
SHC,

User Guide

GIANT Tool Ver 1.1



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1. INTRODUCTION

It is integrated software for POS Printer GIANT series and it includes the all of the necessary utility for our printer product. If you want to other resource for our printer example windows driver, OPOS driver and other interface driver, please visit our web site.

2. SUPPORT DEVICE & INTERFACE

DEVICES

- GIANT-100

FUNCTIONS

- NV Logo download
- User Setup
- Firmware download

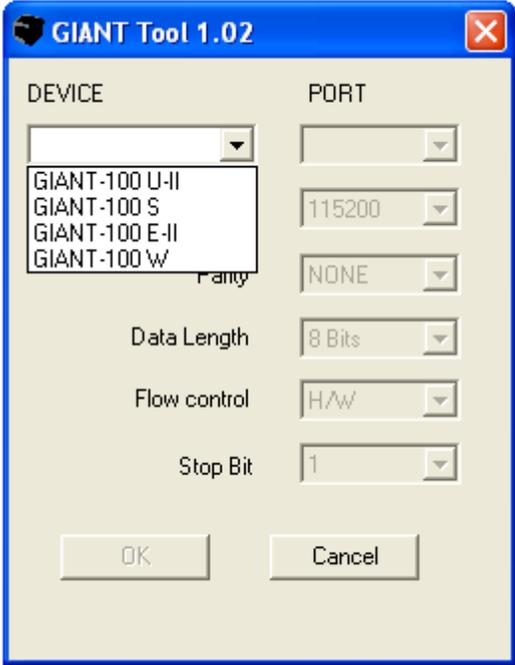
INTERFACES

- RS-232c (Serial)
- USB (Virtual COM , USB)
- Ethernet (TCP/IP)
- Wi-Fi (TCP/IP)



3. User Interface

1) Device Configuration Dialog

	<p>Device Configuration Dialog</p> <p>You can select the device which you want to use comfortable, on the GIANT Tool.</p> <p><DEVICE LIST></p> <ul style="list-style-type: none">- GIANT-100S : GIANT-100 with Serial Interface- GIANT-100U-II : GIANT-100 with USB Interface- GIANT-100E-II : GIANT-100 with Ethernet-II Interface (TCP/IP type)- GIANT-100W : GIANT-100 with Wi-Fi(WLAN) Interface (TCP/IP type)
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2) Function Select Dialog

	<p>Function Select Dialog</p> <p>You can select a function button as you want to use.</p>
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3) NV Logo Download Dialog

	<p>NV Image Logo Download Dialog</p> <p>It is consisted with five property pages which are Select, Preview, Upload, Print and Setup Bitmap tab.</p>
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4) User Setup Dialog

User Setup Dialog

You can change variable custom settings only for GIANT series.

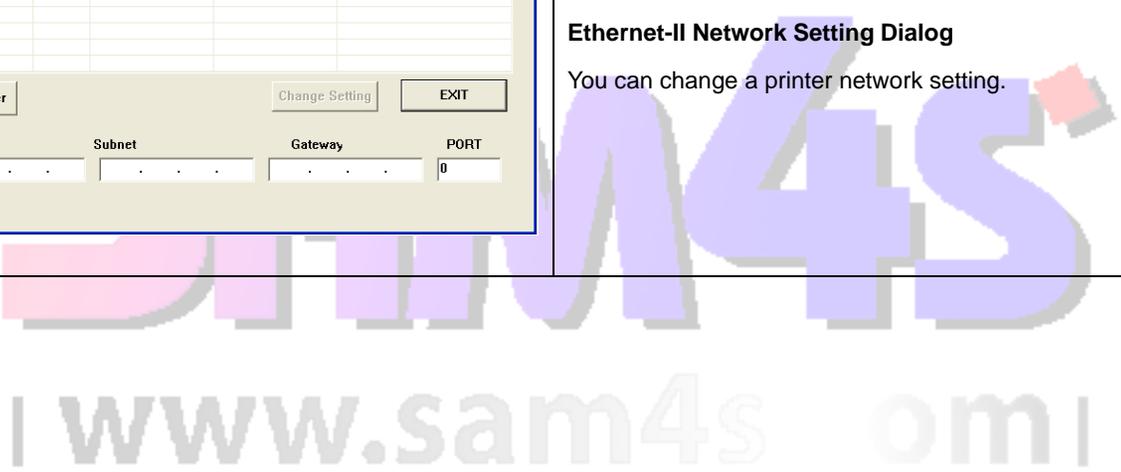
5) Firmware Download Dialog

Firmware Download Dialog

You can update printer's firmware.

6) Network Setting Dialog (Ethernet-II Interface)

	<p>Ethernet-II Network Dialog</p> <p>If you enter IP and Port number, You can access Ethernet-II interface.</p>
	<p>Ethernet-II Network Setting Dialog</p> <p>You can change a printer network setting.</p>



3. Description of each functions

1) Logo download

Logo download function can be used for image downloading to NV (Non-Volatile) memory of GIANT printer or for image printing from it.

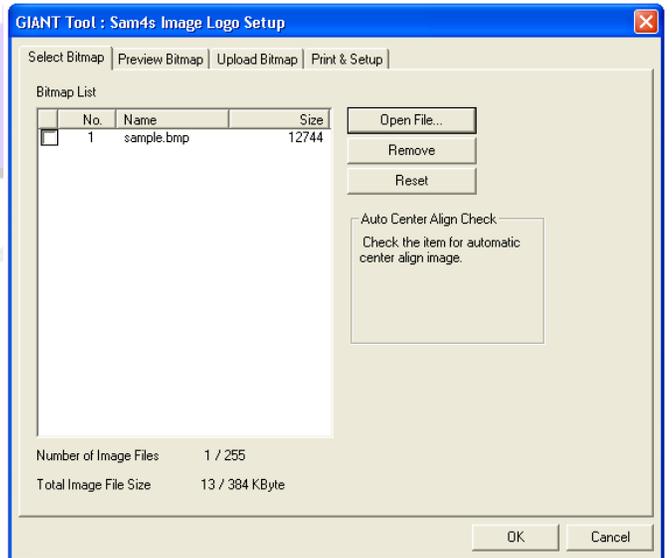
(1) General feature

1. Maximum memory capacity: 128Kbyte (GIANT-100 is fixed 128Kbyte.)
2. Total logo count : Maximum 255
3. Automatic center align

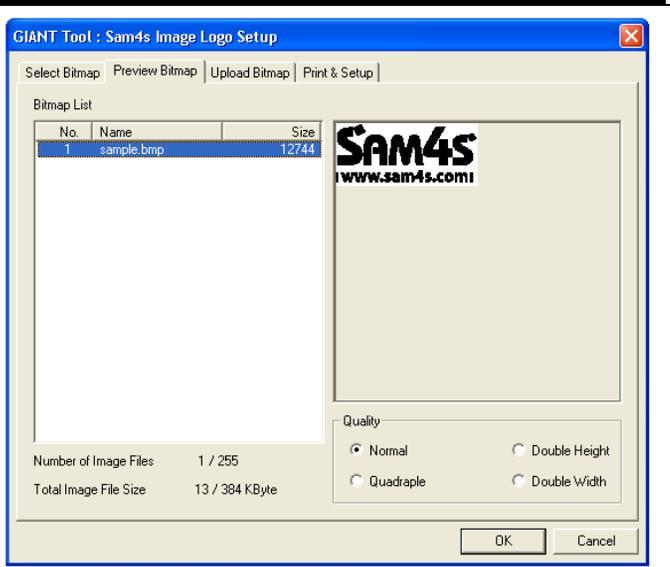
(2) Logo registration sequence

- ✓ Select the bitmap file stored in a printer.
- ✓ If you want to save with “Automatic center align” feature, check the checkbox located at the head of Bitmap No. like a red square.

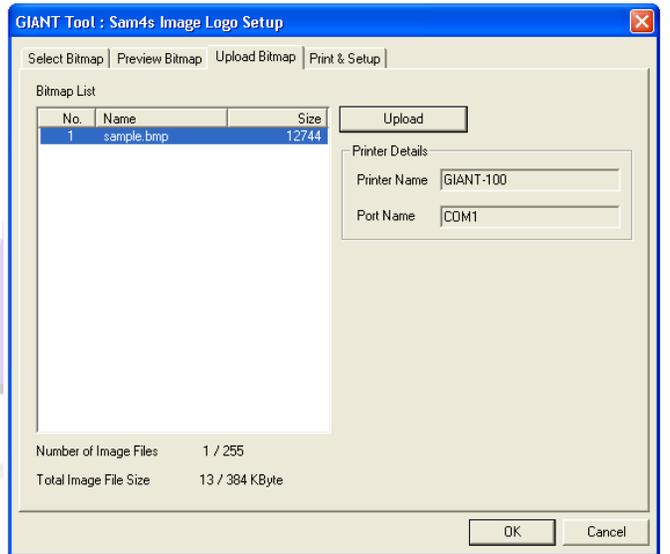
Note) It is very useful the case of printing a small logo image. (size : 512 x 600 pixels or less)



- ✓ At Preview Bitmap tab, you can see the logo file you selected.



- ✓ If you press the Upload button, the Bitmap image data will be downloaded in the NV graphics memory area of the connected printer. If uploading process finishes successfully, the printer feeds paper a little.



✓ You can specify the Printing Range for the logos uploaded in the printer's NV graphics memory area. Selectable choices are below :

All : Prints all logo images saved in the printer connected currently.

Selection : Prints the selected logo image saved in the printer connected currently. Selection range can be from 1 to 255. But you can select multiple logo-images by using ',' or '-' in the edit box.

(e.g. "1,5,10" or "1-5,8,20-22")

✓ You can specify Quality.

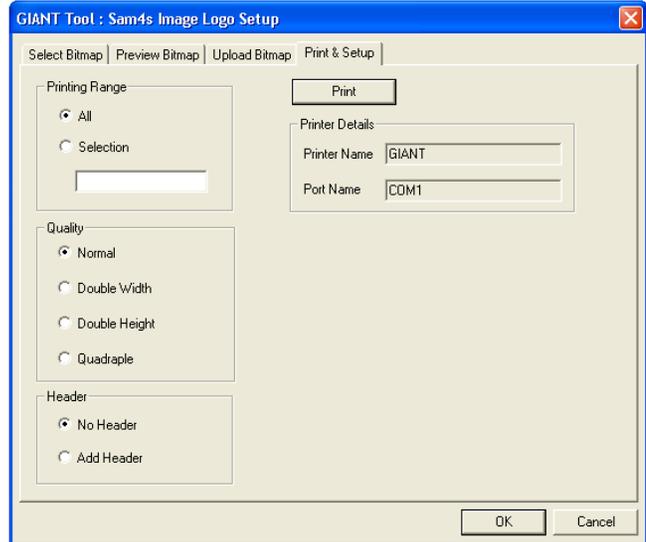
Normal : Print in single height and width

D/Width : Print in double width

D/Height : Print in double height

Quadruple : Print in double height and width

✓ You can select option with/without Header as a numbering value of the logo. It is printed on top of logo image.



2) User setup

✓ **About Buttons**

[TEST]
You can test the printer and check the printer's setting. If you press this button, GIANT prints out some characters and cuts the paper.

[Default]
Can reset to default values all of them.

[Get Value]
It queries the current setting values to the printer and shows those values on the dialog.

[Set Value]
It sets values with displayed on the dialog or selected of the printer.

[EXIT]
Quits this application and returns to Function Select Dialog.

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(1) Description of User Setup Options

A. Paper Width & Max Column (Default : 80mm / 30 column In 58mm)

This is an option of the paper width for printing. It can be set the paper 58mm or 80mm width.

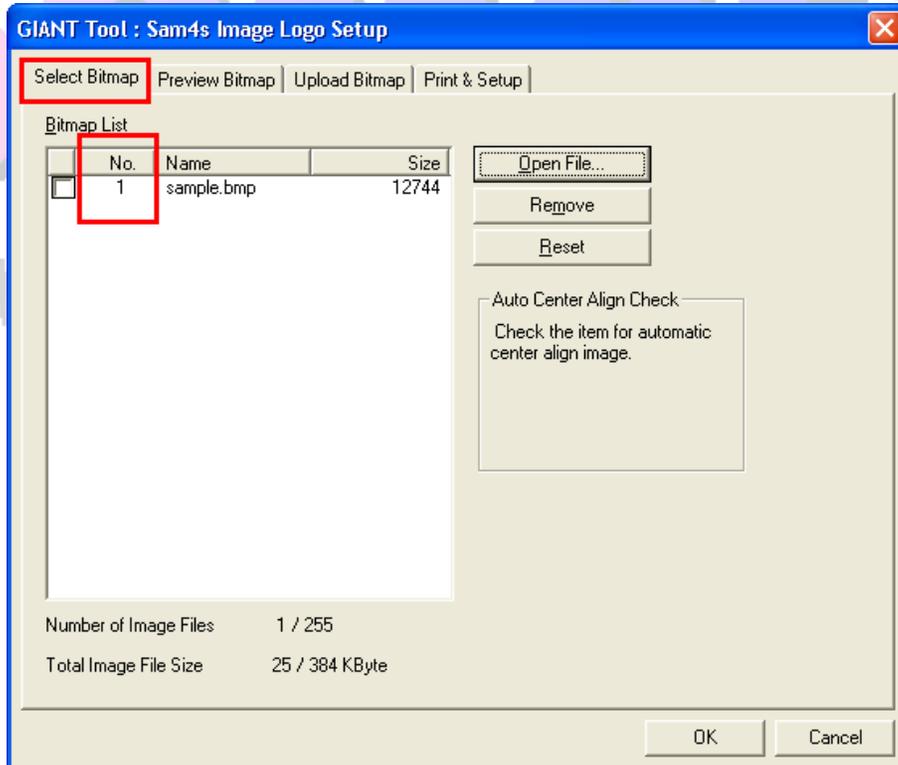
B. Paper Type and Black Density (Default : Black / Medium)

This is an option of the paper type. It can be set Black or 2Color. The second color can be red or blue by 2 color thermal paper type.

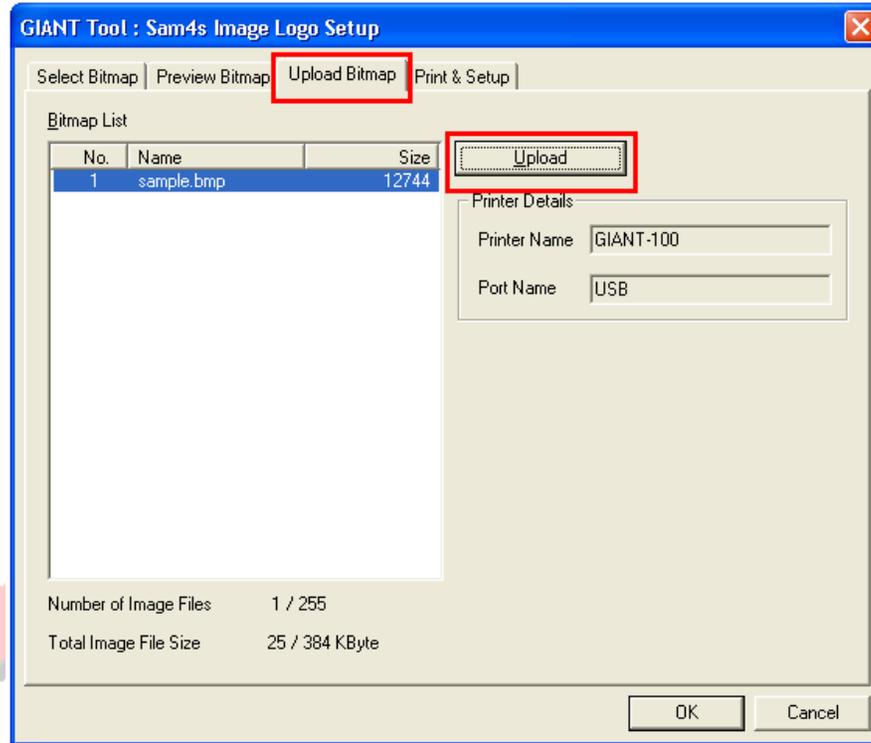
C. Water Mark Function (Default : Disable)

It is GIANT that prints background image on your receipt without any additional commands. You can use Watermark with Image Logo Downloader in GIANT Tool. If you want to print background image, prepare the bitmap image which will be background. And then follow steps as below.

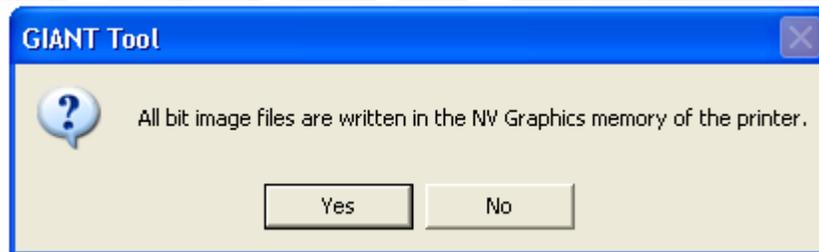
- ① Run Image Logo Downloader and select the prepared bitmap image. And check the image number.



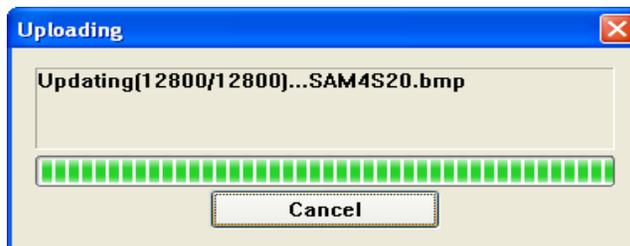
- ② Go to the “Upload Bitmap” tab and click the “Upload” button.



- ③ It will show the message box like below, click the “YES” button.

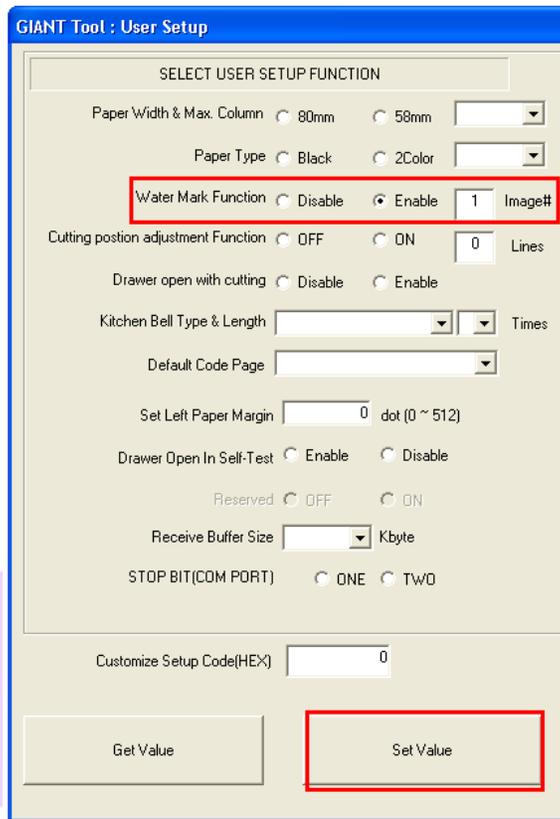


- ④ All of images saved before on the printer will be deleted and new image data will be downloaded on your printer.



- ⑤ Printer feeds some paper when the logo upload is completed successfully.
⑥ Close Image Logo Downloader and run User Setup from Function Select Dialog.

- ⑦ Set Enable of the Water Mark Function and input the number of logo image that you want to print as a background. (Refer step ①) And then click the “Set Value” button. The printer will be set values newly and Water Mark Function setting is finished.



- ⑧ Try to click the “TEST” button and you will see the fantastic receipt with background image. Left picture is the sample receipt that is applied the Water Mark Function. Right one is bitmap image that is used as a background image.



D. Cutting position adjustment Function (Default : Disable / 0 Line)

If your receipt is cut wrong, this option will be very useful with you, it makes the application not change.

When this option set to enable, printer will feed amount (line number input) of paper before cutting.

E. Drawer open with cutting (Default : Disable)

This option will make drawer take an open-signal when printer is received the paper cutting command.

F. Kitchen Bell Type & Length (Default : Bell / 3 times)

GIANT offers one bell and three melodies for using on kitchen. It is possible to adjust ringing time or length of melody.

The offered bell types are below.

Bell: Default bell

Melody 1 ~ 3: Three different melodies

Other Bell: Blend bell (Internal oscillation type)

G. Default Code Page (Default : PC437-USA, Standard Europe)

If you want to fix the specified code page as default, select one of code pages in the list and then click the "Set Value" button.

H. Set Left Paper Margin (Default : 0 dot)

Left margin of paper is changeable for better receipt (printed) shape. For example, if you are using 40-column-format receipt on GIANT, you may be seen a print-result tended to left side. In this case you can take much better result, if you set 24-dots which is the value of left margin.

I. Drawer Open In Self-Test (Default : Disable)

Check the drawer operation at print self-test mode.

J. Received Buffer Size (Default : 4Kbytes)

GIANT's received buffer can be 64Kbytes maximum. You can change buffer size with this option.

K. Stop Bits (COM) (Default : ONE)

Stop bits used during serial communication can be changed.

L. Customize Setup Code (Default : 0)

You can enter a Customize Setup Code .

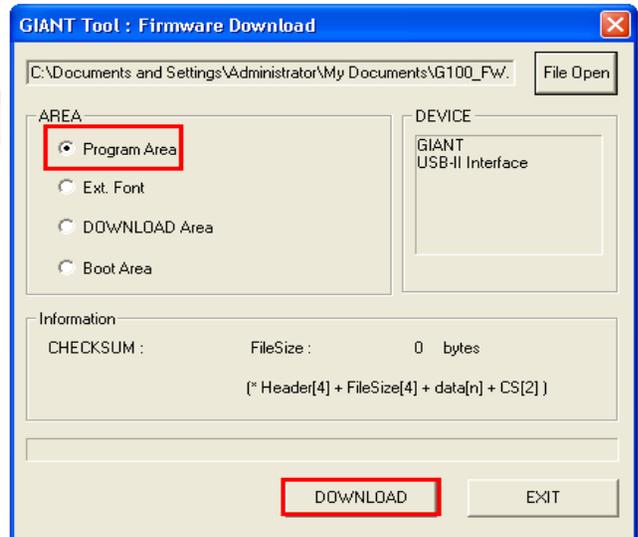
3) Firmware download

(1) GIANT-100

Firmware update sequences are below.

1. Remember folder directory with downloaded firmware file.
2. Turn the GIANT off.
3. Check the cable connection between GIANT and your PC. **Please turn off all dip switches.**
4. Open the printer cover.
5. Turn on GIANT with FEED button; hold the feed button with 2 times buzzer.
6. Now, GIANT is ready to update firmware.
7. Run the "Firmware Update Dialog" on GIANT Tool and open the downloaded firmware file.
8. And then, select the download area which you want to update. (generally select the "Program area")
9. Select the connected port on your PC.
10. If you click the download button, the firmware update will be started and this application will show the status with progress-bar on dialog bottom side.
(If progress-bar does not proceeding well, when you click download button, you should check 'Port Select' or cable connection whether settings are correct or not.)
11. If download is done, printer will notify download completion with 5 times buzzer. (in surely case that download is succeeded). And then turn off a printer.
 - If buzzer does not ring that means communication ERROR is occurred during download. In this case, please check Cable connection status.
12. Please try to operate 'SELF TEST' and check the updated firmware version.

Beeps twice

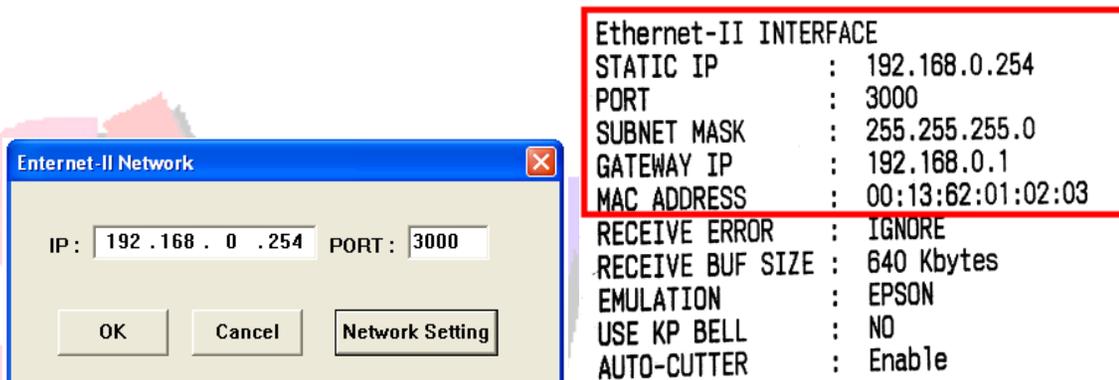


4) Network Setting Dialog (Ethernet-II Interface)

(1) Ethernet-II Network Dialog

When you selected a Ethernet-II (GIANT-100 EII) In the "Device Configuration Dialog" and pressed OK button, Ethernet-II Network Dialog is appears. Enter the IP address and port number to connect. Press the OK button. Function Select Dialog will be executed.

In addition, you can select the "Ethernet-II Network Setting dialogue" It can change the network settings for the printer. Do you want to check GIANT IP and Port number? Please run the Self-Test. You can confirm all the settings of the printer.

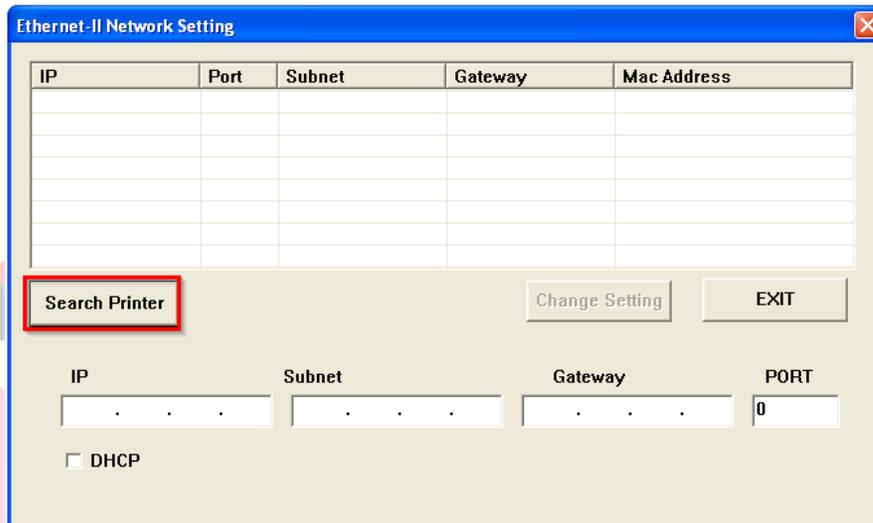


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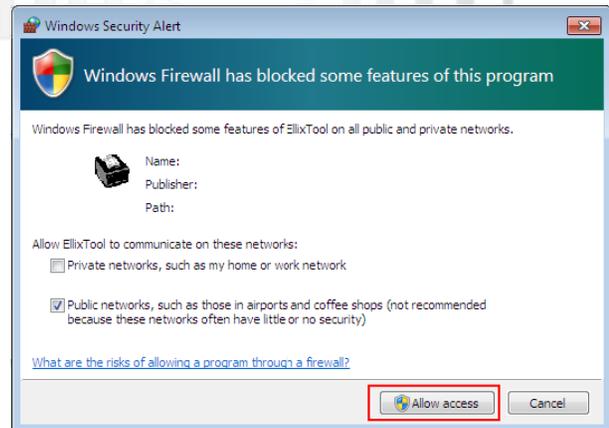
(2) Ethernet-II Network Setting Dialog

Here you can change the network settings for the printer. If you would like to change the network settings, please follow these steps.

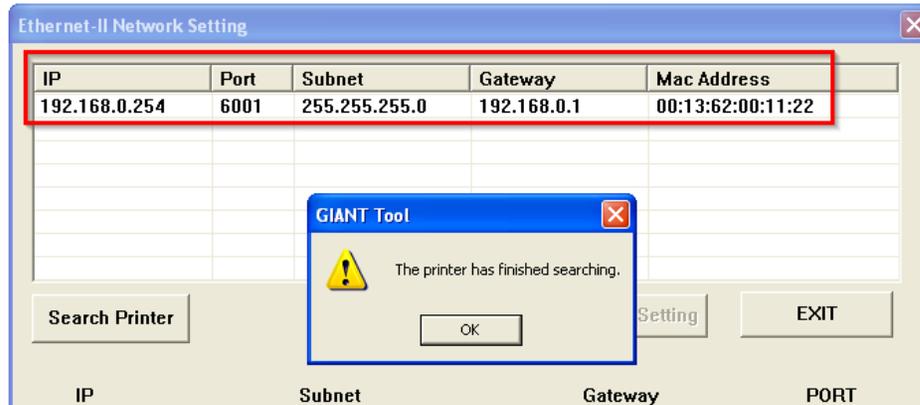
1. The printer is connected to the router. PC must be connected to the same router.
2. Turn on GIANT-100 normally.
3. Run the "Ethernet-II Network Setting Dialog." Press the "Search Printer" button.



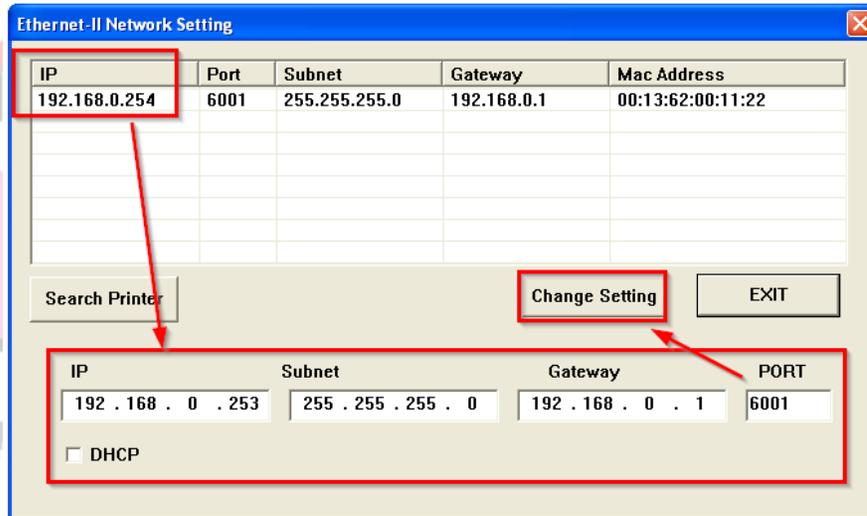
4. If you can see the "Windows Security Alert" message, Click a "Unblock" button (Windows XP) or "Allow access" button (Windows 7). And retry the 3 Step.



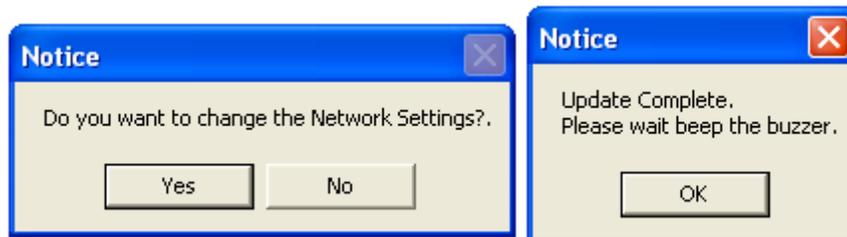
- If you can see the "The Printer has finished searching." message, detected the printer's network settings appear. (If you cannot see any list, Please check cable and network.)



- Choose one to change the IP. Enter the network settings you want (as shown). Finally, press the "Change setting" button.



- You can see the "Do you want to change the Network Setting?" message. Press the "Yes" button. Printer will notify update completion with buzzer, and then printer will be restart.



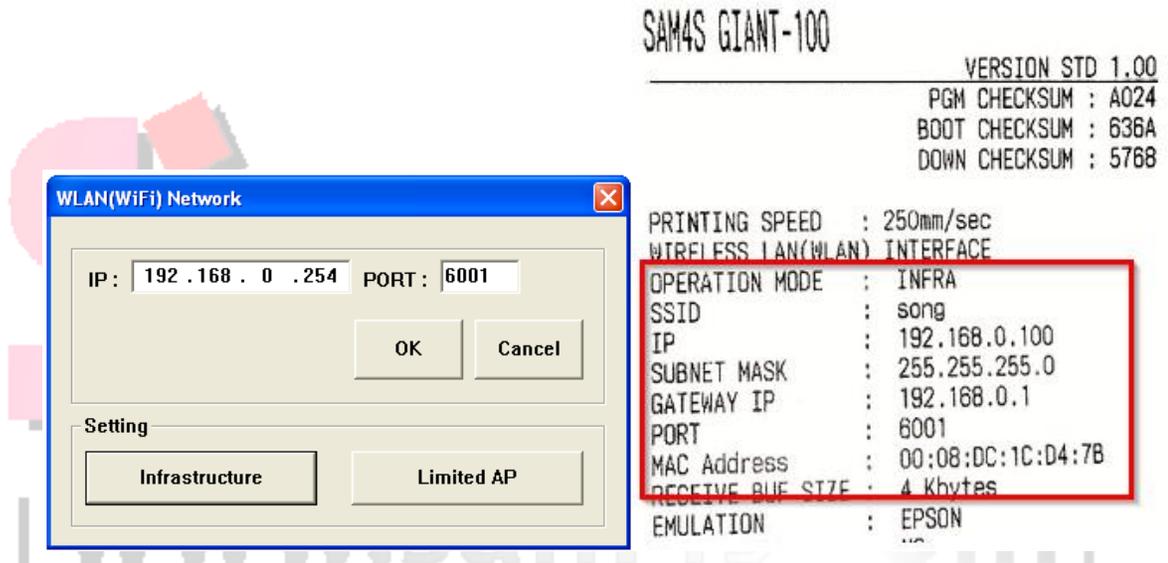
- Do self-test for confirming the updated network setting.

5) Network Setting Dialog (Wi-Fi Interface)

(1) Wi-Fi Network Dialog

When you selected a GIANT-100 Wi-fi (GIANT-100 W) In the “Device Configuration Dialog” and pressed OK button, Wi-Fi Network Dialog is appears. Enter the IP address and port number to connect. Press the OK button. Function Select Dialog will be executed.

In addition, you can select the "Infrastructure Dialog" and “Limited AP Dialog”. It can change the network settings for the printer. Do you want to check GIANT-100 IP and Port number? Please run the Self-Test. You can confirm all the settings of the printer.



(2) Glossary of Terms

AP (Access Point)

AP, actually as a device is a hotspot that is like an Ethernet hub. It can be possible to communicate, which is binding one network with wireless clients (devices) nearby located in AP. And it can be possible to connect to WAN, backbone or another AP (hotspot) through the Ethernet line connected with one AP.

Infrastructure

If several terminals (PC, PCPOS etc.) or clients connect to one AP and they are composed to the same network, this is called 'infrastructure'. In other words, infrastructure is a structure that GIANT-100 WLAN interface connects with PC or terminals through AP.



Limited AP

Limited AP, which GIANT-100 WLAN interface is become AP by itself, can be possible to communicate directly with other terminals (PC, PCPOS etc.) or clients without any other APs.



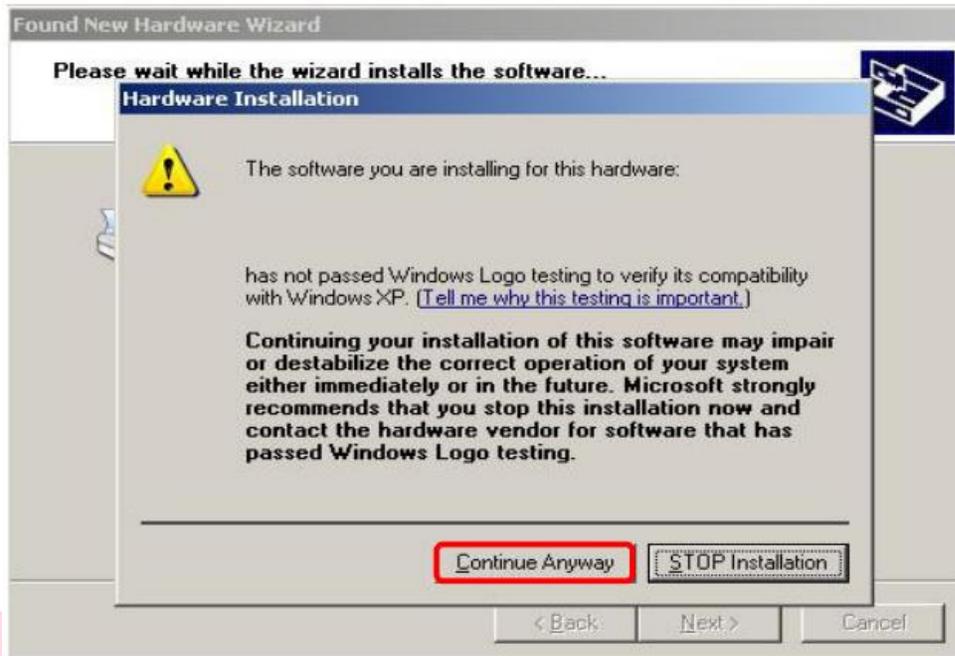
(3) Install a Virtual COM Driver (Windows XP, POSReady 2009)

Virtual COM port driver must be installed when WLAN Interface sets up. During installation, Please do these steps are following.

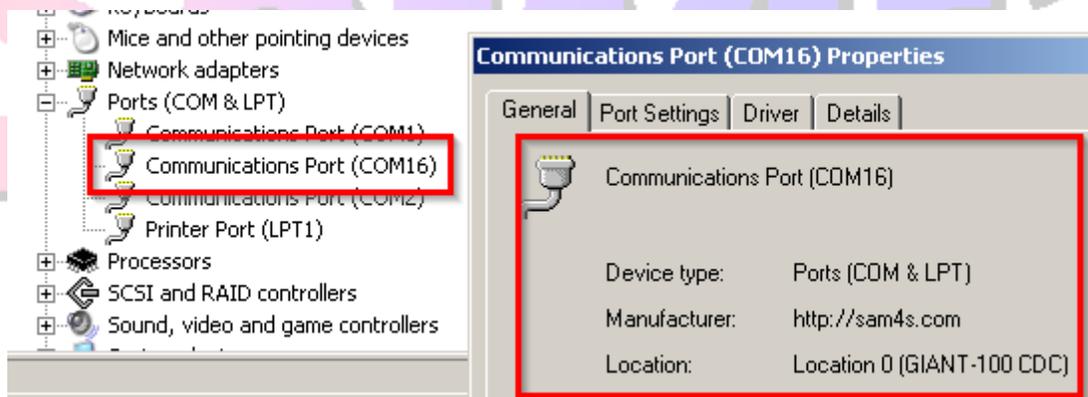
1. Turn a printer off.
2. Install SAM4S Printer Driver for installing virtual COM driver automatically.
(SAM4SPrinterDriverInstallerV1.9.4.exe). Please refer to the manual of SAM4S Printer Driver Installer.
(Select a connection type of the printer: ETHERNET CONNECTION
Create a TCP/IP Printer Port: The value for use later)
3. Connect a USB cable to printer and PC.
4. Turn a printer on.
5. When “Found New Hardware Wizard” is appeared, select a “Install the software automatically (Recommended)”



6. Select a "Continue Anyway" Button.



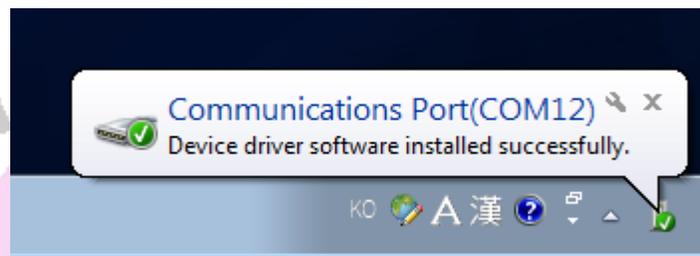
7. When the installation is completed, run the "Device Manager" for checking a New Virtual COM port number.



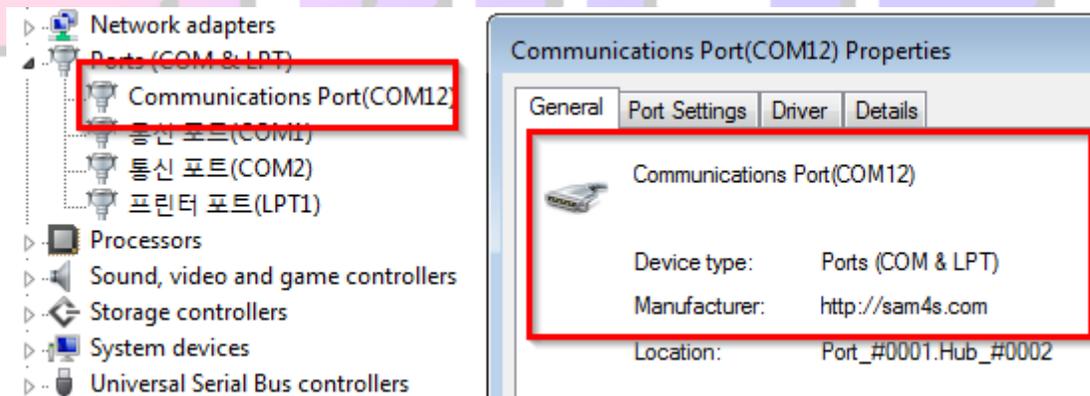
(4) Install a Virtual COM Driver (Windows 7, POSReady 7)

Virtual COM port driver must be installed when WLAN Interface to set up. During installation, Please proceed as follows, depending.

1. Turn a printer off.
2. Install SAM4S Printer Driver for installing virtual COM driver automatically.
 (SAM4SPrinterDriverInstallerV1.9.4.exe) Please refer to the manual of SAM4S Printer Driver Installer.
 (Select a connection type of the printer: ETHERNET CONNECTION
 Create a TCP/IP Printer Port: The value for use later)
3. Connect a USB cable to printer and PC.
4. Turn a printer on.
5. When Virtual COM port is installed properly in Windows, this balloon appears as shown.



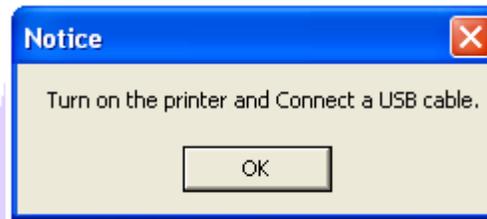
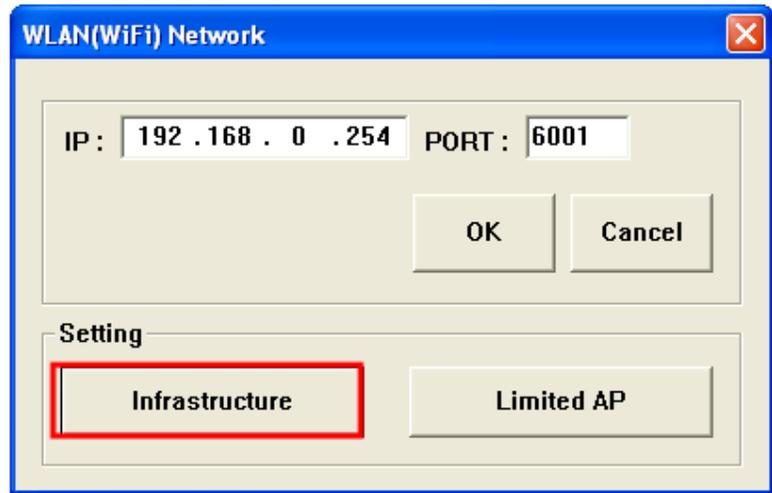
6. When the installation is completed, run the "Device Manager" for checking a New Virtual COM port number.



(5) Infrastructure mode setting

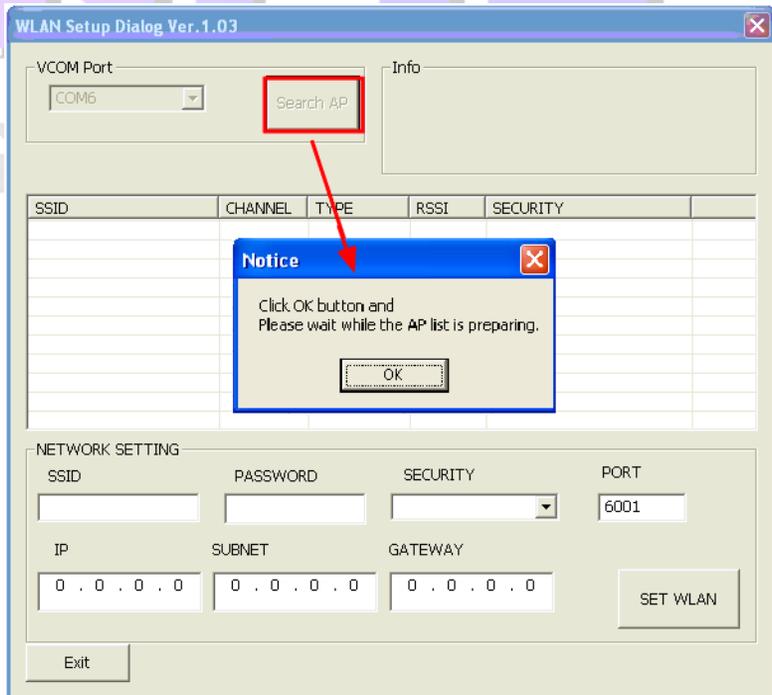
Click "Infrastructure" Button in Wi-Fi Network dialog.

When message box is appeared, turn a printer on and then connect USB cable PC and printer.



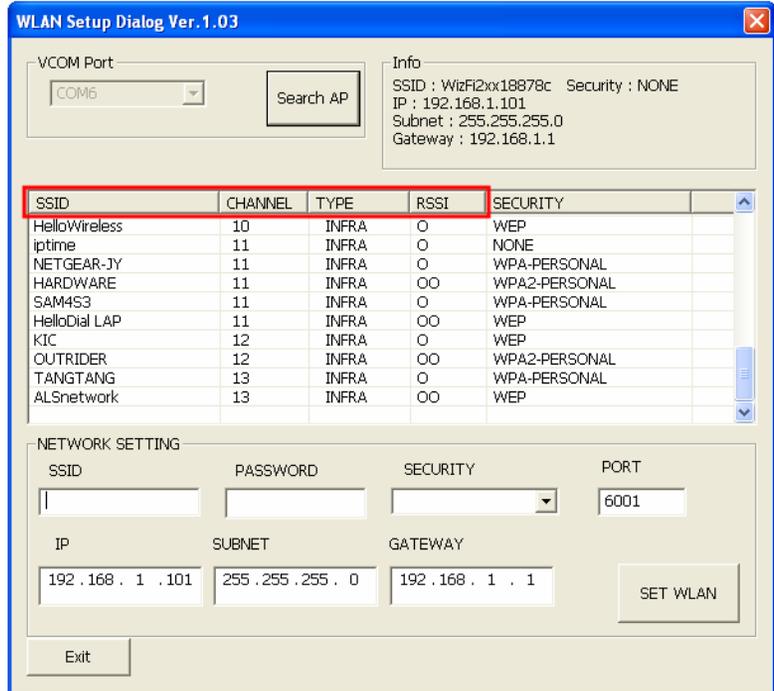
Click "Search AP" button to search AP list.

When message box is appeared, click "OK" button.



When “Search AP” is completed, WLAN interface information and list of around the AP devices appear .

- SSID : AP Name
- CHANNEL: Communication channel
- TYPE : Operation mode
- RSSI : Received signal strength indication
 - O: Weak signal
 - OO : Normal signal
 - OOO : Strong signal



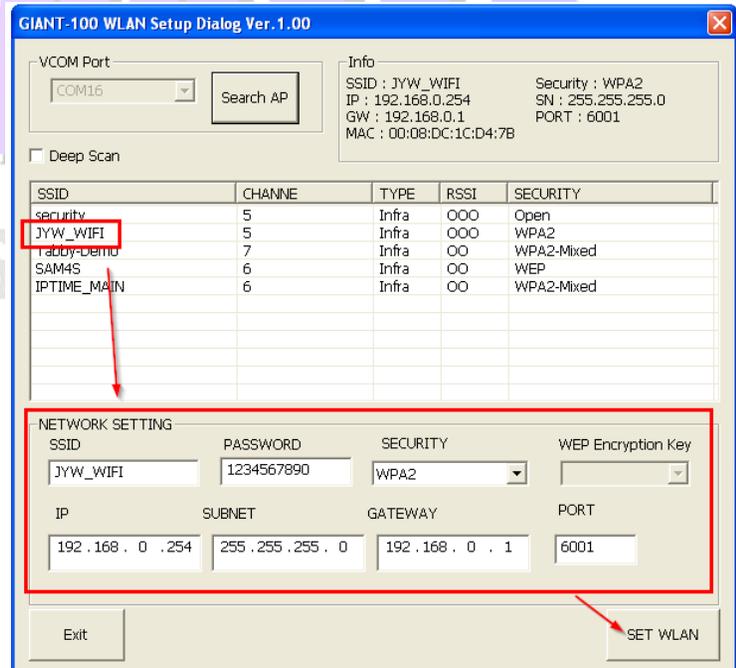
Select the SSID of AP which you want to connect. **(You must select Normal or Strong signal SSID for a safety communication.)**

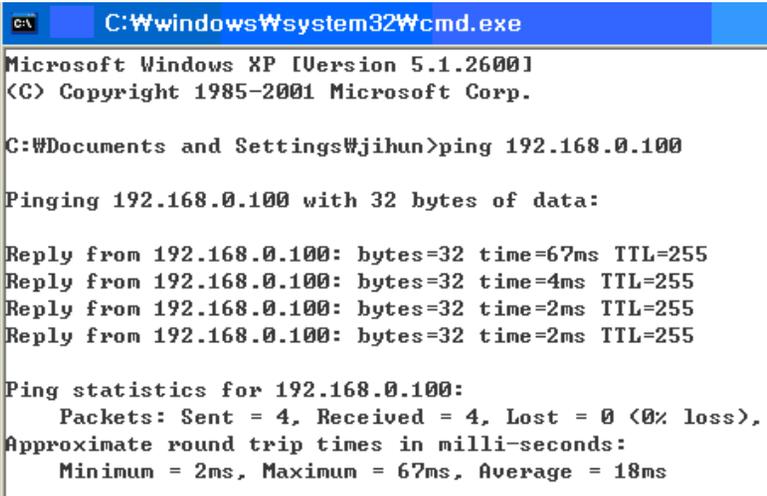
We are recommended that you use the security of WEP or WPA2 series.

If you need a password for connection, enter a PASSWORD.

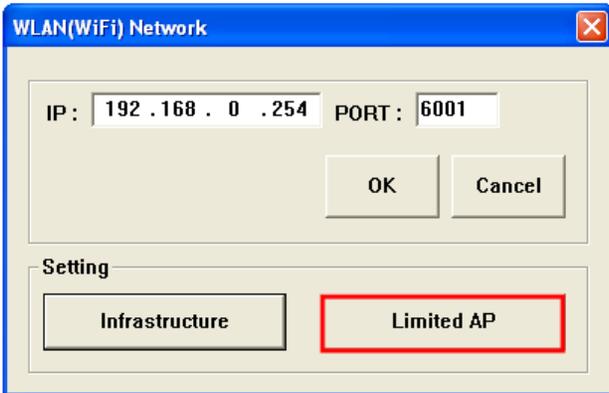
If the security of SSID is WEP, you need to select WEP Encryption key.

Enter the Network setting values (IP, SUBNET, and GATEWAY) that are assigned from the **network administrator**. And then click “SET WLAN” button.



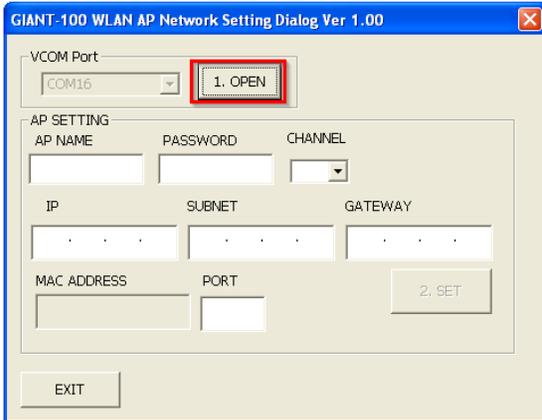
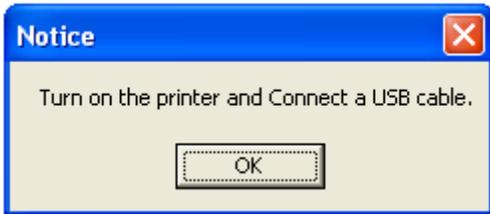
<p>Click the "OK" button; please wait for the completion of setting.</p>	
<p>When the setting is completed, this message appears as shown in the figure.</p> <p>Then disconnect the USB cable from the printer, the printer off and turn it on.</p>	
<p>Run the ping test at the command prompt.</p> <p>Ex) ping 192.168.0.100</p> <p><u>Note: PC and the printer must be on the same network.</u></p>	 <pre> c:\ C:\Windows\system32\cmd.exe Microsoft Windows XP [Version 5.1.2600] (C) Copyright 1985-2001 Microsoft Corp. C:\Documents and Settings\jihun>ping 192.168.0.100 Pinging 192.168.0.100 with 32 bytes of data: Reply from 192.168.0.100: bytes=32 time=67ms TTL=255 Reply from 192.168.0.100: bytes=32 time=4ms TTL=255 Reply from 192.168.0.100: bytes=32 time=2ms TTL=255 Reply from 192.168.0.100: bytes=32 time=2ms TTL=255 Ping statistics for 192.168.0.100: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 2ms, Maximum = 67ms, Average = 18ms </pre>

(6) Limited AP setting



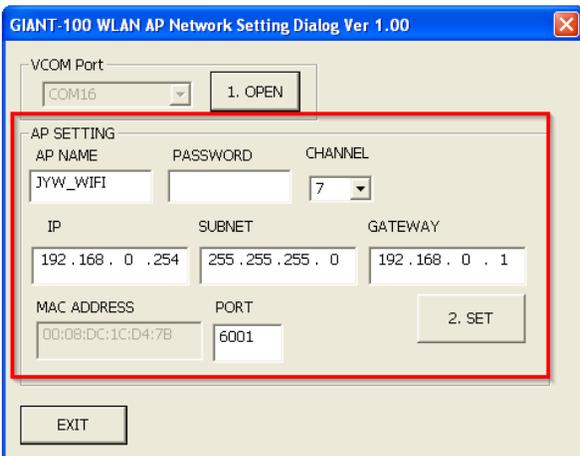
Click "Limited AP" Button to in Wi-Fi Network dialog.

When a message box is appeared, turn a printer on and then connect USB cable between PC and printer.



Click "1.OPEN" button to start WLAN interface setting.

After a few seconds you can see the value of setting WLAN Interface as following image.



- AP NAME: WLAN Interface SSID
- PASSWORD: Password to connect WLAN Interface (Enter a password with 8 ~ 63 number digits or alphabetic value.)
- MAC ADDRESS : MAC address of WLAN Interface
- IP : WLAN Interface IP
- SUBNET : WLAN Interface Subnet
- GATEWAY : WLAN Interface Gateway
- PORT : WLAN Interface Port number (6001,default)
- CHANNEL: WLAN channel

Enter unique AP name and 10-digit password and then set a network values (IP, SUBNET and GATEWAY).

Ex) AP NAME : TEST_AP

SECURITY : WPA2-Mixed (recommend)

PASSWORD : 1234567890

IP : 192.168.0.123

SUBNET : 255.255.255.0

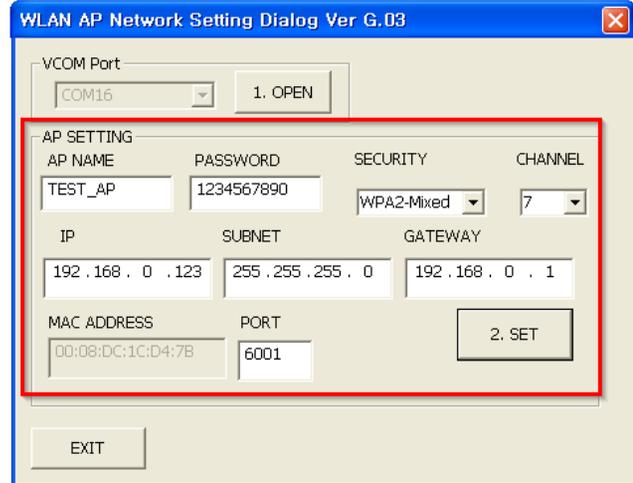
GATEWAY : 192.168.0.1

CHANNEL : It varies from country to country

→ch 1-11(USA only)

→ch 1-13(Europe, Japan)

Click the "2.SET" button; please wait for the completion of setting.



When the setting is complete, a message appears as shown in the figure.

Disconnect the USB cable from the printer, then turn the printer off and turn it on.



To make sure it is set up properly, try searching WLAN interface.

This figure shows result of connection to WLAN interface on iPhone.

Please refer to the manual for how to set up a wireless network of wireless LAN equipment you are using.

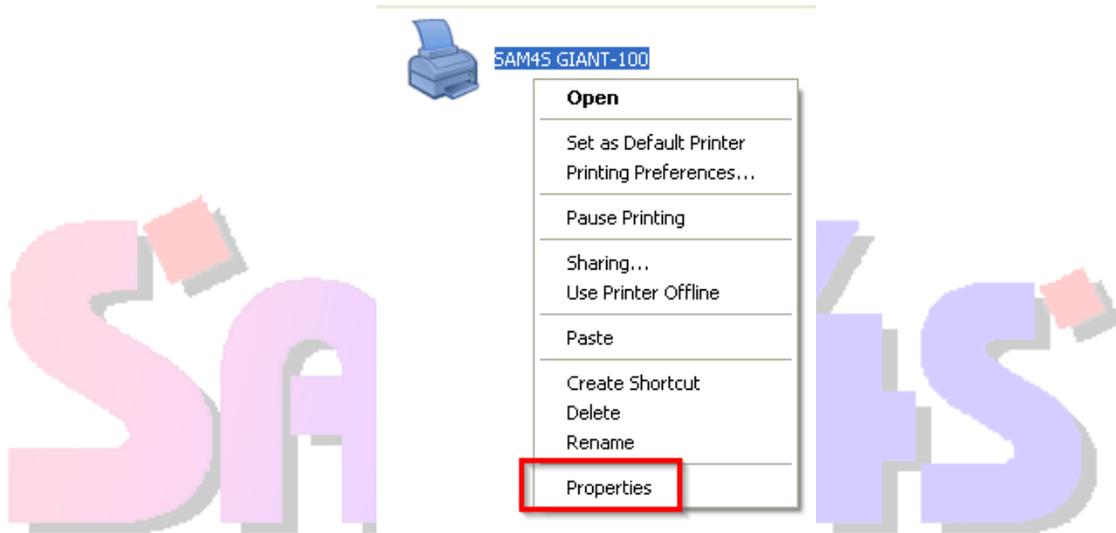


(7) Print Test page (Windows XP, POSReady 2009)

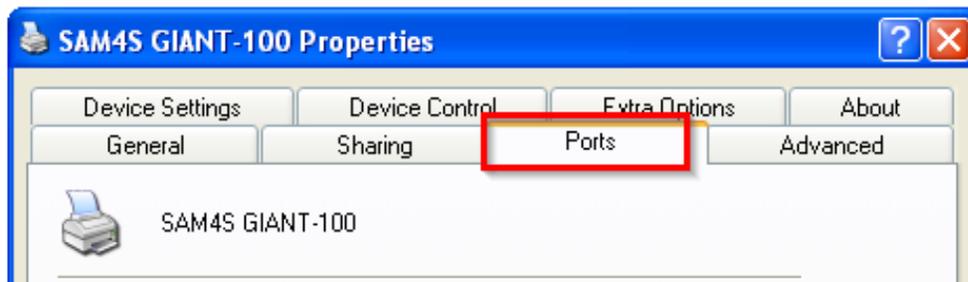
Install SAM4S Printer Driver Installer (SAM4SPrinterDriverInstallerV1.9.4.exe). Please refer to the manual of SAM4S Printer Driver Installer.

(Select a connection type of the printer: ETHERNET CONNECTION Input a Create a TCP/IP Printer Port: any value)

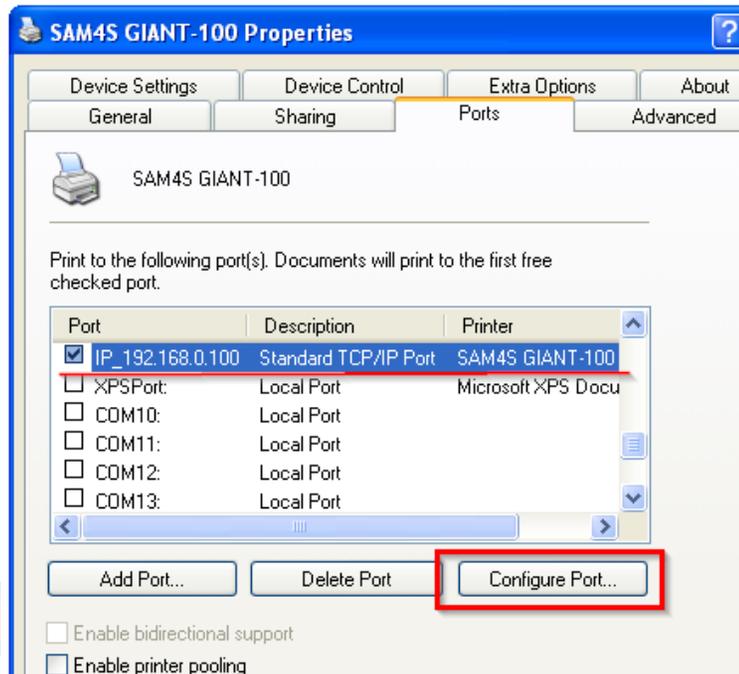
1. Turn a print off.
2. Disconnect a USB cable from printer.
3. Turn a print on again.
4. Select "SAM4S GIANT-100" in "Printers and Faxes" folder. Click a right mouse button and select "Properties".



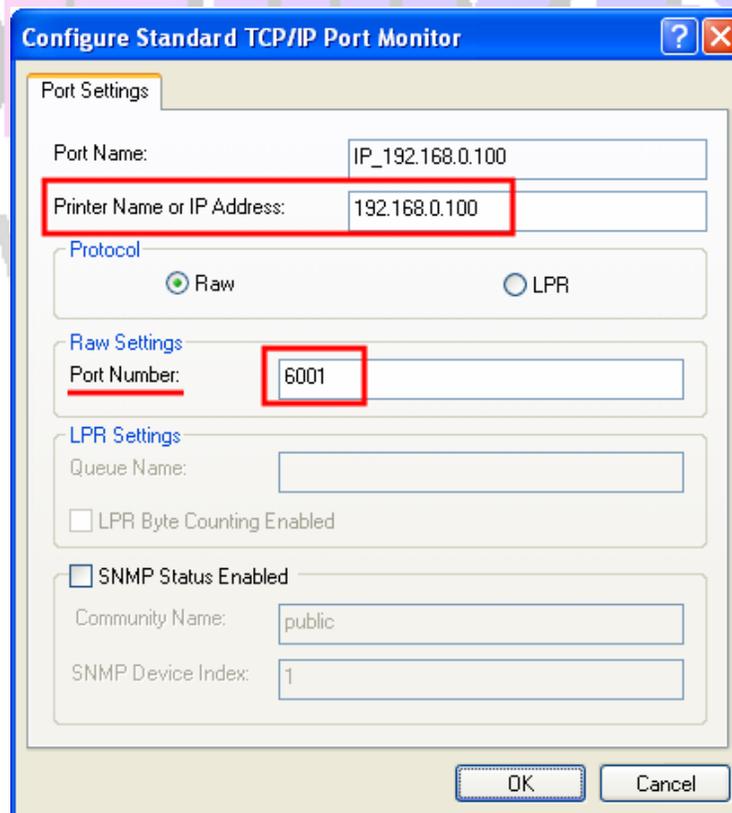
5. Move "Ports" tab.



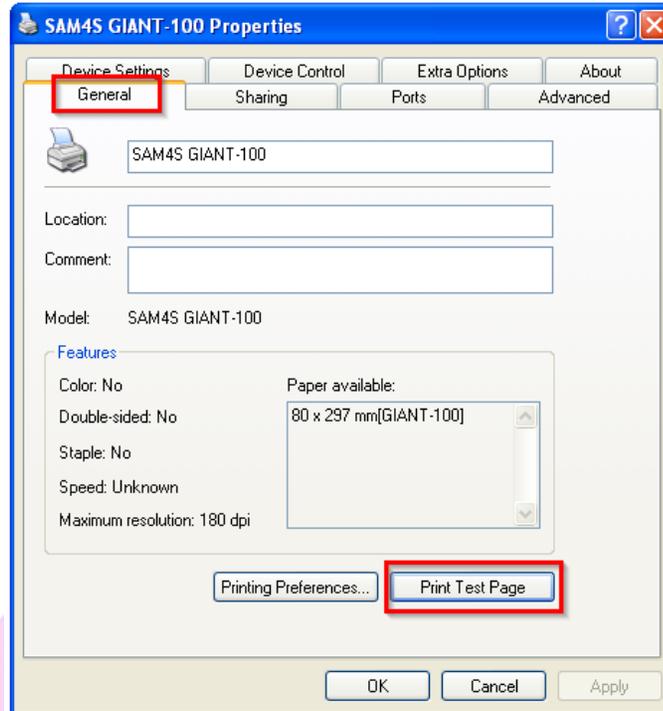
6. Select Standard TCP/IP Port and click "Configure Port" button.



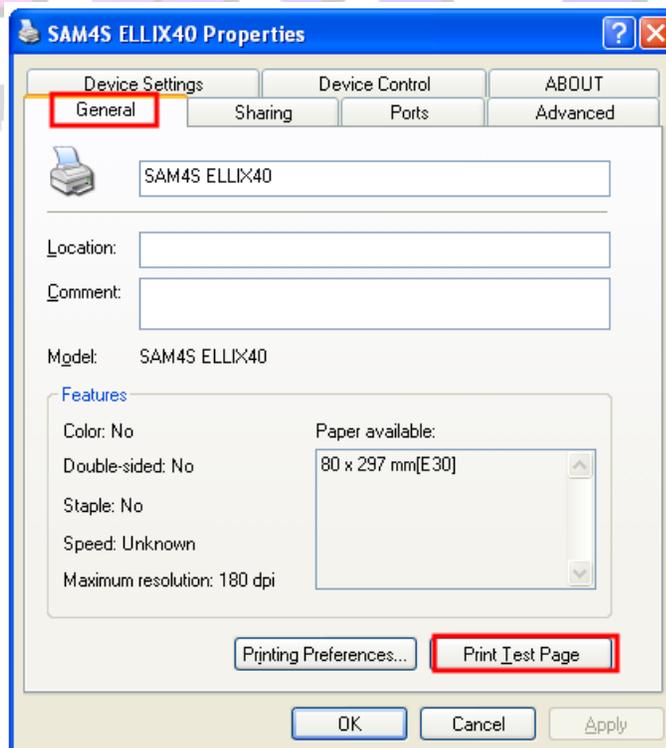
7. Enter a WLAN IP and Port number.



8. Move "General" tab; click "Print Test Page". If a printer doesn't print any page, check network setting and run ping test.



9. Move "General" tab; click "Print Test Page". If a printer doesn't print any page, check network setting and run ping test.

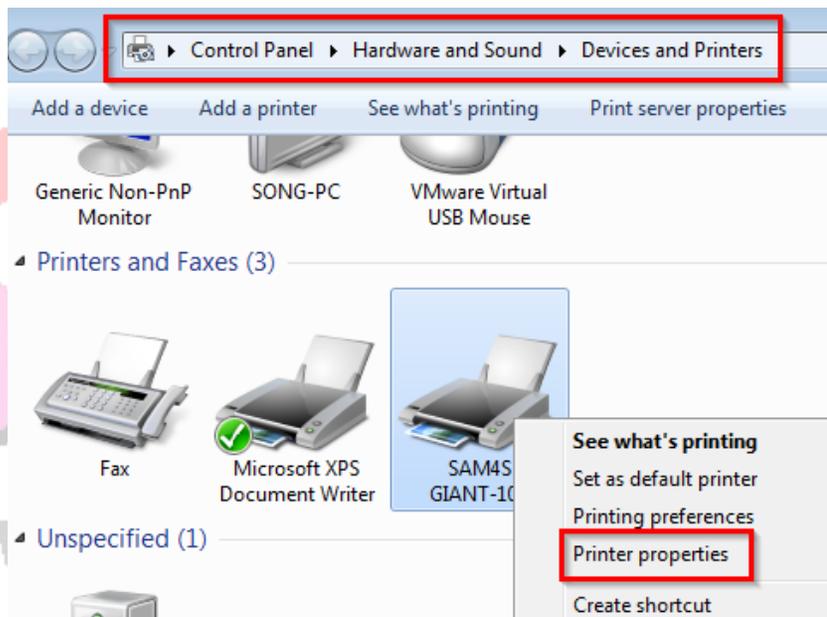


(8) Print Test page (Windows 7, POSReady 7)

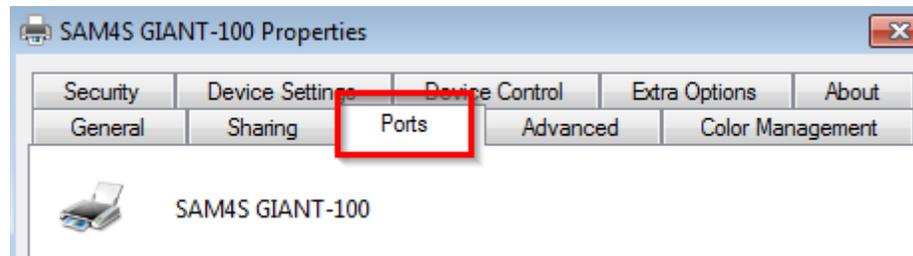
Install SAM4S Printer Driver Installer (SAM4SPrinterDriverInstallerV1.9.4.exe). Please refer to the manual of SAM4S Printer Driver Installer.

(Select a connection type of the printer: ETHERNET CONNECTION / Input a Create a TCP/IP Printer Port: The value for use later)

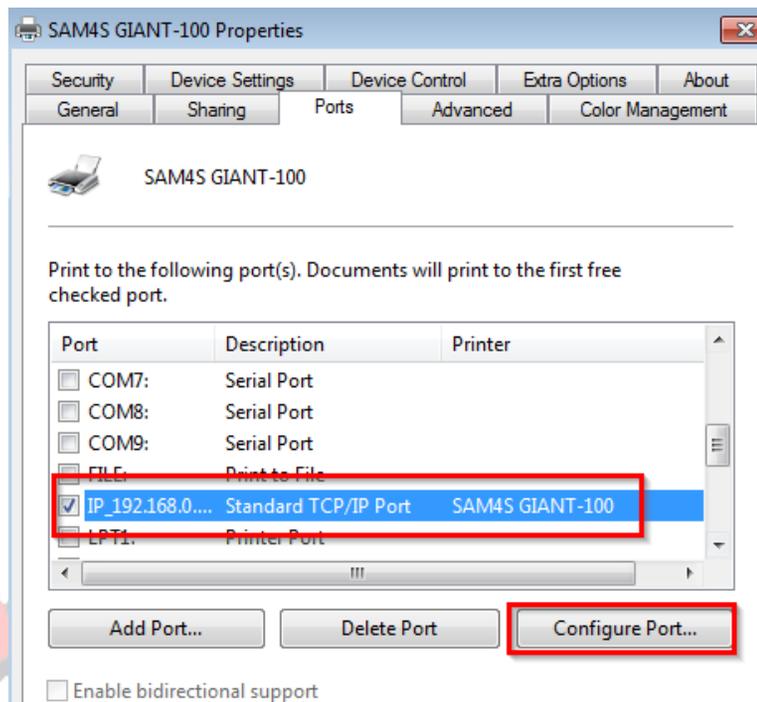
1. Turn a print off.
2. Disconnect a USB cable from printer.
3. Turn a print on again.
4. Click "SAM4S GIANT-100" in "start → Control Panel → Hardware and Sound → Devices and Printers". Click a right mouse button and click "Printer properties".



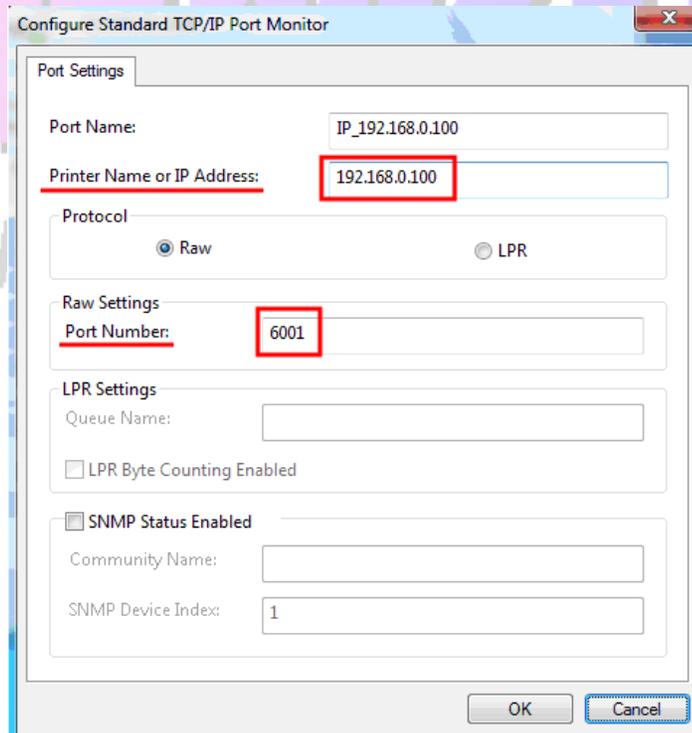
5. Move "Ports" tab.



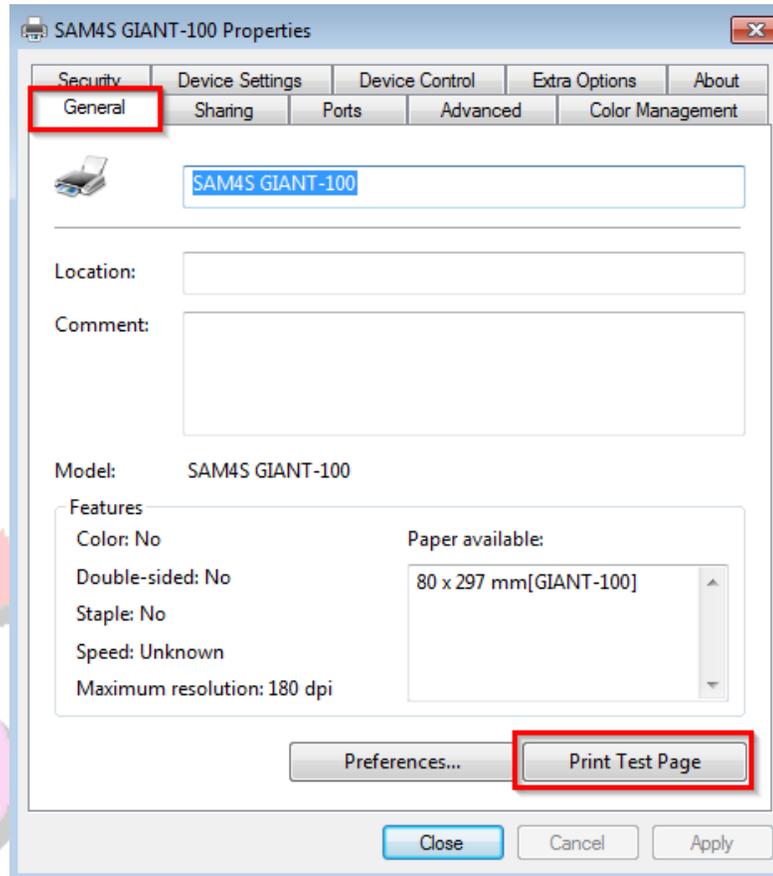
6. Select "Standard TCP/IP Port". Click "Configure Port" button



7. Input a WLAN IP address and Port number.



8. Move "General" tab; click "Print Test Page". If a printer doesn't print any page, check network setting and do ping test.



| www.sam4s.com |



REV 1.1

Revision History	
Rev 1.0	2014/03/02
Rev 1.1	2014/04/25