

Thermal Receipt Printer

Instruction Manual



Save the user manual for future reference.

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A. Important Safety Notification

- Read the instruction manual carefully before use.
 Save the manual in the near location for further reference.
- Use only parts or accessories, especially power adapter, recommended by the manufacturer; unapproved parts may be hazardous and cause injures to the product or human.

WARNING:

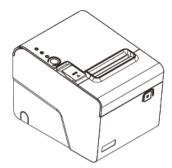
IF ANY FUNCTIONAL PROBLEMS OR DEFECTS OCCUR WHICH ARE ATTRIBUTABLE TO IMPROPER USE OF THE PRODUCT SHALL VOID THE WARRANTY.

- Refer servicing to qualified personnel only.
- Do not attempt to repair or dissemble the product on your own. Opening or removing cover can expose you to dangerous voltage or other hazards.
- Before plugging the power cord into the AC inlet of the power supply unit, make sure that the voltage applied to the power outlet is within the specified range (100V ~240V). Improper power source voltage range will cause damage to the power supply unit.
- Power off the product and remove the power adapter while cleaning the system.
- Before powering on the product, make sure all the connectors, cables are firmly installed.

Important Safety Notification

- Do not expose the product to rain or moisture, such as a bathtub, a washbowl, a kitchen sink, a laundry tub, and a swimming pool.
- Do not expose the machine under direct sunlight, and keep it away from any heat source.
- Do not place the product on an unstable location, stand or table. If the machine falls, it may injure a person or cause serious damage to the appliance.
- Do not allow anything to rest on the power cord.
 Do not locate the product where people may walk on the cord.
- Do not make the power outlet and extension cords overload. Overload can result in fire or electric shock.
- If any of the following situations occurs, unplug the product from the power outlet immediately and consult with a qualified service person:
 - 1. The power cord or plug is damaged or frayed.
 - 2. Liquid is spilled into the system.
 - 3. The product is dropped and damaged.
- Use a soft cloth to clean the product when it is dirty. In case the dirt is hard to remove, use a mild detergent and wipe the product gently.
 - Turn OFF and unplug the product before cleaning.
- When the product is not in use, clean and stores it with care.

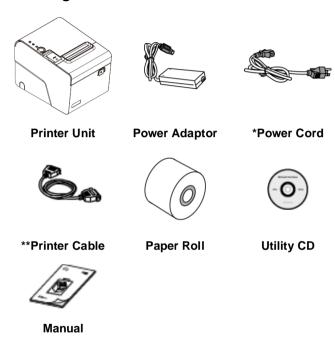
B. Product Overview



Main Features

- Splash and dust proof design
- Paper Auto-Cutter
- Vertical printing
- Multi I/O Interface (Serial +Ethernet +USB or Parallel +USB)
- Cash drawer connection port (RJ-11)
- Compatible with ESC/POS print commands set
- Various Drivers available
- User friendly, drop-and-print paper installation, simple paper jam elimination
- Optional audible indicator version good for noisy environment operation
- Multiple Language fonts selectable
- Ethernet Connection Web Page Configuration
- DHCP Clint support

Packing



- * Power Cord is selectable depending on the types of electrical plug.
- ** Printer cable is selectable depending on the interface required (RS-232, USB, RJ-45 or RJ-11).

Please refer to the nearest local representatives for further information.

Specification

General			
Print Method		Thermal line printing	
Print Speed		250mm/sec	
Print Life		100 Km	
		ANK Font.	
Print	(ASCII Mode)	Font A: 12 x 24 dots,	
Font		Font B: 9 x 17 dots	
	Graphic Font)	Chinese Character: 24 x 24 dots	
Print R	Resolution	576 dots/line or 512 dots/line	
Drint E	ant Character	International Font, Big 5 Chinese,	
Print Font Character		GB Chinese, Japanese,	
Suppo	π	Korean selectable	
Character Per Line		48 (Font A) / 64(Font B)	
Effective Print Width		72mm	
Paper Width		79.5mm± 0.5mm	
Paper Roll Diameter		≦83mm	
Paper	Thickness	0.06~0.08mm	
		Win 9X/Win ME/Win 2000/	
		Win 2003/Win NT/Win XP/	
Driver		Win Vista/Win 7, Win 8	
		compatible with EPSON and	
		SAMSUNG	
Print Command		ESC/POS print commands set	
	Receipt	128K bytes	
Buffer	User-Defined	128K bytes	
NV Flash		256K bytes	

^{*} All specifications are subject to change without prior notice.

Interface		
I/O Interface	Multi I/O Interface (Serial +Ethernet +USB or Parallel type selectable)	
Cash Drawer	DC 24V/1A, 6-Wire RJ-11	

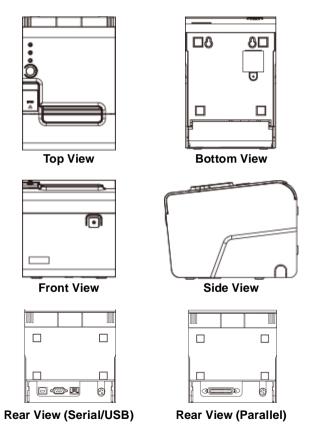
Notification		
Indicator	Audio and LED Indicators	
Auto Cutter	Partial	
Paper End Notice	Yes	
Over-Heat Halt-on Protection	Yes	

Others		
	24VDC/2.5A	
Power Input	(External Adapter:	
	100~240VAC 50/60Hz)	
Color	Black	
Compliance	FCC / CE / WEEE / RoHS	
Weight	1600g (without cable)	
Dimension (mm)	202(L) x 140(W) x 149(H)	
Operating Temperature	0°C~45°C	
Operating Humidity	10% ~ 80% RH, non-condensing	
Storage Temperature	-10°C~ 60°C	
Storage Humidity	10% ~ 90% RH non-condensing	

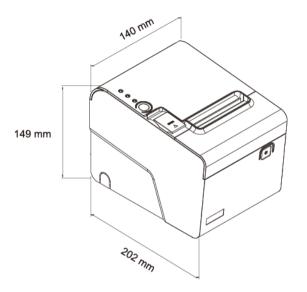
^{*} All specifications are subject to change without prior notice.

Part Description

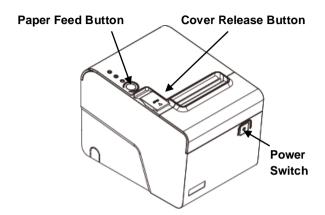
Product Views



Dimensions



Control buttons & Indicators



Paper Feed:

This function is to advance the paper.

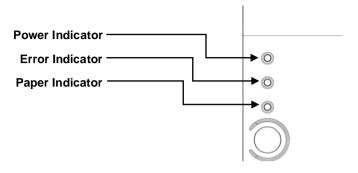
Press the key and the paper advances by a single line.

Press and hold the key for over 3 seconds and the paper advances by multiple lines.

Cover Release Button:

Push the button to the right to open the printer cover.

Indicator Status

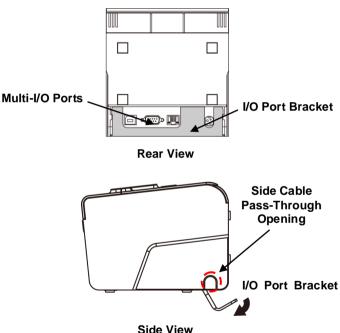


Indicator	Status	Description
Dawer		Power Off
Power		Power On
Error		Printer Error (Out of paper, Printer head over heat, or paper cutter error)
Paper		Out of paper * The Error Indicator is lit as well

I/O Ports & Cables

When plug the cables to the printer, pull the I/O Port Bracket beforehand so as to secure connectors easily.

Open the side cable pass-through opening if necessary.

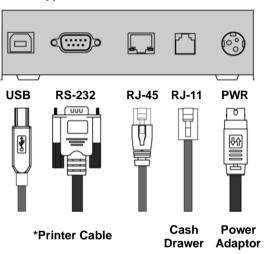


Note:

Remember to re-install the I/O Port Bracket to the printer as the connectors are properly secured.

Multi-I/O Ports

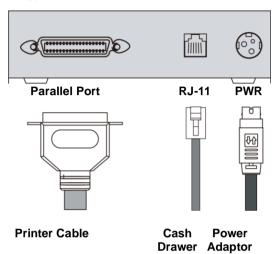
RS-232/USB Type



^{*} Printer cable is selectable depending on the interface required

Please use the supplied printer cable or purchase it separately

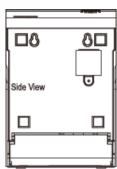
Parallel Type



DIP Switch Configuration

To change the setting of the printer manually:

- 1. Turn off the printer.
- Remove the protective cover of the DIP Switches.
- Turn On or off the switches to configure the printer.



DIP Switch Setting



Protective Cover

Configuration DIP Switches

DIP	Function	ON	OFF
1	Paper Cutter	No	Yes*
2	Audio Alarm	Yes *	No
3	Print Density	Dark	Light *
4	Two-byte Character Code	*No	Yes
5	Character Per Line	42	48 *
6	Cutter with Cash Drawer	Yes	No *
7 & 8	Baud Rate Setting		OFF*

The "*" mark indicates the default value of each setting.

Baud Rate Setting (DIP 7, DIP 8)



19200 (*Default)



9600





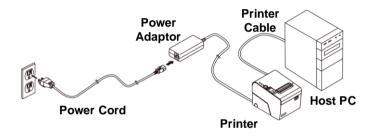


38400

C. Installing your Printer

Connecting Your Printer

Please check the printer and the supplied accessories before Installation. It's recommended to read the entire instruction manual prior to the installation.

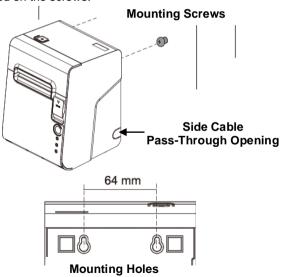


- 1. Place the printer on the designate location.
- Detach the I/O Port Bracket.
 Plug the connector of Power Adaptor to the printer.
- 3. Use the supplied Printer Cable (RS-232, Serial, USB or RJ-45) and connect to the Host PC.
- 4. Plug the Power Cord to the Power Adaptor and then plug to the power outlet.
- If there is a Cash Drawer to be connected, connect the RJ-11 cable to the printer.
- Re-install the I/O Port Bracket.

Vertical Printing Installation

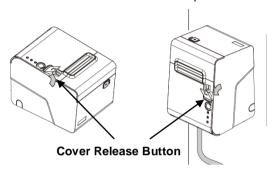
You can install the printer onto a flat surface vertically and perform printing tasks. It is convenient when the space is important concerns:

- Secure two mounting screws onto the location (e.g. wall).
- 2. Connect the cables to the printer.
- Place the printer on the location with the mounting holes fitted on the screws.

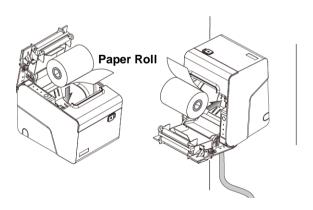


Install/Replace the Paper Roll

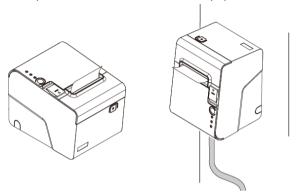
1. Pull the Cover Release Button to open the Cover.



2. Roll out and install the Paper Roll into the Printer.



3. Replace the Cover and tear out the paper.



Installing the Driver of Your Printer

Before installing the driver of your printer, make sure the printer is properly connected to the host PC.

Place the supplied Utility CD into the CD-ROM drive. Browse the CD and open the folder "Receipt Printer" to install the required software.



Note: For USB Interface Installation

Please refer to "**Appendix**" and install the Virtual COM driver (page 36) prior to the Installation of Printer Driver.

To install the driver of the printer:

Select the folder "Driver for Windows".



Select the subfolder to access the driver suitable for the operating system.

(For example: select "Win2000_XP_Vista_7_x32&x64" for Windows XP version).



Double click the icon "PRPDRVEN V9.EXE" to initiate the installation.



Click "Next" to continue.



5. Select the Operating System.

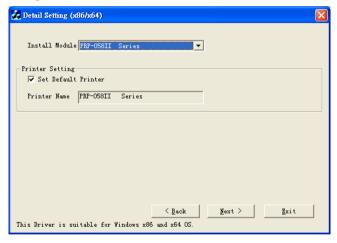
(For example: select "Windows XP" for Windows XP version). Click "Next" to continue.



Printer Configuration

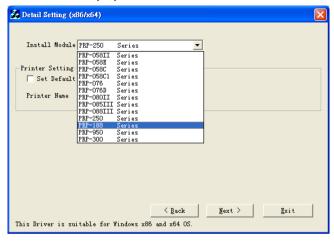
This menu allows user to configure the printer according to the model number.

Please refer to the steps below to complete the configuration.



1. Select Module Number:

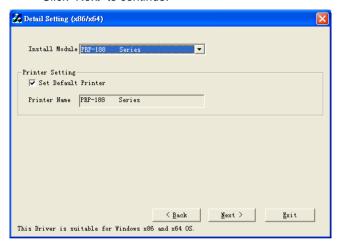
Select the proper Printer Model Number



2. Default Printer Setting:

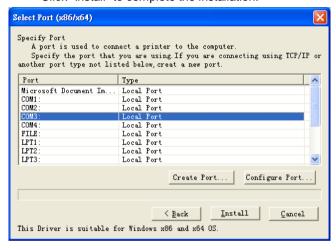
To set the printer as the default printer, click the checkbox to confirm.

Click "Next" to continue.



3. Printer Interface Setting:

Select the communication interface (COM port number or LPT port number). Click "Install" to complete the installation.



4. Configuration Completed.

Click "Finish" to exit the menu.

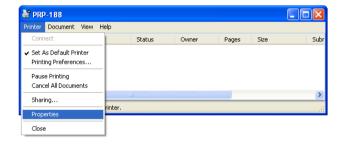


5. Port Setting:

Remember to access the properties of your printer (Start>>Printers and Faxes>> and Double-click the icon) to access the properties.

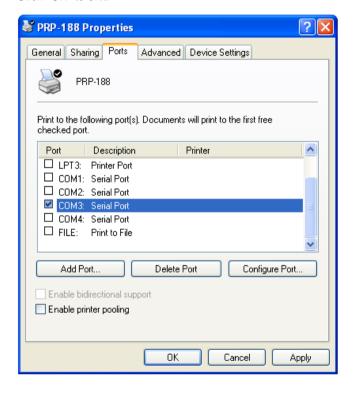
Make sure the port of printer is properly configured.





Access sub menu "**Ports**", and click to select the correct port for your printer.

Click "OK" to exit.



D. Appendix

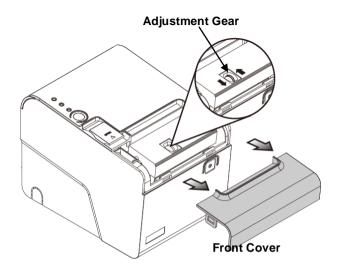
1. Cutter Maintenance

In general, the printer will initial and reset the cutter when turn on the power. To reset the cutter back to the initial position:

- 1. Turn off the printer.
- Turn on the printer and the printer will initial and reset the cutter.

User can manually reset the cutter back to initial position (as images illustrated):

- Push the Cover Release Button to open the Cover.
 Examine and remove the paper dust from the printer by using a soft brush.
- Push the Front Cover and remove it from the printer.
- There is an Adjustment Gear in the cutter.
 Turn the Adjustment Gear to move the cutter back to the position.



Note:

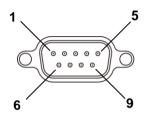
Do not remove the protective cover with force or it may damage the cutter or printer head.

Warning:

Beware of the Cutting Edge of the cutter module during maintenance in order to avoid injury to the person near the printer.

2. Interface PIN Assignment

• RS-232 Pin Assignment



Pin	Signal	Description
1	N.C.	
2	TXD	XON/XOF Handshake
	IND	(Control codes transmission).
3	RXD	Data transmission (the printer
3	3 KAD	receives data from the HOST)
4	N.C.	
5	GND	Ground
6	DTR	Printer Status
7	N.C.	
8	RTS.	Printer Status
9	N.C.	

Parallel Pin Assignment

Pin	Signal	Signal Source	Description
1	/STB	HOST	The HOST (computer) presents the data on the data lines and pulses STB.
2	DATA0		
3	DATA1		
4	DATA2		
5	DATA3	HOST	Indicates Data Bit 0 ~ Data Bit 7 (8 bits)
6	DATA4	позт	
7	DATA5		
8	DATA6		
9	DATA7		
10	nAck	Printer	Acknowledge Signal (Indicates that the printer has received the data successfully and ready to receive the next data).
11	BUSY	Printer	Printer is busy and cannot receive data from the HOST.
12	PE	Printer	Printer Paper is out.
13	Select	Printer	High electric potential.
14, 15	N.C.		
16, 17	GND		Ground
18	Logic-H	Printer	High electric potential.
19 ~ 30	GND		Ground
31	N.C.		
32	nFault	Printer	Printer Error Signal
33	GND		Ground
34 ~ 36	N.C.		

• RJ-11 Pin Assignment

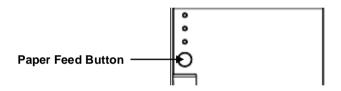
Pin	Signal	Signal Direction	Description
1	Ground		Frame Ground
2	Cash Drawer Kick Out Signal 1	Output	
3	Cash Drawer Status	Input	Open/Close
4	+VDC 24v		
5	Cash Drawer Kick Out Signal 2	Output	
6	GND		Signal Ground

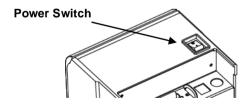
3. Self Test

This function allows user to perform self-test and print out the settings of the printer unit:

- 1. Turn off the printer.
- 2. Press and hold the Paper Feed Button.
- 3. Turn on the Power Switch of the printer.
- 4. Release the Paper Feed Button.

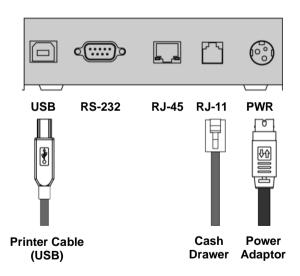
The Indicators would blink and then the printer starts printing out the se-f test data.





4. Virtual Serial Port Installation (for USB Connection Only)

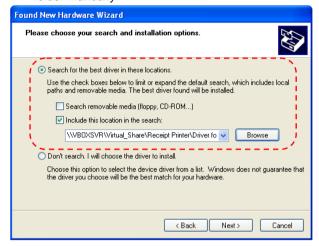
When connect the receipt printer to the computer with USB cable, turn on the computer and the system will found a new hardware automatically and then initiate the Found New Hardware Wizard automatically (as image below illustrated):



 Found New Hardware Wizard is initiated; click "Install from a specific location (Advanced) and then click "Next" to continue.



To specify the location of driver, click "include this location in the search and "Browse" the specified folder manually.



 Browse the subfolder of the path: "\Receipt Printer\PRP_Printer_USB_COM_Driver" (x86 for Windows XP 32 bit version).

Click "OK" to continue.

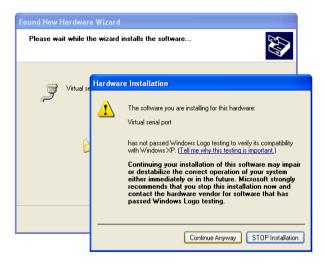




As the location of the driver is specified.
 Click "Next" to continue.



5. Start Notification. Click "Continue Anyway" to continue.



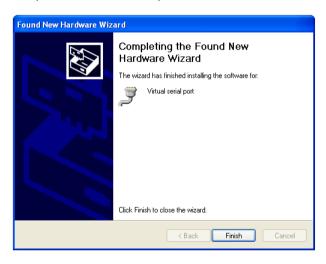
6. The wizard is installing the driver.



The driver of Virtual Serial Port is successfully installed.
 Click "Finish" to exit

Note: Reboot the HOST PC

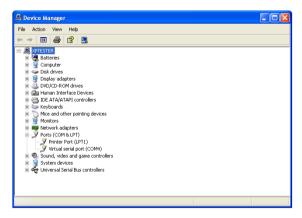
It's recommended to reboot the HOST PC and proceed to the next step.



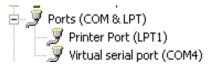
8. The Virtual COM port activates automatically when the printer is switched on.

You can Access

"My Computer>>Proprieties>>Hardware>>Device Manager>> Ports (COM & LPT)" and see the Virtual COM Port Number.



When turn on the printer, the Virtual COM activates automatically (Virtual Serial Port).



5. Ethernet Connection and Configuration

When connecting the printer to the Host PC, you can:

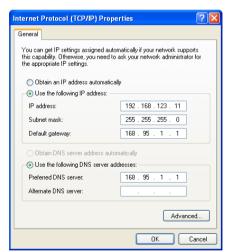
1. Direct Cable Connection:

Use the supplied Ethernet crossover cable to create a direct cable connection to your Host PC.

Note:

Be sure to assign the IP address of the Host PC under the same subnet as your Printer

e.g.: Printer: **192.168.123.**100 Host: **192.168.123.**xxx



Assign the IP address of the Host PC (Direct Cable Connection)

2. DHCP Client Connection:

Connect the printer to the Local Net work (via HUB) with a standard Ethernet Cable.

The DHCP server will assign an IP address to the printer.

Be sure to configure the printer to the **DHCP Client Mode** before install the printer to the Local Network.

Note:

It's recommended to consult the MIS personnel relating to the information about the Local Network and IP address assignment.

Acquire the IP address of the Printer

You can perform Self-Test of the printer and acquire the IP address of the printer.

■ Fixed IP Setting (Default)

If a fixed IP address is assigned to the printer, perform the self-test and the printer will print out the data.

Protocols:	TCP/IP (A1)	
Mac address:	X-XXX-XXX-XX	
IP address:	192.168.123.100	
Netmask:	255.255.255.0	
Gateway:	192.168.1.1	
DHCP:	Disabled	

Print out the Self-test data

Note:

The default IP address is 192.168.123.100

DHCP Client Mode

If the printer is set to DHCP Client mode, the DHCP server will assigned an IP address to the printer when connecting to the local network.

Perform the self-test and the printer will print out the test data; then the printer will stand by to receive the IP address from the DHCP server.

As the IP address is assigned to the printer and configuration is completed, the printer will print out the assign IP address.

Ethernet is configuring...

 Mac address:
 X-XXX-XXX-XX

 IP address:
 168.95.XXX.XXX

 Netmask:
 255.255.255.0

 Gateway:
 192.168.1.1

 DHCP:
 Enabled

 DHCP Timeout (s):
 90

Note:

The printer will be set to the default IP address (192.168.123.100) when there is not any IP address assigned to the printer (DHCP timeout is 90 seconds).

IP Reconfiguration

You can open the web-browser and type the IP address to access the **Ethernet WebConfig** utility.

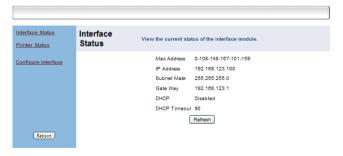
Note:

When first re-configuring the IP address of the printer, you may need to use the supplied Ethernet crossover cable to establish a direct cable connection to your Host PC and start IP re-configuration.

■ Interface Status

This menu displays the current configuration data of the printer. Click "Refresh" to acquire the newest data.

Ethernet WebConfig Version 1.00



Printer Status

This menu displays the printer status and can perform print test.

Ethernet WebConfig Version 1.00



■ Configure Interface

This menu can change the IP address of the printer.

To change the IP address.

Type the new IP address and click "Save" button.
 User can set to "DHCP Client" to enable the DHCP mode.

Note: DHCP Timeout

The DHCP time out is configurable from 14 sec to 90 sec.

2. Click "Reboot" button to re-initiate the printer.

Interface Status
Printer Status
Configure
Interface

IP Address: DHCP Client:
DHCP Timeout (a) 90

© Fixed IP Address: Device IP Address:
Device IP Address: Device IP Address:
Device IP Address: Device IP Address:
Device IP Address: 192 168 123 100
Submet Mask 255 (255) 255 0
Gateway Address 192 168 123 1

Ethernet WebConfig Version 1.00

Note: Restore Default Configuration

You can click "Restore Default" button to retrieve the factory IP configuration data of the printer.

(IP Address: 192.168.123.100)

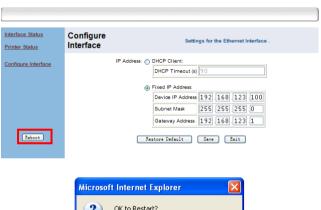


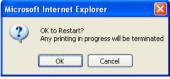
■ Reboot

This function can re-initiate the printer and apply the new configuration.

Click the "Reboot" button to re-initiate the printer.
 Click "OK" to proceed.

Ethernet WebConfig Version 1.00





2. The Printer is initiating.

Ethernet WebConfig Version 1.00



Printer is initiated successfully.

Ethernet WebConfig Version 1.00



Note:

Be sure to access the printer using the new IP address after reboot the printer.

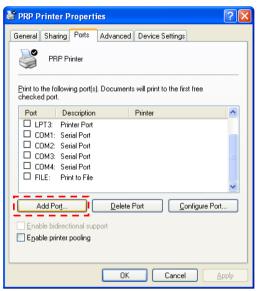
Setup the TCP/IP Printer Port

After the IP address of the printer is re-configured, you can install the printer driver and setup the printer port of your printer.

Access "Start>>Printer and Faxes>> Printer properties.



2. Access submenu "Port" and click "Add Port".



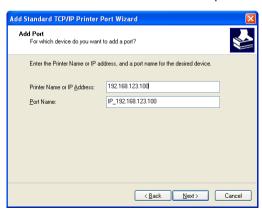
Select "Standard TCP/IP Port" and click "New Port." and proceed.



Add TCP/IP Print Port Wizard initiated.
 Click "Next" to continue.

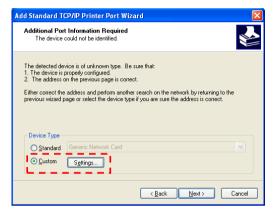


5. Enter the IP address of the Printer then proceed.



6. Additional Port Information.

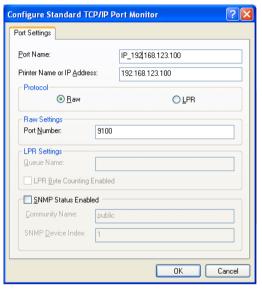
Select "Custom" and click "Setting" to continue.



7. Port Setting.

Please examine the IP address should be the same to the Printer.

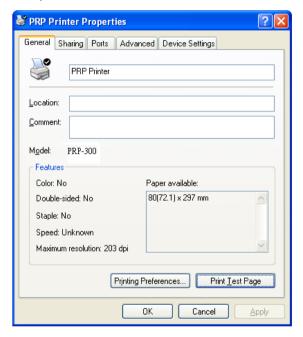
Select the protocol "Raw" and click "OK" to continue.



8. Click "Finish" to complete.



You can exit the setting menu and open the printer properties to perform print test. Click "Print Test Page" to perform the test.



6. Code Page Setup

Place the supplied Utility CD into the CD-ROM drive.

1. Browse the CD and open the folder "Receipt Printer" to install the required software.



2. Open the folder "Tools" to access the utility software.



 Click the folder "SetCodePage" to access the software



4. Double click the icon "Setup.EXE" to initial installation. Follow the instructions to install the utility.



Code Page Setup Utility

This utility can help user to setup the code page of the printer.

Note: Before Setup

It may need to re-configure the printer prior to the codepage setup (e.g.: DIP switch).

It's recommended to consult the technical personnel relating to the information about the code page and application.

■ Interface

User can establish communication with printer via this menu. Select the proper submenu by the connection type of the printer.

For Serial COM Port:

Select the proper COM port and baud rate to establish communication.



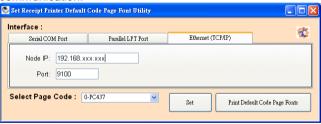
For Parallel LPT Port:

Select LPT1 as the printer port to establish communication.



For Ethernet (TCP/IP):

Enter the IP address of the printer to establish the communication.



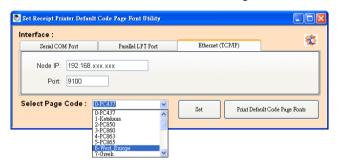
Select Page Code

To select the codepage desired:

- Make sure to the DIP switch 4 of the printer is set ON (please refer to DIP Switch Configuration for further information).
- Go to the scroll menu and select the preset codepage desired

User can enter the codepage number into the field manually. (Please refer to the printed Self-Test page for the code number support).

3. Click "Set" button to confirm the setting.



4. Re-initiate the Printer:

Be sure to **Turn-Off and Turn-On** the printer again to initiate the printer with new codepage setting. (User can perform the self-test again to exam the new codepage setting)