DAYSJET

1870 Ink-Jet Printer

Operation and Maintenance Manual

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Thank you for choosing the 1870 ink-jet printer manufactured by Chongqing VDJ Inkjet manufacturing Co., Ltd.. This manual mainly introduces the safe use of ink-jet printer, operation specifications, installation process, information editing, ink-jet setting, fault maintenance and other operation methods, please be sure to use according to this manual.

Chongqing VDJ Inkjet manufacturing Co., Ltd.
Address: 9-2, Building 26 (B4), No. 105 Yunhan Avenue, Beibei District,Chongqing, China 400714
Tel: 023-67516665
Fax: 023-67537803
Website: www.daysjet.com.cn

■ Instructions for use

Power supply

 When the device is connected to the main power supply, there is a lethal voltage inside. Only trained authorized personnel can perform maintenance.

 Follow all electrical safety laws and practices. Disconnect the ink-jet from the main power supply if it is not required to run before removing the cover plate or attempting any service or repair work. Failure to follow this warning may result in death or life injury.

 High voltage power modules and back-lights have high AC voltages. Exercise extreme caution.

Cable

 Only the main power cord provided with the printer can be used. The end of this power cord shall have an approved three-pole power plug with a protective grounding conductor.

Power cords, sockets and plugs must be kept clean and dry.

For pluggable devices, a socket must be installed near the device and accessible.

 Be sure to check cables for damage, wear, corrosion and degradation. Ensure that all ground and lap connections are free from paint, ink buildup and corrosion.

Ground connection

 The ink-jet printer must be connected to an AC power supply that complies with IEC requirements or local applicable regulations and has a protective grounding conductor.

 Do not use the ink-jet printer if the protective grounding conductor is interrupted or disconnected.

 Failure to follow this warning statement may result in electric shock.

 It is important to ground conducting equipment to electrodes or building grounding systems using approved cables according to NEC standards in order to discharge all potential electrostatic discharge. For example, nozzle bracket to ground.

 The resistance reading from the host bracket to the device or sprinkler bracket should be between 0 and 1 ohms.

 A safe and reliable ohmmeter should be used for regular resistance testing.

Ground and lap

 Be sure to prevent electrostatic discharge and use proper grounding and bonding methods. Use only manufacturer approved supports and ground cables.

 It is important to use approved cables to lap the conducting equipment to maintain the same potential and minimize electrostatic discharge. For example, nozzle to host bracket.

 Be sure to empty the nozzle support frequently. Some inks and cleaners are flammable liquids. Ensure waste liquid is treated as HAZMAT.

Environment

Operating temperature: +5℃ to +45℃ (+41° F to +113° F)

Ambient humidity: Relative humidity ranges from 10% to 90%, without condensation.

Some inks may be narrower than those listed above.

 The in-jet printer shall not be used in explosive environment.

Ink and Make up

 Ink and Make up can irritate the eyes and respiratory system. When handling these substances, take the following measures to prevent personal injury: Wear protective clothing and protective gloves.

Be sure to wear goggles and a face mask with a protective cover on the side. Wear protective glasses when performing maintenance.

Apply hand cream before handling the ink.

If ink or Make up is on your skin, wash it immediately with soapy water. Do not use detergents or Make up to remove ink stains from your skin.

 Ink and Make up are volatile and burn easily. They must be stored and disposed of in accordance with local regulations.

Do not smoke or use open flames around these substances. Only use CO2 or dry powder extinguishers to extinguish fires. Immediately after use, remove any thin sand or clothing that has absorbed large amounts of the substance. Any such articles shall be disposed of in accordance with local regulations.

 Inhaling solvents or cleaning fluid vapors for long periods of time can cause drowsiness and/or a feeling similar to being drunk. Please only use in a large and well-ventilated area.

Cleaning agent

 Ingesting detergent can be toxic. Please don't swallow. If ingested, seek medical attention immediately.

 Cleaning agents can irritate the eyes and respiratory system. To prevent personal injury when handling this substance, please take the following measures:

Wear protective clothing and gloves during operation.

Be sure to wear goggles and a face mask with a protective cover on the side. Wear protective glasses when performing maintenance.

Apply hand cream before handling the ink.

If you have any detergent on your skin, rinse it under running water for at least 15 minutes.

 Cleaning agent will be volatile, and easy to burn. It must be stored and disposed of in accordance with local regulations.

Do not smoke or use open flames around cleaning agents. Only use CO2 or dry powder extinguishers to extinguish fires.

 Immediately after use, remove any thin sand or clothing that has absorbed large amounts of the substance. Any such articles shall be disposed of in accordance with local regulations.

 Before cleaning the sprinkler head, ensure that the cleaning agent is compatible with the ink used, otherwise it may damage the sprinkler head.

Use

 The ink-jet printer is designed as a non-contact ink-jet equipment, and it is prohibited to be used in other occasions. Otherwise, the consequences shall be borne by the user. Consumables (including inks, additives, cleaning agents, maintenance products, repair parts, etc.) not provided by Chongqing Daysjet Marking Co., Ltd. are prohibited, otherwise, the consequences will be borne by the user.

Other consumables shall not be used without the written permission of the Company, otherwise the consequences shall be borne by the user.

carry

 In the handling machine, if there are consumables inside the machine, please keep the machine upright and do not tilt the machine. If you cannot ensure that the machine is always upright, please completely discharge the ink and solvent before handling.

 When transporting circuit boards or electrical components, place them in an antistatic bag. Avoid damage to electronic components caused by

static electricity.

Maintenance

Before removing or replacing parts, remove the power cable of the machine.

Use proper tools when maintaining circuits or pipelines.

After each maintenance, the waste liquid should be emptied and the container should be cleaned. Do not put waste paper and cloth soaked by consumables in the vicinity of the ink-jet printer, and keep the place clean.

Other

After a quick stop, the ink-jet printer shall not be randomly in a dry ink state, which will make it difficult to restart.

Before trying to start the printer, the nozzle must be completely dry, otherwise the high pressure pack will trip.

If you replace the battery with the wrong type, it may cause an explosion. Be sure to dispose of used batteries in accordance with the instructions and local regulations.

■ Quality certification

■ Update

The technical parameters provided in this manual shall not be considered as part of the contract. Chongqing Daysjet Marking Co., Ltd. reserves the right to modify the technical parameters and performance characteristics of the machines introduced in this manual without prior

notice. Without the permission of the Company, no one may copy the contents of this manual in part or in whole.

■ Contact method

Address: No. 60, Star Avenue, Liangjiang New District, Chongqing, China

Tel: 023-67516665 4008879625

Fax: 023-67537803

Website: www.daysjet.com.cn

Main component

一、overview

二、The main parts of the ink-jet printer

Figure 1-1

1、10.1 Inch display screen　2、Power switch　3、Ink box
4、Make up box 5、Ink-jet printer head　6、Ink road system

2.1 1Standard interface IO

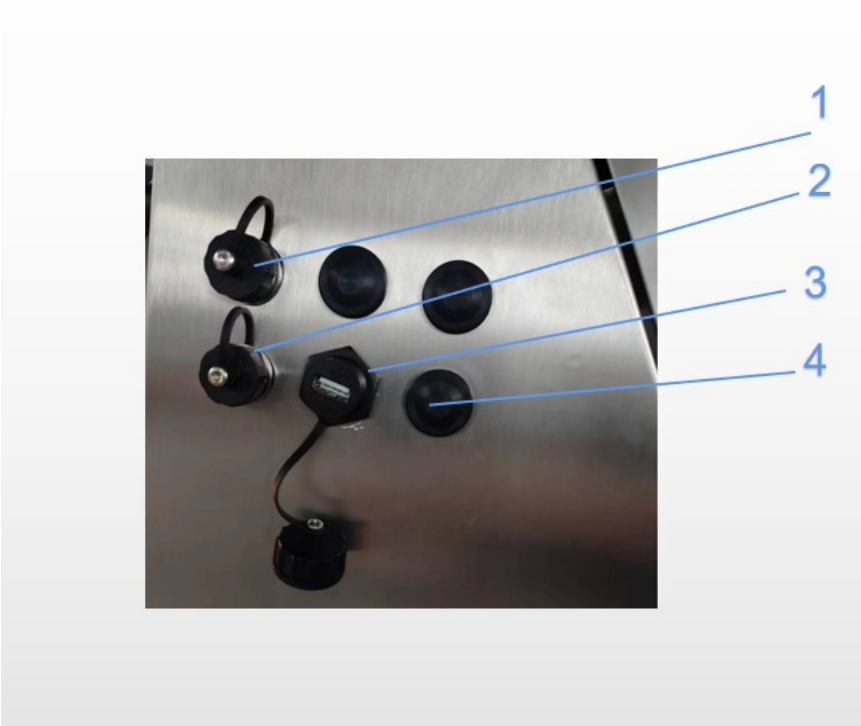


Figure 1-2

1、Sensor connector　　2、Encoder interface

3、 USB　　4、Reserved

2.2 Alarm interface

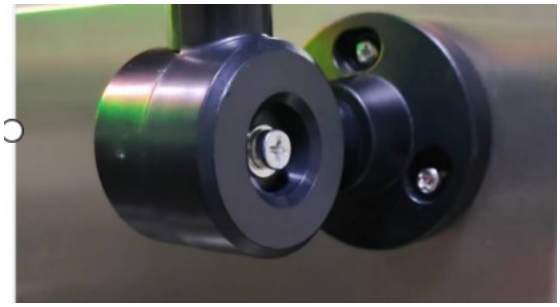


Figure 1-3

2.3 Ink road system

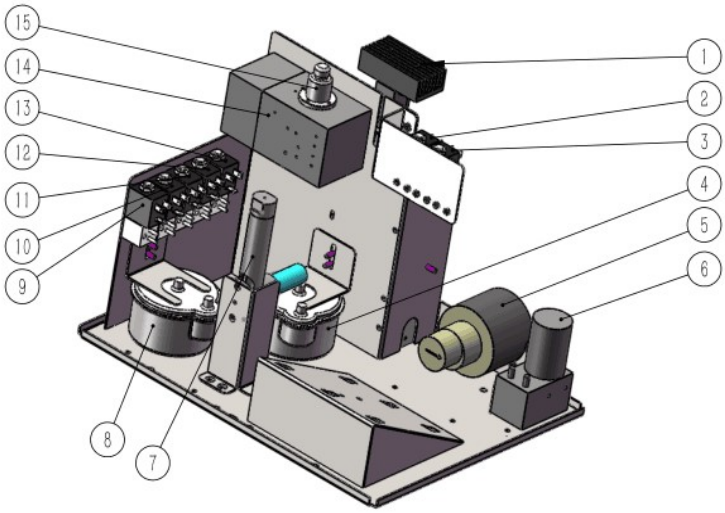


Figure 1-4

2.4 Ink jet printer head

Figure 1-5

User Interface Overview

一、Home

Figure 2-1

1、Communication status bar
2、Process status of ink jet printer
3、System clock、
4、Alarm bar
5、H.V. ON/OFF
6、Current screen name
7、Current information
8、Edit curr.information
9、Status
10、Make up
11、Ink
12、Product count.
13、Information name
14、ON/OFF
15、Tool
16、Printing set up
17、Select information
18、Home

1、Communication status bar	Whether the upper computer is connected with the lower computer, USB and communication are connected.
2、Process status of ink jet printer	The current status of the ink jet printer, such as standby, running, etc.
3、System clock	
4、Alarm bar	Yellow light alarm, red light fault display bar, click to enter the alarm details menu.
5、H.V. ON/OFF	Used to control printing on or off.
6、Current screen name	
7、Edit display bar	Edit display bar
8 、 Edit	Click to quickly edit the information currently

curr.information	being printed.
9、Status	Parameter table of ink jet printer.
10、Make up	Display whether the make up box is connected and the residual amount of the make up box.
11、Ink	Displays whether the ink cartridge is connected and the remaining amount of the ink cartridge.
12、Product count.	Detected number, printed number, current serial number.
13、Information name	Current information name, suffix:message height (point) message width (column)
14、ON/OFF	
15、Tool	
16、Printing set up	Set printing conditions
17、Select infor.	Select information from the stored information to print.
18、Home	

二、How to print information

Before starting information processing, be sure to select information. If the job you want to print is not displayed as the current job, you can select another job. As shown in Figure 2-2, to select information, please perform the following operations,

1. Touch the  button on the “Home” screen.

2. Touch the desired information name in the list. A preview of the selected information will be displayed in the right box of the screen.

3. The information with  is the current job being printed.

4. If the list is too long, a "scroll bar" will be displayed on the right side of the list. Drag the scroll bar up or down to browse the list.

5. Touch the "  ", to send information.

6. To delete or modify information, Touch the corresponding button. To exit, Touch the  .

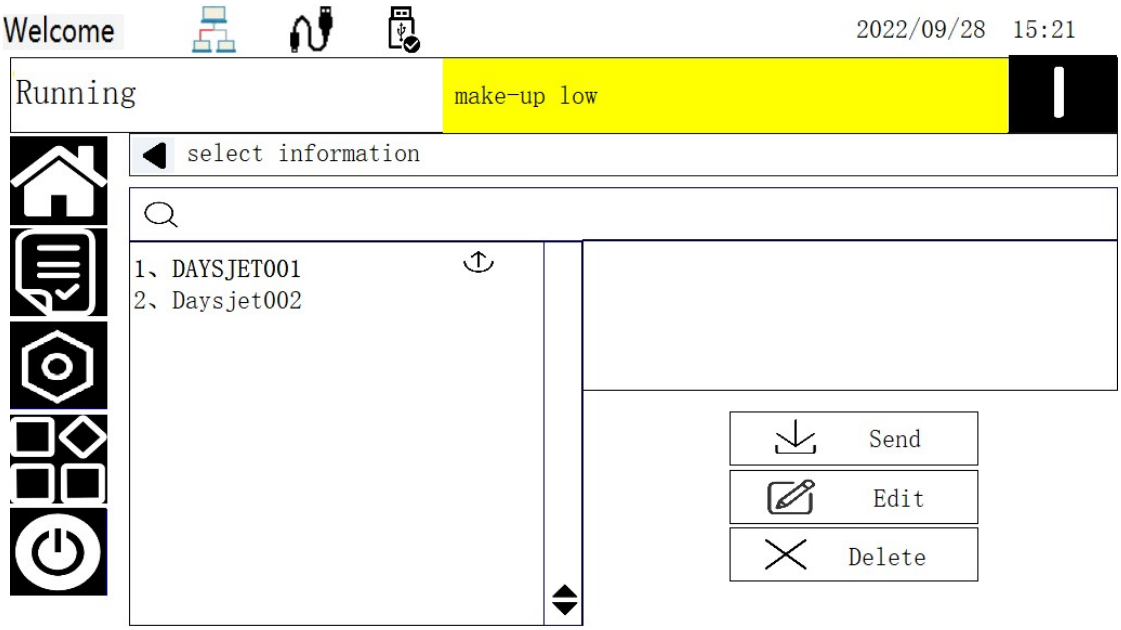


Figure 2-2

三、Using the

Touch , as shown in Figure 2-3。

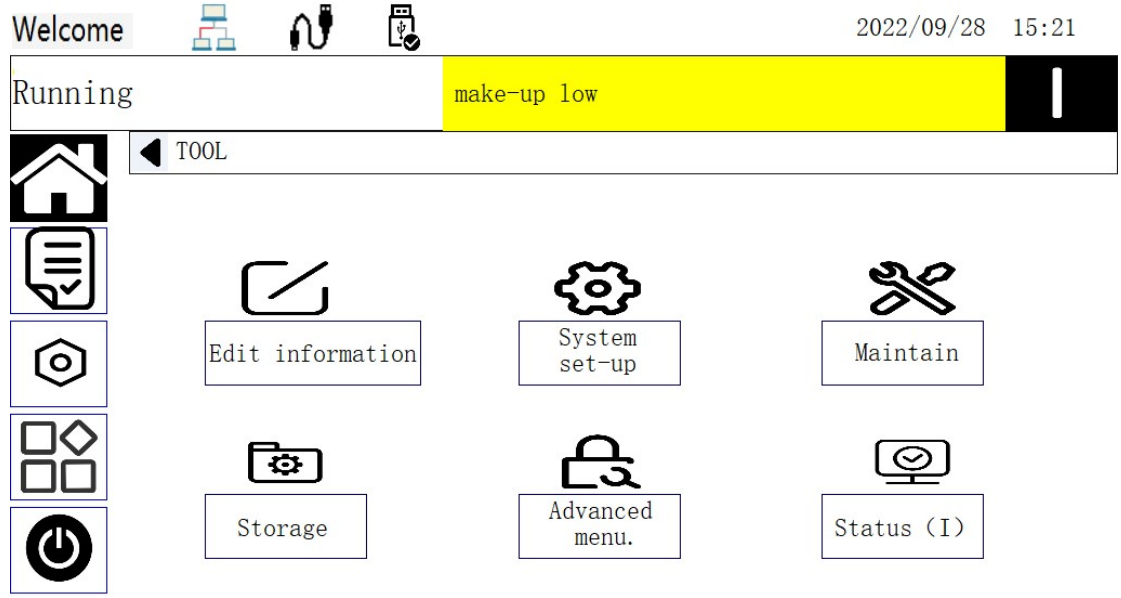


Figure2-3

1、Function notes

Button	Notes
	Create information, delete information, edit information, etc.
	Set the language of the ink jet printer, master clock, alarm details, communication settings, etc
	Parameter setting, maintenance, installation debugging and so on.
	Storage of local information, pictures, QR code, bar code, font and USB data
	Manual debugging, maintenance time, system parameters, etc
	System operation parameter feedback.

2、Use the “Edit Information” function

“Edit Information” allows users to create new information or edit existing information.

To open the Menu:touch the  to display the “Tool” list. Figure 2-4 follows.

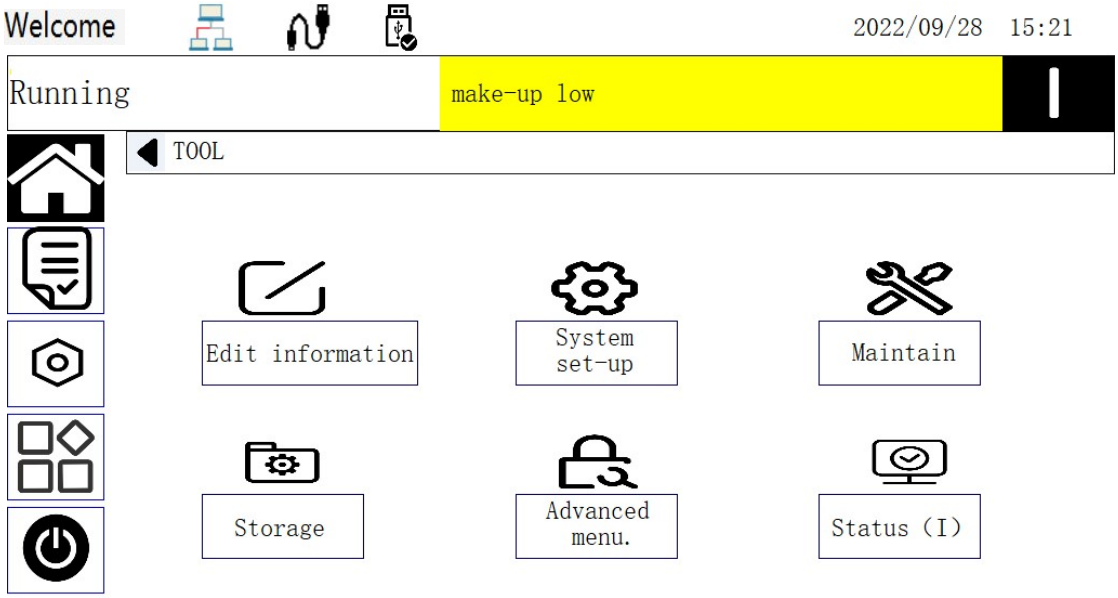


Figure 2-4

Tap the  button to open the “Edit information” screen. The information list screen will appear.

Note: Store a maximum of 100 messages. When the maximum information limit is reached, the New information button cannot be selected. To add new information, first remove the information from the information list.

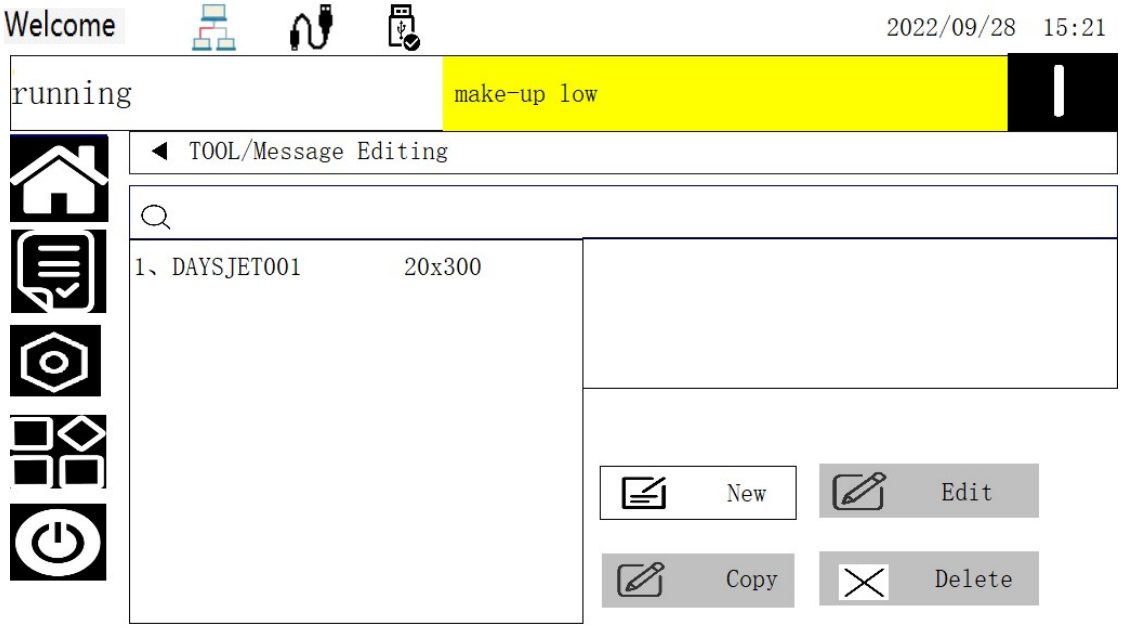


Figure 2-5

For more information about creating, editing, and deleting information, see "Edit Information" actions.

1、Quickly "Edit Curr. Information"

To quickly edit the current information, do the following:

Touch the  to go to the “Home” screen,

Figure2-6

Click  to enter the screen interface as shown in Figure 2-7.

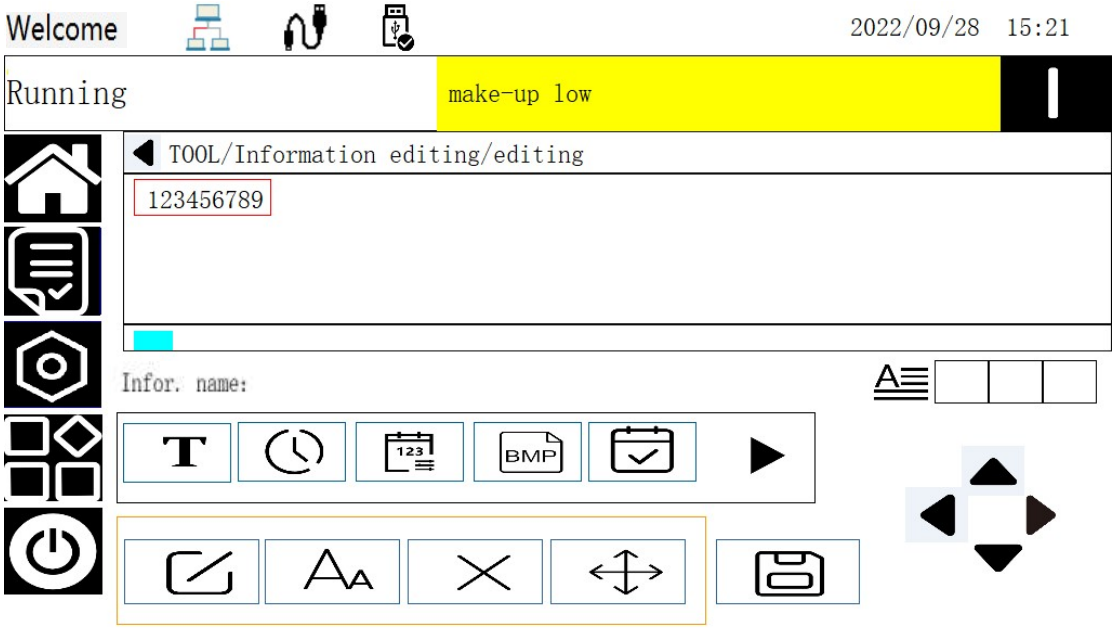


Figure 2-7

After you edit the current information, touch  . The edited information takes effect and is delivered. Press  to exit. For details on how to edit information, see "Information Editing" Operation.

4. How to start printing

If the status bar says "Standby",

Touch the "  button on the "Home" screen, and select "quick startup" or "cleaning startup".

To start printing, you must do the following:

* If a product sensor (photoelectric eye) is configured, a trigger signal will also need to be sent.

* You may need to go to  to adjust printing parameters, such as delay, H.V., etc

* If the encoder is configured, you also need to enter the  , set the printing mode, frequency division of the encoder, etc.

Refer to the detailed introduction of "Printing Settings" for specific Settings.

5. Product counter

The "home" screen counter is used to display the total number of products printed by the printer.

Product count.

Print count.

Current serial

Select the corresponding reset button to reset.

Figure 2-8

6、“Cleaning start” and “Quack start”

Use “Cleaning start” or “Quick start” to start the printer

Note: If the make up box is empty, “Cleaning start” cannot be used.

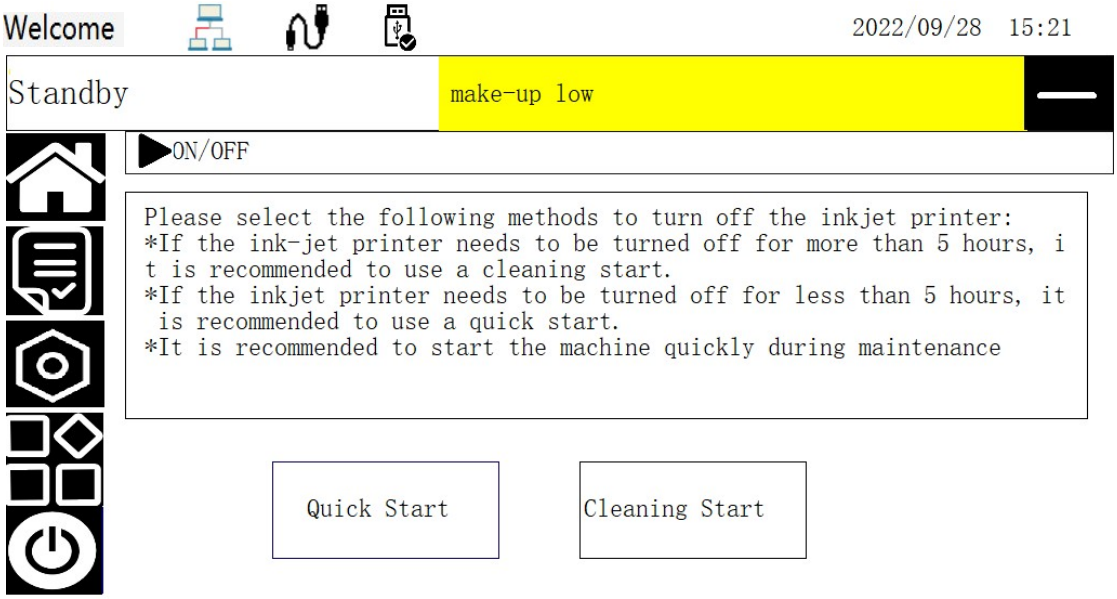


Figure 2-9

7、 how to “Cleaning the shutdown” and “Fast shutdown”

Note: When “Cleaning the shutdown” and “Fast shutdown”, the screen will be locked, and the program will jump to the home page after completion

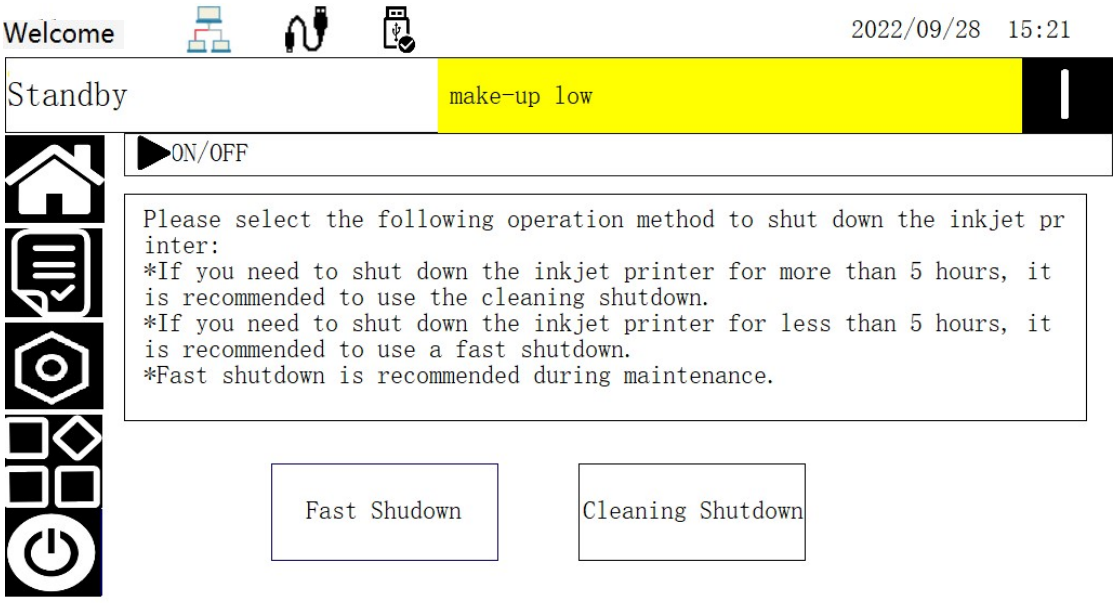


Figure 2-10

8、 Faults and warnings

In case of failure or warning, the ink-jet printer will be displayed in the alarm bar.

Fault message (red)

Failure conditions will cause the in-jet printer to stop printing and quickly shut down.

Warning message (yellow)

Warning conditions will not cause the printer to stop printing.

Read fault messages or warnings message

When there is a fault or warning, the in-jet printer will display the fault message in the alarm bar of the screen. The alarm bar will turn yellow for warning messages and red for fault messages. Touch the ‘alarm bar’ to enter the alarm details screen.

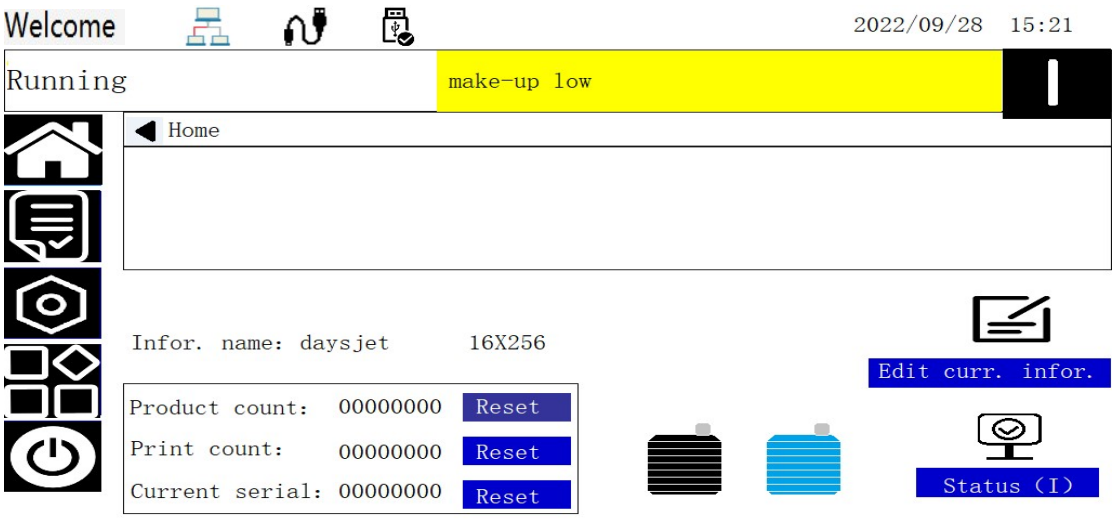


Figure 2-11

Sometimes multiple fault or warning messages appear at the same time. In this case, the alarm bar will show red.

To view fault/warning details, tap the ‘Alarm bar’.

9、Clear fault messages or warnings

To clear warning and fault information, perform the following operations:

1. Touch the alarm bar to view the list of faults and warnings

After repairing the fault, click “Clear alarm” to delete the fault message.

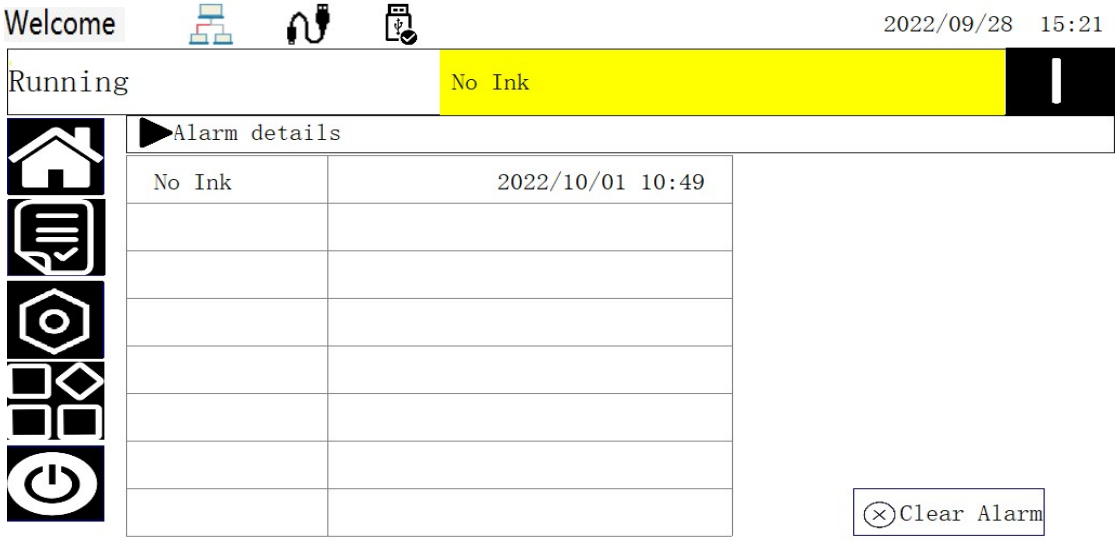


Figure 2-12

Note: The in-jet printer does not support any operation on the interface during shutdown.

Installation

一、Preparations before installation and commissioning

1、 Power supply and its environment

Power supply: 220V/50 Hz Ambient temperature: +5℃ to +45℃

Relative humidity: 10 to 90% without condensation

2、 Grounding

The ink-jet printer requires reliable grounding. If the grounding is bad, it may cause the ink-jet printer can not be used normally, as well as personal injury.

3. Inspection of equipment

Before installation, unpack the box to check whether the items are consistent with the items listed in the packing list, check whether all connectors such as the main board are connected reliably, and check whether the ink circuit system and part of the nozzle pipes fall off or are damaged.

二、Installation process

1、Start the ink-jet printer power supply.

2、Open the door, insert a new ink box, observe the interface ink box capacity; Touch  , and then touch  , as shown in Figure 3-1.

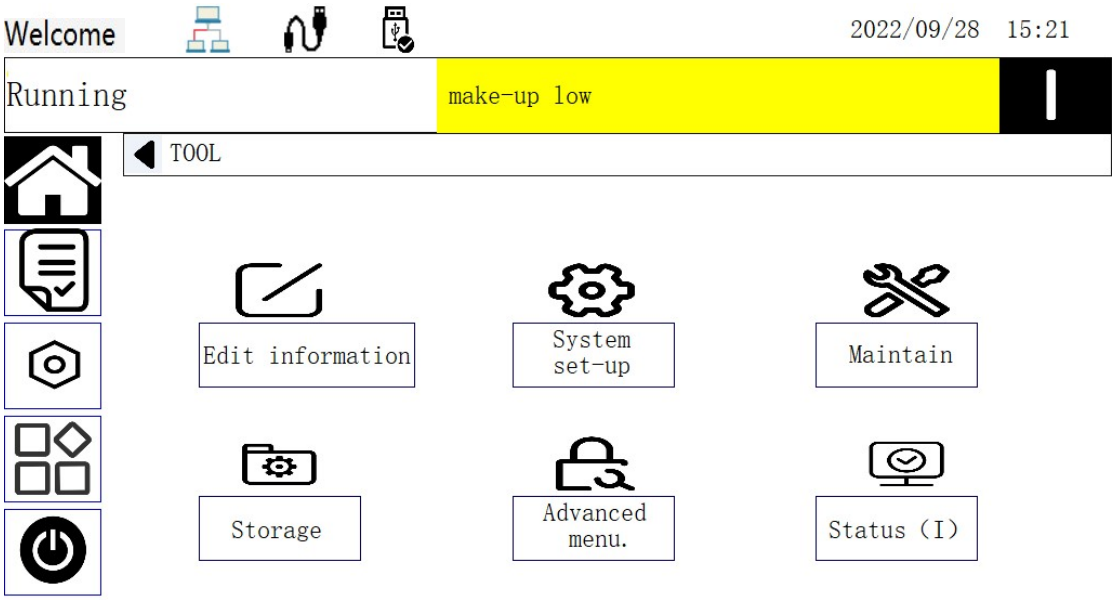


Figure3-1

3、Perform the “**Installation**” operation, as shown in Figure 3-2,. After about 15 minutes, “**Installation**” automatically switches to OFF. Click and touch the alarm bar, enter the alarm details, touch “**Clear Alarm**”, eliminate the red light alarm. See Figure 3-3.

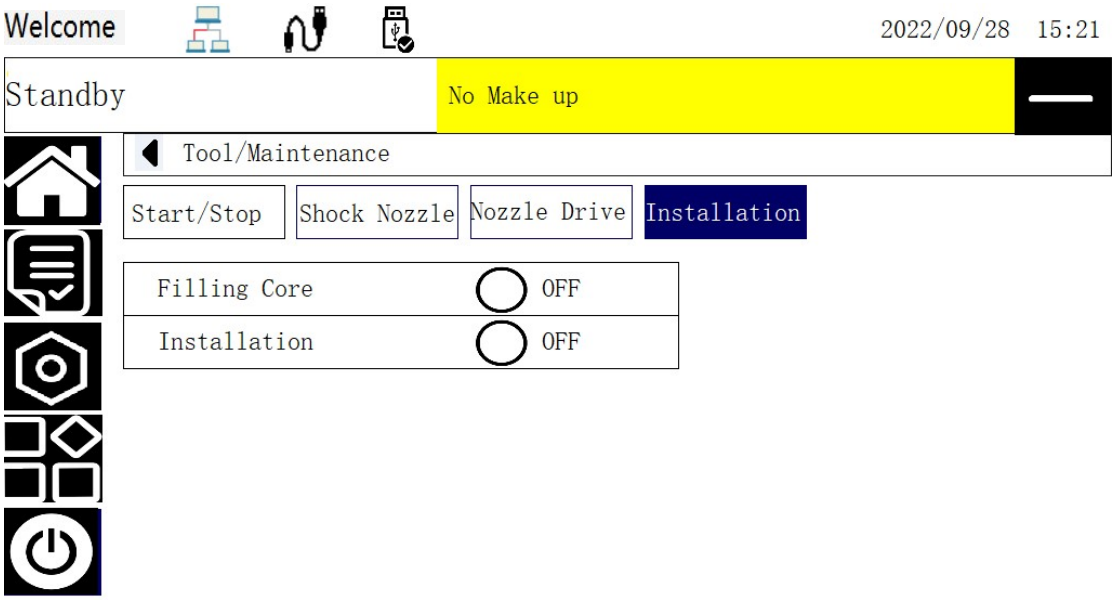


Figure 3-2

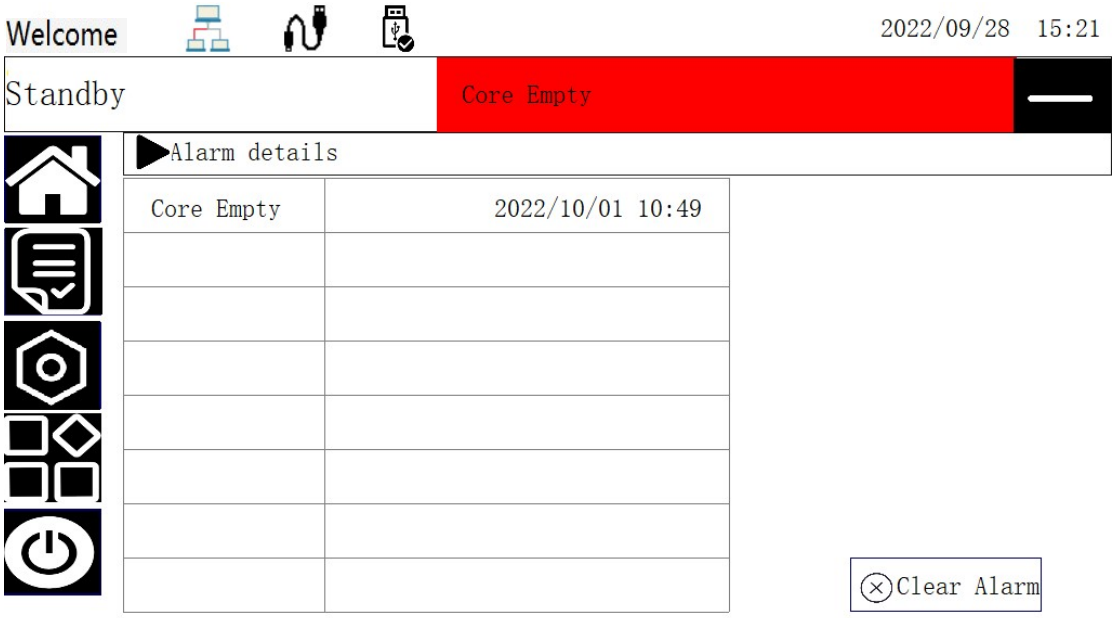


Figure3-3

4、Touch the “Shock Nozzle”, first switch “Start Pump” to ON, and then perform the “Shock Nozzle” operation after starting, to exhaust gas and dredge the nozzle of the target system, as shown in Figure 3-4.

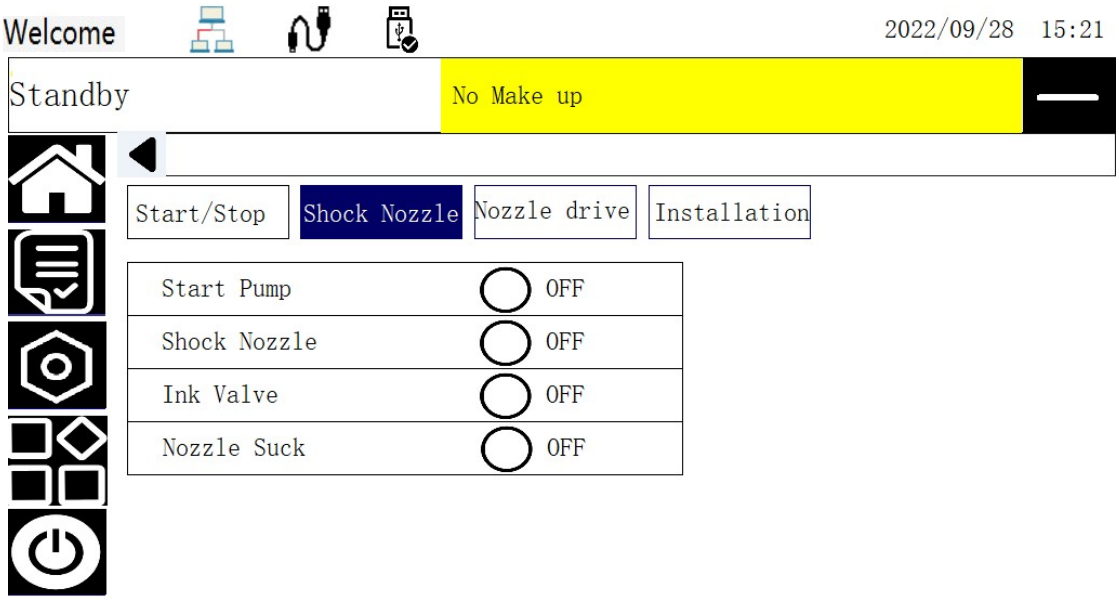


Figure 3-4

After 30 minutes of "**Shock Nozzle**", turn off the "**Shock Nozzle**" function.

5、Switch [**Ink valve**] to ON and adjust the ink line to enter the recovery tube, as shown in Figure 3-5.

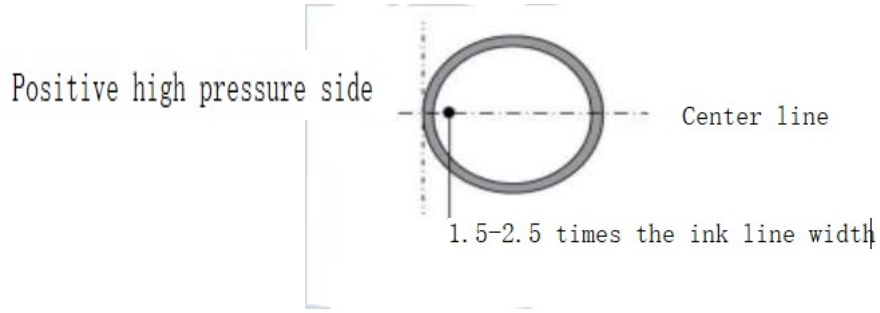


Figure 3-5

6、Close "**Ink valve**", as shown in Figure 4-4. At the same time, switch "**Start pump**" to OFF.

Note: 1. Only when the state of [**Start pump**] is OFF, you can exit this menu. 2. [**Shock nozzle**] and [**Ink valve**] are interlocked and cannot be opened at the same time.

7、Install the head cover and execute "**Cleaning Start**". About 4 minutes later, the status bar will display printing. As shown in Figure 3-6.

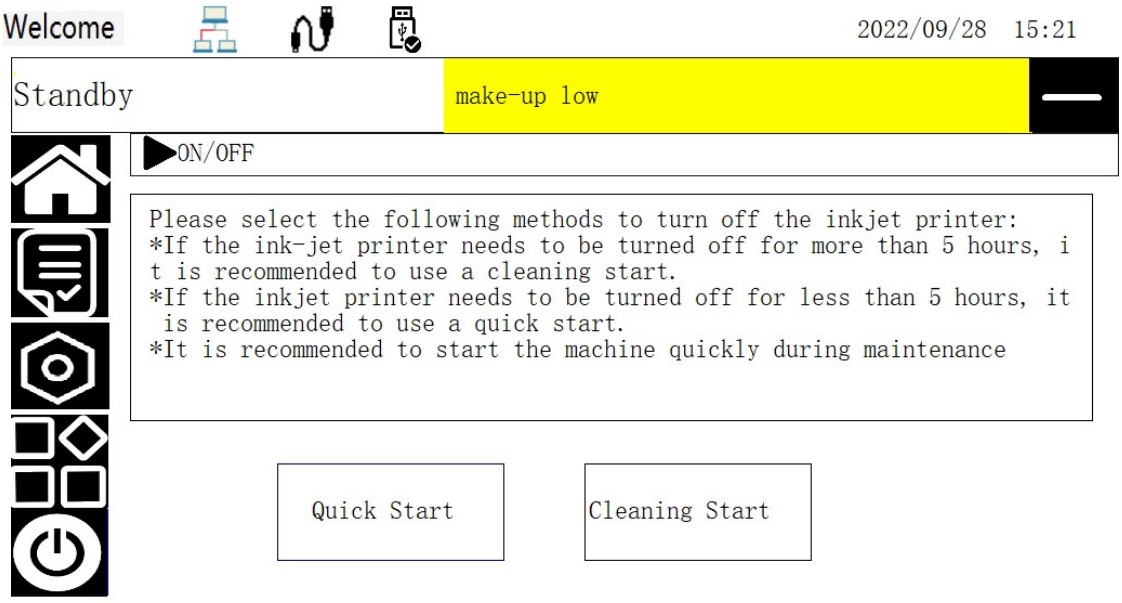


Figure3-6

8、Touch Status (I) and observe the parameters of the in-jet printer, as shown in Figure 3-7. The change in viscosity was observed continuously for 3 cycles, and then the make up box was inserted until the current value of viscosity and the set value were approximately the same. Adjust the "Nozzle Drive" value, refer to the ink circuit system for details.

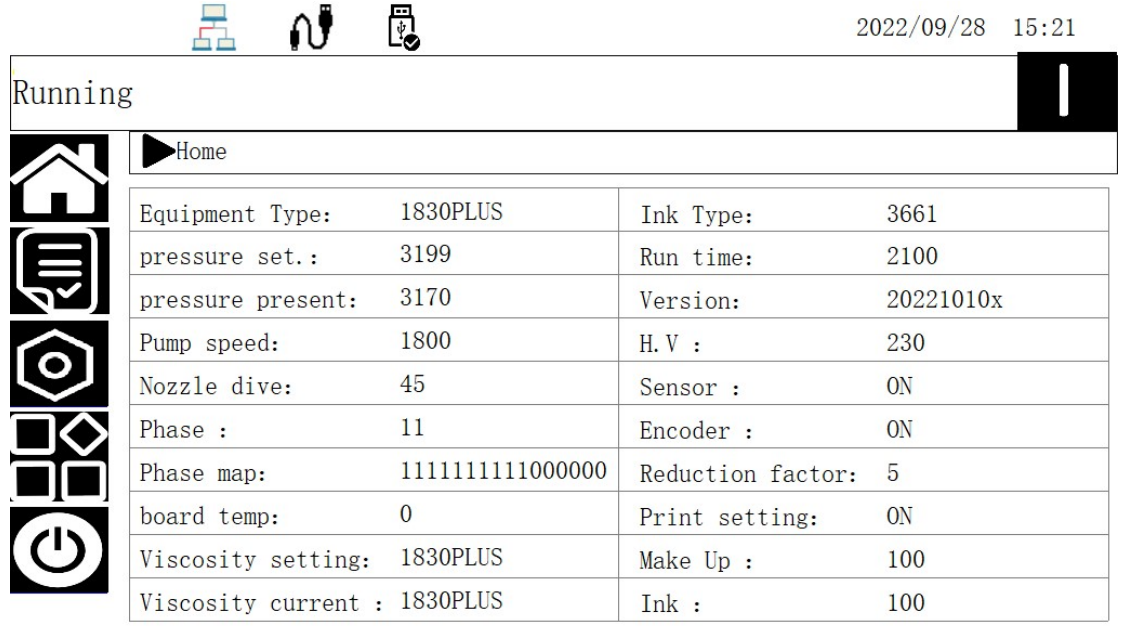


Figure3-7

9、Install the head to the position specified in production, and the

installation height of the head should not be lower than (or very higher than) the position where the shelf and pipe connect. Set the sensor or encoder.

User interface

一、Introduction

This chapter describes how to use the user interface (UI) to accomplish the following tasks:

* Use the “TOOL” screen
* “Edit Information” action
* “System set up”
* “status(I)”
* “Printing setup”
* “Maintain”

二、For more information about the bars and buttons on the “Home” screen, see “User Interface Overview”

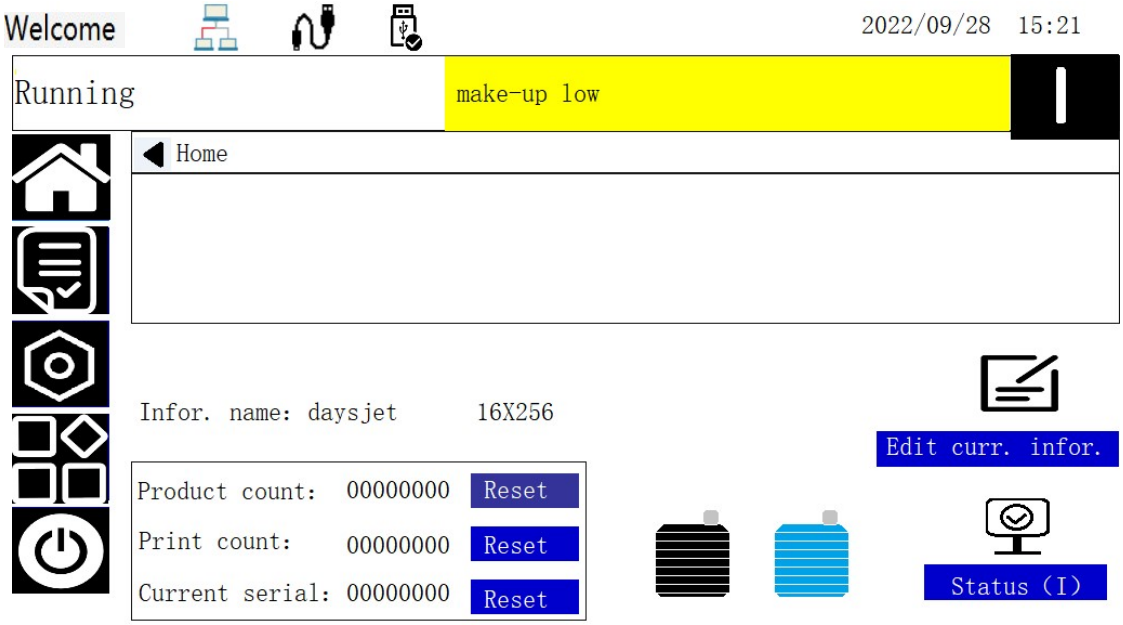


Figure 4-1

三、Use the “Tool” screen

Touch the on the “Home” screen to access the “Tool” screen

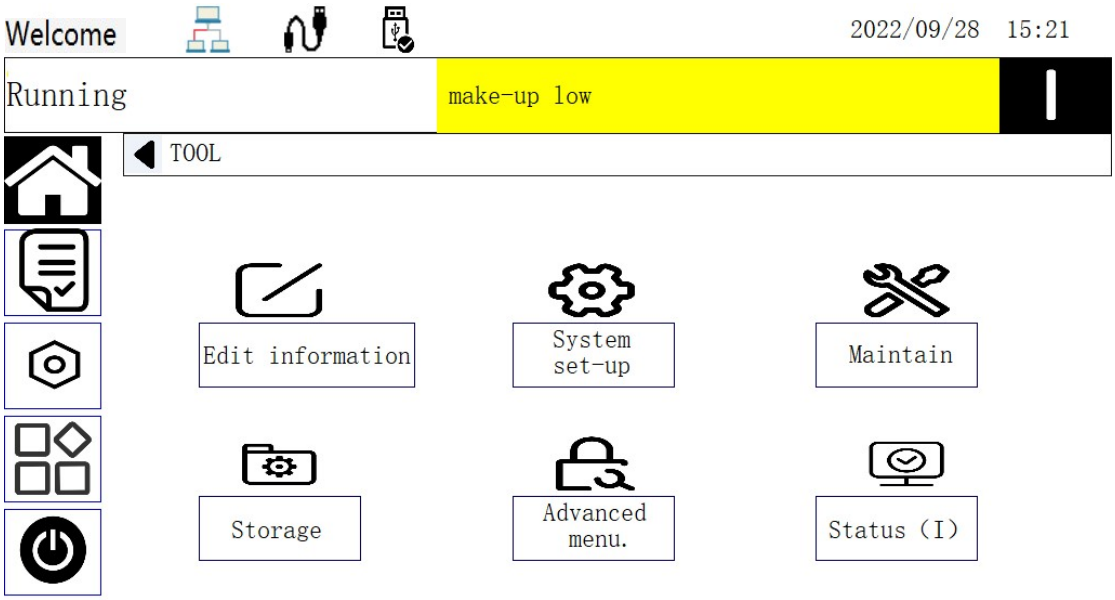


Figure 4-2

1、The “Edit Information” operation

“**Edit information** ” is the primary tool for creating and editing new and existing information.

To open the “Tool”:

* Tap the  to open the “**Edit information**” screen.

* The information list page is displayed, as shown in Figure 4-3.

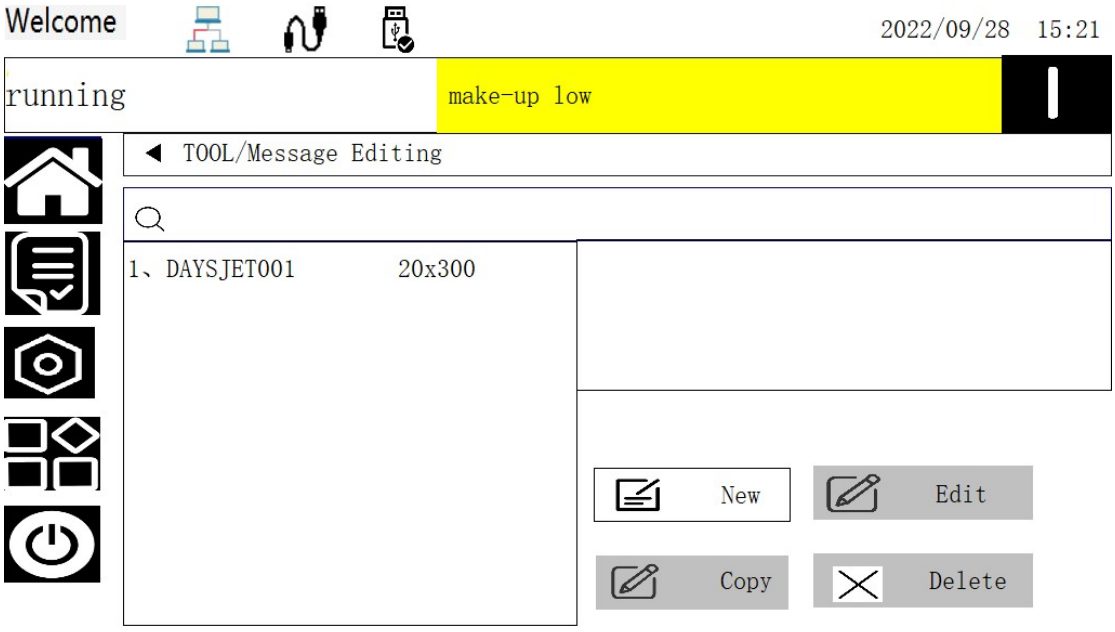


Figure4-3

Create information

Touch the New to create a new message. This displays a blank information page.

Edit information

To edit existing information, select the information you want from the information list on the left side of the screen and touch the Edit button.

Once an existing message is opened, all its fields can be added, edited, moved, and deleted just like a new information.

Delete information

Select the desired information from the information list on the left side of the screen and touch the Delete button to delete this information.

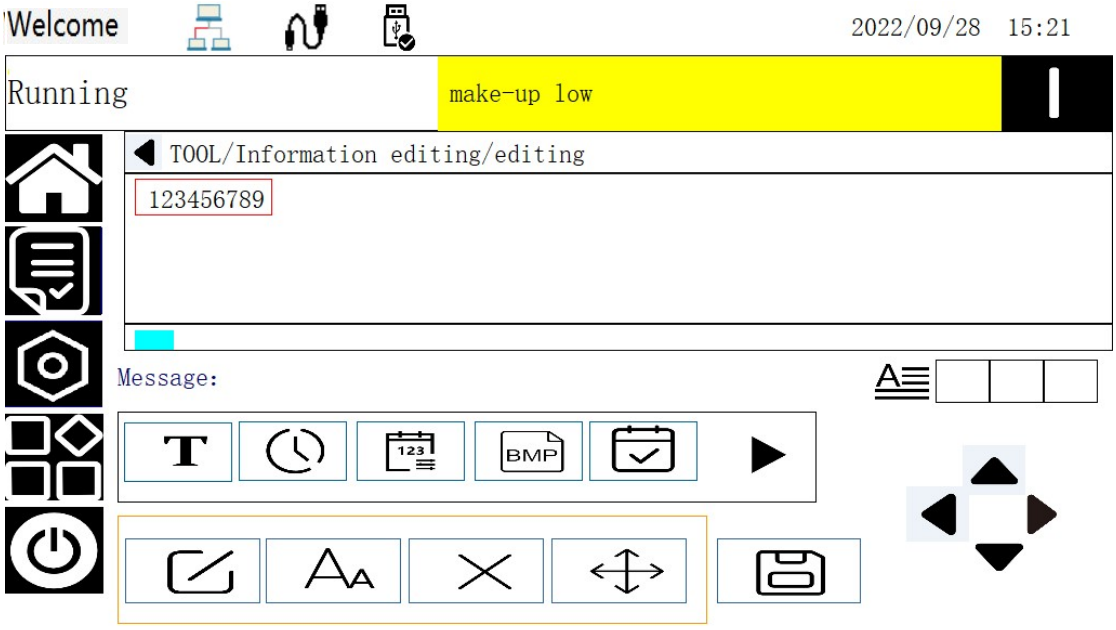


Figure4-4

New

“The New screen allows users to access the following:

Button	Description
T	Enter numbers, English, symbols, Chinese and other language characters
	The insertion requires a print time format
123	Insert the serial number rule that you want to print
BMP	The insert suffix is BMP for the picture
	Insert the shift code that you want to print
	Insert the generated bar code
	Insert the various QR codes generated
	Insert communication data

（1）Add **Text**

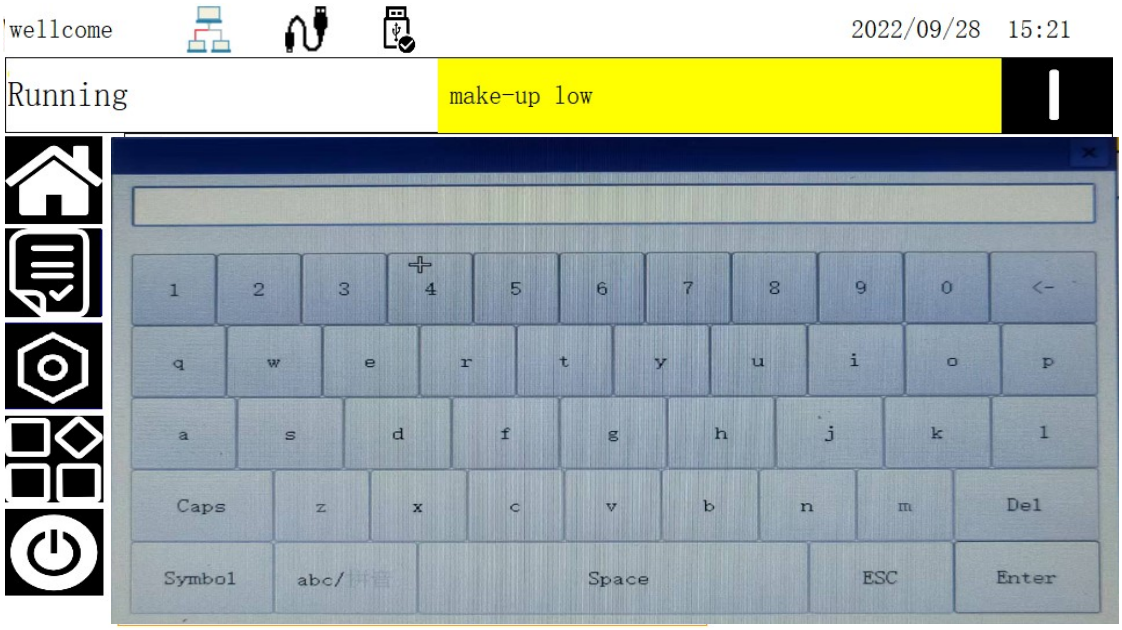


Figure 4-5

* Touch “T”, and then click the position of text to be placed on the screen editing box, the screen as shown in Figure 4-5 appears.

(2) Add “Clock”

Touch , and then click the screen editing box, as shown in the following figure 4-6;

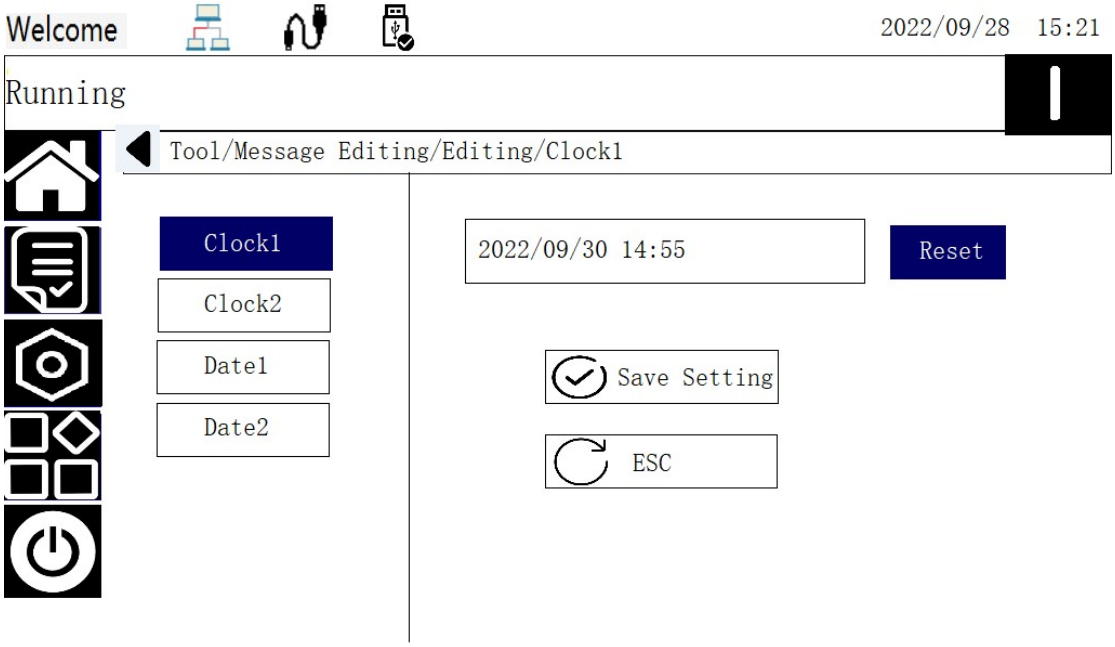


Figure 4-6

Select “Clock 1” or other, and the right box previews its content format.

A maximum of four pieces of clock information (two clocks and two dates) can be added to each piece of information

Touch ✓ to insert the specified clock into the information box. To cancel this operation, touch ↻ to return to the editing interface.

To redefine the clock and date format, touch **“Reset”**, as shown in Figure 4-7.

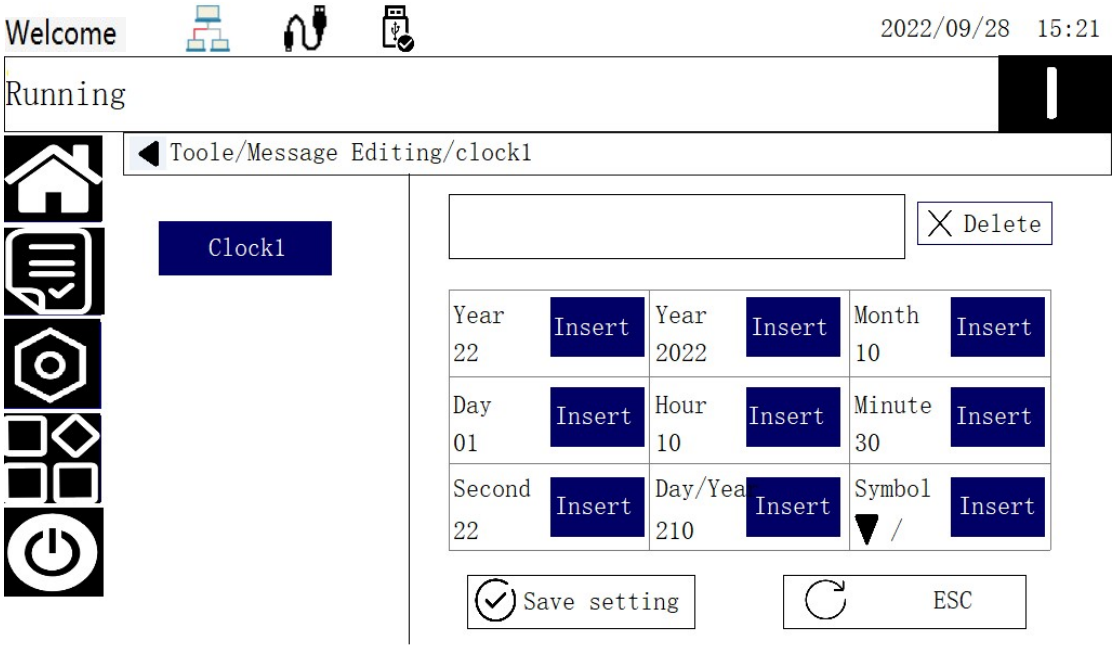


Figure 4-7

Insert the required content into the preview box. After the customization is complete, press ✓ to return to the upper menu. If you cancel this operation, touch "↻" to return to the upper menu. After the customization is complete, the defined "clock" is inserted into the message.

To insert the shelf life, click **“Date 1”** or **“Date 2”** first, as shown in Figure 4-8 below:

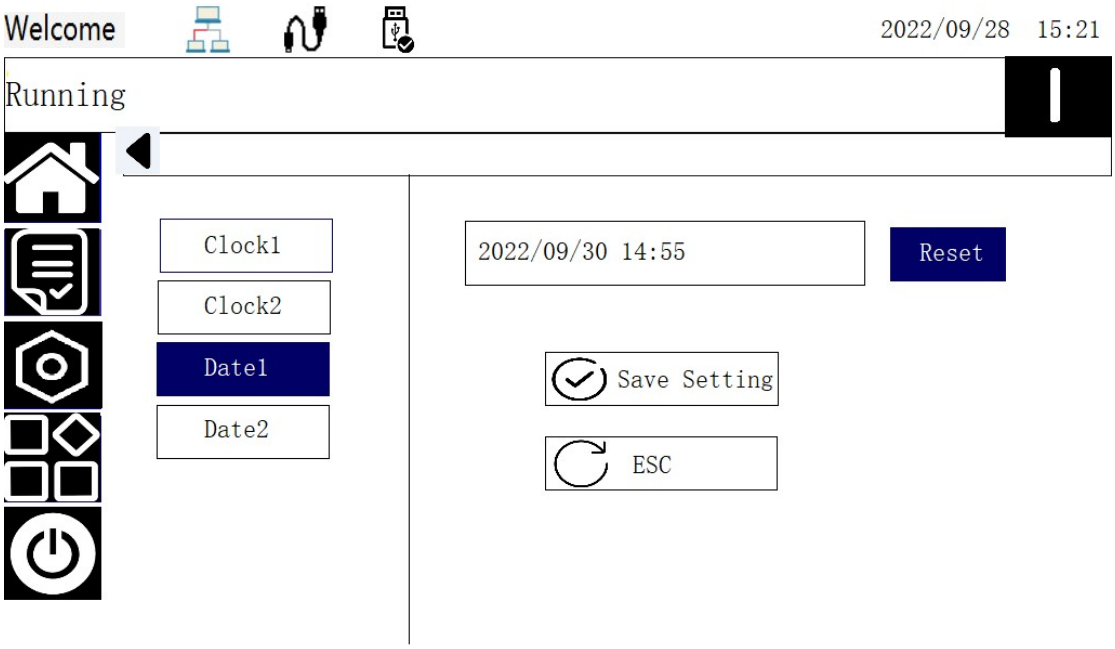


Figure 4-8

Click “**Reset**”, as shown in Figure 4-9, enter “**EXP.DAYS**”, select the content to the preview box, and press ✓ to return to the upper-level menu after the customization. To cancel this operation, touch ↻ to return to the upper menu. After the customization is complete, the defined "date" (shelf life) is inserted into the message.

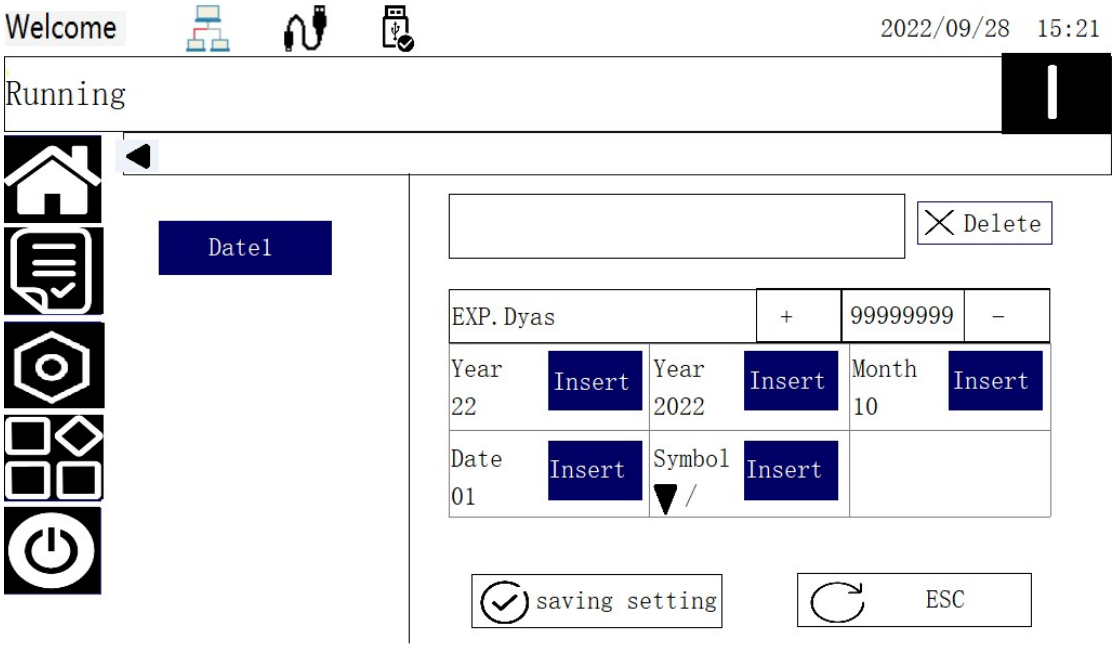


Figure 4-9

（3）Add “Ser. Number”

Click , as shown in the following figure 4-10. Touch the button to insert the confirmed serial number into the information box. If you want to cancel this operation, touch the button to return to the editing interface.

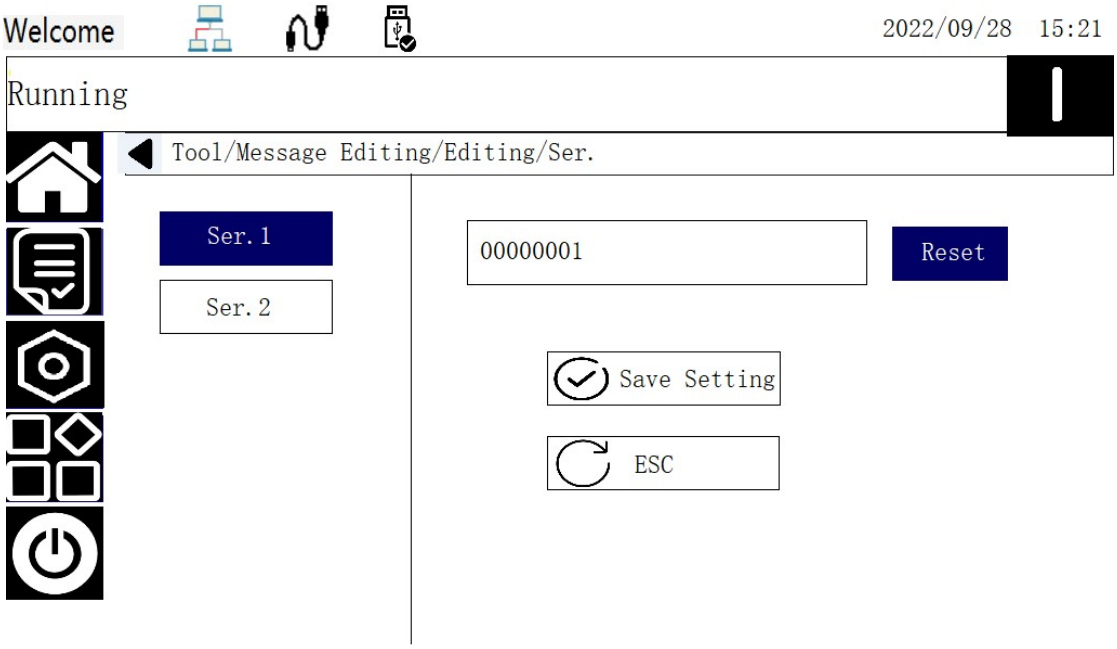


Figure 4-10

To change the serial number rule, click “Reset”, as shown in Figure 4-11 below:

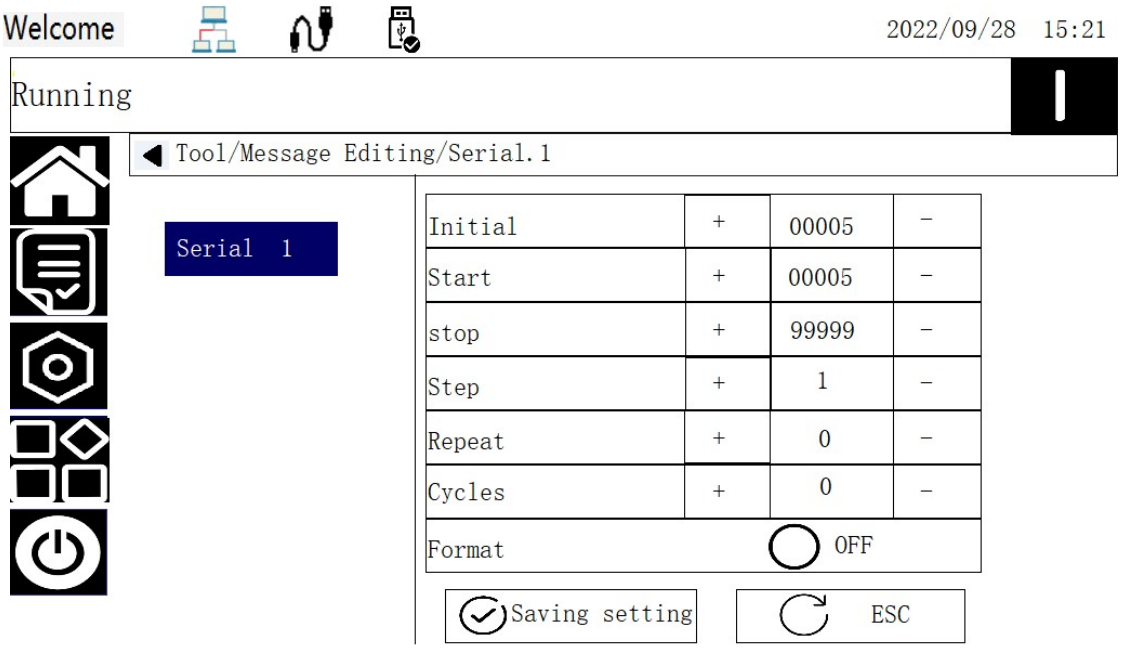


Figure 4-11

Name	Description
Initial	The user can set the current value of the serial number.
Stop	The user can set the termination value of the serial number (the maximum value of the loop).
Start	The user can set the minimum value of the loop
Step	The user can set the number of units by which the serial number increases or decreases.
Format	The user may define another character to replace any leading zero. The default setting is 0. And the leading zero stays the same.
Cycles	Users can set the Loop option to Yes/No. If set to Yes, the count will start from the starting value when the maximum count is reached.
Repeat	Set 0 or 1 without repeating. If the setting is greater than 1, the number of times that the serial number repeats the printing setting will be changed after the step distance.

Insert the required content into the preview box. After the customization is complete, press Save to take effect. After the customization is complete, the defined “serial number” is inserted into the message.

Note: Only two serial number can be added to a message.

（4）Add **BMP**

Touch 

,as shown in Figure 4-12 .

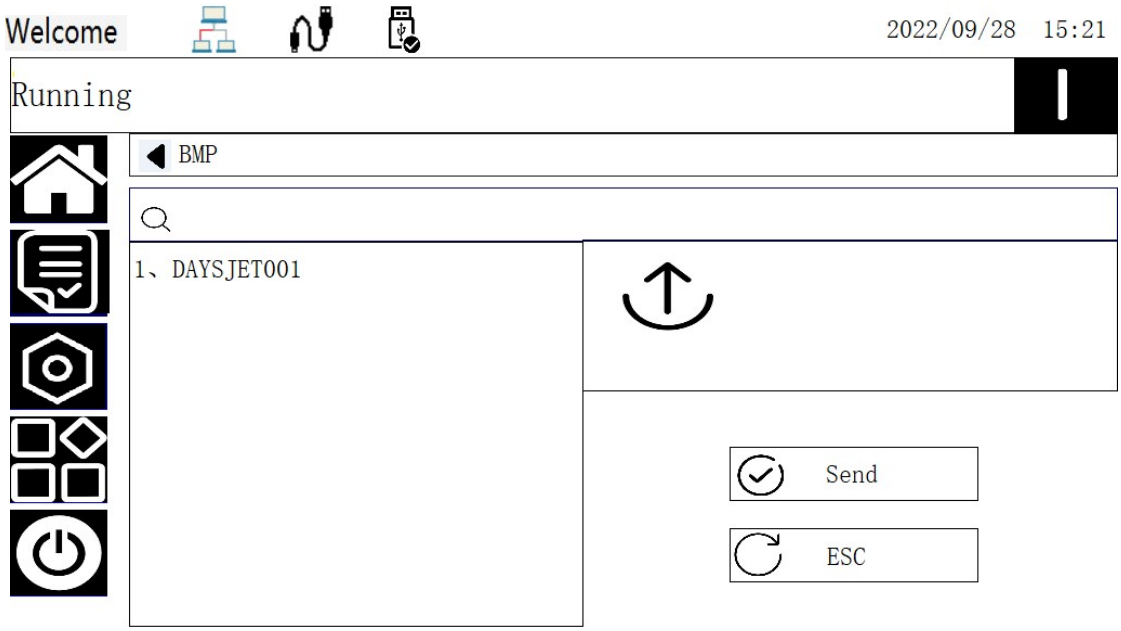


Figure 4-12

Select the desired **BMP** name and preview the picture in the right box.

Touch the  button to insert the selected image into the editing box.

Touch  to abort the addition and return to the editing state.

（5）Add “**Shift Code**”

Touch  , as shown in figure. 4-13:

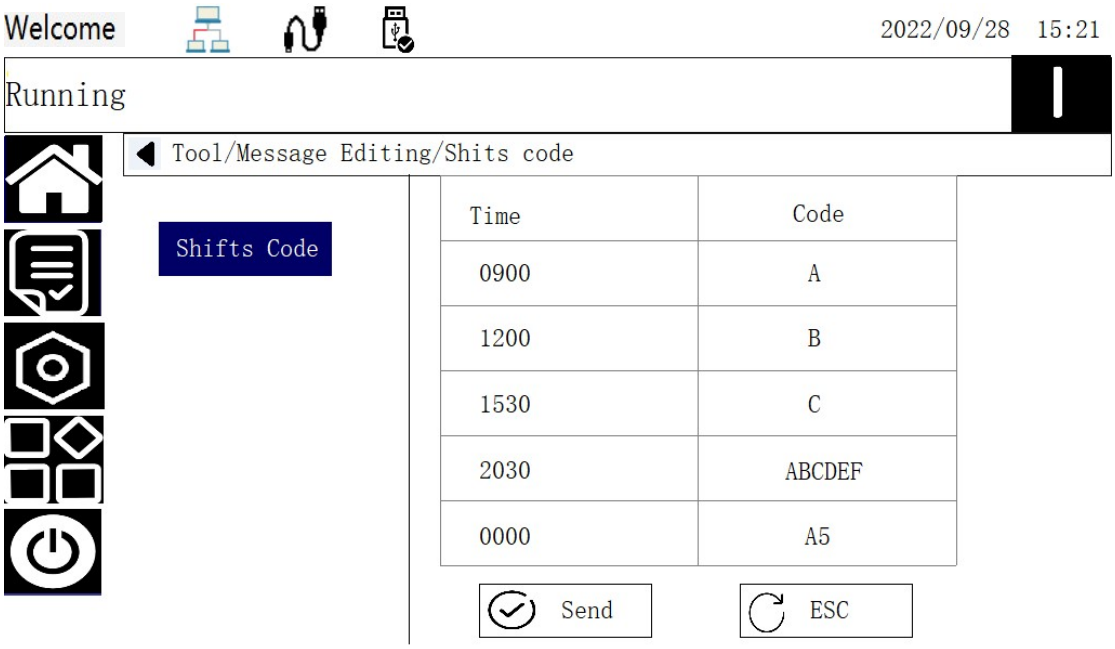


Figure 4-13

Modify the “Time” and “code” of the shift you want to insert, touch the button to insert, touch to stop adding the shift, and return to the edit state.

（6）Save information

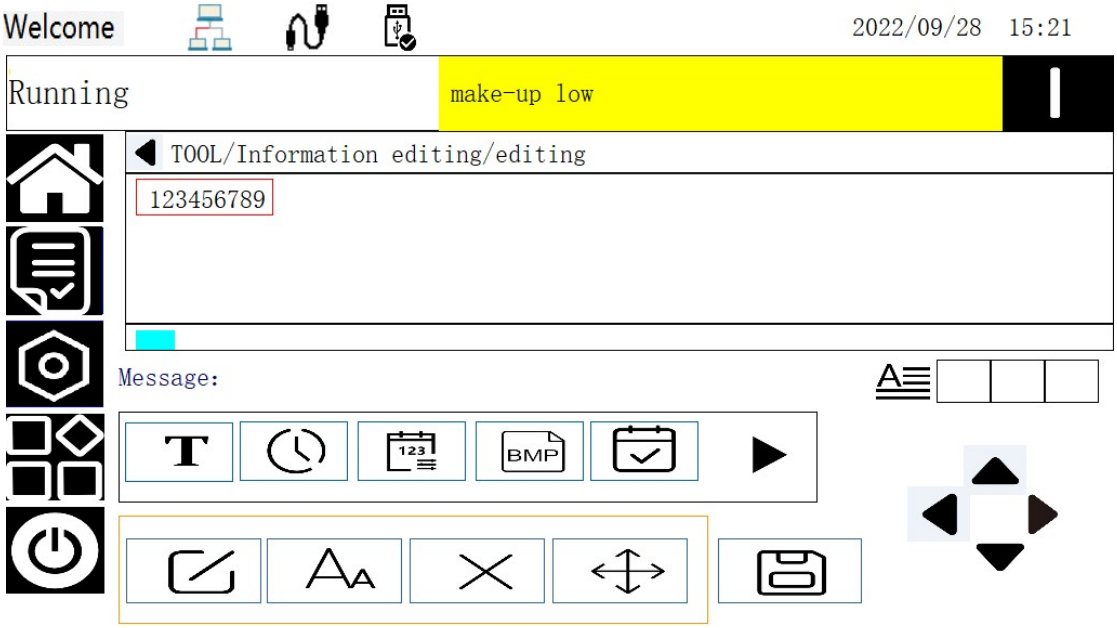


Figure 4-14

For new information, you need to enter the information name to save the information.

Note: Each information name must be unique. If the name you entered for the information already exists, you will be prompted whether you want to overwrite the file. If you select No, you must re-save the file and enter a new information name

(7) Select content

Click the desired field, and a red box is displayed around the selected field, as shown in Figure 4-15. To cancel, click any blank space in the information or click another desired field.

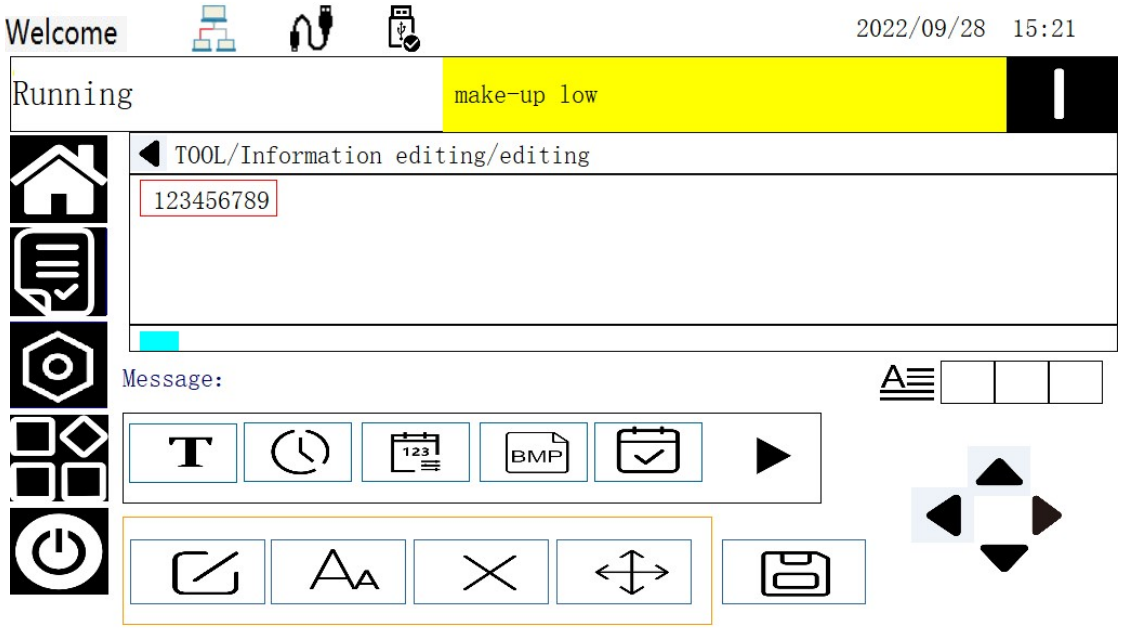


Figure 4-15

Click  to edit the selected field. See "**Edit Information**".

Click  to modify the characteristics of the selected field, as shown in Figure 4-16 below.

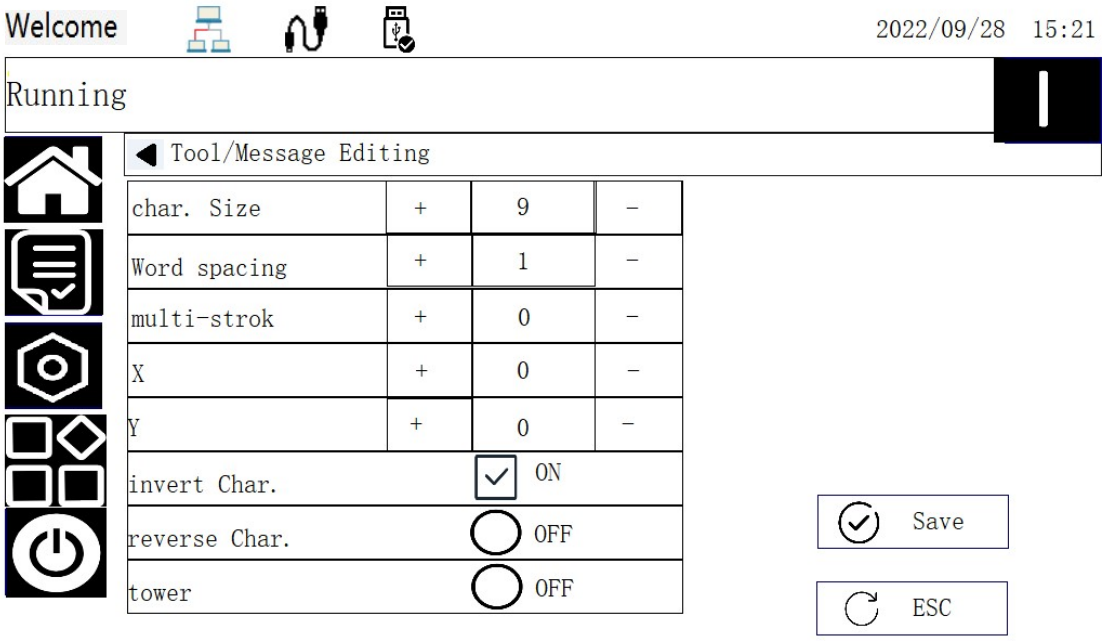


Figure 4-16

Char.Size	5X5, 7X5, 9X7, 12X9, 16X10 etc.
Word spacing	The spacing between characters
Multi-strok	Character horizontal magnification
X	The x coordinate of the current module
Y	The y coordinate of the current module
Invert Char.	The current module content is Invert.
Reverse Char.	The current module content is reverse.
Tower	The current module content is displayed in 90° rotation

Click ✕ to delete the selected field from the information.

After clicking ✥, you can drag the selected field to the position you need to place it, or you can use ✥ to move the module one pixel up, down, left and right. Click ✥ again to cancel the mobile function.

Note: If ✥ does not take effect, the selected field cannot be moved.

Divide rows by adding or subtracting the value of the column. If the value of "column" is 0, the coordinate position of y (line) of the editing module can be moved arbitrarily. If you need to quickly edit the information of 3 lines of a 7-dot matrix and quickly adjust the line spacing, you can set the value of "column" to 8, and the interface

will automatically divide the line positions. After inserting the module, the position of the first line of the module will be fixed at 0, the position of the second line at 8, and the position of the third line at 16. The line spacing of each 7-lattice module is 1, so adjust the "column" value of 9, and the line spacing of each 7-lattice module is 2. Similarly, if the row spacing of 12 lattice modules is 1, the value of "column" can be set to 13; if the row spacing of 12 lattice modules is 2, the value of "column" can be set to 14. Each lattice editor sets the "column" value according to the module lattice +n. The n value is the value of the spacing between the lines of each module.

2、 System set up

（1） Language set up

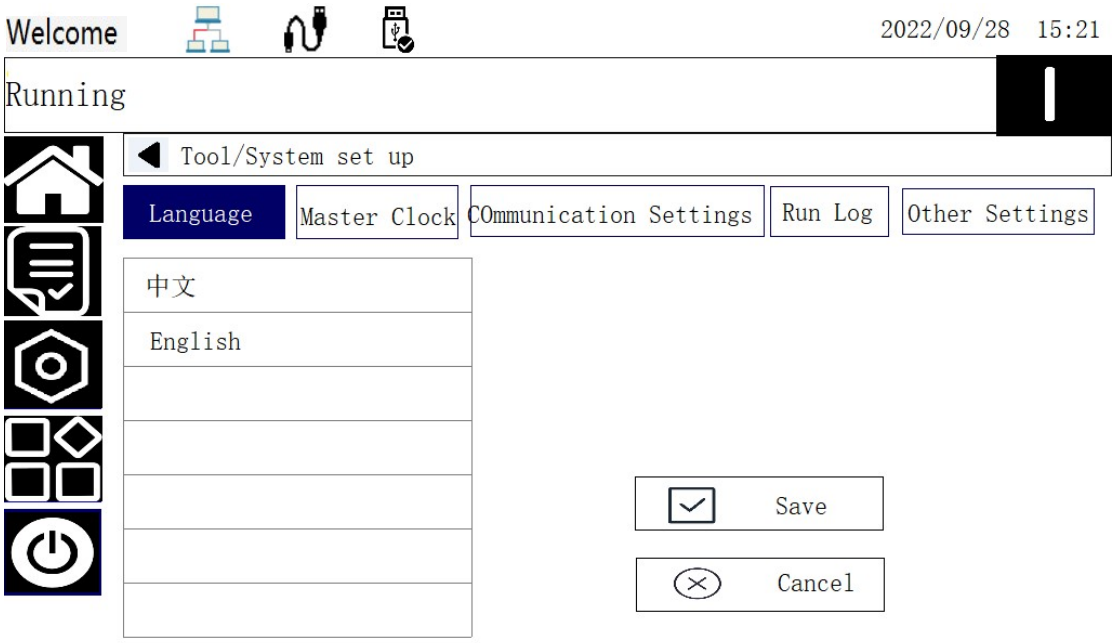


Figure 4-17

As shown in Figure 4-17, select the desired language and click to make the change take effect. To cancel the modification, click , To exit the screen, touch “Home”.

（2）Master clock set up

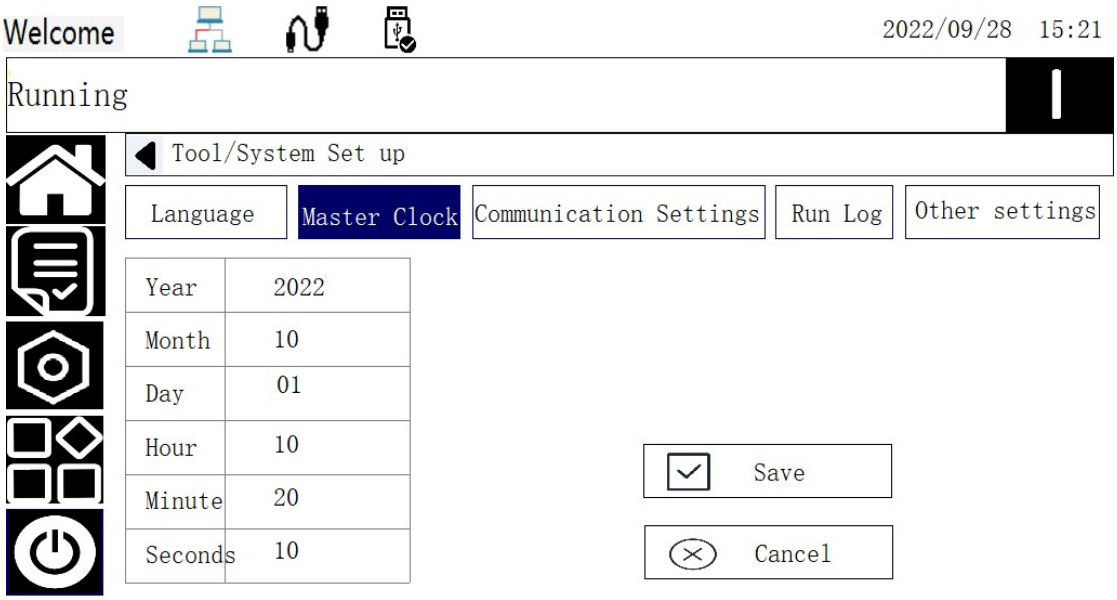


Figure 4-18

Set the system clock and click  to make the change take effect. To cancel the modification, click  . To exit the screen, touch "Home".

(3) Communication settings

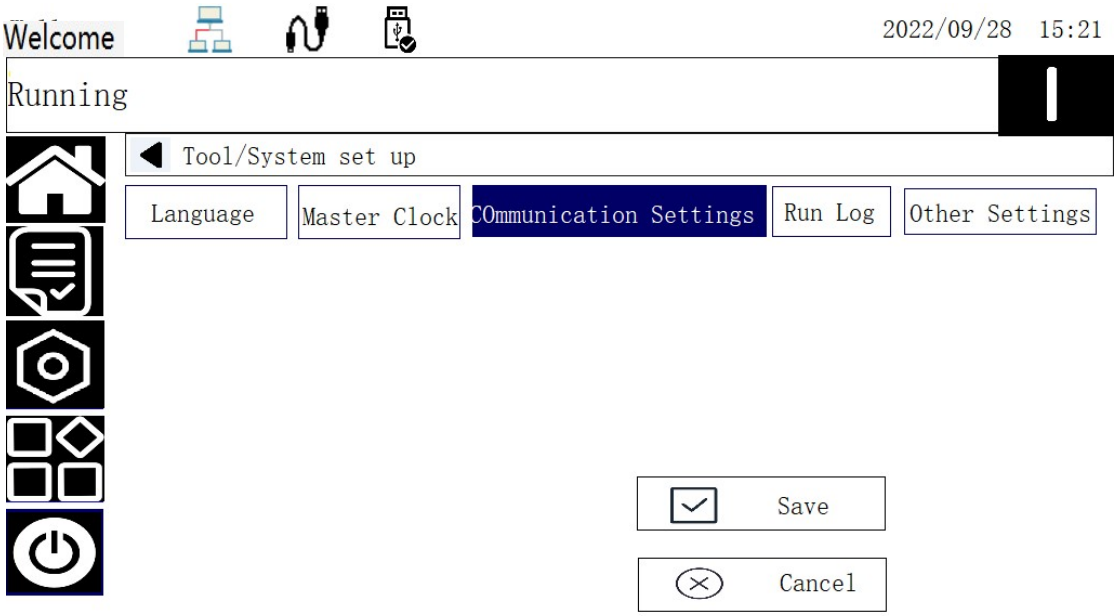


Figure 4-19

(4) Rum log

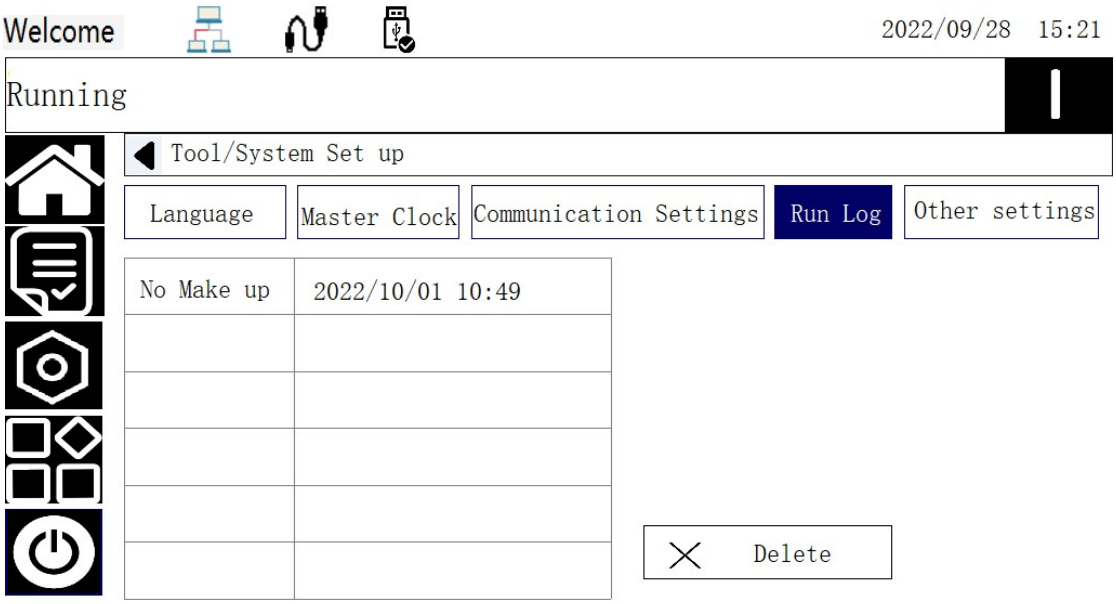


Figure 4-20

This screen displays the warning and failure of the ink-jet printer. Select the column and click ✕ to cancel the display of this failure. As shown in Figure 3-20. To exit the screen, touch Home.

(5) Other setting

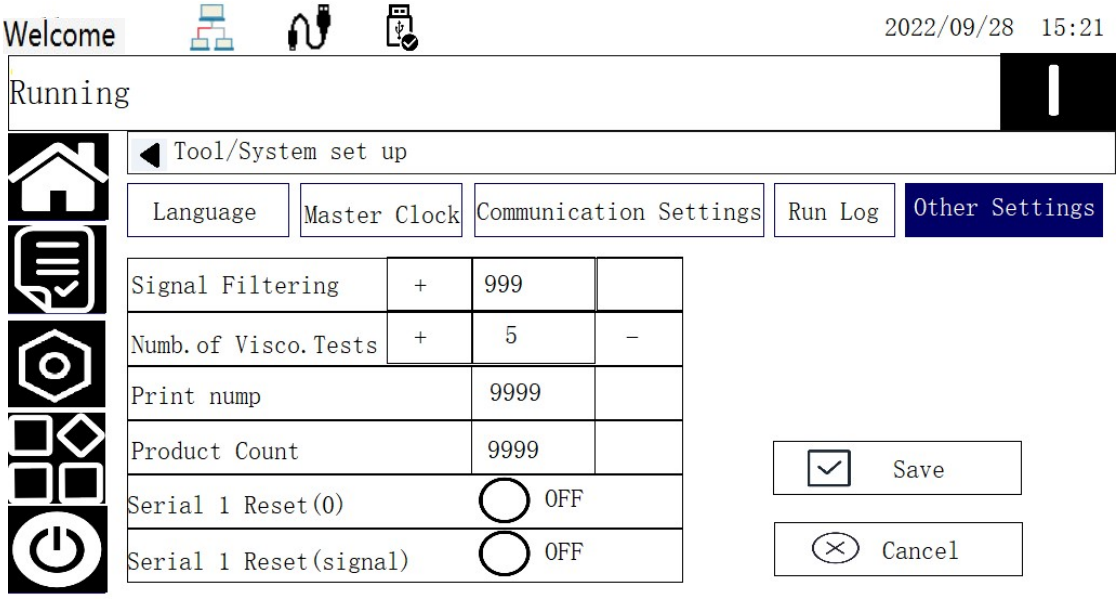


Figure 4-21

Name	Description
Signal filtering	Filter trigger signal, unit: ms
Numb.of viso. tests	After the viscosity test was extended for N times, make up was added
Serial 1 reset(0)	The serial number 1 is automatically reset after 24:00
Serial 1 reset (signal)	Signal control reset serial number 1

After modifying the Settings, click  to make the changes take effect.

To cancel the modification, click  ,To exit the screen, touch **"Home"**

3、Maintain

（1）Start/Stop

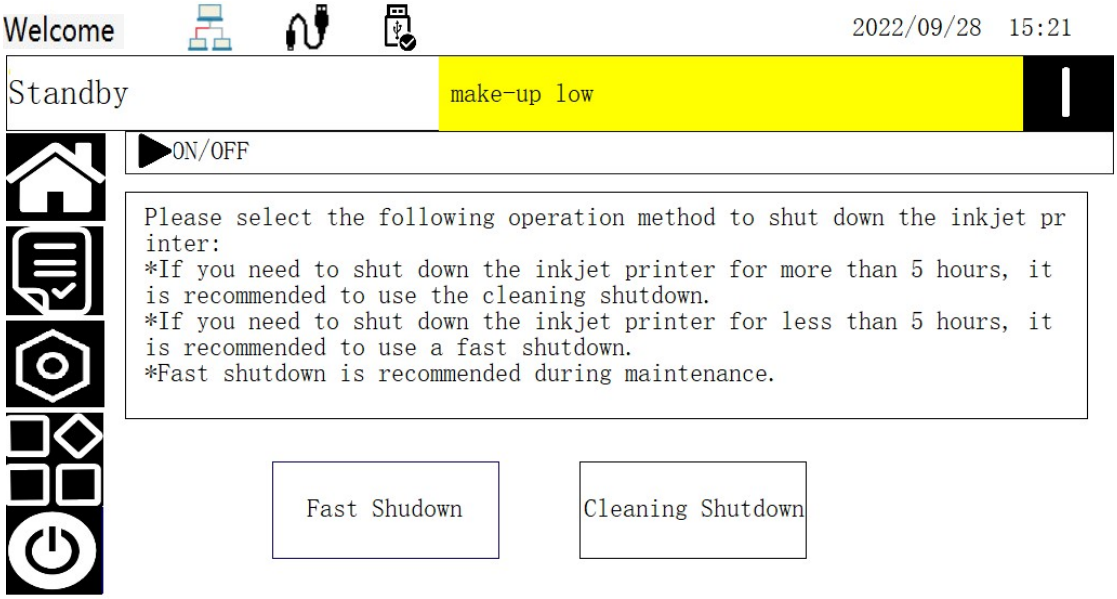


Figure 4-22

Note: A short period of continuous **"Cleaning shutdown"**, may make the viscosity of the system is too low, resulting in a decline in printing quality and other failures.

（3）"Shock Nozzle"

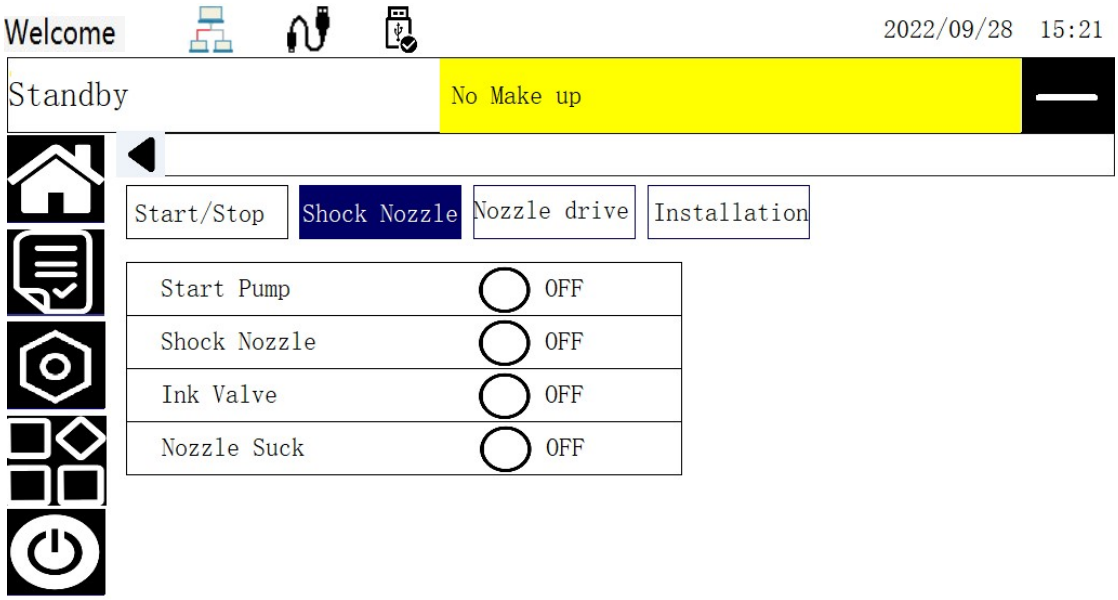


Figure 4-23

* To execute the two functions of “Shock nozzle” and “Ink valve”, the “start pump” must be executed first;

* To perform the “Nozzle suck” function, close the “Start pump” first.

* “Shock nozzle” and “Ink valve” cannot be opened at the same time.

(4) “Nozzle Drive”

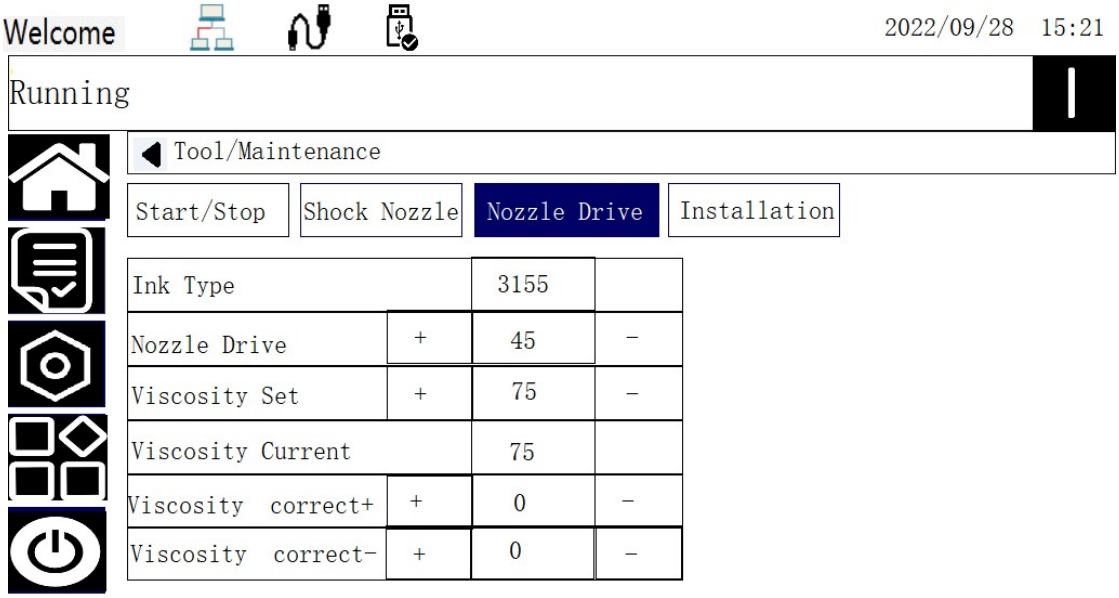


Figure 4-24

As shown in Figure 4-24, this screen can set the viscosity of the system,

nozzle drive value, and type of ink.

The parameters of this menu take effect immediately. To exit, touch “Home”.

（4）Installation

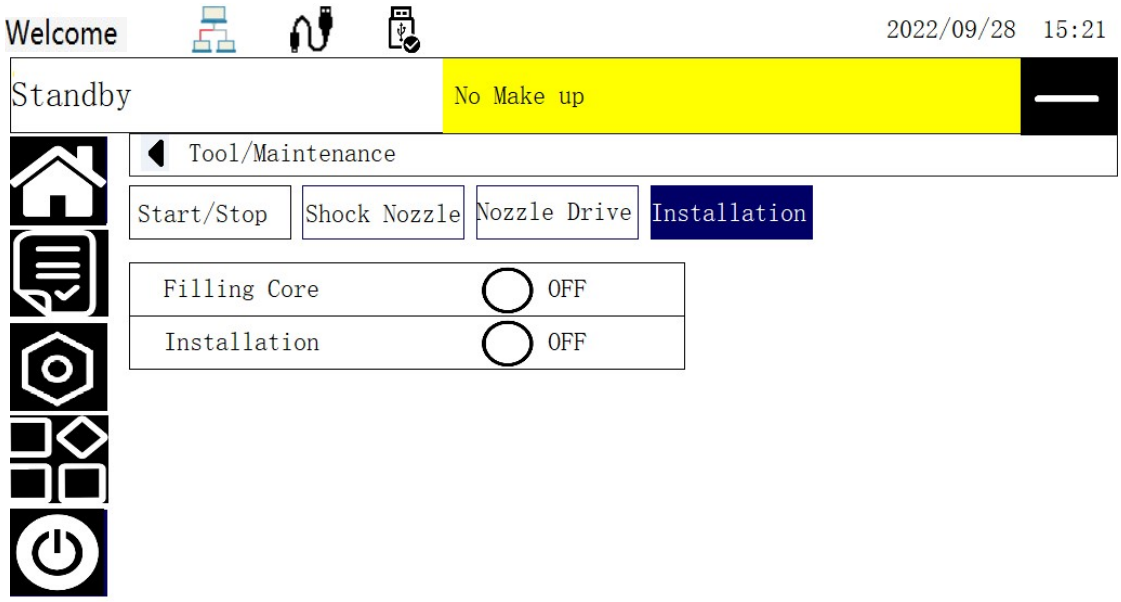


Figure 4-25

Please refer to the introduction of the installation machine.

When the ink core empty fault occurs during the operation of the ink-jet printer, you can install a new ink box and execute “Filling core”.

4、Storage

（1）Information

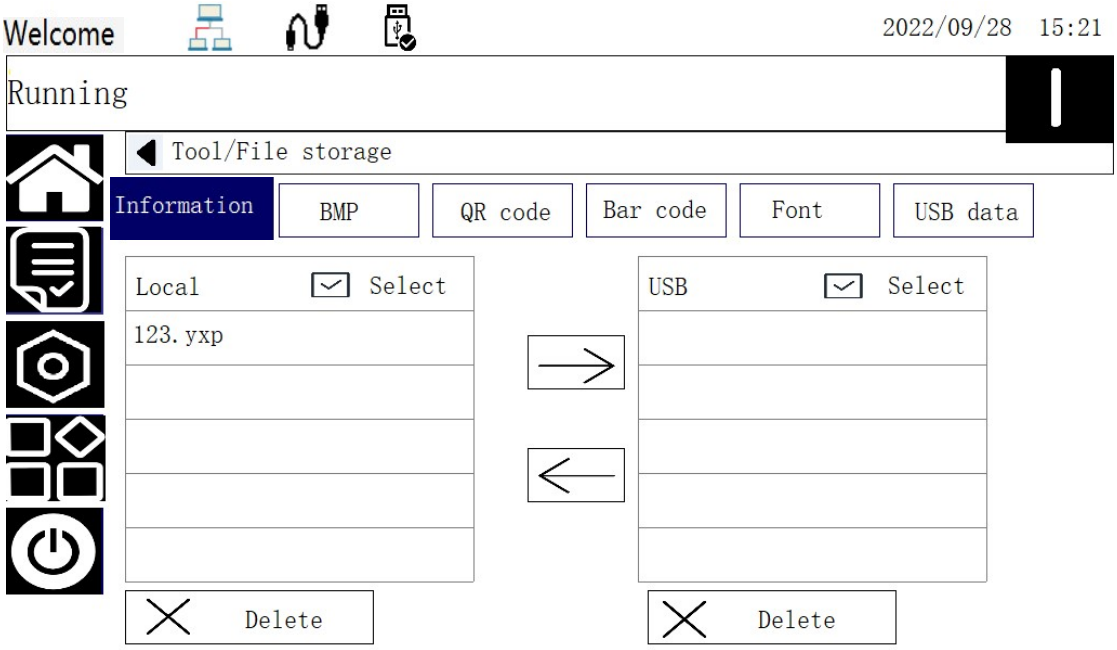


Figure 4-26

Information import and export

A folder named "my_file" needs to be created in the root directory of the USB flash drive. The information exchange between the USB flash drive and Local information of the in-jet printer needs to be realized through this folder.

Select the information in the USB flash drive and press the arrow key to import the information in the USB flash drive to the local.

Select local information and press the arrow key to export the local information to the USB flash drive.

（2）BMP

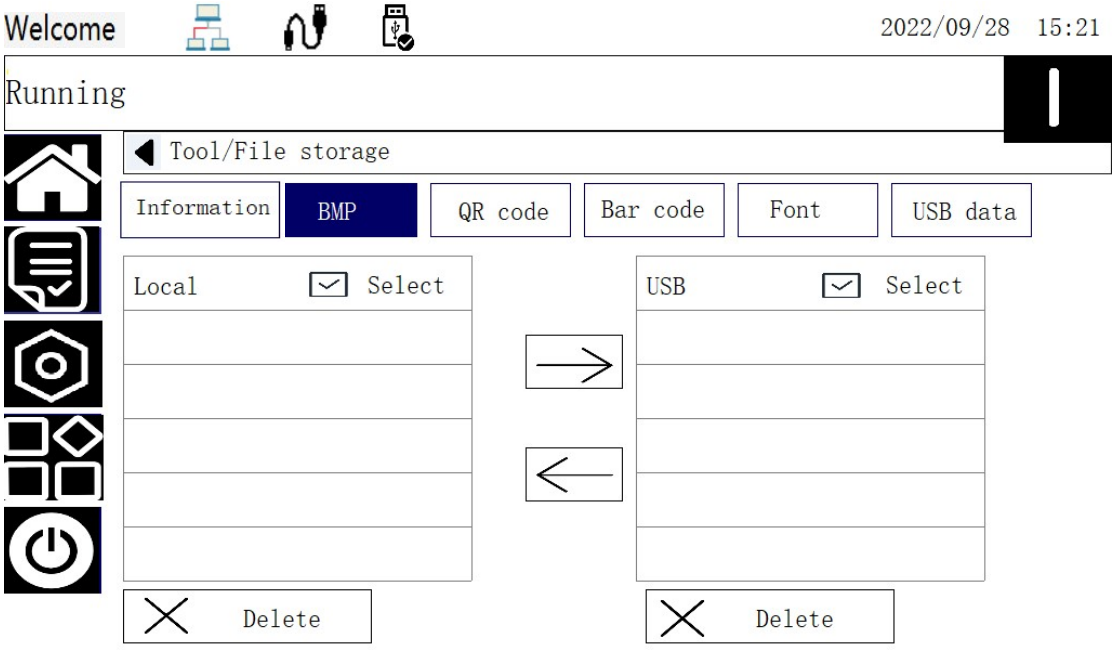


Figure 4-27

BMP import and export

Create a folder named “BMP” in the root directory of the USB flash drive. U disk and in-jet printer in the "BMP" of the picture exchange needs to be realized through this folder.

Select the BMP in the USB flash drive and press the arrow key to import the BMP in the USB flash drive to the local BMP

Select the BMP of the local picture, press the arrow key to export the BMP of the local BMP to the USB flash drive.

(3) QR

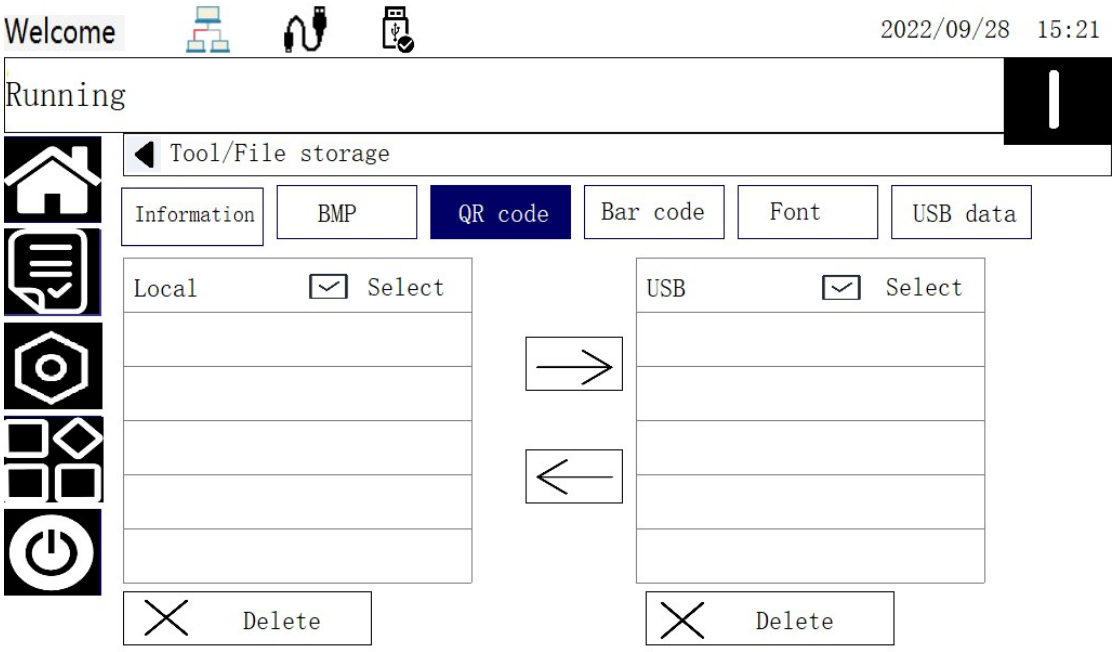


Figure 4-28

Two-dimensional code import and export

Create a folder named QR code in the root directory of the USB flash drive. U disk and ink-jet machine "two-dimensional code" exchange needs to be realized through this folder.

(4) Bar code

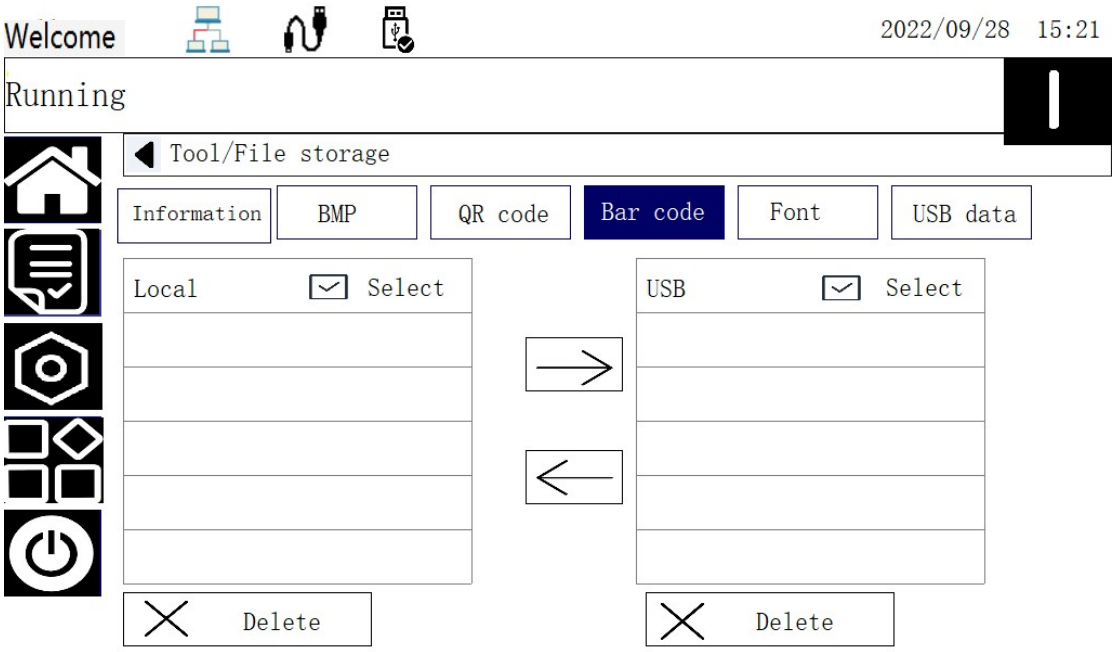


Figure 4-29

Bar code import and export

Create a folder named "code" in the root directory of the USB flash drive.

U disk and ink-jet machine "bar code" exchange needs to be realized through

(5) Font

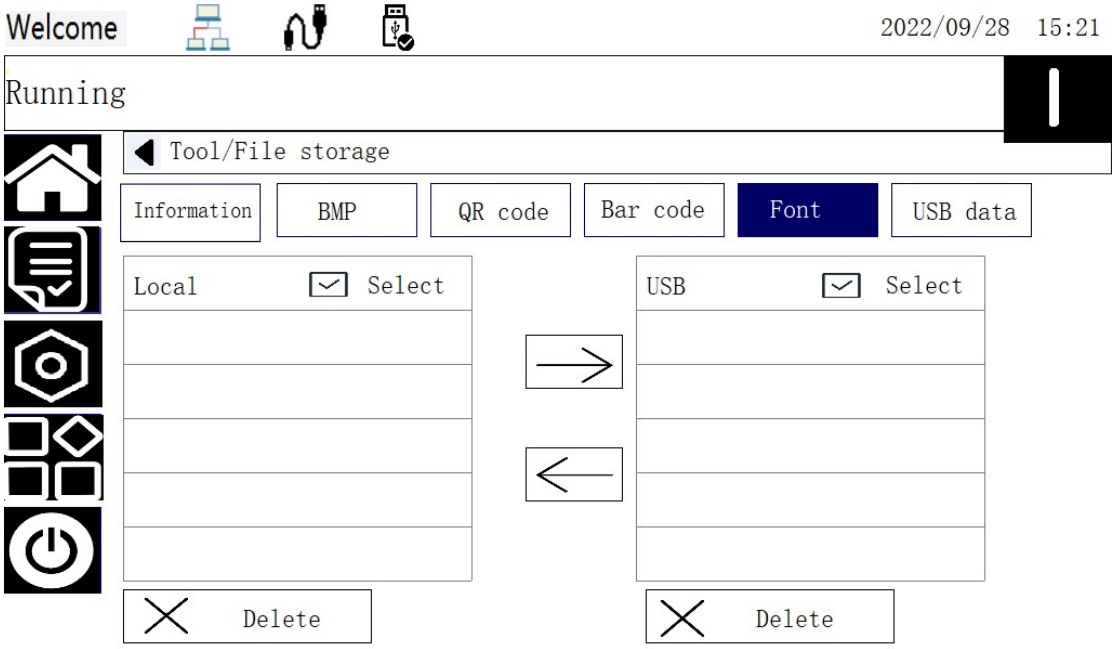


Figure 4-30

Font import and export

Create a folder named Font_file in the root directory of the USB flash drive.

（5）USB Data

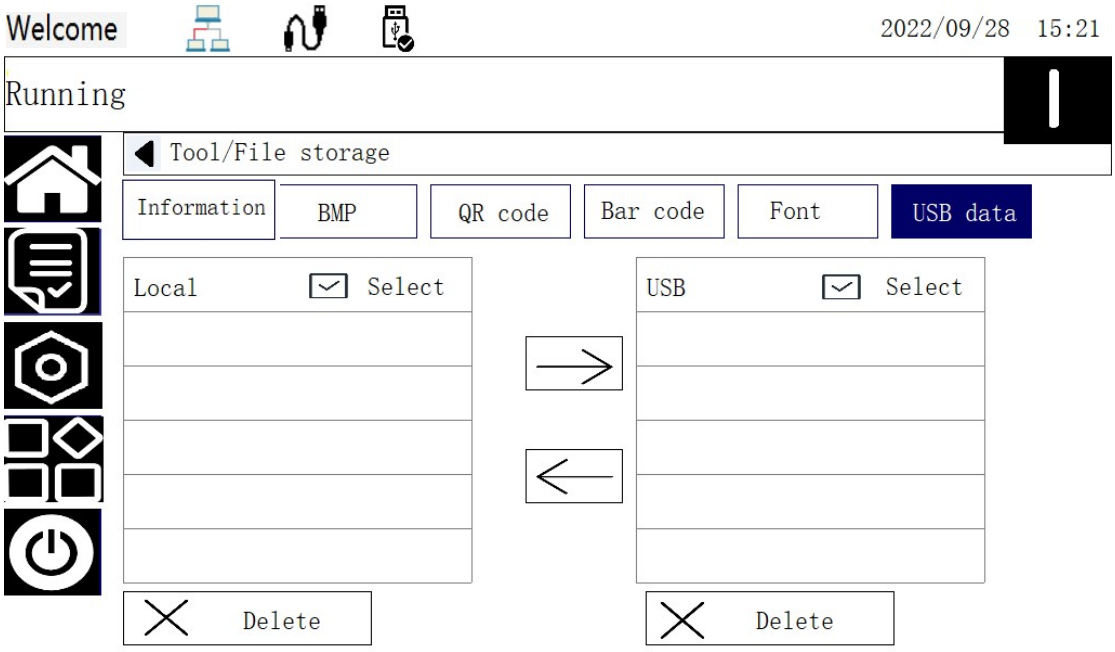


Figure 4-32

USB data import/export

Create a folder named usb_data in the root directory of the USB flash drive.

5、Advanced menu.

Note: This menu cannot be entered when the in-jet printer is in the state of “running”.

(1)Advanced menu password

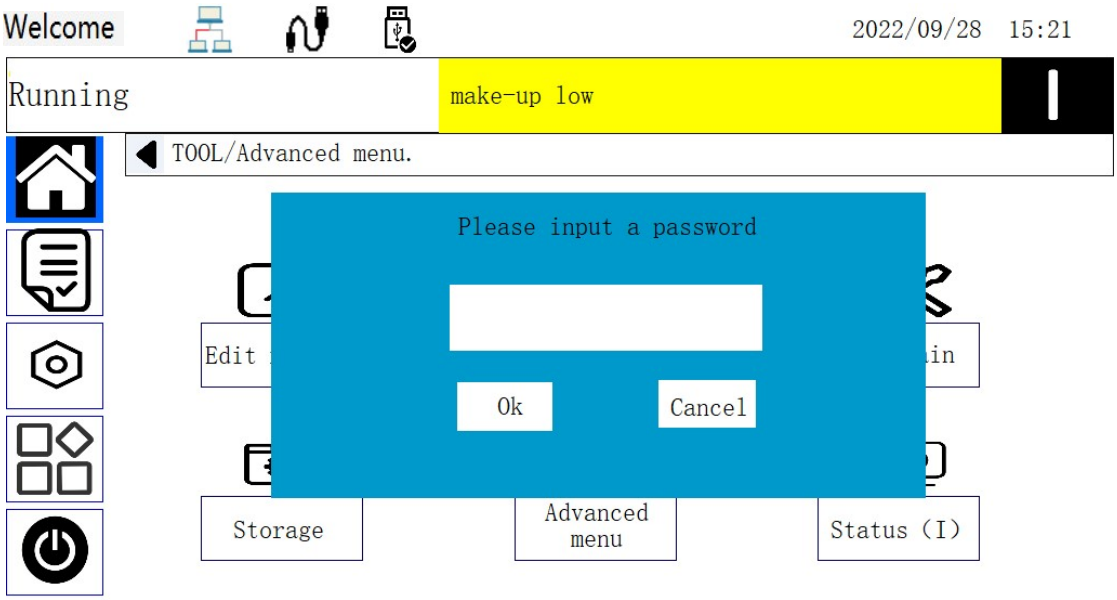


Figure 4-33

Enter the Advanced menu password and click OK to access the Advanced menu.

(2)Manual menu

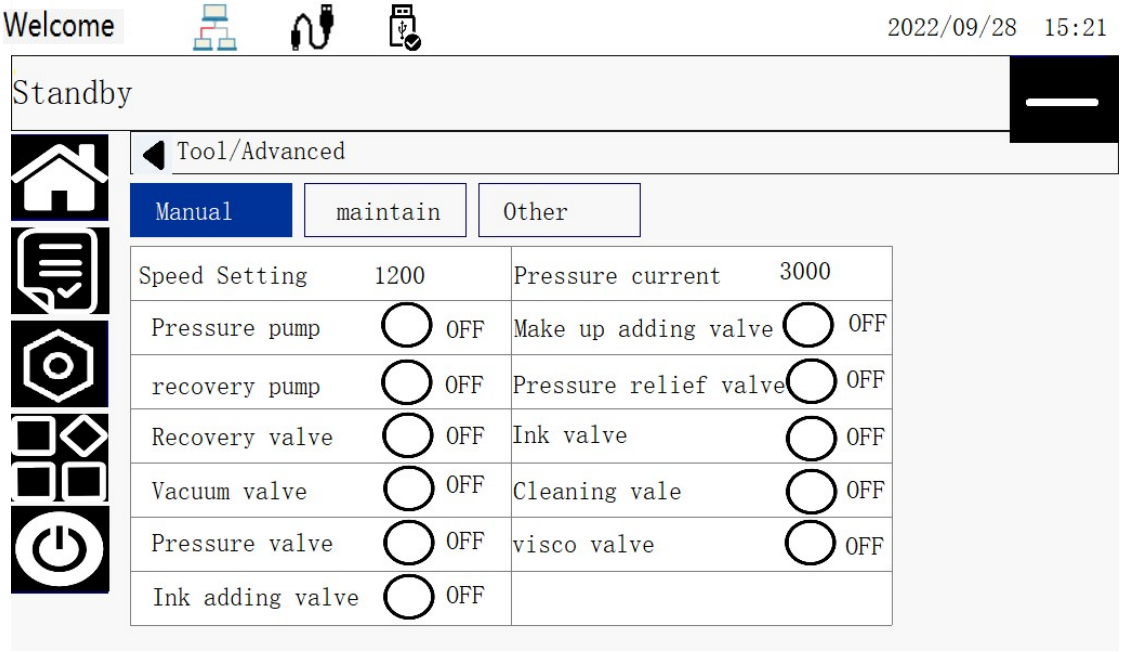


Figure 4-35

This menu can separately control pump, valve to test hardware, debugging ink circuit.

(3)maintain time

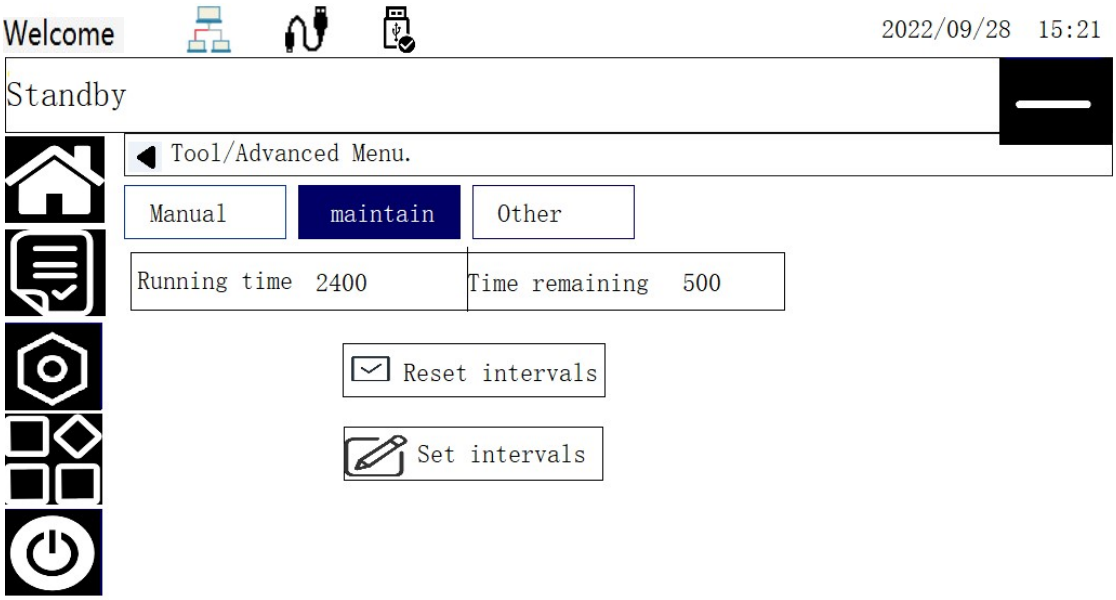


Figure 4-36

Check the running time of the device and modify the remaining maintenance time. The default remaining maintenance time is 2500 hours. If it is less than 500 hours, a yellow alarm will be displayed, and if it is less than 1 hour, a red light will be displayed.

(5) Other setting

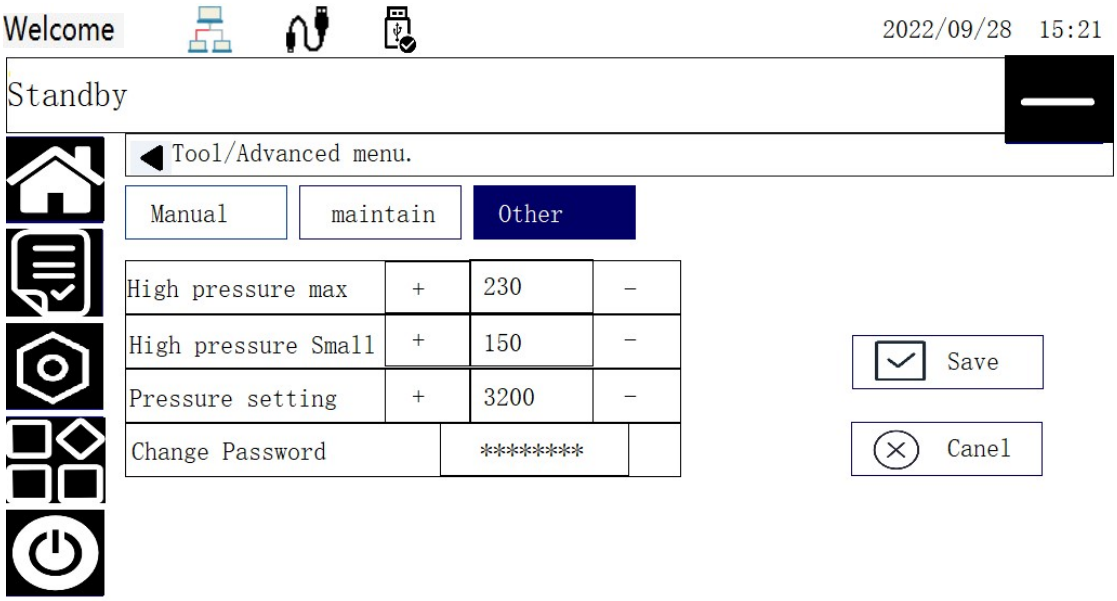


Figure 4-37

Maximum H.V. setting, limiting the maximum H.V. setting. (According to the

factory default Settings)

H.V. setting minimum, limit **H.V.** setting minimum. (According to the factory default Settings)

Pressure set value, the pressure target value for the operation of the equipment. (According to the factory default Settings)

5、Status (I)

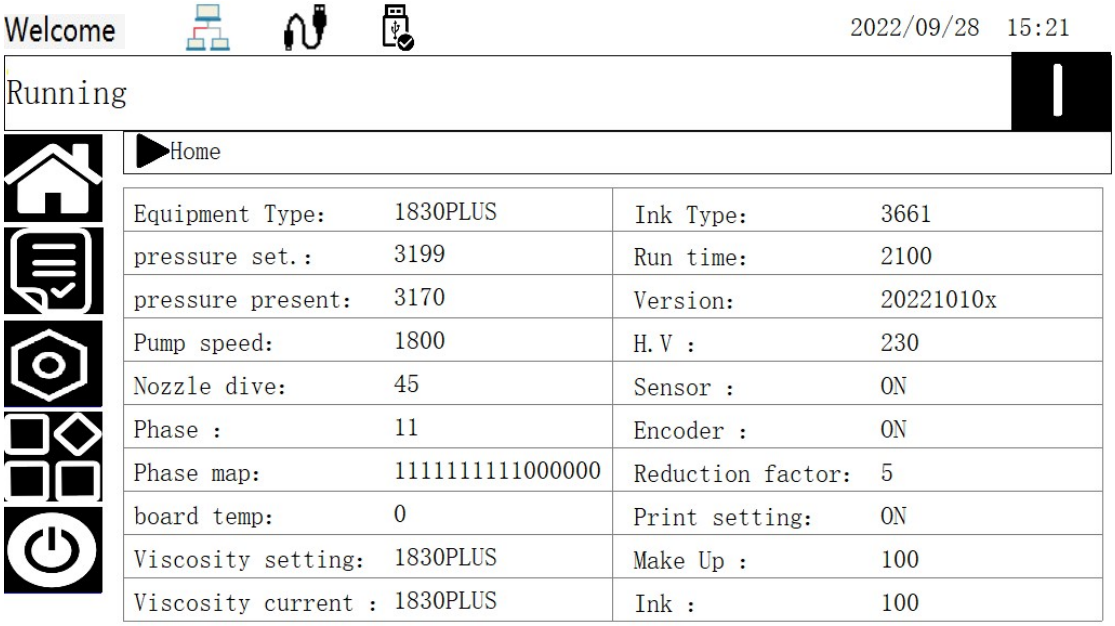


Figure 4-38

This interface shows the system running status and parameter setting status.

四、Printing set up

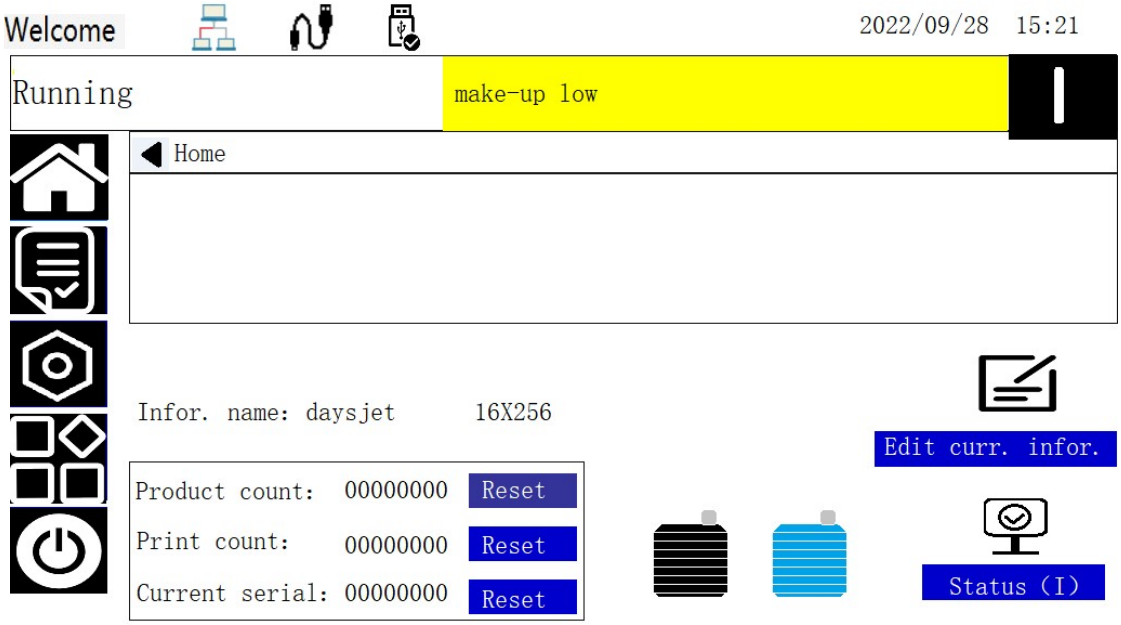


Figure 4-39

Click ", as shown figure4-40 ,

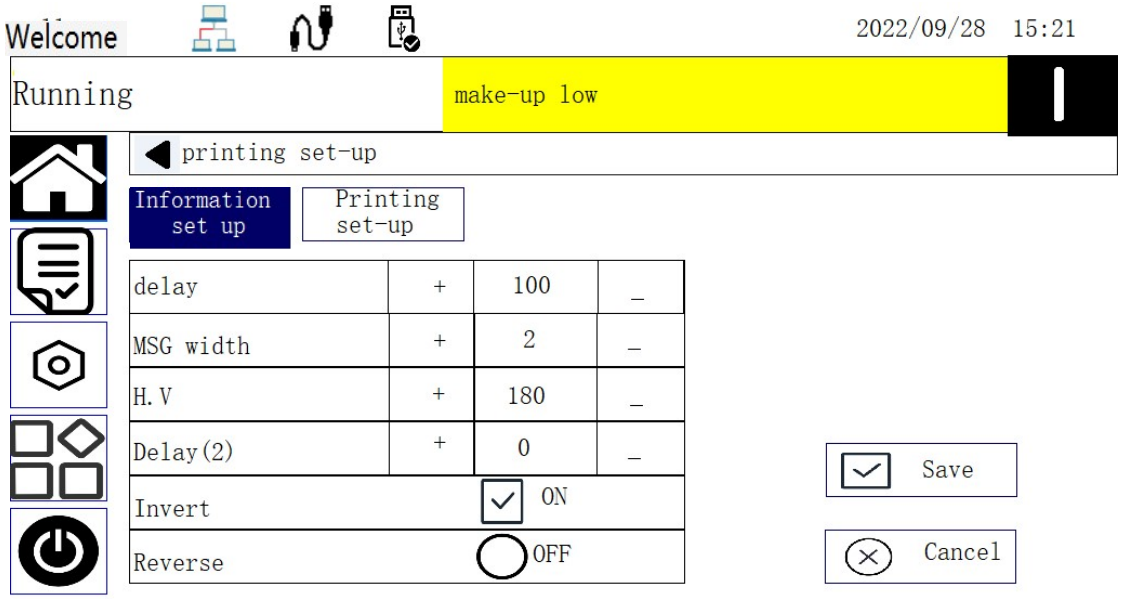


Figure 4-40

1、Information set up

Printing **“Delay”**: how long to start printing after the printing signal

is triggered. When the encoder is OFF, the setting value takes effect in time, in milliseconds. When the encoder is ON, the setting value takes effect as the number of pulses.

H.V., character printing height, setting range refer to the factory setting value.

Word **Width**, adjust the information printing width

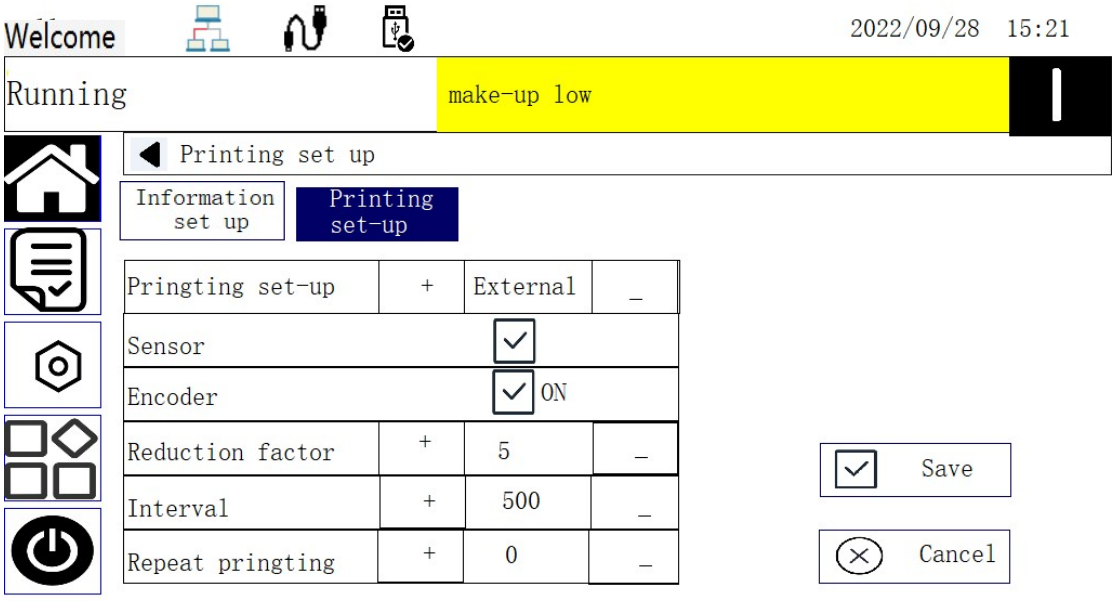
Bold, horizontal bold multiple for the entire information.

delay（2）, round trip printing, back to printing time delay value.

Invert, the entire information is printed upside down.

Reverse, the whole information print reverse.`

2、printing set up



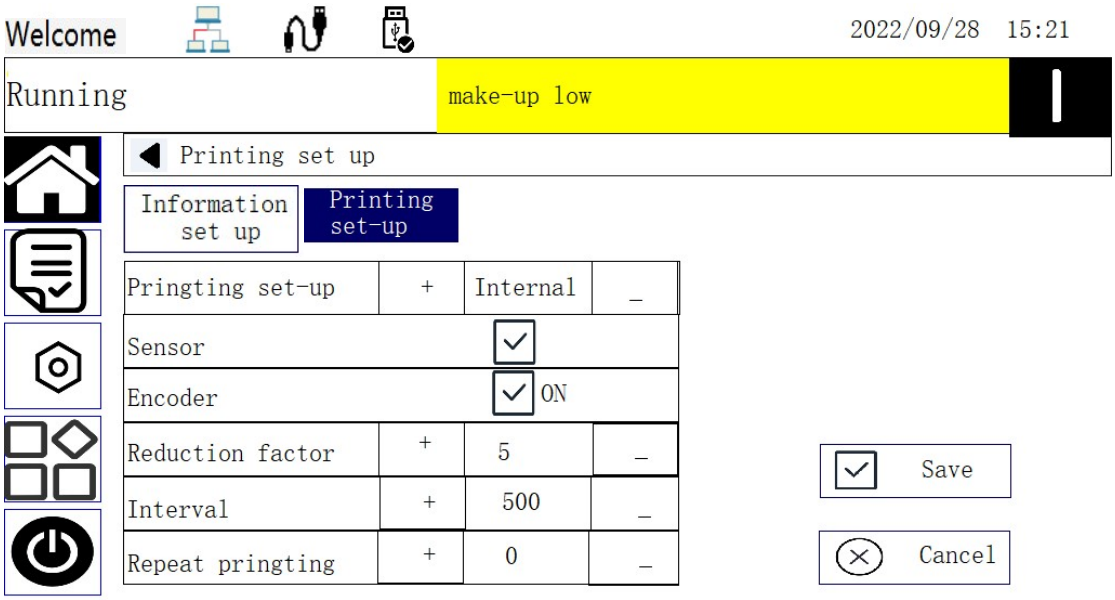


Figure 4-41

In print mode, you can switch between **External** and **Internal** (continuous) modes, as shown in Figure 3-41. In external mode, the printing mode is triggered by an external switch signal. "Internal" mode Continuous printing mode. If no sensor or external control signal is inserted, the system default state is high electrical frequency, continuous printing code. If there is a sensor or external control signal inserted, the switch signal long open state continuous printing, switch signal long closed state stop printing. (The system default printing is high electrical frequency, signal end and com end disconnected and high level, signal end and com end connected and low level).

Sensor: The default state is ON and cannot be switched. If low level triggering is required, set it on the main-board.

Encoder, set switch ON,OFF state.

Encoder frequency division, encoder setting state ON, this setting value and effective, adjust the information printing width.

Print **interval**: When the print mode setting state is "internal (continuous)", it takes effect. When the encoder is OFF, the setting value takes effect in time, in milliseconds. When the encoder is ON, the setting value takes effect as the number of pulses.

Repeat printing. If the print mode is set to "Internal", repeat printing takes effect. If the setting value is 1, the switch signal will be triggered once, and the printing will stop after printing 2 pieces of information continuously. The number of times the signal triggers a print and is set to n+1 times. The function does not take effect if the print mode is set to 0. The function does not take effect if the print mode is set to External.

Ink system part

一、Adjustment of ink-jet printer head and ink splitting

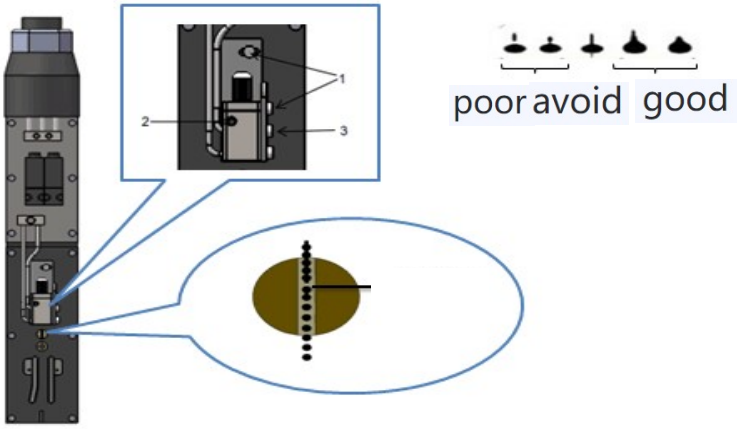


Figure5-1

1. Locking screw 2. Up and down adjustment screw

3. Left and right adjustment screw

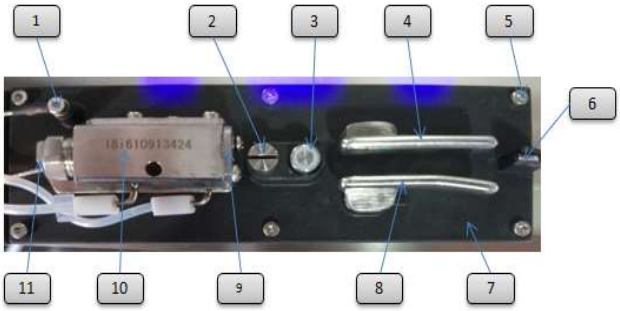


Figure5-2

No.	Part name	Number	No.	Part name	Number
1	Nozzle screw	18046	7	printer cover	18057
2	Charging plate	18047	8	High voltage plate	18050
3	Phase plan	18049	9	Nozzle	18041
4	High voltage plate	18052	10	Cavity	18039
5	Cover screw		11	Nozzle drive stick	18045
6	Recovery tube	18055			

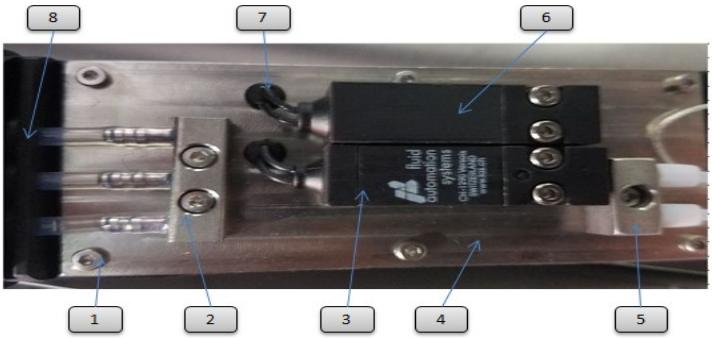


Figure5-3

No.	Part name	Number	No.	Part name	Number
1	Screw		5	Two links	18038
2	Three links	18037	6	Cleaning valve	18097
3	Ink valve	18100	7	Plug	18114
4	PT Distribution plate	18036	8	Seal ring	18112

二、Structural sketch of ink Road

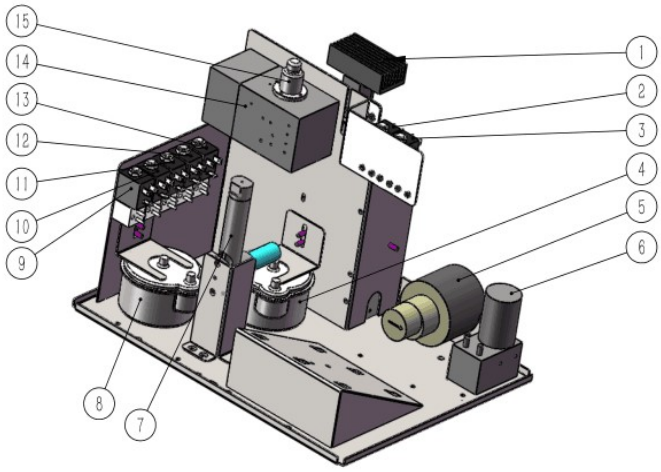


Figure5-4

No.	Part name	Number	No.	Part name	Number
1	Condenser		9	Recovery valve	
2	Immersion valve		10	Drain valve	
3	Solvent addition valve		11	Viscosity valve	
4	Filter		12	Pressure valve	
5	Pressure pump		13	Vacuum valve	
6	Recovery pump		14	Pressure chamber	
7	Viscometer		15	Pressure Sensor	
8	Buffer				

Main Board and I/O Interface

Main board schematic diagram

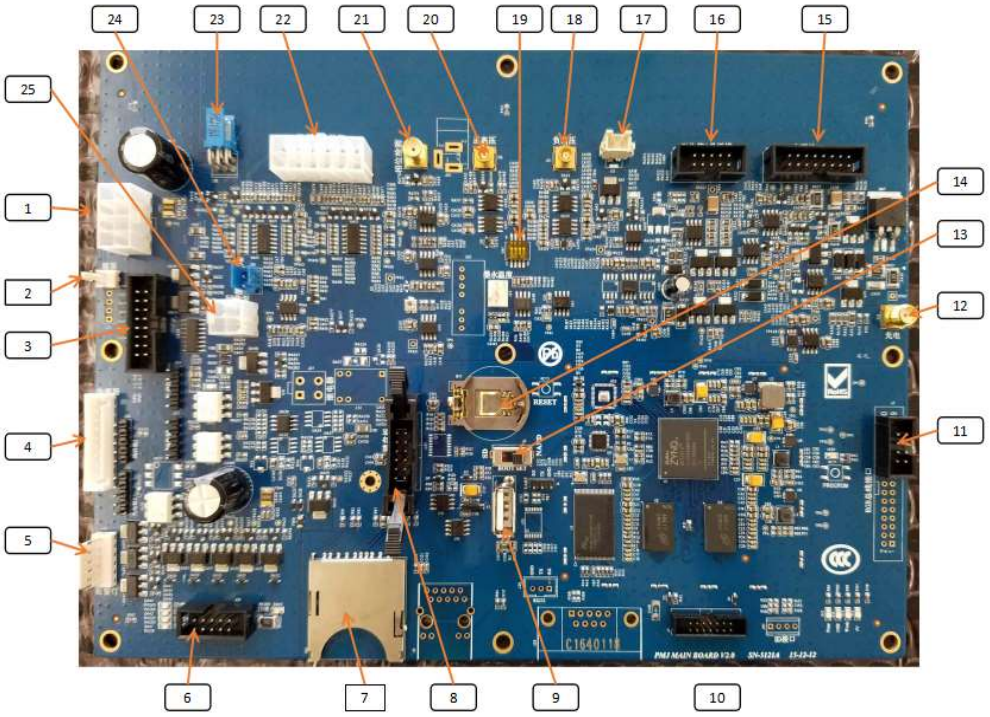


Figure6-1

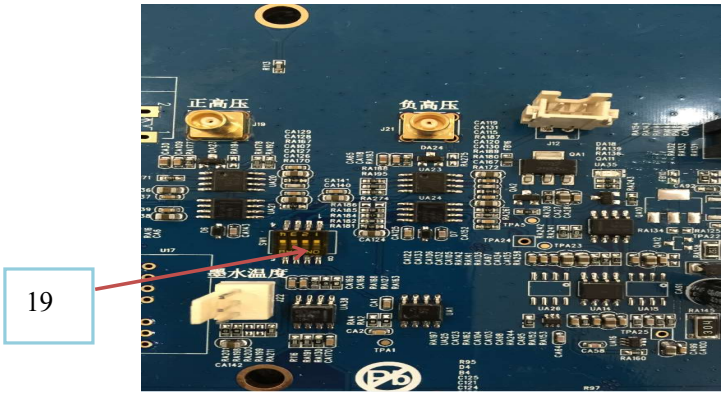


Figure6-2

◆ External interface

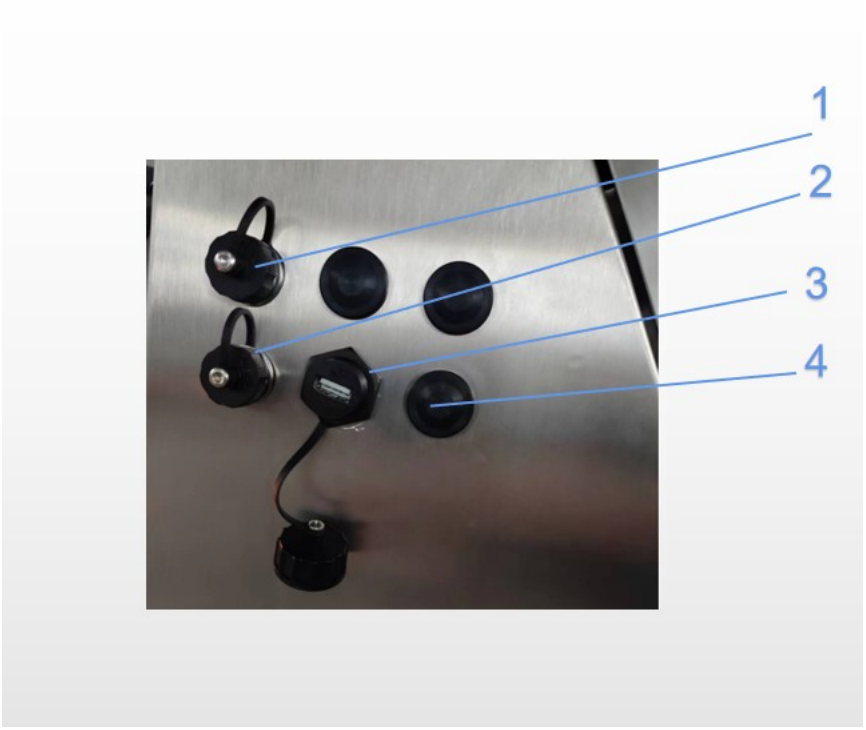
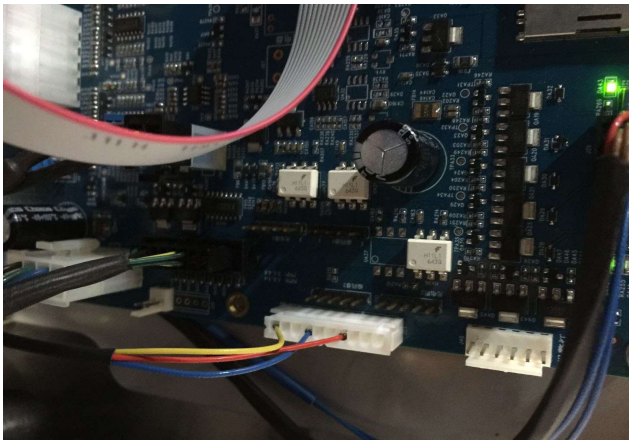


Figure6-3

1、Sensor connector　　2、Encoder interface

3、USB　　4、Reserved



No.	Name
1	Sensor 1 single
2	Encoder single
3	Sensor 2 single

Software Upgrade and Recovery

1、Software Upgrade

As shown in Figure 7-1, place the switch shown in Figure 2 to the left and insert the SD card (1 indicator) for upgrading. Turn on the power until the screen display upgrade is completed. Turn off the power and take out the SD card. Put the switch indicated by 2 to the right.

Note: The software upgrade process may result in loss of some parameters and data. Turn on the power supply and check or reset the parameters of the jet printer when the machine self-check is completed.

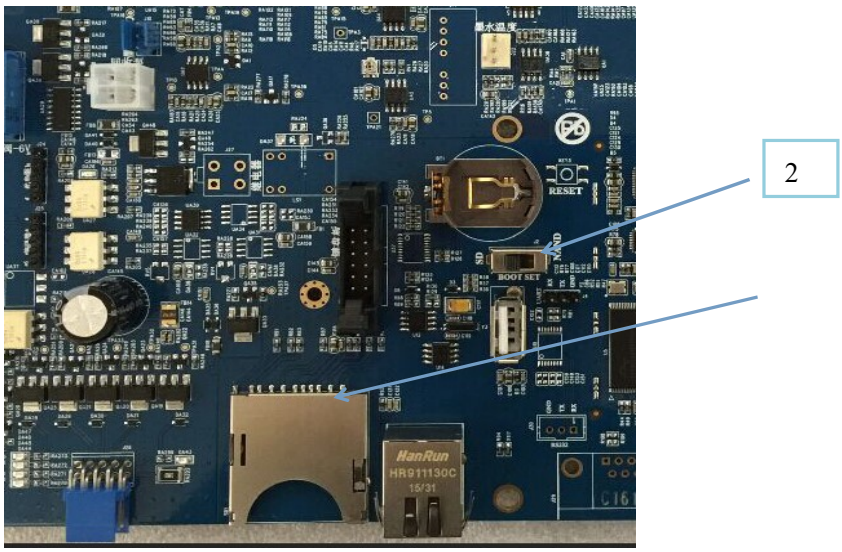


Figure 7-1

2、The factory settings.

When the machine is powered on normally, the jumper cap is shown in Figure 7-2.1 below. After the boot screen is on, the system will be reset to the factory settings.

After restoring the factory settings, unplug the jumper cap, turn off the power supply, and restart the machine for normal use.

Figure 7-2

3、Sensor trigger status setting

When the machine is powered on normally, the jumper cap is shown in Figure 8-2 bis above. In this jumper mode, the machine uses the photoelectric eye to print. The printing state is that the product is printed after leaving the photoelectric eye, that is, the low level is effective. (Normally, when there is no jumper here, the printing state is that the photoelectric eye sees the product and then prints, that is, the high level is valid.)

Details of the current fault can be accessed by clicking the alarm bar, as shown in the figure.

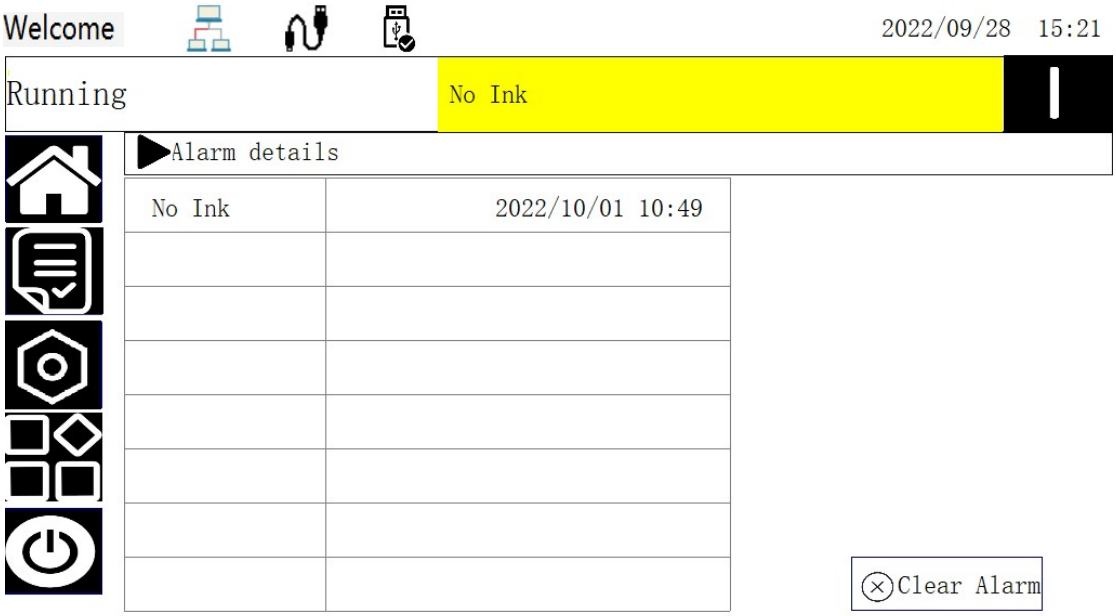


Figure 8-1

The faults of the current jet printer can be displayed through this interface.

■ List of ink-jet printer faults

H.V fault
pressure too high
pressure too low
gutter no ink
core empty
core low
core high
core too high
Viscosity fault
Viscosity too long
Pump speed too fast
no ink
Ink box empty
Ink box low

Ink expiration
Ink too plugs
no make up
make up empty
make up low
make up expiration
make up too plugs
phase fault
cover falling off

■ Regular maintenance

Maintenance time frequency	Maintenance contents	Operation time
When the nozzle is blocked, the printer fails or the printing effect becomes worse.	Cleaning nozzle	3M
Every 2000 hours or 12 months (on a first-come basis)	Replacement of filter and cleaning of whole machine	2H
Every 6 months	Replacement or cleaning of all filters in the chassis	15M

1、Cleaning nozzle

Blockage of nozzles and ink contamination of nozzles can lead to malfunction of nozzle circuit (phase failure, high voltage failure, etc.) or poor printing effect (character distortion or incomplete printing).

2. Basic inspection

Finding faults should start with basic checks. Basic inspection can directly find problems caused by dirty parts, ink leakage, poor circuit contact or discount of ink pipes, loose joints and so on through visual inspection. Turn off the jet printer and cut off the power supply.

■ Troubleshooting

1. **The power indicator is off.** Check grid power, outlets and plugs.
2 **System operation LED and LCD display are not lit Power switch is on** Turn off the printer and restart. Check the cable between the main board and the display board. There is a problem with the motherboard, contact technical support
3 **The LCD screen stays at the LOGO pattern** Turn off the printer and restart. There is a problem with the motherboard, please contact technical support.
4 **The alarm / fault red light is on** Write down the displayed fault information and the operating parameters of the printer at the time and perform other checks based on the fault information.
5 **The ink level is low,**  **please add ink.**
6 **The made up level is low,**  **please add made up.**

7 **GUTTER no ink** A.Restart the start ink line and observe the ink line condition. If the ink line is unstable or deviates (not entering the recovery tank) and there is no ink line, select [shock Nozzle] operation. b If there is still no ink line, it is a pressure line problem, please check the ink pressure feedback value, pressure pump speed feedback value and contact technical support. c If the recovery tank is not inhaled (use the cleaning agent into the recovery tank, observe and listen to the sound), check the recovery line for any discounts and check if the pump is working. d If the problem is still not resolved, contact technical support.
8 **Phase fault** A:Press [Space] to see if the fault is eliminated. b Turn off the printer, clean and dry the nozzle electrode. c Check the printer's operating parameters. d Confirm the expiration date (expiration date) of the ink used by the printer. e Perform the [shock Nozzle] operation for about 2 minutes. f Check the break-point. If it is not good, please adjust the nozzle to drive. g There is a problem with the board, please contact technical support.

9.Pressure too high a: Check if the pressure sensor is properly connected to the motherboard interface. b Check if the 12 volt power supply of the low voltage power supply is normal. c There is a problem with the pressure sensor. Please contact technical support.
10. H.V fault a: Carefully clean and dry the nozzle electrode. B:Open the electronic control cabin, check and clean the high voltage connection (about 1.5mm thick red and black lines). c The sensitivity of the high pressure detection alarm can be appropriately reduced. d Please record the operating parameters (viscosity, pressure, motor speed), please contact technical support.
11 Cover falling off Check that the nozzle cover is clean. Check the magnetic switch on the nozzle for damage
12 Viscosity too long a Check for a solvent cartridge. b Check that the solvent filter and solvent solenoid are working. 3 Check if the viscosity meter is normal. If it is not eliminated, please contact technical support.
13 Viscosity fault a Check the viscosity and viscosity measurement line. b If you cannot eliminate it, contact technical support.
14.No fault display, but not printing a The object passes the object sensor. Check whether the sensor sensitivity adjuster is suitable on the sensor (test the effective distance of the sensor with white paper, adjust the sensitivity of the sensor clockwise) b Check whether the connection between the sensor and the chassis is properly installed. C Check if the contents of the printed information are present. d Check whether the encoder in the [Print Configuration Menu] parameter is selected for use. If the encoder is not connected, select Not used.
15 Poor printing a Clean the nozzle (including the nozzle cover, observe whether there is ink accumulation in the recovery tank), and ensure that there is no obstacle on the deflection track of the ink line. b Check that the nozzle holder is stable (no vibration) and that the grounding wire is good. c Check the distance between the bottom of the nozzle and the object. (typically 12 mm)d Check if the ink line is centered in the charging pole. Check that the ink line is in the recovery tank at 1/3 near the side of the upper deflector. f Check that the viscosity value displayed on the printer meets the theoretical values specified in the (Ink Operating Instructions). g It is necessary to have mechanical and/or electronic adjustment (observation and adjustment of breakpoints) on the nozzle. There is a problem with the motherboard. Please contact technical support.

16The product is too fast In the case where a encoder is used, the number of pulses output by the encoder exceeds the maximum sequence speed processed by the printer. Reduce line speed or re-select encoder mounting position. For related questions, please contact technical support.
17 Product print interval is too small a In the case of continuous printing or repeated printing, the print interval setting is too small, which may result in poor information printing. The printer can predict the result and display the alarm in the form of an alarm. Please set the print interval. b Under the trigger printing, the printing information is longer, but the trigger signal interval is shorter (or the false trigger signal), the printer can predict the bad result, and the alarm has been displayed to prompt the operator, please re-adjust the sensor.

The technical rules

■ Physical characteristics

• dimensions

Host box: 600mm (high) x395mm (transverse) x300mm (width)

- head: 270mm (high) x43mm (diameter)

• weight

Host: 35kg

- head: 3kg

• volume

- ink / additive tank volume:700 milliliter

- ink / additive tank volume:700 milliliter

■ Power source

power:

The 220 volt AC

The frequency of 50Hz

■ Conditions of use

• environmental temperature:

+5 ℃ to +45 ℃ (+41 degrees to +113 degrees Fahrenheit)

• environmental relative humidity:10 to 90% no condensation

■ Can provide standard parts

- head holder

Object sensor

Synchronous machine (optional)

- (external alarm lights and alarm buzzer) (optional)

■ Functions

- counting function: according to a count or by batch count

Automatic time, date and shift code complete

-information base jet printing

Graphic printing function

- send a message only printing a (not repeated printing)

- jet printing delay can be set

Through the operation panel control ink jet printer

Automatic diagnosis of ink jet printer status

Ink viscosity automatic adjustment

Nozzle automatically through the program

Automatic cleaning and discharging machine

Self - cleaning nozzle

- head pressure protection.

■ Performance parameters

• Jet printing

Various performance, various position

Can print 1 to 5 lines

The character height according to the nozzle type and selection device may be please to DAYSJET consulting

An optional character font: 5,7, 9,12,16,24 and (32*32)

Ink jet printing of various characters and graphics

Edit graphics

You can type a letter: standard configuration: English letters

Can change the alphabet characters and information direction set by keyboard

• Nozzle / object distance (the actual font height):

Small models: 5 mm to 20 mm (selected according to the actual font font height of 2 mm to 12 mm)

Micro word models: 5 mm to 10 mm (selected according to the actual font font height of 1 mm to 8 mm)

- The jet printing speed

■ Ink

See[Ink data]

■ Maximum noise

- < 60dB (A)

Consumables

■ Definition

The consumables, refers to consumption, or in order to ensure the normal operation of ink jet printer consumption materials. Consumables include:

Ink:

For the printing of information.

Ink formulation containing the active ingredient of all, in order to ensure:

In the packaging barrel storage time and stability when used in printing (validity period and normal storage conditions).

Good printing effect (in particular surface (including surface tension properties need stable) on adhesion and adaptations to specific environments.)

The ink can take and use, may also need packaging forms mixed before use.

Additive:

To keep the ink viscosity and stable quality.

The composition of additives should be required to comply fully with the printing ink.

Additives should exactly match the original selection of ink.

cleaning agent:

For ink jet printer repair and maintenance (cleaning nozzle cleaning ink system, etc.).

Cleaning agent composition should be matched perfectly with the use of inks and additives (specific ink cleaning agent specific).

Filter:

Should be replaced regularly, to ensure that the machine is in good

operation, reduce failure rate, prolong the service life of the machine an important supplies.Including the main filter, ink supply filter, filter and air filter, viscosity filter.

Such as the use of replacement parts will cause serious damage to the equipment, increase the failure rate and reduce the service life of the equipment.

If you change the printing materials (refer to the surface in contact with the ink phase), please contact with the company, in order to provide you the new seal surface spray printing sample. .

■ Consumables and its use

Quality assessment of user response to the printer and supplies the combination used in their products to assume full responsibility. To help users and customers in the future, Chongqing DAYSJET company can provide various types of printing machine and ink selection, and can provide the sample data, for customers reference to its application (including ink, ink jet printer, printing surface material properties, production process, printing technical requirement etc.) to achieve the quality assessment process.

■ consumables and equipment

[description] ink operation

Users can obtain to Chongqing DAYSJET company.

[description] according to the ink jet printer ink run configuration (such as nozzle size) and the ink, provide the relevant operation parameters to the user(such as ink pressure, nozzle drive voltage), jet printing characteristics (such as nozzle jet printing speed, and the object distance) and storage, use conditions.

Supplies consumption

It should be pointed out, loss is determined in a certain period of time

in the ink jet printing character of each item number, jet printing goods quantity, and the selection of fonts (dot size, not bold and double angle) and the size of the nozzle diameter.

The consumption of an additive mainly depends on the running time and the temperature of the surrounding environment .

■ consumables and security

Before using the Chongqing DAYSJET Company supplies, must understand the physicochemical properties of products, and to understand the safety requirements for product storage, handling and use to comply with the.

All of the above provisions in [list] the material security, users can obtain to Chongqing DAYSJET Company.

Before use, must carefully read the [material] all the content .

[material] safe list include the following contents:

Product identification and the manufacturer information.

Components and materials information.

Hazard identification.

First aid measures.

The accidental spill of remedial measures.

Handling and storage.

Exposure to prevent contact with human body protection

The physical and chemical properties.

Stability and reactivity.

Toxicological information.

Environmental protection information.

Waste treatment recommendations.

Transport information.

Regulatory information.

Other information

[material] safe list include the following contents:

The operating personnel and technical personnel.

The production of health and safety.

Occupation health doctor.

Transport company.

Fire fighter.

The storekeeper

■ Consumables, warranty and civil liability

Chongqing VDJ Inkjet manufacturing Co., Ltd. production of supplies for the special design, printing machine produced by our company is simple to use, low energy consumption, better effect.

The use of other consumables non production of the company will cause the machine warranty. The resulting damage to equipment performance, even cause production loss and various claims, CChongqing VDJ Inkjet manufacturing Co., Ltd. will not be accepted.