Printer Utility
For Barcode Printer

Quick Start Guide

Printer Utility Quick Start Guide

1.Basic introduction

    Gainscha PrinterUtility is a well-loved printer setup tool for the international market with a full range of features.

    You can get the status of the printer at any time, read and set the printer information, upload images and fonts, support various printers command send....

    It allows you to troubleshoot and resolve printer errors faster when you encounter them.

1.1 Start the PrinterUtility

    Double click on PrinterUtility and you will be taken to the following
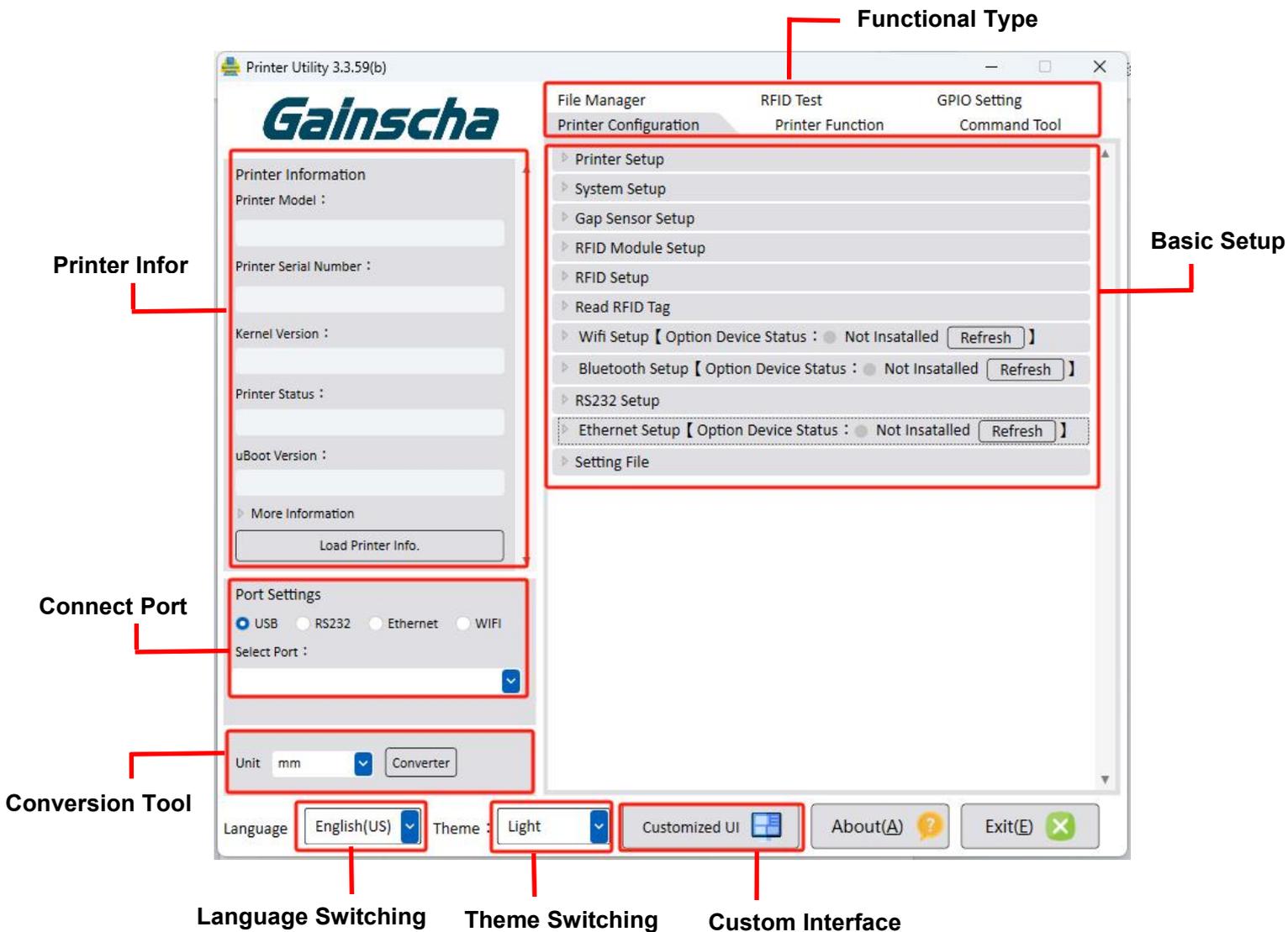
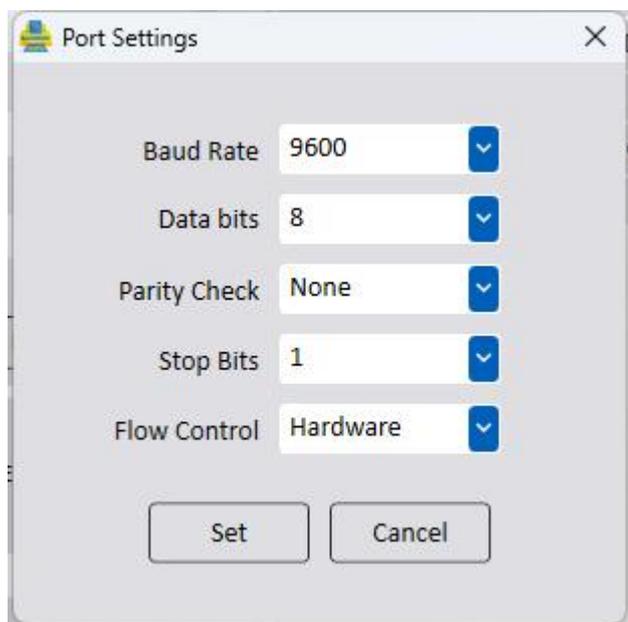## 1.2 Select the port that connects the printer to the PC

Port Settings

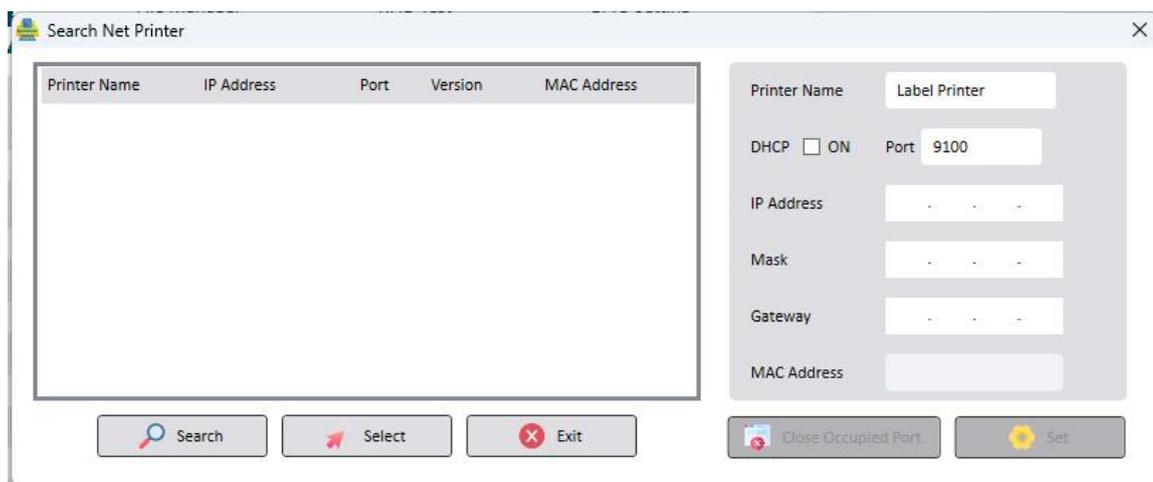○ USB   ○ RS232   ○ Ethernet   ○ WIFI

Select Port：

▲ The USB Port is used by default, and you don't need to set this parameter.

▲ If you select RS-232 then you need to set "Baud Rate", "Date bits", "Parity Check", "Stop Bits", "Flow Control"

Port Settings   ✕

Baud Rate   9600

Data bits   8

Parity Check   None

Stop Bits   1

Flow Control   Hardware

Set   Cancel

▲ If you select Search in Ethernet, you need to perform IP search and select IP operations.

Search Net Printer   ✕

Printer Name	IP Address	Port	Version	MAC Address

Printer Name   Label Printer

DHCP ☐ ON   Port 9100

IP Address   . . .

Mask   . . .

Gateway   . . .

MAC Address

🔍 Search   📌 Select   ❌ Exit   🖥 Close Occupied Port   ⚙ Set

▲ If you choose WAN Connect in Ethernet, you will need to enter the virtual URL and Port Number.
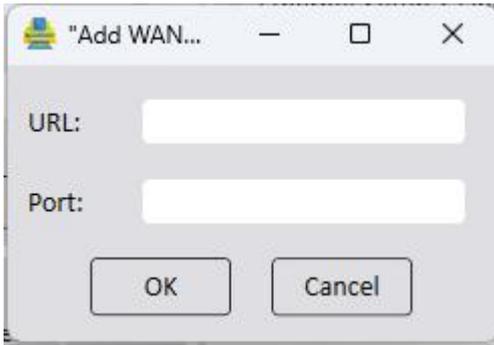
▲ If you choose WiFi, you need to enter the IP port number you set, and search and select.
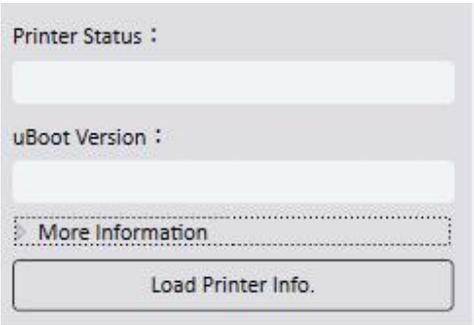
2.Printer Information

▲ If you use USB, RS-232, Ethernet, WiFi, you will get the printer's current model, serial number, firmware version, print length (mm), number of prints, number of cuts, and the printer's resolution.

Printer Information

Printer Model :

Printer Serial Number :

Kernel Version :

Printer Status :

uBoot Version :

Bootstrape Version :

Printed Lengths(mm) :

Printed Labels :

Cutted Count :

DPI :

▲ **Get Status Display**

Printer Status : uBoot Version : ▷ More Information Load Printer Info.	Whenever the red indicator flashes and buzzes, click "Load Printer Infor" and check the Status information returned by the Printer Status interface.

The following list of errors is displayed:

Error Message	Solutions
Ready	1. The current status of the printer is normal and ready to print
Head Open	1. Close print head 2. Check that the left and right sides of the structure are fastened 3. Check the print head sensor for damage
Label Out	1. Check whether the label is used up 2. Check whether the sensor position is correct
Gap Out	1. Check whether the set label type is consistent with the actual label type 2. Whether there is calibration operation before printing 3. Adjust the sensor strength in the tool (manual, weak, weak)
Ribbon Out	1. Check whether the carbon strip has been used up 2. Check whether the silver tail detection function is enabled 3. Check whether the carbon belt recovery shaft and the carbon belt supply shaft are loose
Cutter Jam	1. Check whether a cutting knife is installed 2. Check whether the cutter cable is faulty 3. Flip the cutter gear or press the Pause key to reset
Pause	1. Pressing the FEED key will cancel the pause (For models with only one button) 2. Pressing the Pause key will cancel the pause (For models with two or more buttons)
Printing	N/A
No Cutter	1.This error is generally reported when the cutting function is used when the cutter is not installed
No Peeler	1.This error is usually reported when the peel function is used without Peeler installed
Other Error	1.Overheating protection, after the print head cooling, can print

3.Printer Configuration

3.1 Printer Setup

In this page, you can set the printing speed, printing concentration, label type, After Print, sensor type, etc...

Printer Setup

Speed	5	Direction	Top out
Density	7	Mirror	No
Thermal Mode	Thermal Transf	X Offset(mm)	0.0
Label Type	Gap Label	Y Offset(mm)	0.0
Label Width(mm)	104.1	Reverse Print	No
Cali. Height(mm)	76.2	After Print	Tear Mode
Label Height(mm)	76.2	Print after FEED	Off
Gap Distance(mm)	2.0	Gap Sensor	By Label
Gap Offset(mm)	0.0	Reverse Sensor	Off
BLine Thickness(mm)	0.0	Feed Offset(mm)	0.0
BLine FeedLen(mm)	0.0	Cover Close	Auto Feed
Continue Offset(mm)	0.0	Shift X(mm)	0.0
Shift Y(mm)	0.0		

Continue Label Reserve Blank

Reserve Blank	No	Blank Length(mm)	5.0

Cutter

|			
Cut Number	1	Cut Action	Cut Every Labe
Back After Cut	Yes	Cut Mode	Forward

3.2 System Setup

This page is auto-emulated by default. Whether you send ZPL/TSPL/EPL or DPL, the printer will automatically recognize the command type unless you turn auto-emulation off.
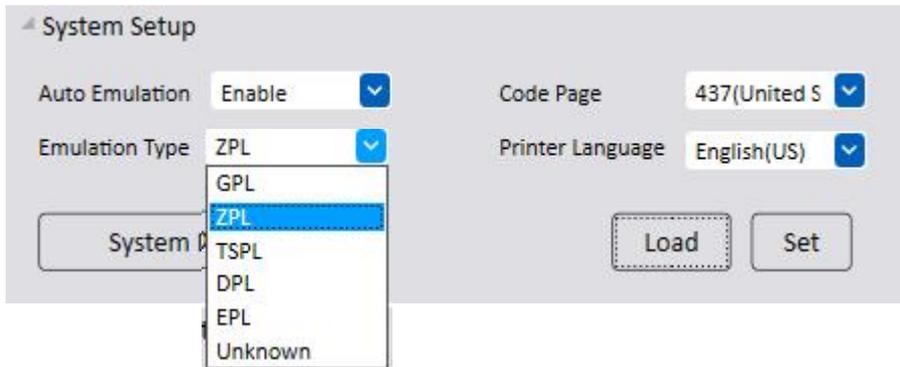
3.3 Gap Sensor Setup

The factory default sensor strength is Middle, it is recommended to set the sensor strength to Manual, Low, Low, so that it will be easier to identify all types of tags
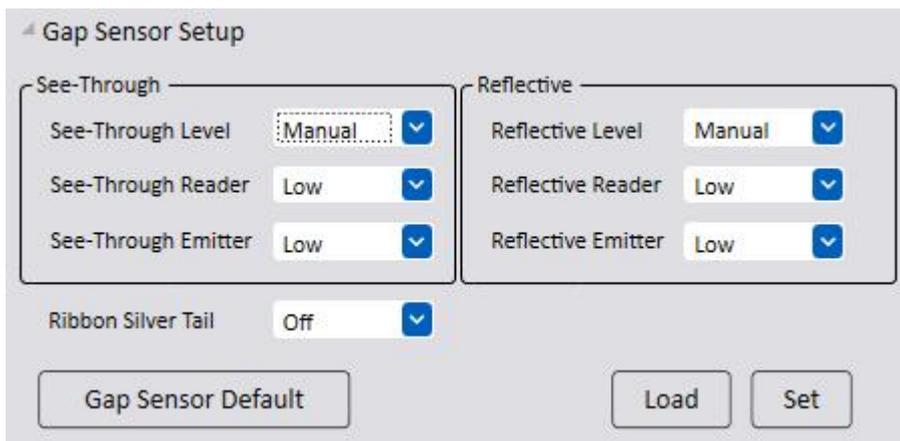
3.4 RFID

▲ RFID Module Setup

It can read the RFID module information on the printer.

▲ RFID Setup

The operation before writing the RFID data can set the relevant parameters about the RFID.

▲ Read RFID Tag

When you finish RFID printing, you can use this function to test whether the RFID data was successfully written to the tag chip.

3.5 WiFi Setup

The WiFi function is in AP mode by default, which does not need to be set up STA mode needs to set WiFi IP, WiFi password, etc..

3.6 Bluetooth Setup

   There is no need to set in Bluetooth mode. Click Read to get the Bluetooth name and Bluetooth PIN when connecting.

3.7 RS-232 Setup

   You need to be consistent with this setup information when selecting an RS-232 connection.
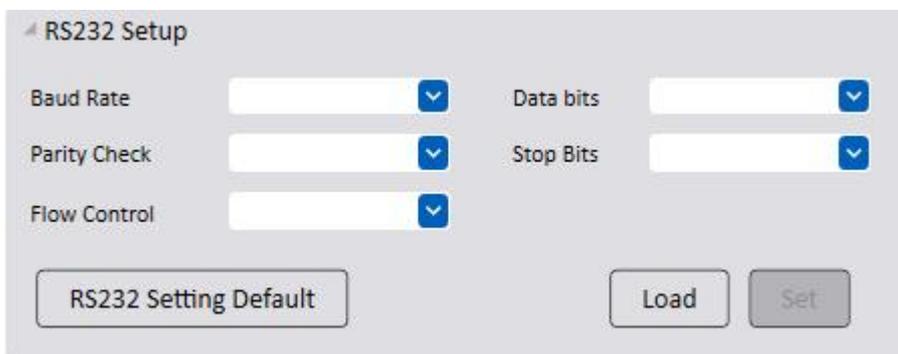
3.8 Ethernet Setup

Two modes are distinguished under this function.
DHCP: The IP can be obtained automatically by connecting the network cable.
Static IP: You need to set the IP information manually.

3.9 Setting File

This function can save the Setup information in the Printer Setup page in the form of a file, and the saved file can be used to set the same setup information in other printers with one click

4.Printer Function
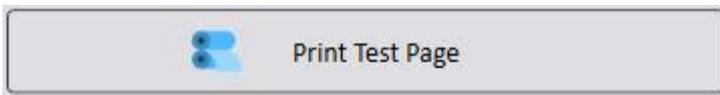
Used for testing and special setups.

4.1 Factory Default

You can restore the information in Printer Setup page to factory Settings with one click.
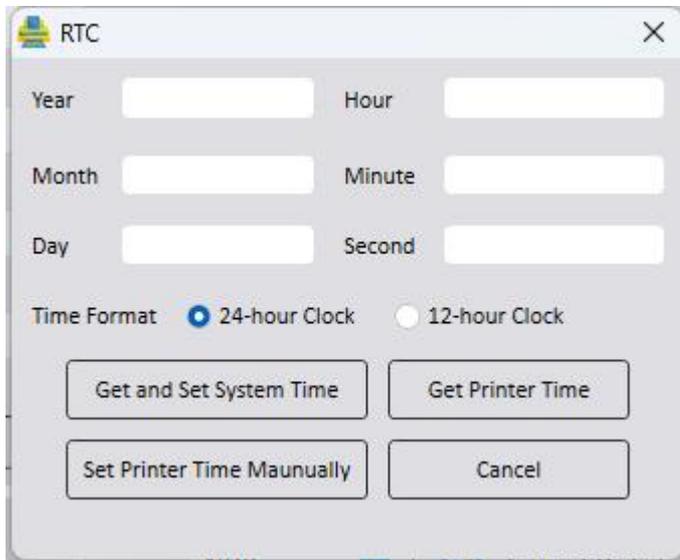

4.2 Print Test Page

Can be used for print head testing.

4.3 RTC Setup

Can customize and get the computer time and date, this function is currently only available under offline printing.
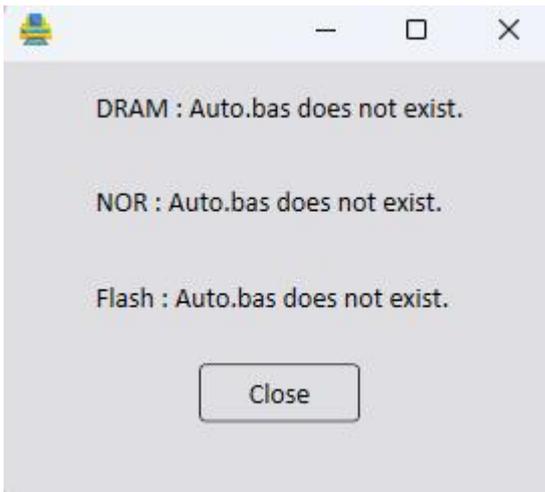
4.4 Cutter Test

Cutter Forward Test and Cutter Backward Test can be used to test the cutter at will.

4.5 AUTO.BAS Exist Check

You can check the printer internal space, whether there is an AUTO.BAS file.

DRAM : Auto.bas does not exist.

NOR : Auto.bas does not exist.

Flash : Auto.bas does not exist.

Close

4.6 Enable Mass Storage

After clicking, the printer will open the internal space into My PC,press FEED to exit.

P_DRAM (J:)
31.7 MB 可用，共 31.9 MB

P_NOR (K:)
7.59 MB 可用，共 7.93 MB

P_FLASH (L:)
22.3 MB 可用，共 31.8 MB
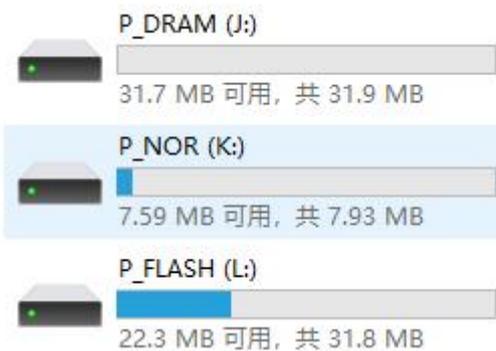
4.7 Get Infor

Click Get Infor to read the size of the printer's internal space, and click Format Disk to clear the printer's internal space with one click.
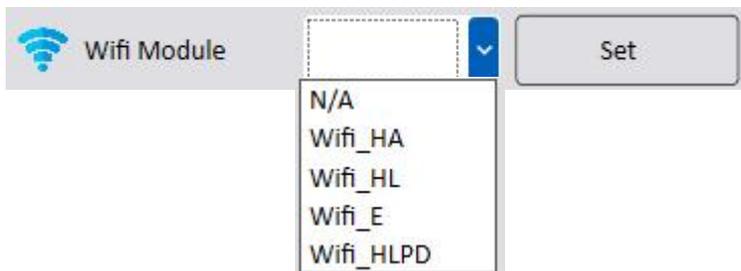
| DRAM ˅ | Format Disk | Get Info. |

DRAM
NOR
Flash
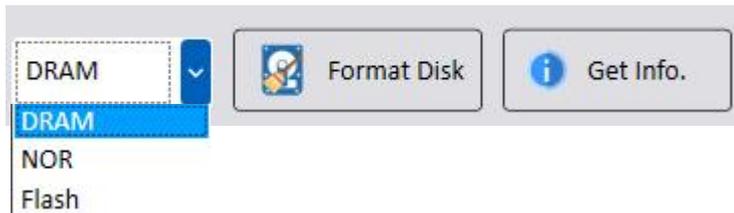
4.8 Buzzer

Can turn off the printer alarm, can turn on the printer alarm.

| Enable Buzzer | Disable Buzzer |

4.9 WiFi Module

You can choose the corresponding WiFi module type according to the different WiFi modules. After setting, you must restart the printer to take effect.
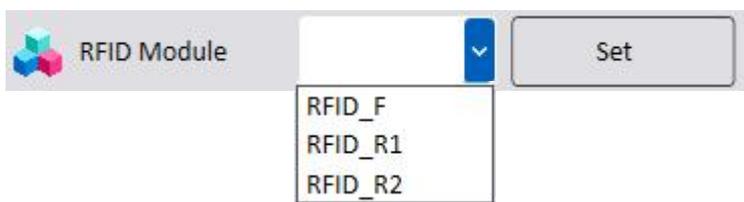
Wifi Module [˅] Set

N/A
Wifi_HA
Wifi_HL
Wifi_E
Wifi_HLPD

4.10 WiFi Module Freq

The default factory WiFi module is 2.4G. This parameter can be modified according to the actual module information.
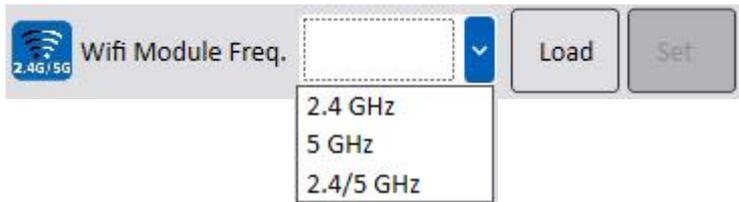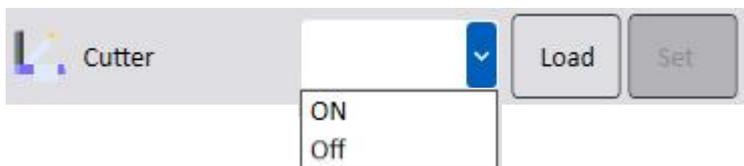

4.11 RFID Module

In general, this does not need to be set, except in special cases, it can be set according to the actual information.
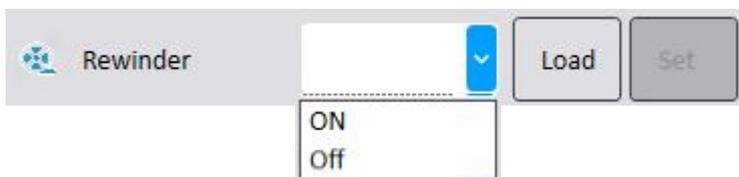

4.12 Cutter

This option is absolute setting, when you turn off the cutter function, then issue the cutting command, the printer will not have cutting action.
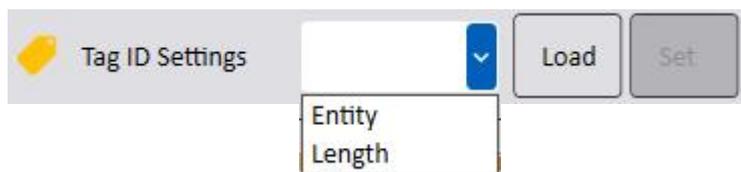

4.13 Rewinder

This option is absolute, when you turn off the Rewinder function, and then issue the Rewinder command, the printer will not Rewinder action.

4.14 Tag ID Setting

The calibration standard can be changed according to the actual situation.

4.15 RFID Tag Manual Calibration

After installing the RDID, the tag calibration should be performed first.

4.16 Paper Manual Calibration

Label calibration must be performed before printing, or after you have changed different label types.
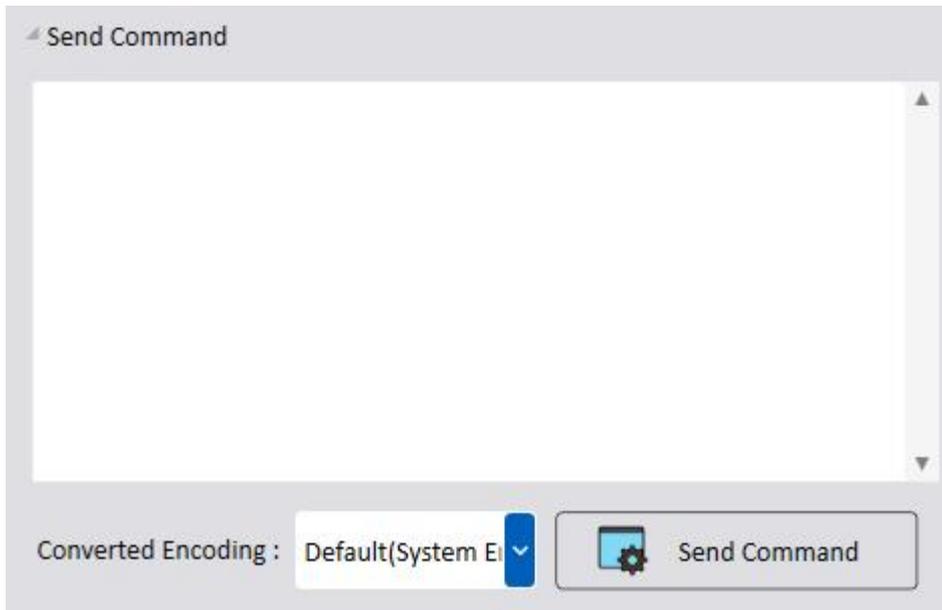
5.Command Tool

Through this window, you can directly issue various types of printer commands.
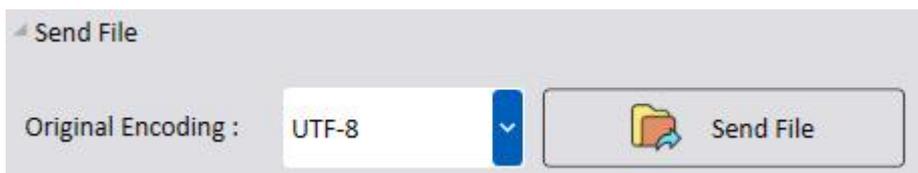
5.1 Send Command

You can directly enter the printer Command in this window, and click "Send Command" the printer will print the content defined by the command
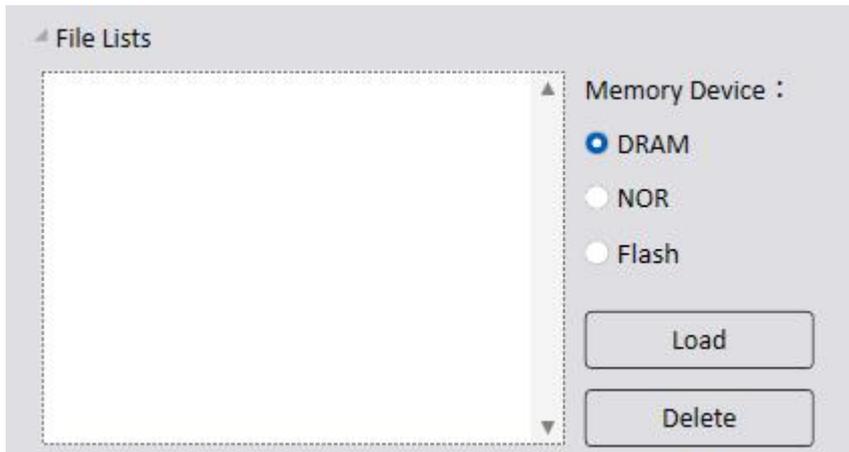**Note: The "Enter" key must be added at the end of the Command**

5.2 Send File

You can send commands to printers as files.

6.File Manager

▲ You can read or delete files from DRAM/NOR/Flash disk through this window.

▲ You can upload images or fonts to DRAM/NOR/Flash.

  Note :DRAM: After restarting the printer, all files will be automatically cleared, only for one-time use.
  NOR: A file that can fit into a picture or smaller memory and will not be deleted on restart.
  Flash: Can be put into fonts or large memory files, will not be deleted after restart.

www.gainscha-aidc.com   20
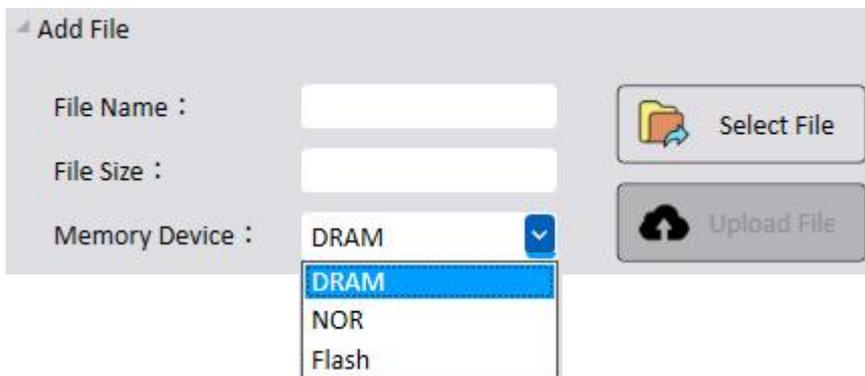
7.RFID Test

You can test before printing on this page, you can define the data type of RFID, read or inactivate the password, etc...

8.GPIO Setting

GPIO allows the host computer to control and access the status of the printer, which is commonly used in automation environments.
In the tool, you can define the trigger conditions for GPIO signals, as well as the signal type.

9.Customized UI

Customers can remove or add certain features by custom.

Update History

Date	Content	Editor
2025/3/9	The first version of the content was formulated	Allen
2025/5/12	Layout optimization	Allen

Gainscha
Reliable and Innovative

Office Address

3F,North gate office bldg,No,15 Pingbei 2nd Rd., Xiangzhou Dist.,Zhuhai,Guangdong,China,519060

TEL: +86-756-3965607

Web site: www.gainscha-aidc.com

E-mail: sales@gainscha.com

Support E-mail: prod25@gainscha.com

Factory Address

8-9 Floor, Building 2, No. 625, Xinsha Fifth Street, High-tech Zone, Zhuhai,Guangdong,China,519000

TEL: +86-756-3965607

Web site: www.gainscha-aidc.com

E-mail: sales@gainscha.com

Support E-mail: prod25@gainscha.com