



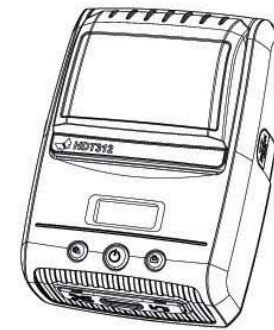
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National service line : 400-8861-061

## HDT312 portable Printer

USER'S MANUAL



Before using your printer ,read carefully the instruction in this chapter



ZICOX



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## Preface

### About manual

Before using your printer , read carefully the instruction in this chapter

### Symbol and Convention

For the information check we use below symbol :

-  **WARNING** Warning ,improper use may cause human hurt or death.
-  **NOTICE** Notice, improper use may cause human hurt damage
-  **REMARK** Remark ,for long and better use of products

The symbol and character may be different with the actual one .

### About manual

Below manual supply printer technical details:

1. «HDT312 ownern's manual » provide printer hardware /physical /technical details
2. «HDT312 development manual » provide printer development details

### Notice:

- We have right to change hardware or software without prior inform
- Please contact with us if you find missed or mistake parts .
- Without formal allowance do not copy ,spread ,transcribe or storage this file .

### STATEMENT









The printer is B class products , radio interference may occur ,user have to avoid this problem





### Product Model

HDT312 have 2 types :bluetooth and infrared type ,for details please contact with your supplier










## Safety

Follow below notes before use








-  **NOTICE** Do not disassemble printer yourself ,read manual carefully .
-  **WARNING** Close the power when trouble happen ,unplug the charger and remove the battery if printer abnormal or have peculiar smell
-  **WARNING** Do not use printer nearby gas station ,fuel warehouse or other combustible materials .
-  **WARNING** When charge make sure the ambient temperature between  $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$ ,use our battery pack and power adapter . Working with others may result in damage of printer ,battery leakage,fire or even explosion
-  **NOTICE** Do not open the cover of paper roll compartment or come into contact with the heating
-  **NOTICE** head of the printer by hand or any part of your body to avoid burns due to over high temperature when the printer is printing.
-  **NOTICE** Do not use dissolved or corrosive chemical products to clean your printer .
-  **NOTICE** Use our original or recommend printing paper ,otherwise may reduce the printing quality or damage printhead .

-  **NOTICE** In case of leaving the printer unused for a long period of time, the battery pack must be removed from the printer and kept separately, otherwise battery failure, leakage or even printer damage may occur.
-  **NOTICE** Before change battery maker sure turn off the printer, cut the power supply if use charge
-  **NOTICE** Though the printer can work normally and stably at the temperature of  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ , over high ambient temperature like  $45^{\circ}\text{C}$  or over low temperature like  $5^{\circ}\text{C}$  may reduce the print quality.
-  **NOTICE** Over high ambient humidity (above 85%)  
Due to the fact that the regular thermal paper has a relatively short storage period please select durable thermal paper for printing of receipts or invoices that needed to be stored for a long period of time.

#### Follow below notes to use battery

-  **NOTICE** Before use please read this manual and details on battery .
-  **WARNING** Charge battery in proper ambient temperature ,if temperature too high may cause battery heat ,flaming or unshaped .
-  **WARNING** Electrolyte contained in the battery is corrosive. In case you handle it improperly and the liquid leaked from the battery pack accidentally gets into your skin or clothing, flush with clean water immediately. If eye contact occurs, flush thoroughly with plenty of clean water immediately and consult a doctor.
-  **WARNING** Do not squeeze ,mechanical vibrate or shake battery ,short-circuit is not allowed .
-  **WARNING** Do not put battery into water ,otherwise short-circuit, battery heat , unshaped ,damage or even explosion may occur.
-  **WARNING** Do not expose the battery under sunshine , dusty or place where have much smoke ,
-  **NOTICE** change battery when power level lower.
-  **NOTICE** Keep battery away from children .
-  **NOTICE** Do not use battery if color or shape changed .

#### Follow below notes to use charger

-  **NOTICE** Before use read the manual and details on charger carefully
-  **WARNING** Do not disassemble or change charger, do not use charger if wire damaged ,otherwise electric shock ,fire and charger damage may occur.
-  **WARNING** Do not touch charger with wet hands ,please cut off the power supply if charger contact with water or other liquid .
-  **WARNING** Do not squeeze ,mechanical vibrate or shake battery
-  **WARNING** Do not use charger under high temperature ,the equipment is not water resistance ,do not wet the battery or waited in the rain .
-  **WARNING** Hold the charger when unplug ,otherwise wire may be damaged .
-  **NOTICE** Keep the charger away from children , avoid hazardous

## 1. Standard equipment

### Standard accessories



HDT312 printer(1)



charger(1)



Printing paper(1)



Battery (1)

Owner's manual (→) 、 Warranty card (→) 、 Certificate (→) 、  
fast use manual (→)

### Optional



RS232C data wire



Car charger

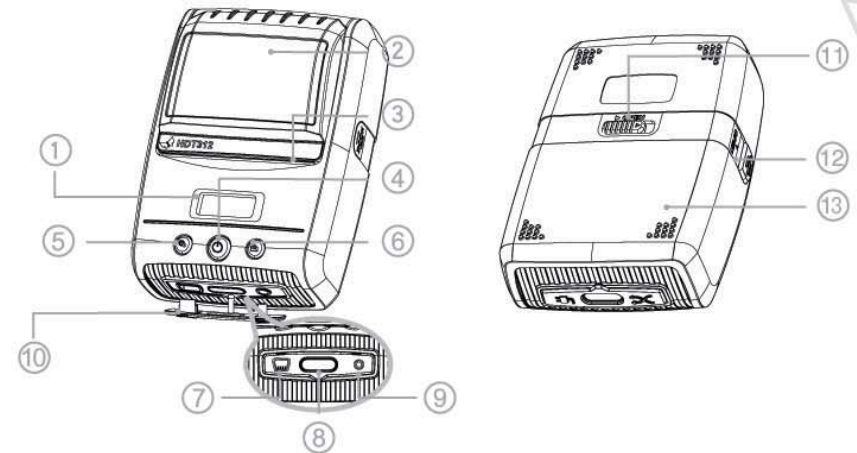
#### NOTICE

Please contact with your supplier if parts missed

#### NOTICE

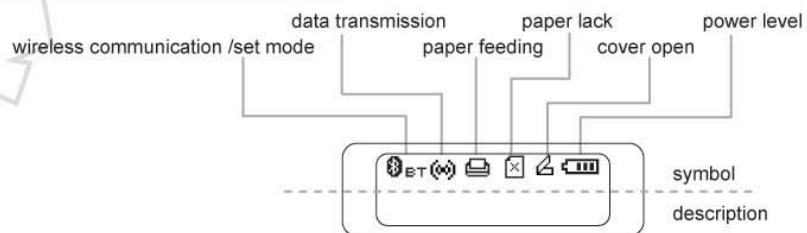
Please contact your supplier .

## 2. Part name



- |                |                        |                                  |                      |                  |
|----------------|------------------------|----------------------------------|----------------------|------------------|
| 1 display      | 4 power button         | 7 RS232                          | 10 rubber plug       | 13 battery cover |
| 2 paper cover  | 5 set button           | 8 infrared communication windows | 11 battery lid lock  |                  |
| 3 paper outlet | 6 paper feeding button | 9 charger port                   | 12 cover open button |                  |

## 3. Display



### 3.1 Wireless communication/Set mode

Below show the wireless communication and set mode .bluetooth mode

BT bluetooth mode	IrCOMM MODE	set mode
	IrSIR MODE	
	IrVIR MODE	
	Ir645 MODE	

### 3.2 Data transmission

When data transmission the symbol blinking .

### 3.3 Printing

When printing the symbol will display

### 3.4 Paper lack

When paper lack or paper loading is incorrect ,the symbol will display

### 3.5 Lid open

When lid do not close , the symbol will display

### 3.6 Power level

When charging the symbol will display

### 3.7 character

This part show the character

## 4.before usage

### Battery installation ,charging and paper feeding ◦



Battery



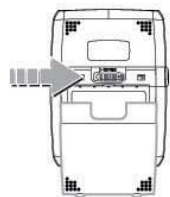
Printing paper

#### REMARK

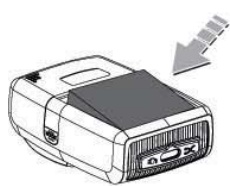
Charge before use,also need charge after storage for long time

### 4.1 Battery installation and notes

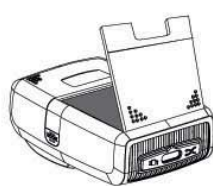
The new printer without battery installation ◦



1 slide latch to right to open battery cover



2 install the battery as shown in the figure



3 install the battery cover as shown in the figure

### 4.2 Charge battery

plug the power adapter into the mains supply power socket and the DC into the power jack of the printer

AC:100V~240V (50-60Hz)

#### WARNING

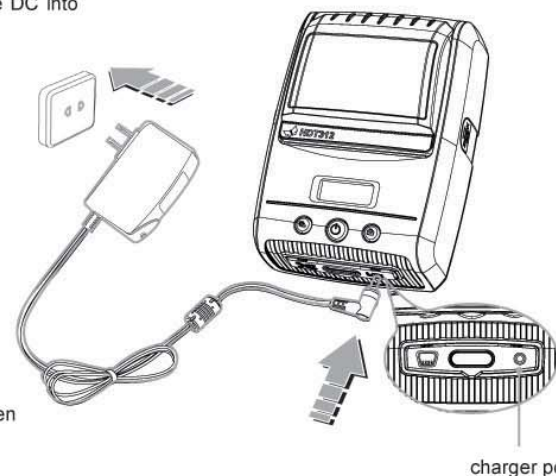
please use our specially designed power adapter ,working with others may result in damage of printer

#### WARNING


do not remove the battery when charging

#### REMARK

could print during charging




Charging : power level blinking ◦

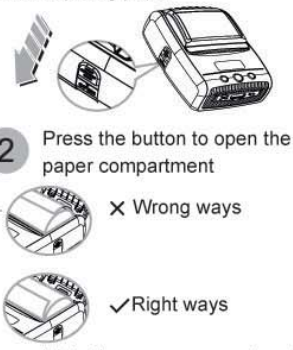
Charging completed: power level full ◦ 



### 4.3 Printing paper feeding


HDT312 use diameter 40mm ,width 58mm thermal printing paper


- 


1 Remove the seal on paper roll
- 

2 Press the button to open the paper compartment


× Wrong ways


✓ Right ways
- 

3 According to the illustration, put the paper roll into the paper compartment with attention to the paper direction. If the paper roll is misplaced, the printer will fail to print.
- 

4 Pull a strip of paper out of the compartment, and close compartment
- 

5 According to the illustration tear out the outside paper

 **REMARK**  
Notice the paper roll direction if opposite may not print .

 **REMARK**  
Pull the paper roll out of paper storage area .

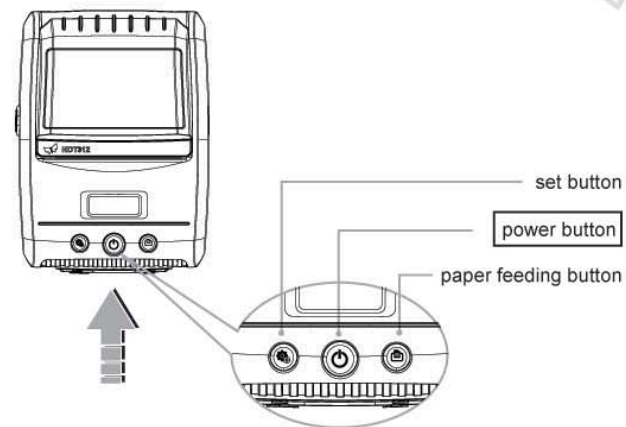
## 5. basic use

### 5.1 turn on

Press the power button for 2s to open printer .

### 5.2 turn off

When unit turned on ,press the power Button 3 s to turn off the printer .



### 5.3 Paper feeding

Press paper feeding button:  feeding 1-2cm

Press constantly :  feeding to black label or 2.5cm



#### REMARK


More details please reference to «HDT312 development manual »

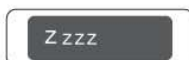
### 5.4 automatic sleep /wakeup

#### Automatic sleep

After turn on the printer , within 6 s no data transmission or operation , printer will automatic sleep

#### Automatic wakeup

Press power button  or if there is data transmission printer will wakeup




#### REMARK

Under sleep mode , "Z"mean remain power level.

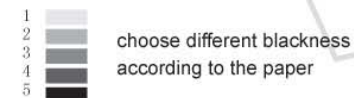
## 6.Printer set

### 6.1 Printer set

After turn on printer , Press set button  (no sleep mode) .



**print blackness**




**Set button**  change option



**print quality**

**common high even high**

set density

**Paper feeding** :  change option




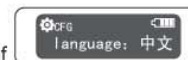
**print self-test**

press feeding button  to print out self-test

**Reserve and quite** : Press power button or within 5 s no operation the printer Will reserve setting and quite

#### REMARK

when  CFG on upper-left of display it mean the printer under set mode ,



Language: ENGLISH Chinese select language

### HDT312 infrared and bluetooth mode optional setting is different

#### Infrared mode



**Infrared mode:**  
IrComm  
VIR  
VIR645  
SIR



**baud rate:**  
9600  
19200  
38400  
57600  
115200

only SIR/VIR have optional baud rate

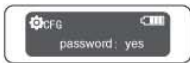


**baud rate choose :**  
9600  
19200  
38400  
57600  
115200

#### bluetooth mode



**bluetooth visible:** visible  
hide



**password:** yes  
no



**REMARK**  
rated baud rate is 115200

### 6.2 Self -test

Self-test have printer mode ,communication interface Character setting.



- 1 After power on press set button
- 2 press set button choose printer self-test , then press feed button to print out the self-test paper

### 6.3 Self-test details



self-test title

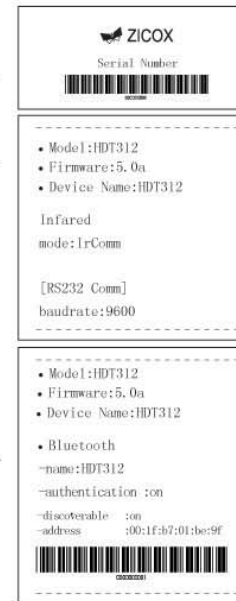
products details

database

barcode

curve line

ASCII



\* symbol

serial number

model  
firmware  
\* device name

\* mode IrCOMM  
RS232C  
\* RS232C baud rate

mode  
Version  
\* device name  
\* bluetooth communication property  
\* bluetooth name  
\* authentication  
\* display / inconvertible  
bluetooth address



**REMARK**  
the item with \*mean you could change content by setting software or printer setting function ,more details please contact with your supplier

## 7.communication

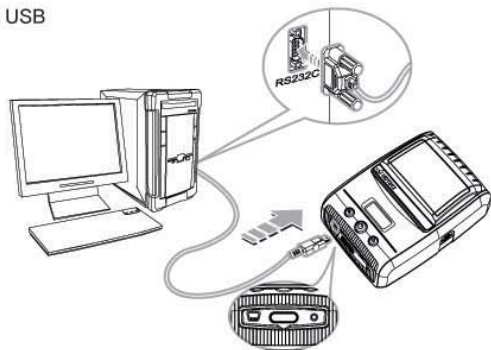
HDT312 printer have 3 communication interface.

- wire: RS232C
- wireless: Bluetooth or Vir Vir645 Ircomm Sir

### 7.1 serial port communication (RS232C)

HDT312 have RS232C wired serial port communication , achieve through 5Pin

Mini USB



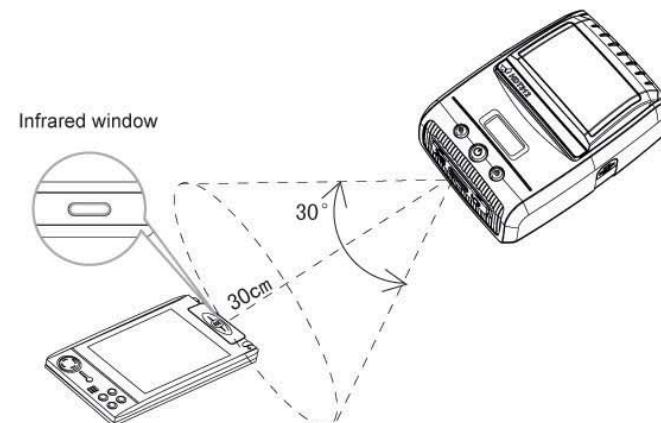
☺ **REMARK**  
change the baud rate  
reference "set"

☺ **REMARK**  
Details see «HDT312  
developmentmanual »

### 7.2 Infrared communication

HDT31 have infrared communication port , maximum baud rate is 115200.

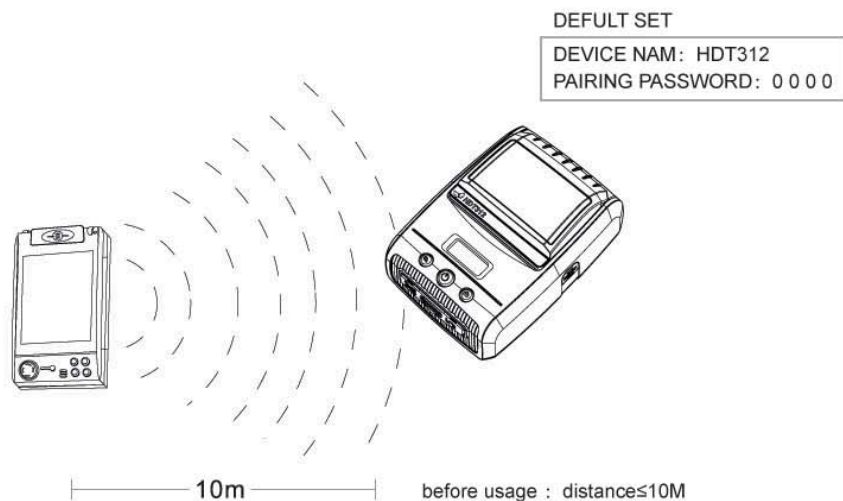
For short distance communication device , direction and distance please reference to below.:



infrared : distance  $\leq$  30cm angle  $\leq$  30°

### 7.3 Bluetooth communication

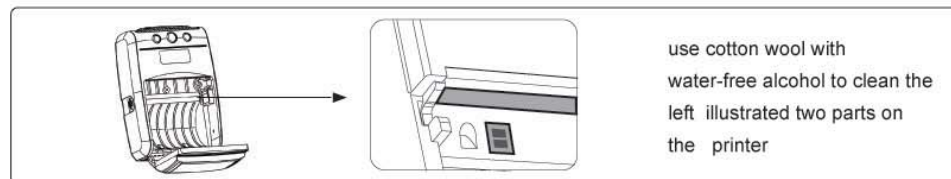
HDT312 have Bluetooth 2.0/CLASS 2 (10m) bluetooth communication port



## 8.maintain and service

### 8.1 Printer maintain

- 1、 Use the dry cloth to clean the printer .
- 2、 Make sure the clean of printhead , details as below



- 3、 Remove the battery and dry the printer if inner part of print have water .
- 4、 Please remove the battery if long time not to use printer .

### 8.2 Printing paper use and storage

- 1、 Do not remove the package when storage the paper ,avoid the sunshine and high temperature .
- 2、 Printed receipt could storage long term under 20°C temperatuer
- 3、 Please choose high quality of thermal paper for long term reservaton.

## 9. Trouble shooting

Trouble status	Trouble cause	Solution	Page
Long Buzz 2 times	Paper lack	Install paper	7
Short buzz 2 times	Power lack	charge	6
Only paper feeding without printing	Paper installation is wrong	nstall paper again with opposite direction	7
Low printing quality	Printer dirty	Clean printer ①	16
	Ribbon problem	Use high quality ribbon	10
Long buzz 3 times	Paper compartment do not closed	Close paper compartment	7
Character faded after weeks of printed	Printing paper problem	Use high quality printing paper	16
	Storage temperature too high	Storage temperature around 20C	16
Turn off automatically	Power run out	charge	6

Remark: ① use low quality printing paper may result the poor printing quality

## 10. Printer details

### 10.1 PRINTER DETAAILS

Print performance	
Print Method	Thermal line
Paper Width	58mm
Print Width	48mm 16 Chinese chars/Line; 32 English chars/Line(Font Height: 24dots)
Print speed(max)	60mm/s
Printing Density	203dpi (8 dots/mm)
Code page	ASCII(8X16,12X24)、GBK(16X16,24X24)、BIG5(16X16,24X24)
Reliability	50km/dot:100million
Default set	ESC/POS Compatible setting
Printing content	English ,number ,symbols ,chinese character ,curveline ,prestored symbol , one dimension (UPCA UPCE ITF) binary barcode
Printing length after charge	100-130 m (12.5% printing density )
Charge way	Standby charge
Charge time	2.5H
Printer standby time	100 – 132H

Communication Interface		
Wire communication	RS232C	
Wireless communication	IrDA:Ircomm / VIR / VIR645 / SIR Bluetooth:Bluetooth2.0 Class2 SPP	
Physical details		
Size (LxWxH)	113mmx82mmx48mm	
Weight	246g(not including paper roll)	
Other function		
Preference	Ir mode ,interface ,bluetooth password, printing blackness	
Black mark detection	Enable	
Paper loading	Clamshell loading	
Lid open	One button open	
Status Display	OLED display: communication、print、paper run out、lid open、battery low、sleep	
Power saving	automatic sleep ,automatic wakeup	
Detect function	Paper run out ,battery low ,inconventionality	
WORK ambient		
Work humidity	Temperature -10℃--+50℃	Humidity 20%--85%
Charge ambient	Temperature 5℃--+40℃	Humidity 20%--85%
Storage ambient	Temperature -20℃--+70℃	Humidity 5%--95%

battery details	
type	LI battery
voltage	7.4V
electricity quantity	1300mAh
duration	recycled charge more than 500
battery storage ambient	temperature -5℃~35℃ relative humidity less than75%
charger details	
input	AC 100-240V 50/60Hz 0.3A
output	DC 12V/1A
size	74.9mm x 48.8mm x 28.0mm
printing paper details	
type	thermal
width	58 ±0.5mm
diameter	≤40mm
thick	60~110μm
thermal surface direction	outside

## 10.2 battery recycle

printer use rechargeable LI battery , please recycle after use



## 11. Hazardous products and element indication

usage time	part name	hazards products and element					
		(Pb)	(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE)
⑩	casing	○	○	○	○	○	○
	electronic assembly components (including electronic component)	×	○	○	○	○	○
	machinery parts(including screws and contacts)	○	○	○	○	○	○
	adapter、data wire ①	×	○	○	○	○	○
⑤	chargeable LI battery	×	○	○	○	○	○
e	no electronic parts (leather bag , paper bag)	○	○	○	○	○	○

### indication of hazardous products and element symbol

- Hazardous products or element within SJ/T11363-2006 standard requirement
  - × Hazardous products or element exceed SJ/T11363-2006 standard requirement , it is difficult to achieve based on current technical level , and above products with in 《2002/95/EC》 standard exemption。
  - ① Accessories may be sell with main products or separately ,the coverage of hazardous products or element is the same
- Environmental protection deadline**
- The character based on national standard and rules , indicate the environmental protection deadline. Please reference to use guide and local law when use .

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