Mini Thermal Printer
USER'S MANUAL
AB-58C

Avoid external impact when operating, do not fall the printer down and avoid vigorously impact.

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

Avoid magnetic objects near the printer.

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

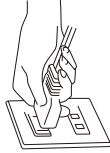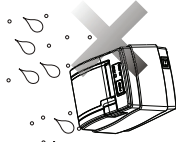Do not put printer on unstable surface.
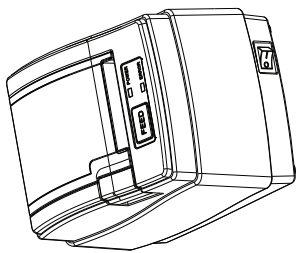
NOTICE

You should used the supplied adapter. It is dangero us to use other adapters.
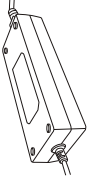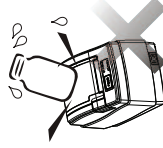
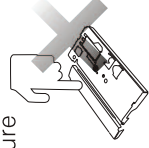Make sure the printer power is off before plug or unplug the cable.

Please don't place the printer in humidity or dusty space, excessive humidity and dust may damage it.
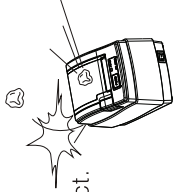
Do not put foods or drinks on the printer, in case that splash into the printer.

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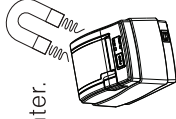
Table of Contents

Chapter 1. Setting up the Printer

Your printer box should include below items.

1. Printer AB-58C
2. User's Manual
3. AC power cable
4. Interface Cable
5. Adapter
6. CD-ROM
7. Paper Roll
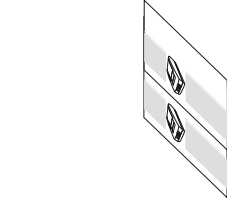
AC power cable

Paper Roll

Printer AB-58C

CD-ROM

Adapter

User's Manual
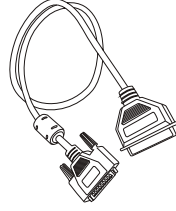
Interface Cable
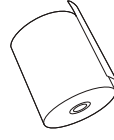
Picture for reference only.

Chapter 3 Product Overview

3.1 Printer Parts

1. Printer Cover
2. Paper Cabin
3. Control Panel
4. Power Switch
5. Cover Opener

3.1

3.2 Interfaces

6. Power Plug Port
7. Communication Port
8. Cash Drawer Port

3.2

Chapter 2 Specification

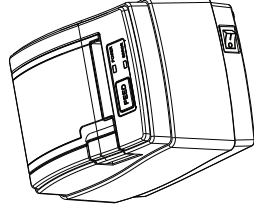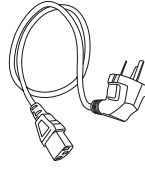|	
Printer Model	AB-58C
Printing Method	Thermal line printing
Dot density	8 dots/mm (203dpi)
Printing width	48 mm
Characters per line	36(12 × 24)/48(9 × 17)
Print Speed(MAX)	150 mm/s
Paper feed speed	150 mm/s
Number of characters	Alphanumeric characters Simplified Chinese characters
Character size	9 × 17, 12 × 24(English) 24 × 24(Chinese)
Receive buffer	4 KB
Bar code	JAN13 (EAN13), JAN 8 (EAN8) CODE39, CODE128
Paper Roll	Thermal paper, Size: Width: 57.5 ± 0.5mm Maximum outside diameter: 80mm, inner diameter: 13mm
Paper Cut	Paritid /Full Cut
Interface	RS-232C, IEEE 1284, USB, Ethernet (option)
Power Supply	DC 24V, 2A
Cash Drawer Port	DC 24V, 2A Rj11 plug
Temperature	Work Temperature &Humidity: 0 ~ 45℃; 35 ~ 85 % RH Storage Temperature &Humidity: -10 ~ 50 ℃; 10 ~ 90 % RH
Life Span	Thermal head: 100,000,000 metes (or above) Auto cutter: 1,500,000 cuts(or above)
Overall Dimensions	129W × 163D × 128H mm
Weight	1.06 KG

Chapter 4 Operations

4.1 Cable Connection

Interface Connector Cable

Drawer kick-out Cable

Power Supply(DC 24V、2A)
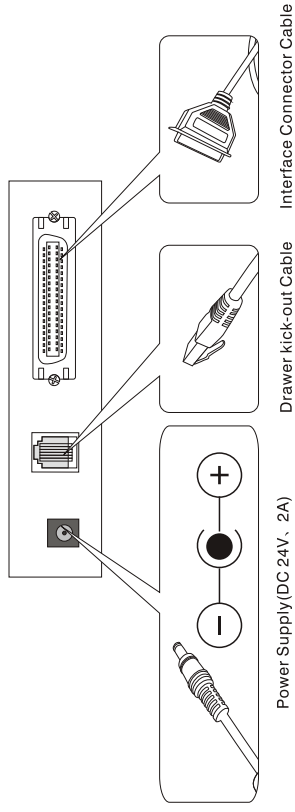
4.1

4.2 Control Panel
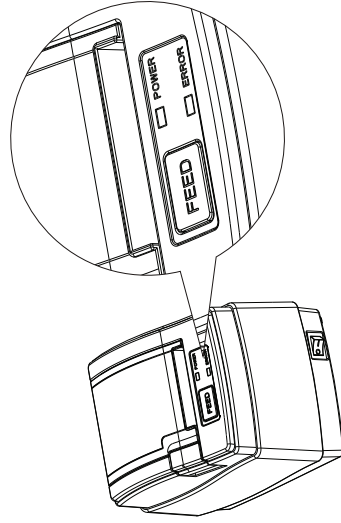
4.2

1、 FEED
   Press the FEED button once to advance paper one line. You can also hold down the FEED button to feed paper continuously.

2、 POWER LIGHT
   In normal status, this light is on. This light will flash when there is any error or paper lack.

3、 ERROR LIGHT
   The light is on when Error happens to the printer.
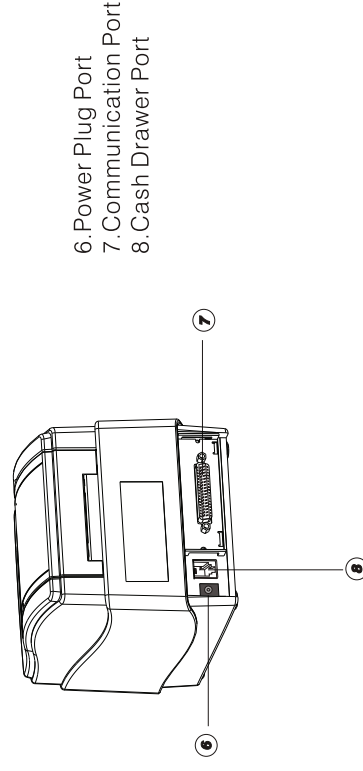
4.3 Install Paper Roll

Paper end direction:
1. Push cover opener in order to open upper cover
2. Put the paper roll in the cabinet. Leave the slip end out of printer. (Easy paper load architecture)
3. Close the upper cover.

A

B

Incorrect   Correct

C
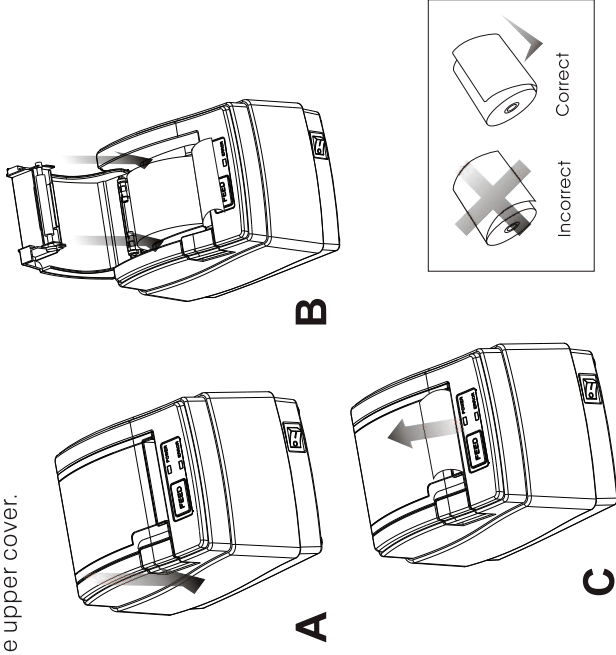
4.3

4.4 Self Test & DUMP Mode

1. Load the paper roll and switch off the printer. Then press FEED button and hold, then switch on the printer. The printer then performs self test.
2. Load the paper roll and switch off the printer. Then open the printer cover and press FEED button. Switch on the printer and then close the printer cover. Then the printer will print out "DUMP". It means the printer enters "DUMP" mode. All data will be printed out in raw HEX format.

Notice: restart the printer could restore to normal printing mode.

DIP switches could perform printer configurations as following: Serial 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 Normal mode switching, Chinese Character double byte mode or English character single byte mode selection.
Below are lists of DIP configurations:

Baud Rate	DIP1	DIP2	Default
9600bps	ON	ON	▲
19200bps	ON	OFF	
38400bps	OFF	ON	
115200bps	OFF	OFF	

Beep	DIP3
ON	ON
OFF	OFF

Density	DIP4
light	ON
dark	OFF

USB/Ethernet	Parallel	Serial	DIP5	DIP6	Default
Default	Default	Default	ON	ON	▲
Default	Default	Default	ON	OFF	
Default	Default	Odd	OFF	ON	
Default	Printer server	Even pardy	OFF	OFF	

Print Mode	DIP7
Normal Mode	ON
Epson Mode	OFF

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

4.5 DIP Switch

Unscrew the screw on bottom of printer and take away the metal cover as picture 4.4. Users will find the DIP switches under the window as picture 4.5.

4.4

4.5

4.6 Replacing the interface:

The standard configuration of the printer contains an interface inside. Users can buy serial, parallel, USB, Ethernet interface separately according to user's requirement. The printer supports replacing the interface by users.

1. Loosen the screws as (4.6)
2. Take away the interface as (4.7)
3. Insert the interface as (4.8)
4. Install the screws again.
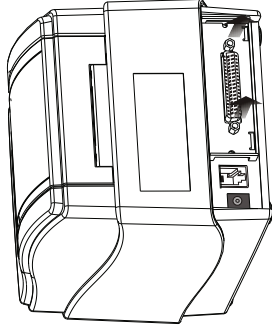
4.6
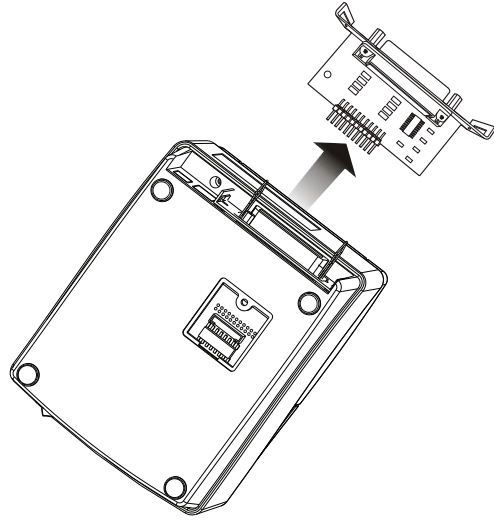
4.7
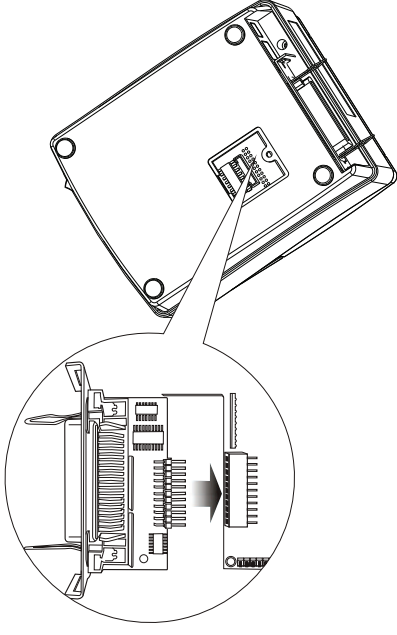
4.8

4.7 Interface Explanation

4.7.1 RS-232 Serial Interface

Printer uses 25-pin DSUB serial connector. Baud rate supports 38400, 115200, 9600, 19200 bps, 8-digits data, 1 stop bit, no parity.

Descriptions to interface signals:

Pin No.	Signal name	Direction	Function
1	FG	-	Frame Ground
2	TxD	Output	Transmit Data
3	RxD	Input	Receive Data
4	RTS	Output	Ready To Send
5	CTS	Input	Clear To Send
6	DSR	Input	Date Set Ready
7	SG	-	Signal Ground
20	DTR	Output	Data Terminal Ready

Signal configuration for communication with PC host:

```
PRINTER           HOST
SIDE(25P)         SIDE(9P)

(S.G)  1          1  (S.G)

(TXD)  2          3  (TXD)
(RXD)  3          2  (RXD)

                  7  (RTS)
                  8  (CTS)

(DSR)  6          6  (DSR)
(DTR) 20          4  (DTR)

(S.G)  7          5  (S.G)
```
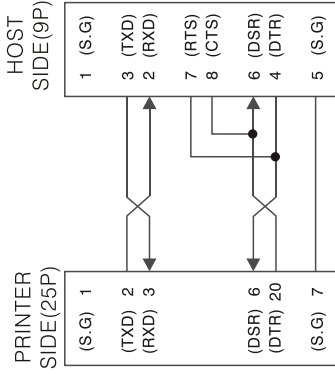
4.7.2 USB Port

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

4.7.3 Drawer Connector

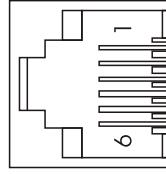| Pin No.	Signal name	Direction
1	Frame ground	-
2	-	-
3	Drawer open/close signal	Input
4	+24V	-
5	-	-
6	Signal ground	-

4.7.4 Parallel Port IEEE1284 A

Printer end uses 36-pin Centronics parallel connector. The signals include 8-digits data and Support "Busy" protocol. Signals are as below:

Pin No	Source	Register	Direction	Description
01	nStrobe	C0	Input	Enable D0-D7
02	DATA 0	D0		
03	DATA 1	D1		
04	DATA 2	D2		
05	DATA 3	D3	Input	8 digits Parallel Signal
06	DATA 4	D4		
07	DATA 5	D5		
08	DATA 6	D6		
09	DATA 7	D7		
10	nAck	S6	Output	"Low"represents "ready to receive data"
11	Busy	S7	Output	"High"represents "printer busy"
12	PaperEnd	S5	Output	"High"represents l"ack of paper"
13	Select	S4	Output	"High"represents "printer selected"
14-18	-	-	-	NA
19-30	GND	-	-	Signal ground
31	-	-	-	NA
32	nError	S3	Output	"Low"represents "error to printer"
33-36	-	-	-	NA

4.7.5 Ethernet Port

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

PIN	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	n/c	Not connected