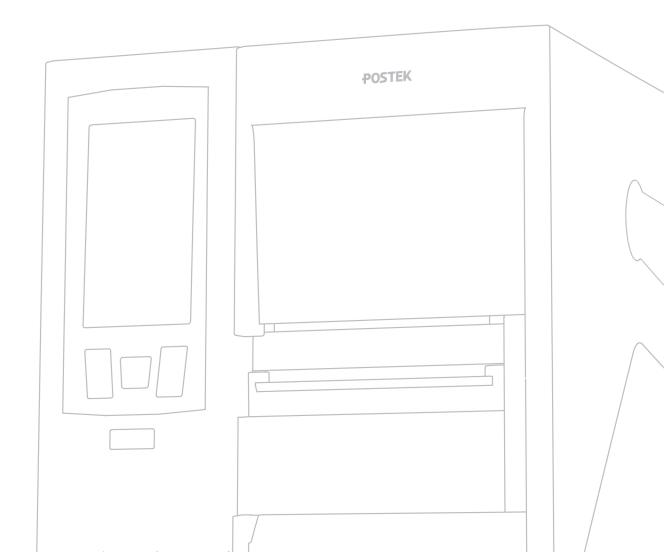




User's Manual

TX Exp Series

RFID|Barcode Label Printer





FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment may generate, use and/or radiate radio frequency energy. If not installed and used in full accordance with this User's Manual, interference to radio communications may occur. This equipment complies with the limits for a Class A Information Technology Equipment pursuant to Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may also cause interference. In such case the user, at his/her expense, will be required to correct the interference using whatever means necessary.

Trademarks

POSTEK is a registered trademark by POSTEK Electronics Co., Ltd. ARM is a registered trademark of Advanced RISC Machines Ltd. Microsoft, Windows are registered trademarks of Microsoft Corporation.

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Disclaimer

POSTEK barcode/RFID printers are developed and produced by Postek Electronics Co., Ltd (hereinafter "POSTEK") with the adoption of direct thermal/thermal transfer printing and RFID encoding techniques. For thermal transfer printing, matching ribbons and media are required. Meanwhile, the wide variety of RFID chip and antenna designs makes it difficult to guarantee RFID tags 100% compatibility with POSTEK printers. To satisfy your printing needs, please consult with the reseller(s) to choose the matching consumables for POSTEK printers.

This manual has been validated and reviewed for accuracy. The instructions and descriptions it contains are accurate for the POSTEK printer at the time of this manual's distribution. However, succeeding printers and manuals are subject to change without notice. POSTEK assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the printer and this manual.

To protect your interests, and to prevent loss due to improper handling, please read the corresponding user's manual before operation, and don't use the printer during abnormal conditions. In no event shall POSTEK be liable for any damage or loss caused by human misoperations, including but not limited to loss of business profits, business interruption, loss of business information, or other pecuniary loss.

Although this manual describes and details many issues which could possibly occur, the manufacturer cannot warrant against unpredictable conditions during the printer's application. For problems such as the printer not working, missed or unclear print content, etc., POSTEK and/or its resellers are

responsible for troubleshooting (according to POSTEK Warranty Clauses) only. In no event shall POSTEK or the resellers involved be liable for any direct or indirect loss, including but not limited to loss of business profits, business interruption, loss of business information, or other pecuniary loss.

Important Safety Instructions

- Only qualified and trained service technicians should attempt to repair the printer.
- Do not place the printer on or near a heat source.
- Be sure that your power source matches the rating listed on the regulatory label on the back of the printer. Be certain your power source is grounded.
- To avoid getting an electric shock, do not use a worn or damaged power cord. If the power cord becomes damaged or frayed, replace it immediately.
- Do not insert anything into the ventilation slots or openings on the printer.
- The printer should never be operated in a location where it can get wet. Personal injury may result.
- The printhead becomes hot while printing. To protect from damaging the printhead and risk of personal injury, avoid touching the printhead.
- To get increased printhead longevity and higher quality printouts, always use approved labels, tags and thermal transfer ribbons. Approved supplies can be ordered from your POSTEK authorized reseller.
- Static electricity that accumulates on the surface of the human body or other surfaces can damage or destroy the printhead or electronic components in this device. DO NOT touch the printhead or the electronic components with bare hands.
- Place the printer on a flat, firm, solid surface.
- Never operate in a high-temperature environment.
- Turn off the power when not in use for extended periods.
- Follow all recommendations and setup instructions included in this manual.

Contents

P	reface	1
Ir	mportant Notes	2
	Thapter 1: Introduction	
C	-	
	1.1 Specifications	
	Optional Features	
C	Chapter 2: Setup and Use	7
	2.1 Main Parts and Structures	
	2.1.1 Front View	
	2.1.2 Interior View	
	2.1.3 Rear View	
	2.1.4 Consumables Loading Path	
	2.2 Setting up the Printer	
	2.2.1 Interface Connection	
	2.2.2 Connecting the Printer	
	2.2.3 Loading the Ribbon	
	2.2.4 Loading the Media	
	2.3 Installing the Printer Driver	
	2.3.1 USB Port Installation	
	2.3.2 Network Port Installation	
	2.4 Installing Label Editing Software	
C	Chapter 3: Operations and Settings	38
	3.1 The Front Panel	38
	3.1.1 Panel Buttons	39
	3.1.2 Status Indicator	
	3.1.3 LCD Touchscreen	40
	3.2 Settings	41
	3.2.1 General Settings	41
	3.2.2 Communication	52
	3.2.3 RFID	55
	3.2.4 Management	
	3.2.5 Advanced	
	3.3 Mechanical Adjustments	
	3.3.1 Adjusting the Media Sensor	
	3.3.2 Adjusting the Printhead Pressure and Balance	
	3.3.3 Adjusting the Ribbon Tension	79
C	Chapter 4: Maintenance	80
	4.1 Cleaning the Printhead	80
	4.2 Cleaning the Platen Roller	
	4.3 Cleaning the Printer Interior	
	4.4 Cleaning the Sensors	
C	Chapter 5: Troubleshooting	82
	5.1 Error Messages	
	J.2 IVIISCEITAITEUUS ISSUES	89



Appendix A: Interface Specifications	. 90
Appendix B: ASCII Table	. 91



Preface

Your POSTEK high performance industrial RFID label printer features innovative state-of-the-art technology and superior quality workmanship. Boasting an all metal frame and unique core construction, it achieves a sturdy and durable stationary platform for smooth printing. A powerful control system can easily handle the most complicated printing requirements, and advanced thermal transfer/direct thermal technology offers optimum printout clarity.

This manual explains how to set up and begin using your printer. It also provides detailed information on configuring your printer, basic operations, care, and troubleshooting.

Please read this manual carefully before using the POSTEK printer.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
WARNING	Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.
A CAUTION	Alerts you to a potentially hazardous situation that could, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
NOTE	Provides additional information to emphasize or supplement important points in the main text.

Version

Version 1.0, published in January, 2023.



1

Important Notes

Please read the following passages thoroughly before proceeding.

Printhead

The thermal printhead can be easily damaged due to its precision construction. A printhead damaged by misuse is not covered under the terms of the warranty. To ensure longevity of the printhead, please note the following:

- DO NOT scrape or use tools that might damage the printhead surface.
- To protect from corroding the printhead, DO NOT touch the printhead with bare hands.
- DO NOT use thermal paper or thermal transfer ribbons which contain Na, K or Cl elements.
- Keep the printhead from any form of liquid or dampness.
- Only use a cotton swab dipped in anhydrous isopropyl alcohol to clean the printhead.
- Always use high-quality consumables:
 - When the printhead module is closed, pressure is placed directly onto the printhead; dirt such as paper scraps, sand, dust and glue can scrape or damage the printhead.
 - > The printhead is also easily damaged by static electricity, which may be generated by poor quality ribbons.
- Always inspect consumables for high quality before purchasing.



CAUTION

The printer functions under Direct Thermal or Thermal Transfer print modes. Thermal Transfer is set as the factory default (requires ribbon for printing). However, if you need to print on Direct Thermal materials (ribbon is not required), please contact your printer supplier or service provider to reduce the printhead pressure. This can protect your printhead from early performance deterioration due to direct contact with the thermal media. Any physical printhead damage caused by direct thermal printing is not covered under warranty.



Cutter (Optional)

The printer equipped with a cutter can automatically cut the label after printing. However, automatic cutters pose a safety hazard since the blades are very sharp. To prevent injuries and cutter failures while using one of the many types of automatic cutters, please follow the safety and maintenance rules listed below:

- Before using the cutter, be sure you have been trained by a qualified individual. A written procedure covering the cutter's use is recommended.
- It is very important to choose the right cutter model for the application to ensure personal safety and prevent damage to the cutter caused by cutting wrong types of media.
- Keep loose items such as long hair, clothing, jewelry, away from the cutter.
- Don't put anything except print media inside the cutter.
- Turn off power of printer if you notice abnormality with the cutting process and alert a qualified technician to resolve the issue.
- Never cut a print media which exceeds the maximum operating conditions of the cutter.
- Not every cutter model is designed to be able to cut through adhesive. Use only the dedicated cutters to cut through adhesive materials. Even so, regular cleaning is required to remove the adhesive built up on the blades over time to prevent cutter jam.
- Routine inspection and maintenance are required to be performed by a qualified technician to keep the cutter in good working conditions.



Chapter 1: Introduction

1.1 Specifications

Model	TX2 Exp	TX3 Exp	TX6 Exp
Model with RFID	TX2r Exp	TX3r Exp	TX6r Exp
Printing Mode Direct Thermal and Thermal Transfer			
Max Printing Speed	16 ips (406.4 mm/s)	12 ips (304.8 mm/s)	6 ips (152.4 mm/s)
Max Printing Width	4.09" (104 mm)	4.16" (105.7 mm)	4.16" (105.6 mm)
Max Printing Length	196" (500 mm)		
MPU	64-bit, quad Arm® Cortex®-A53 core, maximum operating frequency 1.8 GHz		
GPU	GC NanoUltra 3D (1 sh	ader) &GC320 2D Open	GL ES 2.0
Memory	2GB DDR4 RAM, 8GB	managed NAND flash	
HEAT TM Level ^①	I		
RFID Encoder	Supports UHF EPC Ger (Only available for RFII	n 2, ISO 18000-6C protoc D models)	ols
Media Roll	Maximum Media Width: 4.56" (116 mm) Minimum Media Width: 0.39" (10 mm) Maximum Outer Diameter: 8" (203.2 mm) Inner Diameter: 1.5" (38 mm) / 3" (76.2 mm)		
Minimum Label	Tear-off: 0.2" (5 mm)		
Length	Cutter: A150/A400: 0.79	9" (20 mm)	
M. P. Thirten	Regular Barcode Label I 0.012" (0.06 ~ 0.305 mr	Printer and Regular RFID n), including liner	Label Printer: 0.0024" ~
Media Thickness	Mount-on-Metal RFID liner	Label Printer [®] : 0.063" (1.	6 mm) max., including
Ribbon	Maximum Ribbon Length: 1968' (600 m) Maximum Ribbon Width: 4.65" (118 mm) Maximum Outer Diameter: 3.31" (84 mm) Inner Diameter: 1" (25.4 mm) Ink side: both In and Out		
Media Sensor	Upper reflective: detects black marks on print side Lower reflective: detects black marks on back side Transmissive: detects gaps, notches, holes		



Model	TX2 Exp	TX3 Exp	TX6 Exp	
Model with RFID	TX2r Exp	TX3r Exp	TX6r Exp	
	Five built-in dot matrix fonts, which include Basic Latin and Latin-1 Supplement character sets.			
Fonts	Two built-in scalable fonts. One supports Latin, Greek and Cyrillic scripts, and the other is a GB2312 Chinese character set specifically.			
	User downloadable True	eType fonts.		
Barcode Types	1D Barcodes: Code 39, Code 93, Code 128/subset A,B,C, Codabar, Interleave 2 of 5, UPC A/E 2 and 5 add-on, EAN-13/8/128, UCC-128, GS1-128, etc.			
	2D Barcodes: MaxiCode DataMatrix, GS1 QR Co	e, PDF417, Data Matrix, ode, CS Code, etc.	QR Code, GS1	
Interfaces	RS-232 Serial, 10/100/1000Mbps Adaptive Ethernet, USB DEVICE 2.0, USB HOST			
LCD Display	4.5" LCD Capacitive Touchscreen			
Power Source	$100 \sim 240 \text{ V AC}, 50/60$	Hz		
Weight	33.06 lbs (15 kgs)			
Dimensions	W 11.3" (286 mm) x D	17.6" (448 mm) x H 10.7	" (271 mm)	
	Temperature: 32° F ~ +1	104° F (0° C ~ 40° C)		
Operating Environment	Relative humidity: 5% - 90% non condensing			
Environment	Maximum Altitude: 5000 m			
Stances Environment	Temperature: -40° F ~ +	140° F (-40° C ~ 60° C)		
Storage Environment	Relative humidity: 5% - 90% non condensing			

①: $HEAT^{TM}$, or Heating Equilibrium Adaptive Tuning, is a POSTEK designed and developed cutting-edge technology that sets the benchmark for heat management in thermal printing. Printers equipped with $HEAT^{TM}$ have significant improvements in their printout clarity and print speed. The $HEAT^{TM}$ level represents the fineness of the heating uniformity with level I being the finest.

Optional Features

RFID Verifier*	External-mount module (Only available for RFID models)		
Wireless Module*	WIFI IEEE 802.11a/b/g/n/ac/ax, 2.4/5GHz, Bluetooth 5.0		oth 5.0
	Туре	Rotary Cutter	
	Model	A150	A400
Cutters	Max. Cut Width	120 mm	120 mm
Cutters	Min. Cut Length	20 mm	20 mm
	Cut Thickness (white cardboard paper)	0.20 mm	0.20 ~ 0.35 mm



②: For Mount-on-Metal RFID tags, the flexibility of the tag and whether or not to use fillings to bridge the gaps between tags can affect print quality and even encoding success rate. It is strongly recommended to test the tags on this POSTEK printer before purchasing.

Cut Through Adhesive	Yes	Yes
Cuts Guaranteed	600,000	600,000

^{*}Factory dependent.

1.2 Contents in the Box

Inspect the shipping carton(s) for possible shipping damage, if damage is discovered, notify the shipping company to report the nature and extent of the damage.

Please check the items according to the Quick Start Guide. If there are any items missing, notify your authorized reseller.



Chapter 2: Setup and Use

2.1 Main Parts and Structures

2.1.1 Front View

Figure 2-1 shows the front view of the printer.

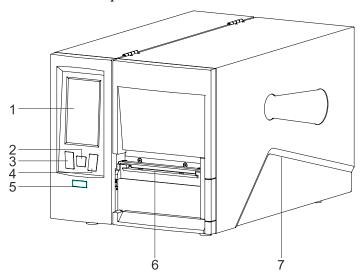


Figure 2-1 Front View

Table 2-1 Front View Description

Number	Description
1	LCD Touchscreen
2	[FEED/Calibration] Button
3	[PAUSE/Self Test] Button
4	[CANCEL/Reset] Button
5	Status Indicator
6	Tear-off Bar
7	Right Cover

2.1.2 Interior View

Figure 2-2 shows the interior view of the printer.

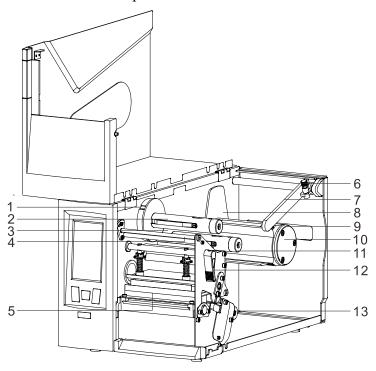


Figure 2-2 Interior View

Table 2-2 Interior View Description

Number	Description
1	Stop Plate Ribbon Take-up Spindle
2	Ribbon Take-up Spindle
3	Stop Plate Ribbon Supply Spindle
4	Ribbon Guide Rod
5	Printhead Assembly
6	Thumbscrew
7	Media Roll Guide
8	Stop Plate Media Spindle
9	External Media Loading Slot
10	Media Spindle
11	Ribbon Supply Spindle
12	Lever
13	Media Guide Roller



2.1.3 Rear View

The printer is equipped with multiple interfaces. See Figure 2-3.

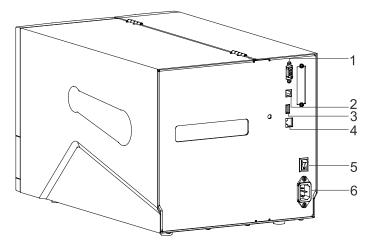


Figure 2-3 Rear View

Table 2-3 Rear View Description

Number	Description
1	RS-232 Serial Port
2	USB Device
3	USB Host
4	Ethernet Port
5	Power Switch
6	AC Port

2.1.4 Consumables Loading Path

Figure 2-4 shows the consumables' loading paths in Tear-off mode.

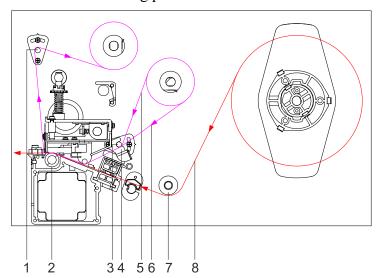


Figure 2-4 Loading Paths in Tear-off Mode

Table 2-4 Loading Path Description

Number	Description
1	Ribbon Guide Rod (Ribbon Take-up)
2	Platen Roller
3	Ribbon Guide Rod (Ribbon Supply)
4	Ribbon End Sensor
5	Ribbon Path (Ribbon-ink side: in)
6	Ribbon Path (Ribbon-ink side: out)
7	Media Guide Roller
8	Media Path

Figure 2-5 shows the consumables' loading paths in Cutter mode (Cutter is optional).

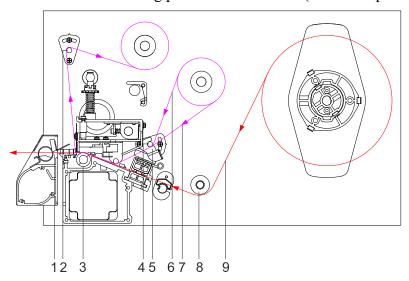


Figure 2-5 Loading Paths in Cutter Mode

Table 2-5 Loading Path Description

Number	Description
1	Media Feed Opening (Cutter)
2	Ribbon Guide Rod (Ribbon Take-up)
3	Platen Roller
4	Ribbon Guide Rod (Ribbon Supply)
5	Ribbon End Sensor
6	Ribbon Path (Ribbon-ink side: in)
7	Ribbon Path (Ribbon-ink side: out)
8	Media Guide Roller
9	Media Path



2.2 Setting up the Printer

2.2.1 Interface Connection

The printer supports RS-232 Serial, USB DEVICE and 10/100/1000 Mbps Adaptive Ethernet interface connections.

To connect:

- Make sure the printer is powered OFF.
- The printer will identify the communication port automatically.
- The default settings of the printer port can be obtained from the self-test report.
- Cable configurations for Serial (RS-232C) interface can be found in Appendix A: Interface Specifications.
- Please take the following measures to reduce cable noise.
 - Restrict the length of the interface cable to less than 6' (1.83 M) if possible.
 - ➤ Keep the interface cable separate from the power cords.

2.2.2 Connecting the Printer



WARNING

- Do not use the printer near liquids or corrosive chemicals.
- Connecting to a wrong power source may cause damage to your printer. POSTEK assumes no liability for any damage in such cases. The rating for the printer is $110/240 \text{ VAC} \pm 10\%$, 50/60 Hz.
- 1. Make sure the printer is switched OFF.
- 2. Plug the female end of the power cord into the AC Port on the back of the printer. See Figure 2-6.

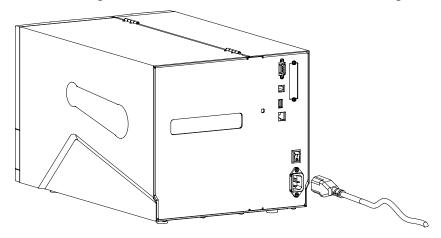


Figure 2-6 Connect the Power Cord

3. Plug the male end of the power cord into a live wall outlet. See Figure 2-7.

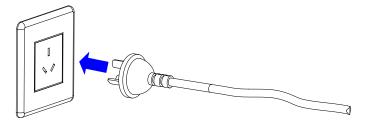


Figure 2-7 Plug the Power Cord

□ NOTE

The shape of power plug varies depending on the region in which it was purchased.

2.2.3 Loading the Ribbon



CAUTION

- Load ribbon only when using the thermal transfer printing mode. Remove any ribbon that may be loaded when using the direct thermal printing mode.
- Use ribbon that is wider than the media to protect the printhead form wear.

To load the ribbon, refer to Figure 2-8 through Figure 2-13 and follow the steps below:

- 1. Lift to open the right cover of the printer.
- 2. Turn the Lever counter clockwise to open the Printhead. See Figure 2-8.

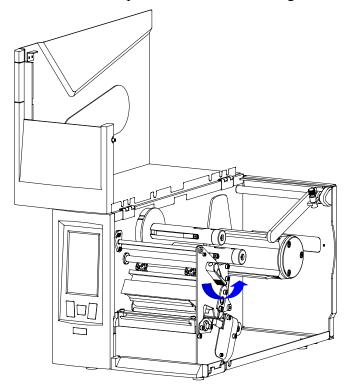


Figure 2-8 Open the Printhead

3. Stick a label to the outside/inside of the ribbon to check which side the ink is on. See Figure 2-9.

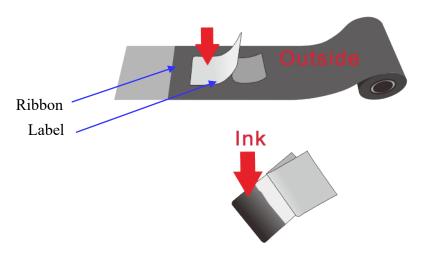


Figure 2-9 Check Ink Side

4. Place the ribbon roll on the Ribbon Supply Spindle, see Figure 2-10. Make sure that the ribbon roll is firmly pushed against the Stop Plate.

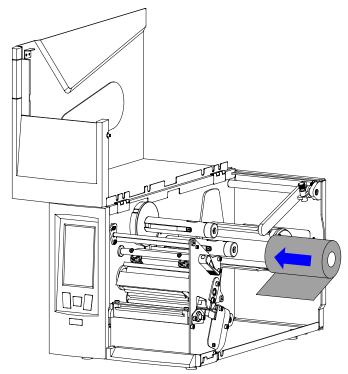


Figure 2-10 Load Ribbon Roll

5. Follow the ribbon path indicated in Figure 2-4, thread the ribbon under the Ribbon Guide Rod and pass the Printhead Assembly, make sure that the ribbon's ink side is facing the media. See Figure 2-11.

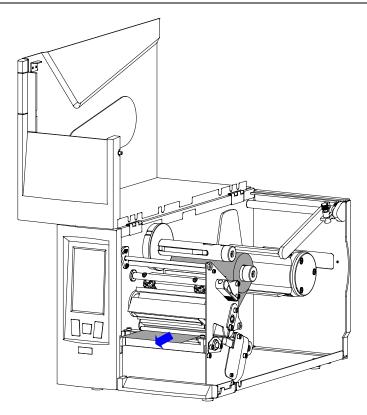


Figure 2-11 Thread Ribbon through Printhead Assembly

6. Wrap the ribbon around a spare ribbon core to form a Ribbon Take-up Roll. See Figure 2-12.

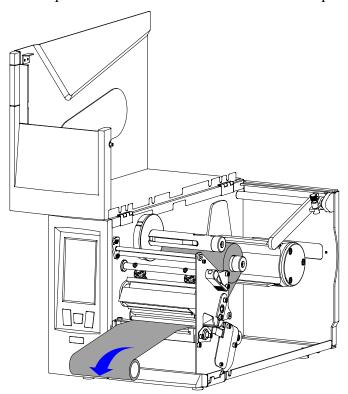


Figure 2-12 Wrap Ribbon on the Core

7. Slide the Ribbon Take-up Roll on the Ribbon Take-up Spindle and push it firmly against the Stop Plate. Turn the Take-up Spindle until the ribbon is tightly wound. See Figure 2-13.

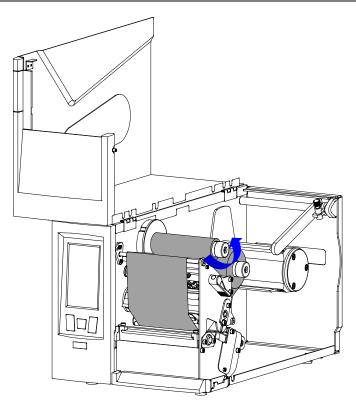


Figure 2-13 Ribbon Roll Loaded

■ NOTE

To make sure the Ribbon End Sensor works properly, please use ribbon rolls that end with reflective or transparent materials.

2.2.4 Loading the Media



CAUTION

- When it is the first time installing the media or when changing to a different type of media, media sensor calibration must be performed.
- No calibration is needed when using continuous media.

The printer has three different handling modes for printed label: Standard Mode, Tear-off Mode, and Cutter Mode.

- When the handling mode is set to Standard Mode, the printer stops at the leading edge of the next label and goes into standby as soon as the print job is complete.
- When the handling mode is set to Tear-off Mode, after the print job is finished, the printer will feed the label until the gap between the current label and the next label aligns with the Tear-off Bar allowing easy tear off for the user.
- When the handling mode is set to Cutter Mode, the cutter automatically cuts off the label(s) after the printer has completed the print job or printed the set number of labels. (Only available on models with cutter installed).



2.2.4.1 Switching Media Core Adapters



CAUTION

The printer is equipped with both 1.5" and 3" media core adapters. The 1.5" core adapter is located inside the 3" core adapter. To load a 1.5" core media roll, please first remove the 3" core adapter; and then adjust the position of the Media Roll Guide Stopper.

Steps to switch to the 1.5" core adapter:

1. Remove the 3" core adapter. Refer to Figure 2-14. Use the Allen wrench bundled with the printer to remove the screw securing the 3" core adapter, and then slide the 3" core adapter out to remove it from the printer.

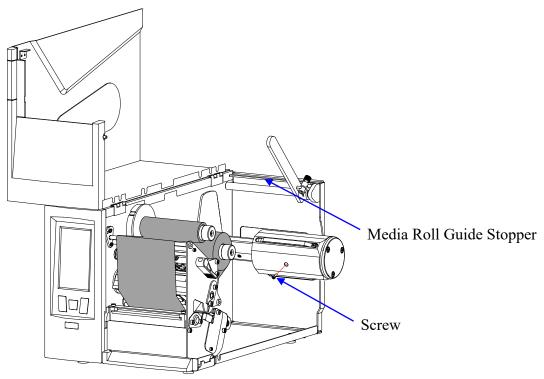


Figure 2-14 Remove the 3" Core Adapter

2. Adjust the position of the Media Roll Guide Stopper. Refer to Figure 2-15. Loosen (do not remove) the two screws securing the Media Roll Guide Stopper, and then move the Media Roll Guide Stopper upwards until it's stopped, and then fasten the two screws. This will give the media roll guide more room to rotate so as to be able to reach (no touch) the thinner 1.5" core adapter.

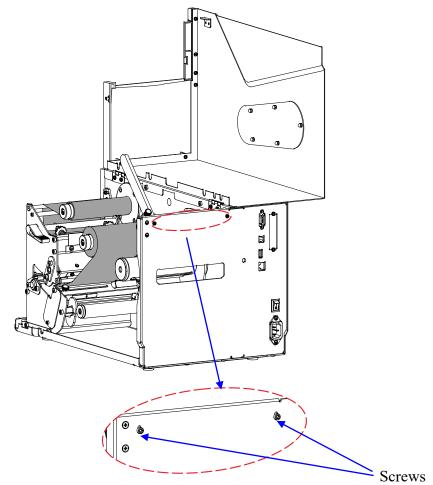


Figure 2-15 Adjust the position of the Media Roll Guide Stopper

◯ NOTE

When switching back to 3" core adapter, make sure to reverse the Media Roll Guide Stopper position adjustment process and move the Media Roll Guide Stopper back to its lower position.

2.2.4.2 Tear-off Mode



CAUTION

- *Tear-off Mode is the default handling mode.*
- The media installation procedure in Standard Mode is the same as in Tear-off Mode.

To load media into the printer while under Tear-off Mode, follow the steps below:

1. Loosen the Thumbscrew, then slide the Media Roll Guide to the far right end and lift it up. As shown in Figure 2-16.

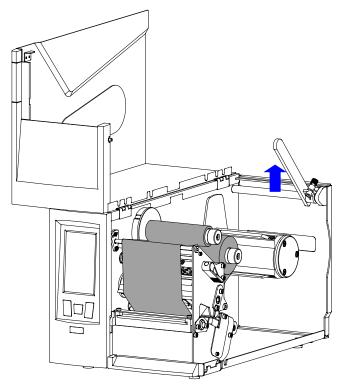


Figure 2-16 Lift the Media Roll Guide

2. Load a media roll onto the Media Spindle, make sure that the media roll is firmly pushed against the Stop Plate. As shown in Figure 2-17.

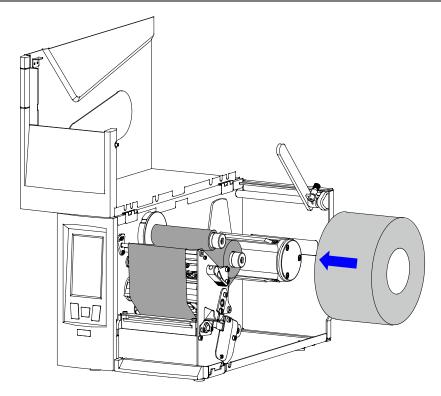


Figure 2-17 Load the Media Roll

3. Press down and adjust the Media Roll Guide by pushing it slightly against the outside edge of the media roll. Tighten the Thumbscrew to lock the Media Roll Guide in place. As shown in Figure 2-18.

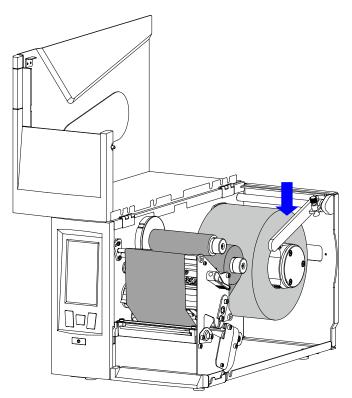


Figure 2-18 Adjust the Media Roll Guide

4. Thread the media along the Media Path as shown in Figure 2-4, loaded media is shown in Figure 2-19.

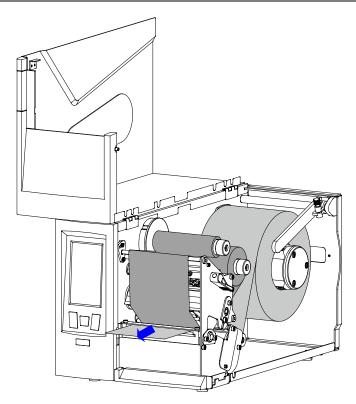


Figure 2-19 Thread the Media

5. Slide the Media Guide to the edge of the media, making sure not to pinch or squeeze the media; keep the media flat and smooth. As shown in Figure 2-20.

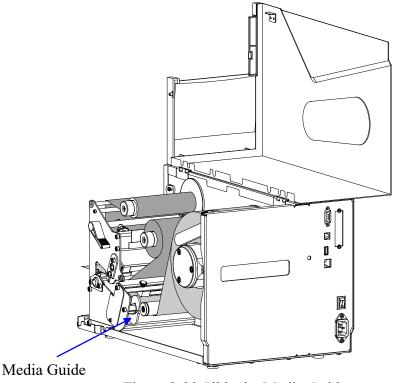


Figure 2-20 Slide the Media Guide

- 6. Adjust the media sensor. See 3.4.1 Adjusting the Media Sensor.
- 7. Turn the Lever clockwise to lock the Printhead in place. As shown in Figure 2-21.

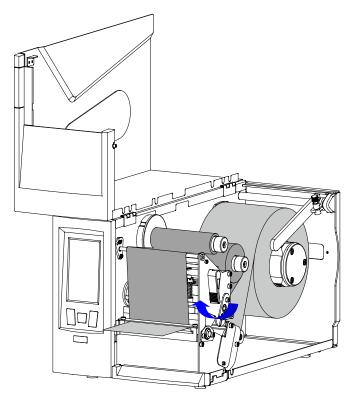


Figure 2-21 Lock the Printhead

8. Turn on the printer and wait for the printer to boot normally., then calibrate the media sensor.

M NOTE

You can choose to calibrate the media sensor manually (press and hold the [FEED/Calibration] button for around 4 seconds) or automatically (refer to 3.2.1.5 Calibration & Registration).

9. Close the flip-up cover. Enter the LCD touchscreen settings menu, and set the printed label handling mode to Tear-off Mode (please refer to 3.2.1.7 Printed Label Handling). As shown in Figure 2-22.

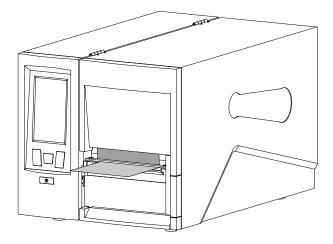


Figure 2-22 Close the Flip-up Cover

2.2.4.3 Cutter Mode (Cutter accessory required)

To load media into the printer while under Cutter Mode, follow the steps below:

- 1. Load a media roll onto the media spindle, please refer to steps $1 \sim 3$ 2.2.4.2 Tear-off Mode.
- 2. Refer to the Media Path as shown in Figure 2-5. Thread the media through the opening on the cutter as shown in Figure 2-23.

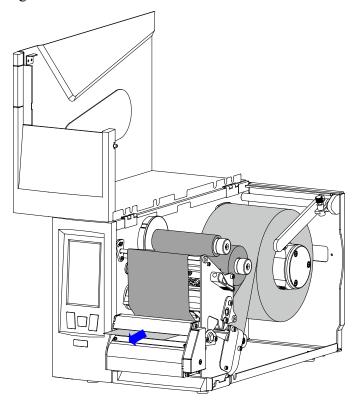


Figure 2-23 Load the Media

3. Slide the Media Guide to the edge of the media, making sure not to pinch or squeeze the media; keep the media flat and smooth. As shown in Figure 2-24.

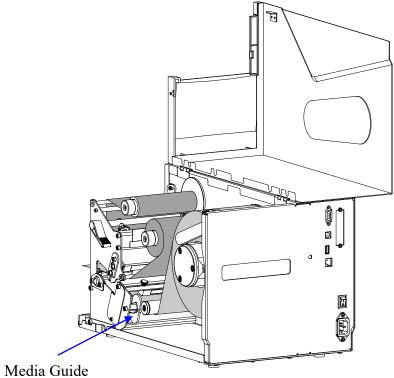


Figure 2-24 Slide the Media Guide

- 4. Adjust the media sensor. See 3.4.1 Adjusting the Media Sensor.
- 5. Turn the Lever clockwise to lock the Printhead in place, as shown in Figure 2-25.

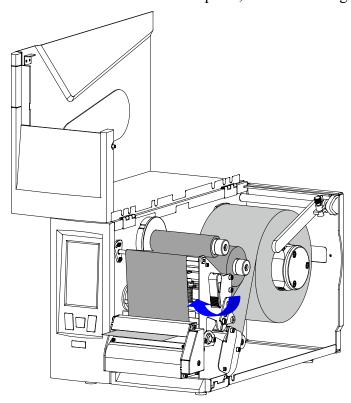


Figure 2-25 Lock the Printhead

- 6. Turn on the printer and wait for the printer to boot normally, then calibrate the media sensor.
 - NOTE

You can choose to calibrate the media sensor manually (press and hold the [FEED/Calibration] button for around 4 seconds) or automatically (refer to 3.2.1.5 Calibration & registration).

7. Close the flip-up cover. Enter the LCD touchscreen settings menu, and set the printed label handling mode to Cutter Mode (please refer to 3.2.1.7 Printed Label Handling). As shown in Figure 2-26.

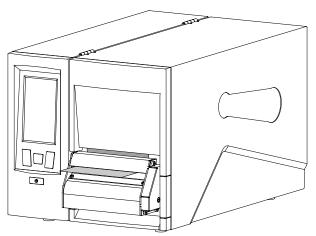


Figure 2-26 Close the Flip-up Cover

2.3 Installing the Printer Driver

2.3.1 USB Port Installation



CAUTION

If you already have a POSTEK printer driver installed on your computer, the printer driver for the additional printer will be installed automatically.

When installing the POSTEK printer driver for the first time, if you connect the printer to your computer via the USB port, please refer to the steps below to complete the printer driver installation (take Windows10 operating system as an example).

- 1. Connect the printer to your computer using a USB cord, then power on the printer.
- 2. Visit the POSTEK website: http://www.postekchina.com and download the printer driver.
- 3. Double-click the printer driver icon to bring up the "License Agreement" screen. Select "I accept the Items in the license agreement" and click "Next", as shown in Figure 2-27.

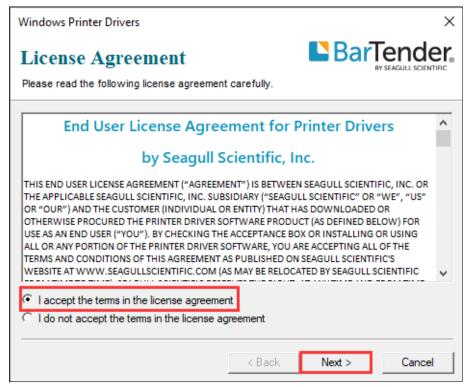


Figure 2-27 License Agreement Screen

4. The "Installation Directory" screen displays. Click "Browse…" and select where the files will be installed, then click "Next", as shown in Figure 2-28.



Figure 2-28 Installation Directory Screen

5. On the "Installation Information" screen, check the box that says "Run Driver Wizard after unpacking drivers", then click "Finish", as shown in Figure 2-29.

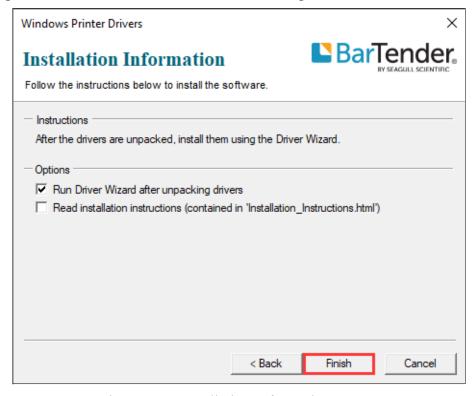


Figure 2-29 Installation Information Screen

6. On the "Seagull Driver Wizard" screen, select "Install printer drivers", and then click "Next", as shown in Figure 2-30.





Figure 2-30 Seagull Driver Wizard Screen

7. The connected printer will be detected, click "Next", as shown in Figure 2-31.

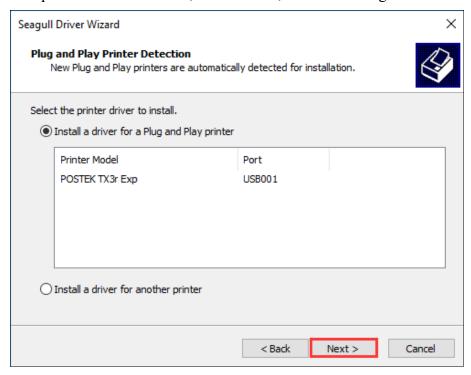


Figure 2-31 Printer Detected

8. On the "Specify Printer Name" screen, enter a name for the printer, as shown in Figure 2-32, then click "Next" to complete the driver installation.

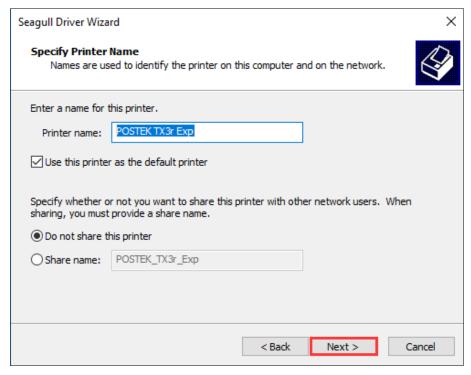


Figure 2-32 Specify Printer Name

9. Print a test page to see whether the printer is connected properly, as shown in Figure 2-33.

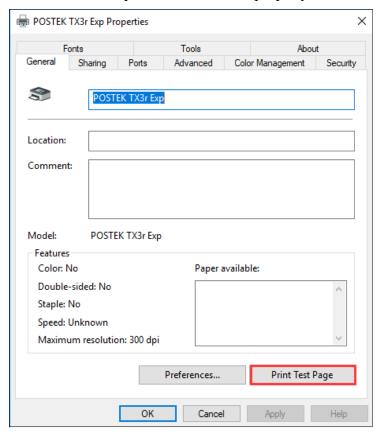


Figure 2-33 Print Test Page

2.3.2 Network Port Installation

If you connect the printer to your computer via the Ethernet port, you will need to configure the printer's network parameters before installing the printer driver and configuring the printer's port information.

2.3.2.1 Ethernet Configuration

Configure the printer's network parameters via the LCD touchscreen settings menu, and the steps are as follows:

- 1. Connect the printer and the computer to the same LAN using an Ethernet cable, then power on the printer.
- 2. Check the LAN information. See Figure 2-34.

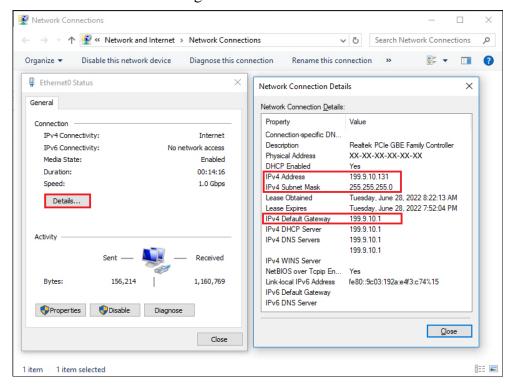


Figure 2-34 Check the LAN Information

3. Enter the LCD touchscreen settings menu and set the network related parameters, see 3.2.2.2 Ethernet.

2.3.2.2 Driver Installation and Port Configuration

After the printer's network parameters have been configured, please refer to the following steps to complete the driver installation and port configuration.

- 1. Visit the POSTEK website: http://www.postekchina.com and download the printer driver.
- 2. Double-click the printer driver icon, follow the prompted screen to extract the driver installer and run the driver installation wizard (for details, please refer to Steps 3~6 in 2.3.1 USB Port Installation).
- 3. On the "Connect Printer" screen, select "Network (Ethernet or WiFi)", and then click "Next", as shown in Figure 2-35.

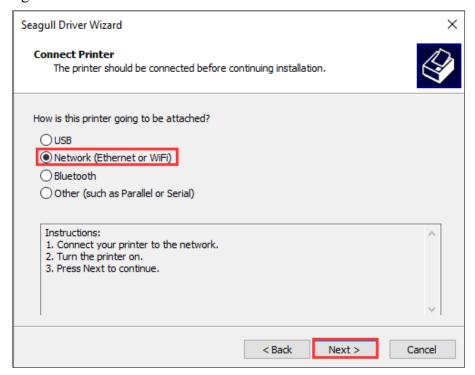


Figure 2-35 Connect Printer Screen

4. The "Specify Printer Model" screen displays, select the printer model, and click "Next", as shown in Figure 2-36.



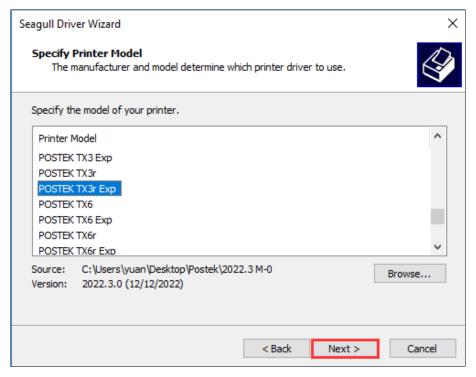


Figure 2-36 Specify Printer Model Screen

5. On the "Specify Port" screen, click "Create Port..." to bring up "Create Port" dialog box, select "Standard TCP/IP Port" - "New Port...", as shown in Figure 2-37.

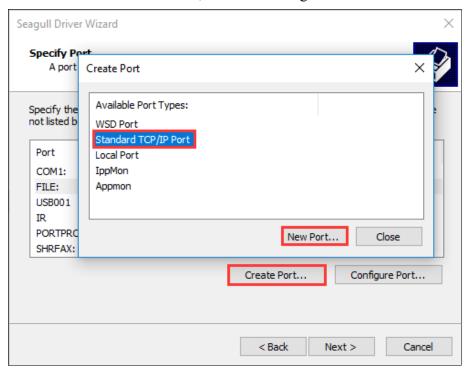


Figure 2-37 Create Port

6. The "Add Standard TCP/IP Printer Port Wizard" screen displays, click "Next", as shown in Figure 2-38.



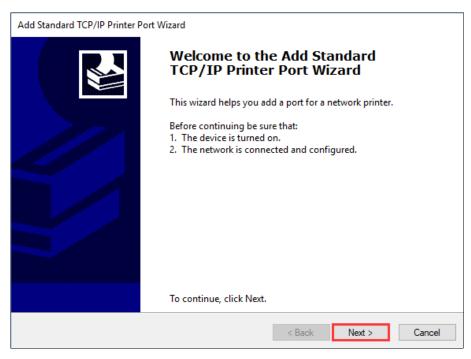


Figure 2-38 Add Standard TCP/IP Printer Port Wizard

7. On the "Add Port" screen, enter the IP Address of the printer (Note: the IP address here must be consistent with the IP address of the printer that has been set, and the port name will be generated automatically), and then click "Next", as shown in Figure 2-39.

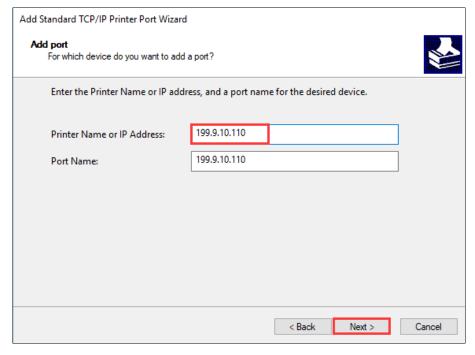


Figure 2-39 Add Port Screen

8. Windows will automatically detect the TCP/IP port. Click "Finish" to complete adding Standard TCP/IP Printer Port, as shown in Figure 2-40.

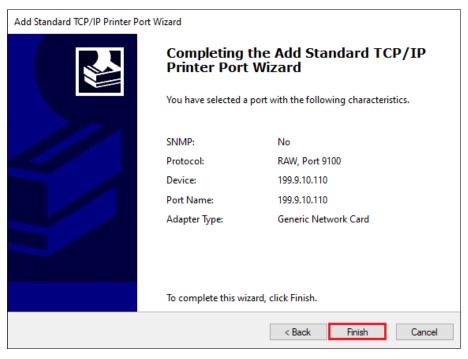


Figure 2-40 Complete adding Standard TCP/IP Printer Port

9. Return to the "Specify Port" screen, select the TCP/IP Port that has been added, and click "Next", as shown in Figure 2-41.

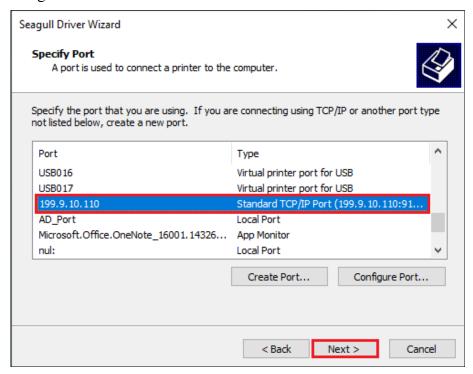


Figure 2-41 Specify Port Screen

10. On the "Specify Printer Name" screen, enter a name for the printer, as shown in Figure 2-42. Click "Next" to complete the driver installation.



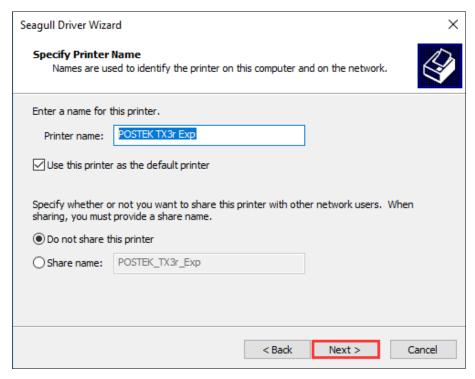


Figure 2-42 Specify Printer Name

11. Print a test page to see whether the printer is connected properly. As shown in Figure 2-43.

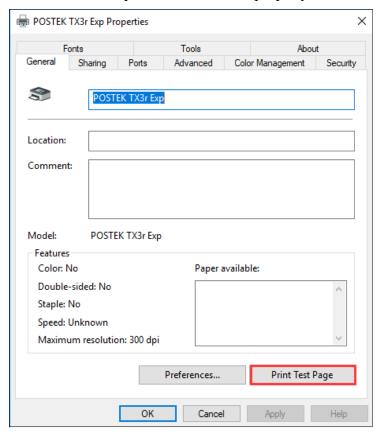


Figure 2-43 Print Test Page

2.4 Installing Label Editing Software

Each printer also comes with a BarTender UltraLite edition software. To access to the software and the directions for use, please scan the QR code on the Quick Start Guide or visit POSTEK website: http://www.postekchina.com.



Chapter 3: Operations and Settings

3.1 The Front Panel

The Front Panel of the printer consists of:

- Three multi-function buttons: [PAUSE/Self Test], [FEED/Calibration], and [CANCEL/Reset]
- One status indicator
- One 4.5" LCD Capacitive Touchscreen

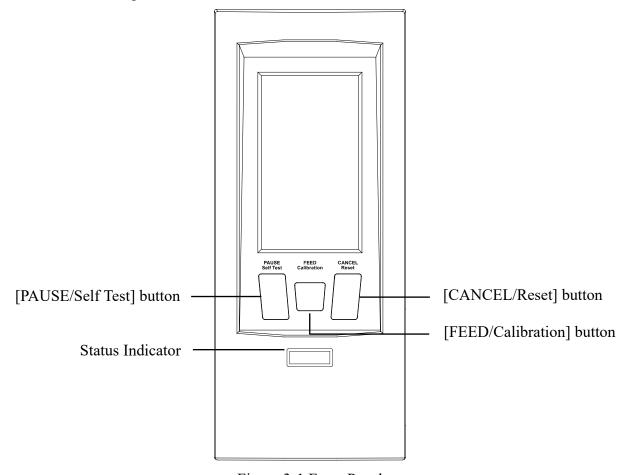


Figure 3-1 Front Panel

3.1.1 Panel Buttons

The three buttons have different functions based on the mode of the operation is performed, please refer to Table 3-1 for details.

Table 3-1 Panel Button Description

Button	Function		
	• When the printer is in working or standby state, press once to pause the printer.		
[PAUSE/Self Test]	• When the printer is in pause state, press once to resume.		
	• When the printer is in a standby state, press and hold the button		
	for around 4 seconds, the printer will print a self-test report.		
[FEED/Calibration]	• When the printer is in a standby state, press once and the printer will feed one label.		
	• When the printer is in a standby state, press and hold the button		
	for around 4 seconds, the printer will automatically feed labels and the media sensor calibration is performed.		
[CANCEL/Reset]	• When the printer is in error, and there is no print job in process, press once and the printer enters the standby state.		
	 When the printer is in standby, press and hold the button for around 4 seconds to enter the Reset settings menu. 		

3.1.2 Status Indicator

The lighting patterns of the status indicator show the various operating states of the printer, please refer to Table 3-2 for details.

Table 3-2 Indicator Description

Indicator	Printer Status
White solid	Printer is in ready or initialization state
White breathing	Printer in hibernation
White blinking	Upgrade in progress
Blue solid	Working state
Blue blinking	Pause state
Blue blinking quickly	Cancelling print job
Red blinking	Printer in error



3.1.3 LCD Touchscreen

The front panel of the printer contains a 4.5" LCD capacitive touchscreen. Settings can be easily configured on the touchscreen. The main screen is shown in Figure 3-2.

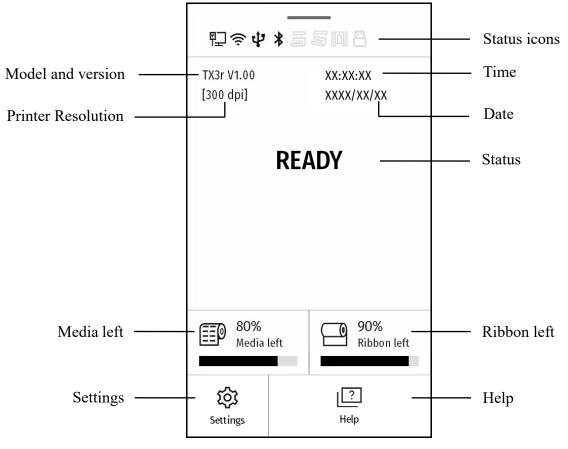


Figure 3-2 Main Screen

For a detailed description of the status icons, see Table 3-3.

Table 3-3 Status Icon Description

Icons	Description	Icons	Description
밑	Network is connected		Network is not connected
<u>\$</u>	WiFi is connected	হ	WiFi is not connected
ψ	USB is connected	ψ	USB is not connected
*	Bluetooth is connected	*	Bluetooth is not connected
量	Cutter mode on		Cutter mode off
	Tear-off mode on	ā	Tear-off mode off
	RFID function on		RFID function off
	USB device is connected	¥ 9	USB device is not connected



3.2 Settings

3.2.1 General Settings

3.2.1.1 Darkness

On the LCD touchscreen, select "Settings" > "General" > "Darkness" to enter the Darkness menu, as shown in Figure 3-3.



Figure 3-3 Darkness Menu

Set the print darkness from this menu. (*Note: Too high the print darkness may result in poor print quality.*). The print darkness defaults to the value sent by print command or printer driver, if you want to use the menu settings, please uncheck the box "Use the value sent by print command or print driver".

Accepted values: 0.0 to 30.0

3.2.1.2 Speed

On the LCD touchscreen, select "Settings" > "General" > "Speed" to enter the Speed menu, as shown in Figure 3-4.



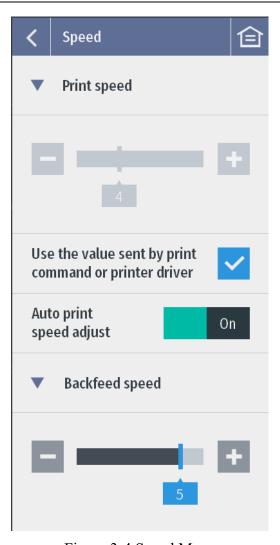


Figure 3-4 Speed Menu

Set the print speed and backfeed speed from this menu. Speed unit: ips (inches per speed).

Print speed: Set the print speed. (*Note: Slower print speed typically yields better print quality.*)

The print speed defaults to the value sent by print command or printer driver, if you want to use the menu settings, please uncheck the box "Use the value sent by print command or print driver".

Accepted values: 0.5, 1 to 16 (for 203dpi models)

0.5, 1 to 12 (for 300dpi models)

0.5, 1 to 6 (for 600dpi models)

Default value: 4

Auto print speed adjust: Set the Automatic Adjustment of the Print Speed on or off.

Due to low ambient temperature, the darkness level you have chosen may not be achievable at the currently selected print speed. The printer will either decrease the print speed or lower the darkness level to start printing. The printhead temperature may increase as a result of continuous printing. If Auto Print Speed Adjust is on, the printer may decrease the print speed to start. As the printhead temperature increases during continuous printing, the printer would automatically increase the print speed until the print speed reaches the originally selected print speed.

If Auto Print Speed Adjust is turned off, the printer may lower the darkness level to start. As the printhead temperature increases during continuous printing, the printer will automatically increase the print darkness level until the set darkness is reached.

Note: Different print speeds may result in differences in printing results, so please use this function according to your actual needs.

Backfeed speed: Set the backfeed speed of the label, i.e., the speed at which the label back feed from the tear-off/cutting position to the print position. Low backfeed speed helps get higher print position accuracy.

Accepted values: 0.5, 1 to 6

Default value: 2

3.2.1.3 Sensor Type

On the LCD touchscreen, select "Settings" > "General" > "Sensor Type" to enter the Sensor Type menu, as shown in Figure 3-5.

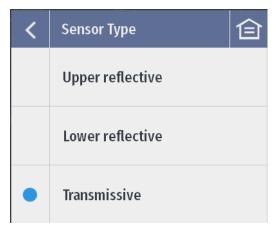


Figure 3-5 Sensor Type Menu

Set the media sensor type from this menu. For labels with a black mark on the surface, choose the upper reflective sensor; for labels with a black mark at the bottom, choose the lower reflective sensor; for gaps, notches and holes, choose the transmissive sensor.

Accepted values: Upper reflective, Lower reflective, Transmissive

Default value: Transmissive



3.2.1.4 Print Mode

On the LCD touchscreen, select "Settings" > "General" > "Print Mode" to enter the Print Mode menu, as shown in Figure 3-6.

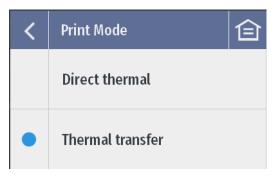


Figure 3-6 Print Mode Menu

Set the print mode from this menu.

Accepted values: Direct thermal, Thermal transfer

Default value: Thermal transfer

Note: If you need to print on Direct Thermal materials (ribbon is not required), please contact your dealer for professional adjustment of the print module to avoid excessive wear of the printhead.



3.2.1.5 Calibration & Registration

On the LCD touchscreen, select "Settings" > "General" > "Calibration & Registration" to enter the Calibration & Registration menu, as shown in Figure 3-7.

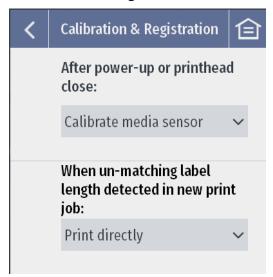


Figure 3-7 Calibration & Registration Menu

After power-up or printhead close: Set the printer's next action when the printer is powered on or the printhead is closed.

Accepted values: No Action, Calibrate media sensor, Feed to next label

Default value: Calibrate media sensor

When un-matching label length detected in new print job: Set the printer's action when the label length in a newly received print job does not match the current label length.

Accepted values: Print after calibration, Print directly

Default value: Print directly



3.2.1.6 Print Direction

On the LCD touchscreen, select "Settings" > "General" > "Print Direction" to enter the Print Direction menu, as shown in Figure 3-8.



Figure 3-8 Print Direction Menu

Set the print direction of the label content. The print direction defaults to the value sent by print command or printer driver, if you want to use the menu settings, please uncheck the box "Use the value sent by print command or print driver".

Accepted values: $0\,^\circ$, $90\,^\circ$, $180\,^\circ$, $270\,^\circ$

Default value: 0 °



3.2.1.7 Printed Label Handling

On the LCD touchscreen, select "Settings" > "General" > "Printed Label Handling" to enter the Printed Label Handling menu, as shown in Figure 3-9.

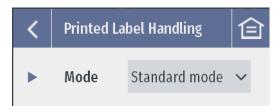


Figure 3-9 Printed Label Handling Menu

Set the printed label handling mode from this menu.

Accepted values: Standard mode, Tear-off mode, Cutter mode

Default value: Tear-off mode

The Tear-off Mode menu, as shown in Figure 3-10.



Figure 3-10 Tear-off Mode Menu

Tear-off position offset: Adjust the relative position between the label's tear-off line and the tear-off bar of the printer when the label is being teared off.

Increase the value of this parameter will move the tear-off line in the same direction as the media feeding direction, as shown in Figure 3-11.

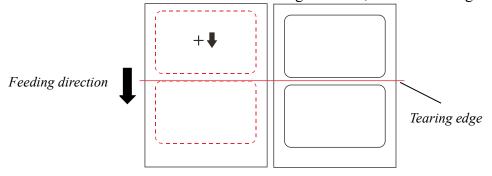


Figure 3-11 Increase Tear-off Position Offset Diagram

Decrease the value will move the tear-off line in the opposite direction of media feeding, as shown in Figure 3-12.

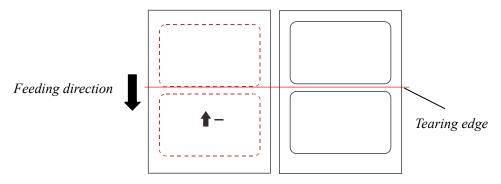


Figure 3-12 Decrease Tear-off Position Offset Diagram

Value range: -1249.8 to 1249.8 mm (for 203dpi models) -847.3 to 847.3 mm (for 300dpi models) -423.6 to 423.6 mm (for 600dpi models)



The Cutter Mode menu, as shown in Figure 3-13.

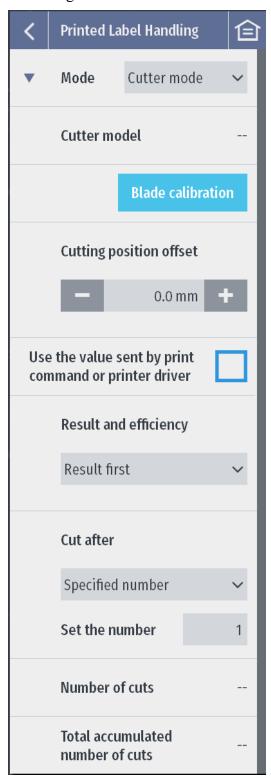


Figure 3-13 Cutter Mode Menu

Cutter model: Display the cutter model.

Blade calibration: Press "Blade calibration" to calibrate the stop position of the blade by performing a test cut.

Cutting position offset: Adjust the relative position between the label's cutting line and the cutter when the label is being cut.

Increase the value of this parameter will move the cutting line in the same direction as the media feeding direction, as shown in Figure 3-14.



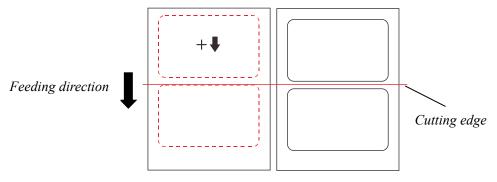


Figure 3-14 Increase Cutting Position Offset Diagram

Decrease the value will move the cutting line in the opposite direction of media feeding, as shown in Figure 3-15.

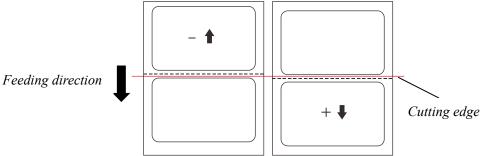


Figure 3-15 Decrease Cutting Position Offset Diagram

Value range: -1249.8 to 1249.8 mm (for 203dpi models)
-847.3 to 847.3 mm (for 300dpi models)
-423.6 to 423.6 mm (for 600dpi models)

Result and efficiency: Select the cutting preference.

Accepted values: Result first, Balanced, Efficiency First

Result first - Keep feeding without printing the next label, stop when reaches the cutting position, and then complete cutting. Back feed to print position and print the next label.

Balanced (Balanced Efficiency and Effectiveness) - Continues to print the following labels, pause printing when reaches the cutting position, and then complete cutting. Resume the printing job.

Efficiency First - Continues to print the following labels, starts cutting when reaches the cutting position without pausing print job. That means the cutting is completed while printing is in progress. (Note: Efficiency First is only applicable for A400 Pro cutters. In this case, the printing speed and paper width will affect the straightness of the media's cut edge, so please try cutting to confirm if the result is acceptable before selecting.)

Default value: Result first

Cut after: Set when the cutter performs cutting.

Accepted values: Specified number, Batch print

Default value: Specified number

Set the number: Set the number of labels to be printed before cutting.

Accepted values: 1 to 255

Default value: 1

Number of cuts: Display the number of cuts since the printer was powered on this time.

Total accumulated number of cuts: Display the total number of cuts the cutter has been used to cut

labels.

Note: If "Use the value sent by print command or print driver" is checked, you cannot set the cutting parameters from the settings menu.



3.2.2 Communication

3.2.2.1 Serial Port

On the LCD touchscreen, select "Settings" > "Communication" > "Serial Port" to enter the Serial Port menu, as shown in Figure 3-16.

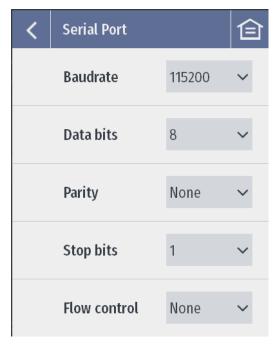


Figure 3-16 Serial Port Menu

Set the parameters of the serial port.

Baud rate: Set the baud rate of the printer's serial port. You need to select the value that matches the computer host.

Accepted values: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200

Default value: 115200

Data bits: Set the data bits of the printer. For accurate communication, you need to select the value that matches the computer host.

Accepted values: 7, 8
Default value: 8

Parity: Set the parity of the printer. You need to select the value that matches the computer host.

Accepted values: no parity, odd parity, even parity

Default value: no parity

Stop bits: Set the stop bits of the printer.

Accepted values: 1, 2
Default value: 1

Flow control: Set the printer's serial port flow control method.

Accepted values: None, Xon/Xoff, Rts/Cts

Default value: None

3.2.2.2 Ethernet

On the LCD touchscreen, select "Settings" > "Communication" > "Ethernet" to enter the Ethernet menu, as shown in Figure 3-17.

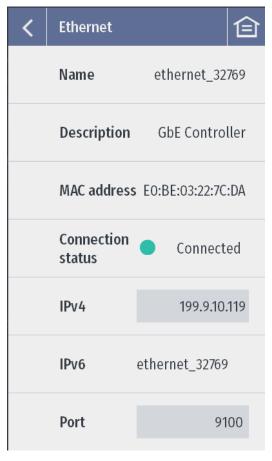


Figure 3-17 Ethernet Menu

Set the network port parameters.

Name: Display the name of the NIC.

Description: NIC description.

MAC address: Display the MAC address of the NIC. **Connection status**: Display the network connection status.

IPv4: Display the IPv4 IP address of the printer. IPv4 settings menu, as shown in Figure 3-18. For a description of the IPv4 setting items, see Table 3-4.

POSTEK

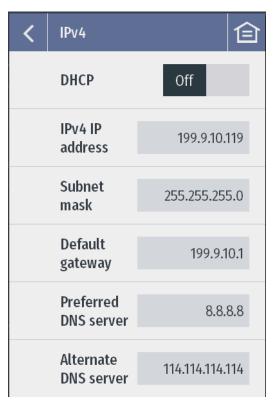


Figure 3-18 IPv4 Settings Menu

Table 3-4 Description of IPv4 Setting Items

Items	Description	
	Set to enable or disable the function of obtaining the printer IP address	
DHCP	dynamically. When DHCP is enabled, "IPv4 address", "Subnet Mask"	
	and "Default Gateway" cannot be set manually.	
	Set the IP address of the printer. (Note: The IP address set here must be	
IPv4 address	in the same network segment as the LAN and cannot be duplicated	
	with the IP addresses of other network devices in the LAN.)	
Subnet mask	Set the subnet mask. Default value: 255.255.255.0	
Default Gateway	Set the default gateway, which must be in the same network segment as	
	the IP address.	
Preferred DNS Server	Set the DNS server address.	
Alternate DNS Server	Set the alternate DNS server address.	

IPv6: Display the IPv6 address of the printer. **Port**: Set the network port. Default value: 9100.



3.2.3 RFID

3.2.3.1 RFID Settings

On the LCD touchscreen, select "Settings" > "RFID" to enable the RFID function, and then select "RFID Settings" to enter the RFID Settings menu, as shown in Figure 3-19.



Figure 3-19 RFID Settings Menu

Set the RFID reader module parameters from this menu.

Read power: Set the read power of RFID module.

Accepted values: 0.0 to 30.0 dBm

Write power: Set the write power of the RFID module.

Accepted values: 0.0 to 30.0 dBm

Frequency region: Select the UHF frequency region.

Accepted values: NA, NA2, NA3, IN, JP, PRC, EU3, KR2, AU, NZ, MY, ID, PH, TW, MO, RU, SG, VN, TH, AR, HK, BD, BR, OPEN The frequency ranges by country/region are listed in Table 3-5.

Table 3-5 Frequency Description

Frequency Name	Frequency Region	Frequency Range
NA	North America	902 ~ 928
NA2	North America 2	917 ~ 928
NA3	North America 3	917 ~ 923
IN	India	865 ~ 867
JP	Japan	915 ~ 921
PRC	China	920 ~ 925
EU3	Europe 3	865 ~ 868
KR2	South Korea 2	917 ~ 921
AU	Australia	918 ~ 926



Frequency Name	Frequency Region	Frequency Range
NZ	New Zealand	922 ~ 928
MY	Malaysia	919 ~ 923
ID	Indonesia	923 ~ 925
PH	Philippines	918 ~ 920
TW	Taiwan, China	922 ~ 928
MO	Macau, China	920 ~ 925
RU	Russia	866 ~ 868
SG	Singapore	920 ~ 925
VN	Vietnam	866 ~ 869
TH	Thailand	920 ~ 925
AR	Argentina	915 ~ 928
HK	Hong Kong, China	865 ~ 868
BD	Bangladesh	925 ~ 926
BR	Brazil	902 ~ 928
OPEN	Open Band	865 ~ 928

Protocol type: Display the protocol type supported by the printer.

Optimal R/W position: Set the optimal read/write position of the RFID tag.

Note: The optimal read/write position of RFID chip is generally the distance from the edge of the tag head to the center of the chip. Manually adjusting the value of the optimal read/write position of RFID chip can correct the inaccuracy value generated by automatic calibration.

The optimal read/write position diagram, see Figure 3-20.

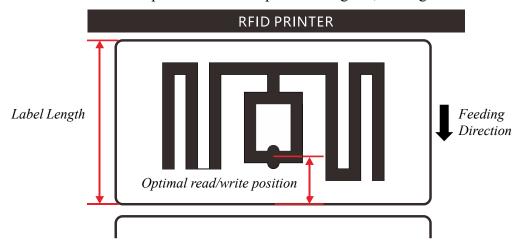


Figure 3-20 Optimal Read/Write Position Diagram

Accepted values: $0 \sim 1249.8 \text{ mm (for } 203dpi \text{ models)}$

 $0 \sim 847.3$ mm (for 300dpi models) $0 \sim 423.6$ mm (for 600dpi models)

Max attempts to reprint VOID tag: Set the maximum number of new RFID tags to retry after the current RFID tag is determined to be invalid (VOID). If any retry is successful, the printer continues to perform the print job; if the RFID encoding still fails after the number of new labels retried reaches the set value, the printer will report an error.

Accepted values: 0 to 5

3.2.3.2 Read RFID Tag Data

On the LCD touchscreen, select "Settings" > "RFID" to enable the RFID function, and then select "Read RFID Tag Data" to enter the Read RFID Tag Data menu, as shown in Figure 3-21.

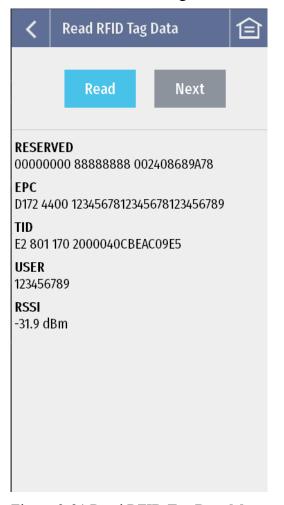


Figure 3-21 Read RFID Tag Data Menu

Read: When the printhead is open, press "Read" to continuously read the RFID tag with the strongest read power and display the data on the LCD touchscreen. Continuous reading will automatically quit after 2 minutes, or can be stopped by pressing "Pause" or closing the printhead.

RESERVED: Display the inactivation password and access password of RFID tag.

EPC: Display the EPC data of the RFID tag.

TID: Display the unique identification number of the RFID tag.

USER: Display user-defined data.

RSSI: Show the signal strength of the RFID tag antenna.

Next: When the printhead is closed, press "Next" to feed and read the next RFID tag.



3.2.3.3 Calibration

On the LCD touchscreen, select "Settings" > "RFID" to enable the RFID function, and then select "Calibration" to enter the Calibration menu, as shown in Figure 3-22.

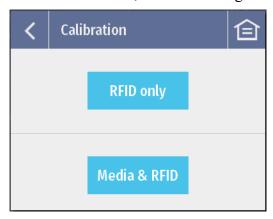


Figure 3-22 Calibration Menu

Perform the RFID calibration to detect the optimal read/write position of the RFID tag.

RFID only: Press "RFID only" to directly perform RFID calibration only.

Media & RFID: Press "Media & RFID" to calibrate the media sensor first and then perform the RFID calibration.



3.2.4 Management

3.2.4.1 Preference

On the LCD touchscreen, select "Settings" > "Management" > "Preference" to enter the Preference menu, as shown in Figure 3-23.



Figure 3-23 Preference Menu

Enable or disable the Automatic Adjustment of the Print Speed prompt message.

Accepted values: On, Off

Default value: Off



3.2.4.2 Label Formats

On the LCD touchscreen, select "Settings" > "Management" > "Label Formats" to enter the Label Formats menu, as shown in Figure 3-24.

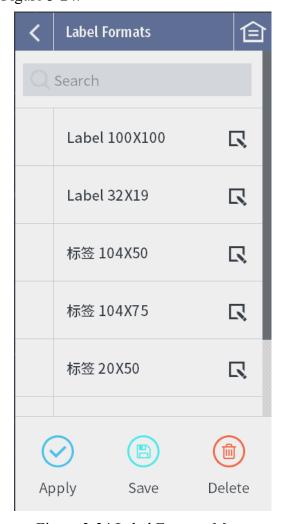


Figure 3-24 Label Formats Menu

Under this menu, up to 100 label format files can be managed. You can select and apply a file in the list, save the current label format, and rename or delete a label format.



3.2.5 Advanced

3.2.5.1 Label Position Offset

On the LCD touchscreen, select "Settings" > "Advanced" > "Label Position Offset" to enter the Label Position Offset menu, as shown in Figure 3-25.

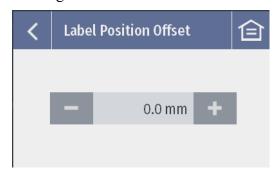


Figure 3-25 Label Position Offset Menu

To compensate for positioning deviations, this parameter can be used to adjust the relative position between the label's leading edge and the heater line of the printhead when the current label is advanced to the starting point.

Increase the value of this parameter will move the leading edge of the label in the same direction as the media feeding direction, as shown in Figure 3-26.

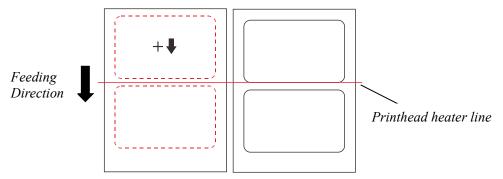


Figure 3-26 Increase Label Position Offset Diagram

Decrease the value will move the leading edge of the label in the opposite direction of media feeding, as shown in Figure 3-27.

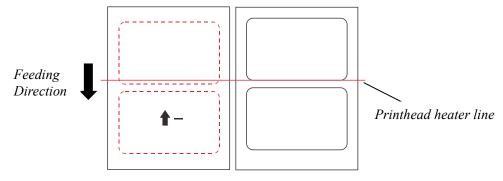


Figure 3-27 Decrease Label Position Offset Diagram

Accepted values: -1249.8 to 1249.8 mm (for 203dpi models)

-847.3 to 847.3 mm (for 300dpi models)

-423.6 to 423.6 mm (for 600dpi models)

3.2.5.2 Horizontal Offset

On the LCD touchscreen, select "Settings" > "Advanced" > "Horizontal Offset" to enter the Horizontal Offset menu, as shown in Figure 3-28.



Figure 3-28 Horizontal Offset Menu

This parameter can be used to adjust the horizontal print position on a label. Facing the front side of the printer, increase the value of this parameter to move the print position to the right. Vice versa, the value can be decreased to move the print position to the left. The Horizontal Offset diagram, as shown in Figure 3-29.

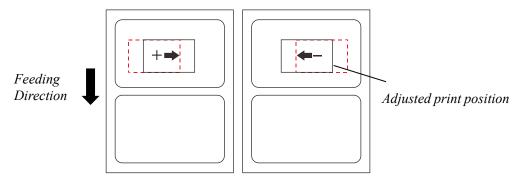


Figure 3-29 Horizontal Offset Diagram

Accepted values: -1249.8 to 1249.8 mm (for 203dpi models)
-847.3 to 847.3 mm (for 300dpi models)
-423.6 to 423.6 mm (for 600dpi models)

Note: If "Use the value sent by print command or printer driver" is checked, you cannot set the horizontal offset from the settings menu.

3.2.5.3 Vertical Offset

On the LCD touchscreen, select "Settings" > "Advanced" > "Vertical Offset" to enter the Vertical Offset menu, as shown in Figure 3-30.

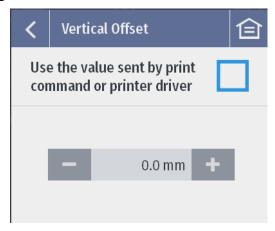


Figure 3-30 Vertical Offset Menu

This parameter can be used to adjust the vertical print position on a label. Increase the value of this parameter to move the print position in the same direction as the media feeding direction. Subsequently, decreasing the value would move the print position in the opposite direction. The Vertical Offset diagram, as shown in Figure 3-31.

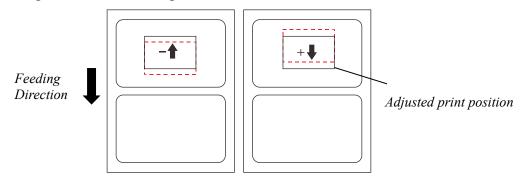


Figure 3-31 Vertical Offset Diagram

Accepted values: -1249.8 ~ 1249.8 mm (for 203dpi models) -847.3 ~ 847.3 mm (for 300dpi models) -423.6 ~ 423.6 mm (for 600dpi models)

Note: If "Use the value sent by print command or printer driver" is checked, you cannot set the vertical offset from the settings menu.

3.2.5.4 Registration Accuracy

On the LCD touchscreen, select "Settings" > "Advanced" > "Registration Accuracy" to enter the Registration Accuracy menu, as shown in Figure 3-32.

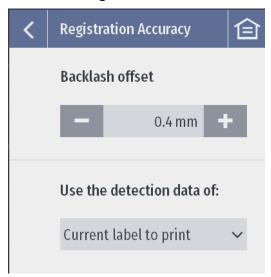


Figure 3-32 Registration Accuracy Menu

Adjust the positioning accuracy of the backfeed label.

Backlash offset: This offset is used to correct the backlash when the platen roller has just reversed its feeding direction.

If the print position deviates in the opposite direction of media feeding, as shown in Figure 3-33, please try to increase the Backlash Offset.

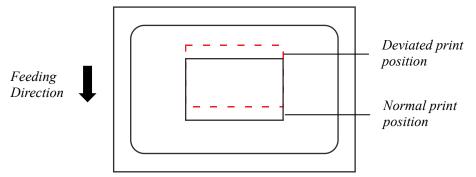


Figure 3-33 Increase Backlash Offset Diagram

If the print position deviates in the direction of media feeding, as shown in Figure 3-34, please try to decrease the Backlash Offset.

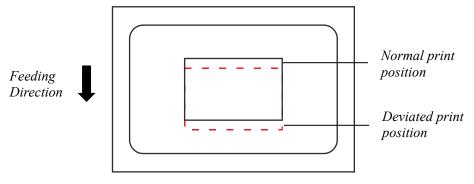


Figure 3-34 Decrease Backlash Offset Diagram

Accepted values: -5.0 to 5.0 mm

Default value: 0.6 mm (for 203dpi models)

0.4 mm (for 300dpi models)
0.2 mm (for 600dpi models)

Use the detection data of: Set the label positioning to be based on the current label to print or the latest detected label. Normally, there is no need to change the settings. However, if the label stock being used has inconsistent gap sizes due to manufacturing issues, please select "Current label to print" so as to improve the label positioning accuracy.

Accepted values: Current label to print, Latest detected label

Default value: Latest detected label



3.2.5.5 Sensor Signal Strength

On the LCD touchscreen, select "Settings" > "Advanced" > "Sensor Signal Strength" to enter the Sensor Signal Strength menu, as shown in Figure 3-35.

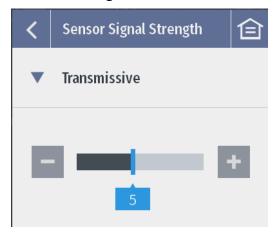


Figure 3-35 Sensor Signal Strength Menu

Set the sensitivity of the media sensor. When the media sensor calibration fails, it is recommended to adjust the sensor signal strength appropriately so as to improve the detection sensitivity.

Accepted values: 1 to 10

Default range: 5

3.2.5.6 Reset

On the LCD touchscreen, select "Settings" > "Advanced" > "Reset" to enter the Reset menu, as shown in Figure 3-36.

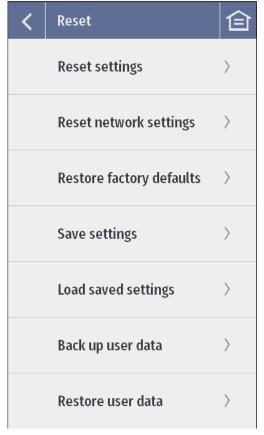


Figure 3-36 Reset Menu



Reset the printer from this menu.

Reset settings: The printer will be reset to default settings except the security, language, and account settings. Any customizations you've made to the printer, such as the print speed and print darkness, will be discarded. The user data, such as the downloaded fonts, will not be affected.

Reset network settings: This will reset all network settings, including Ethernet, WLAN and Bluetooth.

Restore factory defaults: All data will be erased from the printer, including the system and application data, the settings, the downloaded data, and all other user data.

Save settings: Save all current settings.

Load saved settings: Load saved settings, the current settings will be overwritten.

Back up user data: This will back up all data in the printer, including the system and application data, the settings, downloaded files, and other user data.

Restore user data: The backed-up user data, if available, will be recovered after the printer being reset to factory default settings.

3.2.5.7 Languages

On the LCD touchscreen, select "Settings" > "Advanced" > "Language" to enter the Languages menu, as shown in Figure 3-37.



Figure 3-37 Language Menu

Set the language that the printer displays. *Accepted values*: 简体中文、English

3.2.5.8 Units

On the LCD touchscreen, select "Settings" > "Advanced" > "Units" to enter the Units menu, as shown in Figure 3-38.



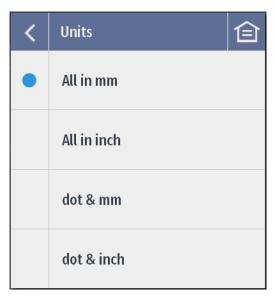


Figure 3-38 Units Menu

Set the units of the setting values.

Accepted values: All in mm, All in inch, dot & mm, dot & inch

3.2.5.9 Date & Time

On the LCD touchscreen, select "Settings" > "Advanced" > "Date & Time" to enter the Date & Time menu, as shown in Figure 3-39.



Figure 3-39 Date & Time Menu



Set the date and time displayed on the printer.

Time: Display the current time. **Date**: Display the current date.

Auto sync date & time: Set the automatic date and time synchronization function on or off. When

this function is on, the NTP server date and time will be automatically synchronized every time the printer is powered on and connected to the

internet.

Military time: Set the 24-hour system on or off.

Timezone: Select the time zone.

NTP server: Select the NTP server address.

Sync date & time: When the printer is connected to the internet, press "Sync date & time", the

system will immediately synchronize the date and time with the NTP server.

3.2.5.10 Maximum Feed Length

On the LCD touchscreen, select "Settings" > "Advanced" > "Maximum Feed Length" to enter the Maximum Feed Length menu, as shown in Figure 3-40.

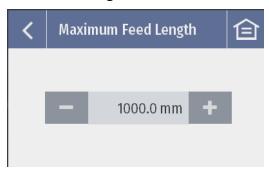


Figure 3-40 Maximum Feed Length Menu

Set the maximum feed length for media sensor calibration. This value needs to be set to more than 2 times of the actual label height.

Accepted values: 100.0 to 15000.0 mm

Default range: 1000.0 mm



3.2.5.11 Media Feed Calibration

On the LCD touchscreen, select "Settings" > "Advanced" > "Media Feed Calibration" to enter the Media Feed Calibration menu, as shown in Figure 3-41.

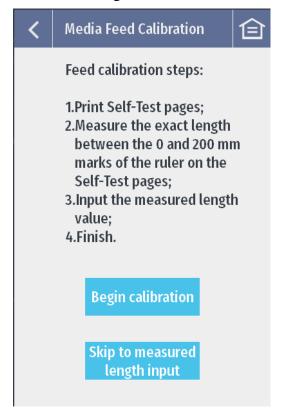


Figure 3-41 Media Feed Calibration Menu

Begin calibration: Press "Begin calibration" and follow the steps to complete the calibration process. **Skip to measured length input**: Press "Skip to measured length input" to skip to Input Measured Length menu.



3.2.5.12 Media Roll Diameter

On the LCD touchscreen, select "Settings" > "Advanced" > "Media Roll Diameter" to enter the Media Roll Diameter menu, as shown in Figure 3-42.

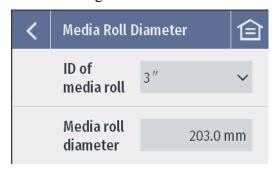


Figure 3-42 Media Roll Diameter Menu

The Remaining Amount of Media Monitoring system detects the real-time variation in diameter of the media roll when printing. By taking both the real-time diameter and the full roll diameter of the media roll into calculation, the system can determine how much media remains on a media roll. The default inner diameter is 3"(76.2 mm). The default value of the diameter of the full media roll is 8"(203.0 mm). If the inner diameter and the full media roll's real diameter are different from the default values, please modify them under this menu.

The real-time remaining media percentage will be displayed on the LCD screen. When the real-time diameter of the media roll equals or is greater than the diameter value as defaulted or modified in the system, the remaining media will be displayed as 100% on the LCD screen.

Inside of paper roll: The inner diameter of the media roll. (Note: The printer is equipped with both 1.5" and 3" media core adapters. The 1.5" core adapter is located inside the 3" core adapter. To load a 1.5" core media roll, please first remove the 3" core adapter; and then adjust the position of the Media Roll Guide Stopper.)

Accepted values: 1.5", 3"

Default value: 3"

Media roll diameter: The full roll diameter of the media roll.

Accepted values: 76.2 to 203.2 mm

Default value: 203.0 mm



3.2.5.13 Ribbon Outer Diameter

On the LCD touchscreen, select "Settings" > "Advanced" > "Ribbon Outer Diameter" to enter the Ribbon Outer Diameter menu, as shown in Figure 3-43.



Figure 3-43 Ribbon Outer Diameter Menu

The Remaining Amount of Ribbon Monitoring system detects the real-time variation in diameter of the ribbon roll when printing. By taking both the real-time diameter and the full roll diameter of the ribbon roll into calculation, the system can determine how much ribbon remains on a ribbon roll. The default value of the diameter of the full ribbon roll is 2.5" (63.6 mm). If the full ribbon roll's real diameter is different from the default value, please modify it under this menu.

The real-time remaining ribbon percentage will be displayed on the LCD screen. When the real-time diameter of the ribbon roll equals or is greater than the diameter value as defaulted or modified in the system, the remaining ribbon will be displayed as 100% on the LCD screen.

Accepted values: 25.4 to 84.0 mm

Default value: 63.6 mm

3.2.5.14 Programming Language

On the LCD touchscreen, select "Settings" > "Advanced" > "Programming Language" to enter the Programming Language menu, as shown in Figure 3-44.

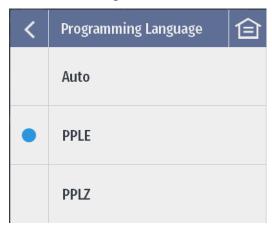


Figure 3-44 Programming Language Menu

Set the programming language of the printer.

Accepted values: Auto, PPLE, PPLZ

Default value: PPLE

3.2.5.15 Firmware Update

On the LCD touchscreen, select "Settings" > "Advanced" > "Firmware Update" to enter the Firmware Update menu, as shown in Figure 3-45.



Figure 3-45 Firmware Update Menu

Upgrade the printer firmware.

OTA update: Upgrade the printer firmware by downloading the upgrade package from a remote server via the internet.

USB update: Upgrade the printer firmware by downloading the upgrade package to the printer via the local USB port.



3.2.5.16 Dump Mode

On the LCD touchscreen, select "Settings" > "Advanced" > "Dump Mode" to enter the Dump Mode menu, as shown in Figure 3-46.

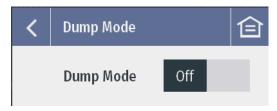


Figure 3-46 Dump Mode Menu

Set the Dump Mode on or off. When the Dump Mode is on, the printer prints out the received data directly without parsing.

Accepted values: On, Off Default value: Off

3.2.5.17 Print Test

On the LCD touchscreen, select "Settings" > "Advanced" > "Print Test" to enter the Print Test menu, as shown in Figure 3-47.



Figure 3-47 Print Test Menu

Press "Start print", the printer will perform print tests by printing a variety of test patterns at print darkness levels of 10, 12, 14, 16, 18, and 20.

The test patterns, as shown in Figure 3-48.

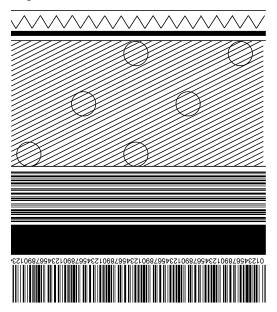


Figure 3-48 Test Patterns



3.2.5.18 About

On the LCD touchscreen, select "Settings" > "Advanced" > "About" to enter the About page, as shown in Figure 3-49.

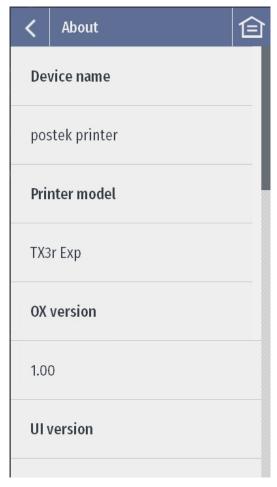


Figure 3-49 About Page

This menu allows you to view the device name, printer model, OX version, UI version, BSP version, OS version, RT version, HEAT version, hardware version, firmware ID and device serial number.

3.3 Mechanical Adjustments

3.3.1 Adjusting the Media Sensor

The position of the printer's integrated reflective and transmissive media sensor can be adjusted left and right, refer to Figure 3-50, by following the steps below.

- 1. Loosen the Thumbscrew.
- 2. Move the thumbscrew and adjust the Media Sensor Assembly to the appropriate position. Make sure that its position is directly over the gap, hole, notch or black mark.
- 3. Fix the Thumbscrew.

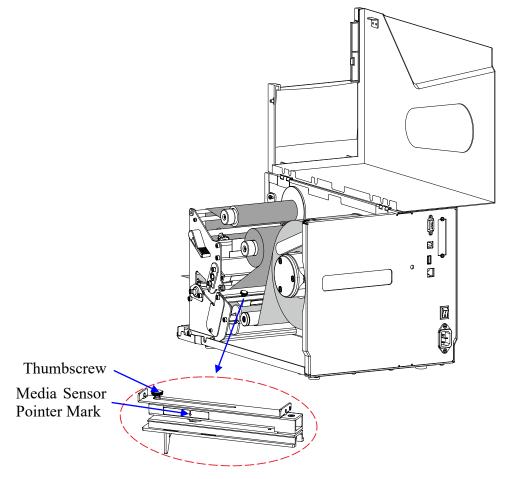


Figure 3-50 Adjust the Media Sensor Position

M NOTE

- *The printer has three types of media sensors:*
 - > Transmissive sensor, detects gap, hole or notch between labels;
 - Lower reflective sensor, detects black mark on the backside of the media;
 - ➤ Upper reflective sensor, detects black mark on the front side of the media. The way to set the sensor type can be found in 3.2.1.3 Sensor type.
- When roll media is produced, the media end would be fixed on the media core with duct tape or scotch tape. If your printer cannot detect the Media Out signal well, please refer to Figure 3-51 to check the position of the tape.



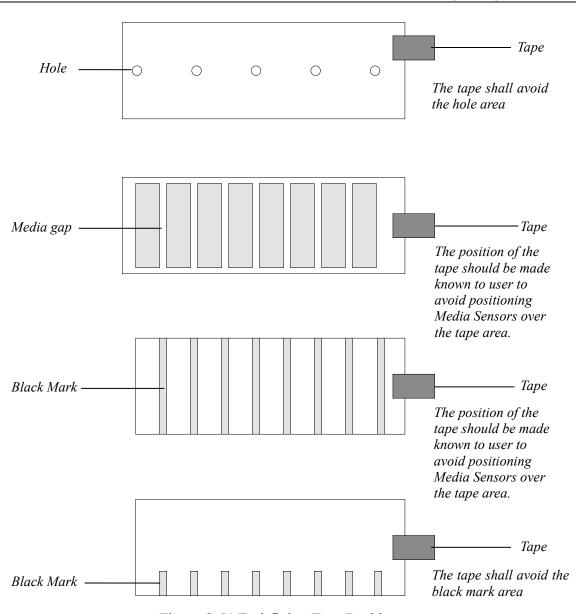
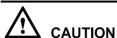


Figure 3-51 End-fixing Tape Position

3.3.2 Adjusting the Printhead Pressure and Balance



A qualified technician is required to adjust the printhead pressure or printhead balance. Printhead damage or poor printout quality may occur if the procedure is not done correctly.

The printhead pressure comes from two spring assemblies, the force generated by the two springs is transferred to the printhead via two Pressure Bars, as shown in Figure 3-52.

Adjusting the position of a Pressure Bar changes the pressure across the printhead and platen roller, thus it has immediate impact on the evenness of printout.

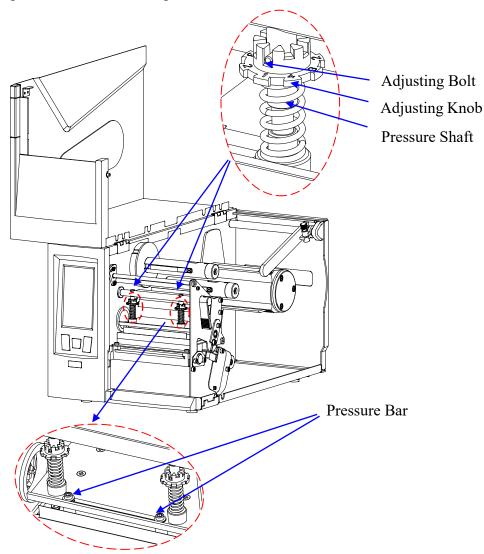


Figure 3-52 Printhead Pressure and Balance Adjustment

Follow the steps below to adjust the printhead pressure:

- 1. Press down the Adjusting Knob, and twist the Adjusting Knob to align the numbered pressure level with the Adjusting Bolt to apply different level of pressure (The bigger the number, the more pressure the spring assembly brings to the printhead).
- 2. Repeat step 1 on another spring assembly to complete the adjustment of the printhead pressure.



Follow the steps below to adjust the printhead balance:

- 1. To adjust the balance of the printhead, only one Pressure Bar's position needs to be adjusted. Moving the Pressure Bar to the left increases the left side pressure of the printhead; moving the Pressure Bar to the right increases the right side pressure of the printhead. Always place one Pressure Bar at end position when making adjustments. Choose the left side or right side Pressure Bar to adjust, then slightly loosen the Pressure Bar by using the Allen wrench bundled with the printer.
- 2. Slide the Pressure Bar to an estimated position and fasten it with the Allen wrench.
- 3. Test print to check the evenness of the printout quality.
- 4. Repeat steps 2 and 3 until even printout is achieved.

3.3.3 Adjusting the Ribbon Tension

Tension on both ribbon supply and ribbon take-up spindles can be adjusted, refer to Figure 3-53, by following the steps below.

- 1. Slightly loosen the Setscrew with the Allen wrench bundled with the printer.
- To increase the tension, turn the Tension Adjustment Screw clockwise by the Allen wrench; to decrease the tension, turn it counterclockwise. The tension level can be read from the Tension Level Indicator. When tension is set at the desired level, fasten the Setscrew to complete the adjustment.

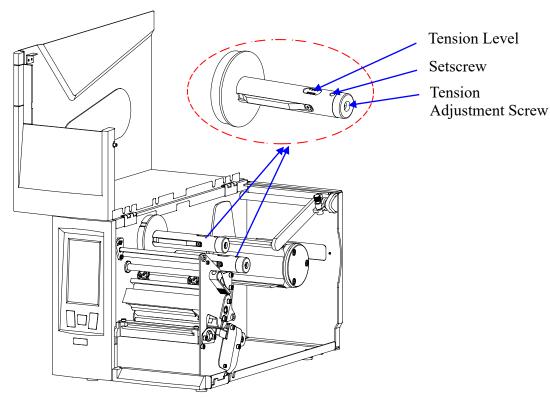


Figure 3-53 Ribbon Tension Adjustment



Chapter 4: Maintenance



WARNING

- Make sure the printer is powered off before performing maintenance operations.
- The Printhead may be hot due to recent printing. Wait until the Printhead cools before performing maintenance.
- *Use only anhydrous isopropyl alcohol to clean the print head.*

4.1 Cleaning the Printhead

Due to the Printhead's functionality in the printer, it comes into contact with consumables and therefore is susceptible to dirt accumulation. If dirt is not removed, the Printhead may be damaged. To ensure longevity of the Printhead, follow the recommended maintenance guidelines below:

Clean the Printhead after every (1) roll of ribbon use or every (3) rolls of label media use. To clean the Printhead:

- 1. Turn off the printer.
- 2. Lift to open the right cover of the printer.
- 3. Turn the Lever counter clockwise to open the Printhead.
- 4. Remove the ribbon (if applicable) and media.
- 5. Use a cotton swab dipped in anhydrous isopropyl alcohol. Wipe the Printhead from end to end.
- 6. Allow a few seconds for the Printhead to dry before using the printer again.

4.2 Cleaning the Platen Roller

The roller can accumulate debris from consumables, such as dirt, sand, dust or glue. To ensure longevity of the Platen Roller, follow the recommended maintenance guidelines below:

Clean the Platen Roller after every (3) rolls of label media used. To clean the Platen Roller:

- 1. Turn off the printer.
- 2. Lift to open the right cover of the printer.
- 3. Turn the Lever counter clockwise to open the Printhead.
- 4. Remove the ribbon (if applicable) and media.
- 5. Use a cotton swab dipped in anhydrous isopropyl alcohol. Rub the swab along the Platen Roller from end to end while rotating the roller until the swab no longer accumulates ink or debris.

4.3 Cleaning the Printer Interior

Over time, the printer's interior may collect dust or debris from the consumables. It is advised to periodically clean the printer's interior in order to prevent the accumulated dirt from damaging internal parts.



To clean the printer interior, use a cotton swabs dipped into anhydrous isopropyl alcohol and remove any dirt.

4.4 Cleaning the Sensors

Over time, dust and debris will accumulate over the sensors and affect their performance, to ensure proper detection, please clean the sensors with cotton swabs dipped into anhydrous isopropyl alcohol periodically.



Chapter 5: Troubleshooting

Occasionally situations occur that require some troubleshooting. Possible issues and potential solutions are listed in this section. While not every situation is addressed, you may find some of these tips useful.

5.1 Error Messages

The LCD touchscreen displays messages when there is an error. See Table 5-1 for error messages, the possible causes, and the recommended solutions.

Table 5-1 Error Messages

Error Message	Possible Cause	Recommended Solution
Memory error.	/	Please restart the printer. If error remains,
Error code:1		please contact a qualified professional for
		service.
System error. Error	/	Please restart the printer. If error remains,
code:2		please contact a qualified professional for
		service.
Upgrade failed.	/	Try again
Error code:3		
System error. Error	/	Please restart the printer. If error remains,
code:4		please contact a qualified professional for
		service.
System error. Error	/	Please restart the printer. If error remains,
code:5		please contact a qualified professional for
		service.
System error. Error	/	Please restart the printer. If error remains,
code:6		please contact a qualified professional for
		service.
System error. Error	/	Please restart the printer. If error remains,
code:7		please contact a qualified professional for
		service.
System error. Error	/	Please restart the printer. If error remains,
code:8		please contact a qualified professional for
		service.
Transmissive	Incorrect signal strength	Go to "Settings" > "Advanced" > "Sensor
sensor failure.	setting	Signal Strength" to adjust the signal
Error code:9		strength.
	The sensor module is not	/
	installed or broken.	
Lower reflective	Incorrect signal strength	Go to "Settings" > "Advanced" > "Sensor
sensor failure.	setting	Signal Strength" to adjust the signal
Error code:10		strength.
	The sensor module is not	/
	installed or broken.	
Upper reflective	Incorrect signal strength	Go to "Settings" > "Advanced" > "Sensor



Error Message	Recommended Solution	
sensor failure.	Possible Cause setting	Signal Strength" to adjust the signal
Error code:11	Setting	strength.
21101 00 00111	The sensor module is not	/
	installed or broken.	,
Failed to enable	Cutter mode not supported	/
cutter mode. Error	with this printer	,
code:13	Cutter module not installed	/
	Cutter module broken	/
Updates failed.	Not enough Flash memory.	Please go to "Settings" > "Mgmt" to clean up
Error code: 100	Two chough I lash memory.	some files such as images or fonts to free up
Effor code.100		space.
Updates failed.	High memory usage by other	Please restart the printer and try again.
Error code: 101	applications.	Trease restart the printer that if y again.
Updates failed.	Invalid update file.	Please check your download source.
Error code: 102	mvana apaate me.	rease eneck your download source.
Updates failed.	Data verification error.	Please try again.
Error code: 103	Data verification error.	Ticuse try again.
Updates failed.	Failed writing Flash memory.	Please contact a qualified professional for
Error code: 104	Tanea writing Flash memory.	service.
Updates failed.	Failed connecting to internet.	Please check network connection.
Error code: 105	Tanea connecting to internet.	Trease effect network confection.
Updates failed.	Execution error.	Please try again.
Error code: 106	Execution error.	Ticuse try again.
Data error. Error	/	There is an error when receiving data, Please
code:10001	,	restart the printer.
Data error. Error	/	There is an error when sending data, Please
code:10002	,	restart the printer.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11000		please contact a qualified professional for
21101 00 00 0111000		service.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11001		please contact a qualified professional for
		service.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11002		please contact a qualified professional for
		service.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11003		please contact a qualified professional for
		service.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11004		please contact a qualified professional for
		service.
Serial port error.	/	Please restart the printer. If error remains,
Error code:11005		please contact a qualified professional for
		service.
Serial port error.		Please restart the printer. If error remains,
Error code:11006		please contact a qualified professional for
		service.
Serial port error.		Please restart the printer. If error remains,
Error code:11007		please contact a qualified professional for



Error Message Possible Cause Recommended Solution					
Error Message 1 Ossible Cause		service.			
USB Device port	/	Please restart the printer. If error remains,			
error. Error	/	please contact a qualified professional for			
code:12000		service.			
USB Device port	/				
error. Error	/	Please restart the printer. If error remains, please contact a qualified professional for			
code:12001		service.			
USB failed to send	/	Please check the USB connection. If error			
data. Error		remains, please contact a qualified			
code:12002		professional for service.			
USB read error.	/	Please check the USB connection. If error			
Error code: 12003		remains, please contact a qualified			
Lifer code.12003		professional for service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code: 12500	,	please contact a qualified professional for			
21101 0040.12500		service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code: 12501	,	please contact a qualified professional for			
		service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code:12502		please contact a qualified professional for			
		service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code:12503		please contact a qualified professional for			
		service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code: 12504		please contact a qualified professional for			
		service.			
Ethernet port error.	/	Please restart the printer. If error remains,			
Error code:12505		please contact a qualified professional for			
		service.			
Invalid command.	Instructions sent to the printer	Please check the command syntaxes.			
Error code:20000	contain an invalid command				
	The configured printer	Please go			
	programming language	to "Settings" > "Advanced" > "Programming			
	doesn't match that in the	Language" to select the matching			
	instructions sent to the printer	programming language.			
Invalid command.	Instructions sent to the printer	Please check the command syntaxes.			
Error code:20001	contain an invalid command				
	The configured printer	Please go			
	programming language	to "Settings" > "Advanced"> "Programming			
	doesn't match that in the	Language" to select the matching			
Y 11.1	instructions sent to the printer	programming language.			
Invalid command.	Instructions sent to the printer	Please check the command syntaxes.			
Error code:21000	contain an invalid command	DI .			
	The configured printer	Please go			
	programming language	to "Settings" > "Advanced"> "Programming			
	doesn't match that in the	Language" to select the matching			
T 1'1 1	instructions sent to the printer	programming language.			
Invalid command.	Instructions sent to the printer	Please check the command syntaxes.			
Error code:22000	contain an invalid command				



Error Message	Possible Cause	Recommended Solution		
The configured printer		Please go		
	programming language	to "Settings" > "Advanced"> "Programming"		
	doesn't match that in the	Language" to select the matching		
	instructions sent to the printer	programming language.		
Keypad error.	/	Please restart the printer. If error remains,		
Error code:23000		please contact a qualified professional for		
		service.		
LCD error. Error	/	Please restart the printer. If error remains,		
code:24000		please contact a qualified professional for		
		service.		
LCD error. Error	/	Please restart the printer. If error remains,		
code:24001		please contact a qualified professional for		
		service.		
System error. Error	/	Please restart the printer. If error remains,		
code:30000		please contact a qualified professional for		
		service.		
System error. Error	/	Please restart the printer. If error remains,		
code:30001		please contact a qualified professional for		
		service.		
Printhead open.	/	Please close the printhead		
Error code:30002				
Data processing	/	Impaired performance of CPU by heat,		
timeout. Error		ambient temperature needs to be well		
code:30003~30004	,	maintained.		
System error. Error	/	Please restart the printer. If error remains,		
code:30100~30119		please contact a qualified professional for		
Excessive label	/	service.		
size. Error code:	/	Not enough memory to process label data of this size.		
31000		this size.		
Media sensor	/	Ensure that the media sensor is aligned with		
calibration failed.	/	the sensing marks, e.g. gaps, holes, black		
Error code:31001		marks.		
Lifor code.51001	/	Choose the best media sensor for the		
		situation: transmissive, upper reflective, or		
		lower reflective.		
	/	The media sensor needs cleaning.		
	/	Incorrect signal strength setting, go		
		to "Settings" > "Advanced" > "Sensor Signal		
		Strength" to adjust the signal strength.		
Out of media.	/	Replace the media.		
Error code: 31002		•		
Media detection	Media sensor calibration not	Press and hold the [FEED/Calibration]		
error. Error code: performed after replacing a		button (hold for around 4 seconds) to		
31003	new media.	perform Media Sensor Calibration		
		Ensure that the media sensor is aligned with		
		the sensing marks, e.g. gaps, holes, black		
		marks.		
	/	Choose the best media sensor for the		
		situation: transmissive, upper reflective, or		
		lower reflective.		



Media sensor needs cleaning.	Error Message	Possible Cause	Recommended Solution			
Ribbon detection error. Error code: 31004		/				
Ribbon detection error. Error code: 31008 Ribbon detection error. Error code: 31007 Ribbon detection error. Error code: 31008 Ribbon detection error. Error code: 31007 Ribbon detection error. Error code: 31008 Ribbon detection error. Error code: 31009 Ribbon detection error erro		/	-			
Ribbon detection error. Error code: 31004 Out of ribbon. Error code: 31005 Media sensing mark misdetected. Error code: 31007 Media detection error. Error code: 31008 Media sensor calibration not performed after replacing a new media. Media detection erw media. Media detection error. Error code: 31008 Media sensor calibration not performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor calibration on performed after replacing a new media. Media sensor readia sensor is aligned with the sensing marks, e.g. gaps, holes, black marks. Media sensor needs cleaning. Reload the ribbon. Resplace the media. Press and hold the [FEED/Calibration] Press and hold the feed a qualified professional for service. Please contact a q						
Ribbon detection cror. Error code: 31004 Out of ribbon. Error code: 31005 Media sensing mark misdetected. Error code: 31006 Out of media. Error code: 31006 Media sensing mark misdetected. Error code: 31006 Out of media. Error code: 31006 Media detection cror. Error code: 31007 Media detection cror. Error code: 31008 A media especial mark misdetection cror. Error code: 31008 A media especial mark media. Error code: 31008 A media especial mark media. Error code: 31008 A media detection performed after replacing a new media. Finance marks. A media especial marks, e.g. gaps, holes, black marks. A media especial marks, e.g. gaps, holes, black marks. A media especial marks, e.g. gaps, holes, black marks. A media especial marks, e.g. gaps, holes, black marks. A media especial marks, e.g. gaps, holes, black marks. A media especial marks, e.g. gaps, holes, black marks. A media especial especial marks, e.g. gaps, holes, black marks. A media especial especial marks, e.g. gaps, holes, black marks. A media especial especial marks, e.g. gaps, holes, black marks. A media especial especial marks, e.g. gaps, holes, black marks. A media especial especial marks, e.g. gaps, holes, black marks. A media especial						
error. Error code: 31004 Ribbon sensor module failure /	Ribbon detection	Ribbon breaks				
Autor fribbon Fror code: 31005			/			
Error code: 31005 Misdetection caused by preprinted text or image, RFID inlays, etc., on the label. Replace the media. Replace the media. Replace the media detection error. Error code: 31007 Media detection error. Error code: 31008 Media sensor calibration not performed after replacing a new media. Press and hold the [FEED/Calibration] button (hold for around 4 seconds) to perform Media Sensor Calibration Dutton (hold for around 4 seconds) to perform Media Sensor is aligned with the sensing marks, e.g. gaps, holes, black marks. Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Rebon breaks Ribbon sensor module broken Sensor or motor failure. Please contact a qualified professional for service. Please contact a qualified professional for service. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Please contact the printer of the pr	31004					
Misdetection caused by preprinted text or image, RFID inlays, etc., on the label.	Out of ribbon.	/	Replace the ribbon.			
mark misdetected. Error code: 31006 Error code: 31007 Out of media. Error code: 31007 Media detection error. Error code: 31008 A compared to the sensing marks, e.g. gaps, holes, black marks. A compared to the sensing marks, e.g. gaps, holes, black marks. A conserver effective. A conserver						
Error code: 31006 Out of media. Error code: 31007 Media detection error. Error code: 31008 Media sensor calibration not performed after replacing a new media. / Media sensor calibration not performed after replacing a new media. / Choose the best media sensor is aligned with the sensing marks, e.g. gaps, holes, black marks. / Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. / Media sensor needs cleaning. / Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Ribbon detection error. Error code: 31009 Ribbon detection error. Error code: 31000 Ribbon detection error. Error code: 31100 Sensor or motor failure. Sensor or motor failure. Sensor or motor failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service.		1				
label.	mark misdetected.	1 1	from these positions. If error remains, please			
Media detection error. Error code: 31008	Error code: 31006	RFID inlays, etc., on the	contact a qualified professional for service.			
Media detection error. Error code: 31008		label.				
Media detection error. Error code: 31008		/	Replace the media.			
error. Error code: 31008 Performed after replacing a new media.						
new media.						
Ensure that the media sensor is aligned with the sensing marks, e.g. gaps, holes, black marks. Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength.		1 -	· · · · · · · · · · · · · · · · · · ·			
the sensing marks, e.g. gaps, holes, black marks. / Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. / Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Ribbon detection error. Error code: 31009 Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31100 Sensor or motor failure. Sensor or motor failure. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer	31008	new media.	1 4			
marks. Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Ribbon breaks Reload the ribbon. Ribbon sensor module broken 31009 Ribbon sensor module broken 31009 Replace the ribbon Printhead open failed. Error code: 31010 Printhead close failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 31101 System error. Error code: 31000 Please contact a qualified professional for service. Please contact a qualified professional for service. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Due to low ambient temperature, the printer		/				
Choose the best media sensor for the situation: transmissive, upper reflective, or lower reflective. Media sensor needs cleaning.						
situation: transmissive, upper reflective, or lower reflective. / Media sensor needs cleaning. / Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Ribbon detection error. Error code: 31009 Out of ribbon. Error code: 31010 Printhead open failed. Error code: 311100 Printhead close failed. Error code: 311101 System error. Error code: 31101 System error. Error code: 31101 System error. Error code: 32020 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		,				
lower reflective. Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings">"Advanced">"Sensor Signal Strength" to adjust the signal strength.		/				
Media sensor needs cleaning. Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength.			= =			
Incorrect signal strength setting, go to "Settings" > "Advanced" > "Sensor Signal Strength" to adjust the signal strength. Ribbon detection error. Error code: 31009		,				
Ribbon detection error. Error code: 31010 Out of ribbon. Error code: 31100 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 31200 System error. Error code: 32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Ribbon breaks Reload the ribbon. Replace the ribbon Please contact a qualified professional for service. Please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		/				
Ribbon detection error. Error code: 31009 Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 3100 System error. Error code: 32000~32025 Printhead overheated. Error code: 32029 Power overload. Error code: 32029 Power overload. Error code: 32029 Low ambient Rebload the ribbon. Replace the ribbon Please contact a qualified professional for service. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		/				
Ribbon detection error. Error code: 31009 Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 31101 System error. Error code: 32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Low ambient Ribbon breaks Reload the ribbon. / Replace the ribbon Please contact a qualified professional for service. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer						
error. Error code: 31009 Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 31200 System error. Error code: 32020 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Low ambient Replace the ribbon Replace the ribbon Please contact a qualified professional for service. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer	D'11 1 4 4'	D'11 1 1				
Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 3100 System error. Error code: 32029 Printhead coverheated. Error code: 32029 Power overload. Error code: 32029 Low ambient Pensor or motor failure. Replace the ribbon Replace the ribbon Please contact a qualified professional for service. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient			Reload the ribbon.			
Out of ribbon. Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 32020 Printhead open failed. Error code: 31101 System error. Error code: 32020 Printhead for exervice. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Due to low ambient temperature, the printer		Ribbon sensor module broken	/			
Error code: 31010 Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Low ambient Sensor or motor failure. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		/	Danlaga the wildham			
Printhead open failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 32000~32025 Printhead open failed. Error code: 3100 Printhead open failed. Error code: 3100 System error. Error code: 32028 Power overload. Error code: 32029 Low ambient Sensor or motor failure. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		/	Replace the ribbon			
failed. Error code: 31100 Printhead close failed. Error code: 31101 System error. Error code: 32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Low ambient Sensor or motor failure. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer		Consor or motor failure	Places contest a qualified professional for			
Printhead close failed. Error code: 31101 Please contact a qualified professional for service.		Sensor or motor failure.	_ = =			
Printhead close failed. Error code: 31101 System error. Error code: 32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Low ambient Sensor or motor failure. Please contact a qualified professional for service. Please restart the printer. If error remains, please contact a qualified professional for service. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Due to low ambient temperature, the printer			Service.			
failed. Error code: 31101 System error. Error / Please restart the printer. If error remains, please contact a qualified professional for service. Printhead / Please decrease print speed or lower the print darkness. Power overload. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer		Sensor or motor failure	Please contact a qualified professional for			
System error. Error / Please restart the printer. If error remains, please contact a qualified professional for service. Printhead / Please decrease print speed or lower the print darkness. Power overload. Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer		Sensor of motor familie.				
System error. Error code: Please restart the printer. If error remains, please contact a qualified professional for service. Printhead overheated. Error code: 32028 Power overload.			Sel vice.			
code: 32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Due to low ambient temperature, the printer		/	Please restart the printer. If error remains			
32000~32025 Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Please decrease print speed or lower the print darkness. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Due to low ambient temperature, the printer	•		1			
Printhead overheated. Error code: 32028 Power overload. Error code: 32029 Power overload. Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer						
overheated. Error code: 32028 Power overload.		/				
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Power overload. Error code: 32029 Please decrease print speed or lower the print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient Due to low ambient temperature, the printer			1			
Error code: 32029 print darkness. If error remains, it's probably a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer		/	Please decrease print speed or lower the			
a power supply failure. Please contact a qualified professional for service. Low ambient / Due to low ambient temperature, the printer						
dualified professional for service. Low ambient / Due to low ambient temperature, the printer						
Low ambient / Due to low ambient temperature, the printer			= = = = = =			
	Low ambient	/				
temperature. Error needs to print at a lower darkness level in	temperature. Error		needs to print at a lower darkness level in			



Error Message	Possible Cause	Recommended Solution
code: 32030		order to maintain the currently set print
		speed. After printing starts, the print
		darkness may gradually increase to the
		current setting as the print head temperature
		rises.
		Press Continue below to start printing with
		lowered print darkness.
		Or you can turn on the "Auto Print Speed
		Adjust" function by going to "Settings" >
		"General" > "Speed". The printer will
		automatically reduce the print speed to
		ensure the print darkness level when the
		ambient temperature is low.
		Go to "Settings" > "Mgmt" > "Preference" to
Cutting failed	Madia iammad	stop this message from showing up again.
Cutting failed. Error code: 33021	Media jammed.	Please clear the jam.
Cutting blade not	/	The blade stops at the wrong position, go
back in place.	1	to "Settings" > "Printed Label
Error code: 33022		Handling" > "Mode" > " Cutter mode",
Effor code. 33022		press "Blade calibration" to adjust the blade
		position.
RFID module	/	Please have a qualified professional check if
initialization		the RFID module is correctly installed.
failed. Error code:		,
40001		
RFID function	/	Please turn on the RFID function from the
closed. Error code:		LCD menu.
40002		
RFID data send	/	Please have a qualified professional check if
error. Error code:		the RFID module is correctly installed.
40003	/	Discontinuo a suntificat sunfaccional about if
RFID data receive error. Error code:	/	Please have a qualified professional check if the RFID module is correctly installed.
40004		the KITD module is correctly histaned.
No RFID Tags	Media with RFID tags is not	/
found. Error code:	correctly loaded	,
40001	Damaged RFID tags	/
	RFID calibration has not been	/
	performed	
	Read power is set too low	Please go to "Settings" > "RFID" > "RFID
		Settings" to increase the read power.
	Loose RFID antenna	
	connection	
Excessive read	/	Please go to "Settings" > "RFID" > "RFID
power. Error code:		Settings" to lower the read power.
40002	W	DI 1 1 1 1
RFID unlock	Wrong password	Please check the password
failed. Error code:	Access password is not	/
40003	available in the chipset of the	
	tag	



Error Message Possible Cause		Recommended Solution			
	Data field to unlock doesn't	/			
	exist in the chipset of the tag				
	Tag is permanently locked.	/			
RFID encoding	Data length is out of range	/			
failed. Error code:	Wrong password for the	/			
40004	locked memory banks				
	Data field to encode doesn't	/			
	exist in the chipset of the tag.				
Read RFID data	Read length is greater than the	/			
failed. Error code:	length of the memory bank				
40005	Wrong password for locked	/			
	memory banks				
	Data field to read doesn't	/			
	exist in the chipset of the tag.				
RFID lock failed.	Wrong password for memory	/			
Error code: 40006	banks already locked				
	Data field to lock doesn't exist	/			
	in the chipset of the tag				
	Tag is permanently unlocked.	/			
Tag ID verification	/	Please replace the RFID tag stock with			
failed. Error code:		which meets the designated tag ID			
40007		specifications			
RFID calibration	Media with RFID tags is not	/			
failed. No RFID	correctly loaded				
tags detected. Error	Damaged RFID tags	/			
code: 41008	Loose RFID antenna	/			
	connection				
	Unstable electromagnetic	Please replace the RFID tag stock			
	coupling between the printer's				
	RFID antenna and the RFID				
	tag.	,			
RFID calibration	/				
failed. RFID tags					
are too close to					
each other. Error					
code: 41009	N. DEID (11 11	DI C M I' O DEED C I'I C			
Un-matching	New RFID tag stock loaded	Please perform Media & RFID Calibration.			
RFID tags without performing RFID detected. Error Calibration.					
detected. Error code: 41011	Calibration.				
	/	Dlagge regtort the printer of successive			
System error. Error code: 42001	<u>'</u>	Please restart the printer. If error remains, please contact a qualified professional for			
Coue. 42001		service.			
		SCI VICC.			



5.2 Miscellaneous Issues

Table 5-2 identifies miscellaneous issues with the printer, the possible causes, and the recommended solutions.

Table 5-2 Miscellaneous Issues

Problem	Possible Cause	Recommended Solution		
Poor printout	Incorrect Darkness	Please go to "Settings" > "General" > "Darkness" to set		
quality	setting	the appropriate darkness.		
	Media and ribbon are	Replace the media and/or the ribbon		
	not properly matched			
	Insufficient printhead	Adjust the printhead pressure, refer to 3.3.2 Adjusting		
	pressure	the Printhead Pressure and Balance		
Horizontally	Media not well guided	Reload the media, refer to 2.2.4 Loading the Media		
displaced print	Unbalanced printhead	Adjust the printhead pressure and balance, refer to		
	pressure	3.3.2 Adjusting the Printhead Pressure and Balance		
Skipped labels	Media Sensor	Press and hold the [FEED/Calibration] button (hold for		
	Calibration not	around 4 seconds) to perform Media Sensor Calibration		
	performed	, -		
	Incorrect page setup in	Correct the page setup values in the software		
	the computer software			
	Incorrect media sensor	Please go to "Settings" > "General" > "Sensor Type" to		
	type	choose the best media sensor for the situation		
Print blank pages	Ribbon loaded	Reload the ribbon. Refer to 2.2.3 Loading the Ribbon		
	incorrectly			
Partial blurry	Unbalanced printhead	Adjust the printhead pressure and balance, refer to		
prints	pressure	3.3.2 Adjusting the Printhead Pressure and Balance		
Vertical blank	Dirty printhead	Clean the printhead		
lines in print	Damaged heating	Replace the printhead, please contact an authorized		
	elements on the	POSTEK service provider for technical support.		
	printhead			
Ribbon take-up	Low torque on ribbon	Increase the ribbon take-up tension, refer to 3.3.3		
slack or stopped	take-up spindle	Adjusting the Ribbon Tension		
Ribbon slides	Torque too high on	Reduce the ribbon supply tension, refer to 3.3.3		
against media	ribbon supply spindle	Adjusting the Ribbon Tension		
Dirty printouts	Adhesive bleed	Change the media roll		
Printouts slanted	Label not squarely die	Change the media roll		
	cut			
	Media not well guided	Reload the media, refer to 2.2.4 Loading the Media		
Compressed	Print speed too high	Please go to "Settings" > "General" > "Speed" to a		
printouts	for the media being	decrease print speed.		
	used			
Data Sent but Not	The driver is incorrect.	ect. Ensure the correct driver is chosen in the label		
Printing		software.		
	Memory overflow	Reset the printer.		

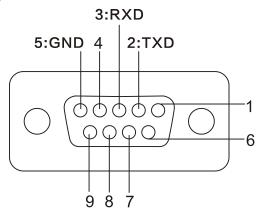
M NOTE

For errors not listed here, please contact an authorized POSTEK Service Provider for further assistance.



Appendix A: Interface Specifications

The RS232 connector on the printer is a DB9F:



Number	Description	Definition
1	/	/
2	Out	TX
3	In	RX
4	/	/
5	-	Ground
6	/	/
7	/	/
8	/	/
9	/	/

Baud rate: 9600, 19200, 38400, 57600 and 115200 **Data format**: 8 data bits, 1 start bit or 1 stop bit.

Flow control: None. If you are using software or drivers under the Windows environment, the flow

control must be set to "hardware."

Any communications port can transmit data from the host (RS232, Ethernet, or USB). Preliminary communications settings are not required since the printer will automatically detect which port is active.



CAUTION

Never send data from 2 ports at the same time. Data cannot be sent to more than one port simultaneously or data corruption and print errors may occur.

Appendix B: ASCII Table

	0	1	2	3	4	5	6	7
0	NUL			0	@	P	1	p
1	SOH	XON	!	1	A	Q	a	q
2	STX		"	2	В	R	b	r
3		XOFF	#	3	C	S	c	S
4			\$	4	D	T	d	t
5		NAK	%	5	Е	U	e	u
6	ACK		&	6	F	V	f	v
7	BEL		6	7	G	W	g	W
8	BS		(8	Н	X	h	X
9)	9	I	Y	i	у
A	LF		*	:	J	Z	j	Z
В		ESC	+	;	K	[k	{
C	FF		,	<	L	\	1	
D	CR		-	=	M]	m	}
E	SO	RS		>	N	^	n	~
F	SI	US	/	?	O	_	0	DEL
_	0	1	2	3	4	5	6	7

■ NOTE

The ϵ sign is included in the embedded table at DEC128 or HEX 80.



