



GIANT & GCUBE Tool

User Manual V1.09

All specifications are subject to change without notice.

SAM4S

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CHAPTER 1. INTRODUCTION



It is integrated software for POS Printer GIANT-100/150/PRO, GCUBE-100/102 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.

CHAPTER 2. SUPPORT DEVICE & INTERFACE



CHAPTER 2 SUPPORT DEVICE & INTERFACE

DEVICES

- GIANT-100
- GIANT-150
- GIANT PRO
- GCUBE-100
- GCUBE-102

FUNCTIONS

- NV Logo download
- User Setup
- Sample Print
- Firmware download
- Net Configuration

INTERFACES

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

CHAPTER 3.

User Interface

3.1. MAIN DIALOG

3.2. PORT SETUP DIALOG

3.3. LOGO SETUP DIALOG

3.4. USER SETUP DIALOG

3.5. SAMPLE PRINT DIALOG

3.6. FIRMWARE DOWNLOAD DIALOG

3.7. NETWORK SETTING DIALOG

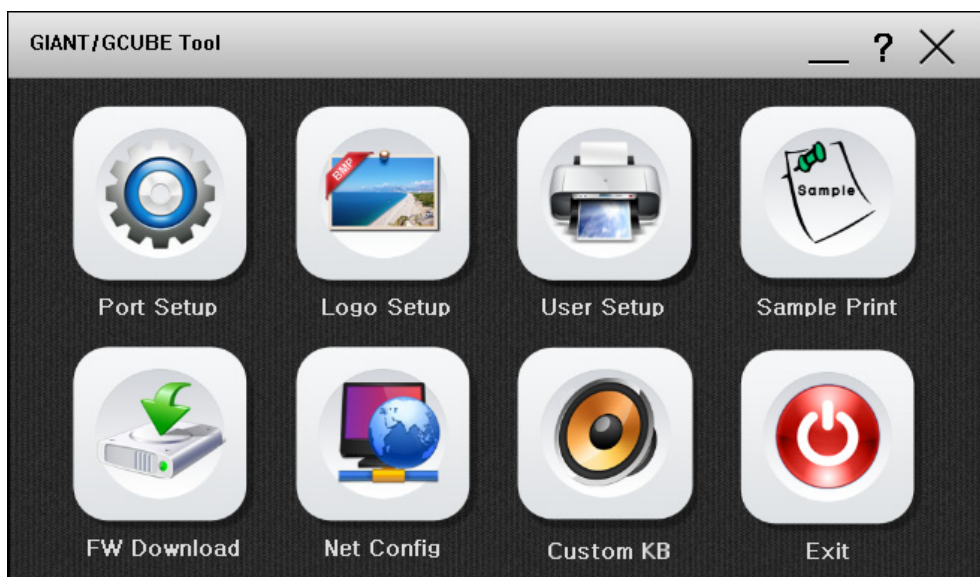


CHAPTER 3 User Interface

3.1. Main Dialog

Main Dialog

It is a Main Page of GIANT Tool.



- Port Setup : Choose Device & Interface
- Logo Setup : Logo Image Downloading & Image printing
- User Setup : Changing variable custom settings
- Sample Print : Print some samples
- FW Download : Update printer's firmware
- Net Config : Changing printer's network setting
- Custom KB : Customize Kitchen Bell
Refer to the KitchenBell_Maker_User_Manual
- Exit

3.2. Port Setup Dialog

Port Setup Dialog

You can select the device & Interface

〈DEVICE LIST〉

- GIANT-100
- GIANT-150
- GIANT PRO
- GCUBE-100
- GCUBE-102

〈INTERFACE LIST〉

- Serial
- USB(USB, VCOM)
- ETHERNET
- WLAN

The screenshot shows the Port Setup Dialog with the following settings:

- Device: GIANT-100
- I/F: (empty)
- Port: (empty)
- BPS: (empty)
- Parity: (empty)
- Data Length: (empty)
- Flow Ctl: (empty)
- Stop Bit: (empty)
- IP Address: 192 . 168 . 0 . 254
- Port: 6001

3.3. Logo Setup Dialog

Logo Setup Dialog

You can download and printing images.

The screenshot shows the Logo Setup Dialog with the following sections:

- Image List:** A table with columns No., Name, and Size. Below it, it shows 'Number of image files: 0 / 50' and 'Total image file size: 0 / 126 KByte'.
- Image thumbnail:** A large empty box for displaying the selected image.
- Buttons:** Open Files, Download, Remove, and Remove All.
- Image Option:**
 - Height Option: X 1 (selected), X 2
 - Width Option: X 1 (selected), X 2
 - NV Image Print: All Image (selected), Selection
 - Diverging point(-255~255): 128
 - Half tone, Sharpen Image, Print to File (checkboxes)
 - Print images button
- Logo Option:**
 - Top Logo Option: Enable, Disable (selected)
 - Bottom Logo Option: Enable, Disable (selected)
 - Image Number: 1
 - Justification: Left, Center, Right
 - Print Logo at Power-on: Enable, Disable (selected)
 - Margin(Image printing): Enable, Disable (selected)
- Buttons:** Set Logo Option, Test Print, and Close.

3.4. User Setup Dialog

User Setup Dialog

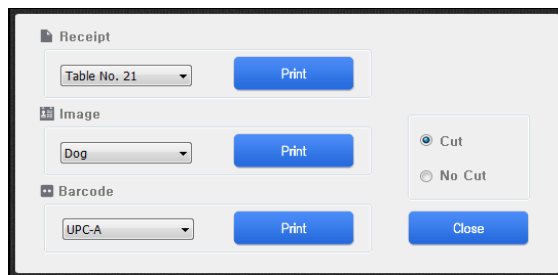
You can change variable custom settings only for Printer.



3.5. Sample Print Dialog

Sample Print Dialog

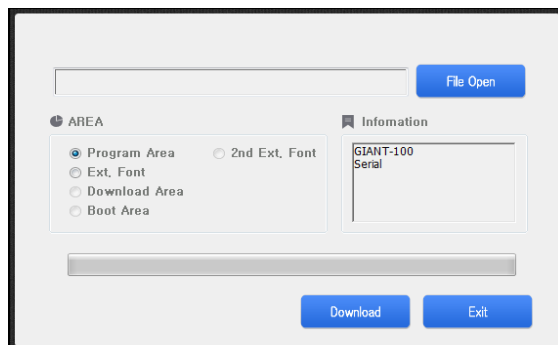
You can print some samples.



3.6. Firmware Download Dialog

Firmware Download Dialog

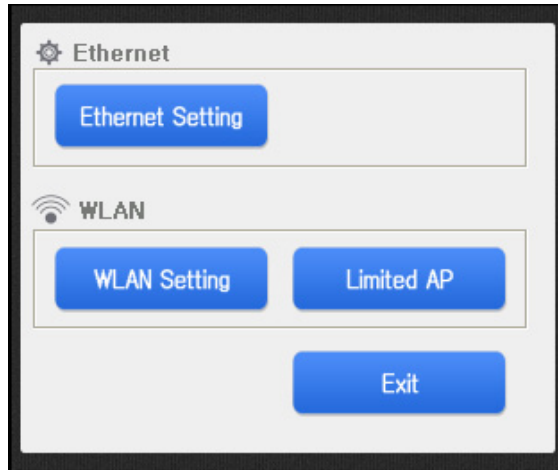
You can update printer's firmware.



3.7. Network Setting Dialog

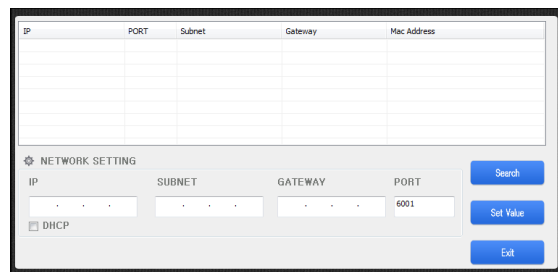
Net Config Dialog

You can change printer's network setting



Ethernet Setting Dialog

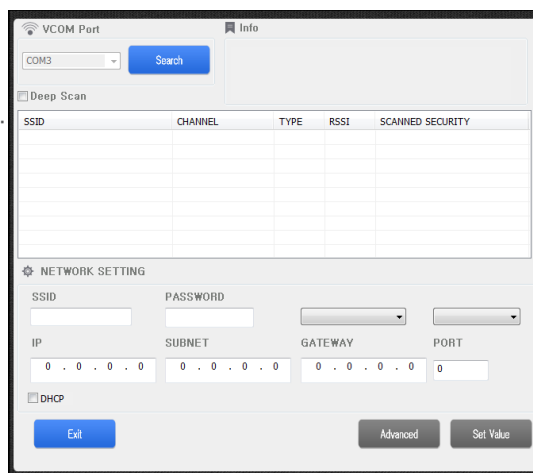
You can change a printer's Ethernet setting.



3.8. Wireless Network Setting Dialog

WLAN Setting Dialog

You can change a printer WLAN network setting for Infrastructure.

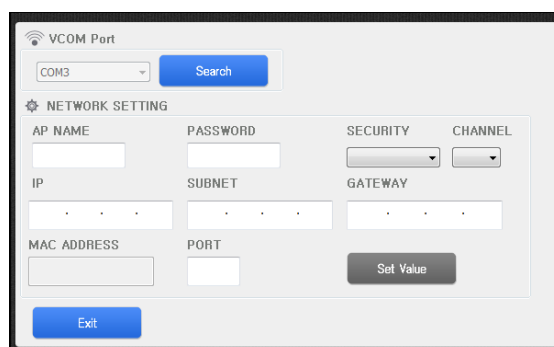


The WLAN Setting Dialog for Infrastructure mode includes a VCOM Port section with a dropdown menu set to 'COM3' and a 'Search' button. Below this is a 'Deep Scan' checkbox. A table with five columns (SSID, CHANNEL, TYPE, RSSI, SCANNED SECURITY) is shown, currently empty. The 'NETWORK SETTING' section contains fields for SSID, PASSWORD, IP (0.0.0.0), SUBNET (0.0.0.0), GATEWAY (0.0.0.0), and PORT (0). There is a 'DHCP' checkbox and buttons for 'Exit', 'Advanced', and 'Set Value'.

SSID	CHANNEL	TYPE	RSSI	SCANNED SECURITY

Limited AP Dialog

You can change a printer WLAN network setting for Limited AP.



The Limited AP Dialog includes a VCOM Port section with a dropdown menu set to 'COM3' and a 'Search' button. The 'NETWORK SETTING' section contains fields for AP NAME, PASSWORD, SECURITY, CHANNEL, IP, SUBNET, GATEWAY, MAC ADDRESS, and PORT. There is a 'Set Value' button and an 'Exit' button.

CHAPTER 4.

Description of each functions

4.1. LOGO SETUP

4.2. USER SETUP

4.2.1. Description of User Setup Options

4.3. FIRMWARE DOWNLOAD (USING UTILITY)

4.4. FIRMWARE DOWNLOAD (USING USB MEMORY STICK)

4.5. SAMPLE PRINT DIALOG

4.6. NETWORK SETTING DIALOG (ETHERNET INTERFACE)

4.6.1. Ethernet Network Dialog

4.6.2. Web Server

4.7. NETWORK SETTING DIALOG (WLAN INTERFACE)

4.7.1. WLAN Network Dialog

4.7.2. Glossary of Terms

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

4.7.4. Install a Virtual COM Driver (Windows 7, POSReady 7)

4.7.5. Infrastructure mode setting

4.7.6. Limited AP setting

4.7.7. WLAN Tips

4.7.8. WLAN factory reset

4 Description of each functions

4.1. Logo Setup

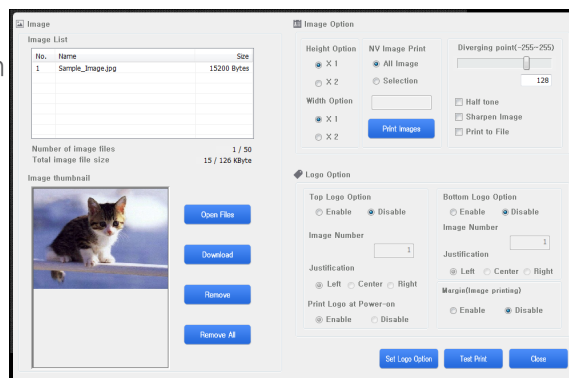
Logo Setup function can be used for image downloading to NV (Non-Volatile) memory of GIANT-100/150/PRO, GCUBE-100/102 or for image printing from it.

1. General feature

- 1) Maximum memory capacity: 126Kbyte
- 2) Total logo count : Maximum 50
- 3) Black/White diverging point
- 4) Image data format : Changeable to a file
- 5) Image editing functions

2. Logo registration sequence

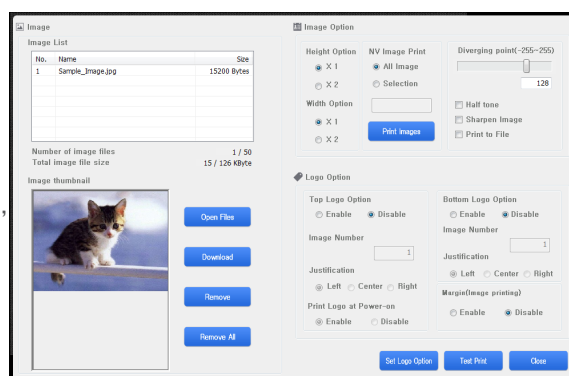
- Select the bitmap file stored in a printer.



4.1. Logo Setup

- At Preview, 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 Image : 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 50. 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 when print NV image by utility.

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

4.1. Logo Setup

- After Logo uploading, you can set logo options.

Logo Option :

Enable/Disable printing logo

Image Number :

Number of uploaded image

Justification :

Justification of logo

Print logo at power-on :

Printing top logo at power on

- Click and input options and press the Set Logo Option button. If setting process finishes successfully, the printer rebooted.
- Try to click the “Test Print” button and you will see the fantastic receipt with logo image.

Logo Option

Top Logo Option <input checked="" type="radio"/> Enable <input type="radio"/> Disable Image Number <input type="text" value="1"/> Justification <input type="radio"/> Left <input checked="" type="radio"/> Center <input type="radio"/> Right Print Logo at Power-on <input checked="" type="radio"/> Enable <input type="radio"/> Disable	Bottom Logo Option <input checked="" type="radio"/> Enable <input type="radio"/> Disable Image Number <input type="text" value="1"/> Justification <input type="radio"/> Left <input checked="" type="radio"/> Center <input type="radio"/> Right Margin(Image printing) <input type="radio"/> Enable <input checked="" type="radio"/> Disable
--	---

Set Logo Option Test Print Close



4.2. User setup

- About Buttons

[Test Print]

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

[Get Value]

It get values from printer.

[Set Value]

It sets values with displayed on the dialog or selected of the printer.

[Set Default]

Can reset to default values all of them.

[Save]

Save all values to file(*.USF).

[Load]

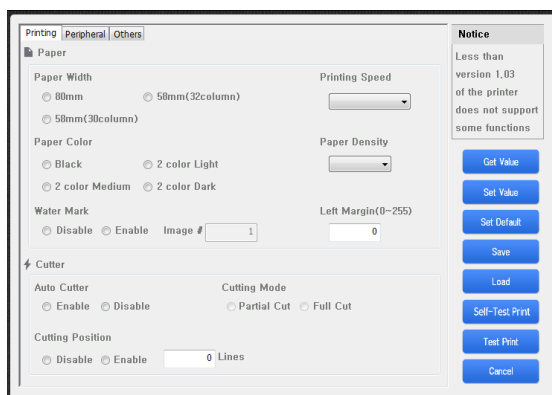
Load all values from file(*.USF).

[Self-Test Print]

Print 1st page of SELF-TEST.

[Cancel]

Quits this application and returns to Main Dialog.



4.2.1. Description of User Setup Options

- A. Paper Width & Max Column (Default : 80mm)

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.

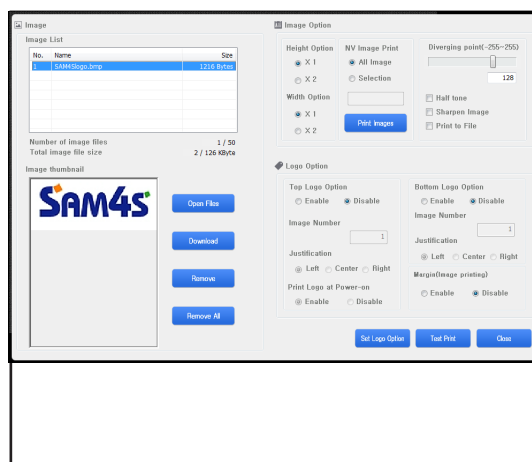
4.2. User setup

C. Water Mark Function (Default : Disable)

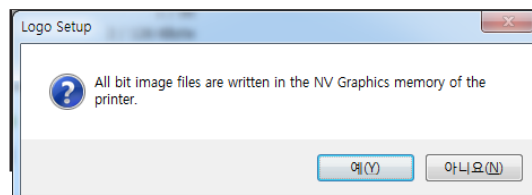
It is GIANT-100/PRO that prints background image on your receipt without any additional commands. You can use Watermark with Logo Downloader in GIANT Tool. If you want to print background image, prepare the bitmap image which will be background. And then follow steps as below.

1. Run Logo Setup Dialog and select the prepared bitmap image. And check the image number.

2. Click the “Download” 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 download is completed successfully.

6. Close Logo Setup Dialog and run User Setup from Main Dialog.

4.2. User setup

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.

The screenshot displays the printer's configuration interface with three tabs: 'Printing', 'Peripheral', and 'Others'. The 'Printing' tab is active, showing settings for Paper, Cutter, and others. The 'Paper' section includes options for Paper Width (80mm, 58mm(32column), 58mm(30column)), Paper Color (Black, 2 color Light, 2 color Medium, 2 color Dark), Printing Speed, Paper Density, and Left Margin (0~255). The 'Water Mark' section is highlighted with a red box, showing 'Disable' and 'Enable' radio buttons, with 'Enable' selected, and an 'Image #' input field set to '1'. The 'Cutter' section includes 'Auto Cutter' (Enable/Disable), 'Cutting Mode' (Partial Cut/Full Cut), and 'Cutting Position' (Disable/Enable) with a 'Lines' input field set to '0'. On the right, a 'Notice' box states: 'Less than version 1.03 of the printer does not support some functions'. Below the notice is a vertical stack of buttons: 'Get Value', 'Set Value' (highlighted with a red box), 'Set Default', 'Save', 'Load', 'Self-Test Print', 'Test Print', and 'Cancel'.

Printing Peripheral Others

Paper

Paper Width
☐ 80mm ☐ 58mm(32column)
☐ 58mm(30column)

Paper Color
☐ Black ☐ 2 color Light
☐ 2 color Medium ☐ 2 color Dark

Water Mark
☐ Disable ☒ Enable Image #

Printing Speed

Paper Density

Left Margin(0~255)

Cutter

Auto Cutter
☐ Enable ☐ Disable

Cutting Mode
☐ Partial Cut ☐ Full Cut

Cutting Position
☐ Disable ☐ Enable Lines

Notice
Less than version 1.03 of the printer does not support some functions

Get Value
Set Value
Set Default
Save
Load
Self-Test Print
Test Print
Cancel

4.2. User setup

8. Try to click the “Test Print” 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 : Sam4s Bell / 3 times)
Printer 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.

4.2. User setup

Sam4s Bell: Default sam4s bell

Melody 1 ~ 3: Three different melodies

Other Bell(DK1, DK2): Blend bell (Internal oscillation type)

Beep 1 ~ 3 : Short beep sound

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

If you want to fix the specified codepage as default, select one of codepages in the list and then click the “Set Value” button.

H. Max Print Speed (Default : 250 mm/sec)

If printer, especially machine is fast and data transfer-speed is low, that is, two of them have speed mismatched. This case may be cause of an intermittent printing. You can control print speed from this option for better printing, e.g. smooth printing.

I. 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 the printer, 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.

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

Check the drawer operation at print self-test mode.

K. Received Buffer Size (Default : 4Kbytes)

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

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

Stop bits used during serial communication can be changed.

M. Paper save mode (Default: OFF)

Set a Paper save mode. This mode saves paper.

N. Upside-Down Print (Default : Disable)

Change the direction of the print. Use this function when the printer is attached to a wall. If the WaterMark, Two Color, Top & bottom logo function is set, it can not be used.

4.2. User setup (GCUBE only)

N. Baudrate (Default : 115200bps)

Baudrate used during serial communication can be changed.

O. Handshaking (Default : H/W)

Handshaking used during serial communication can be changed.

P. Word Length (Default : 8bit)

Word Length used during serial communication can be changed.

Q. Parity Check (Default : No)

Parity Check used during serial communication can be changed.

R. Parity Select (Default : None)

Parity Select used during serial communication can be changed.

S. Download Mode (Default : I/F)

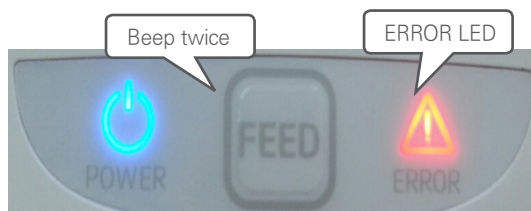
Select whether to use USB memory for firmware downloads.



4.3. Firmware download (Using Utility)

Firmware update sequences are below.

1. Remember folder directory with downloaded firmware file.
2. Turn the printer off.
3. Check the cable connection between printer and your PC.



* If a printer have dip Switches, please turn off all dip switches.

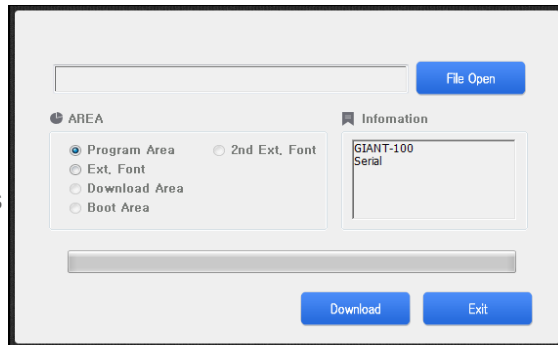
* When printer interface is WLAN, please connect USB cable for F/W update.

4. Open the printer cover.
 5. Turn on printer with FEED button; hold the feed button with 2times buzzer.
 6. Now, printer is ready to update firmware.
 7. Run the “Firmware Update Dialog” on Utility and open the downloaded firmware file.
 8. And then, select the download area which you want to update.
 - Firmware Upgrade : Select the “Program area”
 - Font Upgrade : Select the "Ext.Font"
- * If you want to chage the font after upgrading the firmware, please start again with Step 1.
9. Select the connected port on your PC. (Already selected on utility)
 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 (It should be fasten – Normal).

12. Please try to operate 'SELF TEST' and check the updated firmware version.



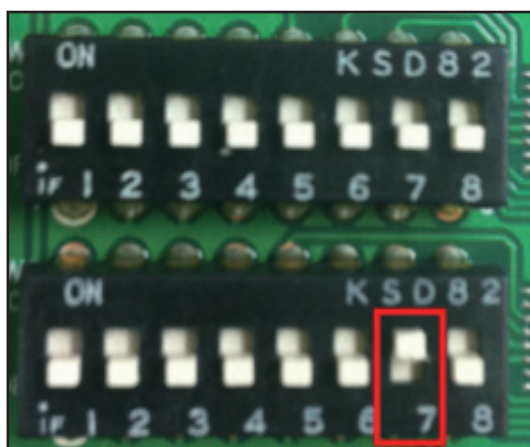
4.4. Firmware download (Using USB memory stick)

Firmware update sequences are below.

1. Format a USB memory stick to FAT file system.
2. Copy the firmware file to USB memory stick.(No folder)
3. Turn off a printer. And then connect a USB memory stick to printer USB port.

4. Printer with dip switch:

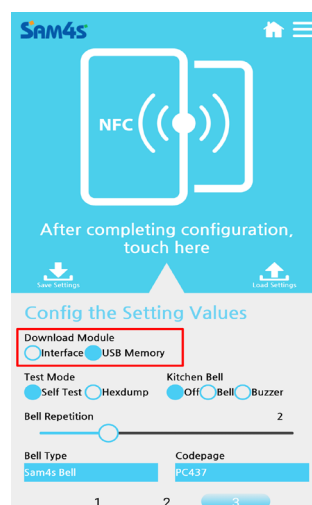
Turn on the switch 7th of dip switch 2nd. Open the printer cover. Turn on a printer with holding the FEED Button. After 2 seconds, Release the FEED button.



Printer without dip switch:

Setting the printer like right picture by APP. And operate as above

5. If firmware update is done, printer will notify update completion with 5 times buzzer. (in surely case that download is succeeded). And then turn off a printer.



6. Do self-test for confirming the updated firmware version.

4.5. Sample Print Dialog

Here you can print some samples.

1. Receipt samples.
2. Image samples.
3. Barcode samples.

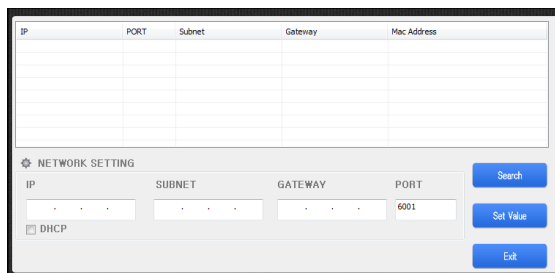


4.6. Network Setting Dialog (Ethernet Interface)

4.6.1. Ethernet Network Setting Dialog

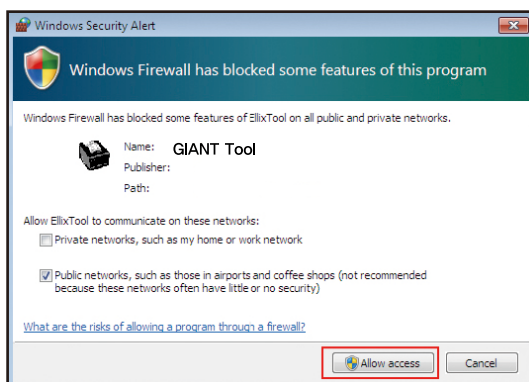
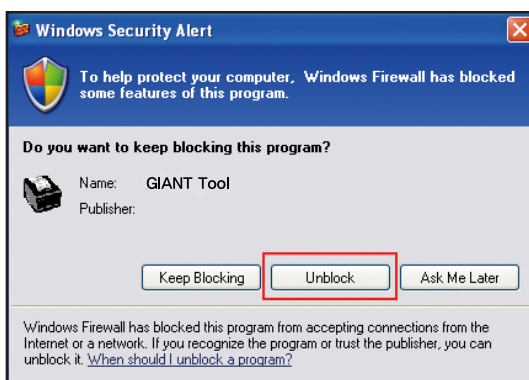
Here you can change the network settings for the printer. If you would like to change the network settings, please follow these steps.

1. The printer is connected to the router. PC must be connected to the same router.
2. Turn on printer normally.
3. Run the “Ethernet Setting Dialog.” Press the “Search Printer” button.

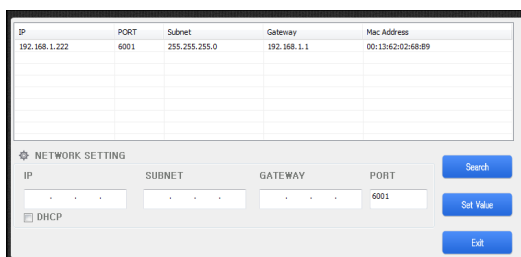


4.6. Network Setting Dialog (Ethernet Interface)

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.



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



4.6. Network Setting Dialog (Ethernet Interface)

6. Choose one to change the IP.
Enter the network settings you want (as shown). Finally, press the “Set Value” button.

IP	PORT	Subnet	Gateway	Mac Address
192.168.1.222	6001	255.255.255.0	192.168.1.1	00:13:62:02:68:89

NETWORK SETTING

IP

SUBNET

GATEWAY

PORT

192 . 168 . 1 . 250

255 . 255 . 255 . 0

192 . 168 . 1 . 1

6001

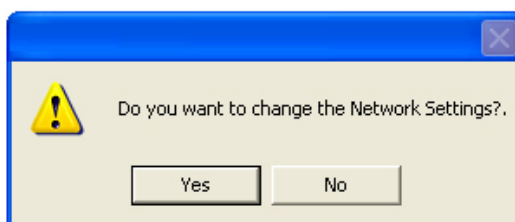
☐ DHCP

Search

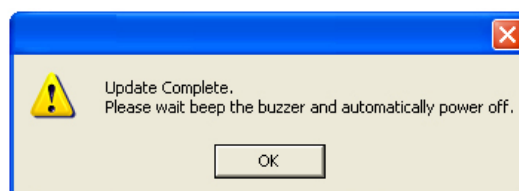
Set Value

Exit

7. You can see the “Do you want to change the Network Setting?” message. Press the “Yes” button.



8. Printer will notify update completion with buzzer, and then printer will be restart.



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

4.6. Network Setting Dialog (Ethernet Interface)

4.6.2. Web Server

Only firmware version 1.20 or later Ethernet interface supports the Web server. Function provided by the Web server are as follows. (Function that supports every version of firmware, may be different.)

〈Function〉

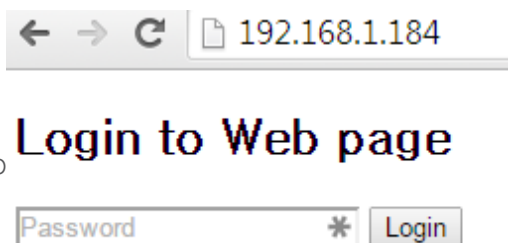
- Check the basic information(including IP network, printer status, etc).
- Printer Network Setting function.
- User Setup function.(including Kitchen bell, code page, etc).
- Change Web server password.
- Printer rebooting

〈Notice〉

- Web server, has been optimized to Chrome browser. In addition, in accordance with the state of the other browsers and network, screen display may be different.
- For reliable management, as far as possible, please be used in situations where you do not have printing.

[Login Screen]

In the address bar of your web browser: When “http // printer’s ip” to enter, you will be able to connect to the printer. Master password is 0821.



4.6. Network Setting Dialog (Ethernet Interface)

[General Information Screen]

Network information of the printer, the version of the firmware, you will be able to check the status.

General Information

Network Information

Printer IP	192.168.000.254
Subnet Mask	255.255.255.000
Gateway	192.168.000.001
Port	6001
MAC Address	00.13.62.00.11.12

Printer Information

Printer Version	STD1.21
-----------------	---------

Check Status

Printer Status	IDLE
----------------	------

Refresh

[TCP/IP Setting Screen]

You can change the network settings, such as the printer of IP. The changed setting is not apply till when you restart.

TCP/IP Setting

Printer IP	192.168.000.254
Subnet Mask	255.255.255.000
Gateway	192.168.000.001
Port	6001

Network Config

[User Setup Screen]

You can change the basic code page, Kitchen Bell settings and receive buffer of the printer.

After the setting, the printer will be restarted.

User Setup

Kitchen Bell

Kitchen Bell Type	<input checked="" type="radio"/> Bell	<input type="radio"/> Melody 1	<input type="radio"/> Melody 2	<input type="radio"/> Melody 3
Kitchen Bell Times	3 times			
Kitchen Bell Output	<input type="radio"/> Board Buzzer	<input checked="" type="radio"/> Internal Bell		

Communication

Received Buffer Size	<input checked="" type="radio"/> 4 Kbyte	<input type="radio"/> 20 Kbyte	<input type="radio"/> 32 Kbyte	<input type="radio"/> 64 Kbyte
----------------------	--	--------------------------------	--------------------------------	--------------------------------

Printing

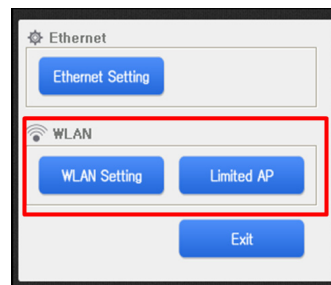
Default Code Page	PC437 (USA, Std Europe)
-------------------	-------------------------

Set Values

4.7. Network Setting Dialog (WLAN Interface)

4.7.1. WLAN Network Dialog

You can select the "Infrastructure Dialog" and "Limited AP Dialog". It can change the network settings for the printer.



4.7.2. Glossary of Terms

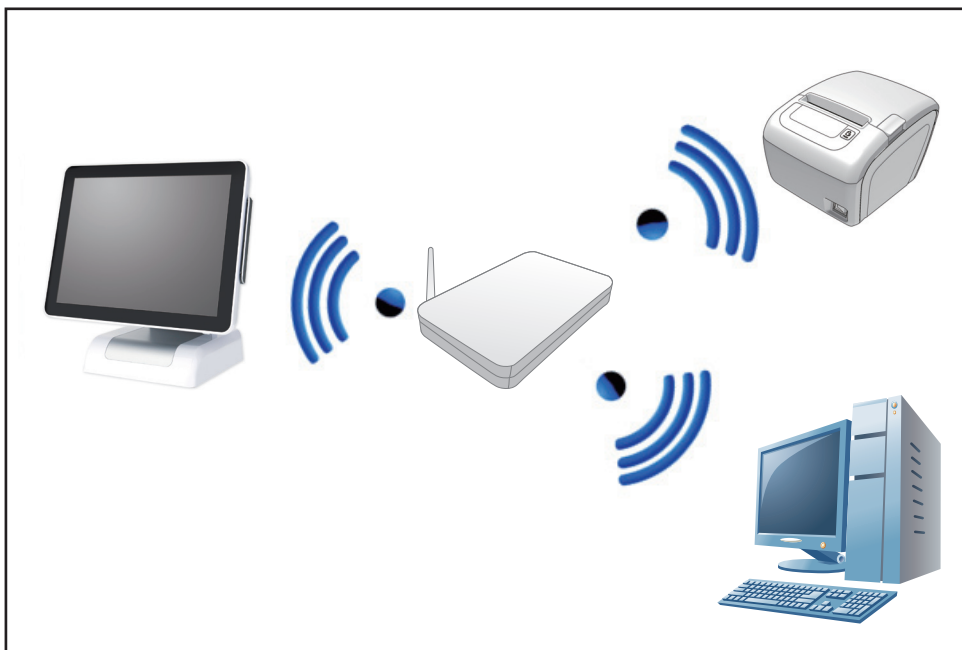
- AP (Access Point)

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) nearly 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

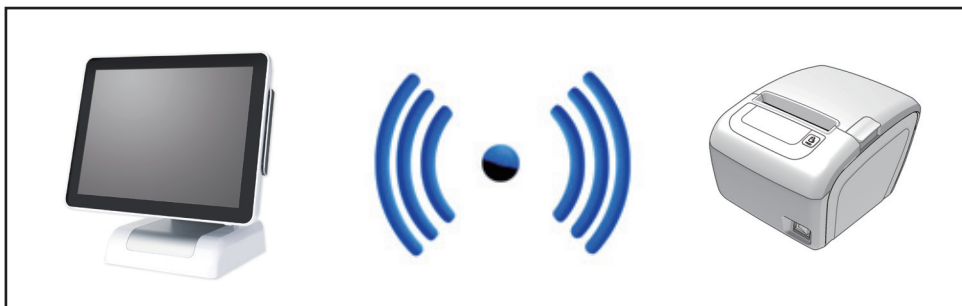
If several terminals (PC, PCPOS etc.) or clients connect to one AP and they are composed to the same network, this is called 'infrastructure'. In other words, infrastructure is a structure that WLAN interface connects with PC or terminals through AP.

4.7. Network Setting Dialog (WLAN Interface)



- Limited AP

Limited AP, which 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.

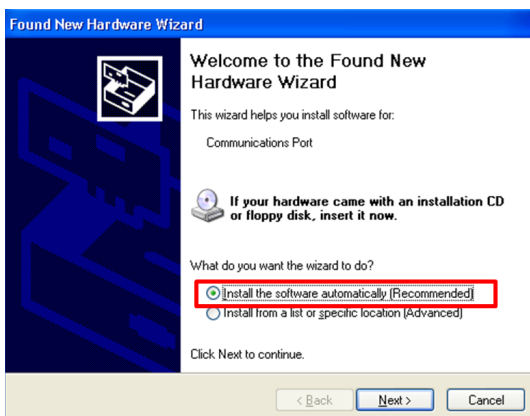


4.7. Network Setting Dialog (WLAN Interface)

4.7.3. 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 Printer Driver for installing virtual COM driver automatically.
Please refer to the manual of 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)”



4.7. Network Setting Dialog (WLAN Interface)

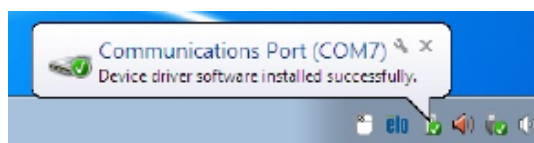
- When the installation is completed, run the “Device Manager” for checking a New Virtual COM port number.



4.7.4. Install a Virtual COM Driver (Windows 7, POSReady 7)

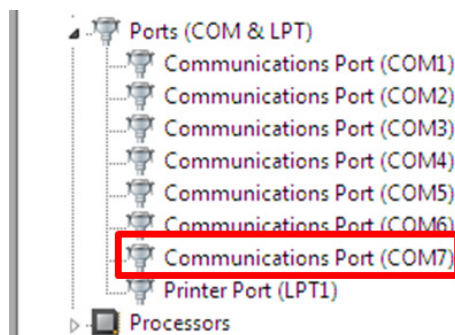
Virtual COM port driver must be installed when WLAN Interface to set up. During installation, Please proceed as follows, depending.

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



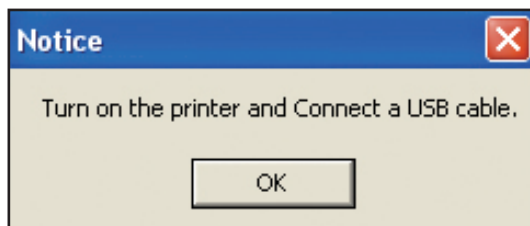
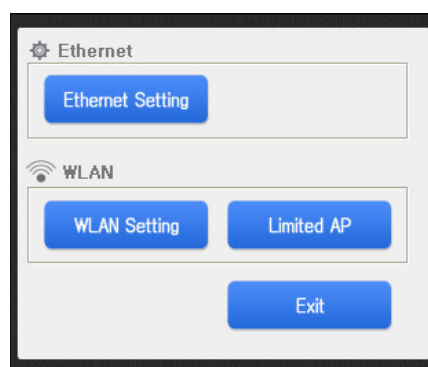
4.7. Network Setting Dialog (WLAN Interface)

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



4.7.5. Infrastructure mode setting

Click “WLAN Setting” Button in dialog. When message box is appeared, turn a printer on and then connect USB cable PC and printer.



4.7. Network Setting Dialog (WLAN Interface)

Click “**Search**” button to search AP list.

When message box is appeared, click “OK” button.

The screenshot shows the 'VCOM Port' window with the 'Info' tab selected. The 'Deep Scan' checkbox is unchecked. Below it is a table with columns: SSID, CHANNEL, TYPE, RSSI, and SECURITY. The table is empty. Below the table is the 'NETWORK SETTING' section with fields for SSID, PASSWORD, SECURITY (dropdown), WEP Encryption Key (dropdown), IP (0.0.0.0), SUBNET (0.0.0.0), GATEWAY (0.0.0.0), and PORT (0). There are 'Exit' and 'Set Value' buttons at the bottom.

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

The screenshot shows the 'VCOM Port' window with the 'Info' tab selected. The 'Deep Scan' checkbox is unchecked. The table below it now contains data for several APs. The 'NETWORK SETTING' section is also updated with the selected AP's settings.

SSID	CHANNEL	TYPE	RSSI	SECURITY
song	1	Infra	OOO	Open
BCNG	1	Infra	OO	WEP
TYWL-WIFI	5	Infra	OO	WPA2
Evan 2.4G	2	Infra	OO	WPA2
106F3F61AA38-1	1	Infra	OO	Open
Tabby-Demo	1	Infra	OO	Unknown
81@CF	5	Infra	OO	WPA2
SAM4S	6	Infra	OO	WEP
Tabby-Demo	7	Infra	OO	WPA2-Mixed
senrity	5	Infra	OO	Open

The 'NETWORK SETTING' section shows the following values: SSID: song, PASSWORD: (empty), SECURITY: OPEN, WEP Encryption Key: (empty), IP: 192.168.0.254, SUBNET: 255.255.255.0, GATEWAY: 192.168.0.1, PORT: 6001. There are 'Exit' and 'Set Value' buttons at the bottom.

4.7. Network Setting Dialog (WLAN Interface)

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

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

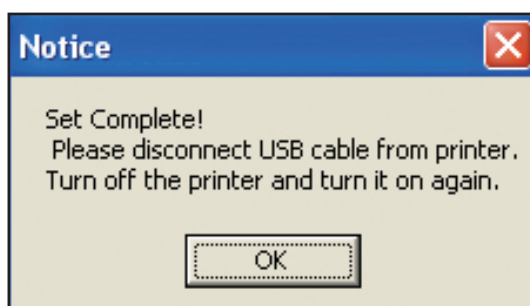
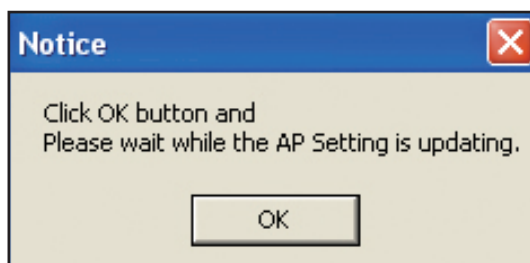
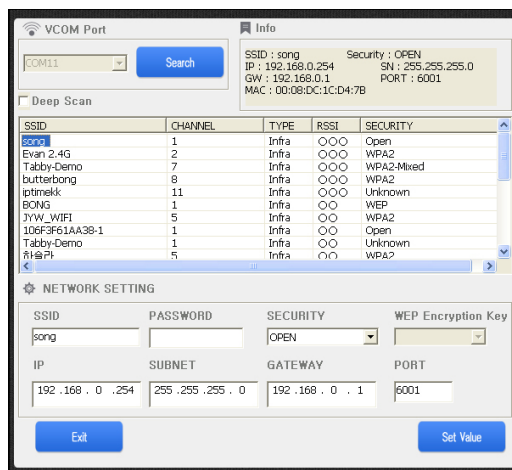
Enter the Network setting values (IP, SUBNET, and GATEWAY) that are assigned from the **network administrator**. And then click “SET Value” button.

Click the “OK” button; please wait for the completion of setting.

When the setting is completed, this message appears as shown in the figure.

Then disconnect the USB cable from the printer, the printer off and turn it on.

Note: PC and the printer must be on the same network.

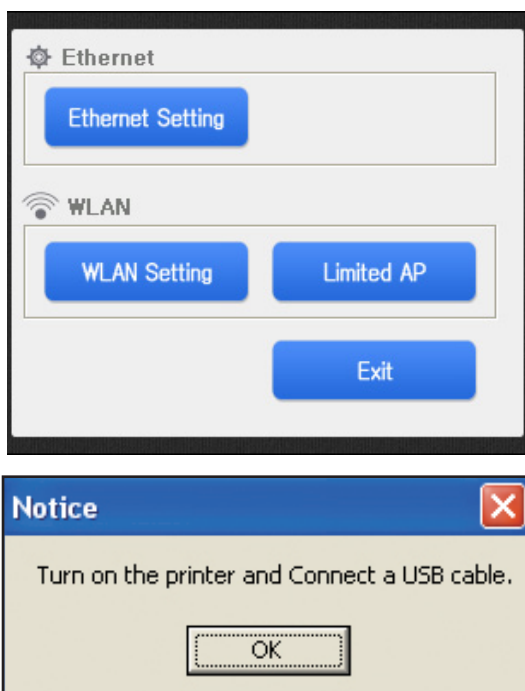


4.7. Network Setting Dialog (WLAN Interface)

4.7.6. Limited AP setting

Click “**Limited AP**” Button to in dialog.

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



4.7. Network Setting Dialog (WLAN Interface)

Click **“Search”** 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 10 number digit 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,only)

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

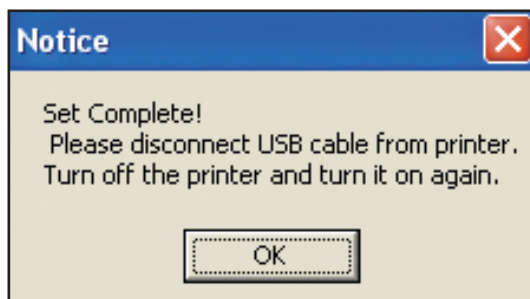
Ex) AP NAME : TEST_AP
PASSWORD : 1234567890
SECURITY : WPA2-AES
CHANNEL : 7
IP : 192.168.0.254
SUBNET : 255.255.255.0
GATEWAY : 192.168.0.1

Click the **“Set Value”** button; please wait for the completion of setting.

4.7. Network Setting Dialog (WLAN Interface)

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.



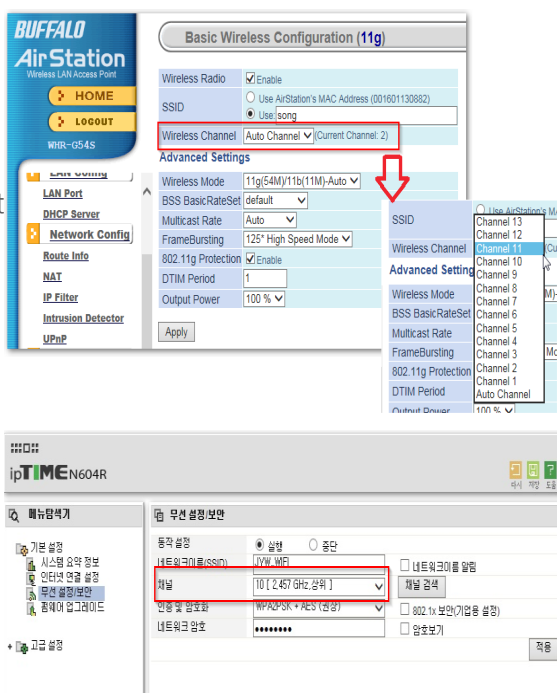
4.7. Network Setting Dialog (WLAN Interface)

4.7.7. WLAN Tips

The following content is the WLAN tips. Please reference.

Q : Printer reaction is too slow, or ping time value is too large.

A : Please try to move closer the physical distance to the WLAN interface and AP router. If there is no improvement, Please try to change the current channel of the wireless LAN channel (Wireless Channel) to another channel in the router settings. The following is an example of the router settings.



Q : WLAN settings are not saved in Infrastructure mode. The self-test sheet is not display before saved network settings.

A : Is encryption method of router that you are trying to connect is WEP? WEP is an older encryption scheme is vulnerable to security. Also, the router operating in abnormal mixed mode, there is a possibility that WLAN configuration is not performed. The recommended encryption method is WPA system. Even as it's inconvenient, please change the router settings to WPA for security.

4.7. Network Setting Dialog (WLAN Interface)

Q : My AP is not detected in Infrastructure mode.

A : Please try to move close to the distance of the AP and the printer. Also, please make sure that radio frequency band of the AP is 2.4GHz. WLAN interface, does not support the AP frequency of 5GHz.

4.7.8. WLAN factory reset

To initialize the WLAN interface, please proceed as follows.

1. Turn on the printer. And, wait for 10 seconds.
2. Press 3 times per second the RESET button on the back of the printer.



3. Then, LINK LED will blink 3 times.
4. Turn off the printer

GIANT & GCUBE Tool

User Guide – Ver 1.09

Version	Date
V1.00	14. 06. 14
V1.01	14. 09. 18
V1.02	14. 10. 02
V1.03	14. 12. 22
V1.04	15. 08. 23
V1.05	17. 04. 25
V1.06	19. 01. 18
V1.07	19. 02. 19
V1.08	19. 06. 03
V1.09	19. 06. 21