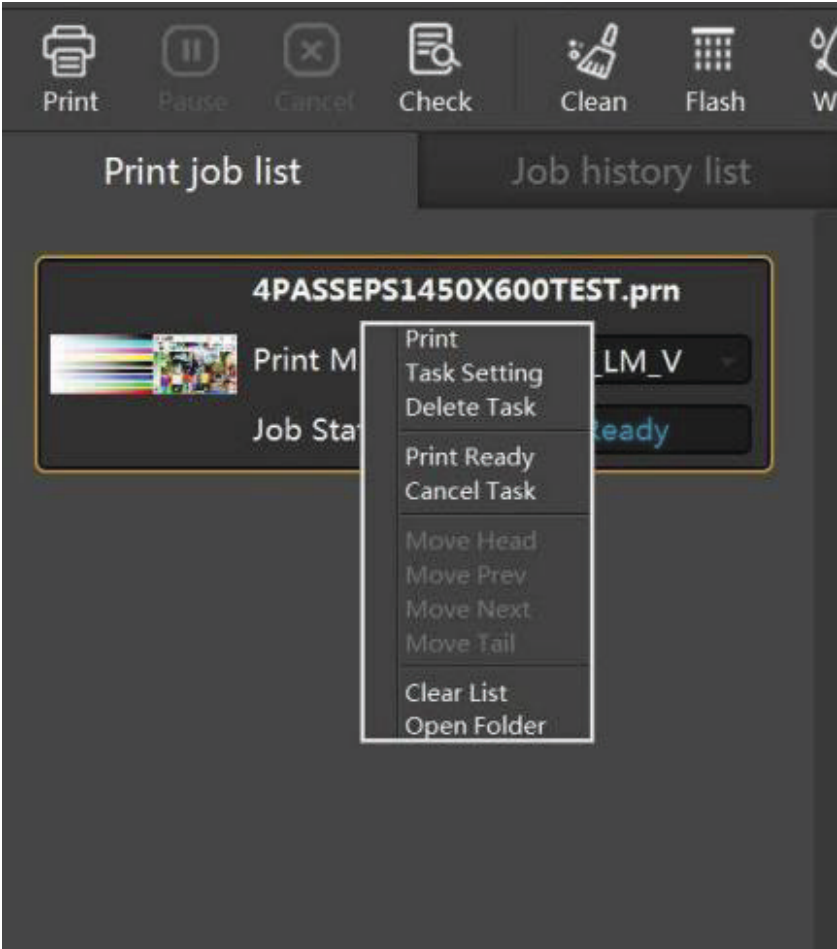


No.	Name	Function description.
1	Main menu function area	Display the area of the main function buttons of the system.
2	Shortcut button function Area	Display the area of frequently used command buttons.
3	Task list function area	Display the current area of all tasks thare being printed or to be printed.
4	Task preview display function area	Display the area of preview of selected print task.
5	Print task information function area	Display the area of all print information for the current print task.
6	Status bar	Display the area of current working status or connection status of the system.

The print interface includes a print task list window, a history task list window, a print task preview window, and a print information window; select a task in the print task list, right click topop up the drop-down menu as shown below:

(1) Open the task list

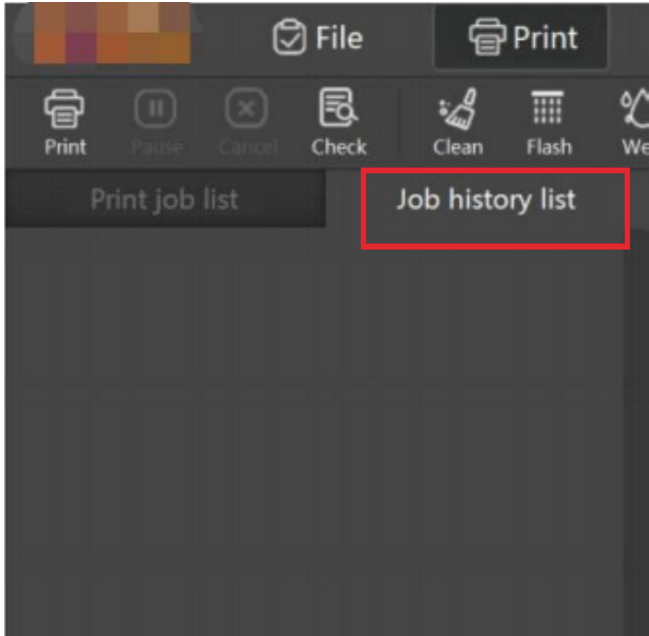
PRINTER CALIBRATION



No.	Name	Function description
1	Print	Perform printing.
2	Task setting	Adjust the setting of printed picture.
2	Delete task	Delete from print task list
3	Wait for printing	Add the current task to the queue to be printed.
4	Cancel task	Cancel the printing or cancel the setting to be printed.
5	Move to the top	Move the selected task to the top of the task list.
6	Move up	Move the print task forward one unit.
7	Move down	Move the print task backward one unit.
8	Move to the last	Move the selected task to the end of the task list.
9	Clear list	Clear all tasks in the print task list
10	Open folder	Open the folder where the print file is located

(2) History task list

PRINTER CALIBRATION



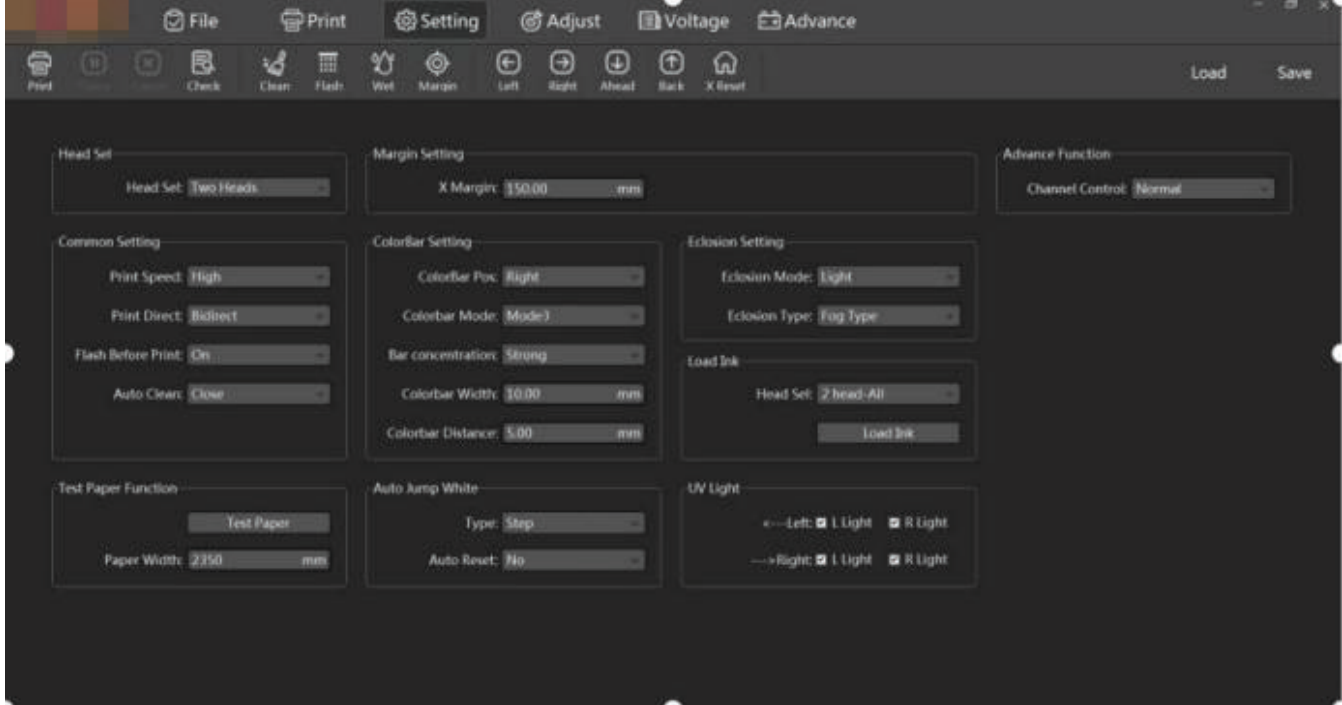
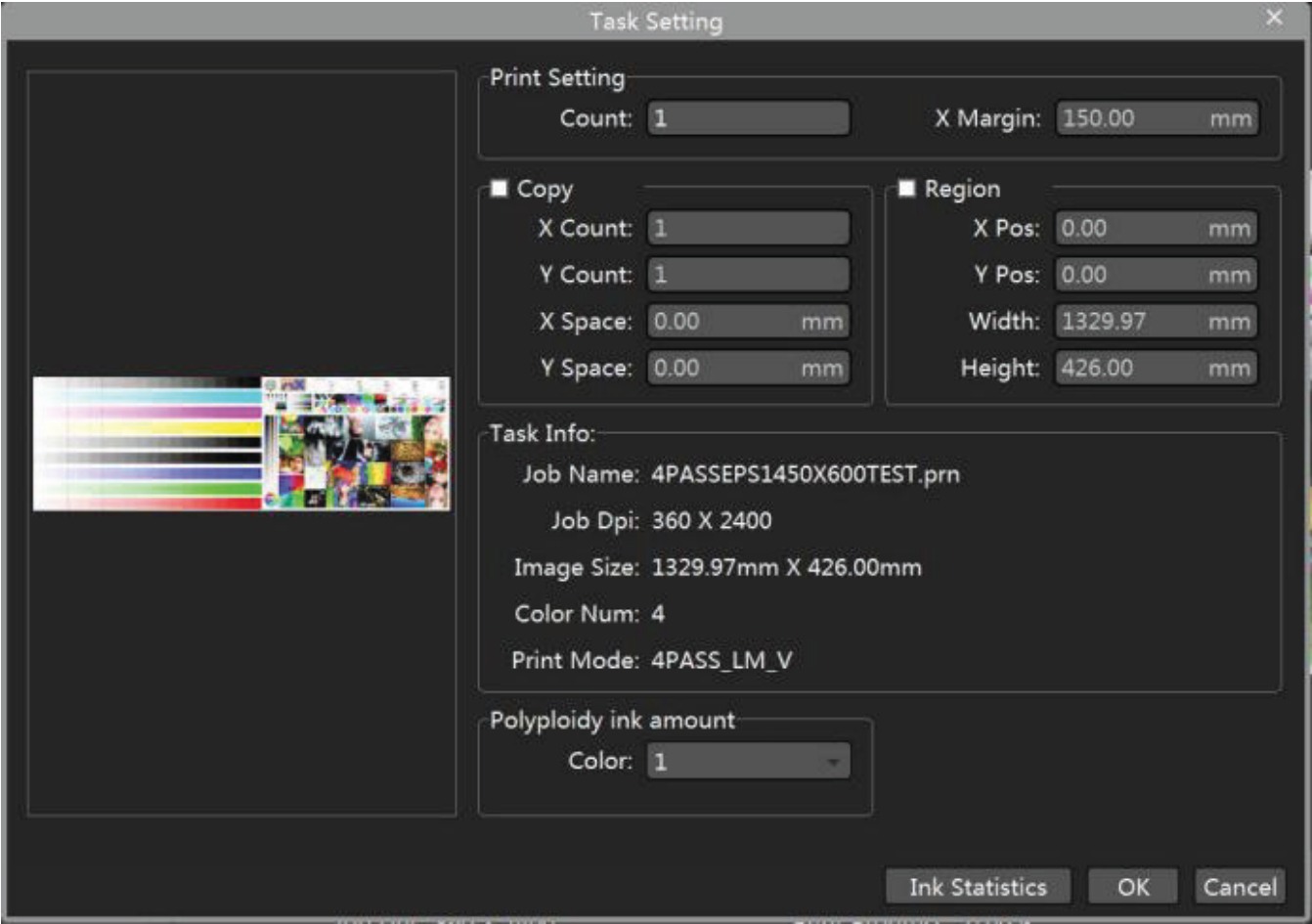
No.	Name	Function description
1	Add to print	Add a task to the print task list
2	Print now	Add a task to the print task list and print immediately
3	Delete task	Delete task from history print list
4	Clear list	Clear the tasks in the history task list
5	Open folder	Open the folder where the print file is located

(3) Task attributes

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

PRINTER CALIBRATION

PRINTER CALIBRATION



No.	Name		Function description
1	Print settings	Number of copies	Set the number of times of repeated printing.
2	Photocomposing setting	X Count	Horizontal photocomposing number.
		Y count	Vertical photocomposing number.
		X spacing	Horizontal photocomposing spacing(mm).
		Y spacing	Vertical photocomposing spacing(mm).
3	Regional printing	X position	Loading position in X direction in print files.
		Y position	Loading position in Y direction in print files.
		Width	Print width of selected area in print files.
		Height	Print height of selected area in print files.
4	Task attribute	Include the name of the task, the print precision of the task,the Size of the print job, the number of color of print tasks, and the number of pass of task.	

4.4 Settings

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

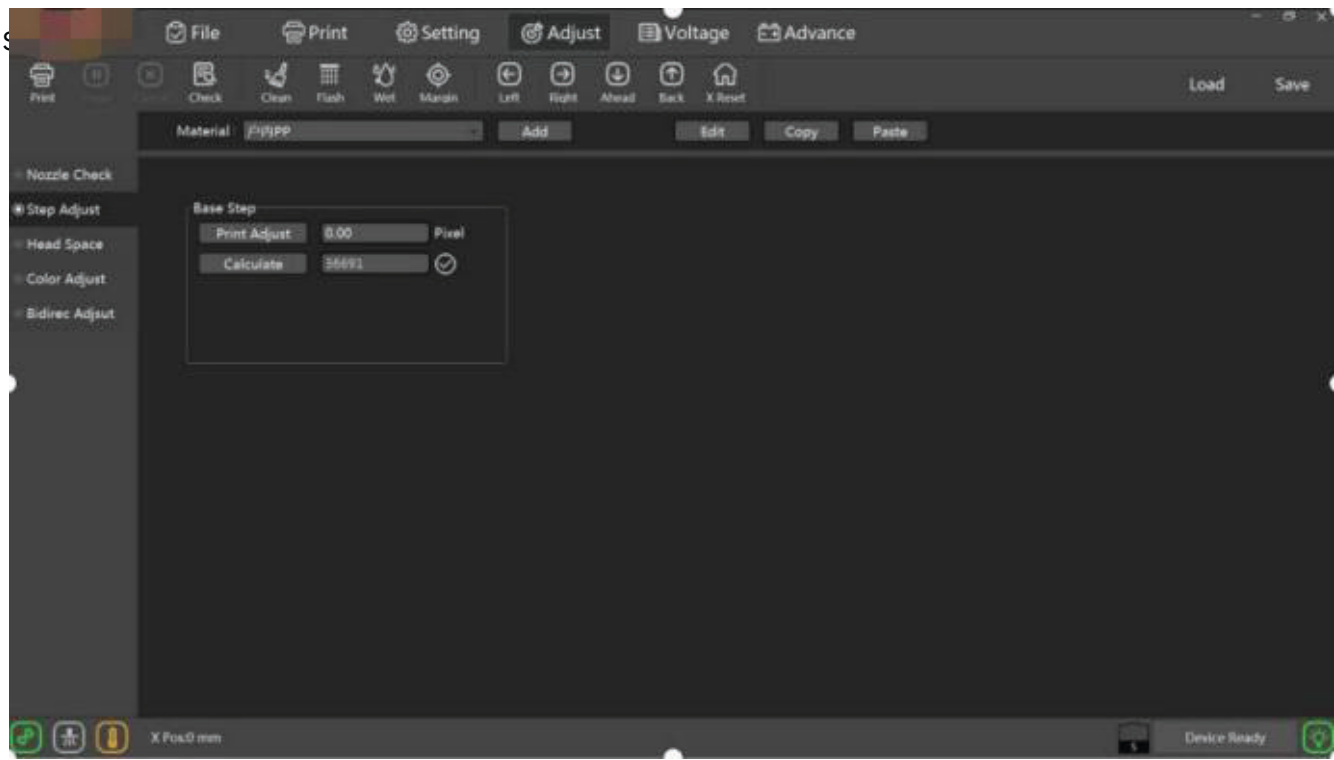
No.	Name		Function description
1	Nozzle selection		Only specific model can have nozzle selection
2	White edge	X white edge	Set loading position
		Y white edge	
3	General setting	Print speed	Set the print speed to below,medium and high speed
		Print direction	Set the print direction to be leftward sprinting, rightward printing and bi-directional printing.
		Flash work before printing	Set flash work on or off before printing
		Automatic cleaning	Set automatic cleaning on or automatic cleaning off
4	Color bar setting	Paper direction	Set the direction of paper moving
		Color bar position	Set the color bar position to be left color bar, right color bar and color bars on both sides or color bar off
		Color bar mode	Select the mode of the color bar for printing
		Color bar concentration	Set color bar concentration to be weak, medium and strong
		Color bar width	Set the width of color bar
		Color bar distance	Blank spacing between color bar and print picture
5	Eclosion setting	Eclosion mode	Set the mode of eclcsion
		Eclosion type	Set the type of eclosion
6	Advance fuction	Channel control	Control the nozzle data
7	Ink loading function		Put inking loading function on or off

PRINTER CALIBRATION

8	Test paper function		Click "test paper" to test the width of printing paper
9	<i>Auto jump white</i>	Stepping jump white	Enable white bar follow PASS feeding in vertical white bar
		Continuous jump white	Enable white bar follow continuous feeding in vertical white bar
		<i>Close jump white</i>	<i>Close white bar function</i>

4.5 Calibration

Click Check(calibration) in the menu bar to enter the calibration interface,as



No.	Name		Function description
1	Nozzle Check	Nozzle check	Check whether the ink jet of orifices of the print heads are in good condition.
		Horizontal check	Check whether the entire nozzle plane of the print head is parallel to the horizontal plane.
		Vertical check	Check whether the print head is skewed.
2	Step Adjust		Calibrate(adjust) stepping parameters and fine-tune stepping parameters for different pass modes.
3	<i>Print head space</i>	Print head horizontal spacing	Calibrate horizontal spacing between print heads.
		<i>Print head calibration(adjust)vertical spacing</i>	Calibrate vertical spacing between print heads.

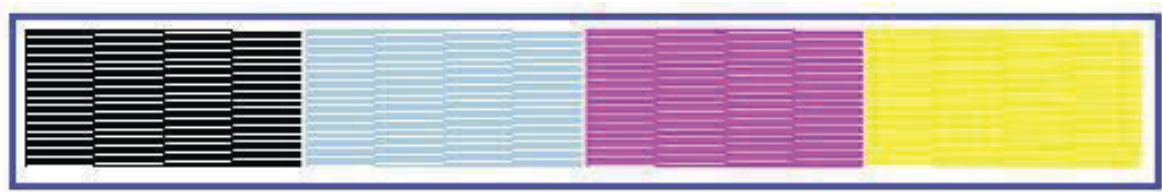
PRINTER CALIBRATION

4	Color adjust		Calibrate(adjust) the vertical and horizontal locations of each channel of print head.
5	Bi-directional		Calibrate(adjust) bi-directional off set under different speed of bi-directional printing.

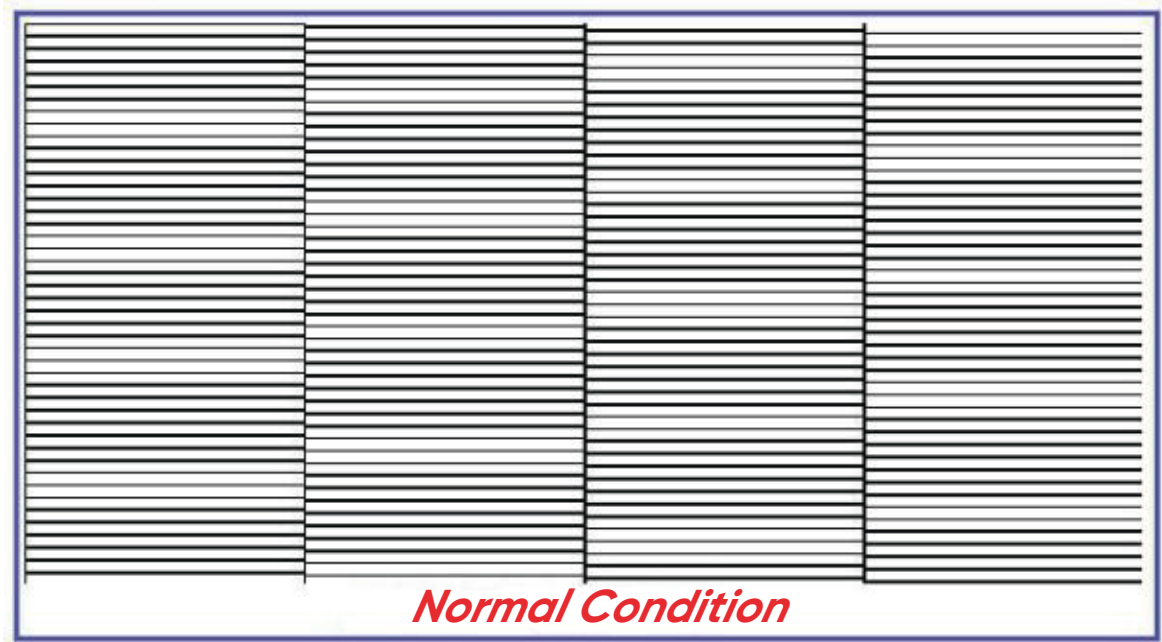
(1) Function introduction of nozzle check

Click "nozzle check", the system will print the testing pattern, following is an example of the EPSON print head state diagram.

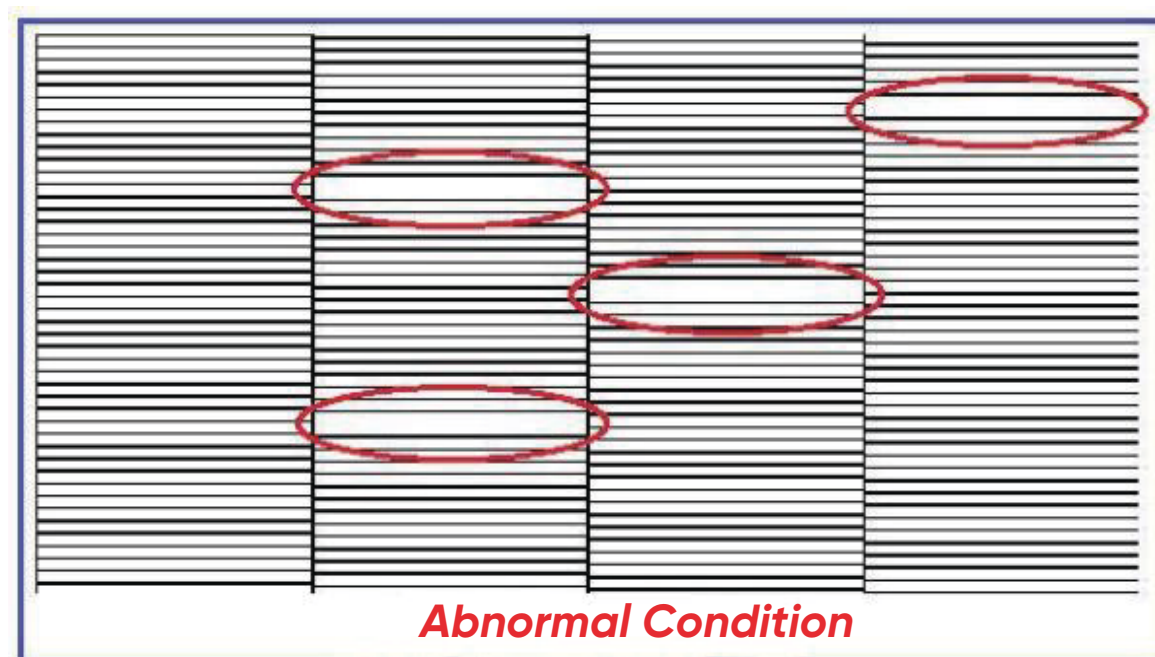
EPSON DX5 printer:



Partially enlarge the black diagram of normal and abnormal conditions, as shown below:



PRINTER CALIBRATION

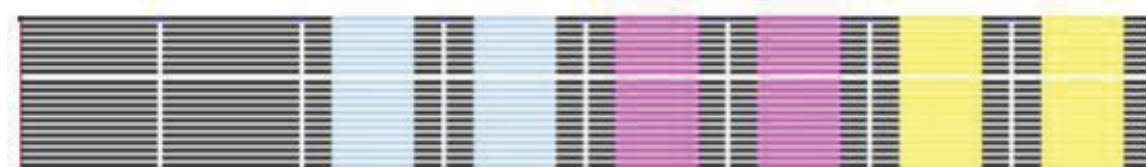


The state diagram in the above picture show that nozzle maybe blocked and needs to be cleaned until the nozzle ink jetting is optimal.

(2) Function introduction of horizontal check

Click "horizontal check", the system will print out the horizontal testing pattern, following is an example of EPSON horizontal detection pattern.

EPSON DX5 printer:

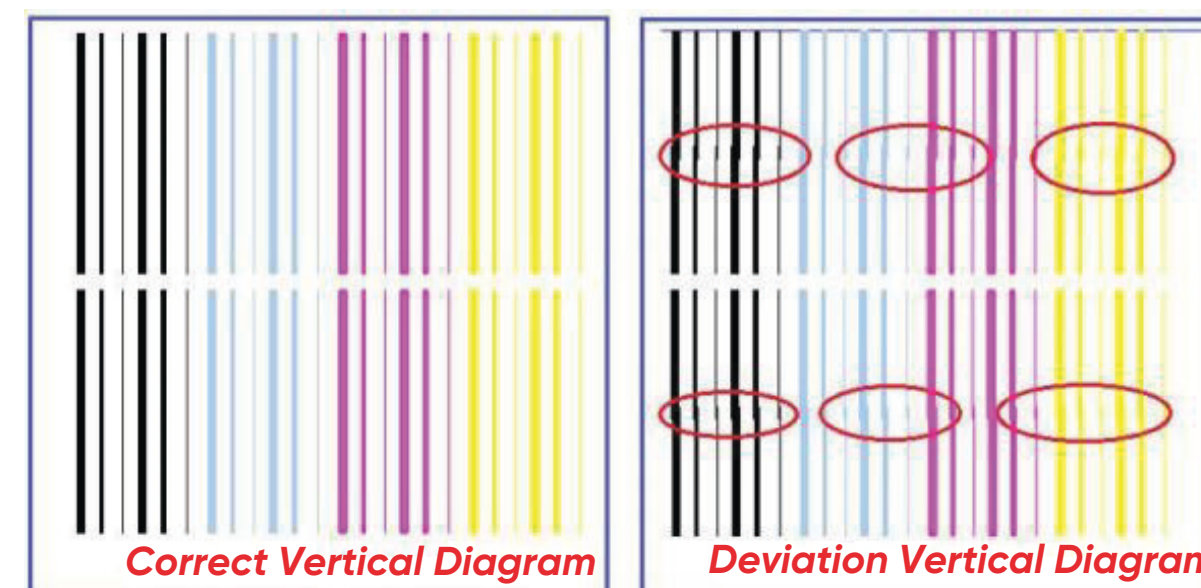


(3) Function introduction of vertical check

Click "vertical check". the system will print a vertical check pattern, following is an example of EPSON vertical check pattern.

EPSON DX5printer:

PRINTER CALIBRATION

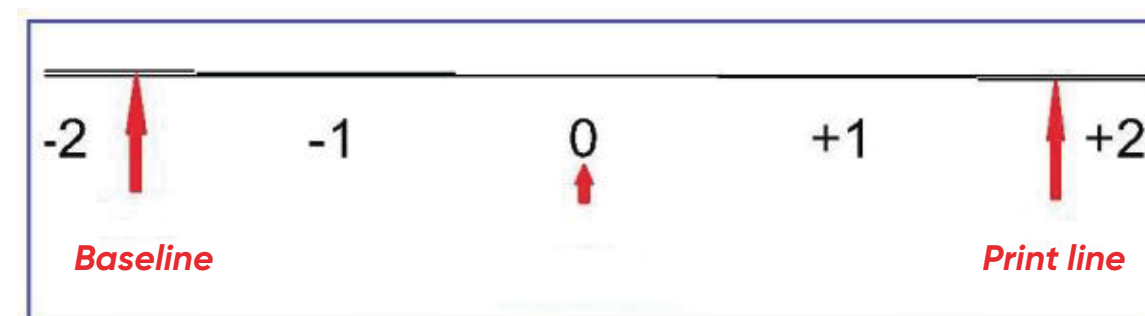


The calibration diagram on the right side of the figure above needs to be adjusted vertically until the vertical calibration diagram is correct.

(4) Function Introduction of step adjust

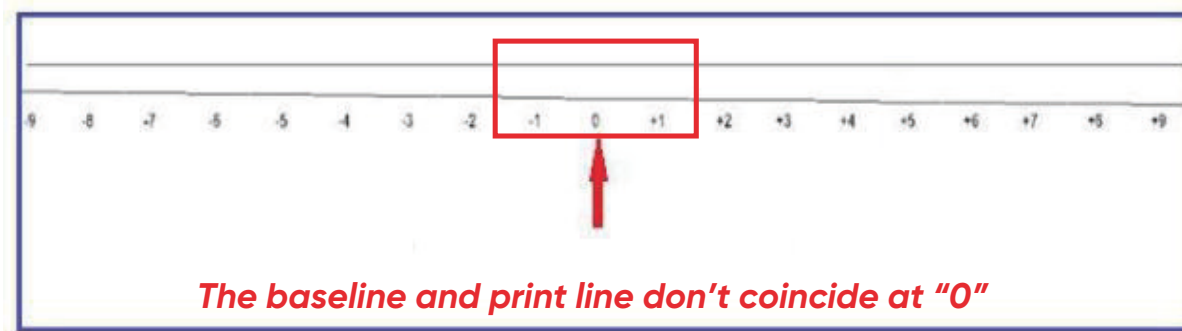
Click "print adjust" under the reference stepping box. The system will print. following is an example of EPSON step check pattern.

EPSON DX5 printer:

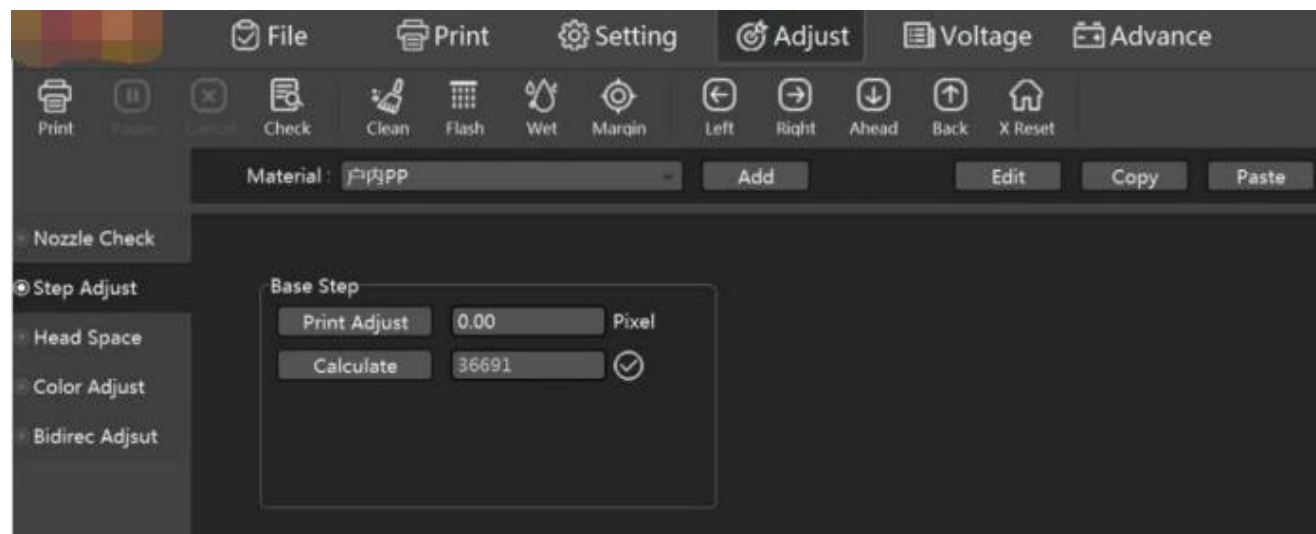


The above diagram shows that the step is adjusted and the reference line and the tick mark are completely coincident at "0". If the step is not adjusted, the following situation will appear:

PRINTER CALIBRATION

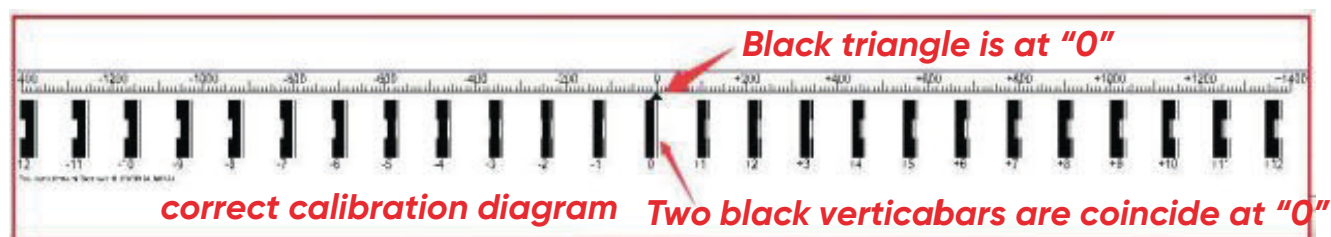


The above diagram needs to be adjusted. Adjustment window is as shown below. Input the adjustment value, click "calculate", and reprint the calibration pattern until the baseline and the print line completely coincide



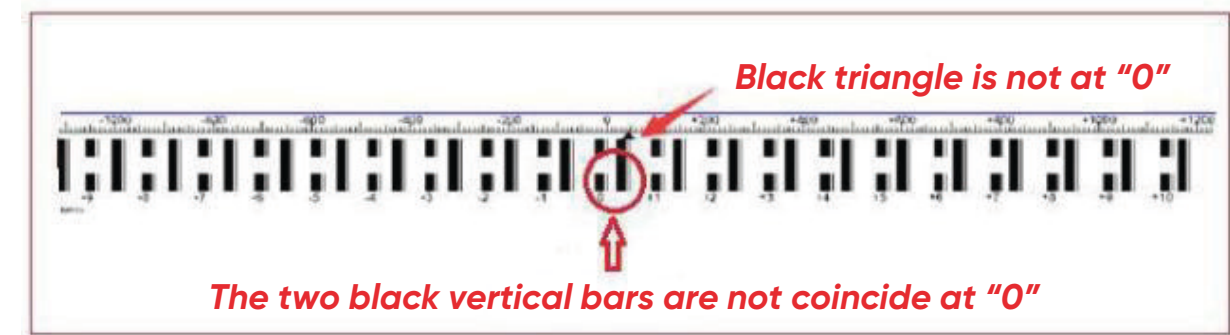
(5) Introduction of print head horizontal distance adjust

Click "left/right adjust" under the horizontal distance adjust box of the print heads. The system will print.

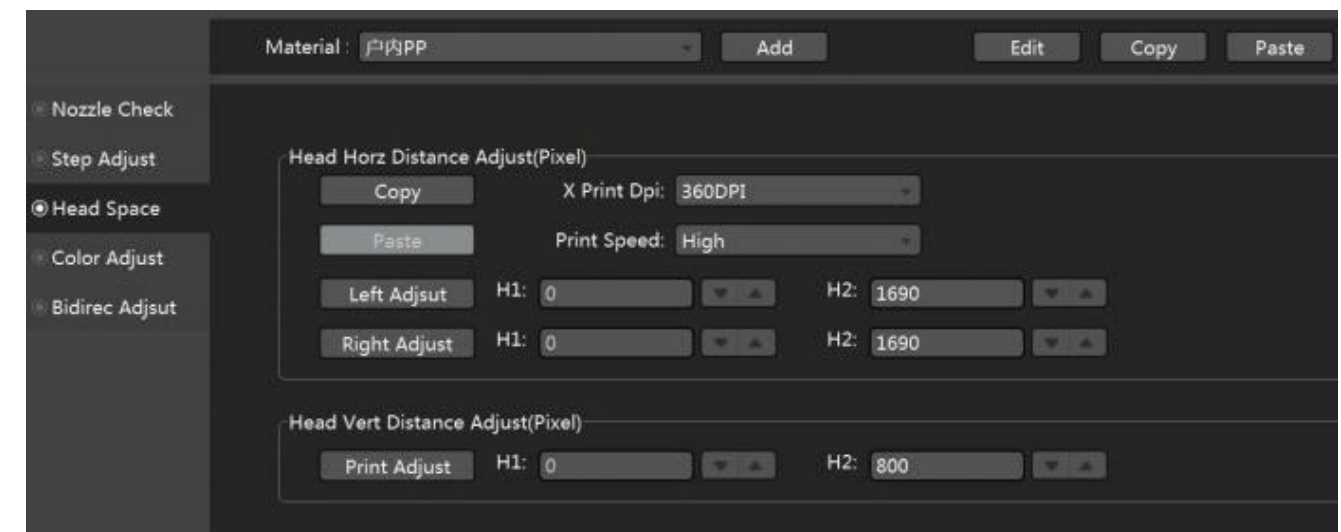


PRINTER CALIBRATION

The above figure shows that the horizontal distance between the print heads is normal, and when the horizontal distance of the print heads is not calibrated, the following situation will appear:



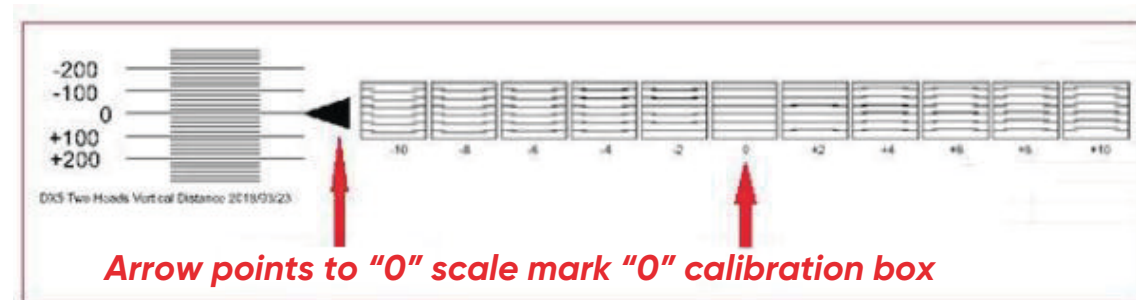
The above picture needs to be adjusted. The adjustment window is shown below. After inputting the adjustment value in the position H2 in the figure below, reprint the calibration diagram until the mark of 0 is pointing to 0.



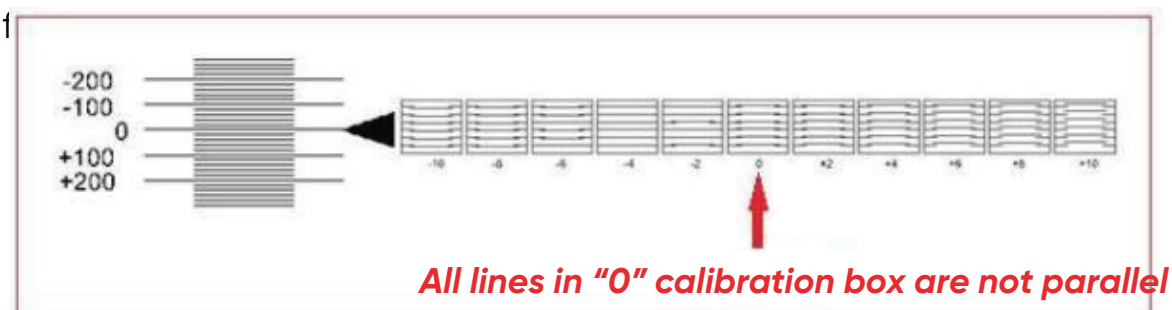
(6) Introduction of print head vertical distance adjust

Click "print adjust" under the vertical distance adjust window of print head. The system will print.

PRINTER CALIBRATION



The figure above shows that the vertical distance between the print heads is normal. All the lines in the "0" calibration box are parallel, and the left arrow points to the "0" scale mark. If the vertical distance is not calibrated, the



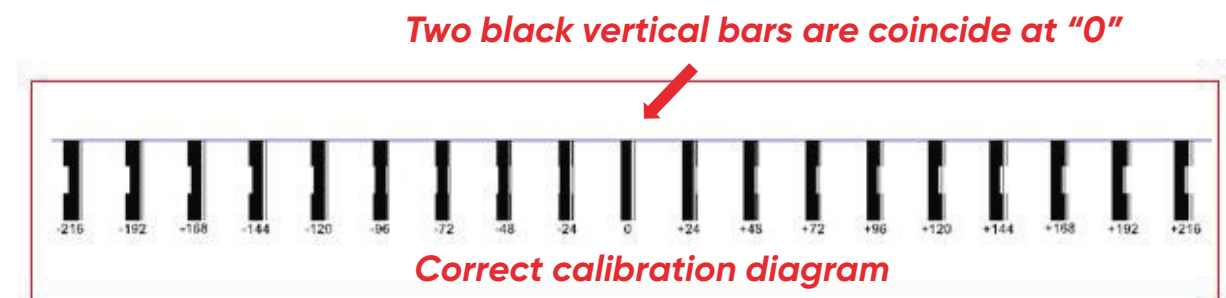
All the lines in the "0" calibration box are not parallel, but all the lines in the "-4" calibration box are parallel, so it needs to be adjusted. Subtract 4 from the original calibration value, and then re-calibrate until all the lines in the "0" calibration box are parallel. The adjustment window is as follows:



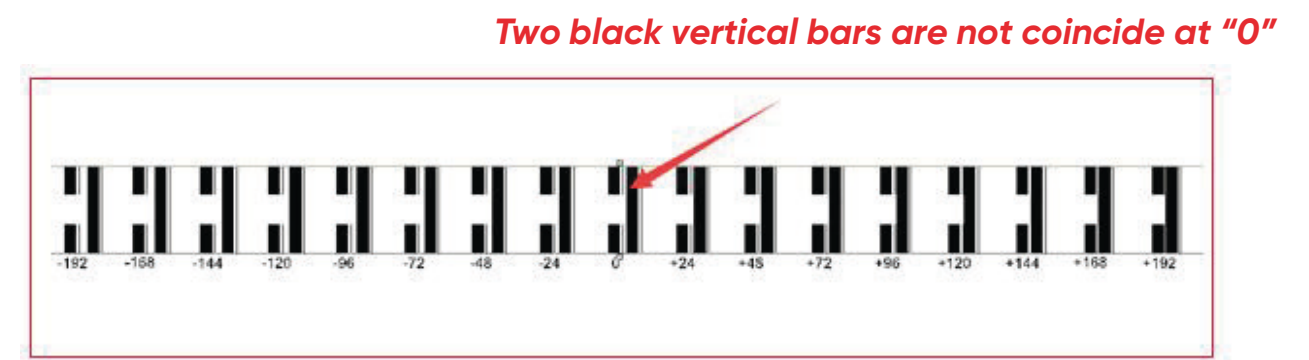
(7) Function introduction of bi-directional calibration

Click "print adjust" under the bi-directional calibration interface, the system will print.

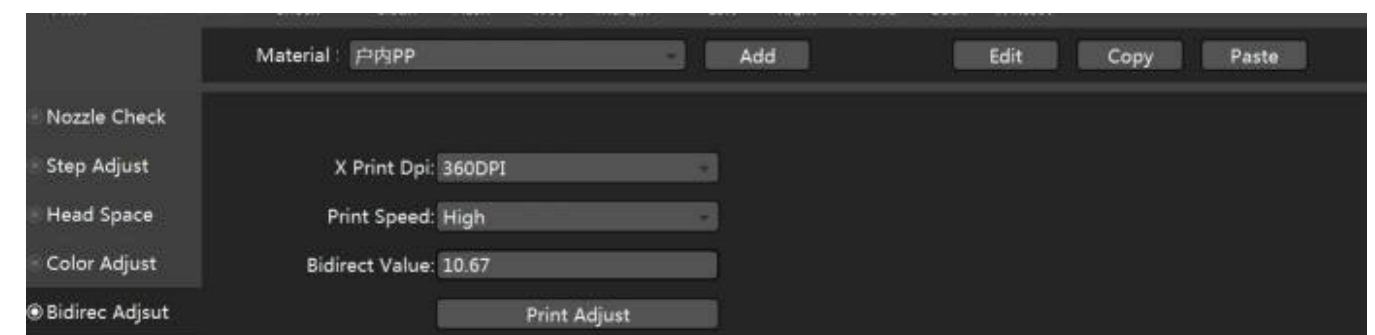
PRINTER CALIBRATION



The figure above shows the normal situation after correct calibration. The uncalibrated situation is as follows:



The calibration value must be refilled in and re-calibrated, as shown below:



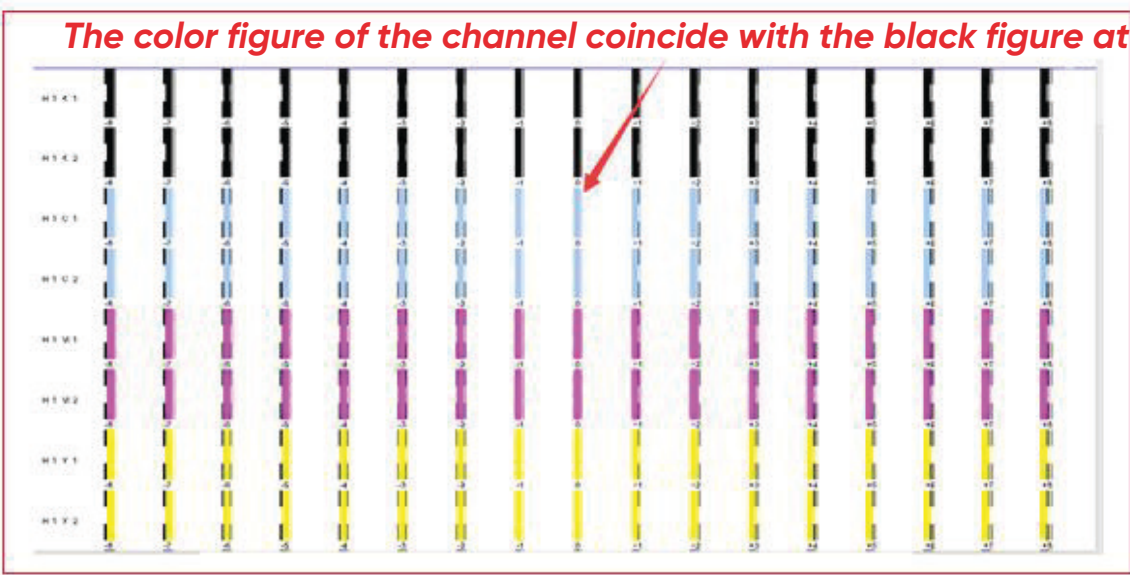
(8) Function Introduction of color adjust

Click "left/right adjust" under the color adjust interface, the system will print

PRINTER CALIBRATION

MAINTENANCE

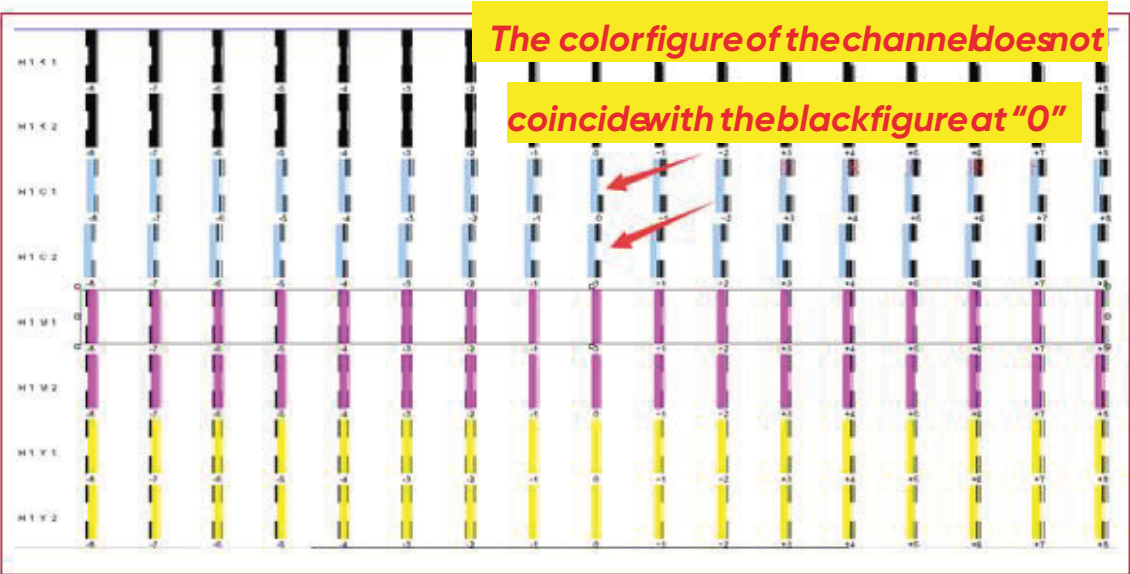
Maintenance



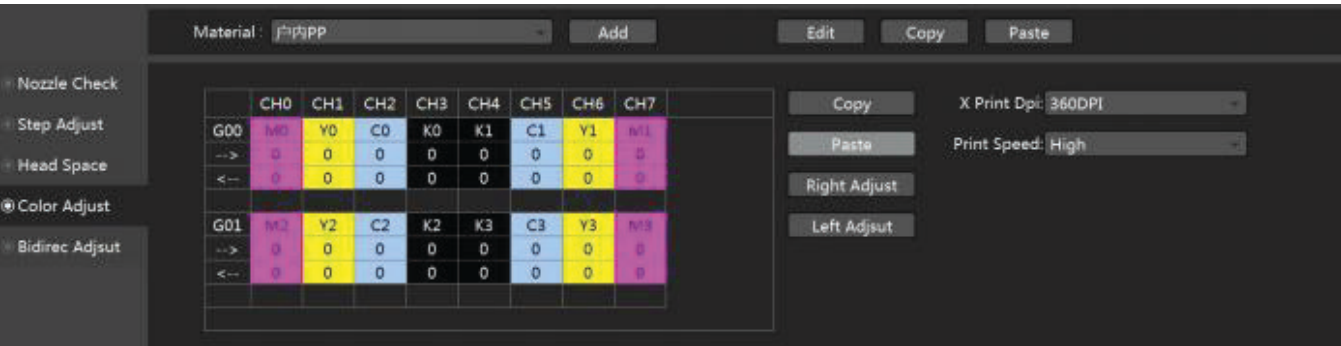
I. Printer Maintenance Instruction

Period	Item	Item content
Before power on machine	Air pressure checking	Check whether the air pump pressure is normal.
	Printing platform checking	Keep the printing platform free of sundries to avoid scratching and damaging the printhead.
	Waste ink bottle checking	Check the liquid level of waste ink bottle, avoid ink flows out of full bottle during cleaning operation.
	Checking of ink supply in cartridges	Ensure the cartridge have enough ink to avoid the problem that printhead works without ink, which will lead to the damage or block of printhead..
Before printing	Wipers Checking	Keep the cleanliness of cleaning components, ensure that the wiper is clean and free from damage to avoid affecting the wiping effect.
	Printhead state checking	Test print to check if the printhead works normally, clean the printhead through the cleaning operation to ensure the best state of printhead.
After power off machine	Return the printhead to capping station	Check if the printhead return to the capping station, prevent the printhead from being exposed for a long time, which may lead to the damage of printhead. (keep white

The figure above shows the normal situation after correct calibration. The uncalibrated situation is as follows:



The calibration value must be refilled in and recalibrated, as shown below:



MAINTENANCE

		ink cycling system opening)
Every day	Environment requirement	Working environment requires no dust indoor, avoid dust affecting the printing layer of media and inks.
	Temperature and humidity	Printer equipment working environment should be temperature 25-30°C humidity 40%-60%.
	Machine cleaning	Keep the cleanliness of the whole printer and components, clean up the dust and stains.
	Printhead cleaning	(1) Move the carriage to cleaning position, clean the bottom of printhead. (2) Use the clean unwoven cloth dipped in flush liquid or distilled water to wipe the surface and around part of printhead, remove the dust and sundries on the printhead.
	Printhead cleaning	(1) Check the surface and surrounding of printhead regularly to see if there are sundries to clean up. (2) Move the carriage to cleaning position, use the cotton swab dipped in flush liquid to clean out the remainder of ink nearby printhead for ensuring the printing effect.

MAINTENANCE

Every week	Maintenance of transmission part	(1) Apply grease on transmission part and on the gear engagement position in regular, such as the air shaft for receiving and discharging media, guide rail slider, and lifting mechanism of the capping station. (2) It is suggested to add proper amount of lubricating grease to the long belt of the carriage motor in X-axis, which can effectively reduce noise.
Per month	Ink path checking	Check pipes of ink cartridges and ink dampers, replace the faulted and damaged ones
	Encoder strip cleaning	(1) Check whether there are dust and stains on the encoder strip, and it is recommended to ignore the slight dust and stains. (2) The cleanliness and position change of encoder strip may affects carriage movement and printing, wipe with clean cloth dipped in alcohol if needed.
	Guide rail checking	Check if the sliders work normally and if there are abnormal noises out of guide rail or sliders.
	Filter checking	Check if filters are blocked periodically, replace or clean the blocked ones promptly, front filter of printhead must be replaced. (cleaning it is not enough)

MAINTENANCE

Per 3 months	Cleaning of ink cartridge and tank	(1) Spent inks may agglomerate at the bottom of ink cartridges and tank, which may causes obstruction. (2) Clean the ink cartridge and spent ink tank periodically in case ink flows.
	Circuit inspection	Check the aging of wires plug and sockets.
	Ink pump checking	Check if the pump working well to produce enough pilling force periodically, check if the ink pumps are blocked, replace them in case of need.
Per year	Electric control box inspection	Keep the electric control box clean and dry, check if it works well, clean sundries in case of need.
	Computer cleaning	Clean dust in computer periodically
	Dryer checking	Check the wires aging of the dryer and the state of light tubes, replace the faulty ones.

Idle time	Item content
Not in use within one week	1. Ensure head test is perfect before turn off printer. (keep white ink cycling system opening)
	2. Keep a clean head and nozzle check every 3 days is advisable.
With one month	1. Ensure head test is perfect, and pour some flush liquid into captop before turn off printer, and block the waste tube.(keep white ink cycling system opening three days every week)
	2. Keep a clean head and nozzle check every 7 days is advisable.
Over two month	1. Clean out all the inks within the tube, remove printhead from carriage and do a cleaning, then preserve it alone.
	2. Repeat printhead cleaning with flush liquid(blue bottle) until no ink

MAINTENANCE

	in it, and then inject protect liquid(white bottle) into the printhead, preserve it alone.
--	--

II. Vulnerable Part Replacement Cycle

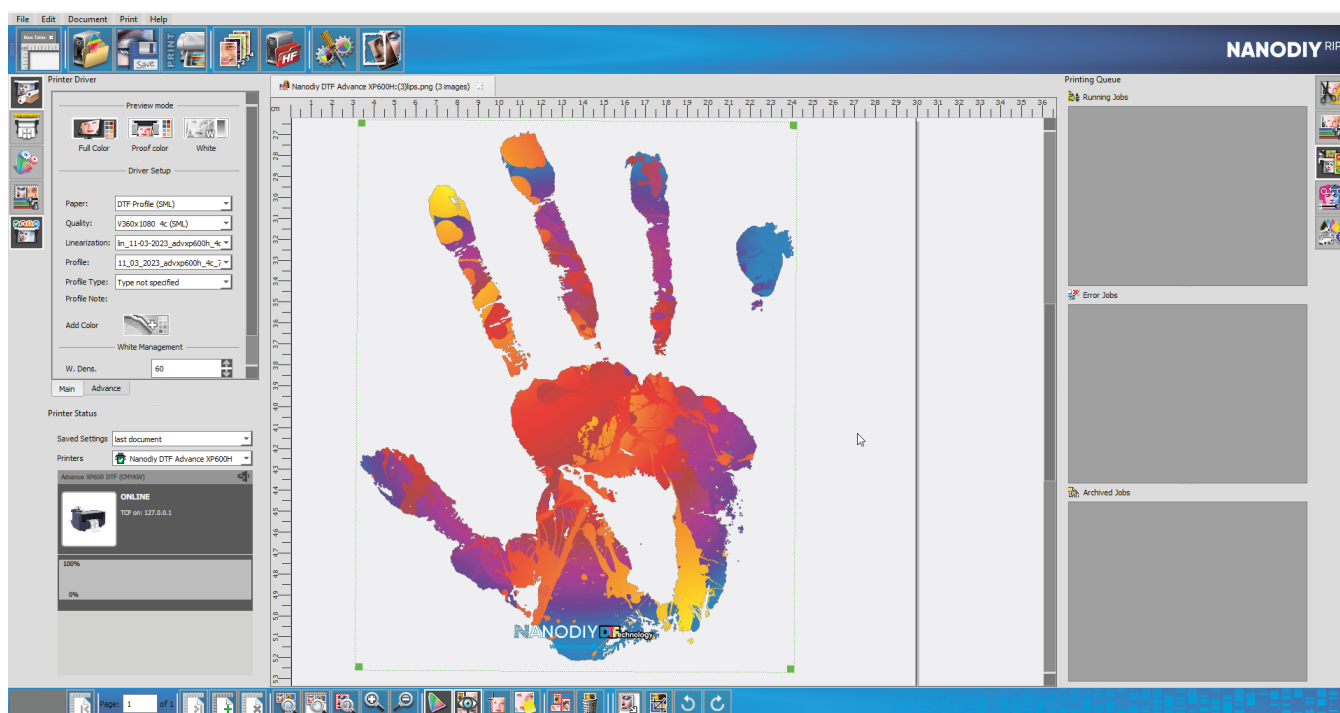
Serial number	Spare parts name	Replacement cycle	Remark
1	Filter	6 month	Replace the filter according to the ink density, higher density and more corrosive ink will lead to shorter replacement cycle span.
2	Damper	6 month	
3	wiper	6 month	
4	Cap top	6 month	
5	Ink tube	12 month	
6	Raster	12 month	Raster will affect printing resolution, if misaligned or error-position printing occurs, please consider the replacement of raster.
7	Synchronous belt	12 month	Synchronous belt will affect printing resolution, if misaligned printing occurs, please check it.
8	Pinch roller	12month	If the media unable to move smoothly or it is not pinched tightly, please check it and replace the roller in case of need.

III. Additional Notes

Additional notes	
Ink storage environment	Ink needs to be stored in the shade, avoiding high temperature and exposure, otherwise it will seriously affect the printing quality, even lead to a nozzle blockage. Try to use up the ink that has been opened within 15 days. The ink in cartridge should be used up within 20 days.(within 15 days if the local temperature is higher)

NANODIY RIP

- Automatic white background
- Built in Teamviewer support
- Cost manager
- Simple User Interface
- Best print quality on market
- Simple Image Editor



WHY NANODIY?

We offer a complete DTF SYSTEM SOLUTION and are constantly working on development.

- » We have been working with transfers since 2015
- » We have NANODIY RIP software
- » We adapt to the needs of our users
- » New in our offer UV DTF and UV FlatBed printers

Adress

Dravska 17
48000 Koprivnica
Croatia

Social networks

fb/nanodiy
insta/nanodiy_official
youtube/nanodiy

Telefon

+385 91 330 4993
+385 91 330 4995

E-mail:

info@nano-diy.com
sales@nano-diy.com

ShowRoom&Office

Đure Basaričeka 1
48350 Đurđevac
Croatia