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Specifications:**Model Name:**

BRP-058-P	Thermal line printer – parallel
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Features:

Printing Method	Direct thermal line printing
Printing Paper Width	57.5mm±0.5mm
Valid Printing Width	48mm
Printing Speed	52mm/sec. or 14 lines/sec. approx
Print head features	Printing Density: 384dots/line or 8dots/mm Printing dot pitch: 0.125mm MCBF: 50miles Over heat protection
Interface	Parallel: D-SUB 25 pin (male) connector, 8-bit parallel, BUSY handshaking. Cash drawer: DC12V/1A, 6-line RJ-11connector
Weight	740G (without paper roll)
Dimension	185(L)×114(W)×140(H)mm
Service conditions	Operating temperature: 0~50°C Relative humidity:10~80% Storage temperature: 0~50°C Relative humidity: 10~80%

Power Supply:

AC Adaptor Input	AC220V, 50Hz
AC Adaptor Output	DC12V/3.5A
Printer Input Voltage	DC12V/3.5A

Printing Character:

ACSII code character set	12×24 dots, 1.25(W)×3.00(H)mm
System command set	ESC/POS system command sets

Printing Paper:

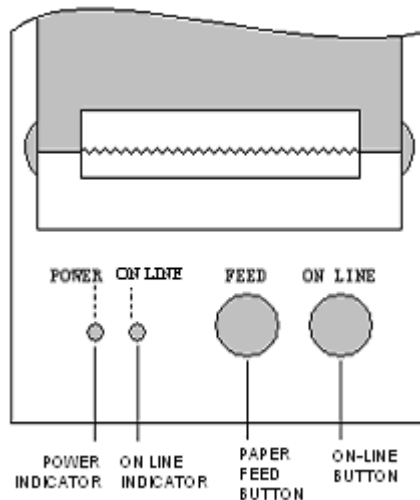
Paper type	Thermal Paper
Paper Model	TF50KS-E(Japan Paper co. ltd) AF50KS-E(JUJO THERMAL)
Paper Specifications:	Width: 57.5±0.5mm Roll diameter: Φ50mm Thickness: 53~60g/m ²

Carton Content:

Name	Quantity
BRP-058-P Thermal Line Receipt Printer	1
BRP-058-P Manual	1
Parallel connector	1
Power Supply (AC220V input/DC12V output)	1
Printer power supply cable	1
BRP-058 drive floppy disk	1
Testing paper roll	1

Installation:

1. Control Panel



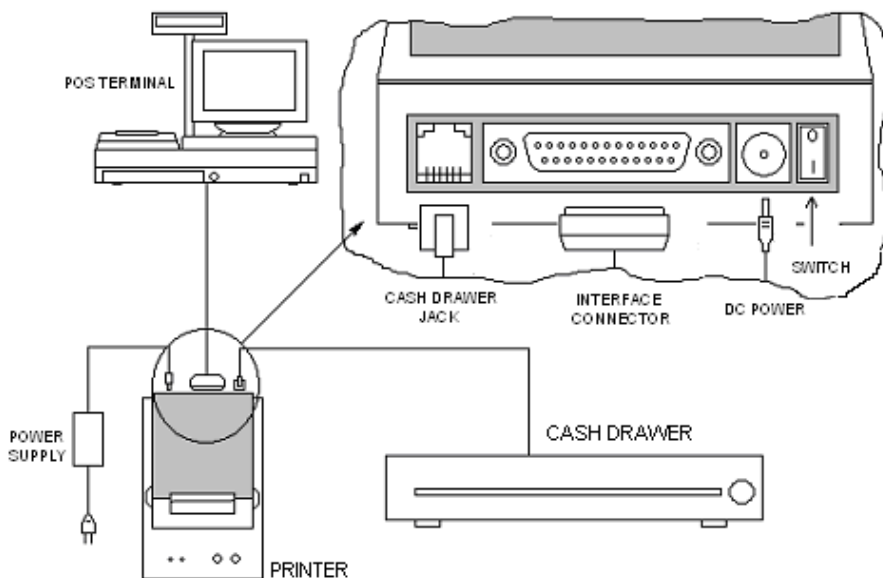
Indicator	Description
Power Indicator Off	No power supply for printer
Power Indicator On	Printer has power supply
On Line indicator Off	Printer is in OFF-LINE mode
On Line Indicator On	Printer is in ON-LINE mode
On Line Indicator Blinks	Warning signal. When timely blink 160ms, means paper out, waiting for paper feed. When timely blink 300ms, means print head over heat. Printer will be back normal automatically, after print head temperature cooling down to 45°C.
Paper Feed Button	When the ON LINE indicator is off, press the button to feed paper. This button is not valid when the ON LINE indicator is on.
On Line Button	Switches the printer between ON LINE and OFF LINE

2. Loading Paper



1. Open the removable upper cover of printer, as picture ① shown.
2. Insert the paper roll deep-down into the paper-in slot as picture ② shown.
Note the correct direction that paper comes off the roll.
3. Pull out a small amount of paper as picture ② shown.
4. Close the upper cover of printer as picture ③ shown.

3. Connecting of cables



- a) Plug the parallel cable with 25 pin D sub Male into 25 pin D sub Female connector of the printer
- b) Plug the cash drawer RJ-11 connector into the cash drawer kick-out connector on the back of the printer, when you have a cash drawer that can be opened by printer.
- c) Either a supplied power adaptor or a printer power cable from host unit can be connected to this connector.

4. Self-test

To start Self-test, press and hold down "ON LINE" button while power on, when the "POWER" indicator is on and "ON LINE" indicator is off, release the button, then Self-test sample will be printed as below:

```

  ~~~~~
  SELFTEST

  Interface: Centronics

  !"#$%&'()*+,-./0123456789:;<=>?
  @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_
  `abcdefghijklmnopqrstuvwxyz{|}~

  国际一二级汉字库

  ~~~~~

  SELFTEST OK!
  ~~~~~

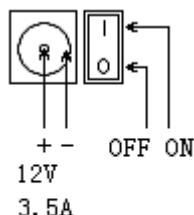
```

Hardware Interface:**1. Connecting of Parallel Interface**

Parallel port of BRP-058-P is 8bit interface which support BUSY handshaking.

Pin Assignment of Parallel Port as below:

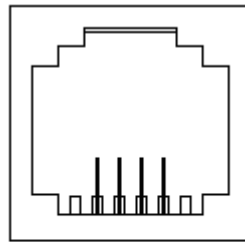
Pin No.	Signal	Description
1	/STB	Strobe pulse to latch data. Reading occurs at falling edge.
2	DATA1	These signals represent the 1 st bit to 8 th bit. Each signal is at "HIGH" level when data is logical "1" and "LOW" when data is logical "0"
3	DATA2	
4	DATA3	
5	DATA4	
6	DATA5	
7	DATA6	
8	DATA7	
9	DATA8	
10	/ACK	Pull up to "HIGH" logical level by a resistor
11	BUSY	"HIGH" level signal indicates that the printer is BUSY
12	GND	Grounding
13	SEL	Pull up to "HIGH" logical level by a resistor
15	/ERR	Pull up to "HIGH" logical level by a resistor
14	NIL	
16		
17		
18~25	GND	Grounding

2. Connecting of Power Supply

DC POWER JACK

The Power Supply output for BRP-058 Printer is DC 12V/3.5A with 12V/1A output to control the cash drawer.

3. Connecting of Cash drawer



6 5 4 3 2 1
RJ-11 Cash drawer
connection

The cash drawer interface of BRP-058 Thermal Line Receipt Printer is RJ-11 connector, with 12V/1A output.

Pin Assignment Definition:

Pin No.	Signal	Description
1	NIL	
2	Driver Signal	Cash drawer driver signal (out)
3	Driver Signal	Cash drawer driver signal (out)
4	DC +12V	Out
5	DC +12V	Out
6	NIL	

Driver:

1. Installing the driver

BRP-058 Printer has two ways of driver, one is installing driver under Windows 95/98/ME, and another way is driver by parallel interface directly.

1) Installing the driver under Windows 9x

Add a named “ POS58 PRINTER” by insert the supplied drive floppy disk into your floppy disk drive under Windows 9x. This way of installing driver was not recommended, because the printing speed is too low, and not easy to control the paper length (paper waste).

2) Directly driver from Parallel interface

The printer could print directly by setting the ESC/POS System command.

ESC/POS System command details**LF – Print and line feed**

ASCII LF

Hex [OAH]

Decimal [10]

Description: Prints the data in the print buffer and feeds one line.

ESC J n – Print and feed paper 'n' dot line

ASCII ESC J n

Hex [1BH][4AH]n 18H ≤ n ≤ FFH

Decimal [27][74]n 24 ≤ n ≤ 255

Description: Prints the data in the print buffer and feed 'n' dot line.

This command is valid only for current line. The line spacing settings remains unchanged.

ESC 2 – Defined default line spacing is 1/6 inch

ASCII ESC 2

Hex [1BH][32H]

Decimal [27][50]

Description: Setting the line spacing: 1/6 inch or 30 dot line.

ESC 3 n – Defined default line spacing is 'n' dot line

ASCII ESC 3 n

Hex [1BH][33H]n 0BH ≤ n ≤ FFH

Decimal [27][51]n 11 ≤ n ≤ 255

Description: Setting the line spacing: 'n' dot line. The default setting is 'n'=30.

ESC ! n – Set print mode

ACSII ESC ! n

Hex [1BH][21H]n n=00H,10H,20H,30H

Decimal [27][33]n n=0,16,32,48

Description: A compound command to set printing mode. This is to used to set character printing size. The default setting is n=0; when n=16, double-height mode; When n=32, double-width mode; When n=48, double-height-width mode. For cancellation use “ESC DC4”.

ESC S0 – Set double-width character printing

ACSII ESC S0

Hex [1BH][0EH]

Decimal [27][14]

Description: All Character after this command within one line will be printed out in double-width. For cancellation use “ESC DC4” or return key.

ESC DC4 – Cancel double-width character printing

ACSII ESC DC4

Hex [1BH][14H]

Decimal [27][20]

Description: The command is the cancellation for “ESC S0” “ESC !n”.

8. ESC c 5 n – Enable and disable panel buttons.

ACSII ESC c 5 n

Hex [1BH][63H][35H]n 00H≤n≤01H

Decimal [27][99][53]n 0≤n≤1

Description: When $n=0$, the panel buttons are enabled.

When $n=1$, the panel buttons are disabled.

The panel buttons are enabled automatically after paper changed.

The default setting is $n=0$.

9. ESC * m n1 n2 d1...dx – Set Bit-Map Graphics printing

ASCII ESC * m n1 n2 d1...dx

Hex [1BH][2AH]m n1 n2 d1...dx

$m=01H, 21H; 00H \leq n1 \leq FFH; n2=00H, 01H; 00H \leq d \leq FFH;$

Decimal [27][42]m n1 n2 d1...dx

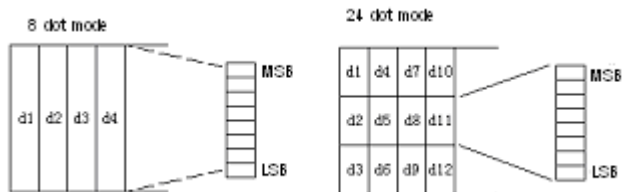
$m=1, 33; 0 \leq n1 \leq 255; n2=0, 1; 0 \leq d \leq 255;$

Description: m for setting bit-map graphics mode: 1 means 8-dot double density;

33 means 24-dot double density. n1, n2 means the number of horizontal dots. Horizontal dots is $n1+256*n2$. If the number of dot is more than one line, the extra portion will be ignored.

d for data byte of the bit-map graphics, the printer will convert the data to binary system dot. 1 of bit means the related dot will be printed and 0 of bit means the dot not printed.

x means the number of data bytes. When $m=1$, $x=n1+256*n2$; When $m=33$, $x=(n1+256*n2)*3$. If the number of dot is more than one line, the extra portion will be ignored.



10. ESC @ - Initialize printer.

ACSII ESC @
 Hex [1BH][40H]
 Decimal [27][64]

Description: This command initializes printer in following aspects:

- clear data in printing buffer;
- reinstate default value;
- select character printing mode;
- clear user-defined characters.

11. ESC p m n1 n2 – Control cash drawer

ACSII ESC p m n1 n2
 Hex [1BH][70H]m n1 n2 m=00H, 01H<n1≤n2, n1≤n2≤FFH
 Decimal [27][112]m n1 n2 m=0, 1<n1≤n2, n1≤n2≤255

Description: This command is to generate a pulse to trigger the opening of cash drawer. The pulse ON time is n1x2ms, and the OFF time is n2x2ms.