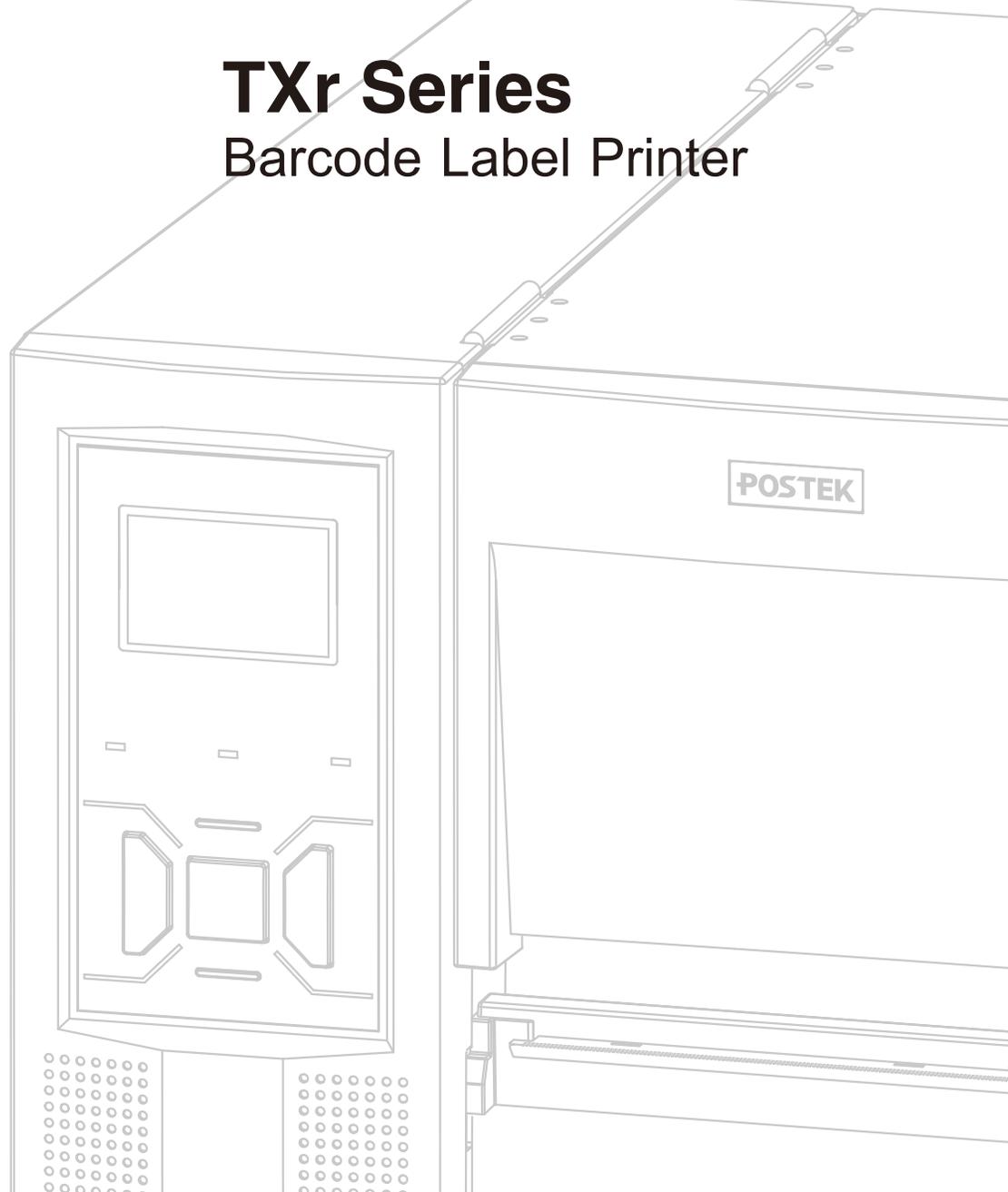




User's Manual

TXr Series

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 instruction 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 will be required, at own expense, to correct the interference using whatever means necessary.

Trademarks

ARM is a registered trademark of Advanced RISC Machines Ltd.

Centronics is a registered trademark of Centronics Data Computer Corporation.

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TXr Series Barcode Label Printer User's Manual

6th edition July 2017

Disclaimer

POSTEK barcode/RFID printers are developed and manufactured by Postek Electronics Co., Ltd (hereinafter as "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 make it difficult to guarantee RFID tag's 100% compatibility with POSTEK printers, to satisfy your printing needs, please consult with the local 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 interest, 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 misoperation, 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). In no event shall POSTEK 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 the output of the power adapter is 24VDC and your power source matches the rating listed on the power adapter. 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 and power adapter should never be operated in a location where either one 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.

Warnings

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

Static electricity that accumulates on the surface of the human body or other objects can damage the print head or electronic components in the TXr printer. Observe proper electrostatic safety precautions when handling.

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Preface

Your Postek TXr Series high performance industrial barcode label printer features innovative state-of-the-art technology and superior quality workmanship. Boasting an all metal frame and unique core construction, the TXr 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 TXr Series printer. It also provides detailed information on configuring your printer, basic operations, care and troubleshooting.

Please read this manual carefully before using the Postek TXr Series printer.

Important Notice, Read Me First

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:

1. DO NOT scrape or use tools that might damage the printhead surface.
2. To protect from corroding the printhead, DO NOT touch the printhead with bare hands.
3. DO NOT use thermal paper or thermal transfer ribbons which contain Na, K or Cl.
4. Keep printhead from any form of liquid or dampness.
5. Only use a cotton swab dipped in anhydrous isopropyl alcohol to clean the printhead.
6. 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 TPH is also easily damaged by static electricity, which may be generated by poor quality ribbons.
7. Always inspect consumables for high quality before purchasing.

Note: The TXr Series printer functions under Direct Thermal or Thermal Transfer print methods. 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.

Chapter 1: Introduction

Printer Specifications

Mode	TX2r	TX3r	TX6r
Printing method	Thermal Transfer		
Printing resolution	203 dpi (8 dots/mm)	300 dpi (11.8 dots/mm)	600 dpi (23.6 dots/mm)
Max printing speed	10 ips (254.0 mm/s)	8 ips (203.2 mm/s)	4 ips (101.6 mm/s)
Max printing width	4.09" (104 mm)	4.17" (106 mm)	
Max printing length	157" (4000 mm)	79" (2000 mm)	19.6" (500 mm)
CPU/Memory	8 MB FLASH ROM, 16 MB SDRAM		
RFID	Integrated UHF Reader/Encoder, EPC Gen 2 Class 1/ISO 18000-6C		
Media	Width: 4.56" (116 mm) max, 0.39" (10 mm) min. Total thickness (including liner, if any): 0.0024" (0.06 mm) ~ 0.012" (0.305 mm). Supply roll: OD 8" (203.2 mm) max. ID 1.5"(38 mm) min.	Width: 4.56" (116 mm) max, 0.98" (25mm) or 0.39" (10 mm) (supporting clip removed) min. Total thickness (including liner, if any): 0.0024" (0.06 mm) ~ 0.012" (0.305 mm). Supply roll: OD 8" (203.2 mm) max. ID 3" (76.2mm) or 1.5"(38 mm) (supporting clip removed) min.	
Ribbon	Max width: 4.65" (118 mm), Max length: 1968' (600 m) Ink side: both In and Out Ribbon roll: OD 3.3" (84 mm) max., ID 1" (25.4 mm) min.		
Media sensor	UP&Down Reflective (Adjustable) / Transmissive (Adjustable)		
Fonts	Five built-in dot matrix ASCII fonts, user-downloadable TrueType Fonts		
Barcode types	1D Barcode: 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, etc; 2D Barcode: MaxiCode, PDF417, Data Matrix, QR, etc.		
Interfaces	RS-232 Serial, USB Device 2.0, Centronics Parallel, USB Host, 10/100 Mb Ethernet.		
LCD display	Graphic Dot Matrix		
Power rating	110/240 VAC ±10%, 50/60 Hz.		
Weight	33.06 lbs (15 kgs)		
Dimensions	W 11.3" (286 mm) x D 17.6" (448 mm) x H 11.0" (280 mm)		
Operation environment	Temperature: 32° F ~ +104° F (0° C ~ 40° C) Relative humidity: 5% - 85% non condensing		
Storage environment	Temperature: -40° F ~ +140° F (-40° C ~ 60° C) Relative humidity: 5% - 85% non condensing		
Optional items	External Rewinder, and Rotary Cutter.		

Contents of 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 Packing List. If there are any items missing, notify your authorized reseller.

Packing List

TXr Series Printer	1 pc
Power Cord	1 pc
USB interface cable	1 pc
Quick Start Guide	1 pc
*CD-ROM	1 pc

***Note:** CD-ROM pack includes TXr printer driver, label design software, TXr Series User's Manual and the Programming Manual.

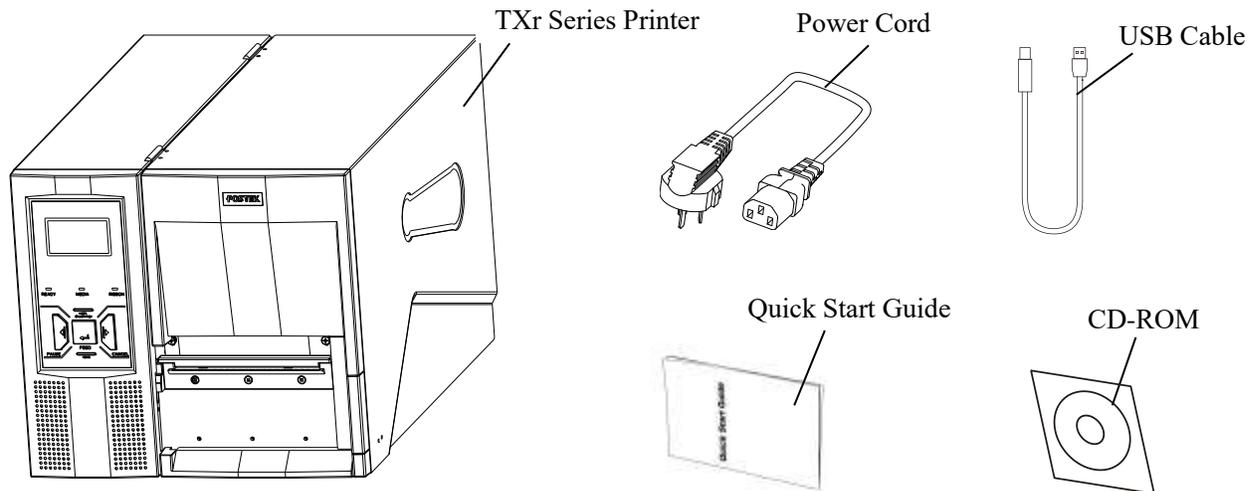


Figure 1: Printer and Accessories

Chapter 2: Setup and Use

Setting up the Printer

Before setting up the printer consider the following:

1. Make sure there is adequate space around the printer for loading consumables and proper ventilation.
2. Make sure the printer is close to the host so the interface cable is easily accessible at either end.

Main Parts and Structures

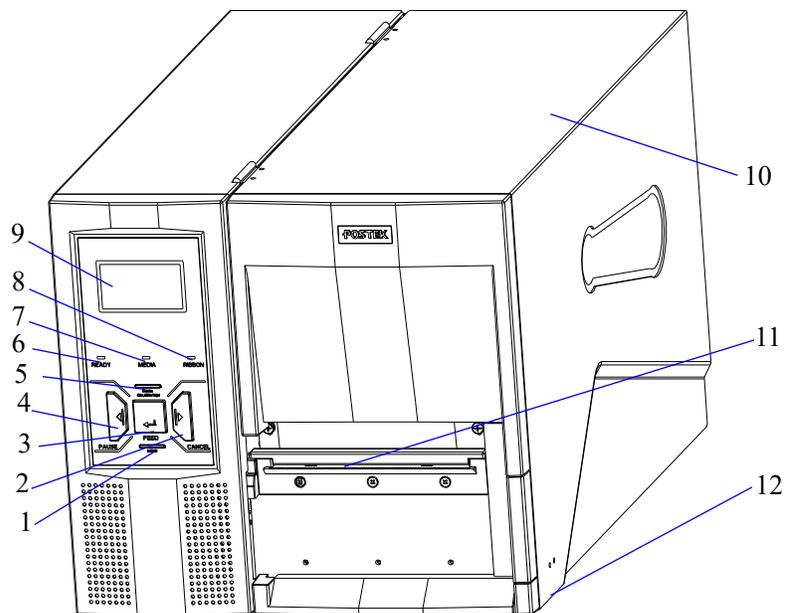


Figure 2-1

- | | | |
|------------------|----------------------|------------------|
| 1. MENU Button | 5. Media Calibration | 9. LCD |
| 2. CANCEL Button | 6. READY Indicator | 10. Right Cover |
| 3. FEED Button | 7. MEDIA Indicator | 11. Media Outlet |
| 4. PAUSE Button | 8. RIBBON Indicator | 12. Cover Handle |

Note: The structure of TX3r and TX6r (see figure 2-2b) is not exactly same with TX2r (see figure 2-2a), the main differences are in the media compartment, the improved media supporting module in TX3 and TX6 reduces the minimum allowed label height to only 4mm.

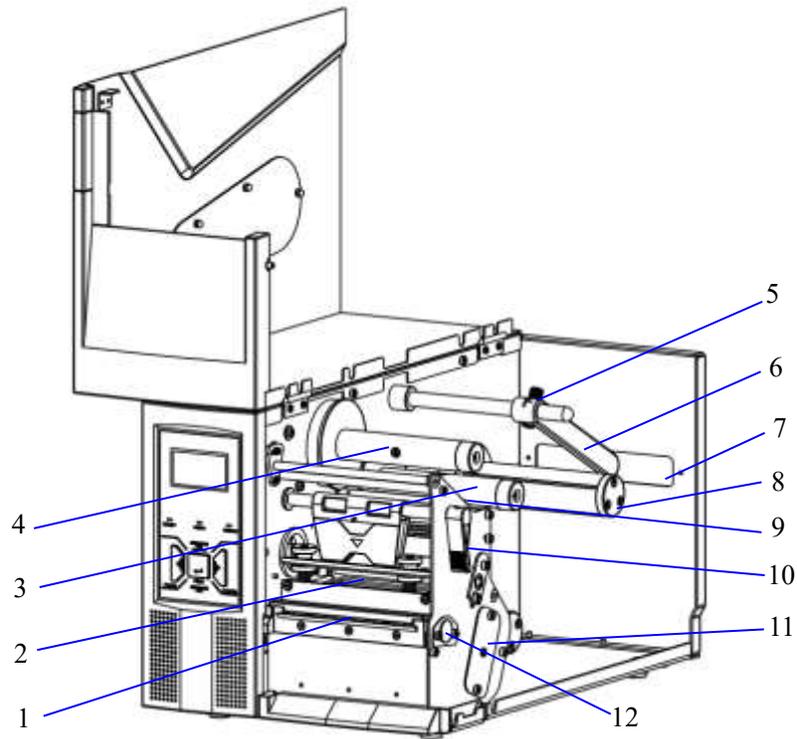


Figure 2-2a

- | | | |
|---------------------------|-----------------------------------|------------------------------|
| 1. RFID Antenna* | 5. Bolt | 9. ESD Brush |
| 2. Printhead Module | 6. Positioning Arm – Media Roll | 10. Lever |
| 3. Ribbon Supply Spindle | 7. External Media Loading Opening | 11. Media Sensor Cover Plate |
| 4. Ribbon Take-up Spindle | 8. Media Spindle | 12. Platen Roller |

***Note:** Only applied to RFID models.

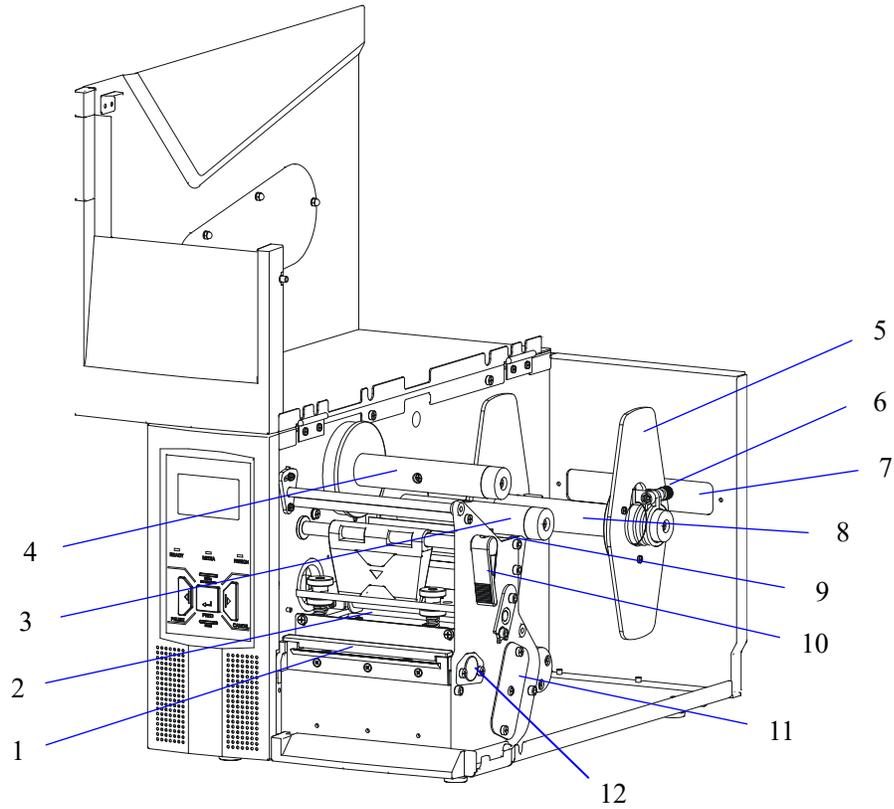


Figure 2-2b

- | | | |
|---------------------------|-----------------------------------|------------------------------|
| 1. RFID Antenna* | 5. Media Roll Guide | 9. ESD Brush |
| 2. Printhead Module | 6. Bolt | 10. Lever |
| 3. Ribbon Supply Spindle | 7. External Media Loading Opening | 11. Media Sensor Cover Plate |
| 4. Ribbon Take-up Spindle | 8. Media Spindle | 12. Platen Roller |

*Note: Only applied to RFID models.

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

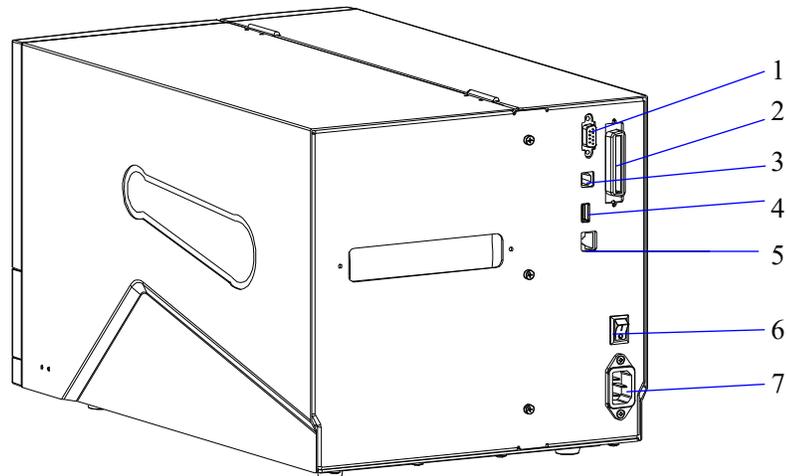


Figure 2-3

- | | | |
|-----------------------|------------------|---------------|
| 1. RS-232 Serial Port | 4. USB Host | 7. AC In Port |
| 2. Centronics Port | 5. Ethernet Port | |
| 3. USB Device 2.0 | 6. Power Switch | |

Loading Path

See figure 2-4a shows the loading path in TX2r.

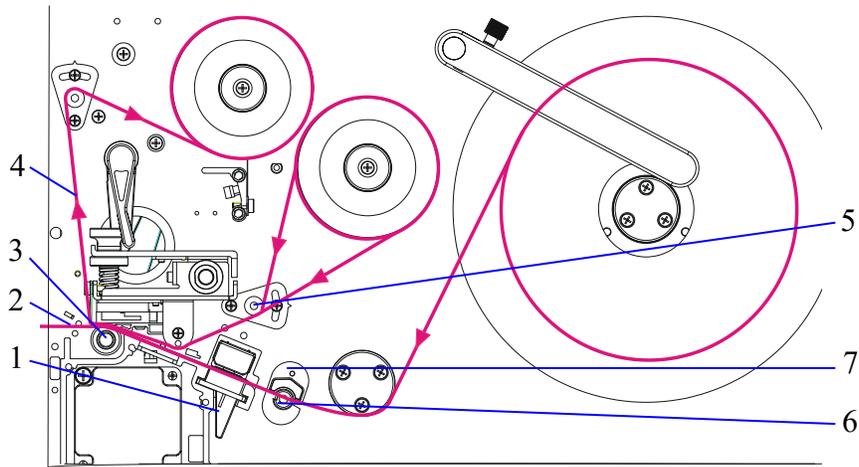


Figure 2-4a

- | | | |
|------------------------|----------------------|----------------------|
| 1. Media Sensor Handle | 4. Ribbon Path | 7. Media Guide Slide |
| 2. Media Path | 5. Ribbon Guide | |
| 3. Platen Roller | 6. Media Guide Lever | |

Figure 2-4b shows the loading path in TX3r and TX6r.

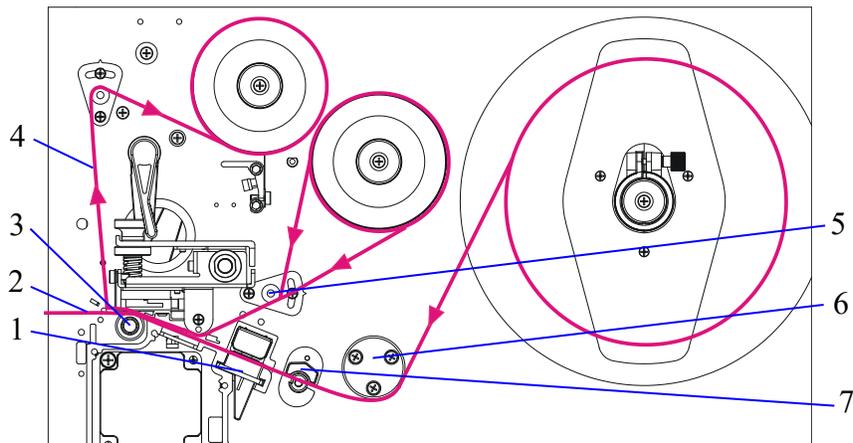


Figure 2-4b

- | | | |
|------------------------|----------------------|----------------------|
| 1. Media Sensor Handle | 4. Ribbon Path | 7. Media Guide Slide |
| 2. Media Path | 5. Ribbon Guide | |
| 3. Platen Roller | 6. Media Guide Lever | |

Connecting the Printer

Warnings:

- (1) Do not use the printer near liquids or corrosive chemicals.
 - (2) Using the wrong power cord may cause damage to your printer. Postek assumes no liability for any damage in such cases. The rating for the printer is 110/240 VAC \pm 10%, 50/60 Hz.
-
1. Make sure the printer is switched OFF.
 2. Connect the power cord to the AC Port on the back of the printer.
 3. Plug the power cord into a live wall outlet.

Interface Connection

The TXr supports RS-232 Serial, USB, Centronics Parallel, Ethernet and USB Host interface connections.

To connect:

1. Make sure the printer is powered OFF.
2. The printer will identify the communication port automatically.
3. The default values of printer port can be obtained from the self-test report. (See Chapter 2: Operation Basics/ Advanced Functions/ Self Test)
4. Cable configurations for Serial (RS-232C) interface is found in Appendix A of this guide.
5. 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 power cords.

Loading the Ribbon

Note: Load ribbon only when using the thermal transfer printing method. Remove any ribbon that may be loaded when using the direct thermal printing method.

To install the ribbon:

1. Lift to open the right cover of the printer.
2. Turn the Lever counter clockwise to release the Printhead Module.

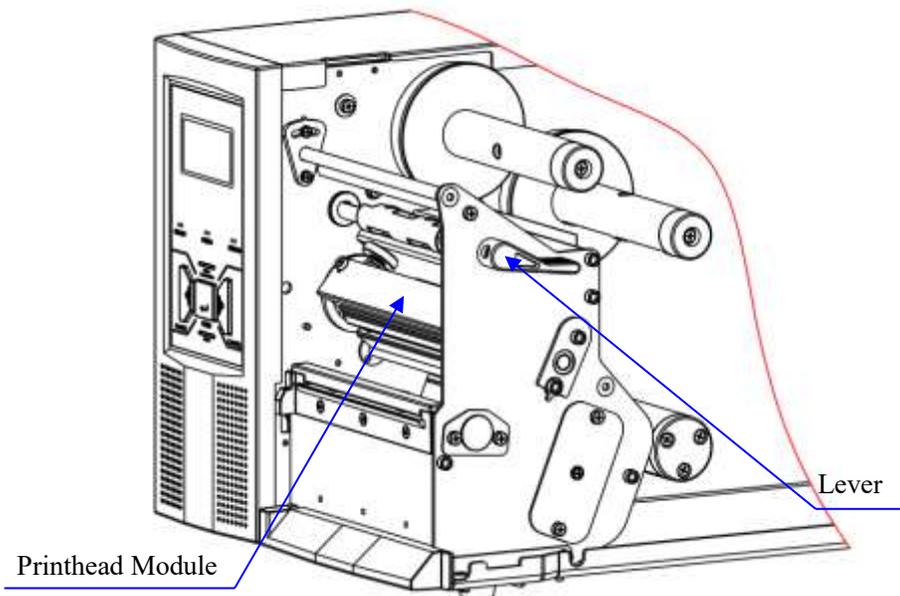


Figure 2-5

3. Stick a label to the outside/ inside of the ribbon to check which side the ink is on. See Figure 2-6.

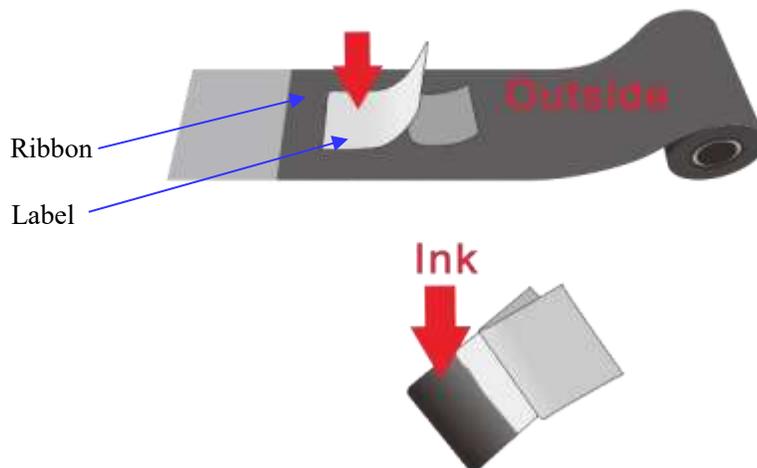


Figure 2-6

- Adjust the Ribbon Core Insert to ensure adequate pressure between the ribbon roll and the ribbon spindle. See Figure 2-7. Loosen the screws on the Shrapnel. Moving the Shrapnel outward or inward can increase or decrease the friction between the Ribbon Supply Spindle and the Ribbon Roll. Tighten the screws after adjusting the shrapnel to the appropriate position.

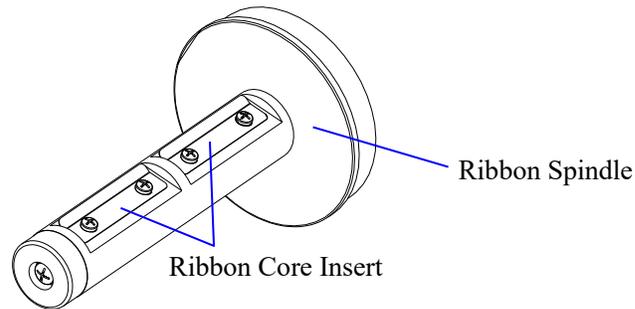


Figure 2-7

- Place the roll into the Ribbon Spindle, adjusting the brackets (see Figure 2-8). Make sure the ribbon roll is firmly in place.

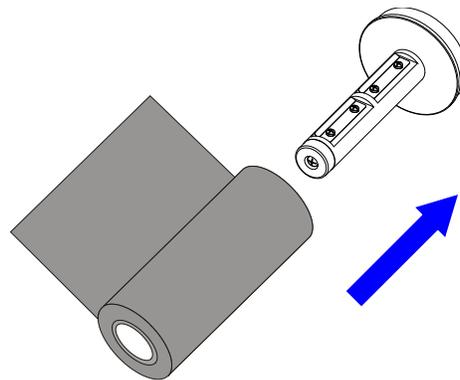
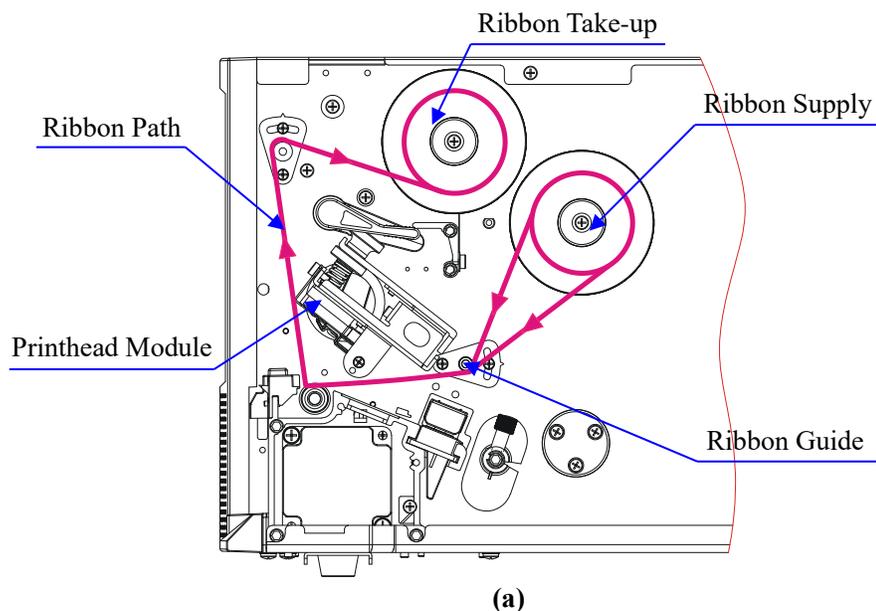
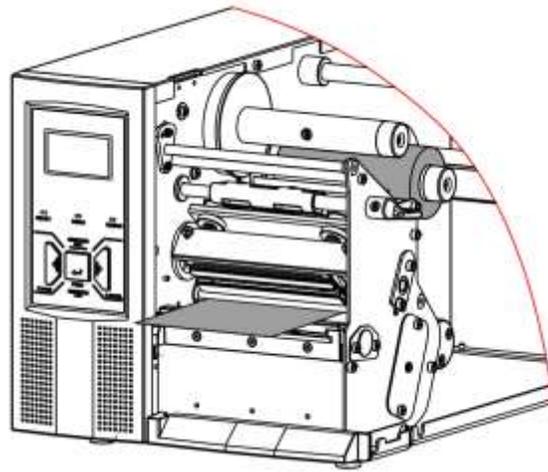


Figure 2-8

- Following the ribbon path indicated in Figure 2-9(a), lead the ribbon under the Ribbon Guide and pass the Printhead Module; make sure that the ribbon's ink side is facing the media. See Figure 2-9(b).





(b)

Figure 2-9

7. Secure the leading edge of the ribbon to the core. See Figure 2-10(a).
8. Slide the core onto the Ribbon Take-up Spindle to push it firmly to the inside edge of the Spindle. Turn the Take-up Spindle until the ribbon is tightly wound. See Figure 2-10(b).
9. Turn the Lever to the close position. See Figure 2-10(c).

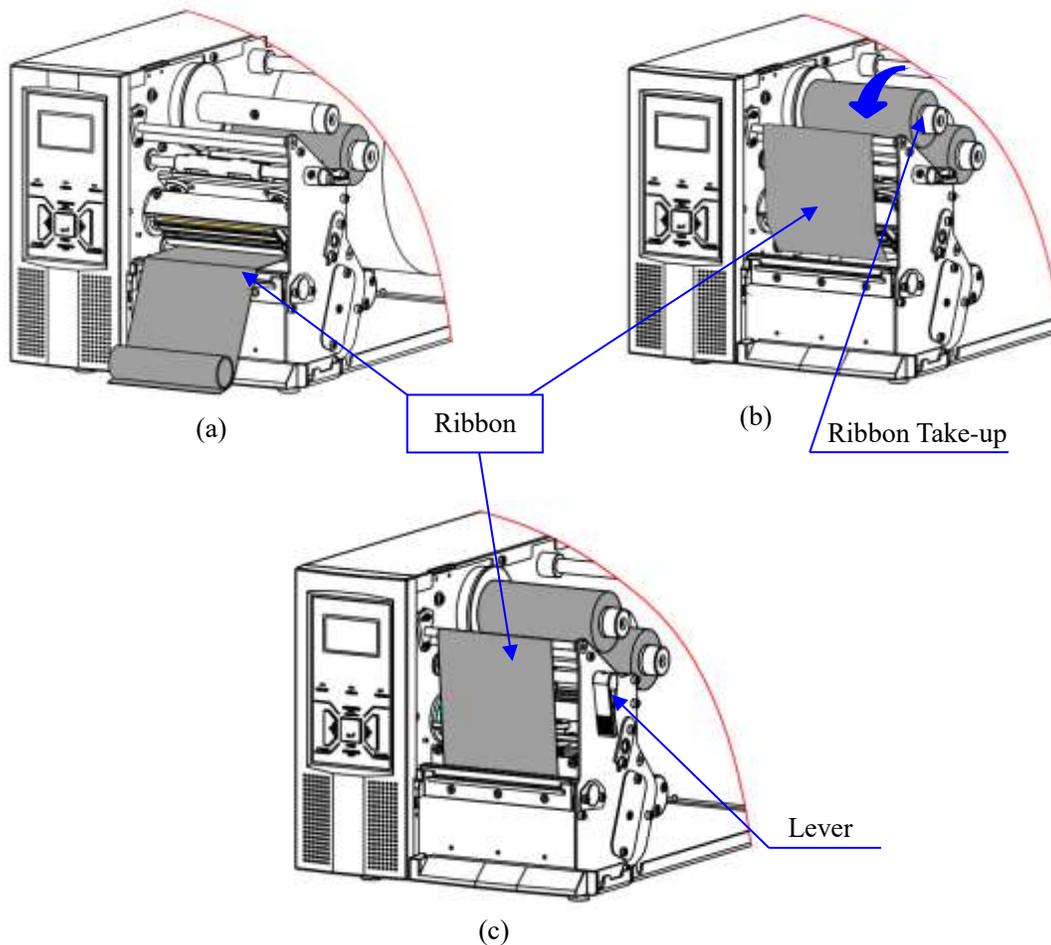


Figure 2-10

Loading the Media

TXr Series printers can be operated in three different modes: Standard mode, Peel-off mode, and Cutting mode.

- In Standard mode, each printed label remains on the backing liner.
- In Peel-off mode, each printed label is peeled away from the backing liner manually.
- In Cutting mode, the printer automatically cuts the label after it is printed.

Standard Mode

To load media into the TXr Series while using Standard Mode:

1. Lift to open the right cover.
2. Lift the Positioning Arm of the Media Roll (figure 2-11a) or loosen the bolt to take off the Media Roll Guide (figure 2-11b), and insert a media roll onto the Media Spindle, pushing it firmly to the inside edge.

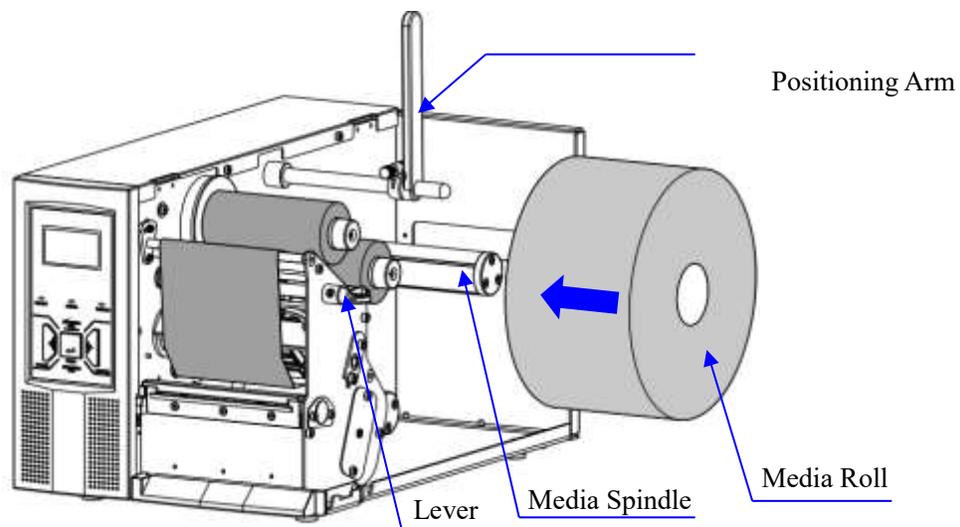


Figure 2-11(a)

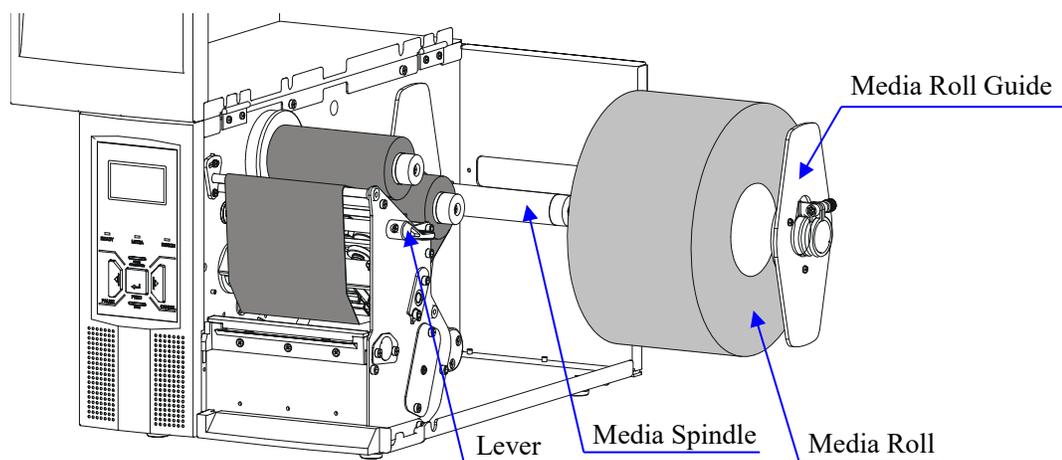


Figure 2-11(b)

3. Adjust the Positioning Arm by pushing it down (figure2-12a) or put the Media Roll Guide back to the media spindle (figure2-12b) to align it to the outside edge of the media roll. Tighten the Bolt to lock it in place.

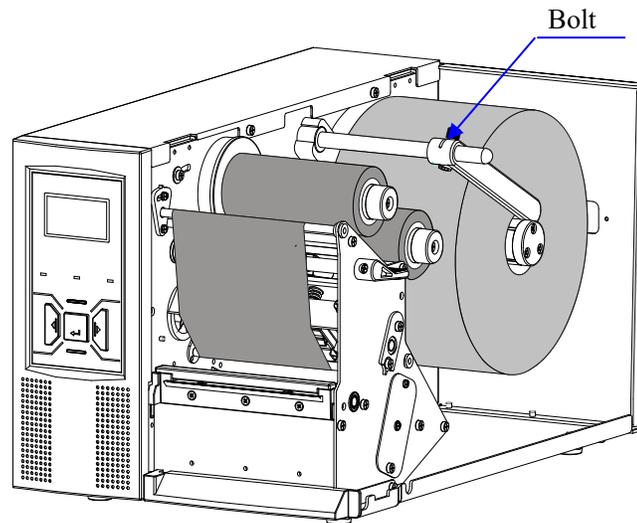


Figure 2-12(a)

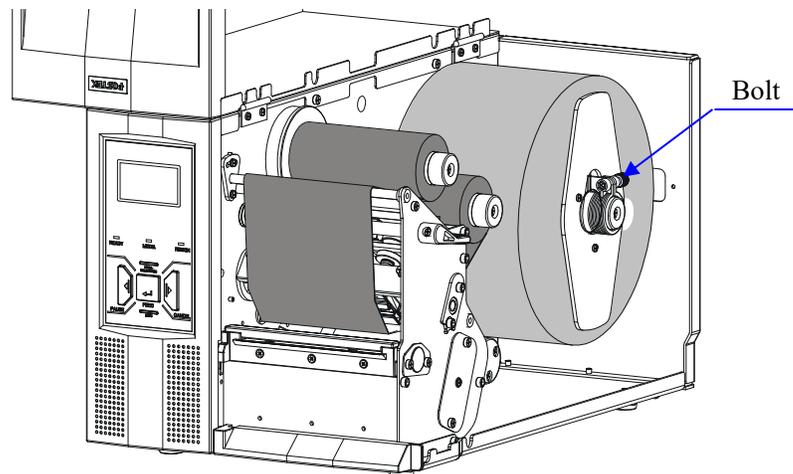


Figure 2-12(b)

4. Turn the Lever counter clockwise to release the Printhead Module. Referring to the media path on Figure 2-4(a) or Figure 2-4(b), lead the media under the Media Guide Lever, and in-between the Media Sensor.
5. Put the media pass and under the Printhead Module and the RFID Antenna (Only applied to RFID models). Such as Figure 2-13.

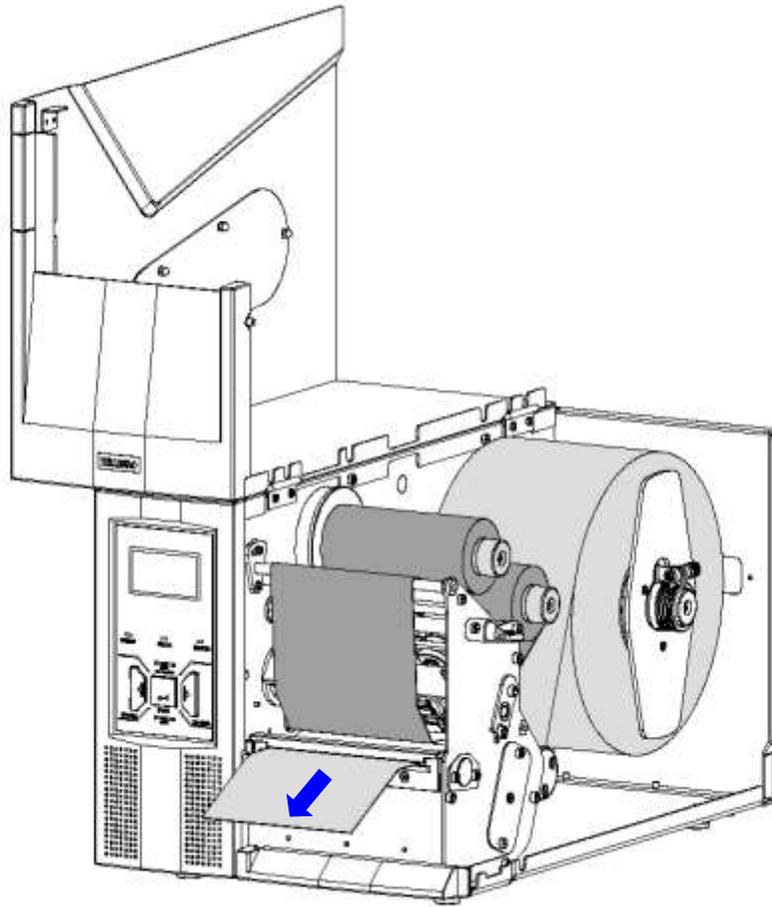


Figure 2-13

6. Move the Media Sensor to the appropriate position (see Figure 2-14). Adjust the Media Sensor to ensure that its position is aligned above the media's separation identifier (e.g. gap, black line, perforation, hole, etc.)
7. Move the Media Guide Slide to the edge of the media, making sure not to pinch or squeeze the media; keep the media flat and smooth. See Figure 2-14.

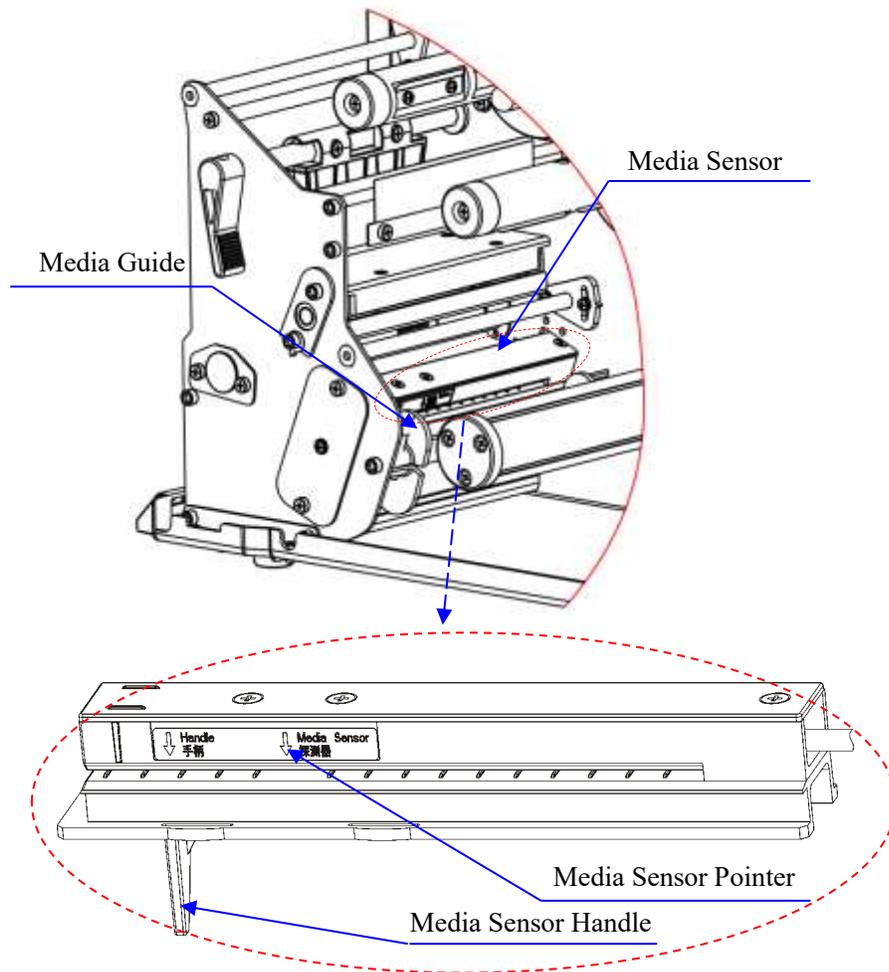


Figure 2-14

Note: [1] The TX-Series printer has three types of media sensors: the up/down reflective media sensor and the transmissive media sensor. The way to set the sensor type can be found on the “LCD Panel Operation” guide.

[2]) When using the transmissive media sensor to detect the tag with hole (see figure 2-15), the tag height should be set as the distance between the bottom of a hole and the top of the next one.

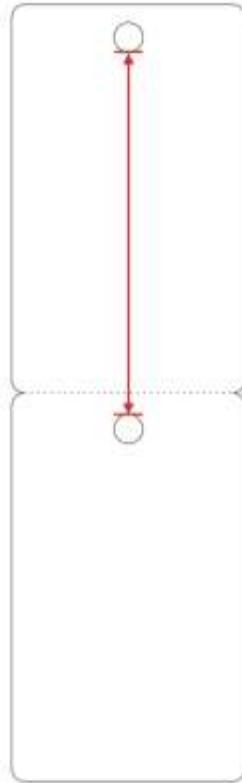


Figure 2-15

8. Turn the lever clockwise to close the Printhead Module.
9. Close the cover and turn on the printer, or press the “FEED” button if the printer is already on.

Peel-off Mode:

To load media into the TXr Series while using Peel-off Mode, use the Standard Mode procedures.

Cutting Mode:

Using the TXr in Cutting Mode requires an optional cutter. See an authorized Postek Reseller for additional information. With the optional cutter, the media loading instructions are provided.

Chapter 3: Operations and Settings

Basic Operations

Power Switch

The power switch is on the back panel of the printer. The symbols on the switch are defined as follows:

- —ON
- —OFF

The Front Panel

The Front Panel of the TXr printer consists of:

- Three Indicator Lamps: MEDIA, READY and RIBBON
- Five multi function buttons: PAUSE, FEED, CANCEL, MEDIA CALIBRATION and MENU.

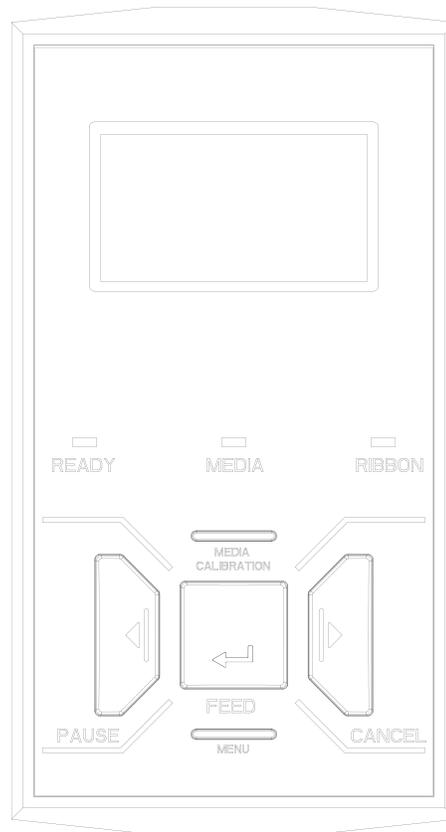


Figure 3-1

Indicator Lamps

The three lamps indicate the status of the printer (please refer to Chapter 4: Troubleshooting, for error indicators).

READY

- **Solid:** Indicates the printer is in the normal state;
- **Blinking:** Indicates the printer is in the 'PAUSE' state.

MEDIA

- **Solid:** Indicates the printer is in the normal state;
- **Blinking simultaneously with READY:** Running out of media;

RIBBON

- **Solid:** Indicates thermal transfer printing;
- **Off:** Direct thermal printing (no ribbon installed);
- **Blinking simultaneously with READY:** Running out of ribbon.

Panel Buttons

The five buttons have different functions based on the mode of the operation is performed.

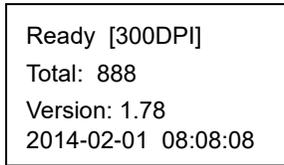
Mode	Function
FEED	Feed one label
PAUSE	- Press once to pause current print job - Press a second time to resume printing
CANCEL	- Cancel current batch of labels - Forces the printer to continue working after an error has been corrected
MEDIA CALIBRATION	Performs media sensor calibration
MENU	Enter/exit setup menu

LCD Display

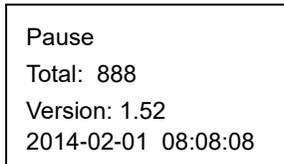
A graphic dot matrix LCD display is affixed to the front panel. Data in the form of characters, letters and numbers are shown on the LCD display. Please see below "LCD Panel Operation".

LCD Panel Operation

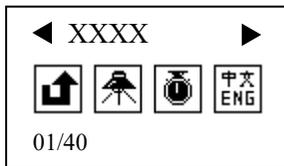
The LCD can display the printer's status, total print quantities, error messages, and is also valuable when configuring the printer. Following are common examples of LCD displays.



Ready Status [Resolution]
Total printed labels count, will be reset to 0 if cycle the printer power.
Firmware Version
Current Date
Current Time



Pause Status
Total printed labels count, will be reset to 0 if cycle the printer power.
Firmware Version
Current Date
Current Time



Settings Menu
XXXX is the name of the currently selected option, icons in the middle represents different settings options.
Selected/Total (Option Number)



Changing An Option's Value
XXXX is the name of the activated option.
Status Bar and Value.

Button functions:

BUTTON	FUNCTION	DESCRIPTION
MENU	Enter/exit	Enter/exit setup mode
PAUSE ◀	Item/Parameter Selection	Descending Item/Parameter selection
CANCEL ▶	Item/Parameter Selection	Increasing Item/Parameter selection
FEED ◀	Confirmation	Confirm selection
PAUSE + FEED	Enter setup mode while printing	Press PAUSE to pause the current printing job, then press and hold FEED for about 4 seconds, then the LCD will display menu for printing setup.

Items to be set and operating guide:

SUB MENU	DESCRIPTION
Exit	Exit from the menu, with or without saving the changes.
Darkness	When set at '0', the printer will accept the default setting or command setting, if not, the printer will not accept the default setting or command setting.
Speed	
Language	Options: English, Chinese Default: English
Print Method	*Direct Thermal, Thermal Transfer. Default: Thermal Transfer.
Tear Off	Options: Enable, Disable. Default:: Disable.
Cutter	
Manual Peel Off	
Media Sensor Type	Options: Down Reflective, Up Reflective, Transmissive. Default:: Down Reflective.
Baud Rate	Options: 9600, 19200, 38400, 57600. Default:: 38400.
Data Bit	Options: 7 Bit, 8 Bit. Default: 8 Bit.
Parity	Options: None, Odd, Even Default: None.
Tear-off Offset	The increment, per TXr model are as follows: – TX2r is 0.125mm – TX3r is 0.085 mm, – TX6r is 0.0423 mm.
Positioning Offset	
Cutting Offset	
Peeling Offset	
Horizontal Offset	
Vertical Offset	
Cutting Frequency	After the specific copies of labels printing will the cutter cut once. Default value: 01.
Error Report	Allow or forbid the printer to send back error information to the host. Options: Enable, Disable
IP Address	The range of XXX is 0-255, press PAUSE ◀ to decrease, CANCEL ▶ to increase, FEED ⏪ to move to next XXX. Upon completion, pressing FEED ⏩ will proceed to the "Save/Abort" screen.
Gateway	
Subnet Mask	
Port	
Set Date	Set system date.
Set Time	Set system time.
View Fonts	Browse the stored fonts.

Delete Fonts	Delete stored fonts.
Command Type	Options: PPLE, PPLZ Default: PPLE
DHCP	Options: Enable, Disable Default: Disable After DHCP is enabled, the printer will ask for a restart. As the printer being powered on again, the LCD will prompt "DHCP CONFIGURING, PLEASE WAIT..." Normally it takes 2 minutes to finish the network settings. If failed, the printer will disable the DHCP and prompt "DHCP DISABLED, CHECK CONNECTIONS!" For printers with firmware versions before V6.28, LCD displays "INITIALIZING PLEASE WAIT..."
Dump Mode	Options: Enable, Disable Default: Disable
Detect Length	The Media feed length when perform Media Calibration. Default 200, Unit mm.
**RFID Calibrate	Automatically find the optimal RFID R/W position, prior to RFID calibration, a proper media calibration is required.
**RFID POWER	RFID emissive power, unit in dBm.
**RFID Offset	Optimal distance between R/W position and the top of label, this value can be automatically set by performing RFID calibration.
**RFID Data	Read data from the EPC block of the RFID tag.
Offline Printing	Browse the pre-stored label forms, select one to print.
Clear Form	Clear the forms downloaded to the printer.
Clear Graphic	Clear the graphics downloaded to the printer.
Clear Setting	Clears only those settings accomplished through the front panel.

Note: * Please read the content in "[Important Notice](#)" section before setting your printer to direct thermal mode.

** Only applied to RFID models.

Tear-off

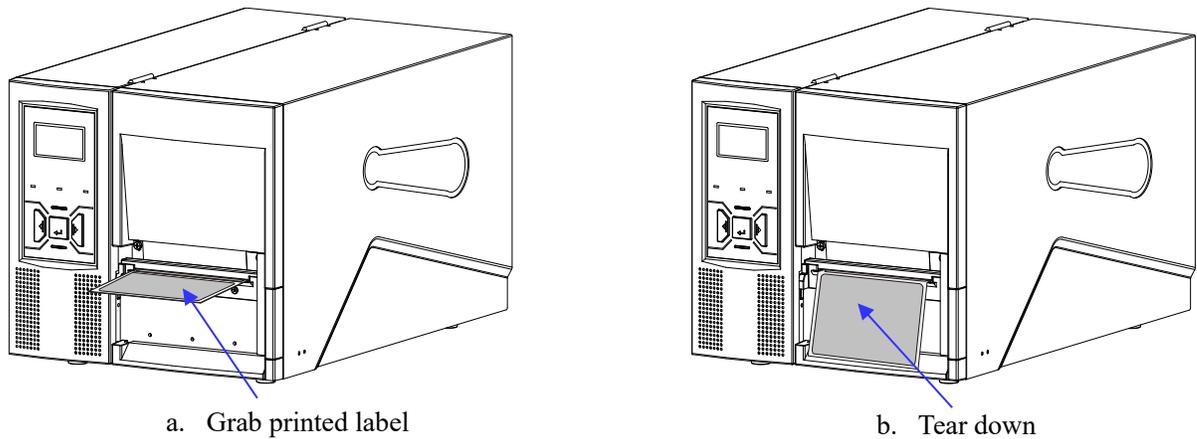


Figure 3-2

1. Press MENU to enter setup menu: Common Settings → Tear Off, select Enable.
2. Follow the directions shown in Figure 3-2 to tear off the label.
3. If the tear-off position needs to be adjusted, press MENU to enter setup menu: Offset Settings → Tear-off Offset, input suitable offset value.

Manual Peel-off

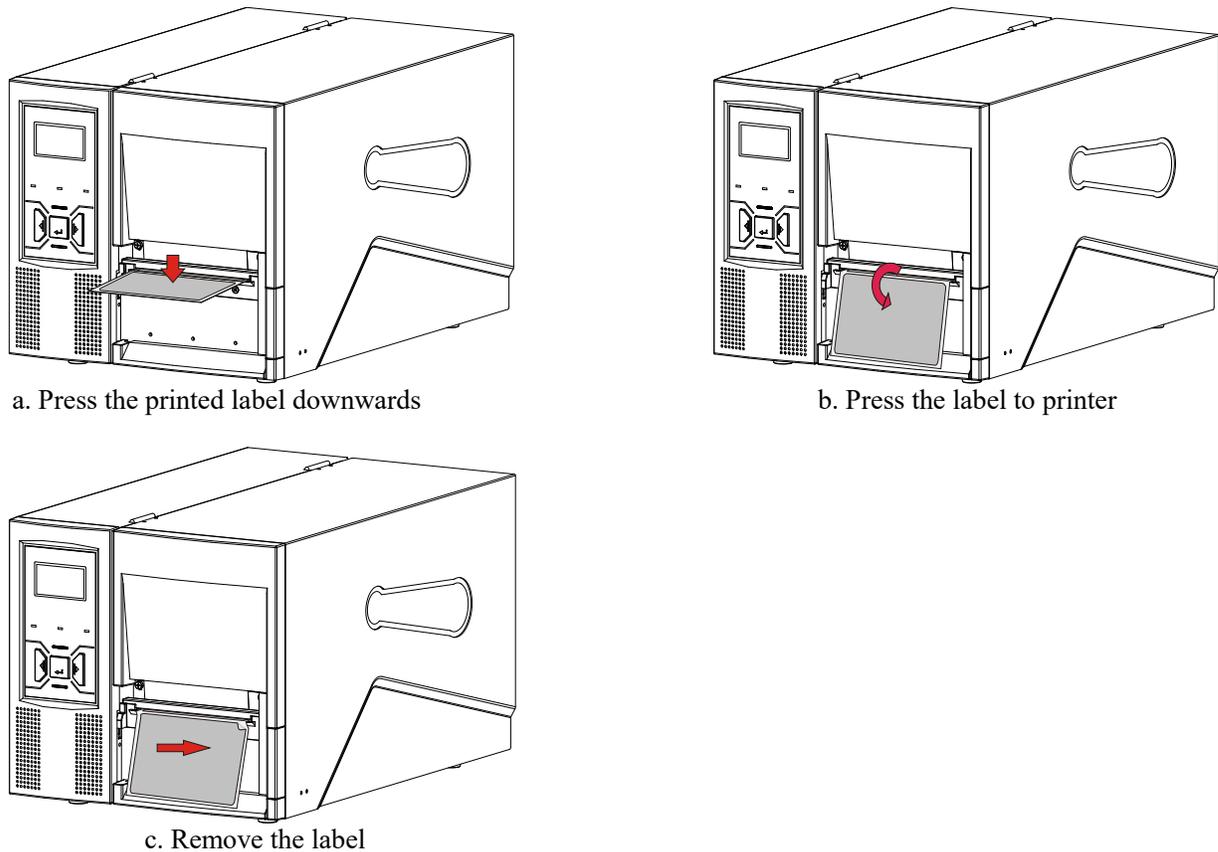


Figure 3-3

1. Press MENU to enter setup menu: Manual Peel Off, select Enable.
2. Follow the directions shown in Figure 3-3 to peel off the label.
3. Press PAUSE to print next label.
4. If the peeling position needs to be adjusted, press MENU to enter setup menu: Peeling Offset, input suitable offset value.

Cutting Mode

Note: The Cutter Kit is an optional accessory.

1. Turn on the printer and enter the Setup Menu by pressing the Setup/Exit button on the Front Panel.
2. Enable the cutter under the LCD menu
3. Reset the printer: press and hold the Cancel button for 4 seconds, the three lamps will blink simultaneously. Release and press the Cancel button again, the three indicators stop blinking and remain lit. The printer is now in its normal state (see Figure 3-4).
4. Turn the lever counter clockwise to release the Printhead Module, load the media and ribbon on the printer, lead the label pass and through the cutter. Then close the printhead, the cutter is now ready to use. See Figure 3-5.

Note: Cutter reset is required before loading the media, or the media will not be able to go through the cutter.

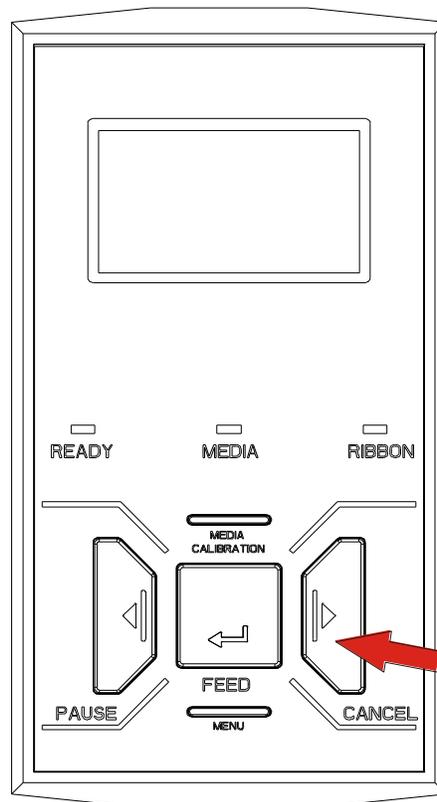


Figure 3-4

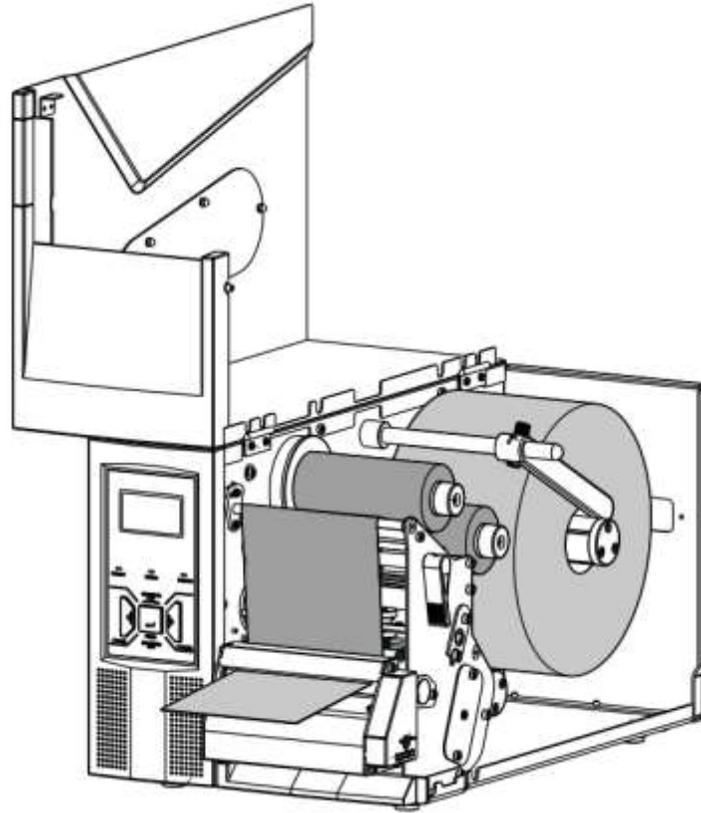


Figure 3-5

Adjusting the Pressure of the Printhead

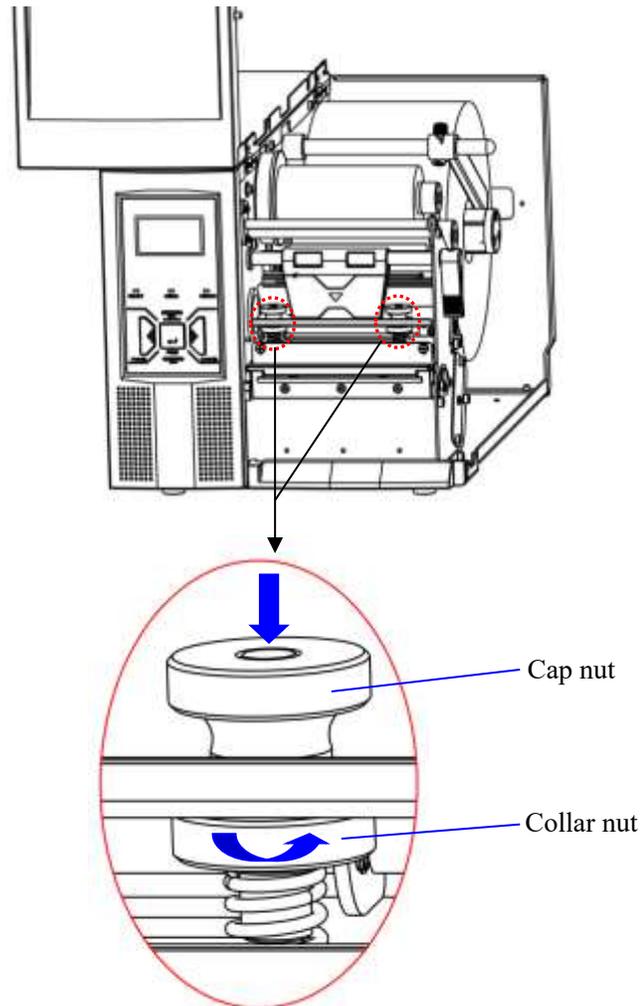


Figure 3-6

As shown in Figure 3-6, there are two set of nuts and screws for adjusting the pressure of Printhead.

The procedures of adjusting the pressure of printhead

1. Unscrew the cap nut counterclockwise to loosen it, please mind that do not separate the nut from the screw;
2. Press down the cap nut, and then screw the collar nut to adjust the pressure for printhead; the pressure will be increased when the nut screws counterclockwise (as shown in figure 3-6), whereas the pressure will be decreased if it screws clockwise.
3. When the collar nut has been adjusted to the appropriate position, fasten the cap nut to lock the position.
4. Apply steps 1~3 on the other set of nuts and screw, then the current pressure adjustment are completed.

RFID Operations

RFID Calibration

Performing the RFID calibration is required every time when a new RFID consumable or a different one is loaded on the printer, which is to ensure that the RFID labels can be accurately detected and printed out.

1. To perform media calibration before RFID calibration: load the consumables on the printer (Refer to [Loading the ribbon](#) and [Loading the media](#)). Turn on the printer, and press the MEDIA CALIBRATION button to calibrate the RFID label.
2. Press MENU to enter setup menu, select RFID CALIB, and then set it as Enable.
3. Press the FEED button, the LCD display will show “Detecting...” and the printer starts to calibrate the position of the RFID antenna in the media.
4. The LCD display will back to the setup menu if calibrate successfully, otherwise the LCD display will go to the main menu and show “RFID Dect Error”, and the READY and MEDIA lamps will blink simultaneously.

Read RFID Data

1. Load the consumables on the printer and turn on the printer.
2. Press MENU to enter setup menu, select RFID DATA, and then press FEED to enter the RFID read mode.
3. Turn the lever counter clockwise to release the Printhead Module; pull the RFID label slowly through the RFID antenna, the RFID data will be read and shown on the LCD panel when the RFID label is within the reading distance of the printer.
4. Press FEED again to exit the RFID read mode.

Note: Pull and place the RFID labels within the reading distance of the printer, and the printer can read RFID Data in a row.

Set RFID Power

It is recommended to use the default value of the RFID power on the printer. However, the value can be changed for specific case or requirements. Please manipulate the setting by professional technicians or contact an authorized SML service provider for technical support.

1. Load the consumables on the printer and turn on the printer.
2. Press MENU to enter setup menu, select RFID POWER, and then press PAUSE to decrease the RFID power, or press CANCEL to increase the value;
3. Press the FEED button to save the setting.

Note: The default RFID power is 23W.

RFID Offset

One of the reasons that may cause error on detecting or reading and writing RFID labels is the inappropriate location, so

it could reduce those errors by adjusting the RFID offset.

1. Load the consumables on the printer and turn on the printer.
2. Press MENU to enter setup menu, select RFID OFFSET, and then press PAUSE to decrease the value, or press CANCEL to increase the value;
3. Press the FEED button to save the setting.

Note: When the printer failed to write a RFID label, the printer will try to write the next label. If failed again, the printer will stop writing and report an error. The data stored in the printer will be deleted if user presses the CANCEL button.

Windows Driver and Label Software

The TXr Series Industrial printer driver is packaged with the printer in the CD-ROM pack, and is compatible with the following operating systems:

- Windows 10
- Windows Vista
- Windows 2000
- Windows 2008
- Windows 8
- Windows XP
- Windows 2003
- Windows NT
- Windows 7
- Windows 98
- Windows 95
- Windows XP

Drivers can also be downloaded from www.postek.com.cn and www.postektechnologies.com

Each TXr Series Industrial printer is also packaged with powerful barcode label editing software.

Chapter 4: Maintenance

Warnings:

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

Cleaning the Printhead

The Printhead is the mechanism that enables the ink to impact the label. Due to the Printheads precision construction and necessary location 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:

Note: A Printhead damaged by misuse is not covered under warranty.

1. Clean the Printhead
2. Clean the Printhead after every (1) roll of ribbon use or every (3) rolls of label media use. To clean the Printhead:
3. Turn printer power off
4. Open the top cover of the printer
5. Turn the handle to open.
6. Remove the ribbon (if applicable) and media
7. Use a cotton swab dipped in anhydrous isopropyl alcohol. Rub the swab along the Printhead until the swab no longer accumulates ink
8. Let the Printhead dry before using the TXr again

Cleaning the Platen Roller

The Platen Roller, located at the exit point and underneath labels, supports the labels as they feed out of the printer. 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. Open the top cover.
3. Release and lift the Printhead Module
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 while rotating the roller until the swab no longer accumulates ink or debris.

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 debris from damaging internal parts.

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

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.

LCD Error Messages

The LCD displays messages when there is an error. See the table below for LCD errors, the possible causes, and the recommended solutions.

LCD Display	Possible Cause	Recommended Solution
Memory Error	Problems occurred with printer's flash or RAM memory during printing or executing printing data/command.	Please restart the printer, and then disable the "Dump Mode" setting from the main menu. Or contact an authorized POSTEK service provider for technical support if problems exist.
Printhead Open	The printhead module is released or unlocked.	Press down the printhead module to the close position, and turn the handle to lock it.
Data Error	The labels' data has been sent to printer but cannot be identified due to the invalid format or syntax.	Please follow the command syntax or data format in the command manual to edit data, and then resend it to the printer.
Ribbon Error	See LED Error Indications for more information.	
Label Error		
Cutter Error	The cutter is jammed with paper or debris; or the cutter is not correctly installed on the printer.	Turn off the printer and unplug power cord, remove large pieces of debris as needed; and then inspect the cutter module for correct installation. Turn on the printer again and reset the cutter following the step 3 of Cutting Mode . Or contact an authorized POSTEK service provider for technical support if problems exist.
System Mode	Press and hold CANCEL for 4 seconds, then the printer will enter the system mode, and display this message on LCD.	To perform the advanced functions or the printer will return to normal state automatically if no operations are performed within 4 seconds.
Upgrade Interrupted	The firmware upgrade is interrupted.	Please contact an authorized POSTEK service provider for technical support.

LED Error Indications

Typically, when the printer is not functioning, one or two of the three indicator lamps will begin blinking. The possible situations addressed by the status of the three indicator lamps are listed below.

READY and MEDIA Lamps blink simultaneously:

Possible Cause	Recommended Solutions
Media sensor cannot detect labels	a) Check and confirm the media has been loaded correctly b) Check the position of the media sensor and confirm it could detect the media gap or black line c) Calibrate the media sensor d) If using continuous media without any positioner (e.g. gaps or black lines), ensure correct settings are chosen in the label software
Media ran out	Load a roll of media
Media jammed	Clear the jam
The Media Roll Guides are not firmly positioned against the Media or have not been installed.	Install the Media Roll Guides correctly and press them firmly press the media.
Media sensor is broken	Contact an authorized Postek service provider for technical support.

Note: If you are using continuous media without gaps or black lines, please make sure the correct Media Type settings are input in PosLabel software.

READY and RIBBON Lamps blink simultaneously:

Possible Cause	Recommend Solutions
Ribbon ran out	Load a new roll of ribbon
Ribbon jammed	Clear the jam
Ribbon Sensor error	Contact an authorized Postek service provider for technical support.

Note: If the printer is switched on during the overall process, the outstanding printing task can be continued by press 'Feed' button after the new ribbon is loaded correctly or the issues are solved.

Only READY Lamp blinks:

Possible Cause	Recommend Solutions
Serial I/O error	Check LCD menu for the baud rate settings
Memory overflow	a) Restart the printer b) Reset the printer

Miscellaneous

Vertical Blank Lines Appear

If the printer prints vertical blank lines as shown in the below picture, it may be due to a dirty or defective Printhead. See the table below for possible causes and solutions.



Cause	Corrective Action
The Printhead is dirty.	Clean the Printhead. Follow the recommended maintenance guidelines for cleaning the Printhead.
Vertical lines still appear after cleaning the Printhead.	Contact an authorized Postek service provider for technical support.

Printer Timeout Error Message

Execute following corrective actions:

1. Check the interface cable for proper connection.
2. Ensure the TXr printer is powered on.

If the trouble still exists, please contact an authorized Postek service provider for technical support.

Data Sent but Not Printing

1. Ensure the correct driver is chosen in the label software.
2. Reset the TXr printer.

If the trouble still exists, please contact an authorized Postek service provider for technical support.

Poor Printing Quality

When experiencing poor print quality, check the following:

1. Adjust print darkness setting value.
2. Adjust print speed setting value.
3. Clean the Printhead and the platen roller.
4. Poor quality printing may be caused from using a low quality ribbon. Change to higher quality ribbon.
5. Poor quality printing may be caused from using low quality media. Change to higher quality media.

Recovery

After the miscellaneous has been cleared, press the CANCEL button to clear the alarm or restart the printer to resume the printing automatically.

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

Appendix A: Interface Specifications

RS232 Serial

The RS232 connector on the printer is a DB9F:

Pin	Direction	Definition
1	/	/
2	Out	TX
3	In	RX
4	In	CTS
5	-	Ground
6	Out	RTS
7	In	DSR
8	Out	DTR
9	/	/

Connection with host:

Host 25S	Printer 9P	Host 9S	Printer 9P
TX 2	..... 3 RX	RX 2	..... 2 TX
RX 3	..... 2 TX	TX 3	..... 3 RX
DSR 6	..... 8 DTR	DTR 4	..... 7 DSR
DTR 20	..... 7 DSR	DSR 6	..... 8 DTR
RTS 4	..... 4 CTS	RTS 7	..... 4 CTS
CTS 5	..... 6 RTS	CTS 8	..... 6 RTS
GND 7	..... 5 GND	GND 5	..... 5 GND

Alternately you can just connect the 3 wires as follows:

Host 25S	Printer 9P	Host 9S	Printer 9P
TX 2	..... 3 RX	RX 2	..... 2 TX
RX 3	..... 2 TX	TX 3	..... 3 RX
GND 7	..... 5 GND	GND 5	..... 5 GND
pin 4	—|	pin 4	—|
pin 5	—|	pin 6	—|
pin 6	—|	pin 7	—|
pin 20	—|	pin 8	—|

- Baud rate: 9600, 19200, 38400, 57600
- Data format: always 8 data bits, 1 start bit and 1 stop bit.
- Parity: always non parity.
- Flow control: RTS/CTS (Hardware flow control).
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.

Note: 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	`	p
1	SOH	XON	!	1	A	Q	a	q
2	STX		“	2	B	R	b	r
3		XOFF	#	3	C	S	c	s
4			\$	4	D	T	d	t
5		NAK	%	5	E	U	e	u
6	ACK		&	6	F	V	f	v
7	BEL		‘	7	G	W	g	w
8	BS		(	8	H	X	h	x
9			)	9	I	Y	i	y
A	LF		*	:	J	Z	j	z
B		ESC	+	;	K	[	k	{
C	FF		,	<	L	\	l	|
D	CR		-	=	M	]	m	}
E	SO	RS	.	>	N	^	n	~
F	SI	US	/	?	O	_	o	DEL

Note: The € sign is included in the embedded table at DEC128 or HEX 80

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