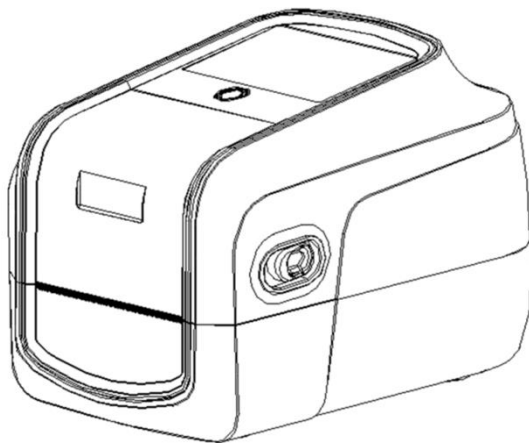


THERMAL TRANSFER / DIRECT THERMAL
LABEL PRINTER

**USER'S
MANUAL**



Agency Compliance and Approvals



EN 55032, Class A
EN 55024

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



FCC part 15B, Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Environmental protection



Do not dispose of this product in an unsorted public trash can. You should recycle this product according to local regulations.

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1. Introduction

- Applications

- o Manufacturing & Warehousing

- Work in Progress
 - Item Labels
 - Instruction labels
 - Agency labels
 - Compliance labels
 - Logistics management labels
 - Electronics labels

- o Parcel Post

- Shipping/ Receiving Labels

- o Healthcare

- Patient Identification
 - Pharmacy
 - Specimen Identification

- o Retail Marking

- Price tags
 - Shelf labels
 - Jewelry tags
 - Asset management labels
 - Care labels

- o Small Office/ Home Office

1.2 Product Features

1.2.2 Printer Optional Features

Product option feature	User options	Dealer options	Factory options
Peeler module		<input type="radio"/>	<input type="radio"/>
Regular full cut cutter (Guillotine cutter) Media thickness: 0.06~0.19 mm Media type: receipt and label liner w/o glue		<input type="radio"/>	<input type="radio"/>
Regular full/partial cutter (TextileCare Cutter)		<input type="radio"/>	<input type="radio"/>
linerless cutter		<input type="radio"/>	<input type="radio"/>
Internal Bluetooth module		<input type="radio"/>	<input type="radio"/>
Internal WIFI module		<input type="radio"/>	<input type="radio"/>
Internal Bluetooth and WIFI module		<input type="radio"/>	<input type="radio"/>

NOTE : Except for the linerless cutter, all regular/heavy duty/care label cutters DO NOT cut on media with glue.

2. Operations Overview

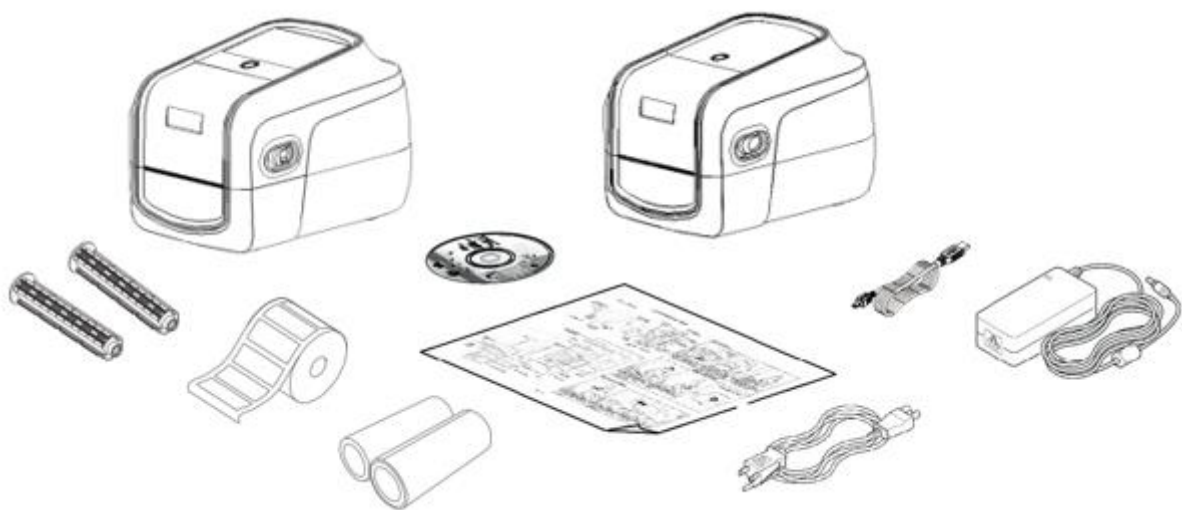
2.1 Unpacking and Inspection

This printer has been specially packaged to withstand damage during shipping. Please carefully inspect the packaging and printer upon receiving the bar code printer. Please retain the packaging materials in case you need to reship the printer.

Unpacking the printer, the following items are included in the carton.

- | | |
|---|--|
| ■ One printer unit | ■ One USB interface cable |
| ■ One quick installation guide | ■ 1inch core ribbon shaft for 300m ribbon |
| ■ One power cord | ■ One sample ribbon and Label roll |
| ■ One external universal switching power supply | ■ One Windows labeling software/Windows driver CD disk |

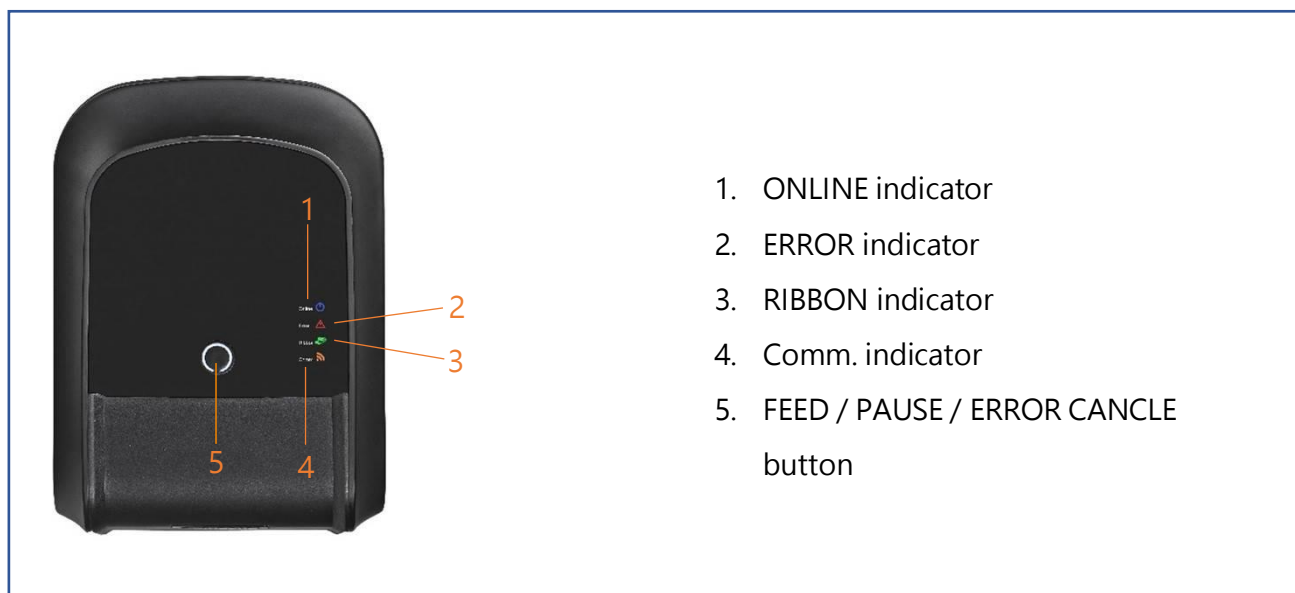
If any parts are missing, please contact the Customer Service Department of your purchased reseller or distributor.




2.2 Printer Overview

2.2.1 Front View

PH44(Contains LED indicator's function introduction)



Operation buttons	
Buttons	Function
<p>FEED / PAUSE / ERROR</p> <p>CANCEL button</p> 	<p>In the ready state, press this button, the printer will spit a sheet of paper, in the printing state, press this button, the printer will stop immediately, in the error state, press this button, the printer will cancel the error state and restore printing function.</p>

LED Indicator



Event	Description
Thermal transfer mode ready	Blue(ONLINE) and Green(RIBBON) solid, and the device is ready to use.
Direct thermal mode ready	Blue(ONLINE) solid, and the device is ready to use.
Open cover	When the cover is open, a beep sound will be made, and Blue(ONLINE), Red (ERROR), and Green(RIBBON) will flash.
PAUSE	Press the PAUSE button. When the Blue(ONLINE) flash, the printer will pause.
FEED	Press the FEED button to print as per demand, Blue(ONLINE) will flash.
Out of paper	When out of paper, a beep sound will be made, and Red(ERROR) flash

Out of ribbon	When out of ribbon, a beep sound will be made, and Red(ERROR) solid · Green(RIBBON) flash
Label gap/black mark error	When label gap/black can't be found, a beep sound will be made, and Red(ERROR) Blue(ONLINE) flash
Cutter error	When cutter can't be found, a beep sound will be made, and Blue(ONLINE) · Red(ERROR) Both flash alternately, flash with Green(RIBBON)
Print head overheated	When print head overheated ,a beep sound will be made, and Blue(ONLINE)and Red(ERROP) alternately flash
Other errors	When other errors ,a beep sound will be made, and Red(ERROP) and Green(RIBBON) alternately flash
Ethernet ready	When the RJ45 network cable is plugged in and the connection is normal, the Orange(COMM) flash
WIFI ready	When the WIFI's AP or STA mode is connected, the orange(COMM) solid
Ethernet +WIFI ready	When the RJ45 network cable is plugged in, and the connection is normal, and the WIFI's AP or STA mode is connected, the orange (COMM) will be solid for 2 seconds and the orange(COMM) flash.

2.2.2 Interior View all Series (Contains Eco-friendly printing solutions introduction)



Eco-friendly printing solutions

introduction

Used for printing on linerless label, which saves consumables and improves the environment.

application

Linerless Label vs Standard Label



Linerless Label

VS



Standard Label

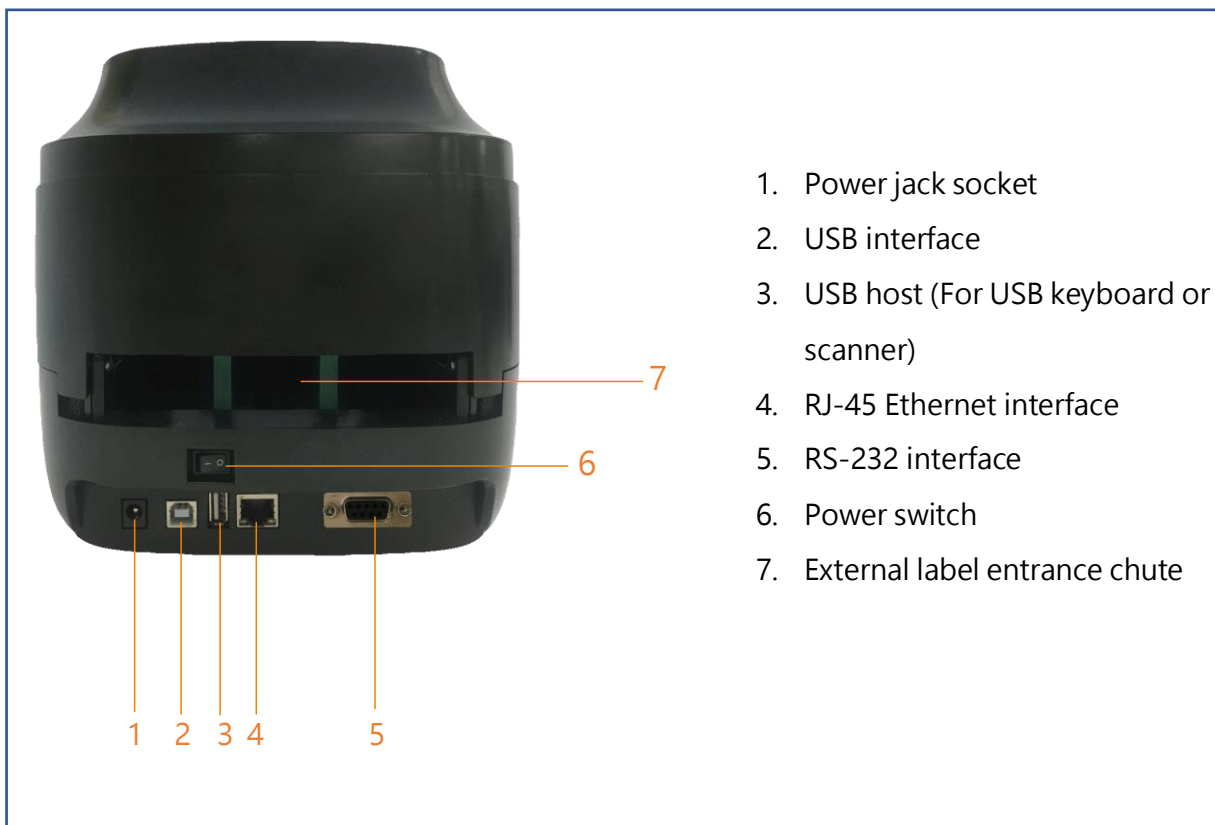
Benefits of using linerless labels

- More labels per roll-increase of 30-40%
- No liner waste removes the risk of injury through slippage
- Less waste disposal translates to less carbon emission
- Reduced transportation costs
- Supports a lower carbon footprint
- Less storage space required

2.2.3 Front View (All Series)



2.2.4 Rear View (All Series)



3. Setup

3.1 Setting up the Printer

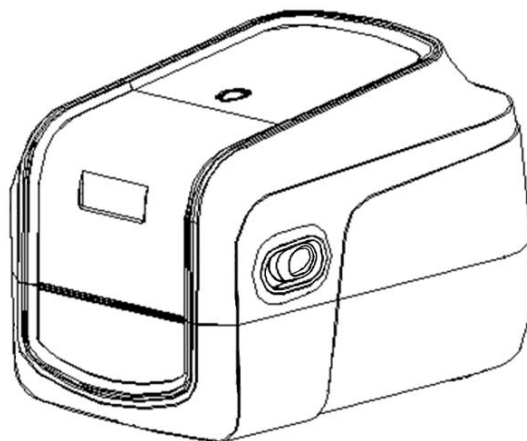
Place the printer on a flat, secure surface, then follow the steps below:

1. Plug the power cord into the AC power cord socket at the rear of the printer. Then, plug the other side into a properly grounded power outlet.
2. Connect the printer to the computer with the provided USB cable.
3. Push the power switch on “-” side to open the power of printer.

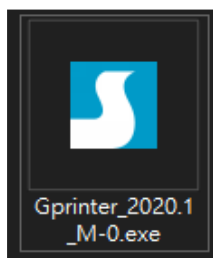
NOTE:

- * Please switch OFF printer power prior to plugging in the power cord to printer power jack.
- * The interface picture here is for reference only. Please refer to the product specification for the interfaces availability.

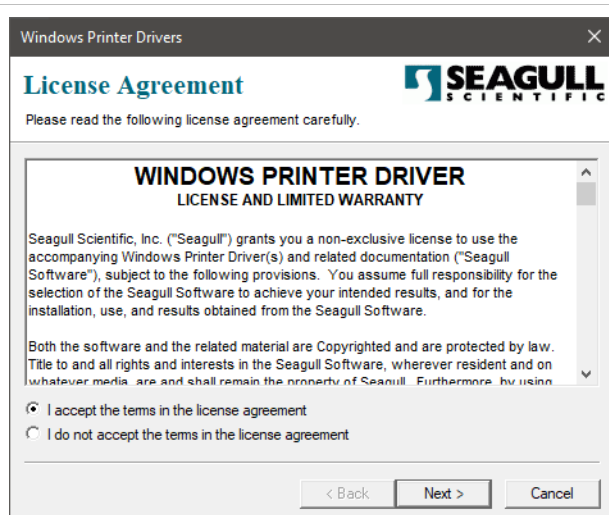
PH44 Series



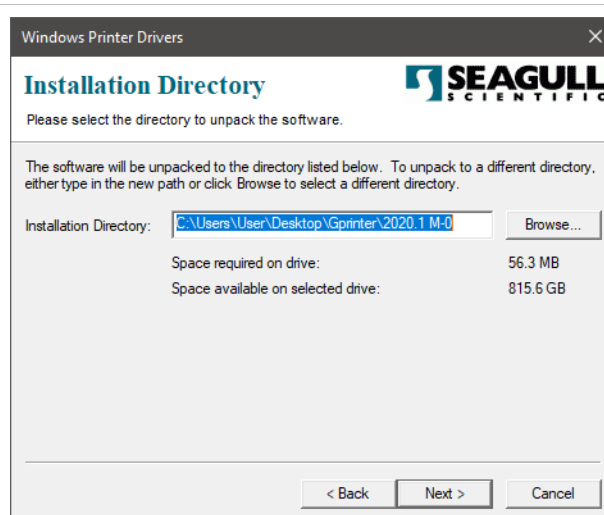
3.2 Install Printer Driver (All Series)



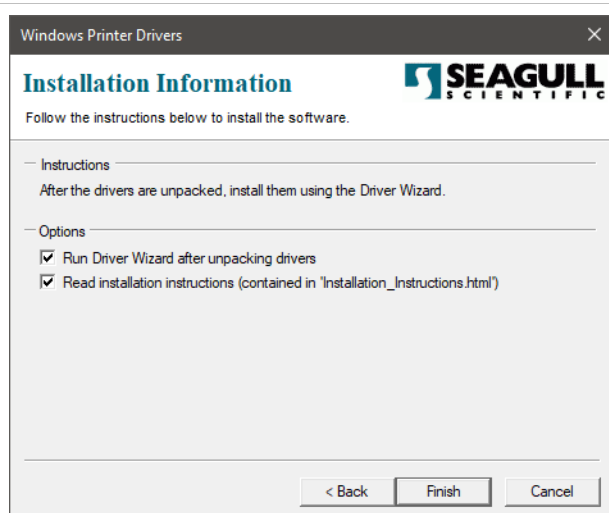
(PH44)



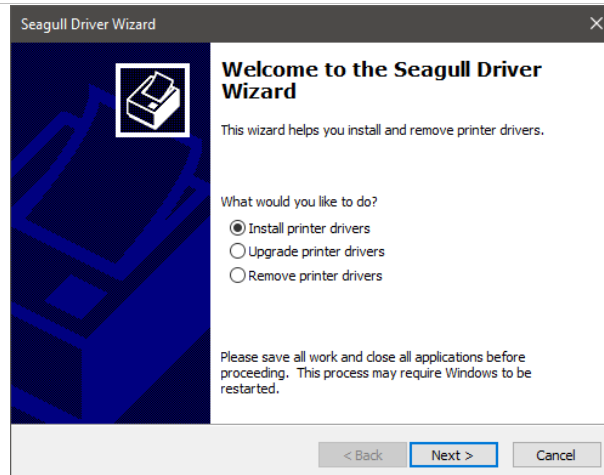
1. Read the license agreement, click [I accept the terms in license agreement], and click [Next].



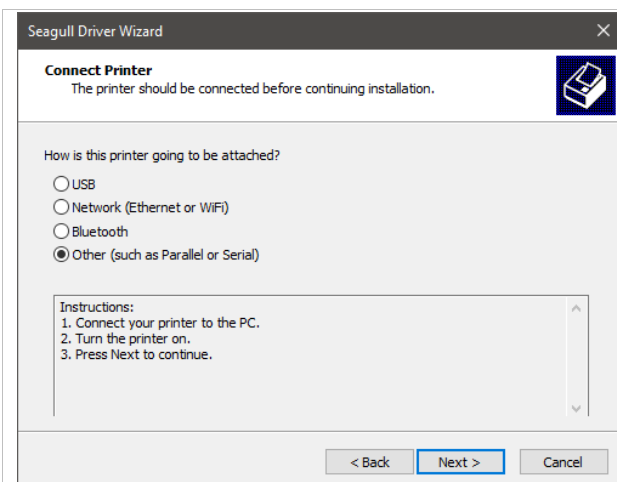
2. Select a installation directory and click [Next].



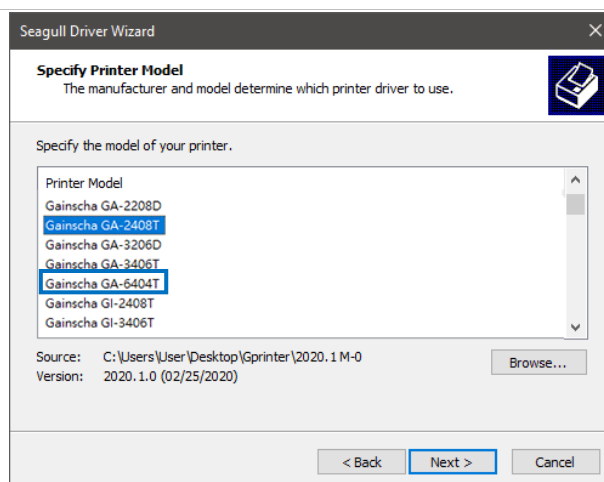
3. Click [Finish].



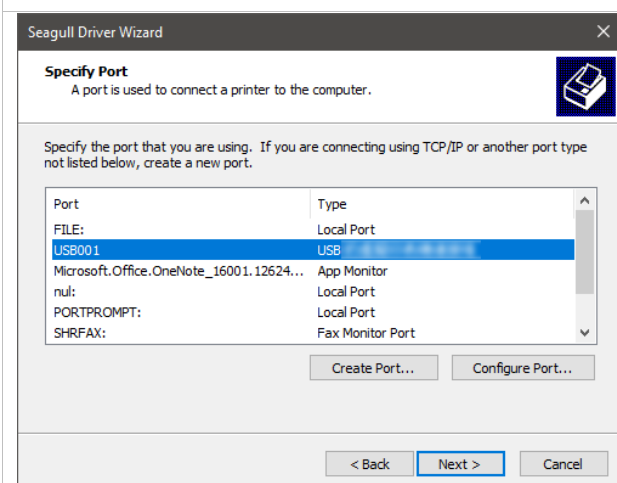
4. Go to installation process, please click [Install Printer Driver], and then click [Next].



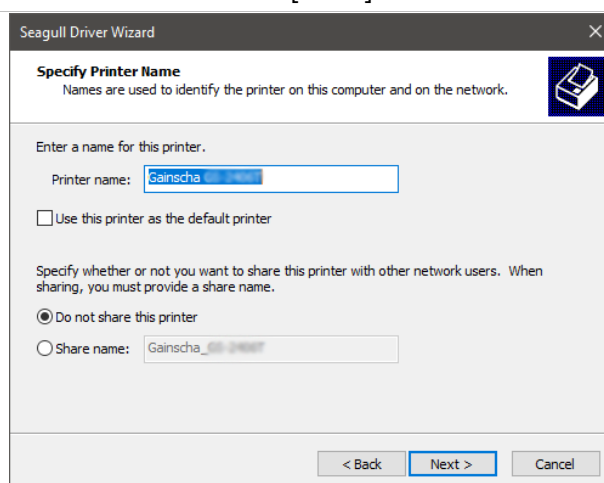
5. Click [Other] and click [Next].



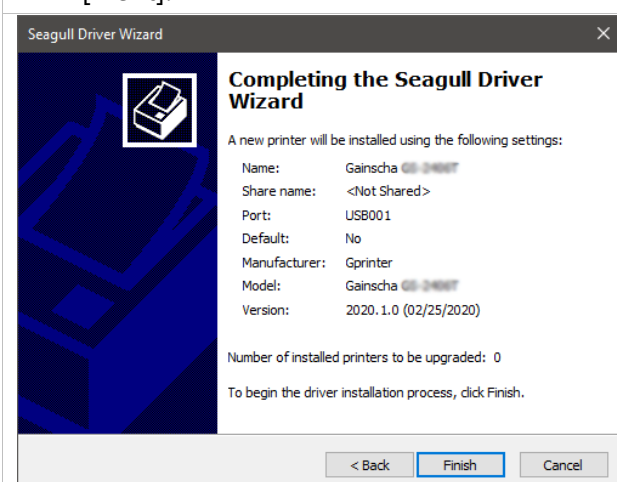
6. Select printer model name, click to install and click [Next].



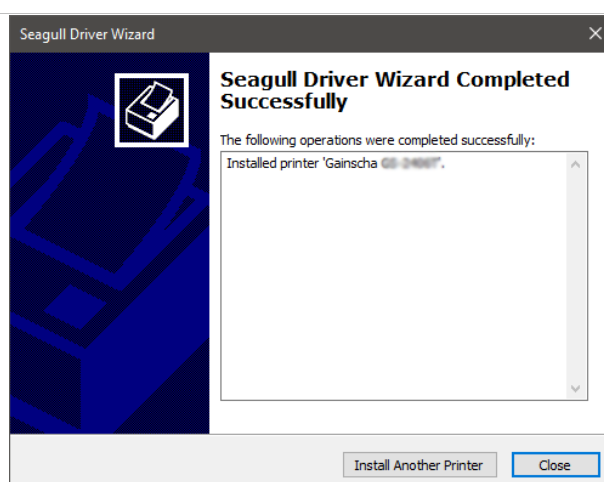
7. Please use a USB cable to connect the printer to the computer, click the corresponding USB interface, and click [Next].



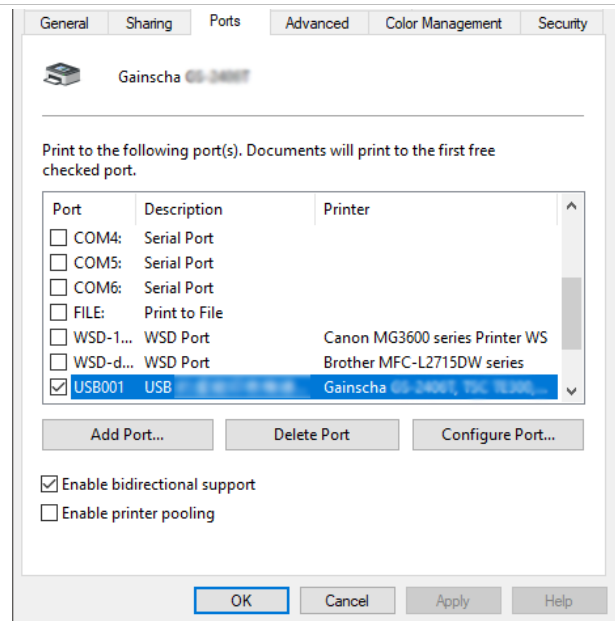
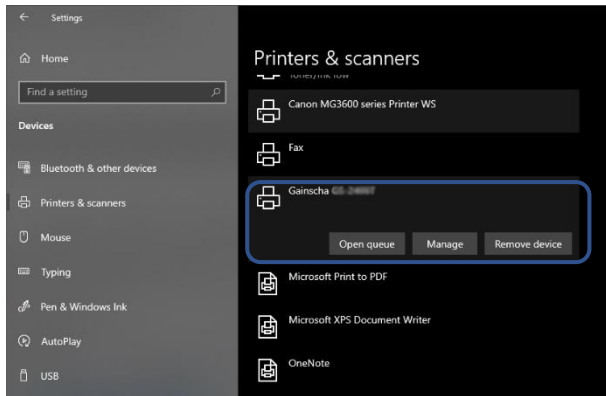
8. Change the printer name as per need, and click [Next].



9. Click [Finish].



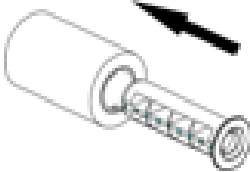
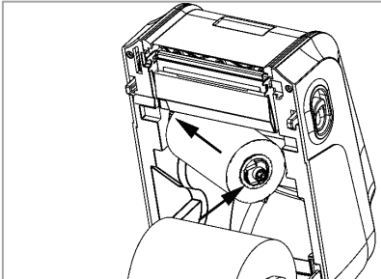
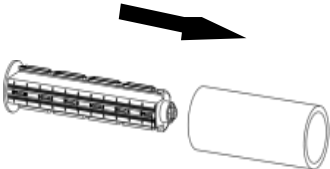
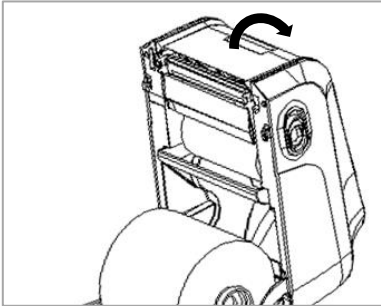
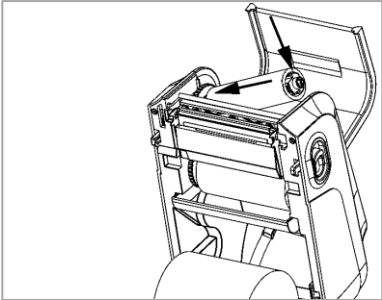
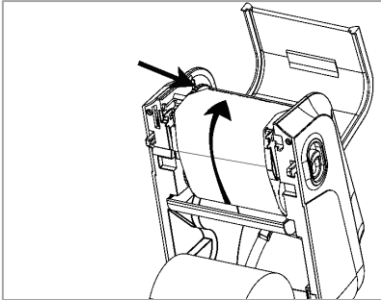
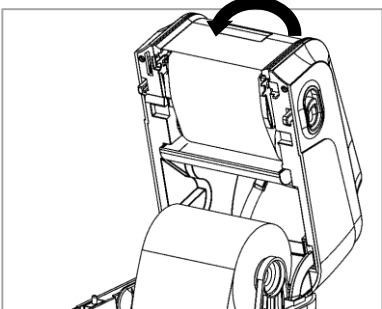
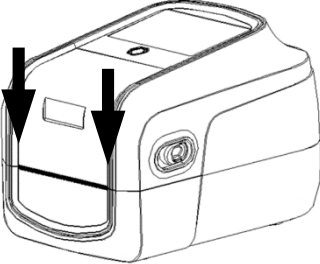
10. The installation is completed, please click [Close].



11. Users can check whether the installation is completed through the following ways:
- If Windows 10, check from [Windows Settings] → [Devices] → [Printers and Scanners].
 - Check from [Control Panel] → [Devices and Printers].

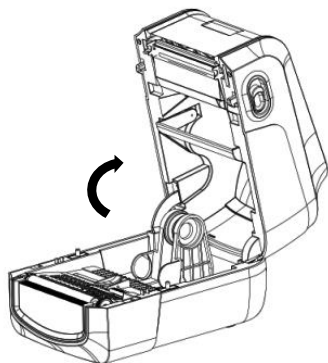
12. Users can change printer interface through the following ways:
- In Windows 10, [Windows Settings] → [Printers and Scanners] → [Devices] → select the corresponding printer model → [Management] → [Printer Content] → [Port] to change different USB port / COM port as per need.
 - From [Control Panel] → [Devices and Printers] → select the corresponding printer model → right-click → [Printer Content] → [Port] to modify it.

3.3 Loading the Ribbon

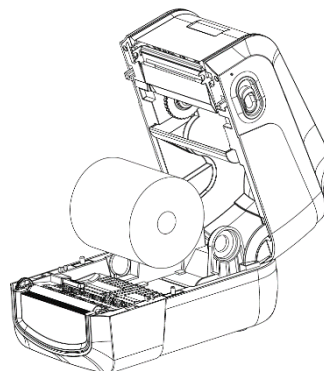
	
<p>1. Insert black ribbon roller into new ribbon.</p>	<p>2. Load ribbon left side first and then right side, fix it well.</p>
	
<p>3. Insert blue ribbon roller into the empty roll for ribbon collecting after printed.</p>	<p>4. Open the font cover.</p>
	
<p>5. Load the empty roll left side first, then right side.</p>	<p>6. Pull out ribbon and stick into the empty roll. Make sure ribbon is flat and smooth when touch print head.</p>
	
<p>7. Close the font cover.</p>	<p>8. Carefully close top cover.</p>

3.4 Loading the Media

3.4.1 Loading the Roll Labels



1. Press two buttons on printer two sides to lift and open the cover.

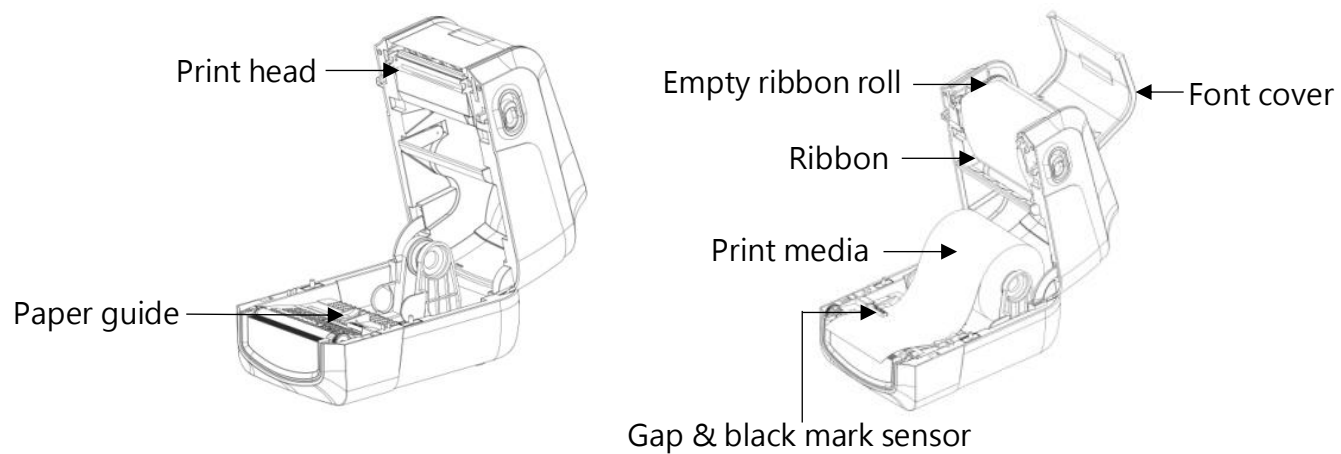


2. Load print media into the printer; adjust the paper guide to be same width of print media.



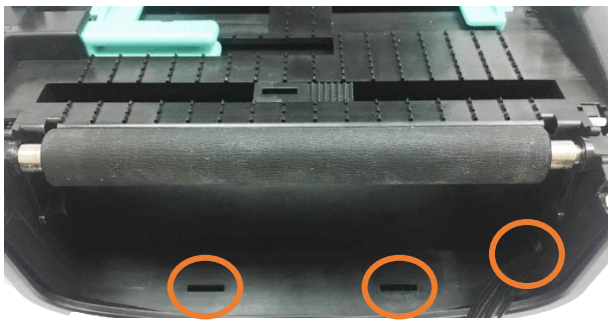
3. Pull out the print media till it pass gap sensor and cutter (cutter is optional), complete media loading.

3.4.2 Ribbon and print media loading diagram



3.5 Loading the Cutter

	<p>Depending on the purchase, there will be different cutters.</p>
	<ol style="list-style-type: none">1. Push the cover button backwards with both hands to open the printer cover.
	<ol style="list-style-type: none">2. Remove the two screws located on the front bezel, and push it out.



3. Align the cutter with the tenon, and place the wire of the cutter into the hole
4. When attaching the cutter, take care not to press it on the wire, lock the cutter with the screw, and cover the upper cover.



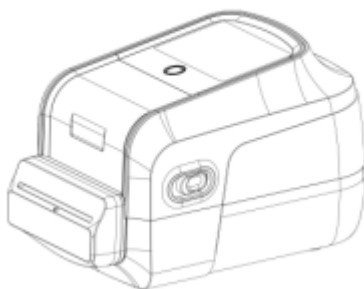
5. After closing the upper cover, turn the printer upside down, remove a screw located on the bottom cover, and open the bottom cover.



6. After opening, pull out the wire just put into the hole and insert it into the wafer 1x10P on the main board.



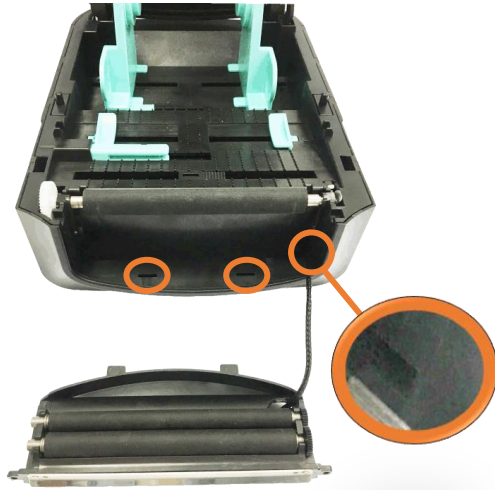
7. After inserting it, cover the bottom cover and lock the screw.



8. Finish.

3.6 Loading the Peeler

	<p>Peeler.</p>
	<ol style="list-style-type: none">1. Push the cover button backwards with both hands to open the printer cover.
 	<ol style="list-style-type: none">2. Remove the two screws located on the front bezel, and push it out.



3. Align the peeler with the tenon and place the wire of the peeler into the hole.

4. When closing the peeler, be careful not to press it on the wire, and lock the peeler with screws.





5. Turn the printer upside down, remove a screw located on the bottom cover, and open the bottom cover.



6. After opening, pull out the wire just put into the hole and insert it into the wafer 1x10P on the main board.



7. After inserting it, cover the bottom cover and lock the screw.



8. Finish.

Note: Please clamp the label roll with the fixing tabs and clamp the media with the media guide, so as not to cause the media to roll into the peeler and cause the phenomenon that the media cannot be peeled off.

4. Button Functions

4.1 Regular Button Functions











This printer has one button for feed, pause or cancel errors. There are different functions in different modes, as shown in the following table:

Button	Printer status	Function	Description
Feed button	Ready	Feed	When the printer is ready (Blue LED ON), press this button once, and the label will advance to the front of the next label
Feed button	Wait for push button to print	Print next	When the button Demand function is activated, the printer will stop after printing and wait for the user to press this button before printing the next label.
Feed button	Print mode	Pause	When the printer is printing continuously, pressing the (PAUSE) button will pause printing. The power indicator is blue flashing. Just press the button again, and the print job returns to normal.
Feed button	Error occurred	Cancel error	When the error RED is on, press the (PAUSE) button once, the printer will cancel the error and resume printing function, and reprint the label layout when the error occurs.

4.2 Power-on Utilities

This printer has six power-on functions for setting or testing the printer's hardware. Press these buttons at the same time when the power is turned on, and release the buttons with the light signal to activate these functions.


Follow these steps to enable the boot function:

Event	Description	Status lights	Beep
Self-test	A. Power off the printer B. Make sure the printer is loaded with paper and close the printer cover C. Press and hold the FEED button, and turn on the printer power. When the ribbon Green solid alone, release the button. At this time, the printer will print a self-test page after turning on the printer.		
Enter USB storage device function	A. Power off the printer B. Make sure the printer is loaded with paper and close the printer cover C. Press and hold the FEED button and turn on the printer power. When the comm. Orange solid alone, release the button. At this time, the printer's storage device will appear on the computer.		
Enter dump mode	A. Power off the printer B. Make sure the printer is loaded with paper and close the printer cover C. Press and hold the FEED button, then turn on the printer. When the online Blue and the error Red are on at the same time, release the FEED button, and the printer is now turning on After the printer, a beep is heard, and the printer enters the dump mode at this time, and it will print out "NOW IN DUMP MODE"		
Skip AUTO.BAS	A. Power off the printer B. Press and hold the FEED button and turn on the printer's power. When the error Red solid alone, release the button. At this time, the printer will hear two beeps after turning on the printer, and the printer will skip AUTO.BAS program		
Printer initialization	A. Power off the printer B. Press and hold the FEED button and turn on the printer power. When the online Blue solid alone, release the button. At this time, the printer will hear five beeps after turning on the printer, and the printer will print the meter parameters are restored to the factory default settings		
Ribbon inspection	The machine will automatically detect the status of the ribbon after turning on and in each thermal transfer printing mode.		

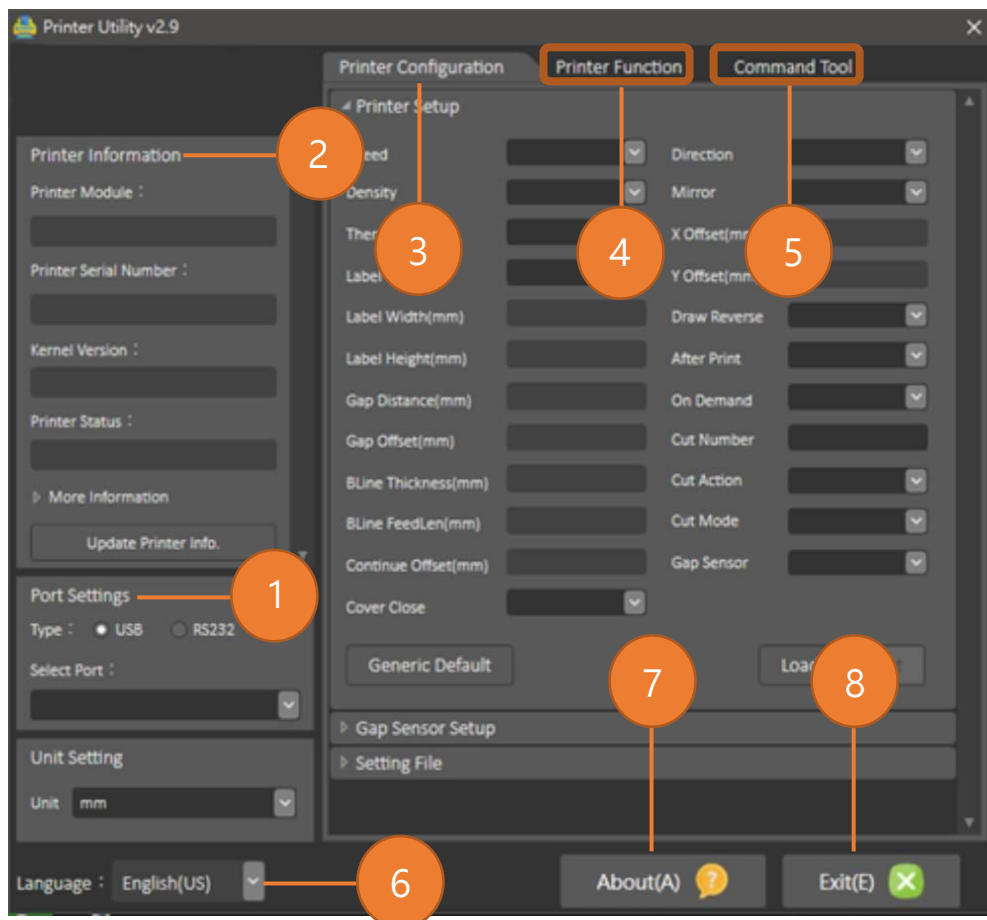
5. PrinterUtility

Printer Utility is an integrated tool software that helps users query printer settings and status, change printer-related settings, and send commands or files to the printer.



5.1 Start the PrinterUtility

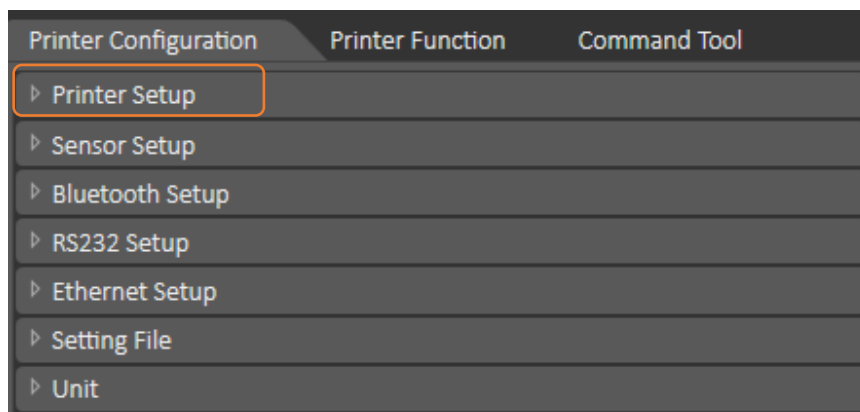
1. Please mouse over Printer Utility icon  Printer Utility.exe image Double click left mouse button.
2. After opening the main screen, you can see the following function items:



- | | |
|---------------------------|------------------|
| (1) Port Settings | (5) Command Tool |
| (2) Printer Information | (6) Language |
| (3) Printer Configuration | (7) About |
| (4) Printer Function | (8) Exit |

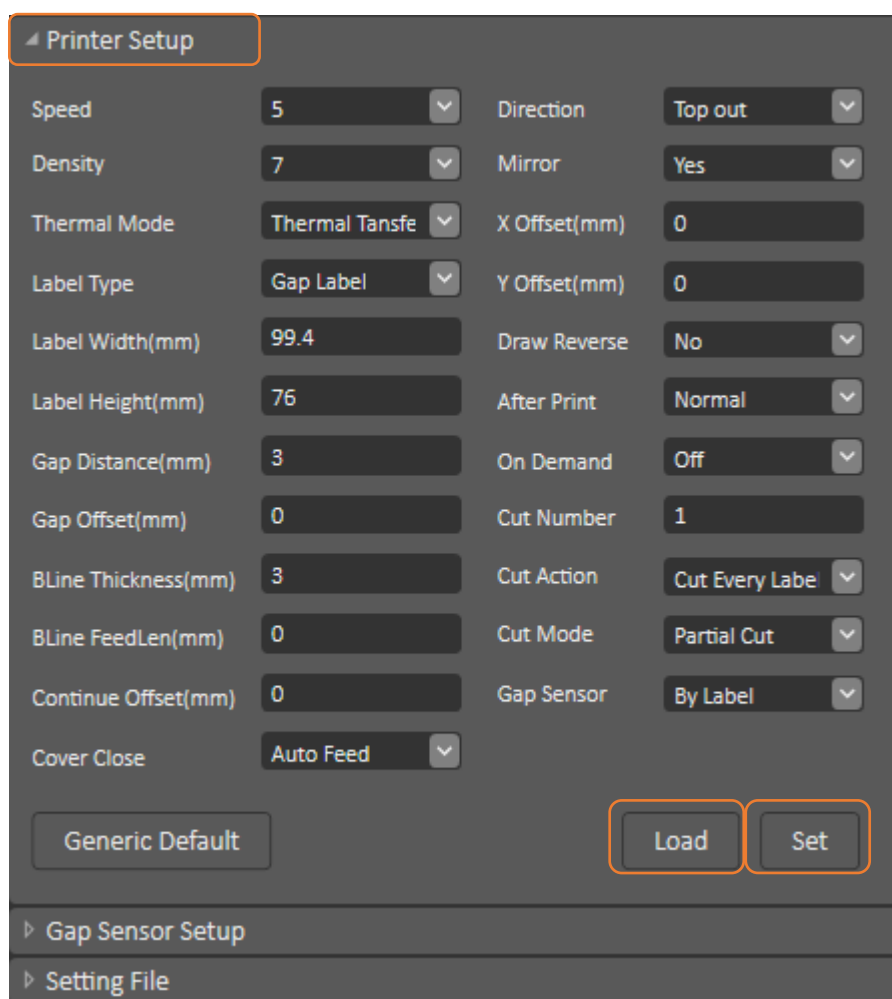


5.2 Printer Function

1. Click the  Printer Configuration and  Printer Setup Can open and close the printer general settings screen.



2. Click the  Load Button to bring out all printer general setting information through the selected communication interface. Click the  Set button to write the setting value to the printer (please execute the reading function before writing).



6. Troubleshooting

6.1 Common Problems

The following guide lists the most common problems that may be encountered when operating this bar code printer. If the printer still does not function after all suggested solutions have been invoked, please contact the Customer Service Department of your purchased reseller or distributor for assistance.

Problem	Possible Cause	Recovery Procedure
Power indicator does not illuminate.	<ul style="list-style-type: none">● The power cord is not properly connected.	<ul style="list-style-type: none">● Plug the power cord in printer and outlet.● Switch the printer on.
Out of ribbon	<ul style="list-style-type: none">● Out of ribbon.● The ribbon installation path is incorrect.	<ul style="list-style-type: none">● Install new ribbon.● Follow the steps for installing the ribbon to reinstall.
Out of paper	<ul style="list-style-type: none">● Out of paper.● The paper installation path is incorrect.● Gap / black mark sensor detection is incorrect.	<ul style="list-style-type: none">● Install new paper.● Follow the steps for installing the paper to reinstall.● Recalibrate the label sensor.
Paper jam	<ul style="list-style-type: none">● Gap / black mark sensor detection is incorrect.● The label size is set incorrectly.● Label may be blocked inside the printer.	<ul style="list-style-type: none">● Recalibrate the label sensor.● Set the correct label size.● Cleaning the inside of the printer.
Unable to print	<ul style="list-style-type: none">● Cable is not well connected to serial or USB interface or parallel port.	<ul style="list-style-type: none">● Re-connect cable to interface.● Change a new cable.● Ribbon and media are not compatible.● Verify the ribbon-inked side.● Reload the ribbon again.● Clean the print head.● The print density setting is incorrect.● Print head's harness connector is not well connected with printhead. Turn off the printer and plug the connector again.

Poor print quality	<ul style="list-style-type: none"> ● Ribbon and media is loaded incorrectly. ● Dust or adhesive accumulation on the print head. ● Print density is not set properly. ● Printhead element is damaged. ● Ribbon and media are incompatible. 	<ul style="list-style-type: none"> ● Reload the supply. ● Clean the print head. ● Clean the platen roller. ● Adjust the print density and print speed. ● Run printer self-test and check the print head test pattern if there is dot missing in the pattern. ● Change proper ribbon or proper label media. ● The print head mechanism does not latch the print head properly.
Skip labels when printing	<ul style="list-style-type: none"> ● Label size is not specified properly. ● Sensor sensitivity is not set properly. ● The media sensor is covered with dust. 	<ul style="list-style-type: none"> ● Check if label size is setup correctly. ● Calibrate the sensor by Auto Gap or Manual Gap options. ● Clear the GAP/Black mark sensor by blower.
The printing position of small label is incorrect	<ul style="list-style-type: none"> ● Media sensor sensitivity is not set properly. ● Label size is incorrect. ● The vertical offset setting in the driver is incorrect. 	<ul style="list-style-type: none"> ● Calibrate the sensor sensitivity again. ● Set the correct label size and gap size. ● If using the software BarTender, please set the vertical offset in the driver.
Missing printing on the left or right side of label	<ul style="list-style-type: none"> ● Wrong label size setup. 	<ul style="list-style-type: none"> ● Set the correct label size.
Wrinkle problem	<ul style="list-style-type: none"> ● Ribbon installation is incorrect. ● Media installation is incorrect. ● Print density is incorrect. ● Media feeding is incorrect. 	<ul style="list-style-type: none"> ● Please set the suitable density to have good print quality. ● Make sure the label guide touch the edge of the media guide.
Gray line on the blank label	<ul style="list-style-type: none"> ● The print head is dirty. ● The platen roller is dirty. 	<ul style="list-style-type: none"> ● Clean the print head. ● Clean the platen roller
Irregular printing	<ul style="list-style-type: none"> ● The printer is in Hex Dump mode. 	<ul style="list-style-type: none"> ● Turn off and on the printer to skip the dump mode.

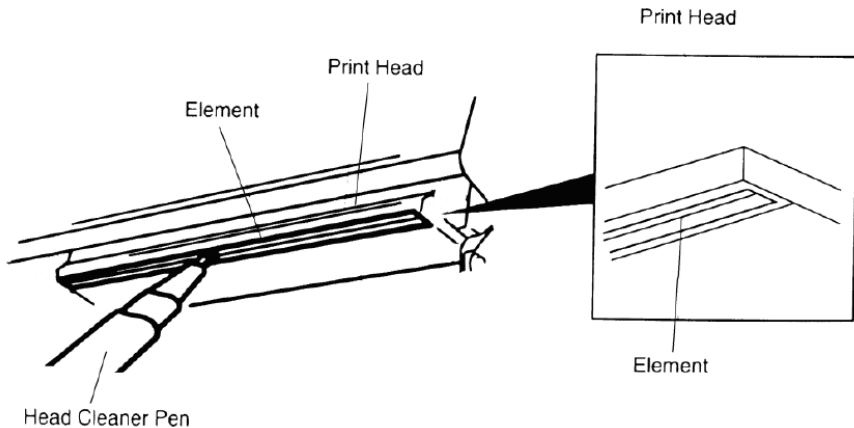
7. Maintenance

This session presents the clean tools and methods to maintain your printer.

1. Please use one of following material to clean the printer.

- Cotton swab
- Lint-free cloth
- Vacuum / Blower brush
- 100% ethanol

2. The cleaning process is described as following,

Printer Part	Method
Print Head	<ol style="list-style-type: none"> 1. Always turn off the printer before cleaning the print head. 2. Allow the print head to cool for a minimum of one minute. 3. Use a cotton swab and 100% ethanol to clean the print head surface. 
Platen Roller	<ol style="list-style-type: none"> 1. Turn the power off. 2. Rotate the platen roller and wipe it thoroughly with 100% ethanol and a cotton swab, or lint-free cloth.
Tear Bar/Peel Bar	Use the lint-free cloth with 100% ethanol to wipe it.
Sensor	Compressed air or vacuum
Exterior	Wipe it with water-dampened cloth
Interior	Brush or vacuum

NOTE:

- Do not touch printer head by hand. If you touch it careless, please use ethanol to clean it.
- Please use 100% Ethenol.DO NOT use medical alcohol, which may damage the printer head.
- Regularly clean the print head and supply sensors once change a new ribbon to keep printer performance and extend printer life.
- The maximum printing ratio per dot line is 15% for this printer. To print the full web black line, the maximum black line height is limited to 40 dots, which is 5mm for 203 DPI resolution printer and 3.3mm for 300 DPI resolution printer.