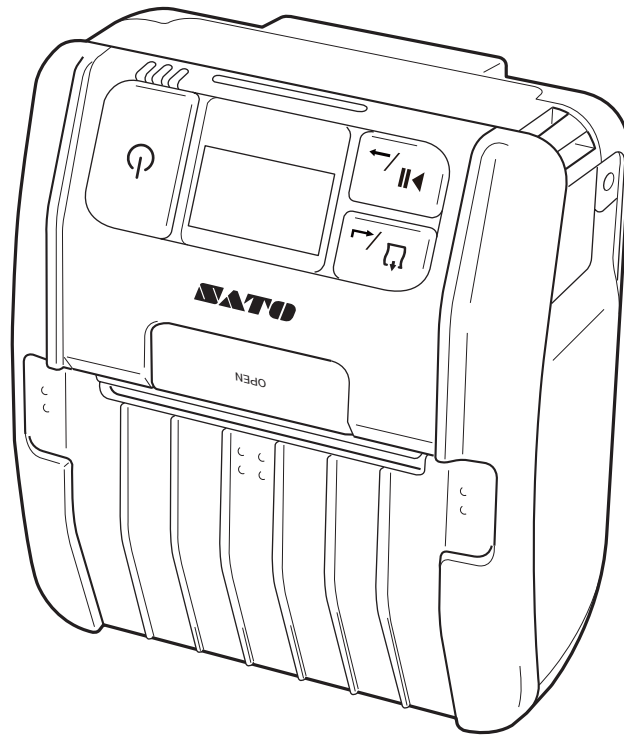




Barcode Printer

**VP208**

# Operator Manual



**SATO CORPORATION**

Before You Start

Operations

Troubleshooting

Options

Cleaning the Printer

Basic Specifications

## Preface

Thank you for purchasing SATO VP208 printer (hereafter “the printer”).

This manual supplies basic information on how to operate the printer in a short period.

Read the manual carefully to understand each function before use.

### Notes

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## Regulatory Approval

机器名称: 条码打印机

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴 联苯 (PBB)	多溴二 苯醚 (PBDE)
印刷电路板	×	○	○	○	○	○
电源、交流转换器 器电池组	×	○	○	○	○	○
热敏头、液晶显 示屏	×	○	○	○	○	○
电动机、切纸机	×	○	○	○	○	○
树脂(ABS、PC 等)	×	○	○	○	○	○
金属(铁、非铁 金属)	×	○	○	○	○	○
电缆等	○	○	○	○	○	×
包装材料(纸盒 等)	○	○	○	○	○	○

本表格依据SJ/T 11364的规定编制。

○：表示该有毒有害物质在该部件所有均质材料中的含量均在GB/T 26572 “电子信息产品中有毒有害物质的限量要求”的标准规定以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 “电子信息产品中有毒有害物质的限量要求”的标准规定。

### 环保使用期限



本标志中的年数，是根据2006年2月28日公布的“电子信息产品污染防治管理办法”和SJ/T11364 “产品污染防治标识要求”，适用于在中华人民共和国（除台湾、香港和澳门外）生产或进口的电子信息产品的“环保使用期限”。在遵守使用说明书记载的有关本产品安全和使用上的注意事项、且没有其他法律和规定的免责事由的情况下，在从生产日开始的上述年限内，产品的有毒、有害物质或元素不会发生外泄或突变，使用该产品不会对环境造成严重污染或对使用者人身、财产造成严重损害。

注1)：“环保使用期限”不是安全使用期限。尤其不同于基于电气性能安全、电磁安全等因素而被限定的使用期限。产品在经适当使用后予以废弃时，希望依照有关电子信息产品的回收和再利用的法律与规定进行处理。

注2)：本标志中的年数为“环保使用期限”，不是产品的质量保证期限。对于同一包装内包含电池、充电器等附属品的产品，产品和附属品的环保使用期限可能不同。

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# Table of Contents



Safety Precautions .....	2
Precautions for Handling .....	4
Checking the Including Items .....	4
1 Before You Start .....	5
1. Parts Identification .....	5
2. Charging a Battery .....	6
3. Setting the Label .....	7
4. Display .....	8
5. Icon .....	8
6. Lighting Pattern When the LED Lights .....	9
2 Operations .....	11
1. Normal Startup .....	11
2. Test Print Mode .....	33
3. List of Initial Value .....	35
3 Troubleshooting .....	36
1. Error List .....	36
2. List of Warning Icons .....	42
4 Options .....	43
5 Cleaning the Printer .....	43
1. Platen Roller .....	43
2. Print Head .....	43
3. Label Guide .....	43
6 Basic Specifications .....	44
1. Printer .....	44
2. Battery .....	45
3. Label Specifications .....	45

## Safety Precautions

This section describes how to safely operate the printer.

**Be sure to read and understand all instructions carefully before you use the printer.**

- These symbols show the safe and correct operation of the printer and how to prevent injury to others and property damage.
- The symbol explanations are as follows.

	<b>WARNING</b>	The Warning symbol indicates that you can cause death or serious injury if you do not follow the instruction or procedure.
	<b>CAUTION</b>	The Caution symbol indicates that you can cause injury or property damage if you do not follow the instruction or procedure.

- The symbol explanations are as follows.



The pictograph means "Caution is required".



The pictograph means "Must not be done".



The pictograph means "Must be done".



## WARNING



### ■ Do not use other than the specified voltage.

- Do not use other than the specified voltage (100 to 240 V AC). Doing so could cause a fire or electric shock.

### ■ Do not place objects into the printer

- Do not place metal or flammable objects inside the printer's opening. If a foreign object gets into the printer, immediately power off the printer and disconnect the AC adapter from the outlet. Then contact your SATO reseller or technical support center. If you operate the printer in this condition, it may cause fire or electric shock.

### ■ Handling of the AC Adapter

- Do not damage, break, or change the AC adapter. If you place a heavy object on the AC adapter or heat, bend too much, twist, or pull the AC adapter, the AC adapter may be damaged, which may cause fire or electric shock.
- If the AC adapter is damaged (the wires exposed or broken), contact your SATO reseller or technical support center. If you operate the printer in this condition, it may cause fire or electric shock.

### ■ When the printer has been dropped or broken

- If the printer is dropped or broken, immediately power off the printer and contact your SATO reseller or technical support center. If you operate the printer in this condition, it may cause fire or electric shock.

### ■ Do not use the printer when something is unusual about it

- Continuing to use the printer in the event something is unusual about it, such as smoke or unusual smells coming from it, may cause fire or electric shock. Immediately power off the printer and disconnect the AC adapter from the outlet. Then contact your SATO reseller or technical support center for repairs. It is dangerous for the customer to try to repair the printer, so absolutely do not try repairs on your own.



### ■ Do not disassemble the printer.

- Do not disassemble or modify the printer. Doing so may cause fire or electric shock. Contact your SATO reseller or technical support center to perform internal inspections, adjustments, and repairs.



### ■ Do not operate with wet hands.







- Do not operate the power switch, connect or disconnect the AC adapter with wet hands. Doing so could cause an electric shock.



### ■ Using the printer cleaning fluid




- Use of flame or heat around the printer cleaning fluid is prohibited. Do not heat it or subject it to flames.



 <b>WARNING</b>	
	<ul style="list-style-type: none"> <li>■ <b>Do not use in hazardous locations.</b> <ul style="list-style-type: none"> <li>• The printer is not explosion proof certified.</li> <li>• Do not use in a potentially explosive environment or atmosphere.</li> </ul> </li> </ul>



 <b>CAUTION</b>	
	<ul style="list-style-type: none"> <li>■ <b>Carrying the printer</b> <ul style="list-style-type: none"> <li>• When setting the printer on the floor or a stand, make sure not to get your fingers or hands pinched under the printer feet.</li> </ul> </li> <li>■ <b>AC adapter</b> <ul style="list-style-type: none"> <li>• When disconnecting the AC adapter from the outlet, be sure to grip it by the plug. Pulling on the cord may expose or break the wires and possibly cause fire or electric shock.</li> <li>• Do not put the AC adapter near a hot device. Leaving the AC adapter near a hot device could cause the adapter's housing to melt and possibly cause fire or electrical shock.</li> </ul> </li> <li>■ <b>Print head</b> <ul style="list-style-type: none"> <li>• Touching the edge of the print head with bare hand could cause injury. Be careful not to get injury for replacing the paper or cleaning.</li> <li>• You should not replace the print head without having received the correct training. Doing so could cause injury, burned or an electric shock.</li> </ul> </li> <li>■ <b>Handling the AC adapter when moving</b> <ul style="list-style-type: none"> <li>• On the occasion of carrying, first disconnect the AC adapter from the outlet. If the AC adapter is not disconnected, it may be damaged, which may cause fire or electric shock.</li> </ul> </li> <li>■ <b>Storing the printer cleaning fluid</b> <ul style="list-style-type: none"> <li>• Keep the fluid out of reach of children. If a child accidentally drinks the fluid, immediately consult with a physician.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Cutter</b> <ul style="list-style-type: none"> <li>• The cutter has the blade edge. Be careful not to get cut your finger.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Print head (taking care of high temperature)</b> <ul style="list-style-type: none"> <li>• The print head is hot after printing. Be careful not to get burned when replacing paper or cleaning.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Cover</b> <ul style="list-style-type: none"> <li>• Be careful not to get your fingers pinched when opening or closing the top cover.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>When not using the printer for a long time</b> <ul style="list-style-type: none"> <li>• When not using the printer for a long time, remove the battery, and disconnect the AC adapter from the outlet to maintain safety.</li> </ul> </li> <li>■ <b>During maintenance and cleaning</b> <ul style="list-style-type: none"> <li>• When maintaining and cleaning the printer, remove the battery to maintain safety. Also disconnect the AC adapter from the outlet.</li> </ul> </li> </ul>

## Safety Precautions on Batteries

**Be sure to read the instructions below to avoid decreased life span of the battery, overheating, smoke, rupture, or fire.**

 <b>WARNING</b>	
	<ul style="list-style-type: none"> <li>• Do not disassemble or modify the battery, such as soldering wire to the battery directly.</li> <li>• Do not apply heat to the battery or place the battery in fire.</li> <li>• Avoid short-circuiting the battery terminals.</li> <li>• When charging the battery, use the specified AC adapter.</li> <li>• Do not touch the battery terminals with wet fingers or moisten the battery with water or salty water.</li> <li>• Do not give serious shock to the battery or throw the battery. Also avoid using a broken or deformed battery.</li> <li>• Do not rub your eyes if battery fluid leaks out and comes into contact with your eyes. Rinse well with clean water such as tap water, and seek medical attention immediately. If leave as it is, it may cause eye damage.</li> <li>• If charging is not completed after the specified time elapses, stop charging.</li> <li>• If you notice any unusual odor, heat, deformation, discoloration, or any other abnormal conditions while using, charging, or storing the battery, do not use the battery.</li> <li>• If you notice battery leakage or unusual smell, do not use the battery. Keep the battery away from fire.</li> <li>• If you notice any dents or cracks on your battery crust caused by strong impacts or shocks, stop using the battery immediately and replace it with a new one. Continued use under these conditions may lead to abnormal overheating or fire.</li> </ul>
	

 <b>WARNING</b>	
	<ul style="list-style-type: none"> <li>• The life expectancy of the lithium ion battery pack ("battery") varies depending on usage. We recommend that you replace the battery after 500 charge cycles or 3 years from the date of first use, whichever is earlier.</li> </ul>

 <b>CAUTION</b>	
	<ul style="list-style-type: none"> <li>• Do not place battery in a high-temperature location, such as under direct sunlight or inside a closed car in hot weather.</li> <li>• If battery fluid leaks out and comes into contact with your skin or clothes, rinse well with clean water such as tap water. Battery fluid can damage human skin.</li> <li>• If you notice corrosion, unusual odor, heat, or any other abnormal conditions in the first use of the battery, do not use it and contact your SATO reseller or technical support center.</li> </ul>

### For Batteries

- To ensure the efficient use of scarce resources, isolate any used batteries by sealing the terminals with a tape and contact your SATO reseller or technical support center.
- Do not place the battery together with other batteries, such as dry-cell batteries.

## Precautions for Handling

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

Do not place the printer in an unlevel or slanted place. Doing so could cause falling.

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

Do not put the printer on a location that produces vibration.

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

Do not put the printer on a location with high temperature or humidity. High temperature and humidity may cause the decrease of life span of the printer. (recommended temperature: 10 to 30°)

### Avoid dust.

Do not put the printer on a location exposed to dust. It may cause failure or the decrease of life span of the printer.

### Do not supply power near from a heater or refrigerator.

Do not supply power from the power source near an electrical device that requires a measurable amount of power. Voltage reduction may cause malfunction or defect.

## Checking the Including Items

Check the including items.

If there is a missing item, contact the SATO reseller or technical support center.

### Global Warranty Program leaflet



### Quick guide



### BD address sticker

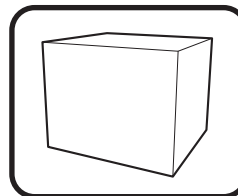


### Battery

### AC adapter (for Thailand, Vietnam)

## ▲ Keep the Warranty and Packaging

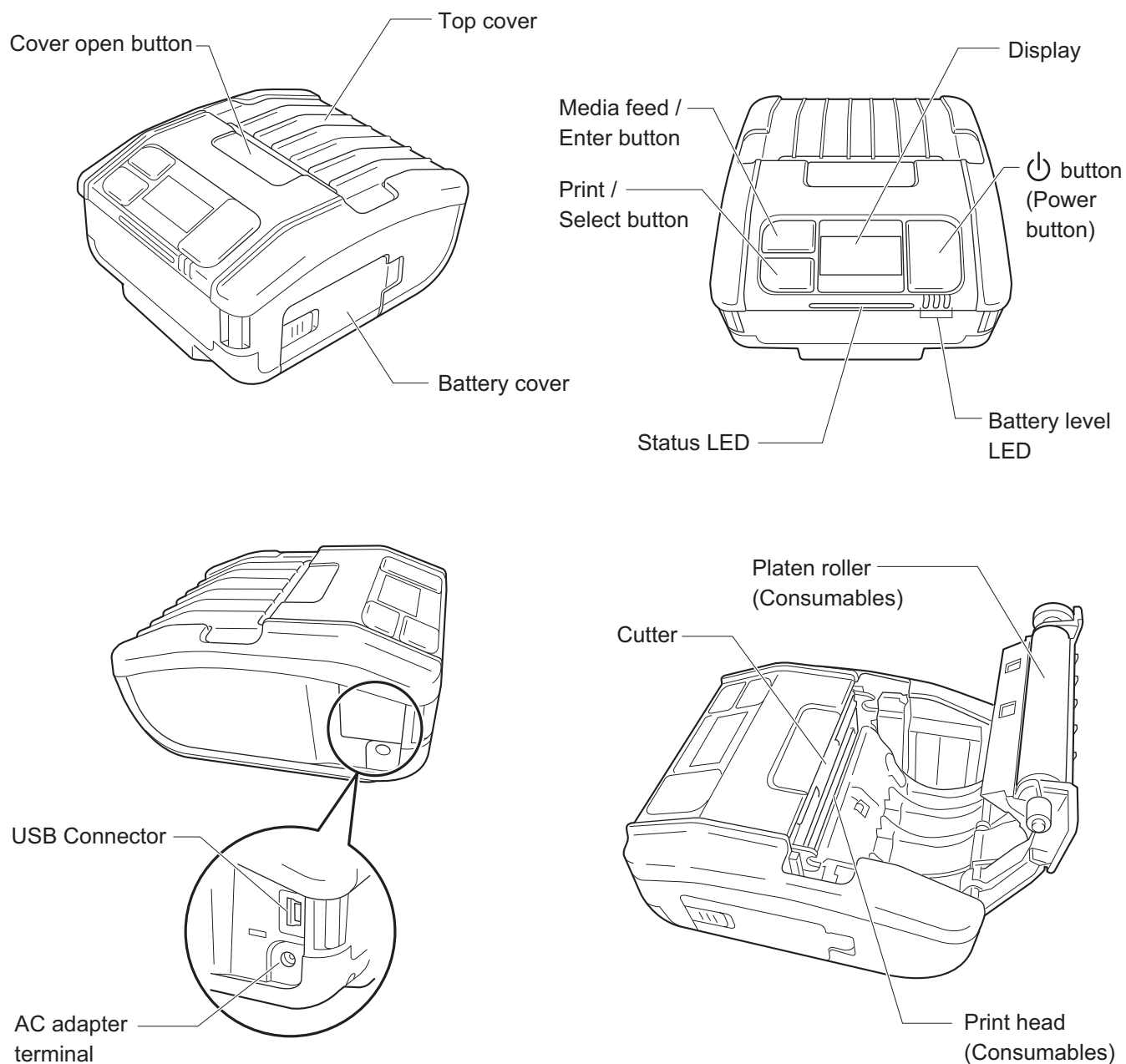
The printer is guaranteed for six months after installation for normal operation, and repair is free of charge.



Keep the box and packaging materials for this printer. When requesting repairs, pack the printer in the original box with the original padding for shipment.

# 1 Before You Start

## 1. Parts Identification



- The print head prints on the label roll.  
The platen roller feeds the label roll.  
Perform maintenance regularly, as these parts are for printing.

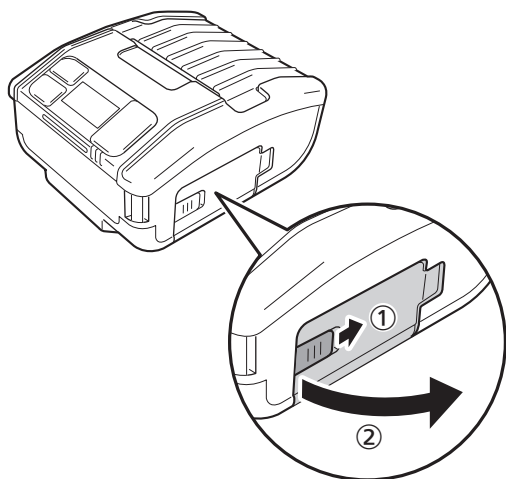


## 2. Charging a Battery

### 1. Inserting a Battery

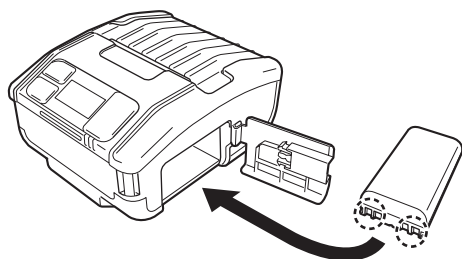
#### 1. Open the battery cover.

- 1) Slide the lever of the battery cover ①.
- 2) Open the battery cover ②.



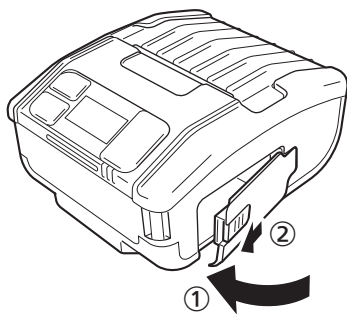
#### 2. Insert a battery.

- 1) Insert a battery from the metal side.



#### 3. Close the cover.

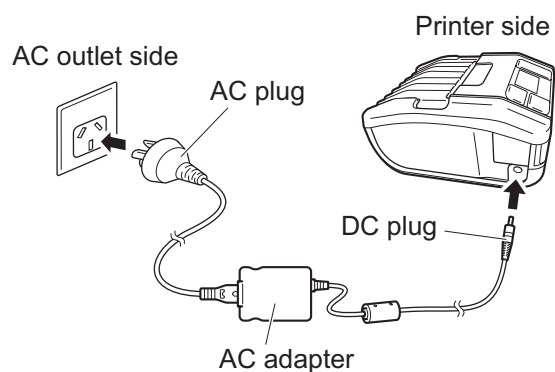
- 1) Close the battery cover ①.
- 2) Slide the lever of the battery cover with the battery cover pressed shut ②.



## 2. Charging the Battery

### 1. Connect the AC adapter.

Connect the DC plug to the printer and the AC plug to the AC outlet.



#### CAUTION

The attached AC adapter is exclusive for this printer. It must not be used with any other electric device. If an AC adapter other than the supplied one is connected to this printer, it may cause a malfunction. Do not use it.

#### AC adapter

Manufacturer: Unifive Technology Co., Ltd.

Model name: UI315-1015

### 2. Start charging.

During charging, do not power down the printer.

For details on the display during charging, see "Icon" (page 8).



## On Batteries

- The battery is consumable. Even if the battery is fully charged, operation time gradually becomes shorter. It is the battery's characteristics, not an error or problem.
- The number of charges (about 500 times) and charging time (about 4 hours) are for reference. They depend on temperature around the charger or battery conditions.
- Charge the batteries in a place of +5 to +35°C. Charging in high or low temperature may cause battery deterioration.
- If the printer is too hot to too cold, keep the battery in a place of +5 to +35°C for about 1 hour then charge the battery. Charging between +10 and +30°C is recommended.
- If the battery has not been used for a long period of time, it may have self-discharged. Charge the battery before use.
- Do not keep the battery fully charged. The battery may become deteriorated.
- Do not keep the battery in high temperature. The battery may become deteriorated.

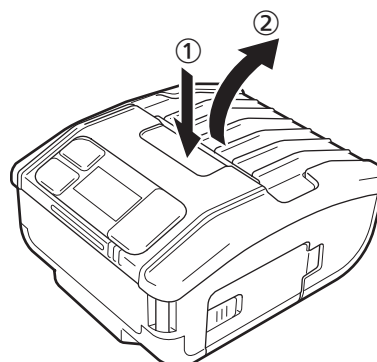
## Notes on Charging

- When the AC adapter is connected to a wall outlet with the power off, the power is automatically turned on.
- If the **Power** button is pressed during charging, the error below is displayed.  
Error 43 "CHARGING Wait till charging is complete."
- If the battery is removed during charging, the error below is displayed.  
Error 42 "NO BATTERY Please put battery."
- Even if AUTO POWER-OFF is set to "Enable," the printer does not turn off during charging.
- In low battery status, printing and feeding cannot be done during charging. Wait until the low-battery error is released.
- During charging, the printer operates in normal mode. However, if the printer has been set to start energy saving mode, the printer operates in energy saving mode even when charging.
- If a battery error occurs, do not use that battery. Replace it.
- If a NO BATTERY error occurs with the battery installed in the printer, replace the battery.
- If the printer is powered down during printing using a deteriorated battery and cannot be restarted, replace the battery.
- The power is turned off once charging is complete, independently of the printer operation.

## 3. Setting the Label

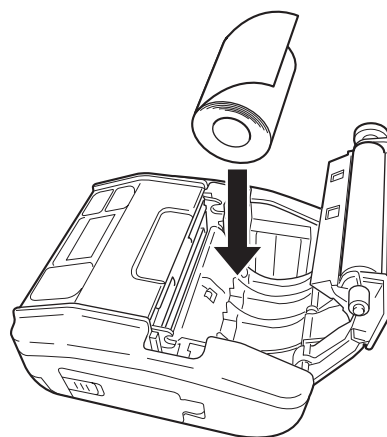
### 1. Open the top cover.

- 1) Push the cover open button ①.
- 2) Open the top cover ②.



### 2. Set the label roll.

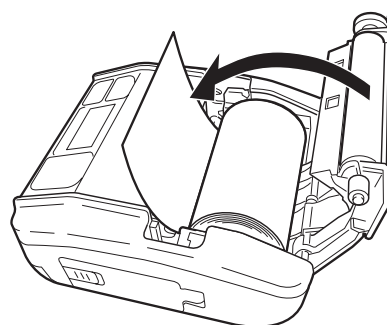
Set the label roll so that the surface touches the print head.



If the label roll is difficult to be set, rewind the label roll so that the ends of the roll becomes even.

### 3. Close the top cover.

Close the cover until it clicks.



## 4. Display

The display has three modes.

- 1. Normal mode
- 2. Error message mode
- 3. Settings mode

Displayed items differ depending on the mode.

### 1. Normal Mode

This display appears in normal mode.



- ① Shows the icon.
- ② Shows the message.
- ③ Shows the remaining battery level.

### 2. Error Message Mode

This display appears in error message mode.



- ① Shows the error number.
- ② Shows the error contents.
- ③ Shows how to release the error status.

### 3. Settings Mode

This display appears in settings mode.



- ① Shows the type of setting menu.
- ② Shows the items to be set.
- ③ Shows the contents.

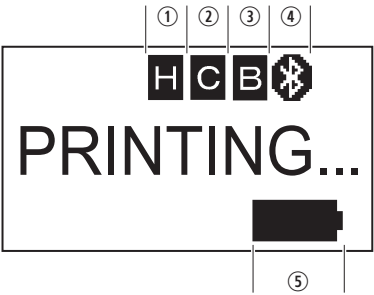
## 5. Icon

The icons indicate three types of information.

- 1. Interface information
- 2. Warning information
- 3. Battery information

The information is displayed in the position corresponding to the type.

Display






### 1. Interface Information

This information appears at position ④ on the display.

No.	Icon	Description
1		Bluetooth interface is selected, but the connection with the master device has not been made.
2		Bluetooth interface is selected and the connection with the master device has been made.
3		USB interface is selected.

## 2. Warning Information

This information appears at positions ① to ③ on the display.

No.	Icon	Description
1		The filament of the print head is open.
2		Command error is detected.
3		Receive buffer near full is detected.

- The icon appears in order of the error being detected.






H : Indicates a head error for some print layout. See “2 List of Warning Icons” (→page 42).

C : Indicates that the print data may be incorrect. Check the print data. See “2. List of Warning Icons” (→page 42).

B : Indicates that the print data buffer is full. Wait for a while. See “2. List of Warning Icons” (→page 42).

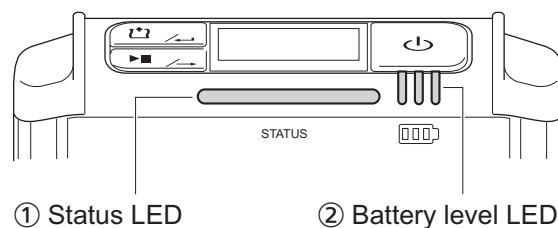
## 3. Battery Information

This information appears at position ⑤ on the display.

No.	Icon	Description
1		Battery remaining level is “3.”
2		Battery remaining level is “2.”
3		Battery remaining level is “1.”
4		The A C adapter is connected and the battery is being charged. The displayed icon indicates the battery remaining level.
5		The temperature inside the printer is extremely high and the battery cannot be charged. This icon appears only when the AC adapter is connected. The displayed icon indicates the battery remaining level.

## 6. Lighting Pattern When the LED Lights

The lighting patterns of the LEDs are described here.



- Status LED**  
Color: Green/Red  
Contents: Printer status
- Battery level LED**  
Color: Green  
Contents: Supplying power to the printer  
Remaining battery level

There are five types of flashing.

Symbol	Flashing length	Interval of ON/OFF
●	Lit	—
○	Unlit	—
◎	Flashing	500 ms lit
◎ 250	Flashing with short interval	250 ms lit
◎1800	Flashing with long interval	200 ms lit, 1800 ms unlit

## 1. Normal Mode




























AC adapter connection	Battery mode	Status (STATUS)	Remaining battery level		
			1 (Green)	2 (Green)	3 (Green)
Not connected	Level 3	—	●	●	●
	Level 2	—	●	●	○
	Level 1	—	◎ 250	○	○
	Level 0*1	Red ●	○	○	○
	Not installed				
Connected	Charging is complete.	—	●	●	●
	Level 3	—	●	●	◎
	Level 2	—	●	◎	○
	Level 1	—	◎	○	○
	Level 0*1	Red ◎	◎	○	○
	Not installed*2	Red ●	○	○	○

—: Depending on the printer status

\*1 Low battery (Error 41)

\*2 No battery (Error 42)

## 2. Energy Saving Mode

AC adapter connection	Battery mode	Status (STATUS)	Remaining battery level		
			1 (Green)	2 (Green)	3 (Green)
Not connected	Level 3	Green  1800			
	Level 2	Green  1800			
	Level 1	Green  1800			
	Level 0* <sup>1</sup>				
	Not installed				
Connected	Charging is complete.	—			
	Level 3	Green  1800			
	Level 2	Green  1800			
	Level 1	Green  1800			
	Level 0* <sup>1</sup>				
	Not installed* <sup>2</sup>				

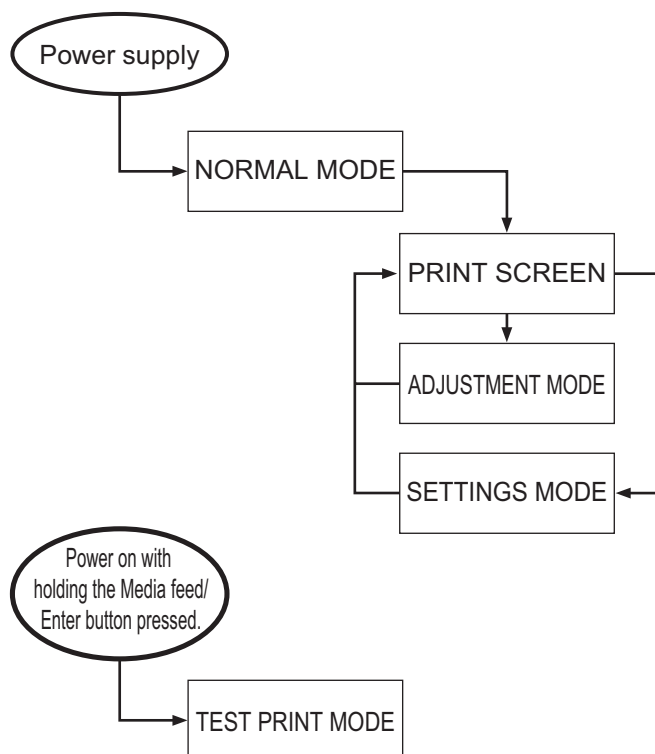
—: Depending on the printer status

\*<sup>1</sup> Low battery (Error 41)

\*<sup>2</sup> No battery (Error 42)

# 2 Operations

This printer has two modes, normal startup and test print mode.

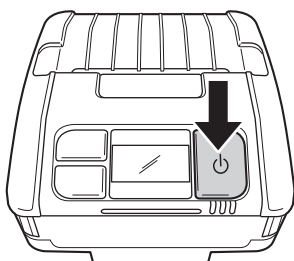


## 1. Normal Startup

### 1. Printer Startup and Shut Down

#### 1.1 Printer Startup

##### 1. Press the button (Power button).



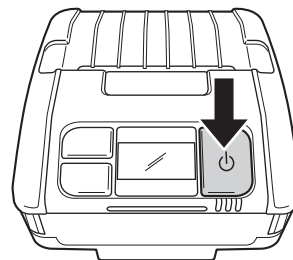
##### 2. When “ONLINE” is displayed, preparation is completed.



The first time “FEED AT BOOT” is activated. If a label roll is not set in the printer or not set in the printer correctly, an error is displayed.

## 1-2. Printer Shut Down

### 1. Press the button (Power button).



### 2. The SAVING MEMORY screen appears.

This appears when the power is turned off while data are being stored or being cleared.

#### Writing screen

SAVING MEMORY  
Please wait

Screen for writing data.  
Message: Please wait.

#### Clearing screen

CLEARING MEMORY  
Please wait

Screen for clearing data.  
Message: Please wait.

#### ■ Notes on Writing Data

- The displayed period depends on the data size.
- If the power is turned off during storing of multiple items, data being stored are saved but subsequent data will not be saved.

#### Example)

If five data items are to be stored and the power is turned off during storing of the third data item, “SHUTTING DOWN...” appears when the third data item has been saved. The fourth and fifth data items will not be saved.

#### ■ Notes on Clearing Data

- If the power is turned off during clearing multiple data, “SHUTTING DOWN...” appears when clearing is completed.

#### Example)

If 999 data items are to be cleared and the power is turned off during clearing of data, “SHUTTING DOWN...” appears when clearing of 999 data item has been completed. Clearing 999 data items takes about three minutes.

### 3. “SHUTTING DOWN...” appears.

SHUTTING DOWN...

Power-down is in progress. Wait until the display disappears.

Depending on the Bluetooth communication status, the time for displaying this screen may be longer.

## 2. Normal Mode

### 2-1. ONLINE

ONLINE screen



Screen for waiting for data reception.

PRINTING screen



Screen for printing a label.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the OFFLINE screen.

### 2-2. OFFLINE

OFFLINE screen



The printer cannot receive the data.  
Press the Print/Select button to set to ONLINE.

PAUSE screen



Screen for printing a label temporarily stopped.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the ONLINE screen.
Media feed/Enter	Feed 1 sheet.
Print/Select + Press for 3 sec. or more.	Changes to adjustment mode.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Data exist. <ul style="list-style-type: none"> <li>Changes to the cancel printing screen</li> </ul> No data exists <ul style="list-style-type: none"> <li>Changes to setting mode.</li> </ul>
Print/Select + Media feed/Enter	Changes to cancel printing

### 2-3. Cancel Printing

PAUSE  
CANCEL PRINT JOB  
YES **NO**

Clears the received data completely.

Default: NO

YES: Clears the data and changes to OFFLINE.

NO: Does not clear the data and changes to OFFLINE.

Button name and button pressing	Screen and printer operation
Print/Select	Select "YES" or "NO."
Media feed/Enter	NO <ul style="list-style-type: none"> <li>Changes to OFFLINE screen or PAUSE screen.</li> </ul> YES <ul style="list-style-type: none"> <li>Changes to the print data cleared screen.</li> </ul>
Print/Select + Media feed/Enter	Changes to OFFLINE or PAUSE screen.

### 2-4. Print Data Cleared Screen

This screen indicates that the data have been cleared.

PAUSE  
CANCEL PRINT JOB  
COMPLETED

All received data have been cleared. This is displayed for about 3 seconds then changes to the OFFLINE screen.

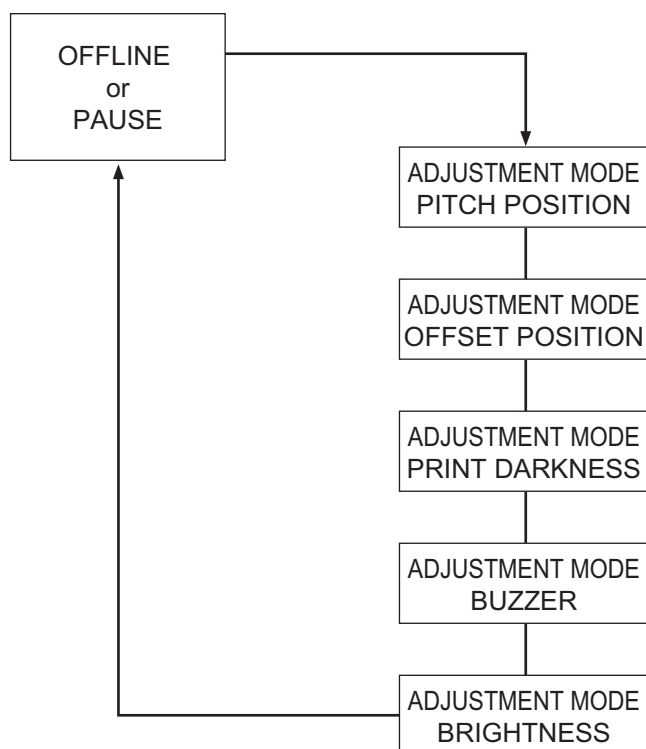
### 3. Adjustment Mode

When you press and hold the **Print/Select** button for 3 seconds or more, the screen changes to the adjustment mode.

The adjustment mode has five types.

- 1 Pitch position adjustment
- 2 Offset position adjustment (page 14)
- 3 Print darkness adjustment (page 14)
- 4 Buzzer setting (page 15)
- 5 Brightness adjustment (page 15)

#### Screen Transition for Adjustment Mode



### 3-1. Pitch Position Adjustment

ADJUSTMENT MODE  
PITCH POSITION  
**+0.00mm**

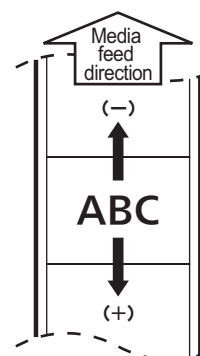
ADJUSTMENT MODE  
PITCH POSITION  
**+0.00mm**

Adjust the pitch position.

Initial value: +0.00 mm

Setting range: -3.75 to +3.75

The media-feed direction is indicated by a plus or minus sign.



Button name and button pressing	Screen and printer operation
Print/Select	Cursor position...sign • Toggles “+” and “-.” Cursor position...digit • Changes the value by 0.25.
Media feed/Enter	Cursor position...sign • The cursor moves to digit. Cursor position...digit • Moves to the offset position adjustment screen (page 14).
Print/Select + Media feed/Enter	Cursor position...sign • No print data exists: Changes to the OFFLINE screen (page 12) • Print data exist: Changes to the PAUSE screen (page 12) Cursor position...digit • The cursor moves to sign.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	No data exists. • Changes to the OFFLINE screen (page 12) Data exist. • Changes to the PAUSE screen (page 12).



### 3-2. Offset Position Adjustment

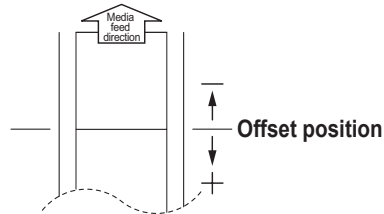
ADJUSTMENT MODE  
OFFSET POSITION  
**+0.00mm**

Adjust the offset position.

Initial value: +0.00 mm  
Setting range: -3.75 to +3.75

The adjustment direction is indicated by a plus or minus sign.

ADJUSTMENT MODE  
OFFSET POSITION  
**+0.00mm**



Button name and button pressing	Screen and printer operation
Print/Select	Cursor position...sign • Toggles “+” and “-.” Cursor position...digit • Changes the value by 0.25.
Media feed/Enter	Cursor position...sign • The cursor moves to digit. Cursor position...digit • Changes to the print darkness adjustment screen.
Print/Select + Media feed/Enter	Cursor position...sign • Changes to the pitch position adjustment screen (page 13). Cursor position...digit • The cursor moves to sign.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	No print data exists • Changes to the OFFLINE screen (page 12) Data exist. • Changes to the PAUSE screen (page 12).

### 3-3. Print Darkness Adjustment

ADJUSTMENT MODE  
PRINT DARKNESS  
**50**

Adjust the print darkness.

Initial value: 50  
Setting range: 00 to 99

The value “00” is the lightest setting.

The value “99” is the darkest setting.

ADJUSTMENT MODE  
PRINT DARKNESS  
**50**

Button name and button pressing	Screen and printer operation
Print/Select	Changes the digit from “0” to “9.”
Media feed/Enter	Cursor position...tens digit • The cursor moves to digit. Cursor position...digit • Changed to the buzzer setting screen (page 15)
Print/Select + Media feed/Enter	Cursor position...tens digit • Moves to the offset position adjustment screen. Cursor position...digit • The cursor moves to tens digit.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	No print data exists • Changes to the OFFLINE screen (page 12). Data exist. • Changes to the PAUSE screen (page 12).

- If the color darkness setting is darker, print speed may be slower.

### 3-4. Buzzer Setting

ADJUSTMENT MODE  
BUZZER  
**ENABLE** DISABLE

Enable or disable buzzer activation.

Default: ENABLE

ENABLE: The buzzer will sound.

DISABLE: The buzzer will not sound.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the brightness adjustment screen.
Print/Select + Media feed/Enter	Changes to the print darkness adjustment screen (page 14).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	No print data exists <ul style="list-style-type: none"> <li>Changes to the OFFLINE screen (page 12).</li> </ul> Data exist. <ul style="list-style-type: none"> <li>Changes to the PAUSE screen (page 12).</li> </ul>

### 3-5 Brightness Adjustment

ADJUSTMENT MODE  
BRIGHTNESS  
**2**

Set the brightness of the display.

Initial value: 2

Setting range: 1 to 3

Dark 1 < 2 < 3 Bright

Button name and button pressing	Screen and printer operation
Print/Select	Changes the digit from "1" to "3."
Media feed/Enter	Decides the value at the cursor position and changes to the brightness adjustment screen.
Print/Select + Media feed/Enter	Changed to the buzzer setting screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	No print data exists <ul style="list-style-type: none"> <li>Changes to the OFFLINE screen (page 12).</li> </ul> Data exist. <ul style="list-style-type: none"> <li>Changes to the PAUSE screen (page 12).</li> </ul>

## 4. Settings Mode

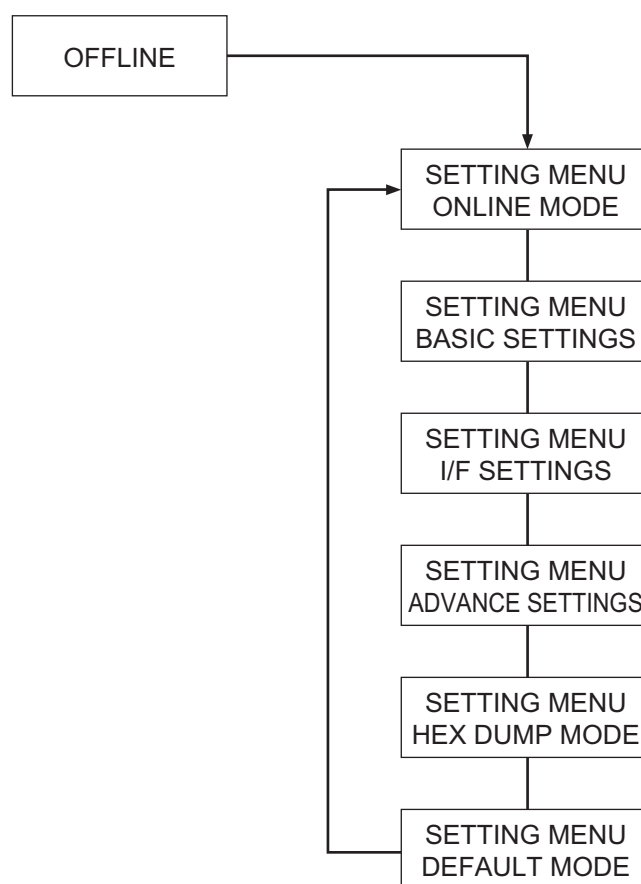
This mode is for the administrator.

The settings mode has six types.

- 1 ONLINE MODE (page 16)
- 2 BASIC SETTINGS (Page 16)
- 3 I/F SETTINGS (page 23)
- 4 ADVANCE SETTINGS (page 27)
- 5 HEX DUMP MODE (page 31)
- 6 DEFAULT MODE (page 32)

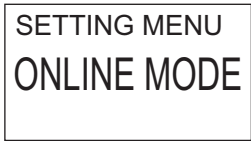
If the **Print/Select** button and **Media feed/Enter** button are held pressed simultaneously for 3 seconds or more with the OFFLINE screen displayed, the ONLINE MODE screen appears.

### Screen Transition for Settings Mode



## 4-1. ONLINE MODE

Select ONLINE MODE.  
When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

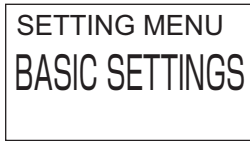


Message: Back to ONLINE Mode.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the BASIC SETTINGS screen
Media feed/Enter	Changes to the ONLINE screen (page 12).
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

## 4-2. BASIC SETTINGS

Select BASIC SETTINGS.  
When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.



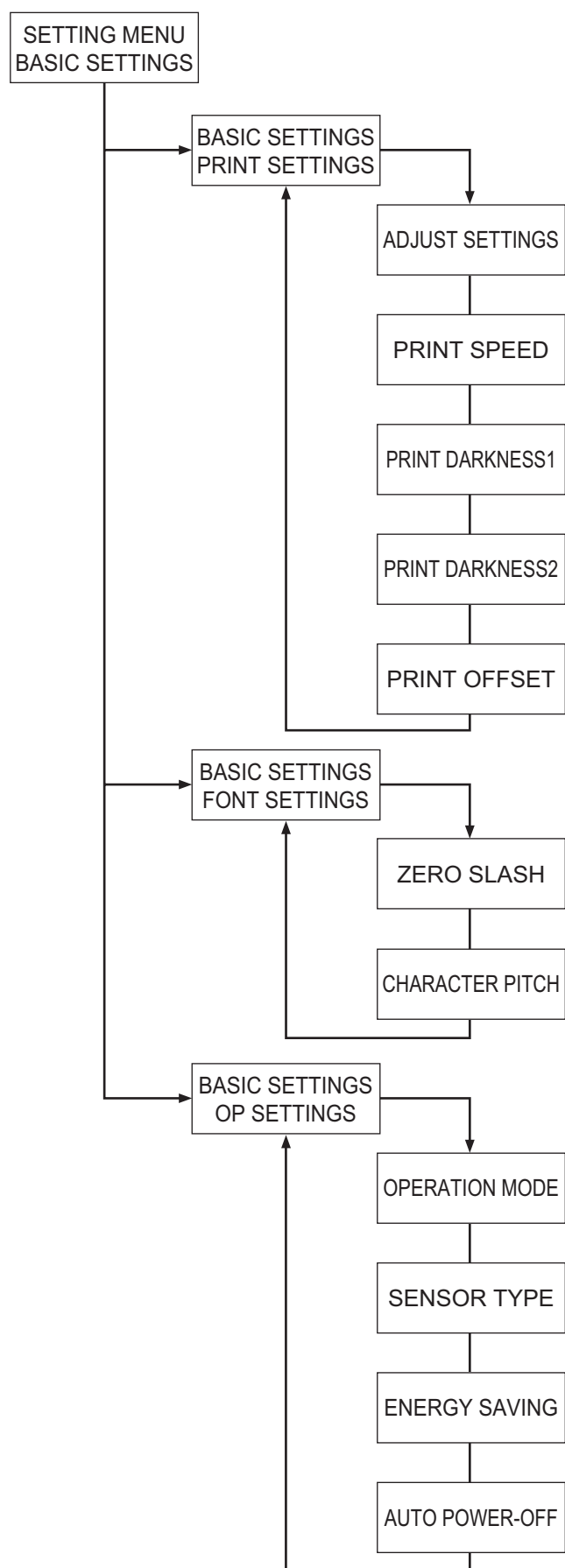
Message: Configure Basic Settings.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the I/F SETTINGS screen (page 23).
Media feed/Enter	Changes to the BASIC SETTINGS screen
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

The basic settings comprise 3 types of settings.

- 1 PRINT SETTINGS**
  - : ADJUST SETTINGS, PRINT SPEED, PRINT DARKNESS, PRINT OFFSET
- 2 FONT SETTINGS**
  - : ZERO SLASH, CHARACTER PITCH
- 3 OP SETTINGS**
  - : OPERATION MODE, SENSOR TYPE, ENERGY SAVING, AUTO POWER-OFF

## Screen Transition for Basic Settings



## 4-2-1. PRINT SETTINGS

Select PRINT SETTINGS.

When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

BASIC SETTINGS  
PRINT SETTINGS

Message: Configure Print Settings.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the FONT SETTINGS screen (page 20).
Media feed/Enter	Changes to the ADJUST SETTINGS screen.
Print/Select + Media feed/Enter	Changes to the BASIC SETTINGS screen (page 16)

### 4-2-1-1 ADJUST SETTINGS

PRINT SETTINGS  
ADJUST SETTINGS  
PITCH +0.00 ▶

The settings for this printer are displayed.

PRINT SETTINGS  
ADJUST SETTINGS  
OFFSET +0.00 ▶

PITCH: Displays the adjustment settings for the print position.

OFFSET: Shows the adjustment settings for the tear-off/cut stop position.

PRINT SETTINGS  
ADJUST SETTINGS  
DARKNESS 50 ▶

DARKNESS: Shows the adjustment settings for the print darkness.

Button name and button pressing	Screen and printer operation
Print/Select	Switches "PITCH," "OFFSET," and "DARKNESS."
Media feed/Enter	Changes to the PRINT SPEED screen (page 18).
Print/Select + Media feed/Enter	Changes to the PRINT SETTINGS screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the PRINT SETTINGS screen.

### 4-2-1-2 PRINT SPEED

#### PRINT SETTINGS PRINT SPEED

4

Set the print speed.

Initial value: 4

Setting range: 4 to 6

4: 100 mm/sec. (4 inch/sec.)

5: 125 mm/sec. (5 inch/sec.)

6: 140 mm/sec. (5.6 inch/sec.)

Button name and button pressing	Screen and printer operation
Print/Select	Selects the print speed.
Media feed/Enter	Changes to the PRINT DARKNESS 1 screen.
Print/Select + Media feed/Enter	Changes to the ADJUST SETTINGS screen (page 17).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the PRINT SETTINGS screen (page 17).

### 4-2-1-3 PRINT DARKNESS 1

#### PRINT SETTINGS PRINT DARKNESS1

05 A

Set the print darkness and darkness range for other than barcode and 2D codes.

Initial value: 05/A

Setting range:

Print darkness: 01 to 10

The lightest is 01 and the darkest is 10.

A value larger than that for PRINT

DARKNESS 2 cannot be set.

Darkness range: A (fixed)

Button name and button pressing	Screen and printer operation
Print/Select	Switches the print darkness and the darkness range.
Media feed/Enter	The cursor position indicates the print darkness. (digit) <ul style="list-style-type: none"> <li>The cursor moves to the darkness range (alphabetical).</li> </ul> The cursor position indicates the darkness range. (alphabetical) <ul style="list-style-type: none"> <li>Changes to the PRINT DARKNESS 2 screen.</li> </ul>
Print/Select + Media feed/Enter	The cursor position indicates the print darkness. (digit) <ul style="list-style-type: none"> <li>Changes to the PRINT SPEED screen.</li> </ul> The cursor position indicates the darkness range. (alphabetical) <ul style="list-style-type: none"> <li>The cursor moves to PRINT DARKNESS (digit).</li> </ul>

Print/Select + Media feed/Enter + Press for 3 sec. or more.

Changes to the PRINT SETTINGS screen (page 17).

### 4-2-1-4 PRINT DARKNESS 2

#### PRINT SETTINGS PRINT DARKNESS2

05 A

Set the print darkness and darkness range for the barcodes and 2D codes.

Initial value: 05/A

Setting range:

Print darkness: 01 to 10

The lightest is 01 and the darkest is 10.

The value less than that for PRINT

DARKNESS 1 cannot be set.

Darkness range: A to B

A is lighter and B is darker.

Button name and button pressing	Screen and printer operation
Print/Select	Switches the print darkness and the darkness range.
Media feed/Enter	The cursor position indicates the print darkness. (digit) <ul style="list-style-type: none"> <li>The cursor moves to the darkness range (alphabetical).</li> </ul> The cursor position indicates the darkness range. (alphabetical) <ul style="list-style-type: none"> <li>Changes to the PRINT OFFSET screen (page 19)</li> </ul>
Print/Select + Media feed/Enter	The cursor position indicates the print darkness. (digit) <ul style="list-style-type: none"> <li>Changes to the PRINT DARKNESS 1 screen.</li> </ul> The cursor position indicates the darkness range. (alphabetical) <ul style="list-style-type: none"> <li>The cursor moves to PRINT DARKNESS (digit).</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the PRINT SETTINGS screen (page 17).

## 4-2-1-5 PRINT OFFSET

### PRINT SETTINGS

#### PRINT OFFSET

V:0000 H:+000

### PRINT SETTINGS

#### PRINT OFFSET

V:+0000 H:+000

### PRINT SETTINGS

#### PRINT OFFSET

V:+0000 H:000

### PRINT SETTINGS

#### PRINT OFFSET

V:+0000 H:000

Set the print offset.

Initial value: V:+0000, H:+000

Setting range:

V: Set the print position by setting how many dots are apart from the print reference point vertically, prefixed with “+” or “-” to indicate the directions to shift.

- + Backward against the feed direction
- Forward against the feed direction

H: Set the print position by setting how many dots are apart from the print reference point horizontally, prefixed with “+” or “-” to indicate the directions to shift.

- + Left from the printer front side
- Right from the printer front side

	V offset	H offset
Thousands digit	“0” to “1”	—
Hundreds digit	“0” to “1”	“0” to “4”
Tens digit	“0” to “1”	“0” to “9”
Digit	“0” to “1”	“0” to “9”

Button name and button pressing	Screen and printer operation
Print/Select	Switches the sign and digit for print offset.
Media feed/Enter	Cursor position...digit for H <ul style="list-style-type: none"> <li>• Changes to the BASIC SETTINGS screen (page 16)</li> </ul> Cursor position...Other than digit for H <ul style="list-style-type: none"> <li>• Selects the sign or digit.</li> </ul>
Print/Select + Media feed/Enter	Cursor position...sign for V <ul style="list-style-type: none"> <li>• Changes to PRINT DARKNESS screen (page 18)</li> </ul> Cursor position...other than sign for V <ul style="list-style-type: none"> <li>• Moves the cursor.</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the PRINT SETTINGS screen (page 17).

[Example for setting the print offset]

### PRINT SETTINGS

#### PRINT OFFSET

V:0000 H:+000

From the print reference point

+40 dots (5 mm) vertically (V)

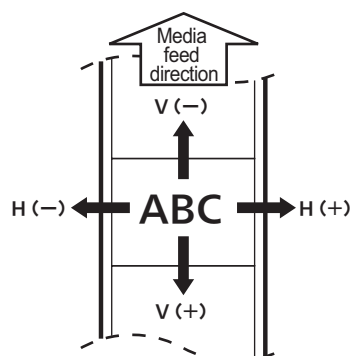
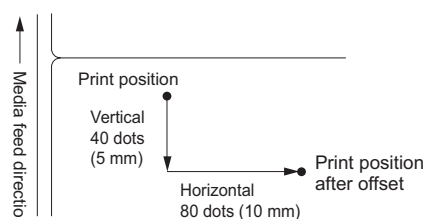
+80 dots (10 mm) horizontally (H)

A setting example for separate points is shown below.

### PRINT SETTINGS

#### PRINT OFFSET

V:+0040 H:+080



## 4-2-2. FONT SETTINGS

Select FONT SETTINGS.

When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

BASIC SETTINGS  
FONT SETTINGS

Message: Configure Font Settings.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to OP SETTINGS screen.
Media feed/Enter	Changes to the ZERO SLASH screen.
Print/Select + Media feed/Enter	Changes to the BASIC SETTINGS screen (page 16)

### 4-2-2-1 ZERO SLASH

FONT SETTINGS  
ZERO SLASH  
ENABLE DISABLE

Set the zero slash.

Default: ENABLE

ENABLE: Print "0" with slash.

DISABLE: Print "0" without slash.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the CHARACTER PITCH screen.
Print/Select + Media feed/Enter	Changes to the FONT SETTINGS screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the FONT SETTINGS screen.

## 4-2-2-2 CHARACTER PITCH

FONT SETTINGS  
CHARACTER PITCH  
ENABLE DISABLE

Set the character pitch (set whether to print based on width of each character or fixed character width).

Default: ENABLE

ENABLE: Print with character pitch.

DISABLE: Print with fixed character width.

Usable fonts: XS, XM, XB, XL

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the FONT SETTINGS screen.
Print/Select + Media feed/Enter	Changes to the ZERO SLASH screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the FONT SETTINGS screen.

### 4-2-3. OP SETTINGS

Select OP SETTINGS.

When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

BASIC SETTINGS  
OP SETTINGS

Message: Configure Operation Settings.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the PRINT SETTINGS screen (page 17).
Media feed/Enter	Changes to the OPERATION MODE screen (page 21).
Print/Select + Media feed/Enter	Changes to the BASIC SETTINGS screen (page 16)



### 4-2-3-1 OPERATION MODE

OP SETTINGS

OPERATION MODE

TEAR OFF ▶

CONTINUOUS ▶

Sets the operation mode.

Default: TEAR OFF:

After printing, the label is fed to the cutter position.

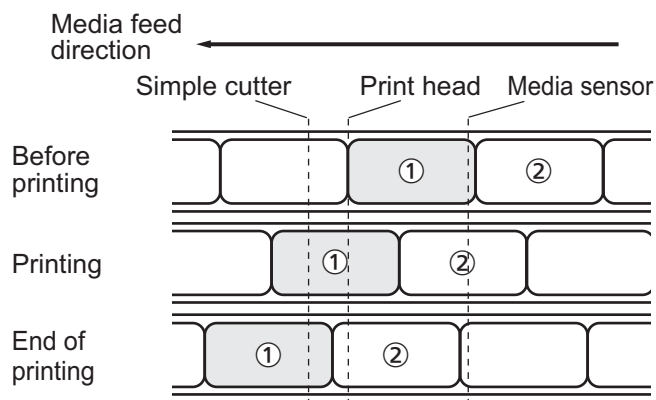
Button name and button pressing	Screen and printer operation
Print/Select	Selects "CONTINUOUS" or "TEAR OFF."
Media feed/Enter	Changes to the SENSOR TYPE screen.
Print/Select + Media feed/Enter	Changes to OP SETTINGS screen (page 20).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to OP SETTINGS screen (page 20).

#### ■ Continuous Print and Tear-Off

This printer has two operation modes, continuous print and tear-off.

#### Continuous Print Operation Mode

The specified number of sheets will be continuously printed. After printing the specified number of sheets or printing a single sheet, the next print start position is placed at the print head.

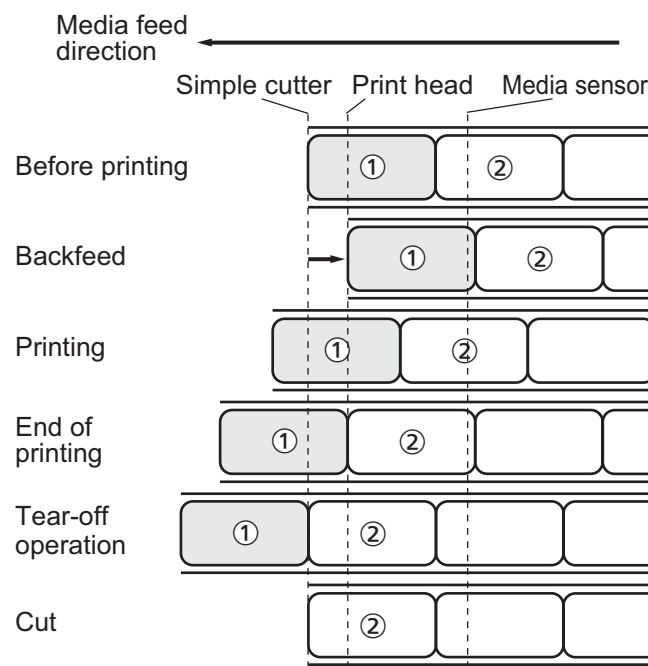


### Tear-Off Operation Mode

After printing the specified number of sheets continuously, the roll is fed to the cutter position automatically.

In this mode, the roll is easily cut manually after printing.

For the next printing, the roll is fed back to the print head and printing will start.



•The figure above does not represent actual labels.

### 4-2-3-2 SENSOR TYPE

OP SETTINGS

SENSOR TYPE

I-MARK ▶

NONE ▶

Sets the sensor type.

Default: I-MARK

I-MARK: Detects the I-mark (black mark on the rear of the label).

NONE: Not using the media pitch sensor

Button name and button pressing	Screen and printer operation
Print/Select	Selects "I-MARK" or "NONE."
Media feed/Enter	Changes to the ENERGY SAVING screen (page 22).
Print/Select + Media feed/Enter	Changes to the OPERATION MODE screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to OP SETTINGS screen (page 20).

### 4-2-3-3 ENERGY SAVING

OP SETTINGS  
ENERGY SAVING  
005 sec

Set the time to make the transition to the energy saving mode.

Initial value: 005

Setting range: 000, 005 to 999

- If “000” is set, the printer does not enter the energy saving mode.
- To increase the life of the battery, setting the lower value is recommended.

Button name and button pressing	Screen and printer operation
Print/Select	Set the time for the energy saving mode.
Media feed/Enter	Cursor position...digit <ul style="list-style-type: none"> <li>• Changes to the AUTO POWER-OFF screen.</li> </ul> Cursor position...Other than digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...Hundreds digit <ul style="list-style-type: none"> <li>• Changes to the SENSOR TYPE screen (page 21).</li> </ul> Cursor position...Other than hundreds digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to OP SETTINGS screen (page 20).

#### ■ Conditions Not to Transit to the Energy Saving Mode

- Print cancel screen, default mode, test print mode, maintenance mode, and download mode.
- USB is selected for INTERFACE SETTING.
- The temperature in the printer is lower than -2°C.
- Receiving data (print data that have not been printed remain in the printer)
- The AC adapter is not connected and the printer is in low-battery status (Error 41).
- No battery is installed (Error 42).
- The temperature in the printer is outside the acceptable range (Error 45).

#### ■ Conditions to Return from the Energy Saving Mode.

- When the cover is closed and opened.
- When receiving data
- When a button is pressed
  - If a button is pressed in energy saving mode, the printer does not return from the energy saving mode. First return to normal mode then press a button again.

### 4-2-3-4 AUTO POWER-OFF

OP SETTINGS  
AUTO POWER-OFF  
000 min

Set the time to turn the printer off when the printer has not been operated within the specified period.

Initial value: 000

Setting range: 000 to 999

- If “000” is set, the printer does not enter the auto power-off mode.
- The printer does not enter auto power-off mode in print cancel screen, default mode, test print mode, maintenance mode, or download mode.

Button name and button pressing	Screen and printer operation
Print/Select	Set the time to enter the auto power-off mode.
Media feed/Enter	Cursor position...digit <ul style="list-style-type: none"> <li>• Changes to OP SETTINGS screen (page 20).</li> </ul> Cursor position...Other than digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...Hundreds digit <ul style="list-style-type: none"> <li>• Changes to the ENERGY SAVING screen (page 22).</li> </ul> Cursor position...Other than hundreds digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select+ Media feed/Enter + Press for 3 sec. or more.	Changes to OP SETTINGS screen (page 20).

### 4-3. I/F SETTINGS

Select I/F SETTINGS.

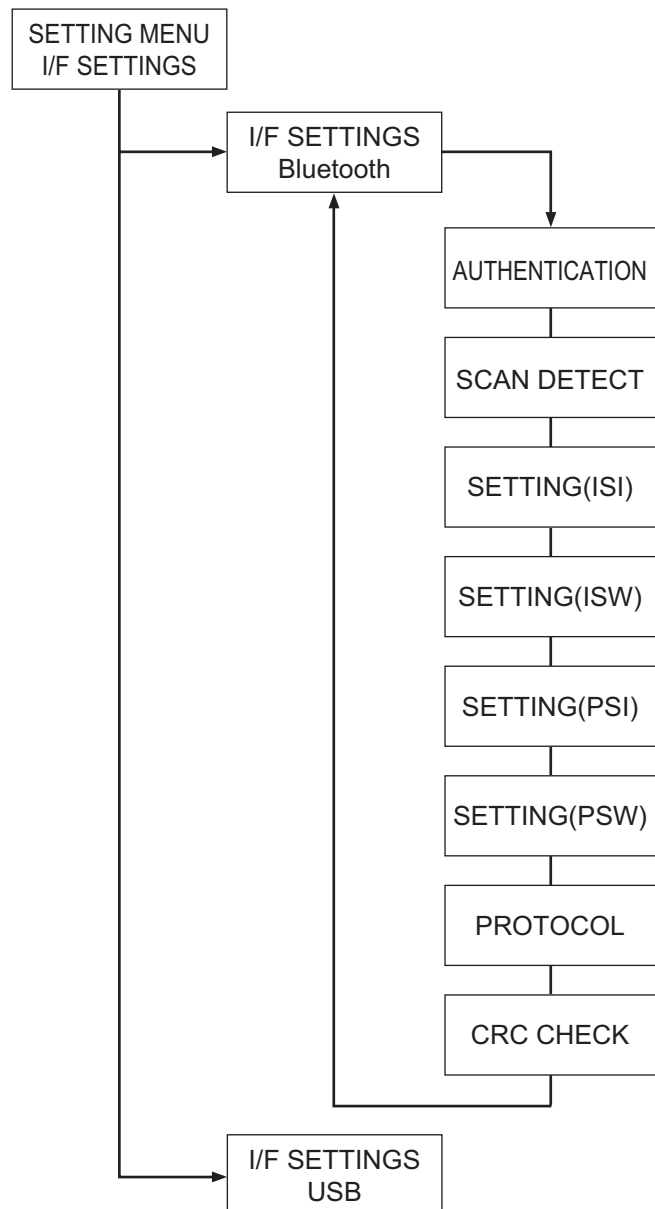
When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

SETTING MENU  
I/F SETTINGS

Message: Configure Interface Setting.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the ADVANCE SETTINGS screen (page 27).
Media feed/Enter	Changes to the I/F SETTINGS screen.
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

#### Screen Transition for Interface Settings



#### 4-3-1. INTERFACE SELECT Screen

I/F SETTINGS  
INTERFACE SELECT  
Bluetooth  
USB

Set the interface.

Default: Bluetooth

Bluetooth: Makes the Bluetooth connection.

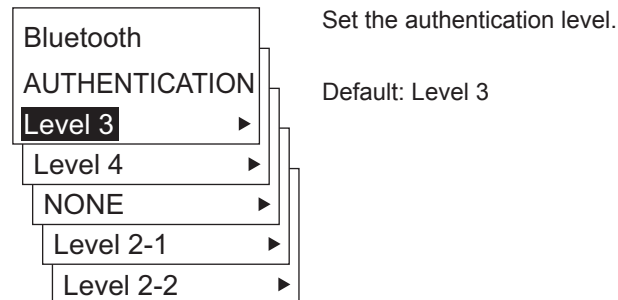
USB: Makes the USB connection.

Button name and button pressing	Screen and printer operation
Print/Select	Select "Bluetooth" or "USB."
Media feed/Enter	For "Bluetooth" <ul style="list-style-type: none"> <li>Changes to the AUTHENTICATION screen (page 24).</li> </ul> For "USB" <ul style="list-style-type: none"> <li>Changes to the I/F SETTINGS screen.</li> </ul>
Print/Select + Media feed/Enter	Changes to the I/F SETTINGS screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen.

## < Bluetooth >

This is the setting screen activated when "Bluetooth" is selected on the 4-3-1 INTERFACE SELECT Screen.

### 4-3-1-1 Authentication Level



NONE: No authentication

Level 2-1: PIN code authentication, service level, and no encryption

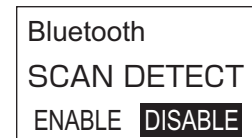
Level 2-2: PIN code authentication, service level, and encryption

Level 3: PIN code authentication, link level, and no encryption

Level 4: Supporting secure simple pairing, service level, and encryption  
(Communication with the device that does not support secure simple pairing.)

Button name and button pressing	Screen and printer operation
Print/Select	Select "Level 3," "Level 4," "NONE," "Level 2-1," or "Level 2-2."
Media feed/Enter	Changes to the SCAN DETECT screen.
Print/Select + Media feed/Enter	Changed to the INTERFACE SELECT screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

### 4-3-1-2 SCAN DETECT

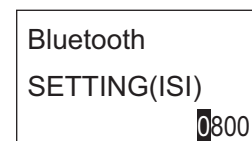


Set the communication protocol.

Default: ENABLE

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	When "ENABLE" is selected <ul style="list-style-type: none"> <li>Changes to the communication parameter ISI.</li> </ul> When "DISABLE" is selected <ul style="list-style-type: none"> <li>Changes to the communication parameter PSI (page 25).</li> </ul>
Print/Select + Media feed/Enter	Changed to the INTERFACE SELECT screen (page 23).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

### 4-3-1-3 PARAMETER SETTING (ISI)



Set the communication parameter ISI.  
Hexadecimal display.  
Displayed when SCAN DETECT is set to "ENABLE."

Initial value: 0800

Setting range: 0012 to 1000

- The setting value is enabled when the power is supplied on the next time.
- If a value smaller than ISW is set, an error sound is output and the value is not set.
- The setting is even only.  
The last digit must be 0, 2, 4, 6, 8, A, C, or E.

Button name and button pressing	Screen and printer operation
Print/Select	Select the digit.
Media feed/Enter	Cursor position...the last digit <ul style="list-style-type: none"> <li>Changes to the ISW screen (page 25).</li> </ul> Cursor position...other than the last digit <ul style="list-style-type: none"> <li>Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...the most significant digit <ul style="list-style-type: none"> <li>Changes to the SCAN DETECT screen.</li> </ul> Cursor position...other than the most significant digit <ul style="list-style-type: none"> <li>Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

#### 4-3-1-4 PARAMETER SETTING (ISW)

Bluetooth  
SETTING(ISW)  
0012

Set the communication parameter ISW.  
Hexadecimal display.  
Displayed when SCAN DETECT is set to "ENABLE."

Initial value: 0012

Setting range: 0011 to 1000

- The setting value is enabled when the power is supplied on the next time.
- If a value larger than ISI is set, an error sound is output and the value cannot be set.

Button name and button pressing	Screen and printer operation
Print/Select	Select the digit.
Media feed/Enter	Cursor position...the last digit <ul style="list-style-type: none"> <li>• Changes to the PSI screen.</li> </ul> Cursor position...other than the last digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...the most significant digit <ul style="list-style-type: none"> <li>• Changes to the ISI screen (page 24).</li> </ul> Cursor position...other than the most significant digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

#### 4-3-1-5 PARAMETER SETTING (PSI)

Bluetooth  
SETTING(PSI)  
0090

Set the communication parameter PSI.  
Hexadecimal display.

Initial value: 0090

Setting range: 0012 to 1000

- The setting value is enabled when the power is supplied on the next time.
- If a value smaller than PSW is set, an error sound is output and the value cannot be set.
- The setting is even only.  
The last digit must be 0, 2, 4, 6, 8, A, C, or E.

Button name and button pressing	Screen and printer operation
Print/Select	Select the digit.
Media feed/Enter	Cursor position...the last digit <ul style="list-style-type: none"> <li>• Changes to the PSW screen (page 26).</li> </ul> Cursor position...other than the last digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...the most significant digit <ul style="list-style-type: none"> <li>• If the scan detect is disabled, changes to the SCAN DETECT screen (page 24).</li> <li>• If the scan detect is enabled, changes to the ISW screen.</li> </ul> Cursor position...other than the most significant digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

### 4-3-1-6 PARAMETER SETTING (PSW)

Bluetooth  
SETTING(PSW)  
0012

Set the communication parameter PSW.  
Hexadecimal display.

Initial value: 0012

Setting range: 0011 to 1000

- The setting value is enabled when the power is supplied on the next time.
- If a value larger than PSI is set, an error sound is output and the value cannot be set.

Button name and button pressing	Screen and printer operation
Print/Select	Select the digit.
Media feed/Enter	Cursor position...the last digit <ul style="list-style-type: none"> <li>• Changes to the PROTOCOL screen.</li> </ul> Cursor position...other than the last digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...the most significant digit <ul style="list-style-type: none"> <li>• Changes to the PSI screen (page 25).</li> </ul> Cursor position...other than the most significant digit <ul style="list-style-type: none"> <li>• Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

### 4-3-1-7 PROTOCOL

Bluetooth  
PROTOCOL  
STATUS3  
STATUS4

Set the communication protocol.

Default: STATUS 3

- The setting value is enabled when the power is supplied on the next time.

Button name and button pressing	Screen and printer operation
Print/Select	Select "STATUS3" or "STATUS 4."
Media feed/Enter	Changes to the CRC CHECK screen.
Print/Select + Media feed/Enter	Changes to the PSW screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

### 4-3-1-8 CRC CHECK

Bluetooth  
CRC CHECK  
ENABLE DISABLE

Set the CRC check function.

Default: DISABLE

- The setting value is enabled when the power is supplied on the next time.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the I/F SETTINGS screen (page 23).
Print/Select + Media feed/Enter	Changes to the PROTOCOL screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the I/F SETTINGS screen (page 23).

## 4-4. ADVANCE SETTINGS

Select ADVANCE SETTINGS.

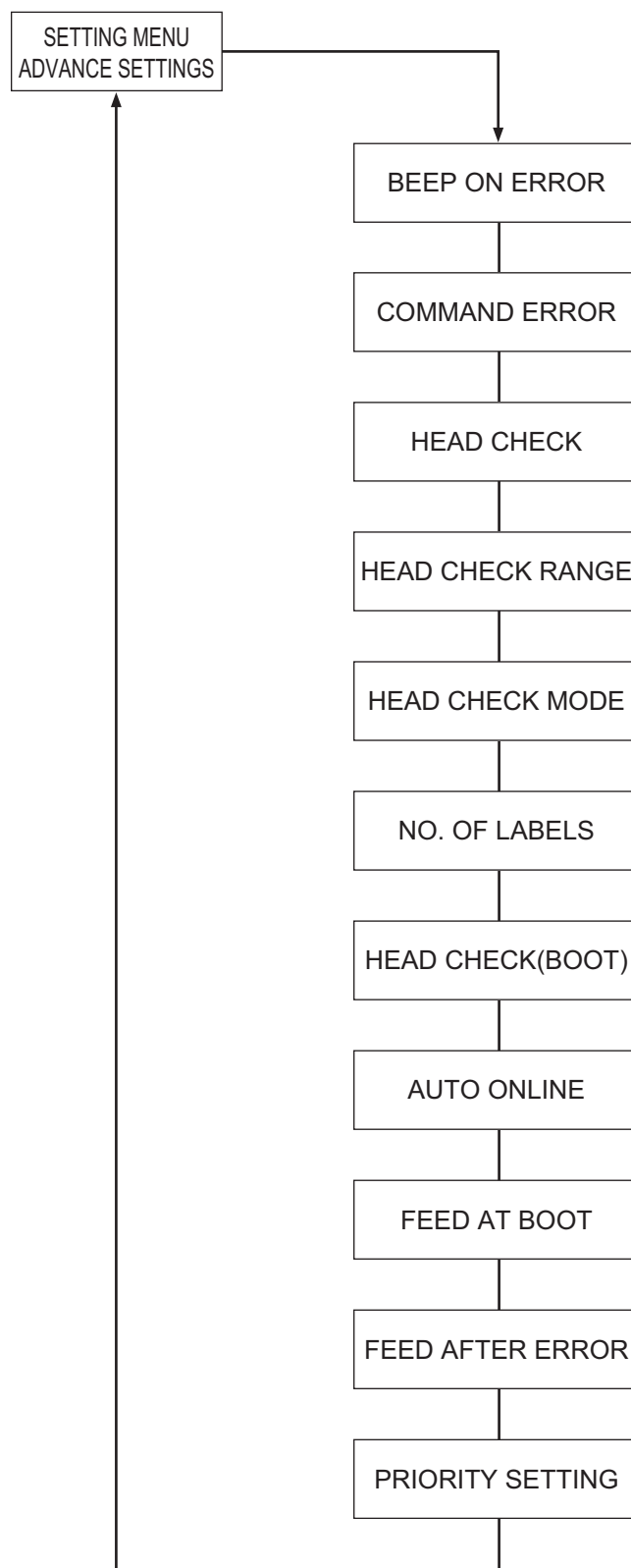
When one second has passed after the screen appears, the message shown below scrolls on the lower part of the screen.

SETTING MENU  
ADVANCE SETTINGS

Message: Configure Advanced Functions.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the HEX DUMP MODE screen (page 31).
Media feed/Enter	Changes to the ADVANCE SETTINGS screen.
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

### Screen Transition for Advance Setting





#### 4-4-1. BEEP ON ERROR

ADVANCE SETTINGS  
BEEP ON ERROR  
ENABLE **DISABLE**

Select whether it is to beep or not when a command error is generated.

Default: DISABLE

ENABLE: It beeps when a command error is generated.

DISABLE: It does not beep when a command error is generated.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the COMMAND ERROR screen.
Print/Select + Media feed/Enter	Changes to the ADVANCE SETTINGS screen (page 27).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-2. COMMAND ERROR

ADVANCE SETTINGS  
COMMAND ERROR  
ENABLE **DISABLE**

Set whether or not to display the command error.

Default: DISABLE

ENABLE: Display the COMMAND ERROR screen when a command error is generated.

DISABLE: Does not display the COMMAND ERROR screen when a command error is generated.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the HEAD CHECK screen.
Print/Select + Media feed/Enter	Changes to the BEEP ON ERROR screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-3. HEAD CHECK

ADVANCE SETTINGS  
HEAD CHECK  
ENABLE **DISABLE**

Set whether to perform head check or not.

Default: DISABLE

ENABLE: Enables the head check function.

DISABLE: Disables the head check function.

##### Head Check Function

Head check is a reference for checking filament disconnection of the print head automatically. If an error occurs, printing stops. Head check is a reference for checking filament disconnection of the print head. This function does not guarantee barcode readability. Check barcode readability regularly. (Failure to print does not necessarily correspond to functioning of the head check.) Check the label printed after head error is generated by scanning the printed barcode.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	When "ENABLE" is selected • Changes to the HEAD CHECK RANGE screen. When "DISABLE" is selected • Changes to the HEAD CHECK (BOOT) screen (page 29).
Print/Select + Media feed/Enter	Changes to the COMMAND ERROR screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-4. HEAD CHECK RANGE

ADVANCE SETTINGS  
HEAD CHECK RANGE  
**BARCODE** ▶  
STANDARD ▶

Set the range for head check.

Default: BARCODE

STANDARD: Check whole the printable range.

BARCODE: Check the barcode only.

Button name and button pressing	Screen and printer operation
Print/Select	Select "STANDARD" or "BARCODE."
Media feed/Enter	Changes to the HEAD CHECK MODE screen (page 29).
Print/Select + Media feed/Enter	Changes to the HEAD CHECK screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-5. HEAD CHECK MODE

ADVANCE SETTINGS	Set the mode for head check.
HEAD CHECK MODE	Default: ALL
ALL	
NO. OF LABELS	
START-END	

ALL: Check the labels one by one.

NO. OF LABELS: Check the labels for each specified number of label.

START-END: Check the starting and ending points of printing.

Button name and button pressing	Screen and printer operation
Print/Select	Select "ALL," "NO. OF LABELS," or "START-END."
Media feed/Enter	When "ALL" or "START-END" is selected <ul style="list-style-type: none"> <li>Changes to the HEAD CHECK (BOOT) screen.</li> </ul> When "NO. OF LABELS" is selected <ul style="list-style-type: none"> <li>Changes to the NO. OF LABELS screen.</li> </ul>
Print/Select + Media feed/Enter	Changes to the HEAD CHECK RANGE screen (page 28).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-6. NO. OF LABELS

ADVANCE SETTINGS	Set the interval to perform head check.
NO. OF LABELS	Initial value: 000001 Setting range: 000001 to 999999
000001	
ADVANCE SETTINGS	
NO. OF LABELS	
000001	

Button name and button pressing	Screen and printer operation
Print/Select	Specify the interval.
Media feed/Enter	Cursor position...digit <ul style="list-style-type: none"> <li>Changes to the HEAD CHECK (BOOT) screen.</li> </ul> Cursor position...Other than digit <ul style="list-style-type: none"> <li>Moves the cursor</li> </ul>
Print/Select + Media feed/Enter	Cursor position...hundred-thousands digit <ul style="list-style-type: none"> <li>Changes to the HEAD CHECK MODE screen.</li> </ul> Cursor position...other than hundred-thousands digit <ul style="list-style-type: none"> <li>Moves the cursor</li> </ul>
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-7. HEAD CHECK (BOOT)

ADVANCE SETTINGS	Set whether the head check is to be performed upon booting of the printer.
HEAD CHECK(BOOT)	
ENABLE	
DISABLE	

Default: DISABLE

ENABLE: Enables the head check function on booting.

DISABLE: Disables the head check function on booting.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to AUTO ONLINE screen (page 30).
Print/Select + Media feed/Enter	Changes to the HEAD CHECK screen (page 28).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-8. AUTO ONLINE

ADVANCE SETTINGS  
AUTO ONLINE  
**ENABLE** DISABLE

Set the status for when the printer is booted.

Default: ENABLE

ENABLE: When the printer is booted, it enters the online mode.

DISABLE: When the printer is booted, it enters the offline mode.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the FEED AT BOOT screen.
Print/Select + Media feed/Enter	Changes to the HEAD CHECK (BOOT) screen (page 29).
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-9. FEED AT BOOT

ADVANCE SETTINGS  
FEED AT BOOT  
ENABLE **DISABLE**

Set whether the roll is fed by one sheet when the printer is booted.

Default: DISABLE

ENABLE: The label roll is fed when the printer is booted.

DISABLE: The label roll is not fed when the printer is booted.

Even if the FEED AT BOOT is set to "DISABLE," the label roll will be fed by one sheet upon turning the power on by pressing the **[Power]** button, if "FEED AFTER ERROR" is set to ENABLE.

\* When the AC adapter is connected, FEED AT BOOT will not be performed.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the FEED AFTER ERROR screen.
Print/Select + Media feed/Enter	Changes to the AUTO ONLINE screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-10. FEED AFTER ERROR

ADVANCE SETTINGS  
FEED AFTER ERROR  
**ENABLE** DISABLE

Set whether the label roll is to be fed by one sheet after an error is generated.

Default: ENABLE

ENABLE: Feed the label roll after an error is generated.

DISABLE: Does not feed the label roll after an error is generated.

- Timing to feed the label roll

When the printer is in online mode after the error is released or the printer is turned on.

Button name and button pressing	Screen and printer operation
Print/Select	Selects "ENABLE" or "DISABLE."
Media feed/Enter	Changes to the PRIORITY SETTING screen.
Print/Select + Media feed/Enter	Changes to the FEED AT BOOT screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

#### 4-4-11. PRIORITY SETTING

ADVANCE SETTINGS  
PRIORITY SETTING  
**COMMAND** **INTERNAL**

Set which takes priority, printer setting or command setting.

Default: COMMAND

COMMAND: The printer settings according to the received data take priority.

INTERNAL: The printer's internal settings take priority.

Items for priority setting are print darkness, darkness range, print speed, print offset, and sensor type.

Button name and button pressing	Screen and printer operation
Print/Select	Select "COMMAND" or "INTERNAL."
Media feed/Enter	Changes to the ADVANCE SETTINGS screen (page 27).
Print/Select + Media feed/Enter	Changes to the FEED AFTER ERROR screen.
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Changes to the ADVANCE SETTINGS screen (page 27).

## 4-5. HEX DUMP MODE

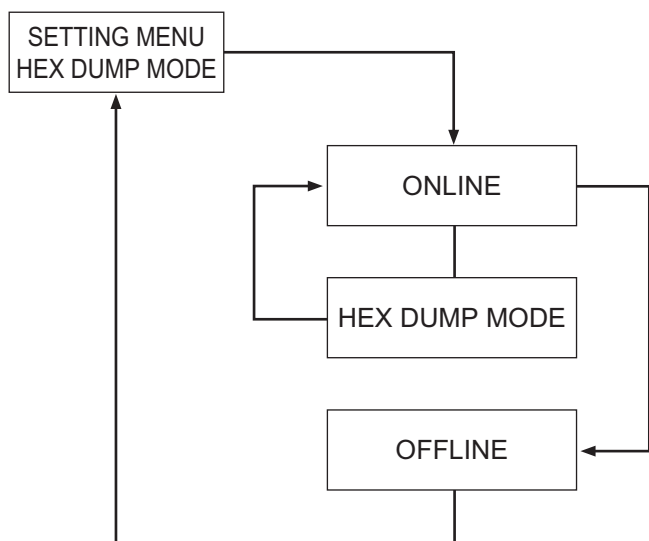
Select HEX DUMP MODE.

SETTING MENU  
HEX DUMP MODE

Message: Enter Hex Dump Mode.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the DEFAULT MODE screen (page 32).
Media feed/Enter	Changes to the HEX DUMP MODE screen.
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

### Screen Transition for HEX Dump



### 4-5-1. HEX DUMP ONLINE

"HEX" is displayed at the upper left of the display.

ONLINE screen

HEX   
ONLINE 

Screen for waiting for data reception.

PRINTING screen

HEX   
PRINTING... 

Screen for printing a label.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to HEX dump offline.

### 4-5-2. HEX DUMP OFFLINE

"HEX" is displayed at the upper left of the display.

OFFLINE screen

HEX   
OFFLINE 

Screen for waiting for label data.

PAUSE screen

HEX   
PAUSE 

Screen for pausing label printing.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to HEX dump online.
Media feed/Enter	Feed 1 sheet.
Print/Select + Media feed/Enter	Changes to the CANCEL PRINT JOB screen (page 12)
Print/Select + Media feed/Enter + Press for 3 sec. or more.	Data exist. <ul style="list-style-type: none"> <li>• Changes to setting mode.</li> </ul> No data exists <ul style="list-style-type: none"> <li>• Changes to the CANCEL PRINT JOB screen (page 12)</li> </ul>

## 4-6. DEFAULT MODE

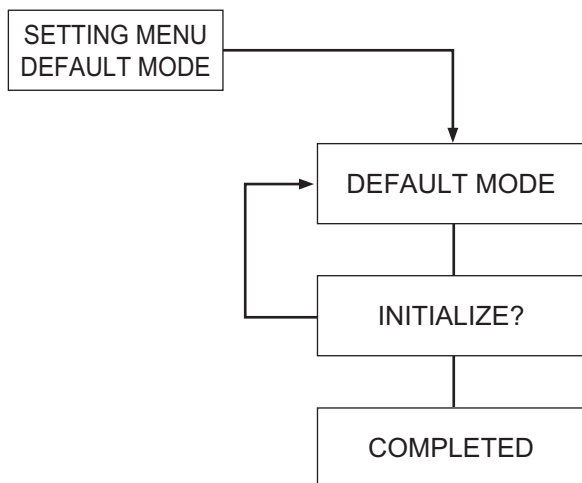
Select DEFAULT MODE.

SETTING MENU  
DEFAULT MODE

Message: Default Printer Settings.

Button name and button pressing	Screen and printer operation
Print/Select	Changes to the Back to ONLINE MODE screen (page 16).
Media feed/Enter	Changes to the DEFAULT MODE screen.
Print/Select + Media feed/Enter	Changes to the OFFLINE screen (page 12).

### Screen Transition for Default Mode



After initializing, turn the power off, then back on.

### 4-6-1. Selection of Items to be Initialized

DEFAULT SETTING  
DEFAULT MODE  
FACTORY SETTING ▶  
PRINTER SETTING ▶  
I/F SETTINGS ▶  
USER MEMORY ▶

Select the items to be initialized.

Default: FACTORY SETTING  
 FACTORY SETTING: Set to the factory settings.  
 PRINTER SETTING: Initialize the basic settings  
 I/F SETTINGS: Initialize the interface settings.  
 USER MEMORY: Initialize the user memory.

Button name and button pressing	Screen and printer operation
Print/Select	Select "FACTORY SETTING," "PRINTER SETTING," "I/F SETTINGS," or "USER MEMORY."
Media feed/Enter	Changes to the INITIALIZE? screen.
Print/Select + Media feed/Enter	Changes to the DEFAULT MODE screen.

### 4-6-2. INITIALIZE?

FACTORY SETTING  
INITIALIZE?  
YES **NO**

Confirm that initializing will be performed.

Default: NO

YES: Initialize the selected item.

NO: Do not initialize.

PRINTER SETTING  
INITIALIZE?  
YES **NO**

I/F SETTINGS  
INITIALIZE?  
YES **NO**

USER MEMORY  
INITIALIZE?  
YES **NO**

Button name and button pressing	Screen and printer operation
Print/Select	Select "YES" or "NO."
Media feed/Enter	When "YES" is selected <ul style="list-style-type: none"> <li>• Initializes the item and changes to the COMPLETED screen (page 33).</li> </ul> When "NO" is selected <ul style="list-style-type: none"> <li>• Changes to the DEFAULT MODE screen.</li> </ul>
Print/Select + Media feed/Enter	Changes to the DEFAULT MODE screen.

### 4-6-3. COMPLETED

FACTORY SETTING  
COMPLETED

PLEASE POWER OFF

This is the screen displayed when initialization is completed.

Turn the power off.

PRINTER SETTING  
COMPLETED

PLEASE POWER OFF

The display remains until the power is turned off.

No button operation is accepted.

I/F SETTINGS  
COMPLETED

PLEASE POWER OFF

USER MEMOY  
COMPLETED

PLEASE POWER OFF

## 2. Test Print Mode

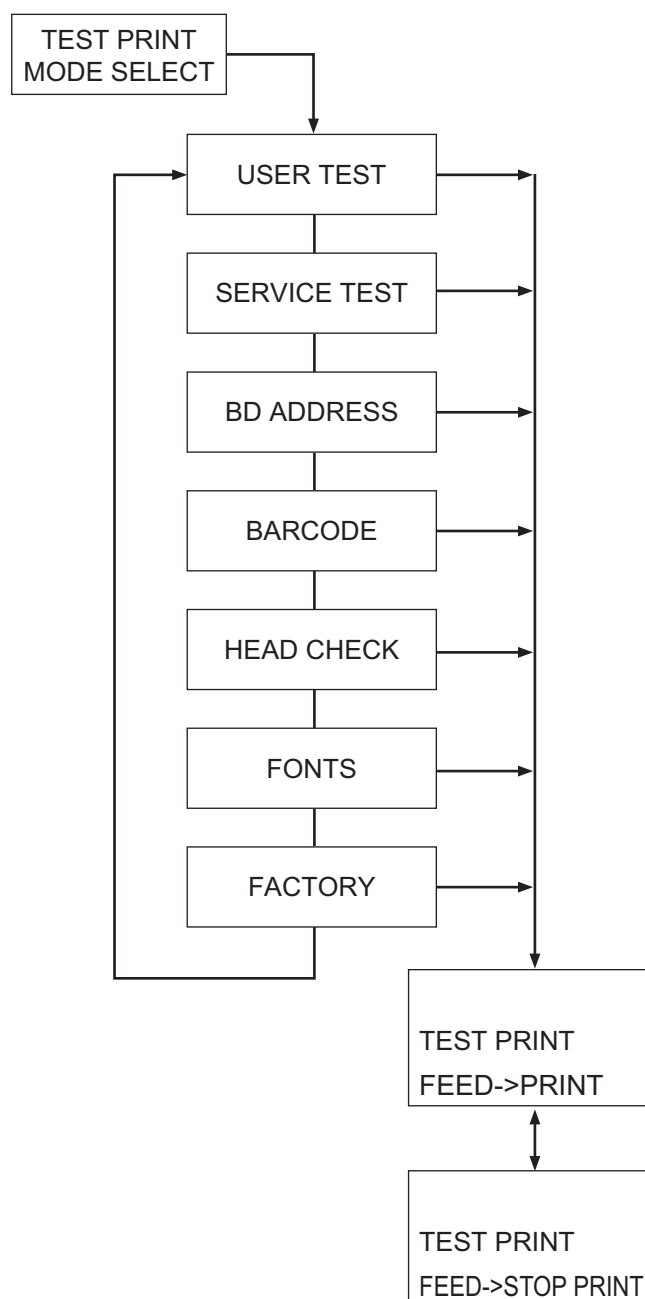
Turning the power on while the **Media feed/Enter** button is held pressed activates test print mode.

The seven items below can be printed in test print mode.

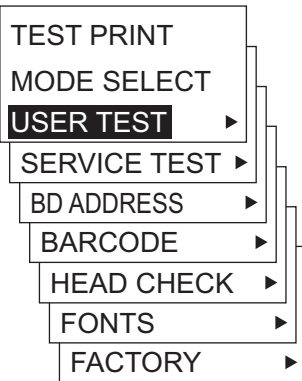
1. User test
2. Service test
3. BD address
4. Barcode list
5. Head check
6. Font list
7. Factory test

When the **Media feed/Enter** button is pressed on each screen, the display changes to the print start screen.

### Screen Transition for Test Print



## 1. Selecting an Item for Test Printing



Select an item for test printing.

Default: USER TEST

- USER TEST:** For checking the setting data for this printer.
- SERVICE TEST:** Test print performed by service personnel.
- BD ADDRESS:** For printing the BD address in QR code and Code39.
- BARCODE:** For printing the barcodes permanently stored in this printer.
- HEAD CHECK:** For printing to check the printer head status.
- FONTS:** For printing the fonts permanently stored in this printer.
- FACTORY:** Test print performed by service personnel.

Button name and button pressing	Screen and printer operation
Print/Select	Select an item for test printing.
Media feed/Enter	Changes to the test print start screen.

### 1-1. Test Print Start

TEST PRINT  
FEED->PRINT

Screen for starting test printing.

Button name and button pressing	Screen and printer operation
Media feed/Enter	Start the test printing.
Print/Select + Media feed/Enter	Changes to the MODE SELECT screen.

### 1-2. Test Print Printing

TEST PRINT  
FEED->STOP PRINT

Screen for printing the test printing.

Button name and button pressing	Screen and printer operation
Media feed/Enter	Stop test printing



### 3. List of Initial Value

Setting Items	Initial Value
ADJUSTMENT MODE	
PITCH POSITION	+0.00mm
OFFSET POSITION	+0.00mm
PRINT DARKNESS	50
BUZZER	ENABLE
BRIGHTNESS	2
BASIC SETTINGS	
PRINT SETTINGS	
ADJUST SETTINGS	PITCH
PRINT SPEED	4
PRINT DARKNESS 1, 2	5A
PRINT OFFSET	V:+0000 H:+000
FONT SETTINGS	
ZERO SLASH	ENABLE
CHARACTER PITCH	ENABLE
OP SETTINGS	
OPERATION MODE	TEAR OFF
SENSOR TYPE	I-MARK
ENERGY SAVING	005
AUTO POWER-OFF	000
I/F SETTINGS	
INTERFACE SELECT	Bluetooth
USB	—
Bluetooth	
AUTHENTICATION	Level 3
SCAN DETECT	ENABLE
SETTING(ISI)	0800
SETTING(ISW)	0012
SETTING(PSI)	0090
SETTING(PSW)	0012
PROTOCOL	STATUS3
CRC CHECK	DISABLE

Setting Items	Initial Value
ADVANCE SETTINGS	
BEEP ON ERROR	DISABLE
COMMAND ERROR	DISABLE
HEAD CHECK	DISABLE
HEAD CHECK RANGE	BARCODE
HEAD CHECK MODE	ALL
NO. OF LABELS	000001
HEAD CHECK (BOOT)	DISABLE
AUTO ONLINE	ENABLE
FEED AT BOOT	DISABLE
FEED AFTER ERROR	ENABLE
PRIORITY SETTING	COMMAND
DEFAULT MODE	
DEFAULT MODE	FACTORY SETTING
INITIALIZE?	NO

# 3 Troubleshooting

When an error message appears on the display, there is error in the printer. Check the error number shown on the display.

Causes and countermeasures depend on the error number and warning message. To release error status, check the type of error and warning message.



Normally in energy saving mode, the Status LED flashes in green with long intervals.

When an error occurs and the printer changes in energy saving mode, the status LED flashes in red with long intervals.

## 1. Error List

Error No.	Description	
1	Screen	<div>ERROR01</div> <div>MACHINE ERROR</div> <div>Contact customer service.</div>
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	Machine error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Board defective
	Countermeasure	① Contact the SATO reseller or technical support center.
2	Screen	<div>ERROR02</div> <div>ROM ERROR</div> <div>Contact customer service.</div>
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	ROM Error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Cannot access the Flash ROM. ② Exceeds the time for writing. ③ Cannot access the EEPROM.
	Countermeasure	① ② ③ Contact the SATO reseller or technical support center.

Error No.	Description	
4	Screen	<div>ERROR04 CONNECTION ERROR Recycle power.</div>
	Message	Recycle power.
	Releasing the error	Turn the power off.
	Type of error	Connection error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① An error is generated in printer communication status.
	Countermeasure	① Restart the printer.
7	Screen	<div>ERROR07 COVER OPEN Close cover.</div>
	Message	Close cover.
	Releasing the error	Open and close the cover.
	Type of error	Cover open
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① The cover is not locked. ② Cover detection sensor error
	Countermeasure	① Lock the cover. ② Contact the SATO reseller or technical support center.

Error No.	Description	
8	Screen	<div>ERROR08 SET MEDIA Load paper.</div>
	Message	Load paper.
	Releasing the error	Open and close the cover.
	Type of error	Paper end error
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① The media is not loaded. ② The media is not loaded correctly. ③ Pitch sensor error
	Countermeasure	① ② Load the media correctly. ② Contact the SATO reseller or technical support center.
10	Screen	<div>ERROR10 CORRECT MEDIA SETTING Check and load paper properly.</div>
	Message	Check and load paper properly.
	Releasing the error	Open and close the cover.
	Type of error	Sensor error
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① Pitch sensor level does not match. ② Setting for the sensor type does not match. ③ Paper skewing
	Countermeasure	① Contact the SATO reseller or technical support center. ② Use the correct sensor type. ③ Clean and adjust the media feeding route.

Error No.	Description	
11	Screen	<div>ERROR11 HEAD ERROR</div> Contact customer service.
	Message	Contact customer service.
	Releasing the error	Temporarily release the head check. Or turn the power off.
	Type of error	Head error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① The filament of the print head is open.
	Countermeasure	① Contact the SATO reseller or technical support center.
12	Screen	<div>ERROR12 MEMORY R/W ERROR</div> Contact customer service.
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	Error in writing to memory.
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Writing to the memory fails.
	Countermeasure	① Contact the SATO reseller or technical support center.

Error No.	Description	
13	Screen	<div>ERROR13 MEMORY FULL</div> Free up space.
	Message	Free up space.
	Releasing the error	Turn the power off.
	Type of error	Memory full
	LED	Light in red
	Buzzer	Short sound, 3 times
	Cause	① No free space in memory.
	Countermeasure	① Delete unwanted data.
14	Screen	<div>ERROR14 DOWNLOAD DATA ERROR</div>
	Message	DOWNLOAD DATA ERROR
	Releasing the error	Press the <span>Media feed/Enter</span> button.
	Type of error	Download data error.
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Received incorrect download data. ② No space for download.
	Countermeasure	① Check the downloaded data. ② Check the download data volume.

Error No.	Description	
21	Screen	<div>ERROR21</div> <div>KANJI DATA ERROR</div> <div>Contact customer service.</div>
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	Kanji data error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Read incorrect kanji data.
	Countermeasure	① Contact the SATO reseller or technical support center.
26	Screen	<div>ERROR26</div> <div>HEAD OVERHEAT</div> <div>Wait till printhead cools down.</div>
	Message	Wait till print head cools down.
	Releasing the error	Power down and let it cool.
	Type of error	Overheat error
	LED	Flash in red.
	Buzzer	Long sound, one time
	Cause	① The printer's temperature is outside the specified range.
	Countermeasure	① Power down and let it cool.

Error No.	Description	
27	Screen	<div>ERROR27</div> <div>Caaa:&lt;bb&gt;:cc</div> <div>Check print data.</div>
	Message	Check print data.
	Releasing the error	Pres the <b>Print/Select</b> button.
	Type of error	Command error
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① Command error is detected.
	Countermeasure	① Check the print data.
35	Notes	On Caaa:<bb>:cc  Caaa: Error position <bb>: Error command name cc: Type of error
	Screen	<div>ERROR35</div> <div>CRC CHECK ERROR</div> <div>Signature doesn't match.</div>
	Message	Signature doesn't match.
	Releasing the error	Press the <b>Print/Select</b> button for 3 seconds or more. Cancel printing.
	Type of error	CRC check error
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① CRC added to the transmitted data (for 1 item) is not correct.
	Countermeasure	① Check the transmitted data and signal conditions.



Error No.	Description	
40	Screen	<div>ERROR40</div> <div>BLUETOOTH ERROR</div> <div>Contact customer service.</div>
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	Bluetooth module error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	① Bluetooth module error
	Countermeasure	① Contact the SATO reseller or technical support center.
41	Screen	<div>ERROR41</div> <div>LOW BATTERY</div> <div>Please charge battery.</div>
	Message	Please charge battery.
	Releasing the error	Connect the AC adapter and charge the battery to charge level 1.
	Type of error	Low battery
	LED	Light in red (Flashing in red while the AC adapter is connected)
	Buzzer	Long sound, one time
	Cause	① The battery is out of charge.
	Countermeasure	① Replace the battery. ② Charge the battery.
	Notes	The power will automatically be turned off after 30 to 40 seconds.


Error No.	Description	
42	Screen	<div>ERROR42</div> <div>NO BATTERY</div> <div>Please put battery.</div>
	Message	Please put battery.
	Releasing the error	Insert a battery.
	Type of error	No battery
	LED	Flash in red.
	Buzzer	Short sound, 3 times
	Cause	① A battery is disconnected. ② A battery is not installed.
	Countermeasure	① ② Insert a battery.
43	Screen	<div>ERROR43</div> <div>CHARGING</div> <div>Wait till charging is complete.</div>
	Message	Wait till charging is complete.
	Releasing the error	Wait until charging is complete.
	Type of error	During charging
	LED	Flashing in red.
	Buzzer	Short sound, 3 times
	Cause	① The <b>Power</b> button is pressed while charging.
	Countermeasure	① Do not press the <b>Power</b> button while charging.

Error No.	Description	
44	Screen	<div>ERROR44</div> <div>BATTERY ERROR</div> <div>Please replace battery.</div>
	Message	Please replace battery.
	Releasing the error	None
	Type of error	Battery error
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	Battery error
	Countermeasure	Replace the battery.
45	Screen	<div>ERROR45</div> <div>PRINTER OVERHEAT</div> <div>Contact customer service.</div>
	Message	Contact customer service.
	Releasing the error	Turn the power off.
	Type of error	Printer overheat
	LED	Light in red
	Buzzer	Long sound, one time
	Cause	The temperature of the printer is outside the specified range.
	Countermeasure	Contact the SATO reseller or technical support center.
	Notes	The power will automatically be turned off after 30 to 40 seconds.

## 2. List of Warning Icons

The warning icons will be displayed in order of detecting.

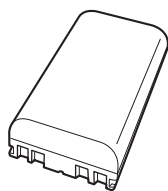
No.	Description	
1	Screen	
	Warning	Head error (area excluding barcode)
	Releasing the error	–
	LED	Light in green
	Buzzer	–
	Cause	① After detecting the head error, the head error is released and printing continues.
	Countermeasure	① Contact the SATO reseller or technical support center. Replace the print head.
2	Screen	
	Warning	Command error
	Releasing the error	If the next item is received or the job canceled, the warning icon will be cleared.
	LED	Light in green
	Buzzer	Short sound, 1 time
	Cause	① Command error is detected.
	Countermeasure	① Check the print data.

No.	Description	
3	Screen	
	Warning	Receive buffer near full
	Releasing the error	–
	LED	Flash in green
	Buzzer	–
	Cause	① Free space in the receive buffer is little.
	Countermeasure	① Do not send the next data until printing the data finishes on the printer.



## 4 Options

### 1. Battery



Install and charge it.

### 2. AC adapter

### 3. 1ch charger (For China)

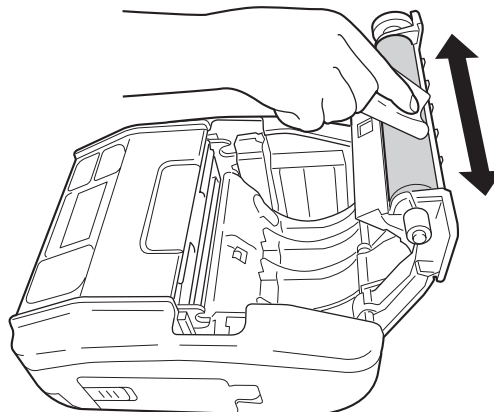
### 4. 6ch charger (For China)

## 5 Cleaning the Printer

Be sure to turn the power off, remove the battery, then clean the printer.

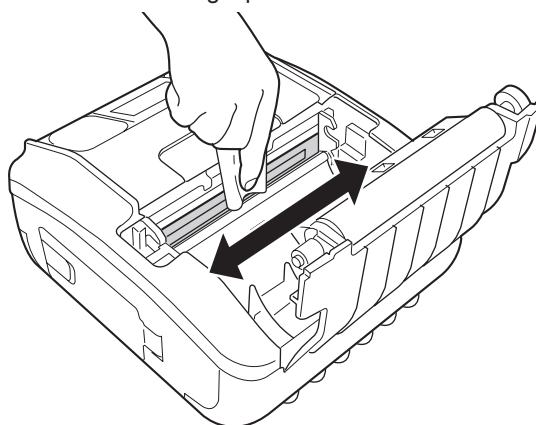
### 1. Platen Roller

Clean the platen roller softly from side to side using a cotton cloth dabbed with cleaning liquid.\*



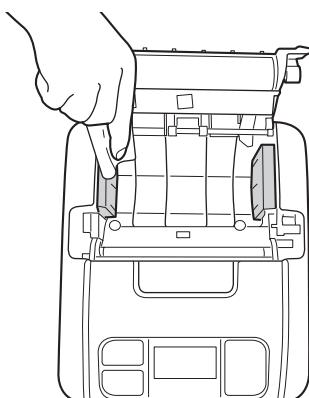
### 2. Print Head

Clean the platen roller softly from side to side using a cotton cloth dabbed with cleaning liquid.\*



### 3. Label Guide

Clean the label guide softly using a cotton cloth dabbed with cleaning liquid.\*



\* The cleaning liquid is not included. Contact the SATO reseller or technical support center for purchasing.

# 6 Basic Specifications

## 1. Printer

Model name	VP208
Print Method	Direct thermal method
Head density (Resolution)	8 dot/mm (203 dpi)
Effective print area	Length 1000 mm × Width 55 mm
Print speed	4 to 5.6 inches/sec. 100 to 140 mm/sec.
	Values may vary with print layout, ambient temperature, or remaining battery level.
Non-printable Area	Length Upper: 1.5 mm, lower: 1.5 mm (not including liner)
	Width Left: 1.5 mm, right: 1.5 mm (not including liner)
Print mode	Continuous, tear-off, pitch sensor disabled
Dimensions/ weight	Width 93 mm×Depth 52 mm (53.5 mm including projecting parts) × Height 105 mm Approximately 345 g (including a battery pack of 105 g, not including media)
Power Supply	Input voltage: 100 - 240 V AC±10%
Required conditions	Operating temperature : -5 to 40°C Humidity : 10 to 90%RH (non-condensing)
	Storage temperature : -20 to 60°C Humidity : 10 to 90% RH (non-condensing)
Interface	① Bluetooth interface ② USB interface
Options	① Battery ② AC adapter ③ 1ch charger (For China) ④ 6ch charger (For China)
Operation	CD : OLED (Horizontal 128 dots × Vertical 64 dots)
	LED : STATUS (green/red), Charge (green) Button : Power, Print/Select, Media feed/Enter

Model name	VP208
Level adjustment	Print position, stop position, print darkness, brightness
Media length detection sensor	I-mark sensor
Barcode	UPC-A/UPC-E, JAN/EAN, CODE39, CODE93, CODE128, GS1-128 (UCC/EAN128), CODABAR (NW-7), ITF, POSTNET
2D codes	QR code, Micro QR, PDF417, Data matrix (ECC200), GS1 data matrix Maxi code
Bitmap Fonts	OCR-A 15×22 dots (Alphanumeric characters, codes) OCR-B 20×24 dots (Alphanumeric characters, codes)
	XU 5×9 dots (Alphanumeric characters, codes) XS 17×17 dots (Alphanumeric characters, codes) XM 24×24 dots (Alphanumeric characters, codes) XL 48×48 dots (Alphanumeric characters, codes) XB 48×48 dots (Alphanumeric characters, codes)
	<b>For China</b> Simplified Chinese (GB18030) 16×16 dots (Sung: Mincho) 24×24 dots (Heiti: Gothic)
	<b>For Vietnam</b> Vietnamese 9×9 dots 16×16 dots 24×24 dots
Print Direction (characters, barcodes)	Characters: 0°, 90°, 180°, 270° Barcode: Parallel 1(0°), Parallel 2 (180°), Serial 1 (90°), Serial 2 (270°)
Ratios	1:2, 1:3, 2:5, Any ratio
Magnification (Character, barcode)	Character: vertical x1 to x12, horizontal x1 to x12 Barcode: x1-12

Model name	VP208
Built-in Functions	① Status return ② Graphic ③ Form overlay (99) ④ Foreign letter registration (95) (For China) ⑤ Character modification ⑥ Ruled line ⑦ Dump list ⑧ Zero slash switching ⑨ Format registration (99) ⑩ Black/white inversion ⑪ Serial number
Self-diagnosis Functions	① Broken head element check ② Head open detection ③ Paper end detection ④ Kanji data check ⑤ Sensor error detection ⑥ Command error detection ⑦ Machine error detection ⑧ Communication error detection
EMC Standards	GB9254, GB17625.1
Safety standards	GB4943.1

## 2. Battery

Battery type	Lithium-ion battery
Nominal voltage	7.4 V
Nominal capacity	2500 mAh
Operating cycle* <sup>1</sup>	Approximately 500 charge cycles or 3 years from the date of first use, whichever is earlier.
Charging time* <sup>1</sup>	Approximately 4 hours
Operating conditions* <sup>2</sup>	Continuous printing time 2 min. / Resting 6 min.
Manufacturer	Joules Miles Co., Ltd.
Model name	GM/200 BAT-SM or JM/200BAT

\*<sup>1</sup> Operating cycle and charging time depend on the operating environment.

\*<sup>2</sup> The charge-discharge cycle and charging time may vary depending on usage environment.

## 3. Label Specifications

Media type/ Media form	Roll Dimension : Φ36 mm maximum Coreless
Media size	Standard Length 20 to 1000 mm (20 to 1000 mm) Width 55 mm (57.5 mm) Tear-off Length 20 to 1000 mm (20 to 1000 mm) Width 55 mm (57.5 mm) * ( ): Liner size

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