

# THERMAL PRINTER SM3-21L / SM3-21LW INSTRUCTION MANUAL

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in domestic environments, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

## Introduction

Thank you very much for purchasing the SM3-21L / LW thermal printer. Read the 'Safety Instructions' and '1. Operating Precautions' carefully before using this printer for safe handling of it. Save these instructions for future reference.

## Safety instructions

To use this equipment safely, or to protect damage to the equipment, the following symbols are used throughout this manual to highlight safety information.

	<b>Warning</b>	The symbol indicates that failure to observe these instructions or mishandling of this equipment could lead to severe injury or death.
	<b>Caution</b>	The symbol indicates that failure to observe these instructions or mishandling of this equipment could lead to injury or only property damage.

## Examples of Symbols

The symbol indicates caution (including DANGER or WARNING). The example in the left column indicates that caution or warning conditions exist.

The symbol indicates the action is prohibited. The example in the left column indicates disassembly is prohibited.

The symbol indicates a required operation that must be performed or an obligatory instruction. The example in the left column indicates unplugging is required.

## Warning

	Do not use any battery pack, AC adapter and AC power cord. Failure to follow this instruction may result in overheating or inflammation, which may lead to fire or accidents.
	Do not bend the power cord forcibly, or place heavy objectives on the power cord. Doing so may damage the power cord and cause fire or electric shock. If the power cord is damaged, discontinue using it.
	Never disassemble the printer, the AC adapter, the AC power cord, the battery pack or the battery charger. Failure to follow this instruction may result in overheating or inflammation, which may lead to fire or accidents.

## Caution

	Do not drop any metallic objects nor spill coffee, soft drinks, water and any other liquid.
	As the thermal head may be very hot immediately after printing, do not touch it. Be sure that the thermal head is cool before removing the paper jam or cleaning the thermal head.
	Do not plug or unplug the AC adapter and batteries with wet hand. It may result in electric shock, burn and failure.
	Do not use the printer in place where it will be exposed to excess moisture and where is watered. It may result in electric shock, burn and failure.
	Remove the interface cable or AC adapter from the connector or the receptacle by holding the connector or the AC plug. Never pull the cable itself. Doing so may damage the cable or adapter.
	For following case, turn the printer power OFF, unplug the AC power cord from outlet, and remove the battery. Continuous use may occur the printer failure, fire and electric shock. <ul style="list-style-type: none"> <li>◆ In case the problem is not cleared and fixed</li> <li>◆ Emitting smoke, making unusual noise and odd smell from the printer</li> <li>◆ The metallic object dropped or spilled liquid into the printer</li> </ul>

## 1. Operating Precautions

Observe the following for safe and proper operation.

### Notes on use

- ◆ Do not subject the printer to strong shocks by dropping or hitting it.
- ◆ Turn off the power switch and keep the AC plug removed from the outlet when the unit is not used.
- ◆ Do not pull the paper from the exit. It may cause the damage or failure of the printer mechanism.

### Notes on treatment of thermal paper

- ◆ Store the paper in a dry, cool and dark place.
- ◆ Do not rub the paper with hard substance.
- ◆ Keep the paper away from organic solvent.
- ◆ Do not let the paper touched with vinyl chloride film, eraser or adhesive tapes for hours.
- ◆ Do not put the paper on diazo print or wet copy that has just been copied.

## 2. Preparation

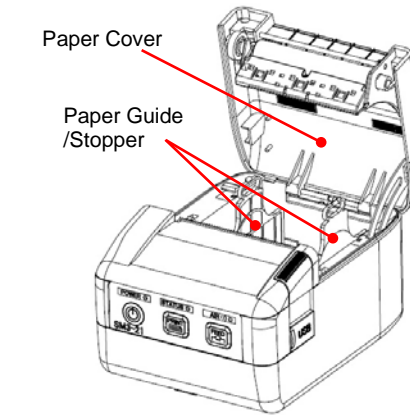
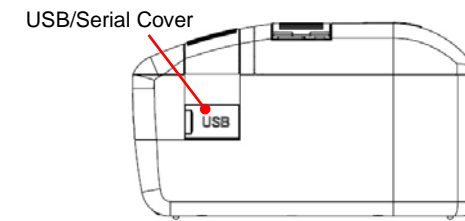
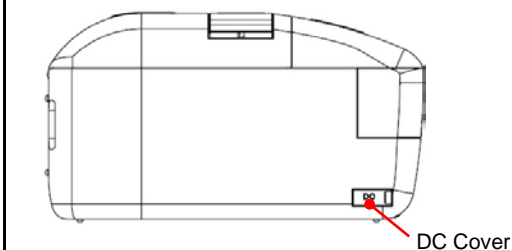
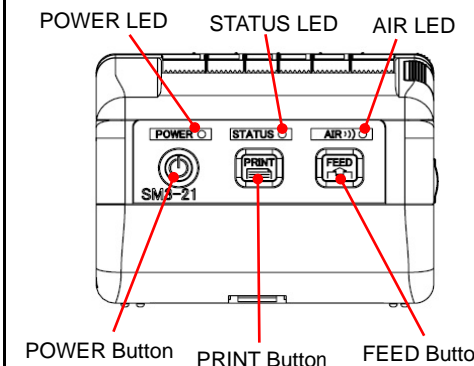
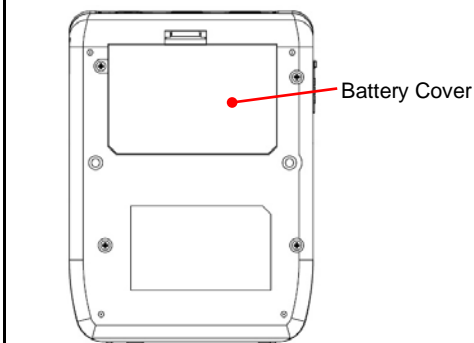
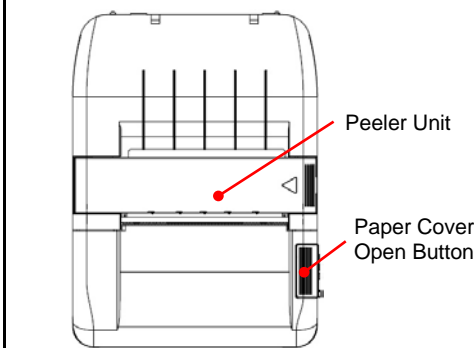
### 2.1 Unpacking

When unpacking the printer, make sure the following components are provided.

- Printer unit 1 unit
- Battery pack 1 piece
- AC adapter 1 piece
- Paper Rolls 1 roll
- Belt Clip 1 piece
- fixing screw 2 piece
- Instruction manual 1 volume

★ For ordering the thermal paper, contact our sales office or local distributors.

### 2.2 Components/Parts



POWER Button : Turn power on or off.

FEED Button : Feed paper during pressing this button.

PRINT Button : Select button to configure settings.

POWER LED : Indicate status of power and battery.

STATUS LED : Indicate status of printer.

AIR LED : Indicate status of the Bluetooth connection

USB/Serial Cover : Cover for wired interface.

Battery Cover : Cover for battery.

DC Cover : Cover for adapter and DC jack.

Paper Cover Open Button : Open paper cover.

Paper Guide : Move guide to fit paper width.

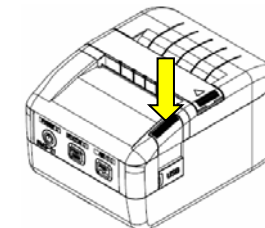
Stopper : Stopper for paper guide.

Peeler unit : Peel label.

## 3. Handling

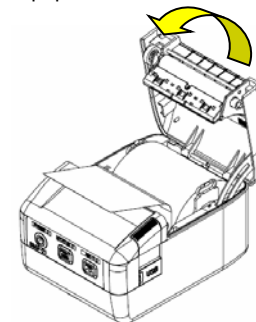
### 3.1 Setting Paper Roll

- 1 Press the cover open button to open the paper cover



- 2 Place the paper roll as shown in the picture. (Make sure the printing surface is correct, or it does not print properly)

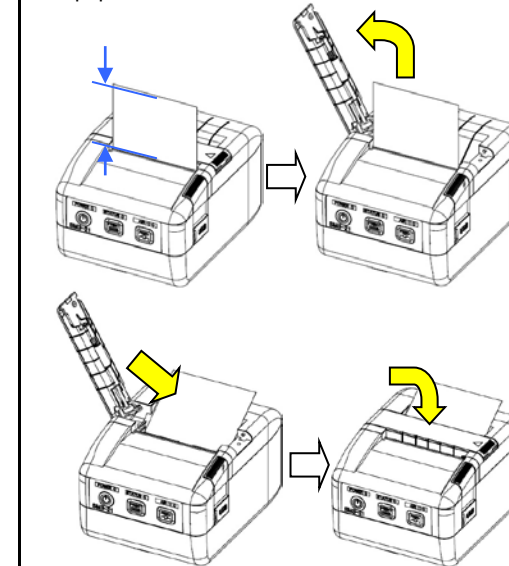
- 3 Close the paper cover.



- Handle the paper cutter carefully so as not to injure fingers or a hand.
- As the thermal head may be very hot immediately after printing, do not touch it to avoid burning your fingers.
- Be sure that the thermal head is cool before replacing a paper

### 3.2 Fixing peeler unit

- 1 Peel a label, and close paper cover as sticking out mat about 40mm
- 2 Left up the presenter unit, Set the peeler unit so as to sandwich the paper base.
- 3 Finally, press feed button to set position of label paper.



### 3.3 Battery pack

Battery pack voltage is low with batteries that have been just purchased or long unused. Charge such batteries before use.

● Insert AC adapter to DC jack and plug to connect to start charge. It takes three hours to full charge.

▼ With a new full charged battery, the printer prints 100m. (Continuous printing, Printing density 100%, Printing ratio 30%)

• Do not dispose the battery pack, and bring it to the near recycling shop.

### 3.4 STATUS LED

When an error occurs, the STATUS LED lights or blinks depending on the type of errors. Please Refer to a technical manual for the contents of an error.

### 3.5 Maintenance

Periodically clean the printer to maintain the printing quality and avoid failures.

Roll Paper : It is recommended to maintain the printer every 6 months or 1 million lines of printing

Label Paper : It is recommended to clean up printer head and roller everyday or every five rolls.

### (1) Thermal head

When cleaning the thermal dot line on the print head, use a cotton swab with alcohol (ethanol) and wipe off stains and dust.

### (2) Paper feed roller

When cleaning the paper feed roller and peeler roller, use a cotton swab with alcohol (ethanol) and wipe off stains and dust while rolling the roller.

### (3) Sensor and peripherals

Clean the stain, dust and paper powder on the paper empty sensor and paper cover sensor.

## (4) Peeler Unit

It's necessary for using continuously and smoothly to clean accumulated residue of paste from peeler unit as figure below, or the unit won't work because of the residue.

If the sign appeared, please clean up peeler unit.

### [Caution]

- Do not use volatile chemical agents, such as thinner and benzene.
- Do not get moisture or spill liquids inside of the printer.

## 4. Specifications

### 4.1 General specifications

Command systems ESC/POS compatible  
 Printing method Direct line thermal  
 Interface Serial, (RS232C)  
 USB, (Ver.2.0)  
 Bluetooth (MFI/SPP)  
 Wi-Fi (IEEE 802.11b) \*1  
 \*1 SM3-21LW model only.

Maximum printing speed  
 Max 100mm/s (Standard),  
 62.5mm/s (Peeler function)

Print width Max 48mm

Paper width 25.4~58mm  
 (Variable Paper Guide)

Barcode UPC-A/E, JAN13/8, CODE39/93,  
 ITF, CODABAR, CODE128

2D barcode QR, PDF417

Power supply Battery pack DC7.4V, 2000mAh,  
 AC adapter

Dimensions (without protruding parts)  
 88mm(W)x120mm(D)x66.5mm(H)

Weight 390g (on battery)

Operating environment  
 Temperature : -10°C to +50°C  
 Humidity : 20%RH to 85%RH  
 (No condensation)

Storage environment  
 Temperature : -20°C to +60°C  
 Humidity : 10%RH to 90%RH  
 (No condensation)

EMC Regulation VCCI CLASS B

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