THERMAL INKJET PRINTER
CM600

USER MANUAL

29th October 2024 Edited V2.0

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1.SAFETY INFORMATION

1) Consumables use

Overall, there are usually two types of consumables, one is water-base ink and the other is solvent-base ink. For each one ink purchased through normal channels is certified for safety including the cleaner. The operator can get all details of the ink from equipment sales company.

Nevertheless, we still insist that all operators wear protective gear such as goggles and gloves when coming into contact with consumables. If ink enters the eyes or body, seek medical help immediately.

Refer to the consumables manual for proper ink storage.

2) Electricity safety and regulations

Check the nameplate to learn the electrical specifications. Any non-standard electrical behavior is dangerous.

Ensure that all personnel involved in circuit inspection and maintenance have received professional training and are aware of the dangers that may arise from violating operating procedures.

It is strictly prohibited to use alternative power sources to power equipment.

Incompatible power sources pose a risk of abnormality and will not receive any compensation.

3) Equipment operation

Before starting any operation, please read this manual first. If the operator are not clear about the consequences of the operation, please consult a device technical expert first.

2.EMERGENCY CASE

For emergency situations, e.g. smoke coming out of printer, uncontrollable continuous printing, fire, explosive sounds, etc.

PLEASE REMOVE THE POWER SUPPLY IMMEDIATELY!

3.ENVIRONMENTAL PROTECTION

Don't throw printer or ink cartridges into regular garbage or recycling bins. Ensure proper disposal (e.g. electronic waste) in accordance with local laws.

4.PRODUCT WARRANTY

Limited warranty. The housing and circuit board for each printer is warranted to be free from defects in materials and workmanship for a period of twelve months from the bill of lading date. This limited warranty does not apply to spare parts, authorized inks, or cartridges, or to housings and circuit boards that experience problems resulting from misuse, tampering or improper storage,

The warranty expires under the following circumstances:

- Any non-original parts and unapproved OEM inks are used.
- The product has been altered or modified without approval from us.
- Printhead damage is a result of improper installation.
- Damage occurs from an accident, such as but not limited to, being dropped, being sprayed with water or other liquids, caused by a natural disaster, caused by stocking or shipping conditions.

- Unapproved, wrong or unstable power supply is used.

5.TECHNICAL SPECIFICATIONS

Date Sheet for 1/2 inch system

NO	DESCRIPTION	SPECIFICATIONS
1	**Model**	CM610/CM620/CM640
2	**Printhead number**	Maximum 2 for CM610/CM620 Maximum 4 for CM640
3	**Guide plate kit**	Guide plate kit for single head (C2.WJ.QT0077B) Guide plate kit for double head (C2.WJ.QT0078B) Guide plate kit for quadruple head (C2.WJ.QT0105B)
3	**Controller Weight/Dim.**	● 1.15Kg ● L204mm, W153mm, D52mm
4	**Printhead Weight/Dim.**	● 280g(Net weight, without guide plate and cartridge) ● G130mm, W32mm, L84mm (With single guide plate and fitted cartridge)
5	**Power supply**	DC 12V-4A
6	**Maximum power consumption**	48W
7	**Maximum printing resolution**	600*300 Dpi
8	**Optional resolution**	4 levels
9	**Operation**	7'' Touch Screen
10	**Message memory**	2G
11	**Ink solution**	Water and Solvent/ based
12	**Menu language**	Multiple/ selectable
13	**Printable characters**	Windows true fonts
14	**No. of lines**	Unlimited
15	**Character height**	Maximum 12.7mm/ 0.5inc for single head
16	**Printability**	Text, image, barcode, counter, shift code, time
17	**Operating temperature**	5 ℃ -50 ℃ and 0-90% air humidity, non-condensing
18	**External connections**	External sensor, External encoder and Alarm beacons

Date Sheet for 1 inch system

NO	DESCRIPTION	SPECIFICATIONS
1	**Model**	CM610T/CM620T/CM640T
2	**Printhead number**	Maximum 2 for CM610T/CM620T Maximum 4 for CM640T
3	**Guide plate kit**	Guide plate kit for single head (C2.WJ.QT0077C) Guide plate kit for double head (C2.WJ.QT0078C) Guide plate kit for quadruple head (C2.WJ.QT0105C)
3	**Controller Weight/Dim.**	● 1.15Kg ● L204mm, W153mm, D52mm
4	**Printhead Weight/Dim.**	● l 310g(Net weight, without guide plate and cartridge) ● l H130mm, W32mm, L96mm ● (With single guide plate and fitted cartridge)
5	**Power supply**	DC 12V-4A
6	**Maximum power consumption**	48W
7	**Maximum printing resolution**	600*300 Dpi
8	**Optional resolution**	4 levels
9	**Operation**	7'' Touch Screen
10	**Message memory**	2G
11	**Ink solution type**	Water/Solvent based
12	**Menu language**	Multiple/ selectable
13	**Printable characters**	Windows true fonts
14	**No. of lines**	Unlimited
15	**Character height**	Maximum 25.4mm/ 1 inch for single head
16	**Printability**	Text, image, barcode, counter, shift code, time
17	**Operating temperature**	5℃-50℃ and 0-90% air humidity, non-condensing
18	**External connections**	External sensor, External encoder and Alarm beacons

Resolutions For Both Model

Available DPI-X and DPI-Y Values				
DPI-X	150	200	300	600
DPI-Y	75	100	150	300

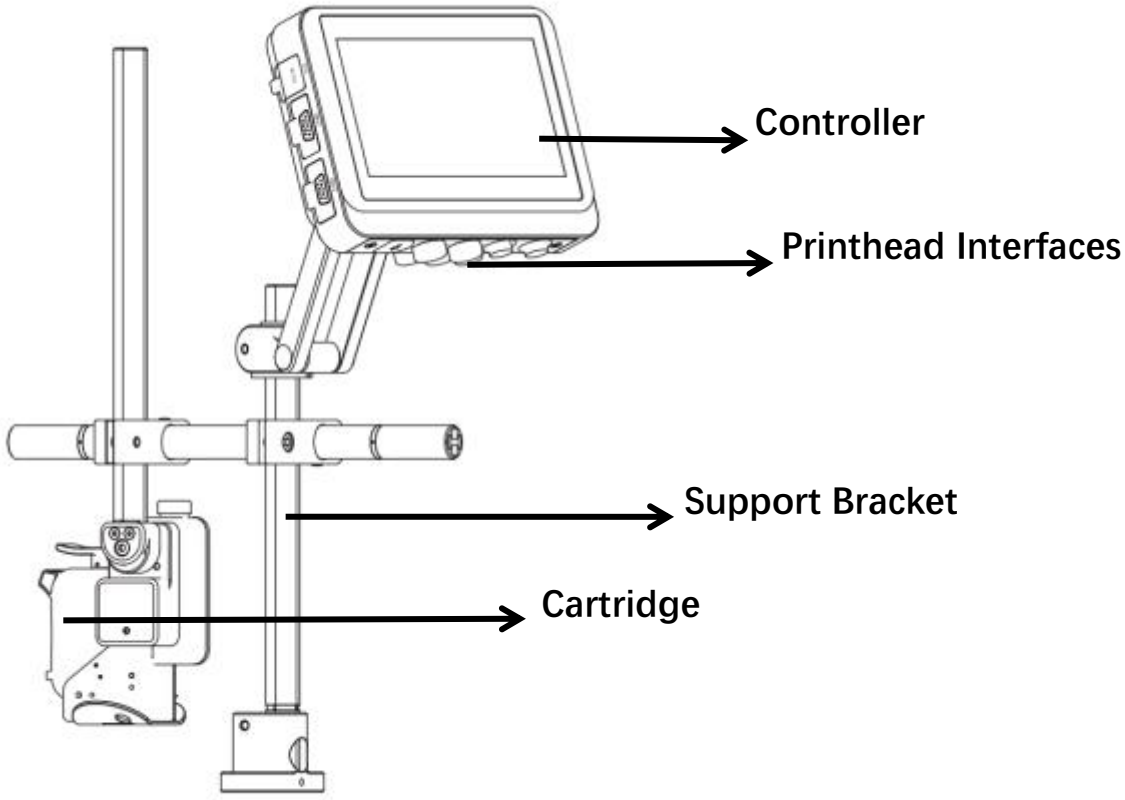
Print Speed For Both Model

Resolution (DPI-X * DPI-Y)	150*300	200*300	300*300	600*300
Print Speed (m/min)	150	114	76	38

Note: DPI-Y value does not affect the printing speed.

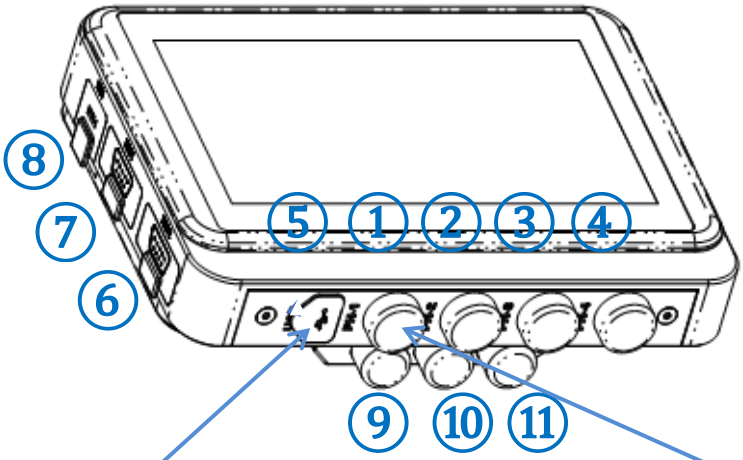
6.PRINTER OVERVIEW

6.1 Overview



6.2 Controller

6.2.1 Front side



⑤USB interface: It can be connected to external devices such as USB flash drives

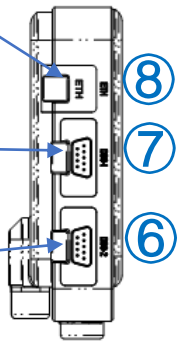
①②③④Printhead interfaces: They should be connected to printhead assembly

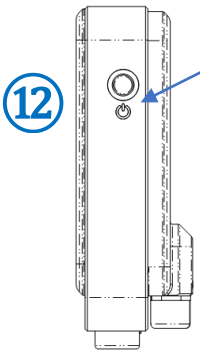
6.2.2 Left&Right side

Ethernet port: External data printing

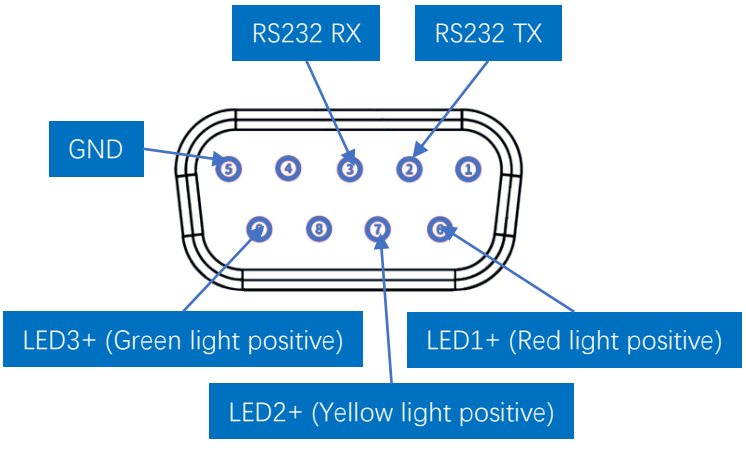
DB9_1: RS232 Uart for external data printing

DB9_2: Alarm lights



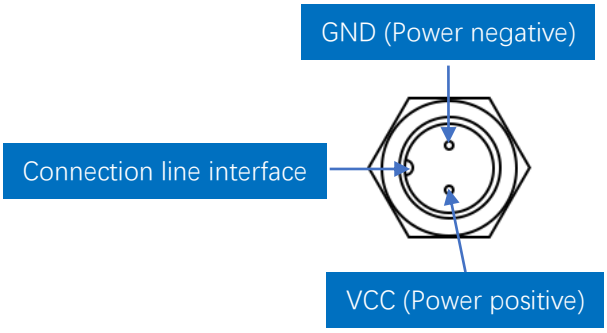


Power switch

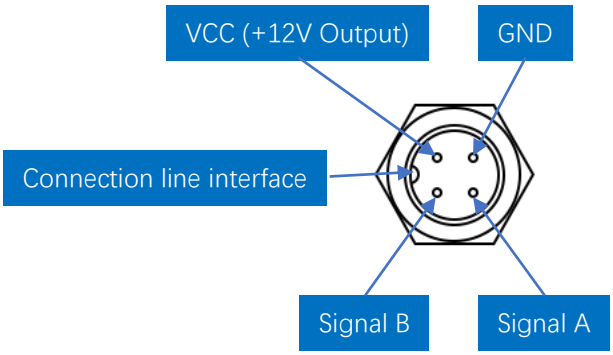


⑥/⑦ DB9

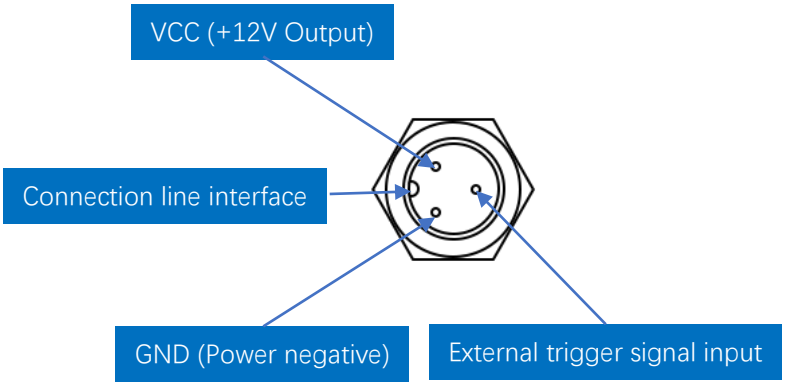
6.2.3 Bottom



⑨ Power connector



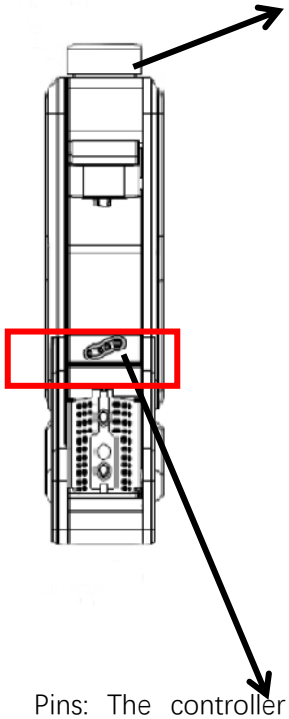
⑩ Encoder

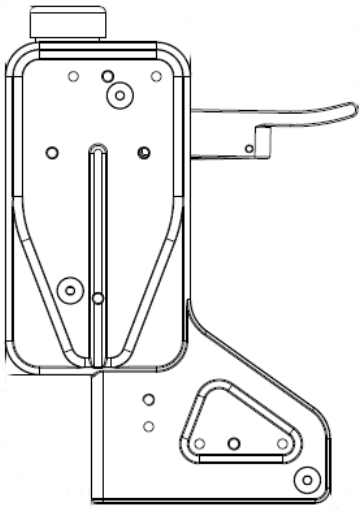


⑪ External electric eye

6.3 Printhead Assembly

Data cable interface: It is used to connect to the controller's printhead interface through data cable.

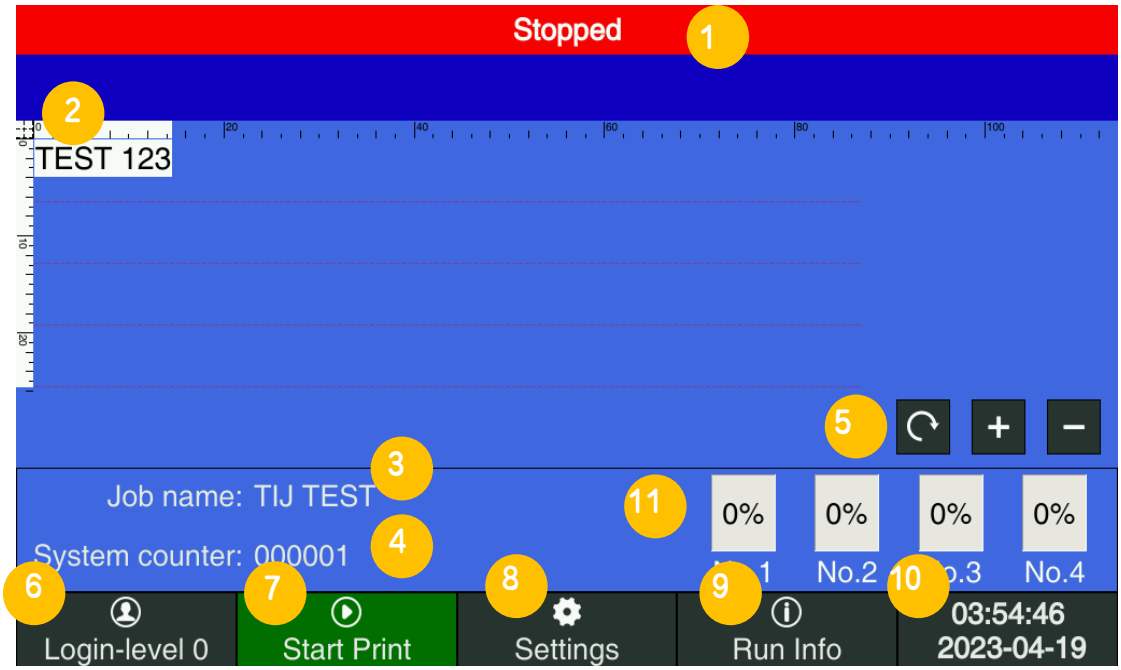




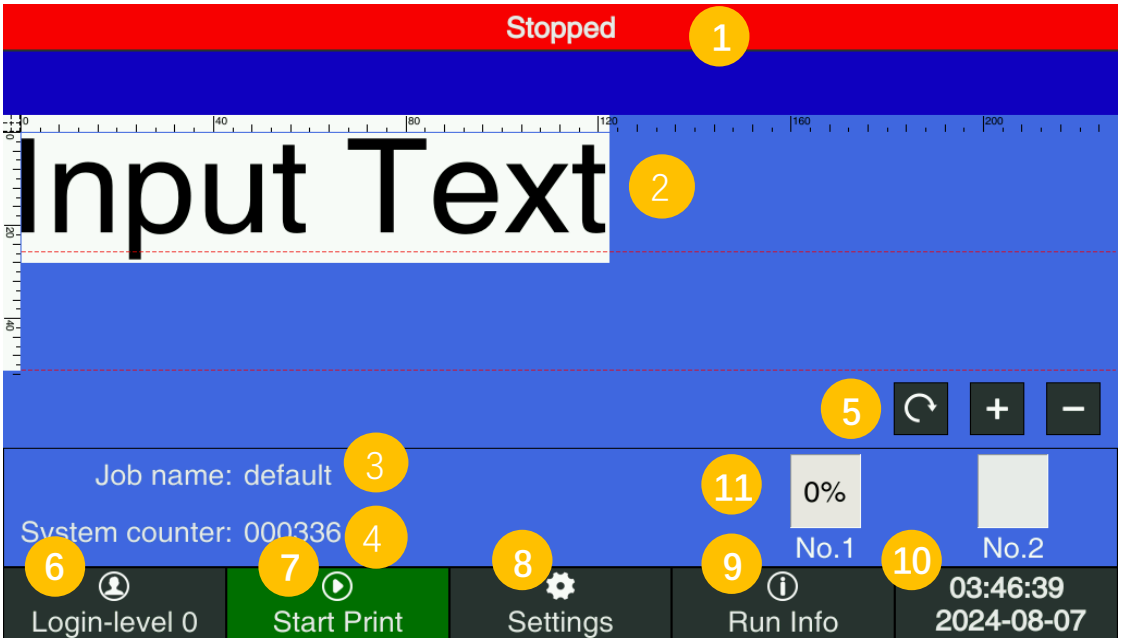
Pins: The controller can read cartridge's chip through these pins.

7.SOFTWARE USING

7.1 Main interface



* (1/2 inch)



* (1 inch)

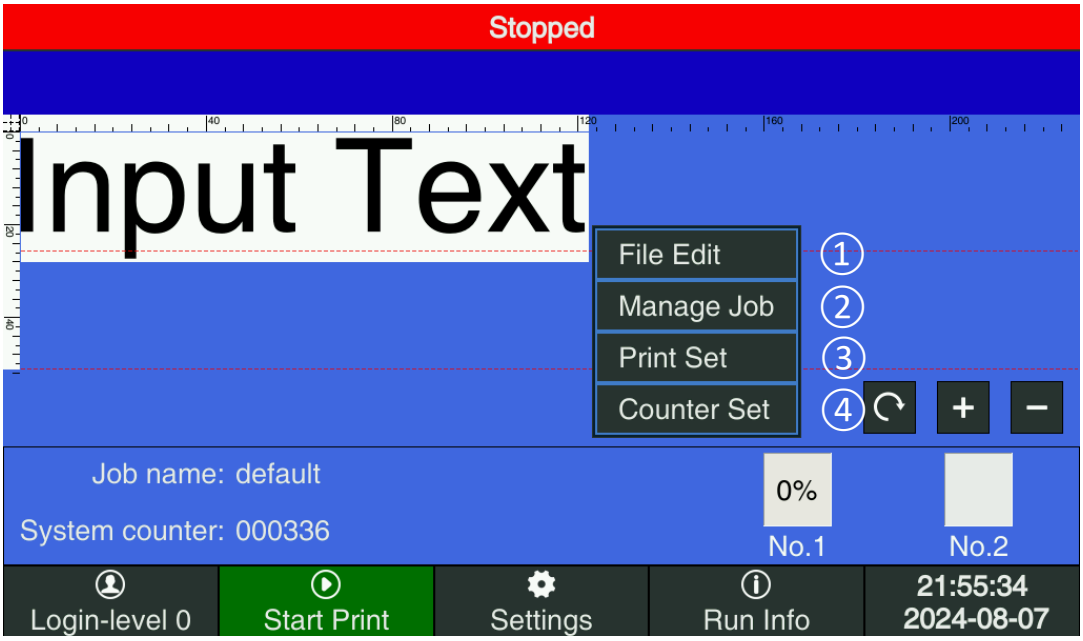
7.1.1 Page function

ITEMS	NAME	DESCRIPTION
1	Print status indicator function	It is in the unprinted state, and the color is red when displayed as Stopped; it is in the printing state, and the color is green when displayed as Ready.

2	Print information preview function	Preview the edited content information and size, each line represent one head. Indicating 1/2" or 1" cartridge with different scale on the left side.
3	Job name	Current file name.
4	System counter	Display the number of times the current content has been printed.
5	Scale setting function	1. The reset button can be used to restore the initial preview size of the system. 2. The zoom in and zoom out buttons can free the size of currently viewed page.
6	User level display	The device has three levels of user level setting permissions, which are 0, 1, and 2. The highest is level 2 administrator users, and the lowest is level 0 ordinary users. Advanced users can assign different operation permissions to low-level users.
7	Print button	Click to start printing or end the current printing.
8	System settings	Click to enter the secondary menu to adjust and modify the system parameters.
9	Run info	Display the current operating information of the system and various parameters.
10	System time and date display	Modify the current system date and time
11	Remaining ink display	Display the remaining ink amount of the current ink cartridges respectively.

7.1.2 **Edit menu**

*** (1/2 inch)**



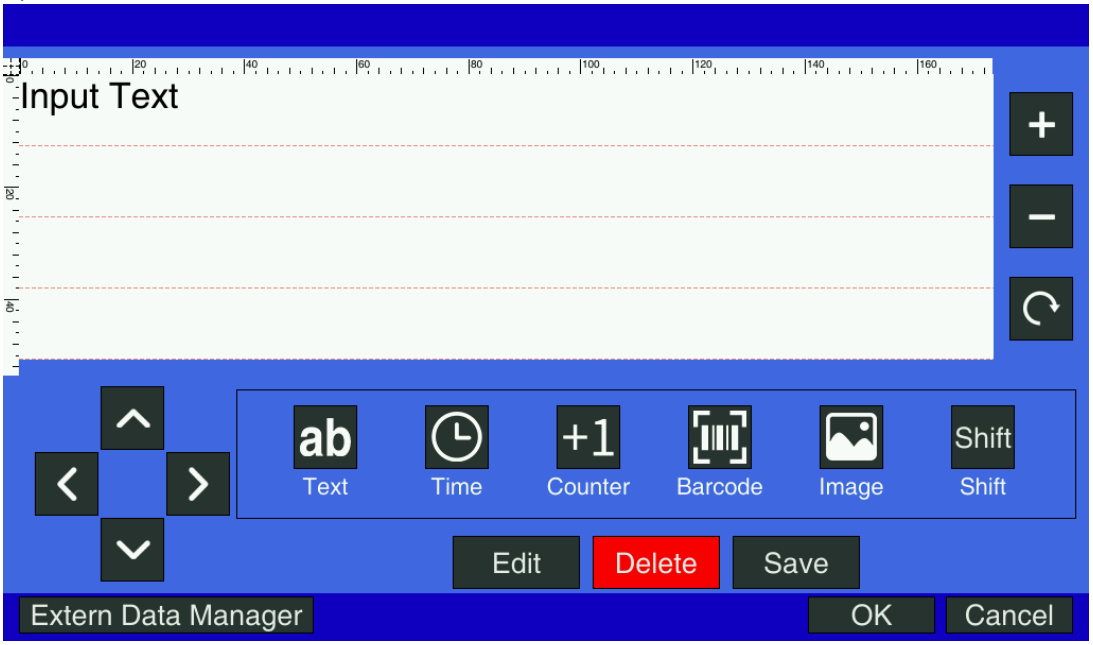
* (1 inch)

Tip: Long press the screen for 1-2 seconds to wake up the edit menu.

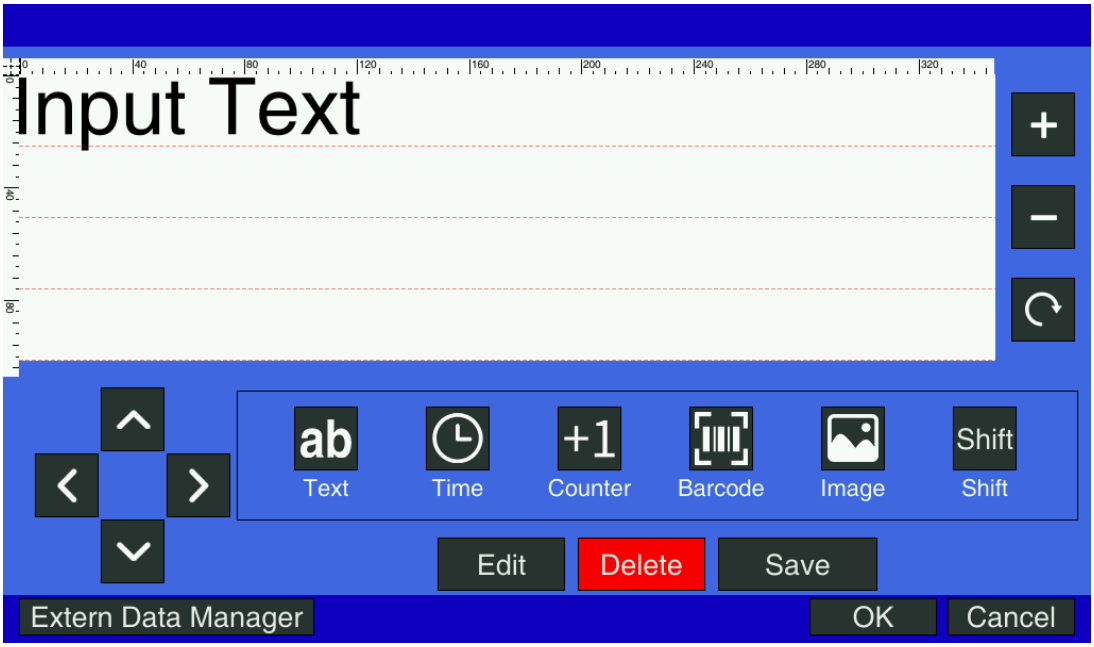
ITEMS	NAME	DESCRIPTION
1	File Edit	Click on this button to edit the content needs to be printed.
2	Manage Job	Click on this button to open the print template management interface.
3	Print Set	Click on this button to set different printing parameters to present different printing effects.
4	Counter Set	Click on this button to open the Counter setting form.

7.1.3 File Edit

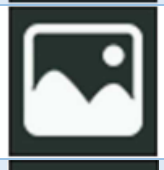
File editing is one of the important parts on the device. It allows operator to design the layout and display result here. The following shortcut icons can make editing easy for operator.



* (1/2 inch)

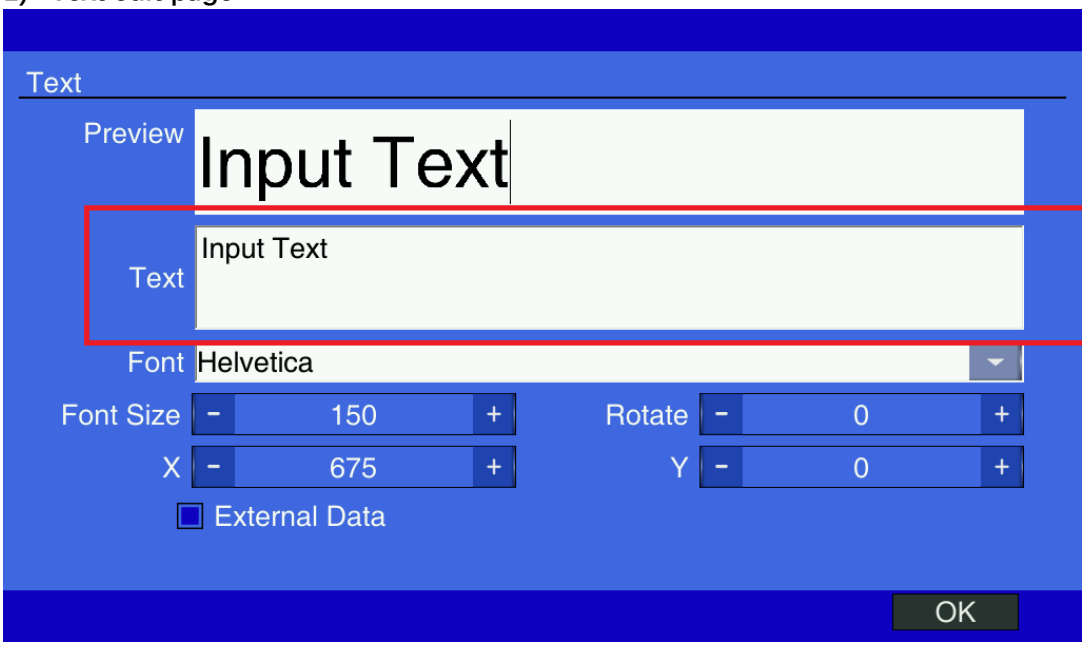


* (1 inch)

ITEMS	NAME	DESCRIPTION
	Position adjustment	Adjust the position of the content on the screen through the arrow keys or direct drag.
	Text Editor	Click on the button to enter text, numbers, symbols, etc.
	Time Editor	Automatically read the current time of the system, with a variety of time formats built-in.
	Counter Editor	Adding a counter in the edit text can help operator count the number of prints.
	Barcode Editor	Support multi-format barcodes and QR codes, and import and print external data directly.
	Image Editor	Import and print pictures stored locally on the device or an external device.
	Shift Editor	This function enables operator to edit different production shifts according to different time periods.

Extern Data Manager	Extern Data Manager	Manage data which are imported through external port.
	Preview function button	1. The zoom in and zoom out buttons can free the size of the currently viewed page. 2. The reset button can restore the initial preview size of the system.

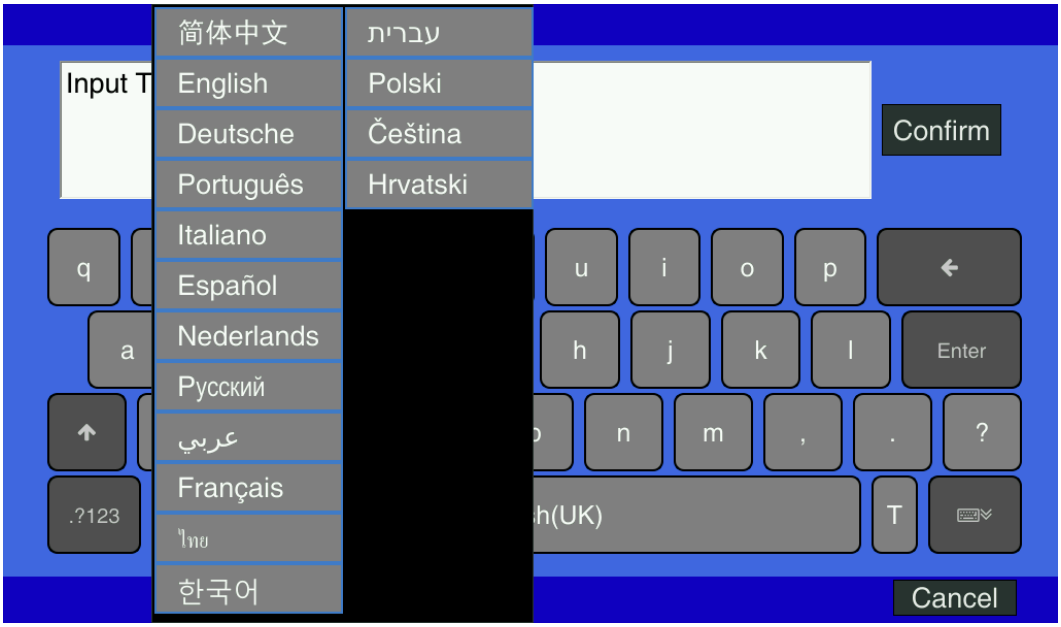
1) Text edit page



The text content, size, angle, and position can be adjusted on text edit page. And CM600 also supports external data importing function with checking 'External Data'. Click on the red area shown in the figure above to enter the text.

Type on the screen to edit the text, and click the **Confirm** button after inputting is completed.

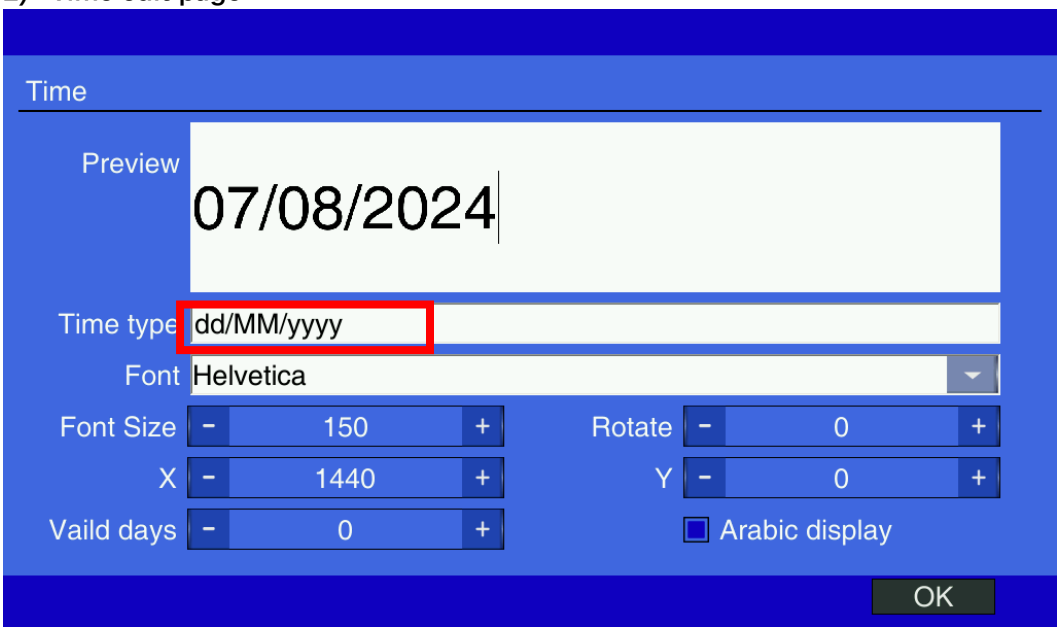
*** (1/2 inch)**



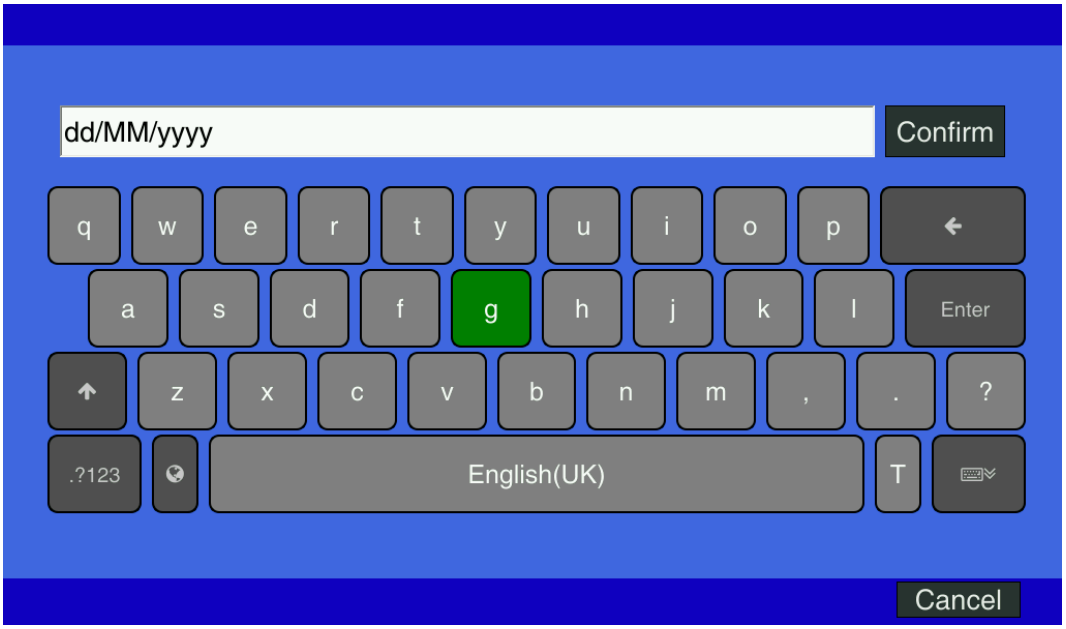
*** (1 inch)**

The device has built-in multiple languages, click the corresponding language to change the keyboard input method.

2) Time edit page



Click on the area indicated by the icon above, and the time format setting keyboard will pop up.



Enter the format that needs to be modified in the input box, and click the confirm button when finished.

If 'JD' is entered, it will count the number of days experienced. For example, if today is 1st-Feb-2024, 'JD' will automatically be converted to '032'.

For the abbreviations of time units, please refer to the following tables.

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

Days can be replaced with 'Sun...Sat', '0X' or 'A...G' by inputting 'NN' or 'NO'. User can also customize these abbreviations on 'Custom date' page (Please refer to 7.3.6). On that page, Month can also be customized, user can input 'NR' to display custom Months.

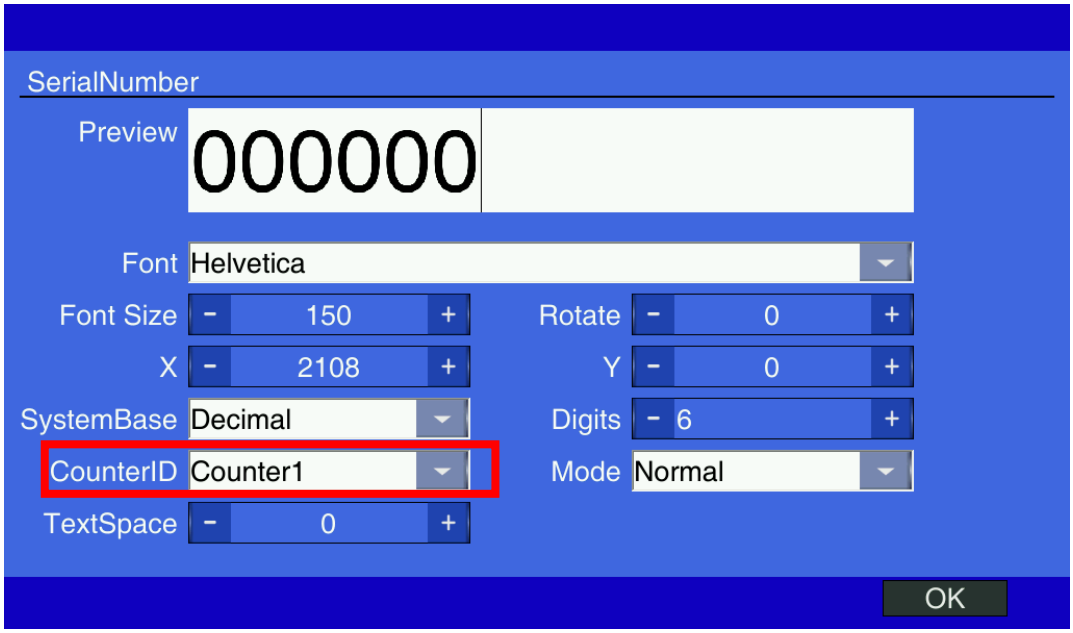
d	Date without prefixed '0' (1~31)
dd	Date with prefixed '0' (01~31)
ddd	Abbreviation of day of week (Mon, Tue...)
dddd	Day of week (Monday, Tuesday...)
M	Month without prefixed '0' (1~12)
MM	Month with prefixed '0' (01~12)
MMM	Full name of month (January, February...)
yy	Two-digital year (00~99)
yyyy	Four-digital year (2023)

Abbreviations of date, month and year

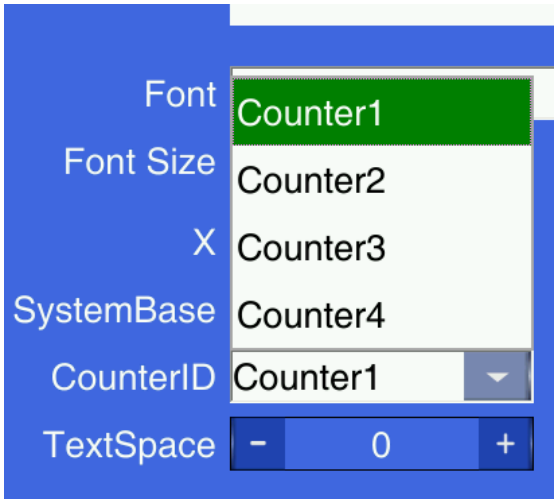
h	Hour without prefixed '0' (0~23, but if 'AP'/'A'/'ap'/'a' is added after it, the range would be 0~11)
hh	Hour with prefixed '0' (0~23, but if 'AP'/'A'/'ap'/'a' is added after it, the range would be 00~11)
H	Hour without prefixed '0' (0~23, even if 'AP'/'A'/'ap'/'a' is added after it, the range would still be 0~23)
HH	Hour with prefixed '0' (00~23, even if 'AP'/'A'/'ap'/'a' is added after it, the range would still be 00~23)
m	Minute without prefixed '0' (0~59)
mm	Minute with prefixed '0' (00~59)
s	Second without prefixed '0' (0~59)
ss	Second with prefixed '0' (00~59)
AP or A	Add to display time with AM or PM
ap or a	Add to display time with am or pm
JD	The **th day of the year (e.g. It displays 032 if the date is 1st Feb)
JW	The **th week of the year (e.g. It displays 01 if the the date is 8th Jan 2024)

Abbreviations of hour, minute, second, Julian Day and Week.

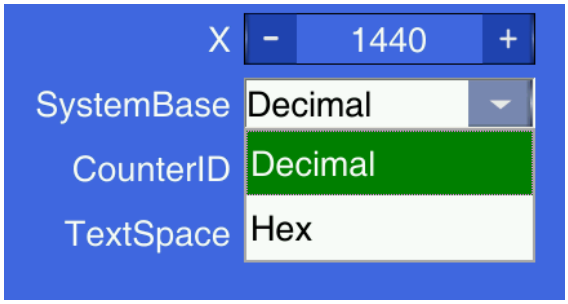
3) Counter edit page

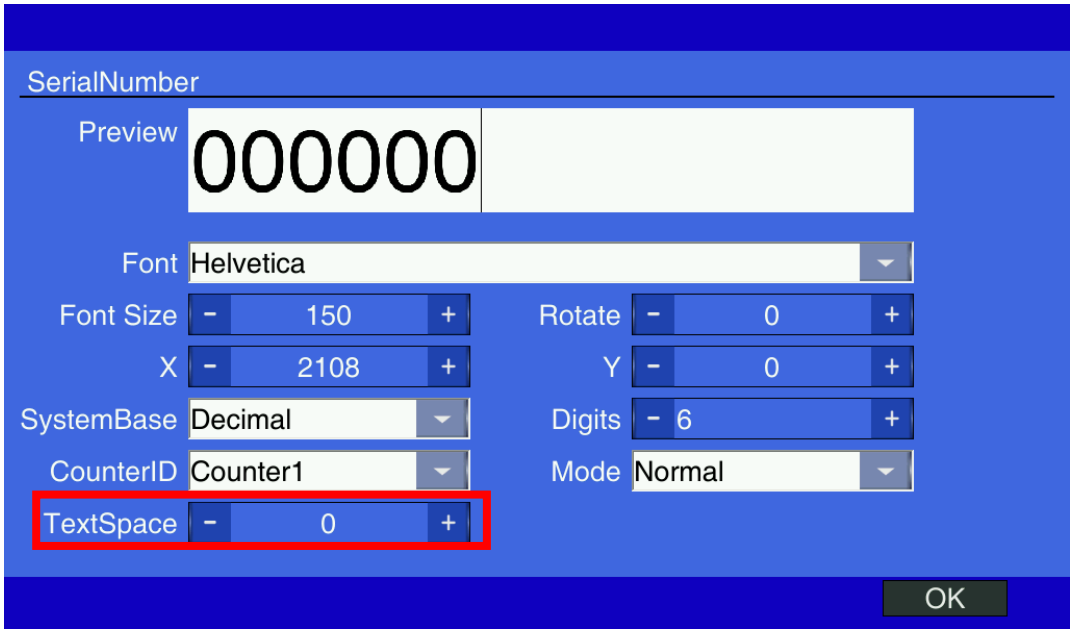


Up to four different counters can be inserted into one edit file.



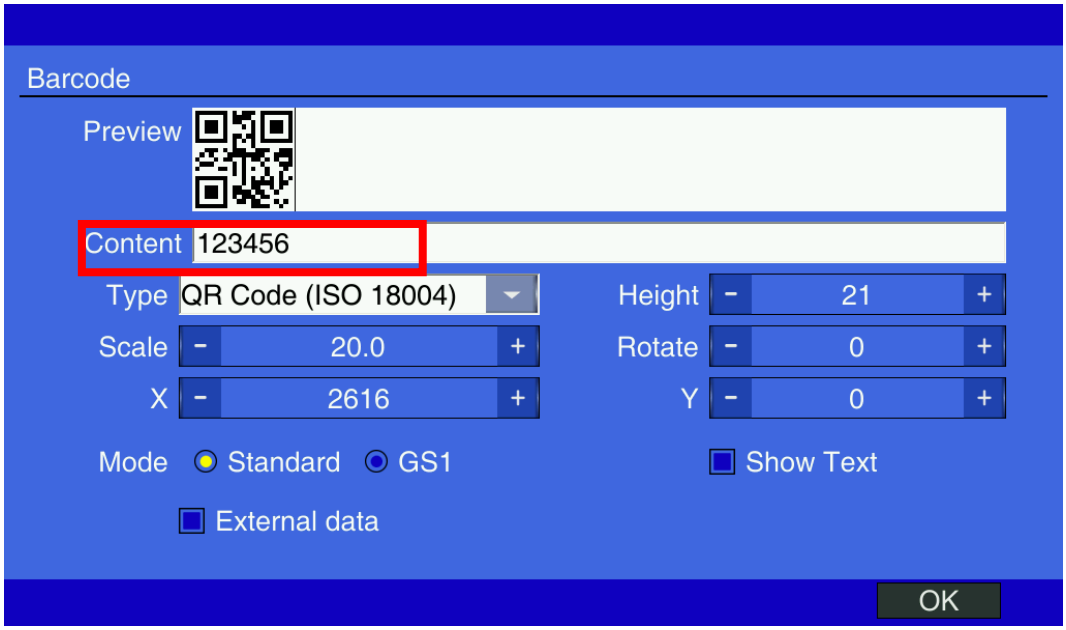
Different formats of the counter can be edited by selecting different modes and modifying the digits.





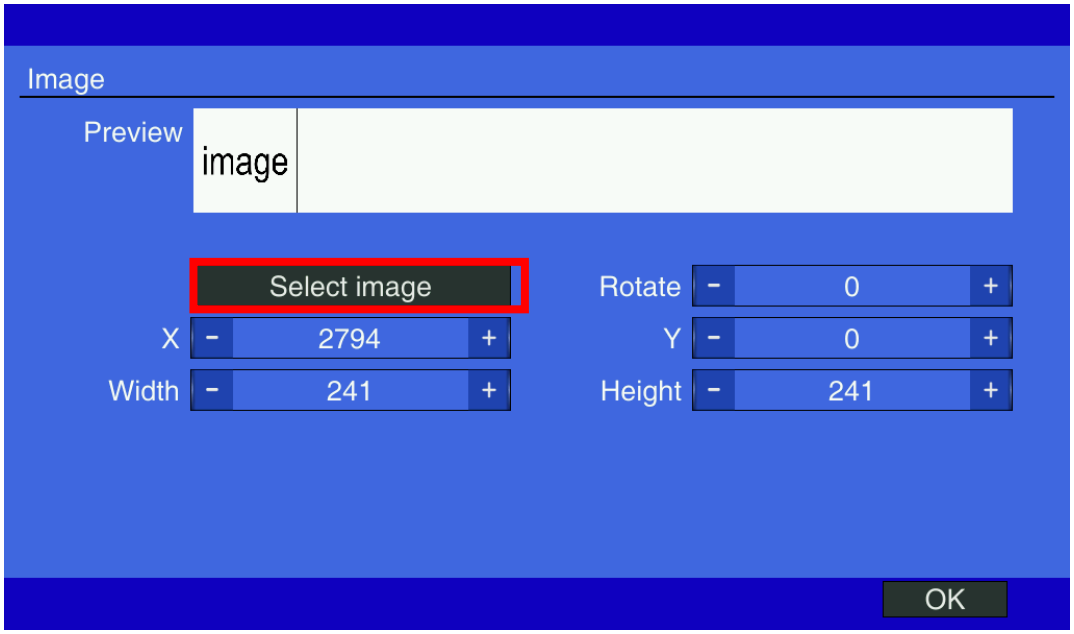
Click '-' or '+' to adjust the distance between each character.

4) **Barcode edit page**



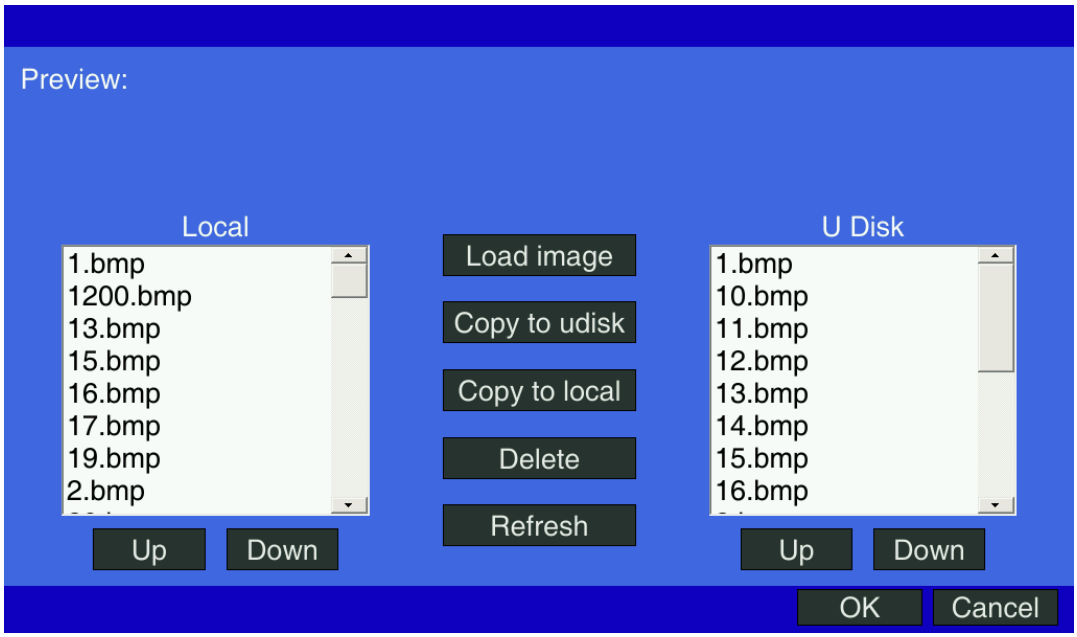
Edit the text in the content area, the below function buttons can be used to adjust the format and parameters. And CM600 also supports external data import function with checking 'External data'.

5) **Image edit page**



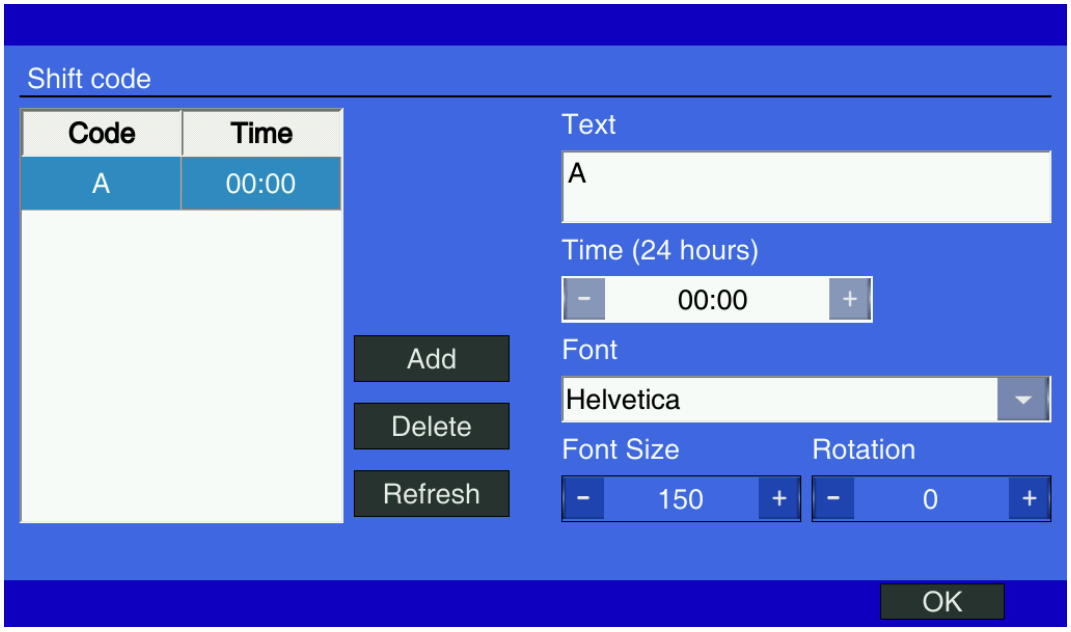
After selecting a picture, the picture information will appear in the upper area, and the below parameters can be used to adjust the size and angle of the picture.

Note: The image size should not larger than 30000px. CM600 supports bmp, png and jpg format imag.



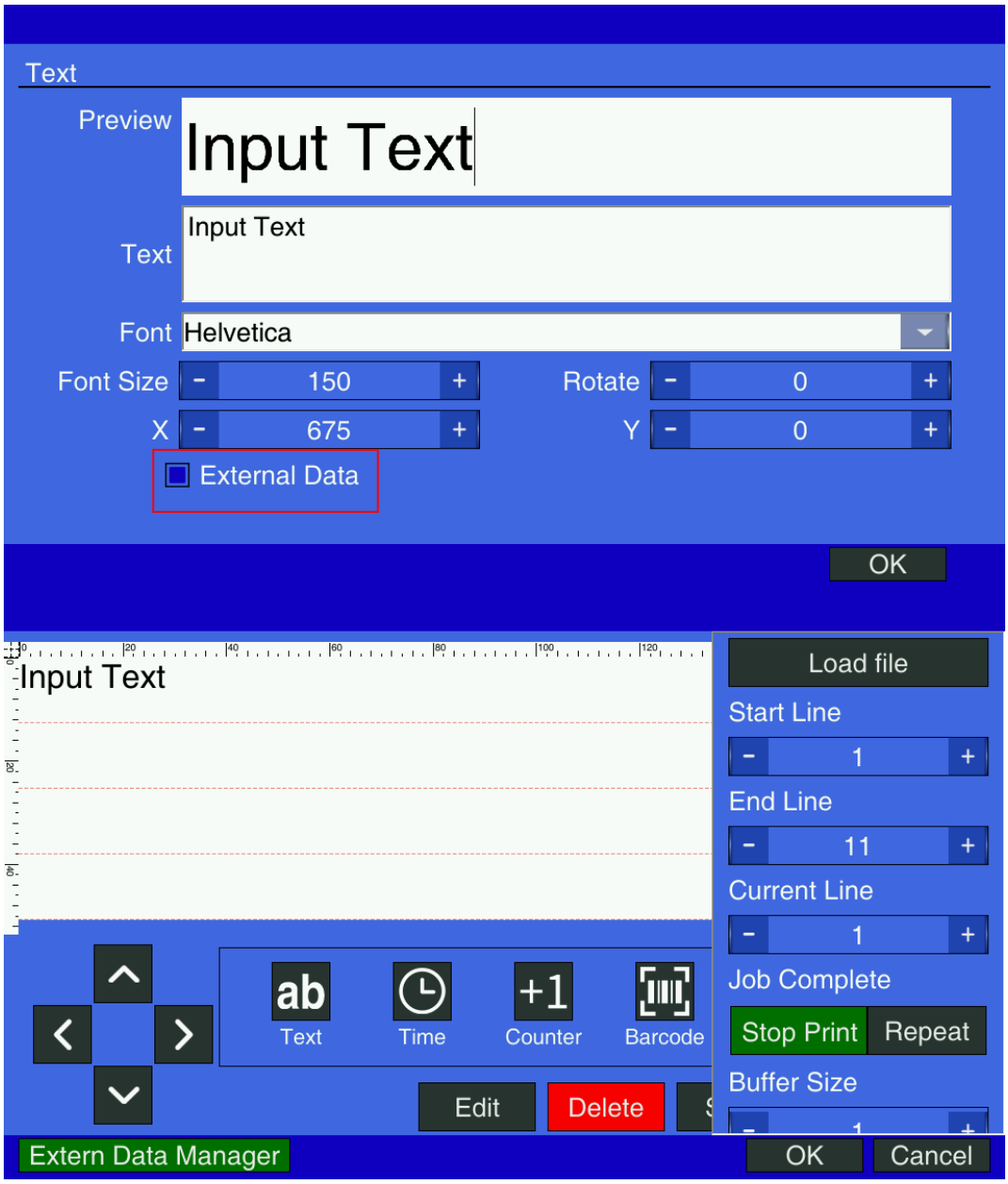
Operator can copy files from the USB flash driver to the device on above page, and CM600 also supports export files from the device to the USB flash driver.

6) Shift edit page

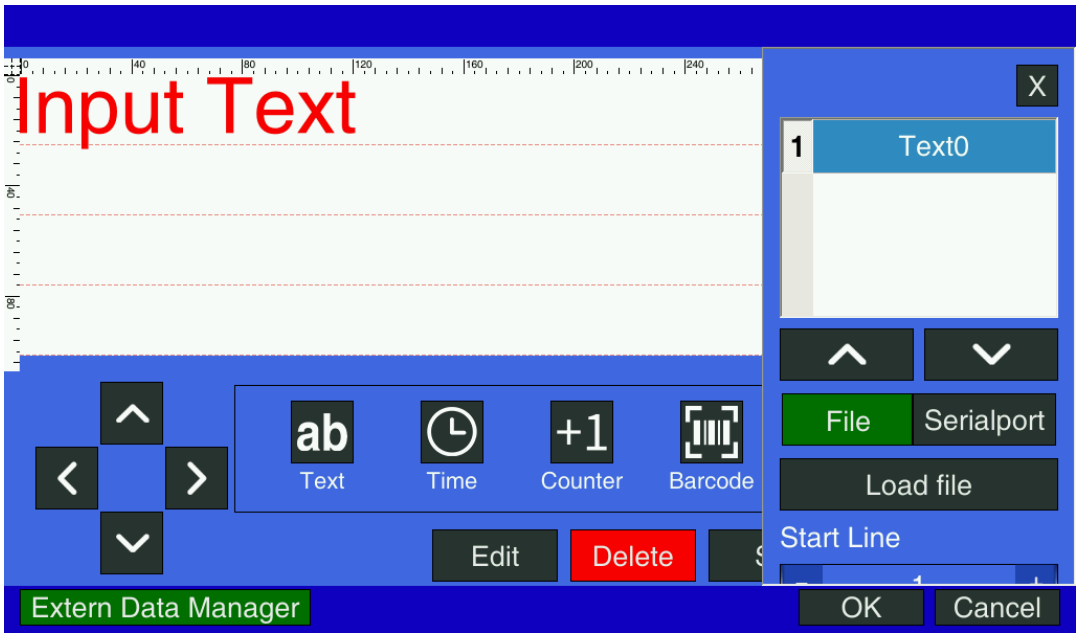


Adjust the time span to assign the corresponding shift code.

7) Extern Data Manager



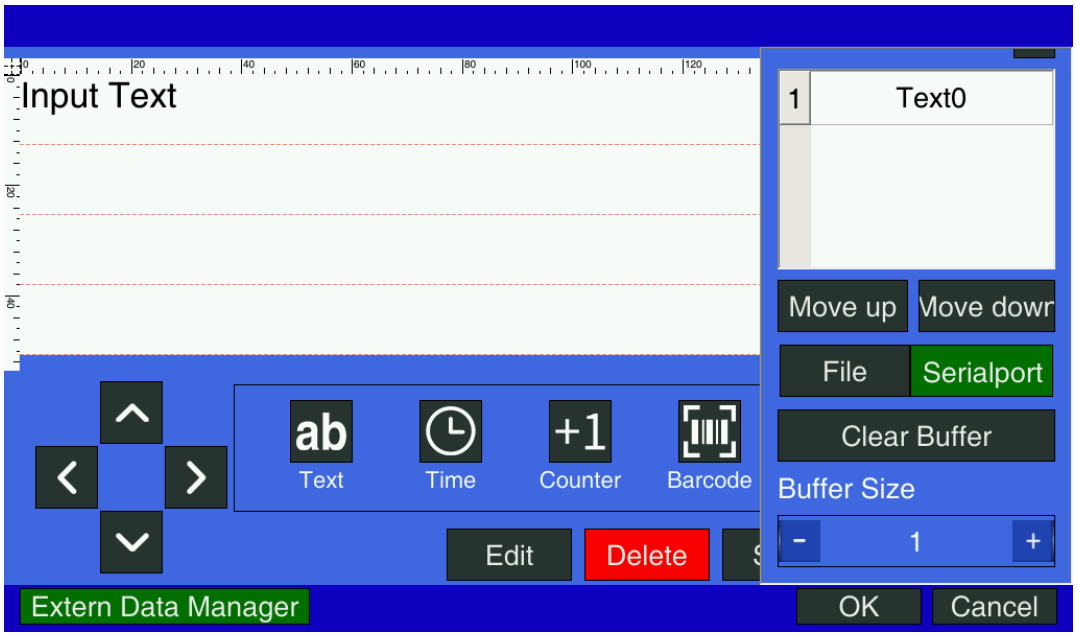
* (1/2 inch)



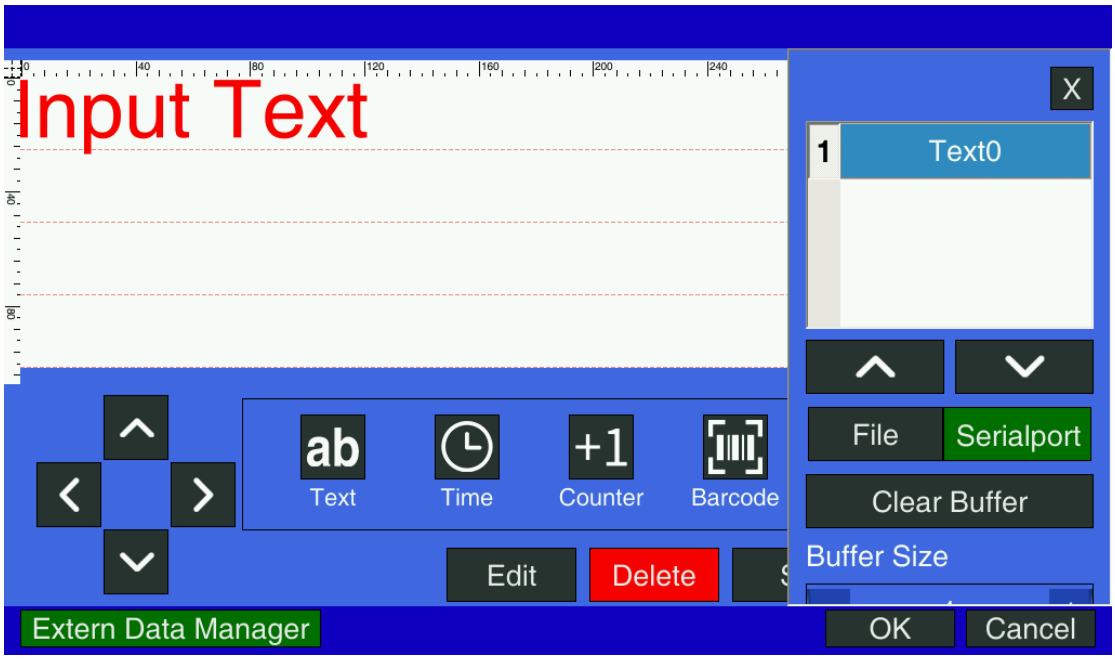
* (1 inch)

CM600 supports TXT and Excel format file, imported through external storage devices such as U disk.

Note: this function will be activated unless 'External Data' is selected .



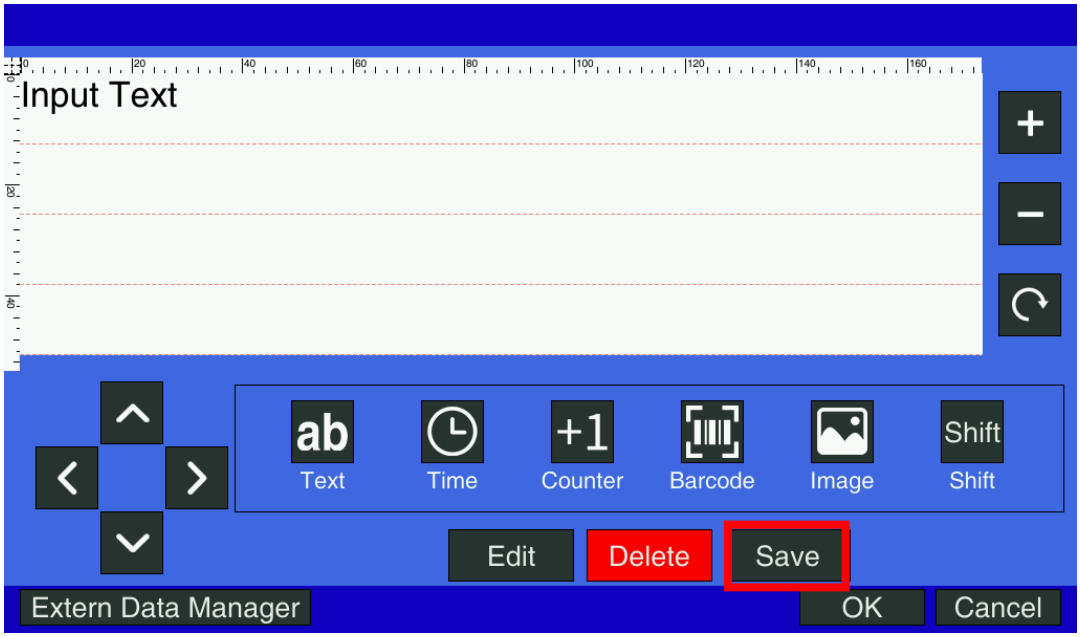
* (1/2 inch)



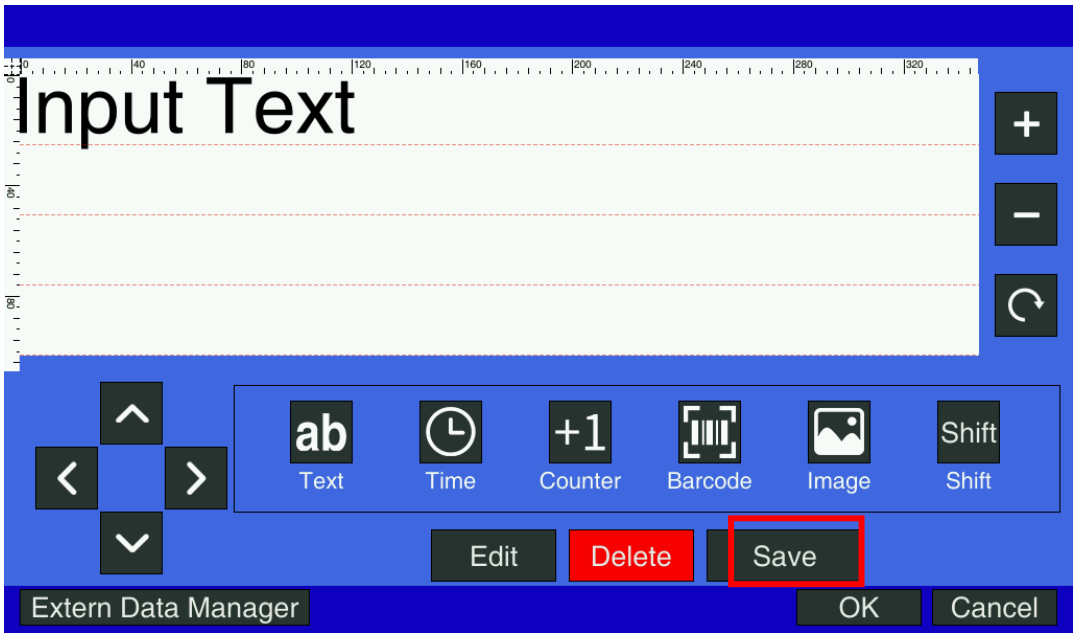
* (1 inch)

External data can also be imported through serial port.

8) File save



* (1/2 inch)

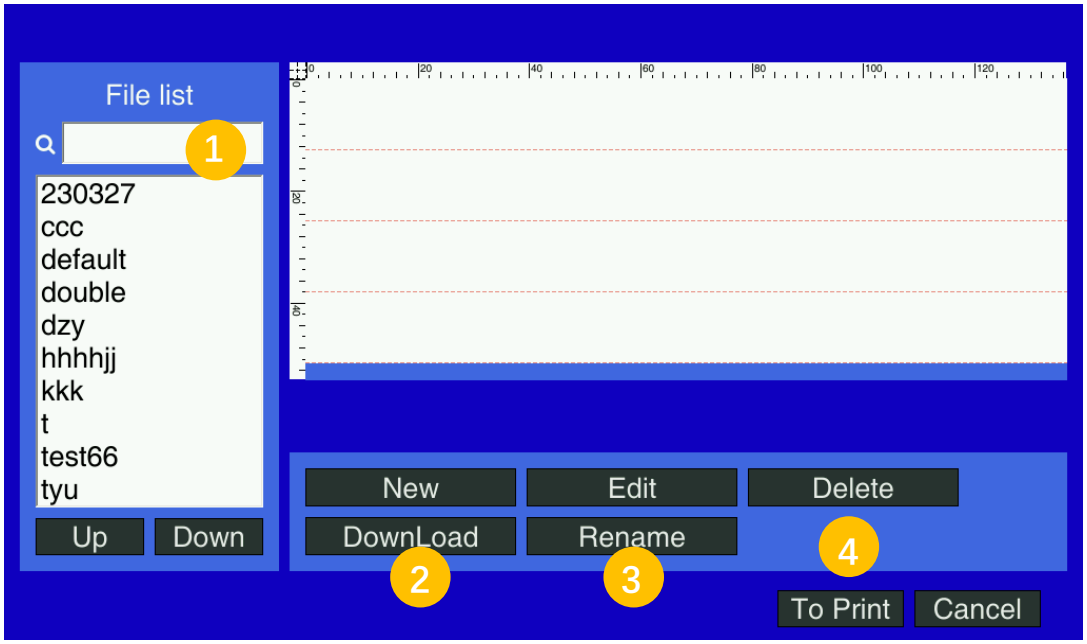


＊(1 inch)

After the file is edited, click the **Save** button to save the file, and click OK to return to the print page.

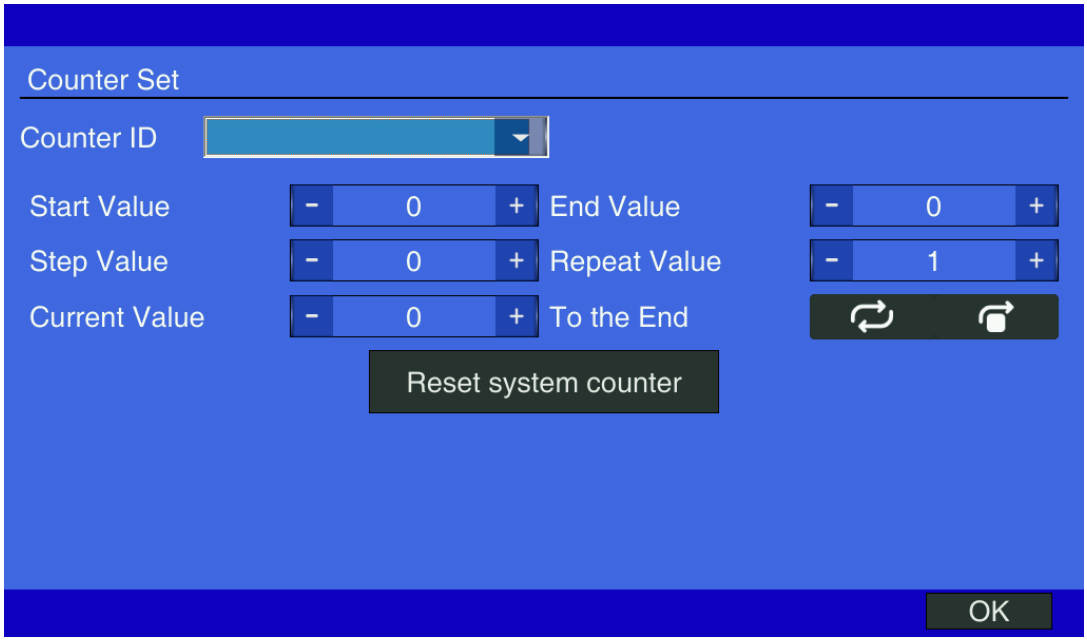
9) Manage Job

The previous edited file data is stored in the file management page. Operator can modify or delete them again, or create a new file template, and then name it.



1. When the device stores a lot of files, operator can search the keywords of the file name in File list.
2. Click the Download button to copy the files to each other.
3. Click the Rename button to change file's name.
4. Click the To Print button below to return to the home page.

7.1.4 Counter Set



The number of counters in the counter setting ID is determined by the number of counters edited in the current file. Up to four counters can be added to a file, and different counters can be assigned different values. Click the drop-down box button to switch between different counters.

Start Value: Counter start value

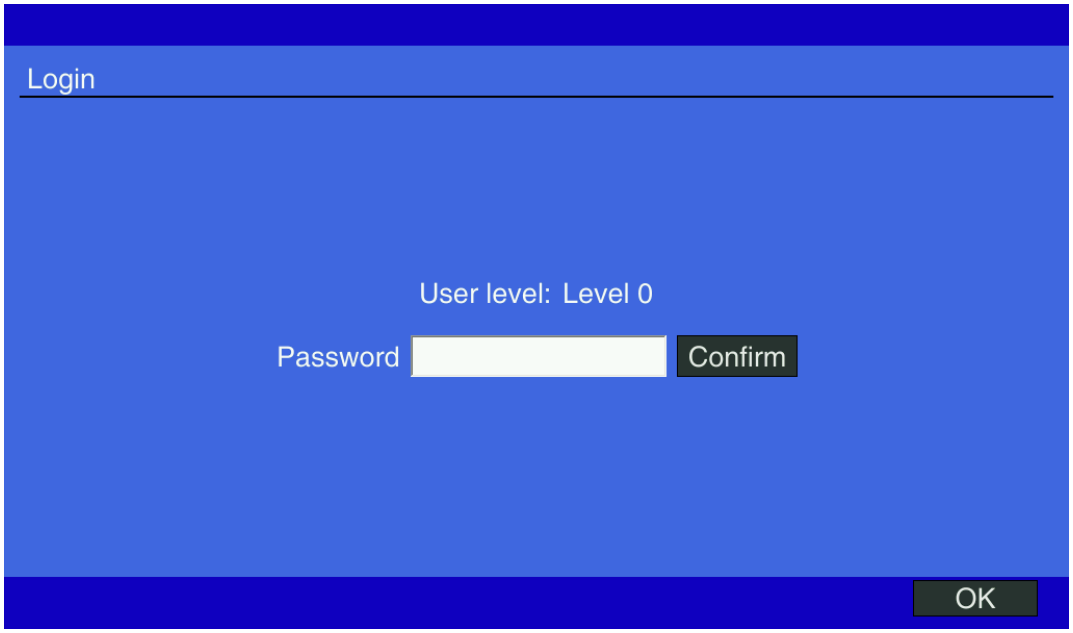
End Value: After reaching this value, count from the start value again

Step Value: Each print counter's accumulative value

Repeat Value: Set the number of times to print each values

Current Value: Set the currently printed value within the range

7.2 User login

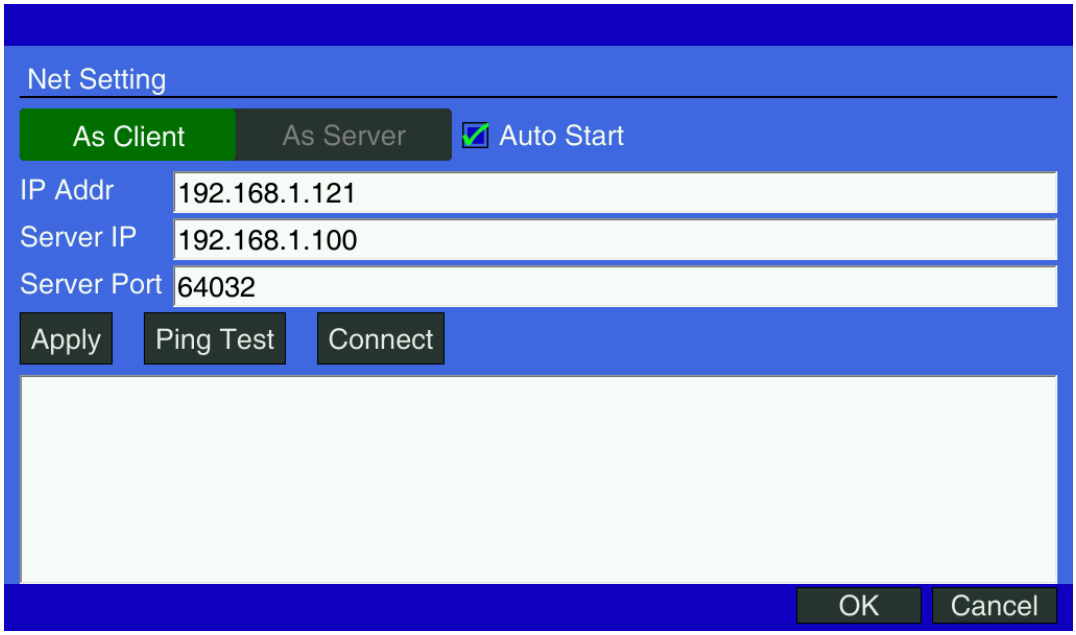


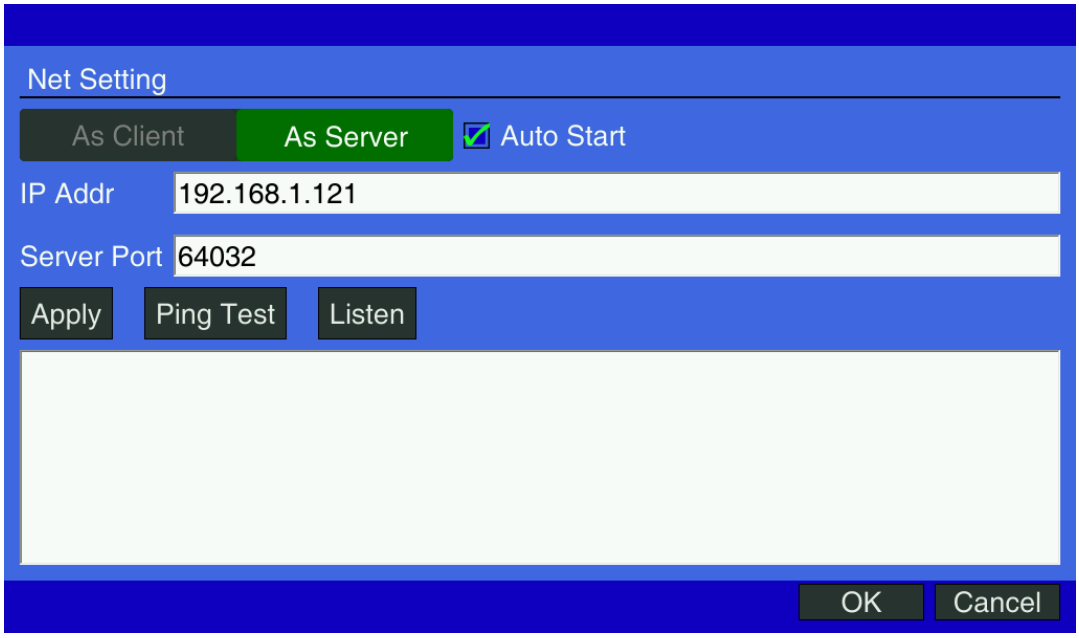
The system will give different user permissions based on the permissions assigned by the administrator. Operator can log in to high-level accounts to get more permissions.

7.3 System settings

7.3.1 Network settings

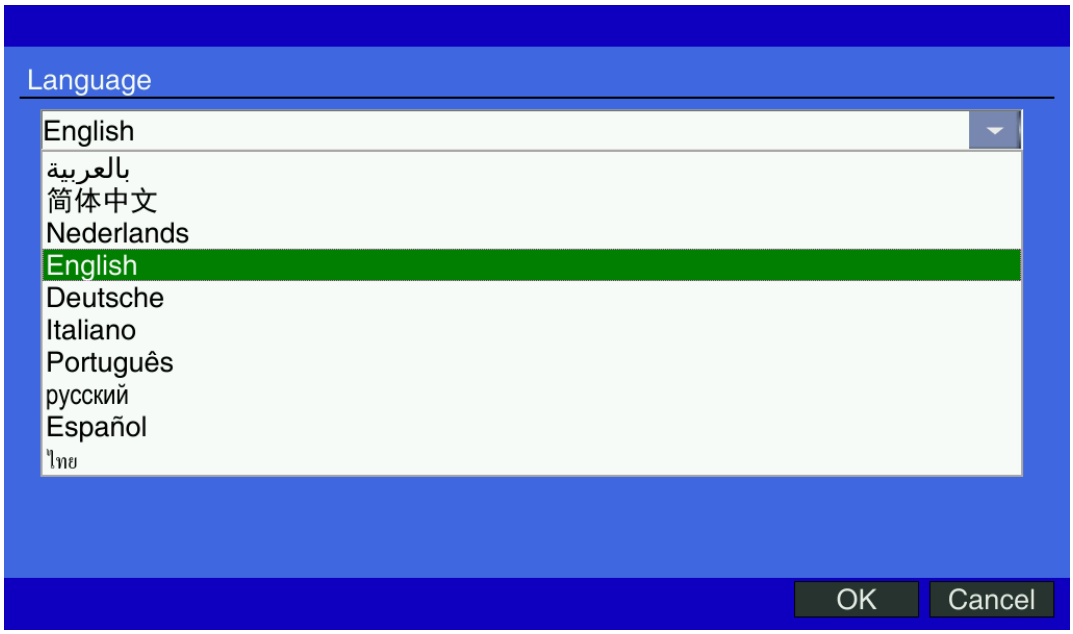
CM600 can be used as a server or a client to communicate with external device.



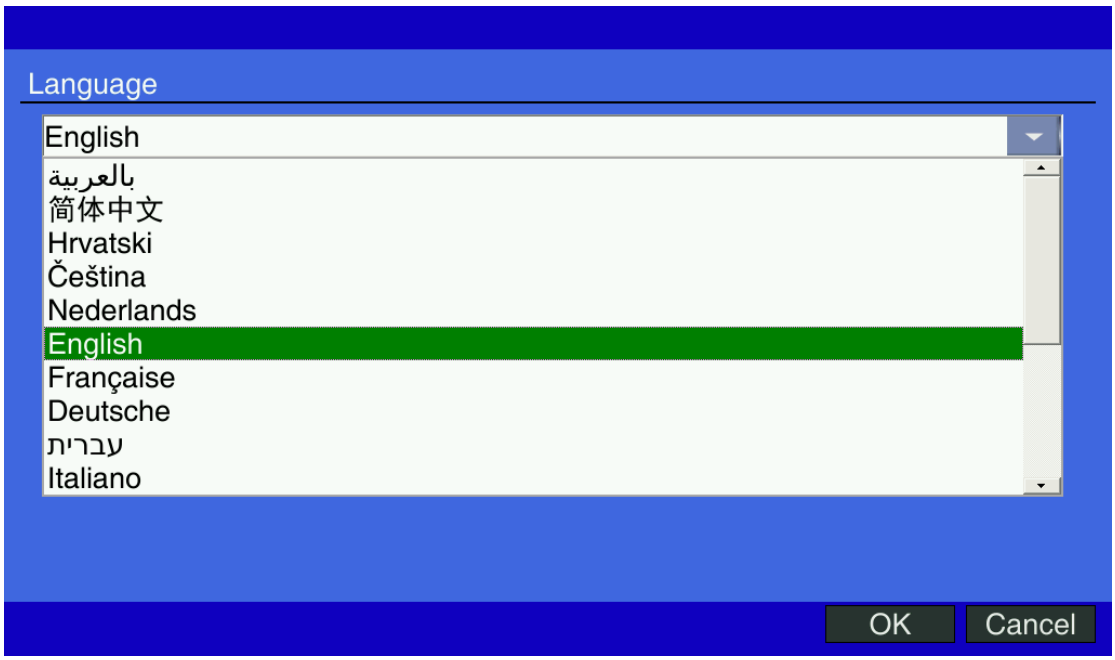


Enter the corresponding IP address, server address, server port, the device will be connected to the local area network, and print collaboratively with other devices.

7.3.2 Language



* (1/2 inch)

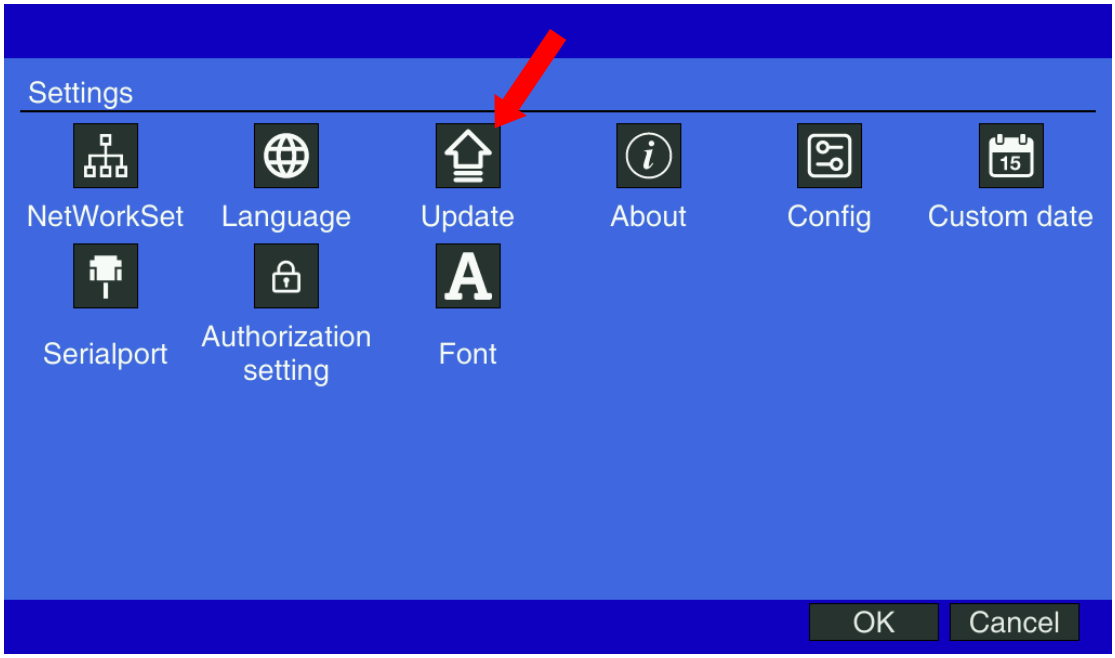


* (1 inch)

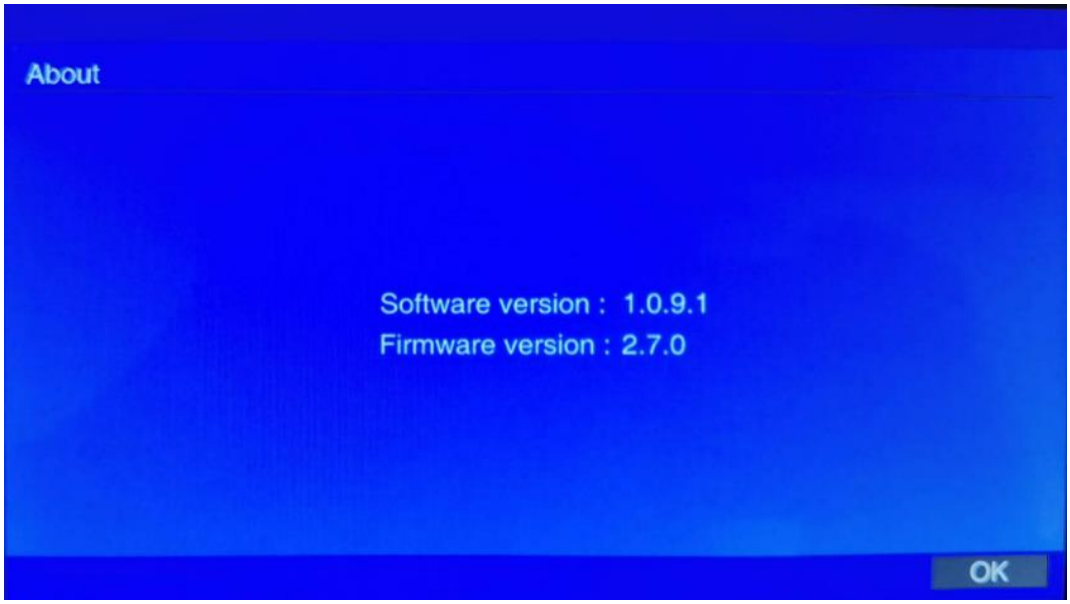
The device contains multi-language by one-click switching.

7.3.3 Update

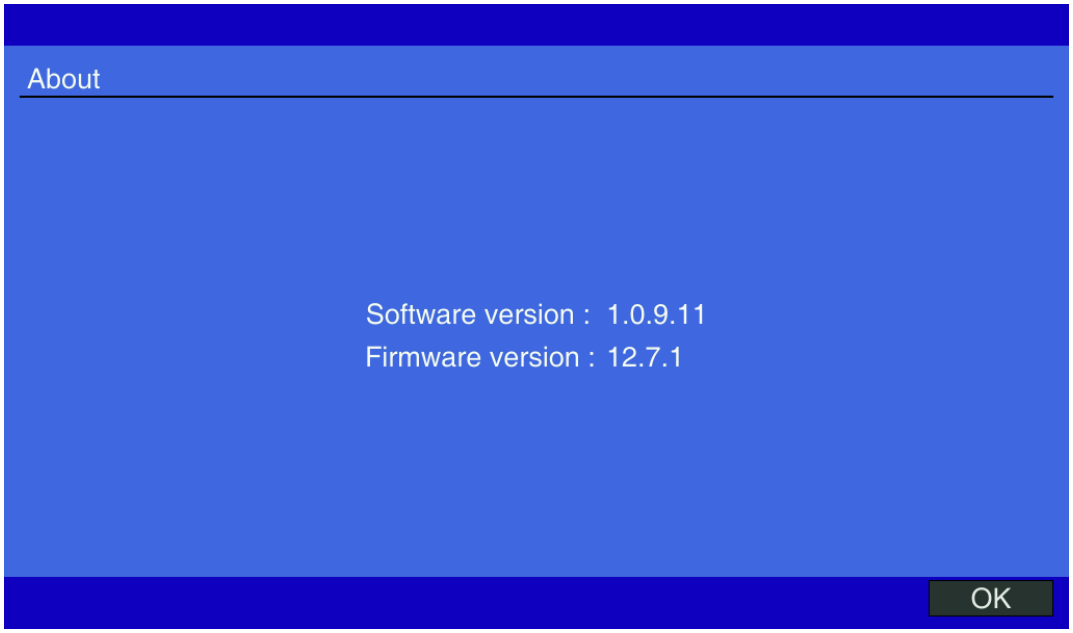
Put the upgraded file in the root directory of the connected USB flash, and click “Update” button.



7.3.4 About



* (1/2 inch)



* (1 inch)

View the version information of the current software and firmware.

7.3.5 Config

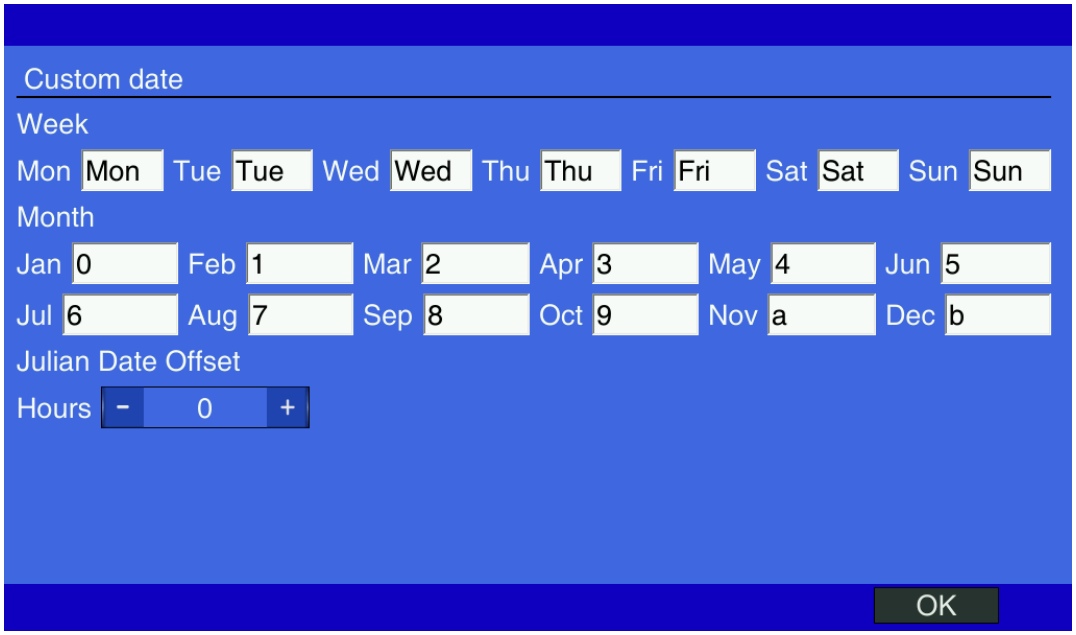
Please set the value of printing voltage and printing pulse according to the label on the ink cartridge or enable Auto Match. **Caution: any incorrect setting might damage printer.**

The Auto jet function is used to keep the nozzle wet and prevent the blockage from not using for a long time.

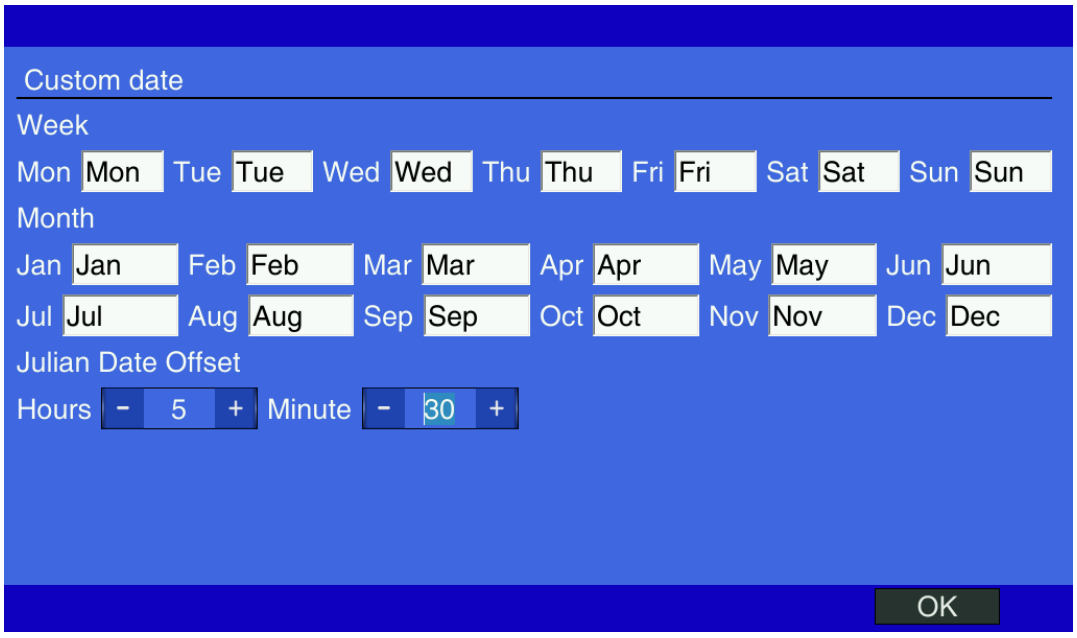
Hold down **Clean** button, and the nozzle will continuously eject ink and clean the nozzle.

When the ink volume is lower than the Ink low level value, system will automatically remind the user that the ink cartridge needs to be replaced.

7.3.6 Custom date



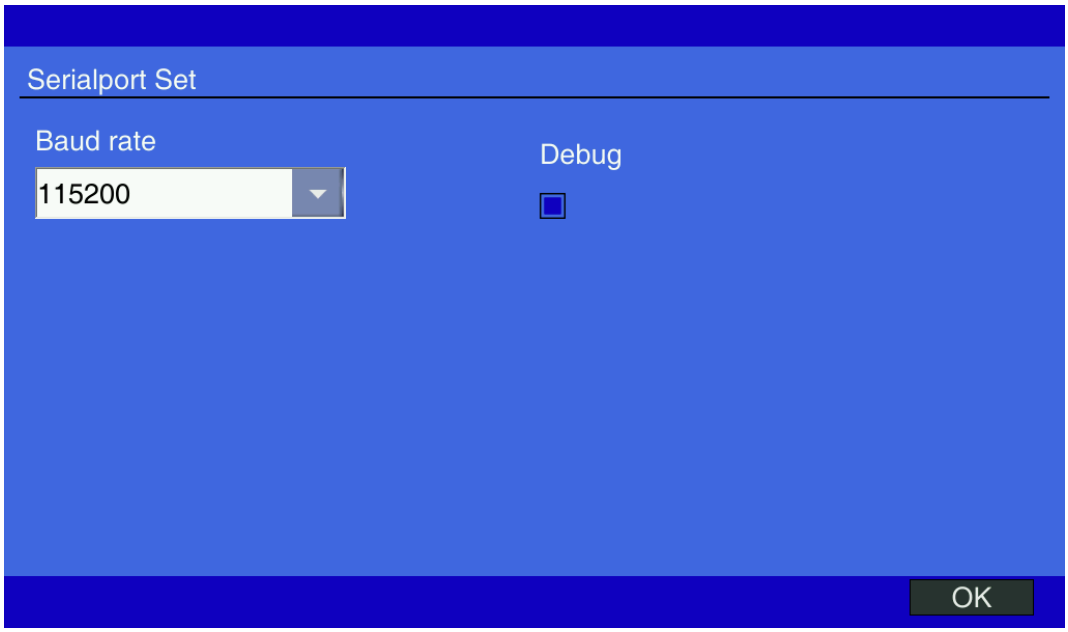
* (1/2 inch)



* (1 inch)

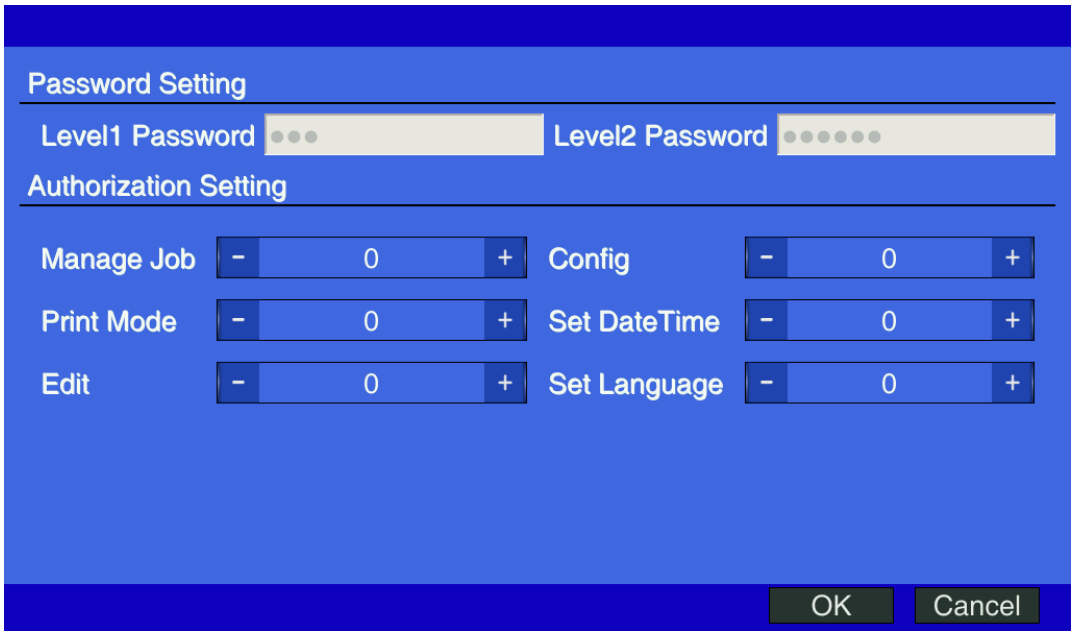
Click Custom date, operator can customize the abbreviation mark for each day and month.

7.3.7 Serial port settings



Select the corresponding Baud rate, the device may be connected to an upper computer.

7.3.8 Authorization settings

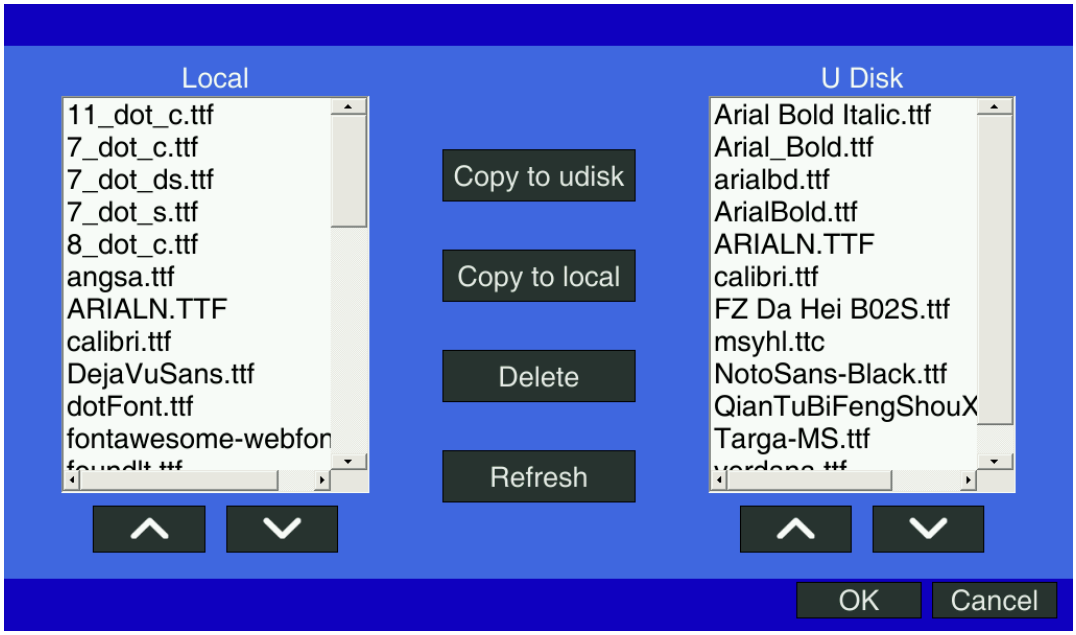


Access to user authority management settings, Low-level users need to enter a password to access to advanced menu which determined by administrator.

The administrator user can set the account and password authority of the same-level and lower-level users. The system can identify three levels of user authority: 0, 1, and 2. The module functions below would be available for different users after selecting different classifications.

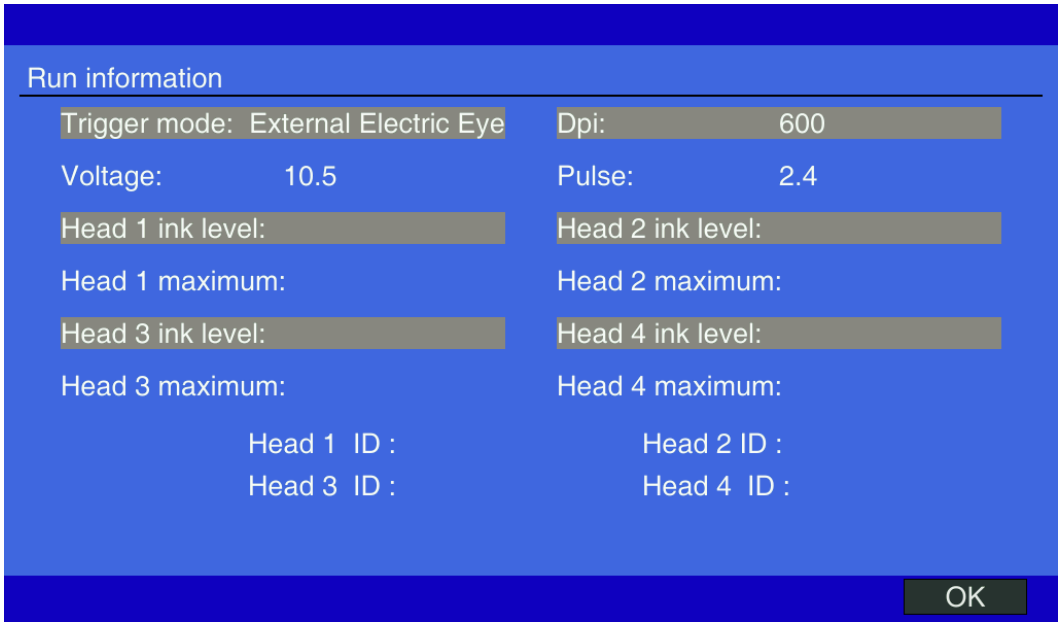
Note: The default passwords of Level1 and Level2 are 123 and 123456.

7.3.9 Font



Install external font to this device by copying the font with TTF format in the connected USB flash.

7.4 Run information



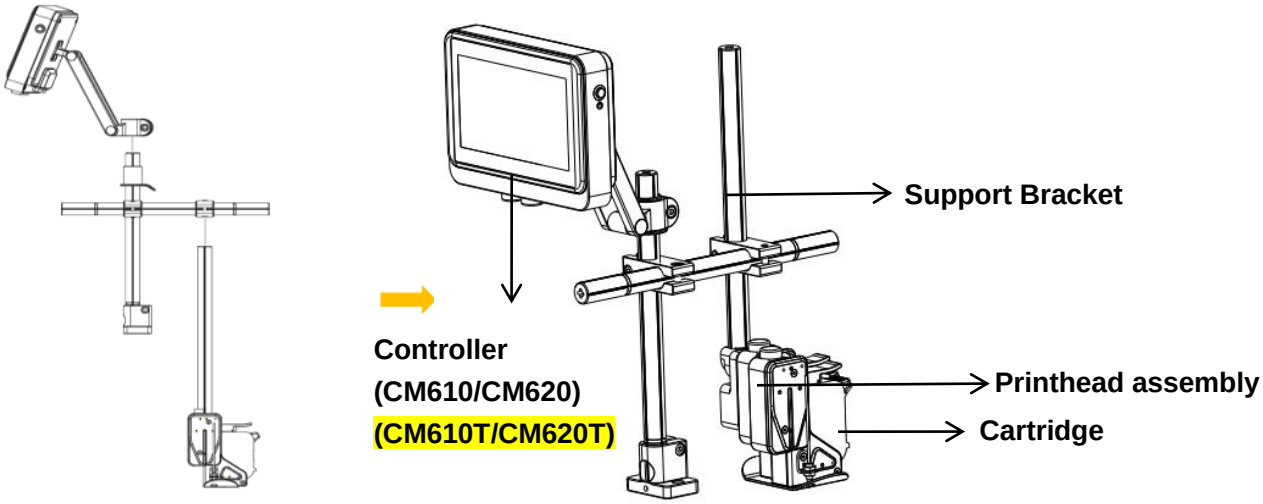
Run information contains the information of various parameters of the equipment, so that operator can quickly understand the current system information of the equipment.

8.Operate the Thermal Inkjet Printer

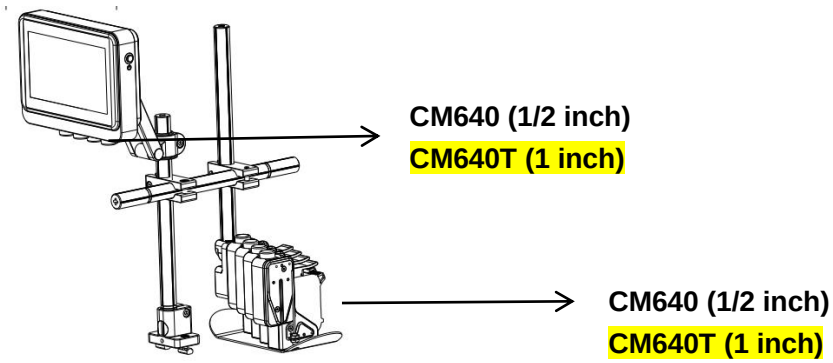
8.1 Installation

8.1.1 Top Level Assembly

Top level assembly includes controller, support bracket, cartridge and printhead assembly.
There are two kinds of controller with different amount of printhead interfaces:
2-printhead-interface controller and 4-printhead-interface controller.
CM610 / CM 610T and CM620 / CM620T have two printhead interfaces which can be connected to at most two printhead assemblies.



CM640 / CM640T has four printhead interfaces which can be connected to at most four printhead assemblies.



8.1.2 Accessory

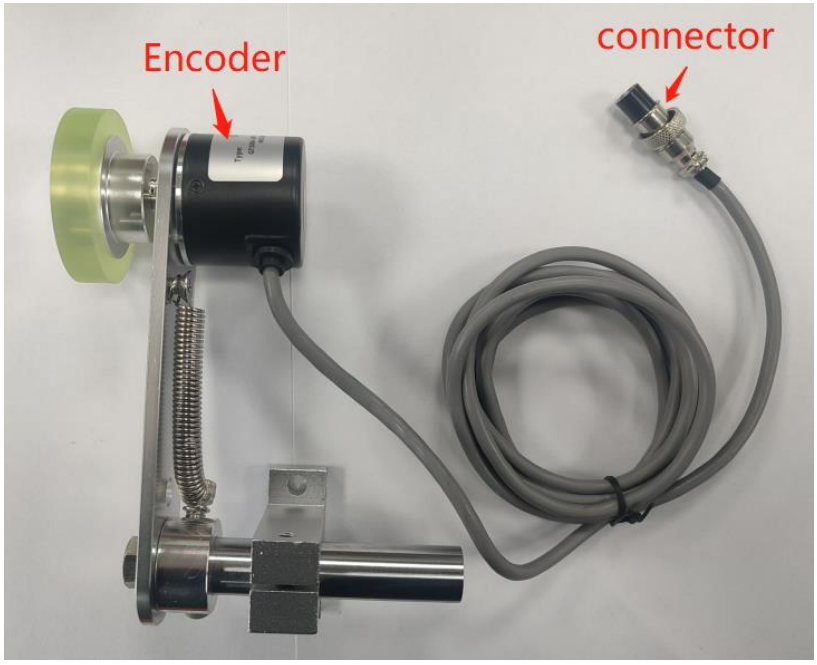
Optical fiber sensor set

Control output: NPN collector output

Power supply: 12-24V

Current consumption: ⩽50mA

Note: Refer to the attached manual for the use of optical fiber sensor set.



Encoder

Encoder (with aviation plug 'GX12-4P' preassembled), bracket, wheel and necessary fastener are included in. 2500PPR

Control output: NPN collector output

Necessity of connecting encoder to controller:

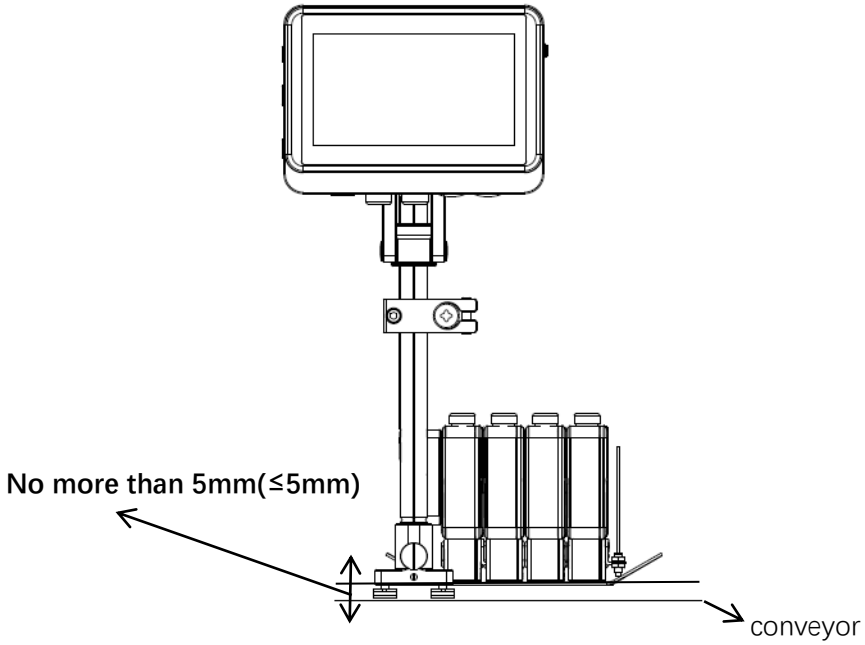
Sometimes the print content is stretched or shortened because of unstable speed of conveyor. To avoid such situation, encoder must be connected to TIJ so that the print speed can match the conveying speed and content can be accurately printed.

Note: Refer to the attached manual for the use of encoder.

8.2 Attention For Installing

1. Stability of support bracket:
Set the support bracket in a reasonable angle. Do not vibrate or slant it and make sure that the support bracket is stable.

2. Nozzle height
Make sure that the distance between nozzle and print target is no more than 5mm.



3. Power
Make sure that the power is grounded.

8.3 Insert the ink cartridge

8.3.1 Correct way of inserting

(1) Insert the cartridge parallel to the bottom.

(2) Adjust the angle of the cartridge so that the nozzle can be fully exposed in the hole, and be careful not to touch the pins.

(3) Press in the cartridge and close the clip.

After inserting the ink cartridge correctly, the screen will display the percent of the ink

8.3.2 Correct way of removing

(1) Open the clip and pull the cartridge up gently.

(2) Adjust the angle of the cartridge so that the cartridge does not touch the pins.

(3) Remove the cartridge.

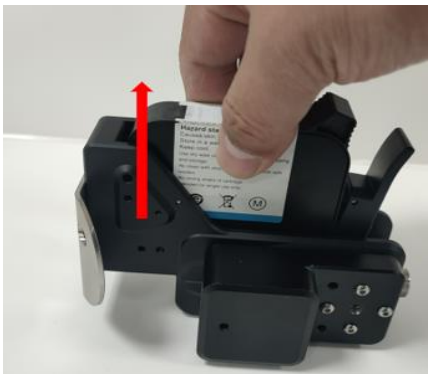
8.3.3 Incorrect way of inserting

(1) Insert the cartridge diagonally and the cartridge touches the pins.

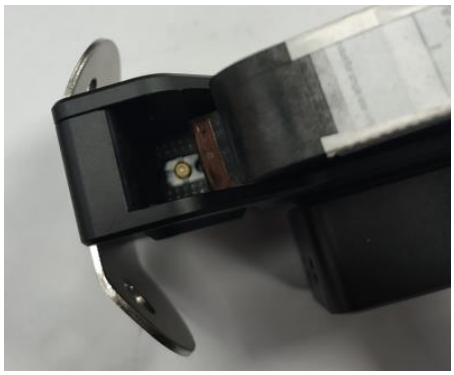
(2) Close the clip before inserting the cartridge completely.

8.3.4 Incorrect way of removing

(1) Pull out the cartridge violently before opening the clip.



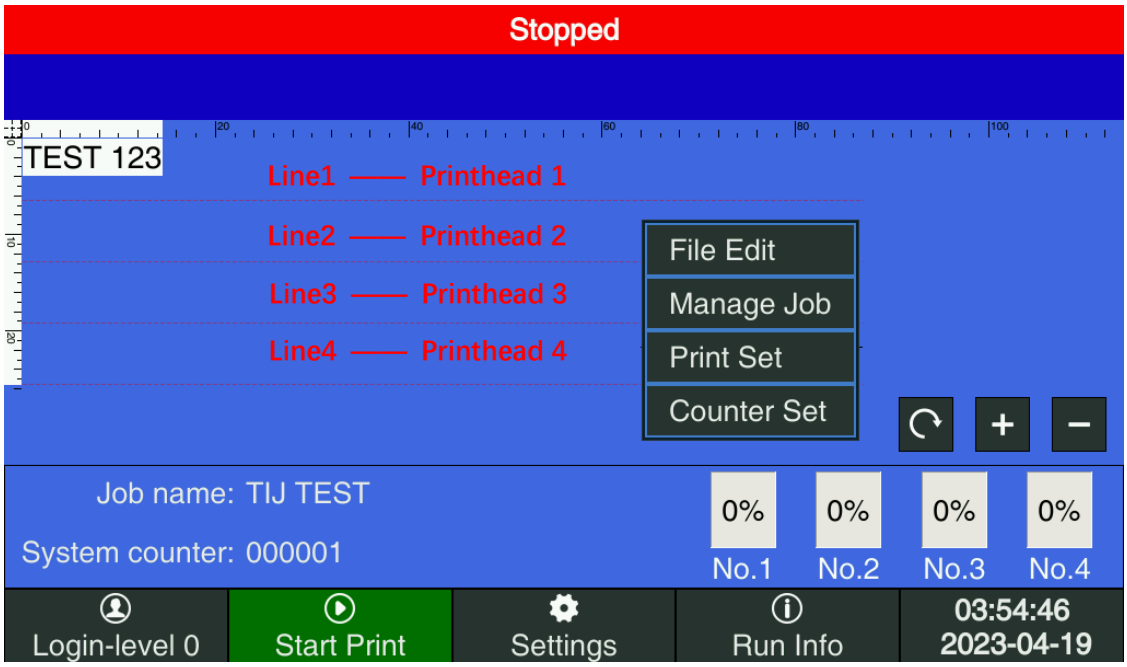
(2) The pins are pressed down while removing the cartridge.



8.4 Print

◆ Step 1: Create a new file that will be printed.

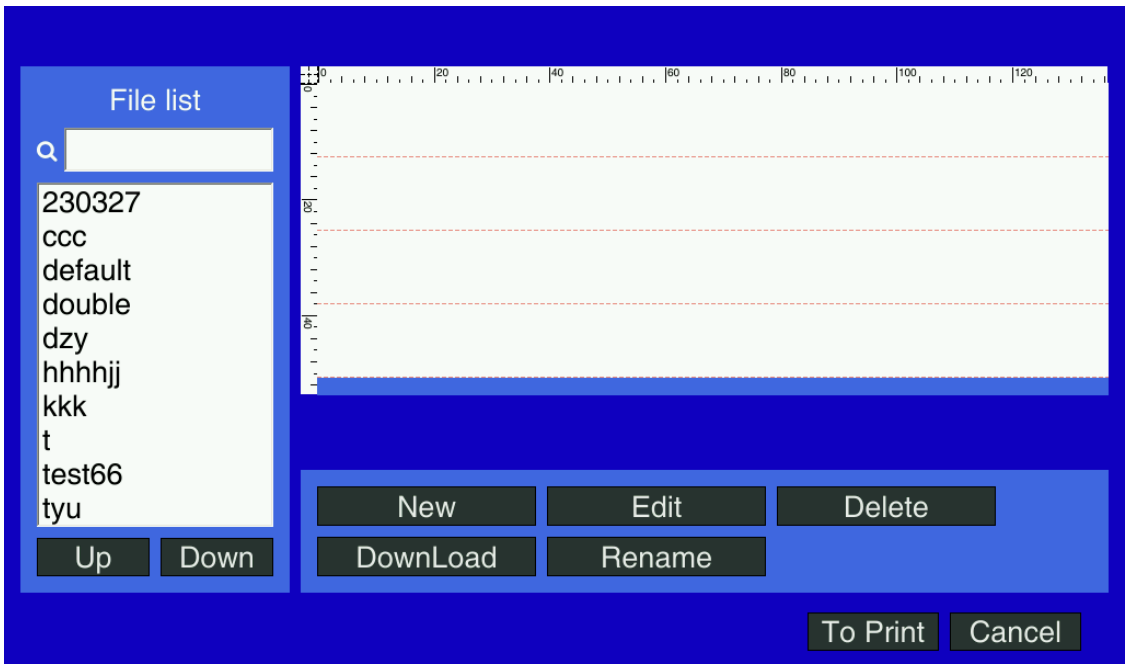
1) Long press the screen for 1-2 seconds to wake up the edit menu.



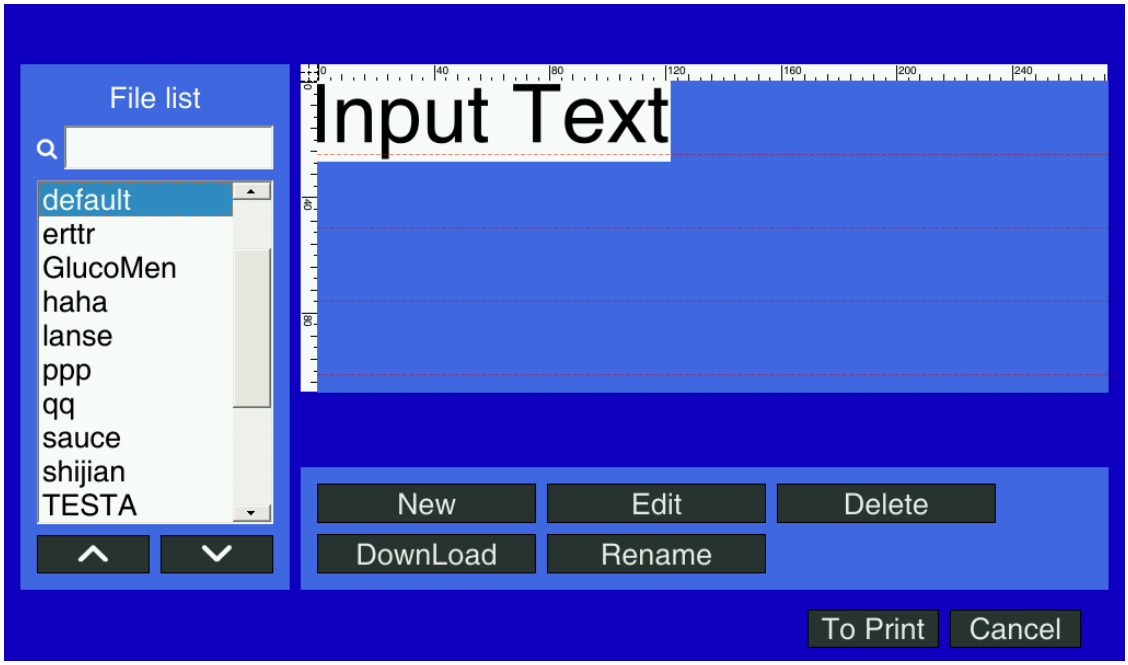
* (1/2 inch)

* (1 inch)

2) Press 'Manage Job'

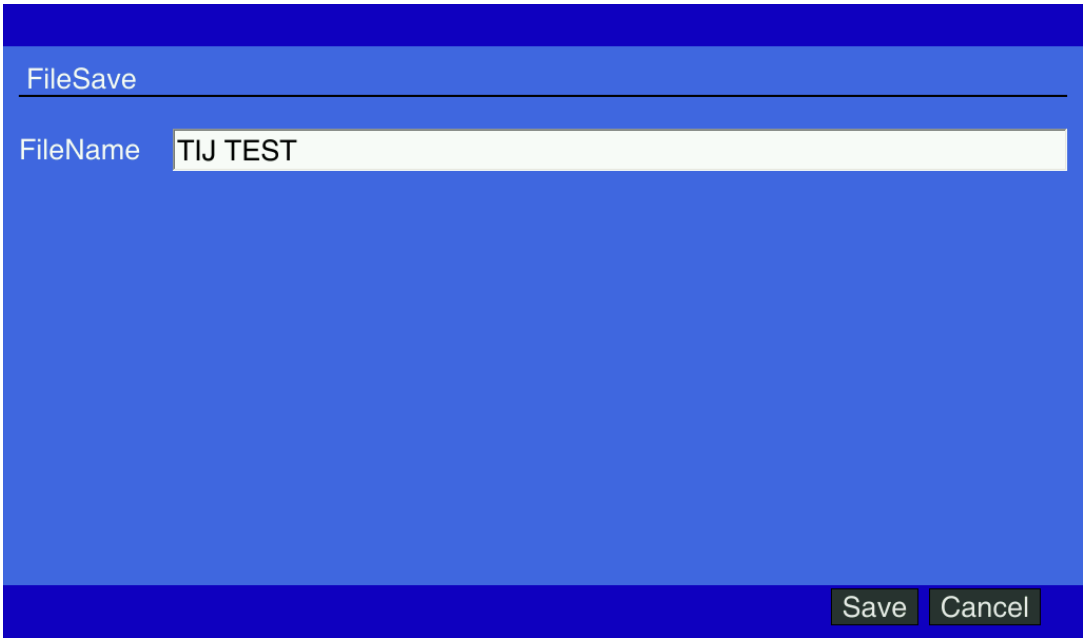


* (1/2 inch)



* (1 inch)

3) Press ‘New’



Input the filename. for example: TIJ TEST. Then press ‘Save’

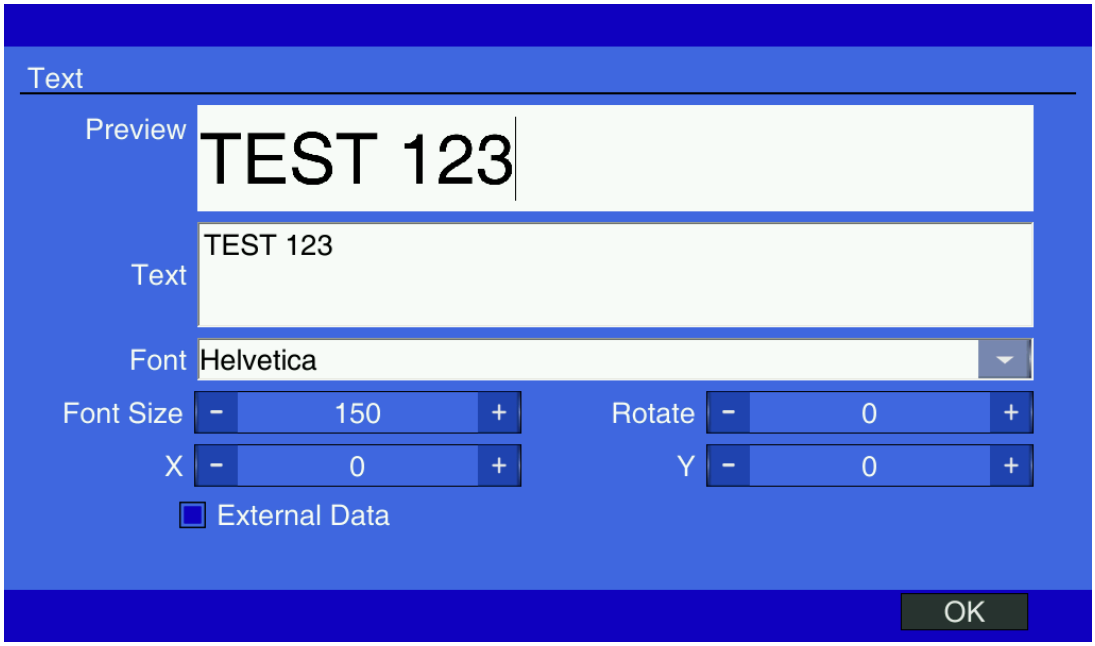
4) It can create text, time, counter, barcode, image, QR code and shift.

Press 

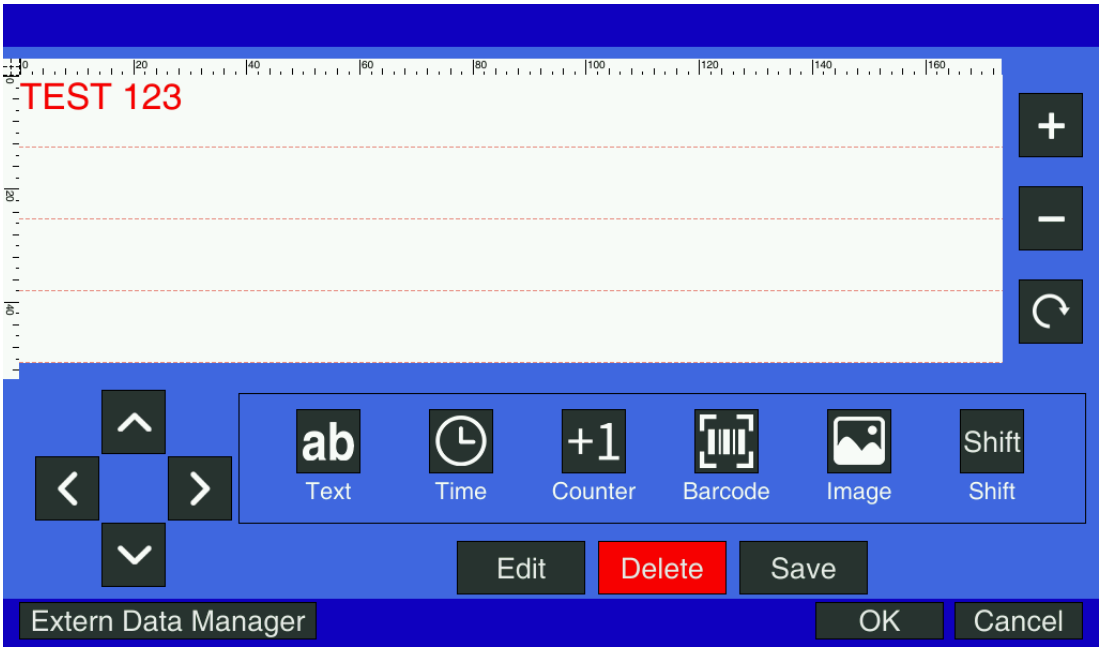
icon to create a text file.

5) Input the TEST 123 in column Text for example

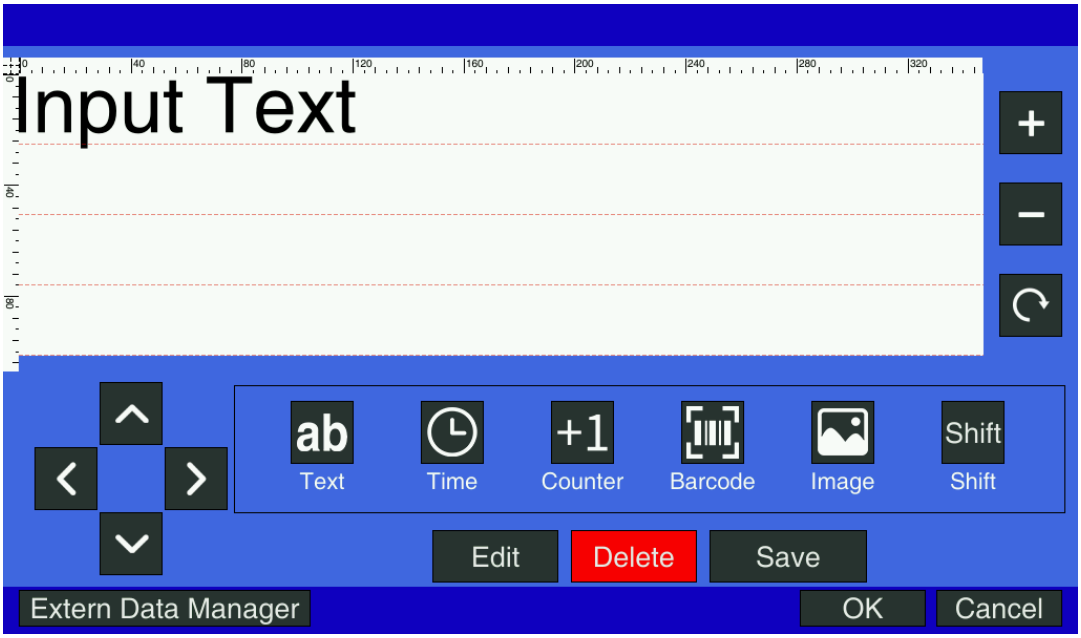
Press ‘Confirm’



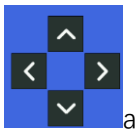
Press OK



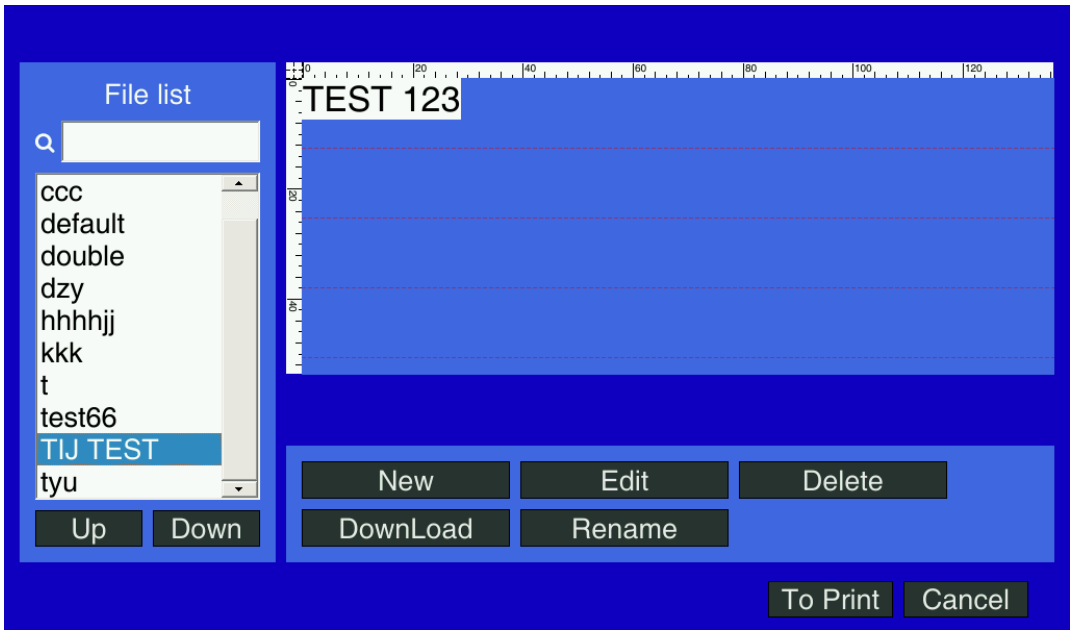
* (1/2 inch)



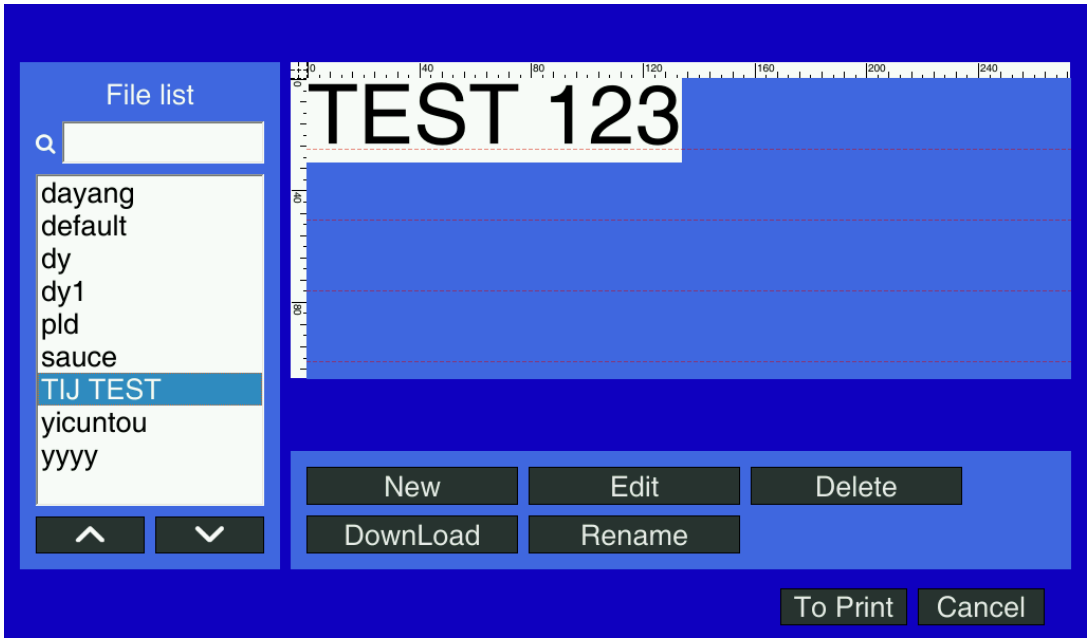
* (1 inch)

Press  arrows to adjust the position, then press OK

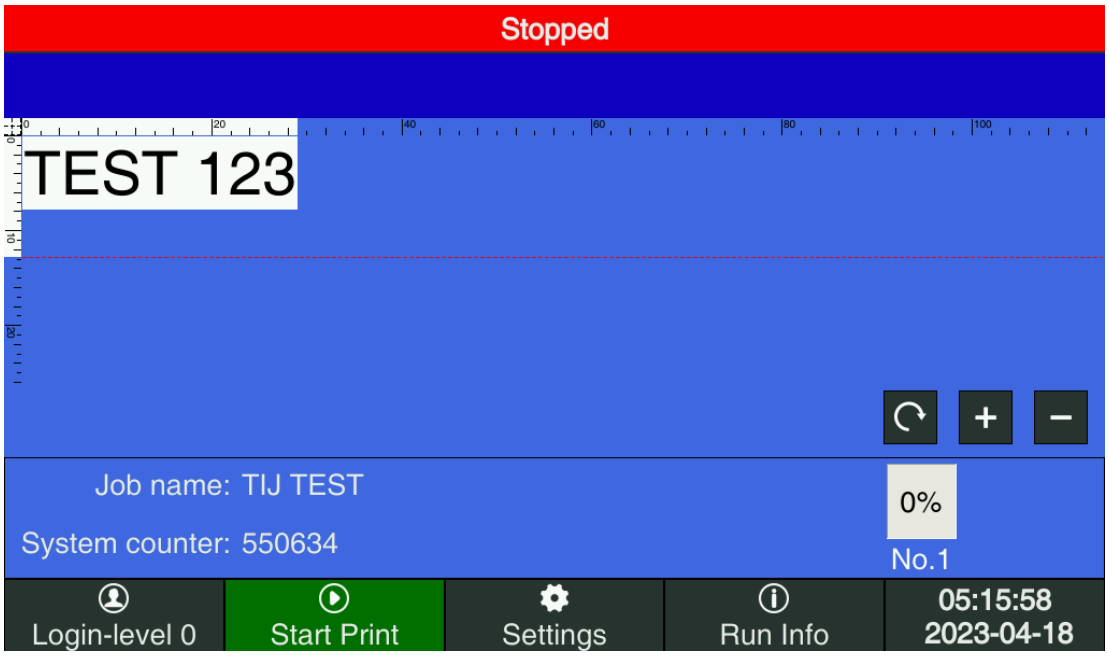
6) Press 'To Print'



* (1/2 inch)



* (1 inch)

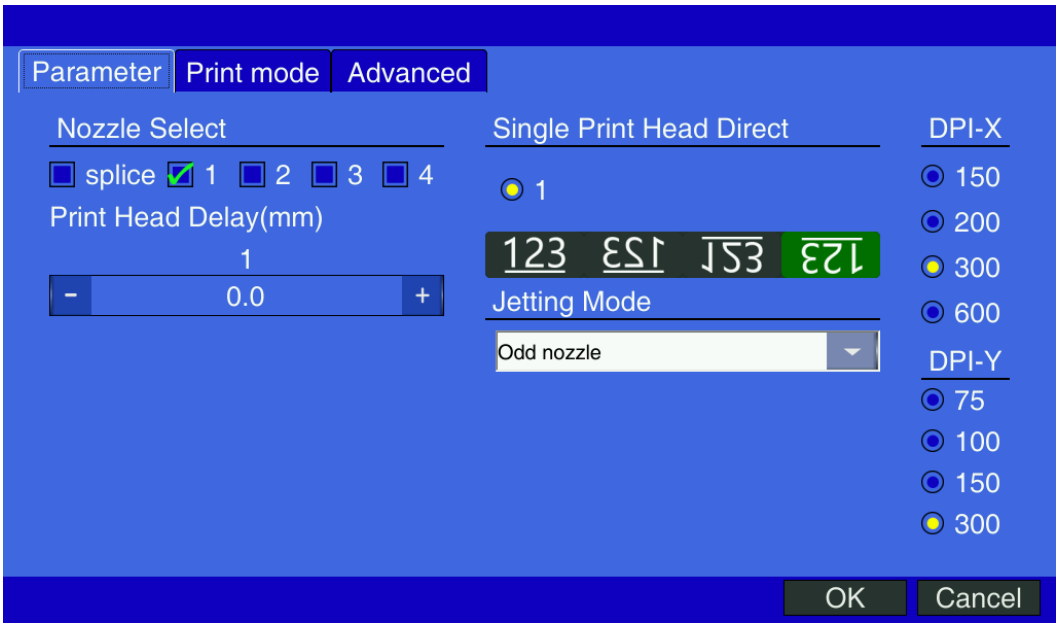


* (1/2 inch)

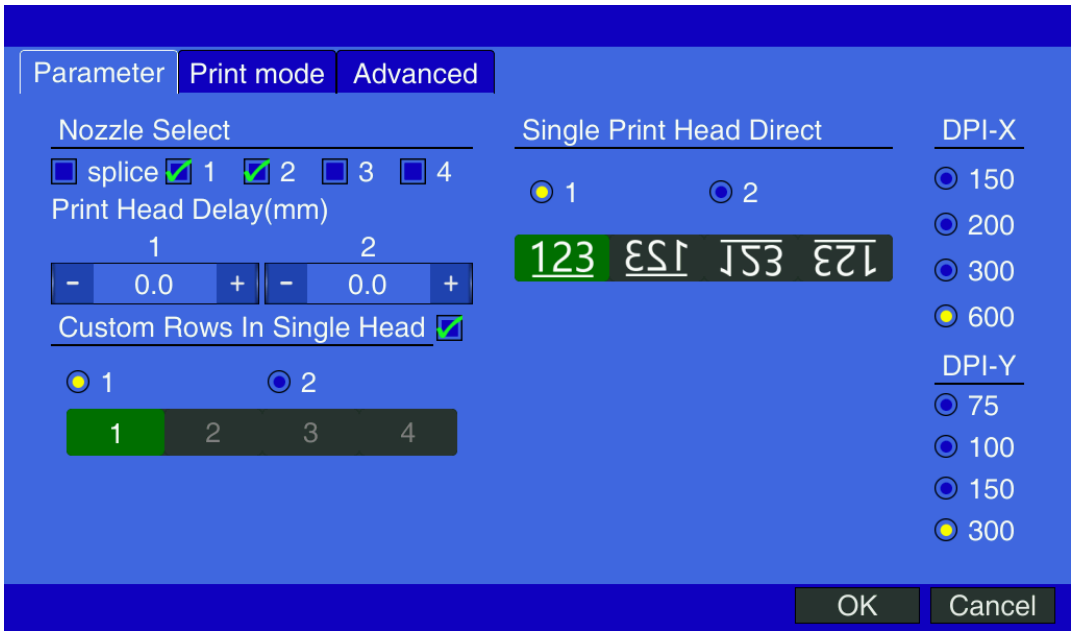
*** (1 inch)**

Create the file successfully.

◆ Step 2: Print set: Long press the screen, select 'Print Set'



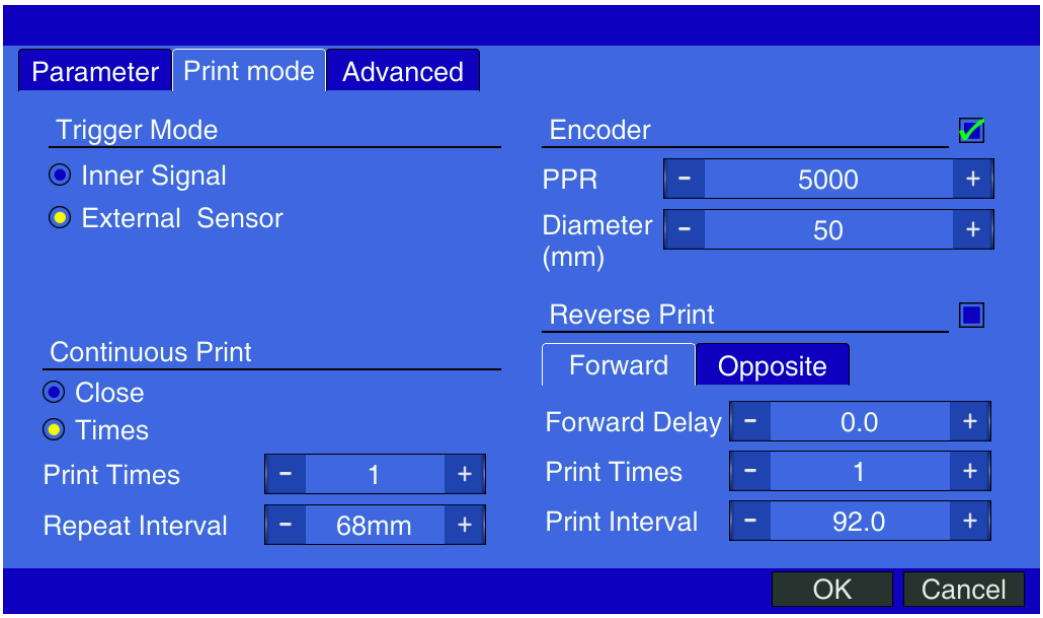
For 1/2" with Jetting setting mode



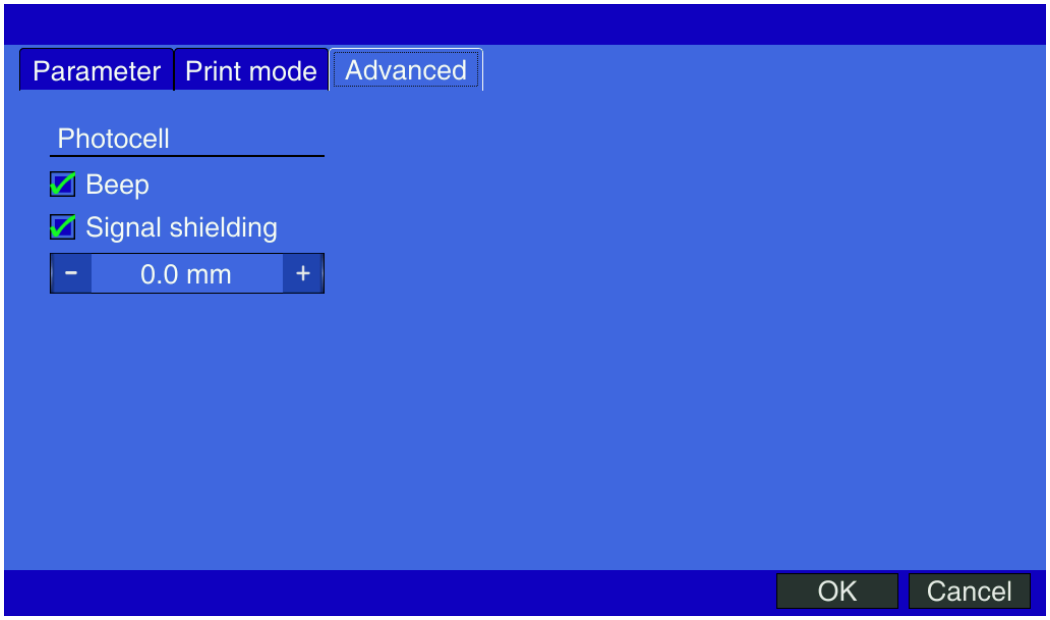
For 1" without Jetting setting mode

Parameter page is for printing parameter settings, operator can set the print head delay, print grayscale (the higher value, the greater ink output). Switching between different print nozzles after using a period of time can make the ink cartridges more durable.

Note: For each printhead, only when it is connected to the corresponding printhead interface can the Nozzle Select function take effects.

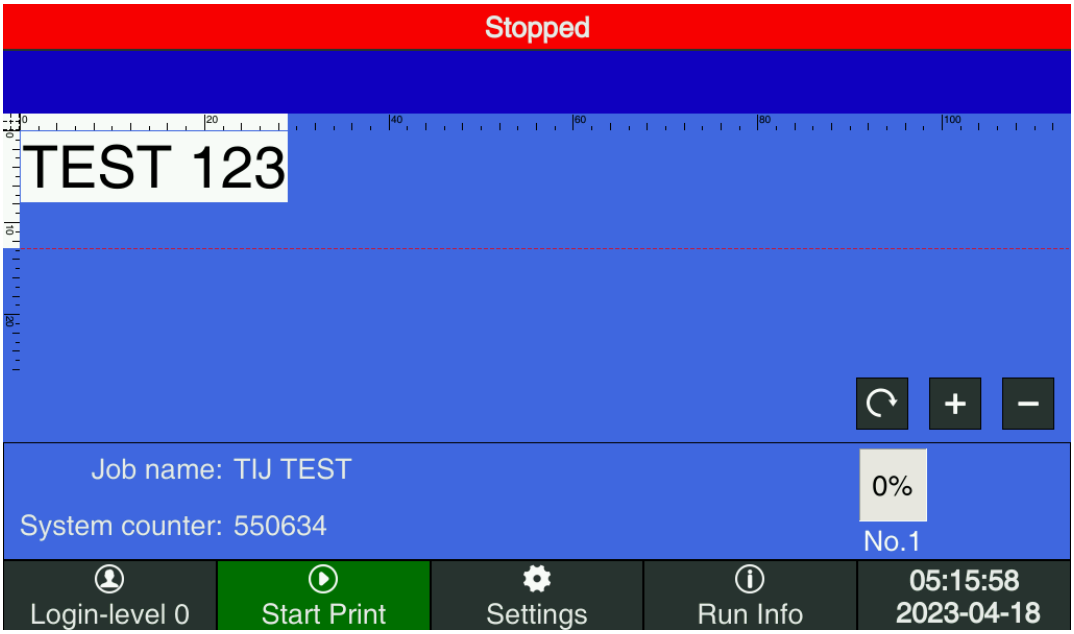


In the Print mode page, operator can select the trigger mode of the device's printing. Increase or decrease the value of the synchronization multiplier parameter, and the proportion of the output print content will be adjusted. When the trigger mechanism of the device is activated, the interval between printing content can be set.



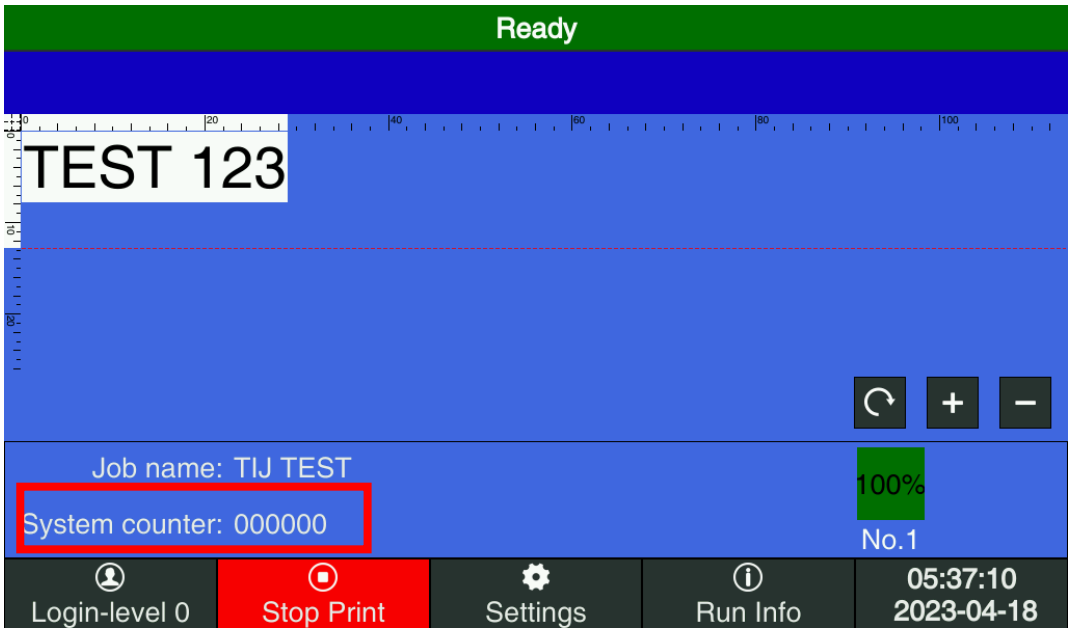
If Beep option is selected, 'Beep' can be heard once per printing is finished.
If Signal shielding is selected, print signal will not be triggered again within certain distance from the first triggered signal location.

◆ Step 3: Start printing



Press 'Start Print' (1/2 inch)

Press 'Start Print' (1 inch)



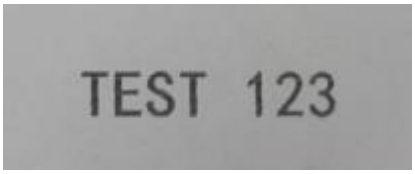
* (1/2 inch)

* (1/2 inch)

When 'Ready' is shown in status bar, it is ready to print now.

Operator needs to activate the encoder and trigger the optical sensor.

The **System counter** value will increase by one once it is printed successfully, .



Print result

9.Maintenance

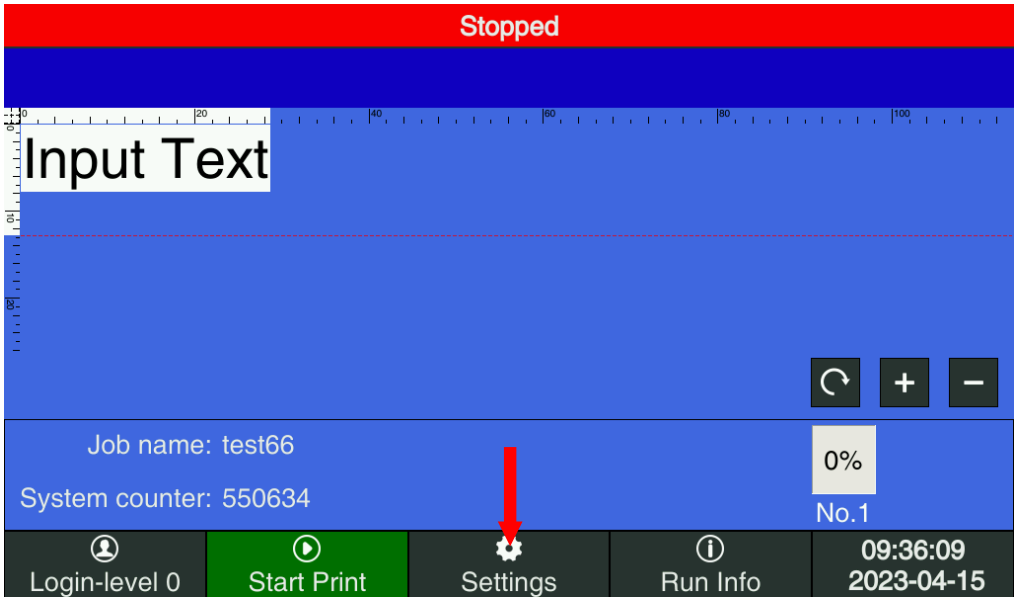
9.1 Maintain the printhead daily

1) Please insert the ink cartridge and remove the ink cartridge correctly.
2) Don't touch the printhead pin
3) If the nozzle is dirty, clean it with non-woven fabrics gently and in the same direction.

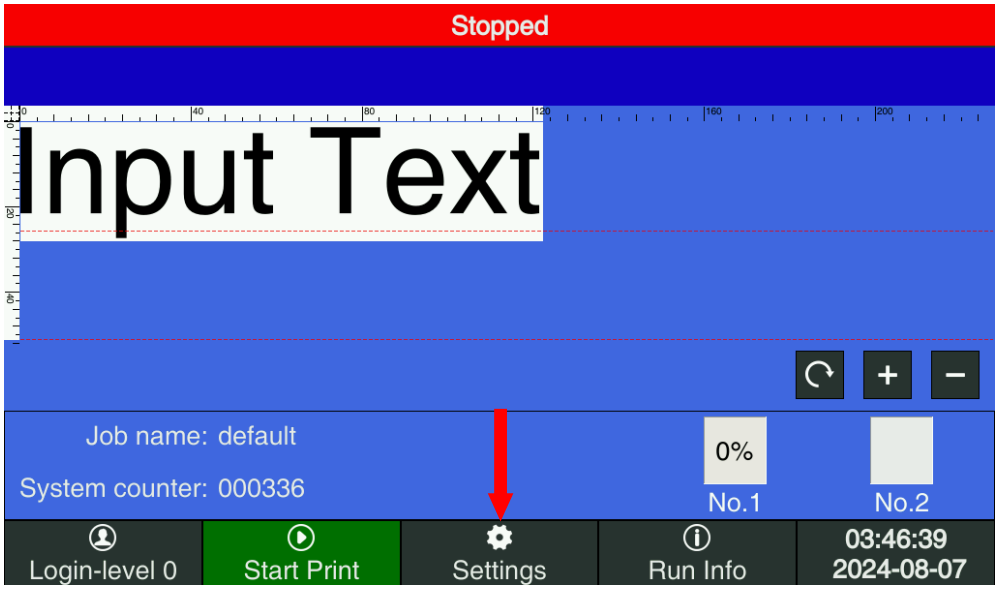
9.2 Nozzle clean

Before starting to print, it is suggested that operator should print some content in advance for testing. If the print result has line defects, or the result is fuzzy, it is necessary to clean the noozle.

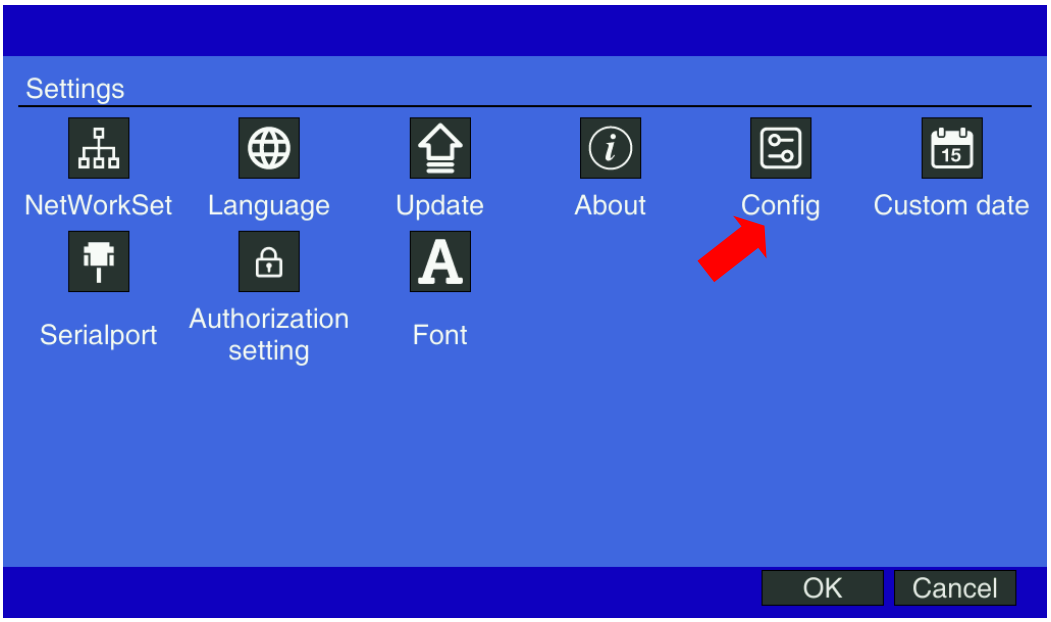
Press 'Setting'---select 'Config'



* (1/2 inch)

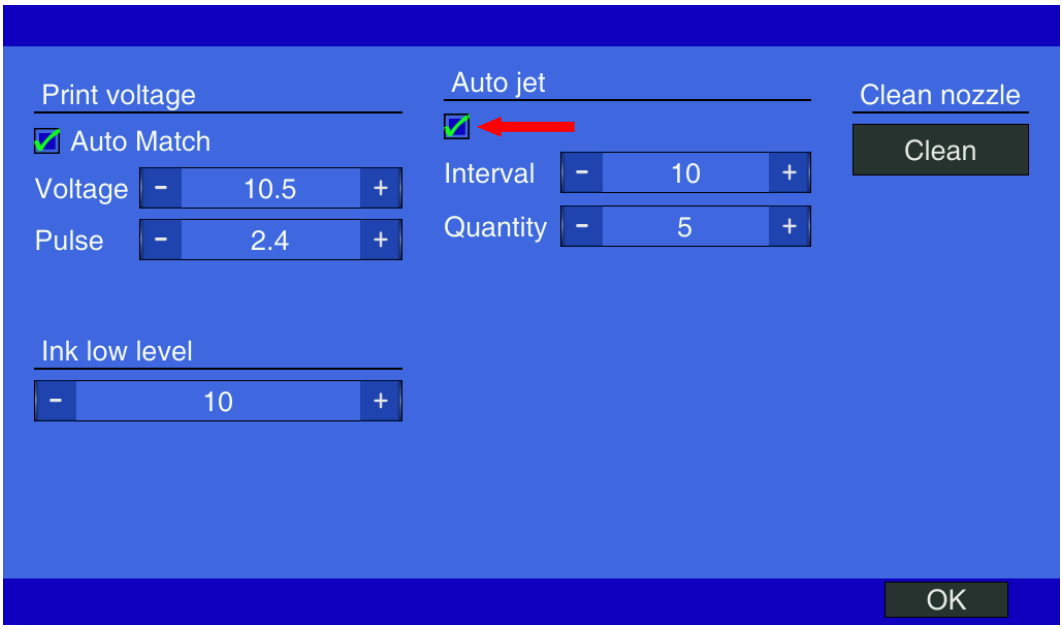


* (1 inch)



Long press 'Clean'

It is recommended to enable ‘Auto jet’.



Then set the interval and quantity according to individual needs.

As the above picture, the nozzle will jet 5 times automatically every 17 seconds.

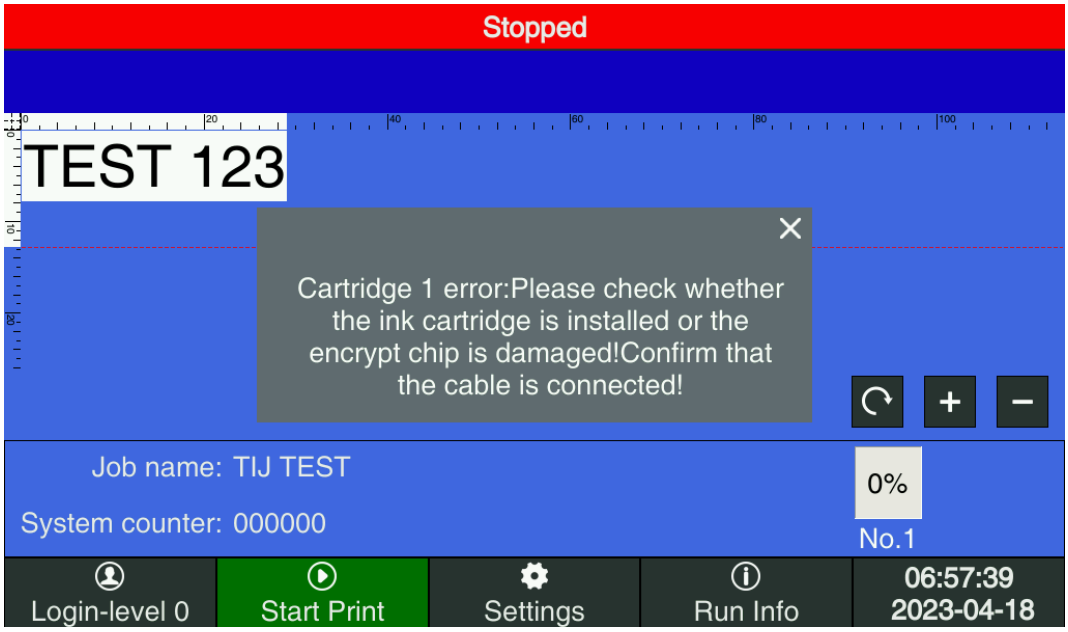
Auto jet can prevent the ink in the nozzle from getting dry.

Note: ‘17’ and ’5’ are not mandatorily set values, they can be altered.

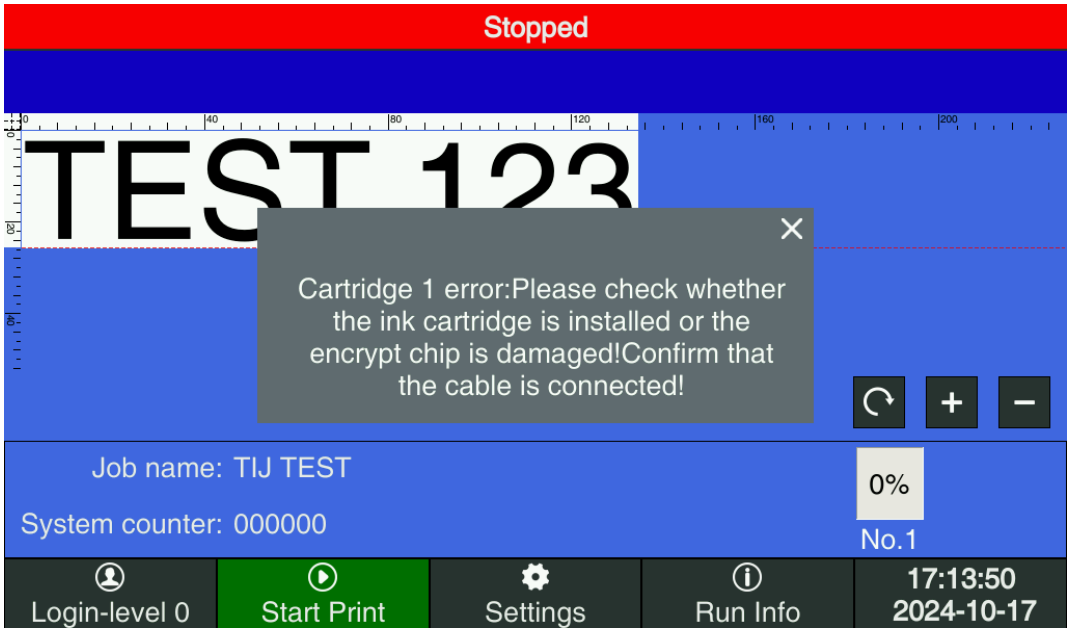
9.3 Troubleshooting

9.3.1 Cartridge Error

When TIJ display Cartridge error, as shown in the picture below.

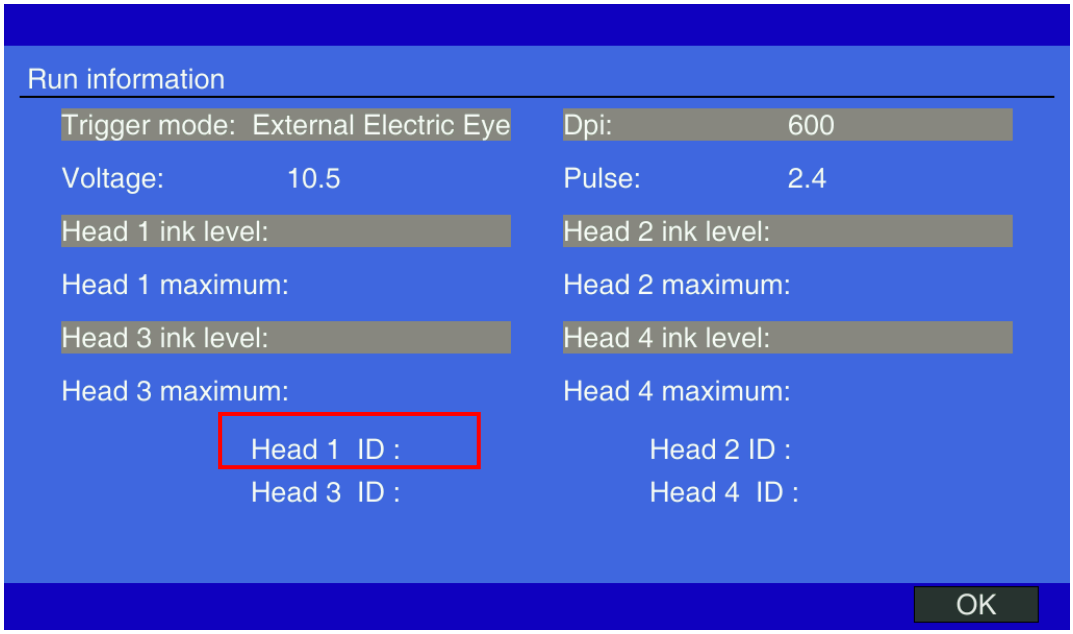


* (1/2 inch)



* (1 inch)

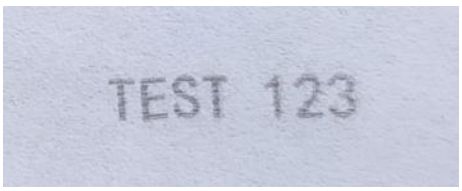
First, please check the Head ID in 'Run Info'. If Head ID is empty, please long press 'Clean' button in Config and check for ink spray.



If any ink comes out, that means printhead/ cable/ controller are normal and connected well, it might be chip's problem. If there is no ink out, please check if printhead/ cable/ controller are normal and connected well.

9.3.2 Poor print quality

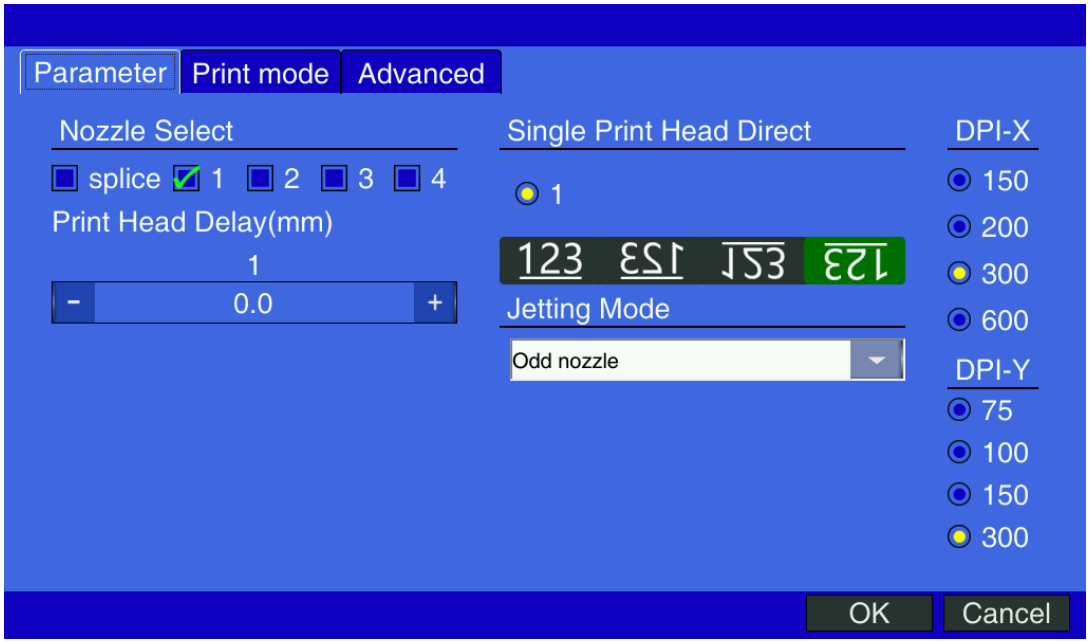
If print result is fuzzy and bad, shown as the picture below



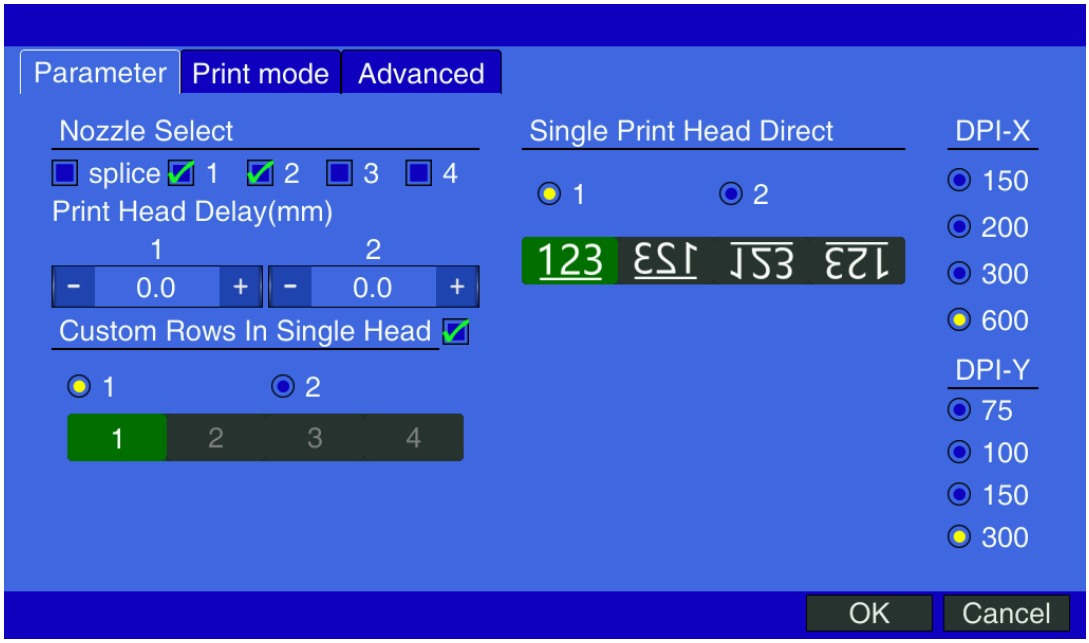
Maybe there are several reasons about it:

1) DPI is too low in the parameter.

Higher DPI can be selected.



* (1/2 inch)



* (1 inch)

2) The distance is too far between the nozzle and the object that will be printed.

The distance should be no more than 5mm and the object should not touch the nozzle.

3) The printhead, cartridge or cable is damaged.

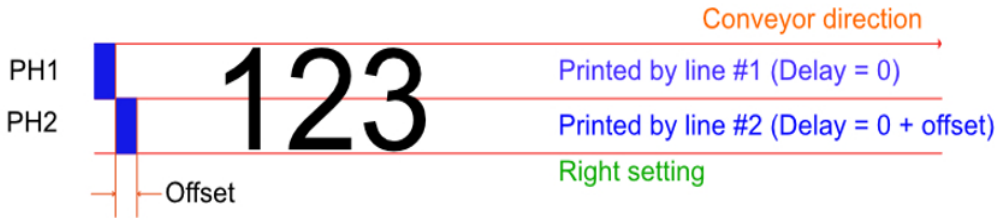
Please replace the printhead, cartridge or cable.

9.3.3 Combination failure for multi-lines

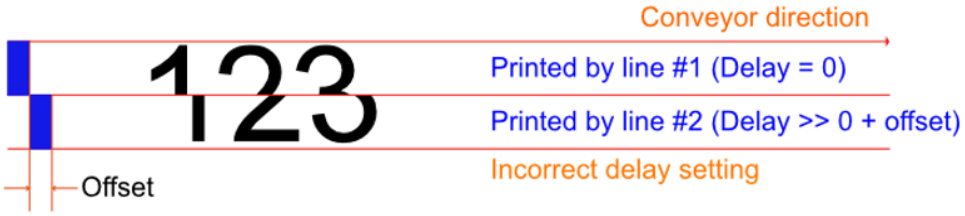
1) When multiple printheads are used for combination, Printhead1 and Printhead2 should be perpendicular to the moving direction of conveyor and the printhead delay value

should be correct.

Well combination and printhead delay value, the print result is shown as the picture below:



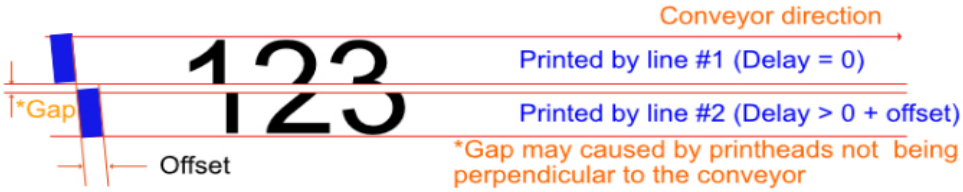
2) If Printhead1 and Printhead2 are perpendicular to the direction of conveyor, but the printhead delay value is incorrect, the result is shown as the picture below:



Please adjust the printhead delay value.

3) It will have a gap between PH1 and PH2, if the printheads is not perpendicular to the moving direction of the conveyor.

The result will also not be OK, as the picture shown below:

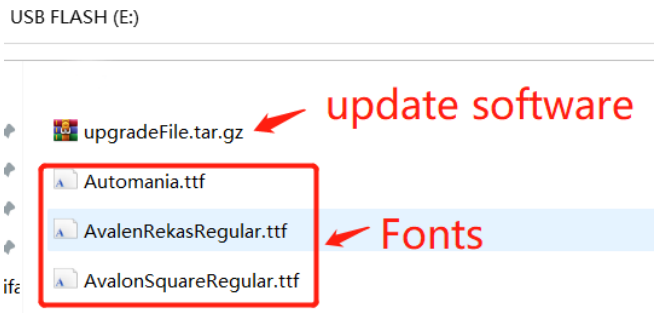


Firstly, fix the gap between PH1 and PH2 by aligning both of them.

Then, adjust the printhead delay value.

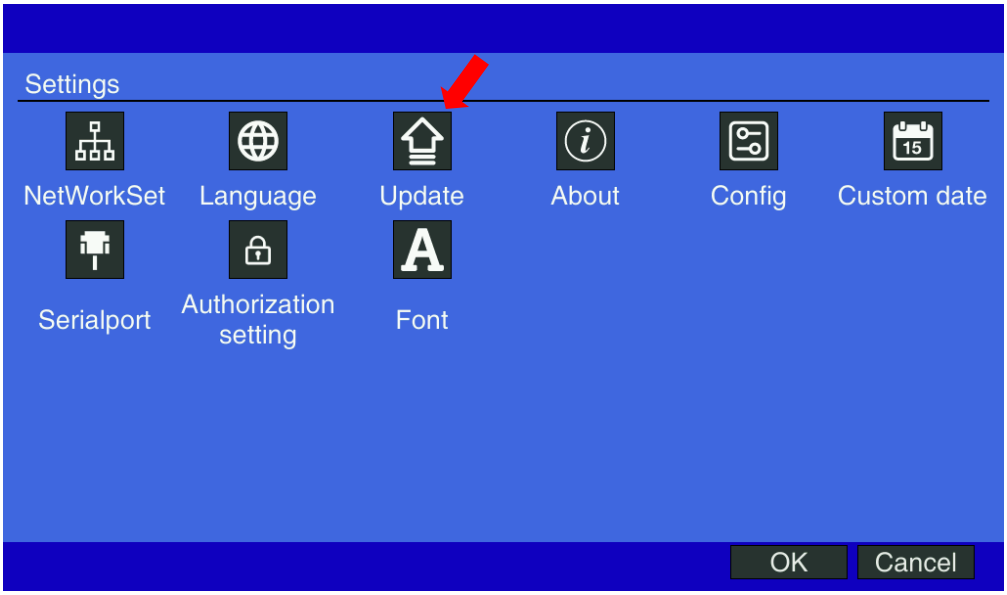
9.4 Software Update

1) Copy the update software to usb flash drive



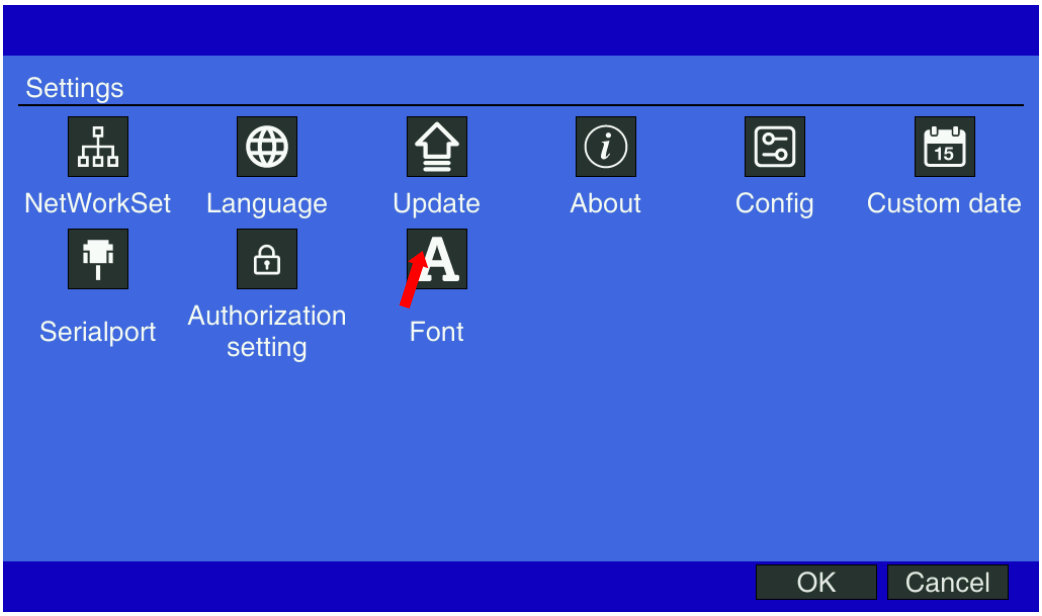
2) Insert the usb flash drive to TIJ usb port

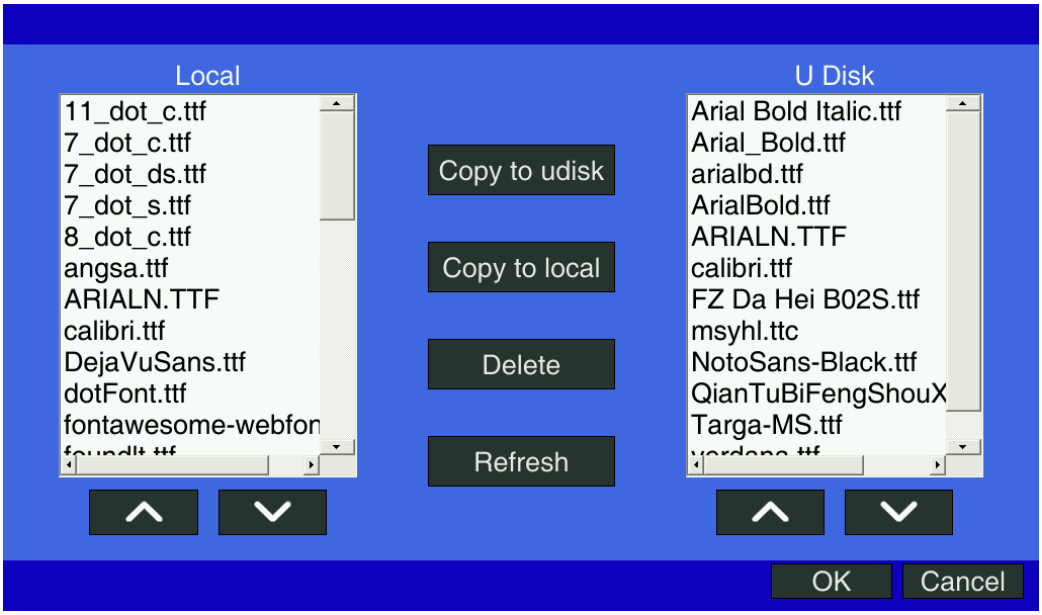
3) Press 'Settings', press 'Update'. TIJ will update the software automatically.



9.5 Import Font

1). Copy the fonts to usb flash drive
2). Insert the usb flash drive to TIJ usb port
3). Press ‘Settings’, press ‘Font’.

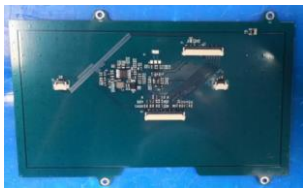
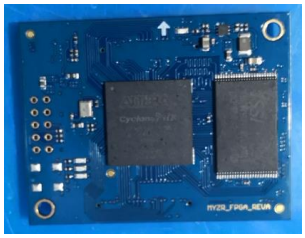




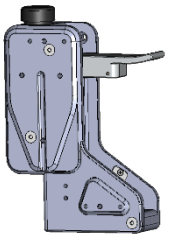
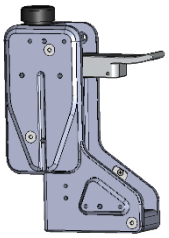
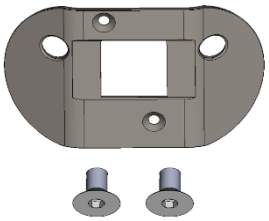
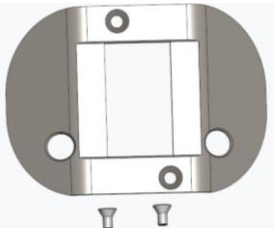
4). Select the font file(*.ttf) in the usb, press ‘Copy to local’.

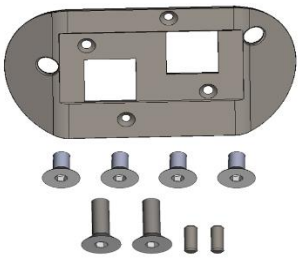
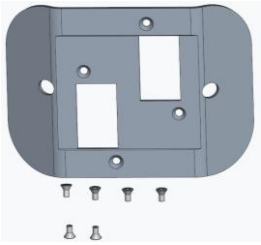
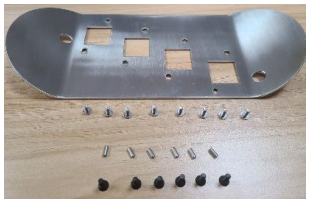
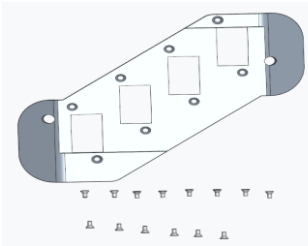
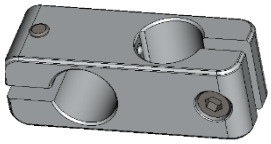
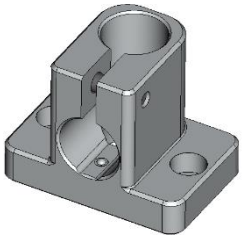
10.Appendix

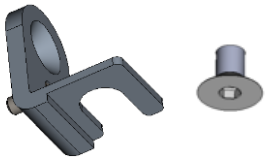
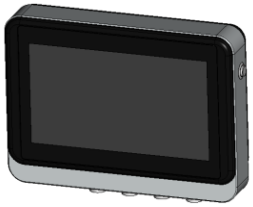
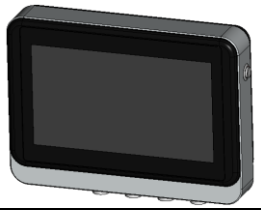
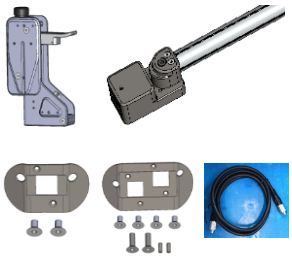
Spare parts list

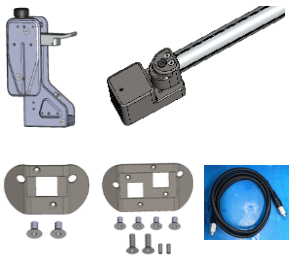
No.	Part No.	Part Name	Reference Picture	Note
1	C2.ZJ.0040A	TIJ Touch screen set		For TIJ controller, HMI
2	C3.BZ.0001QDB	TIJ Screen driver board		For TIJ controller screen driving
3	C3.BZ.0001ZB.2T	TIJ Main board-Double head		For TIJ controller
4	C3.BZ.0001ZB.4T	TIJ Main board-Quadruple head		For TIJ controller
5	C3.BZ.0001FPGA	TIJ FPGA Core board		For TIJ controller

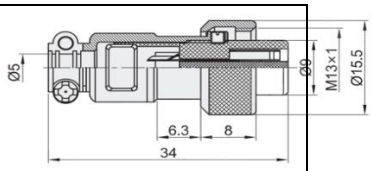
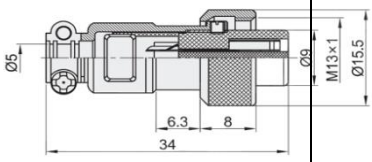
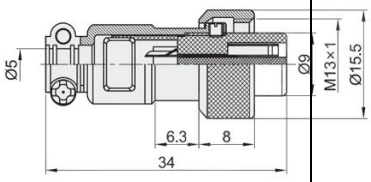
6	C3.BZ.0001CB	TIJ CB200 Core board-CK		For TIJ controller
7	C3.KG.0002A	TIJ 3.0 Switch assembly		For TIJ controller
8	C3.BZ.0001JKB	TIJ Power interface board		For TIJ controller
9	C3.BZ.0002QDB	TIJ Driver& connection board		For TIJ printhead
10	C3.BZ.0003QDB	TIJ Printhead driver board		For TIJ printhead
11	C4.H30H00.1500	TIJ Data cable		For TIJ printhead and controller connection
12	C4.H30H00.5000	TIJ Data cable 5m		For TIJ printhead and controller connection
13	C2.ZJ.0038A	TIJ Power adapter assembly		For TIJ controller power supply

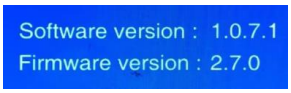
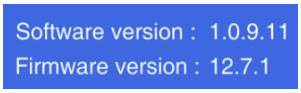
14	Y4.P03H4A.1200	American standard		By default, the plug type depends on market
15	Y4.P03H4B.1200	European standard		By default, the plug type depends on market
16	C2.ZJ.0018A	TIJ Printhead assembly (1/2 inch)		Use with TIJ controller
17	C2.ZJ.0018B	TIJ Printhead assembly (1 inch)		Use with TIJ controller
18	C2.WJ.QT0077B	TIJ Guide plate kit for single head (1/2 inch)		Use with TIJ printhead, protect nozzle
19	C2.WJ.QT0077C	TIJ Guide plate kit for single head (1 inch)		Use with TIJ printhead, protect nozzle

20	C2.WJ.QT 0078B	TIJ Guide plate for double head (1/2 inch)		Use with TIJ printhead, protect nozzle, used to combine two printheads together to enlarge the printing height
21	C2.WJ.QT 0078C	TIJ Guide plate for double head (1 inch)		Use with TIJ printhead, protect nozzle, used to combine two printheads together to enlarge the printing height
22	C2.WJ.QT 0105B	TIJ Guide plate for quadruple head (1/2 inch)		Use with TIJ printhead, protect nozzle, used to combine four printheads together to enlarge the printing height
23	C2.WJ.QT 0105C	TIJ Guide plate for quadruple head (1 inch)		Use with TIJ printhead, protect nozzle, used to combine four printheads together to enlarge the printing height
24	C2.ZJ.001 9A	TIJ Buffer mechanism		Use with TIJ printhead, absorb shock and locate printhead working direction
25	C2.ZJ.002 2A	TIJ Cross bar jointer		For D20 bar cross connection and location
26	C2.ZJ.002 3A	TIJ Base connector		Connect D20 bar to base

27	C2.ZJ.0020B	TIJ Sensor bracket set		Used for optical fiber sensor integration
28	C2.WJ.QT0089A	TIJ Bar D20x300		Provide more possibility for printhead together with cross bar jointer
29	C2.ZJ.0017A	TIJ Controller for two printhead		Control the printhead to work as intended purpose
30	C2.ZJ.0045A	TIJ Controller for four printhead		Control four printheads to work as intended purpose
31	C2.ZJ.0021A	Easy-position bracket assembly		Bracket assembly, hold/support the control on its position and angle as intended purpose
32	C2.ZJ.0024A	TIJ Controller support bar assembly		Support to separate the controller from existing bracket system when used together with Base connector
33	C2.ZJ.0041A	TIJ Single-printhead set (1/2 inch)		Inkjet execution unit

34	C2.ZJ.0041B	TIJ Single-printhead set (1 inch)		Inkjet execution unit
35	C2.ZJ.0044A	TIJ Quadruple-printhead set		Inkjet execution unit
36	C2.ZJ.0044B	TIJ Quadruple-printhead set (1 inch)		Inkjet execution unit
37	C4.B40000.100	TIJ FFC 40Pin		For main board and screen driver board connection
38	C4.N1200.200	TIJ Wire harness 12P		For main board and power interface board connection
39	C4.N08000.200	TIJ Wire harness 8P		For main board and power interface board connection
40	C4.B20000.100	TIJ FFC 20Pin		For printhead inner connection

41	C2.ZJ.0042A	TIJ Optical fiber sensor set		  Optical fiber sensor & amplifier set (amplifier with aviation plug 'GX12-3P' preassembled)
42	C2.ZJ.0043A	TIJ Encoder set/GTS06-OP-RAG2500Z1-2M/TIJ		  Encoder (with aviation plug 'GX12-4P' preassembled), bracket, wheel and necessary fastener are included
43	C3.BJ.TBQ0001B	TIJ Encoder GTS06-OP-RAG2500Z1-2M		  Encoder (with aviation plug 'GX12-4P' preassembled) , fastener and coupler are included
44	C5.QT.0038B	TIJ Wheel D50 for encoder		Wheel for encoder, matching shaft with 6mm diameter
45	C3.QT.BJD0003B	Traffic light-DB9-TIJ		Traffic light (With DB9 preassembled)

46		Software Package for controller (1/2 inch)		Base version for 1/2 inch head
47		Software Package for controller (1 inch)		Base version for 1 inch head

Ink cartridge list (1/2 inch cartridge)

No.	Part No.	Part Name	Description
1	YA.MH.TW46B	Cartridge-Water based/Black/CY642K	Black aqueous ink: Enhanced fade resistance, smear resistance and water resistance, excellent optical density, sharpness and barcode readability on various porous and semi-porous substrates
2	YA.MH.TW47B	Cartridge-Solvent based/Black/CYS640K	Black solvent ink: Fast drying time, excellent adhesion and rub resistance, high optical density, and excellent sharpness and barcode readability on semi-porous and non-porous substrates.
3	YA.MH.TW57B	Cartridge-Solvent based/Blue/CYS640B	Blue solvent ink: Good adhesion and rub resistance, excellent sharpness and barcode readability on semi-porous and non-porous substrates
4	YA.MH.TW51B	Cartridge-Solvent based/Red/CYS640R	Red solvent ink: Fast drying time, good adhesion and rub resistance, and excellent sharpness on semi-porous and non-porous substrates
5	YA.MH.TW58B	Cartridge-Solvent based/green/CYS640G	Green solvent ink: Fast drying time, good adhesion and rub resistance, enhanced optical

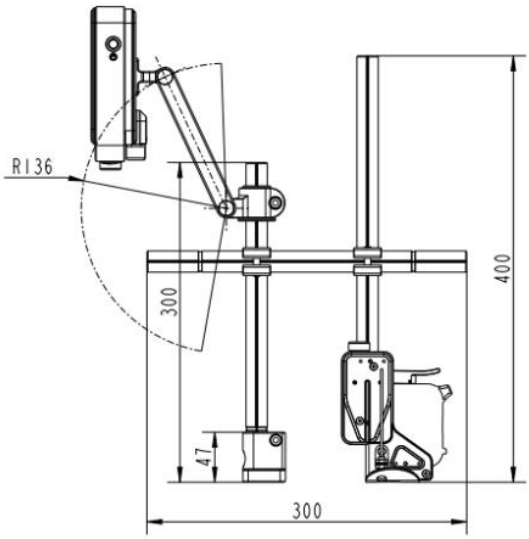
			density and sharpness on semi-porous and non-porous substrates
6	YA.MH.TW59B	Cartridge-Solvent based/yellow/CYS640Y	Yellow solvent ink: Fast drying time, good adhesion and rub resistance, and excellent sharpness on semi-porous and non-porous substrates
7	YA.MH.TW60B	Cartridge-Solvent based/invisible/CYS640I	Invisible solvent ink: Fast drying time, good adhesion and rub resistance, and excellent sharpness on semi-porous and non-porous substrates
8	YA.MH.TW52B	Cartridge-Solvent based/White/CYS640W	White pigment solvent ink: Fast drying time, excellent sharpness, fade resistance and heat resistance on semi-porous and non-porous substrates

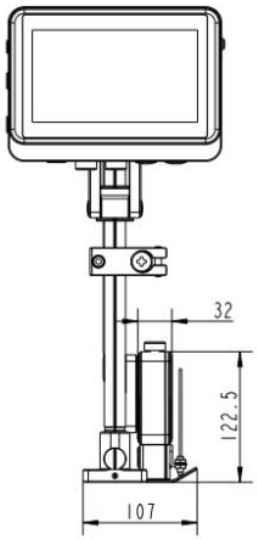
Ink cartridge list (1 inch cartridge)

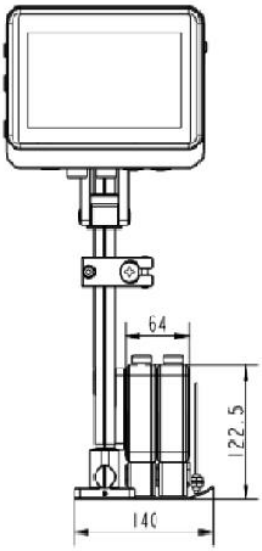
No.	Part No.	Part Name	Description
1	YA.MH.TW81B	Cartridge-Water based/Black/CYW681BK/CK	Black aqueous ink: Enhanced fade resistance, smear resistance and water resistance, excellent optical density, sharpness and barcode readability on various porous and semi-porous substrates
2	YA.MH.TW80B	Cartridge-Solvent based/Black/CYS680BK/CK	Black solvent ink: Fast drying time, excellent adhesion and rub resistance, high optical density, and excellent sharpness and barcode readability on semi-porous and non-porous substrates.

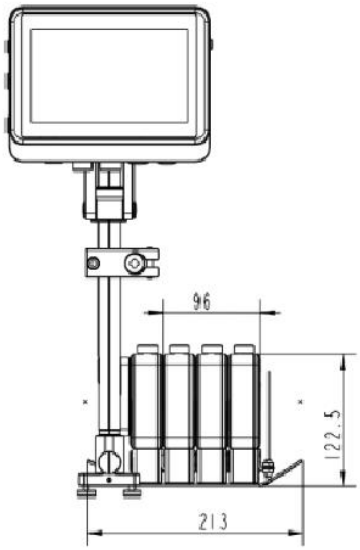
Dimension specification

1. Overall Unit Size(Including 1 inch head)

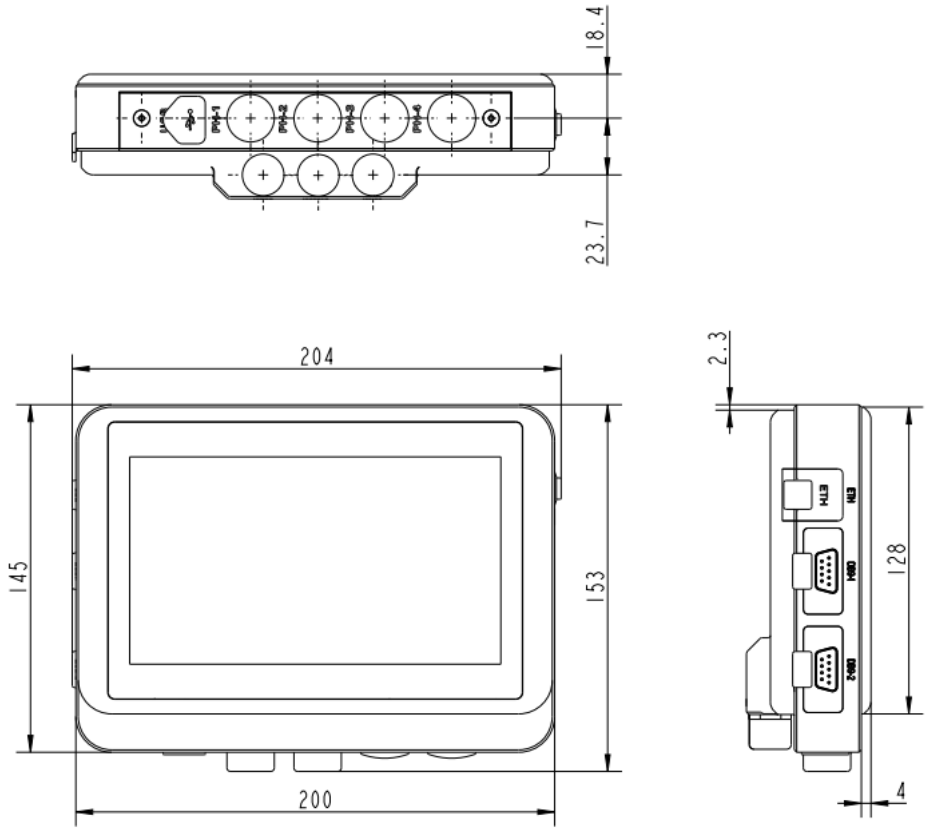






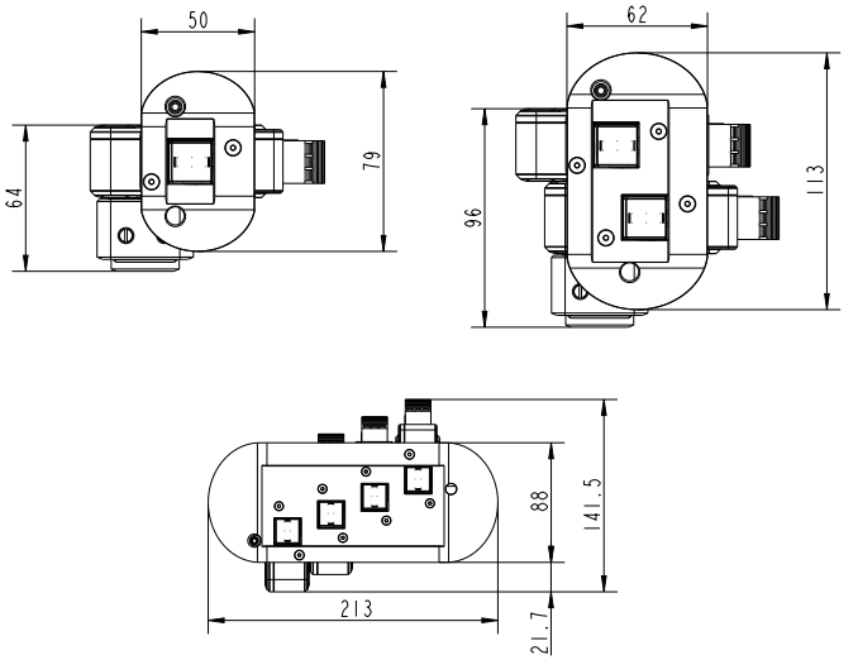


2. Controller Size(Same for both model)

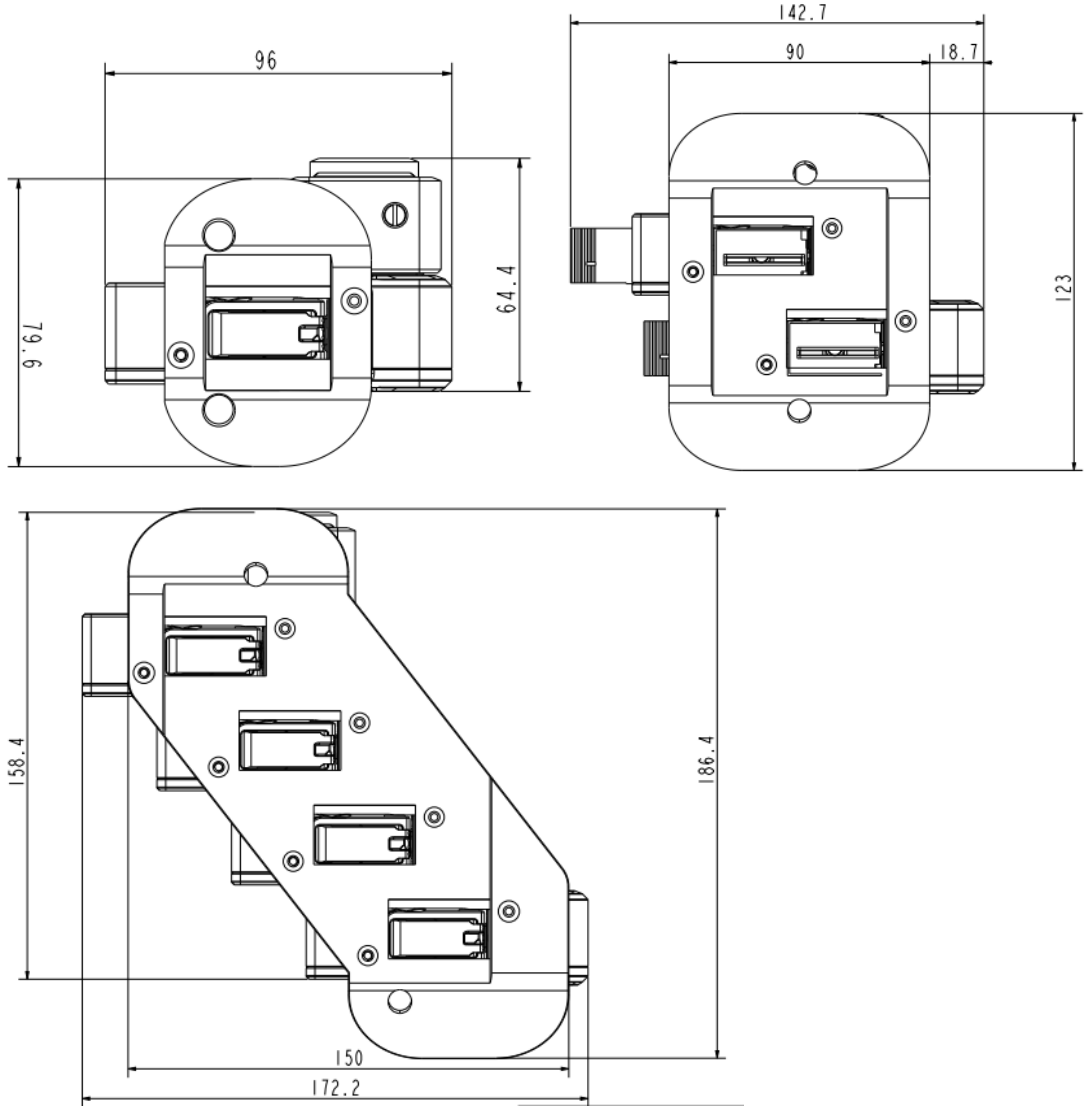


3. Guide Plate Kit Size

For 1/2 inch head



For 1 inch head size:



Cyklop reserves the right to modify the technical characteristics of the product without prior notice.