Ricoh digital printing machine

operating instruction

This manual is applicable to users of Jianhua digital printer or technical engineers operating this machine;

Themanualisdesignedtoexplainthepreparationworkbeforeuse,installation and debugging, daily operation procedures for you and after-sales guidance; Before using the printer, please be familiar with the contents of this manual and focus on some chapters;

 Please observe the warnings and instructions noted on the printer;

Ifyouhaveanyquestions,pleaseconsultwithourtechnicalsupportdepartment.

Safety precautions

Theprecautionsshownhereareformulatedtoensurethatyoucanusetheproduct safely and correctly and to prevent harm and damage to you and others. These precautions are divided into three levels: "attention", "warning", "warning" and "danger". Either way is important related to security.

⚠	Attention:	In misoperation, there is a risk of injury and a risk of article breakage.
⚠	warn:	When misoperation, there isa riskof majorinjury andeven death.
⚠	nger:	Inastateofurgentdanger,thereisariskofseriousinjury or even death.

⚠ warn

1 People with sufficient knowledge and experience should use this product. Theproductoftheproductproductproductwillbymissafety.Theassembly, operation,repairandmaintenanceofthemechanicaldeviceshouldbecarried out by people with full knowledge and experience.

2 Be sure to confirm the safety of the mechanical equipment before using and disassembling the product.1. Please use and maintain the mechanical equipmentafterconfirmingthatthefallingpreventioncountermeasuresand runawaypreventioncountermeasureshavebeenimplemented.2.Pleaseconfirm theabove safetymeasuresand cutoffthe energysourceandequipmentpower supply to ensure the safety of the system, and at the same time, confirm andunderstandtheindividualattentiontotheproductsontheequipment.3. When you

restart the machinery and equipment, please take preventive measures for the accidental action and misoperation.

3When usedunder thefollowing conditions andcircumstances,pleaseconsult the company in advance while considering the safety countermeasures.

3-1.　Use in conditions or environments other than specified specifications, and in outdoor or direct sunlight places.

3-2.　The diction has a significant impact on people and property, especially when used in situations with safety requirements.

3-3.　When used for interlock loop, please set the mechanical protection function for double interlock. In addition, please check regularly to confirm the normal operation.

Catalogue

Chapter I Installation and commissioning of equipment

1. handling and transportation

* Basic data of the machine: long:; wide:; high:

* The machine arrives at the customer site, needs a professionalforkliftorcrane to place the machine in a designated place, the machine mustbeplacedin a flat place.

* When the equipment is operated during lifting, it shall be liftedtogetherwith the wooden board of the machine base, so as to avoid the deformationanddamage of the equipment squeezed by external forces.

2. Acceptance of goods

* Check the outer packing box for damage.

* After the equipment is hoisted in place and placed, open theboxtocheckwhether the machine is normal.

* Remove the fixfixused to fix X and Y axis.

* Confirm whether the random accessories are complete, and sign theacceptanceform.

3. Machine working environment

* Working environment requirements: clean, low dust, goodventilationconditions, no direct sunlight, no vibration and shock place.

* Ambient temperature: 20℃ - -30℃

* Ambient humidity: RH 65% -85% without condensation.

* Power supply requirement: 220V 50HZ.

* The machine input powersupplymustbe strictly grounded and the test leakage voltage is less than5V.When there is a surge equipment (electromagnetic lift high perwaveinductionfurnace motor, etc.) near the equipment, it may cause deteriorationordamageof the internal circuit elements of the equipment. Therefore, pleaseconsiderthe countermeasures of source surge while avoiding the mixedtouchoftheline.· Do not use the load with a surge

4. testing of equipment 4.1 Horizontal ness of whole machine

* Check the level of the elliptical table with a level instrumentandconfirmthat all tables are basically horizontal in digital position andwithheighterror within 0.2mm.

* Mechanical connect the digital machine to the elliptical machine.

* Adjust the pad to keep the machine level and lock the pad nut

4.2 Connect of compressed air

* Requirements for compressed air: pressure of 0.3 KG / cm 2-0.5KG/cm2Cleananddry.

4.3 Connect of the input power supply

Power consumption conditions on the customer site: continuous andstable 220V industrial power consumption requirements, and install an independentandreliable ground wire, the machine shell static electricity islessthan3V.Ground wire installation requirements: at least deep into the wetlandbetween0.5M and 1M in the ground part of the ground wire. If not groundedwirewillhave a great impact on the card and nozzle. In any case of mechanicalmotionsituation, the ground wire can export an abnormal voltage. It hasaverygoodprotection effect on the circuit equipment.

4.4 Power-on test

After confirming the input power is connected correctly, testthefollowingfunctions:

* The boot initialization motion is normal.

* X / Y / Z was manually moved normally.

* The anti-collision function of the car is normal

* The negative / positive pressure values are normal

* Empty machine is normal

* Recheck all the panel height to the trolley floor height

* Add ink to the ink bucket to confirm whether the ink supplyisnormal.

* Spithead installation

The second chapter introduces the machine structure

1. Appearance
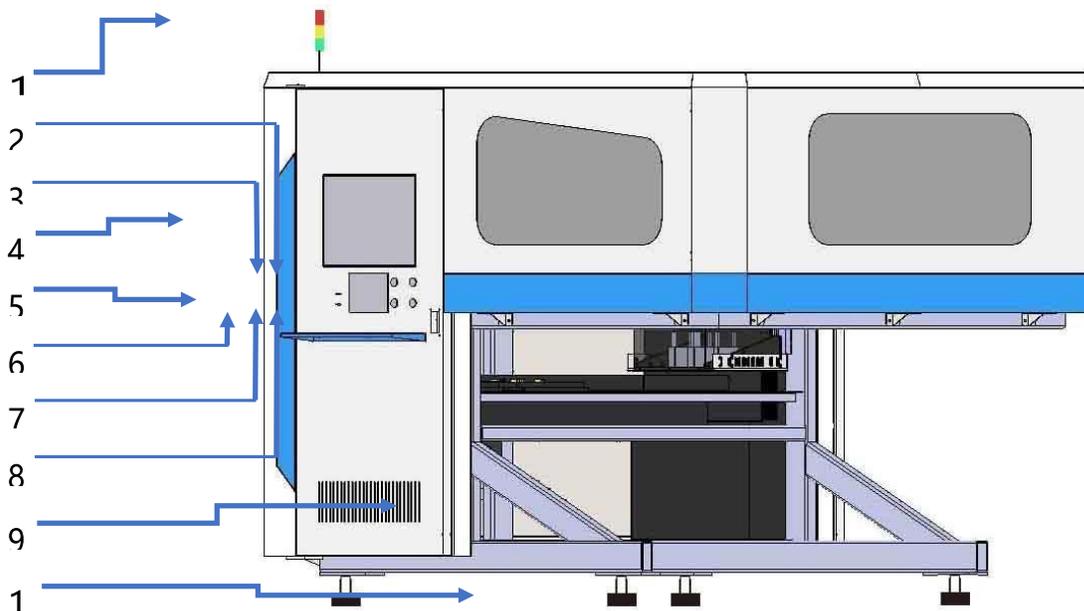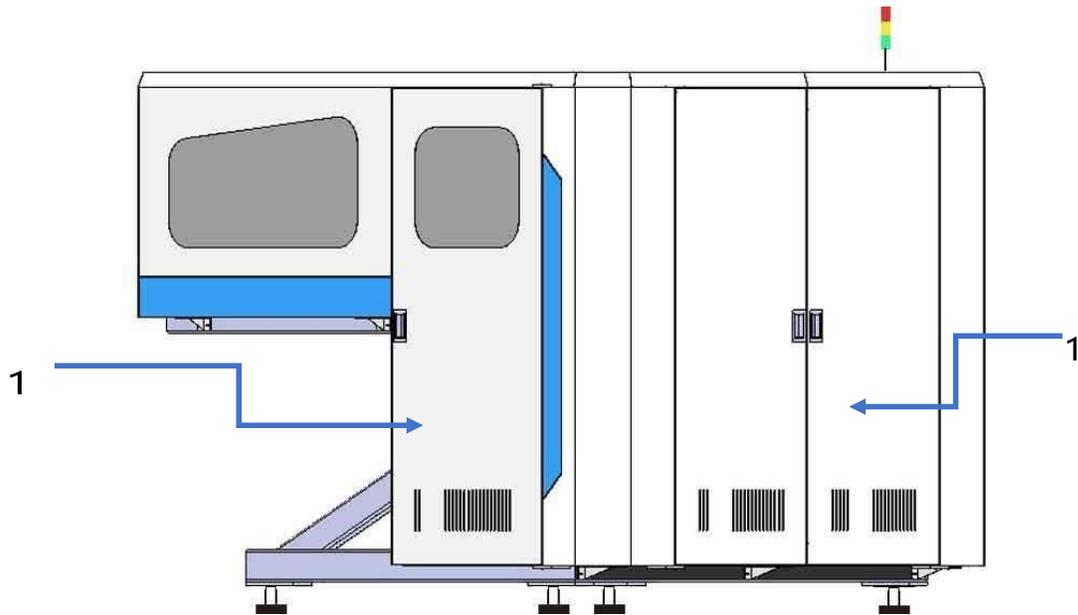
Serial number	Name	Serial number	Name
1	Three-color indicator light	9	Rack
2	Emergency stop button	10	Adjusting foot cups
3	Start button	11	Ink bin
4	Computer monitor	12	Main electric box
5	USB expansion jack		
6	Touch screen		
7	Lighting switch		

8	Computer start button		

2. the main structural components of the machine
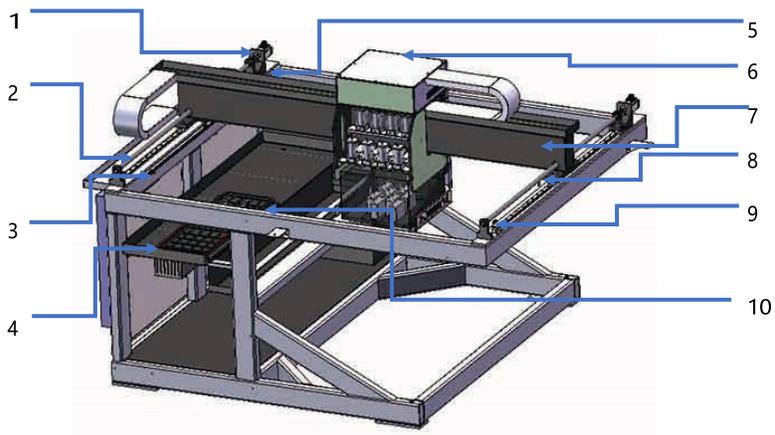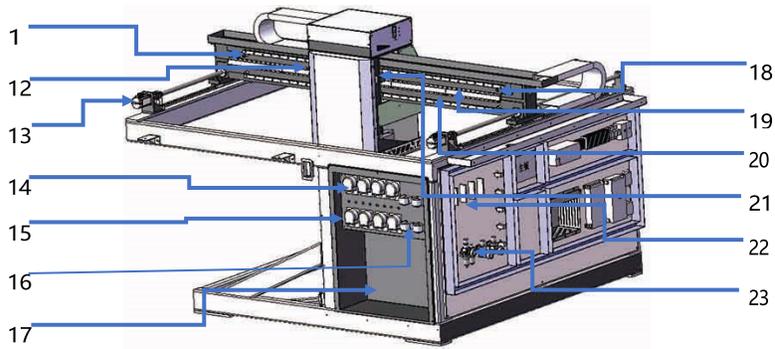
Serial number	Name	Serial number	Name
1	Y1 axis servo motor	13	Y2 axis servo motor
2	Y1 shaft lead rod	14	Ink feed peristaltic pump
3	Y1 Origin sensor	15	Circulating peristaltic pump
4	Clean the ink scraping tray	16	Sac filter
5	Y1 post limit	17	Ink bin
6	Buggy	18	X origin
7	Beam	19	Magnetic grid
8	Y2 shaft lead rod	20	Linear motor stator
9	Y2 Origin sensor	21	Linear electromotor
10	Moisturizing dish	22	Deaerated lung
11	X-axis right origin	23	Pressure regulating valve

12	Magnetic grid reading head		

3. the front part

1

5

2

3

4

10

1

7

8

9

12
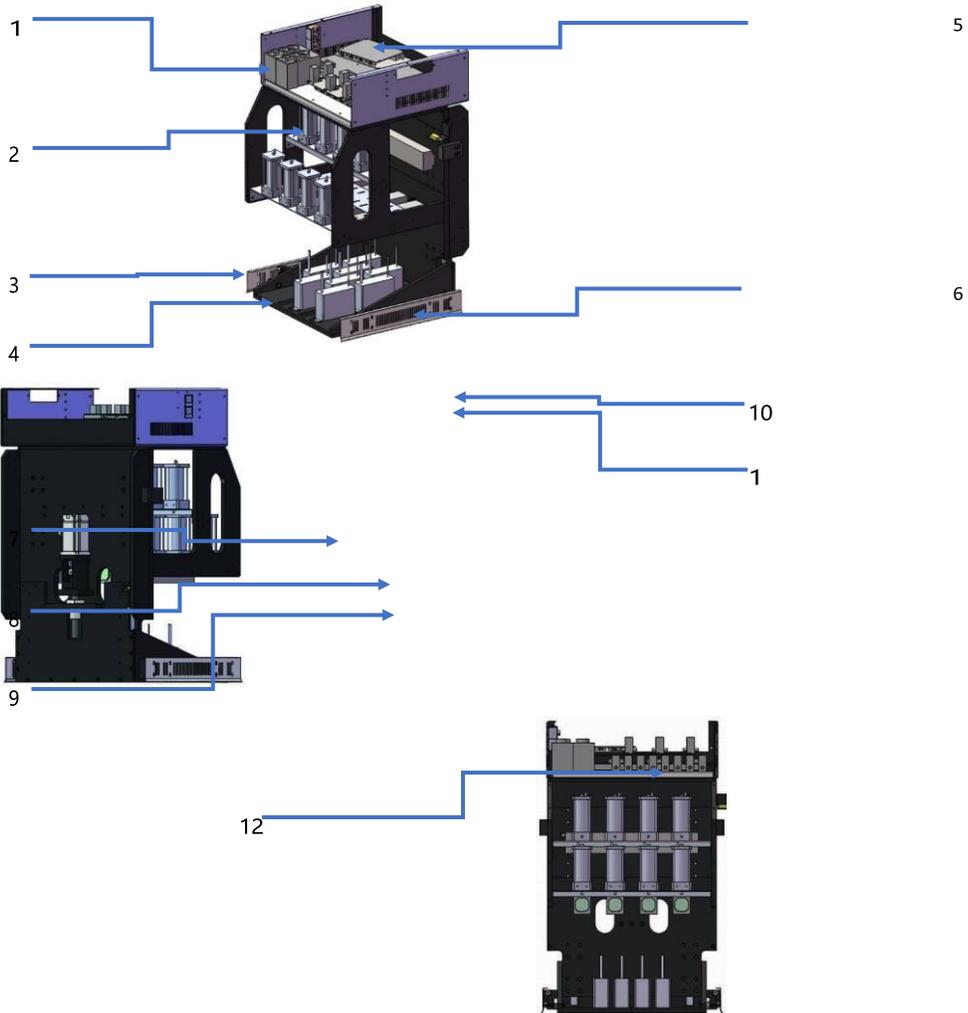
Serial number	Name	Serial number	Name	
1	Main collection gas cylinder	7	Z-axis motor	

2	Secondary ink bottle	8	Z-axis origin sensor
3	Left collision avoidance	9	Z-axis lower limit
4	Sprinkler base plate	10	Collecting cylinder pressure gauge
5	Front plate	11	Degassing pressure gauge
6	Right collision avoidance	12	Ink pressure solenoid valve

4. single color ink circuit connection diagram
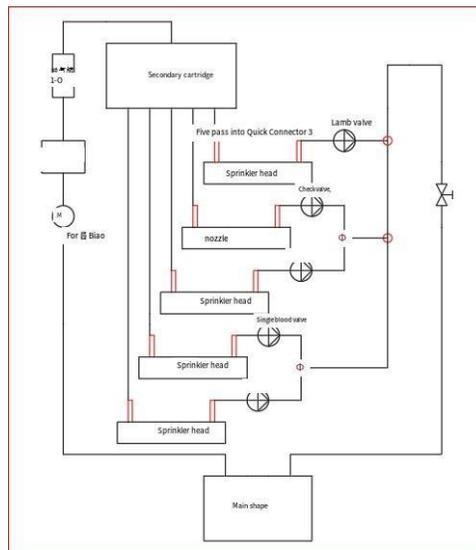
5. Schematic diagram of gas path connection
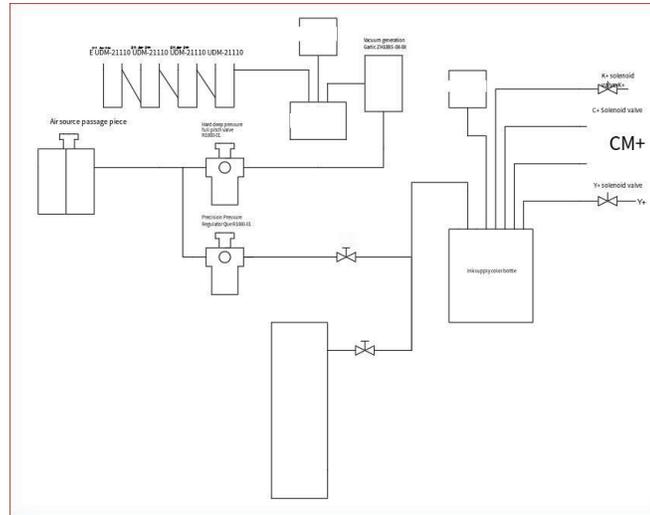
Chapter Three: Operation of the machine

The operation of the machine is divided into two parts: touch screen control and printing software.

∗ Touch screen control is responsible for auxiliary functions of peripheral equipment, gas path and ink path control, moisturizing maintenance of sprinkler head, and signal cross-start of elliptical machine.

∗ Printing software operation: X, Y, Z axis movement, print position setting, task selection, print parameter setting.Calibration of machine parameters.

3.1 Startup process

Power on the	→	Turn on the machine power	→	Turn on the computer power

Touchscreen operation for nozzle start-up, maintenance, and inspection	←	Start the printing software

Machine ready for production
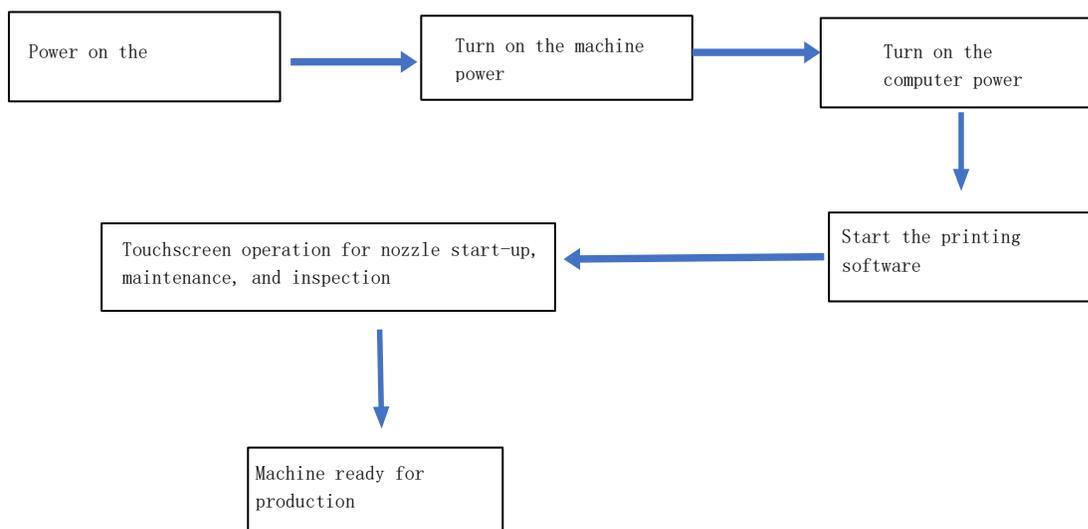
3.1 Starting the machine X, Y, Z axis operation process

Connect the machine power supply		The car returns to its original position.		The car has reached its maximum capacity.

XY The axis senses the origin sensor.

XY The axis moves first towards the endpoint.

When the sensor just moves away from the sensor's sensing position, the return to the origin is complete.

Y//X back to

XY The axis did not sense the origin sensor.

XY The axis first moves towards the origin and senses

The sensor then moves in the opposite direction until it is just away from the original sensor position, and then returns to the original position to complete the process.

3.2 Touch screen operation instructions

∗ Initial screen of startup: Select Chinese and English language on this page.

DongguarKINWAH MachineryCo.,LTD

English   Chinese

* Sprinkler maintenance page:
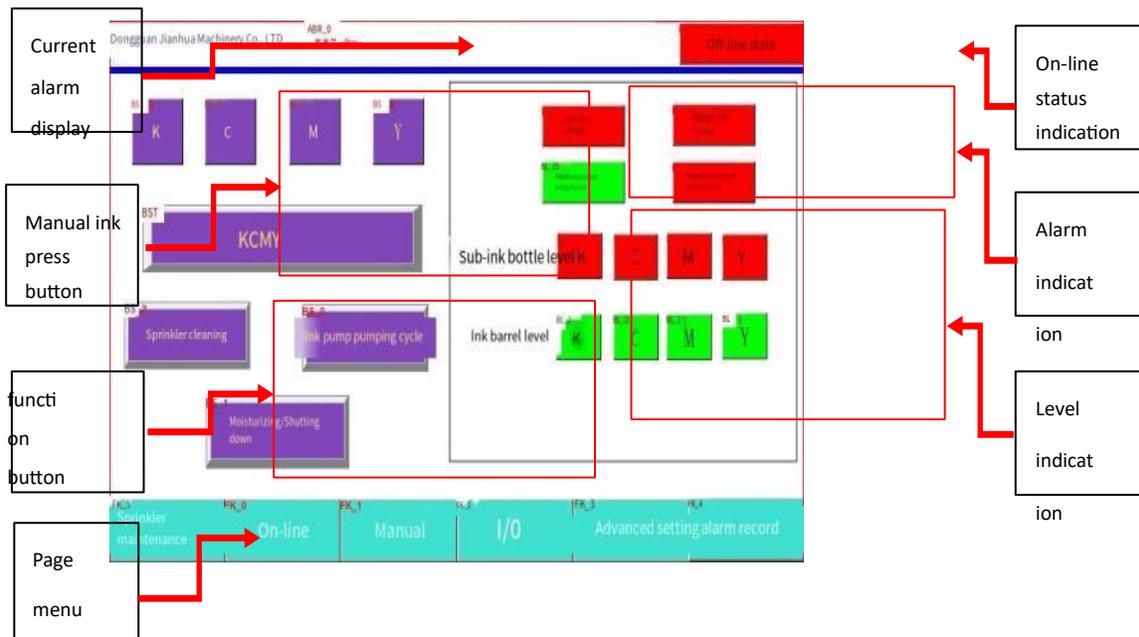
Current alarm display: Displays the current alarm information.

Manual ink press button:

K: Black inking button, press and hold the inking, release the inking end.

C: Cyan press button, press press ink, release the press ink end.

M: Red press ink button, press press ink, release ink end.

Y: Yellow press ink button, press press ink, release ink end.

KCMY: All color press ink button, press press ink, release the press ink end.

Function button:

Nozzle cleaning: Click on the nozzle to perform a cleaning cycle.The cleaning process is as follows:

```
┌──────────────┐   back to square   ┌─────────────────────────────┐
│ Tap nozzle   │   one              │ Positive and negative       │
│ cleaning     │ ─────────────────▶ │ pressure switching solenoid │
└──────────────┘                    │ valve to positive pressure  │
                                    └─────────────────────────────┘
                                                  │
                                                  ▼
┌──────────┐      move backw     ┌──────────┐   ┌──────────────┐
│ move     │      ards           │ Scraping │   │ cart descends│
│ forward  │                     │ finish   │◀──│ to scraping  │
└──────────┘                     └──────────┘   │ level        │
     │                                          └──────────────┘
     ▼
┌───────────────────┐   move up      ┌──────────────┐
│ go back to the    │                │ The dolly    │
│ origin in the Y   │ ─────────────▶ │ goes         │
│ direction         │                └──────────────┘
└───────────────────┘
```
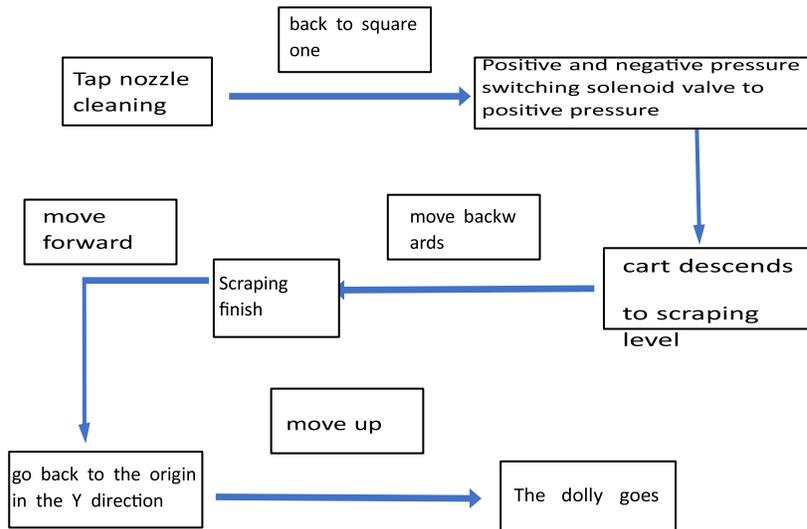
Ink pump pumping cycle: Click on the back ink pump for a cycle pumping cycle. Moisturizing shutdown: Long press the machine for 3 seconds to moisturize and shut down the head of the machine.

Online status indicator: display the online status of digital machine and elliptical machine.

Alarm indication signal: display collecting cylinder, waste ink bottle, air pressure status.Green for normal, red

For abnormal.

Level indication: Shows the level status of each color of ink in each bottle.

* Online page:

Print parameters

Product thickness :###.#   MM

BS_5
Move to print height

Current height :#.#   MM

Main liquid level

Ink level

Production output: 0.2 ###########   PCS

BS_0
clear

BS_4
Single-machine mode

K   C   M   Y

K   C   M   Y
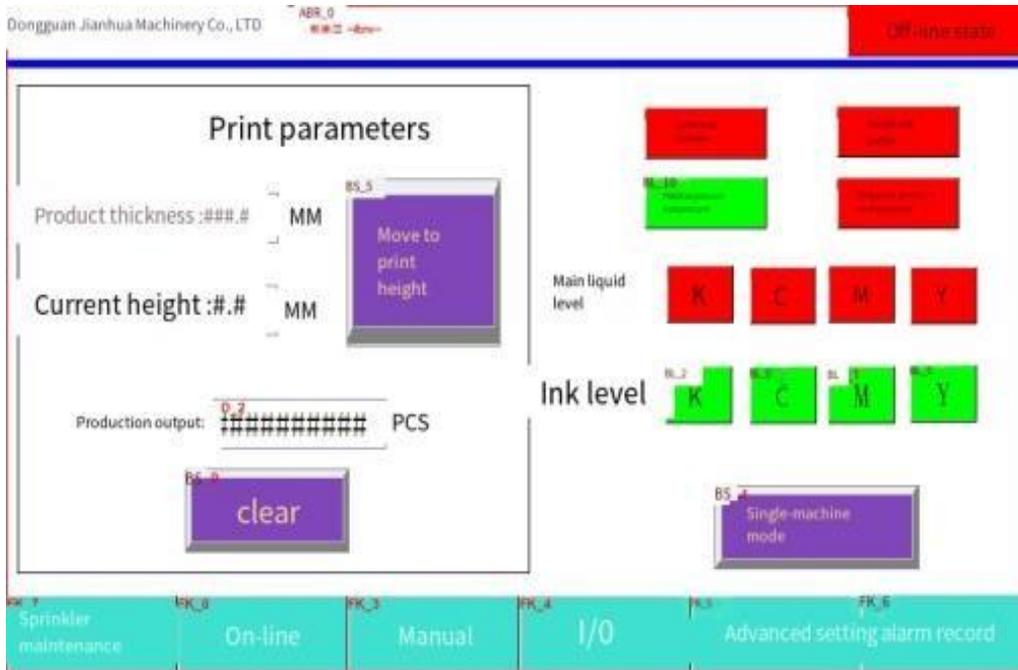
Product thickness: thickness of the material medium

Move to print height: Move the cart to print height.This height is calculated according to the thickness of the product

So please enter the correct product thickness value. Production volume: Displays the total quantity currently produced. Single machine/Online mode: Click to switch the online single machine state
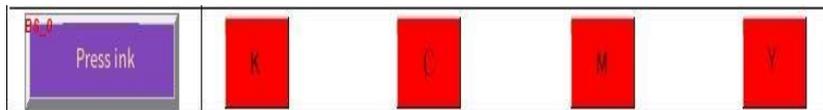
＊ Manual ink circuit maintenance:

Nozzle cleaning: After clicking the nozzle automatically performs a cleaning process.

Press ink time: Set the press ink time when the nozzle is cleaning.

Press ink:

Select the color of ink to be pressed through the four buttons K, C, M and

Y. Click the button to press the ink and then press the ink Mandatory ink supply:
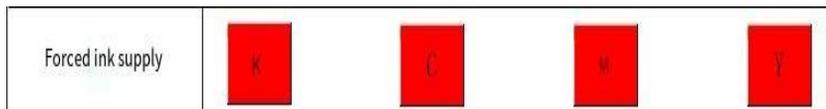
Four buttons K, C, M and Y can be used to switch the forced ink supply of different colors. Once this button is selected, the ink pump will always work, which is not protected by the liquid level sensor.To manually click on the switch, switch off.Pay attention to the overflow of ink when using.

Mandatory closing of ink supply:
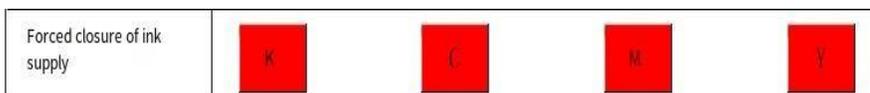
Switch off the ink supply function of the ink pump with different colors through the four buttons K, C, M and Y.The green color indicates the open state of the function, and the red color indicates the closed state of the function.

Mo-road selection:
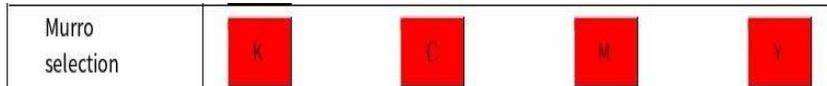
The four buttons K, C, M and Y switch on and off the ink path of each color respectively.The green color indicates that the function is on, and the red color indicates that the function is off.Switch it on here only Other button operations of the corresponding color will take effect when switched on

Emptying options:
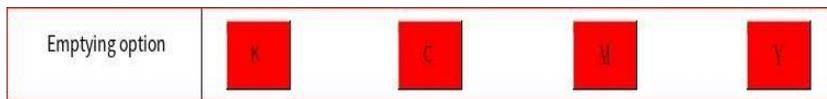
Switch the discharge solenoid valve of different colors through K, C, M, Y four buttons.The green color indicates the open state of the solenoid valve, and the red color indicates the closed state of the function.

∗   Input signal monitoring page: Light on indicates signal input, dark indicates no signal input.
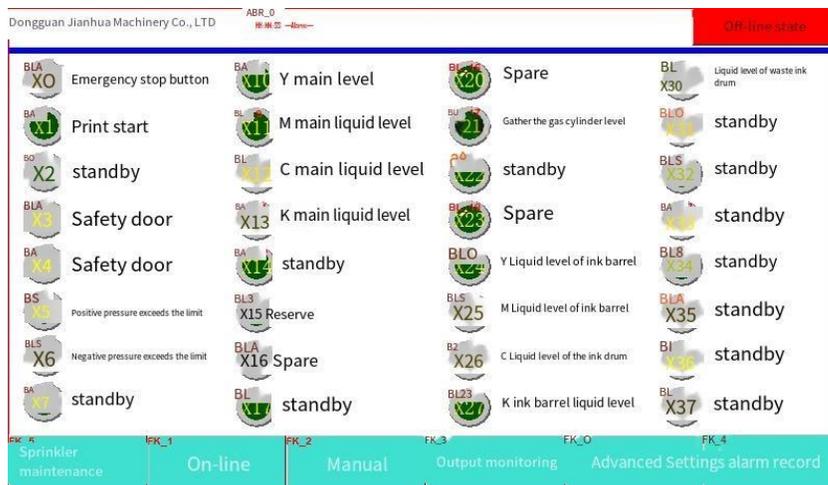
∗   [Sprinkler maintenance] [On-line] [Manual] [Output monitoring] [Advanced Settings alarm record] icates no signal output.

Dongguan Jianhua Machinery Co., LTD   ABR_0 : —   Off-line state

BLOY0 standby	BLOY10 K main solenoid valve	BA 20 Standby	BL Y30 standby
BL Y1 On line	BLOY11 Y Drain the solenoid valve	BA standby	BLC Y31 standby
Be Y2 Print complete	Y12 M Drain solenoid valve	BAY22 Reserve	BLe Y32 standby
BLe Y3 Printer exception	B Selections of13 C Empty the solenoid valve	Y23Y Ink pump	BO Y33 Red alarm light
BL Y4 Moisturizing shutdown	BLA2 Y14 K Empty the solenoid valve	BIY24M ink pump	BLeR Y34 Yellow alarm light
Y5Y main solenoid valve	BA Y15) negative pressure solenoid valve	Bo Y25 C ink pump	BL Y35 Green alarm light
BLO Y6 M Main solenoid valve	BLA Y16 Positive pressure solenoid valve	BA Y26K ink pump	BLOY36 Buzzer
BL Y7 C Main solenoid valve	BLIE Y17 Main pressure relief solenoid valve	BY27 Standby	BLOY37 Stir

FKS Sprinkler maintenance | FK_1 On-line | FK_2 Manual | FK_3 Input monitor | FK_0 Advanced Settings | FK_4 Alarm record

∗ Advanced setting password input page: this page is to enter the machine parameter setting page and language switching function.If you need to set machine parameters, please contact the maintenance personnel of the company

Dongguan Jianhua Machinery Co., LTD   ABR_0   Off-line state

Password   NI_O
           ####

BL_0
Password entered incorrectly

determine

FK_3
Language

FK_6 Sprinkler maintenance | FK_2 On-line | FK_0 Manual | FK_4 I/O | FK_1 Advanced Settings | FK_5 Alarm log
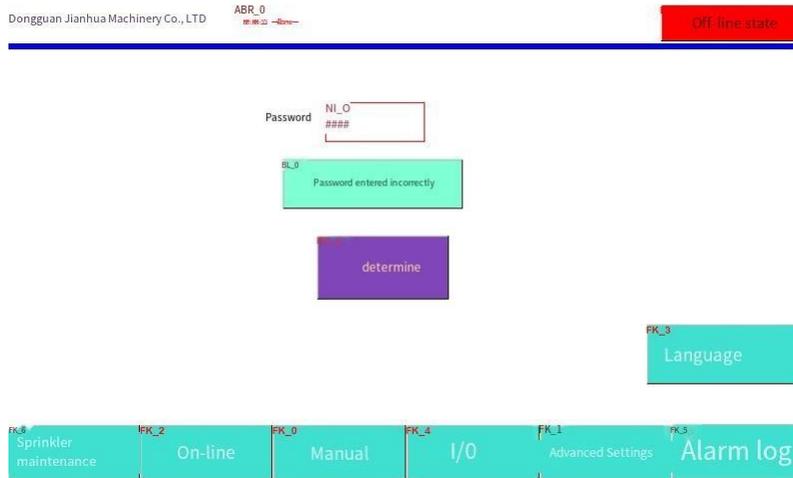
∗ Query page of historical alarm records: This page is used to display the historical records of past alarms.

Dongguan Jianhua Machinery Co., LTD   ABR_0
                                        E   Off-line state

ADP O
HH:MM:SS ---Alarm--

FK_5	FK_1	FK_2	FK_3	FK_0	FK_4
Sprinkler maintenance	On-line	Manual	I/O	Advanced Settings	Alarm log

Chapter 4 Software operation manual

Double click "on the computer desktop.▨▨▨"Icon to open the software.The main interface of the software is displayed.

4.1 Home Screen

menu

ToolBar

Quick Settings bar

Preview bar

status bar

main menu
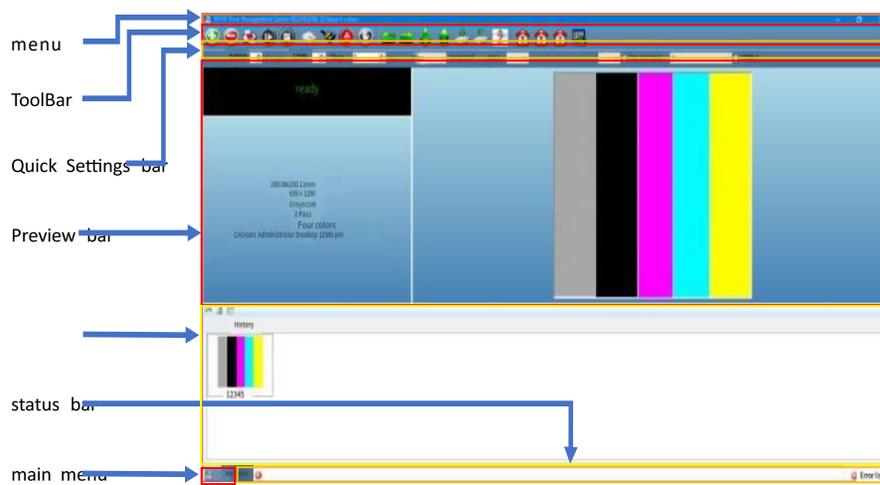
4.2 Menu Bar: Software function information

4.3 Toolbar

| Graphic symbols	Features	Graphic symbols	Features
Add job	Dolly move forward
Delete job	Dolly move backwards
Print job	Dolly moving down
Pause/continue	Dolly move up

Terminating the job	Invalid function
Check the nozzle	X-axis back to the origin
Cleaning	Y-axis back to origin
Flash jet	Z-axis back to origin
Stop	Edit homework
Dolly move to the left	

one	The dolly moves to the right		

4.4 Quick Settings bar

      *X Origin: Print the starting point in the X direction.The distance from the cart origin position to the left edge (or color bar) of the picture.
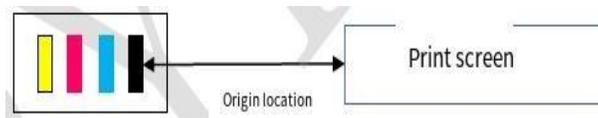
*Y origin: Print the Y direction starting point,.The distance from the cart origin position to the front edge of the picture.

∗   Step: Smile compensation for the steps taken with each PASS, step right overlap when printing, step value should be increased, if there is a missing white, step value should be reduced.

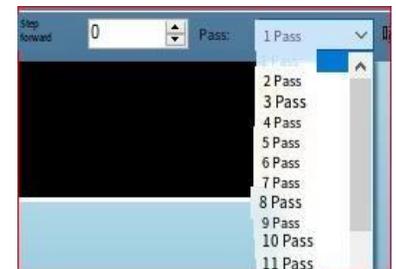 *Pass: The number of times the step is overwritten when printing.Click on the toolbar

 The PASS drop down arrow will select the number of passes to print,

      Please confirm the PASS number before selecting it

      Whether the selected PASS number meets the printing screen accuracy requirements

∗   Spray car speed: when printing the car speed selection, right high, middle and low three gear selection.

∗   Starting printing direction: There are two options: forward and reverse.

∗   Bidirectional: When printing, use the option of single direction printing or bidirectional printing. The check is bidirectional, and the uncheck is unidirectional.

*Y back to origin: After checked, the Y-axis will return to the origin position after the task is printed.

4.5 Preview bar

The preview bar is mainly divided into three parts: system status, job

information and job preview.
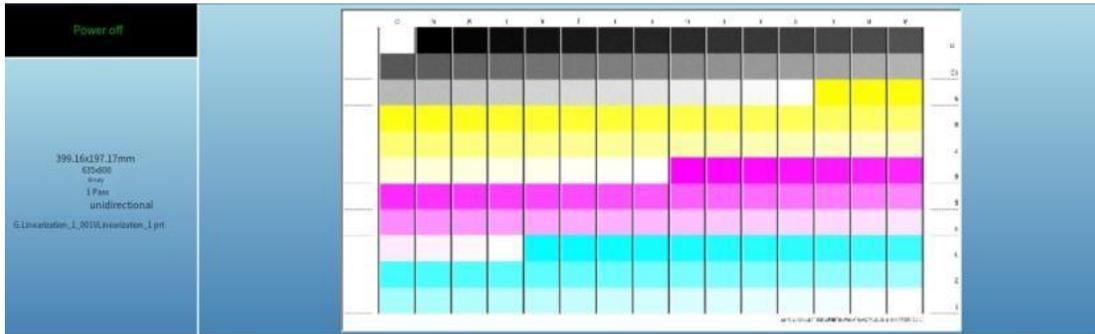
System status: Displays an overview of the current machine.

Job Information: Information about the job will be displayed as listed below.

∗ Job size

∗ Job resolution

∗ Job accuracy

∗ Job PASS number

∗ Job print direction

∗ Job path and job name

Job Preview: Displays a preview of the job picture and an overview of the job progress.

4.6 Task Bar
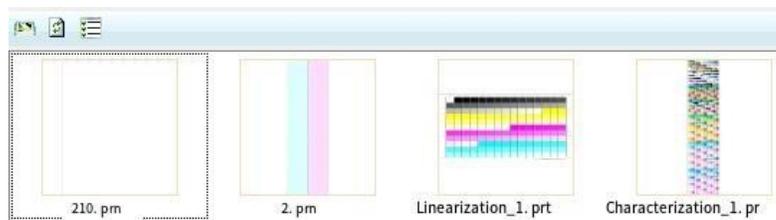
The taskbar consists of a task button and a task selection bar, each of which is described below

Taskbar buttons:

 : Select the path to the folder where the job is located.

 : Refreshes the list of jobs in your current directory.

 : Select all jobs.

Task selection bar:

Right-click after selecting one or more jobs in the print list to bring up the following menu.

* Add Job: Add other jobs

* Delete job: Delete the selected job
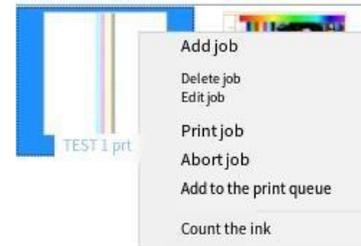
* Edit job: Edit the selected job

* Print job: Print the selected job * Abort Job: Terminates the current print

job and lights this option when the job is printing

* Add to Print Queue: Add to print job list

Ink Count: Count the use of each ink for the current job.

4.7 Status Bar

The status bar is used to display detailed information about the current status of the system, as shown in the figure above.Usually errors, warnings, or other status are displayed there in real time.
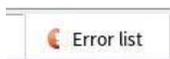
 : Click this button to expand the related errors, warnings and other details of the current system.

4.8 Main Menu

Click the main menu button and the menu will pop up as shown in the figure below. Setting, tools, Help and other setting items will be introduced one by one in the following sections.

4.8.1   Help

Selecting Help from the main menu will bring up the About Settings item, as shown in the picture on the right.

After clicking on About to enter, the version of the entire system and related copyright information will pop up.

4.8.2 Tools

Selecting Tools from the main menu will bring up the Tools Settings item, as shown in the image below.

After entering the tool Settings, the Settings include upgrade, password, test page, Calibration Wizard, hardware Settings, real-time Settings curve, realtime Settings, UV Settings, automatic stop after ink pump timeout and print records.
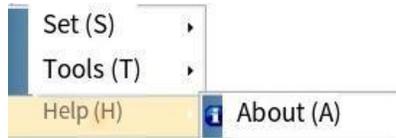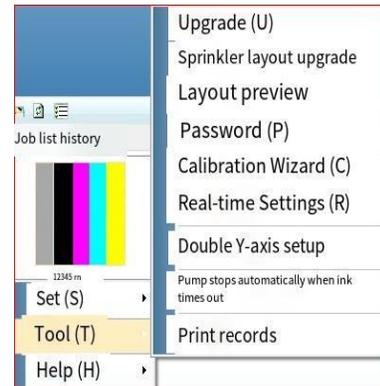

∗　Upgrade: The firmware program used to upgrade the system

∗　Sprinkler head Layout upgrade: Used to upgrade sprinkler head layout

Settings

∗　Layout preview: Browse the nozzle arrangement position relationship
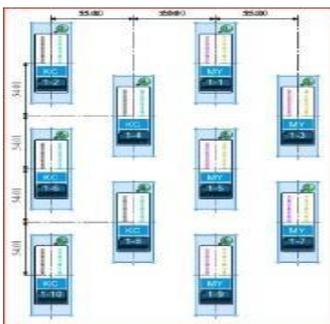
∗　Password: Used to set the system's installment password and language password and limit ink usage password, etc.

∗　Calibration Wizard: Click the Calibration wizard to start calibration

∗　Real-time setting: setting items related to sprinkler voltage.

Set the temperature: the nozzle sets the heating temperature

Nozzle temperature: the current temperature of the nozzle

Correction voltage: Set the correction voltage of the sprinkler head, which can be set separately for each row of nozzles

Current reference voltage: The current reference voltage is the waveform voltage.

Sprinkler voltage: the actual voltage of the current sprinkler head.
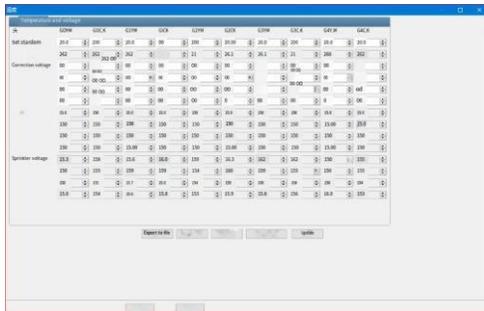
* Double Y setting: Do not change

* Automatic stop of ink pump after timeout: this function is not available

* Print Record: A history of printing.

4.8.3 Settings

When the Settings in the main menu are suspended, the Settings item will pop up, as shown on the right.

* Save: Used to save the relevant configuration parameters

* Load: Used to load related configuration parameters

* Store Settings to printer: Used to save related configuration parameters

 * Load Settings from printer: Due to load related configuration parameters

* Waveform import and Export: Replace the download waveform file

* Edit: Click the Edit button to enter the setting menu, which has the same function as the Enter Setting menu button on the toolbar.

 * Layout Settings:

  Do not change Settings
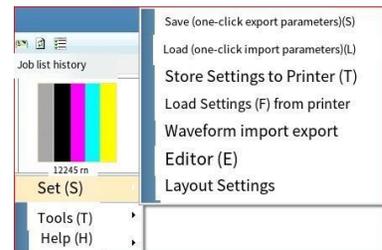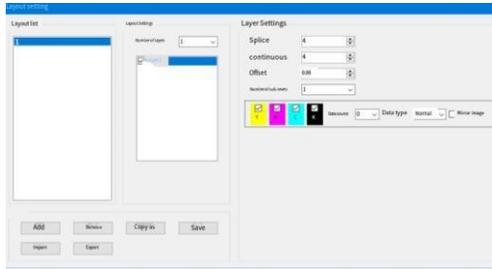
4.8.4 Settings Menu

As mentioned above, this can be accessed via the Enter Settings Menu button on the toolbar and the Edit button on Settings in the main menu bar. After entering, as shown in the picture below, there are four pages of printer, Mobile, Personality Settings, Calibration, white

Ink and Service, which will be introduced one by one below.

4.8.4.1 Printers

Print Settings

* Auto Skip White: Automatically skips the white area on the graph and does not print.

*Y Continuous printing: Defines whether the Y-axis is continuous or reprints back to the Y-axis origin.

* White Jump time: Increases the time of X-axis movement during white jump,

Conducive to the drying of ink and paper on the medium.

* Job spacing: The distance between two jobs.

* Feather type: The type used to set feather

✳ Feathering: Used to set the size setting for feathering, feathering is mainly used to retouch the printing medium step belt

The stripes, improve the print quality.

✳ Fine feathering: Choose the internal default feathering method.

✳ Constant stepping: After using feathering, step the same distance for each step.

✳ A White Jump: The way to jump white

✳ Amount of ink: Used to control the amount of ink.

Medium

*X: X minimum print starting position

✳ Width: The maximum width the machine can print.

*Y: Y Minimum print starting position

✳ Paper length: The maximum length the machine can print.

medium		
X	0.0	
Width	610.0	
Y	0.0	
纸长	1300.0	

Print direction

Mirror printing: Mirror the picture in the X-axis direction.

Reverse printing: Printing from back to front in the Y-axis direction of the

machine

Print direction
☐ Mirror print
☐ Reverse printing

Flash jet setting

✳ Automatic Flash Spray: Print how many passes after returning to the origin automatic flash spray

✳ Flash Period: Frequency setting when idle flash jet, in units millisecond

✳ Prepress flash duration: Flash at a specific frequency before the start

of printing, for the time setting

Flash setting		
Automatic flash spray	0	
闪喷周期	400	
Prepress flash duration	1.50	
Return idle flash spray		
Flash spray back before printing		

✳ Idle flash spray: Flash spray when idle.

✳ Flash spray before printing: Start flashing spray before printing.

✳ Idle flash spray applies strong spray parameter: Use strong flash spray when idle

✳ Flash spray for moisturizing position: Flash spray while moisturizing.

Color bar Settings

* Distance: The distance of the color bar from   the picture.

* Width: The width of the color bar.

* The position of the color bars: (sides, left, right, none).

* Ink percentage: Sets the size of the ink amount of the color bar.

* Normal: Various color track printing.

* Color Overlap: Color overlap printing.

* Same height as the image: The color bar is the same height as the picture.

* Ink test bar: Color bars do not stack.

* Mechanical color bar: When the color bar position is set to the left, the color bar is fixed to print in the X direction zero position Z move:
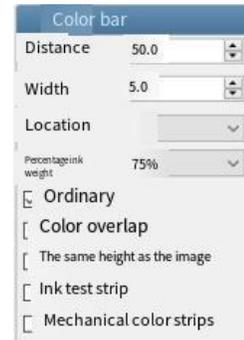
This parameter setting is invalid, the print height setting is set by the touch screen

Manual flash jet Settings:

* Frequency: flash spray frequency

* Period: time between flash and spray
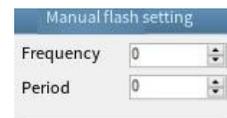
Drying Settings:

Without this function, no setting is required.
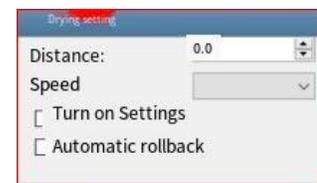
Misc

* Fixed color sequence:

* Pixel Step: Pixel step if checked, scan print if unchecked * No step after calibration:

*X Div:

* Platform distance: the distance of the nozzle from the edge of the platform
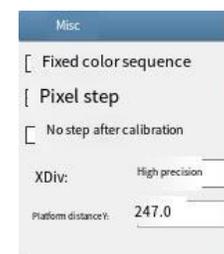
Stride   into

Compensate individually for each stride.

4.8.4.2 Move

Mobile pages are mainly used for baseline positioning,

Fill in the move length with the value of the distance you want to move,

Then select the Z you want to move to move.

4.8.4.3 Personality Settings

The Personality Settings page is used for the home screen display Settings and other related Settings.

∗ Language: Software language of choice.

∗ Unit: A unit of length in software Settings.

Delete the job after printing:

Printing is done

It will be automatically completed after printing

Is deleted from the job queue.
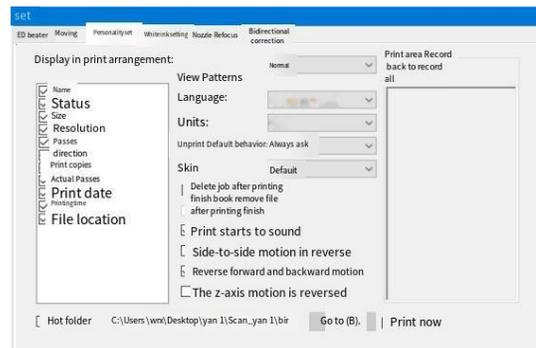
∗ Print starts to sound: Give the machine an early warning signal before printing begins.

∗ Reverse motion left and right: do not change Settings

∗ Reverse forward and backward motion: do not change Settings

∗ Z-axis motion reverse: do not change Settings

∗ Hot folder: Shared folder with RIP software, which can realize functions such as printing while RIP.

∗ Printing area record: automatically record the working area after printing, convenient for working statistics.

4.8.4.4 White ink setting

This parameter setting is invalid.

4.8.4.5 Overlapping Nozzles

This parameter setting is invalid.

4.8.4. Two-way correction

This parameter setting is invalid.

4.9 Editing a Job

Select a print job in the taskbar and double left click to bring up the following job directly

Edit the window.

4.9.1 Clipping job: When clipping is selected, the following will appear in

the picture preview box:
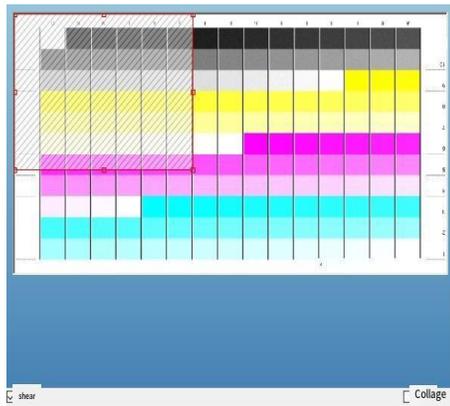
Drag the red box in the picture to finish cutting.Of course, the page can be clipped by entering the corresponding position and length and width Settings in the right clipping Settings box
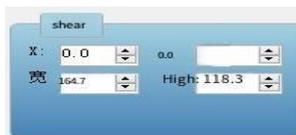
4.9.2 Collage job: Collage job functions such as cutting job.Select one in the taskbar

A print job, double - left - click to pop up the job editing window directly.

After selecting the collage, enter the corresponding collage

parameter Settings in the right Collage Settings. X quantity is horizontal quantity, Y quantity is vertical quantity, X spacing and Y spacing are the spacing between horizontal and vertical when setting the collage job
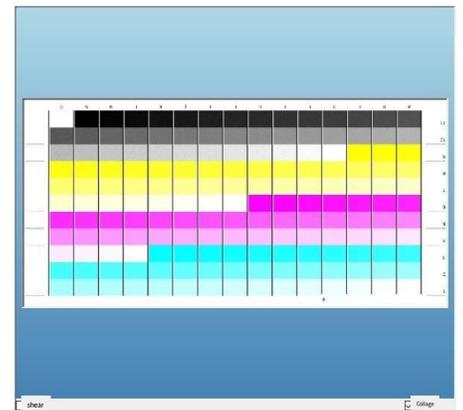
4.9.3 Footnote printing: After entering the job editing window for the above clipping and collage functions, enter the corresponding

Settings in the footnote:
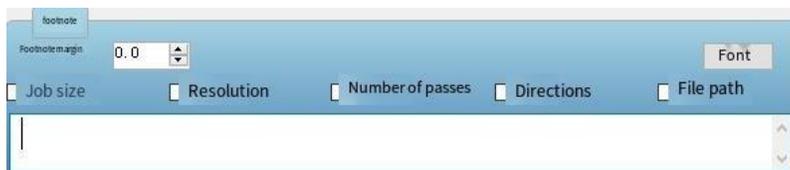
∗ Footnote margin: the y-direction distance between footnote and picture.The

footnote will be printed at the back of the picture.

∗   Job Size: Add job size information in the footnote.

∗   Resolution: Add resolution information in the footnote.

∗   PASS number: Add information about the number of passes in the footnote.

∗   Direction: Add information about the print direction (single/two-way) in the footnote.

∗   File path: Add the path information for the print job file in the footnote.

∗   Font: Defines the font for the text that enters the annotation information.

∗

4.9.4 Multi-copy printing: as above, in the number of copies on the right after entering the job editing window

Fill in the corresponding number of print copies to complete the multi-copy setting.Between multiple prints

The y-direction distance is determined by the job spacing setting in the Settings menu.
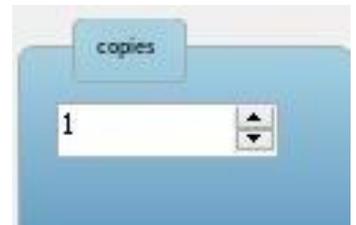
4.10 Printing

        4.10.1   Print offline

To print:

```
┌─────────────────────────┐
│ Select      standalone  │ ──────────────────────►
└─────────────────────────┘                    ┌──────────────────────┐
                                               │ Print software loads the │
                                               └──────────────────────┘


┌──────────┐        ┌──────────────┐        ┌──────────────────┐
│ Start    │ ◄───── │ Send    the  │ ◄───── │ Set          the │
└──────────┘        └──────────────┘        └──────────────────┘
```
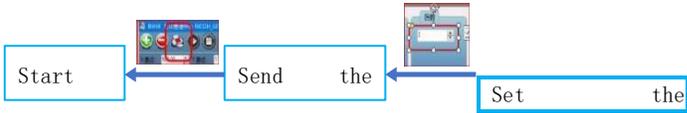
4.10.2 Print online Printing steps:

```
┌──────────────────────┐              ┌──────────────────────┐
│ Select online mode on │ ──────────► │ Print software loads the │
└──────────────────────┘              └──────────────────────┘
                                                   │
                                       ┌──────────────────────┐
                                       │ Double click on the  │
                                       └──────────────────────┘
                                                   │
┌──────────────┐   ┌──────────────┐   ┌──────┐  ┌──────┐
│ Elliptical   │◄──│ Send print   │◄──│ Set  │  │ the  │
└──────────────┘   └──────────────┘   └──────┘  └──────┘
       │
┌──────────────┐
│ Table        │
└──────────────┘
       │
┌─────────────────────────────────────────────────────────────┐
│ Digitizer                                                    │
└─────────────────────────────────────────────────────────────┘
```
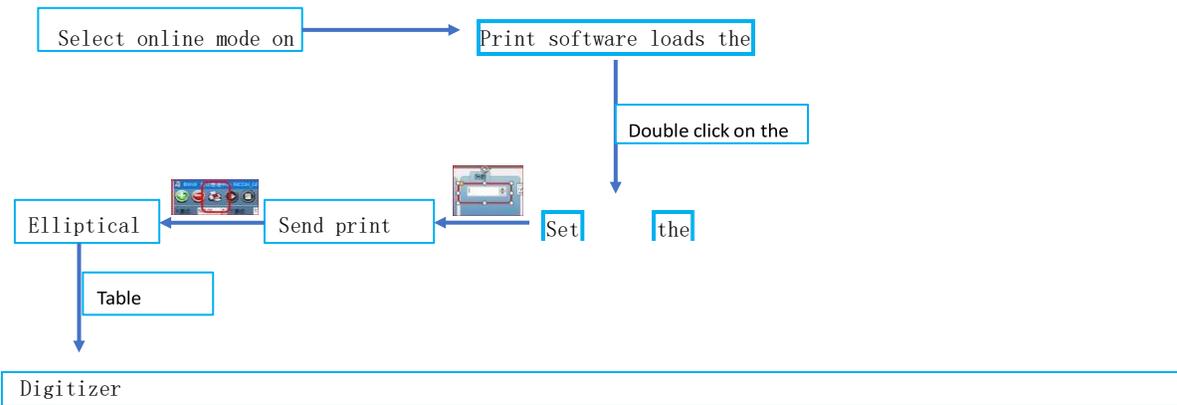
Chapter 5 Color Calibration

Click on "Calibration Wizard" from the main menu (as shown on the right) will bring you to the Calibration Wizard page.Press Soft

The calibration process steps in the piece begin the calibration print.
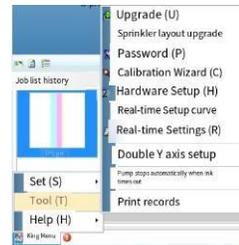
5.1 Calibration Wizard -- Home Page

```
┌──────────────────────────┐
│ Click  "Next"  to        │
│ go  to  the  next        │
└──────────────────────────┘
```
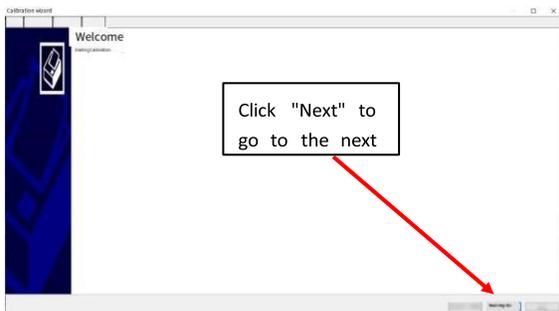
5.2 Calibration Wizard - Mechanical inspection
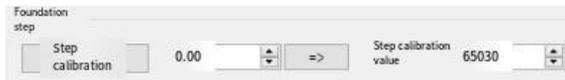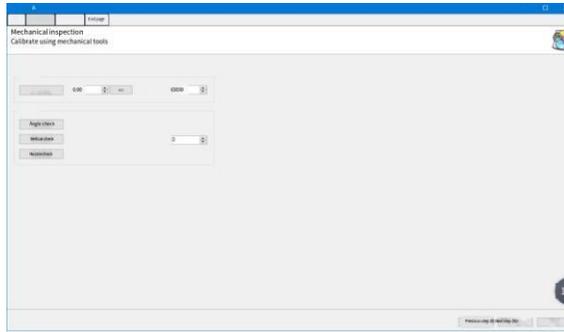
*   Foundation step

Click "Step Alignment" and the image below will be printed. Find the position with the best overlap and fill in the table with the corresponding value.
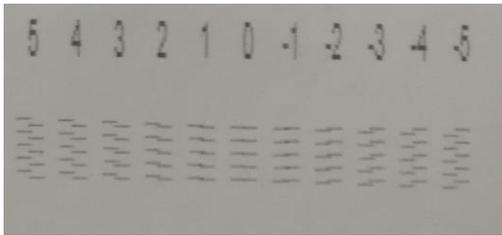
*   Angle check: After clicking "Angle check", each nozzle of the printer will print a line image as shown in the following figure. Use a magnifying glass to observe whether the overlapped part of the line segment in this image is overlapped, and judge whether the nozzle installation Angle is vertical.

overlapping lines

Complete coincidence, nozzle vertical

The overlap is split, need to readjust the Angle of the nozzle, make the overlap part coincide,
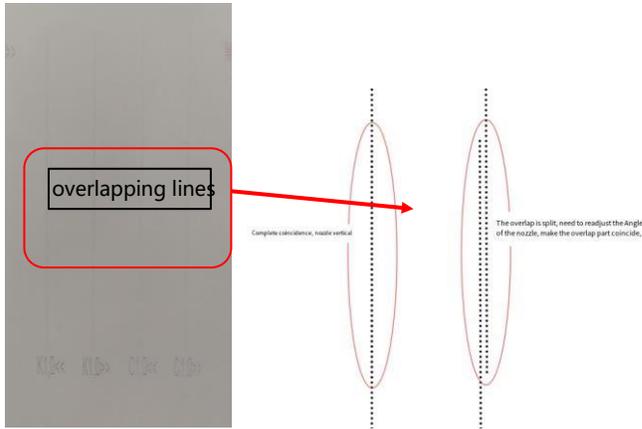
*Vertical check: Calibrate the perpendicularity of the X and Y axes of the machine.

Check whether the horizontal lines in the following figure coincide.
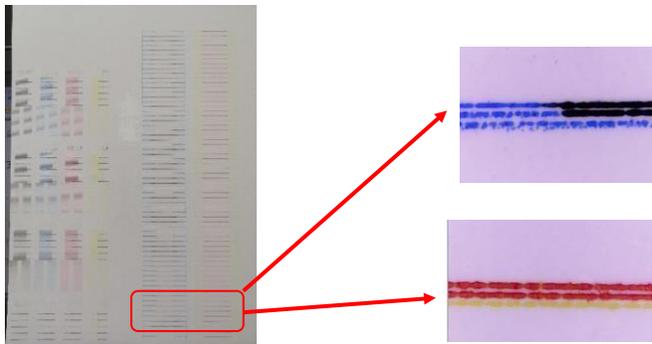
*Check the nozzle:

Check whether the ink out of the jet hole is uniform through this figure to judge whether the ink out of the nozzle is normal or not.Whether there is oblique spray, broken needle and other phenomena.
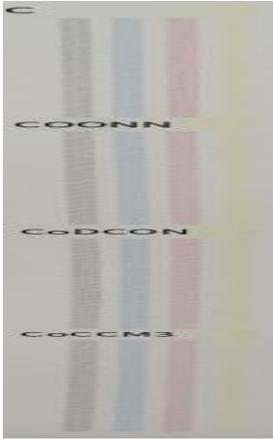
5.3 Control calibration
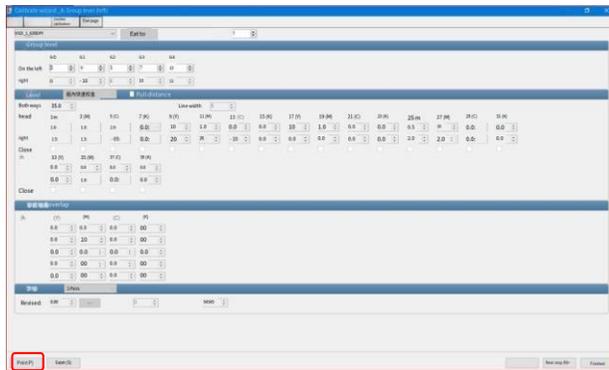
Every time you click "Print" on the current page, the printer will print out a reference calibration chart, and fill the corresponding value into the corresponding position according to the actual situation printed out.Click Save to save the parameters and make them effective.When the current calibration item is confirmed, click "Next" to enter the next calibration item. The sequence of calibration items will be carried out from top to bottom. To go back to the previous step click on "Previous step".

4. This machine uses four rows of sprinkler heads, each row of sprinkler heads is a group, each group of two sprinkler heads.The nozzles from inside to outside are G0 group, G1 group, G2 group, G3 group and G4 group.All the nozzles were controlled with the black ink of group G0 as the baseline.

* Group level -- left: Color matching in the X direction between groups when the car is printed to the left.

Observe which column of left and right directions are aligned at the overlapping position as shown in the figure below, and then add the corresponding value of the column to the original value of the group and fill it in again, and save.Then click Print Check.Click Next when the calibration is complete to proceed to the next item calibration.

组		GO		G1		G2		G3		G4	
		0		-9		3		7		12	
		0		10		5		10		15	
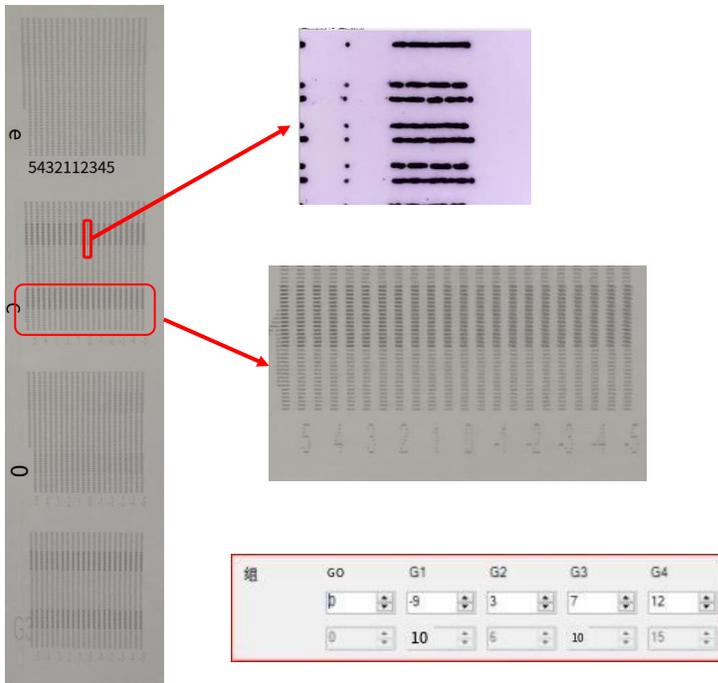
*Group level -- right: color matching in the X direction between groups when the car is printed to the left.

Its steps and methods are the same group horizontal right.

∗ Horizontal -- bidirectional: when calibrating bidirectional printing when the color, with black as the basis.

In the figure below, find the column with the best left and right alignment in the printed calibration chart,

add the corresponding value of the column to the original value, and then fill it in again to save.
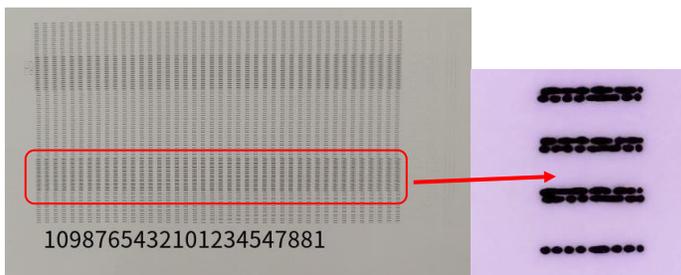
* Horizontal -- left: In this project, calibrate the alignment of the four colors K, C, M and Y printed in the X

direction in the same group.As shown in the figure below, find the column with the best left and right

alignment in the printed calibration chart, add the corresponding value of the column to the original value,

fill it in again and save.
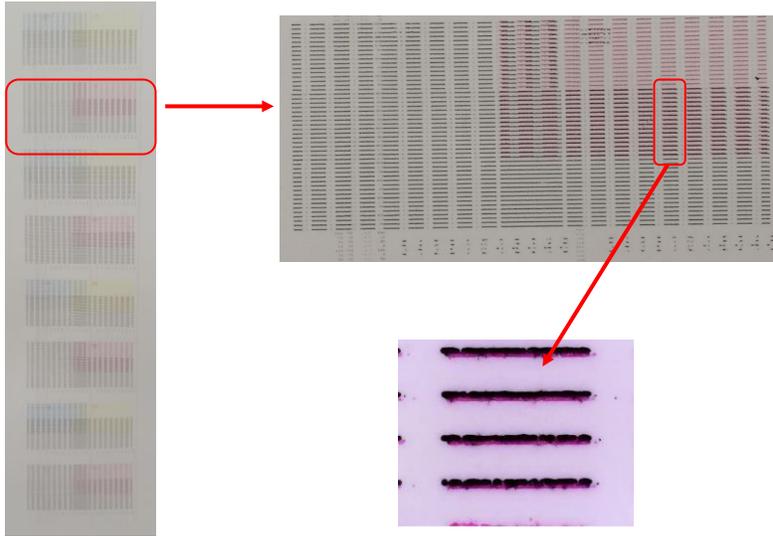
*Horizontal -- right: Calibrate the alignment of the four colors K, C, M and Y printed right in the X direction in the same group for this project.The steps and methods are the same as "horizontal - left".

*Vertical overlap: when calibrated, the nozzle in the Y direction of the front and rear position, whether the nozzle overlap.Calibration here is divided into two steps. First, calibrate the front and back alignment of the nozzle in group G0, and then calibrate the black position of other groups and group G0.

For the front and back alignment of the nozzles in group G0, look for the column with the best front and back alignment in the printed calibration diagram.Add the corresponding value of the column to the original value and then fill in the save.
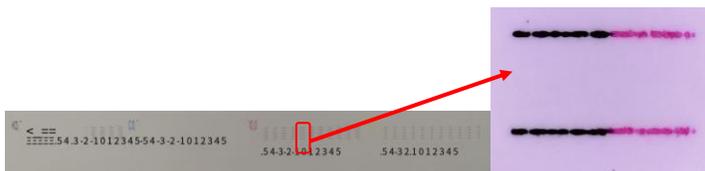
For other groups of alignment, find the best alignment column in the printed calibration chart.Add the corresponding value of the column to the original value and then fill in the save.
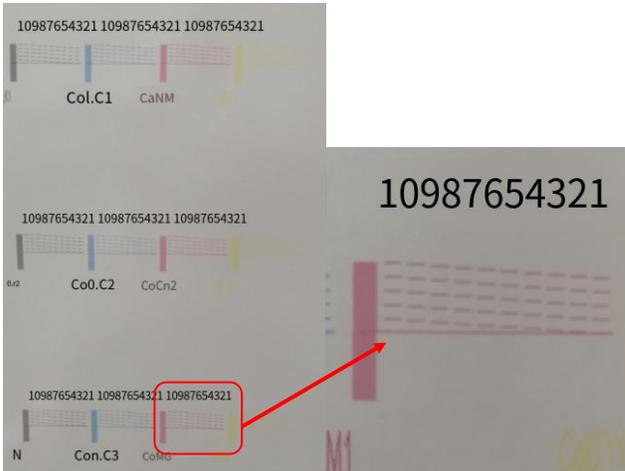
Step:

Revision: According to the actual print Y direction of the print size to the size of the picture ratio, here for rough tuning generally do not use this function.

Step: Calibrate according to the printed calibration drawing by filling in the appropriate value.

Benchmark step: The step of the 1PASS when calibrated.Please contact factory engineer for adjustment here.

Select a different Pass at the time of step calibration and print the corresponding calibration chart.Look in the printed calibration chart for the column that best aligns front to back.Add the corresponding value of the column to the original value and then fill in the save.
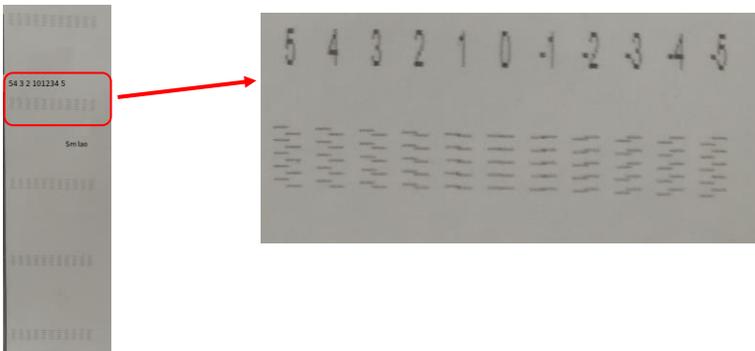
After all calibration steps are completed, click "Next" to complete the calibration process.

Note in the calibration process: when filling in the value according to the printed drawing, the original value in the item to be filled should be added to the value in the calibration drawing, and this value should be signed.For example, when the original value is -2, the value in the calibration chart is 3, and the value filled in again is "-2" plus "3" for 1.

Chapter 6 Maintenance of the machine

1. Equipment maintenance cycle

In order to ensure the good condition of the equipment, the user needs to

clean the equipment regularly according to the following instructions

Clean and maintain the equipment.

＊ Daily maintenance items: clean the fuselage;Clean sprinkler mounting bottom

plate;Check the negative pressure system;

Print the nozzle status test strip;Ink scraping strip. * Weekly maintenance items;Clean the tow chain and arrange the internal wiring;Oil-water separator;Cabinets.

＊ Monthly maintenance items: greasing moving parts, checking ink tubes, ink barrel cleaning, gas pipe joints.

＊ Three months maintenance items: negative pressure gauge display value zero;Check the ink pump;Check the ink tube;Replace the ink filter;And replace degassed lungs.

2. Maintenance and maintenance of mechanical parts

＊ Mechanical transmission parts are lubricated with aluminum base grease, and lubricated and maintained once a month:

Use the pressure rod type oil gun to press the grease into the slide block from the lubricating nozzle installed on the side of the slide block, or use a soft brush to evenly spread the grease on the guide screw.Non-aluminum base grease shall not be used, and the grease must be clean, otherwise it will damage the guide slide.

＊ The transmission parts that need to be cleaned and maintained are as follows: X direction guide rail, Y direction guide rail, Y direction lead screw, trolley lifting screw, trolley lifting slider.

Three, the maintenance of precision parts

＊ Precision parts must be cleaned with anhydrous alcohol and dust-free cloth. * Precision parts that need to be cleaned and maintained include: magnetic grids, photoelectric switches.

4. Daily maintenance and maintenance of sprinkler head

4.1 Daily Maintenance

＊ Print the status test of the sprinkler head before commuting every day to check whether the nozzle is blocked. If there is immediate inking or exhaust treatment, then print the status test of the sprinkler head.If the nozzle is still blocked, you need to clean the nozzle.

＊ Clean the dust and impurities from the bottom plate of the printer nozzle before leaving work every day.

＊ Clean the scraper every day, keep the top of the scraper clean and check whether the scraper is damaged.

＊ For printing a single color image, it is recommended to add color strips when printing, to ensure that all colors are ink-jet, to prevent the ink dry on the surface of the ink nozzle caused by a long time without ink-jet plugging.

4.2 How to protect the inkjet during holidays.

When the holiday is not working for less than 7 days, the method is as follows:

＊ Clean the bottom plate and surface of the sprinkler head with purified water.

＊ Add a certain amount of pure water to the moisturizing dish.

＊ Normal moisturizing Power off and turn off your computer.

When the machine does not work for more than 7 days during the holiday, the ink in the sprinkler head should be removed and the sprinkler head should be cleaned by the following methods:

＊ Disconnect the ink tube from the joint.

＊ Clean the nozzle with purified water drawn with a syringe until the liquid coming out of the nozzle surface is clear and colorless.

＊ Clean the bottom plate of the sprinkler head with pure water.

＊ Add the appropriate amount of pure water to the moisturizing dish.

＊ Turn off normal moisture.

If the machine is shut down for more than 30 days, the nozzle should be removed and moisturized after being cleaned with cleaning solution.Here's how:

＊ Disconnect the ink tube from the joint.

＊ Clean the nozzle with purified water drawn with a syringe until the liquid coming out of the nozzle surface is clear and colorless.

＊ Fill the sprinkler head with sprinkler protector

＊ The surface of the sprinkler head is sealed with plastic wrap, and the entire sprinkler head is sealed in an electrostatic bag.

(Note: in the above moisturizing steps, before adding protective liquid to the sprinkler head, it is necessary to ensure that there is no residual water on the surface of the sprinkler head, including tap water, distilled water, purified water, etc.)

Chapter 7 Guide treatment of abnormal customer use process

I. Working principle of Ink circuit system:

1, ink circuit composition: main ink barrel, two level ink bottle, ink pump, liquid level sensor, filter, degassed lung, ink tube and all kinds of joints, controller.

2, ink supply process: Add ink in the main ink barrel, detect the main ink barrel, the main two level ink bottle, the main collection gas cylinder level sensor, when the main two level ink cartridge level is too low (sensor closed), the ink supply pump starts to feed ink, when the level sensor is disconnected, stop the ink supply.

3, ink cycle process: when cleaning nozzle or press ink and the positive pressure of the secondary ink cartridge when the exhaust solenoid valve automatically opens.You can also open the exhaust solenoid

valve through the stranger maintenance page.The exhaust solenoid valve will automatically close when the cleaning or inking is finished and the printing begins.

Two, ink circuit system failure:

1. Main ink bottle overflow (there is ink reflux phenomenon in the trachea) Reasons:

∗ The liquid level sensor fails

∗ The negative pressure is set too high

∗ The joint leaks air What to do:

∗ Turn off the power

∗ Drain the ink from the main collecting gas cylinder

∗ Replace the air tube with ink

∗ Check the tracheal joint

2 Drop ink

Why:

∗ Low negative pressure

∗ Leakage from joint Treatment:

∗ Power off and machine

∗ Check joints for air leaks or dislodged air pipes

3 The main secondary cartridge is out of ink for a long period of time

The cause:

∗ The liquid level sensor is faulty

∗ Ink barrel is out of ink

∗ Ink pump is faulty

What to do:

∗ Check that the main ink bucket has enough ink, otherwise add ink.

∗ Check that the ink supply pump is working

∗ Check that the ink bottle level sensor is in good condition.

∗ The negative pressure is set too high

∗ The joint leaks air What to do:

* Turn off the power

* Drain the ink from the main collecting gas cylinder

* Replace the air tube with ink

* Check the tracheal joint

2 Drop ink

Why:

* Low negative pressure

* Leakage from joint Treatment:

* Power off and machine

* Check joints for air leaks or dislodged air pipes

3 The main secondary cartridge is out of ink for a long period of time

The cause:

* The liquid level sensor is faulty

* Ink barrel is out of ink

* Ink pump is faulty

What to do:

* Check that the main ink bucket has enough ink, otherwise add ink.

* Check that the ink supply pump is working

* Check that the ink bottle level sensor is in good condition.

   * The cloth is glued to the platform through the platform glue, first of all, the cloth must be paved, and the platform glue should be replaced regularly.Adjust the printing height of the sprinkler head to about

   * 3.5mm from the medium.
   * Note: Once there is an accident that the nozzle surface brushes against the medium, it is recommended to print the nozzle test strip immediately after troubleshooting, check whether the nozzle is damaged, and immediately repair the corresponding.

Attached Table I: Error code reported by printing software

Error code	Interpretation
[80020003]Service Call: chip3.	When starting fpga, the fpga pin (level) is wrong, hardware problem, change the board
[80020007]SDRAM check did not pass.	The memory slide is damaged, causing the inspection to fail. It needs to be repaired
[80020008] Unable to read FPGA from Falsh.	1. Unable to read the fpga program, you can try to upgrade the program again
	2. If the re-upgrade program is invalid, it needs to be repaired
[8002000A] The reading board ID is incorrect.	Hardware check failed and needs to be repaired
	1 Re-upgrade the headboard program
[8002000D] There is no legal Firmware for the head board.	2. Fix the burn program
[80020010]Service Call: 16.	The EEP verification of the motherboard access data fails and needs to be repaired
[80020064] The headboard failed to operate the eeprom.	The eeprom of the head plate is damaged and needs to be repaired (caused by a problem with the head plate).
[80020065] header FPGA error.	The same procedure (exactly the same) motherboard has no problem, it is the head board card is damaged, need to repair
[8002007F] The current version has an unhandled BUG	Upgrade motherboard program
[80100003] Serious motherboard error	Factory data is not set or is set incorrectly
[02020000] is being updated.	1: Do not turn off the power ？？？？ during the update process
[02020001] The upgrade is successful.	1: Restart the power supply after the upgrade
[02020002]DSP start upgrade command times out.	Re-upgrade or find fw
[02020003]DSP data timed out.	Re-upgrade or find fw
[02020004]DSP ends timeout.	Re-upgrade or find fw
[02020005] Wrong upgrade file format.	1: Check that the upgrade file is correct and complete
[02020006] Invalid upgrade file.	1: Check that the upgrade file is correct and complete
[02020007] The upgrade verification code is incorrect.	1: Check that the upgrade file is correct and complete
[02020009]Flash error.	Replace the motherboard
[0202000B] requires special ink password firmware.	Request an ink upgrade pack

[0202000E] Upgrade data send times out	[0202000E] 1: Upgrade again after restart
[0202000F] End of upgrade timeout	1: Restart and upgrade again
xxx	xxx
[02020011]Unknown Enum:CoreBoard_Updating_UPDATE_ERROR	Waveform file error
[02020012]Unknown Enum:CoreBoard_Updating_UPDATE_TIMEOUT	Waveform file error
[02020013] Application operation error	Motherboard program problem
[02020022]DSP upgrade failed	Check log and replace motherboard
[02020023] The upgrade package file size is incorrect	1: Replace the upgrade package
	2: Upgrade again
[04020000] Don't know warning	Software program Problems
[04020008] Entered a time-limited password error, containing illegal	Enter a timed password error, contains illegal characters; Your password is invalid this time. Please re-enter your password

characters; Your password is invalid this time. Please re-enter your password.	
[04020009] is not a valid time-limited password; This password is invalid. Please re-enter your password.	Not a valid time-limited password; Your password is invalid this time. Please re-enter your password
[0402000A] Timed password and vendor do not match; Your password is invalid this time, please re-enter your password.	Timed password and vendor do not match; Your password is invalid this time, please re-enter it
[0402000B] Timed password and board do not match; Invalid password entered this time, please re-enter your password.	Timed password and board do not match; Enter the password invalid this time, please re-enter the password
[0402000C] First warning: The time limit will be exceeded in 100 hours. Please ask the manufacturer for the password.	First warning: The time limit will be exceeded in 100 hours. Please ask the manufacturer for the password
[0402000D] Second warning: The time limit will be exceeded in 50 hours. Please ask the manufacturer for the password.	Second warning: The time limit will be exceeded in 50 hours. Please ask for the password from the manufacturer
[0402000E] Final warning: After 1 hour, the time limit will be exceeded and the printing will stop. Please ask the manufacturer for the password immediately.	Last warning: After 1 hour, you will run out of time and stop printing. Please ask the manufacturer for your password immediately
[04020010] Entered the selection password error, contains a value from 0 to F.	The password is not formatted correctly. Check the password
[04020011] is not a valid password.	Check the password
[04020012] The matching password does not match the manufacturer.	1. Re-enter the password
	2. Check with the manufacturer to make sure the password is correct
[04020013] The matching password does not match the board.	Check password
[04020015] Attempts to use overclocking on a headboard version that does not support overclocking, and the system forces high-speed printing.	Attempts to use overclocking on a headboard version that does not support overclocking, and the system forces high speed printing
[04020016] entered an incorrect ink password containing a value other than 0~F.	Check the password
[04020017] is not a legal ink password.	1 Re-enter your password
	2 Check with the manufacturer to make sure the password is correct

[04020018] The ink password does not match the manufacturer.	1. Re-enter your password 2. Check with the manufacturer to make sure the password is correct
[04020019] The ink code does not match the board.	1 Enter your password from scratch
	2 Check with the manufacturer to make sure the password is correct
[0402001A] Another 10 liters will exceed the ink limit, first warning.	1. Ask the manufacturer for the ink code
[0402001B] 5 more liters will exceed the ink limit, second warning.	Five more liters and you're over the ink limit. Second warning
[0402001C] One more litre will exceed the ink limit. Final warning.	One more litre and you're over the ink limit. Last warning
[0402001D] The current sprinkler does not support the ink password feature.	The current sprinkler does not support ink password function
[04020020] Print data less than ignition number.	1pass data more than 128m, check usb transfer speed.Program problems
[04020021] Print more data than ignition number.	VE core board ignition too high.Uneven grating signal.The buffer distance is too small
[04020027] The current number of nozzles is unknown.	Check whether the nozzle type is wrong or find fw
[0402002B] The printer generates an alarm.	scoripin problem
[0402002D] The FW ID of the header board does not match. The current header board cannot upgrade the FW.	The header upgrade package does not match the nozzle type
[0402002E] An error occurred during the head plate upgrade.	Re-upgrade
[0402002F] An error occurred during the headboard FPGA upgrade.	Re-upgrade
[04020030] An error occurred during the function board upgrade.	Re-upgrade
[04020039] is not a legal opt-in password.	Check the password
[0402003A] The matching password does not match the manufacturer.	The matching password does not match the manufacturer.
[0402003B] The matching password does not match the board.	Check password
[0402003F] has entered offline print state.	You have entered the offline printing state
[04020045] The headboard bootloader is too old, causing the upgrade to be too slow.	The headboard bootloader is too old, causing the upgrade to be too slow
[04020049]S system, the headboard version information is different	For S system, the headboard version information is different
[0402004A]USB2.0 connection	1: Check the USB3.0 driver 2: Check whether the USB port is a 3.0 port 3: Check the FX3 program
	4: win8 above disable digital signatures
[04020050] The headboard is not connected in order	Check head board error number
[04020051] No valid wavefrom	Check head board error number
[04020052] The transfer board connection is abnormal	Replace the transfer board
[0402007F] The motherboard did not write the manufacturer ID	The motherboard did not write the manufacturer ID

[04100001] Motherboard Warning: Correction voltage is not set, use default value	
[04100002] Motherboard Warning: Reference voltage is not set, use default value	
[04100003] Motherboard Warning: Flash jet parameter is not set, use the default value	
[04100006] Failed to set fpga 8-head or 16-head.	
[08020000] initializing ARM.	Initializing an ARM
[08020001] initializing USB.	Initializing USB
[08020002] initializing FPGA.	Initializing the FPGA
[08020003] is initializing the DSP.	Initializing DSP
[08020004] initializing HEADBOARD.	Initializing HEADBOARD
[200100C1] Wrong move command or named parameter	
[200100C2] Server startup failure	
[200100C3] Abnormal Modbus communication	Check the 485 communication cable
[200100C6] The headboard does not support grayscale Settings	
[200100C7] Head plate does not support waveform of configuration	
[200100D1] Print position out of limit	
[200100D7] Triggers current axis sensor, motion terminates	
[200100D9] Ignition is abnormal	
[200100DA] Error setting dsp motion parameters	
[200100E0] The maximum length setting is out of whack	
[200100EA] If the gear ratio stored in the board or measured differs too far from the program default gear ratio, the default gear ratio will be used	
[20020002] Motion COM timeout.	Program bug, replace motherboard
[20020003] Headboard COM timed out.	Front page power supply, lvds, program bug
[20020004] Print data and ignition frequency do not match.	The VE is firing too high.Uneven grating signal.The buffer distance is too small.lvds amplification factor is too small
[20020005] Print data less than ignition frequency	1pass data more than 128m, check usb transfer speed.Program problems
[20020006] Print data out of ignition frequency.	ve is firing too high.Uneven grating signal.The buffer distance is too small
[2002000B] No motion completion command was received 30 seconds after the motion command was issued.	The picture is too large, and the small car travel time is too long for more than 2 minutes.Motherboard program bug
[20020017] Pump ink timed out.	Pump ink timeout

[20020018] Pipe channel communication timed out	The serial port on the mainboard timed out (connected to the customer's special board)
[20020019]scorpion function board reply timed out	The scorpion function board timed out its reply
[2002001A]scorpion function board reported failure	The scorpion function board reported a failure
[2002001D] Data buffer overflow	Motherboard program problem
[2002001E] Corrupted communication command buffer structure	Motherboard program problem
[20020022] Head board high pressure is too low.	Head plate high pressure is too low
[2002002A] Outer expansion plate plate missing connection (communication error)	Check customer's external expansion procedures or wiring
[2002002B] Outer expansion plate status error (outer expansion plate sent)	[2002002b] Check customer's external expansion procedures or wiring
[2002002D]PM set vendor parameters that do not match	Customized function use version does not match (check pm, fw)
[2002002F]Unknown Enum:CoreBoard_Err_NOT_SUPPORT_PRINT	Double Y axis parameter is invalid, use default parameter, enter PM double Y setting parameter
[2002008C]Band print starting point is less than the origin.	Exceeds the printer's preset maximum stroke

[2002008D] Image extra wide.	Exceeding the printer's preset maximum stroke
[20020092] Nozzle type setting is not valid	The set nozzle mix setting headboard is not supported.Check the sprinkler head mashup Settings
[20020094] Negative pressure cartridge blots ink.	Negative pressure cartridge ink deposition
[200300C3] Abnormal Modbus communication	The Modbus communication is abnormal
[200300C4]DSP parameters are illegal	The dsp parameters are configured incorrectly, check the packaging parameters
[200300C7] Headboard unsupported for configuration of waveform	
[400100D1] Print position exceeds the limit. Please try to reduce the print image width or increase the print origin position.	1: Reduce the print width
	2: Reduce the print origin
	3: Increase the print width
[400100D2]DSP initialization failed.	The origin end sensor position was not obtained during initialization.This is usually caused by an emergency stop
[400100D3] Excessive deviation of biaxial position, emergency stop.	Excessive deviation of double axle position, emergency stop
[400100D5] Excessive deviation of double axle position, emergency stop	Excessive deviation of double axle position, emergency stop
[400100D8] resolution parameter configuration error	1: Check that the upgrade package resolution matches the printer resolution
[400100EE] Contact the positioning sensor	Check the limit sensor polarity, if it is in a triggered state
[40020001] Data header error.	1. The printed data format mark sent to the board under the software is wrong, check the usb link (pc, usb cable).
	2. The board card is damaged and needs to be repaired

[40020002] Data header size is incorrect.	1. The size of print header sent to the board under the software is incorrect (program problem pm, fw).
[40020003] No additional data should be attached to the job header.	1. Incorrect size of print header sent to the board under software (program problem pm, fw)
[40020012] Failed to write EEPROM.	The motherboard failed to write data. It needs to be repaired
[40020014] Head board reset.	When the head plate was ready, it reset again.Check the head plate card, head plate power supply
[40020016] The head plate does not match the factory data, please reset the factory data or replace the head plate.	If the headboard does not match the factory data, please reset the factory data or replace the headboard
[40020017] The manufacturer ID of the board does not match. Please upgrade the firmware.	The manufacturer ID of the board does not match. Please upgrade the firmware
[4002001A]USB1.1 connection.	Check that the usb link or motherboard pc is grounded, or that the reboot is too fast and not fully powered off.The board is damaged.
[4002001B] Serious error: The language setting used by the software is inconsistent with the permission, please reset the software language or enter a new language password and restart the printer.	Serious error: The language setting used by the software is inconsistent with the permission. Please reset the software language or enter a new language password and restart the printer
[4002001C] Error writing PINCONF to FPGA.	Program problem or board problem
[4002001F] Nozzle overheats, all heating is forced off.	The headboard hardware is damaged or the nozzle is really overheated or there is a problem with the data cable of the nozzle
[40020027] Error reading board ID.	Production writing board error, upgrade upgrade package, not to repair
[4002003E] double Y-axis position deviation is too large.	The deviation of both Y-axes is too large
[40020040] The system does not currently support this feature	The FW upgrade package or parameter Settings are incorrect
[40020041] The FPGA version is too old	Update Upgrade Pack
[40020043] Head plate high pressure is too low	Check the headboard power supply
[40020046] No default waveform can be found	The default waveform cannot be found
[40020047] Motherboard ARM configuration parameters are illegal	The fw upgrade package is faulty
[40020048] The motherboard EEPROM has illegal data	Program problem
[40020049] The number of bands set by the software and the number of bands currently printed do not match	The number of bands set by the software does not match the number of bands currently printed
[4002006A] The FPGA does not support raster frequency doubling	Fpgas do not support raster frequency doubling
[4002006B] Factory parameter changes require restarting the printer	Restart
[4002006F] Unknown Error	FW upgrade package problem or parameter setting problem
[40020070] Motherboard Fiber 1 receives interruption	Motherboard Fiber 1 receives interrupt

[40020071] Motherboard Fiber 2 receives interrupt	Motherboard fiber 2 receives disconnected
[40020072] Adapter fiber 1 receives interruption	Adapter fiber 1 receives disconnected
[40020073] Adapter fiber 2 receives disconnected	Adapter fiber 2 receives disconnected
[40020074] The two adapter boards are of different versions	Replace the s system adapter board
[4002007F] Internal program bug, please contact R & D engineer to solve	Motherboard program bug
[40020080] The FW is incorrectly configured	Replace the motherboard upgrade package
[40020082]Y or YY encoder reverse, please check the wiring	Y or YY encoder reverse, please check the wiring
[40020083]Y or YY encoder did not connect, please check the connection	Y or YY encoder failed to connect, please check the connection
[40030002] Wrong print file format	
[40030003] Wrong print mode parameter	
[40030004] The medium is too small.	
[40030005] Software and printer handshake failed	
[40030006] Unsupported printer! Please upgrade your software!	
[40030007] Firmware current version is {0}, please update to {1}	
[40030008] Unsupported language	
[40030009] The resolution of the print file does not match the printer resolution!	
[4003000A] Print file contains unsupported resolution!	
[4003000B] Unsupported file format!	
[4003000C] cannot print the current job with the current pass setting, click OK to print the job with {0}pass.	
[4003000D] Print file color number does not match the printer!	
[4003000E]Y feedback is missing, or the step is not calibrated!	
[4003000F] Failed to get hardware Settings!	
[40030010] must upgrade firmware.	
[40030011] Illegal upgrade file. No encryption.	
[40030012] Wrong upgrade file format.	
[40030013]Unknown Enum:Software_Unknown	
[40120001] Header Service Call: Failed to read the EEPROM	
[40120002] Header Service Call: failed to write EEPROM	

[40120003] Serious header error: The header characteristic data is not written or formatted incorrectly	
[40120004] Headboard critical error: Headboard feature data does not match user Settings	
[40130001] cannot find the data frame header	
[40130002]header type is not 0,1,2	
[40130003] The job header is not the job header, and the job header is not the band header	
[40130004]band still comes to light after printing	
[40130005] If the number of fires is not enough, you will receive the command to terminate printing	
[40130006] The actual printed data is greater than the number of printed data in the band header	
[40130007] The actual printed data is smaller than the number of printed data in the band header	
[40130008] Internal error 10.	
[8008006A] The headboard drive unit is faulty	The high pressure of the head plate is not right.
40020088	Initializing motion not passed, report a few axes failed, check a few axes sensor.
20020107	The white ink cycle parameter is set incorrectly
40020103	Double Y test pulse failed to send, J20 was triggered.
20020105	Current fpga version does not support sampling number setting, updated to support magnetic gate FPGas.
40070095	There is a problem with the hardware link and a driver board has failed to connect.
40020089	May have something to do with the type of acceleration on the z-axis, change it to a T-curve
2002010C Print parameter abnormal, cancel the print	Upgrade package is not firing, need to set ignition
The Y-axis is in place and has not moved	The sensor is set in the wrong state.
40070092	Headboard drive unit failure
400200DC	Too many sprinkler heads.The number of nozzles supported by the motherboard is insufficient. You need to modify the motherboard upgrade package.
2 axis initialization failed, FPGA triggered emergency stop	Double Y out of whack.
Dot print history software crashes	Delete the printhistory folder
80070004 Failed to configure the FPGA program	After the upgrade is successful, the power supply is not restarted, and other upgrade packages are directly upgraded.2: The FPGA version of the upgrade package is used incorrectly

40070076 Incorrect motherboard delivery parameters	1: The number of sprinkler heads configured in the factory is incorrect, lower than the number of sprinkler heads used;
arm instruction parameter is wrong	Departure distance cannot be set to 0. Motion parameters are not reasonable.
40010103- Failed to set the motion parameters	Generally, a dual-Y system is used, and dual-Y motion parameters are not configured

Digital machine delivery list (Ricoh 10 head machine)					
Serial number	Name	Model/part number	Quantity	Units	Remarks
1	KCMYRG ink each		10	KG	
2	Cleaning solution		10	KG	
3	RICOH Gen6 Sprinkler head		10	a	

4	Computer (set up already)			1	Set of	
5	photo print RIP software			1	Set of	
6	8 Turn 6T 3-way			2	a	
7	Toolbox			1	a	
8	50ML syringe			2	a	
9	Hex wrench M3			1	a	
10	Flat-head screwdriver	6*150mm		1	a	
11	Flat-head screwdriver	3*75mm		1	a	
12	Phillips screwdriver	6*150mm		1	a	
13	Hex wrench			1	Set of	
14	Hemostatic forceps			4	the	
15	Diagonal pliers			1	the	
16	Adjustable wrench			1	the	
17	Scale plug block			1	a	
18	Dust-free cloth			5	package	
19	Coated paper			5	package	
20	6X4 trachea			5	M	
21	6X3 ink tube			5	M	
22	Hook nose check valve	Brand: Weilu #SCV67230		24	a	

Dopson mechanical

Certificate of conformity

The product is approved for delivery after passing the inspection

Name of machinery

Type number

Body number

Inspector

Day period

Certificate of Quality

This product has been dispatched under satisfactory functional tested and inspected in accordance

with the conditions and requirements of the manufacturer.

*MACHINE*_____

MODEL NO. SERIAL NO._____

CHECKED BY____

DATE

_____