

User's Manual XT5-40 Series

Industrial Label Printer Ver. 1.04



Introduction

XT5-40 series printers have been designed to be connected to various types of electronic devices such as computer peripheral devices.

* The main features of the printer are as follows

- 1. Industrial Label Printer
- 2. Thermal Transfer / Direct Thermal Printing
- 3. Max 356mm/s Print Speed
- 4. Print Width/Length: 104mm/4,000mm(XT5-40), 105.7mm/2,500mm(XT5-43), 105.6mm/1000mm(XT5-46)
- 5. Media Width/Outer Diameter/Inner Diameter/Thickness: 25~114mm/203mm/ 1.5~3inch (ID 1 inch Core: Optional)/0.06~0.3mm
- 6. Ribbon Width/Length/Type: Max 110mm/450m/Wax, Wax Resin, Resin, Outside, Inside
- 7. Movable Transmissive Sensor, Movable Reflective Sensor
- 8. 512MByte Flash/512MByte SDRAM
- 9. 3.5 Inch Color Graphics TFT LCD + Keypad
- 10. Option: Auto Cutter, Rewinder, Peeler, 4.3 Inch Color Touch Screen TFT LCD
- 11. Support Interface: USB, Serial, Parallel, Ethernet, WLAN, Bluetooth

It is advisable to read the contents of this manual carefully before using the printer for the first time.

***** Use only authorized supplies that can be trusted!

- We are not responsible for quality and service for damage caused by the use of unauthorized products (or recycled ones).

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Manual Information

This user's guide contains basic information for product usage as well as for emergency measures that may be required.

* The following separate manuals provide more detailed content on various technological issues and areas.

1. Windows Driver Manual

This manual provides information on the installation instructions and main functions of the Windows Driver.

2. Unified Label Utility-II Manual

This manual provides information on the usage of software for function selection of this product, operating condition modification, etc.

3. Programming (SLCS) Manual

This manual provides information on label printer commands.

4. True Font Downloader Manual

This manual provides information on the usage of the font downloader that can download True Fonts and facilitate their usage as Device Fonts.

5. Network Connection Manual

This manual provides information on the configuration and usage of network.

6. Bluetooth Connection manual

This manual provides information on connection instructions the Bluetooth interface.

7. Label Design Program Manual

This manual provides information on the usage of the Windows PC program that can make labels by adding text, graphics, or barcodes at desired positions.

Safety Information



Marning: Warnings must be heeded carefully in order to prevent serious physical harm.



Caution: Cautions must be heeded in order to prevent minor injuries, equipment damage, or data loss.

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Symbol Information

~	AC (Alternating current)
	DC (Direct current)
	Note
\triangle	Caution, Warning
•	USB

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Safety Precautions

In using the present appliance, please keep the following safety regulations in order to prevent any hazard or material damage.

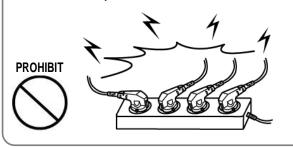


WARNING

Warnings must be heeded carefully in order to prevent serious physical harm.

Do not plug several products in one multi-outlet.

- This can provoke over-heating and a fire.
- If the plug is wet or dirty, dry or wipe it before usage.
- If the plug does not fit perfectly with the outlet, do not plug in.
- Be sure to use only standardized multi-outlets.

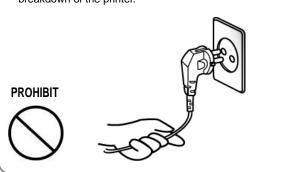


Use only the supplied parts for AC/DC power enclosed. • Do not use any other AC/DC enclosed as it may incur danger.

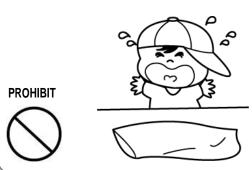


Do not pull the cable to unplug.

 This can damage the cable, which is the origin of a fire or a breakdown of the printer.

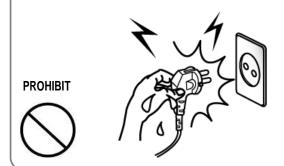


Keep the plastic bag out of children's reach. • If not, a child may put the bag on his head.



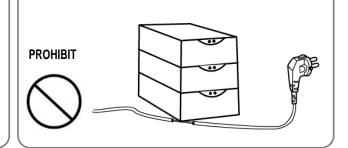
Do not plug in or unplug with your hands wet.

• You can be electrocuted.



Do not bend the cable by force or leave it under any heavy object.

• A damaged cable can cause a fire.



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CAUTION

Cautions must be heeded in order to prevent minor injuries, equipment damage, or data loss.

If you observe a strange smoke, odor or noise from the printer, unplug it before taking following measures.

- Switch off the printer and unplug the set from the mains.
- After the disappearance of the smoke, call your dealer to repair it.

TO UNPLUG





Keep the desiccant out of children's reach.

• If not, they may eat it.







Install the printer on the stable surface.

• If the printer falls down, it can be broken and you can hurt yourself.

PROHIBIT





Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.

- Call your dealer when you need these services.
- Do not touch the blade of auto cutter.

DISASSEMBLING PROHIBITED





Do not let water or other foreign objects in the printer.

• If this happened, switch off and unplug the printer before calling your dealer.

PROHIBIT





Do not use the printer when it is out of order. This can cause a fire or an electrocution.

• Switch off and unplug the printer before calling your dealer.

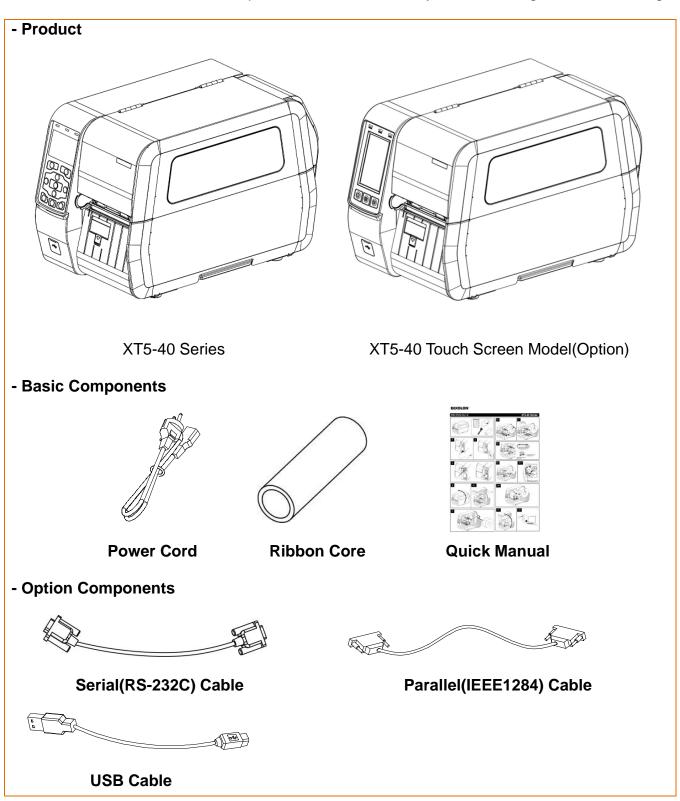
TO UNPLUG





1. Content Confirmation

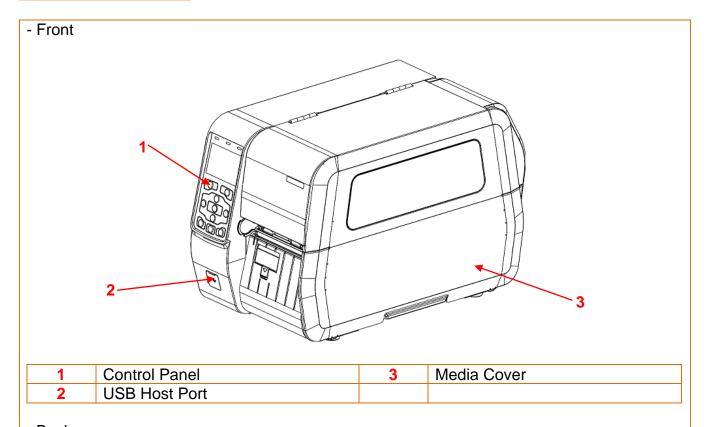
The following items should all be contained in the printer package. Contact the dealer from which the purchase was made if any item is damaged and/or missing.



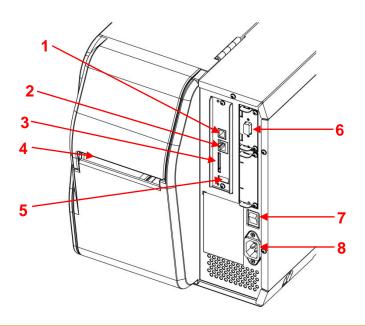
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2. Product Part Names

2-1 Printer Part Names



- Back

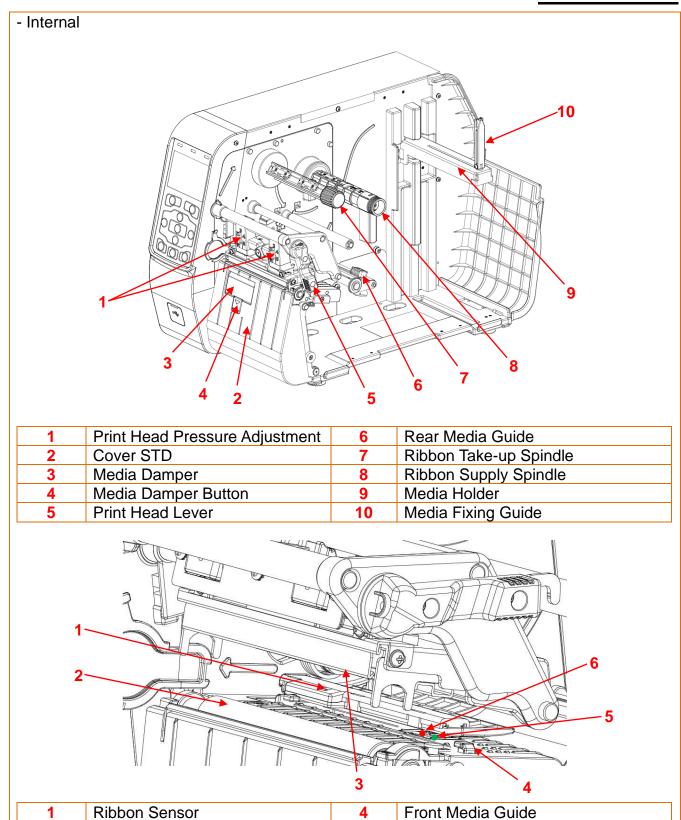


1	USB Port	5	USB Host Port
2	Ethernet Port	6	Serial(RS-232C) Port
3	SD Card Slot	7	Power Switch
4	Rear Access Slot(Media)	8	Power Connector

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Black Mark Sensor (Green LED)

Gap & Notch Sensor (Red LED)



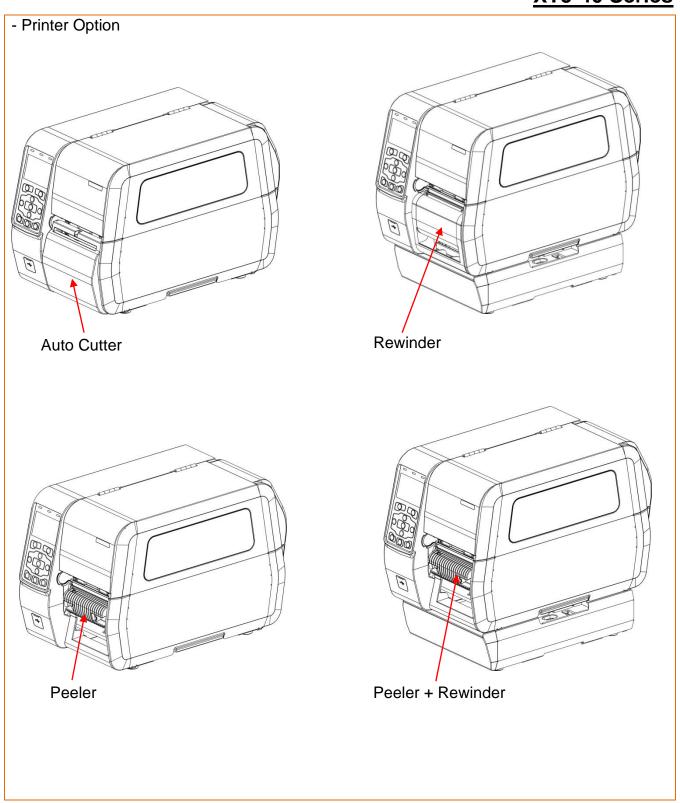
5

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Platen Roller

Print Head

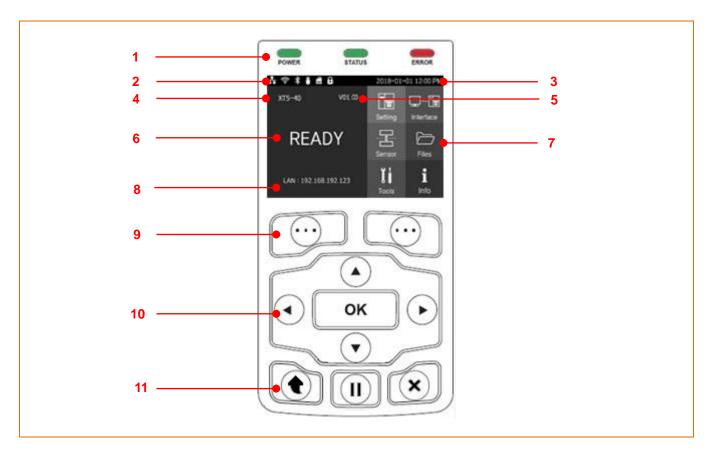
2



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2-2 Major Control Part Names(Standard Model)

2-2-1 Control Panel



No	Description
1	Printer status LED
2	Interface status icon
3	Date, Time
4	Model name
5	Firmware version
6	Printer status
7	Main icon
8	Ethernet IP, WLAN IP
9	Function button
10	Direction button, Selection button
11	Printer operation button

2-2-2 Detailed Descriptions

2-2-2-1 Printer Status LED

List	Status	Explanation
	ON	Printer power on
POWER	OFF	Printer power off
	ON	Waiting for data reception
STATUS	BLINK	Receiving data
	BLINK	Print error
ERROR	OFF	In normal operation

2-2-2-2 Interface Status Icon

List	Status	Explanation
#	ON	Ethernet is connected
	OFF	Ethernet is not connected
76	ON	Not connected to AP
7.	OFF	WLAN communication is not supported
	ON	Connected to AP, Strength: 4
⇒	ON	Connected to AP, Strength: 3
~	ON	Connected to AP, Strength: 2
•	ON	Connected to AP, Strength: 1
•	ON	Bluetooth is not connected to the host
7	OFF	Bluetooth communication is not supported
*	ON	Bluetooth is connected to the host
<u></u>	ON	USB device is connected
u	OFF	USB device is not connected
A11	ON	SD card is installed
SD	OFF	SD card is not installed
0	ON	Password feature is enabled
U	OFF	Password feature is disabled

2-2-2-3 Date, Time (RTC clock)

List	Explanation
YYYY-MM-DD	Date
12:00 AM/PM	Time

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2-2-2-4 Model Name

List	Explanation
XT5-40	Model name

2-2-2-5 Firmware Version

List	Explanation
V01.00	Firmware version

2-2-2-6 Printer Status

Explanation	
Ready for print	
Standing by for user input - Ul button: Switch to Print Standby Mode without feeding any media - button: Feed one sheet of media to align the media position and switch to the Print Standby Mode	
In printing	
Printing pause	
Canceled printing	
Downloading firmware	
Print head is open	
Print head has reached the maximum temperature	
Print head has reached the minimum temperature	
Media is stuck in the auto cutter blade	
Media is not installed correctly	
Ribbon is not installed correctly	
Media is jammed and not printing normally	
Media is not recognized normally	

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2-2-2-7 Main Icons

List	Explanation
Setting	Printer settings
☐ ··· •☐ Interface	Interface settings
Sensor	Sensor settings
Files	File settings
Tools	Additional and other functions settings
i Info	Providing printer information

2-2-2-8 Ethernet IP, WLAN IP

List	Explanation
LAN: 192.168.100.123	Ethernet IP
WLAN: 192.168.100.123	WLAN IP (displayed only when WLAN is supported)

2-2-2-9 Function Button

List	Explanation
	Used for selection, cancellation, storing, and deletion

2-2-2-10 Direction Button, Selection Button

List	Explanation
OK	Used for menu selection

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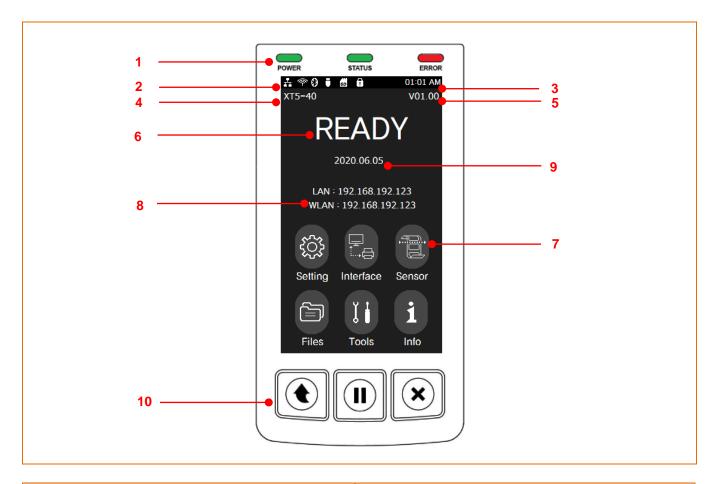
2-2-2-11 Printer Operation Button

List	Explanation	
	Softly press and release the button to feed one label	
	Press the button for 2 seconds during printing to pause printing	
×	Press the button for 2 seconds during printing to cancel printing	

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2-3 Major Control Part Names(Touch Screen Model)

2-3-1 Control Panel



No	Description
1	Printer status LED
2	Interface status icon
3	Time
4	Model name
5	Firmware version
6	Printer status
7	Main icon
8	Ethernet IP, WLAN IP
9	Date
10	Printer operation button

2-3-2 Detailed Descriptions

2-3-2-1 Printer Status LED

List	Status	Explanation
	ON	Printer power on
POWER	OFF	Printer power off
	ON	Waiting for data reception
STATUS	BLINK	Receiving data
	BLINK	Print error
ERROR	OFF	In normal operation

2-3-2-2 Interface Status Icon

List	Status	Explanation
욢	ON	Ethernet is connected
	OFF	Ethernet is not connected
Tr.	ON	Not connected to AP
76	OFF	WLAN communication is not supported
*	ON	Connected to AP, Strength: 4
令	ON	Connected to AP, Strength: 3
ዋ	ON	Connected to AP, Strength: 2
ī	ON	Connected to AP, Strength: 1
•	ON	Bluetooth is not connected to the host
7	OFF	Bluetooth communication is not supported
8	ON	Bluetooth is connected to the host
<u> </u>	ON	USB device is connected
ш	OFF	USB device is not connected
so	ON	SD card is installed
	OFF	SD card is not installed
8	ON	Password feature is enabled
	OFF	Password feature is disabled

2-3-2-3 Date, Time (RTC clock)

List	Explanation
YYYY-MM-DD	Date
12:00 AM/PM	Time

2-3-2-4 Model Name

List	Explanation
XT5-40	Model name

2-3-2-5 Firmware Version

List	Explanation
V01.00	Firmware version

2-3-2-6 Printer Status

List	Explanation	
READY	Ready for print	
STANDBY	Standing by for user input button: Switch to Print Standby Mode without feeding any media button: Feed one sheet of media to align the media position and switch to the Print Standby Mode	
PRINTING	In printing	
PAUSE	Printing pause	
CANCEL	Canceled printing	
F/W Downloading	Downloading firmware	
PRINT HEAD OPEN	Print head is open	
PRINT HEAD OVER TEMP	Print head has reached the maximum temperature	
PRINT HEAD COLD TEMP	Print head has reached the minimum temperature	
AUTO CUTTER JAM	Media is stuck in the auto cutter blade	
MEADIA OUT	Media is not installed correctly	
RIBBON OUT	Ribbon is not installed correctly	
MEADIA JAM	Media is jammed and not printing normally	
SENSING FAIL	Media is not recognized normally	

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2-3-2-7 Main Icons

List	Explanation
₹Ĉ\$ SETTING	Printer settings
INTERFACE	Interface settings
SENSOR	Sensor settings
FILE	File settings
TOOL	Additional and other functions settings
info	Providing printer information

2-3-2-8 Ethernet IP, WLAN IP

2 0 2 0 2 110 110 11 11 11 11	
List	Explanation
LAN: 192.168.100.123	Ethernet IP
WLAN: 192.168.100.123	WLAN IP
	(displayed only when WLAN is supported)

2-3-2-9 Function Button

List	Explanation
<pre><</pre>	Select, Cancel, Save, Delete, Move to main menu
Back Home Select	

2-3-2-10 Printer Operation Button

List	Explanation
•	Press the button to feed one label
	Press the button for 2 seconds during printing to pause printing
×	Press the button for 2 seconds during printing to cancel printing

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3. Installation & Usage

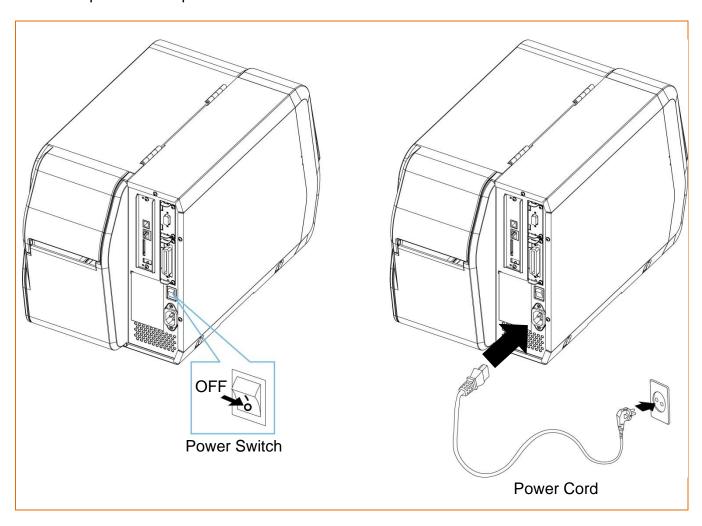
3-1 Printer Installation Placings

- Install the printer in a location that meets the following conditions.
 - Allow sufficient space around the printer for proper ventilation.
 - Do not place objects close to the back or bottom of the printer, which may hinder the air circulation.
 - Install the printer on a flat and level surface.
 - Avoid humid environment.
 - Install in a place that does not exceed the protocol standard of the wireless communication or the specified maximum distance.
 - For stable wireless communication, install in a place where there is no physical obstacle (wall, object, etc.).

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3-2 Power Connection

• Connect power to the printer as shown below.



- 1) Turn off the printer power switch.
- 2) Connect the power cord to the printer.
- 3) Connect the power cord to a power source/outlet.

A Caution	For the safety of people and equipment, please use the appropriate power cord for your country or region.
⚠ Warning	 Be sure to turn off the printer before connecting the power cord to the printer. This can cause serious electrical damage and bodily injury. Do not operate the printer and power supply in a humid environment. This can cause serious electrical damage and bodily injury. Do not connect an input voltage beyond the specifications of the power supply. This may result in product damage and fire.

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3-3 Interface

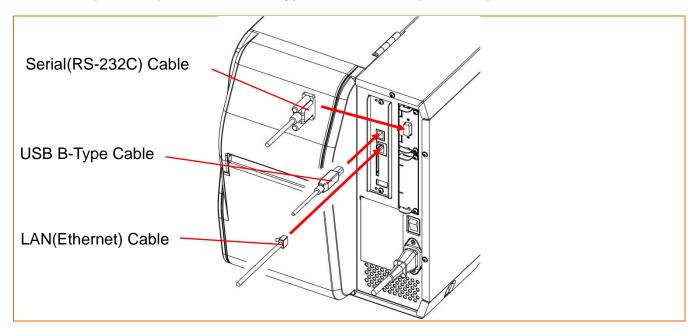
	Shielded cables must be used to prevent radiation and reception of
	electrical noise. Use the shortest possible communication cable to
	minimize the detection of electrical noise in the cable.
Note	- Serial(RS-232C) Cable (1.8m or less recommended)
₩ Note	- Parallel(IEEE1284) Cable
	(1.8m or less with ferrite core recommended)
	- USB B-Type Cable (1.8m or less recommended)
	- LAN(Ethernet) Cable (3m or less, CAT-5 or higher UTP Cable)
	- Connecting unshielded communication cables is in violation of EMC
/ Caution	standards. Use the cable approved by us.
Caution کنک	- Do not bundle the communication cable with objects that may cause
	electrical noise and interference. The printer may be damaged.
<u> </u>	After turning off the power switch of printer, connect and
⚠ Warning	disconnect the communication cable.
	This can cause serious electrical damage and bodily injury.

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3-3-1 Standard Interface

This printer can use the following types of communication.

- LAN (Ethernet) Cable / USB B-Type Cable / Serial (RS-232C) Cable



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
 - Connect the LAN(Ethernet) cable to the Ethernet port.
 - Connect the USB B-Type cable to the USB port.
 - Connect Serial(RS-232C) cable to the serial port and tighten both screws.

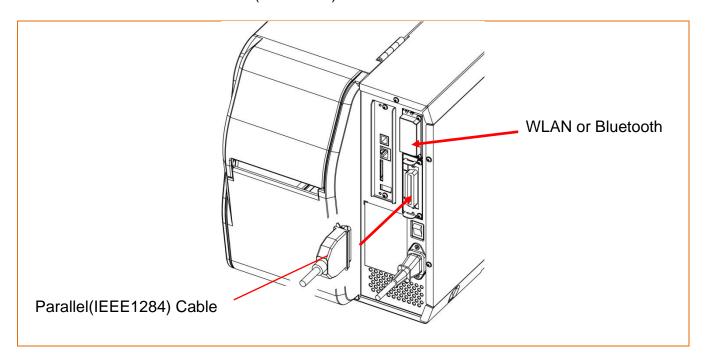


Be aware that the product's electronic components may be damaged due to discharging of electrostatic energy that accumulates on the surface of the body or other objects.

3-3-2 Option Interface

This printer can use the following types of communication.

- WLAN / Bluetooth / Parallel(IEEE1284) Cable



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
 - Connect Parallel(IEEE1284) Cable to parallel port and fasten both clips.
 - Wireless interface does not require a separate cable connection



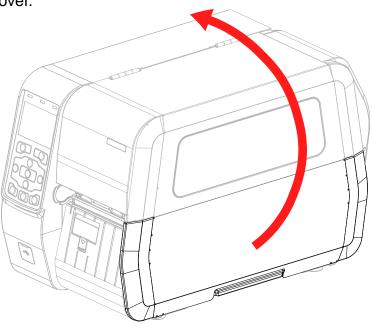
Be aware that the product's electronic components may be damaged due to discharging of electrostatic energy that accumulates on the surface of the body or other objects.

3-4 Media Installation

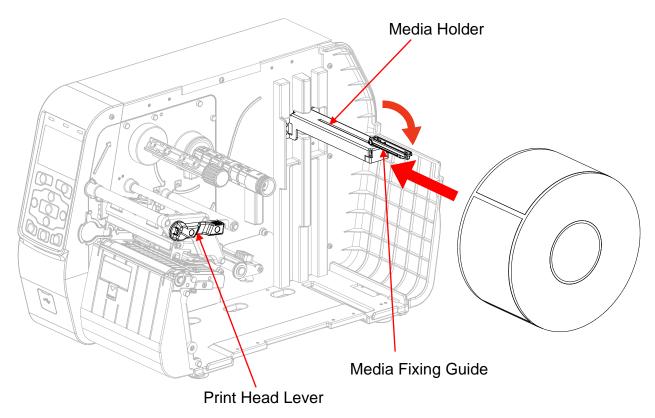
3-4-1 Media Installation Method of Standard Model

For standard models, install media in the following ways:

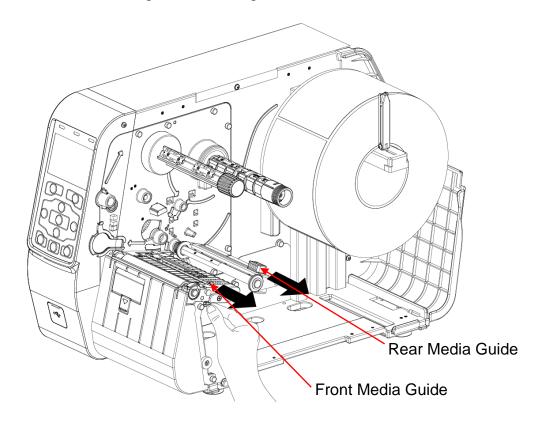
1) Open the media cover.



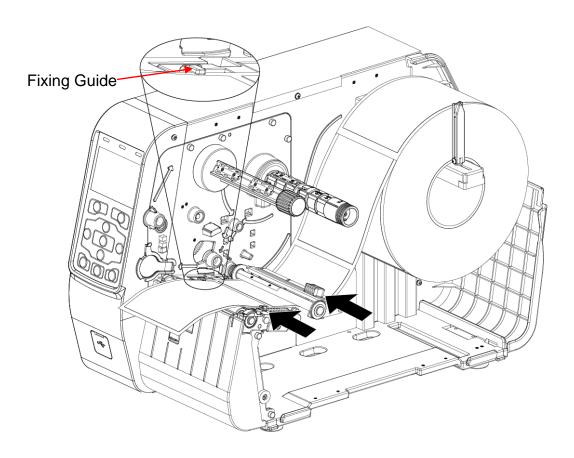
2) Open the print head lever. Flip down the media fixing guide and place the media in the media holder with print side up.



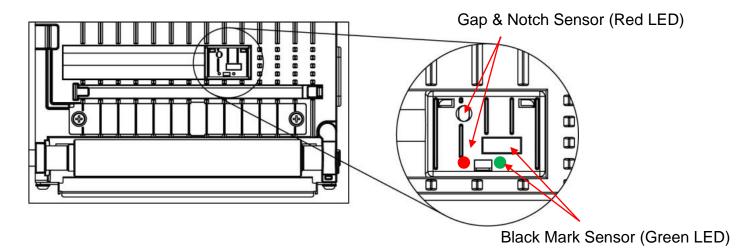
3) After flip up the media fixing guide, push the holder so that it is close to the media. Push the front and rear media guides to the right.



4) After inserting the media into the fixing guides, adjust the front and rear media guides to the media width.



5) Please make sure the sensor position where media gap/black mark will pass through for sensing. Sensor(gap & notch sensor, black mark sensor) can be moved by the sensor lever. Check the sensor position with LED color.



6) Close the print head lever and media cover.

△ Warning	be lost. While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.
⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may

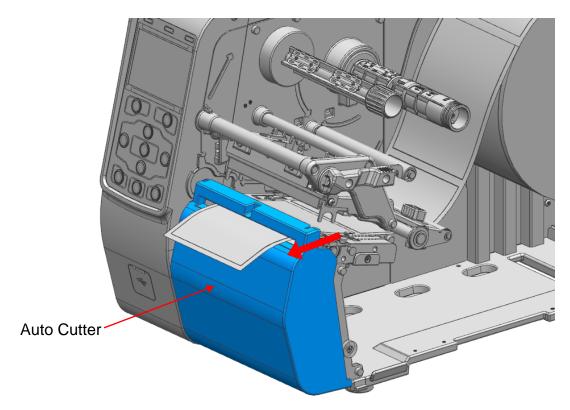
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3-4-2 Media Installation Method of Auto Cutter (optional) Model

Use the autocutter to cut the printed media.

For Auto Cutter Model, install media in the following ways:

- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Install the media through the auto cutter as shown in the figure.



3) Close the print head lever and media cover.

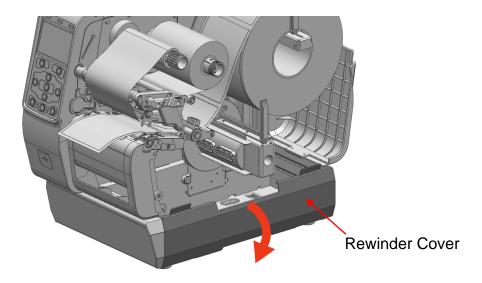
⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may
	be lost. - Never insert objects or fingers while performing the cutting function. This can cause serious bodily injury. - Be careful not to touch the cutter blade with your hand.
⚠ Warning	There may be a risk of personal injury. - While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.

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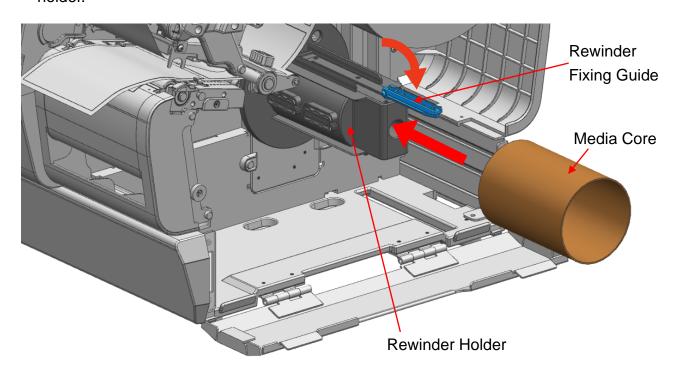
3-4-3 Media Installation Method of Rewinder(optional) Model

Use the rewinder to automatically rewind the printed media. When shipped from the factory, the rewinder is attached. For Rewinder Model, install media in the following ways:

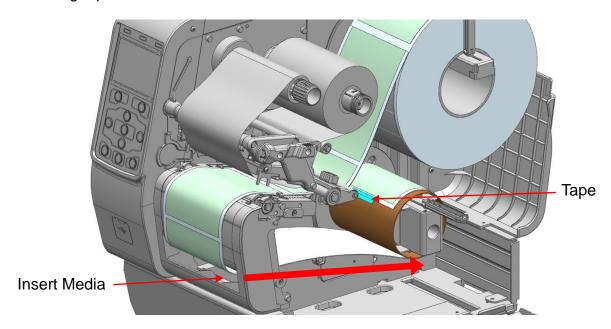
- · 3-4-3-1 Media Installation Method Using Media Core.
- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Open the rewinder cover.



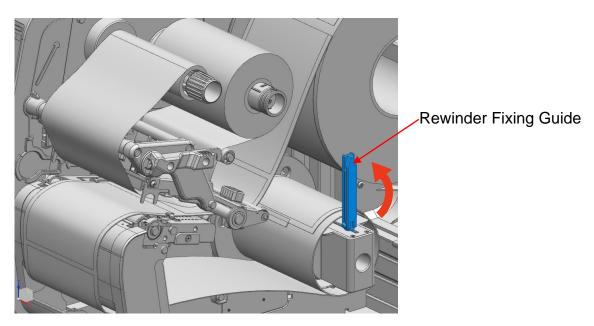
3) After flip down the rewinder fixing guide, install a 3inch media core on the rewinder holder.



4) After installing the media in the same way as the picture, attach the media to the media core using tape.



5) After flip up the rewinder fixing guide, push it close to the media.

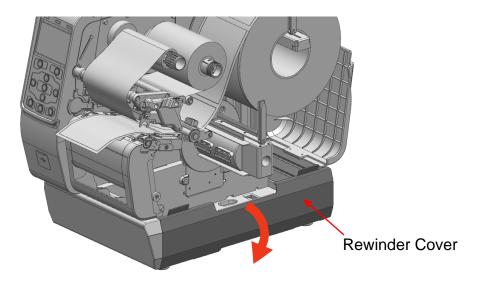


6) Close the print head lever, the rewinder cover, and the media cover.

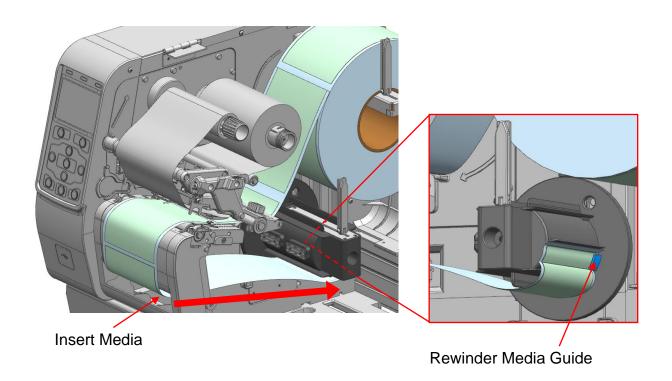
⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may be lost.
⚠ Warning	While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.

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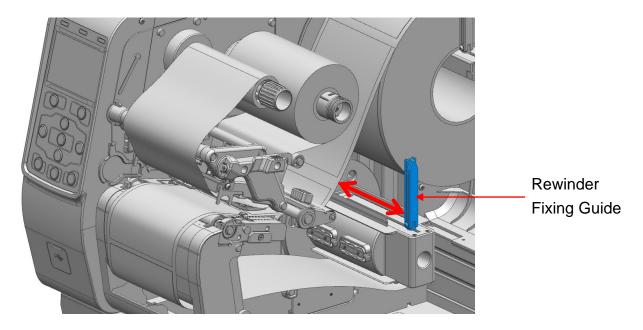
- · 3-4-3-2 Media Installation(Removal) Method Not Using Media Core
- * Media Installation Method
- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Open the rewinder cover.



3) After installing the media in the same way as the picture, fix the media at rewinder media guide.



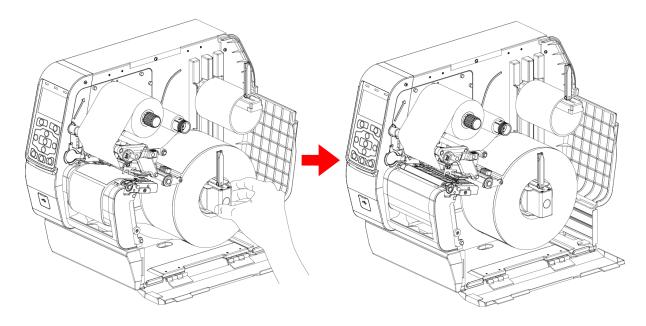
4) Adjust the rewinder fixing guides to the media width.



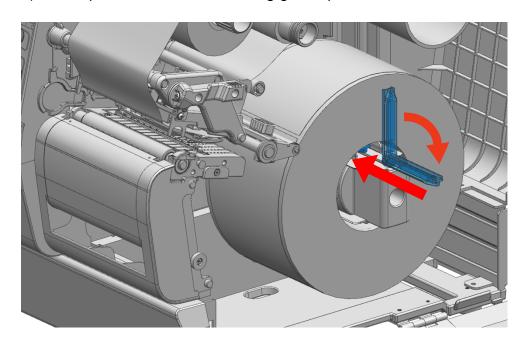
5) Close the print head lever, the rewinder cover, and the media cover.

Media Removal Method

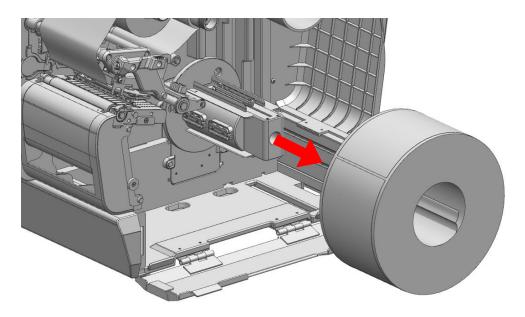
- 1) Open the media cover, the rewinder cover and the print head lever.
- 2) Rotate the rewinder media holder counter-clockwise to collect the media.



3) After flip down the rewinder fixing guide, push it inside.



4) Remove the media.

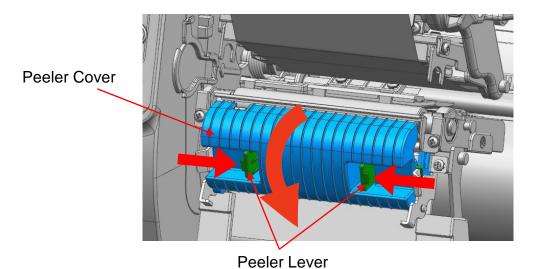


Note	 When removing the media, make sure it is not damaged by other parts.
⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may be lost.
⚠ Warning	While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.

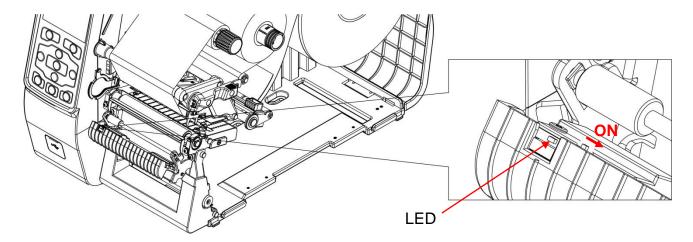
3-4-4 Media Installation Method of Peeler (optional) Model

Use a peeler to automatically separate the printed media from the liner. When shipped from the factory, the peeler is attached. For Peeler Model, install media in the following ways:

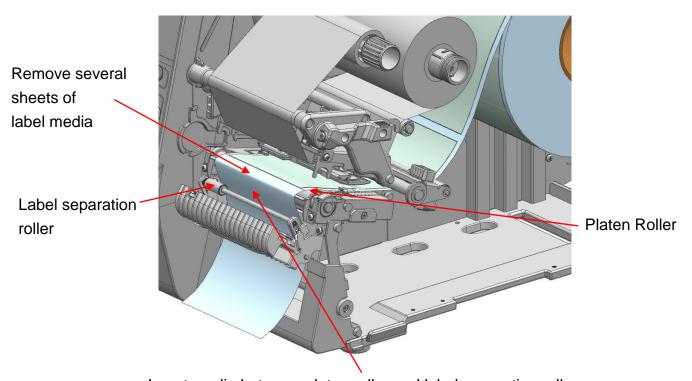
- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Press the left and right peeler levers to open the peeler cover.



3) Move the peeler switch to ON. Please make sure that the LED has turned on.

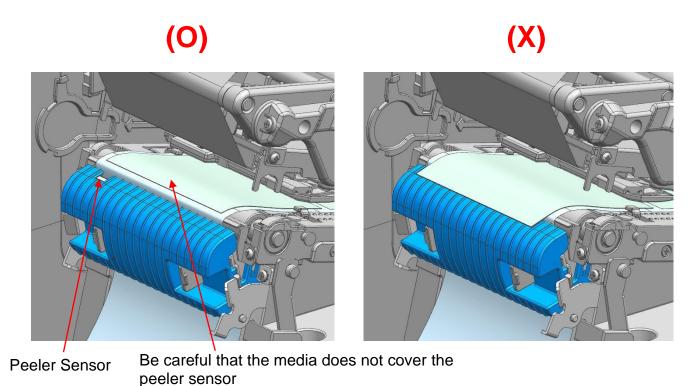


4) Remove several sheets of label media and insert liner as in the picture.



Insert media between platen roller and label separation roller

5) Close the peeler cover until it clicks.



6) Close the print head lever, the rewinder cover, and the media cover.

⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may be lost. The peeler function is only available for label media. When the peeler is switched on, the next label will not be printed unless the printed label is removed from the peeler. 	
	- When the peeler is switched off, the peeler does not work.	
A	While the printer is operating, the print head gets very hot, so turn	
∠!\ Warning	off the power and let it cool down completely.	
	The hot print head can cause serious burns.	

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3-4-5 Media Installation Method of Peeler + Rewinder(optional) Model

Use the 'peeler + rewinder' to automatically separate the printed media from the liner and rewind the printed media.

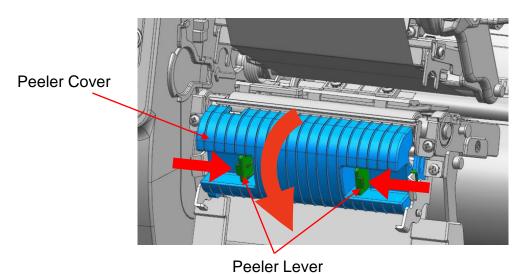
When shipped from the factory, the peeler is attached.

For 'Peeler + Rewinder Model', install media in the following ways:

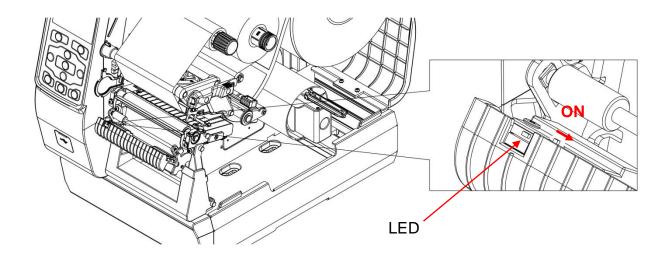
- · 3-4-5-1 Media Installation Method Using Media Core.
- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Open the rewinder cover.

 After flip down the rewinder fixing guide, install a 3inch media core in the rewinder holder.

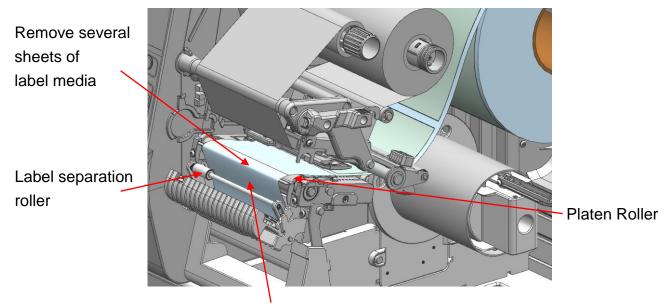
 (Please refer to 3-4-3 Media Installation Method of Rewinder Model)
- 3) Press the left and right peeler levers to open the peeler cover.



4) Move the peeler switch to ON. Please make sure that the LED has turned on.

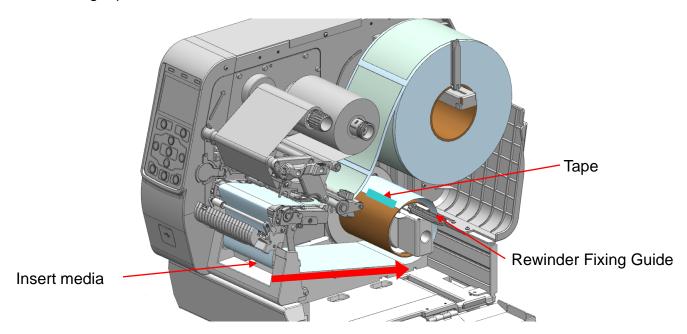


5) Remove several sheets of label media and insert liner as in the picture.



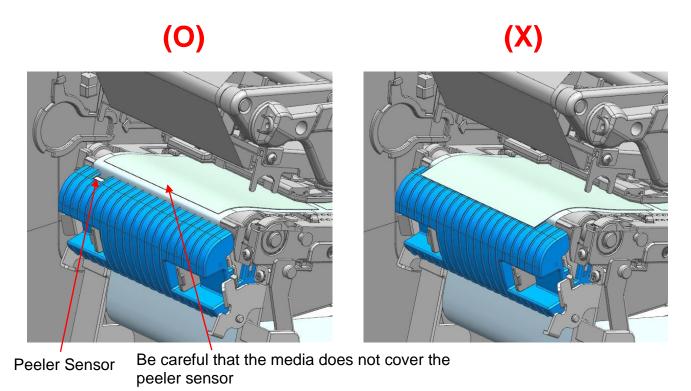
Insert media between platen roller and label separation roller

6) After installing the media in the same way as the picture, attach the media to the media core using tape.



7) Raise the rewinder fixing guide, and then push it close to the media.

8) Close the peeler cover until it clicks.



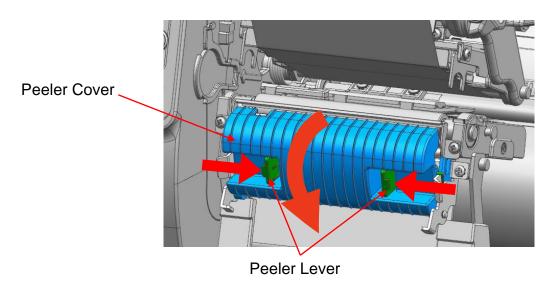
9) Close the print head lever, the rewinder cover, and the media cover.

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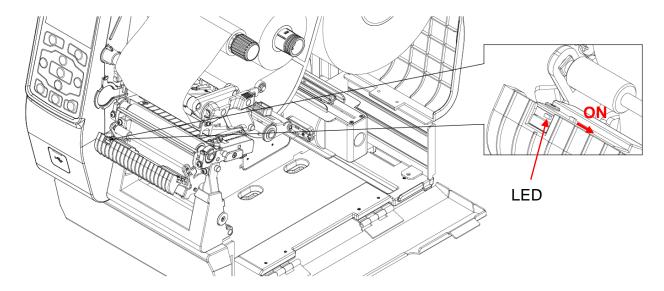
· 3-4-5-2 Media Installation(Removal) Method - Not Using Media Core.

· Media Installation Method

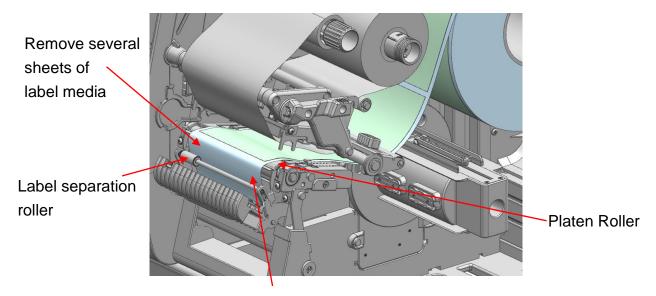
- 1) Refer to '3-4-1 Media Installation Method of Standard Model' to install media, adjust media guide and sensor position.
- 2) Open the rewinder cover.After flip down the rewinder fixing guide, push it inside.(Please refer to 3-4-3 Media Installation Method of Rewinder Model)
- 3) Press the left and right peeler levers to open the peeler cover.



4) Move the peeler switch to ON. Please make sure that the LED has turned on.

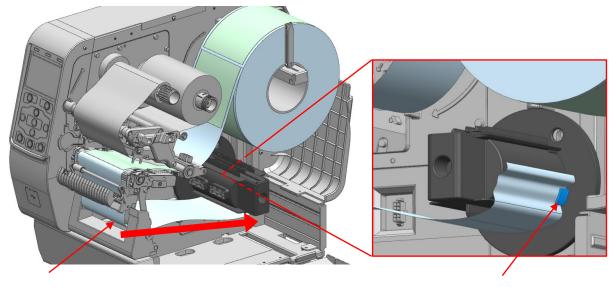


5) Remove several sheets of label media and insert liner as in the picture.



Insert media between platen roller and label separation roller

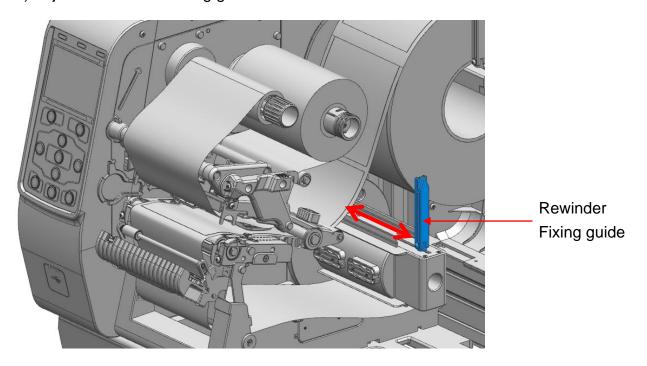
6) After installing the media in the same way as the picture, fix the media on rewinder media guide.



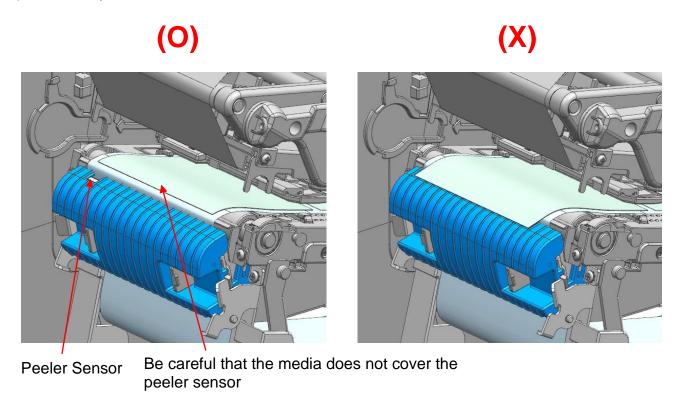
Insert media

Rewinder Media Guide

7) Adjust the rewinder fixing guides to the media width.



8) Close the peeler cover until it clicks.



9) Close the print head lever, the rewinder cover, and the media cover.

* Media Removal Method

- 1) Open the peeler cover, the media cover, the rewinder cover and the print head lever.
- 2) Please refer to Media Removal Method of 'Media Installation(Removal) Method Not Using Media Core'.

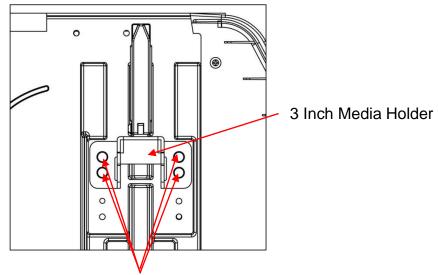
Note	- When removing the media, please work to avoid damaging the surrounding parts.			
⚠ Caution	 When opening or closing the cover, be careful not to pinch your fingers. Do not open the print head levers while the printer is printing. The printer may be damaged. Change the media when the printer is not receiving data, or data may be lost. The peeler function is only available for label media. When the peeler is switched on, the next label will not be printed unless the printed label is removed from the peeler. When the peeler is switched off, the peeler does not work. 			
⚠ Warning	While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.			

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3-4-6 Media Installation method for 1inch Media Core (optional) Model

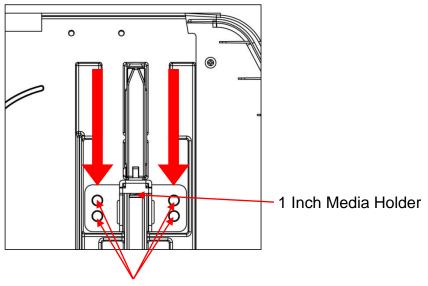
For 1inch Media Core Model, install media in the following ways:

1) Remove the current 3 inch media holder fixture from the printer using a hexagonal screwdriver (3mm).



Unscrew 4 hexagon wrench bolts

2) Assemble 1 inch media holder fixture(sold separately) with printer using a hexagonal driver (3mm).



Screw 4 hexagon wrench bolts

3) Install the media in the same manner as the 3 inch core paper model.

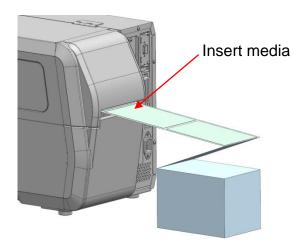
Note	1 inch media holder fixture can be purchased separately. Please contact the place of purchase.	
⚠ Caution	Be sure to turn off the printer before replacing the media holder. The printer may be damaged.	

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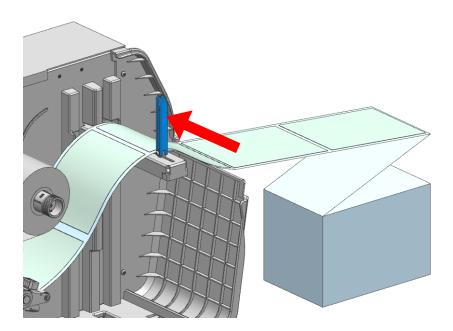
3-4-7 How To Install Media Externally

Install media from outside the printer as follows.

1) Insert the media through the rear access slot of the printer.



2) Adjust the media fixing guide to the media width.



3) Close the print head lever and media cover.



- Do not open the print head levers while the printer is printing. The printer may be damaged.
- Change the media when the printer is not receiving data, or data may be lost.

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3-5 How to Use Media Damper (Standard Model)

You can use the media damper to avoid the issue shown in the following images.

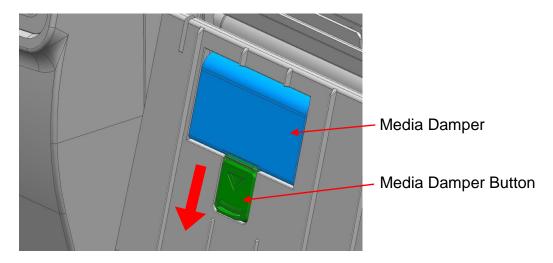




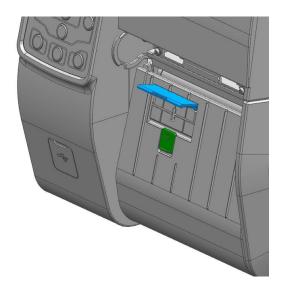
label stuck to the ribbon guide

folded label end when printing

1) Push the media damper button down to lift the media damper.



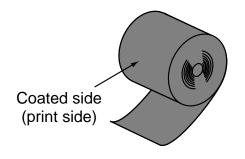
2) Use the printer with the media damper up as in the picture. (Please refer to 3-4-1 Media Installation Method of Standard Model)

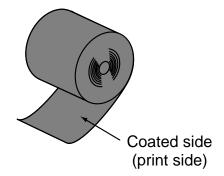


3-6 Ribbon Installation

3-6-1 Ribbon Type

- 1) Type by film coating position
 - This printer can be used with both Outside and Inside Ribbon.





Outside Ribbon

Inside Ribbon

☐ Note	Perform an adhesion test to determine which side of the ribbon is coated. Follow these steps to check the coated side of the ribbon. 1) Remove the label from the liner. 2) Press one corner of the adhesive side of the label against the outside/inside of the surface of the ribbon. 3) Remove the label from the ribbon. 4) Check whether the black ink ribbon appears on the adhesive side
	of the label.
⚠ Caution	Do not dispose of the ribbon core of spent ribbon because it will be reused.

2) Type by Ribbon core

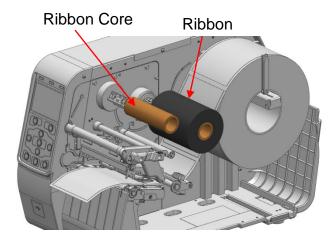
- This printer can be used only with the ribbon of 1 inch ribbon core.

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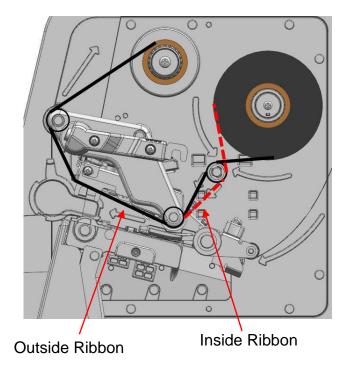
3-6-2 Ribbon Installation Method

Install ribbon as follows.

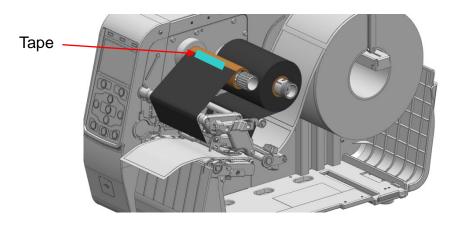
1) Insert the ribbon core into the ribbon takeup spindle and insert the ribbon into the ribbon supply spindle.



2) Open the print head lever and install the ribbon as shown below.



3) Attach the ribbon to the ribbon core using tape.



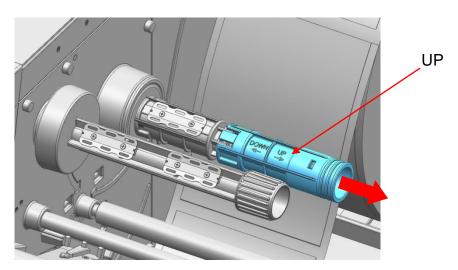
4) Close the print head lever and the media cover.

When opening or closing the cover, be careful not to pinch your fingers.
 Do not open the print head levers while the printer is printing. The printer may be damaged.
 Change the media when the printer is not receiving data, or data may be lost.
 While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely. The hot print head can cause serious burns.

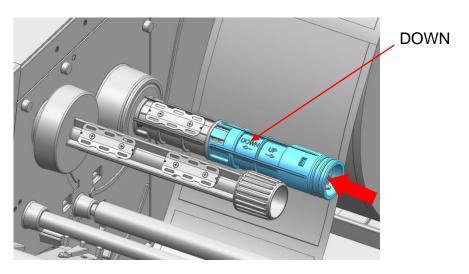
3-6-3 Load Adjustment by Ribbon Length

The printer can use all 1 to 4 inch wide ribbons and is set to 4 inch wide ribbons when shipped from the factory. Adjust the ribbon supply spindle load according to the ribbon width.

1) When using ribbon of 3 inch or 4 inch width, pull in the direction of UP marked on the ribbon supply spindle until it clicks.



2) When using ribbon of 1 inch or 2 inch width, push in the direction of DOWN marked on the ribbon supply spindle until it clicks.



A Caution

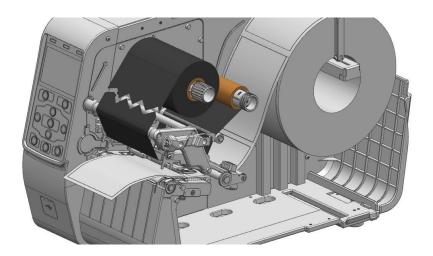
Do not adjust the ribbon supply spindle load while the printer is printing. The printer may be damaged.

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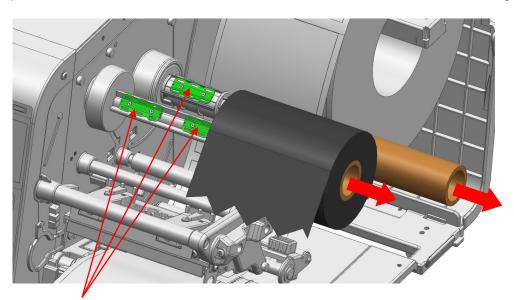
3-6-4 Ribbon Remove Method

Remove the ribbons as follows.

1) Cut the ribbon.



2) Open the print head levers and remove the ribbon and ribbon core from left to right.



Ribbon Core Clip

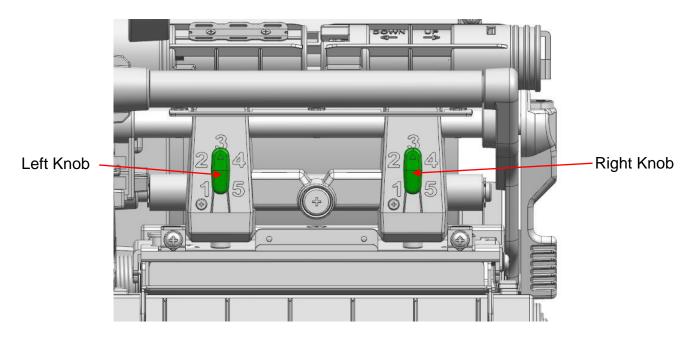
⚠ Caution	Don't remove the ribbon and ribbon core while the printer is printing. The printer may be damaged.	
⚠ Warning	When removing ribbon and ribbon core, be careful of the sharp end of the ribbon core clip. This can cause serious bodily injury.	

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3-7 Print Head Load Control Method

- Adjust the print head load by turning the left and right knobs depending on the media width and thickness. The left and right knobs are set to level 3 when shipped from the factory.
 Adjusting the print head load can improve the print quality.
 - * Turning the knob toward the level 1 (counterclockwise) direction reduces the print head load and the print density.

Turning the knob toward level 5 (clockwise) increases the print head load and the print density.

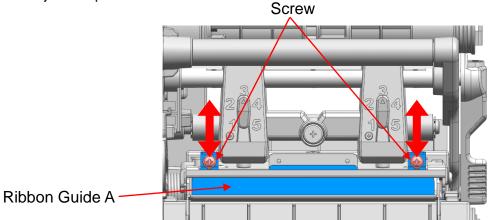


A Caution

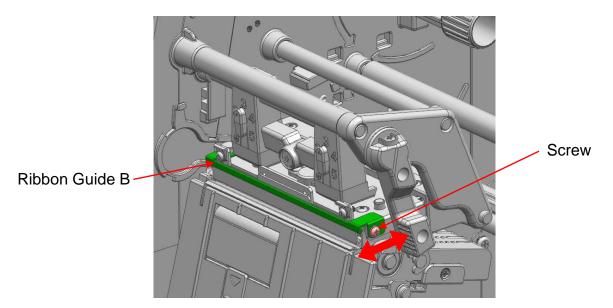
Do not adjust knobs while the printer is printing. The printer may be damaged.

3-8 Ribbon Guide Control Method

- Wrinkles can be improved by adjusting A and B on the ribbon guides.
- 1) How to adjust ribbon guide A
 - Slightly loosen the screw fastened to the ribbon guide A using a cross-tip screwdriver to adjust it up and down.



- 2) How to adjust ribbon guide B
 - Slightly loosen the screw fastened to the ribbon guide B using a cross-tip screwdriver to adjust it forward and backward.

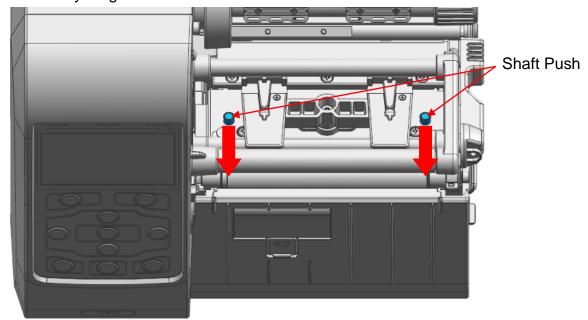


Caution

Do not adjust ribbon guide while the printer is printing. The printer may be damaged.

3-9 How to Fine Tune Print Head Position

- When using special paper, you can fine tune the print head position. There is no need to do this when using standard paper.
 - By fine tuning the print head position, you can improve the printing quality.
- 1) Turn off the printer.
- 2) Unplug the power cord from the printer.
- 3) Open the print head lever. Push the shaft down to remove the print head bundle which is attached by magnetism.



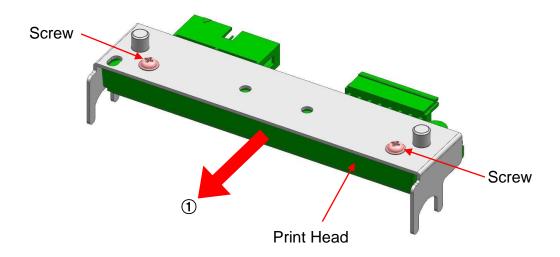
4) Remove the connector connected to the print head bundle.



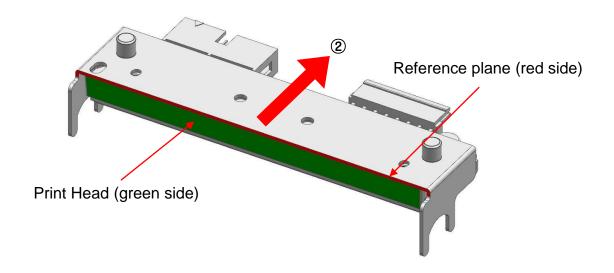
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- 5) After loosening the screws using a cross-tip screwdriver, adjust the print head position.
 - Move the print head in direction

 if you are using thick paper (0.26~0.3mm).

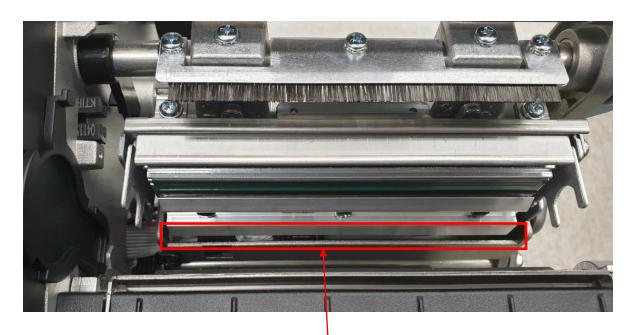


* The factory default position of the print head (green side) is 0.6mm from the red guide in direction ②.



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6) After fine tuning the position, re-assemble in reverse order of disassembly.



Be careful not to let the wires come out.



- Do not adjust the print head position while the printer is in operation as it may cause damage.
- Fine tuning the print head position significantly affects the printing quality. Perform this process only when necessary.

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4. Printer Setting

4-1 Menu Composition(Standard Model)

	Explanation
	Print Width
	Print Length
	Print Direction
	Print Speed
	Print Density
	Print Method
	Media Type
Setting	Tear Off
	Print Offset
	Left Position
	Print Mode
	Power Up Action
	Print Head Close

	Explanation	
	Serial	Baud Rate
		Data Bits
		Parity
		Stop Bit
		Host Handshake
		IP Protocol
		IP Address
	Ethernet	Subnet Mask
		Gateway
		MAC Address
1800-000		Channel
Interface	WLAN	Network
		ESSID (APID)
		Auth (Authentication)
		Encrypt (Encryption)
		WEP Password
		PSK Password
		IP Protocol
		IP Address
		Subnet Mask
		Gateway
		Smart Connection active

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		Device Name		
		Pairing	Pincode	
			SSP(Secure Simple Pairing)	
		MAC Address		
	Bluetooth	Mode	Bluetooth Low Energy	
			Standard Mode	Connect Mode
				Auth&Enc
				(Authentication
				& Encryption)
	Interface Info			

	Explanation
Sensor	Gap Calibration
	Black Mark Calibration
	Sensor Sensitivity

	Explanation	
		Template
		Image
	Coved File	Download Font
	Saved File	E Drive (Flash Memory)
		A Drive (USB Memory)
		B Drive (SD Card Memory)
Files	Twin Function	Printer Setting
		Template
		Image
		Download Font
	Firmware Update	

		Explanation	
	Self Test	·	
	Factory Reset	Factory Reset	
	Dump Mode		
	Print Head Check		
	LCD	Dead Pixel Test	
	LOD	Backlight Brightness	
20.0		Date Setting	
Ϊi	Real Time Clock	Time Setting	
		Date Format	
Tools		Time Format	
	Language Setting		
	Emulation		
	USB Serial Number		
	Buzzer Setting		
	Security	Password Enable	
		Password Setting	
	Demo Print		

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	Explanation	
	Printer Info	
		Media Installation
		Media Installation (Peel Off)
		Media Installation (Rewinder)
•	Installation & Usage	Ribbon Installation
1		Peel off Installation
Info		Auto Cutter Installation
222.000		Replace Media
		Replace Ribbon
		Replace Print Head
	Troubleshooting	
	Contact US	

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4-2 Menu Composition(Touch Screen Model)

	Explanation
	Print Width
	Print Length
	Print Direction
	Print Speed
SETTING	Print Density
	Print Method
	Media Type
	Tear Off
	Print Offset
	Left Position
	Print Mode
	Power Up Action
	Print Head Close

		Explanation
	Serial	Baud Rate
		Data Bits
		Parity
		Stop Bit
		Host Handshake
		IP Protocol
		IP Address
	Ethernet	Subnet Mask
		Gateway
		MAC Address
	WLAN	Channel
INTERFACE		Network
		ESSID (APID)
		Auth (Authentication)
		Encrypt (Encryption)
		WEP Password
		PSK Password
		IP Protocol
		IP Address
		Subnet Mask
		Gateway
		Smart Connection active

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		Device Name		
		Pairing	Pincode	
			SSP(Secure Simple Pairing)	
		MAC Address		
	Bluetooth	Mode	Bluetooth Low Energy	
			Standard Mode	Connect Mode
				Auth&Enc
				(Authentication
				& Encryption)
	Interface Info			



	Explanation
Gap Calibration	
Black Mark Calibration	
Sensor Sensitivity	

	Explanation		
	Saved File	Template	
		Image	
		Download Font	
		E Drive (Flash Memory)	
		A Drive (USB Memory)	
		B Drive (SD Card Memory)	
FILE	Twin Function	Printer Setting	
		Template	
		Image	
		Download Font	
	Firmware Update		

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	Explanation		
	Self Test		
	Factory Reset		
	Dump Mode		
	Print Head Check		
		Dead Pixel Test	
	LCD	Touch Position Test	
		Backlight Brightness	
v ,	Real Time Clock	Date Setting	
I i		Time Setting	
TOOL		Date Format	
		Time Format	
	Language Setting		
	Emulation		
	USB Serial Number		
	Buzzer Setting		
	Security	Password Enable	
		Password Setting	
	Demo Print		

		Explanation	
	Printer Info		
		Media Installation	
	Installation & Usage	Media Installation (Peel Off)	
		Media Installation (Rewinder)	
		Ribbon Installation	
INFO		Peel off Installation	
		Auto Cutter Installation	
		Replace Media	
		Replace Ribbon	
		Replace Print Head	
	Troubleshooting		
	Contact US		

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4-3 Menu Select Method(Standard Model)

1) This is print ready status LCD output screen.



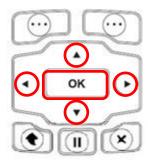
2) Press function button, direction button or OK button.



3) The setting menu is selected.

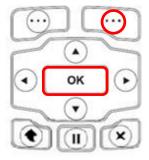


4) Use direction buttons to move to the desired menu.



5) Press OK or the right function button to enter the sub menu.





6) If there are no input for 5 seconds, it returns to main screen



4-4 Setting Confirm Method(Standard Model)

- 1) How to use the up and down buttons
 - (1) Select the desired setting value using or button
 - (2) After selecting the setting value, save it with button
 - (3) If you want to exit the menu without setting, press button to move to the previous screen





- 2) How to input numbers
 - (1) Select the desired input value using ♠,♥,♦, ▶ button
 - (2) Enter the desired value using ok button
 - (3) With Space, you can delete the input value
 - (4) With _____, you can move the cursor
 - (5) After entering set value, save it using button
 - (6) If you want to exit the menu without setting, press button to move to the previous screen





- 3) How to input characters
 - (1) Select the desired input value using ♠,♥,♠ button
 - (2) Enter the desired value using ok button
 - (3) With Space, you can delete the input value
 - (4) With solution, you can move the cursor
 - (5) With 123, you can move to the numeric input screen
 - (6) With _____, you can move to the symbol input screen
 - (7) With abc, you can move to lower case input screen
 - (8) After entering set value, save it using button
 - (9) If you want to exit the menu without setting, press button to move to the previous screen





4-5 Menu Select Method (Touch Screen Model)

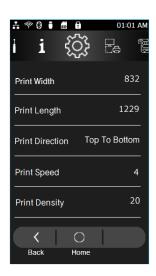
1) This is print ready status



2) Press the setting menu.



3) Press screen to enter the sub menu.





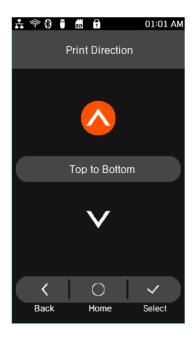


4) If there are no input for 5 seconds, it returns to main screen .



4-6 Setting Confirm Method(Touch Screen Model)

1) How to use the up and down buttons



- (1) Select the desired setting value using or button
- (2) After selecting the setting value, save it with but
- (3) If you want to exit the menu without setting, press button to move to the previous screen
- (4) If you want to exit the menu without setting, press button to move to the main screen

2) How to input numbers



- (1) Select the desired setting value using number keypad.
- (2) With you can delete the input value.
- (3) With DEL, you can delete the all input value.
- (4) After selecting the setting value, save it with button
- (5) If you want to exit the menu without setting, press button to move to the previous screen
- (6) If you want to exit the menu without setting, press button to move to the main screen

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3) How to input characters(English only)



- (1) Select the desired setting value using keypad.
- (2) With you can delete the input value.
- (3) With , you can input the capital lettere.
- (4) After selecting the setting value, save it with button
- (5) If you want to exit the menu without setting, press button to move to the previous screen
- (6) If you want to exit the menu without setting, press button to move to the main screen

4) How to input IP address



- (1) Select the desired IP Address using number keypad.
- (2) With you can delete the input value.
- (3) With you can input the Dot(.)
 - * from 0 to 99, press Dot(.) to move next
 - * from 100 to 255, Dot(.) would be automatically generated.
- (4) After selecting the setting value, save it with



- (5) If you want to exit the menu without setting,
 - press button to move to the previous screen
- (6) If you want to exit the menu without setting,
 - press button to move to the main screen

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4-7 Setting Menu Explanation(Standard, Touch Screen Model)

List	Explanation
Print Width	Explanation Setting media width[dots] Function to adjust image buffer size according to print width Default Value 203dpi: 832dots 300dpi: 1248dots 600dpi: 2496dots Maximum Value 203dpi: 832dots 300dpi: 1248dots 600dpi: 2496dots
Print Length	Explanation Setting media length[dots] Function to adjust image buffer size according to print length Default Value 203dpi: 1225dot (153mm) 300dpi: 1811dot (150mm) 600dpi: 3622dot (150mm) Maximum Value 203dpi: 32000dot (4000mm) 300dpi: 30000dot (2500mm) 600dpi: 24000dot (1000mm)

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		ATO TO OCITES		
	Explanation Setting printing direction Top to bottom: Printing from top to bottom Bottom to Top: Printing from bottom to top			
	Default Value Bottom to Top			
	Variable Value Bottom to Top, Top to Bottom			
Print Direction	Printing Direction			
		From Top to Bottom		
	mottog of qoT mori			
	Top to bottom	Bottom to top		
Print Speed	Explanation Setting print speed[ips] Default Value 203dpi: 6ips 300dpi: 6ips 600dpi: 3ips			
	Variable Value 203dpi: 2 ~ 14ips 300dpi: 2 ~ 10ips 600dpi: 1 ~ 5ips			
	Explanation Setting print density			
Print Density	Default Value 203dpi: 15 300dpi: 15 600dpi: 15			
	Variable Value 0 ~ 30			

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	Explanation
	Setting print method
Print Method	Default Value
	Transfer
	Marial In Wales
	Variable Value
	Transfer, Direct
	Explanation
	Setting media type
	Default Value
Media Type	Gap
	Сар
	Variable Value
	Gap, Black Mark, Continuous
	Explanation
	Setting media position[dots] for tear off after printing or feed
	County modia poolion[acto] for tour on alter printing or rood
	Default Value
Tear Off	0
	Variable Value
	-100 ~ 100
	Explanation
	Setting top print position[dots]
Print Offset	Default Value
	0
	Variable Value
	-100 ~ 100
	Explanation
	Setting left print position[2dots]
Left Position	Default Value
Left Position	0
	Variable Value
	-300 ~ 300
	Explanation
	Setting print mode suitable to the printer option
	Default Value
Print Mode	Default Value Tear Off
	IGAI OII
	Variable Value
	Tear Off, Auto Cutter, Rewinder
	Tour On, Auto Outtor, New Hugh

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Power Up Action	Explanation Setting the action for the printer after the power-up sequence. Default Value No Feed Variable Value No Feed, Set Label Length, Media Calibration, Feed
Print Head Close	Explanation Setting the action for the printer when you close the print head Default Value Feed Variable Value Feed, Standby Mode, No Feed, Set Label Length, Media Calibration

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4-8 Interface Menu Explanation(Standard, Touch Screen Model)

4-8-1 Serial

List	Explanation	
Baud Rate	Explanation Setting the baud rate Default Value 115200 Variable Value 9600,19200,38400,57600,115200	
Data Bits	Explanation Setting the data bit Default Value 8 Variable Value 7, 8	
Parity	Explanation Setting the parity Default Value None Variable Value None, Odd, Even	
Stop Bit	Explanation Setting the stop bit Default Value 1 Variable Value 1, 2	
Host Handshake Default Value RTS_CTS Variable Value RTS_CTS, DTR_DSR, XON_XOFF		

4-8-2 Ethernet

List	Explanation
IP Protocol	Explanation Setting IP assignment method Default Value DHCP Variable Value DHCP, Static IP
IP Address	Explanation Setting IP Address method Default Value Static IP: 192.168.192.123 DHCP: 0.0.0.0 Variable Value 0 ~ 255
Subnet Mask	Explanation Setting subnet mask Default Value Static IP: 255.255.255.0 DHCP: 0.0.0.0 Variable Value 0 ~ 255
Gateway	Explanation Setting gateway Default Value Static IP: 192.168.192.254 DHCP: 0.0.0.0 Variable Value 0 ~ 255
MAC Address	Explanation Indicating MAC address

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4-8-3 WLAN

List	Explanation
Channel	Explanation Setting channel when creating Adhoc network
	Default Value 6
	Variable Value
	1 ~ 14
	Explanation Setting WLAN operation mode
Network	Default Value Soft AP
	Variable Value Soft AP, Infrastructure, Adhoc, P2P
	Explanation
ESSID	Setting the ID of AP to be accessed
	Default Value PRINTER_xxxxxx(product specific value)
	Explanation
	Setting WLAN authentication method
	Default Value
Auth	Open System
	Variable Value
	Open System, Shared Key, WPA1PSK, WPA2PSK, WPA1EAP, WPA2EAP
	Explanation Setting WLAN encryption method
	Setting WEAN encryption method
Encrypt	Default Value
,p:	None
	Variable Value
	None, WEP64/128, TKIP, AES, AES+TKIP
WEP Password	Explanation Setting WEP password
DOM Decomond	Explanation
PSK Password	Setting PSK password

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	ATO 40 OCHOS	
IP Protocol	Explanation Setting IP assignment method Default Value DHCP Variable Value	
Static IP, DHCP Explanation Setting IP address Default Value Static IP: 192.168.1.1 DHCP: 0.0.0.0 Variable Value 0 ~ 255		
Subnet Mask	Explanation Setting subnet mask Default Value Static IP: 255.255.255.0 DHCP: 0.0.0.0 Variable Value 0 = 255	
Gateway	0 ~ 255 Explanation Setting gateway Default Value Static IP: 192.168.1.254 DHCP: 0.0.0.0 Variable Value 0 ~ 255	
Smart Connection active	Explanation After searching a Smart Connection Act Enabled printer with the smart phone app, enable or disable the function synchronizing Wi-Fi login information connected to the smart phone. Default Value Disable Variable Value Disable, Enable	

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4-8-4 Bluetooth

List			Explanation
Device Name		me	Explanation
Device Nume			Name of Device
Pincode		code	Explanation
			Changes required pin code to connect
			Explanation
			Secures simple pairing
Pairing			Default Value
i airing	s	SP	Disable
	•	.	Diodolo
			Variable Value
			Disable, Just Works, Numeric Comparison, Passkey
			Entry
MAC Address		166	Explanation
	MAO Addic		Bluetooth device MAC address
			Explanation
			Bluetooth Low Energy
		Low Energy	Default Value
	Bluetooth		Disable
			Disable
			Variable Value
			Disable, Enable
			Explanation
		Connect Mode	Setting Bluetooth connection mode
			Default Value
Mode			Mode 2
			Variable Value
			Mode 1, Mode 2, Mode 3
	Standard		Explanation
	Mode	Auth&Enc	Setting Bluetooth authentication and encryption
			function
			Default Value
			Enable
			Variable Value
			Enable, Disable
			Litable, Disable

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4-9 Sensor Menu Explanation(Standard, Touch Screen Model)

List	Explanation
Gap Calibration	Explanation
Gap Calibration	Detect media gap and calibrate automatically
Black Mark	Explanation
Calibration	Detect media black mark and calibrate automatically
	Explanation
	Adjusts the sensitivity of the gap sensor
Sensor Sensitivity	Default Value
deliadi delianivity	70
	Variable Value
	10 ~ 100

Note	- Depending on the characteristics of the media, the amount of media
₩ Note	output may be different during gap / black mark calibration.

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4-10 Files Menu Explanation

List	Explanation		
		Template	
		Image	
	Cayad Fila	Download Fonts	Refer
	Saved File	E Drive (Flash Memory)	4-10-1 Saved File
		A Drive (USB Memory)	
		B Drive (SD Card Memory)	
Files		PRT Set (Printer Setting)	Refer
riies	Twin Function	Template	4-10-2 Twin
		Image	
		Download Fonts	Function
	F/W Update		Refer
	1711 Opuate		4-10-3 F/W Update

4-10-1 Saved File

Displays the list of object files stored in the printer on the LCD screen.

List	Explanation	
Template	Template list stored in the printer	
Image	Image list stored in the printer (*.pcx)	
Download Font	Download font list stored in the printer	
E Drive	Saved object files in E drive	
(Flash Memory)		
A Drive	Saved object files in A drive	
(USB Memory)		
B Drive	Saved object files in B drive	
(SD Card Memory)		

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4-10-2 Twin Function

Saves the current printer settings, save files (templates, images, download fonts) to another printer using USB, or loads the settings of another printer and saves files to the current printer.

List	Explanation		
Printer Setting	Explanation Saves printer settings to a USB storage device, or loads the print settings from USB storage.		
	File path F:\configuration		
Template	Explanation Saves template file to a USB storage device, or load the template from USB storage. File path		
	F:\ USER_AREA_TEMPLATES Explanation		
lmage	Saves image file to a USB storage device, or load the image from USB storage (*.pcx)		
	File path F:\ USER_AREA_Images		
Download Font	Explanation Saves download font file to a USB storage device, or load the download font from USB storage.		
	File path F:\ USER_AREA_FONTS		

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List	Explanation
	Explanation Saves template file to a USB storage device, or load the template from USB storage.
	File path F:\ USER_AREA_TEMPLATES
Template	 Save Function Explanation Connect a USB storage to the printer. Select Save on the menu using the up and down buttons. Template files are stored in the USER_AREA_TEMPLATES folder of USB storage device. (USER_AREA_TEMPLATES folder is automatically created) Load Function Explanation Check whether a template file exists in the USER_AREA_TEMPLATES folder of the USB storage device. (If the file does not exist, create a USER_AREA_TEMPLATES folder and save the template file to be copied to the printer below first) Connect the USB storage to the printer. Select Load from the Printer Setup menu using the up and down buttons. Loading message is displayed while loading, and when loading is completed, USB loading completion message is displayed. Go to Save File menu then, check the template file is normally saved to the printer.

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List	Explanation
	Explanation Saves image file to a USB storage device, or load the image from USB storage (*.pcx)
	File path F:\ USER_AREA_Images
Save Function Explanation Connect a USB storage to the printer. Select Save on the menu using the up and down buttons. Image files are stored in the USER_AREA_Images folder storage device. (USER_AREA_Images folder is automatically created) Load Function Explanation Check whether the image file exists in the USER_ARE	
	folder of the USB storage device. (If there is no file, create the USER_AREA_Images folder and save the image file to be copied to the printer below first.) - Connect the USB storage to the printer. - Select Load from the Printer Setup menu using the up and down buttons. - Loading message is displayed while loading, and when loading is completed, USB loading completion message is displayed. - Go to Save File menu then, check the image file is normally saved to the printer.

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List	Explanation
List	Explanation Explanation Saves download font file to a USB storage device, or load the download font from USB storage. File path
Download Font	 Save Function Explanation Connect a USB storage to the printer. Select Save on the menu using the up and down buttons. Download Font files are stored in the USER_AREA_FONTS folder of USB storage device. (USER_AREA_FONTS folder is automatically created)
	 Load Function Explanation Check if the downloaded font file exists in the USER_AREA_FONTS folder of the USB storage device. (If there is no file, create the USER_AREA_FONTS folder and save the download font file to be copied to the printer below first.) Connect the USB storage to the printer. Select Load from the Printer Setup menu using the up and down buttons. Loading message is displayed while loading, and when loading is completed, USB loading completion message is displayed. Go to Save File menu then, check the download font file is normally saved to the printer.

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Firmware can be updated through USB storage.

Explanation

Printer firmware update available using the USB storage directly without any communication.

File path

F:\ FW DOWNLOAD

File name

"XT5-4x Vxx.xx STD mmddyy.fls" in F:\ FW_ DOWNLOAD folder.

F/W Update

- Download process explanation
- Check firmware file(*.fls) is in FW_ DOWNLOAD folder of USB storage.

(If there is no folder, please create FW_download folder and save the firmware file (* .fls) to it.)

- Connect USB storage to the printer.
- Select "F/W Update" from the "Files" menu.

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- Select the firmware download menu.
- If the message "F/W Downloading" is displayed, the firmware download has started normally.
- When the firmware download is completed successfully, the message "Printer Restart" is displayed and the rebooting process is automatically performed.

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4-11 Tools Menu Explanation(Standard, Touch Screen Model)

	List	Explanation	
Self Test		Explanation Prints for self-test	
F	actory Reset	Explanation Initializes the printer settings to factory default	
Dump Mode		Explanation Diagnoses communication status when printing is not normal	
		Default Value Disable	
		Variable Value Disable, Enable	
Print Head Check		Explanation Dot-out check of head through printing	
	Dead Pixel Test	Explanation LCD pixel test function	
	Touch Position Test	Explanation LCD touch position test function	
LCD		Explanation Setting backlight brightness	
	Backlight Brightness	Default Value 70	
		Variable Value 10 ~ 100	
Real Time Clock		Explanation Setting RTC date and time Setting RTC date and time format	
		Date format YYYY-MM-DD, YYYY/MM/DD, MM-DD-YYYY, MM/DD/YYYY, DD-MM-YYYY, DD/MM/YYYY	
		Time format 12H, 24H	

	Explanation Setting language to be displayed on the LCD	
Language Setting	Default Value English	
	Variable Value English, Korean, German, French, Spanish	
	Explanation	
	Setting printer emulation	
	Default Value	
Emulation	AUTO	
	7.010	
	Variable Value	
	AUTO(SLCS, BPL-Z, BPL-E), BPL-D	
USB Serial	Explanation	
Number	Checks USB serial number	
	Explanation	
	Setting beep on / off	
Buzzer Setting	Default Value	
Buzzoi Gotting	Enable	
	Variable Value	
	Variable Value Enable, Disable	
	Explanation	
	Setting a password to restrict printer settings	
	Cetting a password to restrict printer settings	
	Default Value	
Security	Disable	
	Variable Value	
	Disable, Enable	
Demo Print	Explanation	
20	Demo format output function	

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4-12 Info Menu Explanation(Standard, Touch Screen Model)

List	Explanation
Printer Info	Explanation
Frinter into	Checking the printer usage information
Installation 9 Hoogs	Explanation
Installation & Usage	Site linking(QR code) for installation and usage instructions
Troublachooting	Explanation
Troubleshooting	Site linking(QR code) for troubleshooting
Contact US	Explanation
Contact US	Site linking(QR code) for technical support

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5. Maintenance

5-1 Cleaning Printer

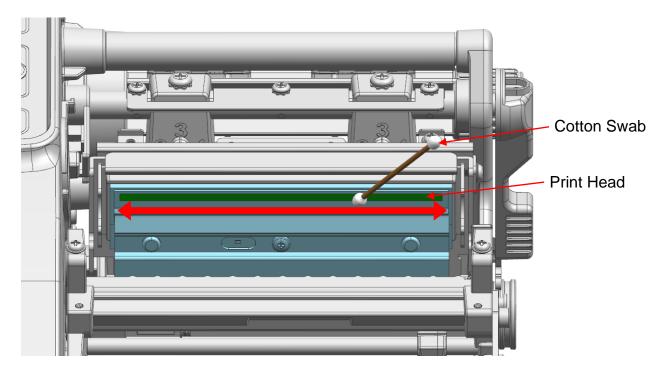
• Due to dust, foreign substances, adhesives, and other contaminants on or inside print head, print quality may be reduced. In this case, clean the printer using the cleaning tools for each area as indicated in the following table.

Area	Tools	Interval
Print Head	Cotton swab dipped in medical alcohol solution	
Platen Roller	Cloth dipped in medical alcohol solution	When changing
Media Sensor	(Cotton swab)	
Ribbon Sensor	(Cotton swab)	media
Media Feed Path	Air compressors,	
Ribbon Feed Path	Cloth dipped in medical alcohol solution	
TUBBOTT CCG T dill	(Cotton swab)	
Manual cutting	Cloth dipped in medical alcohol solution (Cotton swab)	When a foreign substance is discovered
Peeler Roller(Option)		When changing
Peeler Sensor(Option)		media
Auto Cutter(Option)	Air compressors, Cotton swab dipped in medical alcohol solution	When a foreign substance is discovered

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5-2 Cleaning Print Head

- 1) Open the media cover and print head levers and remove the media and ribbon.
- 2) Clean the print head toward both sides from the center using a cotton swab dipped in medical alcohol.
- 3) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the surface of print head has completely dried up.

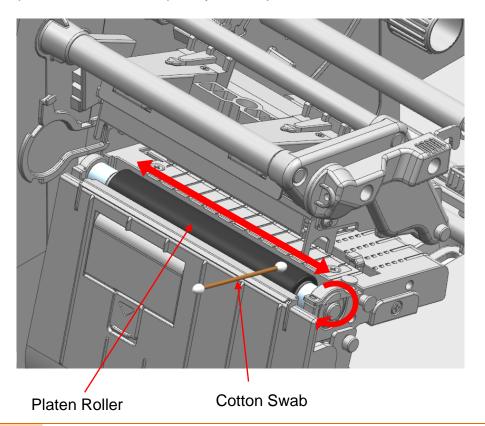


⚠ Caution	 Be sure to clean after turning the printer off. Be careful not to leave scratches in the print head The printer may be damaged. Print head is very hot while the printer is printing, so clean the printer 	
⚠ Warning	after cooling it sufficiently with power off. Do not touch heated area of print-head when cleaning. Perso injury may result from static electricity, etc.	

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5-3 Cleaning Platen Roller

- 1) Open the media cover and print head levers and remove the media and ribbon.
- 2) While rotating the roller, remove dust or foreign substances using a dry cloth or cotton swab.
- 3) In case that adhesive substances or other contaminants remain, remove it using a cloth or cotton swab dipped in medical alcohol solution while rotating the roller.
- 4) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the surface of platen roller has completely dried up.



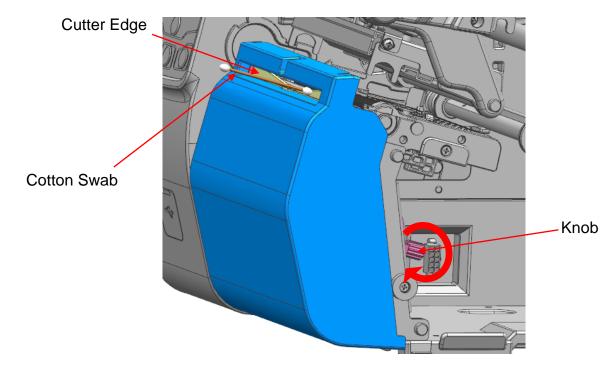
A Caution

- Be sure to clean after turning the printer off.
- Be careful not to scratch the roller. The printer may be damaged.

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5-4 Cleaning Auto Cutter (optional)

- 1) Open the media cover and print head levers and remove the media and ribbon.
- 2) After exposing the cutter blade completely by rotating the knob, remove dust or foreign substances using a cotton swab dipped in medical alcohol solution.



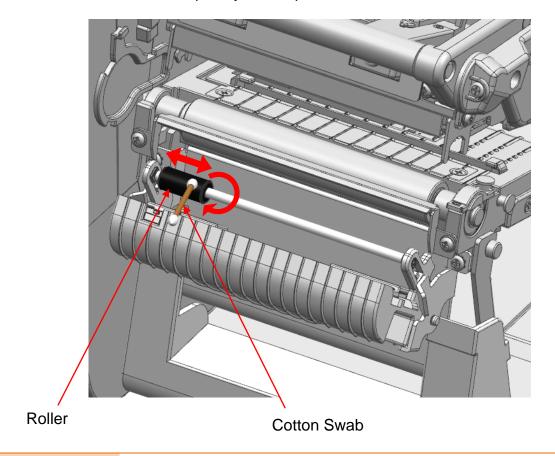
3) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the cutter blade has completely dried up.

⚠ Caution	 Be sure to clean after turning the printer off. Be careful not to scratch the cutter blade. The printer may be damaged. 	
⚠ Warning	Do not touch cutter edge of auto cutter when cleaning. This can cause serious bodily injury.	

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5-5 Cleaning Peeler Module (optional)

- 1) Open the media cover, print head levers, and peeler cover and remove the media and ribbon.
- 2) While rotating the roller, remove dust or foreign substances using a dry cloth or cotton swab.
- 3) In case that adhesive substances or other contaminants remain, while rotating the roller, remove it using a cloth or cotton swab dipped in medical alcohol solution.
- 4) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the surface of roller has completely dried up.





- Be sure to clean after turning the printer off.
- Be careful not to scratch the roller. The printer may be damaged.

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6. Printer Specifications

6-1 Specifications

Item		Description
	Printing Method	Thermal transfer Printing
Printer	Dot Density	XT5-40: 203dpi (8 dot/mm) XT5-43: 300dpi (11.8 dot/mm) XT5-46: 600dpi (23.6 dot/mm)
	Print Width	XT5-40: 000dpf (23.0 dof/fillf) XT5-40: Max 104mm (Max 4.09") XT5-43: Max 105.7mm (Max 4.16") XT5-46: Max 105.6mm (Max 4.15")
	Print Speed	XT5-40: Max 356mm/sec (Max 14ips) XT5-43: Max 254mm/sec (Max 10ips) XT5-46: Max 127mm/sec (Max 5ips)
	Width	25 ~ 114mm
Madia	Outer Diameter	Max 203mm
Media	Inner Diameter	38.1~76.2mm (1.5 ~ 3 Inch), 25.4mm (1 Inch Option)
	Length/Width	Max 450m / 40 ~ 110mm (1.6 ~ 4.3 Inch)
Ribbon	Type	Wax, Wax resin, Resin, Outside, Inside
	Inner Diameter	25.4mm (1 Inch)
A C /DC	Input Voltage	AC 100~120V / AC 200~240V
AC/DC Enclosed	Input Frequency	50/60Hz
LIICIOSEG	Output Voltage/ Current	DC 24V / 7.5A
Usage Conditions	Temperature	5~ 40 ℃ (Operating) -20 ~ 60 ℃ (Storage)
	Humidity (except for Media)	10 ~ 80 % RH (Operating) 10 ~ 90 % RH (Storage)

◯ Note	Print speed may vary depending on the data transfer speed and the combination of command.	
⚠ Caution	 In case of danger, turn off the power to cut the connection. The power cord must be grounded to ensure safety and reduce electromagnetic interference 	

6-2 Label Types

• The label types used with this printer are as follows.

Control Labels: PETOther Labels: PP, PET

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Notice - EU

This wireless device is class A that is considered to be used in an industrial environment.

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Caution

Electronics, such as printers, are prone to damage by static electricity. Therefore, to protect the printer from static electricity, be sure to turn off the printer before connecting or disconnecting the cable to the rear of the printer. If the printer is damaged by static electricity, contact your local dealer.

This euipmeant is not suitable for use in locations where children are likely to be present. When the printer is operating with the media cover open, do not wear anything that can touch the drive, such as clothing, necklaces, rings, watches, or employee certificates close to it. Also, keep yourself away from the printer as it is dangerous for some parts of the body to come into contact with it. If an object or part of your body touches the drive, immediately disconnect the power cord or turn off the power switch on the back of the product.

If the battery is not replaced correctly, there is a risk of explosion. Replace only with the same model or equivalent product specified by the manufacturer. When the battery is used up, be sure to tape the terminals and insulate them and dispose at the designated place in accordance with the relevant laws and ordinances set by the state.

Warning

Hazardous moving parts Keep fingers and other body parts away Pull the print head lever can be stop all moving parts.



IEC 60417-6057 (2011-05) for other moving parts.

Mise en garde

Les appareils électroniques, tels que les imprimantes, risquent d'être endommagés par l'électricité statique. Par conséquent, pour protéger l'imprimante de l'électricité statique, veillez à l'éteindre avant de connecter ou de déconnecter le câble situé à l'arrière de celle-ci. Si l'imprimante est endommagée par l'électricité statique, contactez votre revendeur local

Cet appareil n'est pas adapté d'utilser dans des endroits où des enfants sont probablement d'être présents.

Lorsque l'imprimante fonctionne avec le capot ouvert, ne portez rien qui puisse entrer en contact avec le mécanisme, tel que des vêtements, des colliers, des baques, des montres ou des certificats d'employé à proximité. Éloignez-vous également de l'imprimante car il est dangereux que certaines parties du corps entrent en contact avec celle-ci. Si un objet ou une partie de votre corps entre en contact avec le mécanisme, débranchez immédiatement le câble d'alimentation ou éteignez l'interrupteur situé à l'arrière du produit.

Si la batterie n'est pas remplacée correctement, il existe un risque d'explosion. Remplacez-la uniquement avec le même modèle ou un produit équivalent approuvé par le fabricant. Lorsque la batterie est épuisée, veillez à coller du ruban adhésif sur les bornes, à l'isoler et à la jeter de manière adéquate, conformément aux lois et réglementations locales et nationales en vigueur.

Attention

Pièces mobiles dangereuses

Veillez à ce que vos doigts ou toute partie du corps n'entre(nt) pas en contact avec ces pièces. Tirez le levier de la tête d'impression pour arrêter toutes les pièces en movement.



IEC 60417-6057 (2011-05) pour les autres pièces mobiles.

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Compliance information

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

Caution: Exposure to Radio Frequency Radiation.

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Caution: Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Class A Digital Device : Wired Device

This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

This Class A digital apparatus complies with Canadian ICES-003.

Appareil numérique de classe A: appareil filaire

Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Cet appareil numérique de la classe A est conform à la norme NMB-003 du Canada.

Waste Electrical and Electric Equipment (WEEE)



This marking shown on the product or its literature, indicates that is should not be disposed with other household wastes at the end of its working life, To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household

users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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Revision History

Date	Page	Description
16.10.18	-	New
1.01 17.10.19	- 11 12 13,17 28 31 34 43 47 48 49,50,51 53 55	New Media Damper, Media Damper Button named added. Peeler model image added. Printer operation button image revised. Media Installation (Removal) Method - Not Using Media Core added. Media Installation Method of Peeler (optional) Model added. Media Installation Method of Peeler + Rewinder (optional) Model changed. How to Use Media Damper (Standard Model) added. "using a sharp tool" deleted. Description of print density added. Printer operation button image revised and Print head adjustment instruction added. WLAN section added. Installation & Usage section added.
	67 69 77 78	WLAN section added. Sensor menu reference added. Print head cleaning tool revised. Print head cleaning instructions and images revised
06.12.19		Warning contents revised
07.09.20	1 2 5 6 9 18~21 23 58~60 61~63 68~70 96	Touch Screen Model image added. Introduction revised Manual Information revised. Symbol Information revised. Touch Screen Model image added Major Control Part Names (Touch Screen Model) added. Power Connection revised. Menu Composition (Standard Model) revised. Menu Composition (Touch Screen Model) added. Menu Select Method (Touch Screen Model) added. Label Types added.
11.24.20	98	Caution revised
	17.10.19 06.12.19 07.09.20	16.10.18 - 11 - 12 - 13,17 - 28 - 31 - 34 - 47 - 48 - 49,50,51 - 53 - 55 - 67 - 69 - 77 - 78 - 06.12.19 - 85 - 1 - 2 - 5 - 6 - 9 - 18~21 - 23 - 58~60 - 61~63 - 68~70 - 96

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