



## Quick Guide

For printer model:

**TH208**



PN: 9001232(A)

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Great care has been taken in the preparation of this document. If any problems, mistakes, or omissions are found, please contact your SATO reseller or technical support center.

**FCC Statement**

The printer complies with the requirements in Part 15 of FCC Rules for a Class B Computing Device. Operating the printer in a residential area may cause unacceptable interference to radio and TV reception. If the interference is unacceptable, you can reposition the equipment, which may improve reception.

# Safety Precautions

Please read the following information carefully before installing and using the printer.

## Pictographic Symbols

This instruction manual and the printer labels use a variety of pictographic symbols to facilitate safe and correct use of the printer and to prevent injury to others and property damage. The symbols and meanings for them are given below. Be sure to understand these symbols well before reading the main text.

 Warning	Ignoring the instructions marked by this symbol and erroneously operating the printer could result in death or serious injury.
 Caution	Ignoring the instructions marked by this symbol and erroneously operating the printer could result in injury or property damage.

### Example Pictographs



The  pictograph means "Caution is required." A specific warning symbol is contained inside this pictograph (The symbol at left is for electric shock).



The  pictograph means "Should not be done." What is specifically prohibited is contained in or near the pictograph (The symbol at left means "Disassembly prohibited").



The  pictograph means "Must be done." What is specifically to be done is contained in the pictograph (The symbol at left means "Unplug the power cord from the outlet").

 <b>Warning</b>		
<p><b>Do not set on an unstable area</b></p> <ul style="list-style-type: none"> <li>Do not set on an unstable area, such as a wobbly table or slanted area or an area subject to strong vibration. If the printer falls off or topples over, it could injure someone.</li> </ul> <p><b>Do not place containers full of water or other liquid on the printer</b></p> <ul style="list-style-type: none"> <li>Do not place flower vases, cups, or other containers holding liquids, such as water or chemicals, or small metal objects near the printer. If they are spilled and get inside the printer, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock.</li> </ul> <p><b>Do not put objects inside the printer</b></p> <ul style="list-style-type: none"> <li>Do not insert or drop in metal or burnable objects inside the printer's openings (cable outlets, etc.). If foreign objects do get inside the printer, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock.</li> </ul> <p><b>Do not use other than the specified voltage</b></p> <ul style="list-style-type: none"> <li>Do not use other than the specified voltage. Doing so could result in fire or electric shock.</li> </ul>	<p><b>Always ground the connections</b></p> <ul style="list-style-type: none"> <li>Always connect the printer's ground wire to a ground. Not grounding the ground wire could result in electric shock.</li> </ul> <p><b>Handling of the power cord</b></p> <ul style="list-style-type: none"> <li>Do not damage, break, or modify the power cord. Also, do not place heavy objects on the power cord, heat it, or pull it because doing so could damage the power cord and cause a fire or electric shock.</li> <li>If the power cord becomes damaged (core is exposed, wires broken, etc.), contact your SATO reseller or technical support center. Using the power cord in this condition could cause a fire or electric shock.</li> <li>Do not modify, excessively bend, twist, or pull the power cord. Using the power cord in such a condition could cause a fire or electric shock.</li> </ul> <p><b>When the printer has been dropped or broken</b></p> <ul style="list-style-type: none"> <li>If the printer is dropped or broken, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock.</li> </ul>	<p><b>Do not use the printer when something is abnormal about it</b></p> <ul style="list-style-type: none"> <li>Continuing to use the printer in the event something is abnormal about it, such as smoke or unusual smells coming from it, could result in fire or electric shock. Immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center for repairs. It is dangerous for the customer to try to repair it, so absolutely do not attempt repairs on your own.</li> </ul> <p><b>Do not disassemble the printer</b></p> <ul style="list-style-type: none"> <li>Do not disassemble or modify the printer. Doing so could result in fire or electric shock. Ask your SATO reseller or technical support center to conduct internal inspections, adjustments, and repairs.</li> </ul> <p><b>Regarding the cutter</b></p> <ul style="list-style-type: none"> <li>Do not touch the cutter with your hands or do not put something into the cutter. Doing so could result in an injury.</li> </ul> <p><b>Using the head cleaning fluid</b></p> <ul style="list-style-type: none"> <li>Use of flame or heat around the head cleaning fluid is prohibited. Absolutely do not heat it or subject it to flames.</li> <li>Keep the fluid out of reach of children to prevent them from accidentally drinking it. If the fluid is drunk, immediately consult with a physician.</li> </ul>

⚠ <b>Caution</b>		
<p><b>Do not place in areas with high humidity</b></p> <p> • Do not place the printer in areas with high humidity or where condensation forms. If condensation forms, immediately turn off the power switch and do not use the printer until it dries. Using the printer while condensation is on it could result in electric shock.</p> <p><b>Carrying the Printer</b></p> <p> • When moving the printer, always unplug the power cord from the outlet and check to make sure all external wires are disconnected before moving it.</p> <p> Moving the printer with the wires still connected could damage the cords or connecting wires and result in a fire or electrical shock.</p> <p> • Do not carry the printer with paper loaded in it. The paper could fall out and cause an injury.</p> <p>• When setting the printer on the floor or a stand, make sure not to get your fingers or hands pinched under the printer feet.</p> <p><b>Power supply</b></p> <p> • Do not operate the power switch or plug in/unplug the power cord with wet hands. Doing so could result in electric shock.</p>	<p><b>Power cord</b></p> <p> • Keep the power cord away from hot devices. Getting the power cord close to hot devices could cause the cord's covering to melt and cause a fire or electrical shock.</p> <p> • When unplugging the power cord from the outlet, be sure to hold it by the plug. Pulling it by the cord could expose or break the cord wires and cause a fire or electric shock.</p> <p> • The power cord set that comes with the printer is especially made for this printer. Do not use it with any other electrical devices.</p> <p><b>Top cover</b></p> <p> • Be careful not to get your fingers pinched when opening or closing the top cover. Also be careful the top cover does not slip off and drop.</p> <p><b>Print head</b></p> <p> • The print head is hot after printing. Be careful not to get burned when replacing paper or cleaning immediately after printing.</p> <p> • Touching the edge of the print head immediately after printing could result in injury. Use caution when replacing the label or when cleaning the print head. You should not replace the print head without having received the proper training.</p>	<p><b>Loading paper</b></p> <p> • When loading roll paper, be careful not to get your fingers pinched between the paper roll and the supply unit.</p> <p><b>When not using the printer for a long time</b></p> <p> • When not using the printer for a long time, unplug the power cord from the outlet to maintain safety.</p> <p><b>During maintenance and cleaning</b></p> <p> • When maintaining and cleaning the printer, unplug the power cord from the outlet to maintain safety.</p>

## Precautions for Installation and Handling

Printer operation can be affected by the printer environment. Refer to the following instructions for installation and handling of the printer.

### Select a Safe Location

#### **Place the printer on a surface that is flat and level.**

If the surface is not flat and level, this may result in poor print quality. This may also cause malfunction and shorten the life span of the printer.

#### **Do not place the printer on a location that produces vibration.**

Do not carry the printer when the roll label is set. Vibrating the printer may cause malfunction and shorten the life span of the printer.

#### **Keep the printer out of high temperature and humidity.**

Avoid locations subject to extreme or rapid changes in temperature or humidity.

#### **Do not place the printer in a location subject to water or oil.**

Do not place the printer in a location where it will be splashed with water or oil. Water or oil in the printer may cause a fire, electric shock, or malfunction.

#### **Avoid dust.**

Dust build up may result in poor print quality. This may cause not only malfunction but also shorten the life span of the printer.

#### **Keep out of direct sunlight.**

This printer has a built-in optical sensor. Exposure to direct sunlight will make the sensor less responsive and may cause the label to be sensed incorrectly. Close the top cover when printing.

### Power Supply

#### **This printer requires an AC power supply.**

Be sure to connect the printer to an AC power supply via the supplied AC adapter. Failure to do so may result in malfunction.

#### **Connect the power cord to a grounded power outlet.**

Make sure that the printer is plugged into a grounded power outlet.

#### **Provide a stable source of electricity to the printer.**

Do not share the power outlets with other appliances such as a heater and refrigerator requiring a measurable amount of power. Also, avoid using the power outlet near where such appliances are plugged into. This may cause voltage reduction and malfunction.



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# 1

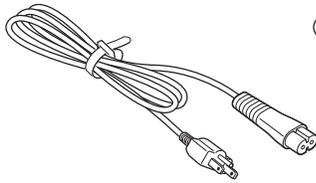
## ACCESSORIES

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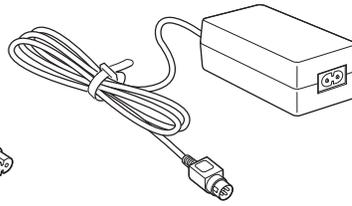
Make sure that you have received all of the following items in the package. If there are any accessories missing, contact your SATO reseller or technical support center.



User documents  
(Quick Guide  
and Warranty)



Power cord



AC adapter



USB cable

## ABOUT THE BOX

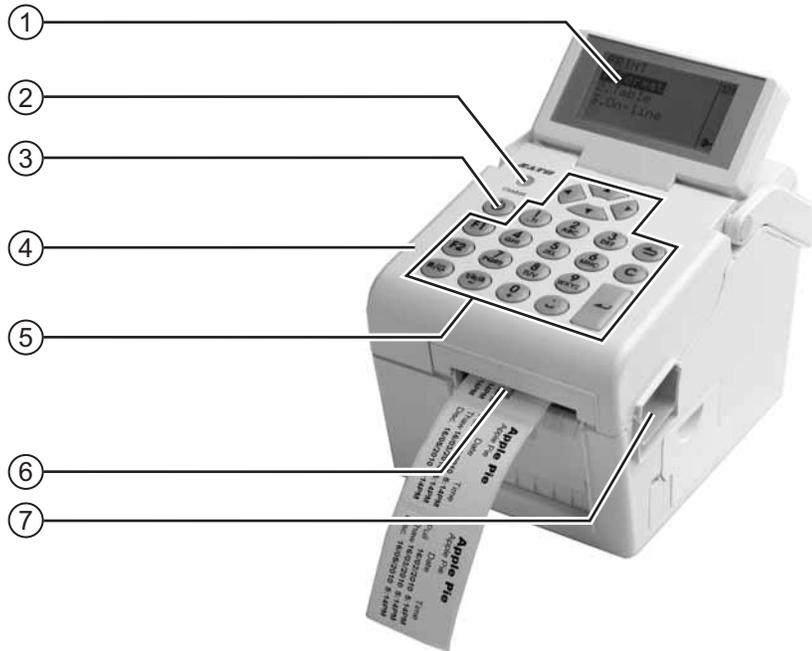
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Please retain both the box in which the printer was packed, and the cushioning material (cushions that hold the printer in place). If you ever need to send in the printer for repair, repack it in this box.

## PARTS IDENTIFICATION

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### Front view



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① **LCD panel**

Display the operator menus, printer status, selections for settings and error message. The LCD panel can be tilted to an angle which is most comfortable for the user's view.

② **CHARGE indicator**

It turns on when the optional battery pack is charging. It turns off when the battery pack is fully charged or no battery pack is in the printer.

③ **Power button**

Press and hold for one second to turn on the power.  
Press and hold for three seconds to turn off the power.

④ **Top cover**

Open this cover to load the media.

⑤ **Operator panel**

It consists of alpha-numeric keypad, arrow buttons and other functional buttons.

⑥ **Media ejection slot**

Opening for media output.

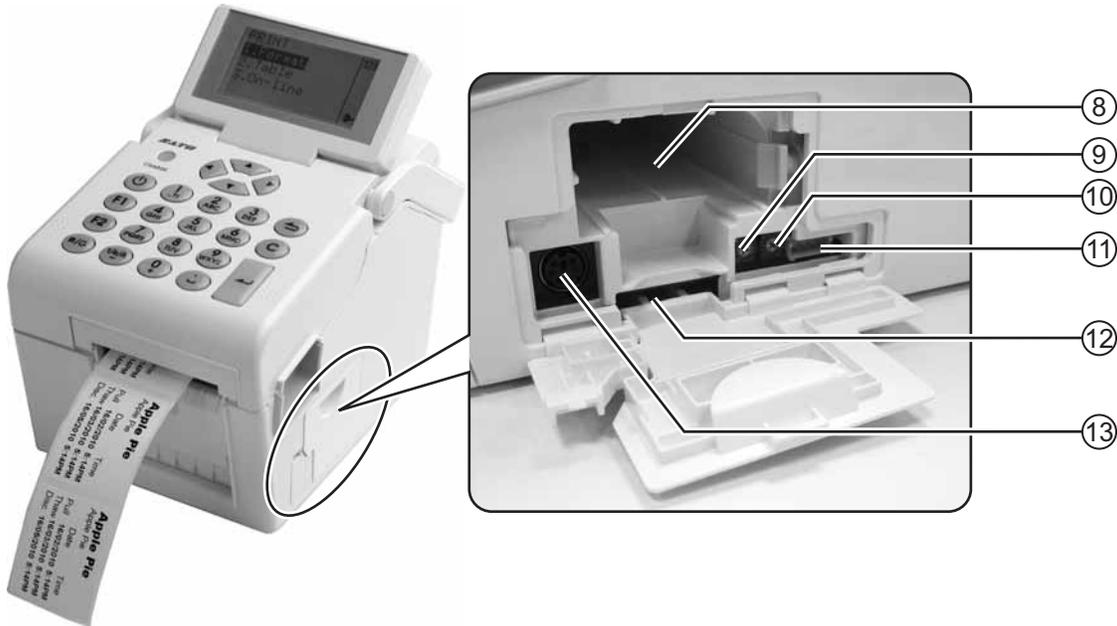
⑦ **Cover open/close latch**

Push the latch on the right side of the printer downward to open the top cover of the printer.

To close top cover, push down firmly on left and right side of top cover until click sound is heard. Make sure top cover is closed properly to ensure proper feeding and printing of labels.

**PARTS IDENTIFICATION (cont'd)**

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**Front view with battery cover open****⑧ Battery pack compartment**

Insert the optional battery pack into the compartment with the terminal side facing inward.

**⑨ VR1 (I-Mark) potentiometer**

Adjust for I-Mark sensor level calibration.

**⑩ VR2 (Gap) potentiometer**

Adjust for Gap sensor level calibration.

**⑪ CN10 terminal**

To connect printer to the testing jig. This is only for used by SATO authorised technical personnel.

**⑫ SD card slot**

To insert SD card for additional memory.

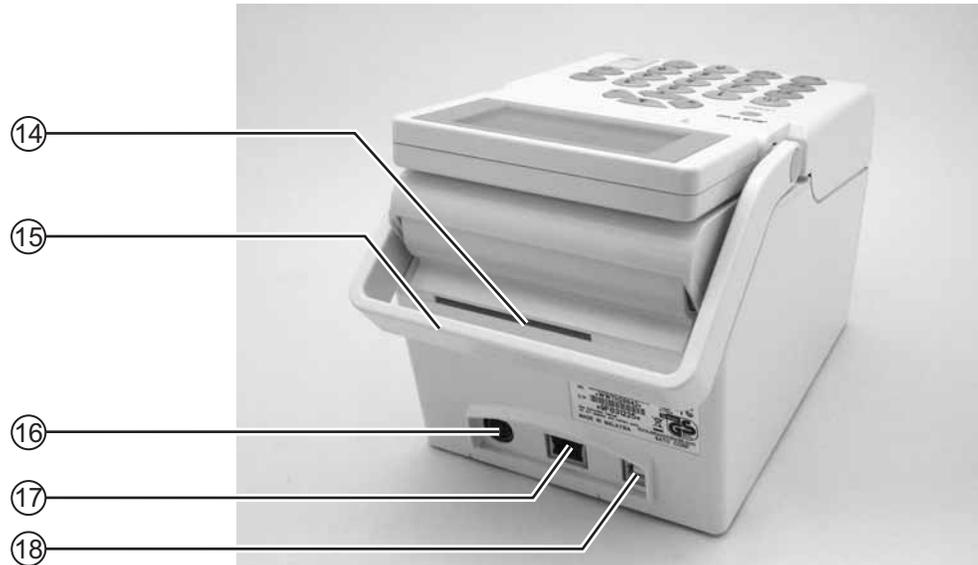
**⑬ Scanner connector**

To connect printer to a PS/2 barcode scanner.

## PARTS IDENTIFICATION (cont'd)

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### Back view



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⑭ **Media inlet**

An opening for Fan-folded media or media from unwinder to feed in to the printer.

⑮ **Handle**

To carry the printer around.

⑯ **DC input power connector**

Supplies power to the printer by inserting the power cable of the AC adapter.

⑰ **LAN interface connector\***

To connect printer to the host computer using LAN interface.

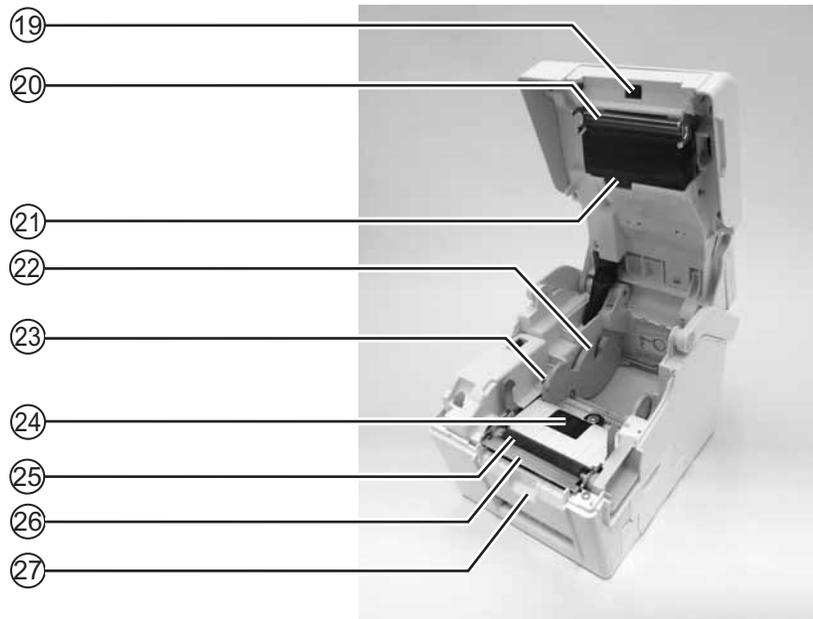
⑱ **USB interface connector\***

To connect printer to the host computer using the USB interface.

**\* The availability of the interface connector depends on the type of printer you purchased.**

**PARTS IDENTIFICATION (cont'd)**

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**Internal view when Top cover is opened****①9 Dispensing sensor (Label taken sensor)**

Detects the label is taken away after dispensed.

**②0 Print head**

This component is used to print on the media. Perform maintenance at regular intervals.

**②1 Gap sensor**

Detects the gap of the label.

**②2 Roll media holder**

To hold the roll media and adjust it to meet the size of the media used.

**②3 Media guide**

A guide for the media to feed properly.

Make sure the media guides are adjusted to both edges of the label roll.

**②4 I-Mark/ Gap sensor**

Detects the I-Mark on the media or gap of the label.

**②5 Platen roller**

This roller feeds the media. Perform cleaning maintenance at regular intervals.

**②6 Dispenser/ Tear off plate**

Used to separate the label from the liner or to tear off the journal paper.

**②7 Pressure bracket**

To hold the dispensing roller for label liner (backing paper) movement.

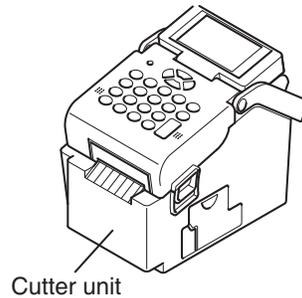
## **PARTS IDENTIFICATION (cont'd)**

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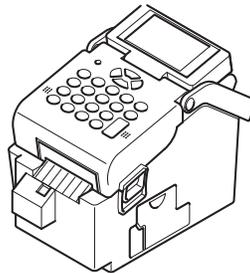
There are three types of TH208 printers:

- Standard (with no cutter)
- Cutter type
- Cutter type for linerless labels

### **Cutter type unit**



### **Cutter type unit for linerless labels**



Cutter unit for linerless labels



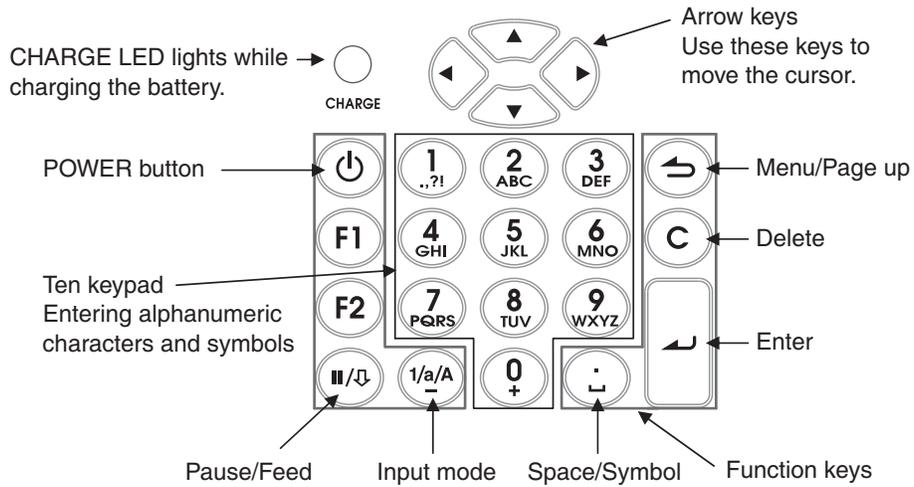
#### **WARNING**

- The cutter is sharp. Be cautious so as to not cut your fingers.

**PARTS IDENTIFICATION (cont'd)**

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**Operation Panel**



**PARTS IDENTIFICATION (cont'd)**

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**Function Keys**

<b>POWER button</b>	<b>Power ON:</b> Hold down for 1 second. <b>Power OFF:</b> Hold down for more than 3 seconds.
<b>Menu / Page up</b>	Goes to the initial screen or up one level. <b>[Menu]</b> Hold down for more than 1 second to go back to main menu. <b>[Page up]</b> Press once to go up one level.
<b>Delete</b>	Deletes characters. Press once for deleting the character to the left of the line cursor. Hold down for deleting the entire row of input characters.
<b>F1</b>	Menu access (note: available functionality determined by corporate headquarters)
<b>F2</b>	Input mode/press once: Scroll mode. Scrolls within a column by pressing an arrow key. Input mode/press twice: Jump mode. Jumps between columns in a table by pressing an arrow key.
<b>Pause / Feed</b>	<b>[Pause]</b> Print mode/press once: Stops print job/cancels print job. Print mode/press again: Feeds label. <b>[Feed]</b> Feeds one label.
<b>Input mode</b>	Toggles between different input modes. <b>[1]</b> Numeric input (default) <b>[a]</b> Lower case input <b>[A]</b> Upper case input
<b>Space / Symbol</b>	Enters space/symbols such as [.] [.] [;] [\$] [€] ["] [space] [?] [€] [£] [\$] [¥]
<b>Enter</b>	Confirms an input sequence. Confirms a selection in a menu list.

# 2

## CHARGING THE BATTERY PACK

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### CHARGING BY INSTALLING THE BATTERY PACK IN THE BATTERY CHARGER (OPTIONAL)

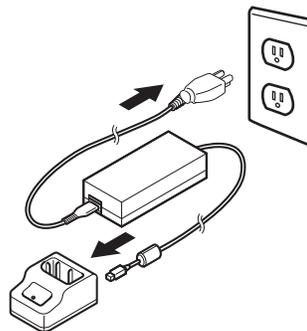
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Install the battery pack in the battery charger (optional) and charge it.

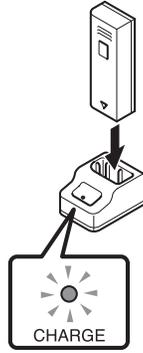


#### WARNING

- The optional battery charger set provided for this printer is specific to this printer. Do not use it for other electrical equipment.



1. Connect the power cord from the AC adapter to the charger unit. Then, connect the power cord to the AC adapter and plug it to the outlet.



2. Insert the battery pack into the slot, with the terminal pointing downward. When charging begins, the CHARGE lamp will be illuminated red. When charging is complete, the CHARGE lamp will be illuminated green, to indicate that the battery is fully charged.
3. Remove the battery pack when charging has been completed.

### Charging time

It takes about 1.5 hours for the CHARGE lamp to turn green when charging a completely depleted battery.

### Notes

- When the CHARGE lamp is not illuminated, check that the battery pack is installed securely. The battery may not be charged if it is not securely installed.
- When a charged battery pack is inserted in the charger, the CHARGE lamp first illuminates red, and then it is illuminated green.

## **CHARGING BY INSTALLING THE SUPPLIED AC ADAPTER ON THE PRINTER**

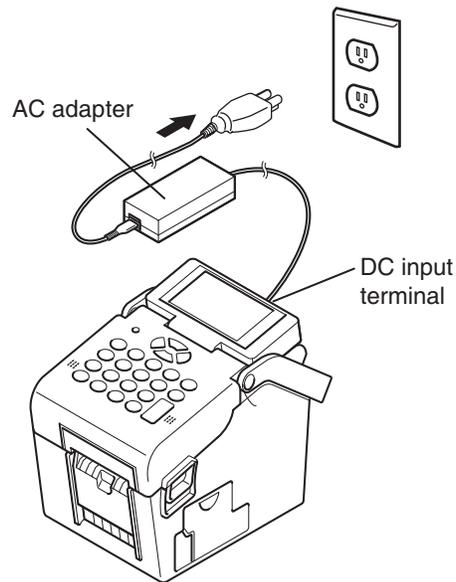
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This charges the battery pack while it is installed in the printer.



### **WARNING**

- The AC adapter set provided for this printer is specific to this printer. Do not use it for other electrical equipment.
- Use only power supplies listed in the Basic Specifications.



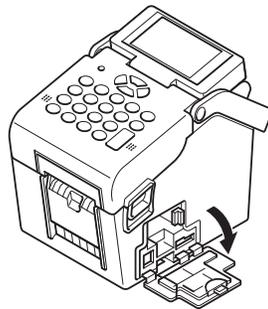
1. Insert the DC power cord in the DC input terminal.
2. Connect the power cord to the AC adapter and plug it into the outlet.

**Notes**

- When charging begins, the CHARGE LED illuminates.
- When charging has been completed, the CHARGE LED turns off, which indicates that the battery is fully charged.
- **Charging time:** It takes about 6 hours for the CHARGE LED to turn off when charging a completely depleted battery.

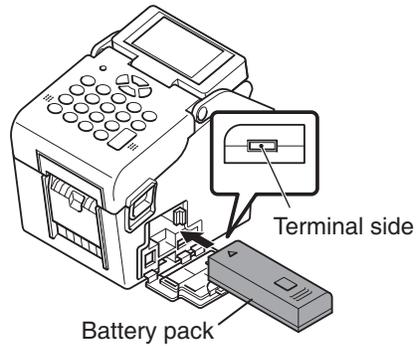
## **INSTALLING AND REMOVING THE BATTERY PACK**

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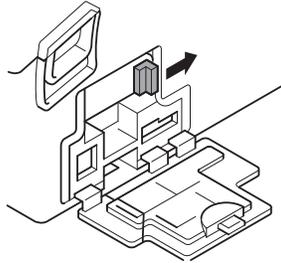


1. Open the battery cover.

## Section 2: Preparing for First-Time Operation



2. Insert the battery pack, then close the battery cover. Insert the battery pack with the terminal side toward the printer.



3. To remove the battery pack, press the blue hook to unlock it, then hold the tab and pull out the battery pack.



### CAUTION

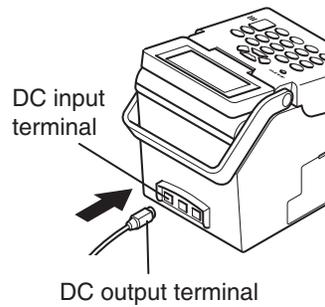
- Be sure to turn the power off before removing or replacing the battery pack.
- When the power is off, the LCD display turns off. Do not remove the battery pack until the LCD display turns off.
- Note that removing the battery pack by the operation above may prevent updating the information in the printer memory.

## USING THE AC ADAPTER

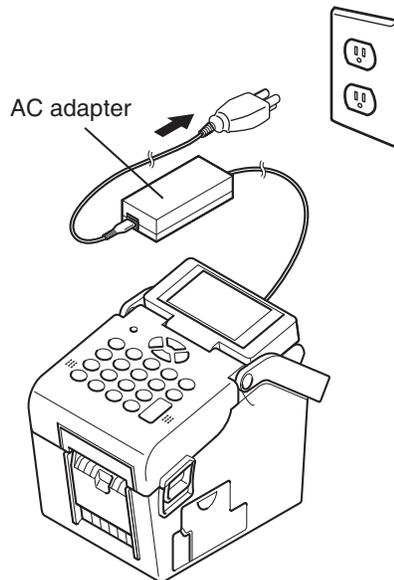
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Install the supplied AC adapter on the printer for use.

	<p><b>CAUTION</b></p> <ul style="list-style-type: none"><li>• The AC adapter set provided for this printer is specific to this printer. Do not use it for other electric equipment.</li><li>• Use only power supplies listed in the Basic Specifications.</li></ul>
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1. Insert the DC output terminal into the DC input terminal.



2. Connect the AC adapter to the outlet.



**CAUTION**

- Be sure to turn the printer power off before detaching the DC output terminal of the AC adapter, or before disconnecting the power supply.
- Note that disconnecting the power supply in ways other than described above may prevent the printer from correctly storing any settings in memory.
- No battery pack is necessary when the AC adapter is used. When the battery pack and AC adapter are used simultaneously, charging begins if the battery is not fully charged.

# 3

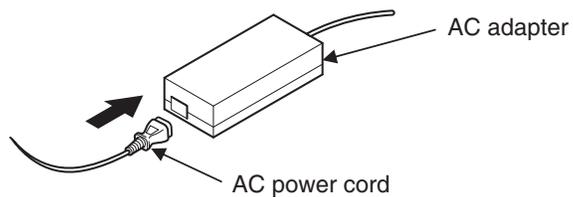
## TURNING ON THE POWER

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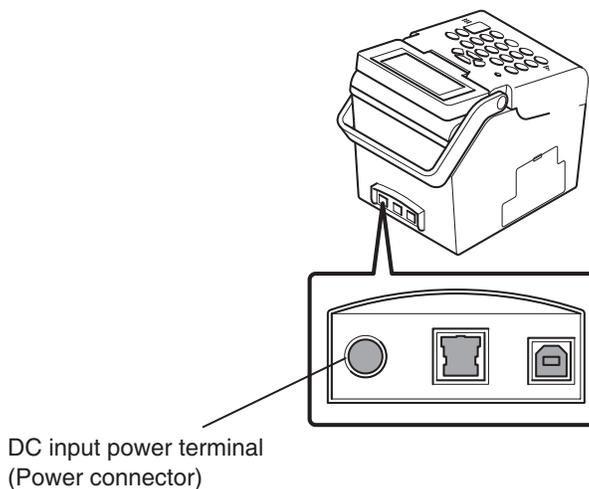
### SETTING THE POWER

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Plug the DC power cord of the AC adapter into the printer and turn on the power.



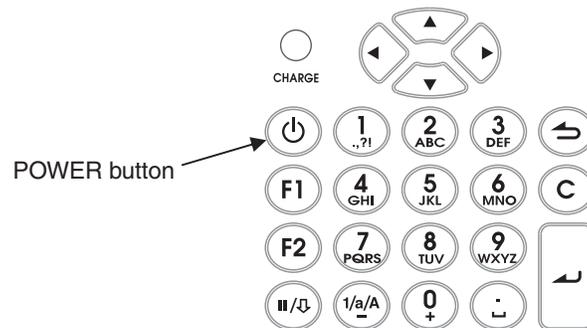
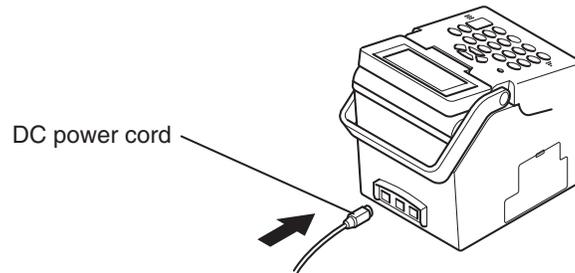
1. Connect the AC power cord to the AC adapter.



2. Connect the printer to the AC adapter. Connect the AC adapter to the AC power outlet.

### Section 3: Turning On the Power

3. When plugging the DC power cord into the printer's power connector, make sure the DC power cord connector is oriented properly.
4. When plugging in the DC power cord to the printer, use one hand to hold the printer while using the other hand to plug in the cord.
5. Make sure the flat side of the DC power cord is facing upward.



6. Press the POWER button on the operation panel of the unit. The LCD display is illuminated when the printer is turned on.
7. Hold down the POWER button for more than 3 seconds to turn off the printer. When the power is off, the LCD display turns off.

	<p><b>CAUTION</b></p> <ul style="list-style-type: none"><li>• The power cord set supplied with this printer is only for use with this printer. Do not use it for other electrical products.</li><li>• Do not operate the POWER button or plug in/unplug the power cord with wet hands. Doing so could result in electric shock.</li></ul>
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# 4

## BASIC SPECIFICATIONS

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<b>Model name</b>	<b>TH208</b>
Printing method	Direct Thermal
Head density (resolution)	203 dpi (8-dot/mm)
Printable area	6.1" pitch x 2.2" wide (156 mm pitch x 56 mm wide)
Unprintable area	<p><b>Length direction:</b> Upper: 0.07" (2.0 mm) Lower: 0.07" (2.0 mm)</p> <p><b>Width direction:</b> Left: 0.05" (1.5 mm) Right 0.05" (1.5 mm) These measurements do not include backing paper.</p>
Printing speed	2 to 4 inches per second (50 to 100 mm/sec) Printing speed differs depending on paper type and usage environment.
Label type /label shape	Roll paper (Winding face-in/face-out) We recommend using label manufactured or specified by SATO.
Paper thickness	140 to 190µm 0.005 to 0.007" (0.14 to 0.19 mm)

Model name	TH208
Label size	<p><b>Label size</b> <b>Continuous type</b></p> <p>[Die cut label] Pitch: 0.6 to 6.1"/16 to 156 mm (Backing paper 0.7 to 6.2"/19 to 159 mm) Width: 0.9 to 2.3"/25 to 60 mm (Backing paper 1.1 to 2.4"/28 to 63 mm)</p> <p>[Butt-cut label] Pitch: 0.6 to 6.1"/16 to 156 mm (Backing paper 0.6 to 6.1"/16 to 156 mm) Width: 1.1 to 2.3"/28 to 60 mm (Backing paper 1.1 to 2.3"/28 to 60 mm)</p> <p><b>Cutter type</b></p> <p>[Die cut label] Pitch: 0.6 to 6.1"/16 to 156 mm (Backing paper 0.7 to 6.2"/19 to 159 mm) Width: 0.9 to 2.3"/25 to 60 mm (Backing paper 1.1 to 2.4"/28 to 63 mm)</p> <p><b>Tear-off type</b></p> <p>[Die cut label] Pitch: 0.6 to 6.1" /16 to 156 mm (Backing paper 0.7 to 6.2"/19 to 159 mm) Width: 0.9 to 2.3"/25 to 60 mm (Backing paper 1.1 to 2.4"/28 to 63 mm)</p> <p>[Butt-cut label] Pitch: 0.6 to 6.1"/16 to 156 mm (Backing paper 0.6 to 6.1"/16 to 156 mm) Width: 1.1 to 2.3"/28 to 60 mm (Backing paper 1.1 to 2.3"/28 to 60 mm)</p> <p><b>Dispenser type</b></p> <p>[Die cut label] Pitch: 0.6 to 4.6"/16 to 117 mm (Backing paper 0.6 to 4.7"/16 to 120 mm) Width: 0.9 to 2.3"/25 to 60 mm (Backing paper 1.1 to 2.4"/28 to 63 mm)</p> <p>[Butt-cut label] Pitch: 0.6 to 4.6"/16 to 117 mm (Backing paper 0.6 to 4.6"/16 to 117 mm) Width: 1.1 to 2.3"/28 to 60 mm (Backing paper 1.1 to 2.3"/28 to 60 mm)</p> <p><b>Linerless type (without cutter)</b> Pitch: 1 to 3.9"/25.4 to 100 mm Width: 1.1 to 2.3"/28 to 60 mm</p> <p><b>Linerless type (with cutter)</b> Pitch: 1.7 to 3.9"/45 to 100 mm Width: 1.1 to 2.3"/28 to 60 mm</p> <p>Some restrictions may apply to the paper sizes that can be used depending on the type of paper, usage environment, and application.</p>
Outer diameter of paper roll / Internal diameter of roll core	<p>Outer diameter: Maximum <math>\varnothing</math>2.9"/<math>\varnothing</math>75 mm</p> <p>Internal diameter: <math>\varnothing</math>1.0"/<math>\varnothing</math>26 mm</p>

Model name	TH208
Label issuing mode	<p><b>Standard:</b> Continuous mode, Dispenser mode, Tear-off mode, Sensor off mode</p> <p><b>Option:</b> Cutter mode, Linerless mode (with cutter)</p> <p>Linerless mode (without cutter)</p>
Dimensions	<p>5.1" (W) x 7.6" (D) x 5.7" (H)</p> <p>132 mm (W) x 194 mm (D) x 147 mm (H)</p>
Weight	Approximately 3.7 pounds/1.7 kg
Power specifications	<p><b>AC adapter</b> Manufacturer: SATO Corporation Model name: PAH7020 Input power voltage: AC100V to AC240V <math>\pm</math>10% (Full range) Frequency: 50/60 Hz</p> <p><b>Power consumption</b> Input power voltage conditions: AC 100V At peak: 64.0VA/42.5W (at 30% printing ratio) During standby: 12.6VA/6.2W</p>
Battery pack	<p>Battery type: Lithium ion battery Manufacturer: SATO Corporation Model name: PT/MB400-BAT Rated voltage: 14.8V Rated capacity: 1700mAh (TYP) External dimensions: 1.6" W x 0.9" D x 4.2" H (43 mm W x 20.4 mm D x 109 mm H) Weight: Approximately 0.3lbs (Approximately 170g) Charge cycle: Approximately 300 times Charging time: Approximately 6 hours (Fully charged with the unit) Approximately 1.5 hours by dedicated charger</p>
Environmental conditions (Temperature/ Humidity)	<p>Operating environment: 32 to 104°F, (0 to 40°C) 30 to 80% RH (No condensation) Storage environment: 23 to 140°F, (-5 to 60°C) 30 to 90% RH (No condensation) (These values are not valid for labels and other supplies)</p>
Standard Interface	<p>(1) USB (Full speed, USB version 2.0 compliant) (2) Scanner connector (Supported PS/2) (3) SD card slot (4) FAT file system</p>
Options	Cutter unit, Linerless kit (w/cutter), Linerless kit (w/o cutter), External label unwinder, External label rewinder (RW350), Battery pack, Battery charger, SD card, Key cover, Wall-mounting kit, 1D barcode scanner, Full keyboard
LED	CHARGE (Red)

Model name	TH208
Operation buttons	<p><b>Ten keypad buttons:</b> 0 to 9 (for alphanumeric characters and symbol input)</p> <p><b>Function buttons:</b></p> <p style="text-align: center;">          </p> <p><b>Arrow buttons:</b></p> <p style="text-align: center;">     </p>
Paper length detection sensor	I-mark sensor (Reflective type) Gap sensor (Transmissive type)
Barcode	(1) UPC-A/E, JAN/EAN-8/13 (2) CODE39 (3) CODE128A/B/C, GS1-128 (UCC/EAN128) (4) Codabar (NW-7) (5) Interleaved 2 of 5 (6) BOOKLAND (2-5 char add-on code) (7) GS1 DataBar (RSS-14)
2D barcode	QR Code (Including Ver.8.1 Micro QR) Datamatrix
Resident embedded bitmap fonts	M 13 x 20, S 8 x 15, U + XU 5 x 9 (alphanumeric and symbols) X1 20 x 50 (alphanumeric and symbols) X2 8 x 20 (alphanumeric and symbols) X3 13 x 21 (alphanumeric and symbols) OCR-B 20 x 24 (alphanumeric in upper case) Price font 16 x 24 (numeric, period, currency marks) POP1 28 x 48 (numeric, comma, currency marks) POP2 48 x 68 (numeric, comma, currency marks) POP3 26 x 56 (numeric, comma, currency marks) Support subscript (numeric only): X1, X2, X3
Resident True Type fonts	SATO Sans, SATO Serif
Printing direction (Characters/Barcode)	<p><b>Characters:</b> 0°, 90°, 180°, 270°</p> <p><b>Barcode:</b> Parallel 1 (0°), Parallel 2 (180°), Serial 1 (90°), Serial 2 (270°)</p> <p>True Type text can be rotated 0 to 359° (1° increment).</p>
Barcode ratio	1:2, 1:3, 2:5, Free specification
Magnification ratio (Characters / Barcode)	<p><b>Characters:</b> Vertical 1 to 12 times, Horizontal 1 to 12 times</p> <p><b>Barcode:</b> 1 to 12 times</p>
Self-diagnostic function	(1) Broken head element check (2) Paper end detection (3) Test print (4) Cover open detection (5) Calendar check (6) Calendar battery check (7) Battery check (8) Cutter error

Model name	TH208
Noise (EMC) standard	FCC15B Class B
Safety standards	UL60950-1(2001) CSA22.2 No.60950-1-03
Wireless standards Wireless LAN (2.45 GHz)	FCC15B/FCC15C

**Notices regarding the registered trademarks and trademarks of other companies:**

QR Code is a registered trademark of DENSO WAVE INCORPORATED.  
This product is manufactured under Patent No. 6, 784, 906.  
SD logo is a trademark.

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