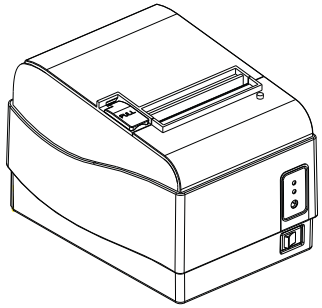
iDiPOS
NEW TECHNOLOGY
www.idipos.com



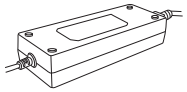
AB-88H

MINI Thermal Printer
USER'S MANUAL

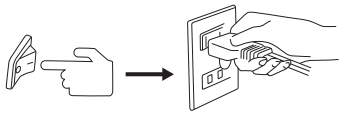
MANUAL REVISIONE N 1.1

NOTICE

You must use the only supplied adapter. It is dangerous to use other adapters.



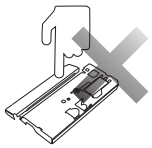
Make sure the printer power is off before plug or unplug the cable.



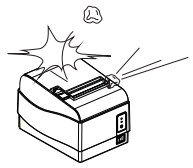
Please don’ t place the printer in humidity or dusty space because excessive humidity and dust may damage it.

Do not put foods or drinks on the printer, in case that splash into the printer.

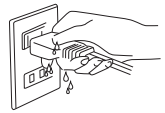
The print head has a high temperature after work. Please don t to'uch the print head or touch the motor shell in case scalded.



Do not fall the printer down and avoid vigorously impact.

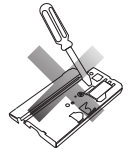


Do not plug or unplug with your hands wet. You may be electrocuted.

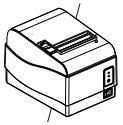


Avoid magnetic objects near the printer.

Don’t use tweezers, knife, screwdriver or other hard objects to touch the heating piece; for the heating piece will hurt you eternally.



Do not put printer on unstable surface.



⚠ NOTICE

If there appears any abnormal noise, smoke etc, please power off the machine and unplug power at once. Please ask after-sarle service for help.

Table of Contents

Chapter 1 Packing List 01
Chapter 2 Specification 02
Chapter 3 Product Overview 03
3.1 Printer Parts. 03
3.2 Interfaces. 03
Chapter 4 Usage Description 04
4.1 Connect the cables 04
4.2 Control Panel 04
4.3 Installing the Roll Paper 05
4.4 Installing Oil Proof Cover. 06
4.5 Paper Jam Caused By Cutter 06
4.6 Self-Test and DUMP Mode. 07
4.7 DIP Switch. 08
4.8 Interface Explanation Interface Explanation 10
4.8.1 RS -232 Serial Interface. 10
4.8.2 USB Interfacet 10
4.8.3 Ethernet Interface 11
4.8.4 Cash Drawer Interface 11

Chapter 1 Packing List

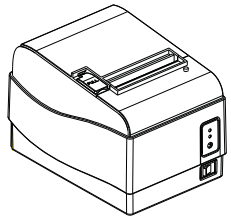
Your printer box should include these items.

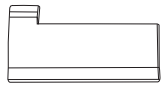
1. Printer
2. User's Manual/Warranty Card
3. Paper Roll
4. RS232 Interface Cable
5. AC Adapter
6. AC power cable
7. Oil Proof Cover
8. USB Cable

Paper Roll

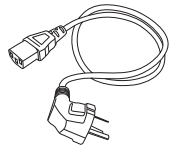

RS232 Interface Cable

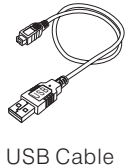

User's Manual/Warranty Card


Printer


Oil Proof Cover


AC power cable


AC Adapter


USB Cable

Pictures for reference only.

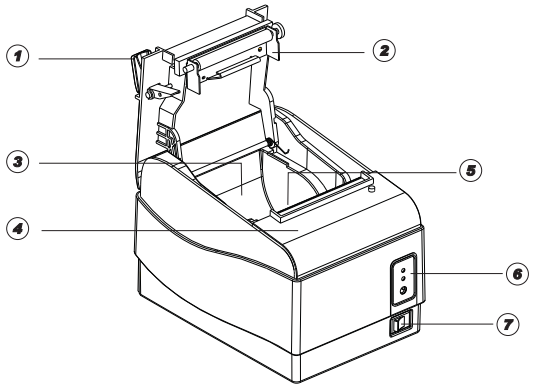
Chapter 2 Specification

Printing	Printing Method	Thermal line printing
	Printing Speed	Max 250 mm/sec
	Resolution	203 DPI
	Paper Supply Mode	Easy paper loading
	Language	User language supported
	Interface	RS-232 / USB / Ethernet
	Pringing width	72 mm
	Character Size	Font A:12×24 Font B:9×17
	Character Per Line	42/48/53
	Barcodes	Code 39,Code 128,EAN 8,EAN 13
	Driver	Windows 2000/XP/2003 Server/VISTA/7
	Sensor	Out of paper
	Receive Buffer Size	4K Bytes
	Mass	Approx.1.45 kg
Dimensions	W×D×H	146×196×152mm
Paper	Paper type	Thermal Paper
	Width	79.5±0.5 mm
	Diameter	Max.¢80 mm
Reliability	Printer head life	Approx. 100 km (pringting rate 12.5% or less)
	Autocutter	500,000 cuts
Usage conditions	Power supply	24 VDC ± 10%
	Operating	5℃～45℃，20～85%RH
	Storage	-10℃～50℃，10～90%RH(the paper is not included)

Notice: The printing speed relates with data transporting, command control and power voltage etc.

Chapter 3 Product Overview

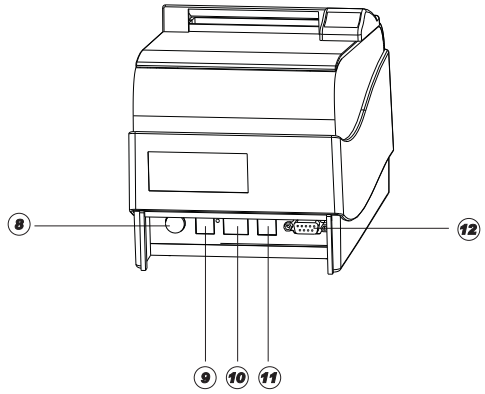
3.1 Printer Parts



1. Cover Opener
2. Printer Cover
3. Paper Cabin
4. Cutter Cover
5. Printer Head
6. Control Panel
7. Power Button

3.1

3.2 Interfaces

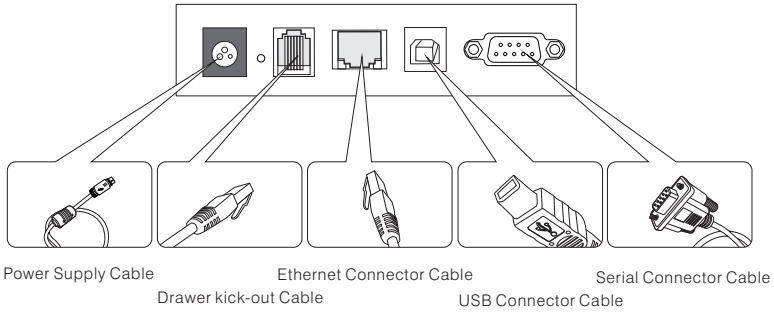


8. Power Plug Port
9. Cash Drawer Interface
10. Ethernet Port
11. USB Port
12. RS232 Interface

3.2

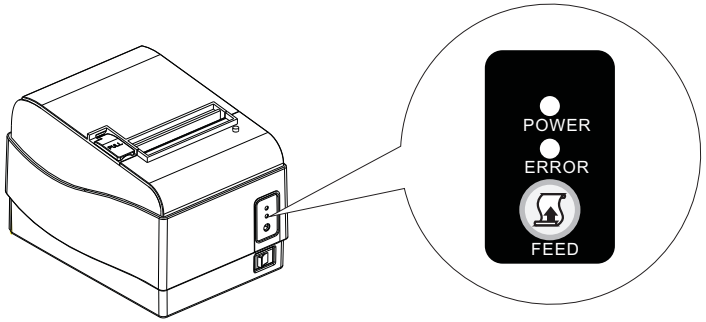
Chapter 4 Usage Description

4.1 Connection the Cables



4.1

4.2 Using the Printer

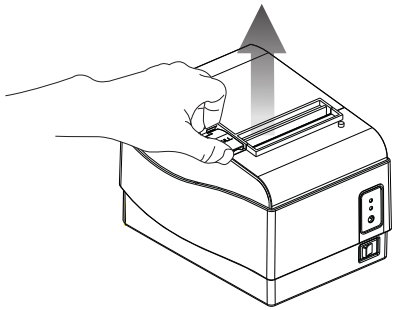


4.2

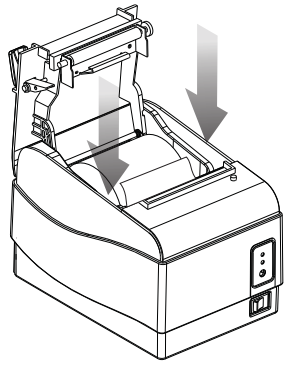
- POWER INDICATING LIGHT
  Power on the printer, power lights; power off, light off.
- ERROR INDICATING LIGHT
  The light is on when the printer is lack of paper; the light will flash when the printer cover installs not well or Online error.
- FEED
  Press the FEED button once to advance paper one line. You can also hold down the FEED button to feed paper continuously.

4.3 Install the Roll Paper

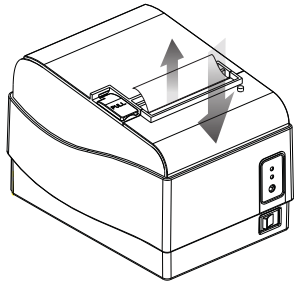
1. Make sure that the printer is not receiving data before replacing the roll paper; otherwise, data may be lost.
2. Upward the" PULL" buckle handle till the cover open.
3. Remove the used paper roll core.
4. Put into new paper roll. As picture 4.4shows.
5. Be sure the correct direction of the paper comes off the roll.
6. Pull out a small amount of paper, and then close the cover. As picture 4.5shows.



4.3

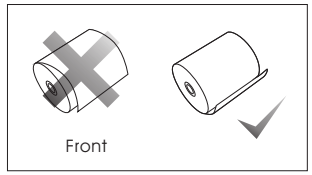


4.4



4.5

Paper end direction:



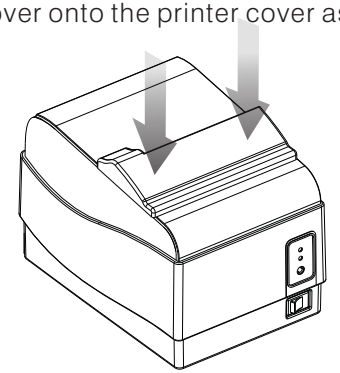
4.6

4.4 Installing Oil Proof Cover

The printer is an Oil Proof Cover supplied. It's used to prevent water splashing into the inside of the printer and not oil-water corrosion and oxidation protection to the internal electronic components, which extends the life of the printer.

Installation method:

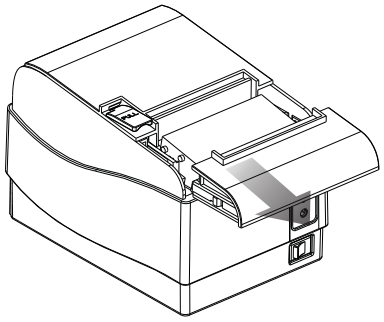
Put the Oil Proof Cover onto the printer cover as the picture4.7 shows.



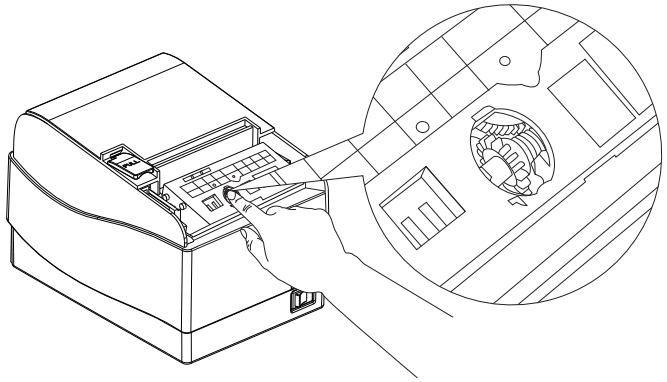
4.7

4.5 Paper Jam Caused By Cutter

1. If the paper is thick or sudden lack of power when cutting, paper jam might appear.(cutter cannot reset)
2. Normally the cutter will reset when repowered, if the cutter did not reset, users could follow below steps to solve the problem.
   ① Take away the cutter cover as below picture4.8 shows.
   ② Stir the cutter gear till the cutter moves to the Initial position as picture4.9 shows.



4.8



4.9

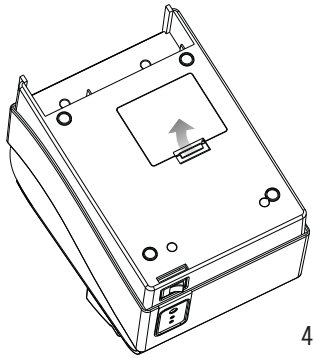
4.6 Self-Test and DUMP Mode

1. Press "FEED" button and hold on when powering on the printer, the printer will perform self-test.
2. Power off the printer and take out the paper roll. Then press "FEED" button and hold on and power on the printer. Then put in the paper roll and close the printer cover. The printer will print out "DUMP". That means the printer enters in DUMP mode. All data will be printed out in raw hex format.

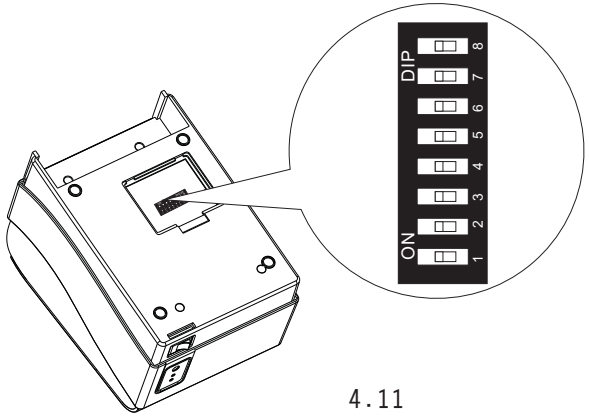
Back to normal mode: restart the printer could put the printer in normal mode.

4.7 DIP Switch

1)Unscrew the screw on bottom of printer and take away the metal cover as the picture 4.10shows.
2)Users will find the DIP switches under the window as the picture 4.11shows.



4.10



4.11

DIP switches could perform printer configurations as follows: COM port baud rate adjusting, beep alarm switch, printing density adjusting, parity selection (for serial communication), parallel printing server mode or normal mode adjusting , EPSON mode or 64character mode switching, Chinese Character double byte mode or English character single byte mode selection.
Below are lists of DIP configurations:

Baud rate adjusting:

Baud Rate	DIP1	DIP2	Default
9600bps	OFF	OFF	▲
1920bps	OFF	ON	
38400bps	ON	OFF	
115200bps	ON	ON	

Character per line	DIP3	DIP4	Default
42	OFF	OFF	▲
48	OFF	ON	
Reserved	ON	ON	
53	ON	OFF	

Beep	DIP5	Default
Disable	ON	
Enable	OFF	▲

Density	DIP6	Default
Dark	ON	
Light	OFF	▲

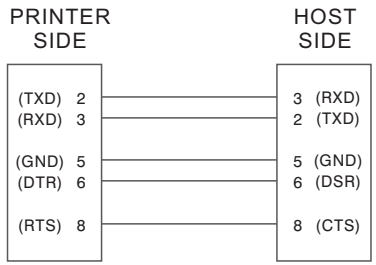
Printing speed	DIP7	Default
SLOW	ON	
FAST	OFF	▲

Byte Mode	DIP8	Default
Double-Byte Mode	ON	
SingleByte Mode	OFF	▲

4.8 Interface Explanation

4.8.1 RS-232 Serial Interface

Signal configuration for communication with PC host:



Printer serial port is DB9, baud rate supports 9600, 19200, 38400, 115200 bps, 8 bits data word length, 1 stop bit, no parity settings.

Descriptions to interface signals:

Pin No.	Signal name	Direction	Function
1	–	–	–
2	TXD	Output	Transmit Data
3	RXD	Intput	Receive Data
4	–	–	–
5	GND	–	Signal Ground
6	DTR	Intput	Ready To Sen
7	–	–	
8	RTS	Output	Clear To send

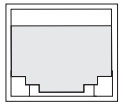
4.8.2 USB Interface

USB port uses Type B plug and support USB1.0 and USB2.0. Signals are as below:

PIN	Signal Name	Direction
1	VCC	+ 5V DC
2	D-	Data -
3	D+	Data +
4	GND	Ground

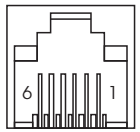
4.8.3 Ethernet Interface

Ethernet port uses RJ45 port with 10M ability. Configurations are as below:



Pin No.	Signal Name	Description
1	TX+	Tranceive Data+
2	TX-	Tranceive Data+
3	RX+	Receive Data+
4	n/c	Not connected
5	n/c	Not connected
6	RX-	Receive Data-
7	n/c	Not connected
8	nc	Not connected

4.8.4 Drawer Connector Interface



Pin No.	Signal name	Direction
1	Frame ground	–
2	–	–
3	Open cash drawer	Input
4	+24V	–
5	–	–
6	Signal ground	–