

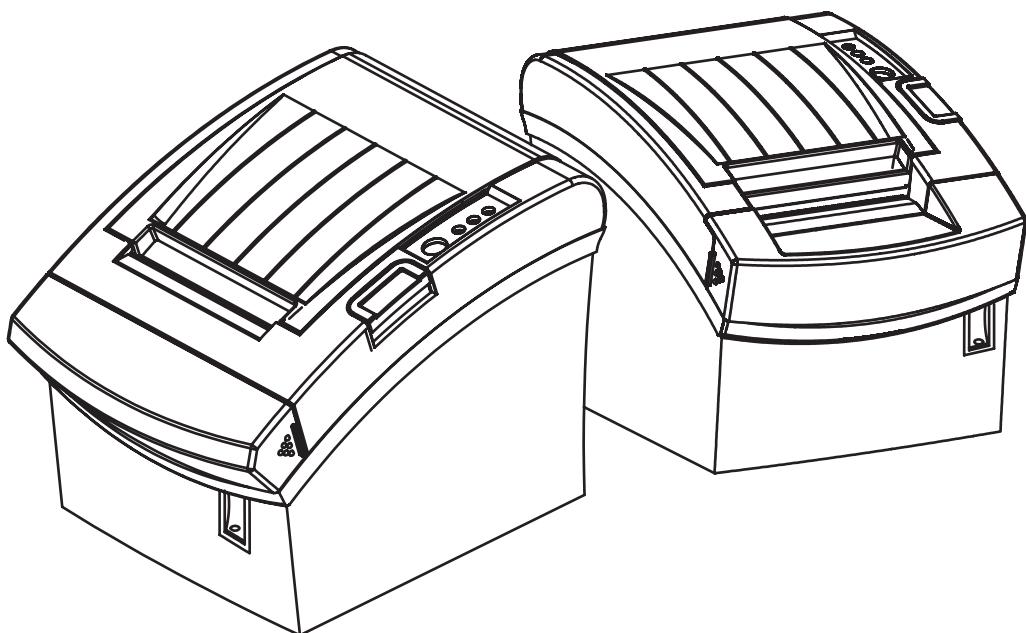
BIXOLON®

User Manual

Network Interface

Rev. 1.00

**SRP-350plusII
SRP-352plusII**



<http://www.bixolon.com>

■ Table of Contents

| | |
|--|-----------|
| 1. Manual Information..... | 3 |
| 2. Specifications..... | 3 |
| 2-1 Hardware version..... | 3 |
| 2-2 Configuration Tool..... | 3 |
| 3. How to install..... | 4 |
| 4. Configuration Tool | 5 |
| 5. Web Server | 8 |
| 6. Ethernet Test by using Windows Test Page | 11 |
| 7. Factory Reset | 17 |
| 8. Function Key set up..... | 18 |
| 9. Troubleshooting..... | 19 |
| [Appendix 1] Details of interface card..... | 21 |
| [Appendix 2] Virtual Driver..... | 21 |

1. Manual Information

The purpose of this manual is to provide information on the operation and usage instructions of the Ethernet Interface for the BIXOLON Printers.

We at BIXOLON maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. In following, product specifications and/or user manual content may be changed without prior notice.

2. Specifications

2-1 Hardware version

| Interface Card | Picture |
|----------------|---------|
| IFA-EP TYPE | |

2-2 Configuration Tool

BIXOLON provides 2 types of network and serial communication set up utilities as a below.

- **Configure_Vx.x.x.exe**
- **Web Server**

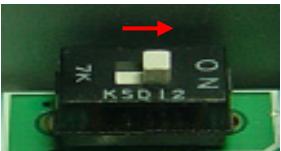
3. How to install

1) Check the interface version.

[Note]

Each version uses its own Configuration Tool.

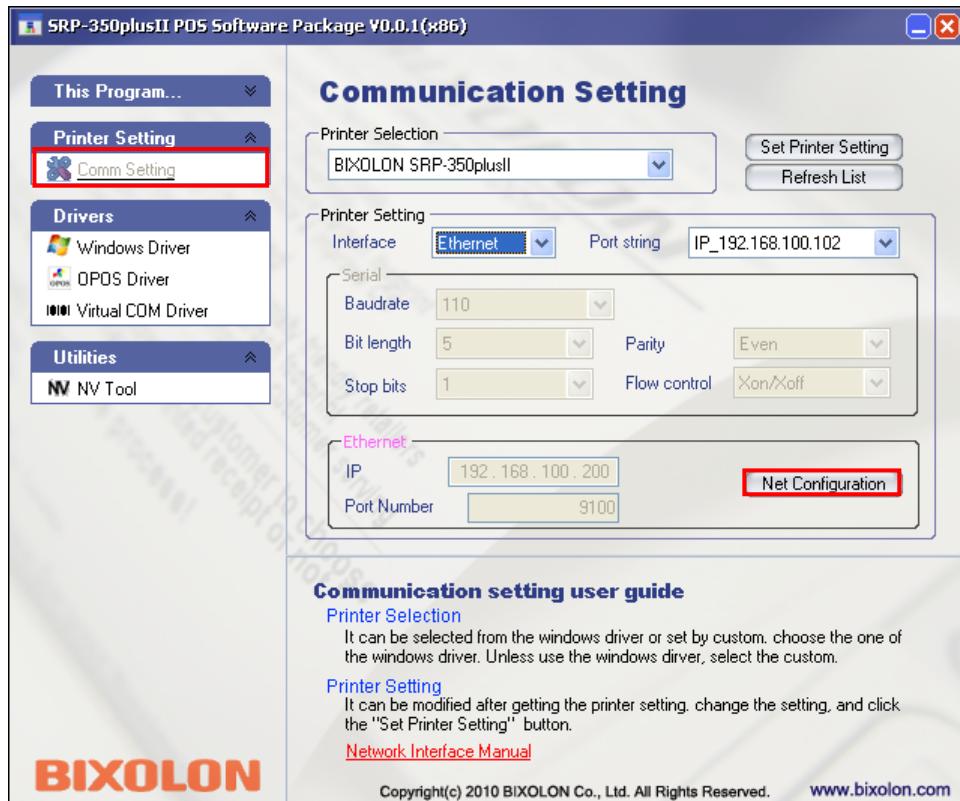
2) Turn off the printer and insert the interface card.

| Interface Card | Printer | Picture |
|----------------|---------------|---|
| IFA-EP TYPE | SRP-350plusII |  |

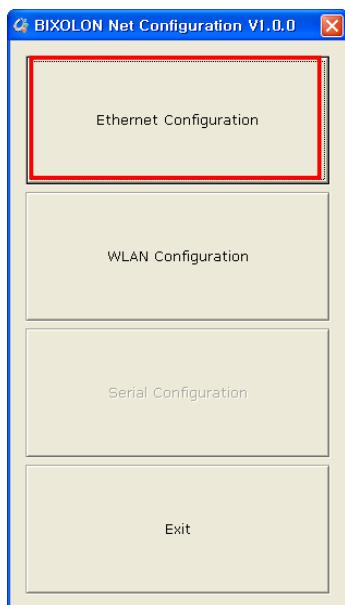
4. Configuration Tool

Install SRP-350plusII PSP and execute it.

(Start >> BIXOLON >> SRP-350plusII POS Software Package >> PSP Launcher)



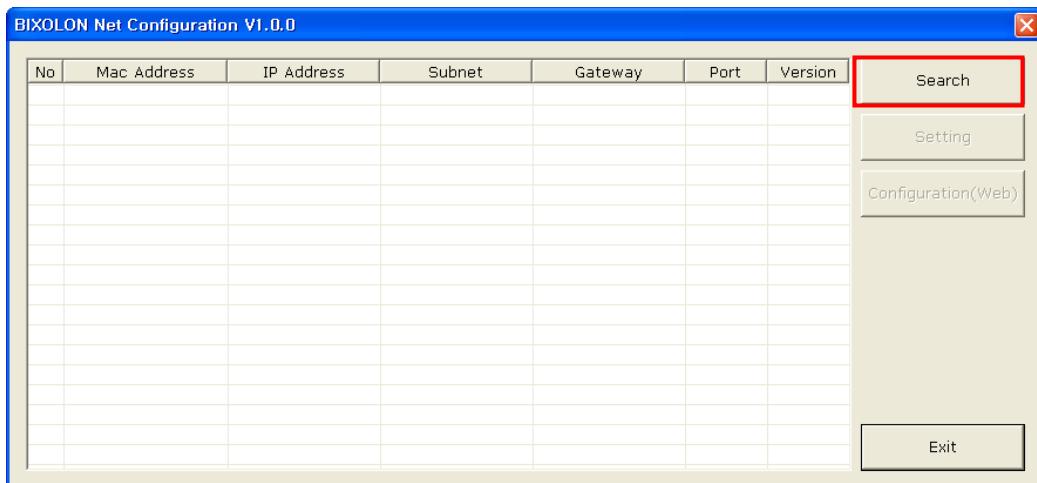
Select the “Printer Setting >> Comm Setting” and click the “Net Configuration button”



Click the Ethernet Configuration button when the printer is connected to the Ethernet.

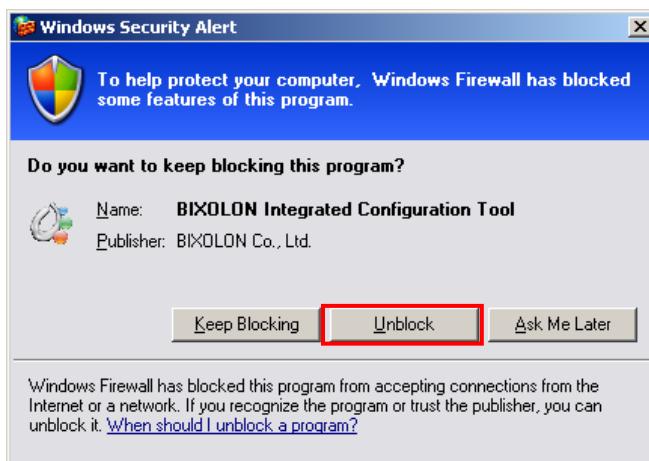
Network Interface

LAN Configuration

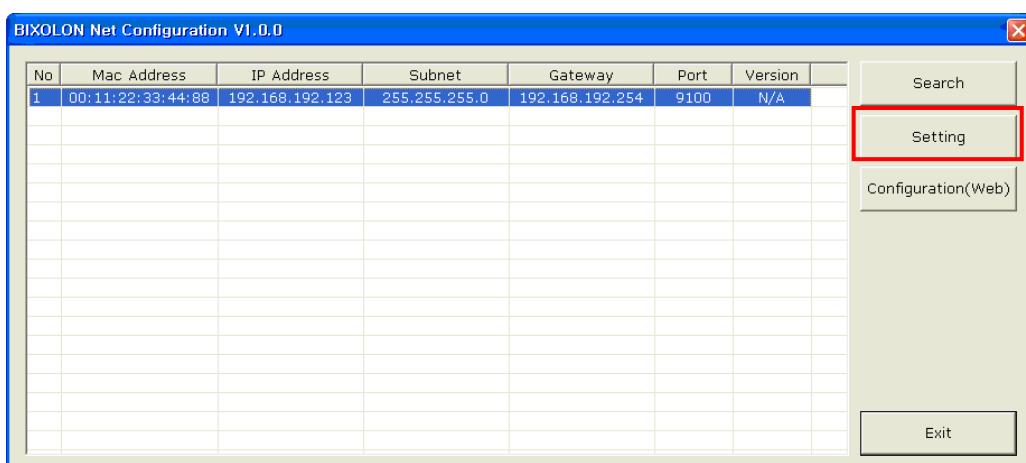


When you press the Search button, the SRP-350plusII printer connected to the network will be shown in the list.

The following warning message may pop up if the firewall is installed.

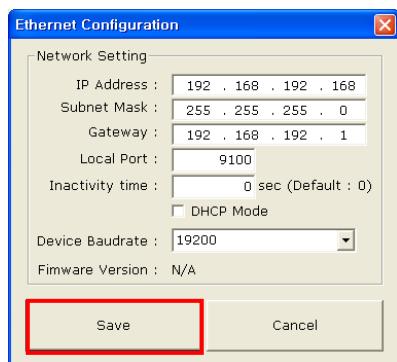


Select [Unblock], and then retry the Search operation.

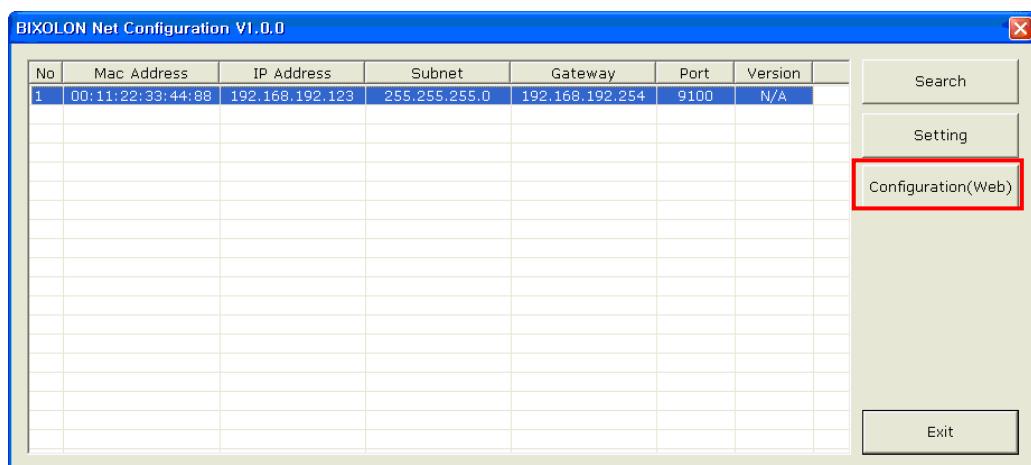


Select the SRP-350plusII printer from the list and press the [Setting] button, and then the following window for setting Ethernet settings will pop up.

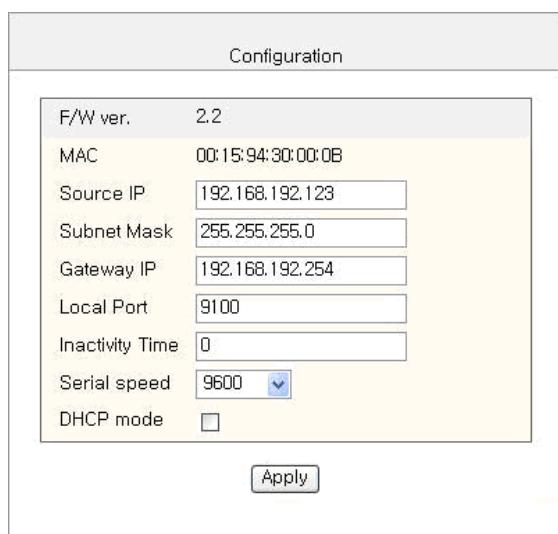
Network Interface



Enter the proper IP Address, Subnet Mask, and Gateway for the currently used network, and then press the Save button to save the settings.
(Device Baudrate setting, which is used for other models, is not necessary for SRP-350plusII.)



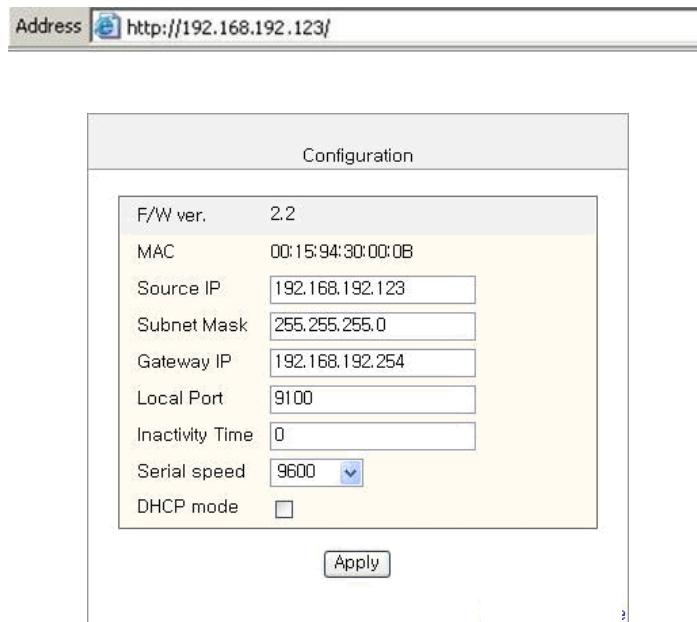
Select the SRP-350plusII printer from the list and press the [Configuration(Web)] button you will see the web browser for changing the Ethernet and WLAN settings as shown below.



5. Web Server

1) Execute Internet Explorer.

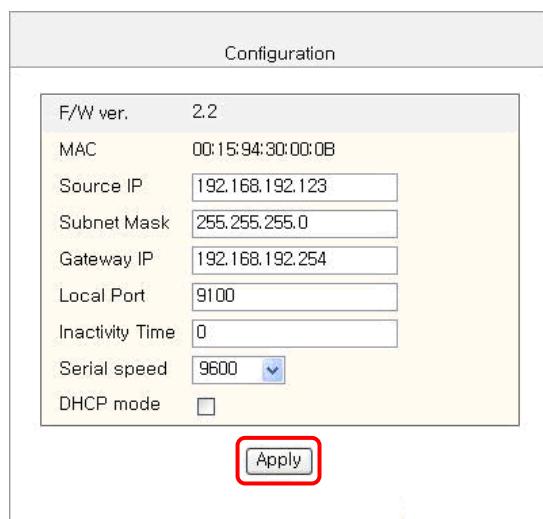
2) Enter IP address of the printer at **Address** of Internet Explorer and click **go**.



[Note]

- If you are not aware of IP address, check IP address by pushing Function key.
- Ask Network administrator IP Address and its related information.

3) When **Configuration** Window appears, enter new **Network Setting**.



Network Interface

[Note]

- If you are not aware of Subnet Mask, refer to the below.

- When the IP address is

(1) 1~126.xxx.xxx.xxx: Subnet Mask: 255.0.0.0

(2) 128~191.xxx.xxx.xxx: Subnet Mask: 255.255.0.0

(3) 192~223.xxx.xxx.xxx: Subnet Mask: 255.255.255.0

For example, when the IP address is 192.168.192.321,

Subnet mask is 255.255.255.0.

- If you are not aware of Gateway.

(1) When the Network is connected to Internet (Router or Server computer),
refer to the Network setting of other computers on the Network.

(2) When the Network is connected to Internet (Router or Server computer),
enter 0.0.0.0 for Gateway.

[Note]

- When the setting finishes successfully, the following message appears.

Please press here if you would like to back to the configuration

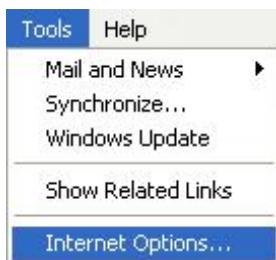
4) If you click the message, you can check your configuration setting.

[Note]

- If any change was not found after setting on Web Server, check the bellows.

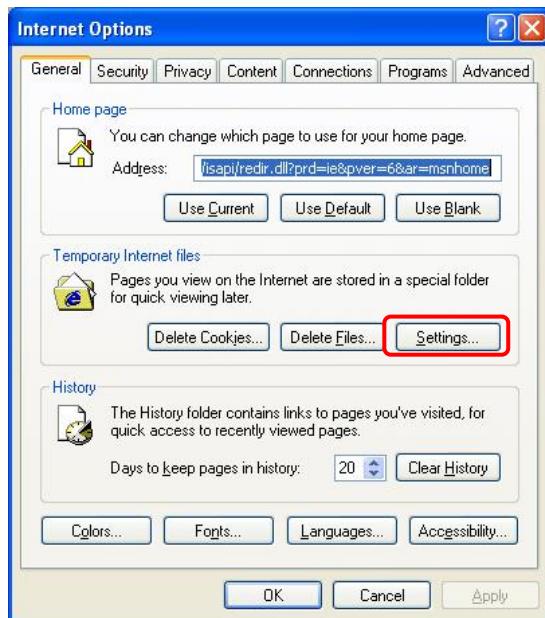
(1) Execute Internet Explorer.

(2) Internet Explorer **Menu** → **Tools** → **Internet options**.

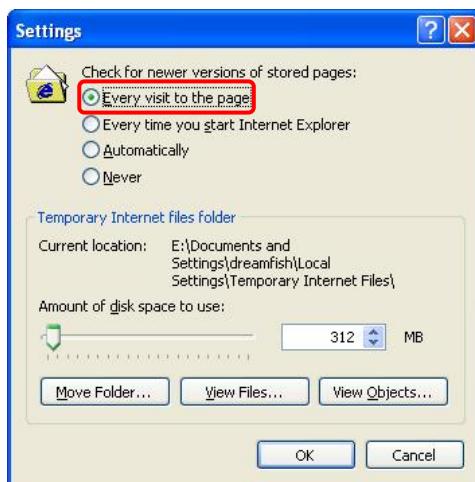


Network Interface

(3) General tab → Temporary internet file → Settings



(4) Check for newer version of stored pages → Click Every visit to the page.



(5) Click Refresh in Internet Explorer.

6. Ethernet Test by using Windows Test Page

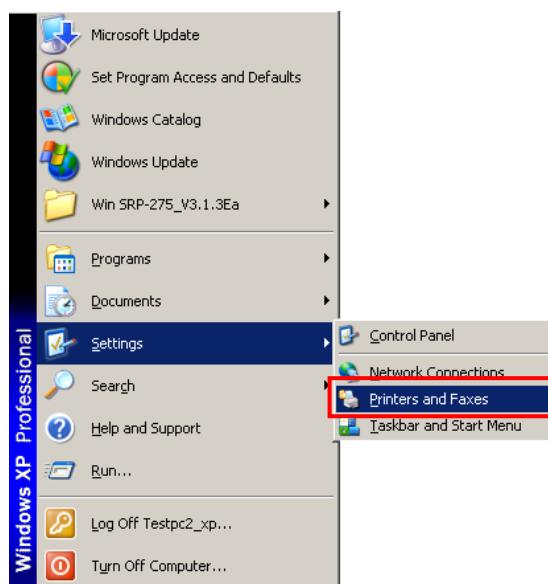
You can use the Windows printer driver as shown below when there is no test program. Operating systems that allow you to use the Windows printer driver are Windows 2000, XP, 2003 Server, VISTA, 2008 Server, 7.

1) Install the Windows printer driver.

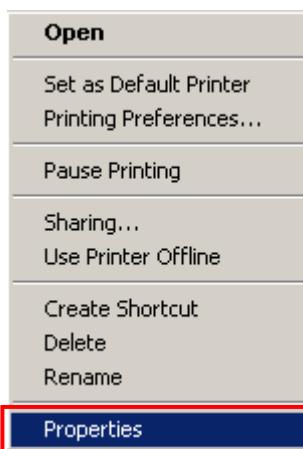
[Note]

- The Windows driver is included in the CD, and you can download the latest version from our home page.
www.bixolon.com

2) Click the Start button, and then select “Printers and Faxes.”

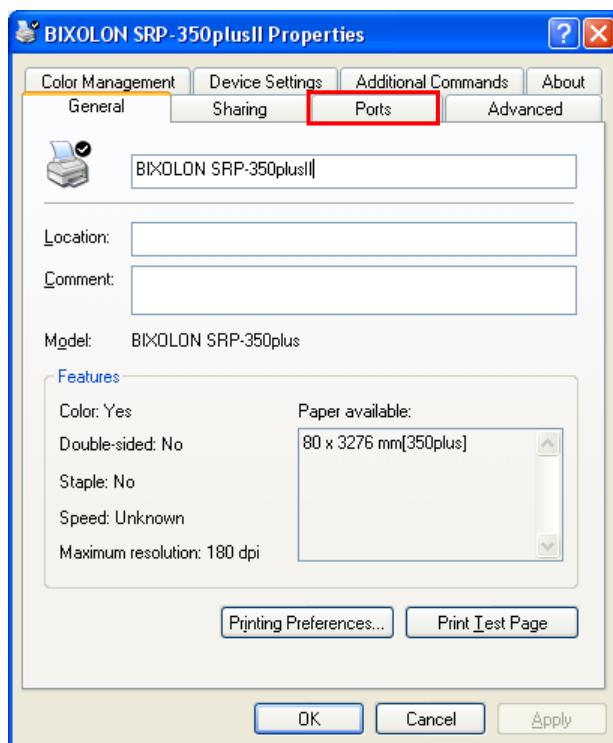


3) Select and right click on the corresponding model, and then select “Properties.”

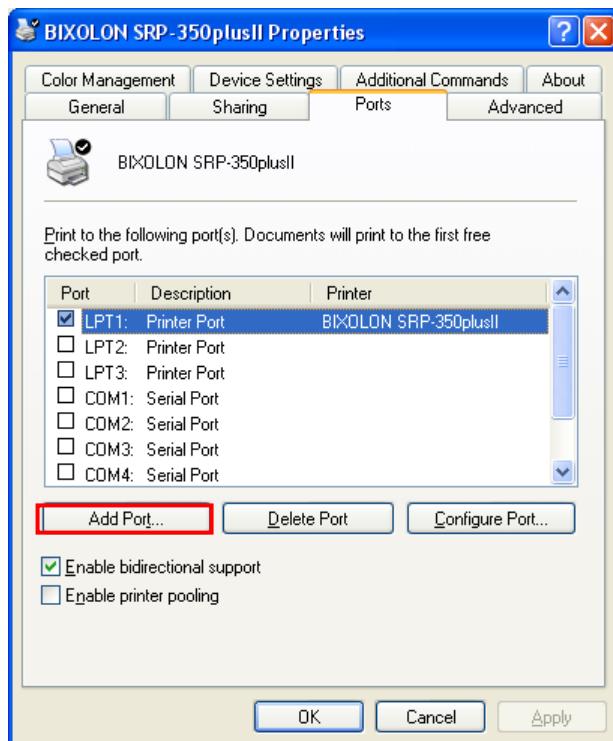


Network Interface

4) Select the “Ports” tab from the “Properties” window.

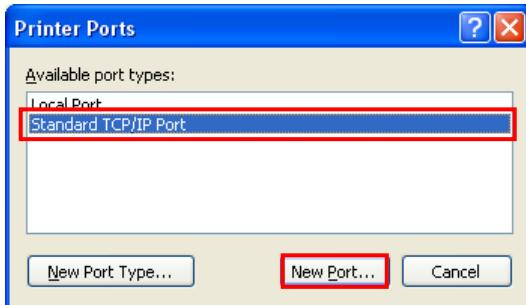


5) Click “Add Port...”

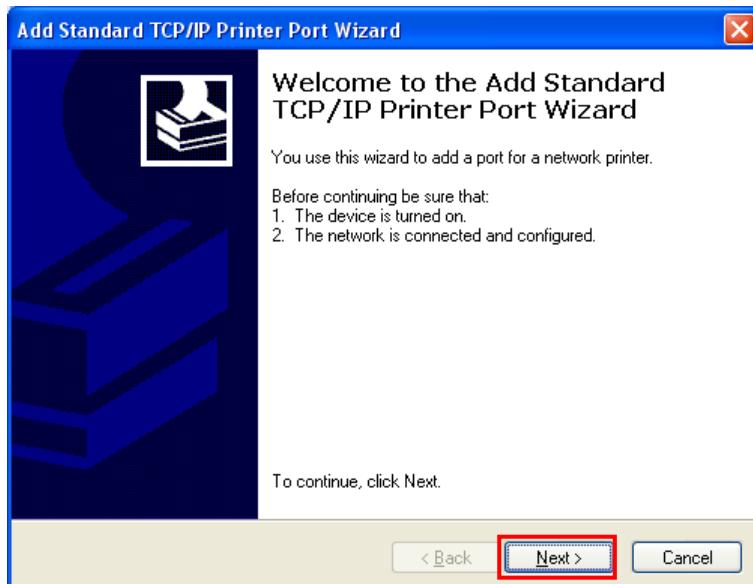


Network Interface

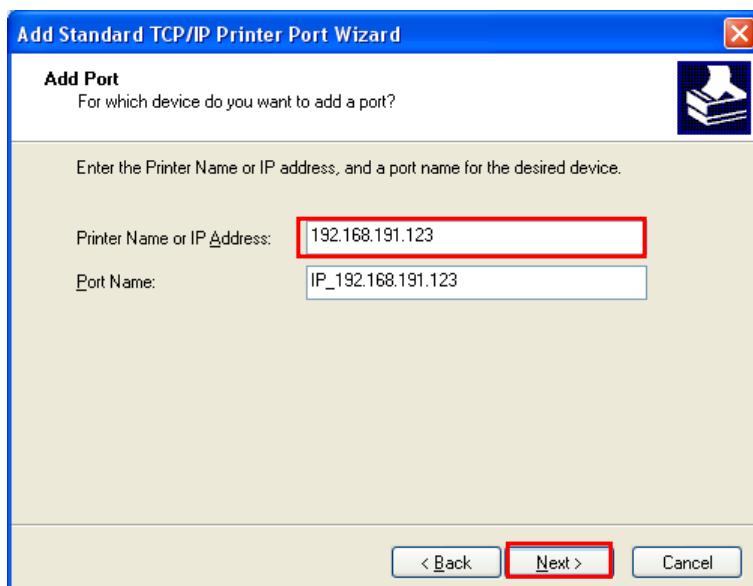
6) Select “Standard TCP/IP Port” and click “New Port...”



7) Click the [Next] button in the “Add Standard TCP/IP Printer Port Wizard” window.



8) Enter the IP address assigned to the printer in the “Printer Name or IP Address” field in the “Add Port” pop up window, and then click the [Next] button.

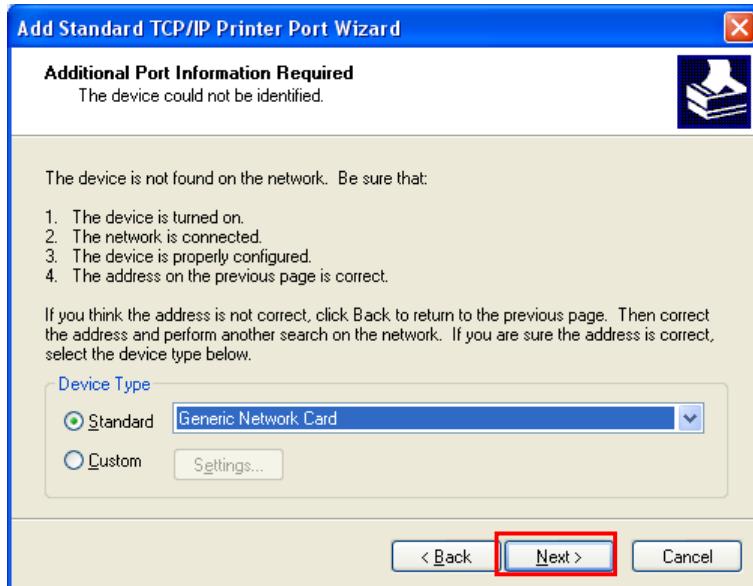


[Note]

- Enter the same IP address entered during the installation of the interface card.
Only enter the “Printer name or IP address.”

Network Interface

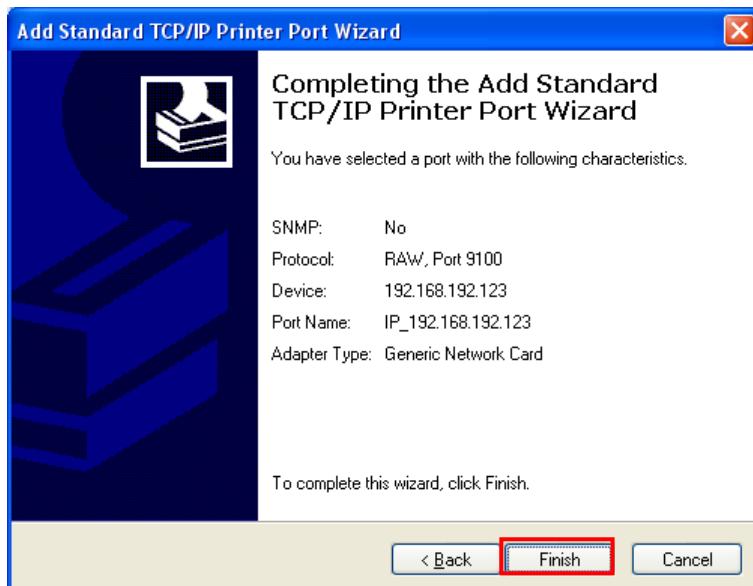
- 9) Click the [Next] button in the “Additional Port Information Required” window.



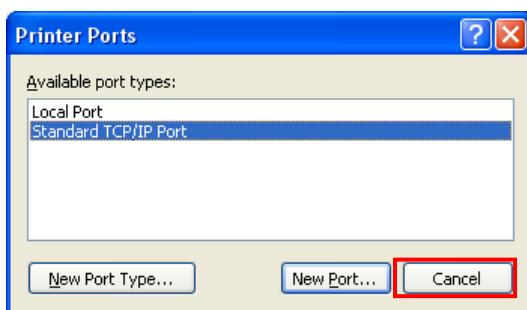
[Note]

- Click the [Next] button to proceed without any changes.

- 10) Click the [Finish] button at the “Completing the Add Standard TCP/IP Printer Port Wizard” window.

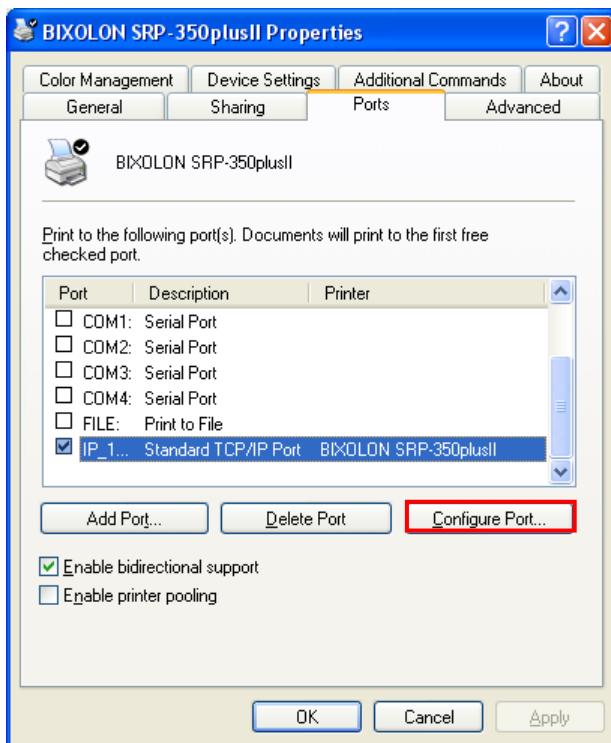


- 11) Click the “Cancel” button in the Printer Port window, closing the window.

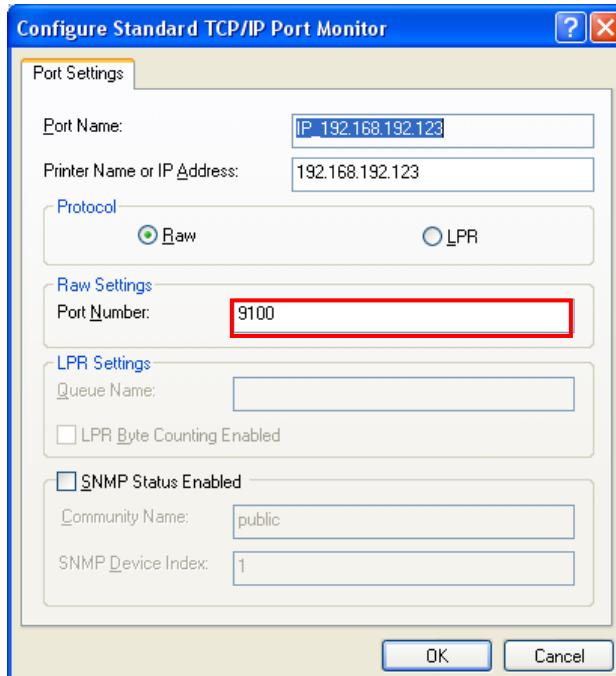


Network Interface

- 12) Click the “Configure Port...” button in the “Properties” window.



- 13) Enter the same number as the local port number set during the installation of the interface card in the “Port Number” field in the Raw Settings.

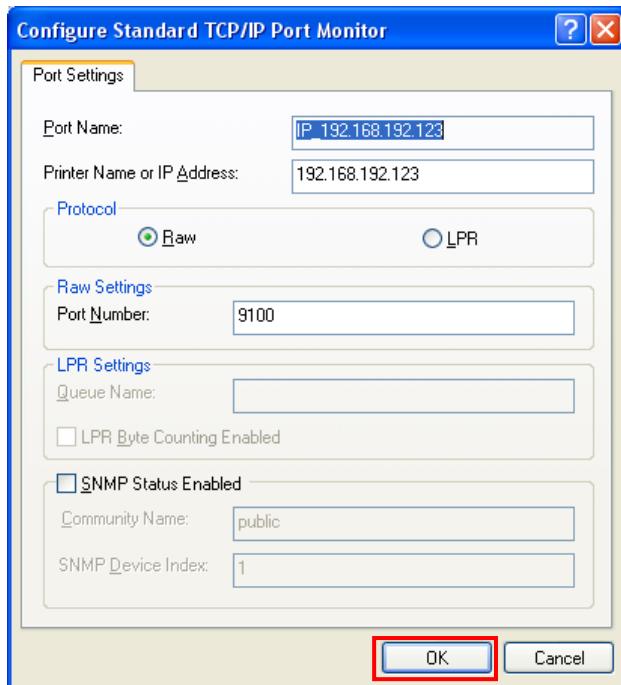


[Note]

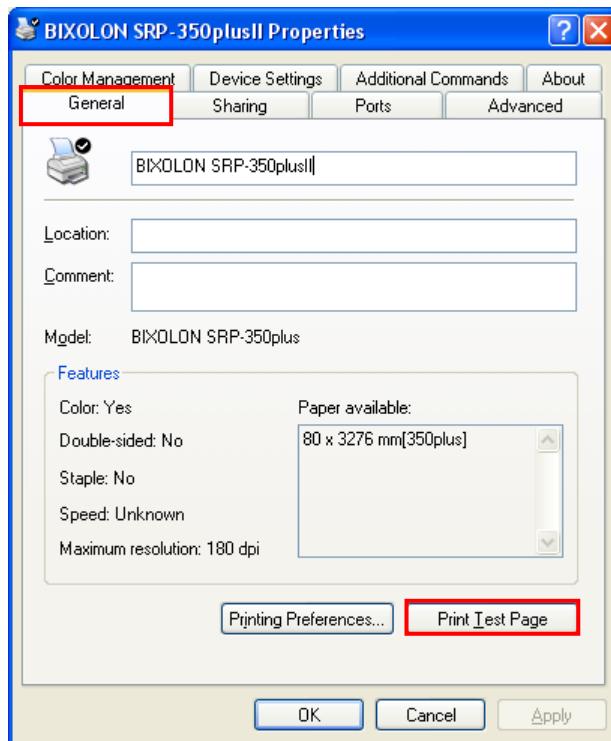
- Do not change any other items except the RAW Settings.

Network Interface

- 14) Click [OK] when you finish entering the required values, and then click the [Apply] button.



- 15) Select the “General” tab in the Properties window, and then select the “Print Test Page” to check the printing status.



7. Factory Reset

1) Default setting after factory reset

- Activate DHCP mode
- Local Port: 9100
- Inactivity Time: 0

2) How to reset

(1) Turn off the printer.

(2) Turn on the printer while pressing Function Key .

[Note]

- Press Function key 3 more seconds after turning on the printer.

(3) Wait 10 seconds until new IP address is allocated to the printer.

- The IP address will be allocated automatically under DHCP mode.

[Note]

- DHCP Network environment

Connect to web-server with newly allocated IP address.

Check new IP address by pressing Function key.

- Static IP Network environment

The IP address will not be allocated automatically.

Set up Static IP with Configuration utility.

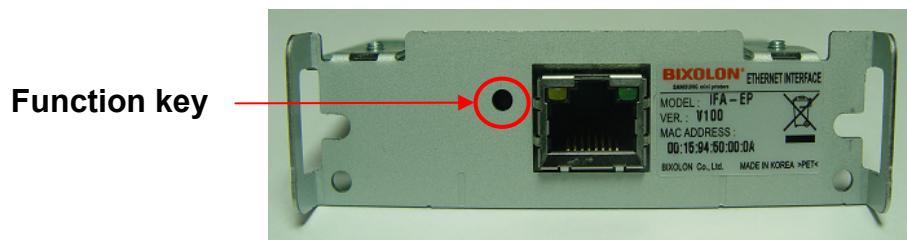
(4) Print Network setting information by pressing Function key.

Connect web-server to change any network setting.

8. Function Key set up

1) How to use

- (1) Turn on the printer.
- (2) Wait 10 or more seconds until the Ethernet interface boots up.
- (3) Push the Function key.



- (4) The settings will be printed only one time since the printer is turned on.
- (5) Turn off and on the printer to print them again.

2) Printed settings

- MAC address
- IP address
- Subnet Mask
- Gateway
- Port
- Inactivity time
- Serial speed
- Firmware Version

9. Troubleshooting

When printing doesn't work

Check network setting

When using Ethernet

- IP Address
Check whether the IP Address band of the printer and the AP (or wireless terminals) are the same. The first three digits of the four digit value in the IP Address must be the same.
- Subnet Mask
Check whether the subnet mask of the printer matches with the one in AP (or wireless terminal).
- Port
Check whether the port configured in the printer and the host (PC, PDA) are the same.

When using WLAN

Check the wireless network setting of the AP and the printer.

(Refer to Configuration for checking/changing the printer settings)

- SSID
Check whether the SSID of the printer matches with the one in AP (or wireless terminal).
- 802.11 mode
Check whether AP supports 802.11b or 802.11g.
BIXOLON printer supports 802.11b/g, and 802.11a is not supported.
- Network Mode
Check the network mode of the printer.
Network mode must be set to "Infrastructure" to connect to AP and "Ad-hoc" to connect between wireless terminals.
- IP Address
Check the band of the IP Address.
Check whether the band of the printer and the AP (or wireless terminals) are the same.
The first three digits of the four digit value of the IP address must be the same.
- Subnet Mask
Check whether the subnet mask of the printer matches the one in AP (or wireless terminal).

Network Interface

- Port
Check whether the port configured in the printer and the host (PC, PDA) are the same.
- Authentication / Encryption
Check the authentication/encryption setting status.
Check whether the settings of the printer and the AP (wireless terminals) are the same.

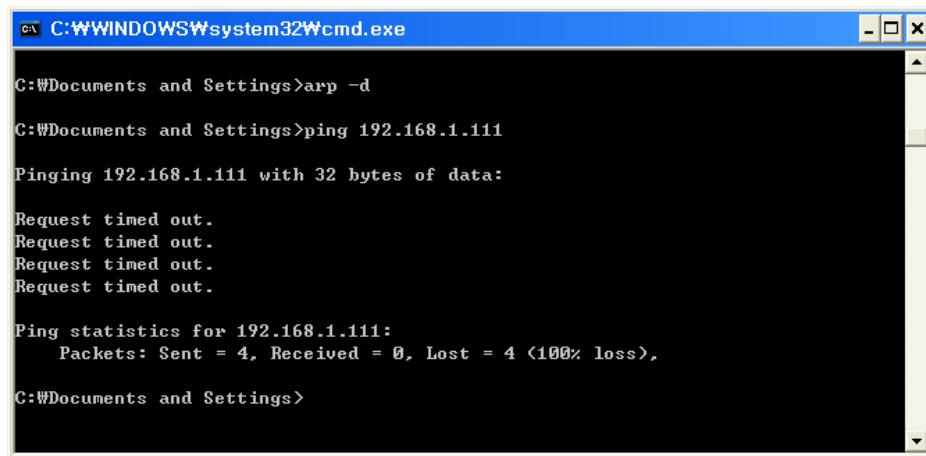
PING Check

Checking IP collision

- When entering IP address manually without using DHCP, you must check whether the corresponding IP address is used by other equipment. The printer may not work normally when there is a collision in the IP address.
- When the printer is turned off, carry out the Ping Test to the printer IP.

Ping TEST

- Turn off the printer.
- Select “Run” from the Windows Start menu, and then enter “cmd”.
- Enter “ARP –d” and delete ARP table.
- Enter “ping {printer IP}”.
- ARP –d, ping {IP address}



The screenshot shows a Windows Command Prompt window titled "cmd C:\WINDOWS\system32\cmd.exe". The command "arp -d" is run to clear the ARP table. Then, the command "ping 192.168.1.111" is run to test connectivity to a printer at that IP address. The output shows four failed ping attempts ("Request timed out.") followed by statistics: "Packets: Sent = 4, Received = 0, Lost = 4 <100% loss>".

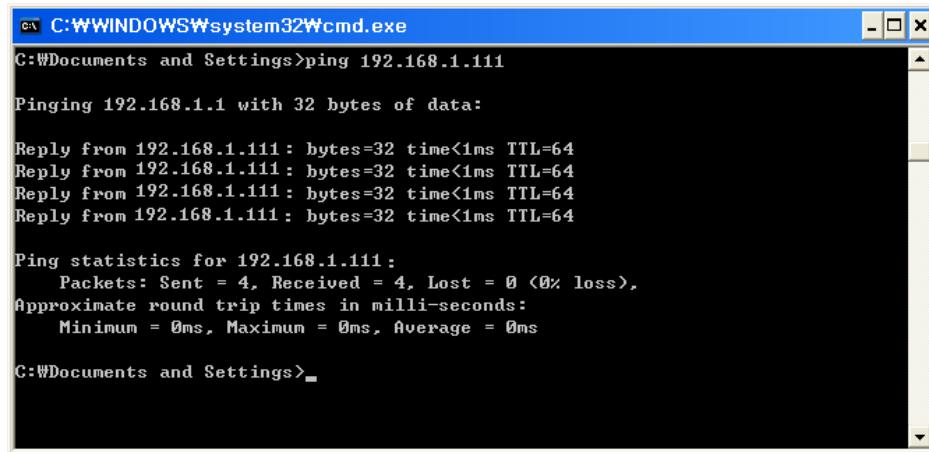
```
C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings>arp -d
C:\Documents and Settings>ping 192.168.1.111
Pinging 192.168.1.111 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.111:
    Packets: Sent = 4, Received = 0, Lost = 4 <100% loss>,
C:\Documents and Settings>
```

When you see “Request timed out.” as shown below, it means that there is no collision. The corresponding IP can be used.

Network Interface

On the other hand, if there is a reply as shown below, then the corresponding IP is used by another network terminal and it cannot be used for the printer IP.



```
C:\> C:\WINDOWS\system32\cmd.exe
C:\>Documents and Settings>ping 192.168.1.111
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.111: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.111:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>Documents and Settings>
```

Check Cable

When using Ethernet

- In order to check whether the problem is due to the LAN cable, connect the cable connected to the printer to other terminals or the PC to confirm whether its operation is normal.

[Appendix 1] Details of interface card

| Item | Details |
|-------------------|---|
| Network interface | 10/100 Base-T All in one (Auto detection) |
| Protocol | TCP, IP, ICMP,IGMP, ARP, HTTP |
| IP mode | static IP, DHCP (Dynamic Host Configuration Protocol) |
| RX buffer | 2K Byte |
| Flow control | Hardware (RTS/CTS) |

[Appendix 2] Virtual Driver

It converts output of Serial (COM) port into output of Ethernet (TCP/IP) port.
It is available for Windows 2000, XP, 2003 Server, VISTA, 7.