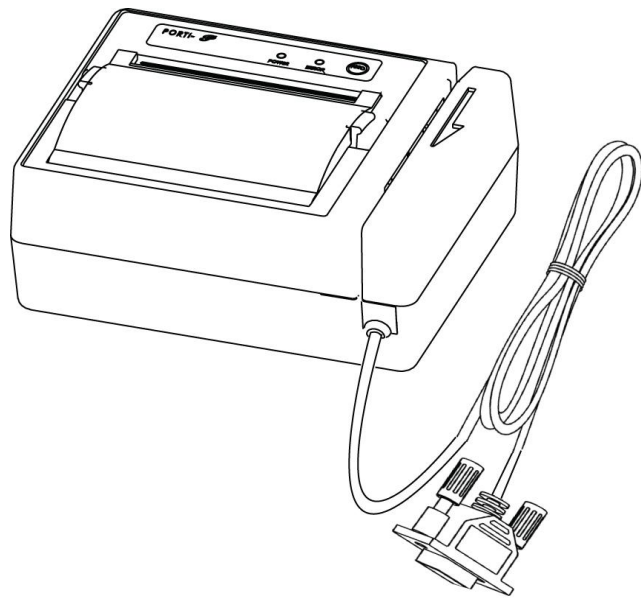


Operator's Manual

MODEL PORTI-PC40

(2inch Desktop Printer)

Rev. 3.0



All specifications are subjected to change without notice

■ Copyright

PORTI-PC40 2inch Desktop 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.

■ Introduction

The **Porti-PC40** is the ideal solution for taxi receipt printer, receipt printer, Medical analyzer, industrial instrument, recorder, geological analyzer, underground analyzer, chemical analyzer, metallic analyzer, etc.

The general features of Porti-PC40 printer are as follows:

- ▶ Pocket size(105 x 80.4 x 45.7mm)
- ▶ Light weight(241g) for true mobility.
- ▶ Very silent printing thru direct thermal printing method
- ▶ High speed(50mm/sec, MAX)
- ▶ High resolution(203dpi : 8dots/mm).
- ▶ UART(RS-232C or TTL) interface
- ▶ Support text and graphic printing.
- ▶ Support Magnetic Stripe Reader
- ▶ Low power consumption
- ▶ Easier paper loading by CLAMSHELL design.
- ▶ Easier maintenance with self-diagnostics.
- ▶ In field programming – Update Firmware, Download Fonts and Logos
- ▶ Microsoft Windows/Windows CE, Linux, Android compatible
- ▶ Flow control : Software (XON/XOFF)
 - ※ Hardware flow control not supported in printer.
- ▶ Agency Approvals



■ Operating Precautions

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 50°C
 - ◆ Relative humidity : 30% to 80%
- 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 during printing.
- Switch the POWER OFF when not in use.
- Do not use alcohol or other solvent.

▶ 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.

**Federal Communications Commission
Radio Frequency Interference Statement**

FCC ID : QDDPORTI-PC40

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

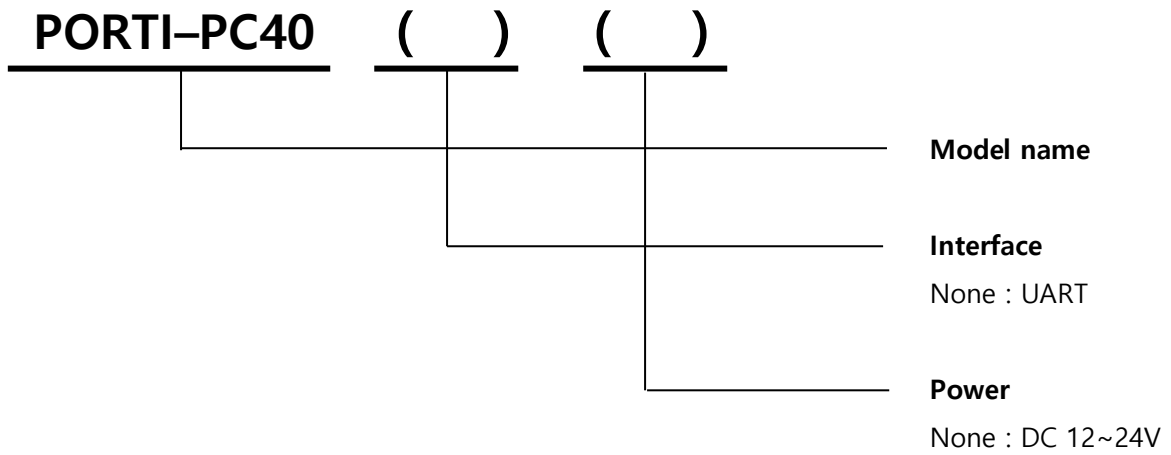
This Device has been evaluated to comply with RF exposure requirement for general use limit in portable condition. It is safe to be used in sold condition.

CONTENTS

- 1. Outline 7**
 - 1.1. Model classifications 7
 - 1.2. Product Part Number System..... 7
 - 1.3. Specifications 8
- 2. Setting up the printer..... 9**
 - 2.1. Printer & Accessories 9
 - 2.2. Printer Features.....10
 - 2.2.1. Part name10
 - 2.2.2. Dimensions11
 - 2.3. Replacing paper roll12
 - 2.4. Specified power supply.....12
- 3. Interface.....13**
 - 3.1. UART.....13
- 4. Using the printer.....14**
 - 4.1. Control panel.....14
 - 4.2. The self test.....14
- 5. Consumable Parts.....15**
 - 5.1. Recommended paper15
 - 5.2. Printing position15
- 6. Revision History16**

1. Outline

1.1. Model classifications



1.2. Product Part Number System

Model name / Interface Spec.

<p>S40 SC30 W25 . . .</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Wired</th> <th colspan="2">Wireless</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>RS-232C</td> <td>1</td> <td>Bluetooth</td> </tr> <tr> <td>B</td> <td>TTL</td> <td>2</td> <td>IrDA</td> </tr> <tr> <td>C</td> <td>USB</td> <td>0</td> <td>None</td> </tr> <tr> <td>D</td> <td>RS-485</td> <td></td> <td></td> </tr> <tr> <td>E</td> <td>Parallel</td> <td></td> <td></td> </tr> <tr> <td>Z</td> <td>None</td> <td></td> <td></td> </tr> </tbody> </table>	Wired		Wireless		A	RS-232C	1	Bluetooth	B	TTL	2	IrDA	C	USB	0	None	D	RS-485			E	Parallel			Z	None			
Wired		Wireless																												
A	RS-232C	1	Bluetooth																											
B	TTL	2	IrDA																											
C	USB	0	None																											
D	RS-485																													
E	Parallel																													
Z	None																													

Example) 1. Porti-S40 UART/Bluetooth Part No. ⇒ S40/A1
 2. Porti-SC30 Bluetooth Only Part No. ⇒ SC30/Z1

Note) The above table is the interface format which is supported.
 But some of the interfaces are not supported according to the product
 and please contact us, if you have any questions regarding the interface.

1.3. Specifications

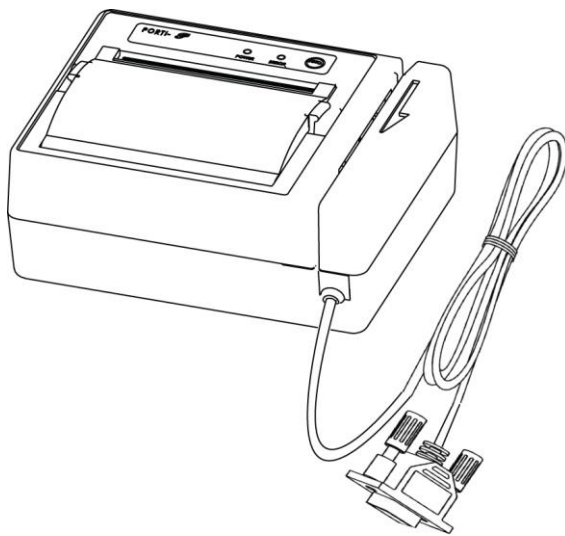
Item	Specification	
Printing method	Direct thermal line printing	
Characters per line	- Font A : 32cpl / Font B : 42cpl / Font C : 48cpl - KOR, CHN, JPN : 16cpl	
Character size	- Font Size A: 12X24 / Font Size B : 9X24 / Font Size C : 8X16 - KOR : 24X24(16X24) / CHN, JPN : 24X24	
Optional Characters	Alphanumeric:95, Extended Graphics:128X31 pages, International:10, Simplified/Traditional Chinese, Japanese, Korean	
Resolution	203dpi, 8dots/mm	
Print width	2-inch (48mm, 384dots)	
Printing speed	50mm / sec (MAX)	
Dimensions	105 X 80.4 X 45.7 mm	
Weight (w/o paper)	241g	
Interface	UART(RS-232C or TTL)	
Paper supplied	Thermal roll paper (57mm wide, 40ø)	
Barcode supplied	1-dimension : Code128, Code39, I2/5, Code93 UPC, EAN, KAN, JAN, CODABAR 2-dimension : PDF417, QR-Code, DATA Matrix	
Driver	Microsoft Windows, Linux	
Receive buffer size	10K bytes	
Input Power	12~24V DC, Standby 60mA and Max 3A	
MSR	ISO 7810 / 7811 / 7812 1&2 or 2&3 Track Reading	
Environment Conditions	Temperature	-10°C ~ 50°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

< Table 1 >

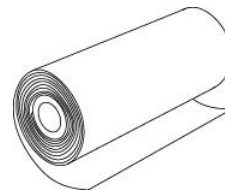
2. Setting up the printer

2.1. Printer & Accessories

Your printer box should include these items. If any items are damaged or missing, please contact your dealer for assistance.



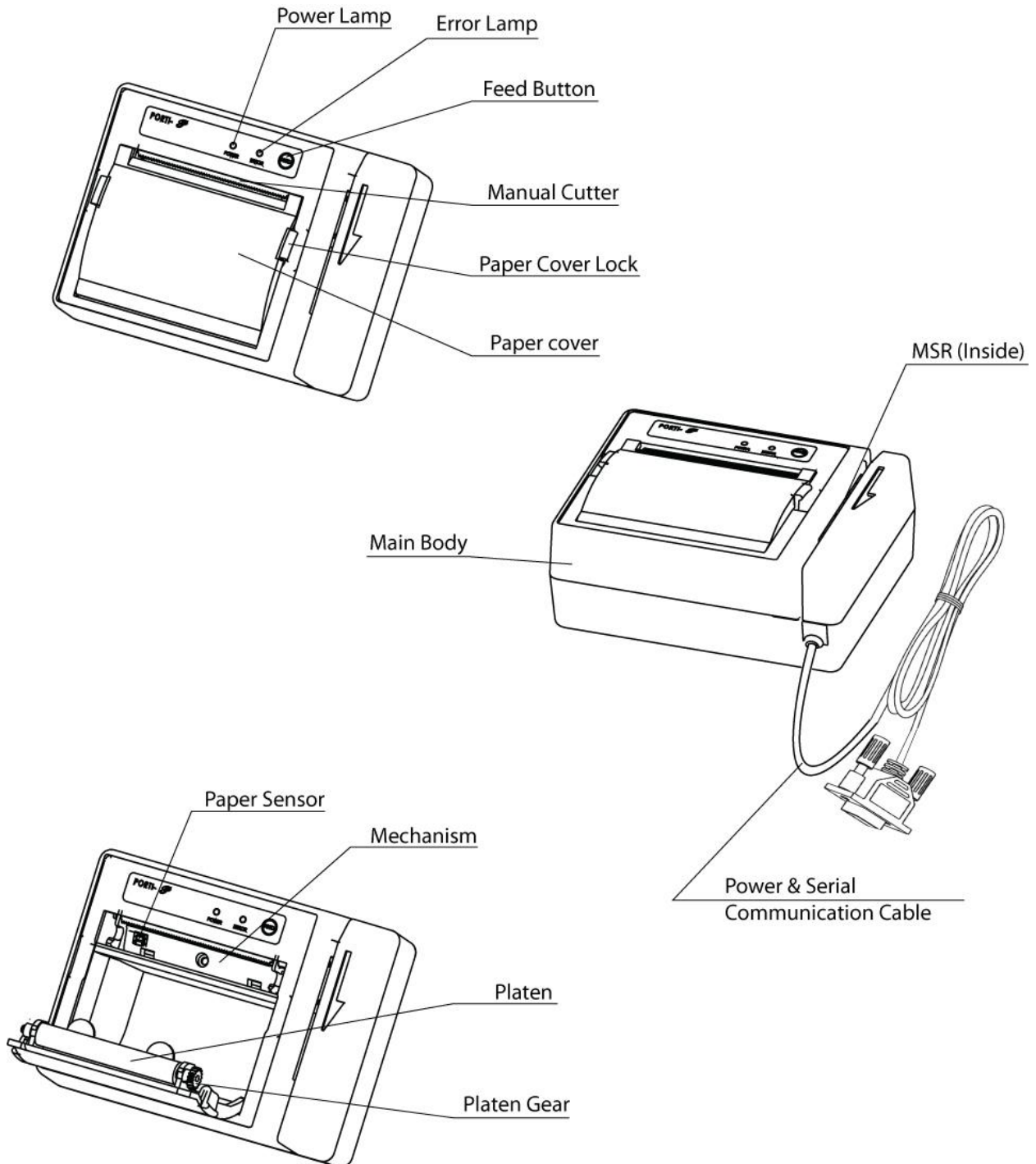
PORTI-PC40



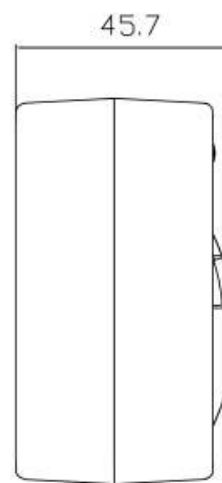
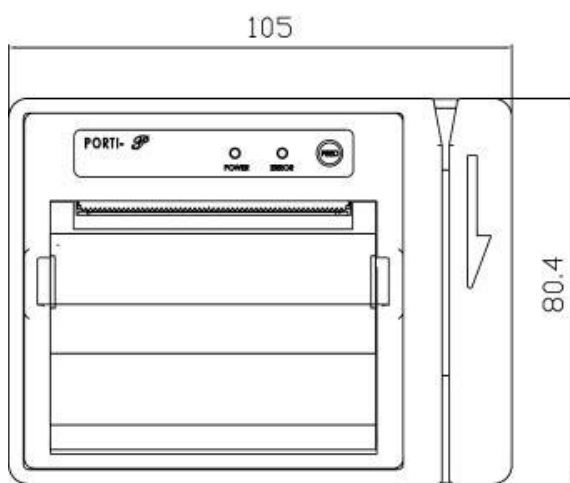
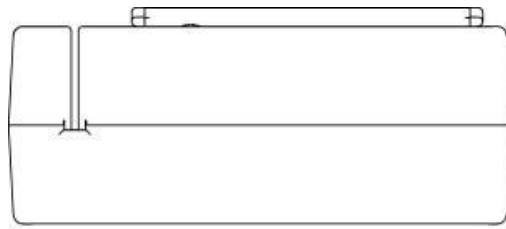
Thermal roll paper

2.2. Printer Features

2.2.1. Part name



2.2.2. Dimensions

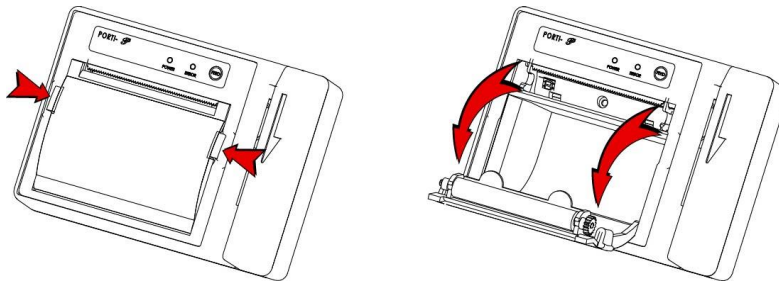


2.3. Replacing paper roll

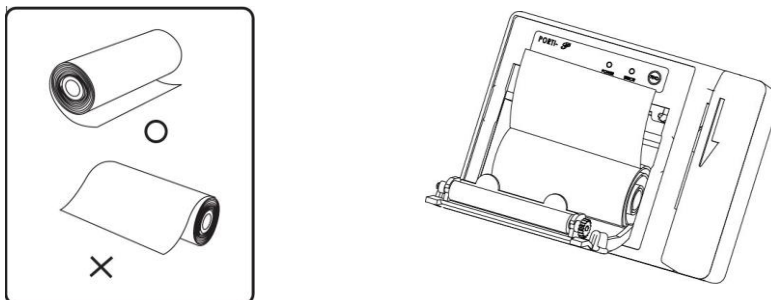
Note : Be sure to use paper rolls that meet the specifications.

Do not use paper rolls that have the paper glued to the core because the printer can not detect the paper end correctly.

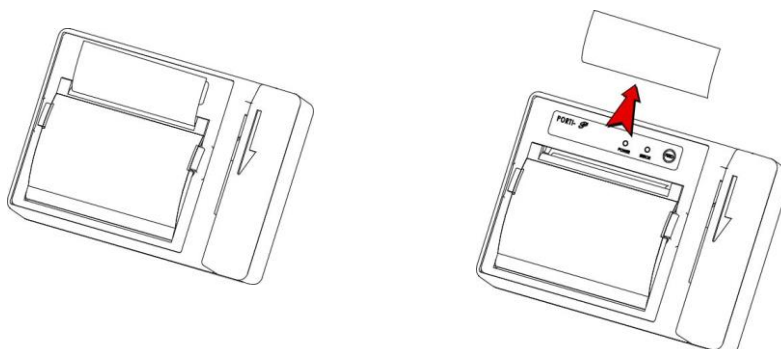
1. Make sure that the printer is not receiving data; otherwise, data may be lost.
2. Open the paper cover using finger on both side of printer, and remove the remaining paper.



3. Insert the paper roll as shown.



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



2.4. Specified power supply

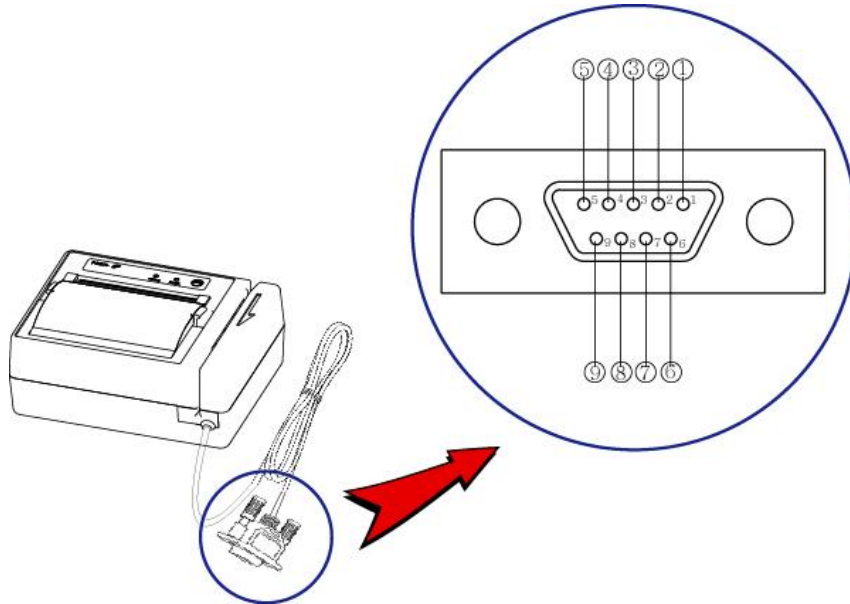
The following specifications are requested for Power supply.

Input : DC 12V~24V / Max 3A

Avoid using power supply which its power capacity of power current is extremely high.

3. Interface

3.1. UART



The Porti-PC40 printer has a UART(RS-232C or TTL) interface is connected by means of a 9 pin D-sub(Female Type) connector. In the following table, the signals present on the connector are listed:

Pin No.	Signal Name	Direction	Function
2	TxD	Output	Transmit Data
3	RxD	Input	Receive Data
5	GND		Ground
9	INPUT		12~24VDC / 3A

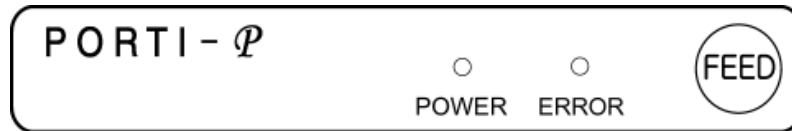
<D-Sub 9p Female >

※ RS-232C Technical Specifications

DATA TRANSFER RATE : 9600 Baud
WORD LENGTH : 8 Data Bits
 1 Stop Bit
SIGNAL LEVELS : Mark or Logical 1 = -3 to -15 VDC
 Space or Logical 0 = +3 to +15VDC

4. Using the printer

4.1. Control panel



▶ Button

FEED Button : Use feed button to feed the paper continuously.

▶ Power & Error Lamp

Power (Green) : Printer is ON and ready to receive data.

Error (Red) : Indicates a fault condition or a printer error.
(details: no paper, paper cover opened. etc.)

4.2. The self test

Self-Test prints out the current setting value of printer. The way of self-test is as follows.

1. Insert proper paper into the printer.
2. Power on while pressing feed button to start self-test.
3. Printer will print out the current status. (F/W version and set contents)
4. And then pattern of characters will be printed out.
5. Self-test will be finished automatically and turned to the standby status.

※ In case printer does not work properly, please contact Woosim customer service center.

5. Consumable Parts

5.1. Recommended paper

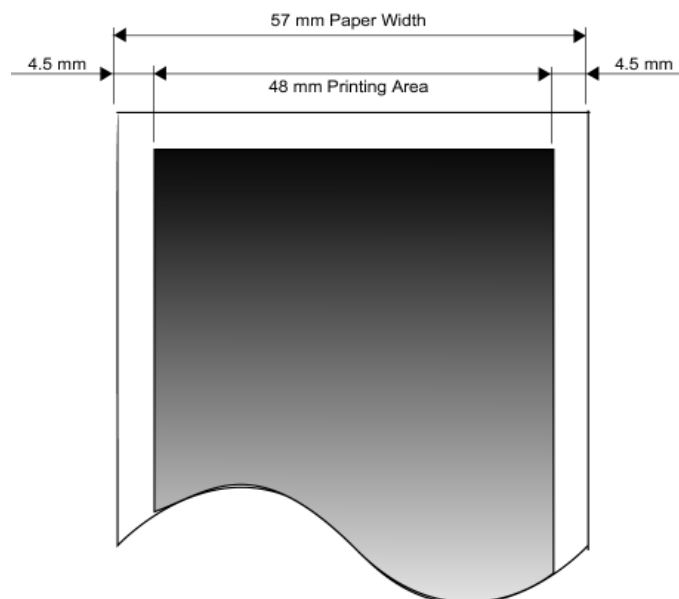
Type	: Thermal Paper
Paper width	: 57mm
Paper thickness	: $60 \pm 5 \mu\text{m}$
Outer diameter	: $\varnothing 40\text{mm}$ or less
Recording side	: Outside of roll



Cautions

1. Do not paste the paper to the core. And the roll paper which has near end mark printing on its near end is recommended.
2. Chemicals or oil may change the color of paper, or printed Characters may fade.
3. Change of paper color starts from approx 70 °C.
Pay attention to heat, humidity and sun light.
4. Color of paper may be changed by being scratched by nail or hard metal, etc

5.2. Printing position



6. Revision History

Date	Version	Comments
Jun. 09. 2017	3.0	* Change page layout (B5→A4) * Delete address