

Please read this manual carefully before using it, and keep it for future reference

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#### About this manual

Thanks for choosing NCTS 80MM thermal printer.

This manual can help you to use this product. Please read this manual before use, and safekeeping, so that all the user of this product can read it.

#### **Note**

Due to our constant efforts to improve and upgrade the product's function and performance, our company reserves the right to change the hardware and software specifications of the manual without prior notice.

If you find any errors or missions in the contents of this manual, please tell us or our agent, thank you very much.

Without the prior written permission of our company, the contents of the relevant manual attached to the product shall not be reproduced, transmitted, transcribed, stored, etc.

#### **Statement**

This product is type A product, may cause the wireless radio interference in the living environment, in this case, the user need to protect the interference with effective protection measures.

## Safety tips

- •Do not disassemble the printer personally, pls read this manual before use.
- •The printer should be installed in a stable place to avoid damage to the printer due to vibration or shock.
- •Do not store and use the printer in the environment of high temperature, high humidity, and heavy pollution.

- •The power adapter of the printer should be connected to the grounding socket. Avoid to use the same socket with other large motor or other equipment can lead to voltage fluctuation. Otherwise, it may lead abnormal to printer and even damage to the printer.
- •Pls use the standard power adapter to the printer.
- •When connect to printer, please make sure the printer is in power off status.
- •When the printer is printing, please do not open the paper cover, otherwise it may cause unexpected situation, and even damage the printer.
- •After printing, print head is still in high temperature, pls do not touch, to avoid burn.
- •Pls do not use dissolved substances, such as: benzene, thinner or alcohol wipe to clean the printer casing. At the same time, please do not use corrosive chemicals and detergent to contact printer. To avoid damage to the printer.
- •Pls use our company approved or regular factory produced printing paper, otherwise it may lead to poor print quality, and even damage the printer core.
- •How long the letters can stay on the receipt is related to thermal paper quality, if you want to print the long-term preservation bills, please choose a high quality thermal paper.
- •The printer is only suitable for using in the altitude below 2000M.
- •The printer is only suitable for use in non tropical climates.

#### **Application Area:**

- Electronic cash register POS system printing
- Electronic transfer POS system printing
- Sports, postal, civil aviation bill printing
- Query, service system bill printing

- Catering industry bill printing
- Tax bill printing

#### Package:

- Printer 1PC
- •Standard power adapter (including power line) 1SET
- ●Paper roll 1ROLL
- ●Data line 1PC
- User manual 1PC
- Driver CD 1PC

#### **Printer Features:**

- Support vertical placing and printing;
- Ultra-low power consumption, and ultimate power saving;
- Support billing coming reminder and error warning function;
- Support wall hanging function, meet the special environment printing;
- Support 80MM large diameter roll;
- Support kitchen printing and Internet printing;
- Support printer monitoring function, to avoid losing bills;
- Using 100M Ethernet card, Printing more fast and fluently.
- Re-printing after network disconnection, to avoid lose bills;
- Support LOGO Graphical download and print;
- Support 1D bar code printing;
- Support GB18030 large character library, easy to print uncommon words;
- Support Multi language printing;
- •Rich Interface:USB,Serial,Internet,Bluetooth,WIFI,etc.(Interface combination, pls contact manufacture to confirm)
- Compatible with ESC/POS print instruction mode;
- Support Windows, Linux, Android and IOS system;

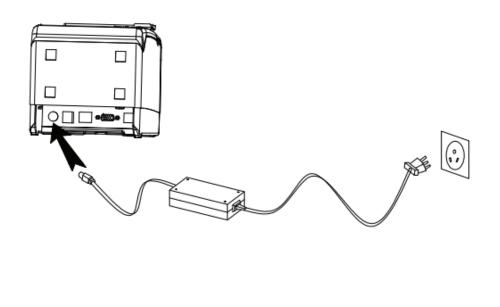
# **Printer Parameters:**

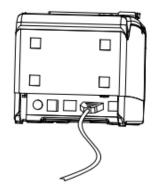
Item		Parameters	
	Printing Method	Thermal Line	
	Printing width	72mm	
	Resolution	8dots/mm,203dpi	
	Print speed	160mm/s(Max)	
Print parameters	Line Spacing	3.75mm(Can adjust line spacing by command)	
	Line No.	FontA-48Lines/FontB- 64Lines/Simple,traditional Chinese-24 lines	
	Character	Standard GB18030 simplified / BIG5 traditional Chinese Fonts(Japanese and Korean optional)	
	Character Size	ANK character: Font A:1.5X3.0mm(12x24dot) Font B:1.1X2.1mm(9x17dot) Simple/Traditional Chinese: 3.0x30.mm(24x24dot)	
	Extended character set	PC437/Katakana/PC850/PC860/PC863/ PC865/WestEurope/Greek/Hebrew/ EastEurope/Iran/WPC1252/PC866/PC852/ PC858/IranII/Latvian/Arabic/PT151,1251/ PC737/WPC/1257/ThaiVietnam/PC864/ PC1001/(Latvian)/(PC1001)/(PT151,1251)/ (WPC1257)/(PC864)/(Vietnam)/(Thai)	
Bar code Character	Bar code	1D bar code: UPC-A/UPC- E/JAN13(EAN13)/JAN8(EAN8)/CODE39/ITF/ CODABAR/CODE93/CODE128	

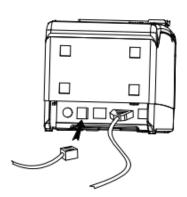
Bar code Character	Graphics printing	Supports bitmap download and print (Each bitmap size max to 20k)	
Cutter	Cutter Function	Full cut/Half cut	
	Туре	Thermal Paper	
Paper	Width	79.5±0.5mm	
	Diameter	≤82mm	
	Feed method	Easy feed(Clameshell feed)	
Print commands	Commands	ESC/POS	
Power	Power Adaptor	Input: AC 100V-240V, 50 ~ 60Hz Output: DC 12V/2A	
	Cash Drawer output	DC 12V/1A	
Buffer	NV Flash	256K bytes	
physical characterist ics	Weight	1.2KG	
Environme	Dimension	195*148*145(MM)	
nt	Working	Temp: 5 ~ 45°C, Humidity: 10 ~ 80%	
Reliability parameter	Storage	Temp: -10 ~ 50°C, Humidity: 10 ~ 90%	
parameter	Cutter Life	1000,000times	
Software	Print Head Life	100KM(print density≤12.5)	
	Driver	Android,IOS,Linux,Windows	

#### **Printer connection**

- 1. Connect the power adapter cable with printer.
- 2. Connect the data cable(eg: USB line) with printer also.
- 3. Connect Cash drawer line with printer as well.



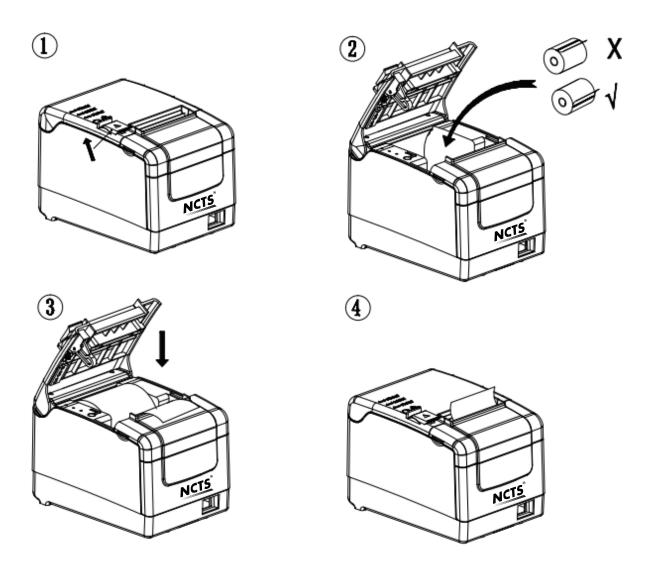




## Install thermal paper

80MM series thermal printer using 80MM thermal paper, using easy paper structure, convenient to install paper.

- 1 Pressing down the opening button, open the printer cover
- 2 Put thermal print paper in the paper holder according to the pic below
- 3 Pull a little paper out of the warehouse
- 4 tear excess printing paper



Note: take care of the roll direction, if reverse direction, the content won't be print out.

# Power switch, press bottom, indicators and their functions

#### 1 Power switch button

The switch can turn on and off the printer power supply.

#### 2 Feed button

Press this button can feed the paper out, if keep pressing, will continue to feed.

#### 3 Paper light indicator

When this paper light and the Error light flashing at the same time, it indicates printer is lack of paper; When this paper light and the Error light are off, means the printer has paper.

#### 4 Power light indicator

This light on indicates that the printer is connected to the power supply, this light off indicates that the printer power is off.

#### **5 Error light**

When Lack paper in printer; or cutter have problem; or the print head is overheated; or the cover is not closed properly, this error indicator will flash.

#### How to print a self test page

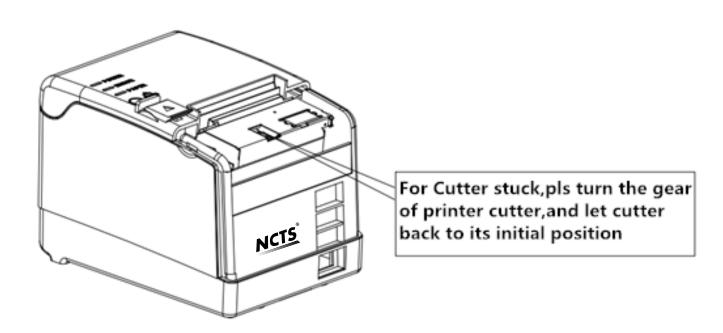
Connect printer with the power adapter, press feed button and turn on power button at the same time, keep pressing the feed button until the paper light turn off and then release the feed button, you will see a self test page printed. In self test page, it shows the current printer status and setting details.

#### How to set the beep function close or open

Connect printer to the power adapter, press feed button and turn on power button at the same time, keep pressing the feed button until the Paper light and error light all turn off, then release the feed button, then you will see the beeper have been set closed / opened.

## How to set printing density

Connect printer to the power adapter, press feed button and turn on power button at the same time, keep pressing the feed button until the Paper light and error light all turn off, and paper light turn on, then



Note: do not open cover by force, or may cause unrecoverable damage to the print head and the cutter.

#### **Printer driver**

80MM series thermal printer driver mode has two kinds, one is using the port for directly printing, the other is install driver in Windows system to print.

## 1.port direct drive

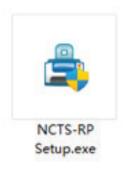
In this way, do not need to install the driver, only need to output the character (commands and data) directly to port, and to achieve character conversion printing by printer inner hard font library. Using port directly drive, make the print control more convenient.

If you use port direct drive mode, you need to use the print command set to control the printer's printing, 80MM series thermal printer has integrated the ESC/POS instruction set.

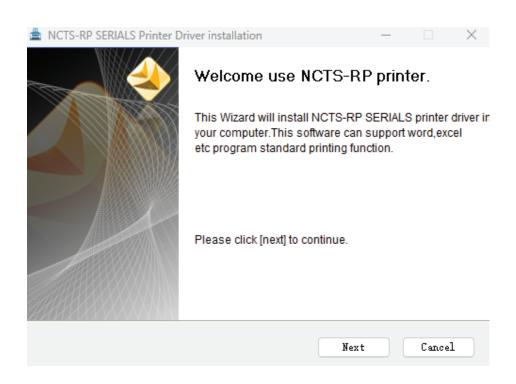
## 2.Install driver in windows system

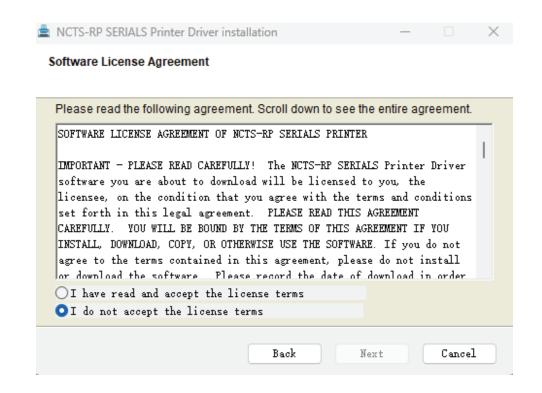
Install driver stored on our website www.ncts.co under windows system, you use the driver under the program and realize printing. In this way, it is driver Windows that turn the character into a graphic dot and realize printing.

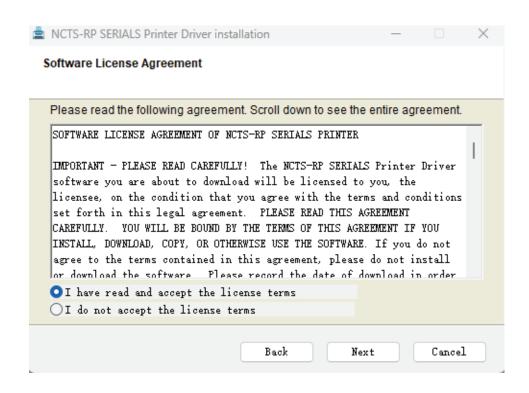
Windows driver installation instructions, pls see Step (1)-(6):

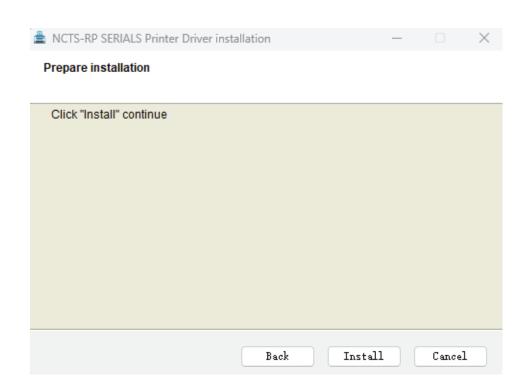


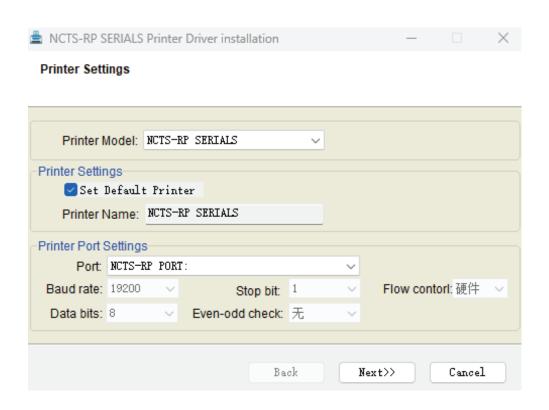


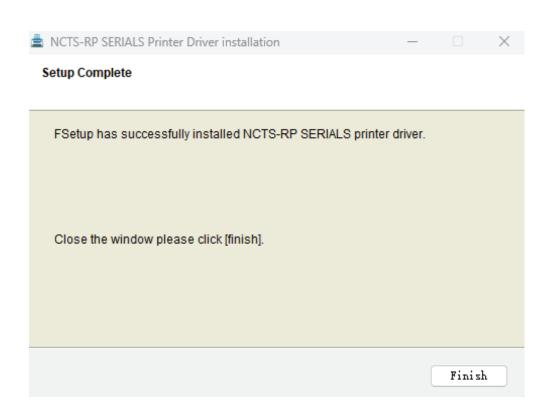












## **Printer Repair and maintenance**

- 1. printer external and warehouse cleaning: please use a wet cloth gently wipe the printer surface and internal paper warehouse.
- 2. Printer core clean: printer core must be clean on time, especially the quality of printing is decline, cleaning methods are as follows: put cotton dipped in anhydrous alcohol and gently wipe the printer core ceramic parts as shown in the picture below until clean enough.
- 3.If find water inside printer, pls immediately cut off power, and dry the printer naturally.

## Failure Analysis:

Failure	Failure cause	Solution
phenomenon Printer paper light and Error light flashing at same time,and make a Di Di beep sound	Printer lack of paper	Install paper correctly
Printer error light flashing and make a Di Dibeep sound	1,The printer cutter problem. 2.The printer head is overheated 3. The cover not closed well	1,Pls follow the "Cutter stuck maintenance" schedule above to solve. 2,Open the cover and dissipate heat fully then go on printing. 3. Confirm Cover Closed well
When printing, only paper running but no print	Thermal paper install reverse	Pls install the paper in a opposite direction

The printer print fuzzy	The print head not clean for a long time	Put cotton dipped in anhydrous alcohol and gently wipe the printer core ceramic parts until clean enough
	The thermal paper is not good	Pls choose high quality thermal paper
There is no response on printer	The power adaptor not connected	Pls check power adaptor is connected well and power switch is on.
Printer can self test, but can not print online	Driver port selection error	Pls select the correct print driver port based on the actual connection port
Printer serial port does not print or print garbled	Bit rate selection error	Pls set COM baud rate according to the COM info on self test page



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