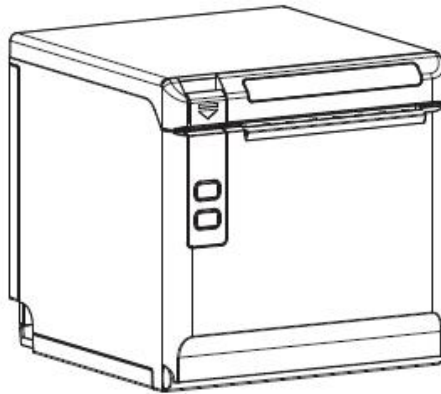




Thermal Receipt Printer

TP808

User Manual



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Statement

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Printed in China

Version 1.7

Warnings



This must be complied with in order to avoid any damage to the human body and to the equipment.



This is showing the important information and tips for the printer operating.

Note

Due to continuous update of product, please take in kind of real machine, such as accessories, programs etc.

Important Safety Instructions

1. Safety Warning



Warnings: The print head will become very hot during printing; avoid contact with the print head after printing has finished.



Warnings: Do not touch the printer head and connector in case static damage the printer head.

2. Instructions

Carefully read the installation and operating instructions provided with the printer before starting up your printer.

- 1) Place the printer on a flat and stable surface.
- 2) Leave enough space around printer for operation and maintenance.
- 3) Do not place the printer on or near a heat source.
- 4) Do not use the printer near water. Never spill liquid into the printer.
- 5) Do not expose the printer to high temperatures, direct sunlight or dust.
- 6) Protect the printer from shock, impact and vibration.
- 7) Be certain the power source is within the voltage rating and frequency listed for the printer.
- 8) Switch off the printer power supply when won't use it for a long time.
- 9) Do not place the power cord where it can be stepped on. If the power cord becomes damaged or frayed, replace it immediately.
- 10) To ensure the print quality and reliability, you are suggested to use the recommended paper or the same quality paper.
- 11) Please switch off the power supply when connect/disconnect all the ports or it will cause damage to the printer control circuit.
- 12) Never carry out maintenance or repair work yourself. Always contact a qualified service technician.
- 13) Keep this User Manual in a place which is easily accessible at all times.

3. Other Precautions

The copyright for this user manual and various other manuals is property of our company. Any copying or conversion into electronic form and saving of this material without the express written permission is strictly prohibited. Use of the information contained in this manual is not subject to any patent liability. This manual has been prepared with utmost care and attention to detail but may contain certain errors and/or omissions. Our company is not legally liable for any damages resulting from the use of the information in this manual. Our company and its affiliates are not legally liable (United States excluded) for any damages, loss, costs, and/or expenses that result from the breakdown, malfunction, and/or misuse of the product due to violation or neglect of the operation and maintenance information and instructions provided by our company, as well as from the unauthorized alteration, repair, and/or modification of the product by the user and/or third party. We are not legally liable for any damages and/or issues resulting from the use of options and/or parts that are not authentic or authorized products.

4. WEEE (Waste Electrical and Electric Equipment)



This mark shown on the product or its literature indicates that the corresponding item should not be discarded at the end of its working life with others household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate marked items from other types of waste and recycle them responsibly to promote the sustained reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office for details of where and how they can conduct environmentally safe recycling of such items. Commercial users should contact their suppliers and check the terms and conditions of purchase contracts. This product should not be combined with other commercial waste for disposal.

1 OVERVIEW

1.1 Introductions

TP808 is a thermal receipt printer, featured by high print quality, high print speed, high stability, etc. It can be used in commercial POS system, food industry and occasions which need real-time field print receipts.

This printer can connect with other equipment through USB, cash drawer and Wi-Fi interfaces. And the printer drivers are available for the WINDOWS XP/WINDOWS 7/WINDOWS 8/WINDOWS 10/Linux operating system.

1.2 The Main Features

- 1) Low noise
- 2) High print speed
- 3) Easy paper loading
- 4) Support page mode printing
- 5) Compatible with various width paper
- 6) Cash drawer interface
- 7) Communication interfaces optional

2 GETTING STARTED

2.1 Packing List

After receiving your printer, please check for possible shipping damage:

1. Inspect the outside of both the box and the printer for possible damage.
2. Check whether you have received the following accessories together with the printer, if there are any items missing, please contact your local dealer.



Printer



USB Cable



Power Cord



Power Adapter



Roll Paper



Quick Start Guide



CD

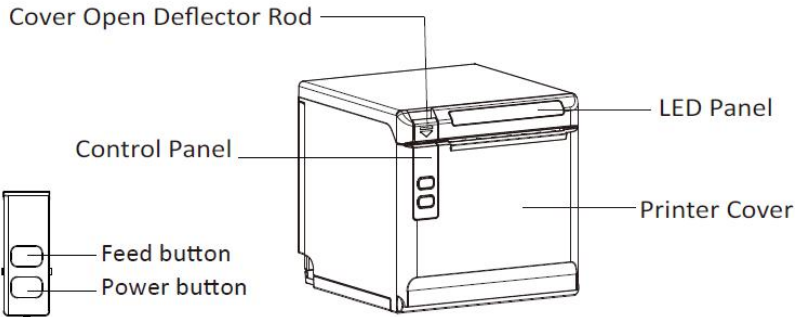


Notes:

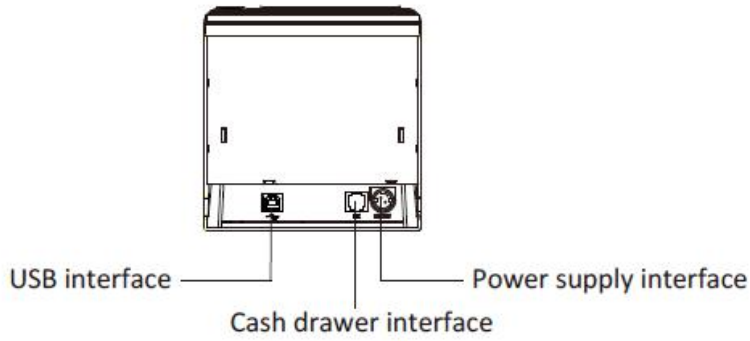
- 1) The Power adapter and power cord vary by region.
- 2) Items in the package are dependent on the actual order.

2.2 Appearance and Components

■ Front



■ Rear



■ Inside



3 SPECIFICATION

3.1 Printer Specification

Table3-1 General Specification

(1/2)

Item		Parameter
Printing Parameter	Printing Method	Direct thermal line printing
	Resolution	203DPI, 8dots/mm
	Printing Width	72mm
	Print Speed	Max. 260mm/s
	Interface	USB, Cash drawer, Wi-Fi
	Print density	Adjustable from level 1 to level 4
Page Mode		Support
Memory	RAM	2MB
	Flash	4MB
Fonts	Chinese	GBK 24×24
	Alphanumeric	ASCⅡ9×17,12×24.
	User-defined	Support
	Code page	PC437(std.Europe), Katakana, PC850(Multilingual), PC860(Portuguese), PC863(Canadian), PC865(Nordic), PC857(Turkish), PC737(Greek), ISO08859-7(Greek), WPC1252, PC866(Cyrillic #2), PC852(Latin 2), PC858(Euro), KU42(Thai), TIS11(Thai), TIS18(Thai), PC720(Arabic), WPC775(Baltic Rim), PC855(Cyrillic), PC862(Hebrew), PC864(Arabic), ISO8859-2(Latin2), ISO8859-15(Latin9), WPC1250(Latin 2), WPC1251(Cyrillic), WPC1253(Greek), WPC1254(Turkish), WPC1255(Hebrew), WPC1256(Arabic), WPC1257(Baltic Rim), WPC1258(Vietnamese), MIK(Cyrillic), PC755(Latin 2), Iran, Iran II, Latvian, ISO-8859-1(WestEur), ISO-8859-3(Latin 3), ISO-8859-4(Baltic), ISO-8859-5(Cyrillic), ISO-8859-6(Arabic), ISO-8859-8(Hebrew), ISO-8859-9(Turkish), PC856, PC3848(ABICOMP), MONGOLIAN, VISCII

Table3-1 General Specification(Continued)

(2/2)

Item		Parameter
Barcode	1D	UPC-A, UPC-E, EAN8, EAN13, CODE39, ITF, CODEBAR, CODE128, CODE93
	2D	PDF417, QR code
Graphics		Support varied density bitmap and download bitmap printing Max size of each bitmap is 40K, the total size of bitmap is 256K.
Detection	Sensors	Paper end detection, Cover open detection
LED Indicator	Power LED	Blue
	Paper LED	Orange
	Error LED	Red
Power Supply	Input	AC100V-240V
	Output	DC24V, 2.5A
Paper	Paper type	Specified Thermal Paper
	Paper width	58 ⁺⁰ ₋₁ mm/80 ⁺⁰ ₋₁ mm
	Paper thickness	0.056 ~ 0.13mm
	Roll paper diameter	Max. OD φ83mm
	Paper load	Easy-loading structure of forward open cover or upward open cover
	Paper cut	Partial cut / full cut
Physical Spec.	Operating condition	0°C ~ 50°C, 20% ~ 85%RH
	Storage condition	-20°C ~ 70°C, 5% ~ 95%RH
	Dimensions	137.3(L)*132(W)*130.5(H)mm
	Weight	1.33kg
Command		ESC/POS
Software	Driver	Windows2000/XP/Vista/Win7/Win8/Win10/POSReady/Linux CUPS/OPOS/ JavaPOS
	SDK	WinCE, Win Mobile, Android, iOS
Agency Approvals		FCC, CE

3.2 Printing Media Specification

3.2.1 Continuous Thermal Paper Specification

Paper Type : Specified Thermal Paper

Paper Width : 58^{+0}_{-1} mm / 80^{+0}_{-1} mm

Paper Outer Diameter : Max. 83 mm

Paper Thickness : 0.056 ~ 0.13m

Paper Type	Manufacturer
FD210,PD150R,PD160R	OJI Paper CO.,LTD.

3.2.2 Notices

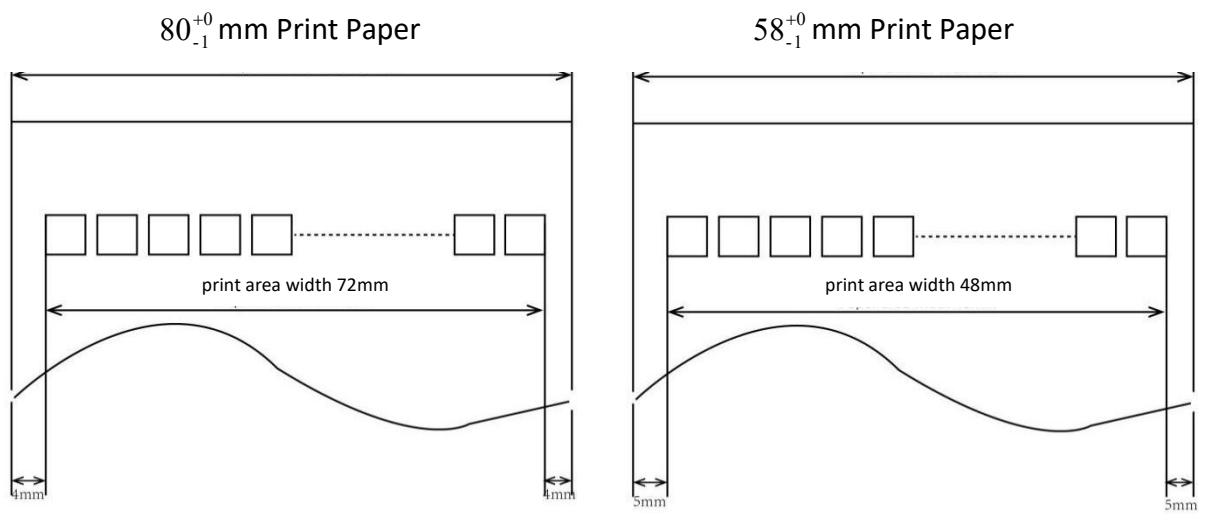


Notes:

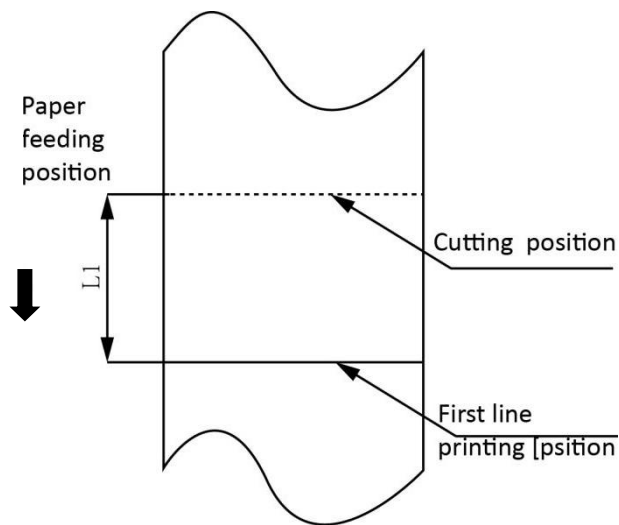
- 1) Please use the recommended thermal paper or same quality paper, otherwise it will influence the printing quality and decrease the thermal printer head life;
- 2) Don't stick the paper on the roll paper mandril;
- 3) If the thermal paper is polluted by chemical or oil, the thermal paper heat sensibility decreases, which will influence the printing quality;
- 4) Don't use finger nail or hard articles to touch the surface of thermal paper, otherwise it will cause color fading;
- 5) When the environment temperature is higher than 70°C, the thermal paper color will fade, so pay attention to the influence of temperature, humidity and sunlight.

3.3 Printing and Cutting Position

3.3.1 Printing position



3.3.2 Cutting Position



Type	Paper Cutting Position(L1)
TP808	11.6mm

4 INSTALLATION AND USAGE

4.1 Media Loading

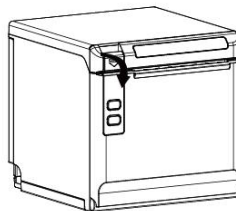
4.1.1 Paper Confirmation

- 1) When using 80mm(width) roll paper, take down the paper guide of both sides.
- 2) When using 58mm(width) roll paper, insert the paper guide to each side.

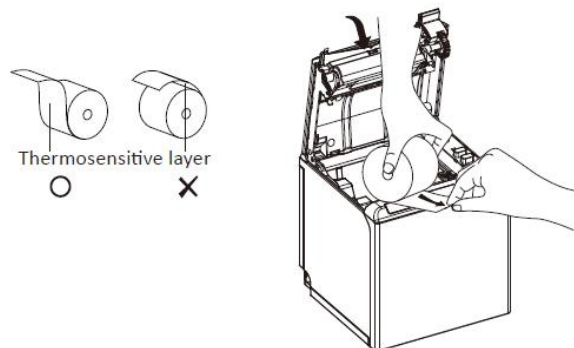
Note: Roll paper should be placed in the middle.

4.1.2 Paper Installation (Forward Paper-out Direction)

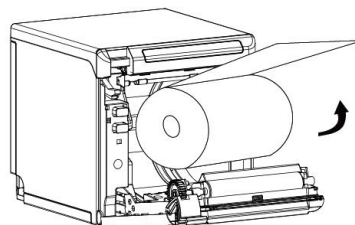
- 1) Pull the deflector rod to open the printer cover.



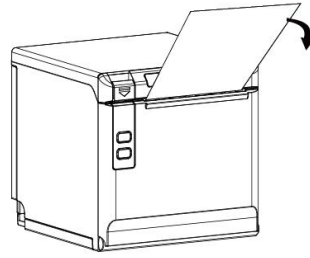
- 2) In the correct direction of the roll paper, insert the paper.



- 3) Pull out some roll paper, and close the printer cover.



4) Tear the extra paper in the direction of printer.



Notes:

- 1) Adjust the paper guide according to the paper size;**
- 2) Make sure the paper inside is at tight status, or it will cause paper jam or other trouble.**

4.2 LED Indication and Beeper

Function specification of indicated light and beeper.

Name	Status	Specification
POWER LED (Blue)	ON	The printer works well
	OFF	The printer does not work
ERROR LED (Red)	Flashing	The printer is in an error state
	OFF	The printer is in a normal state
PAPER LED (Orange)	ON	The printer is in paper end state
	OFF	The printer is in a normal state

Description	POWER LED	ERROR LED	PAPER LED	Beeper
Open the printer cover	ON	ON	ON	"Beep, Beep—, Beep"
Paper sufficient	ON	OFF	OFF	Silent
No paper	ON	ON	ON	"Beep Beep Beep".
Cutter jam	ON	Flash	OFF	"Beep—, Beep—"

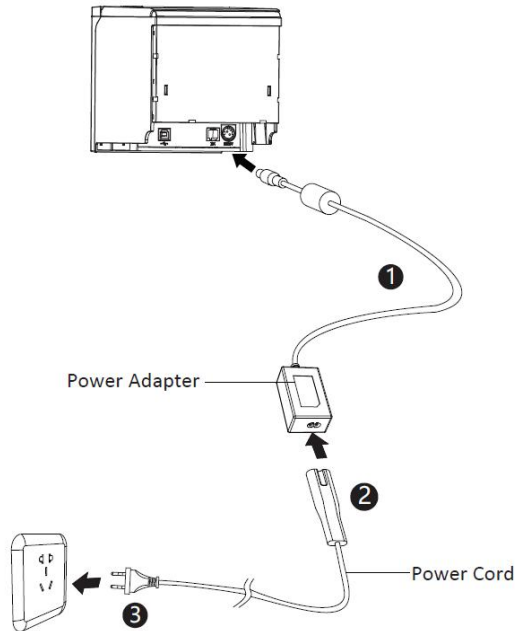


Notes:

The printer uses a thermistor to detect the temperature of the print head. If the temperature of print head is higher than 65° C, printer will send a warning. If the temperature of print head is higher than 80° C, printer will stop working until the temperature is lower than 60° C.

4.3 Power Connection

- 1) Connect power adapter to printer;
- 2) Connect power adapter to power cord;
- 3) Plug the other side of power cord into the socket outlet.



Note: The Power adapter and power cord vary by region.

When pulling out the adapter, please pinch the shell of power adapter and pull the switch up, when the switch is fully opened then pull out the power adapter.

Don't pull the plug by holding at any other place of the power adapter. Because it is more difficult to pull it out and easy to damage the cable.

**Notes:**

- 1) Please only use the power adapter recommended by supplier or equivalent products.
- 2) When disconnecting the power adapter plug, handhold plug connector shell to avoid pulling on the cable in force.
- 3) Avoid dragging the power adapter cable, otherwise it will damage the cables, causing fire and shock.
- 4) Avoid putting power adapter around a heating device, otherwise the cable may melt, causing fire and shock.
- 5) If you do not use the printer in a long time, disconnect the power supply of printer power adapter.

4.4 Interface Cable Connection

- 1) Make sure the printer's power switch is turned off;
- 2) Put the interface cable into the matched interface and fixed with screws (or spring) on the plug;
- 3) Connect the other end of the interface cable to the host.

4.5 Cash Drawer Connection

- 1) Make sure the printer's power switch is turned off;
- 2) Connect the cash drawer cable into the cash drawer interface on the rear side of the printer.



Warning:

Cash drawer interface can only be connected to a voltage of 24V cash drawer device (can't connect to the phone line, etc.)

4.6 Wi-Fi Settings

Printer factory default Wi-Fi mode is AP mode with IP address "192.168.1.1" and SSID

"POS_WIFI" . After the PC or mobile phone is connected with printer successfully, users can set the parameters through the below link:

Link: <http://192.168.1.1/>

Access password: 12345678

Please refer to the *Wi-Fi Operation Manual* for details



QR code for Wi-Fi Operation Manual

4.7 Print Test

4.7.1 Print Self-Test

The self-test checks the printer's current settings, status and whether the printer has any problem.

- 1) Make sure the power is connected and paper is loaded properly.
- 2) Make sure the printer is off and top cover is closed properly.
- 3) Press the paper feed button and power button simultaneously to turn the printer on. The printer is ready to receive data as soon as it completes the self-test.

4.7.2 Printing of Windows Driver Program

- 1) Install the Windows Driver program. (Please refer to the *Windows Driver Manual*)
- 2) Please set the "Interface" as the type you use.
- 3) Use the Windows Driver Program to print out the "Print Test Page".

5 INTERFACES

This printer supports cash drawer interface, USB interface and Wi-Fi interfaces.

5.1 USB

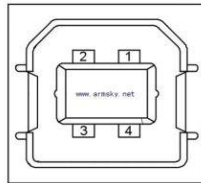


Figure 5-1

PIN	SIGNAL NAME
1	VBUS
2	D-
3	D+
4	GND

5.2 Cash Drawer Interface



Figure 5-4

PIN NO.	Signal Name
1	FG
2	Drawer 1
3	DRSW
4	VDR
5	Drawer 2
6	GND

Electrical characteristics

- Driving voltage: DC 24 V

- Driving current: Maximum 0.8 A (In 510 ms)

Drawer check signal: “L” = 0 ~ 0.5 V “H” = 3 ~ 5 V

5.5 Power Supply Interface

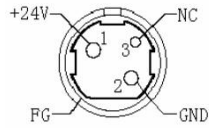


Figure 5-5

PIN No.	Signal Name
1	+24V
2	GND
3	N.C
SHELL	F.G

Printer end: Unetop DC-002 or other products of the same type.

User end: Unetop DP-002 or other products of the same type.

6 TROUBLESHOOTING

Your printer is very reliable, but occasionally problems may occur. This chapter provides information on some common problems you may encounter and how to solve them. If you encounter problems that you can not resolve, contact your dealer for assistance.

6.1 Printer Not Working

Problem Description	Probable Reason	Solution
LED does not light, printer is not working	Printer has no power	Connect printer to the power supply
	Printer is not on	Turn on the printer
	Circuit board is broken	Contact with the dealer

6.2 LED Indicator and Beeper

Problem Description	Probable Reason	Solution
Paper LED is always on	Paper near end	The roll paper is near end, the printer can work normally
Error LED is always on and beeper alarms	Printer cover is open	Close the printer cover
Paper LED and Error LED are always on and beeper alarms	Paper end	Reload the roll paper
Error LED blinks and beeper alarms	Thermal print head is overheated	Turn the printer off and resume when it cools
	Over-voltage	Print with specified voltage
	Low-voltage	Print with specified voltage

6.3 Troubles Occur During Printing

Problem Description	Probable Reason	Solution
Coloured stripe in the paper	Paper near end	Reload the roll paper
Blurred printing or spot	Incorrect roll paper loading	Check if the roll paper is installed
	Unqualified roll paper	Use recommended thermal roll paper
	Dirty thermal head or print roller	Clean the thermal head or print roller
	Low print density	Increase the print density level
Paper is not feeding normally	Paper jam	Open the printer cover, check the paper path and remove jammed paper
Vertical print words are missing	Dirty thermal head or print roller	Clean the thermal head or print roller
	Thermal head is damaged	Contact with your dealer for assistance



Note: Regarding the density of setting, please refer to "Utility Tool Manual".

6.4 Problems Emerge During the Paper Cutting

Problem Description	Probable Reason	Resolution
Cutter jam, the movable cutter cannot go back	Cutter abrasion, insufficient cutting	Replace the cutter
	Worn gear and worn wheel abrasion	Replace the worn gear and worn wheel
	Motor is burnt	Replace the motor
	Paper scraps	Clean the paper scraps on the transmission system
Insufficient cutting	Cutter edge abrasion, paper is too thick	Replace the cutter
Paper jam	Thermal printer head is over-heated	Reduce the density of printing
	Driving too fast	Reduce the printer speed to the limit of thermal printer head
	Wrong paper feeding position	Put the paper parallel with the paper mount and insert into the space between platen roller and the thermal printer head.



Note: The density of setting, please refer to "Utility Tool Manual"

6.5 Removing Jammed Paper



Warning: Do not touch the thermal print head because it becomes very hot after printing.

If the printer cover can be opened, operate it according to the next steps.

- 1) Turn off the printer and pull the deflector rod to open the print cover.
- 2) Remove jammed paper, reload the paper roll, and close the printer cover.

7 PRINTER CLEANING AND MAINTENANCE

Print quality might be degraded by dust, foreign substance, adhesive substance, or other polluted materials stuck on the printer head or inside the printer.

When printer is dirty, clean the print head as follows:

※ CAUTION

- Make sure to turn off the printer before cleaning.
- As the print head gets hot during printing, turn the printer off and wait approximately 2~3 minutes before starting cleaning.
- When cleaning the print head, take care not to touch the heated portion of the print head. Print head may be damaged by static electricity, etc.
- Avoid the print head being scratched and/or damaged in any way.

7.1 Cleaning Head

- 1) Open the Printer Cover and use a cotton stick with medical alcohol to clean the head in the direction from the center of the head to the edges.
- 2) After cleaning the head, do not use the printer until the alcohol used for cleaning evaporates completely (1~2 min) and the printer is absolutely dry.

7.2 Cleaning Sensors, Roller and/or Paper Path

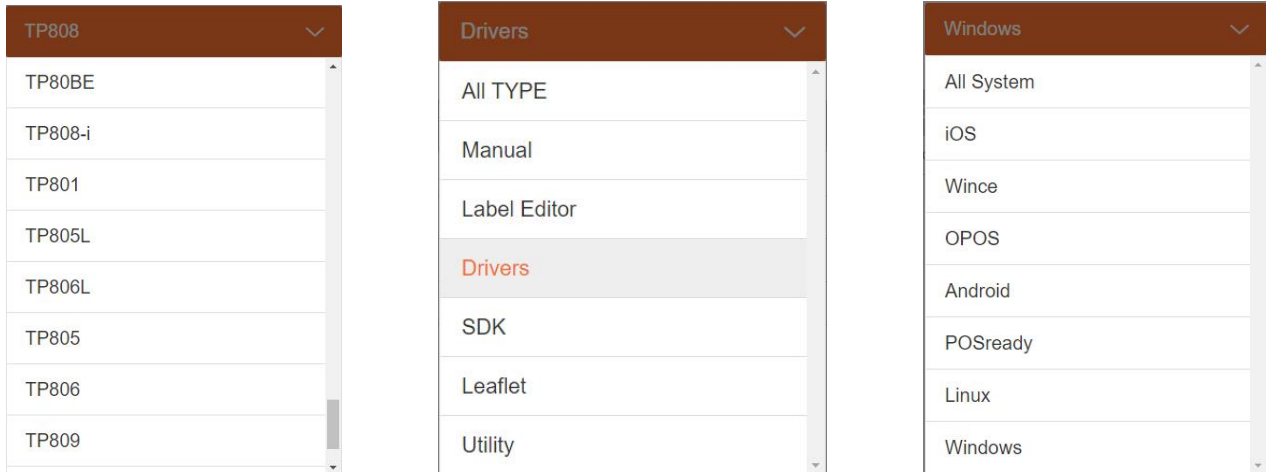
- 1) Open the printer cover and then remove the paper.
- 2) Use dry cloth or cotton swab to remove any dust or foreign substance .
- 3) Soak the cloth or cotton swab in medical-use alcohol and use it to remove adhesive foreign substances or other polluted materials.
- 4) After cleaning the parts, do not use the printer until the alcohol evaporates completely (1~2 min) and the printer is completely dry.

※ Clean the parts whenever print quality or paper detection degraded.

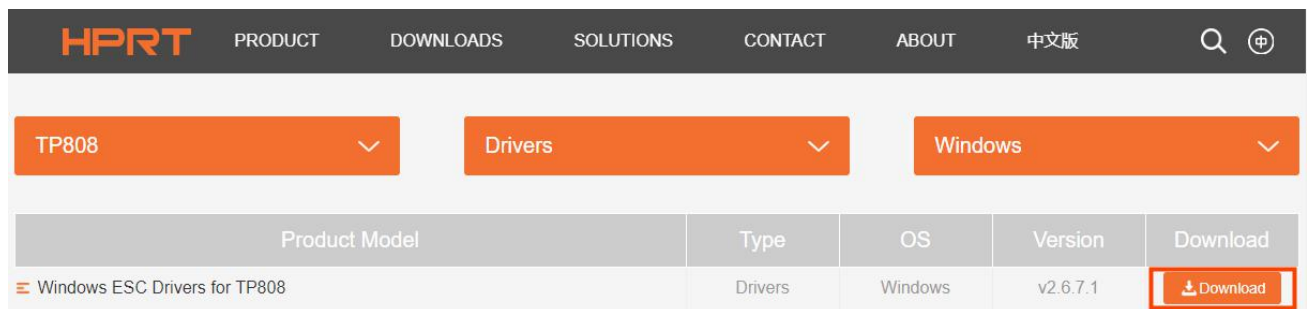
8 DOWNLOAD SOFTWARES FROM HPRT WEBSITE

Under URL <http://www.hpert.com/Downloads.html>, take the following steps to download softwares from HPRT website:

- 1) Choose model name of product -> Choose type -> Choose system



- 2) Click "download"



APPENDIX

FCC WARNING

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.

Any 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

EC DECLARATION OF CONFORMITY

Manufacturer certifies that the following designated product

HPRT TP808

Type of product

Direct Thermal Line Printing

It is in conformity with the standards

Test standard information

Under the Council Directive: (LVD) Directive 2014/35/EU relating to electrical equipment designed for use within Low Voltage Directive.

EN 62368-1:2014+A11:2017

Under the Council Directive: (EMC) Directive 2014/30/EU relating to Electro Magnetic Compatibility.

EN 55032: 2015+AC:2016

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

We declare herewith that as a result of the manner in which the device designated Below was designed, the type of construction and the devices which, as a result have been brought on to the general market comply with the relevant fundamental regulations of the EC Rules for Safety. And we declare herewith the below mentioned model is conformity with Directive 2014/30/EU and 2014/35/EU. In the event of any alteration which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

The declaration is sole responsibility of the manufacturer

Name of manufacturer

HPRT