

19E8pro,19E15pro Installation Process

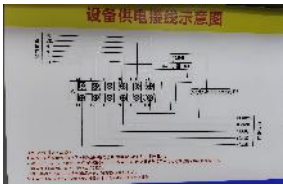
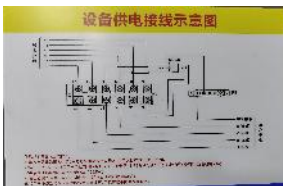
Pre-communication work: Communicate with customers in advance about floor space, electricity requirements, machine size, machine air circuit, whether cranes and forklift trucks are needed, and prepare computers, inks and materials in advance.

Installation process

1. Preparing forklift trucks to unload machines and 10,000 metre bases.
2. Unpacking and assembling related accessories.
3. Machine to determine the position of the machine to debug the level of the machine and the base
4. Installation of print head
5. Add ink, load paper and switch on the machine.
6. Vertical calibration
7. Testing the machine's paper movement
8. Calibrate the software accuracy after the paper runs without problems
9. Finally, test the left and right lines to see if they are right, and hit the darker colours to see if there is any ink breakage
10. Training clients

Step 1 : Communicate with the client about advance preparations

1. Prepare site and power requirements

Model Type	Machine Dimension L*W*H	Printer power	Dryer power	Number of dryers	Recommended regulator power (except dryer)	Dryer Power Requirements
19E8pro	4000*1000*1870	2200W	7200W	2	7KW voltage stabilizer for machine power supply only	
19E15pro	4000*1000*1870	2200W	10800W	3	7KW voltage stabilizer for machine power supply only	

2. Site environmental requirements

In order for the printer to be able to stabilize the output, the printer working environment as much as possible to maintain the temperature 18-30 degrees, humidity in the 35-65 degrees.

3. Alignment requirements

Need to make sure that the printer power supply and other high-power equipment power supply is used separately, to avoid high-power equipment switching current fluctuations on the printer's impact,

4. Equipped with voltage stabilizers

As society advances at a rapid pace, the number of power-using equipment is increasing day by day. But the aging of power transmission and distribution facilities and the development of lagging behind, as well as poor design and insufficient power supply and other reasons resulting in the end of the user's voltage is too low, while the head of the user is often high voltage, the power equipment, especially on the voltage requirements of strict high-tech and precision equipment, resulting in a certain harm, affecting production, quality and other aspects of the loss of instability. At the same time to accelerate the aging of equipment, affecting the service life or even burn accessories, so that customers face the need to repair the trouble or short-term need to update the equipment, a waste of resources; serious and even safety accidents, resulting in incalculable losses. So the use of voltage stabilizers, power equipment, especially for the voltage requirements of strict high-tech and precision equipment is essential.

5. Ground Requirements

If the user's power supply has a standard ground input, be sure to securely connect the ground lead of the unit to the incoming ground.

If the user's power supply does not have a standard ground input, it is strictly prohibited to connect gas pipes, water pipes and lightning rods, please complete the specification according to the "anti-static grounding requirements".

Anti-static homemade grounding wire requirements:

- The use of $\geq 40\text{mm} \times 4\text{mm}$ angle 4 along the straight line into the ground depth of ≥ 2 meters, each spacing ≥ 1 meter; with a flat steel $30\text{mm} \times 3\text{mm}$ will be the 4 series firmly welded together.
- Grounding body and building spacing of not less than 2 meters. Use galvanized flat steel $30\text{mm} \times 3\text{mm}$ welded with any corner of the angle as the ground lead, lead up to a height of 2 meters, (to avoid pressure on the car, or people touching the grounding of poor or other risks), galvanized flat steel non-welded end of the $\Phi 8\text{mm}$ round hole.

Use $\Phi 16 \text{ mm}^2$ soft copper core wire and ground network lead flat steel through the copper wire nose to connect firmly into the indoor common ground terminal block.

6. Computer configuration requirements

19E8pro,19E15pro

CPU: Intel Core i7 10700, Intel Core i7 10875H

Memory: 16GB DDR4

Hard disk: 1TB, it is recommended to install a solid state disk as the system disk

Power supply: 500W or above

Motherboard: Configure the USB3.0 port, gigabit network card

Based on PCIe system, Asus / Gigabit etc

Operating system: Windows10/64 bit, win11/64 bit

PS:

Network cable interface machine requires the use of gigabit network card, 100Mbps network card will fail to connect to the printer

Step 2: Preparation for technical installation

1. Machine code to be staged password

Communicate with the business in advance to get the installment code in advance according to the machine code and try to get the code a day in advance before installing the machine.

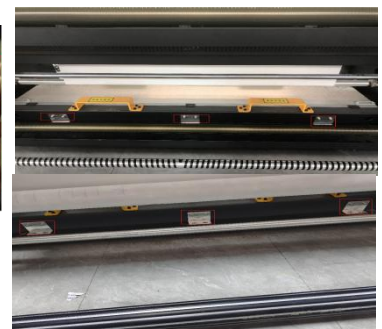
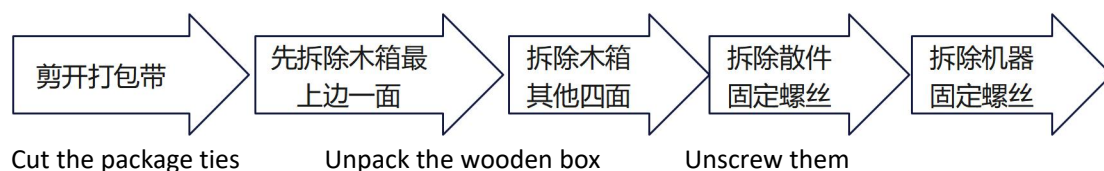
2. Preparation tools

Tools required	
scissor	Need to cut the box tape
Electric drill (+ M8 socket)	Need to return self-tapping wire from packing boxes
Set of hexagonal sockets	Installation of machine accessories for use
Levels, levels	Measurement of base and printer parallelism
Large caliber wrenches	Fixing the rack base, adjusting the base and printer leveling
multimeter	Alternate measurement of printhead resistance
screwdrivers	Installation of machine accessories for use

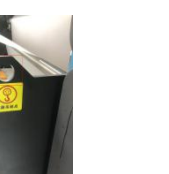
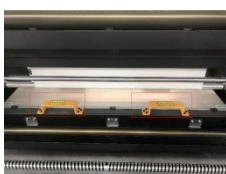
3. Communicate with the customer to prepare if the forklift and crane are in place, make sure the power supply, ink, and paper are ready.

Step 3: Disassembly and assembly

1. Unpacking procedure (base and printer unpacking)



2. Machine forklift points and lifting points



3. Instructions for installing machine accessories

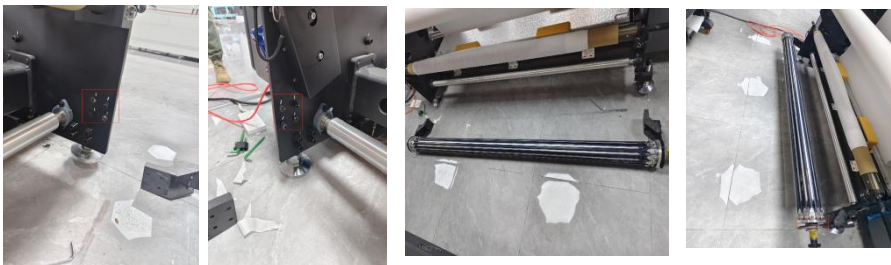
3.1 Front heater installation

Remove the four set screws to install the heater bracket, then loosen the screws on both sides of the heater to place the heater on top of the bracket.



3.3 Tape roller installation

Fix the tape rollers flush on both sides, paying attention to the narrow top and wide bottom.



3.4 Install the large inkwell



3.5 After the installation of all the accessories of the machine is completed, turn on the power to test whether the machine operates normally.

- 1 Is the cleaning action normal
- 2 Ink alarm is normal
- 3 Is the paper receiving and discharging system normal

3.6 After the machine is powered on and tested properly, confirm that the printing platform is free of foreign objects, shut down the machine and manually lower the ink stack, pull the cart to

the center

3.7 Printhead installation (please contact supplier for confirmation)

3.8 Feeding paper(the take-up and put-down system must be in automatic position after the paper is installed)

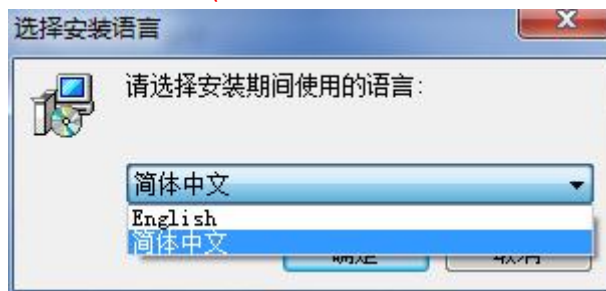


Step 4: Commissioning

1. 软件安装(已有)

1.1 Find the software download instructions on the machine platform, follow the above method to download the corresponding software version from the official website, find the software installation package corresponding to the model version and unzip it.

1.2 选择安装语言(已有)

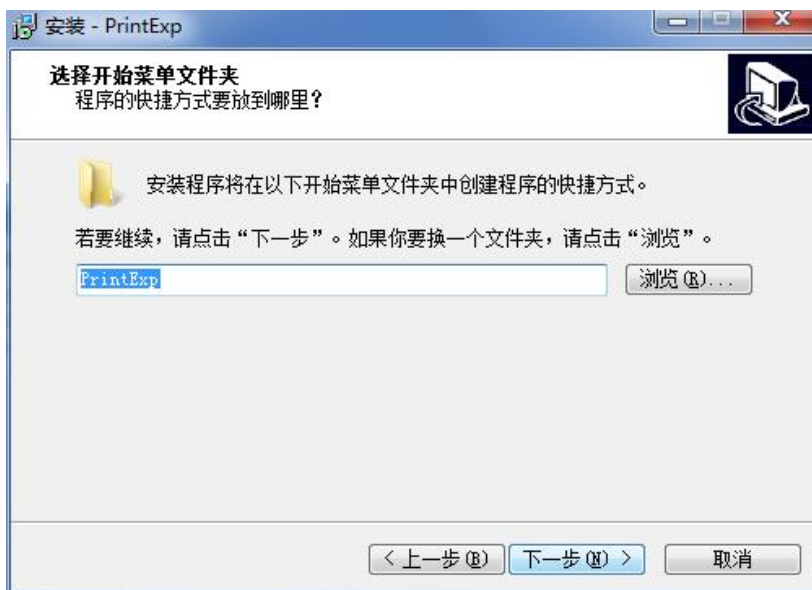


1.3 选择安装路径(已有)

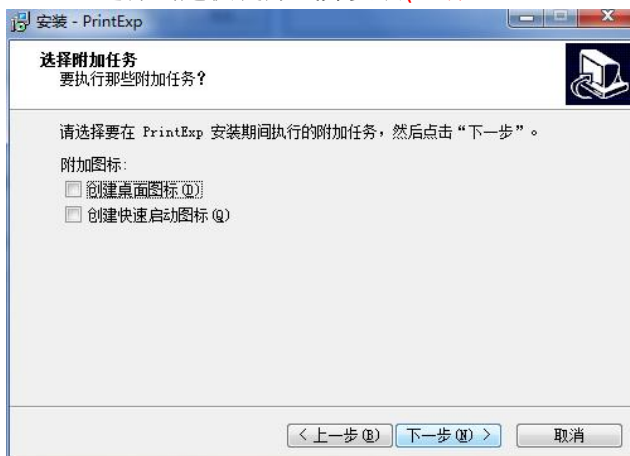




1.4 Selecting the Start Menu folder



1.5 选择创建快捷方式并安装(已有)

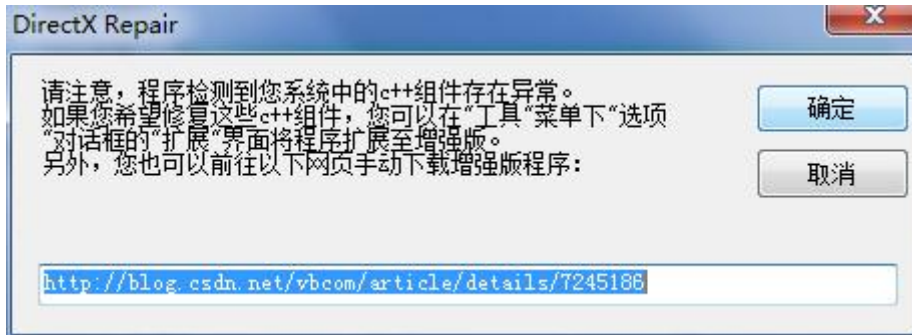




1.6 Detect and repair



1.7 Click OK



1.8 Click to complete

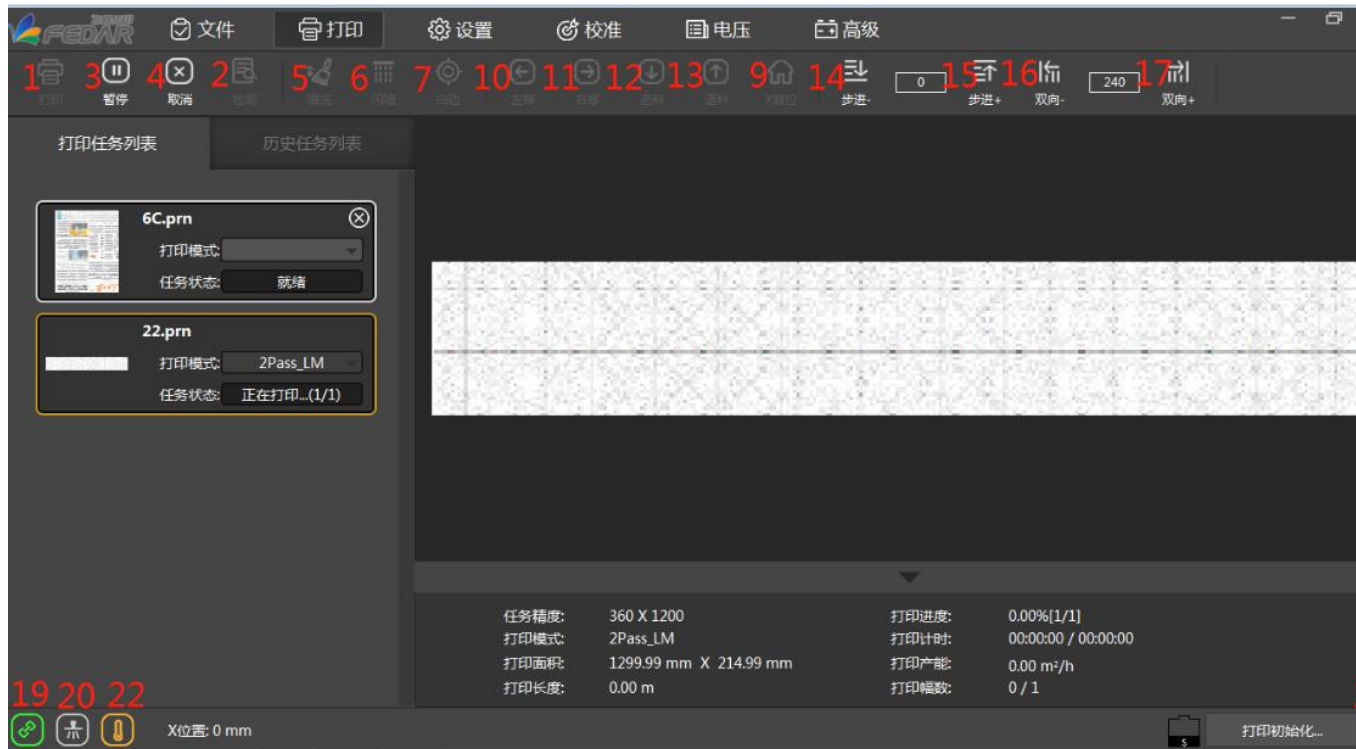


1.9 Double-click the desktop icon to start the software
































2. Software Interface and Functional Description

2.1 Functional description of the driver interface shortcut button



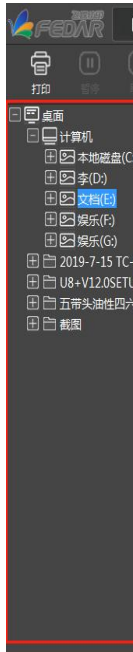
PrintExp software main interface mainly includes the main menu function area, shortcut button function area, print list function area, task preview map display function area, print task information function area, status bar and other major parts of the following respectively on the introduction of these major parts.

Serial Number	Shortcut Button	Functional Description	Serial Number	Status Bar Icon	Status Description	Icon
1		Activate the print button to execute the print command	19		Normal state of network cable connection	
2		Printhead check button, performs printing of printhead status map	19		Network cable disconnected status	
3		Pause/Continue Printing Button	19		offline state	

4		Cancel Print button to execute the End Print	20		Turn on the flash spray.
5		Activate the print button to execute the print command	20		Turn off flash spray status
6		Flash on/off button	21		System Normal State
7		White Edge Positioning Button	21		System Error Status
9		reset button	21		System warning status
10		X-motor left shift button	21		offline state
11		X-motor right shift button	22		Nozzle temperature normal state
12		Feed button	22		Abnormal nozzle temperature status
13		Unwind Button	22		Printhead temperature warning status
14		Step Trim Reduction Button	22		offline state
15		Step Trim Add Button			
16		Bi-directional fine-tuning reduction			
17		Bi-directional fine-tuning increase			

2.2 Mapping Printing Process

2.2.1 Click on the file in the menu bar to enter the file interface, the interface mainly includes a file directory window, picture preview window, picture information display bar as follows. The interface mainly includes a file directory window, picture preview window, picture information display bar as follows:



Serial number	Name	Functional Description
1	Re-preview	Regenerate the preview image of the currently specified print file
2	Refresh Catalog	Refresh all print files in the specified print file folder
3	Delete file	Deleting print files
4	Print Now	Adds the current print file to the print job list and executes the print immediately
5	Add Printing	Add the selected print file to the print job list
6	Open Catalog	Open the folder corresponding to the print file

Serial number	Name	Functional Description
1	File Catalog ribbon	Select the folder where the print files are stored
2	Print File Preview ribbon	Displays all print files under the specified print file
3	Print file information display ribbon	Displays print information for the selected print file

2.2.2 Select the preview image and then right click on it, a menu list will pop up as below:



2.2.3 Opening the task list



Serial	Name	Functional Description
1	Start Printing	Execute Print
2	Deletion of	Remove from print job list
3	Waiting to	Add the current job to the pending
4	Cancellation of mandates	Cancel Printing or Cancel Waiting for Printing Status
5	Move to the	Move the selected task to the top of
6	Upward shift	Move the print job one place forward
7	Downward	Move the print job back one place
8	Move to the	Move the selected task to the end of
9	Empty the	Empties all jobs from the print job
10	Open Catalog	Open the folder where the print file

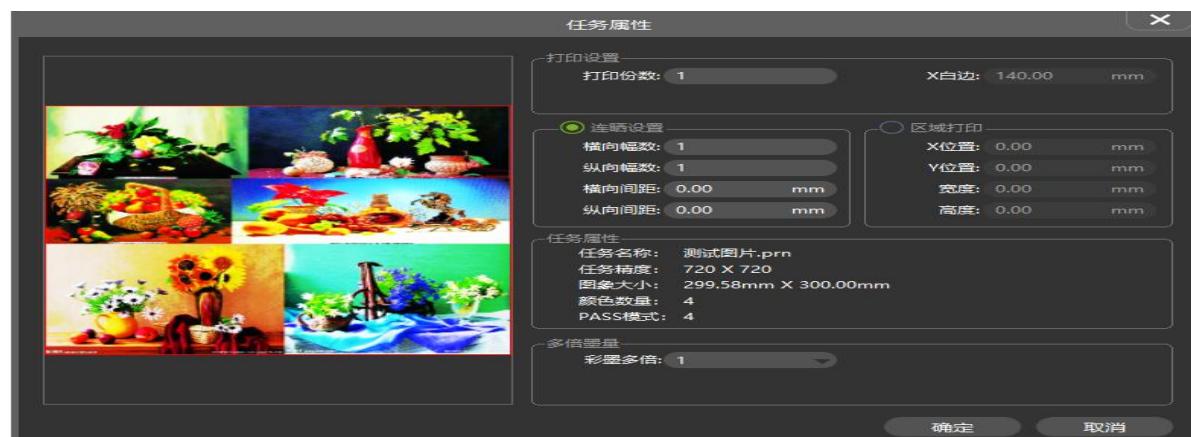
2.2.4 Historical task list



Serial	Name	Functional Description
1	Add Printing	Adding a job to the print job list
2	Print Now	Add a job to the print job
3	Deletion of tasks	Removing a job from the
4	Empty the list	Clears all jobs from the history print list
5	Open Catalog	Open the folder where the

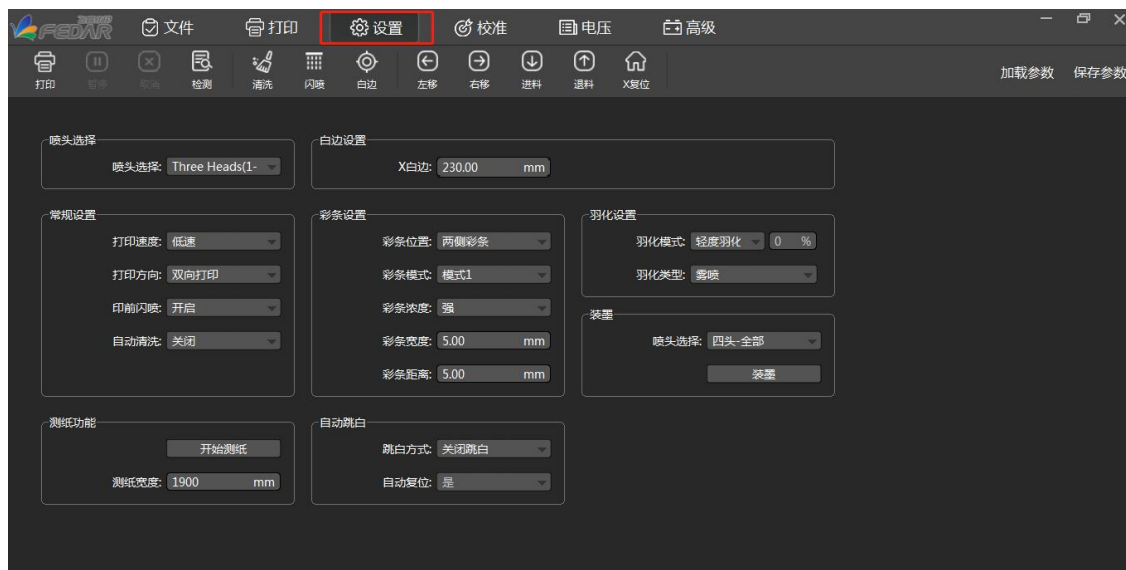
2.2.5 Task attributes

Double-click the print job list of a task that is to enter the task of the task properties window, you can choose to print and regional printing settings, the following chart:



2.3 Print Settings

Click Settings in the menu bar to enter the Settings interface, as shown in the following figure:

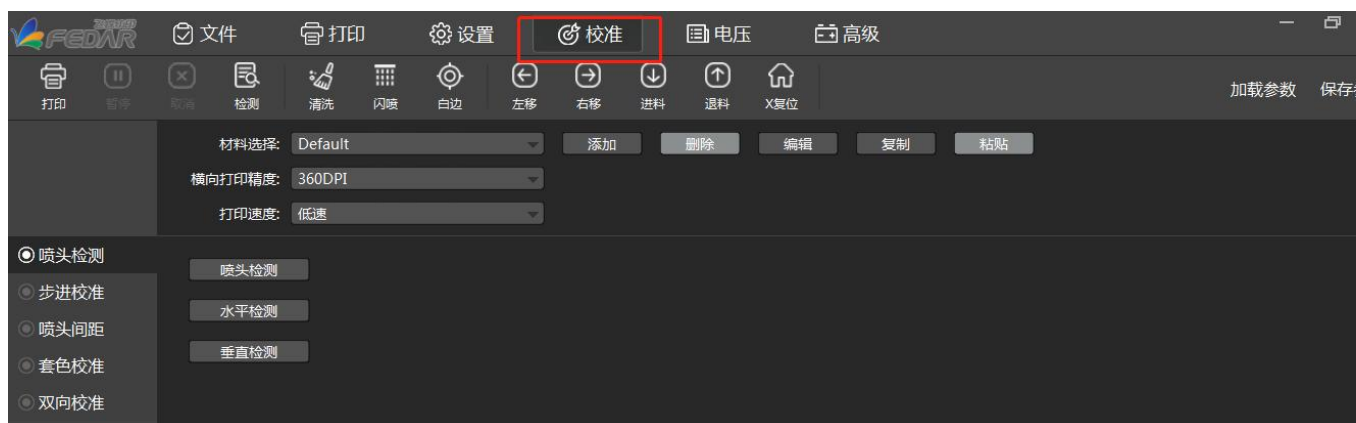


Serial number	Name	Functional Description	
1	Printhead Selection	Printhead selection settings are available for specific models.	
2	X-white border	Setting the start position for printing	
3	General Settings	Printing speed	Set the print speed to low, medium, and high speeds
		Print Direction	Set the print direction to left, right, and bi-directional printing.
		Prepress flash spray	Setting Prepress Flash On or Prepress Flash Off
		Automatic cleaning	Setting Auto Purge On or Auto Purge Off
4	Color Stripes Setting	Color Stripe Position	The position of the color bar can be set to the left side out of the color bar, the right side out of the color bar, both sides out of the color bar, off the color bar, respectively.
		Color bar pattern	Difference between the two color bar modes
		Color bar concentration	Weak, Medium and Strong color bar concentration can be set.
		Width of colored stripes	Width of the color bar
		Distance of	Blank spacing between the color bar and the

		Colored stripes	printed image
5	Feathering settings	Magnitude of Feathering	Feathering range selection
		Type of feathering	Feathering type selection
6	Ink Loading Function		Enable and disable ink loading function
7	Paper Measurement Function		Click on "Start Test" to test the width of the paper.
8	White-out function	Step by step white out	Enable whiteout, press PASS to go material when vertical whiteout is enabled
		Continuous white space	Enable whiteout, continuous material walking during vertical whiteout
		Turn off whiteout	Turn off white-out

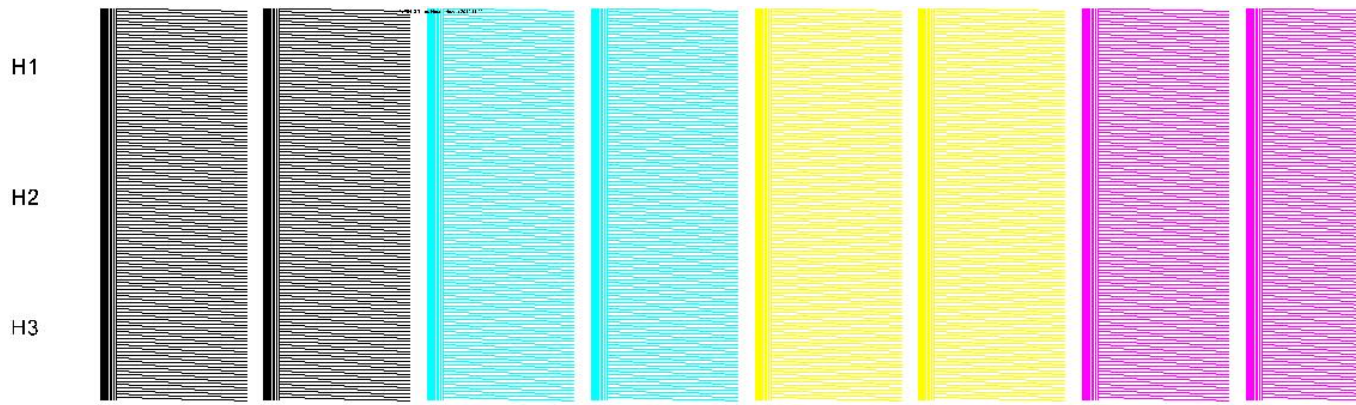
3. 校准(已有)

Click Calibrate in the menu bar to enter the calibration interface, and calibrate the printer according to the following process, as shown in the following figure:



3.1 喷头检测

Click **喷头检测**, the system will print out the nozzle to detect if the pattern is clogged and needs to be cleaned until the nozzle ink jet is optimized

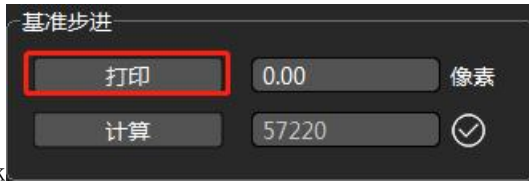


Click **垂直检测**, the system will print out the vertical detection pattern as shown below, the left figure needs to adjust the printhead until the right figure state.

The printer prints vertical inspection will have two directions to the left and right of the calibration map, must be aligned at the same time, if one direction is not aligned, you need to adjust the printhead base plate and the print platform parallelism.



3.2 步进校准



Click **打印** to check the value of the horizontal line alignment. As shown below: -4 is flush.

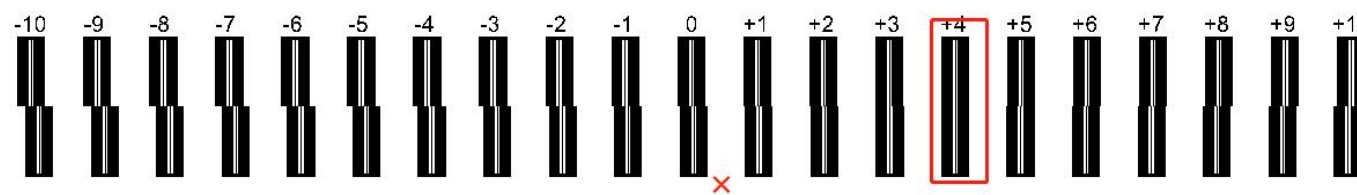
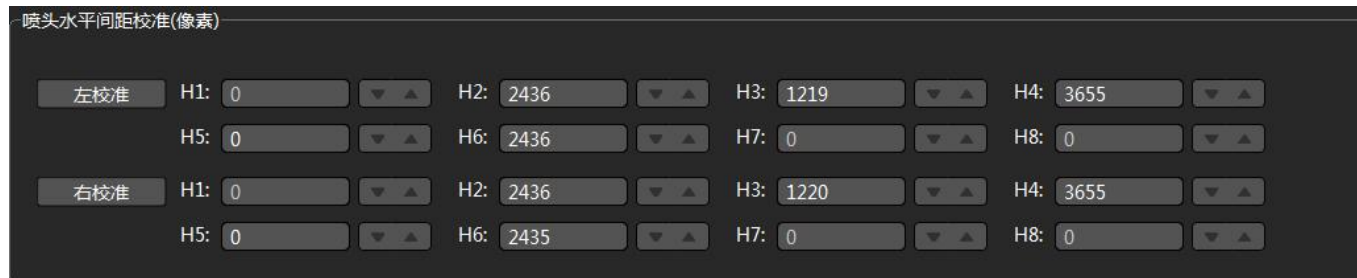


Then fill in -4, click **计算**, and print again until it's 0-aligned like below.

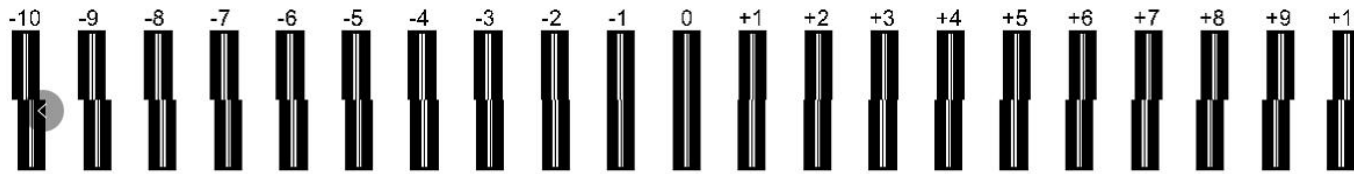


3.3 喷头间距

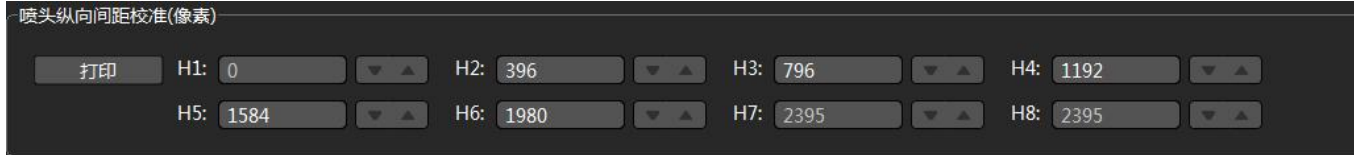
Click **左校准** or **右校准** to print the following figure:



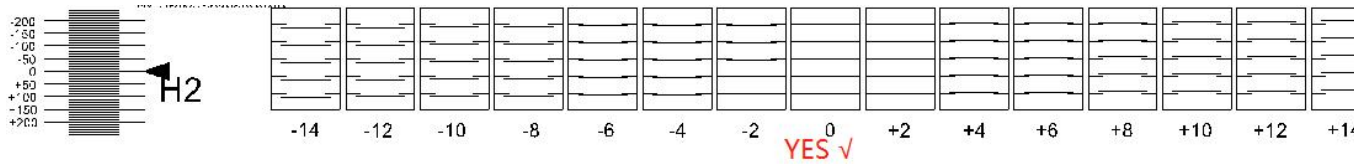
Find the corresponding printhead group, such as H2, and print the calibration chart as shown above +4 is more aligned, then H2 is changed from the original 2436 to 2440 until every printhead group is 0-aligned like the chart below.



The printheads are calibrated vertically, click Print as shown below:

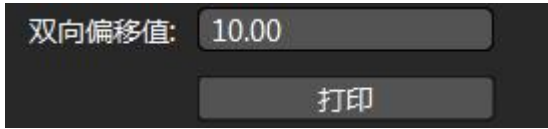


Find the corresponding printhead group, e.g. H2, and print the calibration chart if -2 is more aligned, then subtract 2 from the original value until every printhead group is 0-aligned like the chart below right.

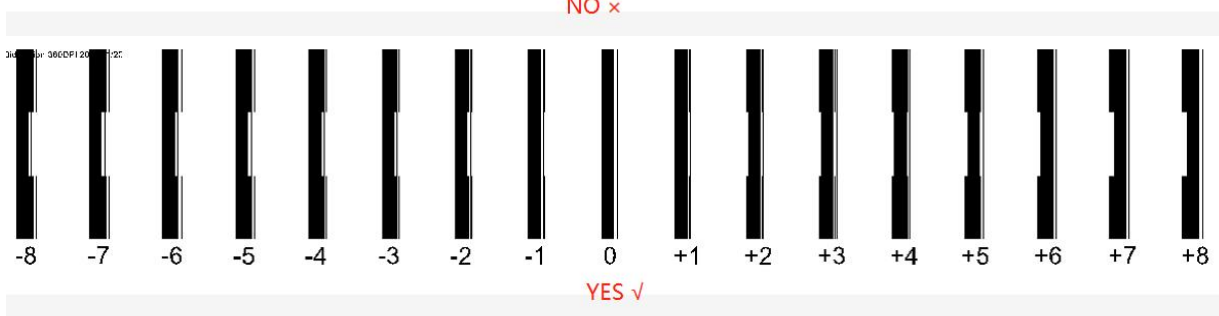
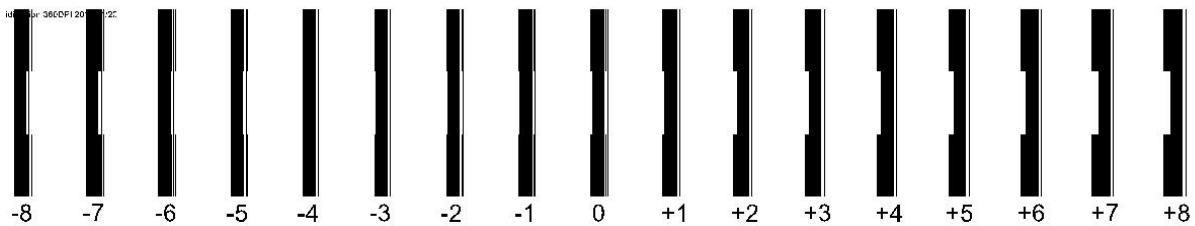


3.4 套色校准 This option is the default and does not need to be changed.

3.5 双向校准





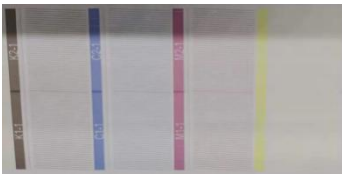

Click Print, the calibration chart is shown below -4 is more aligned, then subtract 4 from the bi-directional offset value until 0 is aligned.

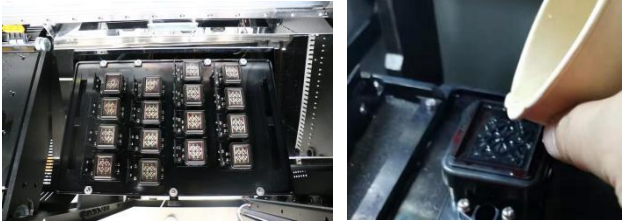




3.6 The calibration process is now complete, finally click Save Parameters.

Step 5: Care and Maintenance

routine maintenance

Cyclicity	Content of the project	Legend (of a map, etc)
Daily Inspection Program	Print Platform Check Check the printing platform for debris before starting the machine every day to prevent rubbing the printheads.	
	Stator inspection Also check whether there are debris adsorbed on the stator before starting the machine, to prevent scratching the stator movable when printing	
	Check that the nozzle is in good condition before production. If not please perform a cleaning.	
15-day inspection and maintenance program	Guideway Maintenance Wipe down the grease inside the accessory box and make sure the rails are well lubricated.	

	<p>ink-stack cleaning First of all, move the cart out of the ink stack position, open the ink pump test function, will be prepared water (water-based ink only) slowly pour into the ink stack for cleaning</p>	
	<p>Scraper Cleaning Clean with a damp towel or white cloth dipped in water (water-based ink only).</p>	
<p>3-month inspection and maintenance program</p>	<p>Grating cleaning If the environment is poor, it is recommended to clean it once a month. Clean up with a white cloth soaked in alcohol and wiped down</p>	
<p>1-year inspection program</p>	<p>Power Check</p>	<p>power cords and outlets for deterioration.</p>
<p>Prolonged non-working condition check</p>	<p>No work for a month It is recommended to perform cleaning once every two weeks</p> <p>Three months or more without work It is recommended that the ink circuit be emptied and the printheads be removed and cleaned and stored separately.</p>	

routine maintenance

Recommended replacement intervals for wear parts

	(machine) Filter	3-6 months	Depending on the ink consistency and formulation, the recommended replacement cycle will vary accordingly, and the replacement cycle will be shorter when using highly viscous and corrosive inks.
	Squeegee	6 months	
	Cartridge	6 months	
	Ink pipe	2 years	
	Ink pump	2 years	
	Damping roller friction shims	1 year	