

# **WLAN Device Setting Guide**

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## Precautions

- This program assumes serial port connection or USB connection.
- Serial port connection printer
  - If user computer has only USB port, USB-Serial convert cable is required. Installing dedicated driver could be needed with the type of USB-Serial converter. USB-Serial converter cable is not included in the standard accessory set.
  - When printer communicates with setting program, the baud rate of the setting program should be same as the one of the printer. If the baud rate is unclear, it can be checked on the self-test. To print self-test, turn on the power of the printer while holding down <FEED> button
- USB connection printer
  - Separate drivers or software are not required to be installed, and printer device is automatically detected after connecting the printer to PC with USB cable.
  - No need to set baud rate.
- VCP USB connection printer
  - Some printer which has USB port may need a VCP driver. It uses USB port and cable but works internally same as serial connection.  
If a VCP driver should be installed, refer to "VCP Driver Installation Guide".

# 1. WLAN module checking

Run self-test and see the contents for WLAN information.

If below contents are printed, you should use WSwLAN\_Manager v5.0.exe or above version.

```
--- WLAN Info ---
SOFT-AP mode
SSID: xxx
Printer's MAC address: XX-XX-XX-XX-XX-XX
Server IP: nnn.nnn.nnn.nnn
Local Port: nnn
...
```

Or

```
--- WLAN Info ---
IP Address Type: XXX
SSID: xxx
MAC Address: XX-XX-XX-XX-XX-XX
IP Address: nnn.nnn.nnn.nnn
Subnet Mask: nnn.nnn.nnn.nnn
Gateway IP: nnn.nnn.nnn.nnn
DNS Server: nnn.nnn.nnn.nnn
Channel: nn
...
```

If below contents are printed, you should use WSwLAN\_Manager v4.x.exe.

```
--- WLAN Info ---
MAC Address: XX-XX-XX-XX-XX-XX
IP Address: nnn.nnn.nnn.nnn
Subnet Mask: nnn.nnn.nnn.nnn
Gateway IP: nnn.nnn.nnn.nnn
DNS Server: nnn.nnn.nnn.nnn
DHCP: ON/OFF
Auto DNS Server: ON/OFF
OP Mode: Ad hoc/Infrastructure
...
```

## 2. Using WLAN Module Setting Tool

### A. Version 5.0 or above

- 1) Connect the printer to the PC with communication cable after turning on the printer.
- 2) Press <Open> button, after setting the communication mode.

WSwLAN\_Manager\_Utility Ver5.7

**Communication Setting**

☒ Serial    Port: COM1    Baud rate: 57600    Data bit: 8    Parity: None    Stop bit: 1  
☐ USB

**WLAN Information**

Printer Status:   
 Version:   
 MAC Address:   
 State Msg:

**Basic Setting**

WLAN: Soft AP mode    SSID:   
 Port: 1470    Region: US:United States of America

**Station Mode**

☒ DHCP  
 IP: 0 . 0 . 0 . 0  
 NetMask: 0 . 0 . 0 . 0  
 Gateway: 0 . 0 . 0 . 0  
 DNS: 0 . 0 . 0 . 0

**Soft AP Mode**

IP Address : 192.168.xx.1 (fixed)  
☐ IP Address: 192 . 168 . 10 . 1  
☐ mDNS  
 Host Name:

**Security Setting**

Security: ☒ None    ☐ WEP (Open/Shared)    ☐ WPA-PSK (TKIP)    ☐ WPA2-PSK (AES)    ☐ WPA:WPA2-PSK (TKIP/AES)

WEP Type: WEP-64bits    Data Type: ASCII  
 Key:

ASCII : WEP 64bit : 5bytes(fixed) / WEP 128bit : 13bytes(fixed) / WPA-PSK, WPA2-PSK : 8 ~ 63 byteses

3) If the connection is successful, press <Read WLAN Info> button

The screenshot shows the WSwLAN\_Manager\_Utility Ver5.7 window. The 'WLAN Information' section is highlighted with a green box, and the 'Read WLAN Info' button is highlighted with a red box. The 'Communication Setting' section shows 'Serial' selected with 'COM1' port, '57600' baud rate, '8' data bits, 'None' parity, and '1' stop bit. The 'Basic Setting' section shows 'WLAN' set to 'Soft AP mode', 'Port' set to '1470', and 'Region' set to 'US:United States of America'. The 'Station Mode' section shows 'DHCP' selected with IP, NetMask, Gateway, and DNS all set to '0 . 0 . 0 . 0'. The 'Soft AP Mode' section shows 'IP Address' set to '192 . 168 . 10 . 1'. The 'Security Setting' section shows 'Security' set to 'None', 'WEP Type' set to 'WEP-64bits', and 'Data Type' set to 'ASCII'.

Communication Setting	
<input checked="" type="radio"/> Serial	Port: COM1 Baud rate: 57600 Data bit: 8 Parity: None Stop bit: 1
<input type="radio"/> USB	

WLAN Information	
Printer Status	Success
Version	G0621A12
MAC Address	AC-3F-A4-38-3C-A0
State Msg	350

Basic Setting	
WLAN: Soft AP mode	SSID:
Port: 1470	Region: US:United States of America

Station Mode	
<input checked="" type="checkbox"/> DHCP	
IP	0 . 0 . 0 . 0
NetMask	0 . 0 . 0 . 0
Gateway	0 . 0 . 0 . 0
DNS	0 . 0 . 0 . 0

Soft AP Mode	
	IP Address : 192.168.xx.1 (fixed)
<input type="checkbox"/> IP Address	192 . 168 . 10 . 1
<input type="checkbox"/> mDNS	
Host Name	HostName

Security Setting	
Security	<input checked="" type="radio"/> None <input type="radio"/> WEP (Open/Shared) <input type="radio"/> WPA-PSK (TKIP) <input type="radio"/> WPA2-PSK (AES) <input type="radio"/> WPA WPA2-PSK (TKIP/AES)
WEP Type	WEP-64bits Data Type ASCII
Key	

ASCII : WEP 64bit : 5bytes(fixed) / WEP 128bit : 13bytes(fixed) / WPA-PSK, WPA2-PSK : 8 ~ 63 byteses

- 4) Press <Save WLAN Info> button, after setting each value in WLAN information table.

WSwLAN\_Manager\_Utility Ver5.7

**Communication Setting**

☒ Serial    Port: COM1    Baud rate: 57600    Data bit: 8    Parity: None    Stop bit: 1

☐ USB

**WLAN Information**

Printer Status	Read Success	OPEN	CLOSE
Version	G0621A12	Read WLAN Info	
MAC Address	AC-3F-A4-38-3C-A0	<b>Save WLAN Info</b>	
State Msg		EXIT	

**Basic Setting**

WLAN: Station mode    SSID: woosim

Port: 1470    Region: KR:Republic of Korea

**Station Mode**

☒ DHCP

IP: 0 . 0 . 0 . 0

NetMask: 0 . 0 . 0 . 0

Gateway: 0 . 0 . 0 . 0

DNS: 0 . 0 . 0 . 0

**Soft AP Mode**

IP Address : 192.168.xx.1 (fixed)

☐ IP Address: 192 . 168 . 10 . 1

☐ mDNS

Host Name: HostName

**Security Setting**

Security: ☒ None    ☐ WEP (Open/Shared)    ☐ WPA-PSK (TKIP)    ☐ WPA2-PSK (AES)    ☐ WPA WPA2-PSK (TKIP/AES)

WEP Type: WEP-64bits    Data Type: ASCII

Key:

ASCII : WEP 64bit : 5bytes(fixed) / WEP 128bit : 13bytes(fixed) / WPA-PSK, WPA2-PSK : 8 ~ 63 byteses

- Basic Setting

WLAN	<p>Network type to connect</p> <p>Station mode: connect device through Access Point</p> <p>Soft AP mode: connect device as Access Point</p> <p>Soft AP is used to make a client antenna works as either a Access Point, or a client.</p>
Port	Port number of waiting. Default value is 1470
SSID	<p>Service set ID to connect (maximum 32 bytes)</p> <p>Default value in Station mode : woosim</p> <p>Default value in Soft AP mode : woosimap</p>
Region	Set WLAN country code

- Station Mode

DHCP	Check if user wants to receive IP address of printer via DHCP
IP Address	IP address of printer
NetMask	Subnet Mask
Gateway	Gateway's IP address
DNS	Domain name system

- Soft AP Mode

Server IP	<p>Set the server IP. (Default : 192.168.10.1 )</p> <p>192.168.<b>xx</b>.1: IP address can be changed only the third item (xx marked part).</p>
mDNS	<p>multicast Domain Name System</p> <p>Check if user wants to assign host name for the device.</p>
Host Name	User assigned unique device name in the connected network (maximum 32 bytes)

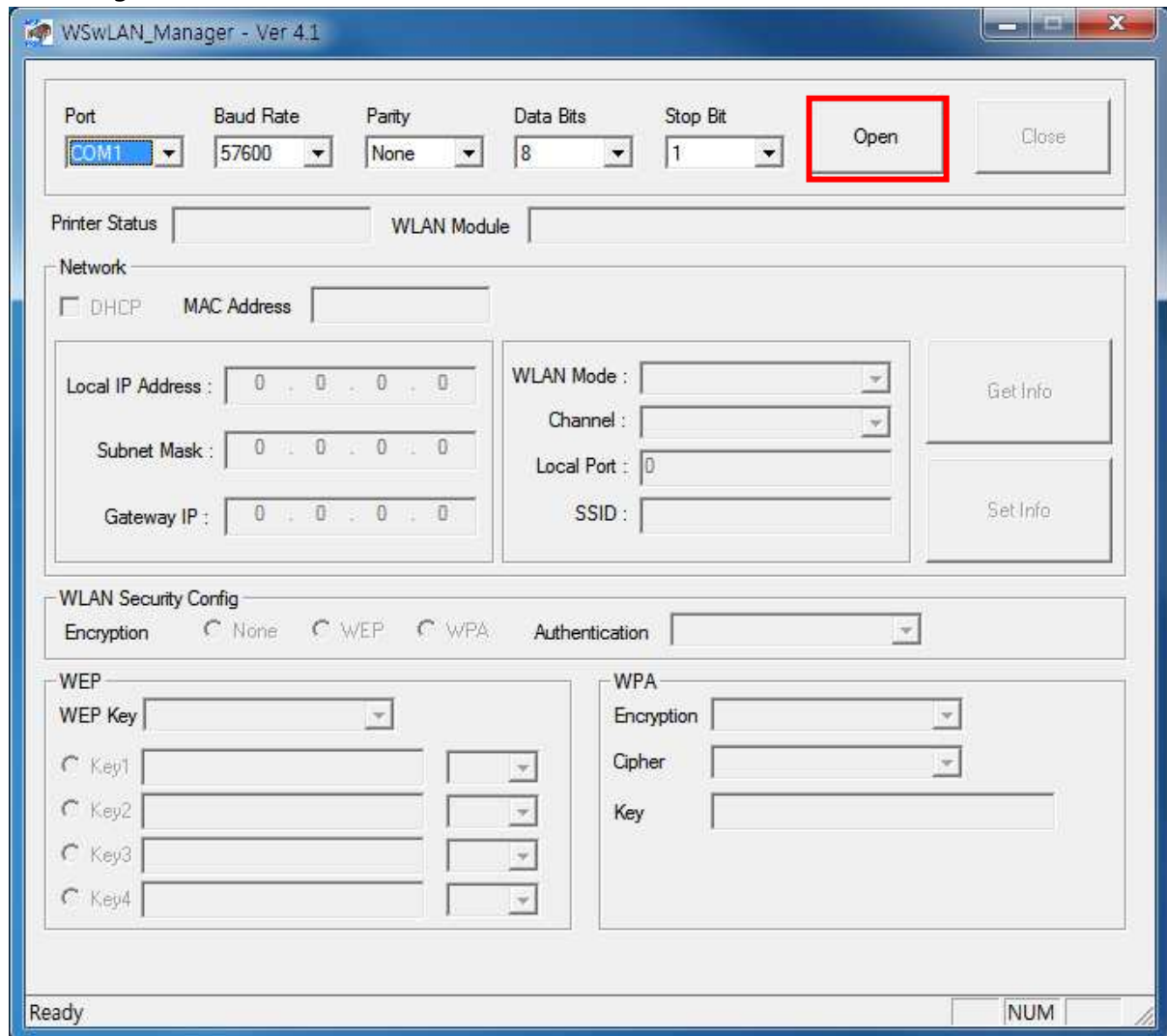
- Security Setting

Security	Encryption type (None / WEP / WPA-PSK / WPA2-PSK / WSP WSP2-PSK)
WEP Type	Select WEP-64bits or WEP-128bits
Key	<p>WEP-64bit: 5 bytes fixed length key should be entered.</p> <p>WEP-128bit: 13 bytes fixed length key should be entered.</p> <p>WPA: 8 ~ 63 bytes variable length key can be entered.</p>



## B. Version 4.x

- 1) Turn on the power of a printer and connect a cable between a printer and a computer.
- 2) Execute the program and click <Open> button after setting serial communication configuration.



- 3) Click <Get Info> button

WSWLAN\_Manager - Ver 4.1

Port: COM1, Baud Rate: 57600, Parity: None, Data Bits: 8, Stop Bit: 1, Open, Close

Printer Status: COM1 is opened, WLAN Module: [Empty]

Network

☐ DHCP, MAC Address: [Empty]

Local IP Address: 0 . 0 . 0 . 0, Subnet Mask: 0 . 0 . 0 . 0, Gateway IP: 0 . 0 . 0 . 0

WLAN Mode: [Empty], Channel: [Empty], Local Port: 0, SSID: [Empty]

Get Info (highlighted in red), Set Info

WLAN Security Config

Encryption: ☐ None, ☐ WEP, ☐ WPA, Authentication: [Empty]

WEP

WEP Key: [Empty]

Key1, Key2, Key3, Key4 (each with a dropdown menu)

WPA

Encryption: [Empty], Cipher: [Empty], Key: [Empty]

Ready, NUM

- 4) Change setting values and click <Set Info> button

WSWLAN\_Manager - Ver 4.1

Port: COM1, Baud Rate: 57600, Parity: None, Data Bits: 8, Stop Bit: 1, Open, Close

Printer Status: COM1 is opened, WLAN Module: ProductID 21, Ver1.1h, 00000000, MAC00:30:F9:09:43:2C, 0000

Network

☒ DHCP, MAC Address: 00:30:F9:09:43:2C

Local IP Address: 10 . 1 . 0 . 1, Subnet Mask: 0 . 0 . 0 . 0, Gateway IP: 0 . 0 . 0 . 0

WLAN Mode: Infrastrucure, Channel: 1, Local Port: 1470, SSID: Woosim

Get Info, Set Info (highlighted in red)

WLAN Security Config

Encryption: ☒ None, ☐ WEP, ☐ WPA, Authentication: None

WEP

WEP Key: WEP-64bits

Key1: 0 36, Key2: 46 20, Key3: 30 3, Key4: 9 20 (each with an ASCII dropdown menu)

WPA

Encryption: WPA PSK, Cipher: TKIP, Key: 1234567890123456789012345678901

Ready, NUM

- WLAN network items

Local IP Address	IP address of printer
DHCP	Check if user want to receive IP address of printer via DHCP
WLAN Mode	Network type to connect Infrastructure: connect through AP Ad-Hoc: connect without AP
Channel	Channel number for ad-hoc (The channel number will be randomly in some case)
Local Port	Port number of waiting. Default value is 1470
SSID	Service set ID to connect (maximum 32 bytes) Default value: woosim

- WLAN security items

Encryption	Encryption type (None / WEP / WPA)
Authentication	Open System: No authentication on connecting AP Shared key: Authentication by key on connecting AP
WEP Key	WEP-64bit: Maximum key length is 5 bytes, and store up to 4 keys WEP-128bit: Maximum key length is 13 bytes, and store up to 4 keys
WPA Encryption	WPA PSK / WPA2 PSK
WPA Cipher	None / TKIP / AES
WPA Key	Alphanumeric 8 ~ 31 bytes