

IWE810-POS Mini-POS Ticket Printer

User's Guide

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, (example – use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/CE OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 9 March 1999 on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity (R&TTE).

The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) as of April 8,2000.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Denmark, Finland, France (with Frequency channel restrictions), Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, The Netherlands, and United Kingdom.

The ETSI version of this device is also authorized for use in EFTA member states Norway and Switzerland.

EU Countries Not Intended for Use

None.

Potential Restrictive Use

France: only channels 10, 11, 12, and 13.

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1. Unpacking

A. Overview

1.	IWE800-POS mini-POS Ticket Printer	1 piece
2.	Control Keypad	1 piece
3.	User's Guide	1 piece
4.	Y Cable	1 piece
5.	Serial Cable	1 piece
6.	Power Adapter (7.5 VDC output)	1 piece
7.	Paper Roll	1 piece

2. Indicators and Connections

A. Front View of the Printer

Power Indicator	Shows power on/off status
Error Indicator	Shows error status: On: Printer is on line Off: Printer is off line Blinking: 160 ms interval - out of paper 300 ms interval – print head overheated (Wait till print head cools off then resume printing. The error indicator stops blinking when the temperature drops below 40°C.)
Feed Button	Advances paper roll (<i>the button is inoperable when error indicator blinks</i>)
Online Button	Switches printer online or offline

B. Rear View of the Printer



C. Loading Paper Roll



- 1) Open the top cover
- 2) Place the paper roll in the paper compartment. Pull the leading edge of the paper roll straight to pass the front panel of the printer.
- 3) Close the top cover and make sure the roller sits firmly on top of the paper roll.

3. Self Test of the Printer

- Power up the printer while pressing and holding down the Online button. Power Indicator comes on and Error Indicator goes out.
- Release the Online button. The printer prints out a successful test page.
- Error Indicator turns back on.

```
SELFTEST  
Interface: Centronics  
  
!"#$%&'()*+,-./0123456789:;=<?>  
@ABCDEFGHIJKLMN OPQRSTUVWXYZ[\]^_`  
`abcdefghijklmnopqrstuvwxyz{|}~  
  
國際一二級字庫  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
  
SELFTEST OK!
```

4. Using the Printer

A. Connecting the IWE800-POS mini-POS Ticket Printer to the Hotspot Gateway

- Locate an optimum location for the printer. In most instances, the best place for the printer is close to the keypad and Hotspot Gateway.
- Using the Y-type cable provided (as shown in Figure 1), connect the 7-pin serial (PS/2) cable end to the keypad, shown as Figure 2.



Fig. 1. Y-cable



Fig. 2. Connect Y-cable to keypad.

- Then, connect the 9-pin (female) cable end to the Hotspot Gateway serial port, shown as Figure 3.



Fig. 3. Connect Y-cable to HotSpot Gateway serial port.

- Using the printer cable provided, as shown in Figure 4, connect the 25-pin cable end of the printer cable to the printer, shown in Figure 5.



Fig. 4. Printer cable



Fig. 5. Connect 25-pin cable to the printer.

- Then, connect the 9-pin end of the cable to the Y-type cable's 9-pin (male) connector, shown in Figure 6.



Fig. 6. Connect the printer cable to the Y-cable.

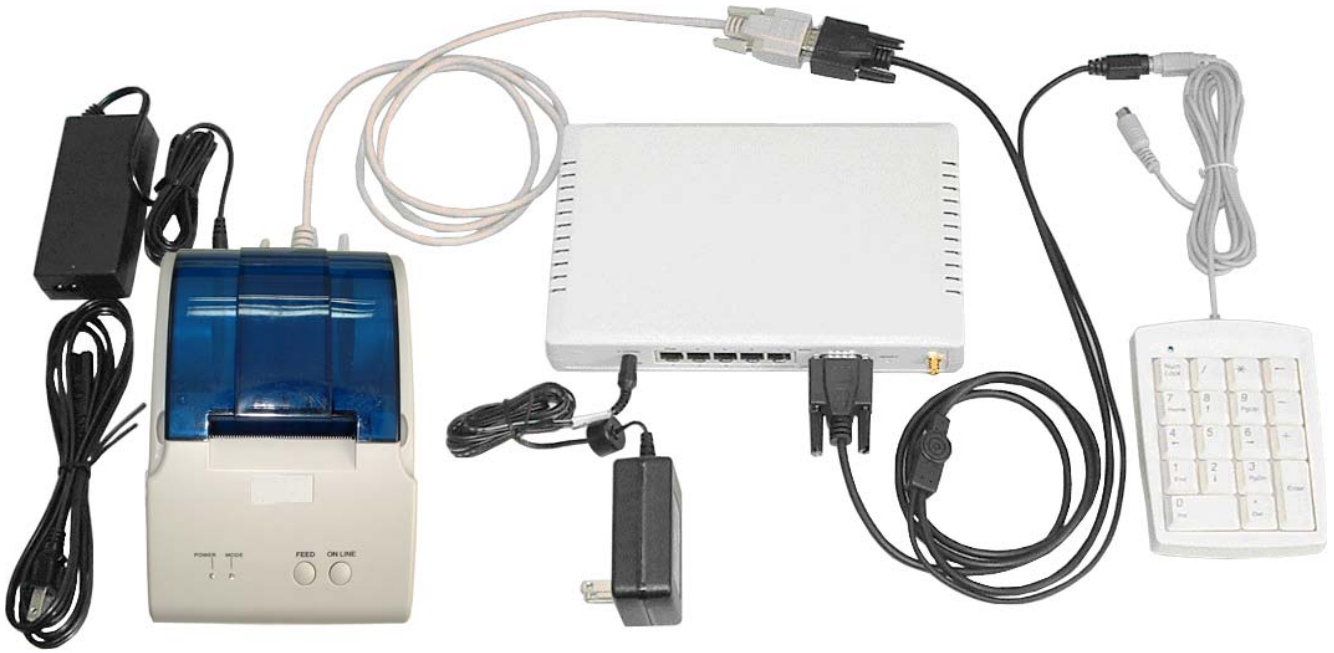
- Connect the AC power adapter to the printer's power socket, as shown in Figure 7, and the other end to the electrical outlet.
- Connect the power adapter to the Hotspot Gateway, as shown in Figure 8. Plug the other end of the power adapter into the electrical outlet.
- Turn on the printer and the Hotspot Gateway.



Fig. 7. Connect the power adapter to the printer.



Fig. 8. Connect the power adapter to the HotSpot Gateway.



NOTE: Use of a different adapter may result in product damage.

B. Configuring the Hotspot Gateway and Printer for Ticket Printing

Detailed instructions can be found in the 2.4GHz 802.11g Hotspot Gateway User Guide.
Please see sections 1.8.6 to 1.8.6.3

5. Specifications

Mini Printer

A. Physical Characteristics

Print Method	Direct thermal
Paper Width	57.5 mm ± 0.5 mm
Effective Print Width	48 mm
Print Speed	Approx. 52 mm/sec or 14 lines/sec
Print Head	Print density: 384 dots/line or 8 dots/mm Print dot space: 0.125 mm Print life: 50 km Overheat suspension protection
Interface (Serial)	Dsub 25-pin female connector 9600 bps, none, 8 bits, 1 stop bit RTS/CTS and Xon/Xoff protocol
Interface (Parallel)	Dsub 25-pin male connector 8 bits, BUSY protocol
Cash Drawer Port	DC 12V/1A, 6-wire RJ-11 socket
Net Weight	740 g (without cable and paper roll)
Dimensions	185 mm (L) x 114 mm (W) x 90 mm (H)
Operating Environment	Temperature: 0 - 50°C Humidity: 10 - 80 RH
Power Input	DC 7.5V/2.0A

B. Printer Font

ASCII Character	12 x 24 dots, 1.25 mm (W) x 3.00 mm (H)
Print Commands	ESC/POS

C. Print Paper

Type	Thermal
Model Number	TF50KS-E (Japan Paper Co. Ltd.) AF50KS-E (JUJO Thermal)
Parameters	Width: 57.5 ± 0.5 mm Max diameter: 50 mm Thickness: 53-60 g/m ²

Keypad

A. Electric Characteristics

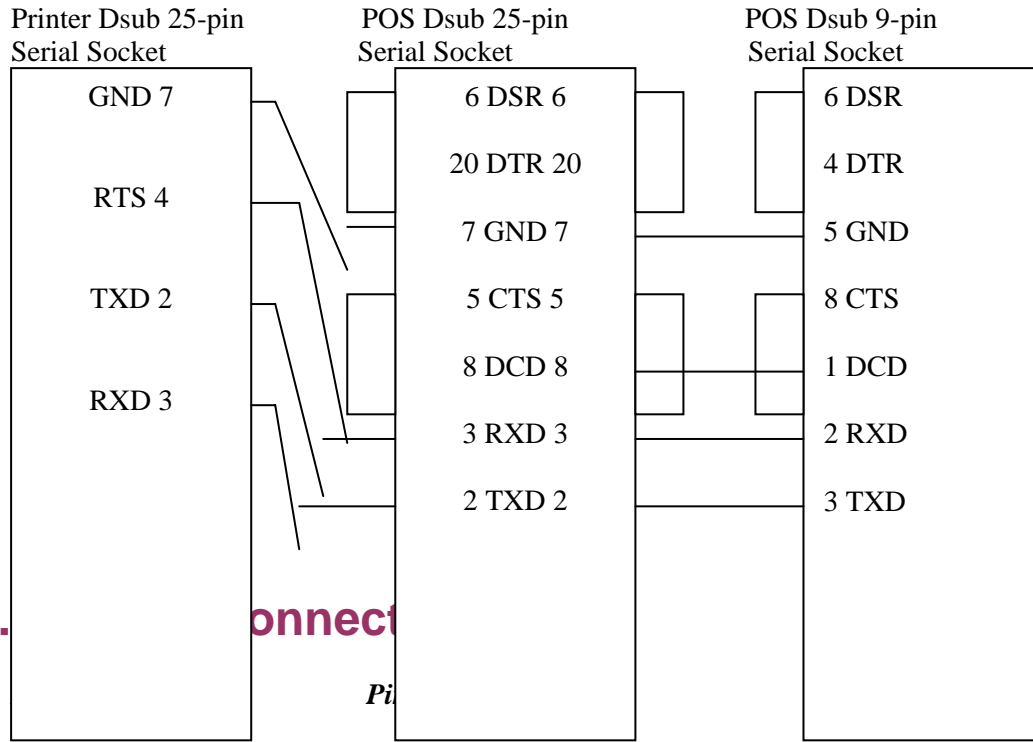
Power Interface	PC PS/2 PORT
Electric Voltage	DC 5V
Electric Current	LED light on Static state: 16.4mA Work state: 16.5mA LED light off Static state: 10.1mA Work state: 10.2mA
Input Interface	PS/2

B. Physical Characteristics

Dimensions	96 mm (L) x 128 mm (W) x 27.37 mm (H)
Key Number	18 key
Main Material	ABS
Switch Type	Conductive Rubber
Key Frequency	1000000
Operating Environment	Temperature: 5 - 50°C Humidity: 10 - 80 RH

6. Pinouts

A. Serial Connection



B. Connect

Pin

2	DATA1	16	N/C
3	DATA2	17	N/C
4	DATA3	18~25	GND
5	DATA4		
6	DATA5		
7	DATA6		
8	DATA7		
9	DATA8		
10	/ACK		
11	BUSY		
12	GND		
13	SEL		
14	/ERR		

C. Power Input



IWE800-POS mini-POS Ticket Printer requires DC 7.5V/2.0A power.

D. Cash Drawer Port

<i>Pin#</i>	<i>Signal</i>	<i>Description</i>
1.	N/C	
2.	Drive Signal	Cash drawer drive signal (output)
3.	Drive Signal	Cash drawer drive signal (output)
4.	DC +12V	Output power
5.	DC +12V	Output power
6.	N/C	

7. Command Set

<i>No.</i>	<i>Command</i>	<i>Hex Code</i>	<i>Function Description</i>
1	LF	0A	Prints out buffer and advances one line
2	ESC J n	1B 4A n 18<=n<=FF	Prints out buffer and advances n lines
3	ESC 2	1B 32	Sets line space to 1/6 inch or 30 dots
4	ESC 3 n	1B 33 n 0B<=n<=FF	Sets line space to n dots, n=30 default
5	ESC ! n	1B 21 n n=00, 10, 20, 30	Sets font size, n=00 default n=10 double height n=20 double width n=30 double height and double width (This command gets overridden by ESC DC4 command.)
6	ESC SO	1B 0E	Sets double width printing for all characters subsequent to the command in a line (This command gets overridden by LF, CR, or ESC DC4 command.)
7	ESC DC4	1B 14	Resets to default font size
8	ESC c 5 n	1B 63 35 n 00<=n<=01	Enables Feed & Online buttons n=00 default Disables Feed & Online buttons n=01 (The buttons get enabled automatically when paper roll being loaded.)
9	ESC * m n1 n2 d1...dx	1B 2A m n1 n2 d1...dx m=01, 21 00<=n1<=FF n2=00, 01 00<=d<=FF	Sets dot matrix m=01 8 dots double density m=21 24 dots double density n1+256*n2 total number of horizontal dots d=1 to print the dot d=0 not to print the dot x denotes the data number x=n1+256*n2 when m=01 x=(n1+256*n2)*3 when m=21
10	ESC @	1B 40	Initializes printer and sets all defaults
11	ESC p m n1 n2	1B 70 m n1 n2 m=00 01<n1<=n2 n1<=n2<FF	Controls cash drawer n1 is the time for attracting micro-switch n2 is the time for starting next attractive command, attractive time interval=n1*2ms, response time interval=n2*2ms