QPrint Thermal 4 Tool

QUORiON

Contents

CHAPTER 1.
INTRODUCTION

CHAPTER 1

INTRODUCTION

It is integrated software for POS Printer QPrint Thermal 4 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
- QPrint Thermal 4

FUNCTIONS
- NV Logo download
- User Setup
- Firmware download
- Net Configuration

INTERFACES
- RS-232c (Serial)
- IEEE1284 (Parallel)
- USB (Virtual COM , USB)
- Ethernet (TCP/IP)
- WLAN (TCP/IP)

CHAPTER 3.
User Interface

CHAPTER 3

User Interface

3.1. Main Dialog

Main Dialog

It a Main Page of QPrint Thermal 4 Tool.

- Port Setup : Choose Device & Interface
- Logo Setup : Logo Image Downloading & Image printing
- User Setup : Changing variable custom settings
- FW Download : Update printer's firmware.
- Net Config : Changing printer's network setting.
- Exit

3.2. Port Setup Dialog

Port Setup Dialog

You can select the device & Interface

<DEVICE LIST>

  - QPrint Thermal 4

<INTERFACE LIST>

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

3.3. Logo Setup Dialog

Logo Setup Dialog

You can download images and printing images.

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3.4. User Setup Dialog

User Setup Dialog
You can change variable custom settings only for Printer.
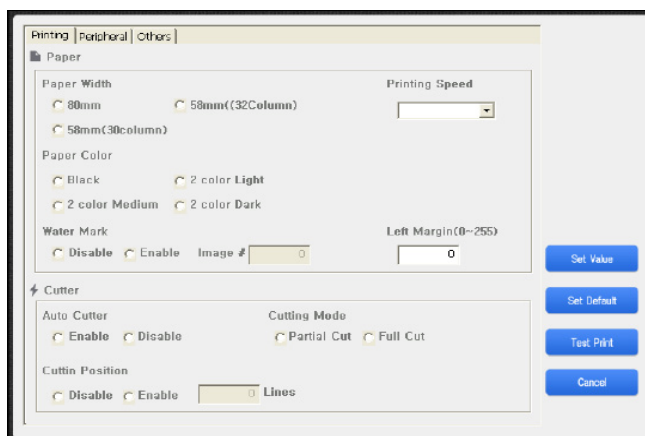
3.5. Firmware Download Dialog

Firmware Download Dialog
You can update printer's firmware.

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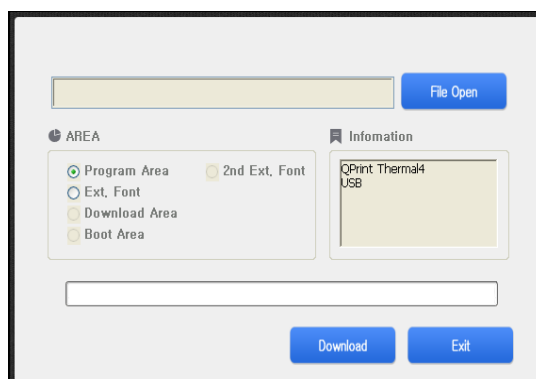
3.6. Network Setting Dialog

Net Config Dialog

You can change printer's
network setting
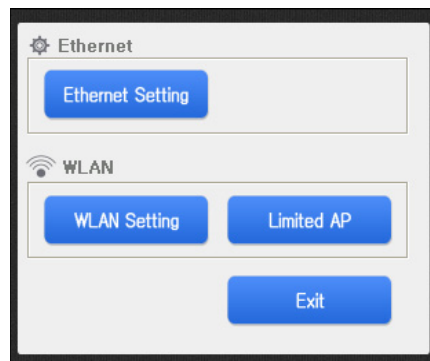
Ethernet Setting Dialog

You can change a printer's
Ethernet setting.

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3.7. Network Setting Dialog

WLAN Setting Dialog

You can change a printer
WLAN network setting for
Infrastructure.

Limited AP Dialog

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

CHAPTER 4.
Description of each functions

4 Description of each functions

4.1. Logo Setup

Logo Setup function can be used for image downloading to NV (Non-Volatile) memory of QPrint Thermal 4 or for image printing from it.

1. General feature
   1) Maximum memory capacity: 128Kbyte
   2) Total logo count : Maximum 255

2. Logo registration sequence

• Select the bitmap file stored in a printer.
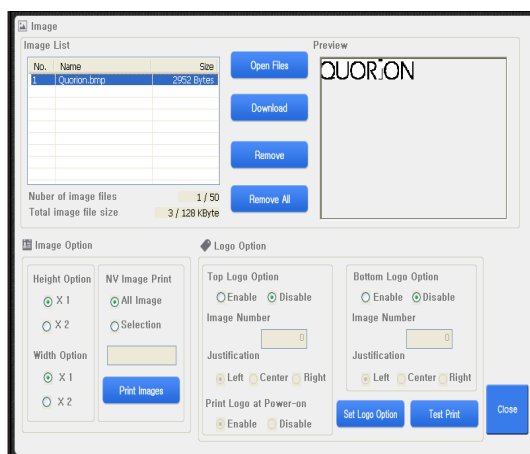
4.1. Logo Setup

- 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.
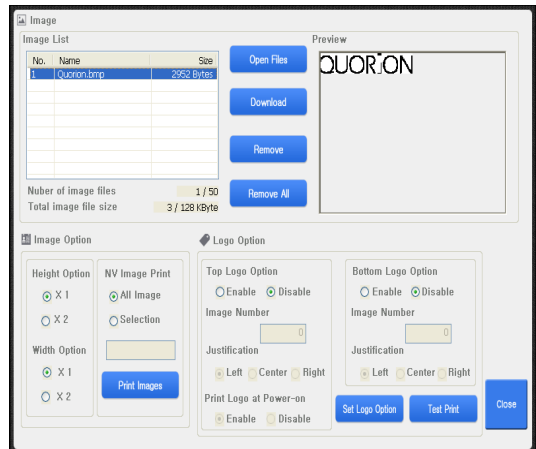
- You can specify the Printing Range for the logos uploaded in the printer's NV graphics memory area. Selectable choices are below :
  All : Prints all logo images saved in the printer connected currently.
  Selection : Prints the selected logo image saved in the printer connected currently. Selection 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.

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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.

[Set Default]

Can reset to default values
all of them.

[Set Value]

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

[Cancel]

Quits this application and returns to Main Dialog.
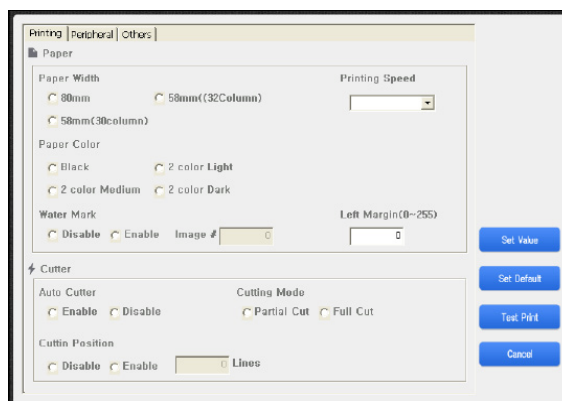
4.2.1. Description of User Setup Options

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.

C. Water Mark Function (Default : Disable)

It is QPrint Thermal 4 that prints background image on your receipt
without any additional commands. You can use Watermark with Logo
Downloader in QPrint Thermal 4 Tool. If you want to print background
image, prepare the bitmap image which will be background. And
then follow steps as below.

4.2. User setup

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

2. Click the "Download" button.
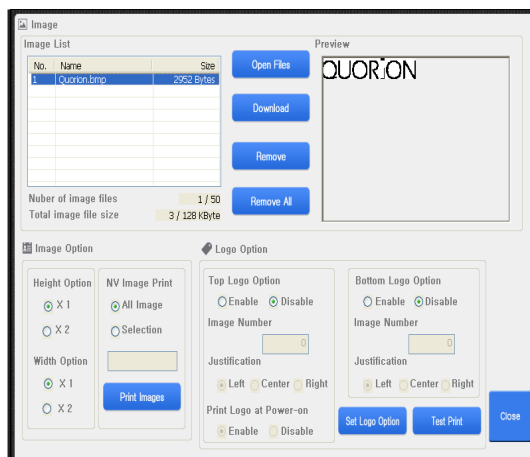
3. It will show the message box like below, click the "YES" button.
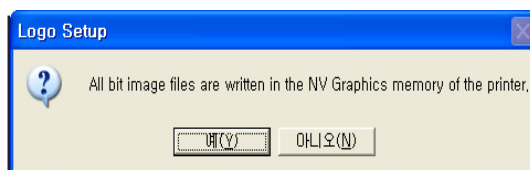
4. All of images saved before on the printer will be deleted and new image data will be downloaded on your printer.

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.

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 : 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

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 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.

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.

Beep twice   ERROR LED
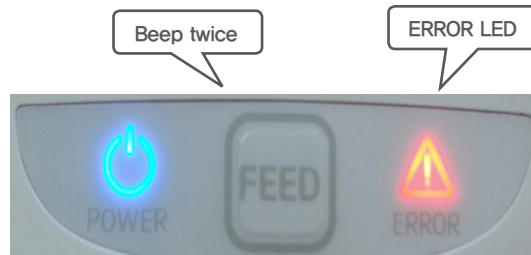
4. Open the printer cover.
5. Turn on printer with FEED button; hold the feed button with 2times buzzer.
6. Now, printer is ready to update firmware.
7. Run the "Firmware Update Dialog" on Utility and open the downloaded firmware file.
8. And then, select the download area which you want to update. (generally select the "Program area")
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 'SELFTEST' and check the updated firmware version.
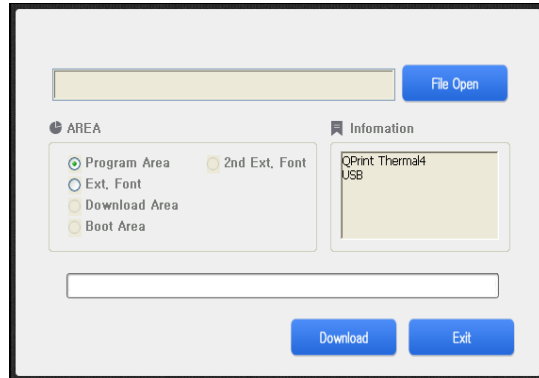
4.4. Firmware download (Using USB memory stick)

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.
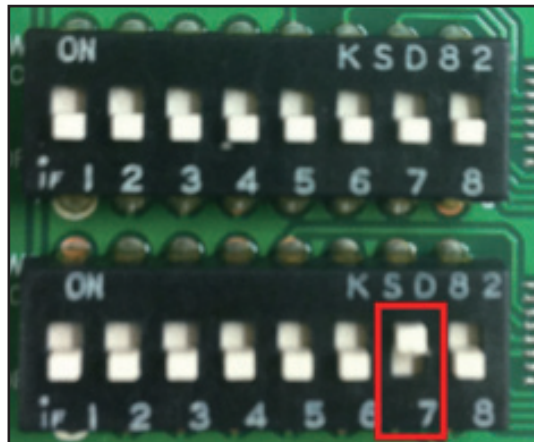
5. If firmware update is done, printer will notify update completion with 5 times buzzer. (in surely case that download is succeeded). And then turn off a printer.
6. Do self-test for confirming the updated firmware version.

4.5. Network Setting Dialog (Ethernet Interface)

4.5.1. EthernetI 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.

4.5. 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.
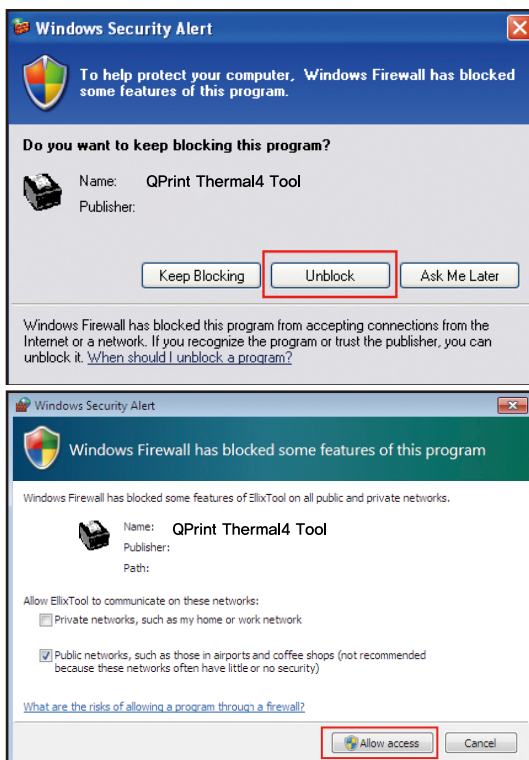
5. If you can see the "The
   Printer has finished
   searching." message,
   detected the printer's
   network settings appear.
   (If you can not see any list,
   Please check cable and
   network.)

IP	PORT	Subnet	Gateway	Mac Address
192.168.0.254	6001	255.255.255.0	192.168.0.1	00:13:62:01:3E:D6

⚙ NETWORK SETTING

IP   SUBNET   GATEWAY   PORT
                                            6001

☐ DHCP

Search
Set Value
Launch Browser
Exit
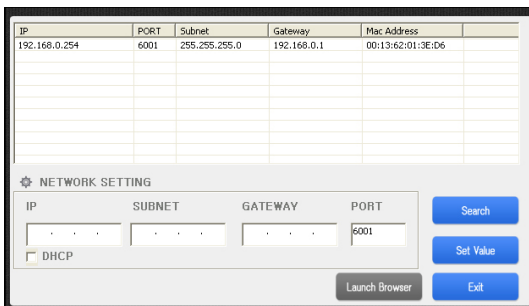
4.5. Network Setting Dialog (Ethernet Interface)

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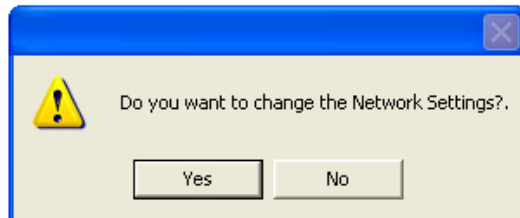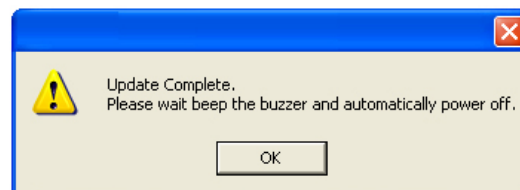

7. You can see the "Do you wand to change the Network Setting?" message. Press the "Yes" button.

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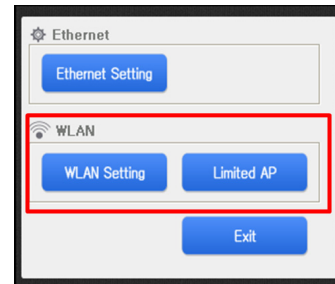

9. Do self-test for confirming the updated network setting.

4.6. Network Setting Dialog (WLAN Interface)

4.6.1. WLAN Network Dialog

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

4.6.2. 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.

4.6. 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.
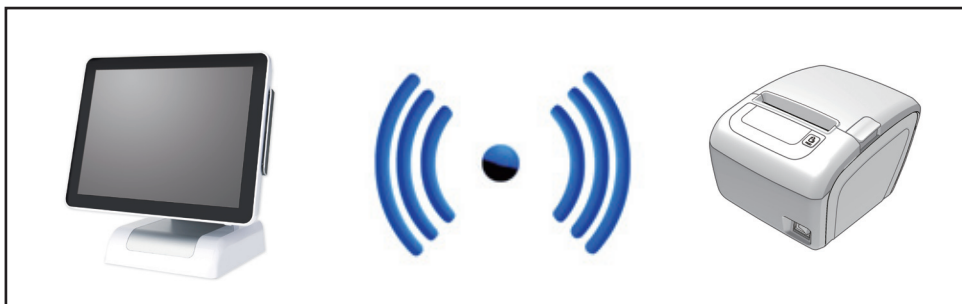
4.6. Network Setting Dialog (WLAN Interface)

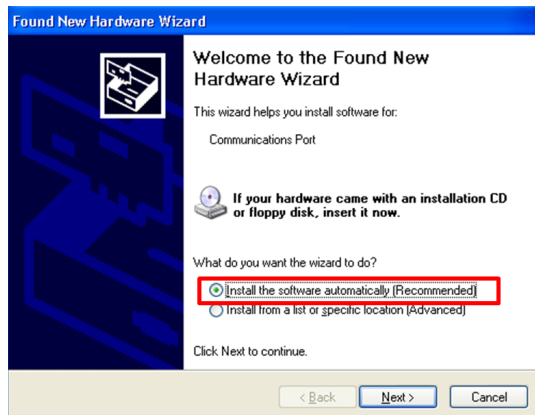### 4.6.3. Install a Virtual COM Driver (Windows XP, POSReady 2009)

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)"
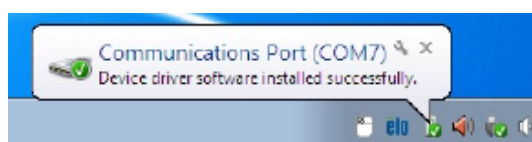
4.6. Network Setting Dialog (WLAN Interface)

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

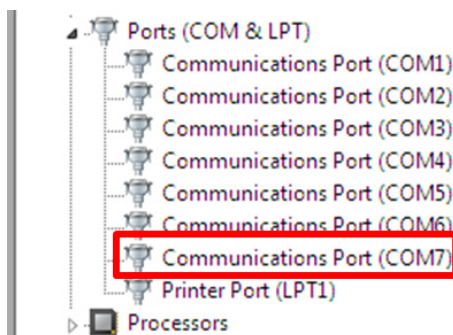#### 4.6.4. Install a Virtual COM Driver (Windows 7, POSReady 7)

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 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 Virtual COM port is installed properly in Windows, this balloon appears as shown.
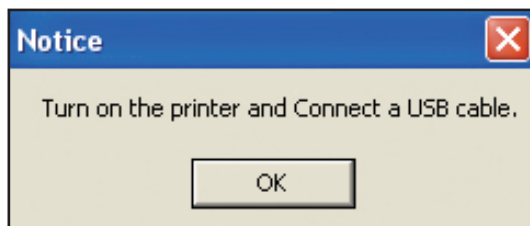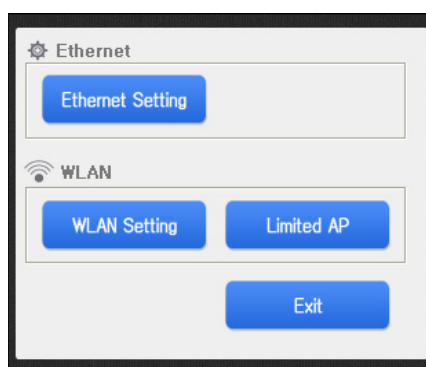

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4.6. Network Setting Dialog (WLAN Interface)

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

```
▲ ·🖵 Ports (COM & LPT)
      🖵 Communications Port (COM1)
      🖵 Communications Port (COM2)
      🖵 Communications Port (COM3)
      🖵 Communications Port (COM4)
      🖵 Communications Port (COM5)
      🖵 Communications Port (COM6)
      🖵 Communications Port (COM7)
      🖵 Printer Port (LPT1)
  ▷ 🖳 Processors
```

4.6.5. 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.

| ⚙ Ethernet |
| Ethernet Setting |
| 📶 WLAN |
| WLAN Setting   Limited AP |
| Exit |

Notice ☒

Turn on the printer and Connect a USB cable.

OK

4.6. Network Setting Dialog (WLAN Interface)

Click "**Search**" 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

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4.6. 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.
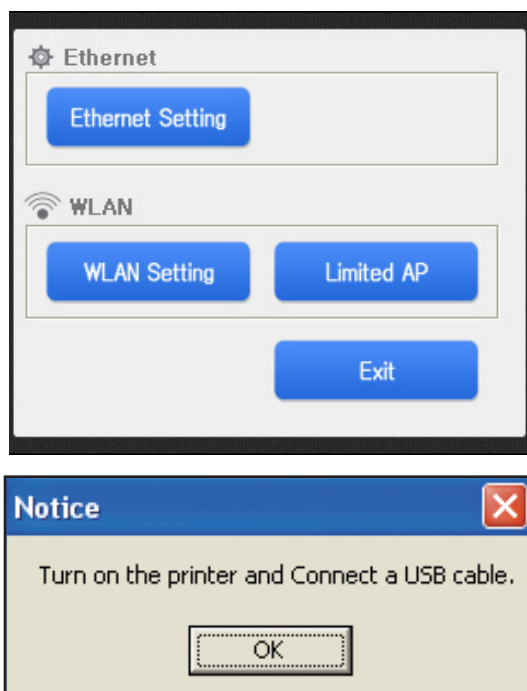
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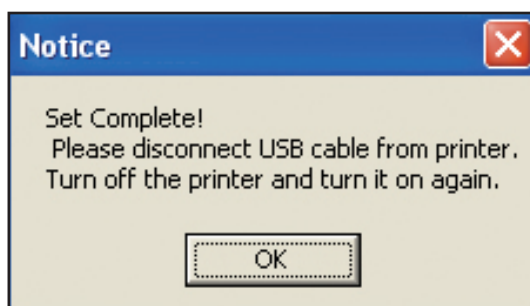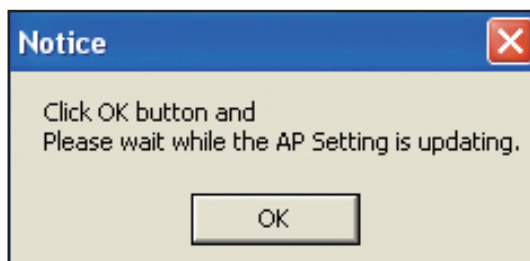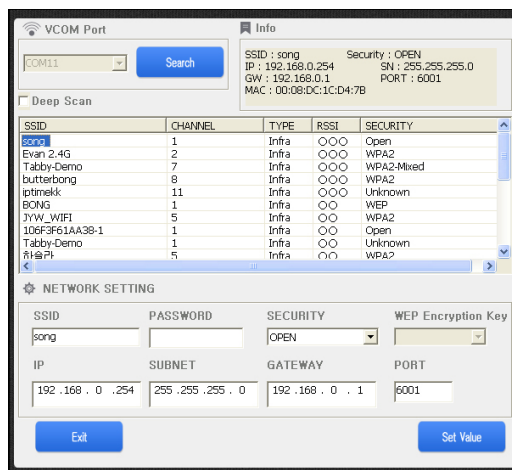
4.6. Network Setting Dialog (WLAN Interface)

4.6.6. 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.

4.6. 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.

4.6. 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.

QPrint Thermal 4 Tool

Version	Date
V1.00	14. 09. 24