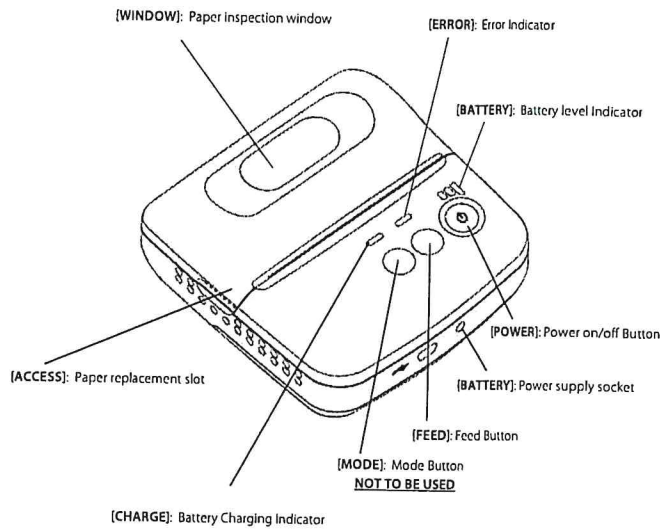
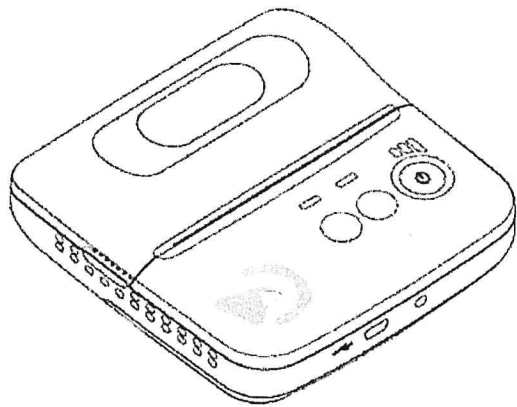


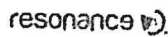
1.1 Drawing



Release history

A/A September 2017 – draft version

B/A October 2017 – first release (in use)



NOTE

Thank you for purchasing this Resonance PPRT-01 printer.
Please read this manual carefully before using the PPRT-01 printer!

For your safety

- Make sure the provided battery and power supply are used. Using different products may cause fire, explosions or damage both printer and battery.
- Keep the battery away from fire, do not disassemble or heat it and do not short it out; this may cause fire, explosions or damage both printer and battery.
- In case the printer is not to be used for some time, make sure the battery is taken off to avoid the leakage of corrosive liquids.
- In case of leakages from the battery onto the skin or clothes, rinse with water.
- In case the liquid gets in touch with your eyes, rinse them thoroughly with water and see a doctor.
- Do not open the paper case cover while the printer is working, or immediately after the print-out is finalized.
- Do not touch the printer head to avoid burns.

For a good use of the printer

- Do not spill water or any other liquids on the printer.
- Do not open the paper case cover when the printer is working to avoid malfunctioning.
- When you want using PPRT-01 with wifi connection:
 - Before start any operation plug the wifi adapter into the Resonance device at the dedicated USB port.
 - Switch on the PPRT-01.
 - The device will automatically recognize the PPRT-01 (please refer to chapter 3.2.5)

Operating room temperature: 5 °C – 45 °C

Operating humidity: 20% - 85%

The use of poor quality paper or old paper may affect the printing quality and even damage the printer.

Use ONLY Resonance approved quality paper (part number C1000035).

Storage

Storage temperature: -40°C - +70°C

Storage humidity: 10% - 95%

When storing the printer make sure the battery is taken off to avoid damages to both battery and printer.

Printed out results fade out shortly if you use standard thermal paper. In order to make sure your test results last longer, use long-term effective thermal paper.

Thermal paper has to be stored in a dark and cool place.

Chapter 2 – Technical specifications

2.1 Specifications

Print	Printing Method	Thermal line
	Printing Speed	80mm/s
	Resolution	8 dots/mm, 576dots/line
	Effective Printing Width	72mm
Characters	Characters per Line	48
Paper Specs	Paper Type	Resonance Thermal paper
	Paper Width	79.5± 0.5 mm
	Paper Roll Diameter	Max: 40.0 mm
	Roll Core Inner Diameter	13mm(min)
	Paper Thickness	0.06 to 0.07mm
Paper Supply Method	Drop-in easy loading	
Reliability	MCBF	15 million lines
Sensor	Paper End Sensor	
Power Adapter	9V DC/2A	
Battery Power	7.4V DC, 1.5A rechargeable Li-ion battery	
Battery duration	120m continuous printing	
Weight	260g (excluding roll paper)	
Dimensions (WxLxH)	103x99x46mm	
Environment	Operating Temp	0°C~50°C
	Storage Temp	-40°C~70°C
	Operating Humidity	10%~80%
	Storage Humidity	10%~95%

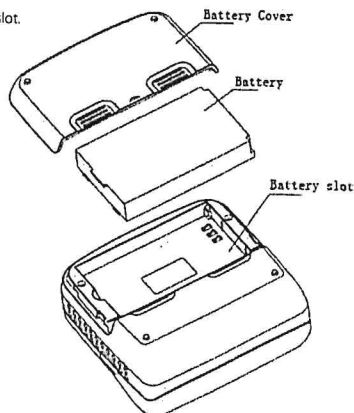
- Paper end sensor: when the paper is finished, the ERROR Indicator lights up, the buzzer rings, and the printer stops working.
- Printing Control Command: ESC/POS compatible command set.
- Power Supply Unit: 9 V 2.0 A.
- Power Supply: 7.4VDC/1500mAh rechargeable polymer lithium battery.
- Power Alarm: when the battery is low, the battery indicator blinks.
- Battery Charging: quick charging, full charging taking about 3 hours.

Chapter 3 - Performance

3.1 First use

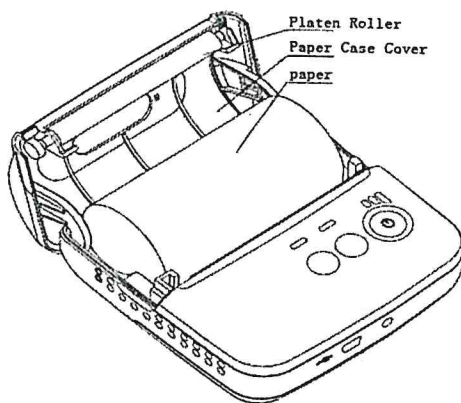
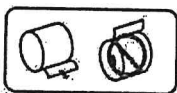
3.1.1 Battery Installation

1. Place the battery into the battery slot.
2. Close the battery cover.



3.1.2 Paper Roll Installation

1. Hold both sides of the paper case cover, and open it.
2. When positioning the paper roll, make sure the effective printing side of the paper is correctly facing outwards.
3. Pull out a part of the paper roll and place it in the center of the paper slot.
4. Shut down the paper case cover and cut off the jutting out paper.



3.2 Printer operation

3.2.1 Switching On

To start the PPRT-01, press and keep pressed the **POWER** button: the power indicator will light up and, immediately after, you will hear two tones. Releasing the **POWER** button you will set the printer into working mode. The battery indicator will show the remaining battery power.

3.2.2 Switching Off

To switch the PPRT-01 off, press and keep pressed the **POWER** button again: you will hear two tones and the power indicator will go off. Releasing the **POWER** button the printer will be switched off.

3.2.3 Paper Feeding (Manual Feeding)

When the printer is on, press the **FEED** button to start feeding the paper and release it when finished.

3.2.4 Battery Charging

The battery runs out of power with use. When the battery power starts to be low the battery indicator on the printer will start blinking and you will need to recharge it.

To recharge the battery plug in the adapter to the power socket (220V, 50HZ) and connect it to the printer. During recharging the **CHARGE** indicator is red, and its colour turns into blue when the recharging is completed. Charging time is 3 hours approximately. If you use the printer while recharging, the charging time becomes longer. If anything goes wrong while charging, the **CHARGE** indicator blinks blue and red.

A dedicated template will be printed including all test's information. ONLY if the tests results has been previously stored, the printing option will be enabled.

To check if the PPRT-01 is connected, on the Setup menu press the icon "wifi".

On the following screen, press the icon "setup"; a pop-up message will appear. The printer name and status will be shown on the first row.

For a fast connection check, without checking the printer name, press the icon "printer" from the setup menu.

A status "Connected" or "Disconnected" will be shown.

3.3 Indicators and Buzzer

There are four red and blue light indicators: blue for **CHARGE, BATTERY** and **POWER**, red for **ERROR**.

POWER indicator

1. Light constantly on: the PPRT-01 is on.

CHARGE indicator

1. Blue light constantly on: charging is **completed**.
2. Red light constantly on: **charging**;
3. Blue and red lights blinking: **error message**. You need to check the battery connection and temperature

BATTERY indicator

The battery indicator is composed of three segments showing the battery status:

1. All segments on: the battery level is **high**
2. Two segments on: the battery level is **medium**
3. One segment on: the battery level is **low**
4. Lowest segment blinking: the battery is **extremely low** and it must be charged
5. Three segments blinking at the same time: the printer is **overcharged** (this may happen when using an external power supply directly)

BUZZER

The buzzer is an indicator of different printer status:

1. One low sound + one high sound: **power on**
2. One high sound + one low sound: **power off**
3. Two continuous low sounds indicate a **printer error**

ERROR indicator:

1. Light constantly on: the **printer is out of paper**
2. Light blinking: **printer error**. Different types of errors are differently indicated:

- In case of continuous blinking the error can be automatically corrected

Error	Description
Printer head temperature	The temperature of the printer head is too high. The printer will resume working as soon as the temperature has gone back to normal
Printer paper case cover open	The paper case cover is opened when printing. To automatically re-start printing, close the paper case cover

- When the indicator is blinking and then constant in a cycle, the error cannot be automatically solved.

Error	Description
Memory ERROR	The printer cannot work, memory must be re-calibrated
Overcharge	The power voltage is too high; out of range
Low voltage	The power voltage is too low