



WH-T1

Dot Matrix Printer User Manual

深圳炜煌打印机有限公司

Shenzhen Brightek Printer Co.,Ltd.

Version

Version	Date	Description
V1.0	2017-7-3	Enactment

Content

CHAPTER 1 OVERVIEW	4
1.1 SPECIFICATION	4
1.2 OPERATION.....	7
1.2.1 Indicator Light	7
1.2.2 Button.....	7
CHAPTER 2 POWER AND COMMUNICATION	8
2.1 POWER INTERFACE	8
2.2 COMMUNICATION INTERFACE	8
2.2.1 TTL and RS233 Interface	8
2.2.2 RS485 Interface.....	9

Chapter 1 Overview

1.1 Specification

	Item	Description
Print Head (M-150)	Printing Method	Dot Matrix printing
	Printing Speed	1 line / sec
	Effective Print Width	33.6 mm
	Print Density	0.35 mm/dot
	Resolution	96 dots / line
Printing	Character Set	Chinese (GB2312), English (ASCII)
	Character / line	16
	Paper Cutter	None
Paper	Paper Type	Normal paper
	Paper Width	44 mm
	Thickness	0.06~0.08 mm
Power	DC	DC 5V, 3A / DC 9-24V, 10W
Communication	Interface	RS232 / RS485 / TTL
Condition	Temperature	0~50°C (14~122°F)
	Humidity	10~90% RH (non-condensing)

	Item	Description
Print Head (M-160)	Printing Method	Dot Matrix printing
	Printing Speed	0.7 line / sec
	Effective Print Width	48 mm
	Print Density	0.33 mm/dot
	Resolution	144 dots / line
Printing	Character Set	Chinese (GB2312), English (ASCII)
	Character / line	24
	Paper Cutter	None
Paper	Paper Type	Normal paper
	Paper Width	58 mm
	Thickness	0.06~0.08 mm
Power	DC	DC 5V, 3A / DC 9-24V, 10W
Communication	Interface	RS232 / RS485 / TTL
Condition	Temperature	0~50°C (14~122°F)
	Humidity	10~90% RH (non-condensing)

	Item	Description
Print Head (M-164)	Printing Method	Dot Matrix printing
	Printing Speed	0.4 line / sec
	Effective Print Width	48 mm
	Print Density	Horizontal: 0.20 mm / dot Vertical: 0.33 mm / dot
	Resolution	240 dots / line
Printing	Character Set	Chinese (GB2312), English (ASCII)
	Character / line	32
	Paper Cutter	None
Paper	Paper Type	Normal paper
	Paper Width	58 mm
	Thickness	0.06~0.08 mm
Power	DC	5V, 3A
Communication	Interface	RS232 / RS485 / TTL
Condition	Temperature	0~50°C (14~122°F)
	Humidity	10~90% RH (non-condensing)

1.2 Operation

1.2.1 Indicator Light

There is a green LED showing the printer status as shown in below table:

Status	Description
Light keeping on	The printer is powered on and normal
Flashing	Out of Paper

1.2.2 Button

The printer has two buttons: (1) Paper Feed (**LF**) ; (2) Setting (**SET**)

Feed Paper: After turning on the printer, press the **LF** button to feed paper.

Self-Test:

1. When the printer is powered off, press and hold the “**LF**” button;
2. Do not release the **LF** button and power on the printer at the same time, the printer will print out the “self-test” slip which shows the firmware version and various setting values of the printer.

Setting:

1. When the printer is powered off, press and hold the “**SET**” button and power on the printer. The printer prints the setting slip and enters the setting state;
2. In the setting state, press the **SET** button to enter setting item selection state. Then press SET button again to switch to different setting item (see below table);
3. In the item selection state, press the “**LF**” button to select the current item and enter setting item value selection state. In this state, press **LF** button again to switch to different setting item value. After selecting the required value, press **SET** button to confirm it and return to item selection state;
4. The printer should be restarted after setting. The selected setting item value is stored and effective.

No.	Item	Setting Value					
			Default				
1	Baud Rate (bps)	1.1 4800	1.2 9600	1.3 19200	1.4 38400	1.5 57600	1.6 115200
2	Print Direction	2.1 direction	2.2 direction				

Chapter 2 Power and Communication

2.1 Power Interface

The printer uses DC 5~8.5V or DC9~24V power supply (depending on the selected model). The following figure is a schematic diagram of the power socket:



Figure 1-1

2.2 Communication Interface

2.2.1 RS232 / TTL Interface

The printer has RS232, TTL or RS485 interface for communication, depending on the selected model.

The RS232 level is compatible with Standard RS232. The default Baud rate is 9600bps, which can be changed by the button “SEL”, refer to the Button setting above.
(1 start bit, 8 data bits, 1 stop bit).

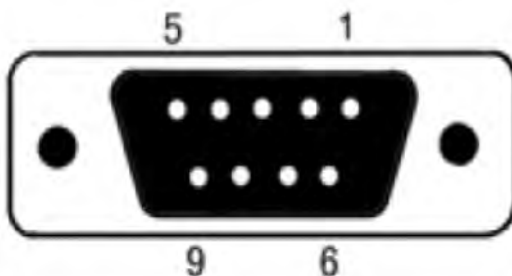


Figure 1-2 Serial Interface Diagram

Pin configuration for RS232 / TTL :

Pin	Signal	Direction	Description
2	TxD	Out	Printer sends data to the host
3	RxD	In	Printer receives data from the host
5	GND	---	Signal ground
6	Same as "Busy"	Out	Logic signal "1" indicates the printer is Busy and not able to receive data; Logic signal "0" indicates the printer is ready to receive data.
8	Busy	Out	Logic signal "1" indicates the printer is Busy and not able to receive data; Logic signal "0" indicates the printer is ready to receive data.

Note:

1. "Out" stands for output from the printer
2. "In" stands for input to the printer
3. RS232 is using negative logic level, i.e. Logic "1" is -3 to -15V; Logic "0" is +3 to +15V

2.2.2 RS485 Interface

The RS485 interface pin configurations are shown in below table:

Pin	Name
2	B (D-)
3	A (D+)