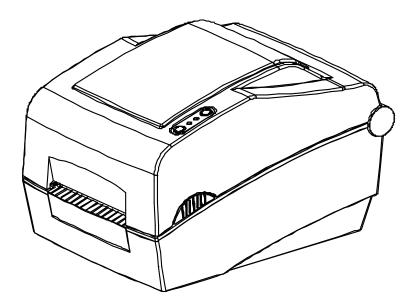


User's Manual SLP-TX400/TX403

THERMAL LABEL PRINTER Ver. 1.07



http://www.bixolon.com

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Manual Information

This user manual 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 Printer Utility 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. Ethernet interface Manual

This manual provides information on the configuration and usage of Ethernet interface.

6. 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.

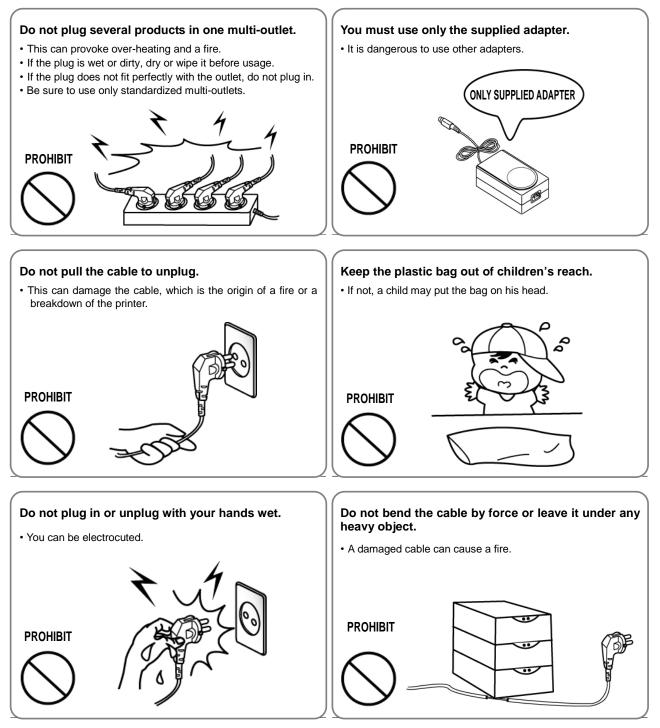
Safety Precautions

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



WARNING

Violating following instructions can cause serious injury or death.



CAUTION

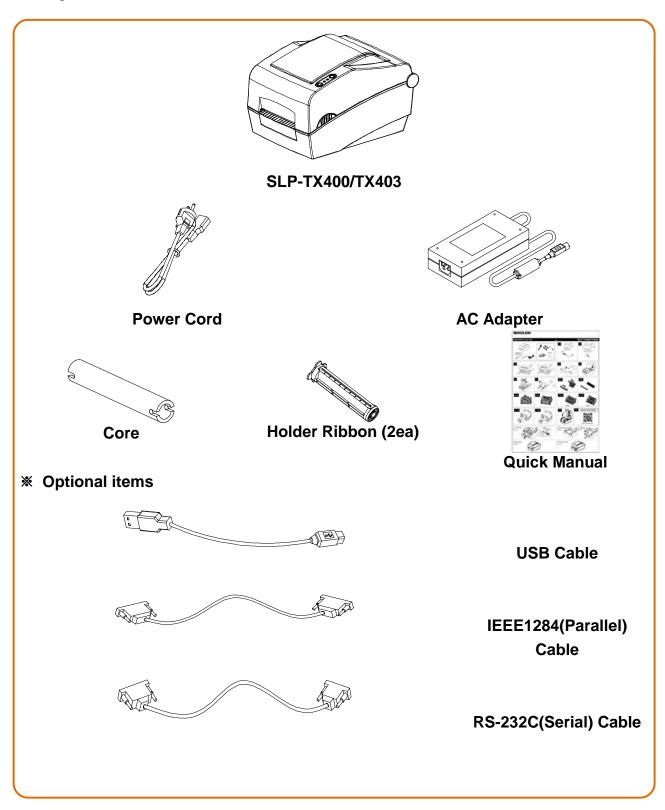
Violating following instructions can cause slight wound or damage the appliance.



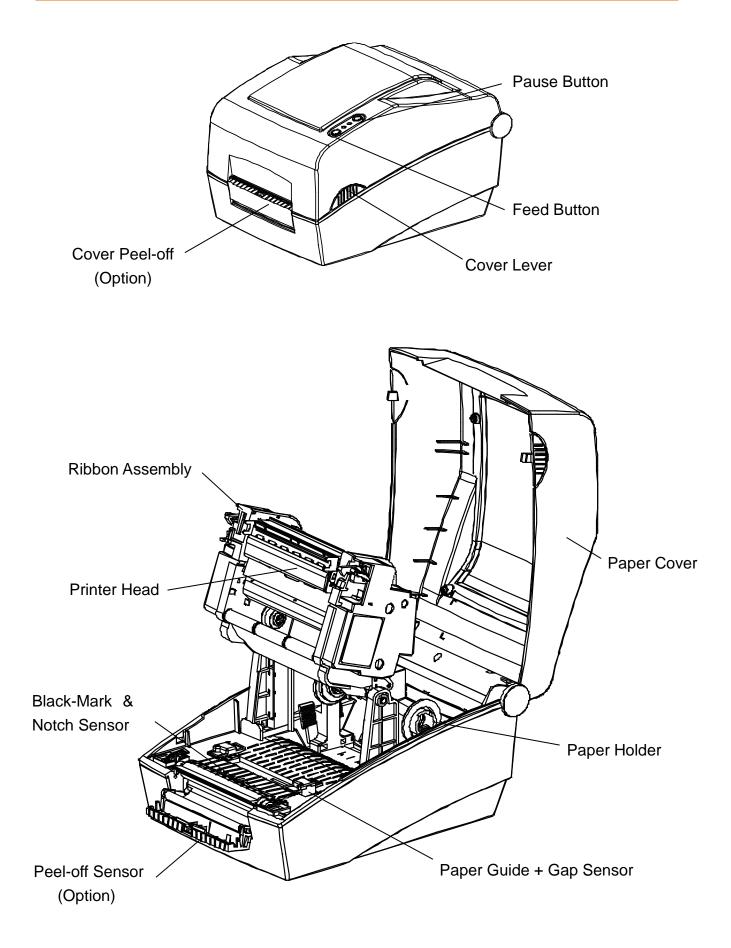
1. Content Confirmation

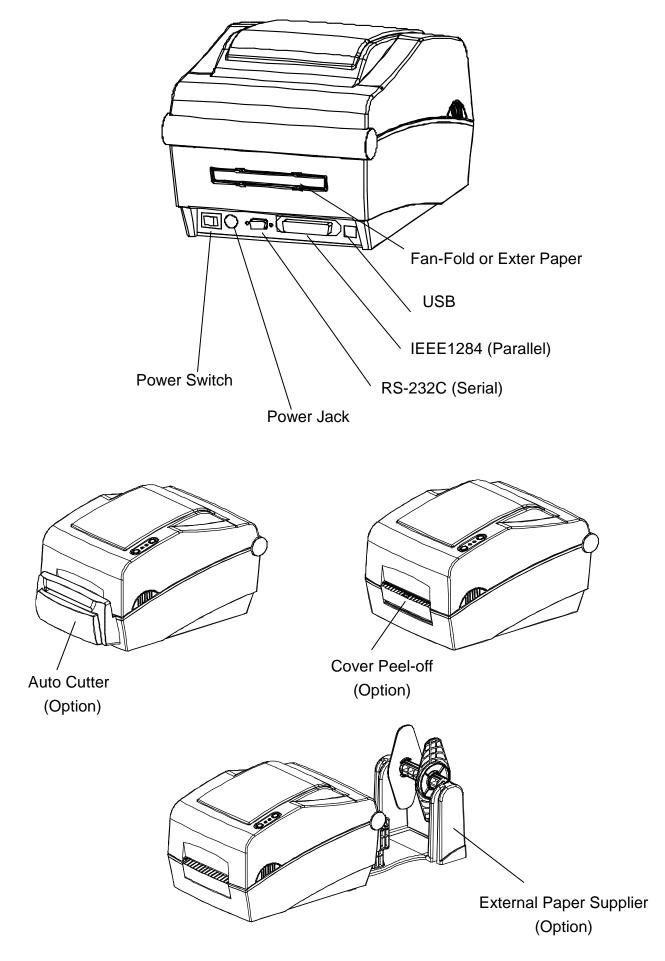
The following items should all be contained in the printer package.

Contact the dealer from which the purchase was made if any item is damaged and/or missing.



2. Product Part Names

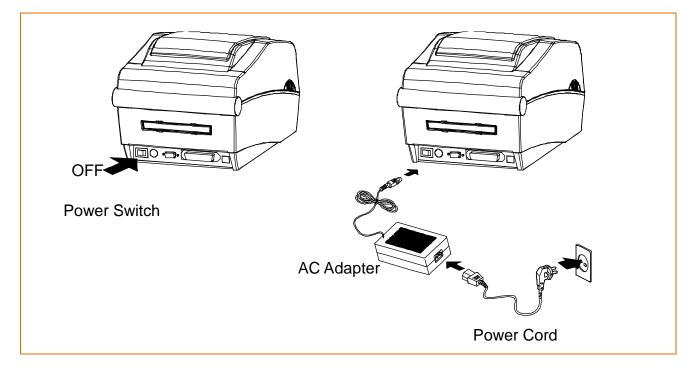




3. Installation & Usage

3-1 Power Connection

• Connect power to the printer as shown below.



- 1) Turn off the printer power switch.
- 2) Check to see that the AC adapter voltage matches that of the power source.
- 3) Connect the AC adapter jack to the printer power connector.
- 4) Connect the power cord to the AC adapter.
- 5) Connect the power cord to a power source/outlet.

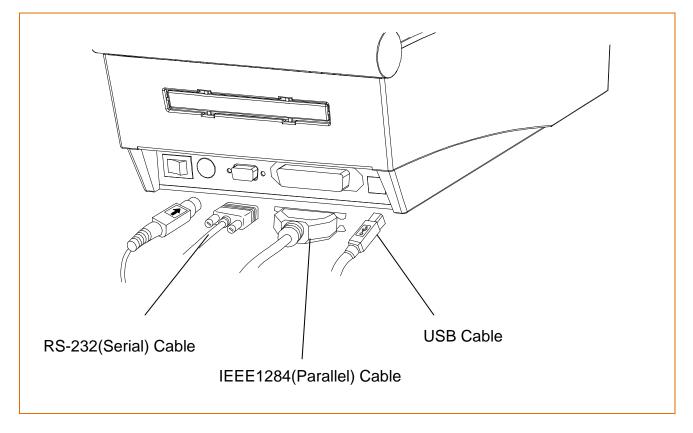
3-2 Interface Cable Connection

3-2-1 Standard Model

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- RS-232C(Serial) Cable
- IEEE1284(Parallel) Cable
- USB B-Type Cable



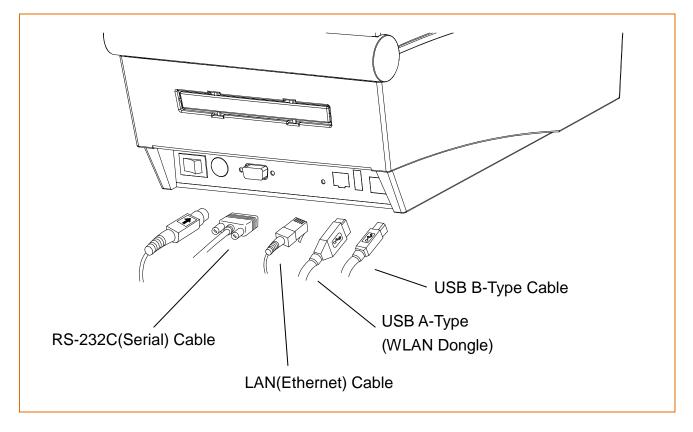
- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
 - Connect the RS-232C(Serial) Cable to the SERIAL port. and tighten the screw on both sides.
 - Connect the IEEE1284(Parallel) Cable to the PARALLEL port. and fasten the clips on both sides.
 - Connect USB B-Type cable to the USB port.

3-2-2 Ethernet Model(SLP-TX40xE)

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

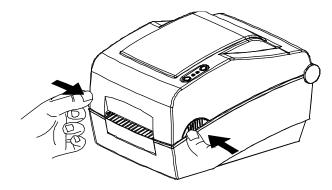
- RS-232C(Serial) Cable
- LAN(Ethernet) Cable
- USB A-Type(WLAN Dongle)
- USB B-Type Cable



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
 - Connect the RS-232C(Serial) Cable to the SERIAL port. and tighten the screw on both sides.
 - Connect the LAN(Ethernet) Cable to the ETHERNET port.
 - Connect USB A-Type(WLAN Dongle) to the HOST port.
 - Connect USB B-Type Cable to the USB port.

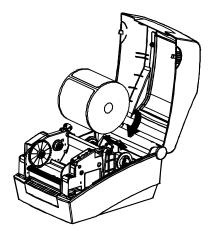
3-3 Paper Installation

1) Open the Paper Cover.

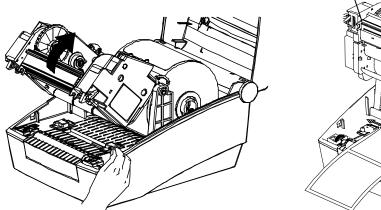


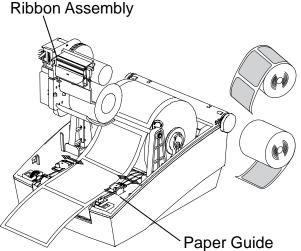
3) Open the Ribbon Assembly and spread the paper guide.

2) Spread the paper holder and insert paper as shown.

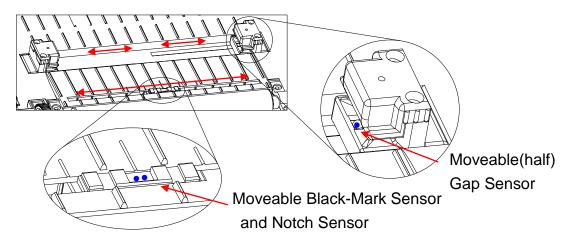


4) Feed the paper between the Paper Guide on both sides.





5) After Installation the paper, manually set the sensor(Gap & Black-Mark) and Paper Guide to the correct position.

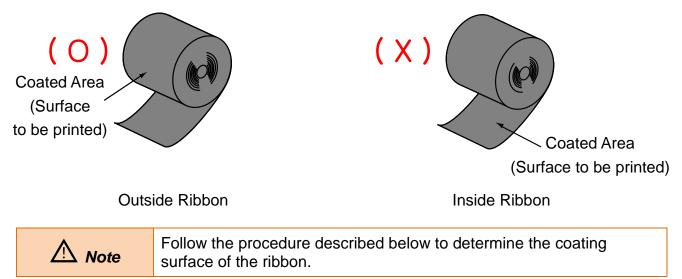


6) Close the Ribbon Assembly until a click sound is heard, close the Paper Cover.

3-4 Ribbon Installation

3-4-1 Type of Ribbon

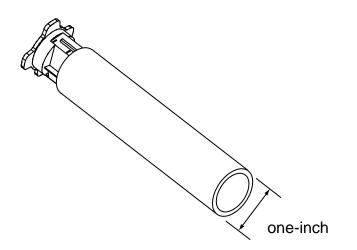
- 1) Type by Film Coating Location
 - Take note before ribbon purchase that only ribbons facing outward can be used.

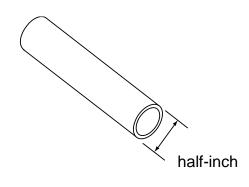


- Ribbon test using adhesive material
 - Perform contact test in order to determine which side is coated if there are useable labels.
- Complete the following steps to carry out the contact test
 - Remove the liner from the label
 - Put a piece of adhesive surface of the label on the outer/inner surface of the ribbon, and apply pressure.
 - Remove the label from the ribbon
 - Check whether adhesive surface of the label is stained by black ink ribbon.

2) Type by Roll Core

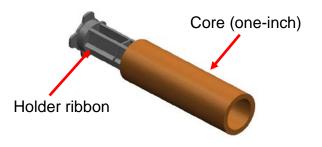
- This printer can be used to one-inch or half-inch core ribbon.
- For a 1-inch core, a roll core must be used.
- The holder ribbon and roll core of the fully used ribbon must be reused. Do not discard.



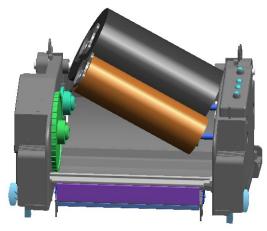


3-4-2 Inserting a One-Inch Core Ribbon

1) Insert the Holder ribbon into the core and ribbon. (keep note of ribbon printing direction)



2) Open the ribbon assembly and insert the ribbon and core by pushing from left to right.



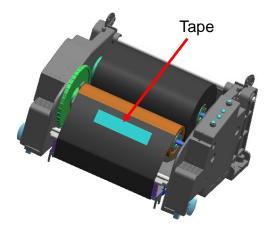
4) Press the Close area to shut the ribbon assembly.

3-4-3 Inserting a Half-Inch Core Ribbon

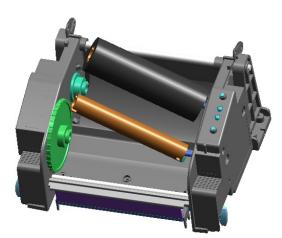
 Open the ribbon assembly and insert the ribbon and core by pushing from left to right. (keep note of ribbon printing direction)

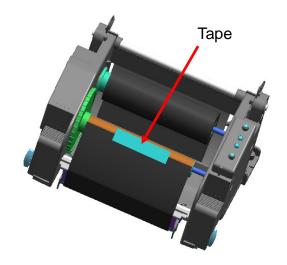


3) Apply tape to the coiling portion of the ribbon.



2) Apply tape to the coiling portion of the ribbon.

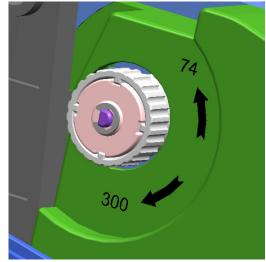




3-4-4 Knob Adjustment by Ribbon Length

Ribbon lengths of 74m, 100m (0.5" core), and 300m (1" core) can all be used with this product. Adjust the knob accurately according to the ribbon length (74 \sim 300 m). Exercise care as print quality and operation can be affected.

- The product is shipped with a default setting for a ribbon length of 300m (1" core). To use a 74m (0.5" core) ribbon, adjust (rotate) the knob in the direction of 74m prior to use.
- When the cover is outside the knob as shown in the image, the ribbon length is set to 74m. If the cover is inside the knob as shown in Image B, the ribbon length is set to 300m.



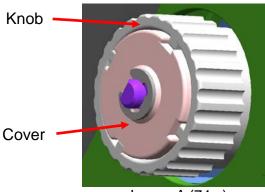


Image-A (74m)

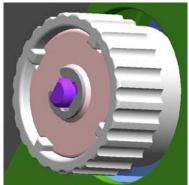
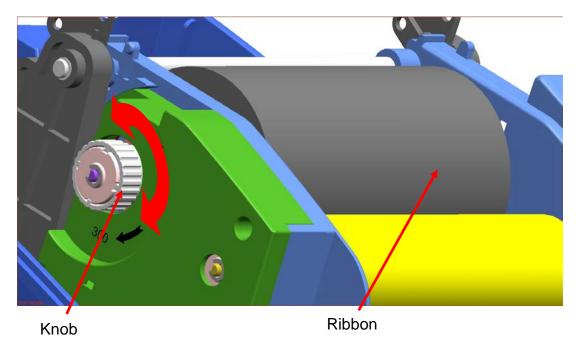


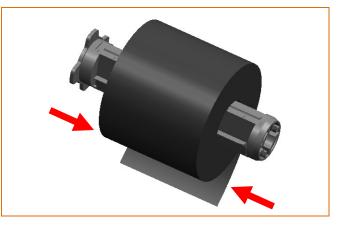
Image -B (300m)

- Knob Adjustment
- Grasp the ribbon while it is fitted and rotate the knob as shown in the image.



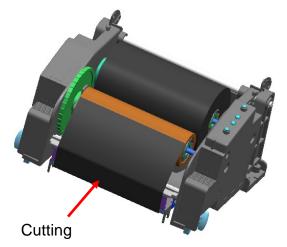
3-4-5 Narrow Ribbon Installation

When using ribbons of widths of 110mm or lower, install in a centered position on the holder ribbon.



3-4-6 Ribbon Removal

- 1) Use a knife or other sharp-edged object to cut the ribbon. (Take care not to injure hands)
- 2) Open the ribbon assembly and remove the ribbon and core by pushing from left to right.
- 3) Detach the ribbon holder from the ribbon and core.



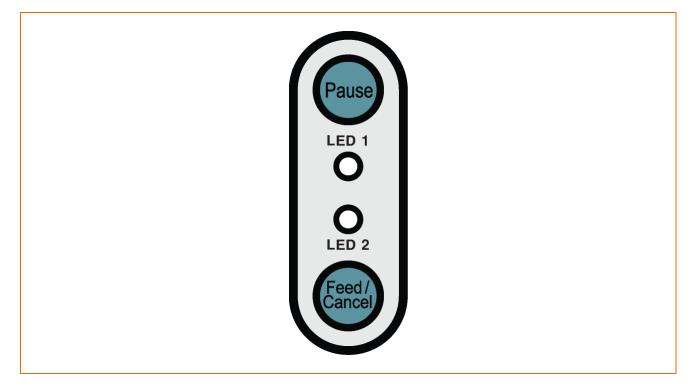
3-4-7 Ribbon Sensor Activation

Ribbon detection sensor is disabled by default factory settings. Check the settings related to ribbon detection sensor if printing does not stop when the printer is out of ribbon or ribbon is broken.

* Ribbon detection sensor can be enabled by command control. And default setting can be changed by Unified Label Utility.

| A Caution | When replacing a ribbon, keep affixed the core of the fully used ribbon to the ribbon coiling portion on the other side and do not discard as its use is required. As the ribbon holder is required for continuous use, make sure not to misplace it. |
|-----------|--|
|-----------|--|

3-5 LED Display



3-5-1 Button Operations

| Printer state | But | tton | | | |
|---------------------|-----------------|-------|---|--------------------------------|--|
| before operation | Feed/ Cancel | Pause | Operation procedure | Printer operation mode | |
| Power OFF | Press | - | Apply power while pressing the button. Hold the button for about five seconds. | Self-test Printing Mode. | |
| Print Standby | Press | - | Press the button softly and release it immediately | Feed Mode | |
| Print Standby | - | Press | Press the button for two seconds and continue to hold | Stand-alone configuration Mode | |
| During printing | Press | - | Press the button softly and release it immediately | Print Cancel Mode | |
| During printing | - | Press | Press the button softly and release it immediately | Print Pause Mode | |

3-5-2 LED indicator for various printer statuses

| LED 1 | | LED 2 | | Drinter Status | | |
|--------|--------|--------|--------|--------------------------------|--|--|
| Color | Status | Color | Status | Printer Status | | |
| Green | On | Green | On | Print standby mode | Print standby mode | |
| Red | On | Red | On | Error mode | Ribbon is not detected | |
| Red | On | Orange | On | Error mode | Paper jam (gap/black mark is not recognized) | |
| Red | On | Green | Blink | Error mode | Printer head overheating | |
| Red | On | Red | Blink | Error mode | Cover open | |
| Red | On | Orange | Blink | Error mode | No paper | |
| Red | On | - | Off | Error mode | Media calibration failure | |
| Red | Blink | Red | Blink | Error mode | Auto-Cutter error | |
| Orange | On | Orange | On | Mode switching notification | Mode switching notification | |
| Green | Blink | Red | On | Wait for input | Print is paused temporarily. Wait for button input | |
| Green | Blink | Green | Blink | Wait for input | Cover Close Mode. Wait for button input | |
| Green | On | Red | Blink | Wait for input | Print Cancel Mode. Wait for button input | |

3-6 Test printing

3-6-1 Printing using Windows driver

Windows Driver installation files and manuals are provided on the BIXOLON official website. (<u>http://www.bixolon.com</u>) Please refer to the manual to install the Windows Driver and print a test page.

3-6-2 Printing using label design program

Label Design Program installation files and manuals are provided on the BIXOLON official website. (<u>http://www.bixolon.com</u>)

Please refer to the manual to install the Label Design Program and print a test page.

4. Self-Test

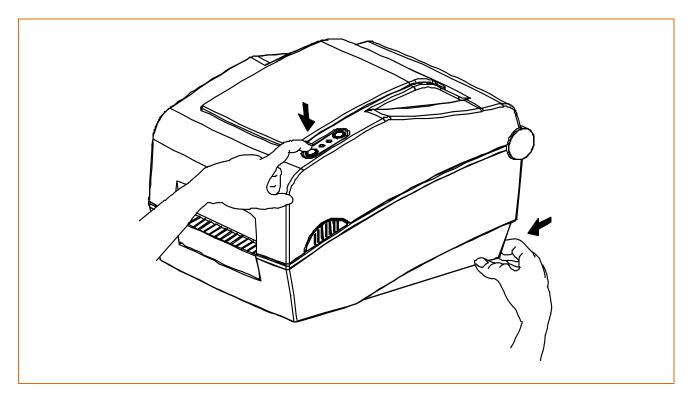
The self-test checks whether the printer has any problems.

- Firmware version, printer configuration information, printing quality checking pattern, and peripheral configuration information, etc.

Users cannot perform this procedure if using the printer's label peel-off option. If the printer does not function properly, contact an authorized dealer.

The self-test checks the following;

- 1) Make sure that the paper roll has been installed properly.
- 2) Turn on the power while pressing the feed button then self-test will begin. (Hold the button for about five seconds)



5. Detailed features

5-1 Printer setting using utility program

• Various printer settings can be changed using the utility program (Unified Label Utility).

Functions that can be used with the utility program are as follows.

- 1) Serial communication settings Handshake, Stop bit, Data bit, Parity, and Baud rate can be configured.
- Basic printer settings Paper size, printing speed and density, paper type, and use of ribbon can be configured.
- 3) Language setting

Code page can be configured.

- 4) Media sensor manual calibration function This function can be used to detect special type or special material paper that is not detected through automatic calibration function. Refer to M Manual Calibration page for more details
- 5) Other functions for printer test are also provided.

Unified Label Utility-II installation files and manuals are provided on the BIXOLON official website. (<u>http://www.bixolon.com</u>)

Please refer to the manual to install the Unified Label Utility-II and print a test page.

| Serial | ○ Parallel ○ USB ○ Ethernet | User Setting Configure Printer 1 | etting | |
|----------------------------|-----------------------------|-------------------------------------|---|----------------|
| ommunication | Setting | Configure Print Q | User Setting Manager | |
| LPT Port | LPT1: | Calibration Setting M | | |
| COM Port | COM1: | Downloader PCX File Downlo | Serial Basic Advanced Real-Time Clock L | anguage Others |
| Baud Rate | 115200 | | Serial Communication Setting | |
| Data Bits | 8 | Printer Tool | Baudrate : | × |
| Parity | None | Jend Tie | | |
| Stop Bits | | | Data Length : | × 1 |
| otop bits | 1 | SLCS Test To | Parity: | |
| IP | 192 . 168 . 100 . 185 | RFID | | |
| Port | 9100 | Set Configuration | Stop Bit : | <u> </u> |
| | | | Protocol mode : | ~ |
| | Disconnect | EXIT | | |
| | | | Default Setting Get | Set |
| | | Copyright (C) BIXOLON Co., Lt | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |

5-2 Stand-alone Configuration Mode

• Various modes can be executed using buttons and LED only.

5-2-1 How to start stand-alone configuration mode

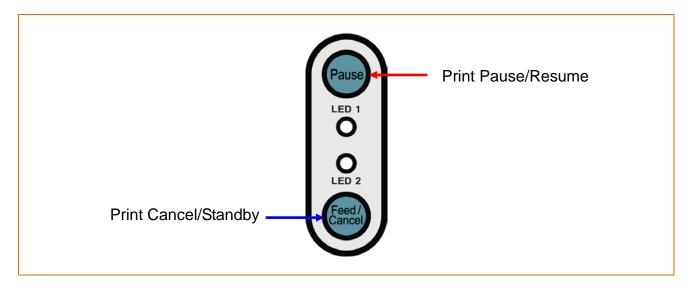
- 1) The printer mode is set to Printer Setting Mode when the Pause button is pressed for two seconds while in Print Standby Mode.
- 2) Both LEDs will change to orange color and the printer will be set to Stand-alone Configuration Mode.
- 3) When the printer enters into this mode, the status of LED 1 and LED 2 are changed sequentially.
- 4) When the Feed button is pressed at specific LED color combination, the corresponding printer operation will be selected.

5-2-2 List of supported functions

| Sequence | LED 1 | | LED 2 | | Printer exerction | |
|----------|--------|--------|--------|------------------|-----------------------------|--|
| number | Color | Status | Color | Status | Printer operation | |
| 1 | | | Green | Blink four times | Print Configuration Info. | |
| 2 | Green | On | Orange | Blink four times | Print File List | |
| 3 | | | Red | Blink four times | Factory Reset | |
| 4 | | | Green | Blink four times | Gap Sensor Auto Calibration | |
| 5 | Orange | On | Orange | Blink four times | B/M Sensor Auto Calibration | |
| 6 | | | Red | Blink four times | Data Dump Mode | |
| 7 | | | Green | Blink four times | - | |
| 8 | Red | On | Orange | Blink four times | - | |
| 9 | | | Red | Blink four times | - | |

5-3 Pause/Cancel

• During multiple-page print jobs, the Pause and Cancel button can be used to temporarily cease printing and cancel the print job altogether, respectively.



5-3-1 Pause/Resume Function

- 1) When printing labels, pressing the Pause button
- 2) The printer will pause after finishing the current label printing and the status of LED will be as follows.
 - LED 1: Green Blink
 - LED 2: Red On
- 3) While the print job is paused, press the Pause button again to resume printing.

5-3-2 Print Cancellation

- 1) During label printing and/or pause mode, pressing the Cancel button enters the print cancellation mode.
- 2) The following processes occur in the print cancellation mode.
 - All label printing cancelled
 - All data received in the printer communications buffer deleted.
 - All received data deleted.
- 3) The LED Status in the print cancellation mode can be as follows.
 - LED 1: Green On
 - LED 2: Red Blinking
- 4) While in the print cancellation mode, press the Cancel button again to return to print standby mode.

5-4 Media Calibration

• This printer has been designed to recognize the gaps with most print papers, but sometimes it may not recognize the gap and keep feeding paper if a special type of paper is used. In this case, run Auto Calibration function so that the printer can recognize the gap. BIXOLON printer provides various media calibration methods in order to accommodate various special paper types.

5-4-1 About media calibration

- This function is for adjusting the sensitivity of the paper detection sensor for accurate printing position control and measuring actual length of paper.
- Sensor sensitivity adjustment
- The purpose is to detect the identifier (gap/black mark/groove) of installed label printer
- Paper length measurement
 - Accurate length is required to rotate the printing orientation.
 - The purpose is to detect the change of paper type.

5-4-2 When is media calibration required?

- When the printer is installed first time
- When the newly installed paper is a different paper type
- When printer position is not accurate or printer does not stop in the right position

5-4-3 How to perform media calibration

- The following four methods of media calibration can be used depending on the conditions.
 - Smart Media Detection
 - Gap Sensor Auto Calibration Mode
 - Black Mark Sensor Auto Calibration Mode
 - Manual Calibration Mode
- Why are several calibration methods provided?
 - Multiple labels should be scanned for media calibration and more accurate sensitivity calibration can be performed when more labels are scanned.
 - The number of labels to scan for sensor sensitivity adjustment depends on various conditions such as label paper material, color, surface status, thickness, gap length, pre-printed pattern, etc.
 - Four different media calibration modes are provided for compromise between prevention of excessive use of paper and accuracy of sensor sensitivity adjustment.
 - Smart media detection mode that allows for adjustment of sensitivity with minimum amount of scanning should be good enough for most cases with general labels.
 - Try various methods in order of Smart Media Detection → Gap Sensor Automatic Calibration → Black Mark Sensor Automatic Calibration → Manual Calibration Mode.

5-5 Smart Media Detection

Printer executes this function when necessary without user input and media configuration can be completed with Smart Media Detection function for most print papers.

Papers with gap and black mark can be identified without separate settings.

3 ~ 5 pages of labels will be used depending on the type of paper.

Smart Media Detection function is executed in the followings cases

- When the printer is installed first time, it is executed through Feed button or print command.
- When change paper length is detected during feeding or printing.
- When the paper type entered by command is different from the configured paper type.
- After reset with factory settings

Smart Media Detection function will be turned off after setting the sensor sensitivity using Automatic Calibration Mode or Manual Media Calibration mode, and it will be enabled again after resetting the printer with factory settings.

5-6 Gap Sensor Auto Calibration Mode

Use this mode when paper is not detected correctly with Smart Media Detection function.

Printer feeds paper and calibrates Gap Sensor automatically.

The printer will enter error mode if paper detection fails after feeding up to 1 meter of paper. Error mode can be released by opening and closing the cover.

Use Manual Calibration Mode if paper detection fails in this mode.

Smart Media Detection will be disabled if paper detection is successful in this mode.

5-6-1 Procedure to run the calibration

• Press the Feed button at 4th LED sequence in 5-2-2 (LED 1 Orange / LED 2 Green – Blink four times) to start Gap Sensor Automatic Calibration Mode.

5-7 Black Mark Sensor Auto Calibration Mode

Use this mode when paper is not detected correctly with Smart Media Detection function.

Printer feeds paper and calibrates Black Mark Sensor automatically.

The printer will enter error mode if paper detection fails after feeding up to 1 meter of paper. Error mode can be released by opening and closing the cover.

Use Manual Calibration Mode if paper detection fails in this mode.

Smart Media Detection will be disabled if paper detection is successful in this mode.

5-7-1 Procedure to run calibration

• Press the Feed button at 5th LED sequence in 5-2-2 (LED 1 Orange / LED 2 Orange – Blink four times) to start Black Mark Sensor Automatic Calibration Mode.

5-8 Manual Calibration Mode

Manual-calibration of media detection can be used when the printer cannot detect a media gap (or black mark) even after auto-calibration has been executed.

Users can calibrate sensor parameters in detail by using the utility program provided by the manufacturer.

The installation files and manuals are provided on the BIXOLON official website. (<u>http://www.bixolon.com</u>)

Please make sure the printer is connected and execute the utility program. Please the Calibration Setting Manager Button after setting the interface type.

| ed Label | Utility-II (Version 2.0.8) | BIXOLON | Manual Calibration | |
|---------------------|----------------------------|---|--|------------------------------|
| Serial | OParallel OUSB OEthernet | User Setting Configure Printer Setting Configure Print Quality | Sensing Value Distribution | STEP 1 : Start |
| PT Port | | Calibration Setting Manager | 064: 0000 96: 0000 128: 0000 | Sensing Type : ⓒ G O B |
| OM Port aud Rate | COM1: | PCX File Downloader Printer Tool | ○ 128 ; 0000 ○ 160 : 0000 ○ 192 : 0000 ○ 224 : 0000 | Label Length : (mm) 150 |
| ata Bits arity | 8 V | Send File Printer Tool | 256 : 0000 288 : 0000 320 : 0000 | Check Sensing Value |
| top Bits | 1 192 , 168 , 100 , 185 | Communication Tool SLCS Test Tool RFID | 352: 0000 384: 0000 416: 0000 448: 0000 | STEP 2 : Save |
| ort | onnect Disconnect | Set Configuration Write/Read | 480 : 0000 512 : 0000 544 : 0000 576 : 0000 | Middle Gap Value : |
| | | E X I T Copyright (C) BIXOLON Co., Ltd. All rights reserved. | 576 : 0000 608 : 0000 640 : 0000 672 : 0000 704 : 0000 736 : 0000 768 : 0000 | Gap Count : 7 |
| | | | 0.768 0.000 800 0.000 832 0.000 864 0.000 996 0.000 960 0.000 992 0.000 992 0.000 1024 0.000 | Cancel Cancel Calibration |
| | | | | CLOSE |

- 1) Select the sensing type and input the label length by millimeter and click on "Check Sensing Value" tap. Then printer starts to calibrate.
- 2) The scanned values will appear on the Utility.
- 3) Optimal sensing values will appear in black bold letters on the left of the utility screen and select one of the values and click on "Save Calibration"
- 4) If chosen value does not work properly, please try the other values among the black bold letters.
- 5) To go back to the initial value, please click on "Cancel Calibration"

5-9 Cover Closing Mode

5-9-1 About Cover Closing Mode

- The printed area may become out of range of paper if the paper is not in the accurate printing position when the cover is opened and closed.
- The printer is put to Cover Closing Mode instead of Print Standby Mode when the cover is closed in order to prevent this problem, and it waits for user input.
- The status of LEDS are as follows in this mode.
 - LED 1: Green Blink
 - LED 2: Green Blink
- The data received during Cover Close Mode are not printed, and they are printed automatically when the printer recovers to the Print Standby Mode.

5-9-2 How to switch the printer from Cover Close Mode to Print Standby Mode

- Press the Pause button to switch to Print Standby Mode without feeding any paper.
- Press the Feed button to feed one page to align the paper position and switch to the Print Standby Mode.

5-10 Data Dump Mode

This function can be used to diagnose the communication issues when the printing does not work correctly.

In this mode, the received data are not analyzed and printed, instead they are dumped in hex format without processing.

Turn the printer off and on to recover to the Print Standby Mode.

5-10-1 How to start Data Dump Mode

1) Press the Pause button for two seconds during Print Standby Mode.

- 2) Both LEDs will change to orange color and the printer will be set to Stand-along Configuration Mode.
- 3) Press the Feed button at the sixth LED sequence in 5-2-2 (LED 1 Orange / LED 2 Red 4 times Blink) to enable Data Dump Mode.

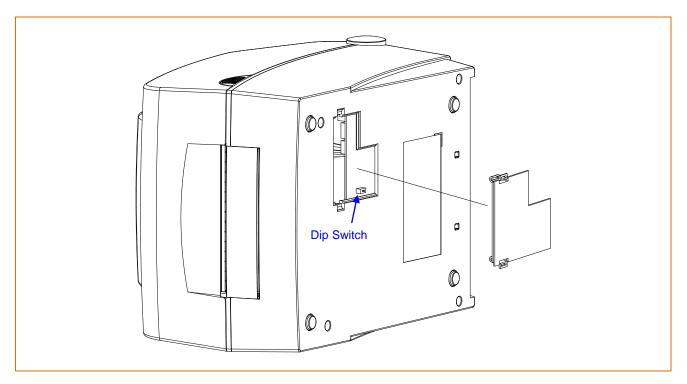
5-11 Factory Reset

• This function is used to reset the printer settings to factory default settings.

5-11-1 How to reset the printer

- 1) Press the Pause button for two seconds during Print Standby Mode.
- 2) Both LEDs will change to orange color and the printer will be set to Stand-along Configuration Mode.
- 3) Press the Feed button at the third LED sequence in 5-2-2 (LED 1 Green / LED 2 Red 4 times Blink) to reset the printer to factory settings, and Smart Media Detection function will be executed.

5-12 Firmware Download



Please refer to Firmware Download manual for details. (http://www.bixolon.com)

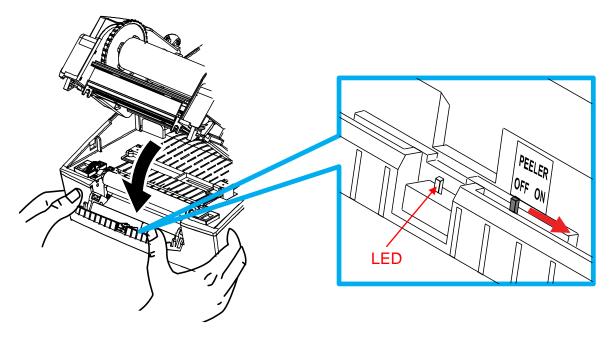
A Caution Make sure if the dip cover is closed prior to operating.

5-13 The Peel-Off

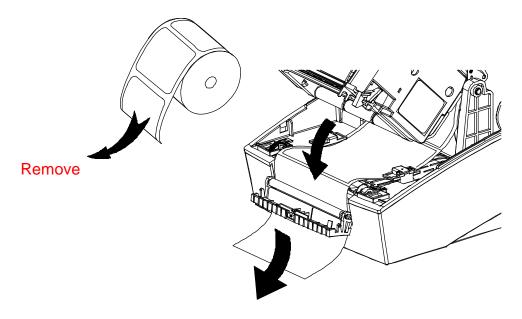
• As a function that is used to peel-off labels, it is used only with label paper.

(After adjusting the peeler switch, power must be turned off and on in order for the operation to be acknowledged.)

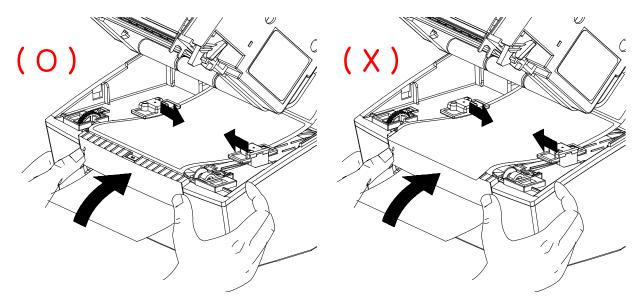
- 1) Open the paper cover.
- 2) Open the Ribbon Assembly.
- 3) Open the label peel-off cover and set the peeler switch to the ON position.
 - Check to see that the LED has turned on.



4) Remove one sheet of the label paper, and insert the paper as shown in the image below. - Prior to removing a label, the peeler switch must be set to the ON position.



5) Adjust the paper guides and close the label peel-off cover.



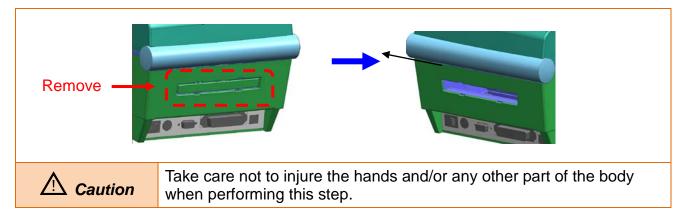
- 6) Close the Ribbon Assembly until a click sound is heard, close the Paper Cover.
- 7) Turn the printer off and on.

5-14 Using Fan-Fold Paper

• Supplying paper to the printer externally is done as follows.

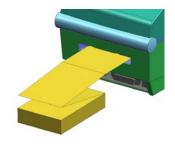
5-14-1 Printer Preparation

Remove the rear paper supply cover on the back side of the printer with a knife or other cutting instrument.

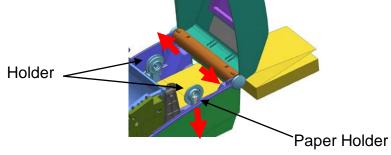


5-14-2 When Using Pan-Fold Paper

1) Insert the paper at the rear of the printer using the slot and guides.

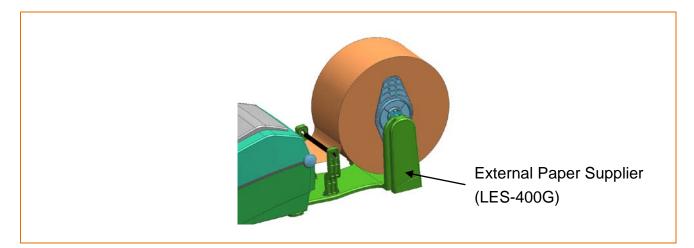


2) Adjust the holder and guides to the width of the paper.



5-14-3 When using large-capacity paper roll (option)

* install the paper in the same way as pan-fold paper.



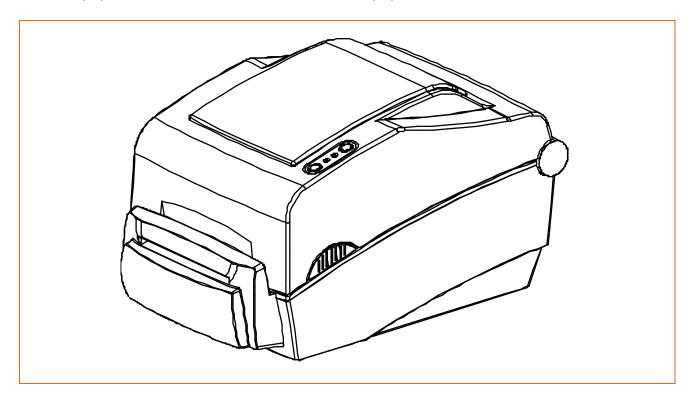
5-15 Auto Cutter (SLP-TX40xC)

• For auto paper cutting, products equipped with auto cutter are available.

In factory setting, the auto cutter is attached.

Auto-Cutter can be controlled by command. And default setting can be changed by Unified Label Utility.

* The paper installation method is the same as paper with no auto cutter.



6. Cleaning Head

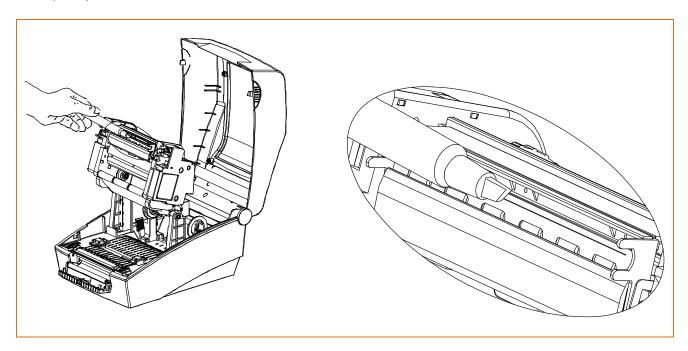
Printing quality might be degraded by dust, foreign substance, adhesive substance, or other pollution materials stuck in the printer head or inside the printer.

When dirty, clean the print head as follows:

| Caution | Make sure to turn the printer power off prior to cleaning. As the print head gets very hot during printing, if intending to clean the print head, turn the printer power off and wait approximately 2~3 minute before commencement. When cleaning the print head, take care not to touch the heated portion of the print head. → Printer Head is susceptible to damage from static electricity, etc. Take care not to allow the print head to become scratched and/or damaged in any way. |
|---------|---|
|---------|---|

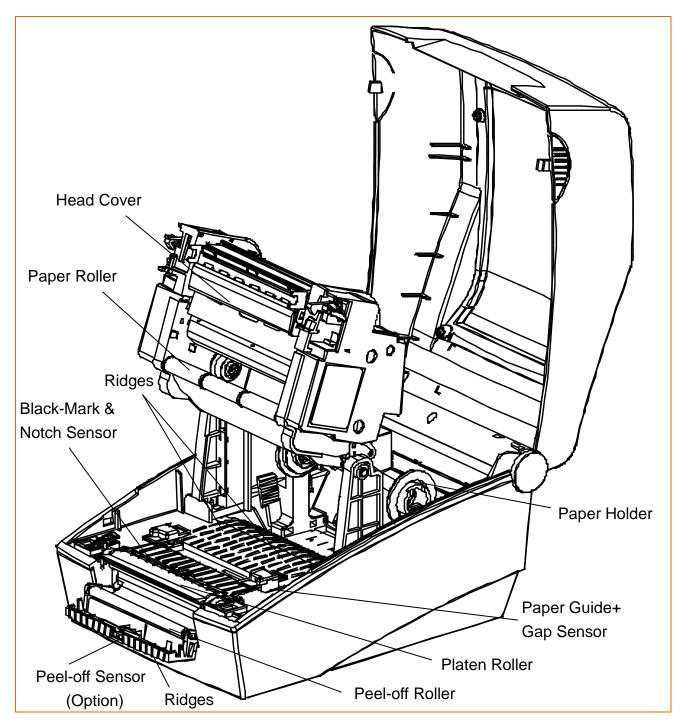
6-1 Cleaning Head

- 1) Open the paper cover and Ribbon Assembly and then use the cleaning pen to clean the head in the direction from the center of the head to the edges.
- 2) After cleaning the head, do not use the printer until the alcohol used for cleaning evaporates completely (1~2 min) and the printer has completely dried.
- * Perform the cleaning process each time the paper roll is replaced to prevent print quality deterioration.



6-2 Cleaning Sensors, Roller or/and Paper Path

- 1) Open the paper cover and ribbon assembly, and remove the paper and ribbon.
- 2) Remove any dust or foreign substance using dry cloth or cotton swab.
- 3) Soak the cloth or cotton swab in alcohol for medical use and use it to remove adhesive foreign substances or other pollution materials.
- 4) After cleaning the parts, do not use the printer until the alcohol evaporates completely (1~2 min) and the printer has completely dried
- Clean the parts when there is a degradation of performance in printing quality or paper detection.



7. Appendix

7-1 Specifications

| | Item | Description |
|------------|--------------------|--|
| | Printing Method | Thermal Transfer / Direct Thermal Printing |
| - | Dot Density | SLP-TX400 : 203 dpi (8 dot/mm) |
| | Dot Density | SLP-TX403 : 300 dpi (11.8 dot/mm) |
| Printer | Printing Width | SLP-TX400 : Max. 108 mm |
| | | SLP-TX403 : Max. 105.7 mm |
| | Printing Speed | SLP-TX400: Max. 178 mm/sec (Max. 7ips) |
| | | SLP-TX403: Max. 127 mm/sec (Max. 5ips) |
| | Width | 25 ~ 116 mm |
| Paper | Roll | Max 130mm |
| Core | | 25.4~38.1mm (1~1.5") |
| | Length / Width | Max 300m / 33 ~ 110mm(1.3~4.3") |
| Ribbon | Type(Outside) | Wax, Wax/Resin, Resin |
| | Core | 0.5" / 1" |
| AC | Input Voltage | AC 100~240V |
| Adapter | Frequency | 50/60 Hz |
| Auaptei | Output Voltage | DC 24V |
| | Tomporofuro | 5 ~ 40 ℃ (Operating) |
| Usage | Temperature | -20 ~ 60 ℃ (Storage) |
| Conditions | Humidity | 10 ~ 80 % RH (Operating) |
| | (except for paper) | 10 ~ 90 % RH (Storage) |

| ⚠ Note | Printing speed can vary depending on the data transmission speed and combination of control commands. This equipment is for indoor use and all the communication wirings are limited to inside of the building. The switch is the disconnecting device. Turn off switch from any hazard. |
|--------|--|
|--------|--|

7-2 Label Types

The label types used with this printer are as follows.

- Control Labels: PP
- Other Labels: PET

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Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

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.