MX Pro & Plus

Online Inkjet Printer

User Manuel

Revised Edition V1. 4

Dec. 2022

Version Log

Version	Revised Content	Revised Date
V1.0	User Manual	Sep. 2021
V1.1	Correct the Errors, add the Network Integrated Control function	Dec. 2021
V1.2	Add the Counter Function, improved Serial Port and Network Functions	May. 2022
V1.3	Add MX Plus 2.0 Instructions, add Log and double spray functions	Sep. 2022
V1.4	Add functions such as file saving as, text font scaling, print setting parameters following up files, etc	Dec. 2022

Catalog

Chapter 1 Introduction

1.1 Inkjet Printer

The MX Pro Inkjet Printer shown in Figure 1-1 is an inline inkjet printer that prints fixed and variable information at a high line speed on consumer goods and industrial products.This inkjet printer provides operators with excellent jet print quality and unparalleled ease of use.

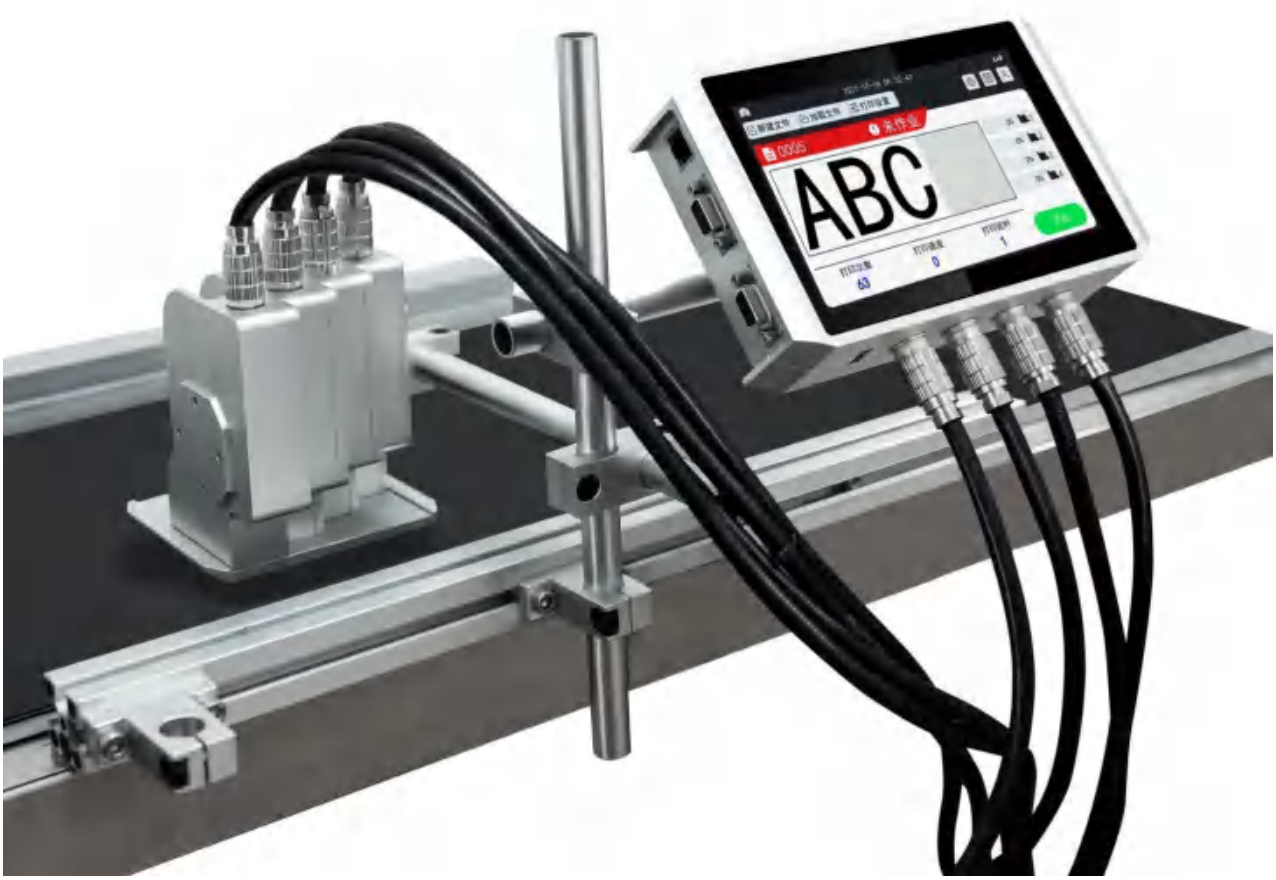


Figure 1-1 MX4 Pro Online Inkjet Printer

1.2 About Manual

This "Operation Manual" is specially written for the daily users of this inkjet printer. It can help users understand the various components and various printing operations of this inkjet printer.

1.3 Inkjet Printer Parameters

1.3.1 Specification Parameters

Item	Description	Specification
1	**Model**	MX Pro（Plus）Online Inkjet Printer

2	**System Language**	Arabic, Chinese, English, French, German, Greek, Italian, Korean, Persian, Portuguese, Russian, Spanish, Thai, Turkish, etc
3	**External Connection**	External Sensors、External Encoder , Alarm Lights
4	**Power Adapter**	12V/4A、16.8V/4A
5	**Maximum Resolution**	600DPI（150、200、300、400、500、600）
6	**Print Speed**	200DPI：95m/min；300DPI：70m/min；600DPI：35m/min
7	**Ink Cartridge**	HP Original 42mL Ink Cartridge
8	**Ink Cartridge Color**	Black, White, Red, Yellow, Green, Blue, Invisible
9	**Character Height**	**MX Pro**：Minimum 12.7mm，Maximum 50.8mm **MX Plus**：Minimum 12.7mm，Maximum 25.4mm
10	**Print Distance**	2mm-5mm Can Guarantee the Best Printing Quality
11	**Machine Size**	**MX Pro**：Controller：185*125*42mm；Print Head：156*110*150mm **MX Plus**：Controller：194.5*129.9*32mm；Single Print Head：100*100*34mm；Double Print Head：108.7*105.9*90mm
12	**Machine Weight**	**MX Pro**：controller：1.0kg；Print Head：0.2*4kg **MX Plus**：controller：0.9kg；Print Head：0.2*2kg
13	**Print Content**	Text, Images, Barcodes, Serial number, Box / Batch, Shift Code, Date, Time, Expiration Date, Database, POD and Shape
14	**Print Material**	Paper, Stone, Pipe, Cable, Wire, Metal, Plastic, Woodwork
15	**Operational Environment**	Temperature 0-45℃ (20-30℃ Is the Best), Humidity 40-60%R.

1.3.2 Print Speed Chart

The printer is increased double spray function from version 2.3.0, which made the print speed improved. It's print speed increased twice during testing by high speed spray mode. The print speed could reach to 75m/min when print Fixed file under 600 DPI.

All data in the following table are tested with HP original ink cartridges. Due to the complex production environment, the data may be different.

File Type	Trigger Mode	DPI	Print Speed（m/min）	Signal Interval（mm）
Fixed File	Auto Print	150	150	3
		200	95	3
		300	75	3
		600	36	3
	External Signal	150	150	-
		200	95	-
		300	75	-
		600	36	-
Variable File	Auto Print	150	60	5
		200	50	5
		300	41	5
	External Signal	150	70	20
		300	55	27

1.4 Content Tips

This manual contains various types of information, such as security criterion, additional notes, user interface (UI) terminology, etc. To help you identify different types of information, we adopted different writing styles.This section specializes in introducing these writing styles.

1.4.1 The Term of Inkjet Printer

The term Inkjet Printer refers to the MX Pro & Plus Inkjet Printer, and this abbreviation is used in the rest of this manual.

1.4.2 Reference Position

Unless otherwise agreed, the positions and directions such as left, right, front, back, left and right are specified as the orientation on the front view of the printer.

1.4.3 Measurement Units

This manual uses metric units of measurement.

Chapter 2 Security Information

This chapter contains the following information:

2.1 Brief Introduction

The purpose of this inkjet printer is to print information on the products. Using this device for other purposes may cause serious personal injury or product failure. The safety guidelines introduced in this chapter are intended to explain all safety issues to operators so that they can safely operate and scientifically maintain the printer and its related accessories.

2.2 General Safety Criterion

- Be sure to use the official standard power adapter, do not use other power adapters privately, otherwise it may damage the machine or cause serious safety accidents;
- Before using the machine, please check whether all cables are damaged, otherwise it may cause a safety accident;
- Do not expose the machine to heat, strong light, fire or similar environments too much;
- Do not disassemble or repair the machine privately, if it is damaged, it is not covered by the warranty;
- Do not plug or unplug any accessories, cables and ink cartridges with power on;
- Try to use official encoders, photoelectric eyes and other accessories, if you need to bring your own accessories, please ensure that they meet the relevant electrical characteristics requirements;
- Try to avoid storing or using the machine in a dusty environment;
- Do not store or use this machine in an excessively humid environment;

2.3 Usage Specification

- Please use officially certified ink cartridges;
- Do not pull or insert the ink cartridges with power on, otherwise the machine or the ink cartridges may be damaged;
- Please try to print without exceeding the nominal voltage and pulse width of the ink cartridge, otherwise the service life of the ink cartridge may be shortened;
- When the machine is not working, please shut down and take out the ink cartridge in time and cover it

with a plastic clip to prevent the ink cartridge nozzle from drying out and clogging;

- The print cartridge is a precision object. If it gets stuck during the installation process, please do not use force, adjust the position of the ink cartridge and insert it according to the trend;
- If the ink cartridge does not print clearly, you can use a non-woven cloth to wipe the nozzle of the ink cartridge lightly, and do not shake the ink cartridge violently;
- When installing the nozzle, make sure that the nozzle plane is parallel to the printing surface, and the nozzle is perpendicular to the direction of movement of the product being sprayed. And pay attention to adjust the height to prevent the sprayed product from scratching the nozzle;
- When cleaning the machine, keep it away from water and do not use chemical solvents for cleaning.

2.3.1 Emergency Treatment Solution

Emergency Treatment	**Such as the emergence of smoke from the printer, uncontrollable continuous printing, fire, explosions and other emergencies, Please disconnect the power immediately and turn off the device!**

2.3.2 Environmental Protection

Please do not throw the device or ink cartridges into ordinary trash cans or recycling bins. Make sure to dispose of it correctly (e.g. e-waste) in accordance with local laws.

2.3.3 Warranty

- Quality Assurance: Within 12 months from the date of the bill of lading, the entire machine is guaranteed except for the ink cartridges. The essential guarantee does not apply to problems caused by misuse, tampering or improper use.

The following conditions are not covered by the warranty:

- Use any non-original ink cartridges and unapproved OEM inks.
- Unauthorized disassembly or modification of the product.
- The print head is damaged due to improper installation.
- Accidents caused by natural disasters, storage or transportation conditions, such as (but not limited to) damage caused by falling, spraying with water or other liquids, etc.
- Use unapproved, wrong or unstable power supply.

Chapter 3 Main Components

This chapter contains the following information:

- Overview of the Inkjet Printer
- Main components of MX Pro Inkjet Printer
- Main components of MX Plus Inkjet Printer

3.1 Overview of the Inkjet Printer

3.1.1 MX Pro Inkjer Printer

The inkjet printer shown in Figure 3-1 is a MX Pro Online inkjet printer that can print fixed and variable information on consumer and industrial products at a high line speed, **and at the same time, the printer can be operated in the printing state.**

Figure 3-1 MX Pro Online Inkjet Printer

3.1.2 MX Plus Inkjet Printer

The inkjet printer shown in Figure 3-2 is a MX Plus Online inkjet printer, the system operation inferface is similar as MX Pro inkjet printer. But compare to MX Pro, the MX Plus no Network function, and the print speed is slower if print variable file.

Figure 3-2 MX Plus Online Inkjet Printer

3.2 Main components of MX Pro Inkjet Printer

The inkjet printer contains the following main components as shown in Figure 3-3.

1. Touch Screen
2. Power Switch
3. Interface
4. Controller Cable
5. Print Head
6. Ink Cartridge
7. Bracket

Figure 3-3 MX Pro Main components of the Inkjet Printer

3.2.1 Touch Screen

The printer is equipped with a 7-inch high-definition capacitive touch screen (see Figure 3-4). The printer control is performed through a graphical user interface (GUI).

Figure 3-4 Touch screen

3.2.2 Power Switch

The power switch button is used to turn on or off the printer's power (see Figure 3-5), located on the right side of the printer.

Note: Do not press the power switch to start the machine immediately after shutting down. It will take a certain time for the system to shut down. Please wait for about 10s.

Figure 3-5 Power Switch

3.2.3 Interface

The printer is equipped with a variety of interfaces for printing control and interaction with the outside, as shown in Figures 3-6. The various available standard IO connections are provided in Table 3-2.

Figure 3-6 MX Pro interface figure

Number	Interface	Usage
1	**Adapter**	Connect external power supply
2	**Encoder**	Connect external encoder
3	**Sensor**	Connect external sensor
4	**Multifunctional DB9 Serial Port**	Connect external Alarm light, UV Light
5	**Reserved DB9 Serial Port**	Connect external data

Table 3-2 MX Pro interface

3.2.3.1 Adapter interface

The adapter interface is used to connect with the power adapter to provide power for the printer to work. The specification of the power adapter used by this machine is 12V/4A, please do not use other adapters privately. The power interface is shown in Figure 3-7.

Figure 3-7 Adapter interface

3.2.3.2 Encoder interface

The encoder interface is used to connect the encoder for printing speed control. When you need to splice multiple nozzles for large format printing, it is strongly recommended that you use the encoder mode to print. The encoder interface is shown in Figure 3-8;

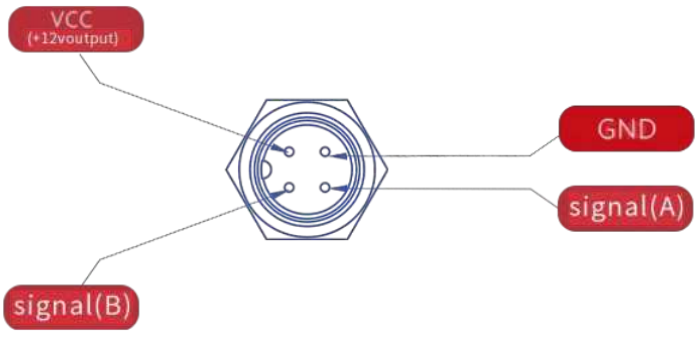


Figure 3-8 Encoder interface

3.2.3.3 Sensor interface

The sensor interface is used to connect external sensors to control the triggering of printing, such as photoelectric sensors, optical fiber sensors, label sensors, proximity switches, etc. You can also use the PLC signal of other equipment as the trigger signal. At this time, you only need to connect the signal wire and the ground wire. The photoelectric eye interface is shown in Figure 3-9.

Note: The inkjet printer detects the falling edge of the signal as the trigger signal. Customers should choose NPN normally open (NO) or PNP normally closed (NC) photoelectric sensors as the trigger signal.

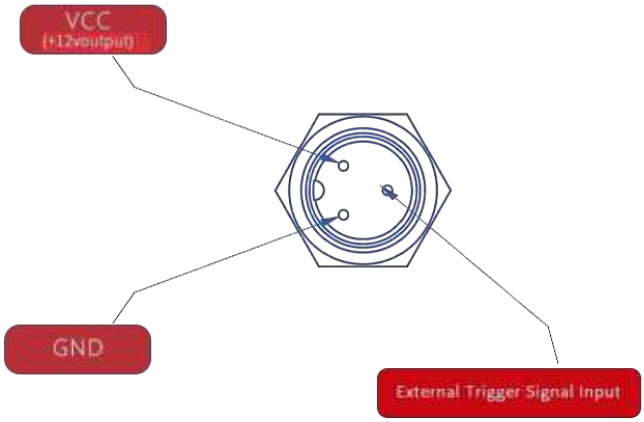


Figure 3-9 Sensor interface

3.2.3.4 Multifunctional DB9 Serial Port

The multi-function DB9 serial port provides the function of connecting the alarm light. That allows users to remotely monitor the printer status through the light signal sent out by the alarm. The definition of the interface is shown in Figure 3-10.**For the external warning light function, it is recommended that the user use the official warning light (12V/common cathode/red, yellow and green).**

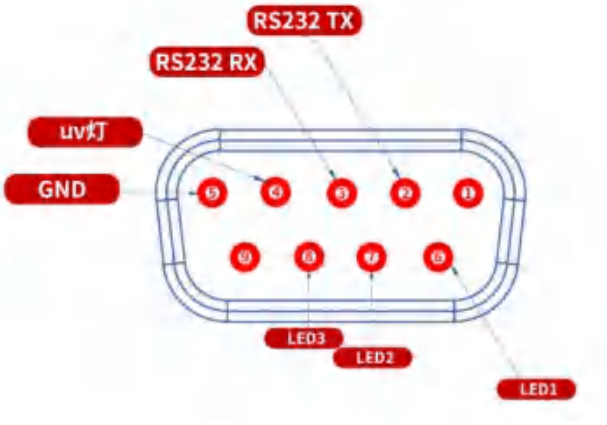


Figure 3-10 Multi-functional DB9 Serial Port

DB9 Serial port pins	Function	Description
6-LED1	**Stop Status**	The printer will stop printing for the following reasons: 1. No cartridge or invalid cartridge is installed. 2. Use up the ink. 3. Rate-limiting.Real-time print speed overload (delayed data / lost data).
7-LED2	**Alarm Status**	The ink is not enough and needs to warn the operator, but it is still able to print.(it can be set a value of how many left will start warning).
8-LED3	**Print Status**	Users click on the Start button on the screen.The inkjet printer is operating normally in the print state.
4-UV Light	**UV Light**	Every time after printed, the prints can be quickly dry and attached to the object.

3.2.3.5 Reserved DB9 Serial Port

The DB9 serial port is reserved to provide the function of connecting to the external serial port to print variable data. The definition of the interface is shown in Figure 3-11. For the use of the external serial port, please refer to the "MX4 Pro External Serial Port Usage Guide", this manual will not repeat it here.

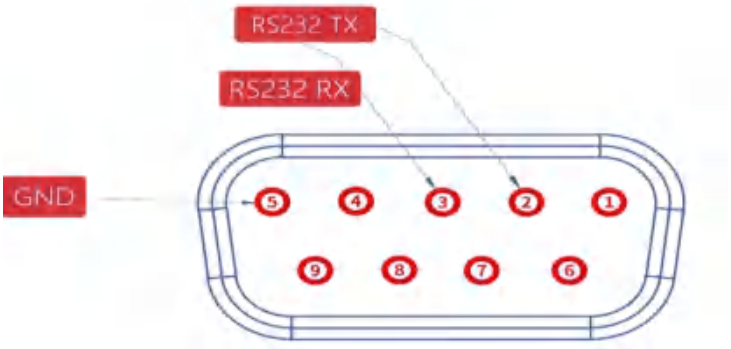


Figure 3-11 Reserved DB9 Serial Port

3.2.4 Controller Cable

The print head connection line is the cable that connects the printer to the host and the print head. The standard length of the connection line is 1.5 meters (4.92 feet), and the longest support is 5 meters (16.4 feet). The connection line is shown in Figure 3-12.

Figure 3-12 MX Pro Controller cable

3.2.5 Print Head

The print head controls the ink cartridge to print on the product, and the control signal is transmitted from the main controller to the print head through the print head connection line. The printer can support the free combination of 1~4 heads, which can splice and print large-format (up to 50mm) information, or each print head can independently print the information of its own corresponding area. The print head is shown in Figure 3-13.

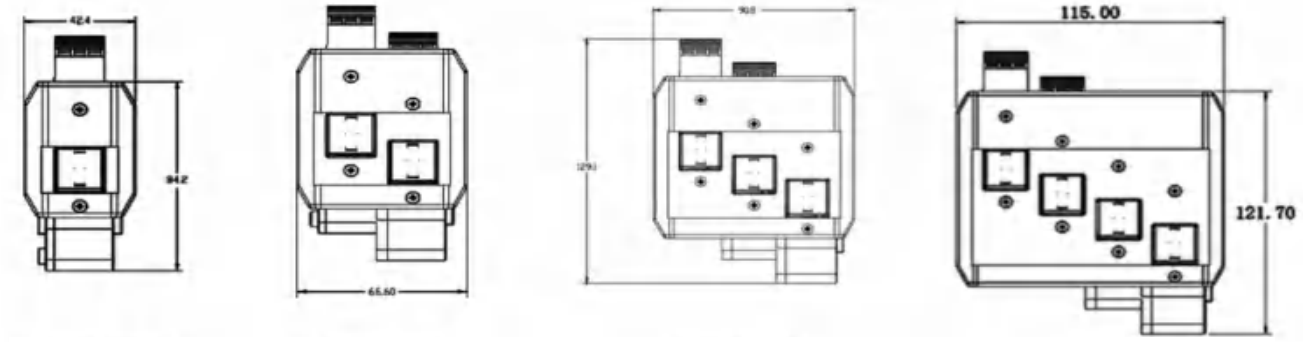


Figure 3-13 MX Pro Print Head

3.2.6 Ink Cartridge

The inkjet printer uses HP45 original ink cartridges with encryption chips. At present, the ink cartridges supported by the printer include black water-based ink, black solvent ink, white solvent ink, yellow solvent ink, red solvent ink, blue solvent ink, green solvent ink, invisible red solvent ink, invisible blue solvent ink and UV Ink etc. The ink cartridge is shown in Figure 3-14.

Figure 3-14 Ink cartridge

3.2.7 Bracket

The bracket is used to fix the controller and print head, where the fixation of the print head has a crucial impact on the printing quality, especially if you need a splicing print.

The following points should be paid attention to during bracket installation:

- Brackets in different directions are perpendicular to each other;
- The print head direction should be perpendicular to the vertical direction of the conveyor;
- The distance of the print head is not more than 5 mm from the sprayed object.

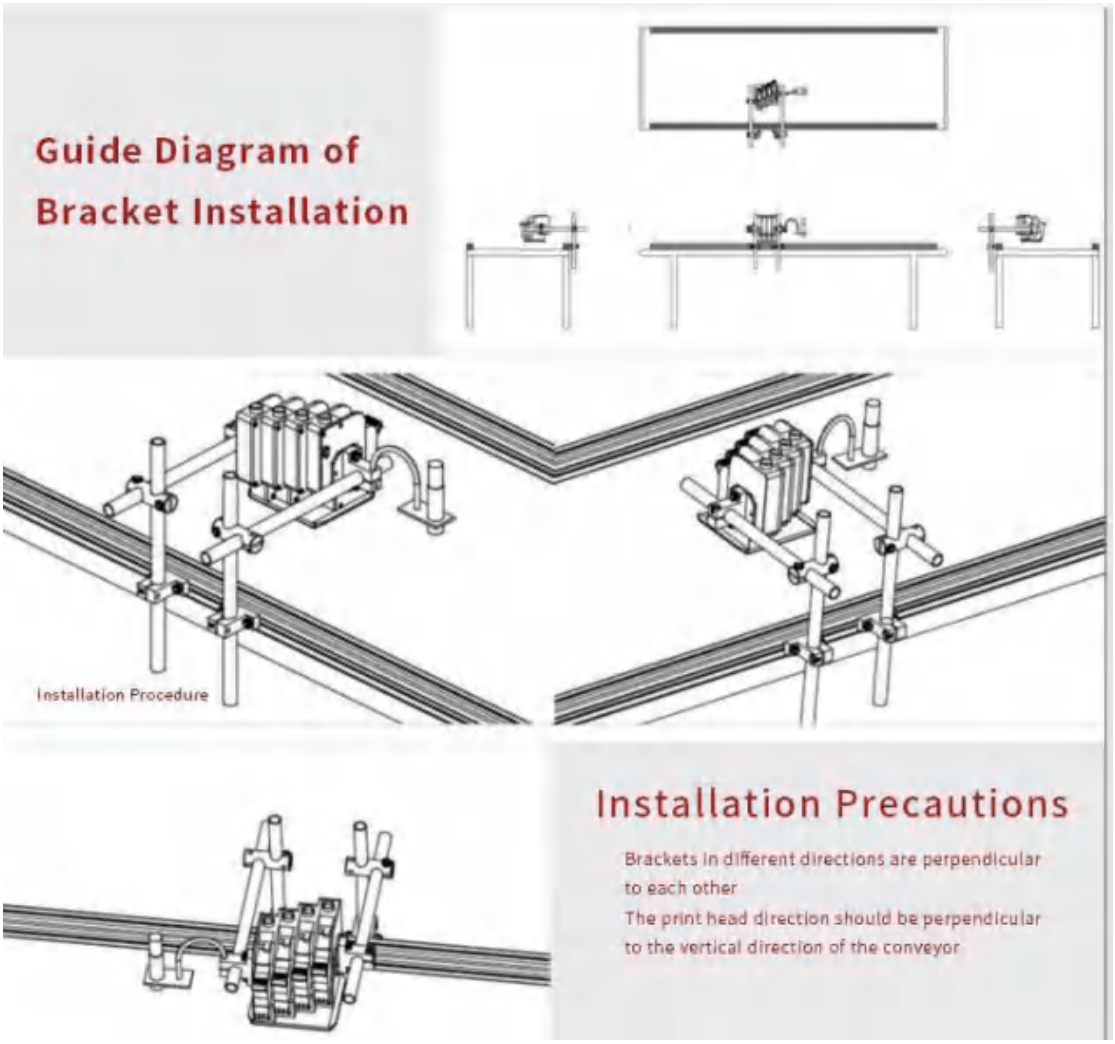


Figure3-15 Diagram of Bracket Installation

3.3 Main components of MX Plus Inkjet Printer

The inkjet printer contains the following main components as shown in Figure 3-16.

1. Touch Screen
2. Power Switch
3. Interface
4. Controller Cable
5. Print Head
6. Bracket

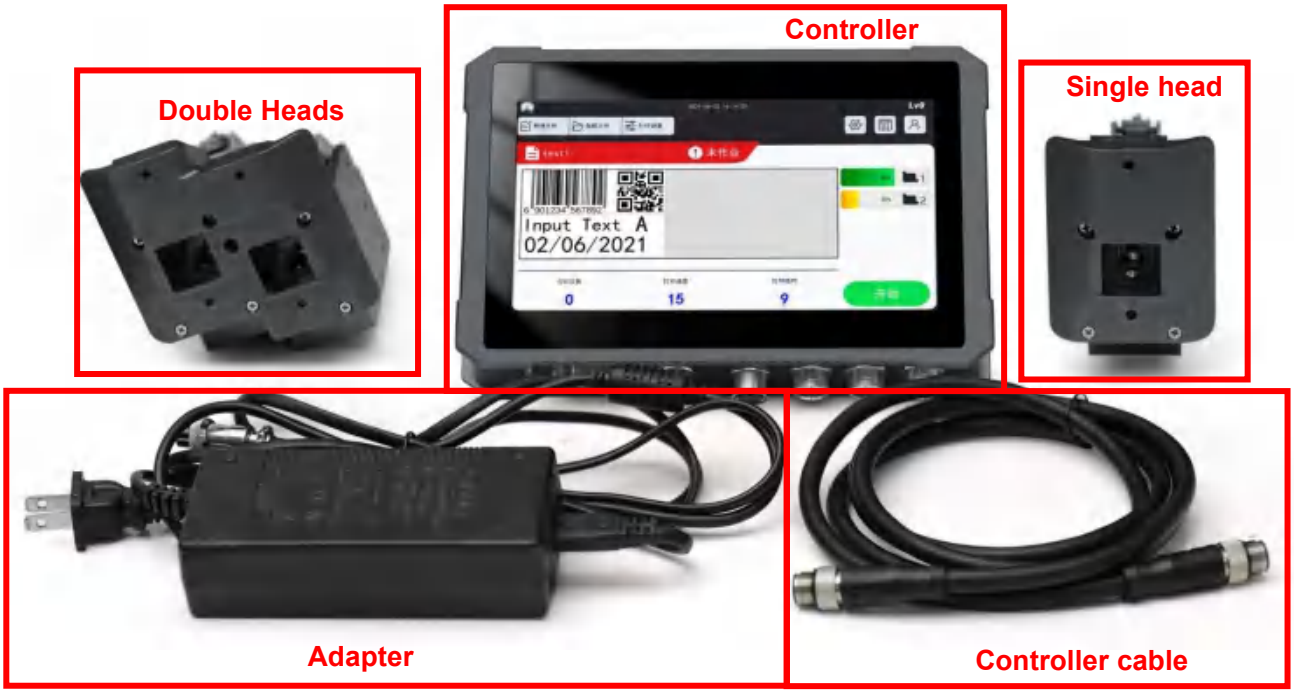


Figure 3-16 Main components of MX Plus Inkjet Printer

3.3.1 Touch Screen

The printer is equipped with a 7-inch high-definition(800*480) capacitive touch screen (see Figure 3-17). The printer control is performed through a graphical user interface (GUI).

Figure 3-17 Touch Screen

3.3.2 Power Switch

The power switch button is used to turn on or off the printer's power (see Figure 3-18), located on the right side of the printer.

Note: Do not press the power switch to start the machine immediately after shutting down. It will take a certain time for the system to shut down. Please wait for about 10s.

Figure 3-18 Power Switch

3.3.3 Interface

The printer is equipped with a variety of interfaces for printing control and interaction with the outside, as shown in Figures 3-19. The various available standard IO connections are provided in Table 3-3.

Figure 3-19 MX Plus interface figure

Number	Interface	Usage
1	**Adapter**	Connect external power supply
2	**Sensor**	Connect external encoder
3	**Encoder**	Connect external sensor
4	**Multifunctional DB9 Serial Port**	Connect external Alarm light, external data, UV light

Table 3-3 MX Plus interface

3.3.3.1 Adapter interface

The adapter interface is used to connect with the power adapter to provide power for the printer to work. The specification of the power adapter used by this machine is 12V/4A, please do not use other adapters privately. The power interface is shown in Figure 3-20.

Figure 3-20 Adapter Interface

3.3.3.2 Sensor interface

The sensor interface is used to connect external sensors to control the triggering of printing, such as photoelectric sensors, optical fiber sensors, label sensors, proximity switches, etc. You can also use the PLC signal of other equipment as the trigger signal. At this time, you only need to connect the signal wire and the ground wire. The photoelectric eye interface is shown in Figure 3-21.

Note: The inkjet printer detects the falling edge of the signal as the trigger signal. Customers should choose NPN normally open (NO) or PNP normally closed (NC) photoelectric sensors as the trigger signal.

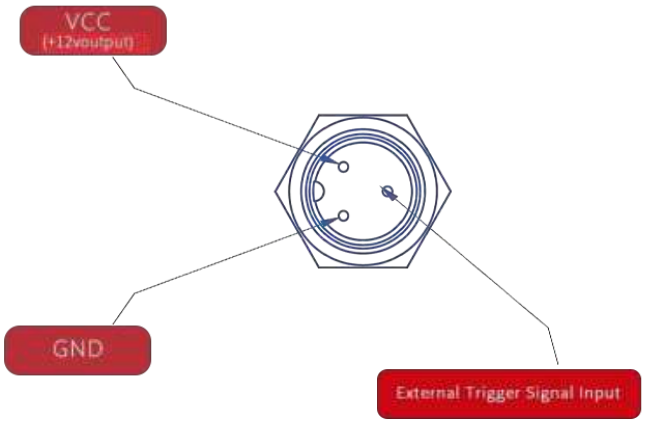


Figure 3-21 Sensor interface

3.3.3.3 Encoder interface

The encoder interface is used to connect the encoder for printing speed control. When you need to splice multiple nozzles for large format printing, it is strongly recommended that you use the encoder mode to print. The encoder interface is shown in Figure 3-22.

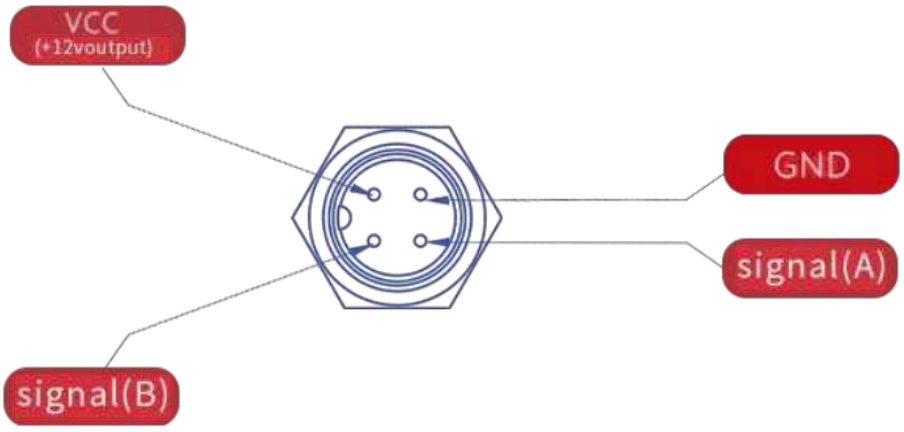


Figure 3-22 Encoder interface

3.3.3.4 Multifunctional DB9 Serial Port

The multi-function DB9 serial port provides the function of connecting the alarm light, UV light and External data. That allows users to remotely monitor the printer status through the light signal sent out by the alarm. The definition of the interface is shown in Figure 3-23.**The alarm light of MX Plus is only red and yellow.**

Since it shares a serial port with the alarm lamp, if you need to print external variable data, you need to connect pin 2 and pin 3 separately to the external device.

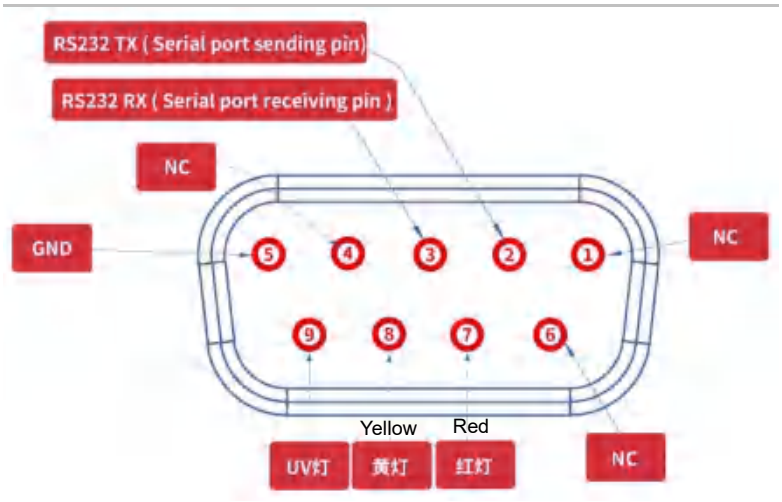


Figure 3-23 Multifunctional DB9 Serial Port

DB9 Serial Port Pins	Function	Description
7-Led	**Stop Status**	The printer will stop printing for the following reasons: 1. No cartridge or invalid cartridge is installed. 2. Use up the ink. 3. Rate-limiting.Real-time print speed overload (delayed data / lost data).

8-Yellow	**Alarm Status**	The ink is not enough and needs to warn the operator, but it is still able to print.(it can be set a value of how many left will start warning).
9-UV Light	**UV Light**	Every time after printed, the prints can be quickly dry and attached to the object.

3.3.4 Controller Cable

The cable connects the printer controller to the print head. The standard length of the connection line is 1.5 meters (4.92 feet), and the longest support is 5 meters (16.4 feet). The connection line is shown in Figure 3-24.

Figure 3-24 MX Plus controller cable

3.3.5 Print Head

The print head controls the ink cartridge to print on the product, and the control signal is transmitted from the main controller to the print head through the print head connection line. The printer can support the free combination of 1~2 heads, which can splice and print large-format (up to 25.4mm) information, or each print head can independently print the information of its own corresponding area. The print head is shown in Figure 3-13.

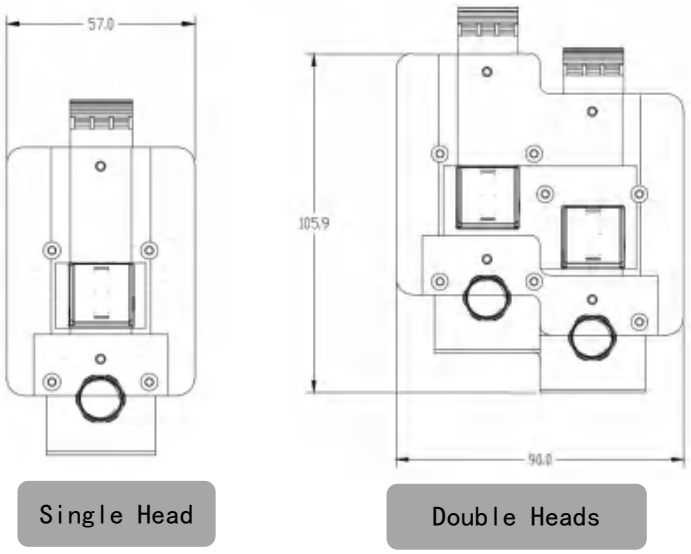


Figure 3-25 MX Plus print heads

3.3.6 Bracket

The bracket is used to fix the controller and print head, where the fixation of the print head has a crucial impact on the printing quality, especially if you need a splicing print.

The following points should be paid attention to during bracket installation:

- Brackets in different directions are perpendicular to each other;
- The print head direction should be perpendicular to the vertical direction of the conveyor;
- The distance of the print head is not more than 5 mm from the sprayed object.

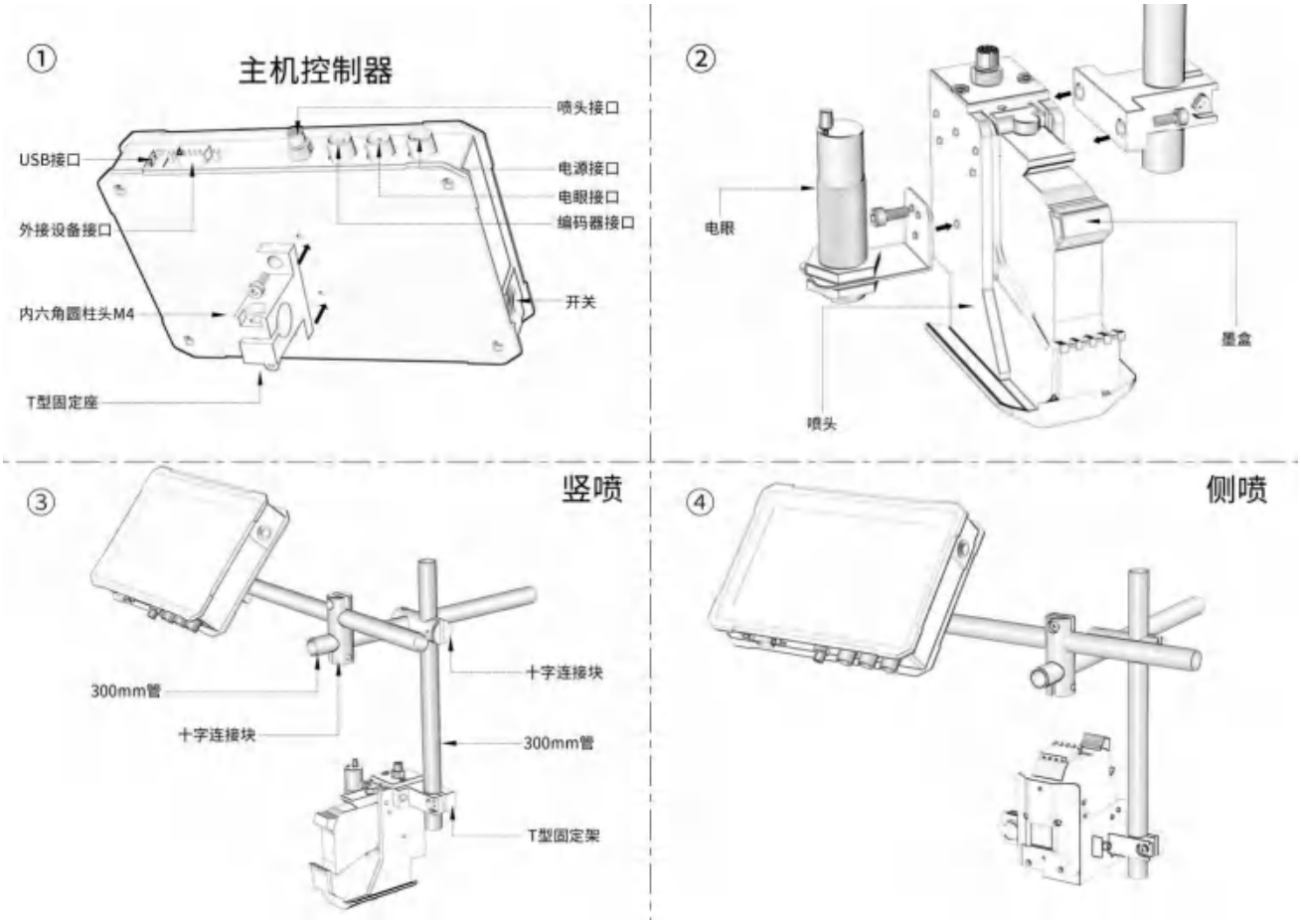


Figure 3-26 Diagram of Bracket Installation

Chapter 4 Operation

This chapter introduces the basic operational information and contains the following topics:

4.1 Turn On

Turn on the inkjet printer as follows:

1. Perform visual inspection. Make sure that all connections are secure and that the cables are connected correctly.
2. Ensure that the main power cable is connected.
3. Press the power switch on the right side of the inkjet printer.
4. After the inkjet printer is successfully started, the system will then display the home screen.

4.2 User Interface Introduction

The user interface is a button-based control system. It has an easy-to-use touch screen, and most areas of the display are active. All technical settings and controls of the printer are done through the tool buttons.

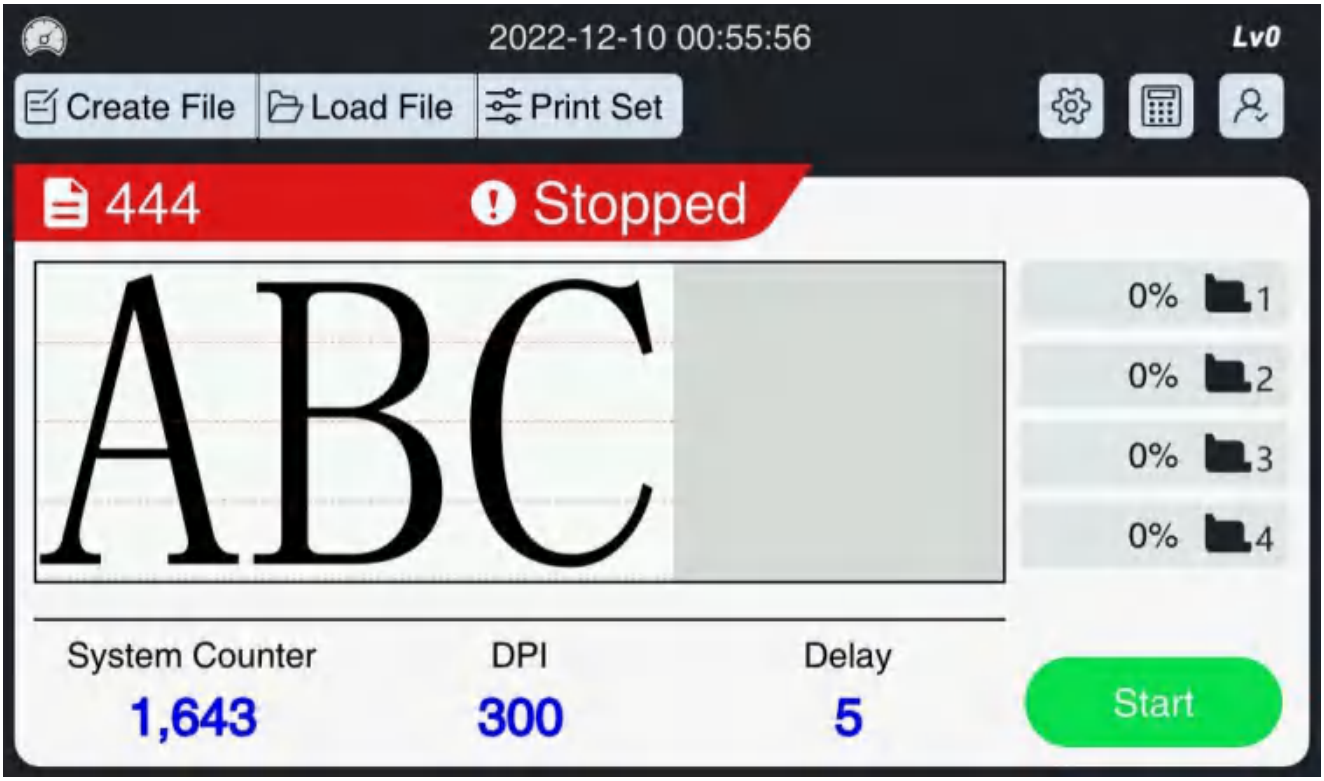
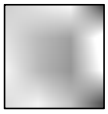
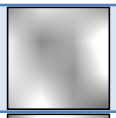
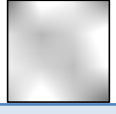
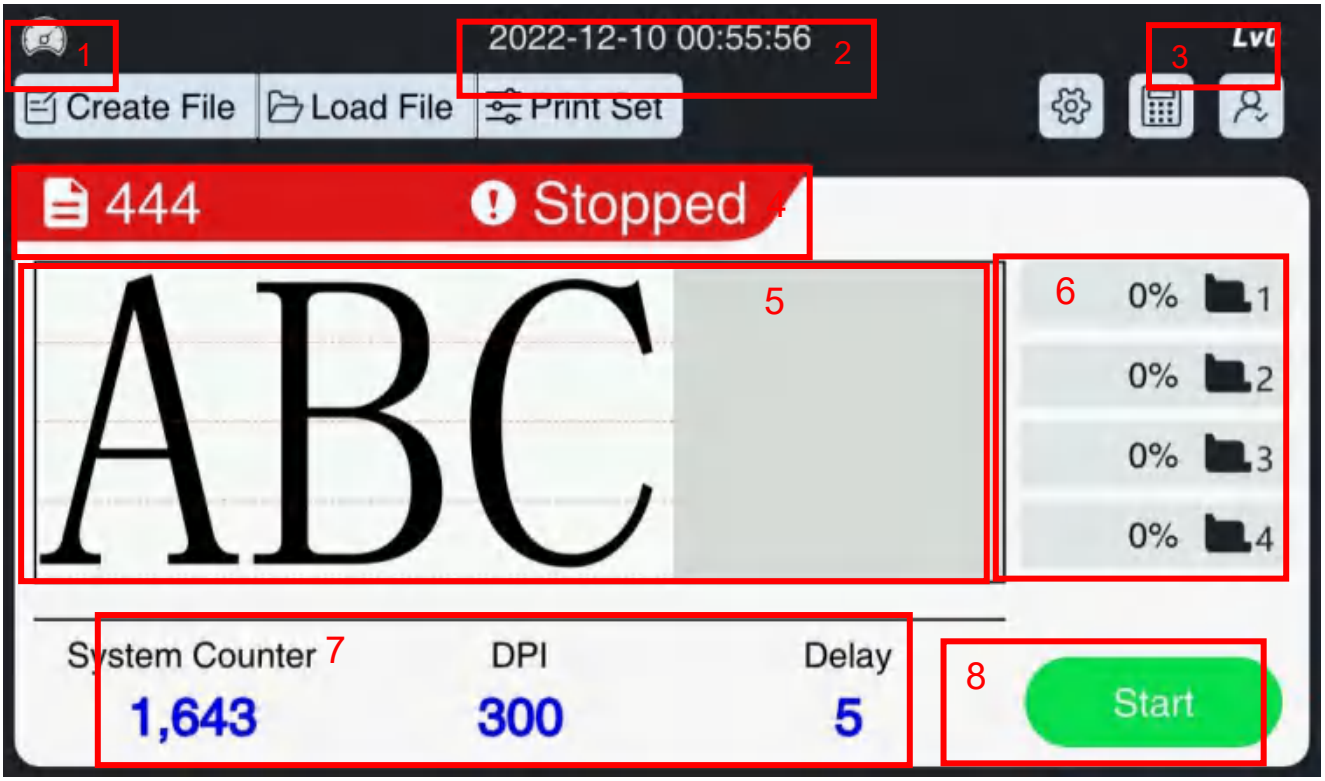


Figure 4-1 Home Page Interface

Button	Name	Description
	**Create File**	Enter the editing interface to quickly create a new print file.
	**Load File**	Actions the saved file. Such as edit, delete, select print, etc.
	**Print Set**	Adjust all of the print parameters. Such as print parameter, print head, print mode, advance.
	**System Setting**	Set some auxiliary parameters. Such as Configure, password, Custom Date, Language, etc.
	**Counter Setting**	Set the counter parameters. Such as start value, step value, current value, etc., the number of prints can be reset.
	**Authority Management**	Different user levels can be logged in according to the corresponding password.
	**Start Printing**	The printer starts the printing job.
	**Stop Printing**	The printer stops the printing job.



Number	Area Meaning	Description
1	**Speed Indicator Light**	1、The indicator light is white under normal conditions. If it turns red during printing, it means that the production line speed is too fast and the current printing parameters cannot meet the requirements. 2、If you are not using an encoder at this time, please reduce the "Line Speed" in "Print Settings"-"Print Mode" to reduce the DPI; if you use an encoder, please slow down the production line speed and reduce the DPI.
2	**System Time**	This area is used to display the current system time and to modify the system time.
3	**User Level**	This area is used to display the user level of the current device.
4	**Status Showing**	This area is used to display the file name of the current print file and the working status of the printer. 1、Idle Status：**Stopped** 2、Printing (Working) Status ： **Printing** 3、Ink Volume Reaches Alarm Value ： **Low Ink Volume**
5	**File Preview**	This area is used to display the information content of the current print file. Drag this area left and right to view the information content outside the display area.

6	**Ink Level Preview**	This area is used to display the remaining ink volume of each print head currently being printed.
7	**Parameter Preview**	1、This area is used to display the current printing times, and you can calculate the number of products for a certain job based on this. 2、You can quickly and conveniently view some of the current important parameters through this area, namely DPI and delay (the offset of the first print head).
8	START STOP	1、Click this button when idle, the printer will verify the legality of the ink cartridge and enter the printing state. At the same time, the print button will turn red and "stop" will be displayed. 2、Click this button during printing, the printer will stop printing. At the same time, the print button will return to green and display "Start".

4.3 Print File Selected

1. Click the Load File button on the main interface, select the file from the "File List", or enter the desired file name in the search box.

2. After selecting the desired file from the list, a preview of the file content will be displayed on the right side of the screen. As shown in Figure 4-2.

3. Click the [illegible] button, the system returns to the main interface.**(Selecting a file in the printing state will directly enter the printing state, and the printing content will be updated accordingly.)**

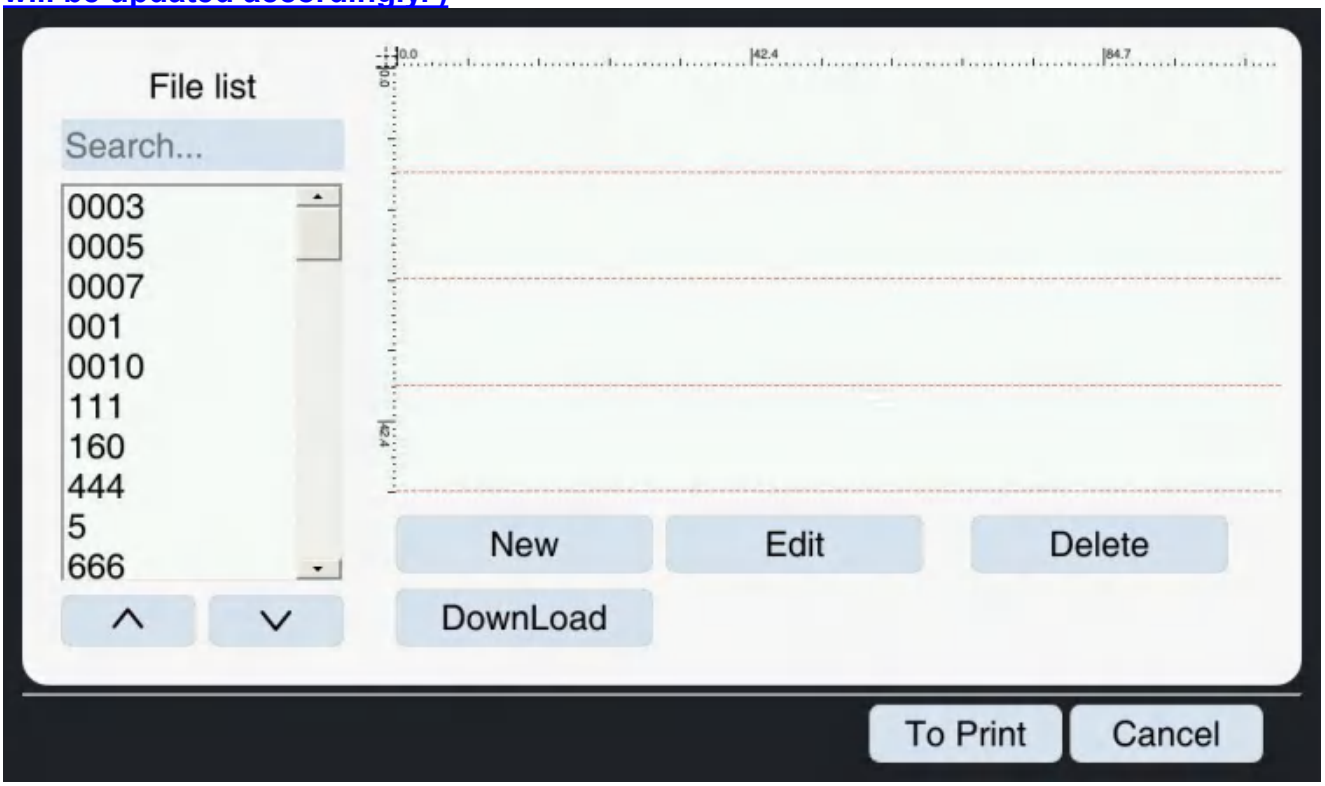


Figure 4-2 File Selection Interface

4.4 Fault and Warning

When a fault occurs, the printer will pop up a fault message in the middle of the screen.

4.5 Start Printing

Click the START button to start the printing operation, and then the button will change to STOP 。It will start the printing now.

4.6 Stop Printing

Click the STOP button,the status of the printer will be changed to stop printing.

4.7 Turn Off

You need to stop printing before turning off the inkjet printer.

If the inkjet printer is in the stopped printing state, directly press the power switch on the right side of the inkjet printer(The inkjet printer has power-off protection. After shutting down, you need to wait for about 10 seconds before starting the next operation).

Chapter 5 File Editor

This chapter introduces the basic operation information of the file editor, including the following topics:

5.1 How to Create New Print Files

This chapter introduces two ways of how to create new print files. They are: 1. Use the "New File" function, 2. Use the "Load File" function. Both of these methods can enter the file editing interface. The specific operation steps will be introduced below.

5.1.1 Use the “New File” Function

1、Clicking the  button on the main interface，and the system will enter the file editing interface . As shown in Figure 5-1. In this interface, you can enter the required information according to your own requirements.

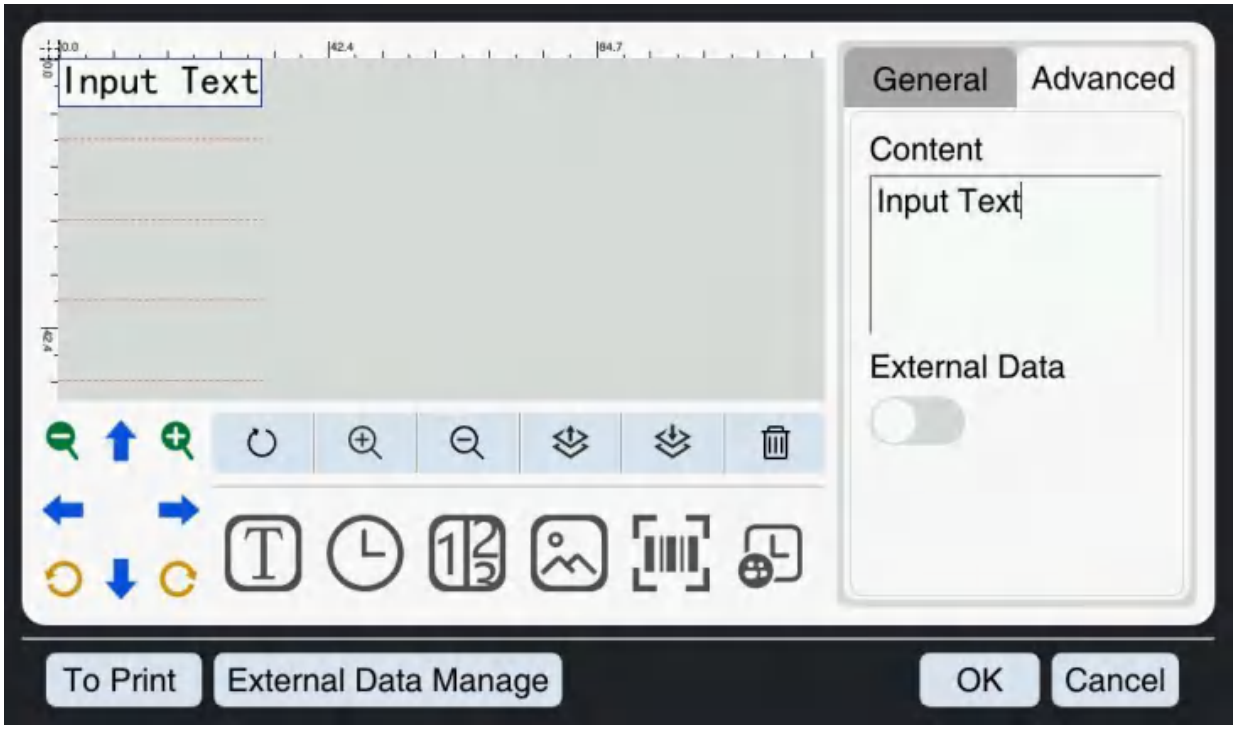
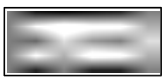
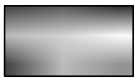
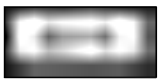


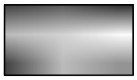
Figure 5-1 File Editing Interface

2、After editing the information we need, we can select the  button or the  at the bottom of the screen to save the edited information.

3、When the system enters the file saving interface, enter the file name in this interface, as shown in Figure 5-2. Please note that only numbers and letters can be used to name files, Chinese characters and symbols cannot be used for naming.

Figure 5-2 File Saving Interface

4、Clicking the  button to save the file successfully, the system will return to the main interface.

Button	Description
	After the file is saved, the edited information is directly updated to the main interface. If the device is in the printing state at this time, it will be updated to the newly edited content the next time it prints.
	The file is only saved locally and cannot be updated to the main interface for direct use.
Save as	Saved the modified print file to another new file.

5.1.2 Use the "Load File" Function

1、Clicking the  button on the main interface, the system will enter the file loading interface. As shown in Figures 5-3.

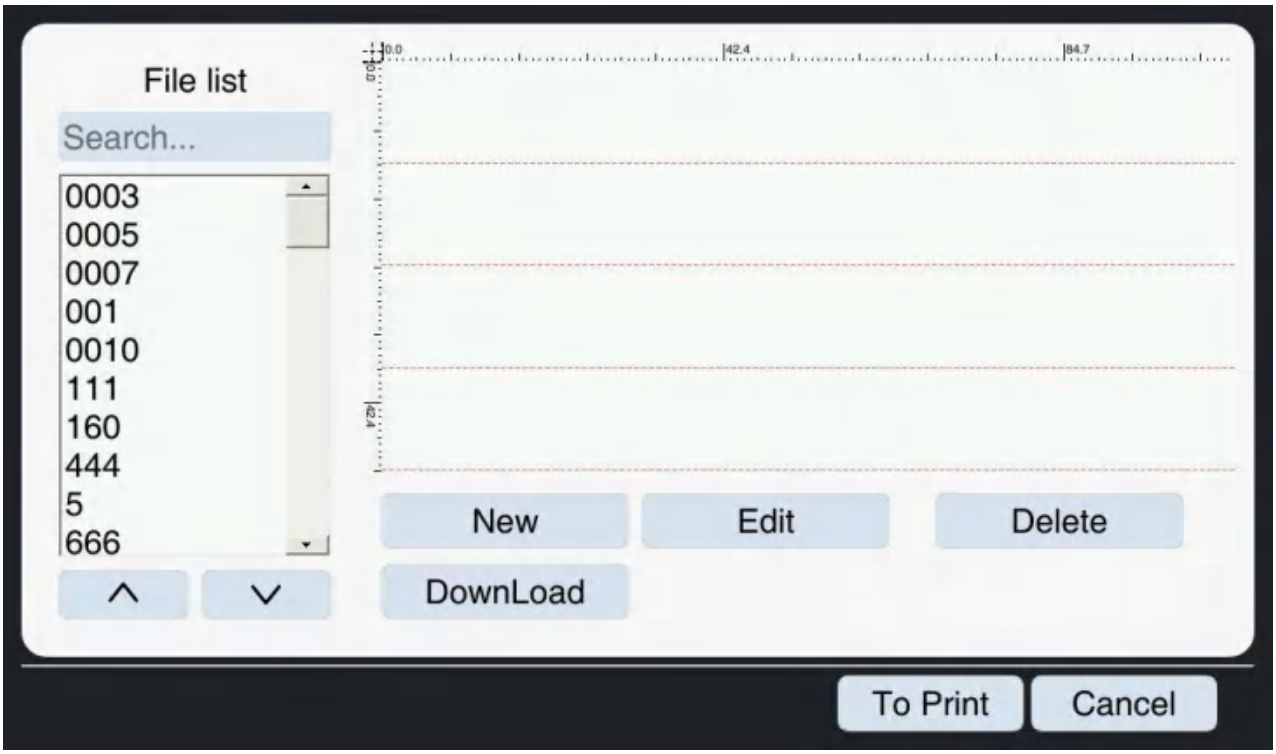


Figure 5-3 File Loading Interface

2、Clicking the 

button, then enter the file editing interface. As shown in Figure 5-4.In this interface, you can enter the required information according to your own requirements.

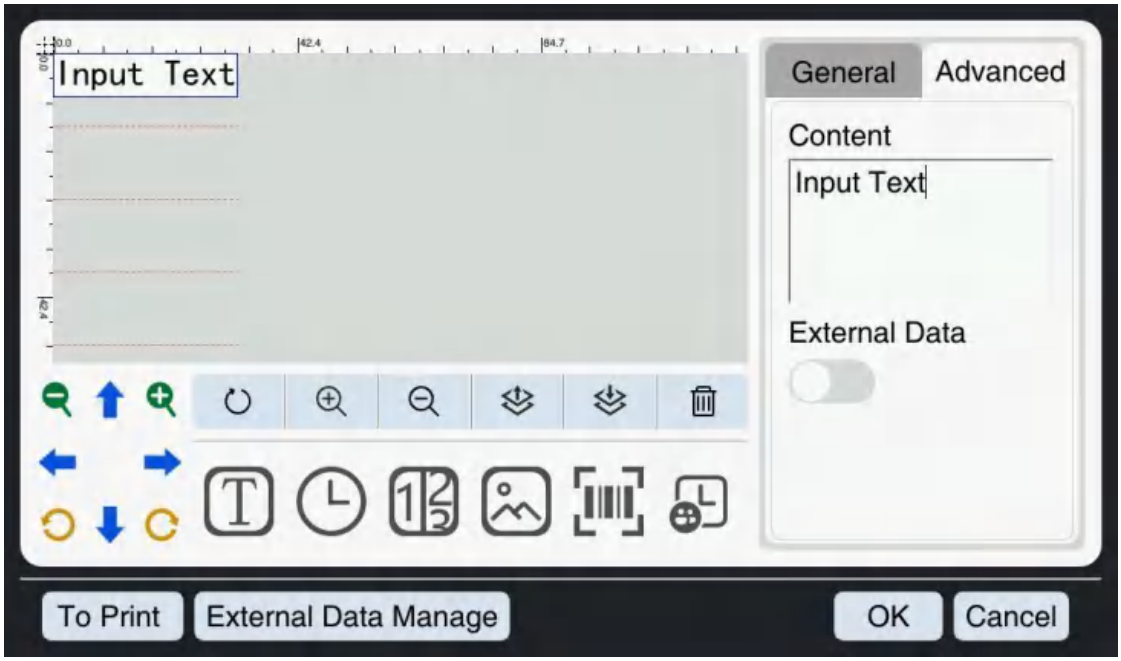
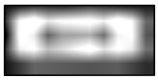


Figure 5-4 File Editing Interface

3、We can see that there is only the “OK” button at the bottom of the screen. Clicking the Button, the system will enter the file saving interface. As same as step 3 in 5.1.1, you can enter the file name to save the file.

4、Clicking the  button, the file will be saved successfully, and then the system will return to the file loading interface. In this interface, you can select the saved file for printing.

5.2 How to Edit the Print File

This chapter introduces how to edit different print information.

1、Following the two ways in section 5.1 to make the system enter the file editing interface. As shown in Figure 5-5 (the figure shows the file editing interface entered by using the "New File" function).

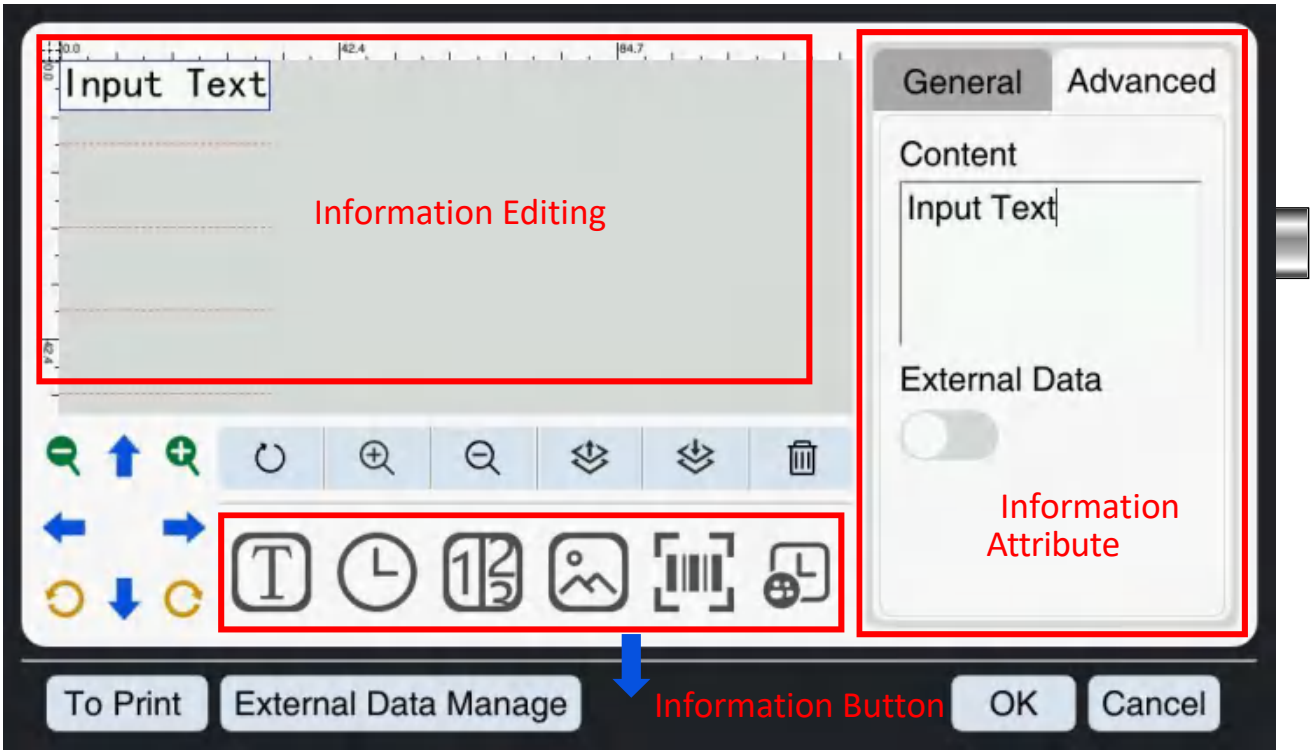
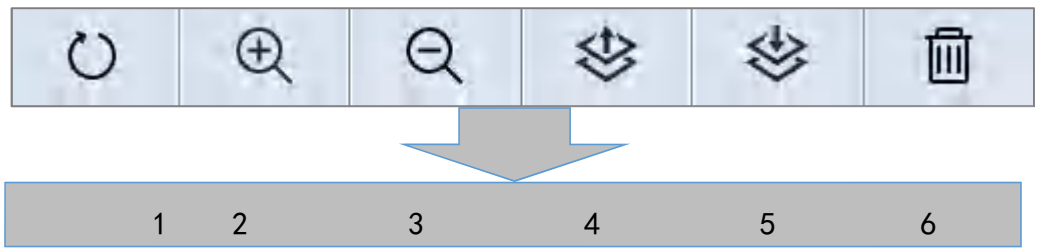
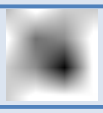
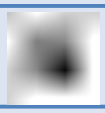
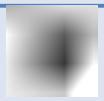
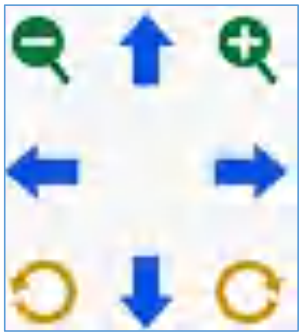


Figure 5-5 File Editing Interface

2、In the file editing interface, you can edit the print information. The content of the printed information can include "Text", "Time", "Serial Number", "Image", "Bar Code" and "Shift Code".



Number	Button	Description
1		Restore the enlarged or reduced information in the information editing area to its original state.
2		Enlarge and view the information content in the information edit area.
3		Reduce and view the information content in the information edit area.
4		When two pieces of information overlap, the selected information is at the top level and the content is visible.
5		When two pieces of information overlap, the selected information is located at the bottom and the content is not visible.
6		The information content in the information editing area can be deleted.



Button	Description
	Use to adjust the font size of the information.
	Adjust the position of the information according to the direction of the arrow.
	Adjust the rotation angle of the information according to the direction of the arrow.

5.2.1 Text Editing

1、If you need to print Chinese characters (CN), English (EN), numbers, symbols, etc., please click the  button in the “Information Button Area”,then a default text entry will appear in the “Information Editing Area”.Click the content box of the "Information Attribute Area" and enter the required information in the pop-up keyboard. As shown in Figures 5-6.

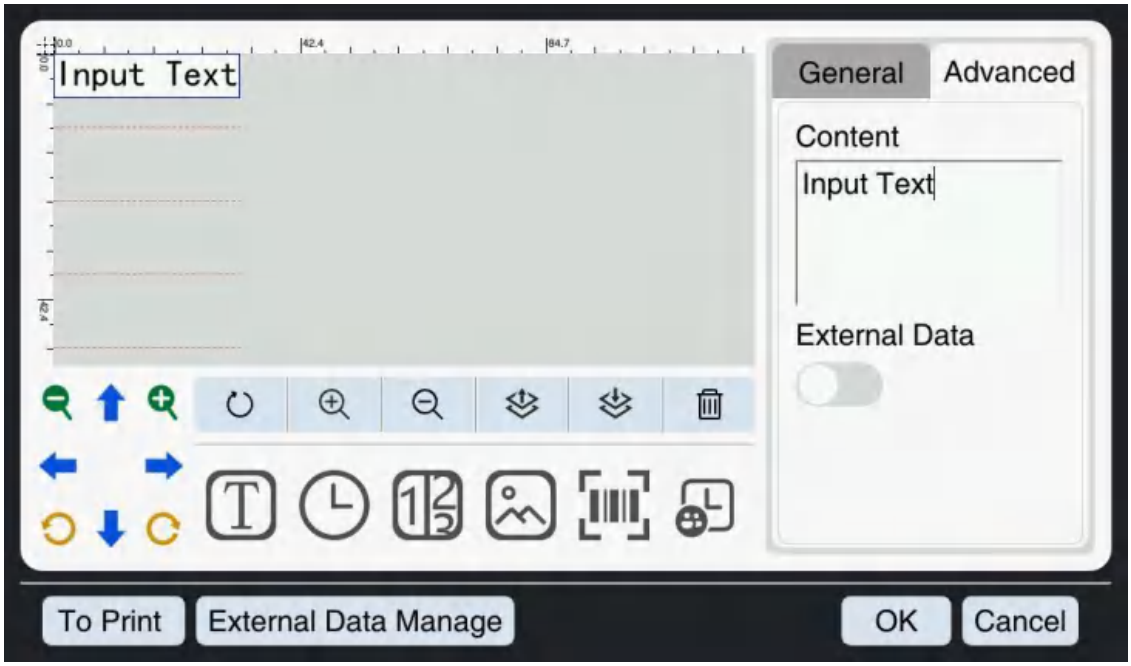
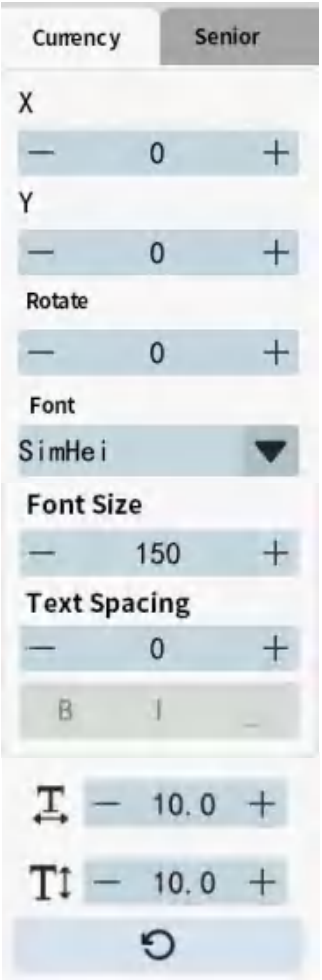


Figure 5-6 Text Editing Interface

2、In the general options of the "Information Attribute Area", you can adjust the position, font, font size and other attributes of the text entry. **Note: This Font Scaling function is only applicable to software version V2.3.1 and above.**



Number	Button	Description
1	X	Press the "+" sign or "-" sign to adjust the position of the text on the X coordinate axis.
2	Y	Press the "+" sign or "-" sign to adjust the position of the text on the Y coordinate axis.
3	Rotation	Press the "+" sign or "-" sign to adjust the rotation angle of the text.
4	Font	Click the font drop-down box to change various font styles.
5	Font Size	Press the "+" sign or "-" sign to adjust the size of the text.
6	Text Spacing	Press "+" sign or "-" sign to adjust the distance between texts.
7	B	Click on it makes the background color white and the text bold.
8	I	Click on it makes the background color white and the text slanted.

9	–	Click on it to make the background white and the text underlined.
10		The font is scaled horizontally. The font can be widened horizontally by adjusting the value.
11		Font vertical scaling. The font can be lengthened longitudinally by adjusting the value.
12		Restores the scaled font to its default state.

5.5.2 Time Editing

1, If you need to print the variable time, that is, the time content in the printed information is automatically updated, without human intervention, please click the button in the “Information Button Area”, then a default time entry will appear in the "Information Editing Area". Then a default time entry will appear in the "Information Editing Area". As showing in Figure 5-7.It supports real-time variable time information. In the printing state, the time information is updated in real time. This function is only available for version 2.3.0 and above.

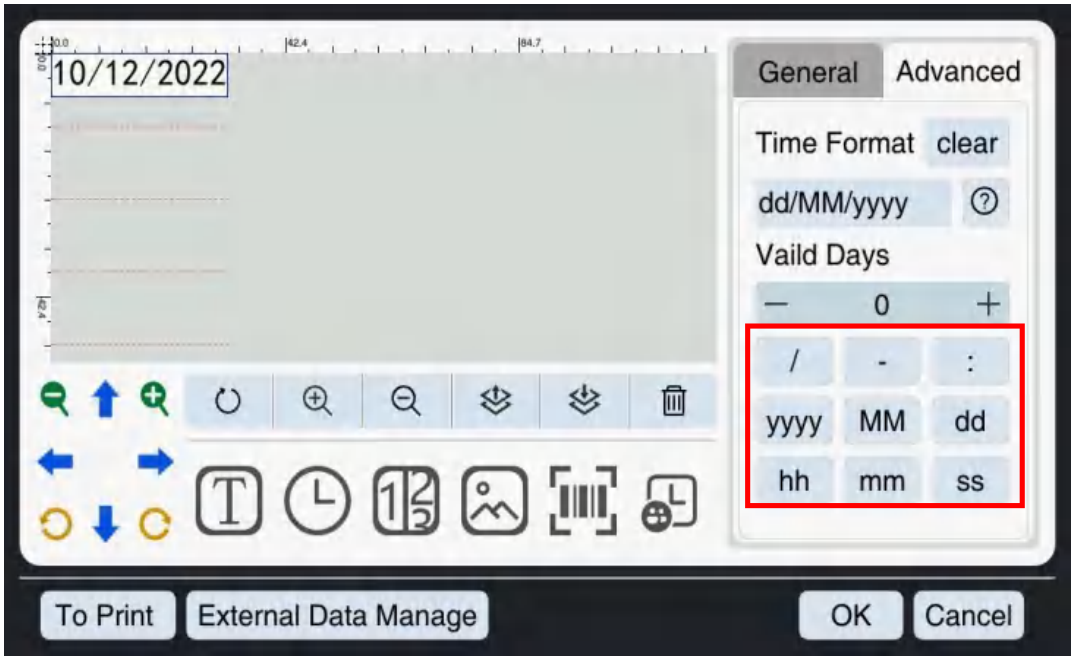


Figure 5-7 Time Editing Interface

2.In the advanced options of the "Information Attribute Area", you can set the time format, valid days, etc. To customize the time format, please refer to Appendix 1.

3.In the general options of the "Information Attribute Area", you can adjust the position, font, font size and other attributes of the time entry.

Number	Options	Description

1	Time Format	Freely combine formats through the keyboard or the shortcut keys below.
2	Valid Days	The number of days after the current system time is added.

5.2.3 Serial Number Editing

1.If you need to print the variable order number, that is, the counted content in the printed information is automatically updated, without human intervention, please click the  button in the "information button area" ，then a default order number entry will appear in the "Information Editing Area". As shown in Figures 5-8.

2.In the advanced options of the "Information Attribute Area", you can choose different fixed digits, the maximum digit is 8 (the high digits can be filled with 0), or you can choose a custom prefix (when the prefix is set to blank, it is equivalent to a natural number).

3.The printer system contains four counters, named "Counter 1", "Counter 2", "Counter 3" and "Counter 4" in the "Counter ID" drop-down box. You can set the initial value, step value, current value, maximum value and number of repetitions of the four counters through "Counter Settings".

4.In the general options of the "Information Attribute Area", you can adjust the position, font, font size and other attributes of the order number entry.

5.In the advanced options of the "Information Attribute Area", select the "Separator" button to add a separator to the serial number entry.

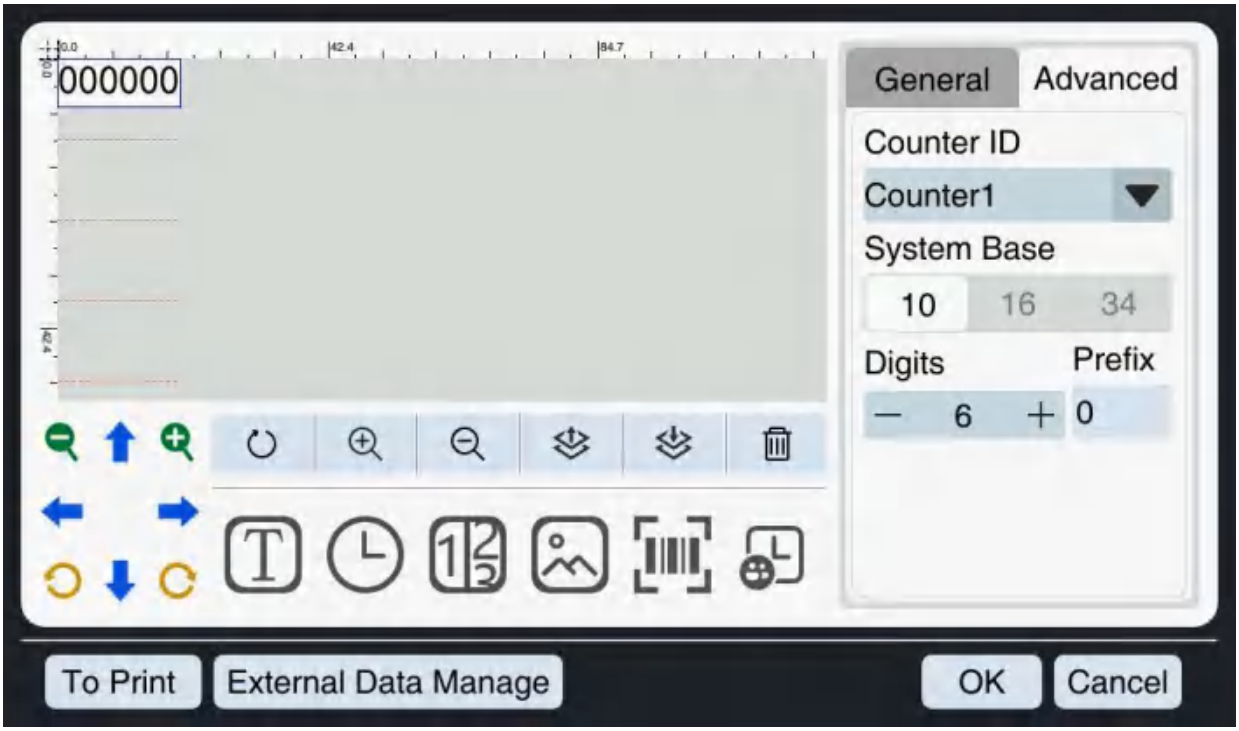


Figure 5-8 Serial Number Editing Interface

5.2.4 Image Editing

1. If you need to print images, please click the button in the "Information Button Area" ,then a default "image" picture entry will appear in the "Information Editing Area". As shown in Figure 5-9.

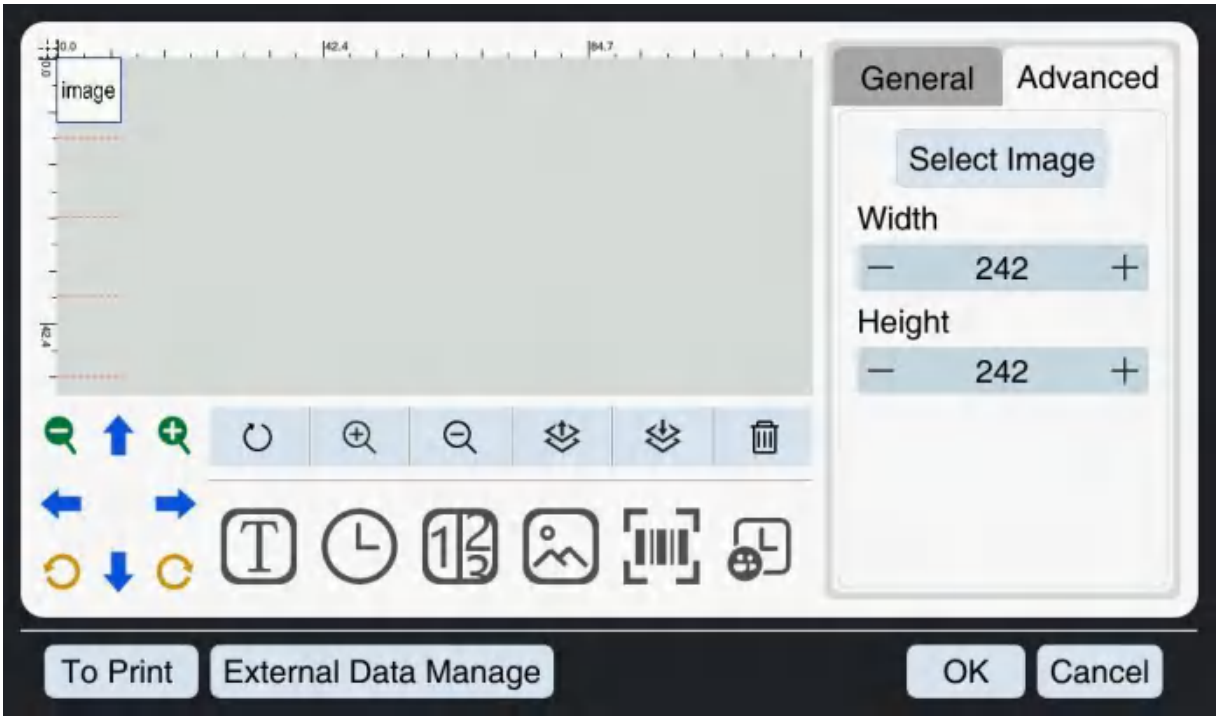


Figure 5-9 Image Editing Interface

2.In the advanced options of the "Information Attribute Area", you can click the Select Image button and select the image file to be printed, and adjust the height and width.

3.In the general options of the "Information Attribute Area", you can adjust the position, rotation angle and other attributes of the time entry.

It should be noted that the image formats supported by this system are png, jpg, and bmp. In addition, if your image is imported via U disk, the image will be automatically copied to the local.

5.2.5 Barcode Editing

1.If you need to print a barcode, please click th button in the "Information Button Area", and then a default QR code entry will appear in the "Information Editing Area". As shown in Figure 5-10.

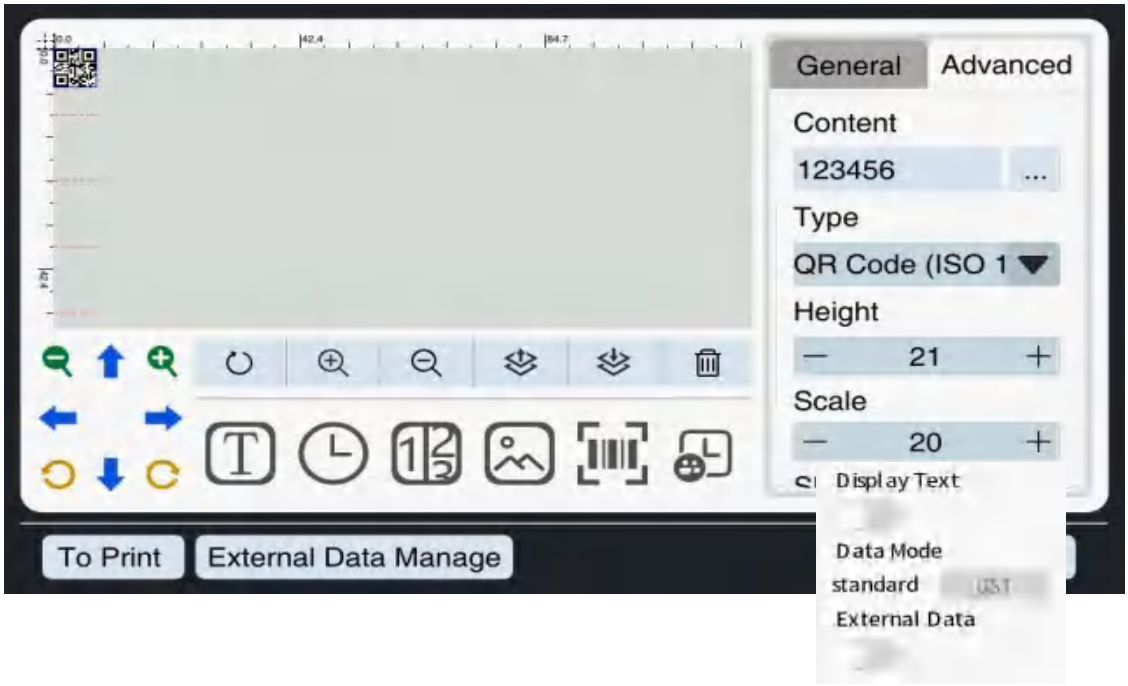
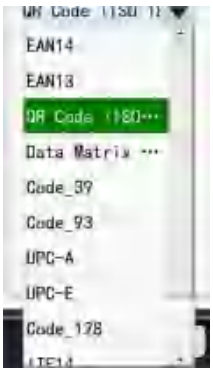


Figure 5-10 Barcode Editing Interface

2.Click the content box of the "Information Attribute Area" and enter the req pop-up keyboard.

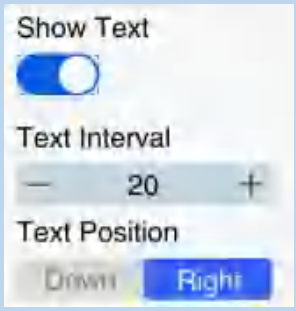
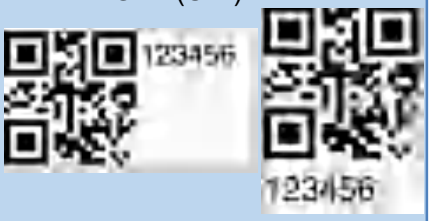
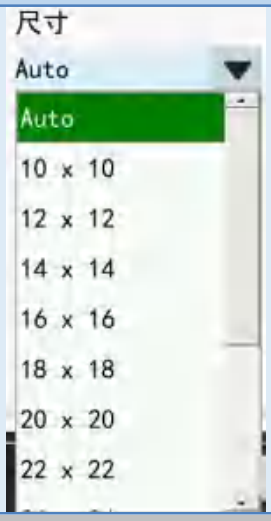
3.In the general options of the "Information Attribute Area", you can adjust the attributes such as the position and rotation angle of the barcode entry.

Number	Button Meaning	Description
1	Type	Click the drop-down menu to select the type of shape code.
2	Height	Press the "+" sign or "-" sign to adjust the height of the bar code(only valid for bar codes).
3	Scaling	Press the "+" sign or "-" sign to zoom the bar code size ratio.
4	Display Text	Click the button below the display text to turn it into blue, and the text can be displayed, otherwise it will not be displayed.
5	Data Pattern	You can choose between "Standard" mode and "GS1" mode.
6	External Data	You can connect external devices to print variable information.



1、It should be noted that different barcodes have their own definition specifications. If the edited content does not conform to the corresponding barcode specifications, it may cause barcode display errors.

2、The three barcodes QR Code, Date Matrix and Code_128 support GS1 mode, and GS1 has specific coding rules.

Type	Specific functions	Description
QR Code		1.The space between text displays can be adjusted. 2.The adjustable text is displayed to the right or below the DR code. 3.Support to display 5 rows of text in GS1 (UDI) mode 
DM Code		1. Like QR code, DM code can also adjust text spacing and text display position. 2. Available in sizes from 10 x 10 to 40 x 40. 3. Support the display of 5 rows of text in GS1 (UDI) mode.

Note: This specific function is only applicable to software version V2.3.0 and above.

5.2.6 Shift Code Editing

1.If you need to record the rotation of each shift, that is, automatically change to the set content at the set time, please click the  button in the "Information Button Area", and then a default entry will appear in the "Information Edit Area". As shown in Figure 5-11.

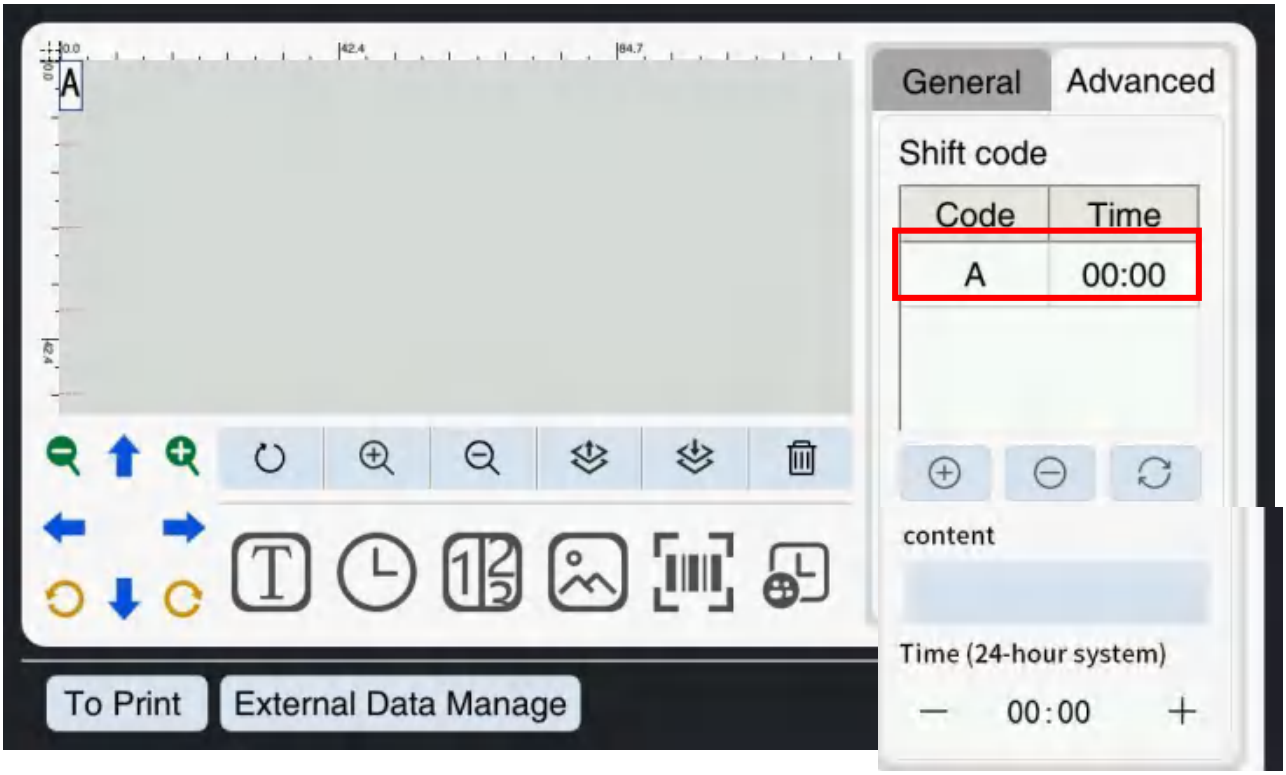


Figure 5-11 Shift Code Editing Interface

2.In the advanced options of the "Information Attribute Area", click the red box under the conversion code and enter the required information in the content box.

3.In the general options of the "Information Attribute Area", you can adjust the position, rotation angle and other attributes of the shift code entry.

Number	Button	Description
1	+	Add a line of content.
2	-	Delete a line of content.
3		Cancel the selected content.
4	Time	Set the rotation time.

5.3 How to Edit External Data

This chapter introduces how to edit variable data information. In section 5.2, we can see that in the "Text Editing" and "Barcode Editing", and in the "Information Properties Area" advanced options, there is a "External Data" button.Clicking this button to turn it into blue,then you can start using the external data function.

1.Clicking the `External Date Manage` button,The "Information Attribute Area" on the right becomes

the external data management interface. As shown in Figure 5-12.

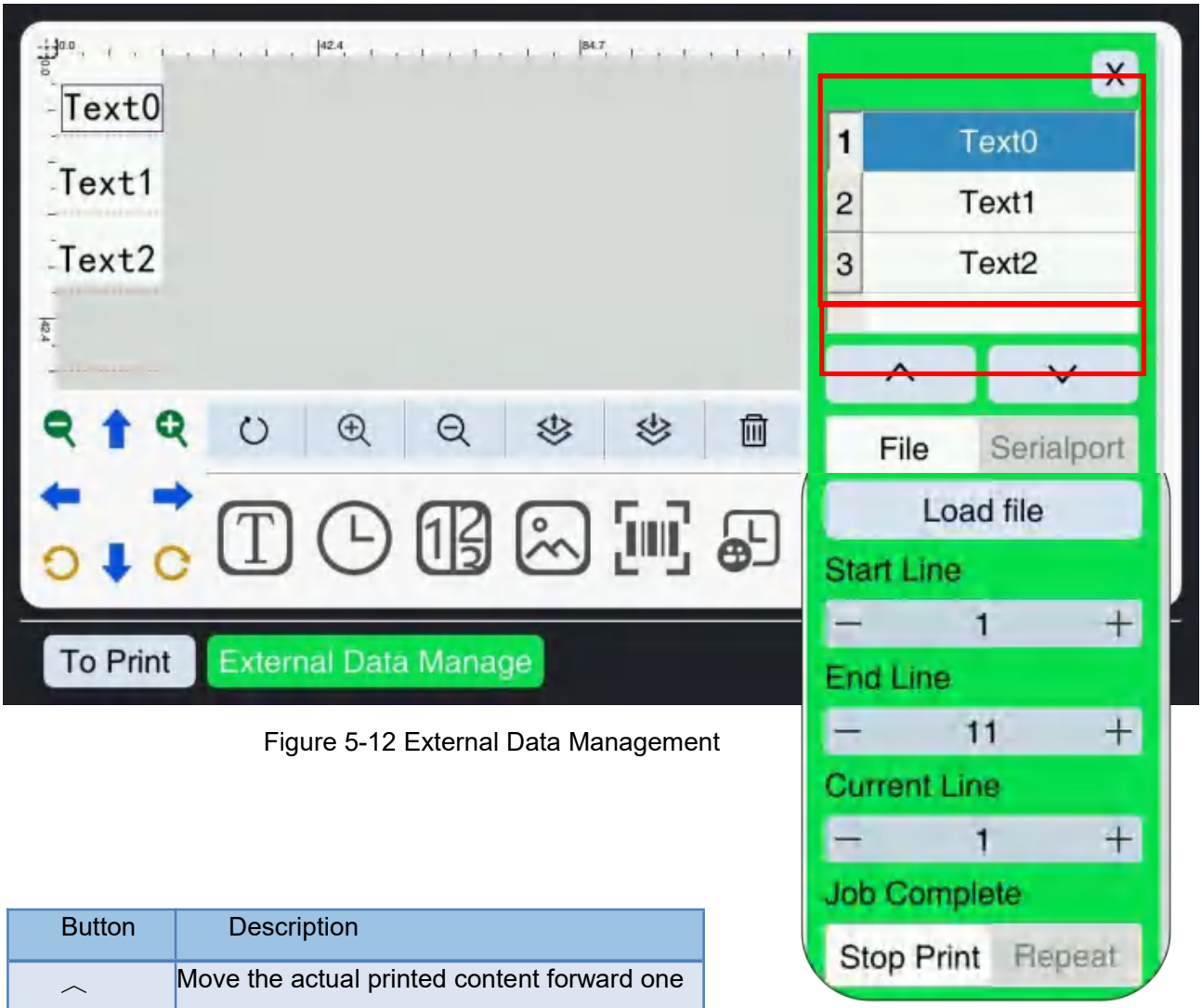


Figure 5-12 External Data Management

Button	Description
^	Move the actual printed content forward one column.
v	Move the actual printed content backward one column.

2.The source of the variable information can be either TXT text content encoded in UTF-8 format, or real-time content transmitted through the RS232 serial port.

3.When you select the U disk to print TXT text, click the File button, then click the File Loading button, and then the system will enter the preview interface. As shown in Figures 5-13. Selecting the file to be printed, and clicking the  button.

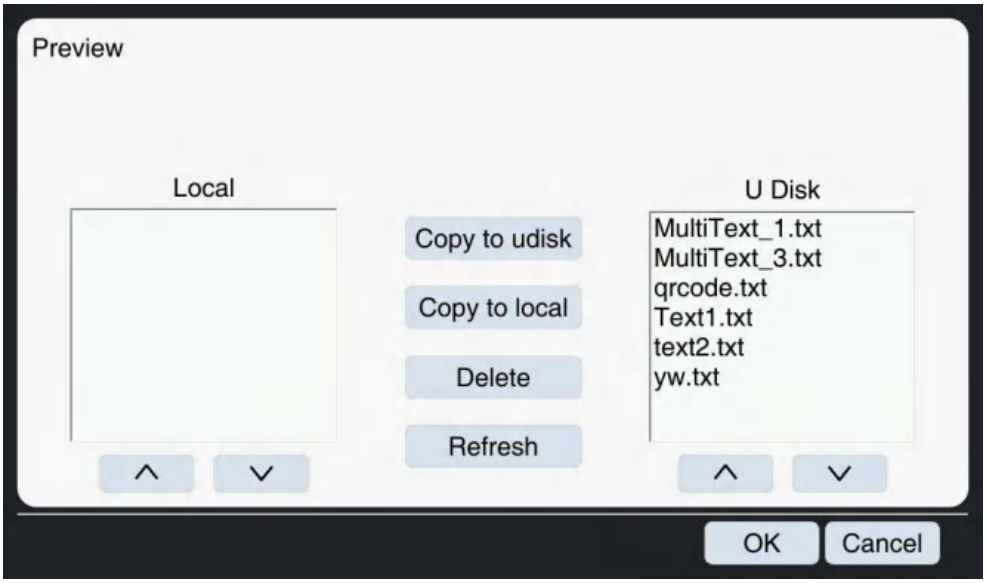


Figure 5-13 File Preview Interface

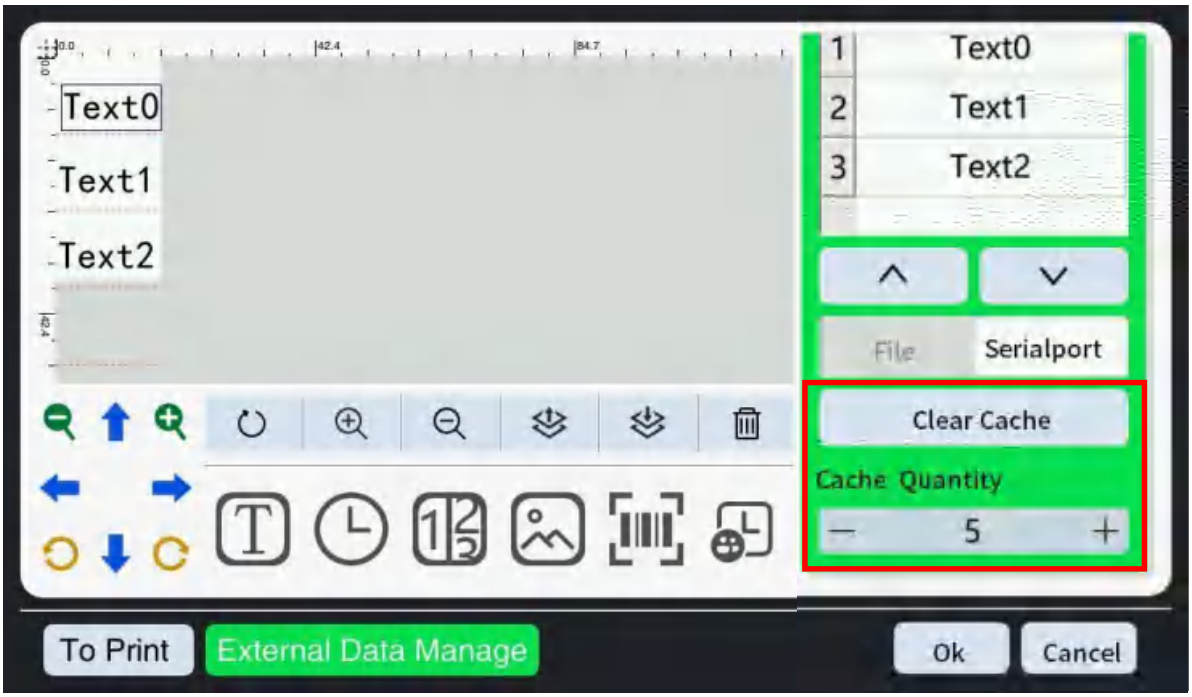
4.Load one line at a time and print until the end of the file. In the interface shown in Figure 5-12, set the "Start Line", "End Line", "Current Line" to be printed, and select "Stop" printing or "Repeat" printing after the job is completed.

Button Name	Description
Stop	When the data is printed to the set end line, the device stops printing.
Repeat	When data is printed to the set end line, it will start printing again from the set start line.

5.If the Excel table is printed, when the number of edited information is less than or more than the number of data columns in the Excel table, the data can still be loaded effectively. (This function only supports Excel tables in xlsx format)

6.The Excel file takes a long time to load for the first time on the machine (test 10w rows, and the loading is about 17s). The software has an external database cache function. During the power-on of the printer, it only needs to be loaded once, and there is no need to load the same file again after that. The name of the external database file (same as txt), if the printer restarts or shuts down, the external database file will be reloaded when entering the system.

7. When "Serial Port" is selected, the real-time data transmitted externally will be received for printing. The variable data can be printed through the TCP/IP protocol of the network port, and the current printing status of the device can be read. You can also print single cache and multi cache variable data through the serial port. For specific operations, please refer to the “Description of External Serial Port Protocol v1.1 of MxPro” and the “Use Guide of External Serial Port of Online printer”.



Button Name	Description
Clear Cache	If you need to print other external data, you need to clear the cache in the device first, otherwise the cached data in the device (the last data sent last time) will be printed.
Cache Quantity	1.You can set the amount of data cached in the device. When the number of caches is set to 1, only one variable data will be saved in the device and will not be accumulated. The variable data sent by the host computer will be displayed on the screen in real time (whether in the printing state or non-printing state), and the host computer will send the variable data again, the device will still be updated; The current print data content is subject to the last variable data of the host computer. When the number of buffers is set to be greater than or equal to 2, multiple pieces of variable data will be stored in the device, and they will be printed one by one in the order in which the variable data is sent by the host computer, until when the remaining data in the device reaches the set number of buffers, the device will return 0x06+ 0x00 and prompt to resend data to the device. 2.The device can cache up to 99 pieces of data. If the cache has been printed completely and no new data has been sent, the device will repeatedly print the last one, and the print content will not be updated until the device receives new data.

Note: From 5 to 7 only apply to software version V2.2.9 and above.

5.4 How to Edit the Saved Print File

This chapter introduces two ways of how to edit the saved print file. They are: 1. Use the "Load File" function, 2. Long press the "Information Preview Area". The specific operation steps are introduced below.

5.4.1 Use the "Load File" Function

1.Clicking the  button on the main interface，and the system will enter the file loading interface. As shown in Figure 5-14.

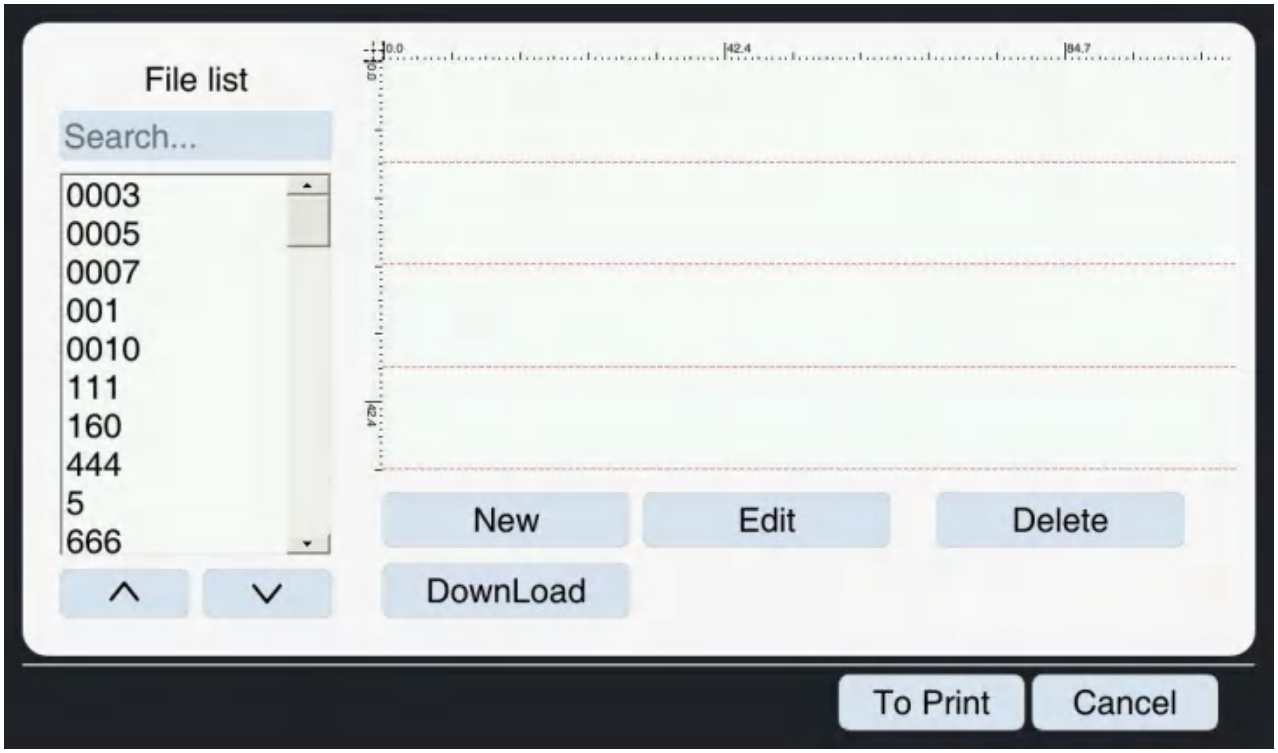


Figure 5-14 File Loading Interface

2.Selecting the file to be edited in the file list and clicking the "Edit" button, the system will enter the file editing interface, and then the information content of the file will be displayed in the “Information Editing Area. “

3.Selecting the information to edit and modify. After the modification is completed, clicking the "OK" button, the system will return to the file loading interface, and then you can select the file for printing.

5.4.2 Use Long Press "Information Preview Area"

1.Pressing the "information preview area" for a long time in the main interface and clicking the pop-up "Edit Current File" button, the system will enter the file editing interface. As shown in Figure 5-15.

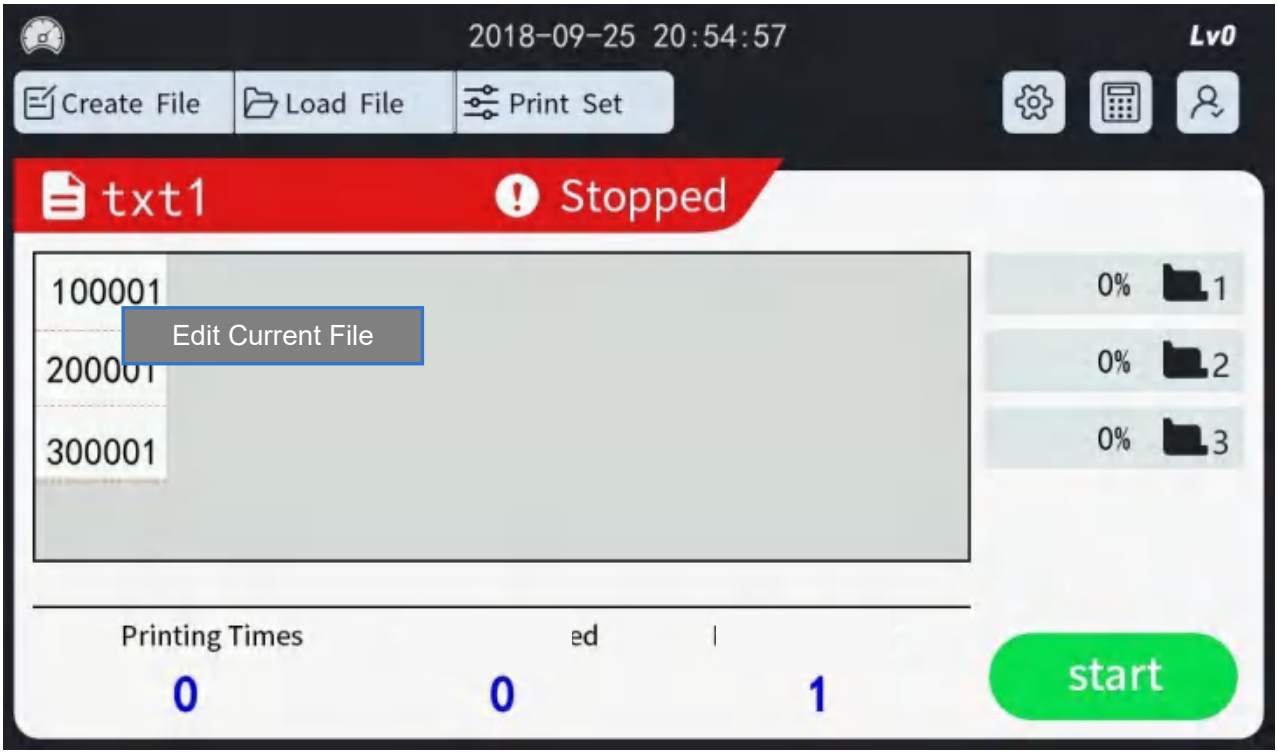


Figure 5-15 File Editing Interface

2. Selecting the information to edit and modify. After the modification is completed, clicking the "OK" button, the system will return to the main interface, and the modified information will be updated to the “Information Preview Area” in the main interface. Then you can directly start printing.

5.5 How to Delete / Copy Files

The operation interface of loading files is shown in Figure 5-16. After you select a file, clicking the Delete button to delete the selected file.

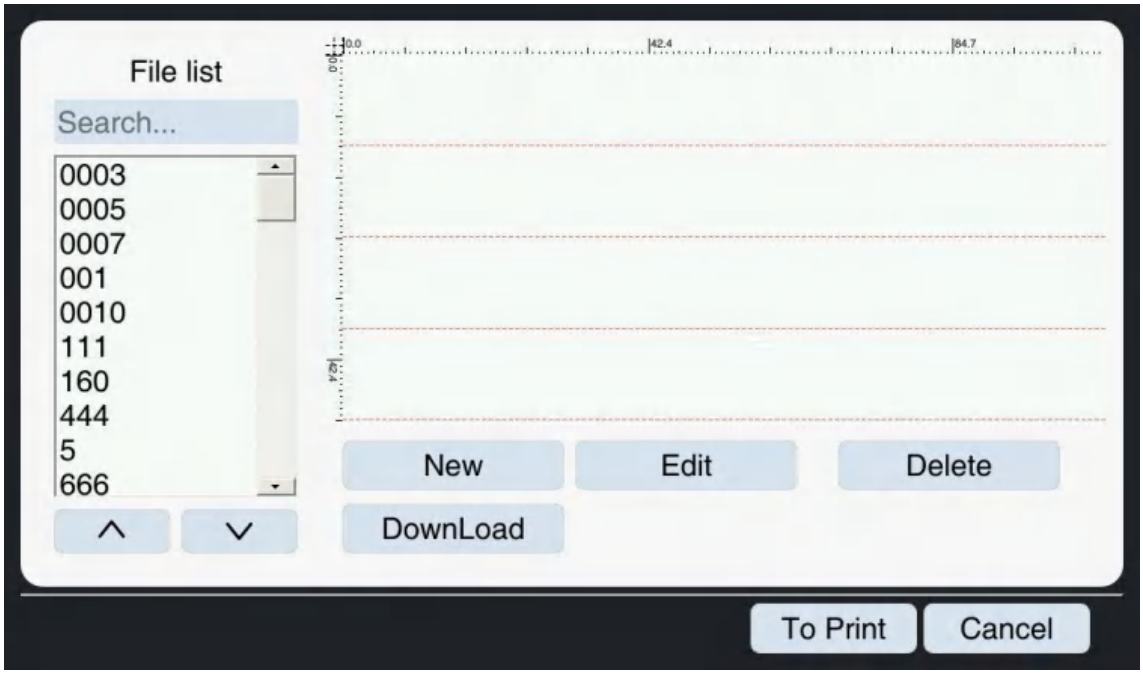


Figure 5-16 File Loading Interface

In addition, click the DownLoad button to copy files. The copy file interface is shown in Figure 5-17. Firstly, you need to find the file to be copied in the file content, and the click the [illegible] button or click the Copy to local button to complete the copy.

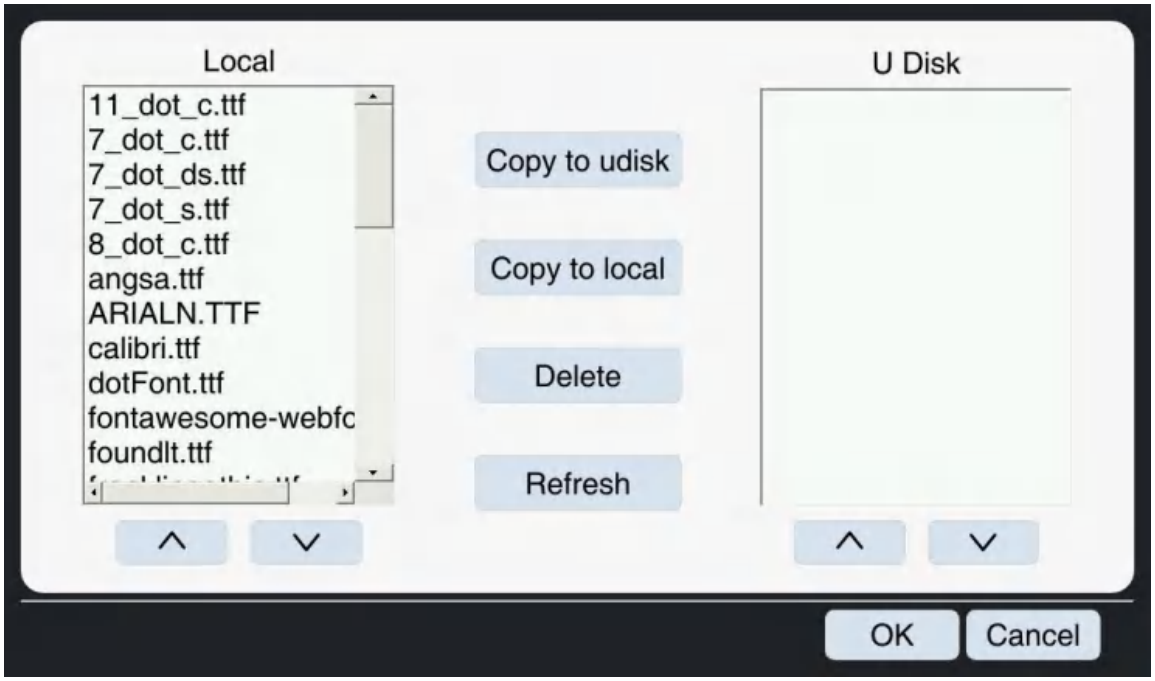


Figure 5-17 File Copying Interface

Note: The function of deleting removable disk is added to the download file interface to improve the security of the USB flash disk when it is pulled out and ensure the integrity of the file. **Only applicable to software version V1.2.13 and above.**

Chapter 6 The User Interface

This chapter introduces the basic operation information of the user interface, including the following topics:

6.1 Print Settings

Clicking the  button on the main interface, and the system will enter the print setting interface. The print settings includes 4 pages, namely "Parameters", "Print Head", "Print Mode" and “Advance”. **It increased the function “print setting parameters following up files” to software version V2.3.1 and above.**

6.1.1 Print Parameters

The interface of printing parameters is shown in Figure 6-1, which contains common parameters for basic printing.

Figure 6-1 Print Parameter Interface

Number	Button Name	Description
1	Spray Type	1. The HP ink cartridge used by the inkjet printer includes two rows of nozzles, namely left and right nozzles. If the nozzle on one side cannot print clearly, you can select the nozzle on the other side to print. It is recommended that you switch the "Spray Type" every time you use it for a period of time to better maintain the nozzle. 2. High Quality: the nozzles on both sides simultaneously jet ink, improving the printing quality, making the information content printed darker, and the overall printing speed will decrease. 3. High speed: the nozzles on both sides spray ink at the same time to improve the printing speed to meet the needs of high-speed printing, and the printed information content color (gray scale) will become lighter. 4. Alternation: the nozzles on both sides print alternately, which is conducive to the maintenance of the nozzle and prolongs the life of the ink cartridge.
2	Double Spray interval	If double jet printing is used, it is necessary to adjust the value of double jet spacing so that the printing positions of nozzles on both sides coincide and a complete piece of information is printed. The default spacing is 4.2mm.
3	DPI	The larger the DPI, the clearer the printed information, and the slower the printing speed. 400 and 500 DPI are added in new version.

Note: Double jet function is only applicable to software version V2.3.0 and above.

6.1.2 Print Head Settings

The interface of print head is shown in Figure 6-2. Since the 4 print heads of this equipment are designed side by side, there is a gap between the 4 print heads, so you need to use the parameter "Print Head Offset" to set the distance between the print heads. If you experience splicing misalignment when using this equipment, you can adjust the “Print Head Offset” parameter to adjust the printing position of each print head.

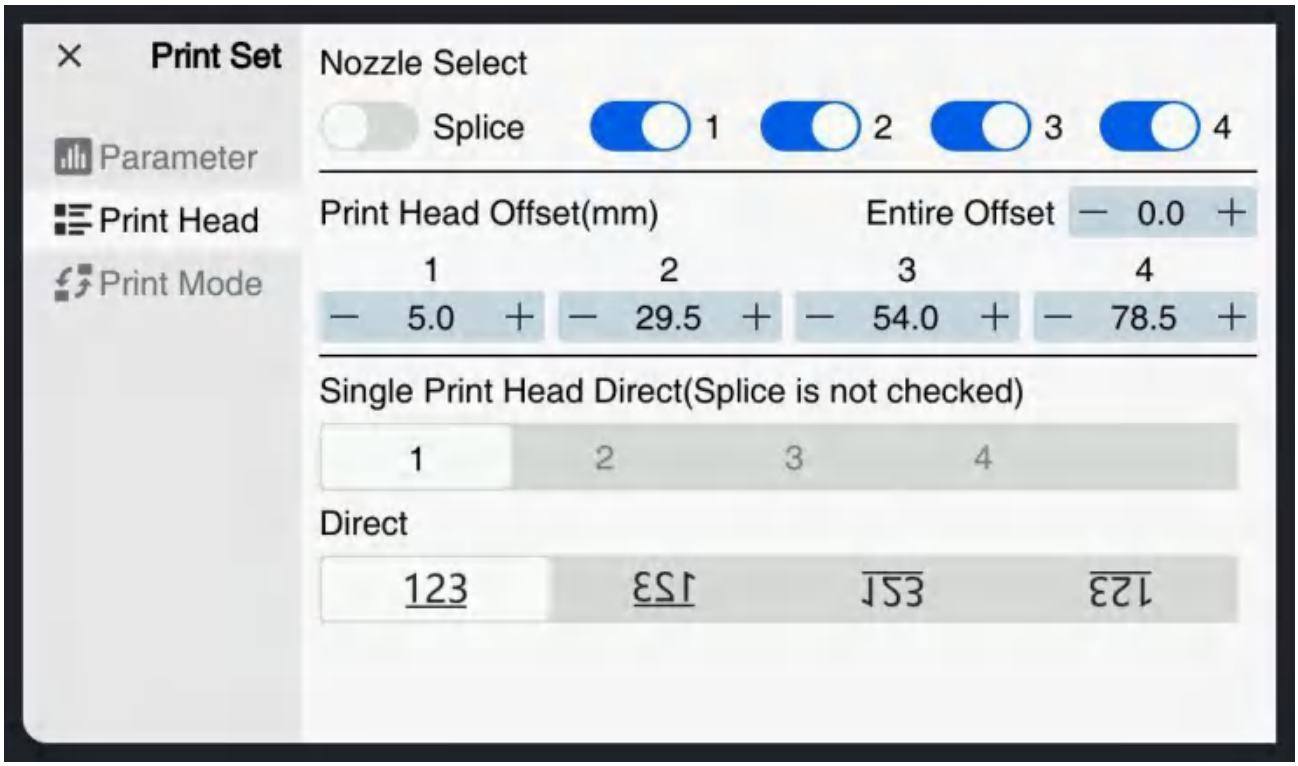


Figure 6-2 Print Head Settings Interface

Number	Button Name	Description
1	Nozzle Select	1.When splicing is not selected, the printing direction of a single print head can be set. The number of print heads can be selected arbitrarily. 2.When splicing is selected, the print heads print from the same direction. The number of print heads can be selected arbitrarily.
2	Entire Offset	1.Setting the "Entire Offset" parameter, the offset of the 4 print heads will change accordingly. Example: Add 10 to the overall offset, and the offsets of 4 print heads will all add 10 to their own value. 2.Every time you set the "Entire Offset" parameter, it will add or subtract from the original print head offset.
3	Print Head Offset	The distance of each print head from the receipt of the trigger signal to the starting of printing can be set.
4	Single Print Head Direct	It only takes effect when splicing is not selected, and any print head can be selected to set the printing direction.
5	Direct	Selecting the printing direction of the information, they are forward, reverse, forward handstand，inverted handstand.

6.1.3 Print Mode

The interface of the print mode is shown in Figure 6-3.

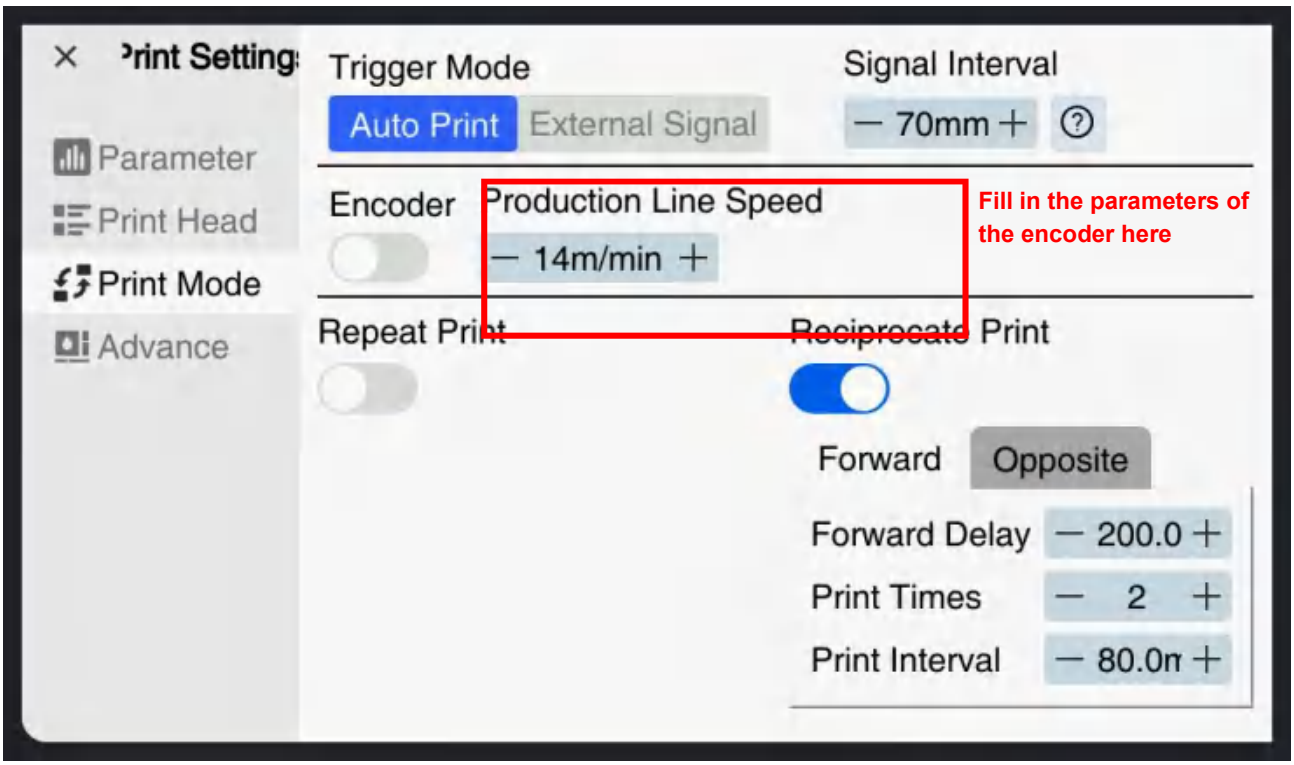


Figure 6-3 Print Mode Interface

1.You can choose different "Trigger Modes" according to your needs. If you need to print continuously, then you do not need a trigger signal, and for the "Trigger Mode", please selecting "Auto Print";If you use an external sensor to trigger, then you need to orient the printing, and for the "Trigger Mode" ,please selecting "External Signal".

2.When "Auto Print" is selected for printing, the sum of "Signal Interval" and "Print Head Offset" determines the distance between two adjacent information printing; when "External Signal" is selected, the "Print Head Offset" determines the distance from when the device receives the trigger signal to the start of printing.

3.When the production line speed is uneven, you can select the "Encoder" option in the interface and fill in the encoder parameters. The synchronization wheel and the encoder can detect the speed of the production line and automatically adjust the inkjet speed to ensure that the printing is not deformed and the stitching is aligned. When the "Encoder" is not used, the parameters in the "Production Line Speed" on the device should be consistent with the actual line speed.

Number	Button Name	Description
1	Trigger Mode	1, Auto Print: Continuous printing, no trigger signal is required. 2.External Signal: To use an external sensor to trigger, orienting the printing is needed.

2	**Signal Interval**	It only takes effect when printing with "Internal Signal", and its used to adjust the distance between two adjacent information printing. There is a default minimum value according to the length of the information,and the minimum distance is 3 (mm).
3	**Production Line Speed**	It only takes effect when the encoder is not used. The entered parameters must be consistent with the actual production line speed to ensure that the printed content is not deformed. If the input parameter is greater than the actual production line speed, the printed content will be elongated. If the parameter is less than the actual production line speed, the printed content will be shortened.
4	**Encoder**	If you use an encoder, you need to truthfully fill in the encoder's parameters to ensure that the printed content is not deformed and the splicing is neat. PPR should be filled with the number of pulses of the encoder; The diameter (mm) should be filled with the diameter of the synchronous wheel.
5	**Repeat Print**	The "Repeat Print" function can only be used normally when the "Trigger Mode" is selected as "External Signal". When "Repeat Print" is used, the device will print multiple times each time the external electric eye is triggered. Repeat times: Setting the number of times the print head repeats printing each time it is triggered. Repeat delay: Setting the interval between two adjacent information to be printed. There is a default minimum value according to the length of the information.
6	**Reciprocate Print**	The "Reciprocate Print" function can only be enabled normally when the single head is triggered by an external signal. It is divided into forward printing and opposite printing. It is applicable to the scene where the nozzle moves back and forth from left to right. Forward (opposite) delay: set the distance from the trigger signal received by the nozzle to the start of printing (at this time, the offset value of the nozzle does not take effect, and only the set delay value is calculated). Print times: set the number of times the nozzle prints information for each trigger. Print Interval: set the interval between two adjacent information prints. There is a default minimum value based on the length of the information.

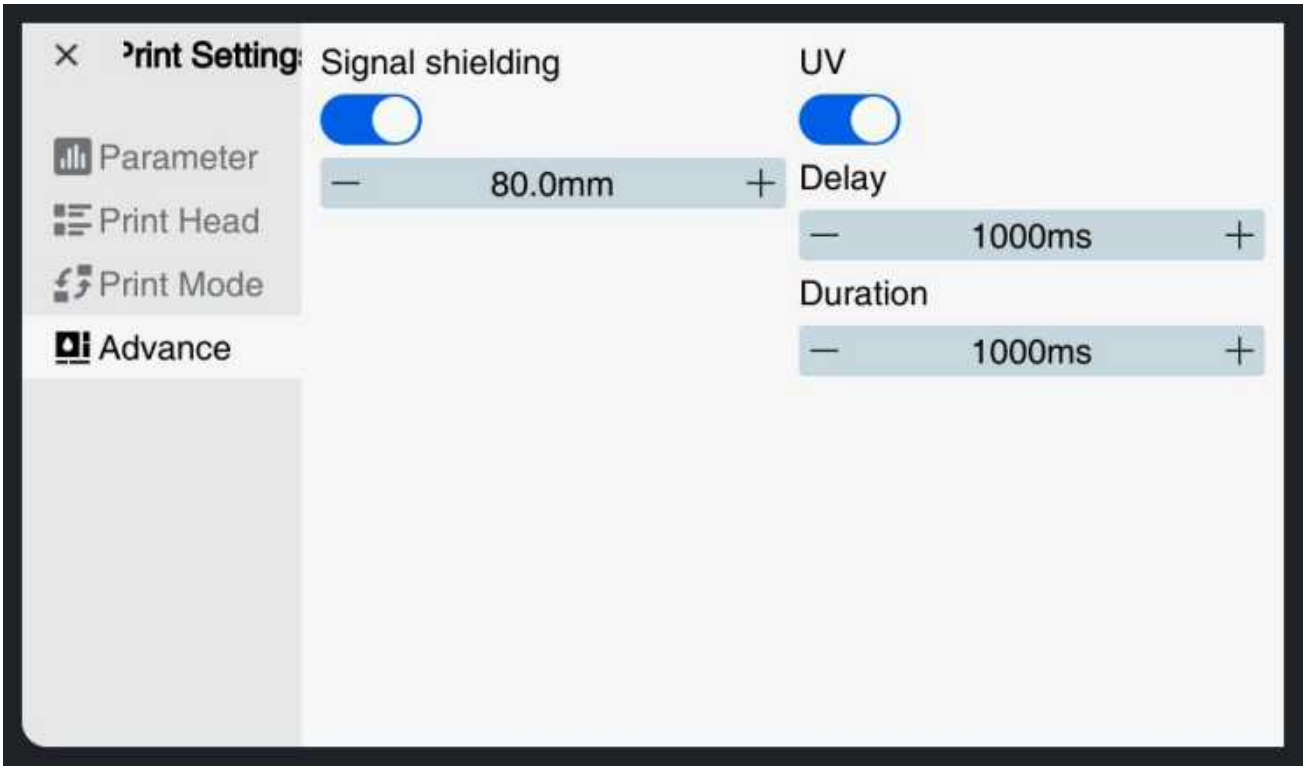
6.1.4 Advance Function

The advance function interface is shown in Figure 6-4. "Signal shielding" and "UV" functions are added.

Signal shielding:The signal shielding function is added to avoid repeated triggering of printing signals by objects with complex patterns, which will affect the printing effect.

UV:When using UV ink, you can enable the UV function to make the ink quickly attach to the object.

Note: Advance function is only applicable to software version V2.3.0 and above.



Number	Button Name	Description
1	**Signal Shielding**	It is set that the print signal will not be triggered within a certain distance. For example, when the setting parameter is 30.0mm, the second printing signal will not be triggered within 30.0mm after triggering the first printing signal.
2	**UV**	Delay: set the time from the completion of information printing to the UV lamp on. Duration: The time the UV light shines.

6.2 Settings

Clicking the  button on the main interface, and the system will enter the setting interface. The settings include 7 interfaces, namely "Configure", "Password", "Custom Date", "Language", "Serial Port", "Network","Log" and "About".(There is no “Network” function in MX Plus)

6.2.1 Configure

The interface for configure is shown in Figures 6-5. The print voltage and pulse cannot be modified when the printer is in the printing state.

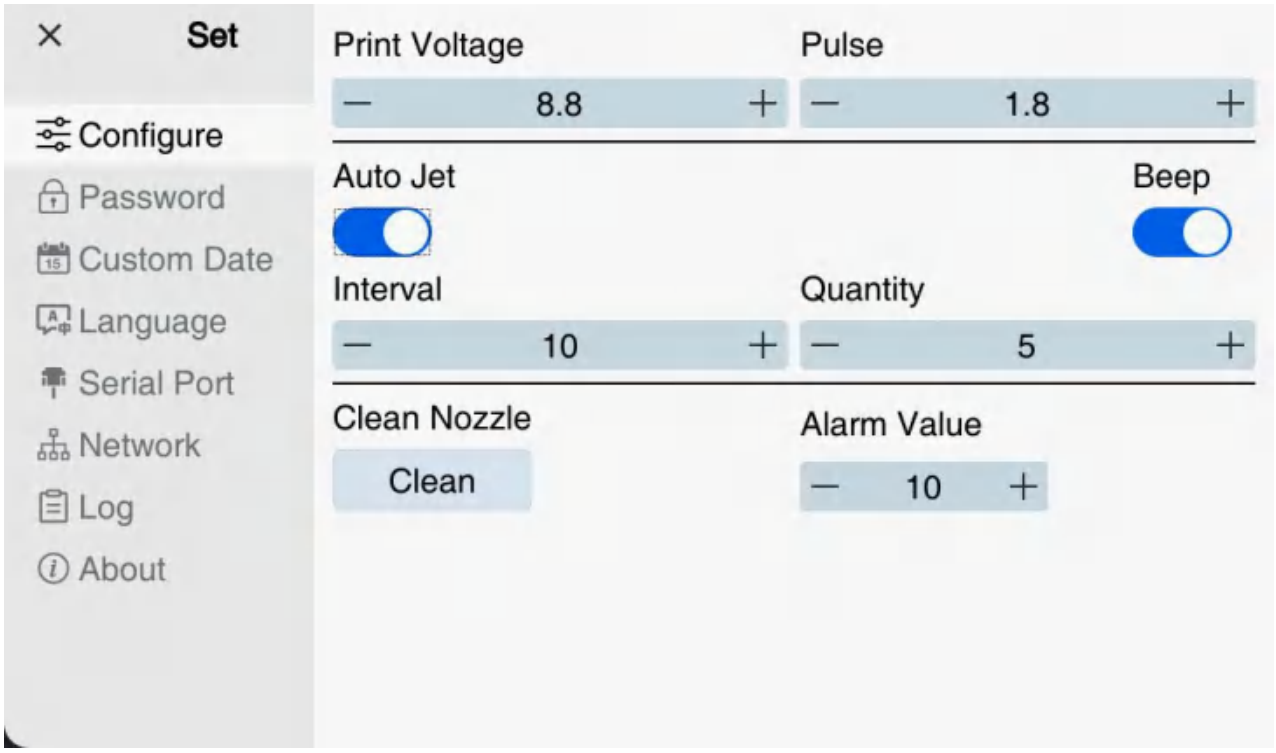


Figure 6-5 Configure Interface

Number	Button Name	Description
1	Print Voltage	Its used to set the working voltage of the cartridge nozzle (set according to the ink cartridge).
2	Pulse	Its used to set the print pulse width of the ink cartridge nozzle (set according to the ink cartridge).
3	Auto Jet	1.Interval: the waiting time between two flash ink jet. 2.Quantity: the amount of ink jet each time.
4	Beep	Triggered by an external signal, the buzzer will emit a "Didi" prompt tone every time the printing is completed.
5	Alarm Value	Its used to set the Beep. Used in conjunction with the alarm light, when the ink volume reaches the set value, the status of the main interface becomes yellow, indicating that the ink volume is low, and the warning light is on yellow at the same time.

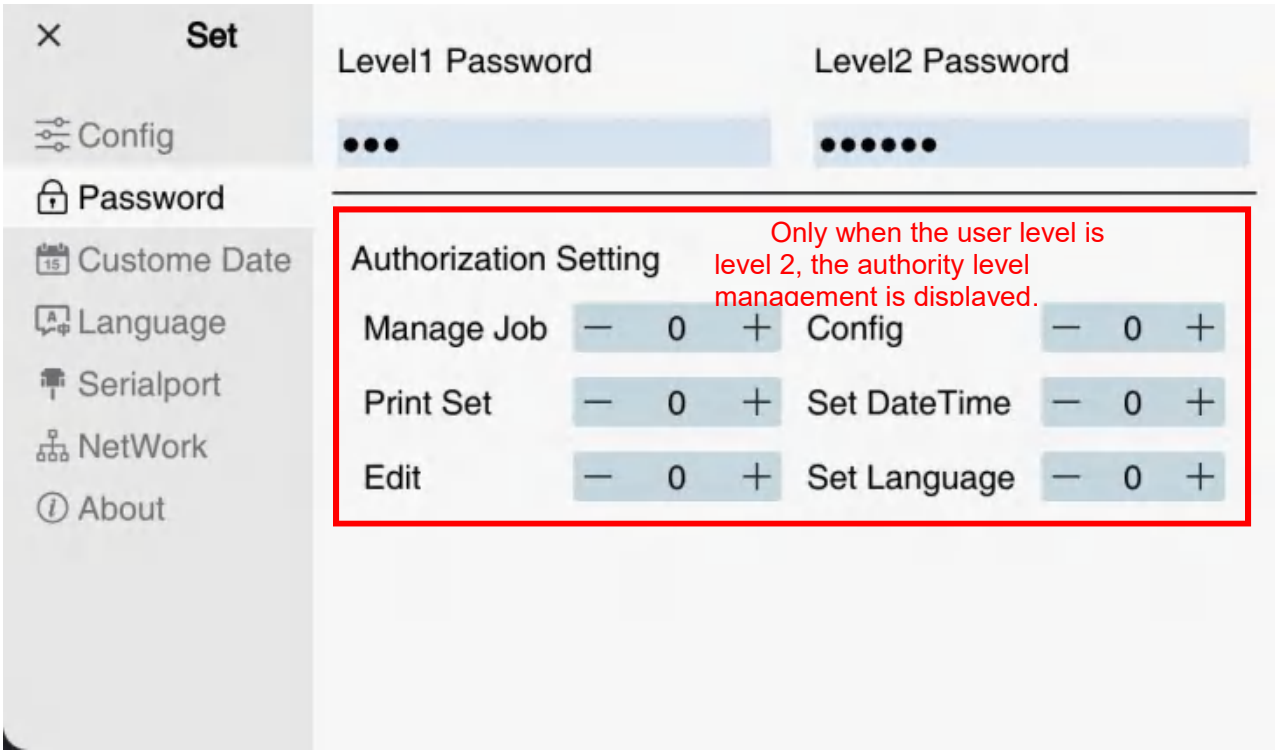
6.2.2 Password

The password interface is shown in Figure 6-6, which is a level 2 user interface. you can set the level 1 password and the level 2 password here, and can also set the permissions for each function.(It will effect immediately after password is modified. Be carefully operating it to avoid forgetting.)

Level 0 is the default level, no password is required. Level 1 and Level 2 requires a password to log in, Level 2 is the highest level and can set the access rights of levels 0 and 1.(Default password Level 1: 123,

Level 2: 123456).

For example, when we set the print setting to level 1, then if the user level is level 0, the user will be prompted to have no access rights when using the print setting and cannot use this function. When the user level is logged in to level 1, then this function can be used normally.



Figures 6-6 Password Interface

6.2.3 Custom Date

The custom date interface is shown in Figure 6-7. We can define "week" and "month" according to our needs and make them display according to our needs. See Appendix 1 for the specific operation method.

Figure 6-7 Custom Date Interface

6.2.4 Language

The interface of the system language is shown in Figure 6-8. Currently there are Language for Chinese, English, Arabic, French, Spanish, etc.

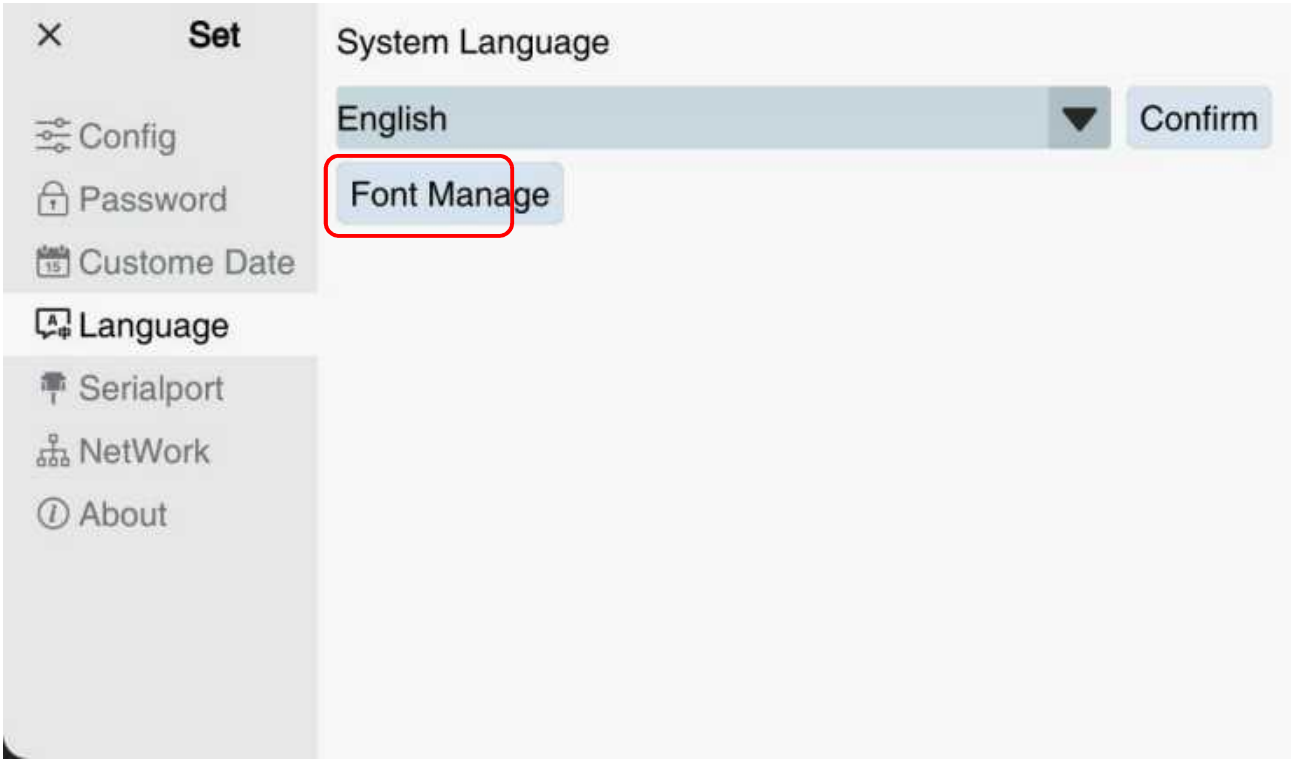
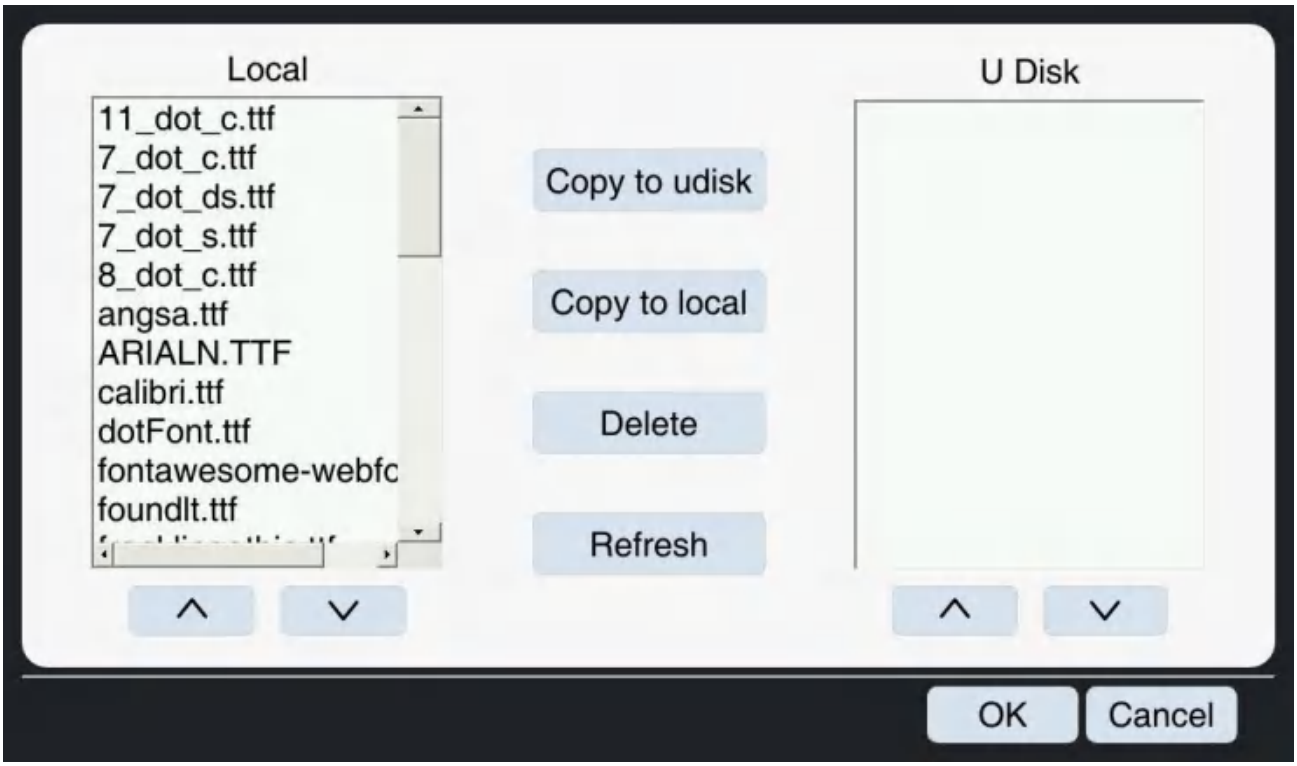


Figure 6-8 System Language Interface

Font Manage: You can use the U disk to copy the required font to the device, and you can select the font when editing the information. Note: Recognizable suffixes are the .tftc and the .ttf formats.



6.2.5 Serial Port Settings

The interface of serial port setting is shown in Figure 6-9. When need to use an external serial port to send print information, after ensuring that all cables are properly connected, then we can use the serial port setting function to test whether this device and the external device are connected.

During commissioning, the baud rate must be consistent with that of the external device. Sending a information from the external device, If this device can receive and display normally, it means that this device is connected to the external device and can receive information well.

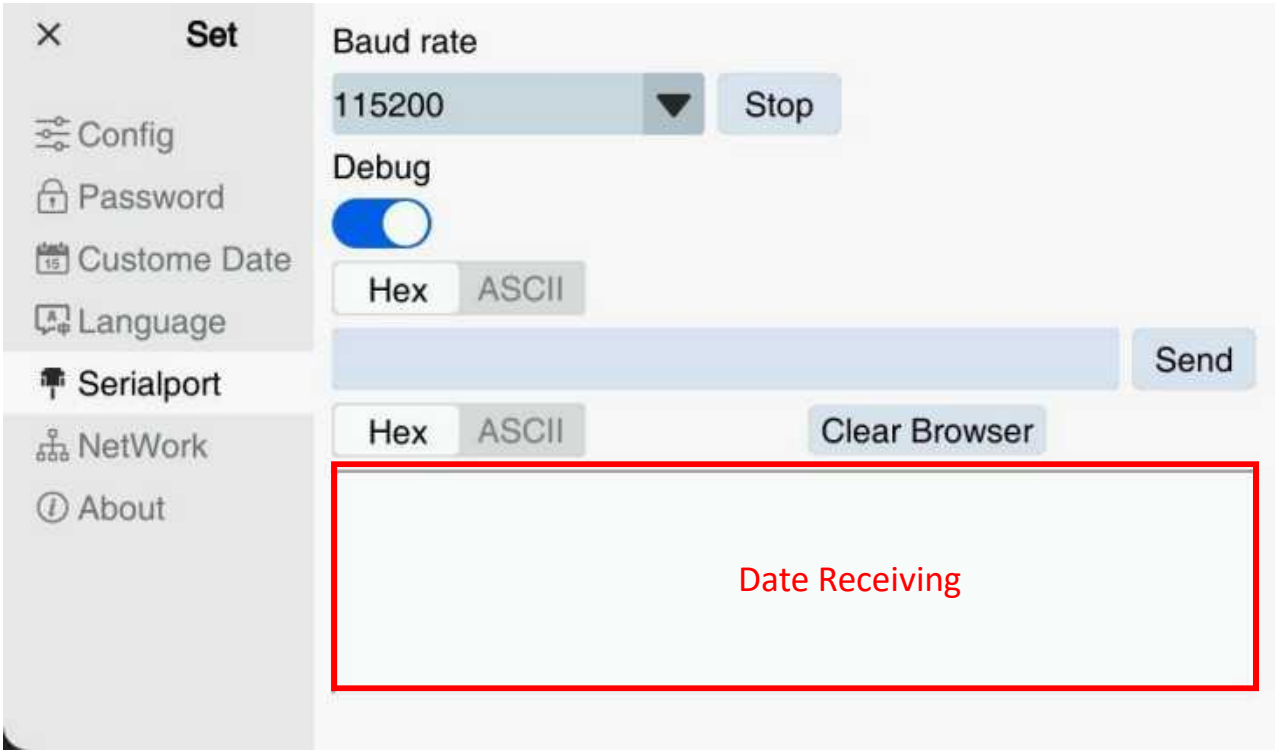


Figure 6-9 Serial Port Settings Interface

6.2.6 Net Work

(MX Plus No Net work Function)

The network setting interface is shown in Figure 6-10. When we use multiple devices at the same time, with the "Network Integrated Control Software", we can achieve unified management on the PC. For specific operations, please read the "Network Integrated Control Software User Guide".

This section mainly introduces how to connect the printer to the PC. Before using, firstly make sure that the printer and PC are connected with a network cable.

1. As Client

In the network setting, select As Client, you should fill in the IP address, server IP address and server port, and then click the "Connect" button to complete the connection.

Number	Button Name	Description
1	IP Addr	The IP address of the device can be set arbitrarily within the specified range.
2	Server IP	Fill in the IP address of the PC connected to it.
3	Server Port	The port number of the service port in the TCP/IP protocol on the PC side ranges from 0 to 65535.
4	Connect	Select automatic connection,and automatically connect to the PC end every time you turn it on.
5	Auto Start	After startup, the network function will be started automatically and automatically connected to the PC according to the settings.
6	Pint Test	If the connection fails after clicking the "Connect" button, click the "Ping Test" button to test whether the connection or settings with the PC are correct.

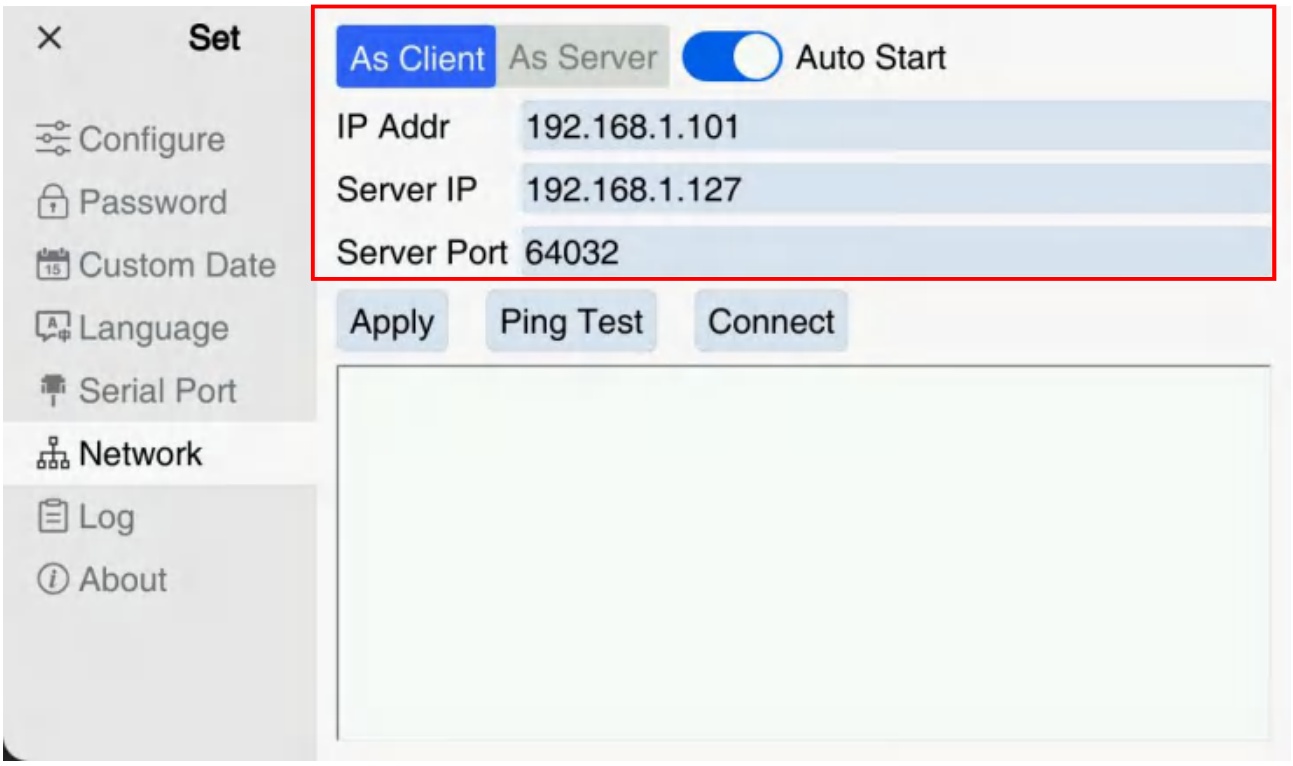


Figure 6-10 As Client of Network Settings Interface

2. As Server

In the network setting interface, click the "As a server" button, fill in the IP address and server port in turn, and click the "Listen" button to complete the connection.

Note: This function is only applicable to software version V2.3.0 and above.

Figure 6-11 As Server of Network Settings Interface

Number	Button Name	Description
1	IP Addr	The IP address of the device can be set arbitrarily within the specified range.
2	Server Port	The port number of the service port in the TCP/IP protocol on the PC side ranges from 0 to 65535.
3	Listen	It is used by the server to listen the client, which is equivalent to an " IP address" and is the connect between the server and the client.

6.2.7 Log

The log interface is shown in Figure 6-12. The inkjet printer will keep operation record during working if enable the "Log" function. Select the object to record in Record Type.

The log is saved as a log. txt in the device. You can use a USB to export the log (Insert USB, click "Export Log", and click "Copy to USB").

If the "Log" function is disable, the inkjet printer will stop recording. It will continue recording again once the "Log" function is enable. All the records generated will be saved in turn. In order to avoid excessive record storage and affecting the printer speed, it is recommended to clear the log regularly (You can use a USB to export the log for backup).

Note: This function is only applicable to software version V2.3.0 and above.

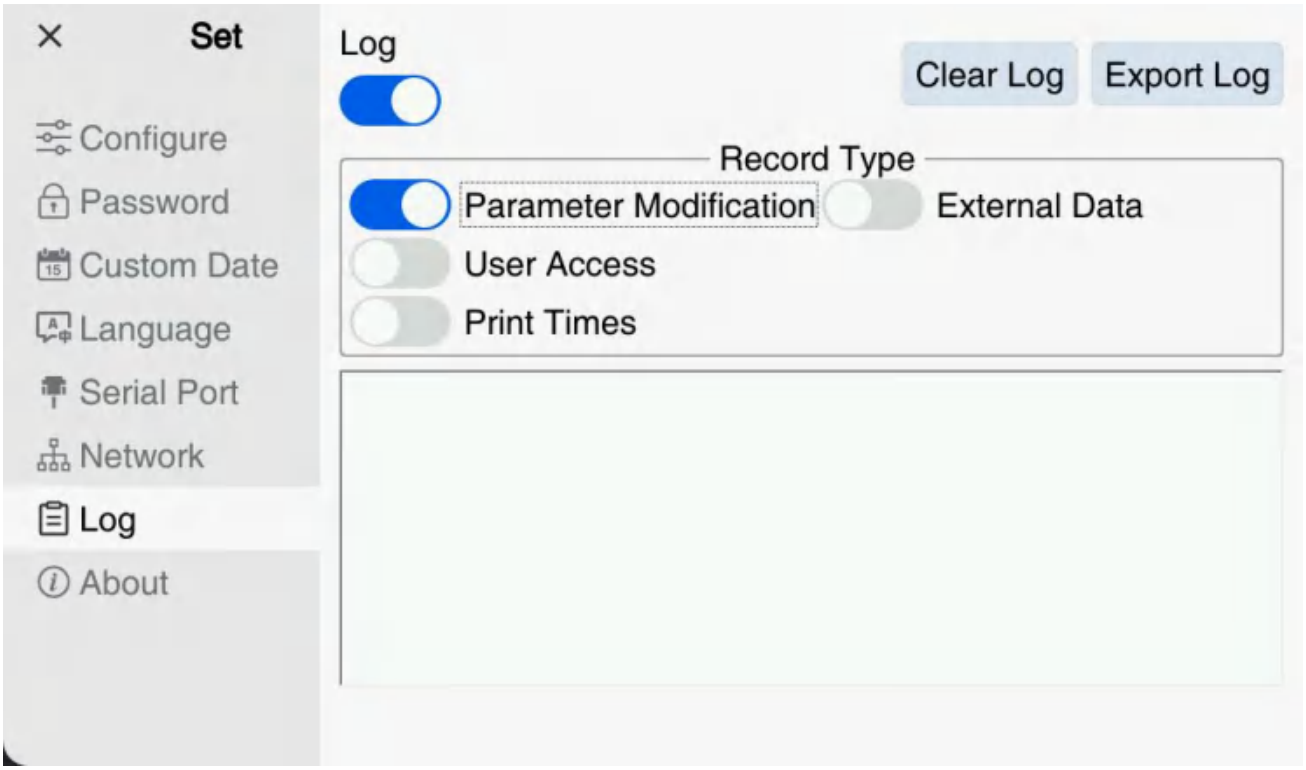


Figure 6-12 Log Interface

6.3 Counter Settings

Clicking the button on the main interface, the system will enter the counter settings interface. The counter settings interface includes "Counter Set" and "System Counter". As shown in Figure 6-13.

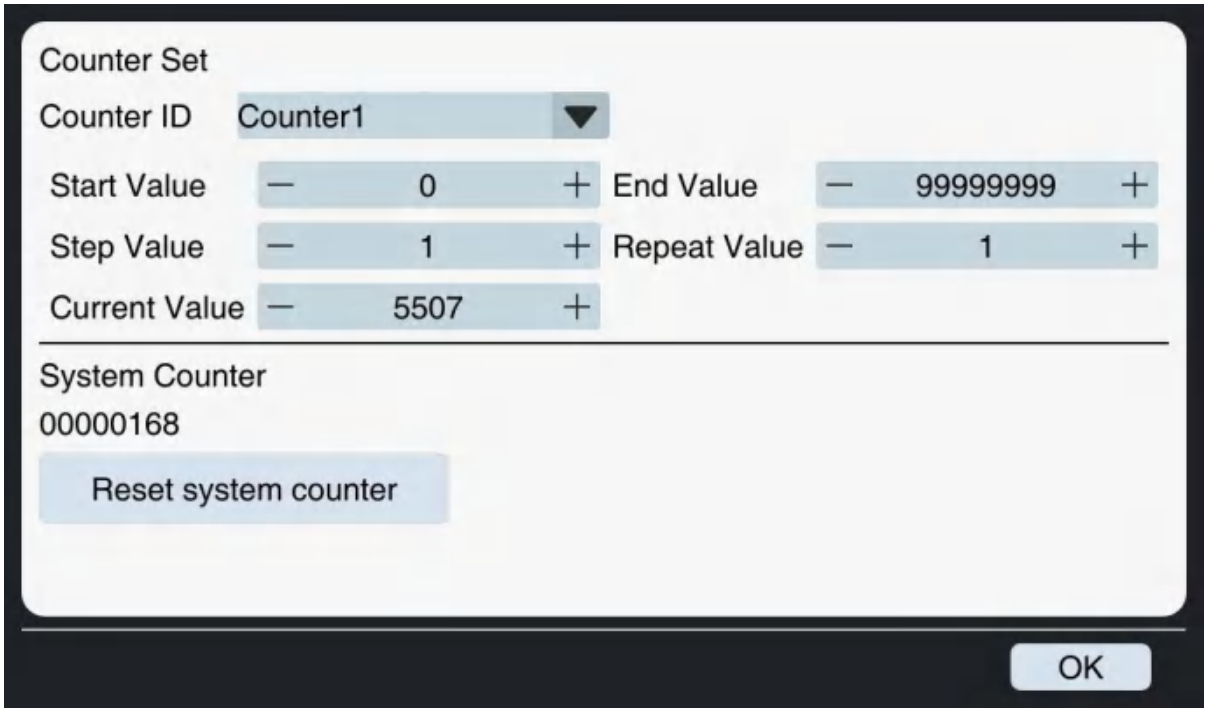


Figure 6-13 Counter Settings Interface

Number	Button Name	Description
1	Start Value End Value	The start value and end value define the range of the counter. When the counter accumulates to the end value, it will automatically return to the starting value for printing.
2	Step Value	The accumulative value that the counter increases once.
3	Repeat Times	Set the number of repeated printing of each data.
4	Current Value	The current value of the counter that needs to be printed.
5	Reset system counter	It is used to reset the printing times of the main interface and reset the printing times to zero.

6.3.1 Decrement counter

Countdown serial numbers can be printed. For example, if the current value is set to 100, the end value is set to 0, and the step value is set to - 1, that is, the device starts printing from 100, which is 100, 99, 98... 0 in turn. If the start value is set to 100, the device starts printing again from 100, which is printed in turn.

Note: Decrement counter is only applicable to software version V2.2.13 and above.

6.4 Authority Management

Clicking the  button on the main interface, and then the system will enter the user login interface. As shown in Figures 6-14.Entering the set password to log in to the corresponding user level.

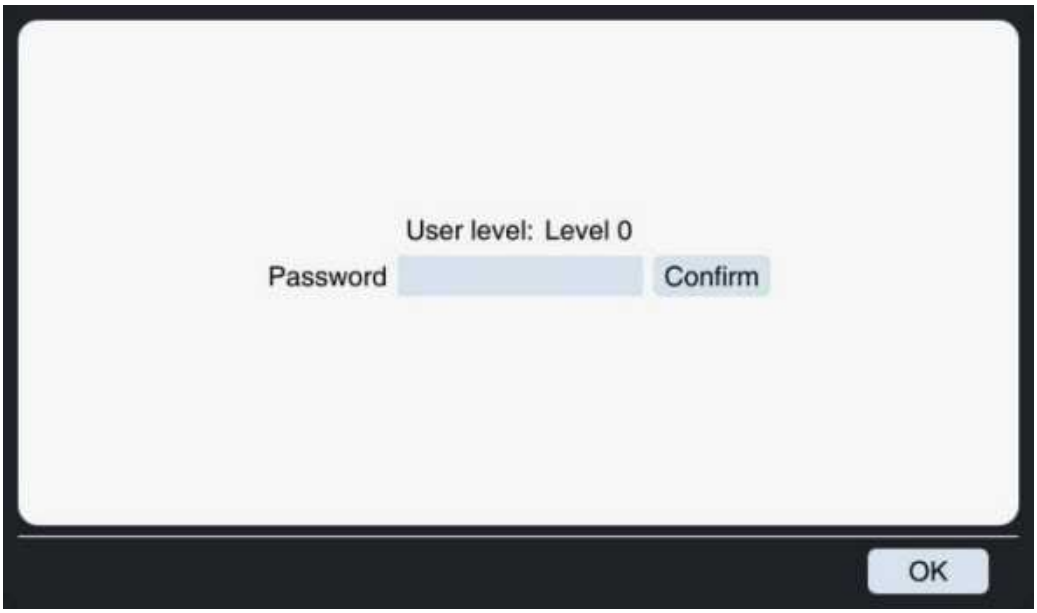


Figure 6-14 User Login Interface

Chapter 7 Actual Printing Cases

7.1 Printing TXT Text by U Disk

1.First enter the required information in the U disk, and note that the two pieces of information are separated by a comma”,”, as shown in Figure 7-1.

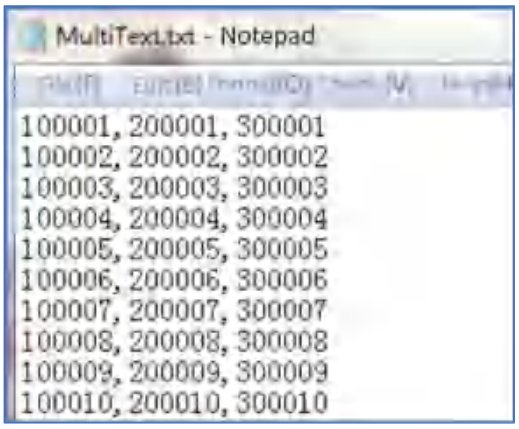


Figure 7-1

2.Editing the external data file on the inkjet printer. Clicking the "Create File" button on the main interface and selecting "Text", and then select "External Data" in the advanced options of the "Information Properties Area" on the right. Note: The number of text information created should be consistent with the number of file columns in the U disk. Because there are 3 columns of information in the U disk, we need to create 3 text information. For each text information, you need to check "External Data" and then click the "External Data Management" button. As shown in Figure 7-2.

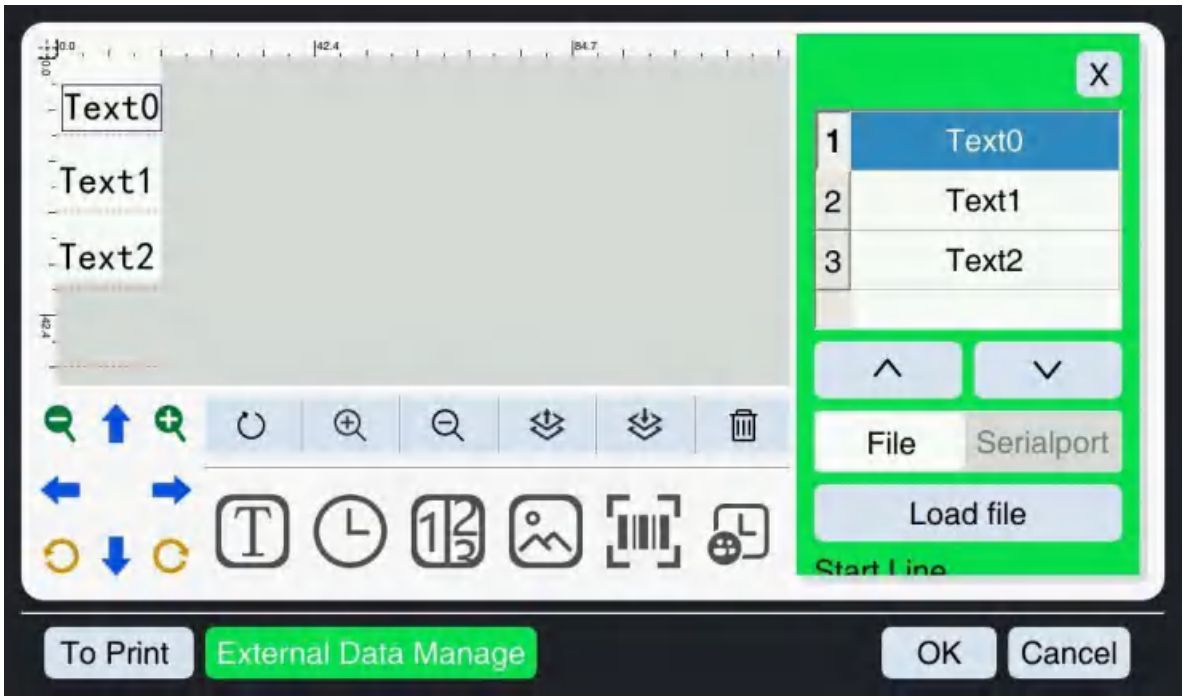


Figure 7-2

3.Selecting "File--->File loading" in the "Information Attribute Area" at the right side, in the pop-up preview interface, selecting the file in the U disk and clicking the "OK" button. As shown in Figure 7-3.

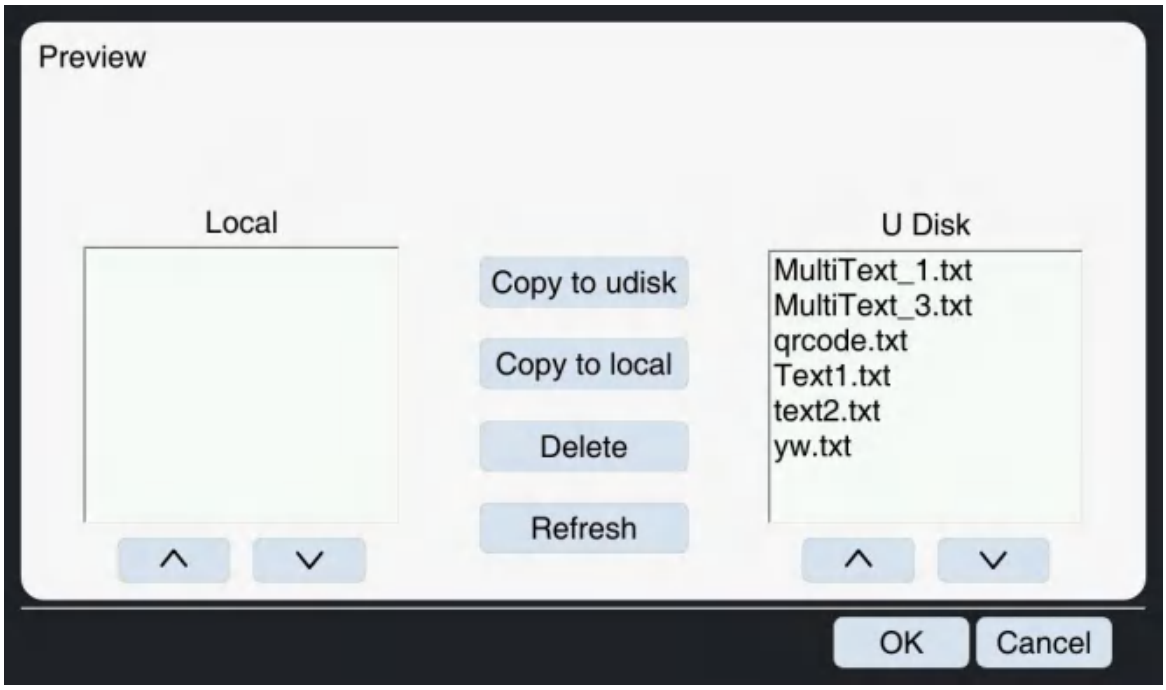


Figure 7-3

4.The system returns to the file editing interface, and you can see that the information in the "information editing area" has been updated to the first line of information in the U disk. As shown in Figure 7-4. After the job is completed, select "Stop", and other parameters are not modified by default.

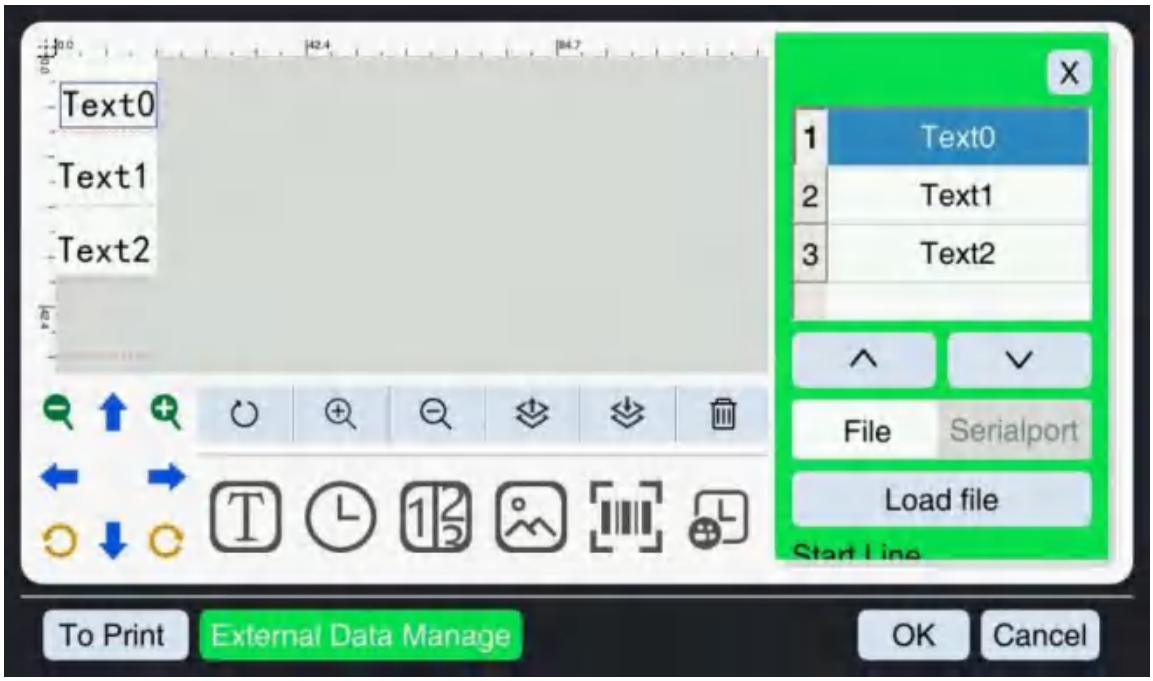


Figure 7-4

5. Clicking the "Print" button, the system will enter the file save interface; entering the file name "txt1" and clicking "Save", then the system will return to the main interface and load the "txt1" file. As shown in Figure 7-5.

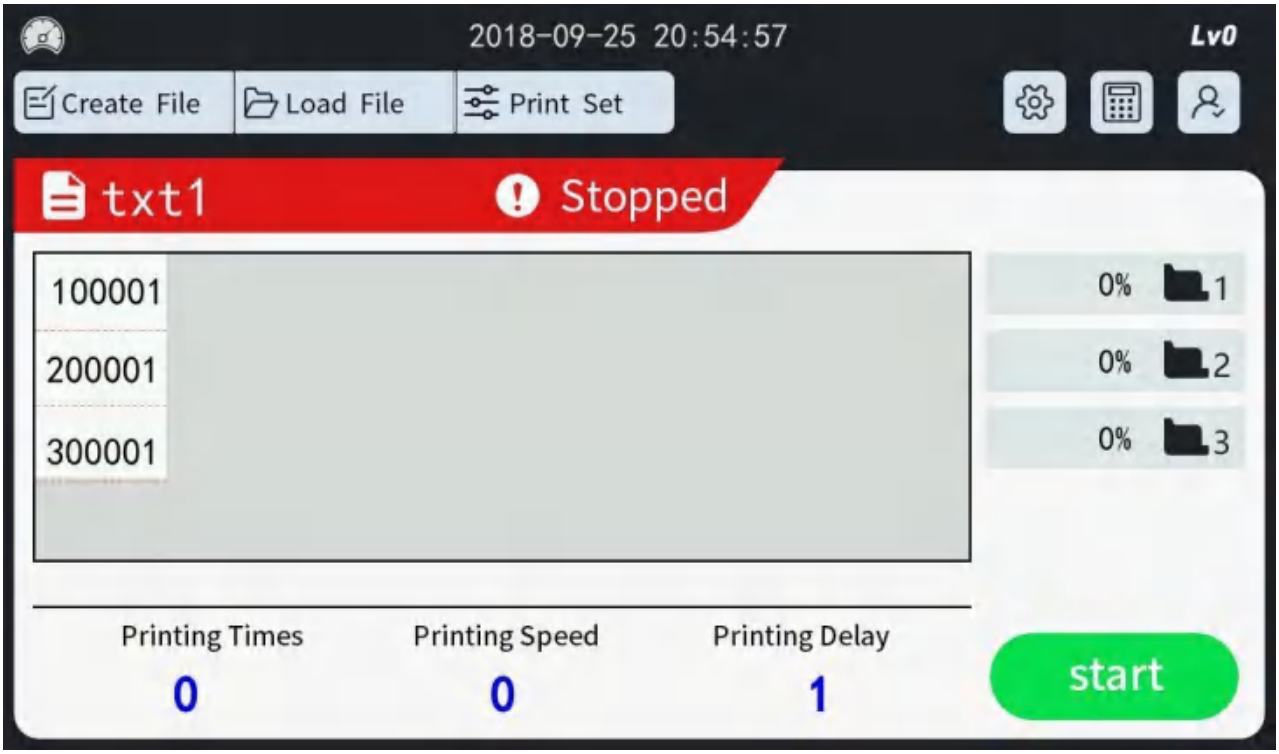


Figure 7-5

6.Clicking the "Print Settings" button on the main interface, and setting the spray type to right, DPI-300; selecting to turn on the print head 1, 2, 3 and the print head offset in the print head setting interface, and the direct is forward; Trigger Mode: external signal +encoder. As shown in Figures 7-6 to 7-8.

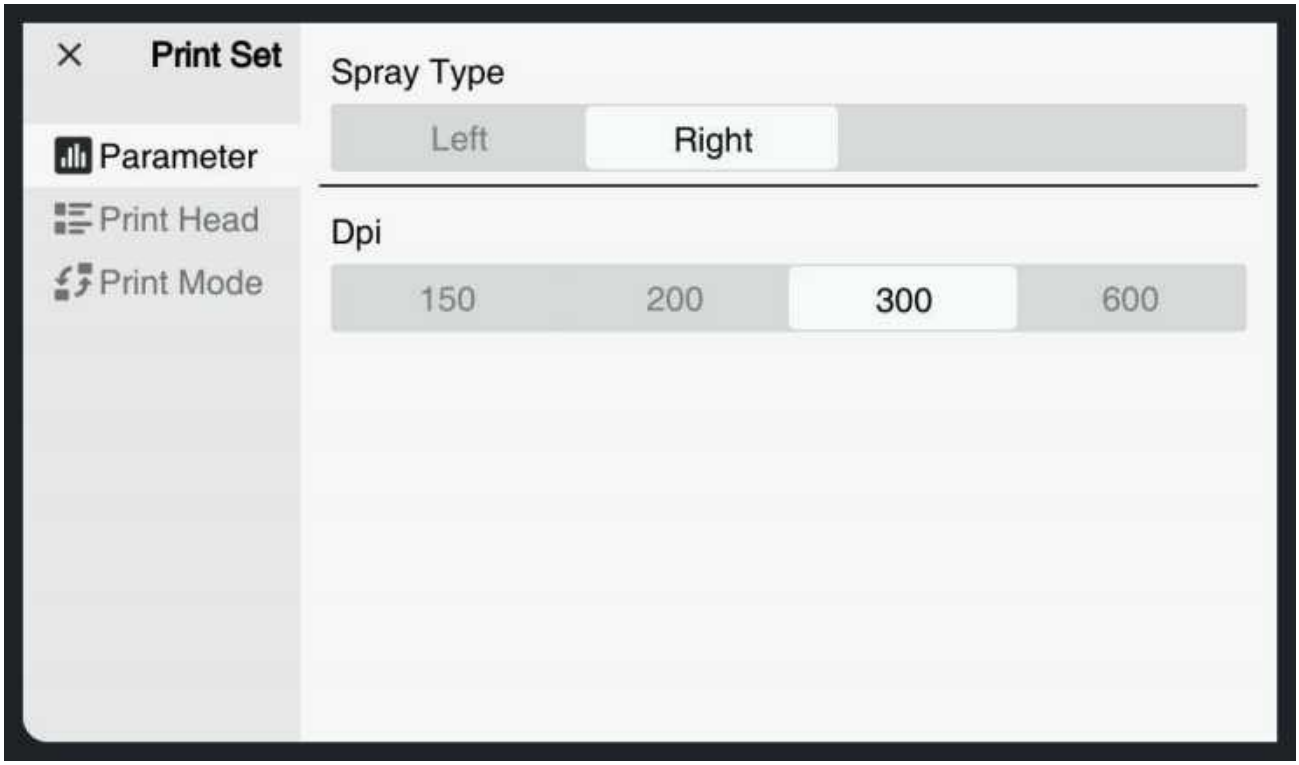


Figure 7-6

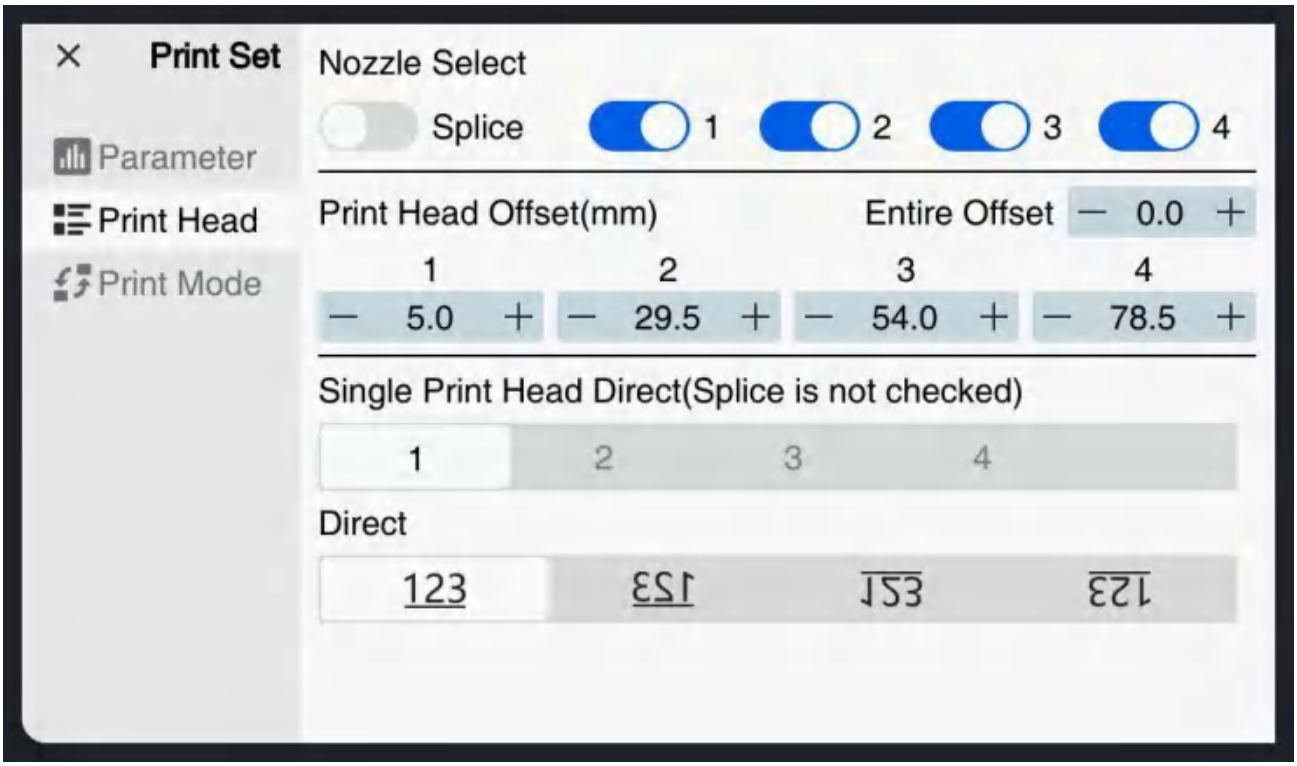


Figure 7-7

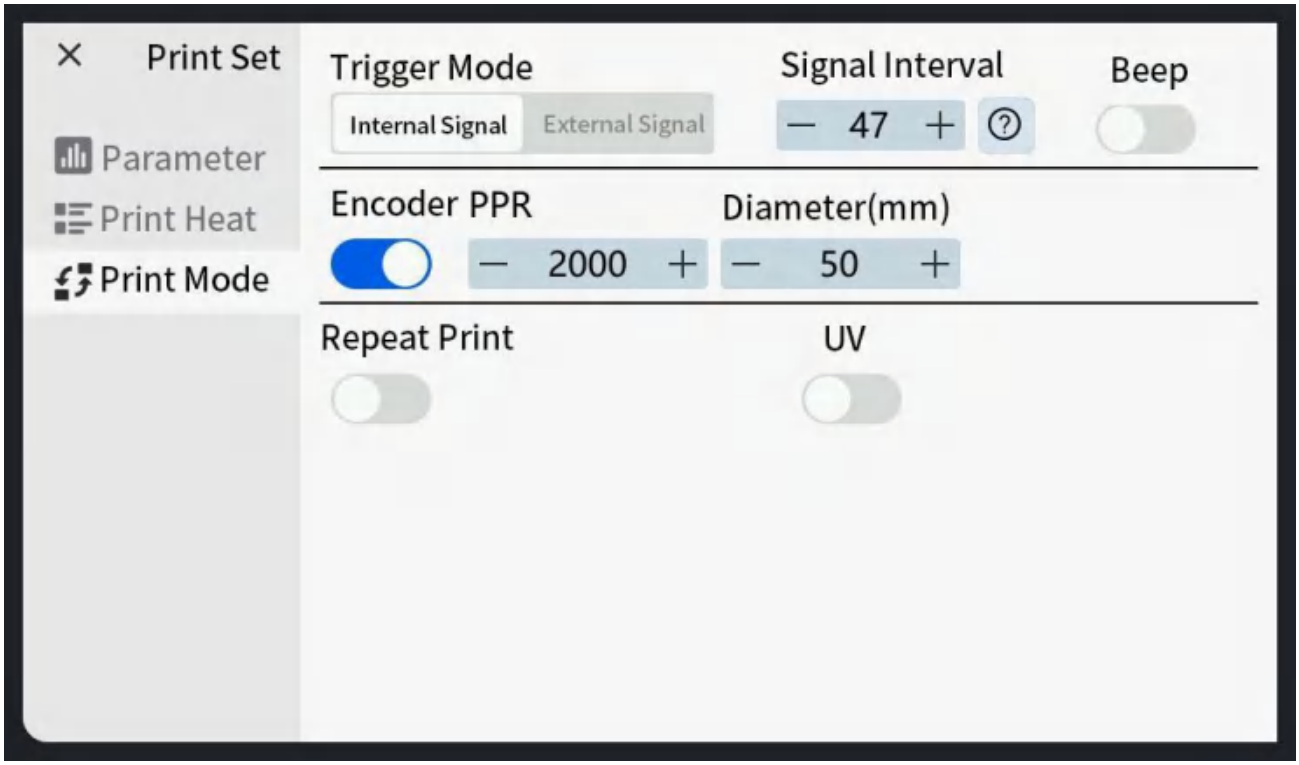


Figure 7-8

7.Clicking the "Start" button on the main interface to start printing.

7.2 Four Head Splicing

1.Clicking the "Create File" button in the main interface and selecting "Text", then enter the letter "ABCD" in the content box in the advanced option of "Information Attribute Area" on the right, and adjust the font size to **1500** in the general option, other parameters remain unchanged. As shown in Figures 7-9.

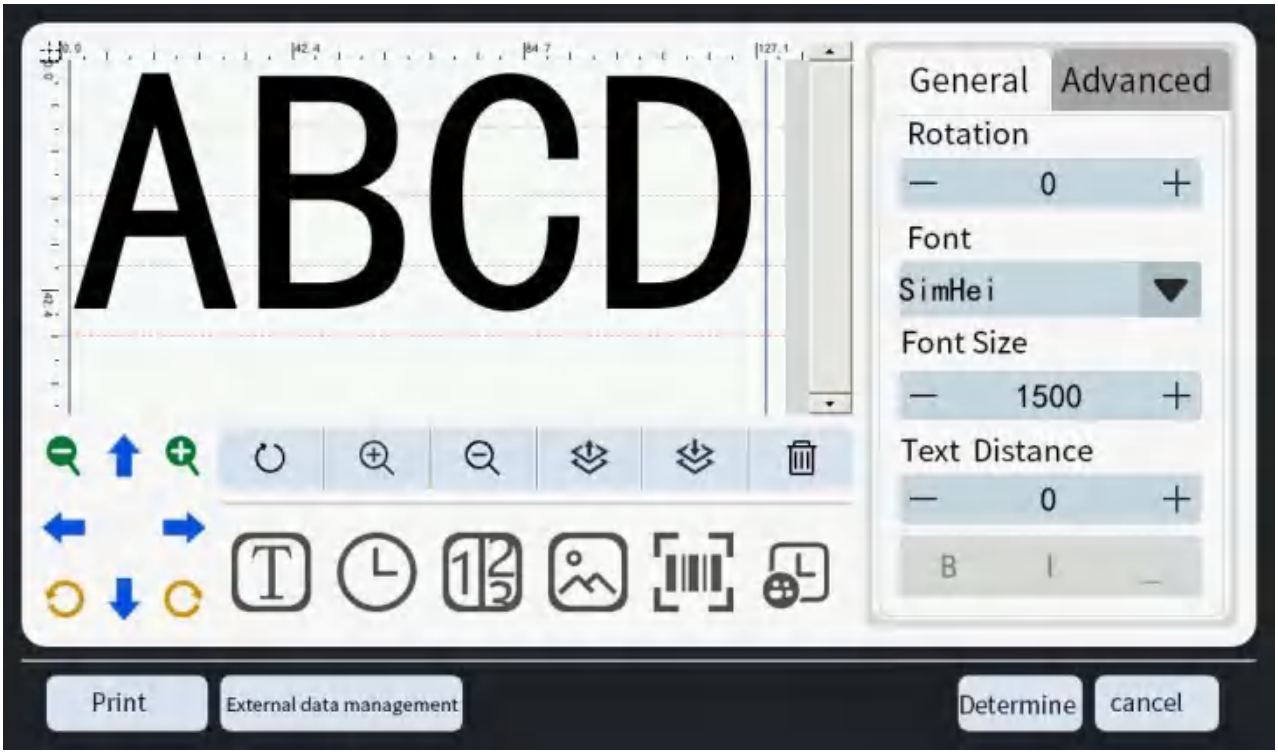


Figure 7-9

2.Clicking the "Print" button, the system will enter the file saving interface; entering the file name "txt2", clicking "Save", the system will return to the main interface and load the "txt2" file. As shown in Figure 7-10.

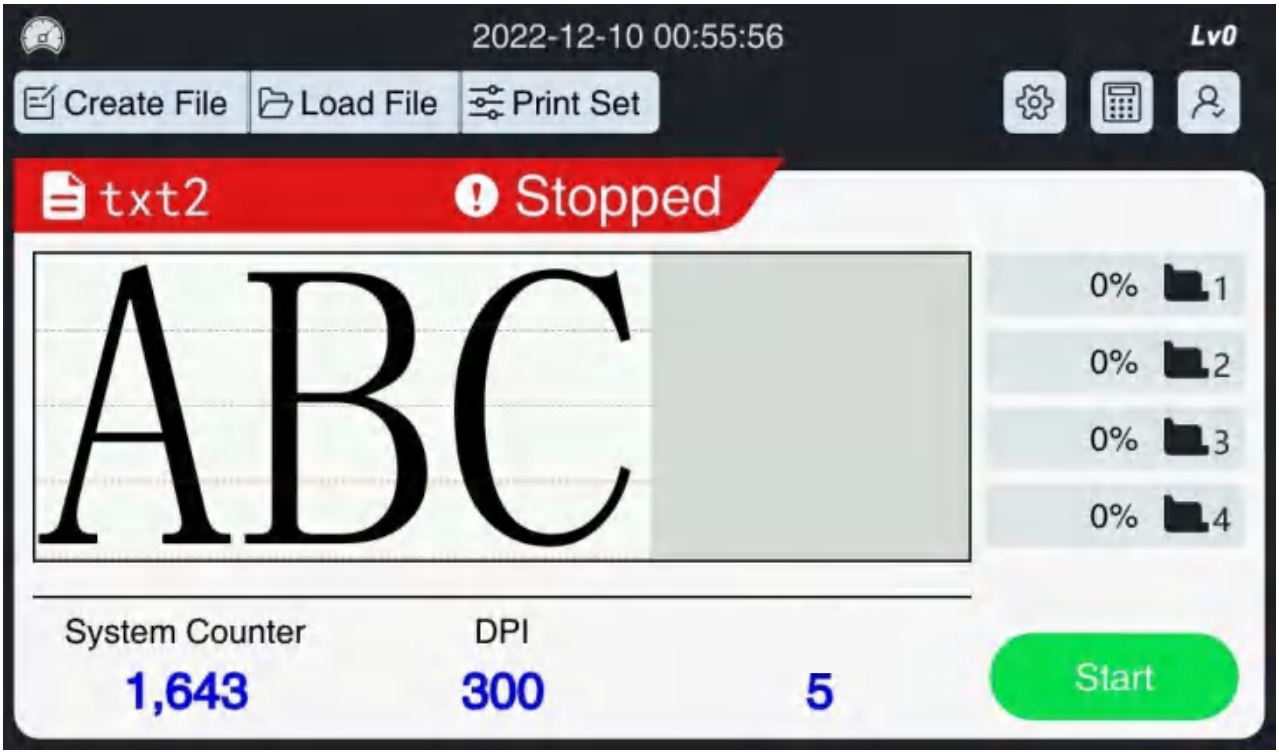


Figure 7-10

3.Clicking the "Print Settings" button on the main interface, and then set the Spray Type to right,

DPI-300 on the print parameter interface; choosing to turn on the print heads 1, 2, 3, 4 on the print head setting interface; and the offset of the print heads is shown in Figure 7-12. The direct of the print heads is forward; Trigger Mode:External sensor + encoder. As shown in Figures 7-11 to 7-13.

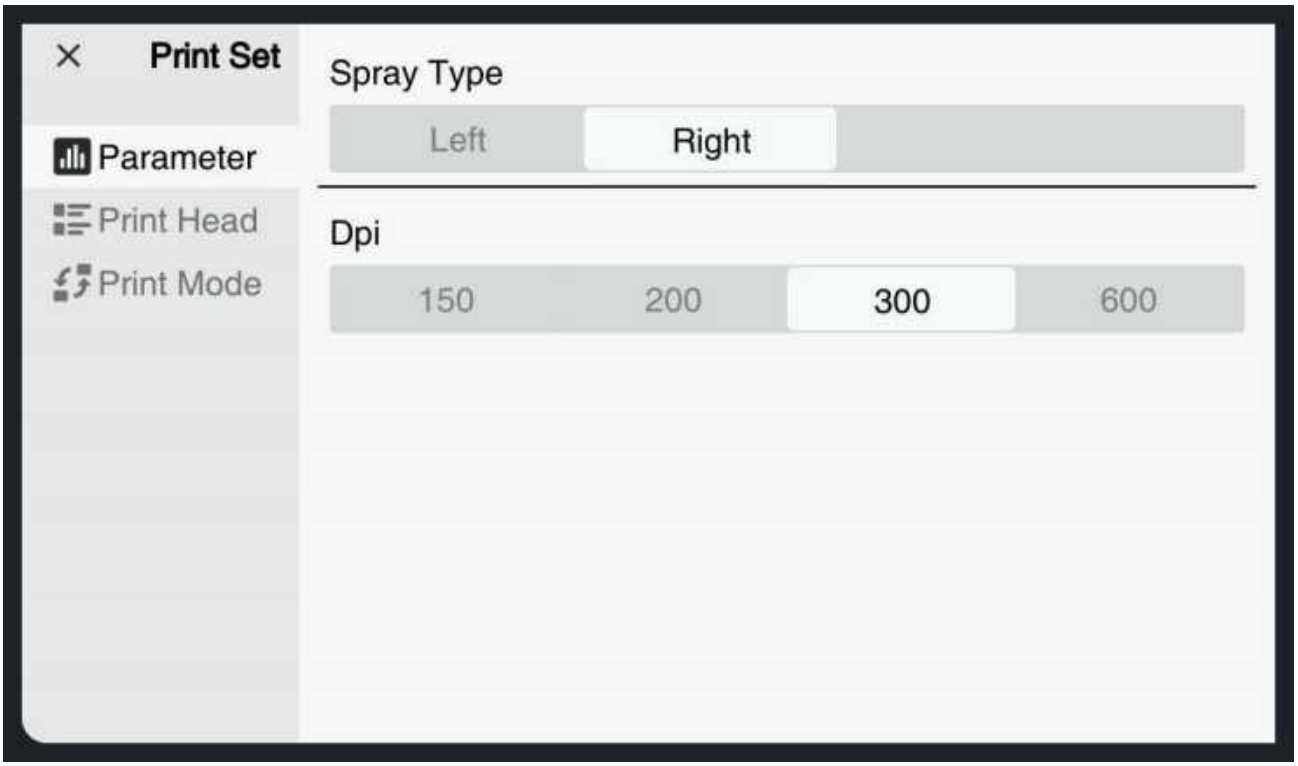


Figure 7-11

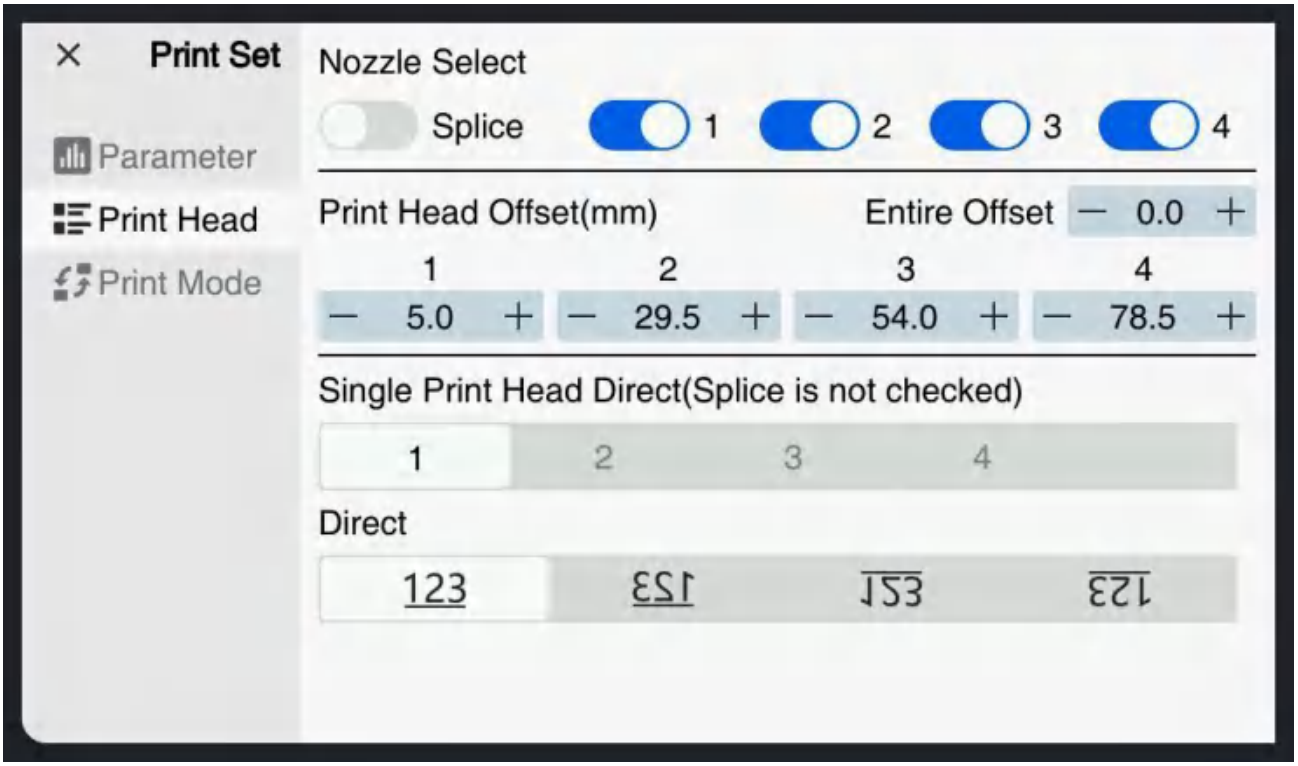


Figure 7-12

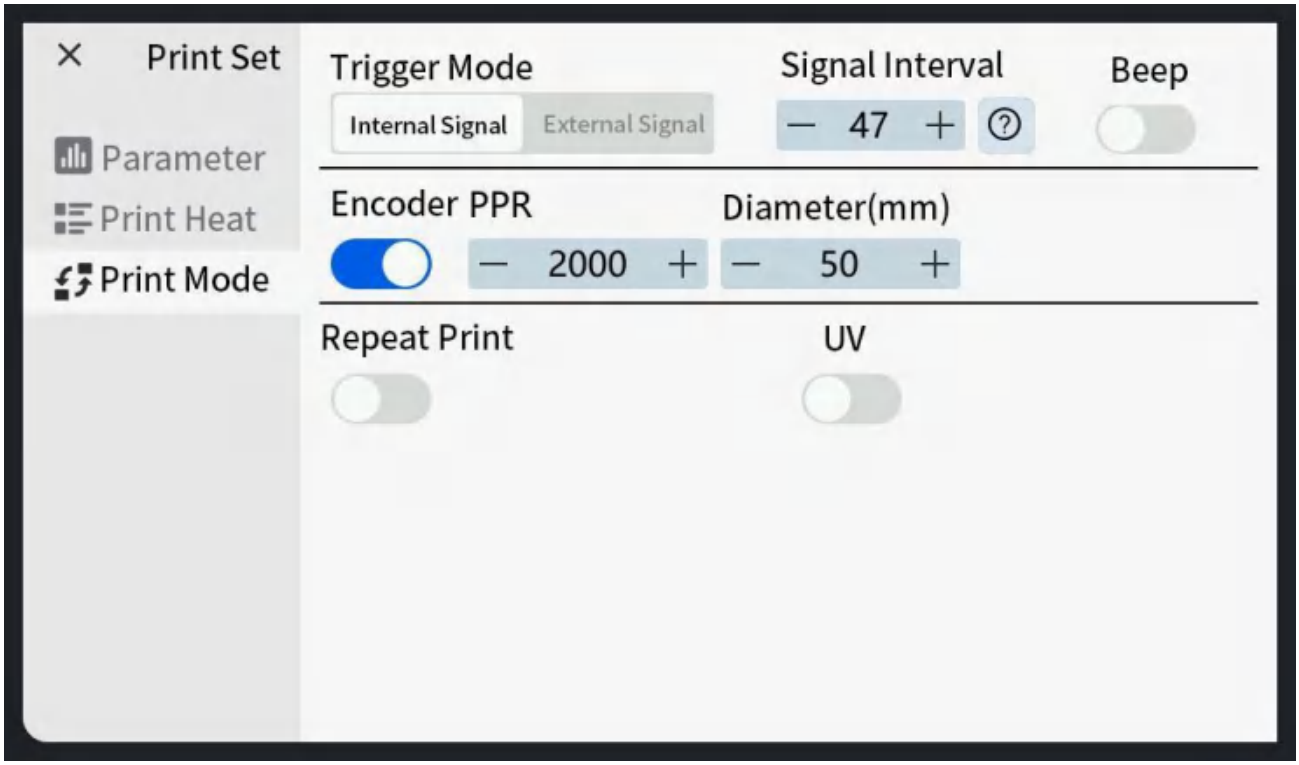


Figure 7-13

4.Clicking the "Start" button on the main interface to start printing.

Appendix 1

About the Custom Dates

d	Date number without leading zero (1 to 31)
dd	Date number with leading zero (01 to 31)
ddd	Abbreviated week name (e.g. "Mon" to "Sun")
dddd	Full week name (e.g. "Monday" to "Sunday")
M	Month number without leading zero (1-12)
MM	Month number with leading zero (01-12)
MMM	Abbreviated month name (e.g. "Jan" to "Dec")
MMMM	Full month name (e.g. ""January" to "December")
yy	Two-digit year (00-99)
yyyy	Four-digit year

h	Hour without leading zero (0 to 23, displayed as 1 to 12 if with AM/PM)
hh	Hour with leading zero (00 to 23, displayed as 01 to 12 if with AM/PM)
m	Minute without leading zero (0 to 59)
mm	Minute with leading zero (00 to 59)
s	Whole second without leading zero (0 to 59)
ss	Whole second with leading zero (00 to 59) when it is applicable
AP/ap or A/a	When it is interpreted as AM/PM time,the AP will be "AM" or "PM". Suit text-transform.
JD	Displayed as the several-th day in the year
JW	Displayed as the several-th week in the year

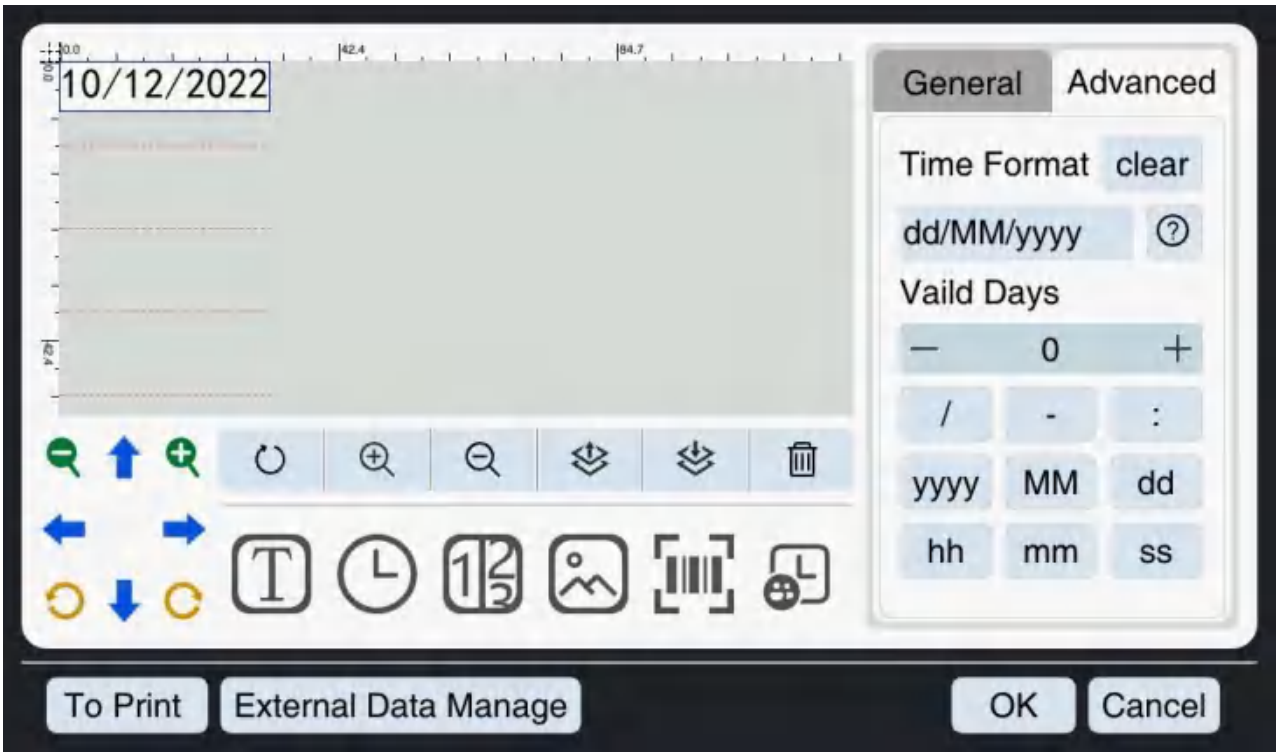
Custom Date

ND	NN	NO
Sun	01	A
Mon	02	B
Tue	03	C
Wed	04	D
Thu	05	E
Fri	06	F
Sat	07	G

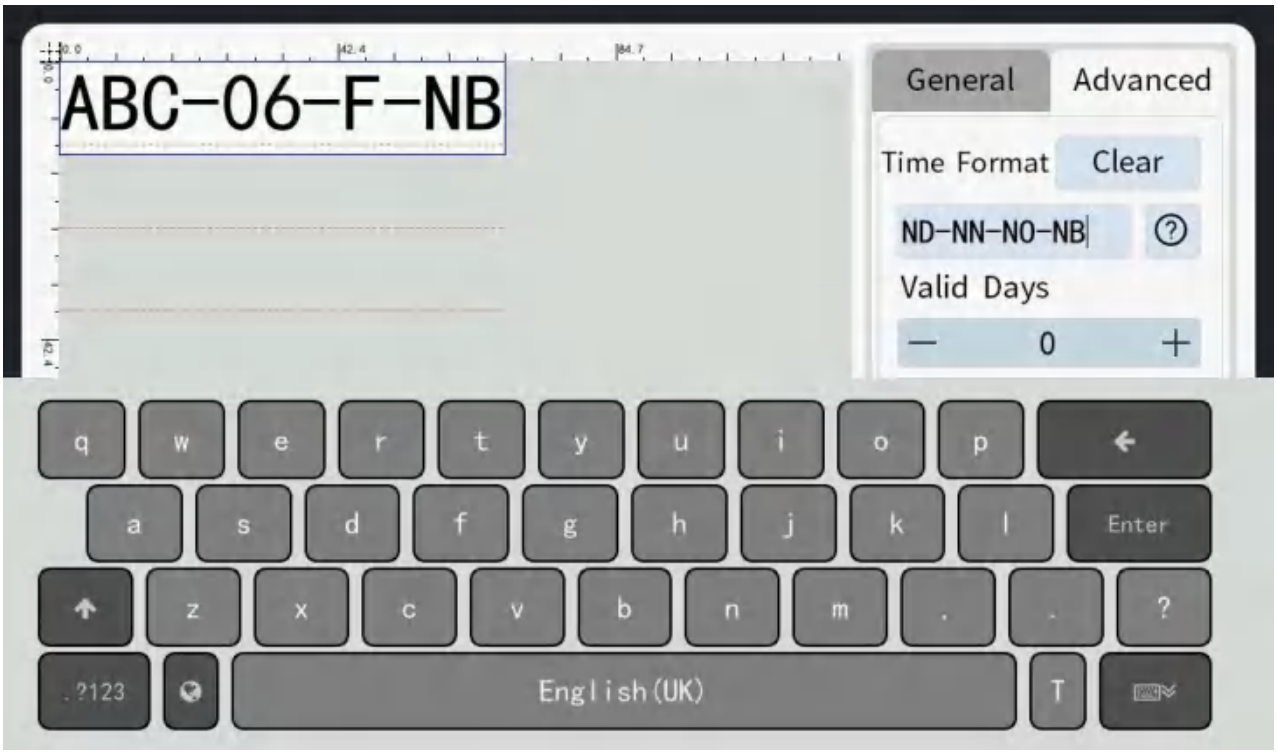
NR Custom Month

For the custom month, we cannot use ‘M’ because it is character. So we replaced it with ‘NR’.

1. Time Editing



2. You can click the "Clear" button to edit the date format you want. As shown in the figure below.

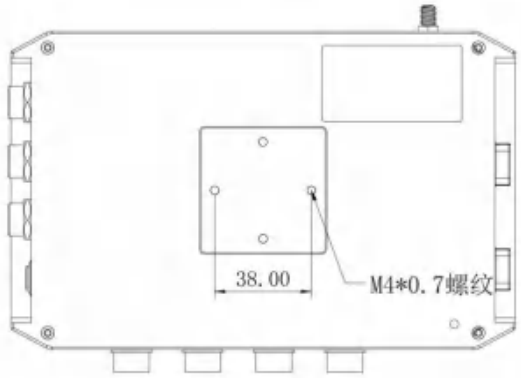
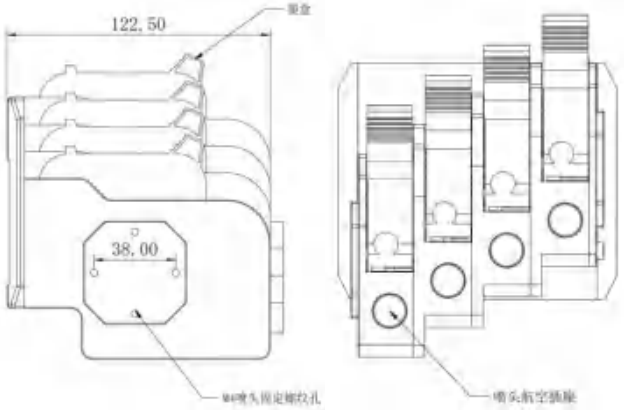


3. Finishing editing and clicking the [redacted] button.

4. Custom Date (Settings -> Custom Date).

If you have any questions, please let us know. Thank you for your patient reply.

Appendix 2

Machine	Controller	Print Head
MX Pro		
MX Plus