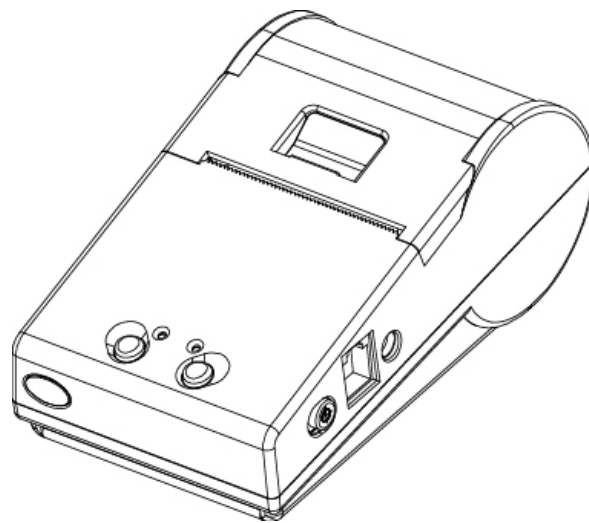


MODEL PORTI-SB50

(Mobile Printer)



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All specifications are subjected to change without notice



<http://www.woosim.com>

FCC Compliance Statements

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

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

Warning : Your are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.



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Copyright

PORTI-SB50 mobile printer operator's manual.

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Caution

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

If the printer is damaged by the static electricity, you should turn the printer "OFF".

Notice

The contents of this manual are subject to change without notice.



<http://www.woosim.com>

■ Introduction

The **PORTI-SB50** is suitable designed for use with a growing variety of mobile devices. RS232, IrDA(physical layer) and HPIR interfaces make the **PORTI-SB50** the perfect comrade for applications such as point of transaction warehousing, distribution, point of sales, hospitality, gaming and healthcare.

The general features of **PORTI-SB50** printer are as follows:

- ▶ Pocket size (78mm x 131.5mm x 55mm).
- ▶ Light weight(200g) for true mobility.
- ▶ Very silent printing thru direct thermal printing method.
- ▶ High speed (50mm/sec, MAX)
- ▶ High resolution (203dpi, 8dot/mm)
- ▶ RS-232C, IrDA, HPIR interface
- ▶ Easier paper roll loading by CLAMSHELL design.
- ▶ Easier maintenance with self-diagnostic.
- ▶ Microsoft Windows 98/ME/XP/2000 compatible.
- ▶ Support bit-image(logo) download.
- ▶ Flow control : Software (XON/XOFF)
 - ※ Hardware flow control not supported in printer.

■ Operating Precaution

Please follow the precautions below to enjoy and maintain the full performance of the printer.

▶ Using the Printer

- Be careful not to drop or bump the printer on a hard surface.
- Do not install the printer in direct sunlight or such areas.
Suitable environment for the use of the printer is as follows :
 - ◆ Operating temperature :-10°C to 40°C
 - ◆ Relative humidity : 10% to 90% (No condensation)
- Do not install the printer near devices that generate strong electromagnetic fields such as a copy machine.
- Do not open the platen cover during printing .
- Do not remove or reinstall the communication cable during printing or transmission.
- Do not touch the connectors of the communication cable and to close up the Infrared transmitter /receiver during printing.
- Switch the POWER OFF when not in use.
- Do not use alcohol or other solvent.
- The AC adapter, the battery charger and the battery pack may become warm when in use. This is normal and is not a malfunction.
- When the battery pack is used at low temperature, the length of time the printer can be used may be shortened.

► **Thermal Paper Handling**

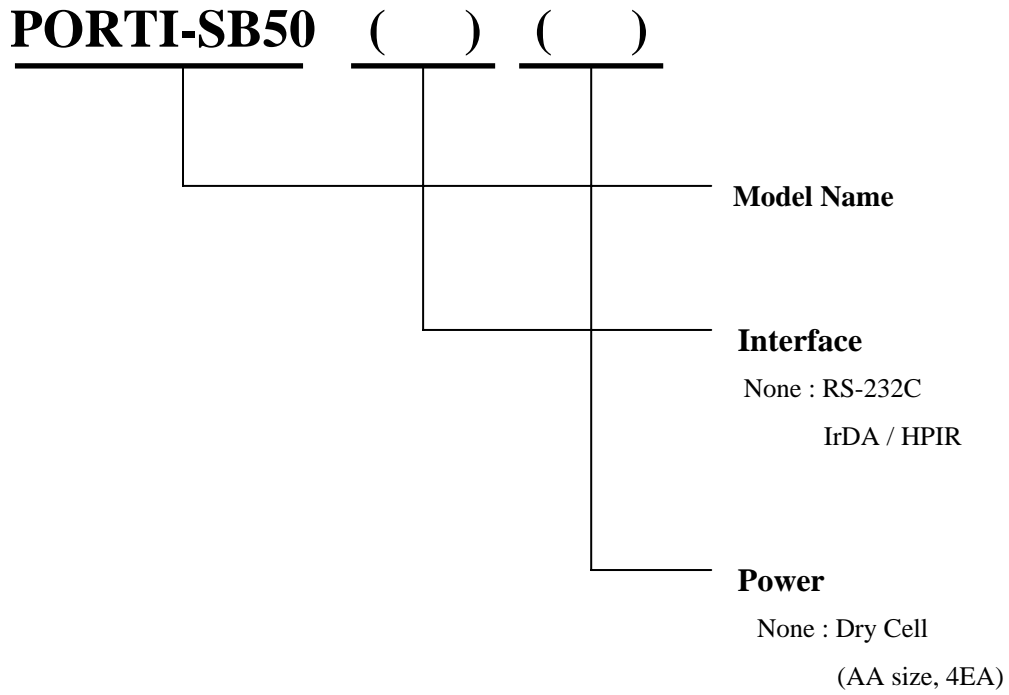
- Store the thermal paper in a cool, dry and dark place.
- Do not rub the paper with hard object.
- Do not leave the paper with hard object.
- Do not allow plastic film, erasers, or adhesive tape to touch the paper for long periods.
- Do not stack the thermal paper with diazo copies immediately after copying or wet-type copies.
- Do not use chemical glue.
- Always use the clean thermal paper.

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1. Outline

1.1. Model classifications



1.2. Specifications

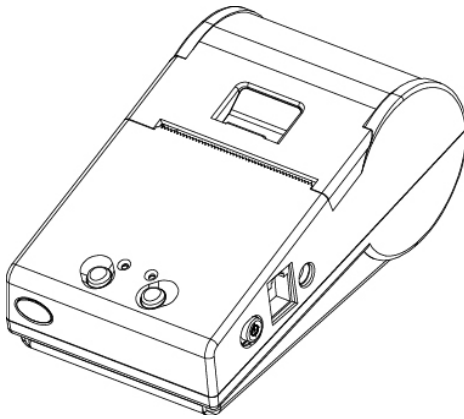
Item	Specification	
Print method	Direct thermal line printing	
Characters per line	48cpl (MAX)	
Character size	Eng. : 8x24dots , 9x24dots, 12x24dots, 16x24dots	
Resolution	203dpi, 8dots/mm	
Print width	2-inch (48mm, 384dots)	
Print speed	50mm / sec (MAX)	
Dimension	78 × 131.5 × 55 mm	
Weight	200g (Except Dry cell)	
Interface	RS-232C IrDA (Physical Layer) / HPIR	
Paper roll	Thermal roll paper (57mm wide, 50ø)	
Barcodes	Code128, Code39, I2/5, UPC, EAN, CODABAR	
Receive buffer size	10K bytes	
Battery Type	Dry cell(AA size, 4EA) (It is recommended that a high capacity of rechargeable battery be used.)	
Battery Charger	Output (9VDC/800mA)	
Environment Conditions	Temperature	-10°C ~ 40°C (operating) -10°C ~ 70°C (storage)
	Humidity	30% - 80% (operating) 10% - 90% (storage)
MCBF (Mean Cycle Between failure)	Mechanical	37,000,000 lines
	Head	Approximately 50 Km

2. Setting up the printer

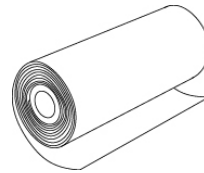
2.1. Printer & Accessories

When unpacking your printer box make sure it contains the printer and all accessories.

If any accessories are missing or damage, please contact your dealer for assistance.



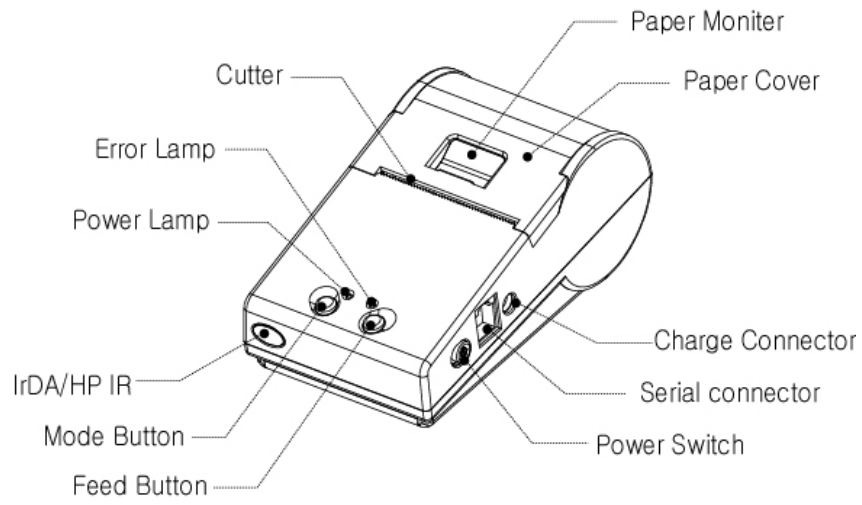
PORTI-SB50



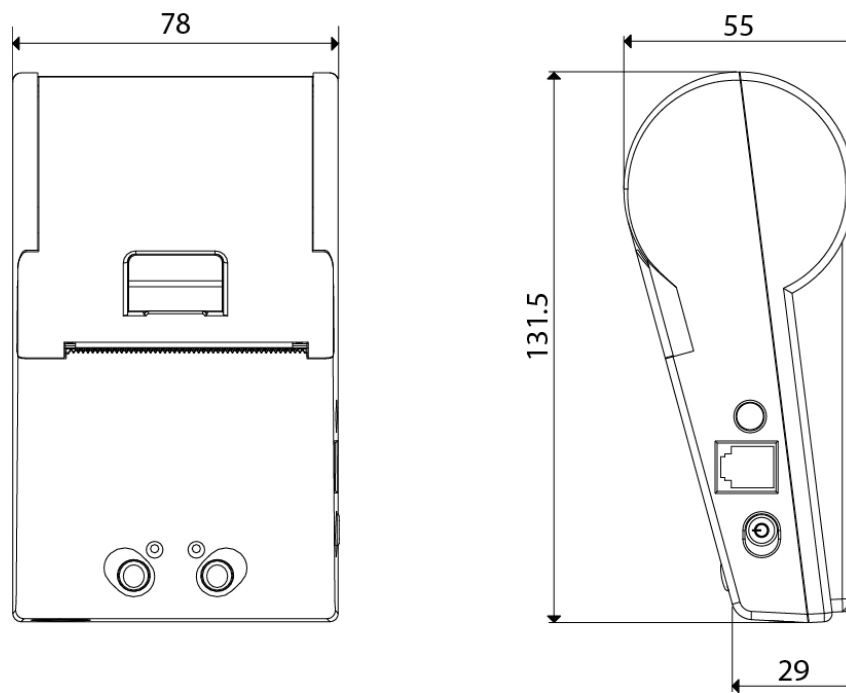
ROLL PAPER

2.2. Printer Features

2.2.1. Part name



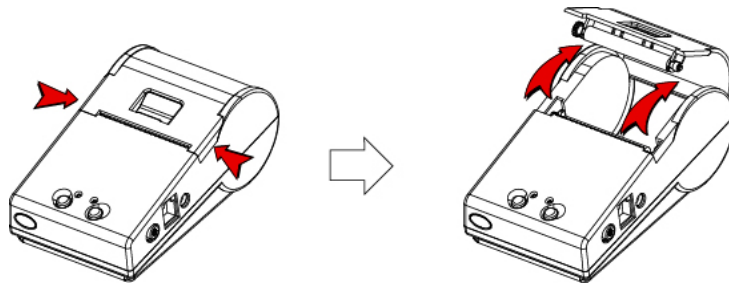
2.2.2. Dimension



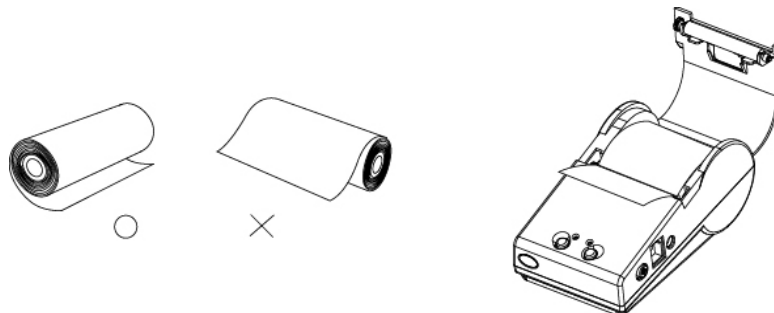
2.3. Replacing paper roll

**Note : Be sure to use paper rolls that meet the specifications.
Do not use paper rolls that have the paper glued to the
core because the printer cannot detect the paper end
correctly.**

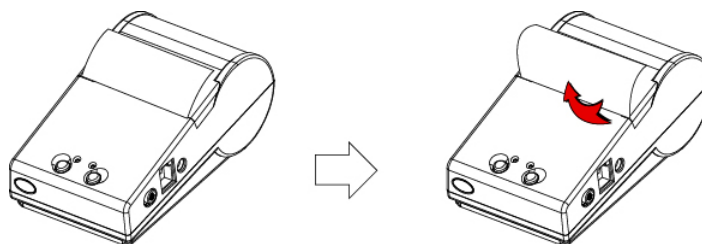
1. Make sure that the printer is not receiving data; otherwise, data may be lost.
2. Open the paper cover using finger on both side of printer, and remove the remaining paper.



3. Insert a new paper roll as shown.



4. Tear the excess paper off using the edge of paper door as a tear bar.



2.4. Power supply

2.4.1. Internal power supply

- The following specification is requested for Power supply.
Power supply : 4 X 1.2V Ni-MH 1600mAh, AA cells (Battery Charging : 9VDC/800mA)
- Use only power supplies stipulated specifically for your PORTI-SB50 printer.
Using a different power supply may cause damage to the printer.

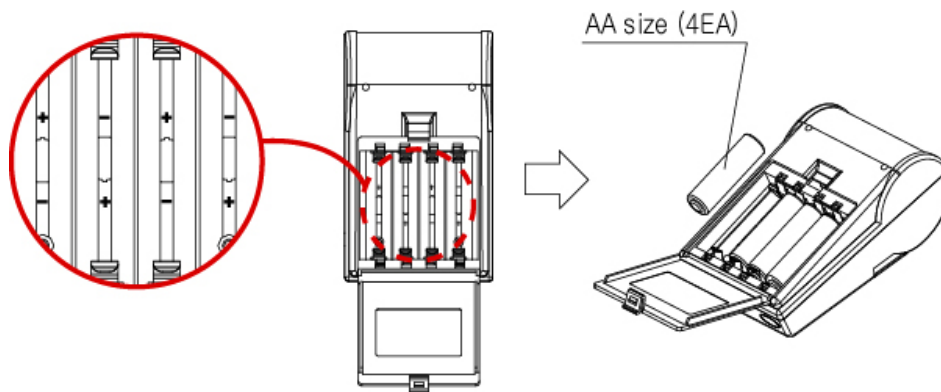
2.4.2. Installing the Battery

NOTE :

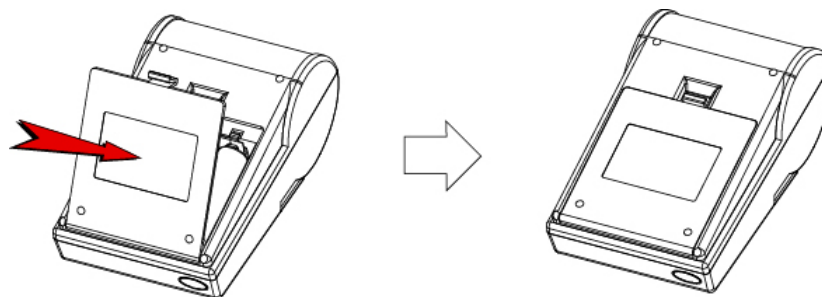
- Before installing or removing the dry cells, ensure the printer is OFF.
- If the printer is not used for long period of time, remove the dry cell from the printer.

① Installing the battery

- Install the dry cells by referring to the polarity diagram in the battery compartment.



- Close the battery cover in the direction of the arrow.

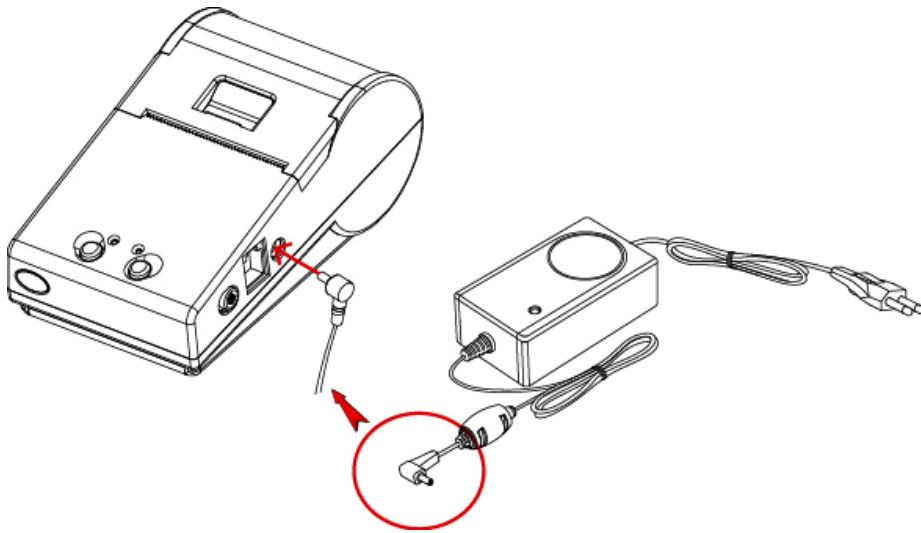


② Reverse the order to remove the dry cells.

2.4.3. Recharging the battery

Before recharging the battery, install the battery in the printer.

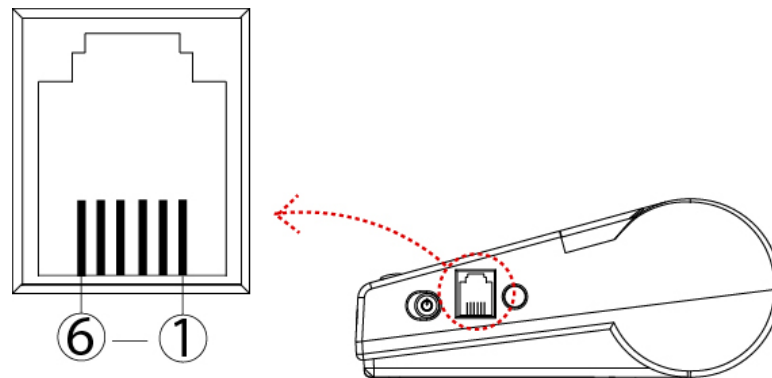
Insert the charger to the charge connector of the printer, as shown.



- NOTE :**
- While charging the printer, turn off the printer power.
 - Do not remove the battery during charging.
 - The battery is consumable parts and when purchasing, compared to the use hour is gradually decreases. (Warranty 6 month)
 - If the printer is not used for a long time, unplug the power cord from the printer and outlet.
 - The recharging time depends on the voltage level and ambient temperature of the dry cell.

3. Interface

3.1. RS-232C



The RJ-12 socket is provided for applications requiring RS-232C interface with connections as detailed below:

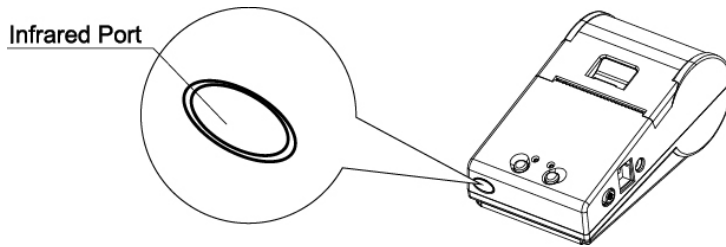
Pin No.	Signal	I/O	Definition
1	GND	N/A	Signal Ground
2	TxD	O	Transmitted data to host
3	RxD	I	Received data from host
4	N/C	N/A	No connection
5	N/C	N/A	No connection
6	N/C	N/A	No connection

<CN9 : RJ-12 SOCKET>

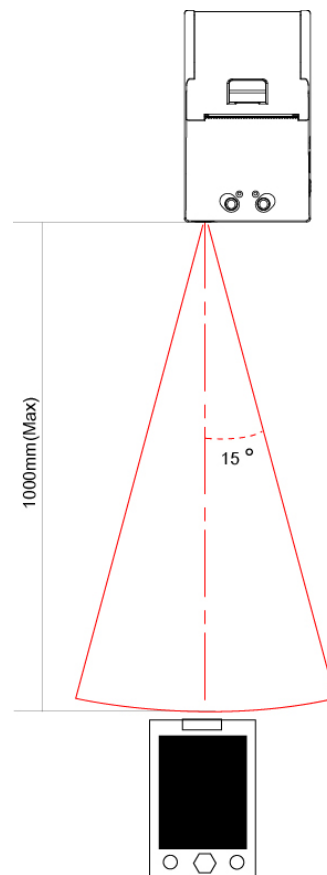
NOTE : ● When data receiving, when it removes the communication cable, it loses a data.

3.2. Infrared data communication

The PORTI-SB50 has a serial interface for bi-directional data exchange. The infrared port is the left side of the front part.



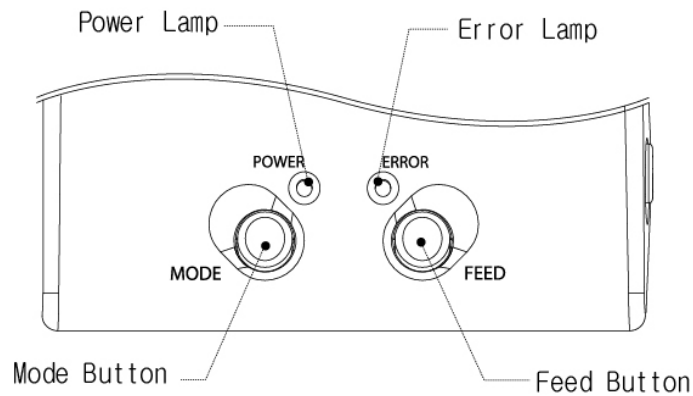
1. To use the PORTI-SB50's infrared port by a Computer or a Personal Digital Assistant (PDA) with IR port is required.
2. Position a PDA conforming to the specifications in point not more than 50 centimeter away from the printer's infrared port. Make sure the two ports are in front of each other with an angle of not more than 15° on the four sides.



NOTE : ● When infrared ray communication doing, directness it does not see the IrDA window roll up.
Eye damage there is a danger.

4. Using the printer

4.1. Control panel



► Button

- FEED :

When the printer is on, paper can be feed manually by pressing and holding the FEED button for more than one second.

- MODE :

MODE Button is for use to change communication mode.

Do not operate the mode button without instructions.

► Panel lamp

- **Power** : Printer is ON and ready to receive data.

(Green) The status indicator will flash continuously to show the batteries are nearly exhausted and in need of re-charging.

- **Error** : Indicates a fault condition or a printer error.

(Red) (i.e : no paper, paper cover opened. etc.)

4.2. Self test

The self test procedure will check most of the printer functions. For self test, turn on the power while holding down the FEED Button. The Self-Test checks the following :

- 1) Make sure paper roll has been installed properly.
- 2) The Self-Test prints the current printer status, which provides the control ROM version and the communication method setting.
- 3) After printing the current printer status, Self-Test will print a pattern using the built-in character set.
- 4) The Self-Test automatically ends.

The printer is ready to receive data as soon as it completed the self test.

4.3. Troubleshooting

Check the following points before you make a request for repair.

▶ **The power does not turn on.**

- Charger or dry cell(AA size, 4EA) being used?
- AC cable and Charger or dry cell is connected.
- Charger is connected to the printer correctly?
- Dry cell is fully recharged?

▶ **The printer does not print.**

- Interface cable is connected correctly?
- Interface cable that meets the Communication Connector specification list on page 15 of the Operator's Manual being used?
- IrDA transmission status is good? (To close up between Infrared Transmitter / Receiver and the host computer?)
- Transmission conditions of the host computer is correct? (IrDA port is activated and set-up correctly?)
- Paper is not inserted?
- Paper orientation(top/bottom) is correct?

▶ **Error Lamp of the power Lamp is blinks.**

- Paper end or cover opened?
- Battery is almost exhausted? (Recharge the battery by using the AC adapter.)

▶ **The Dry cell is not installed.**

- Dry cells correctly oriented?
- Correct dry cells being used?

▶ **The battery runs out soon even if recharged.**

- Battery been recharged correctly?
- If the battery is recharged correctly, but does not take a long time, it is almost dead.
Replace it with a new one.

5. Consumable parts

5.1. Recommended paper

Type	: Thermal Paper
Paper width	: 57mm
Paper thickness	: $70\pm 5\mu\text{m}$
Outer diameter	: $\text{Ø}50$ or less
Recording side	: Outside of roll



Cautions

- Do not paste the paper to the core. And the roll paper which has near end mark printing on its near end is recommended.
- Chemicals or oil may change the color of paper, or printed characters may fade.
- Change of paper color starts from approx. $70\text{ }^{\circ}\text{C}$.
Pay attention to heat, humidity and sun light.
- Color of paper may be changed by being scratched by nail or hard metal, etc.

5.2. Printing position

