



USER'S GUIDE

Smart Label Printer

SLP850 SERIES

Read this USER'S GUIDE carefully before using the printer.
Keep this USER'S GUIDE in a place where it can be accessed quickly.


Seiko Instruments Inc.

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Applicable EC Directive and Standards

Product: Thermal Printer SLP850 (Model with Bluetooth) (with AC adapter PW-L1230-W1)

| <u>Directive:</u> | <u>Title</u> |
|---|---|
| 2014/53/EU | Radio Equipment Directive |
| 2009/125/EC | Directive on Eco-Design of Energy-related Products |
| 2011/65/EU (Commission Delegated Directive (EU) 2015/863) | Restriction of the use of certain hazardous substances (RoHS) Directive |

Standards

EN 301 489-1
EN 301 489-17
EN 300 328
EN 62368-1
EN IEC 63000
EN 62311



Restrictions: Operations in 5150-5350 MHz band is for indoor use only.

This product is for use only with nominal voltage in each country.

Product: Thermal Printer SLP850 (with AC adapter PW-L1230-W1)

| <u>Directive:</u> | <u>Title</u> |
|---|---|
| 2014/30/EU | EC Electromagnetic Compatibility Directive |
| 2014/35/EU | EC Low Voltage Directive (with AC adapter only) |
| 2009/125/EC | Directive on Eco-Design of Energy-related Products |
| 2011/65/EU (Commission Delegated Directive (EU) 2015/863) | Restriction of the use of certain hazardous substances (RoHS) Directive |

Standards

EN 55032
EN IEC 61000-3-2
EN 61000-3-3
EN 55035
EN 62368-1
EN IEC 63000

Product: **AC adapter PW-L1230-W1**

| <u>Directive:</u> | <u>Title</u> |
|---|---|
| 2014/30/EU | EC Electromagnetic Compatibility Directive |
| 2014/35/EU | EC Low Voltage Directive |
| 2009/125/EC | Directive on Eco-Design of Energy-related Products |
| 2011/65/EU (Commission Delegated Directive (EU) 2015/863) | Restriction of the use of certain hazardous substances (RoHS) Directive |

Standards

EN 55032
EN IEC 61000-3-2
EN 61000-3-3
EN 55035
EN 62368-1
EN IEC 63000

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receive antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Seiko Instruments could void the user's authority to operate the equipment.

Innovation, Science and Economic Development (ISED) compliance statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure compliance

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Applied to only Bluetooth model:

contains FCC ID: SQK-7BTZ61
contains IC: 337L-7BTZ61

1. INTRODUCTION

This manual describes how to handle SLP850 series smart label printer (hereinafter referred to as printer), AC adapter and AC cable.

Read through "2. SAFETY PRECAUTIONS" and "3. OPERATING PRECAUTIONS" carefully before using the products, and handle them safely and properly.



Keep this manual in a place where it can be accessed quickly.

This manual consists of the following sections.

| | |
|---|----|
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2. SAFETY PRECAUTIONS

In this SAFETY PRECAUTIONS, the following symbols are used to ensure safe and proper use of products and prevent from damaging devices.

| | |
|--|--|
|  WARNING | Failure to follow the instructions marked with this symbol could result in severe personal injury or death. |
|  CAUTION | Failure to follow the instructions marked with this symbol could result in minor personal injury or property damage. |

■ About symbols



The symbol indicates information which you should pay attention to (including danger and warnings).



The symbol indicates information about prohibited procedures.



indicates "Disassembly is prohibited."



The symbol indicates information about obligated or instructed procedures.
















indicates "Unplug the power plug from the outlet."



OPERATING PRECAUTIONS

The "products" shall collectively mean the printer, the AC adapter and the AC cable.



WARNING

| | |
|---|--|
| Never attempt the following. Failure to follow the instructions leads to fire, electric shock, or accident. | |
|  | DO NOT insert any foreign objects such as a piece of metal or any liquid into the products. |
|  | DO NOT touch the terminals of the products, power connector, AC plug, and DC plug. To avoid short circuits, prevent terminals of the products, power connector, AC plug, and DC plug from touching any conductor such as metal. |
|  | Take care not to spill liquid on the products. |
|  | DO NOT touch the products with wet hands. |
|  | DO NOT disassemble or reconstruct the products. |
|  | Use the printer only with the specified AC adapter and specified AC cable. |
|  | DO NOT use the AC adapter at a voltage other than the specified voltage. |
|  | Keep the terminals of the products, power connector, AC plug, and DC plug away from dust and metal objects. |
|  | Make sure the AC plug and DC plug are securely plugged in when using the products. |
|  | DO NOT damage the AC cable, AC plug, and DC plug. DO NOT bend, pull, twist the cable forcibly or place heavy stuff on it. |
| Be sure to observe the following instructions. Failure to follow the instructions may lead fire, electric shock, or accident. | |
|  | Be sure to use only in countries where the products meet the regulations. Using non-compliant products may endanger the safety of products or be considered against regulations. |
|  | The power cord is a 3-prong power cord with a ground wire. Use a 3-prong power outlet with a protective earth terminal. |
|  | Be sure to hold the plug when unplugging the AC cable from the outlet. |







For Wireless communication

| | |
|---|---|
| Observe the following instructions. | |
|  | Always turn off the printer in areas or regions where its use is prohibited, such as in an airplane. |
|  | The printer may affect medical or other electronic devices. Obtain information and data concerning influence due to radio interference from each device manufacturer or dealer. |

Procedures to take when in trouble

| | |
|--|--|
| Follow the instructions in the following cases. Failure to follow the instructions may lead fire, electric shock, or accident. | |
|  | <p>Turn off the printer, and unplug the AC plug from the outlet in any of the following cases:</p> <ul style="list-style-type: none"> ◆ Abnormal status continues. ◆ The products are giving off an unusual smell, smoke, excessive heat or unusual noise. ◆ A piece of metal, water or other foreign objects get into the products. ◆ The case is broken. |
|  | When the cable of the AC adapter or AC cable is damaged, unplug the AC plug from the outlet. DO NOT use a damaged AC adapter or AC cable. |

CAUTION

| | |
|--|--|
| Observe the following instructions. Failure to follow the instructions may lead fire, electric shock, or accident. | |
|  | Turn off the printer and unplug the AC plug from the outlet when not in use for a long time or before maintenance. |
|  | <p>DO NOT use or store the products in the following locations:</p> <ul style="list-style-type: none"> ◆ Locations exposed to direct sunlight or high temperature. ◆ Locations exposed to high humidity, a lot of dust, and liquid. ◆ Locations subject to strong vibration, or unstable locations. |
|  | DO NOT cover the products with a cloth when in use. |
|  | NEVER touch the thermal head immediately after printing because it may get hot. Be sure to allow it to cool down before clearing a paper jam. |
|  | Keep loose objects such as long hair away from the printer while the printer operates. When they fall into the printer, it may cause personal injury or damage the printer. |
|  | Keep the products away from infants and children. |

3. OPERATING PRECAUTIONS

Be careful of the following precautions and use the products properly in order to deliver and maintain the full performance of the products.

■ Using Products

Precautions for use environment

- ◆ Be careful not to drop or bump the products on a hard surface.
- ◆ DO NOT install the products in direct sunlight.
- ◆ Be careful about the ambient temperature and humidity.
Suitable environment for the use of the printer is as follows:
 - Range of the temperature : 5°C to 40°C (41°F to 104°F)
 - Range of the humidity : 30%RH to 80%RH (Non condensing)See "15. SPECIFICATIONS" for the guaranteed humidity range at each temperature.
- ◆ DO NOT install the products near devices that generate strong magnetism such as a copy machine motor.
- ◆ DO NOT install the products in a location that is subject to corrosive gas, siloxane and so on.
- ◆ DO NOT connect the AC adapter or AC cable to the same outlet with devices that generate noise.

Precautions on use and operation

- ◆ DO NOT print without the thermal paper.
- ◆ DO NOT use thermal papers taped together.
- ◆ NEVER forcibly pull out the thermal paper by hand with the thermal paper loaded.
- ◆ DO NOT open the top cover during printing.
- ◆ DO NOT connect or disconnect the interface cable during printing or communication.
DO NOT touch the plug of the interface cable during printing.
- ◆ When handling the printer, be aware of static electricity. When the static electricity is discharged, this could cause a USB communication failure.
When this problem occurs, disconnect the USB plug that is connected to the host device and wait a few seconds before connecting it again.
- ◆ DO NOT use the thermal head when it is wet. Doing so may damage the printer.
- ◆ Printing under low temperature environment or printing at a high print rate might cause unclear printing or generate loud sound. This is not a failure in the printer but an inherent paper phenomenon.
- ◆ When printing at a high print rate for longer length, even non-printing area may be colored due to accumulation of heat in the thermal head.
Verify the performance with your actual device in advance.
- ◆ The AC adapter may get a little hot when in use. This is normal and not a malfunction.
- ◆ Always use the specified thermal paper. See "16. ACCESSORIES AND CONSUMABLE PARTS" for details.
- ◆ DO NOT touch the thermal head directly. Doing so may result in poor printing quality due to the dirt or damage by the static electricity.

- ◆ NEVER touch the thermal head, paper sensor, or platen roller directly while opening the top cover to install the thermal paper. Doing so may cause injury or other accidents.
- ◆ Be careful not to get your fingers or hands caught in the printer when opening or closing the top cover.
- ◆ In order to ensure the function and the safety of the product, be sure to observe the installation direction.
- ◆ DO NOT drop or insert any foreign objects such as clips, pins, and screws in the internal parts or slot of the products.
- ◆ DO NOT drop any liquid or spray a solvent to the products.
- ◆ NEVER use sharp object such as pen tip to push the switch on the operation panel.
- ◆ Make sure not to injure your body or other objects by the plate edge.
- ◆ As the plated sheet steel is used in the printer, the edge face might rust.
- ◆ When moving the printer from the installation site, hold the printer tightly with both hands, then lift it upward slowly to leave the rubber feet from the installation surface. Lifting it rapidly or moving it horizontally may peel the entire rubber feet, peel their surfaces, or damage the outer case.
- ◆ When something goes wrong with the printer during use, stop using it immediately, and unplug the AC plug from the outlet.
- ◆ NEVER disassemble the printer without a serviceman.

Precautions for Wireless communication

- ◆ When using the Bluetooth interface, the communication may become unstable due to the influence from external radio waves. This is based on Bluetooth specification which is a wireless communication standard.
- ◆ The model with Bluetooth operates in the 2.4 GHz frequency range. So if it is used around Wireless LAN (using IEEE802.11b/g/n) or any equipment using the same frequency range such as a microwave oven, radio frequency interference may occur, and the communication may become unstable. When it happens, turn off the interfering equipment or increase the distance. Alternatively, shorten the distance between the host device and the printer as much as possible.

Precautions for maintenance

- ◆ Clean the products' cases using a soft and lint-free cloth. DO NOT use alcohol or other solvent.
- ◆ Before using, clean the terminals using a dry, soft, and lint-free cloth when they are dirty. If the terminals are dirty, it may cause contact failure.

Precautions for storing

- ◆ Turn off the printer when not in use.
In addition, when the printer is not used for a long time, unplug the AC cable from the outlet. Moreover, set thermal paper to protect the platen.

■ Thermal Paper Handling

- ◆ Store the thermal paper in a cool, dry, and dark place.
- ◆ DO NOT rub the thermal paper with hard objects.
- ◆ DO NOT leave the thermal paper near organic solvents.
- ◆ DO NOT allow PVC film, erasers, or adhesive tape to touch the thermal paper for long periods.
- ◆ DO NOT stack the thermal paper with diazo copies immediately after copying.
- ◆ DO NOT use chemical glue.
- ◆ DO NOT use 2-ply thermal paper and perforated thermal paper.

■ Precautions on Discarding

When discarding used products, discard them according to the disposal regulations and rules of each district.

■ Notation

The following 2 types of notation are used throughout this manual to denote operating precautions and items to remember besides the symbols shown in "2. SAFETY PRECAUTIONS":

NOTE

- ◆ Operating Precautions

This box contains items that may lead to a malfunction or deterioration of performance when not followed.

HINT

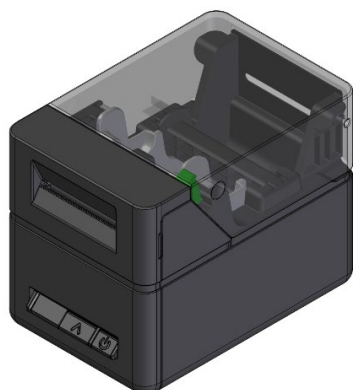
- Items to Remember

This box contains helpful hints to remember when using the products.

4. PREPARATION

Make sure that the printer and its accessories are contained.

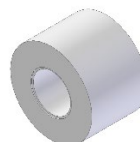
Keep the package and packing materials for future transportation or long-term storage.



Printer

Documents

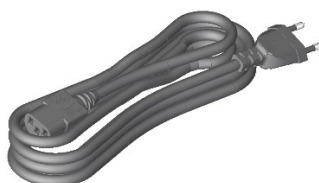
- Safety Precautions
- Quick Start Guide



Sample Thermal Paper



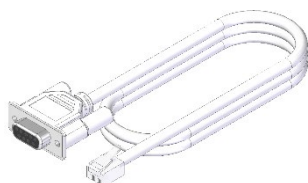
AC Adapter



AC Cable



USB Cable*1



Serial Cable*2

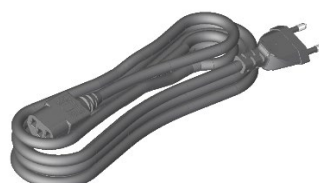
*1: USB model, serial + USB model only

*2: Serial + USB model only

The available accessories are shown below. See "15. SPECIFICATIONS" and "16. ACCESSORIES AND CONSUMABLE PARTS", and be sure to purchase our specified products listed on these references.



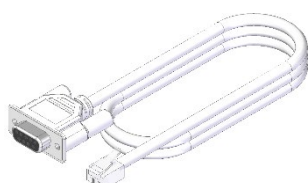
AC Adapter



AC Cable



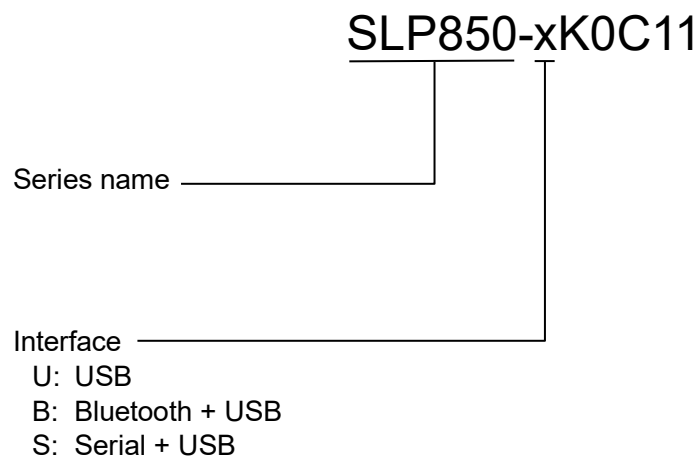
USB Cable



Serial Cable

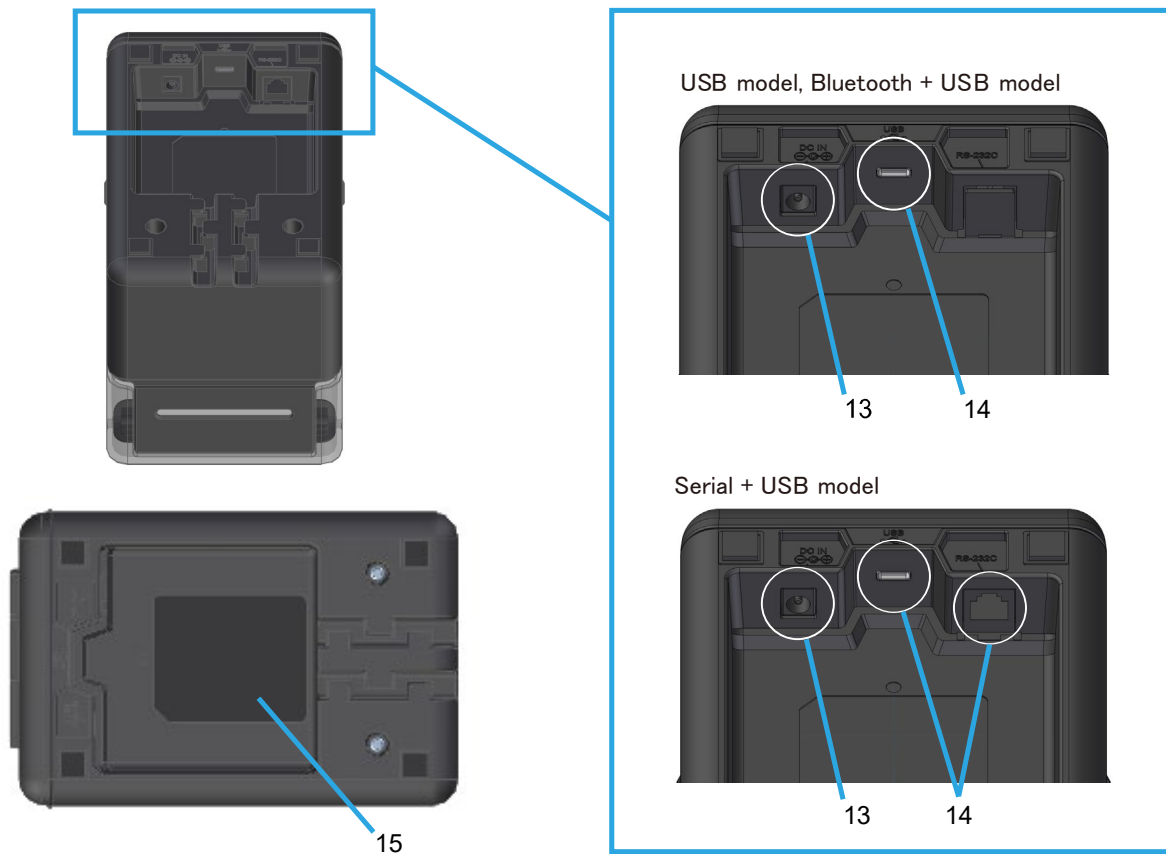
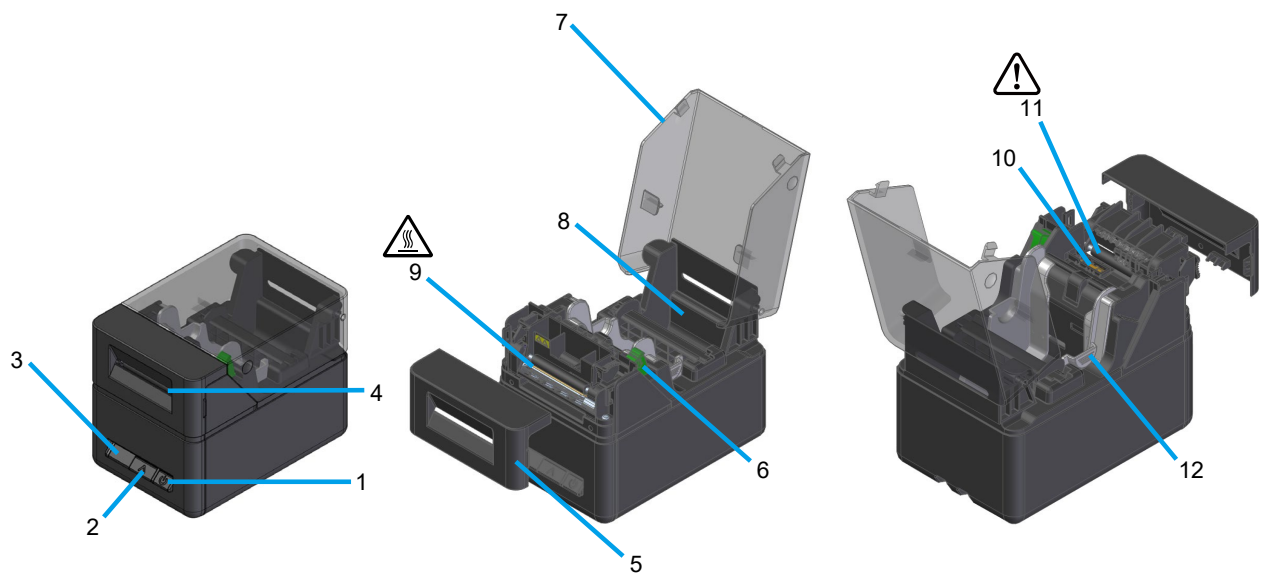
5. IDENTIFYING MODEL TYPE

The printer model is identified as follows:



- ◆ When the printer is incorporated into your equipment and then supplied electric power from the equipment, follow the rated value of input voltage for SLP850 described in the printer specifications of "15. SPECIFICATIONS".
- ◆ When using a power supply other than the specified AC adapter, use a power supply at your own risk under the safety standard and EMC regulations.

6. EACH PART OF PRINTER



1 POWER Switch

The POWER Switch turns the power on or off. The LED lights when turning on the power. To turn off the power, hold down the switch for longer than 3 second.

2 FEED Switch

The FEED Switch operates paper feed. When holding down the switch for a few seconds, the printer feeds the thermal paper continuously for the period of held.

3 LED

The LED lights when turning on the power. See "LED Indication" on the next page for details.

4 Paper outlet

Thermal paper is ejected from here. The paper outlet has a paper cutter, so make sure not to touch it.

5 Protective cover

The cover protects the thermal head and platen. Do not remove it except when a paper jam occurs.

6 Release lever

The release lever is used for removing the jammed paper.

7 Top cover

Open this cover when replacing the thermal paper.

8 Paper holder

The paper holder holds the thermal paper.

9 Thermal head

The thermal head prints data on the thermal paper. NEVER touch the thermal head with hands immediately after printing because it may get hot. In addition, make sure not to injure your body or other objects as the sheet metal part of the thermal head has sharp edges.

10 Black mark sensor

The sensor detects thermal paper presence and the black mark.

11 Platen

The platen brings the thermal paper into contact with the thermal head. The platen rotates to feed the paper.

12 Paper guide

The paper guide is adjusted according to the width of the paper to be used.

13 Power connector

The AC adapter is connected here.

14 Interface connector

The interface cable is connected here.


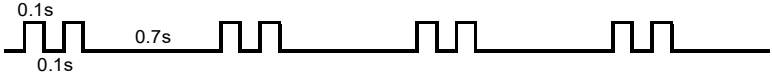

15 Product label

This label indicates the product name, rated value, serial number, and the Bluetooth address for each product.

■ LED Indication

| Printer Status | LED (Color) | LED (Lighting Pattern) |
|---|-------------|------------------------|
| Standby (Initializing) | - | Off |
| Hardware error | Red | On |
| Head error (head short, head open) | Purple | Blink-1 |
| Vp voltage error | Purple | Blink-2 |
| Output buffer full | Purple | Blink-3 |
| Out-of-paper error | Yellow | Blink-1 |
| Paper jam error while detecting mark | Yellow | Blink-2 |
| Head temperature error | Yellow | Blink-3 |
| Printing | Green | On |
| Test mode | Green | Blink-2 |
| Printable (print-ready) / USB communication | Green | On |
| Printable (print-ready) / Bluetooth communication | Green | On |
| Pause | Yellow | On |
| Not connected Bluetooth communication | Blue | Blink-1 |
| Pairing mode | Blue | Blink-2 |
| Diagnostic (self-diagnosis mode) | White | Blink-1 |
| Rewriting firmware | White | On |
| Power off | - | Off |

■ LED Blink Pattern

| Status | Pattern |
|---------|--|
| Blink-1 |  |
| Blink-2 |  |
| Blink-3 |  |

■ Error and Recovery Procedure

When an error occurs, the printer stops printing operation. However, the data receiving is enabled. The table below shows errors and their recovery procedures.

| Error | Detail | Recovery Procedure | Priority* |
|------------------------|--|---|-----------|
| Return-waiting | The printer becomes this state after releasing out-of-paper error or Vp voltage error. | The return-waiting state is released after about 1 second, and the printer becomes print-ready state. | - |
| Output buffer full | Output buffer of the printer is full. | Read response data from the host device. | 1 |
| Out-of-paper error | There is no thermal paper. | Open the top cover, load thermal paper, and then close the top cover. | 2 |
| Head temperature error | Head temperature rises to about 85°C (185°F) or higher. | The printer automatically recovers when head temperature becomes about 80°C (176°F) or lower. | 3 |
| Vp voltage error | The power voltage is out of the allowable range. | The printer automatically recovers when the voltage is returned to the allowable range. | 4 |
| Hardware error | An abnormality occurs in the thermal head or the circuit board. | Recovery is not possible. Request for repair. | 5 |

*: This indicates the priority when multiple errors occur simultaneously. The bigger number indicates higher priority.
For example, when "Head temperature error" and "Out-of-paper error" occur simultaneously, the LED shows "Head temperature error" which has the higher priority.

7. POWER CONNECTION

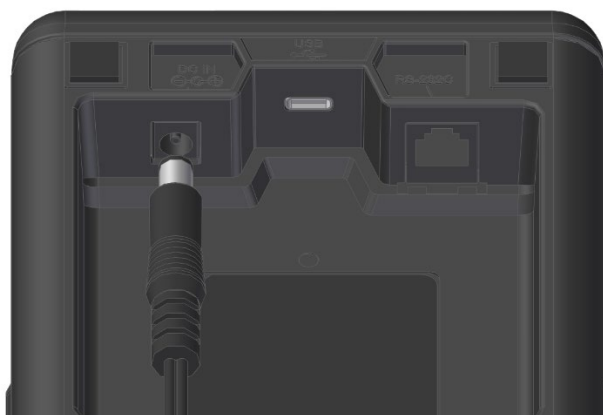
To supply power to the printer, use the AC adapter.

Be sure to see "15. SPECIFICATIONS" for the AC adapter.

The AC adapter and the AC cable are optional accessories. See "15. SPECIFICATIONS" and "16. ACCESSORIES AND CONSUMABLE PARTS", and be sure to purchase our specified products listed on these references.

■ Connecting AC Adapter

- (1) Connect the AC cable to the AC adapter.
- (2) Plug the DC plug of the AC adapter to the power connector of the printer.



- (3) Plug the AC plug of the AC cable to an outlet.

NOTE

- ◆ Unplug the AC plug of the AC cable from the outlet when inserting or pulling out the DC plug.
- ◆ When the printer is not used for a long time, unplug the AC plug of the AC cable from the outlet.

8. LOADING THERMAL PAPER

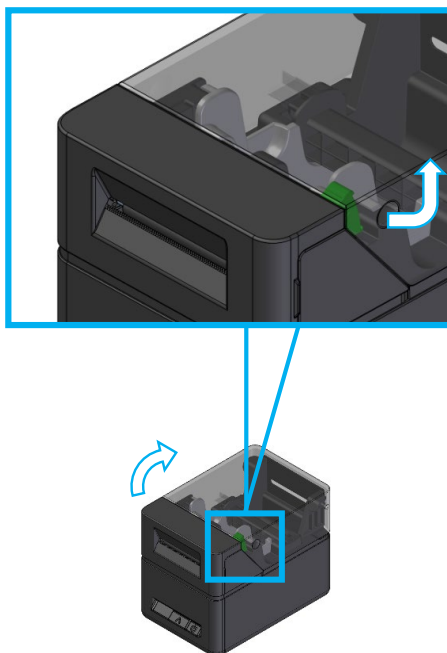
The printer uses the thermal paper roll (hereinafter referred to as thermal paper).

Use the thermal paper with printing surface rolled outwards.

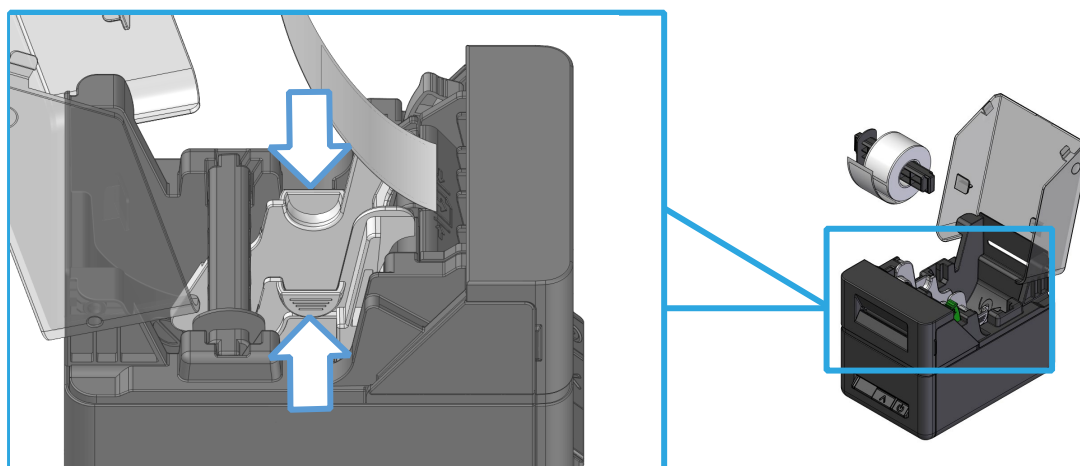
The function settings of the printer differ depending on the thermal paper. See "11. FUNCTION SETTINGS" for details.

■ Adjusting Paper Width

- (1) Grasp the recessed part of the top cover to pull it upward and open the top cover.



- (2) Hold the tabs of the paper guide with the fingers of both hands and move them slowly.

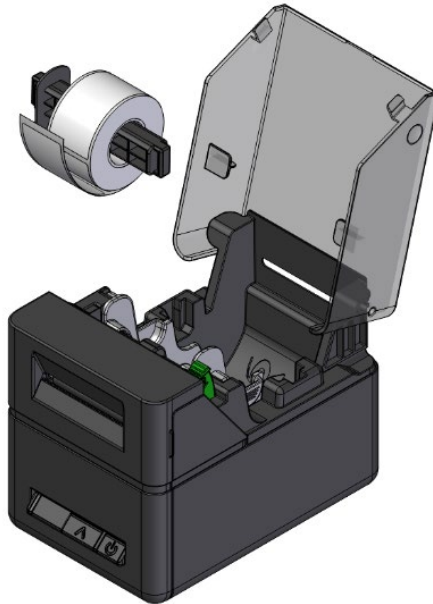


NOTE

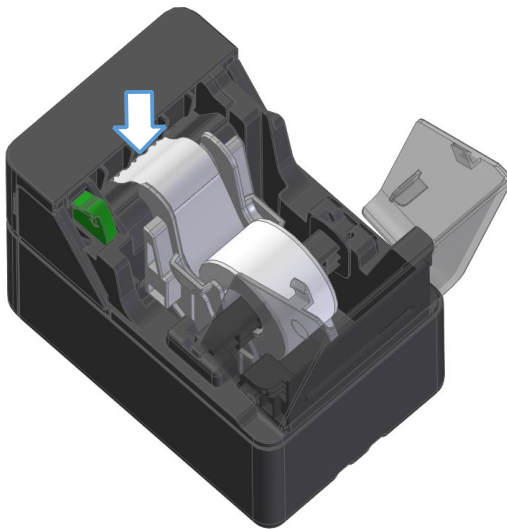
- ◆ Set the paper width before using the printer for the first time. DO NOT change the paper width after starting to use the printer. Doing so may damage the printer.
- ◆ When the thermal paper smaller than 58 mm in width is used, rubber crumbs of the platen may be generated because the platen contacts with the thermal head. Remove rubber crumbs regularly to maintain the printing quality.

■ Loading Thermal Paper

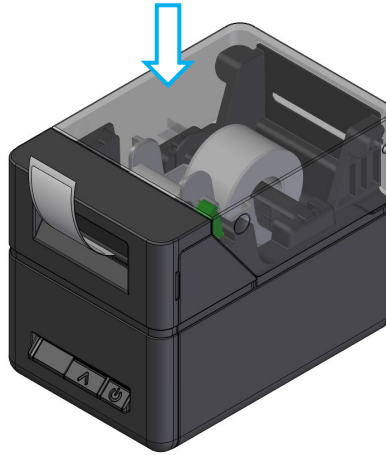
- (1) Grasp the recessed part of the top cover to pull it upward and open the top cover.
- (2) Take the glued end from the thermal paper.
- (3) Load the thermal paper into the paper holder.



- (4) Insert the thermal paper into the printing part until it is automatically inserted, making sure it does not slant.



(5) Close the top cover firmly by pushing the center part downward until it locks into place.



NOTE

- ◆ When inserting the thermal paper, make sure it does not slant.
- ◆ Push the top cover firmly to close and avoid one side lock defect.
- ◆ DO NOT cover the paper outlet or hold down the thermal paper ejected. Doing so may cause a paper jam.
- ◆ DO NOT touch the platen. Doing so may cause loss of printing quality or damage.

HINT

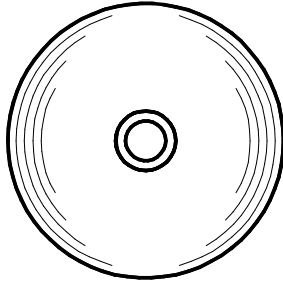
- Leaving the printer with the thermal paper for a long time may cause a paper feeding problem because the surface of the thermal paper sticks to the thermal head (in the case of linerless label, the adhesive sticks to the platen) due to the environmental changes. In that case, open the top cover to operate the release lever, and separate the thermal paper from the thermal head and the platen. After that, close the top cover again before use.

■ Thermal Paper Shape

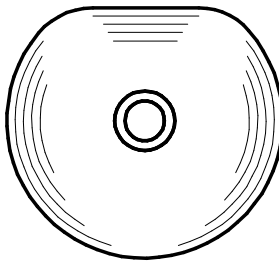
Always use the specified thermal paper. See "16. ACCESSORIES AND CONSUMABLE PARTS" for details.

NOTE

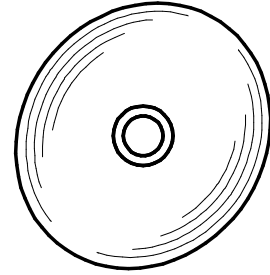
- ◆ DO NOT use the thermal paper whose end is glued, taped or folded.
- ◆ Use the thermal paper whose core outside diameter is ϕ 12 mm or more for non-adhesive tags and ϕ 18 mm or more for label paper.



Correct



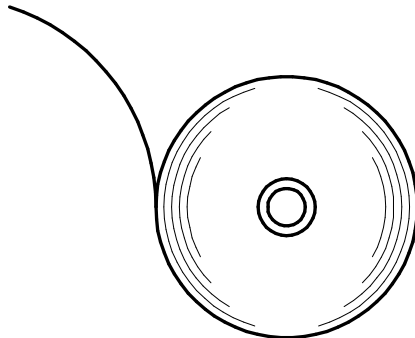
Incorrect



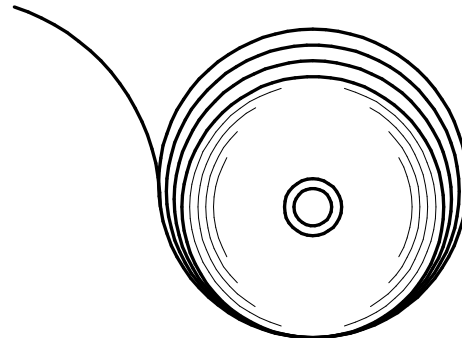
Incorrect

NOTE

- ◆ DO NOT use deformed thermal paper. Doing so may cause the printer damaged.



Correct



Incorrect

NOTE

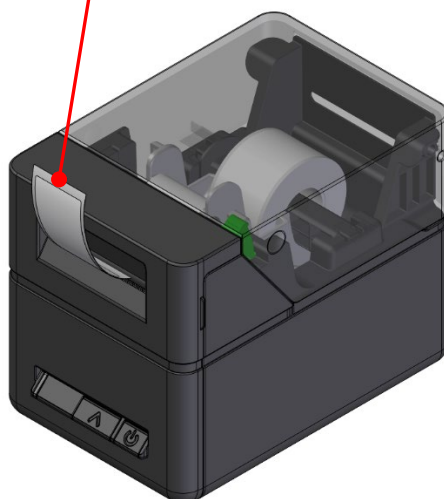
- ◆ In the case of using loosened thermal paper roll, rewind the roll before using it. If the paper is used while it loosens, it may cause a paper jam.

9. PREVENTION AND TREATMENT OF PAPER JAM

■ Prevention of Paper Jams

DO NOT touch the thermal paper while the paper is being ejected. Covering the paper outlet or pulling out the thermal paper when ejecting may cause a paper jam or line feed failure.

DO NOT touch the thermal paper during operating.



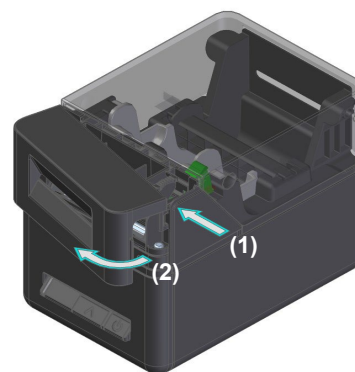
■ Clearing Paper Jam

When a paper jam occurs, remove the thermal paper according to the following procedure.

- (1) Turn off the printer.
- (2) Open the top cover to operate the release lever, and remove the jammed paper.

HINT

- When the paper jam error cannot be cleared by operating the release lever:
 1. While firmly pressing the edge of the main body's side (1) with one hand, remove the protective cover by opening it with the other hand (2).
 2. Remove the paper jam.
 3. Set the protective cover back to its original position.



- (3) Load the thermal paper straight and then close the top cover gently after automatic insertion.
- (4) Turn on the printer.
- (5) When the printer is recovered normally, the LED turns to steady green.

NOTE

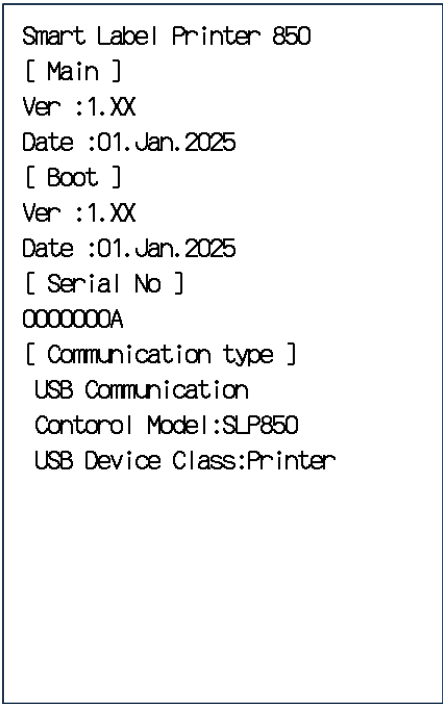
- ◆ Do not damage the printer when removing the thermal paper. Especially, do not touch the thermal head because it is easy to break.
- ◆ DO NOT touch the thermal head immediately after printing because it may get hot.

10. TEST PRINT

The printer can perform a test print.

In the test print, informations such as the firmware version are printed.

- (1) Install the thermal paper in the printer as instructed in "8. LOADING THERMAL PAPER".
Ensure that no error occurs, and then turn off the printer.
- (2) Hold the FEED Switch down and press the POWER Switch, then release the POWER Switch.
Release the FEED Switch when the test print has been started.
- (3) The printer returns to the print-ready status when the test print has completed.



```
Smart Label Printer 850
[ Main ]
Ver :1.XX
Date :01.Jan.2025
[ Boot ]
Ver :1.XX
Date :01.Jan.2025
[ Serial No ]
0000000A
[ Communication type ]
USB Communication
Contorol Model:SLP850
USB Device Class:Printer
```

**Figure 10-1 Test Print Example
(USB Model)**


```

Smart Label Printer 850
[ Main ]
Ver :1.XX
Date :01.Jan.2025
[ Boot ]
Ver :1.XX
Date :01.Jan.2025
[ Serial No ]
0000000A
[ Communication type ]
*Bluetooth Communication*
Printer Name:SLP850
Address:XX:XX:XX:XX:XX:XX
*USB Communication*
Control Model:SLP850
USB Device Class:Printer

```

**Figure 10-2 Test Print Example
(Bluetooth + USB Model)**

Table 10-1 Bluetooth Information

| Item | Description |
|--------------|-------------------|
| Printer Name | Printer Name |
| Address | Bluetooth Address |

```

Smart Label Printer 850
[ Main ]
Ver :1.XX
Date :01.Jan.2025
[ Boot ]
Ver :1.XX
Date :01.Jan.2025
[ Serial No ]
0000000A
[ Communication type ]
*Serial Communication*
Baud Rate:115200[bps]
Parity:None
Bit Length:8[bit]
*USB Communication*
Control Model:SLP850
USB Device Class:Printer

```

**Figure 10-3 Test Print Example
(Serial + USB Model)**

11. FUNCTION SETTINGS

This printer can set various functions according to use conditions and intended use.

The setting contents are stored in the Memory Switch (hereinafter referred to as MS) in the FLASH memory mounted in the printer, and it is possible to set MS by software or inputting command.

See "17. MS SETTINGS LIST" for the MS setting list.

HINT

- The memory switch can also be set from software. Download software from the download page listed on the rear cover.

The following software can be set.

- For Windows: "SII Printer Setting Utility" included in "SII Software Package for Windows"
- For iOS and Android: App "SLP800 Series Utility" provided by App Store or Google Play

12. CONNECTING TO HOST DEVICE

The printer supports the USB interface, the Bluetooth interface, and the serial interface. The available interface varies depending on the model, order the model of interface method to use from the following.

| Model | Interface | Product Name |
|-----------------------|--------------------------------------|---------------|
| USB model | USB interface | SLP850-UK0C11 |
| Bluetooth + USB model | Bluetooth interface USB interface | SLP850-BK0C11 |
| Serial + USB model | Serial interface USB interface | SLP850-SK0C11 |

Each interface cables are required separately for communication with the USB interface or serial interface. See "15. SPECIFICATIONS" for details of interface specifications.

The communication speed may be decreased depending on processing by software or print contents.

■ USB Interface / Serial Interface

- (1) Ensure that the printer is off.
- (2) Connect the interface cable to use to the interface connector on the back side of the printer.
- (3) Turn on the printer, and send data from the host device to the printer.
- (4) Verify that the data is printed correctly.



Figure 12-1 Printer and USB Cable Connection

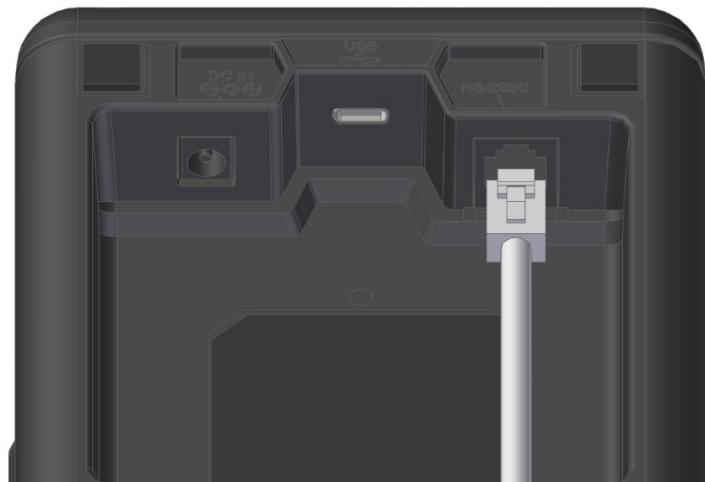


Figure 12-2 Printer and Serial Cable Connection

NOTE

- ◆ When connecting each interface cable to the interface connector, push the plug to the end.
- ◆ NEVER connect plugs of other interface cables including a modular cable or a phone line to the interface connector.

■ Bluetooth Interface

- (1) When the USB cable is connected to the printer, disconnect it from the printer.
- (2) Turn on the printer and pair it with the host device.

NOTE

- ◆ Application for inter-device communication needs to be added to the Android device separately.

- (3) In the factory state, the printer enters pairing mode for about 60 seconds by pressing the POWER Switch for 5 seconds or more with the printer off state. In the pairing mode, the LED blinks blue twice per second. In this period, pair the printer with the host device. Pairing is conducted by SSP (Simple Secure Pairing). However, it is needed to enter the PIN code when the host device requires the PIN code. The PIN code is "0000" at the factory.
- (4) Conduct Bluetooth connection with the host device.
After the Bluetooth connection is established, the LED lights in steady green.
- (5) Check the communication states on the host device.
- (6) Send data from the host device, and verify that the data is printed correctly.



WARNING

- ◆ The printer may affect medical or other electronic devices. Obtain information and data concerning influence due to radio interference from the respective manufacturers or dealers.
- ◆ When using the printer in medical institutions, follow their guidelines.
- ◆ DO NOT use the printer in areas or zones where its use is prohibited.

HINT

- For Bluetooth + USB models, Bluetooth communication and USB communication can be used (at the factory).

When the USB cable is connected, USB communication is prioritized, and when it is not connected, Bluetooth communication is prioritized.

Bluetooth communication can be stopped in a place where the output of radio waves is prohibited from the factory.

Press the POWER Switch 3 times within 3 seconds with the printer on state. The LED turns to steady green and only USB communication can be used.

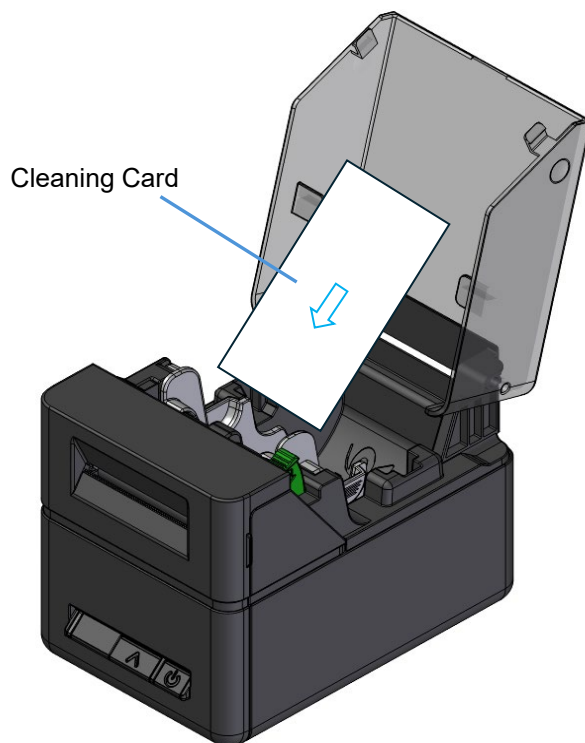
To use Bluetooth communication when Bluetooth communication is stopped, press the POWER Switch 3 times within 3 seconds with the printer on state. The LED blinks blue and Bluetooth communication and USB communication can be used.

- The distance of communication is approximately 10 m. However, the distance may differ depending on the radio interference and environment.

13. PRINTER MAINTENANCE

The printer can be cleaned using the Seiko SMART LABEL PRINTER Cleaning Card (SLP-CLNCRD).

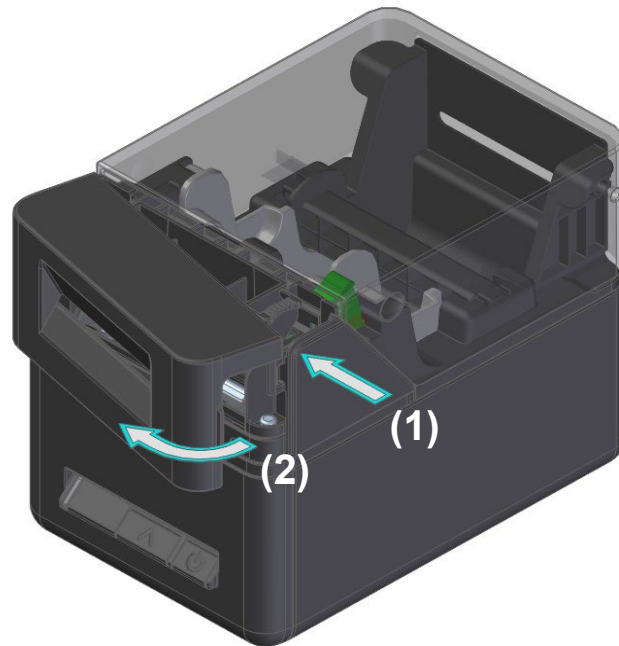
- (1) Remove the thermal paper from the printer.
- (2) Insert the Seiko SMART LABEL PRINTER Cleaning Card (SLP-CLNCRD).
- (3) The Cleaning Card is fed automatically.
- (4) Dispose of the used card properly.



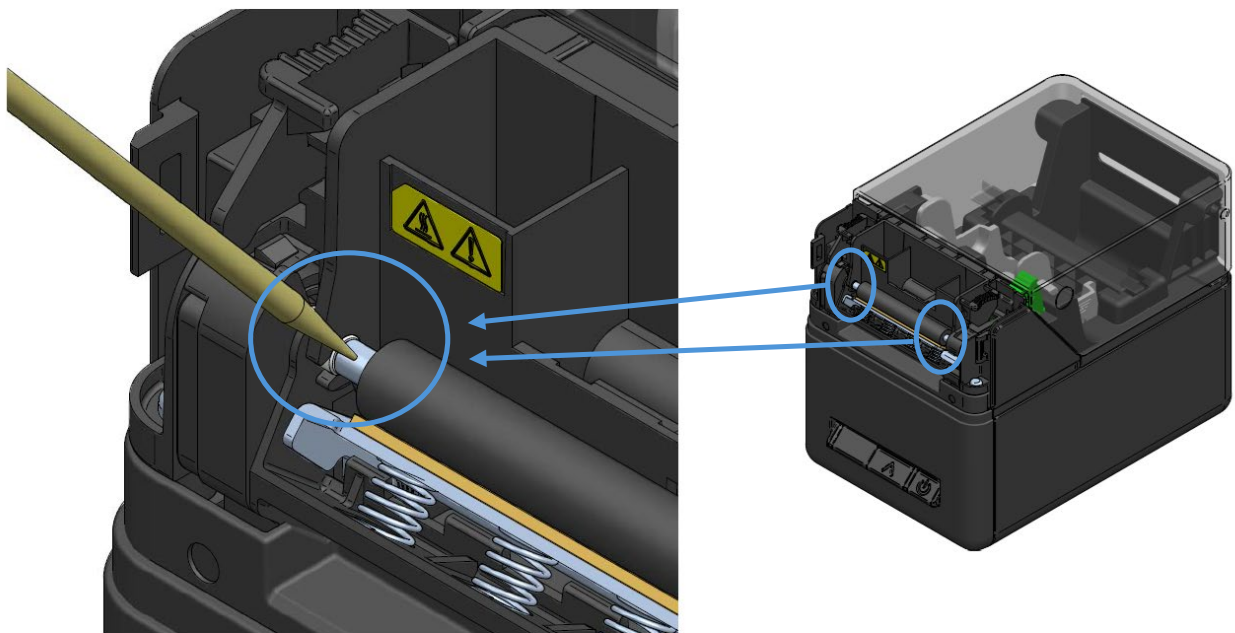
When label glue accumulates on the edge of platen during using the linerless label, cleaning can maintain the function of the printer for an extended period of time.

■ Cleaning Method

- (1) Turn off the printer.
- (2) While firmly pressing the edge of the main body's side (1) with one hand, remove the protective cover by opening it with the other hand (2).



- (3) Remove label glue accumulated on the platen shaft using a non-metallic scraping stick (plastic or wooden materials).



- (4) Set the protective cover back to its original position.

14. TROUBLESHOOTING

Check the following points before requesting for repair:

■ The power does not turn on

- Is the specified AC adapter being used?
- Are the AC cable and the AC adapter connected correctly?
- Are the AC adapter and the printer connected correctly?

■ The printer does not print or connect

- Is the interface cable connected correctly?
- Do the specifications of the interface cable conform to its specifications of this manual?
- Does the used interface conform to the printer?
- Is the Bluetooth status normal?
- Is the communication condition between the printer and the host device correct?
- Is the specified thermal paper being used? Is the paper orientation (surface/back) correct?

■ An error is shown

- See "LED Indication" described in "6. EACH PART OF PRINTER".
- Are the function settings of the printer correct?

15. SPECIFICATIONS

■ Printer Specifications

| Item | Specification |
|--|---|
| Model | SLP850 |
| Printing method | Thermal printing |
| Number of effective dots max. | 576 dots |
| Dot density | 11.8 dots/mm |
| Paper width max. / Printing width max. | 62.5 mm / 48.8 mm |
| Printing speed max. | 120 mm/s |
| Operating temperature | 5°C to 40°C (41°F to 104°F) |
| Relative humidity | 30%RH to 80%RH |
| Dimensions (W × D × H) | 113.2 mm × 169 mm × 132 mm ^{*1} |
| Mass | Approx. 710 g (excluding the thermal paper) |
| Input voltage | DC12.0 V ±10% |
| Current consumption ^{*2} | Waiting : Approx. 18 mA avg. Printing (print rate 25%) : Approx. 1.3 A max. Printing (print rate 100%) : Approx. 3.2 A max. |
| Power consumption (Power off state) | SLP850-U : 0.216 W SLP850-B : 0.232 W SLP850-S : 0.233 W |
| Power consumption (Bluetooth communication standby state) | Bluetooth on : 0.255 W Bluetooth off : 0.252 W |

*1: Excluding projections

*2: Condition: Dynamic division 120 dots printing

■ AC Adapter Specifications

(Specified Accessories)

| Item | Specification |
|------------------------------|------------------------------|
| Model identifier | PW-L1230-W1 |
| Input voltage | AC100 to 240 V |
| Input AC frequency | 50/60 Hz |
| Output voltage | DC12.0 V |
| Output current | 3.0 A |
| Output power | 36.0 W |
| Average active efficiency | 87.40% min. |
| Efficiency at low load (10%) | 77.40% min. |
| No load power consumption | 0.1 W max. |
| Dimensions (W × D × H) | 46.8 mm × 98.5 mm × 32.1 mm* |
| Mass | Approx. 170 g |

*: Excluding the cable.

■ Interface Specifications

USB interface specifications

| Item | Specification |
|--------------------------------|-------------------------|
| Version | Ver. 2.0 |
| Printer data transmission mode | Bulk transfer (12 Mbps) |

Bluetooth interface specifications

| Item | Specification |
|--------------------------|---------------|
| Version | Ver. 5.3 |
| Transmission power class | Class 2 |
| Profile | SPP, iAP2 |

Serial interface specifications

| Item | Specifications |
|--------------|---------------------------------------|
| Synchronous | Asynchronous |
| Baud rate | 9600, 19200, 38400, 57600, 115200 bps |
| Data length | 8 bits |
| Data control | Hardware control, Xon/Xoff |

■ Sale Destinations

Sale destinations for the printer and specified accessories are listed below.

| Country/ Region* | SLP850 | | | AC Adapter | AC Cable |
|---------------------|------------------|--------------------------|-----------------------|-------------|-------------|
| | USB model | Bluetooth + USB model | Serial + USB model | | |
| USA Canada | SLP850-UK0C11-13 | SLP850-BK0C11-03 | SLP850-SK0C11-23 | PW-L1230-W1 | CB-US07-18A |
| EU EFTA | SLP850-UK0C11-15 | SLP850-BK0C11-05 | SLP850-SK0C11-25 | | CB-EU06-18A |
| UK | SLP850-UK0C11-17 | SLP850-BK0C11-07 | SLP850-SK0C11-27 | | CB-GB01-18A |
| Brazil | SLP850-UK0C11-19 | - | - | | CB-BR01-18A |
| Malaysia | SLP850-UK0C11-1B | - | - | | CB-MY01-18A |
| Israel | SLP850-UK0C11-1D | - | - | | CB-IL01-18A |

*: Ask your SII sales representative if the product can be used in countries or regions other than those listed above.

16. ACCESSORIES AND CONSUMABLE PARTS

■ Specified Accessories

| Name | Model |
|--------------|-------------|
| AC adapter | PW-L1230-W1 |
| AC cable* | CB-US07-18A |
| | CB-EU06-18A |
| | CB-GB01-18A |
| | CB-BR01-18A |
| | CB-MY01-18A |
| | CB-IL01-18A |
| USB cable | IFC-U07-1 |
| Serial cable | IFC-WH-003S |

*: The shape of an outlet differs by country. Confirm it before using.


■ Specified Thermal Paper

Use the thermal paper specified by SII.

Ask your SII sales representative when considering purchasing.

When using different roll paper or thermal paper from the one specified, the printing quality or specified life of the thermal head would not be guaranteed.

17. MS SETTINGS LIST

 : Default value

General Setting 1

| MS | Function | Value | |
|----------|--|--|-----------------------|
| | | 0 | 1 |
| 1-1 | Mark Mode Selection (Mark Mode) | Enable ^{*1} | Disable ^{*2} |
| 1-2 to 3 | Thermal Paper Selection ^{*3} (Thermal Paper) | 00B : Non-adhesive tags 01B : Linerless label 10B : SLP Label 1^{*4} 11B : SLP Label 2 ^{*5} | |
| 1-4 | Reserved | Fixed | - |
| 1-5 | Reserved | - | Fixed |
| 1-6 | Reserved | Fixed | - |
| 1-7 | Reserved | - | Fixed |
| 1-8 | Reserved | - | Fixed |

*1: When printing continuously on linerless label, set to "Disable".

*2: When printing continuously on non-adhesive tags or SLP Label, set to "Enable".

*3: Excessive printing energy may shorten the life of the thermal head or cause a paper feed problem, so be sure to select the thermal paper and the print density correctly.

If the thermal paper to be used differs from the thermal paper selection, or if the print density selection is other than 100%, the reliability of the product specification may not be satisfied.

*4: This is the default setting. Normally, use this setting.

*5: Set this when you want to make the printing lighter.

General Setting 2

| MS | Function | Value | |
|----------|--|---|-------|
| | | 0 | 1 |
| 2-1 to 2 | Maximum Print Speed Selection (Print Speed) | 00B : Low 01B : Middle 10B : High 11B : Prohibition | |
| 2-3 | Reserved | - | Fixed |
| 2-4 | Reserved | - | Fixed |
| 2-5 | Reserved | - | Fixed |
| 2-6 | Reserved | Fixed | - |
| 2-7 | Reserved | - | Fixed |
| 2-8 | Reserved | - | Fixed |

General Setting 3

| MS | Function | Value | |
|-----|--|---------------|---------------------|
| | | 0 | 1 |
| 3-1 | iOS Auto Connection Selection (Auto Connection) | Enable | Disable |
| 3-2 | Reserved | - | Fixed |
| 3-3 | Inquiry Response Selection (Inquiry Response) | Always | Pairing Mode |
| 3-4 | Reserved | - | Fixed |
| 3-5 | Reserved | - | Fixed |
| 3-6 | Reserved | Fixed | - |
| 3-7 | Reserved | - | Fixed |
| 3-8 | Reserved | - | Fixed |

General Setting 4

| MS | Function | Value | |
|----------|------------------------------------|---|--------------|
| | | 0 | 1 |
| 4-1 to 3 | Baud Rate Selection (Baud Rate) | 001B : 115200 bps 010B : 57600 bps 011B : 38400 bps 100B : 19200 bps 101B : 9600 bps Other than those above : Prohibition | |
| 4-4 | Reserved | - | Fixed |
| 4-5 | Reserved | - | Fixed |
| 4-6 | Reserved | Fixed | - |
| 4-7 | Reserved | - | Fixed |
| 4-8 | Reserved | - | Fixed |

General Setting 5

| MS | Function | Value | |
|----------|--|---|-------|
| | | 0 | 1 |
| 5-1 to 4 | Print Density Selection* ¹ (Print Density) | 0000B : 70% 0001B : 75% 0010B : 80% 0011B : 85% 0100B : 90% 0101B : 95% 0110B : 100% 0111B : 105% 1000B : 110% 1001B : 115% 1010B : 120% 1011B : 125% 1100B : 130% Other than above : Prohibition | |
| 5-5 | Reserved | - | Fixed |
| 5-6 | Reserved | Fixed | - |
| 5-7 | Reserved | - | Fixed |
| 5-8 | Reserved | - | Fixed |

*1: Excessive printing energy may shorten the life of the thermal head or cause a paper feed problem, so be sure to select the thermal paper and the print density correctly.

If the thermal paper to be used differs from the thermal paper selection, or if the print density selection is other than 100%, the reliability of the product specification may not be satisfied.



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(Specifications are subject to change without notice.)