



Unified Utility Manual

Mobile Printer

Rev. 2.00

SPP-R200III
SPP-R200IIIplus
SPP-R210
SPP-R215
SPP-R220
SPP-R310
SPP-R310plus
SPP-R318
SPP-R400II
SPP-R410
SPP-R418

<http://www.bixolon.com>

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1. Notice

This Unified Utility manual provides information of a utility program which is used to set printer options and functions.

The Unified Utility program consists of three functions.

- 1) Function that sets software-based virtual switches for printer options (**VMSM: Virtual Memory Switch Manager**)
- 2) Function that facilitates the downloading of image files to the printer (**NV Image Download Manager**)
- 3) Function that transfer files to printer (**File Transfer**)

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

2. Operating System (OS) Environment

Following operating systems are supported.

*** PC**

- Microsoft Windows XP SP3 Over (32bit/64bit)
- Microsoft Windows Server 2003 SP1 Over (32bit/64bit)
- Microsoft Windows VISTA (32bit/64bit)
- Microsoft Windows Server 2008 (32bit/64bit)
- Microsoft Windows Server 2008 R2 (64bit)
- Microsoft Windows 7 (32bit/64bit)
- Microsoft Windows 8 (32bit/64bit)
- Microsoft Windows 10 (32bit/64bit)
- Microsoft Windows Server 2012 (64bit)

*** PDA**

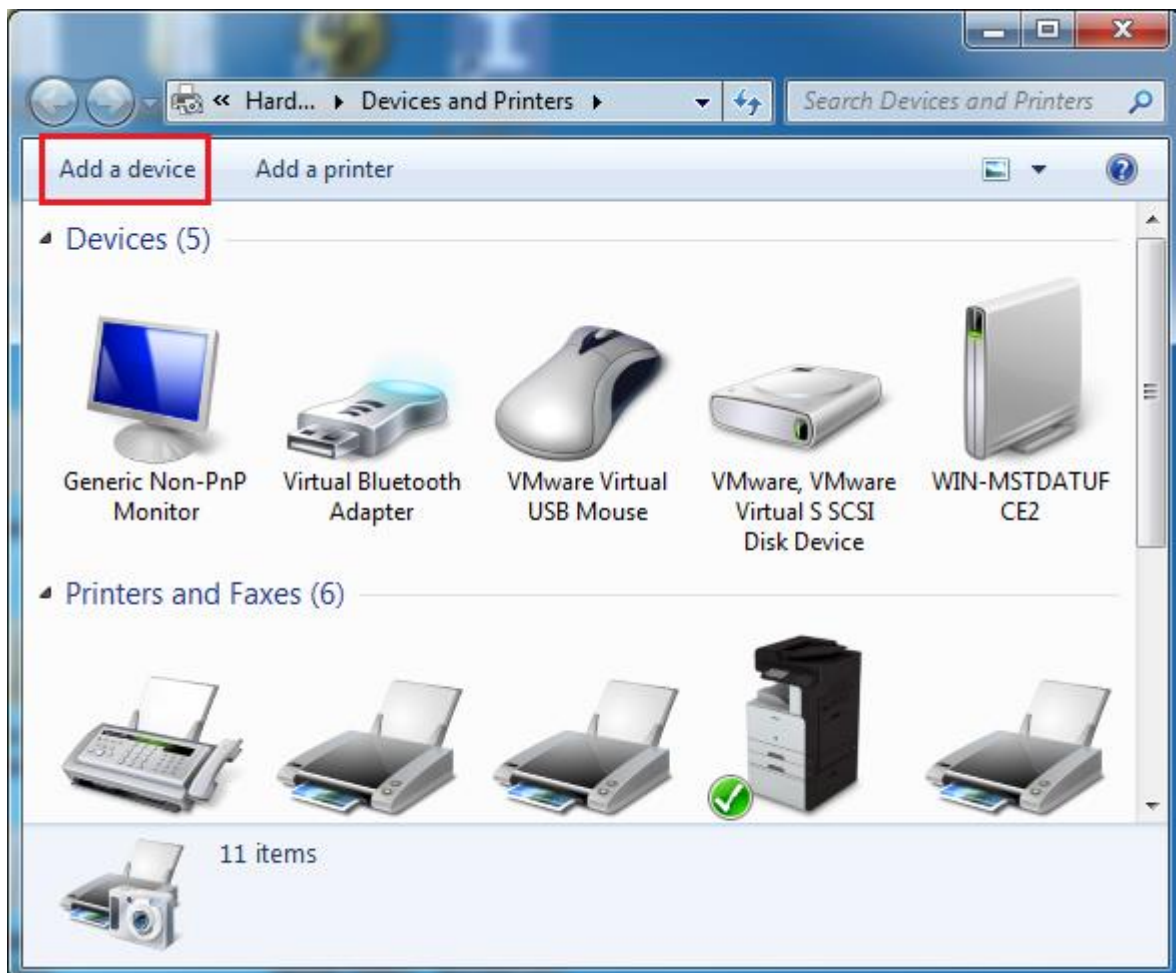
- Microsoft Windows CE 5.0
- Microsoft Windows CE 6.0 (supported after building with custom SDK)
- Microsoft Windows Mobile 5
- Microsoft Windows Mobile 6

3. Wireless interface settings

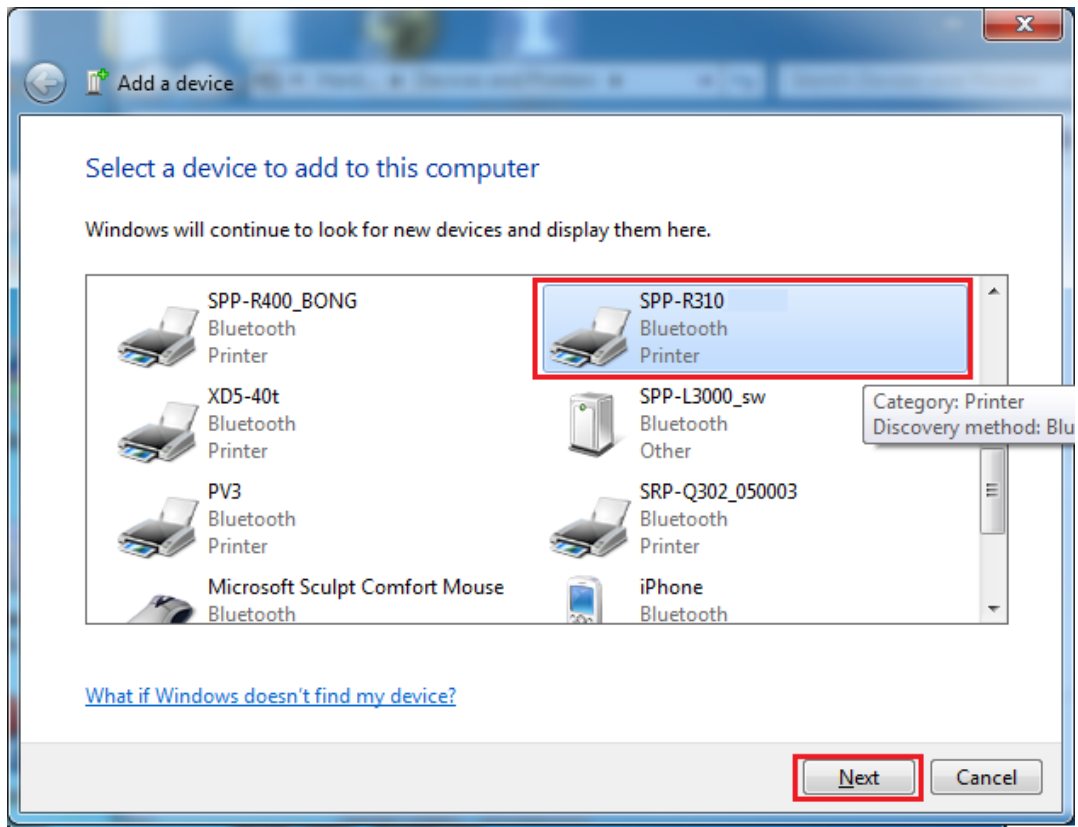
3-1 Adding a Bluetooth device

* OS based on Windows 7

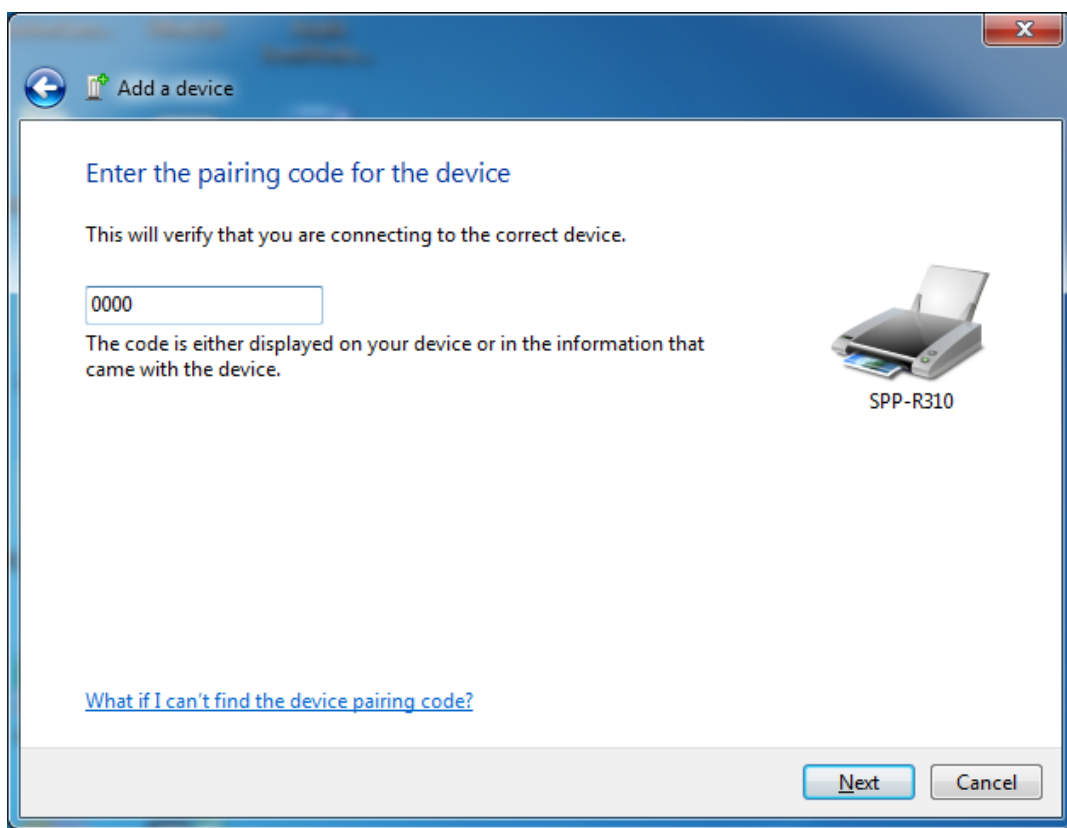
- 1) Turn on printer.
- 2) Click “Windows Start button” -> “Devices and Printers” -> “Add a device”



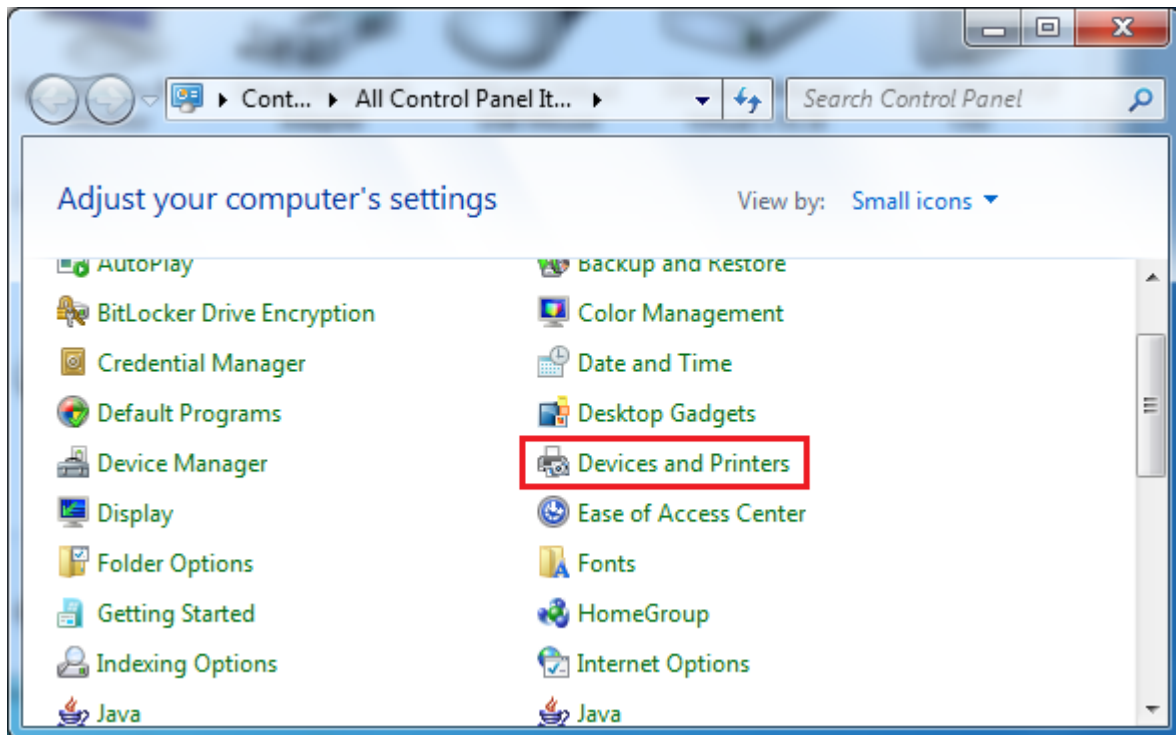
3) Select a printer to be added. (Printer name displayed depending on product)



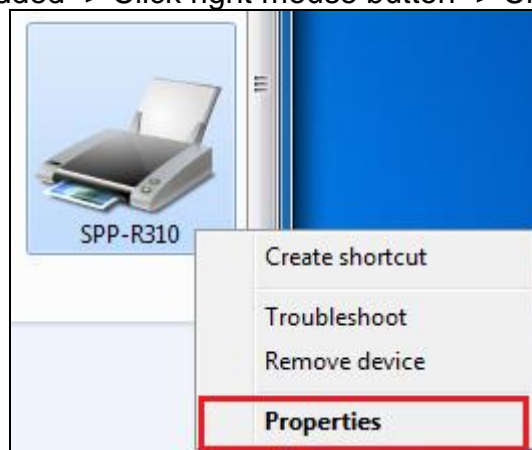
4) Enter pairing code for the printer. (default pairing code is "0000")



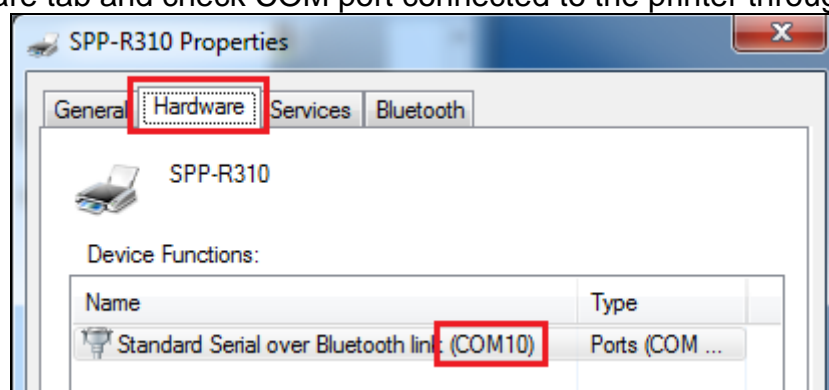
5) After adding the printer, move to "Control panel" -> "Devices and Printers"



6) Select a printer to be added -> Click right mouse button -> Click Properties



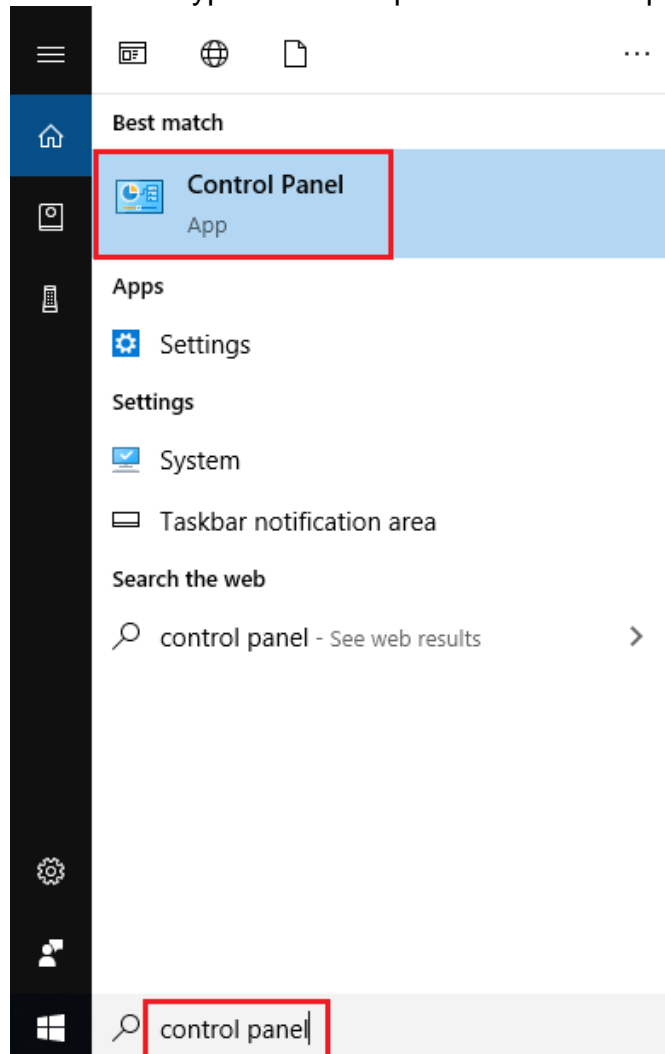
7) Click Hardware tab and check COM port connected to the printer through Bluetooth.



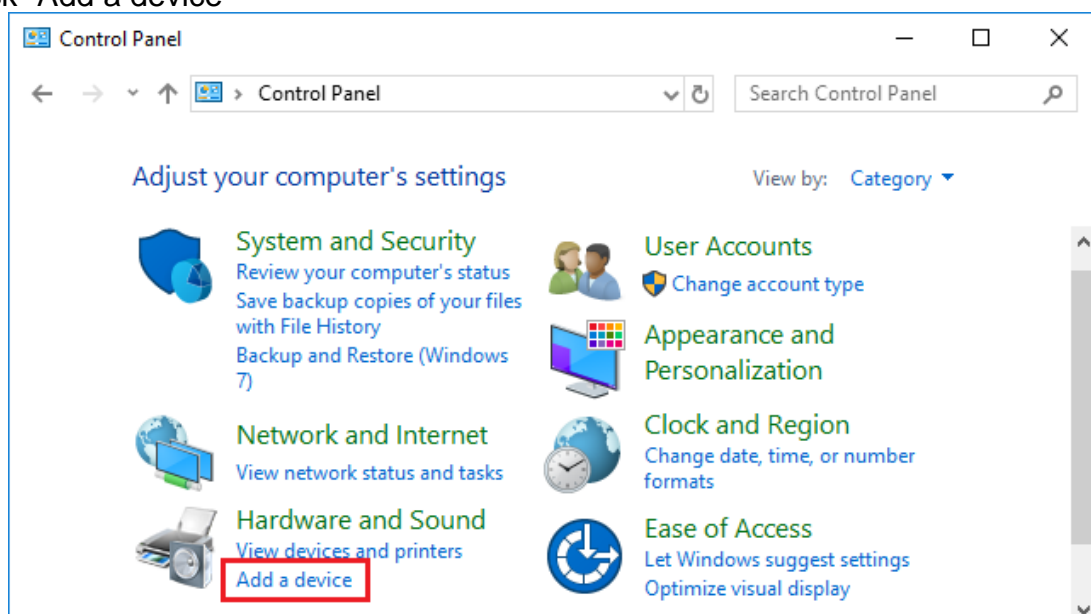
* OS Based on Windows 10

1) Turn on printer.

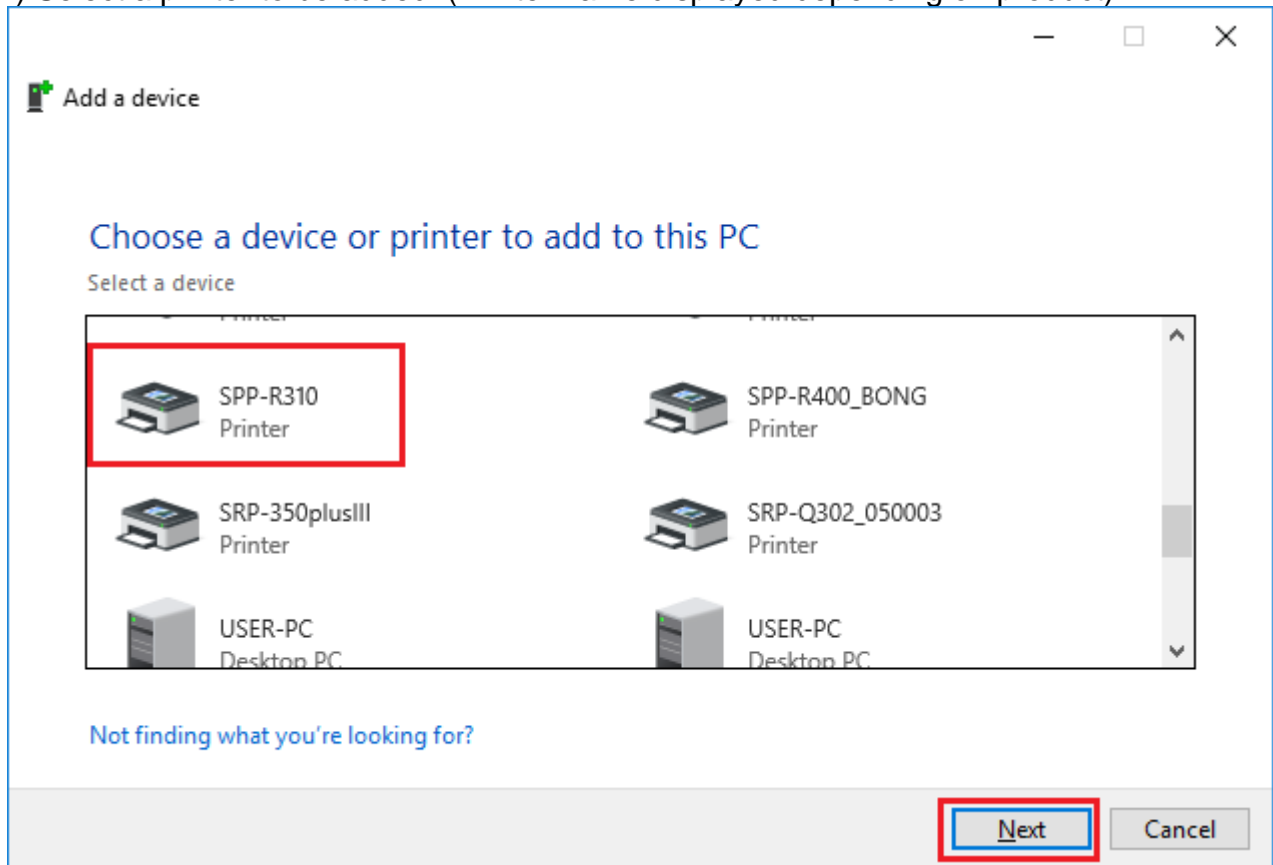
2) click “Windows Start button” -> type a “control panel” -> “control panel”



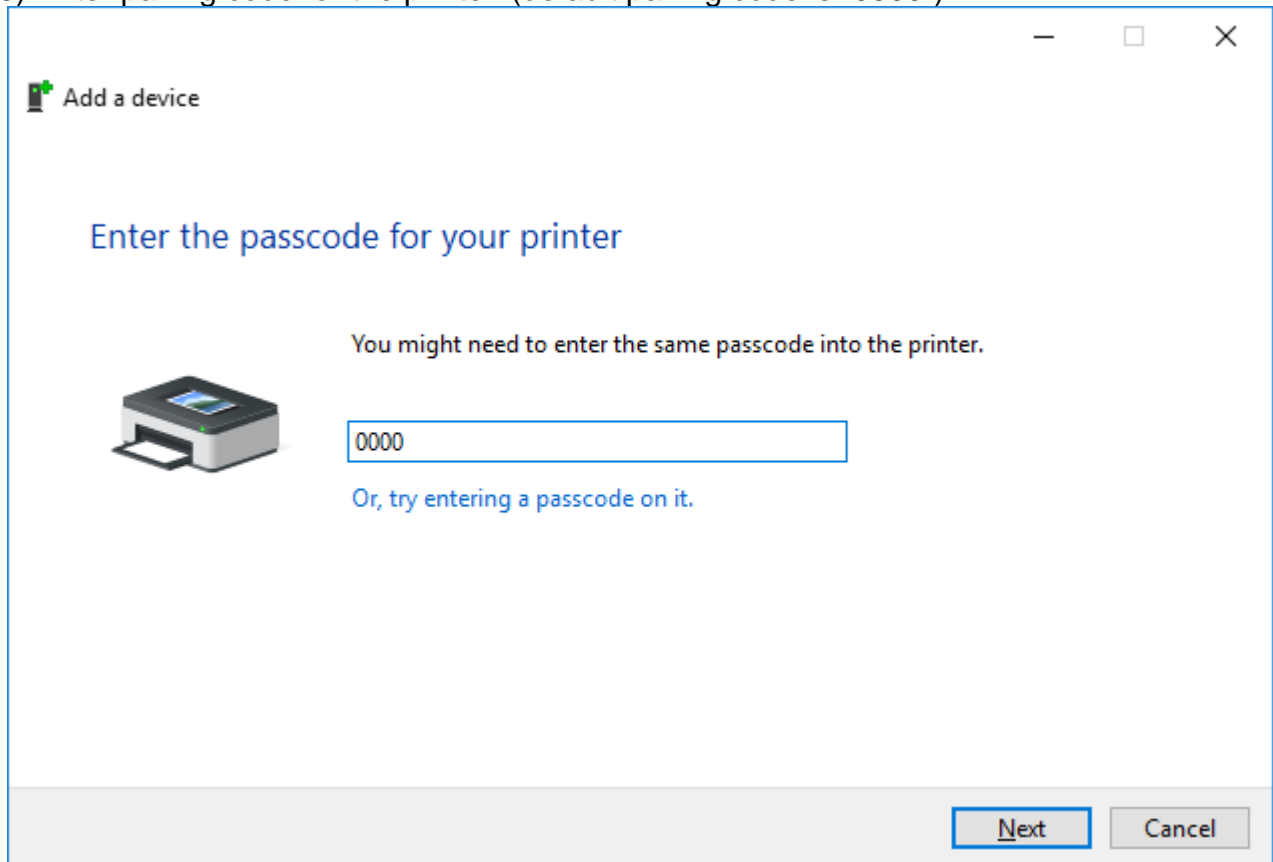
3) Click “Add a device”



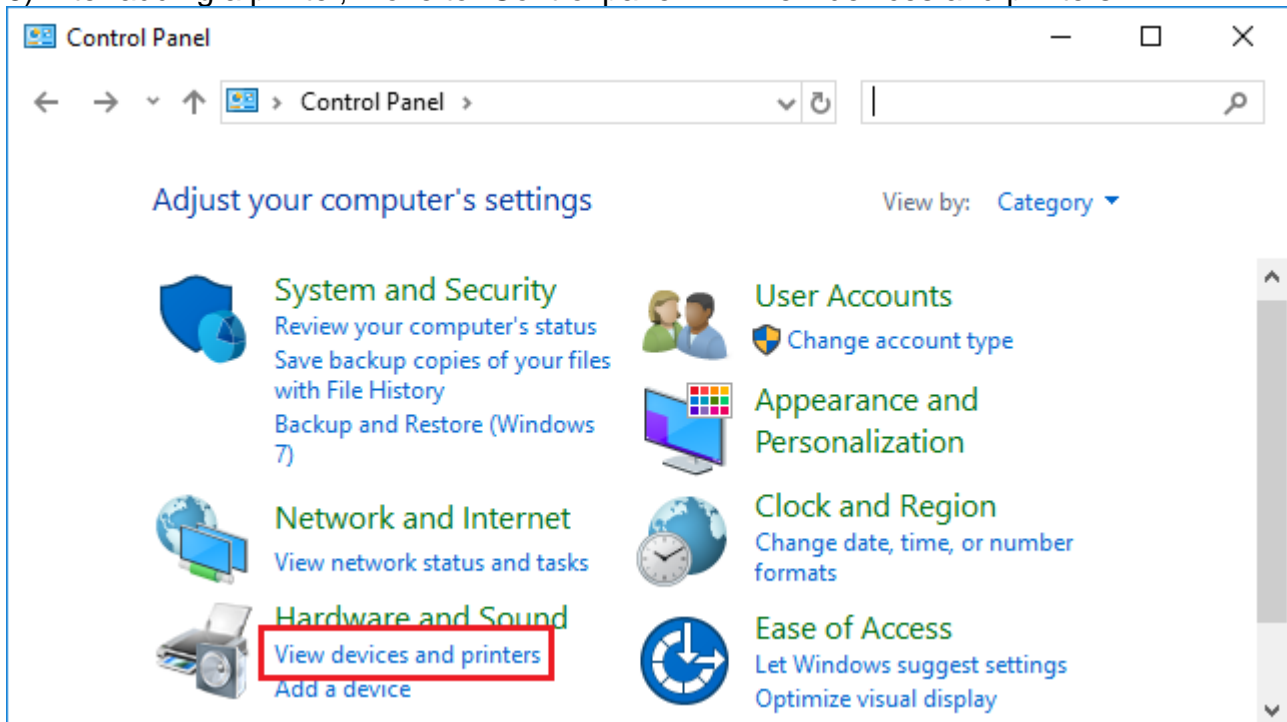
4) Select a printer to be added. (Printer name displayed depending on product)



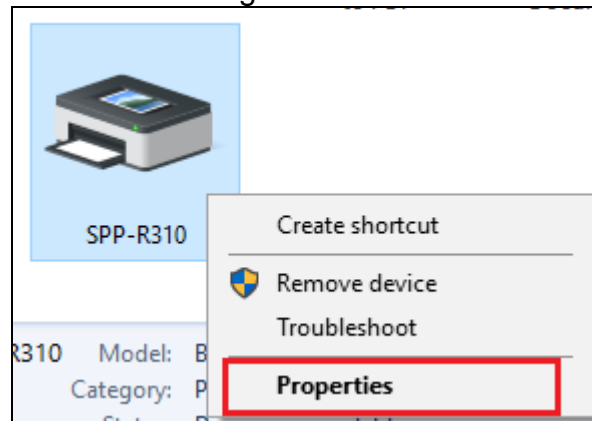
5) Enter pairing code for the printer. (default pairing code is "0000")



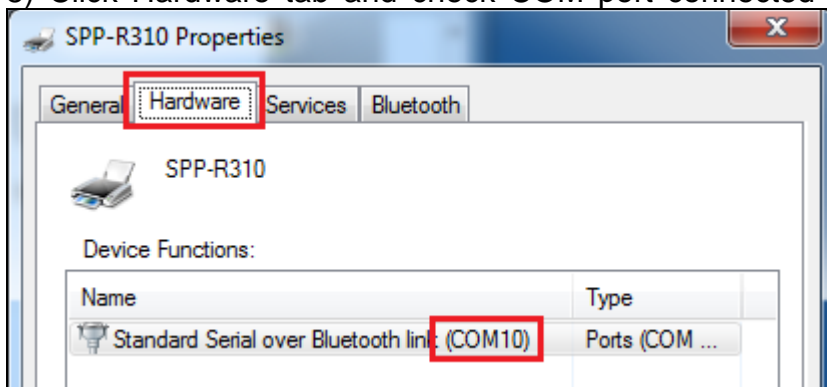
6) After adding a printer, move to “Control panel” -> “View devices and printers”



7) Select a printer to be added -> Click right mouse button -> Click Properties



8) Click Hardware tab and check COM port connected to the printer through Bluetooth



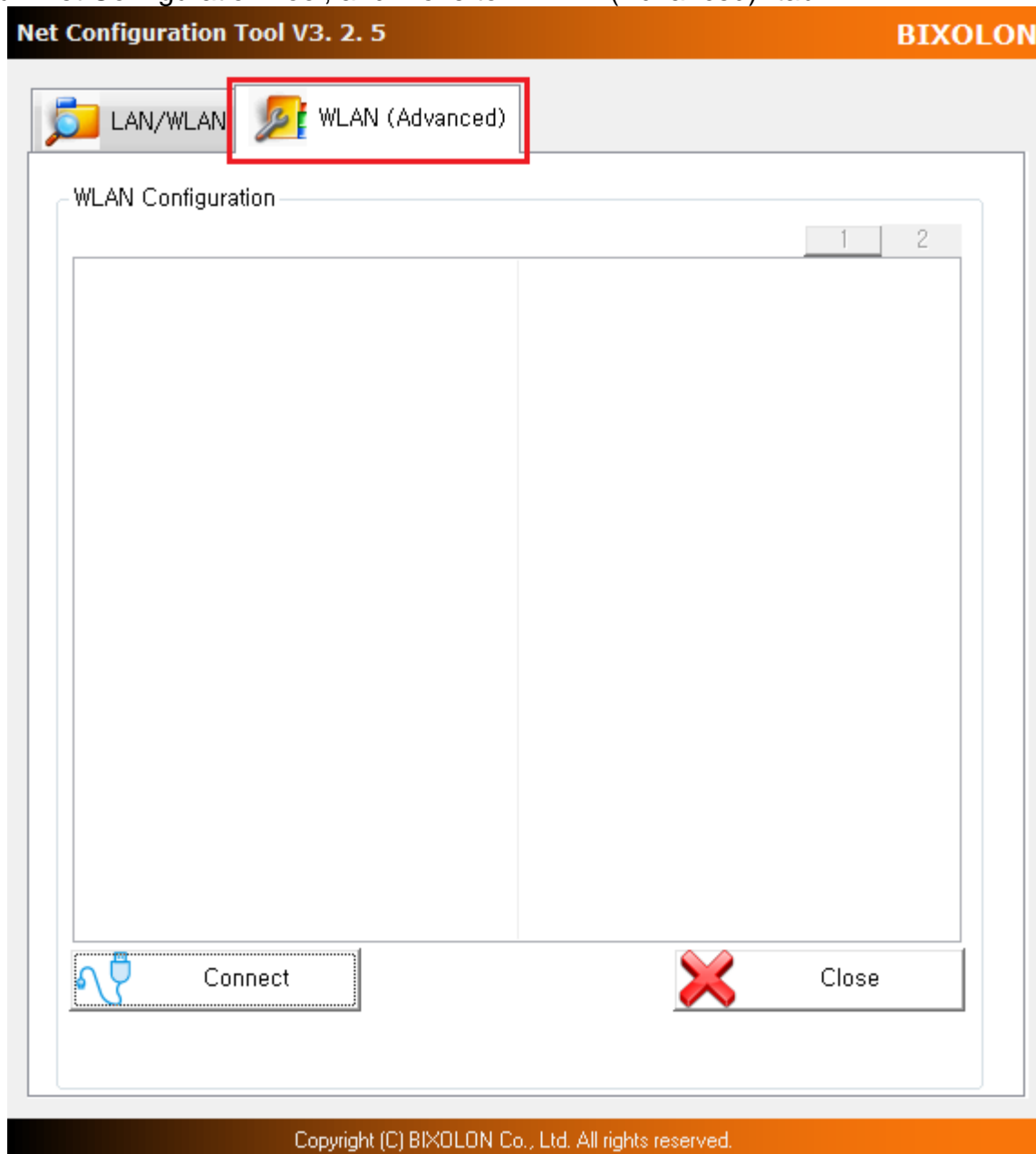
3-2 WLAN settings

- 1) Turn on printer.
- 2) Connect the printer and PC with an interface cable (USB or Serial).

※Without the interface cable, Net Configuration Tool cannot be accessed to set up a WLAN. Connect using Soft AP or use Utility App for mobile.

- 3) Download and install “Net Configuration Tool” from BIXOLON website (www.bixolon.com)

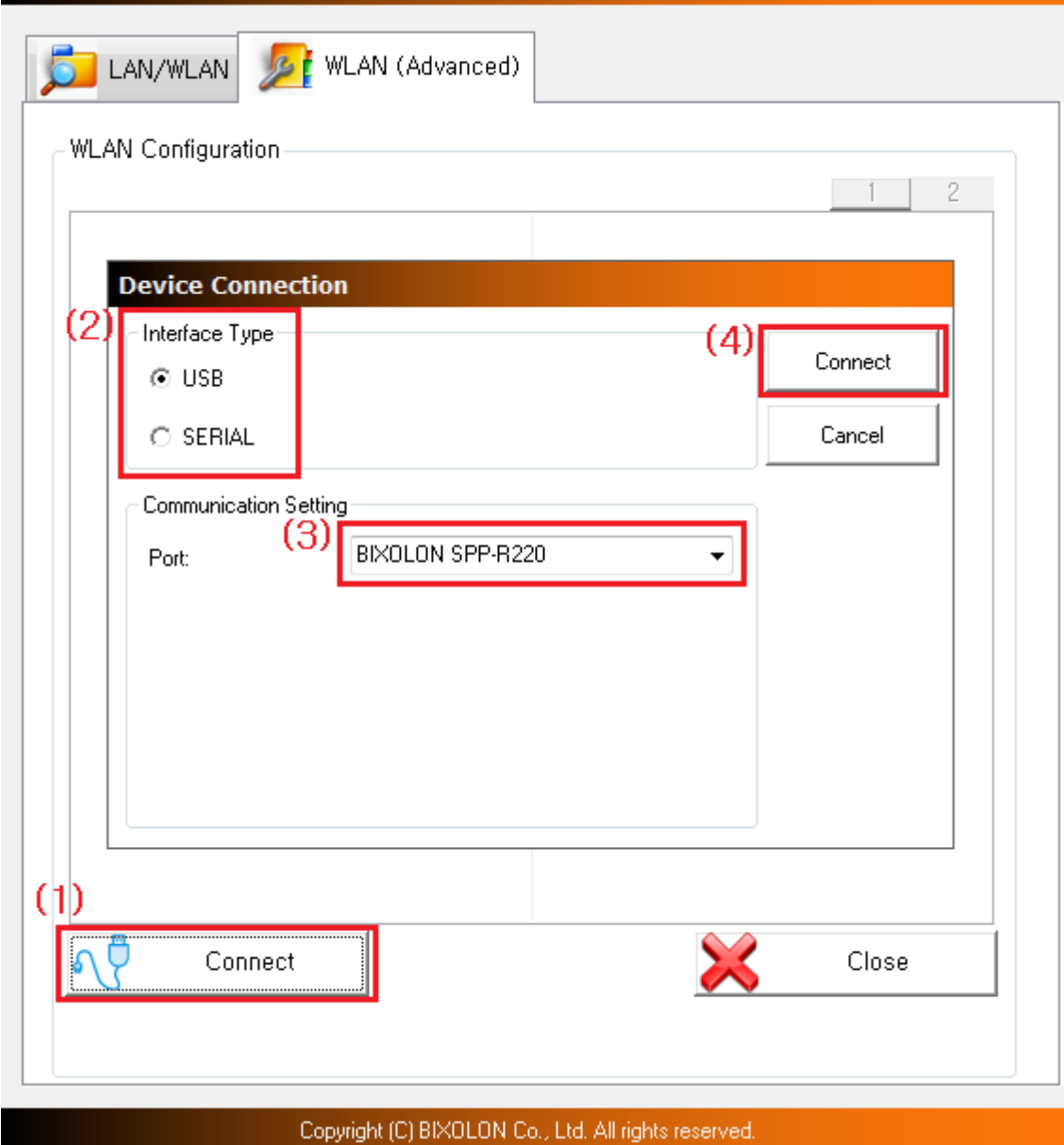
- 4) Run Net Configuration Tool, and move to “WLAN (Advanced)” tab.



- 5) Click Connect button and select interface type that connects between printer and PC. Then configure communication settings and click Connect button.

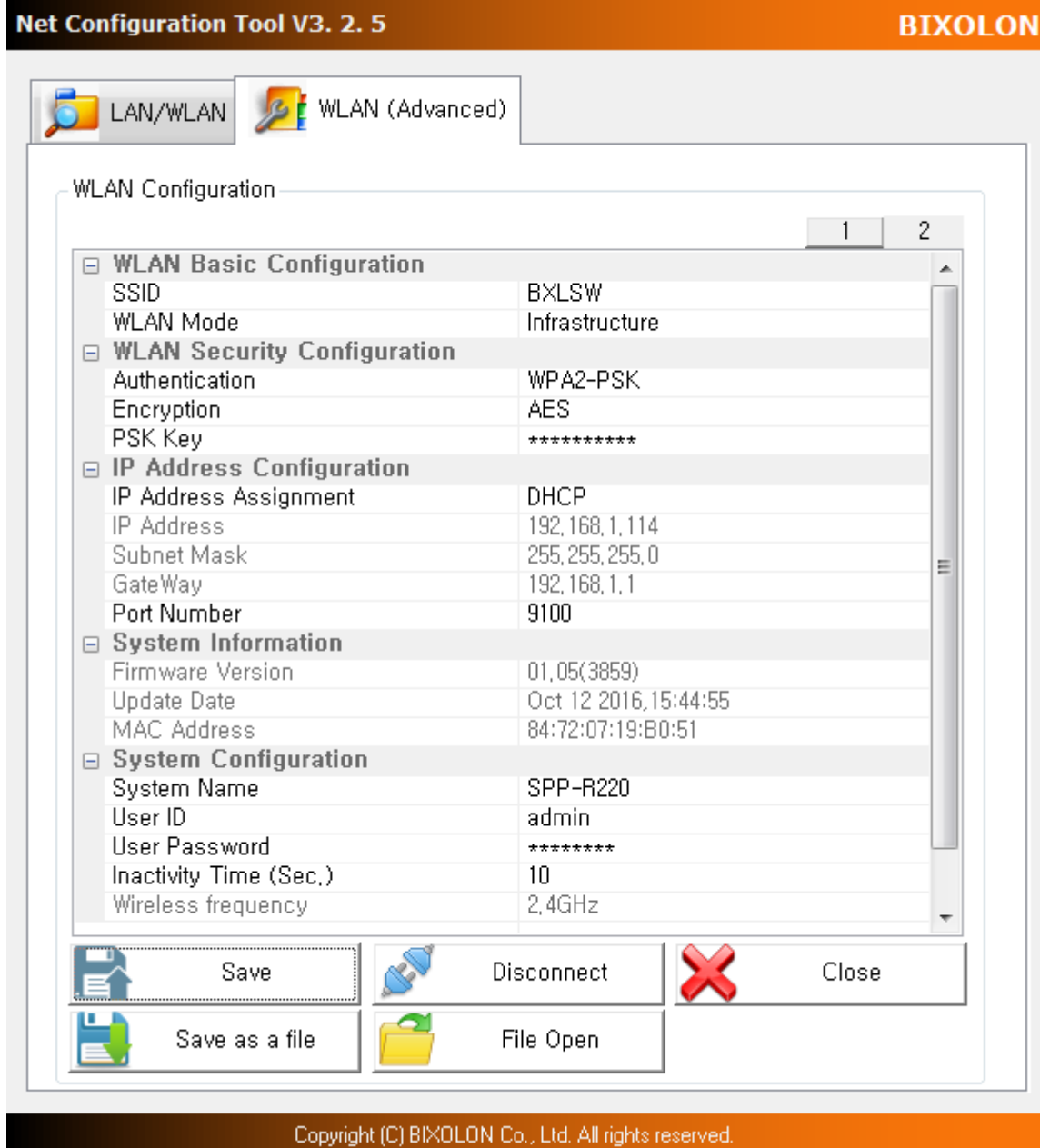
Net Configuration Tool V3. 2. 5

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6) Check printer's current WLAN settings, and modify it to suit printer environment.

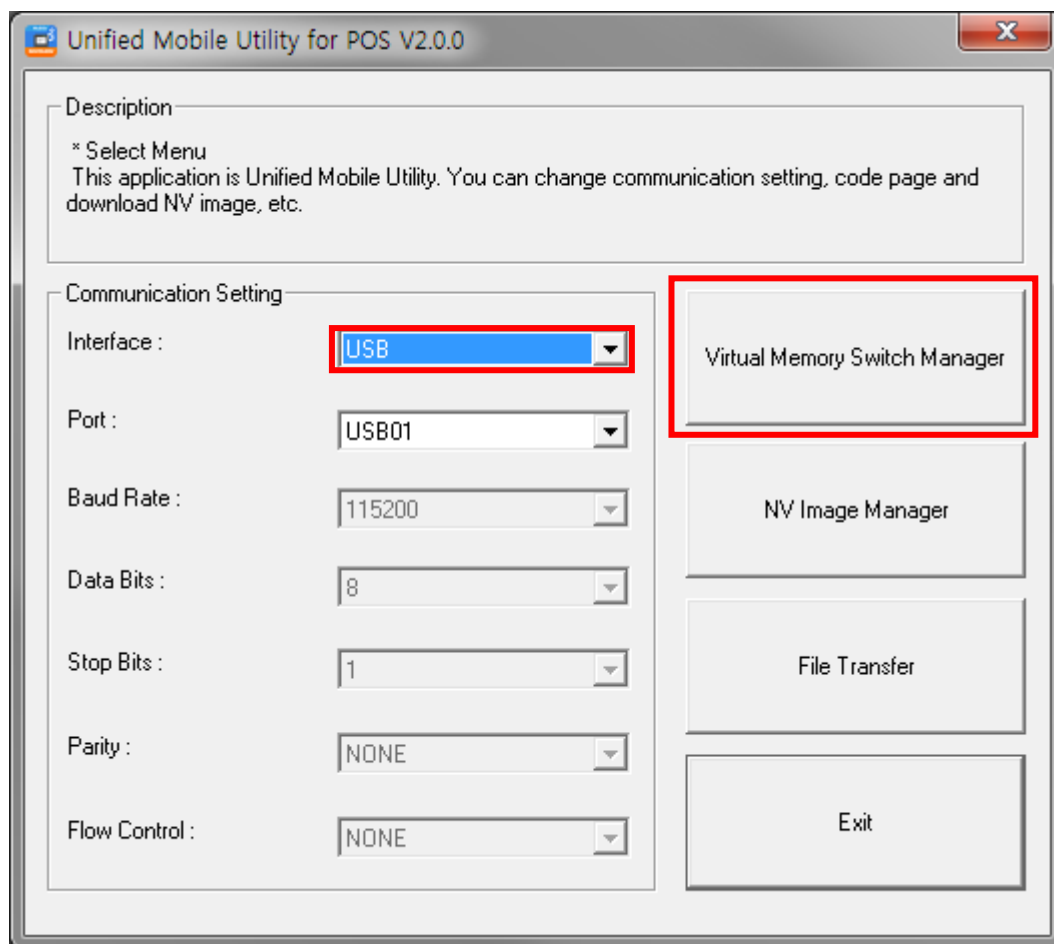


※ For more information, please refer to Net Configuration Tool Manual

4. Virtual Memory Switch Manager Usage

4-1 When Using on a PC

- 1) Connect printer and PC via interface cable (USB or Serial type).
If using WLAN or Bluetooth, a cable connection is not necessary.
 - 2) Turn on printer.
 - 3) Run Unified Utility executable file.
- ※ Latest file versions can be downloaded from the BIXOLON website.
(www.bixolon.com)
- 4) Select “Interface” and click “Virtual Memory Switch Manager” button.
To connect via Bluetooth or WLAN, please refer to Section 3. Wireless interface settings.



5) Virtual Memory Switch settings information of the printer displays on screen.

Virtual Memory Switch Manager (fw:V01.00 STOBi 2nd D.V 091015)

Printer Setting 1 | Printer Setting 2 | Printer interface

Printing Density: print density 100%

Printing Speed: 100mm/s

Default Code Page: PC437 - USA, Standard Europe

Default Font Type: ☒ Font A (12 x 24) ☐ Font B (9 x 17) ☐ Font C (9 x 24)

Double Byte Font Mode: ☒ Off ☐ On

Default Save Cancel

Virtual Memory Switch Manager (fw:V01.00 STOBi 2nd D.V 091015)

Printer Setting 1 | Printer Setting 2 | Printer interface

Printer Service: Receipt

tear off position: 0 units (0~320)

Beep For Roll Paper End: Off

Beep Mode For Low Battery End: On

Auto Power Off Time (Not Connected): 0 min (0~90 ex> 30)

Auto Power Saving Time (Connected): 10 sec (0, 10~255 ex> 100)

MSR Configuration

MSR Trigger: Not used MSR trigger

Advance

Default Save Cancel

Virtual Memory Switch Manager (fw:V01.00 STObi 2nd D.V 091015)

Printer Setting 1 | Printer Setting 2 | **Printer interface**

Serial Interface Configuration

Baud Rate: 115200 Parity: None

Data Bits: 8 Stop Bits: 1

☐ Enable Bluetooth Setting

Bluetooth Interface Configuration

Authentication_Encryption: Enable Connection Mode: Mode 2

PIN Code: 0000 Printer Name: SPP-R310

Default Save Cancel

6) After setting function(s), click “Save” button to store settings. Functions per category are as follows.

Function	Description
Printing Density	Set printing density Value range is 80~150%
Printing Speed	Set printing speed Value range is 50~100 mm/s (may vary according to device)
Printer Service	Set receipt mode or label mode. - Receipt : Feed the paper by line. - Label : Feed the paper to the gap or black mark.
Tear Off Position	Set Tear off position
Default Code Page	Set the default code page (Refer to the Code Page Manual for more detailed information on the Code Pages supported.)
Default Font Type	Set default font type and size
Beeps for Low Battery	Set beeping when reaching low battery capacity
Beeps for Paper Roll End	Set no beeping or beeping when reaching paper roll end
Double Byte Character Mode	Set double byte language usage mode
Auto Power Off Time	Set time interval between absence of printer use and automatic turning off of printer power

Auto Power Saving Time	Set time interval for automatic entering into power saving mode while the printer is in use
MSR Trigger	Set MSR data scanning mode. * "Command read mode" command must be sent to the printer before MSR data is read.
Serial Interface Configuration	Changes the serial Interface setting *Printer must be reset after change for changed setting to take effect
Authentication & Encryption	Set or cancels Authentication & Encryption mode when connecting via Bluetooth * If Authentication & Encryption mode is disabled, connection to a device can be done without a PIN Code.
Connection Mode	Set Mode1, Mode2, or Mode3 when connecting via Bluetooth. - Mode1: connection possible only with the first device with which connection succeeds - Mode2: connection with all Bluetooth enabled devices possible via use of a PIN Code - Mode3: connection possible only with the first device with which connection succeeds and searching or use of connected device possible
PIN Code	Change the PIN Code required for Bluetooth connections (maximum 16 characters long)
Printer Name	Change the device name produced when establishing a Bluetooth connection (maximum 30 characters long)

* Check authentication, Encryption mode as well as connection mode of the Bluetooth from self test page.

7) Reset printers.

When Bluetooth settings are being changed, check LED status of the printer. If RED LED is turned on and it prints Bluetooth setting information, reset the printer.

4-2 When Using on a PDA

1) Turn on printer power.

2) Run the Unified Utility executable file.

※ Latest file versions can be downloaded from the BIXOLON website.

(www.bixolon.com)

3) Check “TCP/IP Communication” and click “Virtual Memory Switch Manager” button.
Refer to Network Connection Manual regarding TCP/IP setting (may vary according to device).

The screenshot shows a software interface with a red rectangular box highlighting the 'Communication Setting' section. This section includes a checkbox for 'TCP/IP Communication', a 'Port' dropdown menu set to 'COM6:', and a 'Baudrate' dropdown menu set to '115200'. Below this highlighted area is a button labeled 'Virtual Memory Switch Manager'. Underneath that button are two more buttons: 'NV Manager' and 'Exit'.

4) Virtual Memory Switch settings information of the printer is received and shown on screen.

5) After setting printer functions, click “Next” button.

(The functions per category are identical to those on the PC.)

* Please click “Default” button to return the printer to default setting.

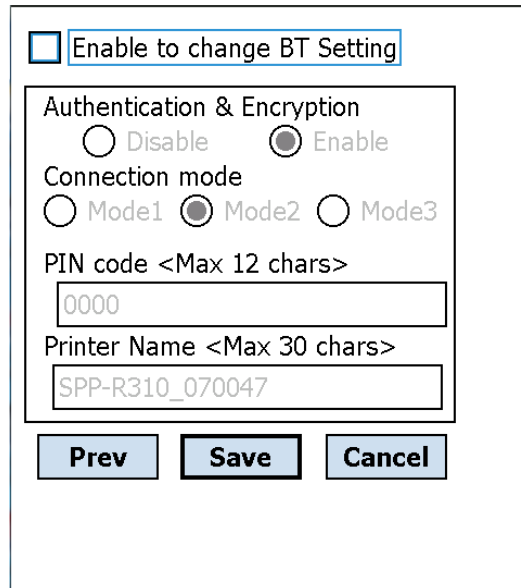
<p>Printing Speed : <input type="text" value="100mm/s"/></p> <p>Printing density : <input type="text" value="print density 100%"/></p> <p>Default Font Type <input checked="" type="radio"/> 12x24 A Font <input type="radio"/> 9x17 B Font <input type="radio"/> 9x24 C Font</p> <p><input type="button" value="Default"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/></p>	<p>Default Code Page <input type="text" value="PC437 - USA, Standard Europe"/></p> <p>MSR Trigger mode <input type="text" value="Track 1/2/3 read mode AUTO trig"/></p> <p><input type="button" value="Advance.."/></p> <p>Service : <input checked="" type="radio"/> Receipt <input type="radio"/> Label</p> <p>tear off position : <0~320 units> <input type="text" value="302"/></p> <p><input type="button" value="Prev"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/></p>
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6) After setting printer functions, click “Next” button.

(Clicking the “Prev” button returns to previous screen.)

<p>Beeps for roll paper end <input checked="" type="radio"/> False <input type="radio"/> True</p> <p>Beep mode for low battery status <input checked="" type="radio"/> On <input type="radio"/> Off</p> <p>Double byte character mode <input type="radio"/> On <input checked="" type="radio"/> Off</p> <p><input type="button" value="Prev"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/></p>	<p>Serial Interface configuration</p> <p>Baudrate : <input type="text" value="115200"/></p> <p>Parity : <input type="text" value="None"/></p> <p>Data Length : <input type="text" value="8"/></p> <p>Stop bits : <input type="text" value="1"/></p> <p>Auto Power Off Time <0~90 min> <input type="text" value="15"/></p> <p>Auto Power Saving Time <10~255 sec> <input type="text" value="10"/></p> <p><input type="button" value="Prev"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/></p>
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7) After setting printer functions, click the “Save” button.



The screenshot shows a settings dialog box for a mobile printer. At the top, there is a checkbox labeled "Enable to change BT Setting" which is currently unchecked. Below this, there is a section titled "Authentication & Encryption" with two radio buttons: "Disable" (unchecked) and "Enable" (checked). Underneath, there is a "Connection mode" section with three radio buttons: "Mode1" (unchecked), "Mode2" (checked), and "Mode3" (unchecked). Below the radio buttons, there are two text input fields. The first is labeled "PIN code <Max 12 chars>" and contains the text "0000". The second is labeled "Printer Name <Max 30 chars>" and contains the text "SPP-R310_070047". At the bottom of the dialog box, there are three buttons: "Prev", "Save", and "Cancel". The "Save" button is highlighted with a black border.

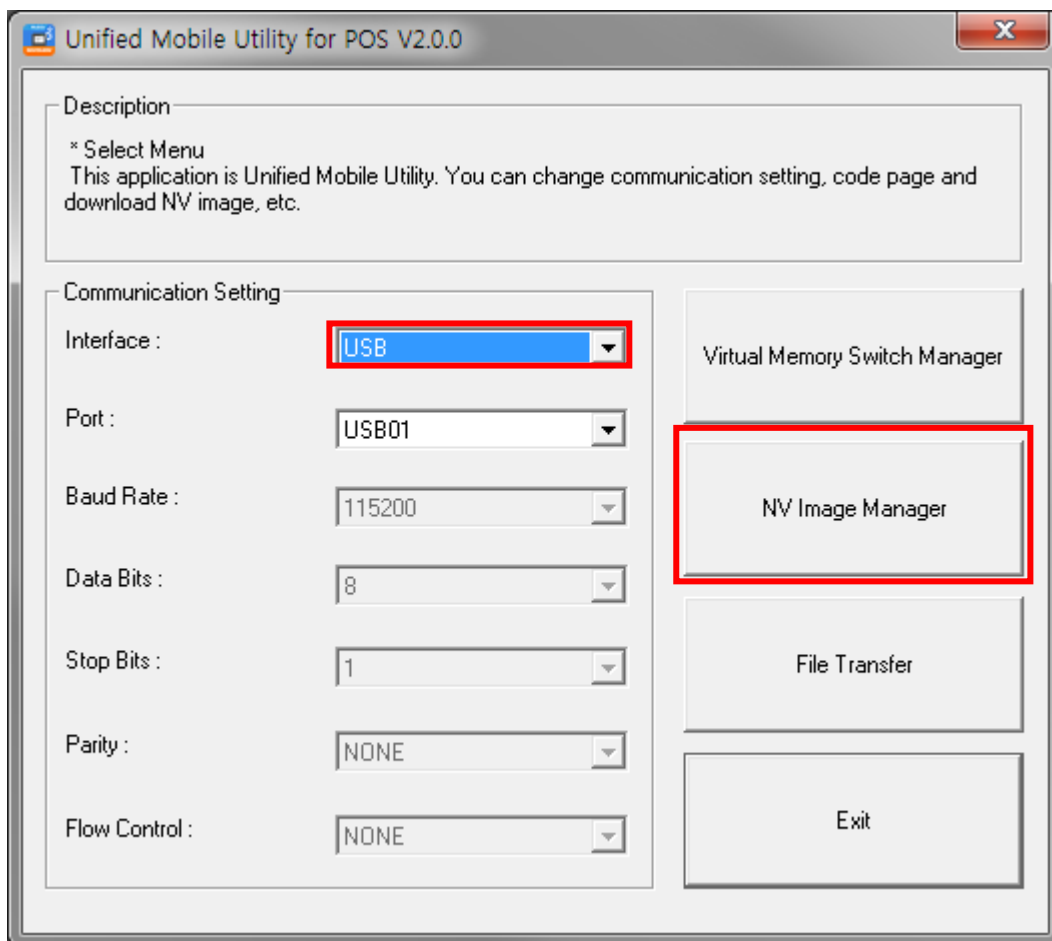
8) Reset printers.

When Bluetooth settings are being changed, check LED status of the printer. If RED LED is turned on and it prints Bluetooth setting information, reset the printer

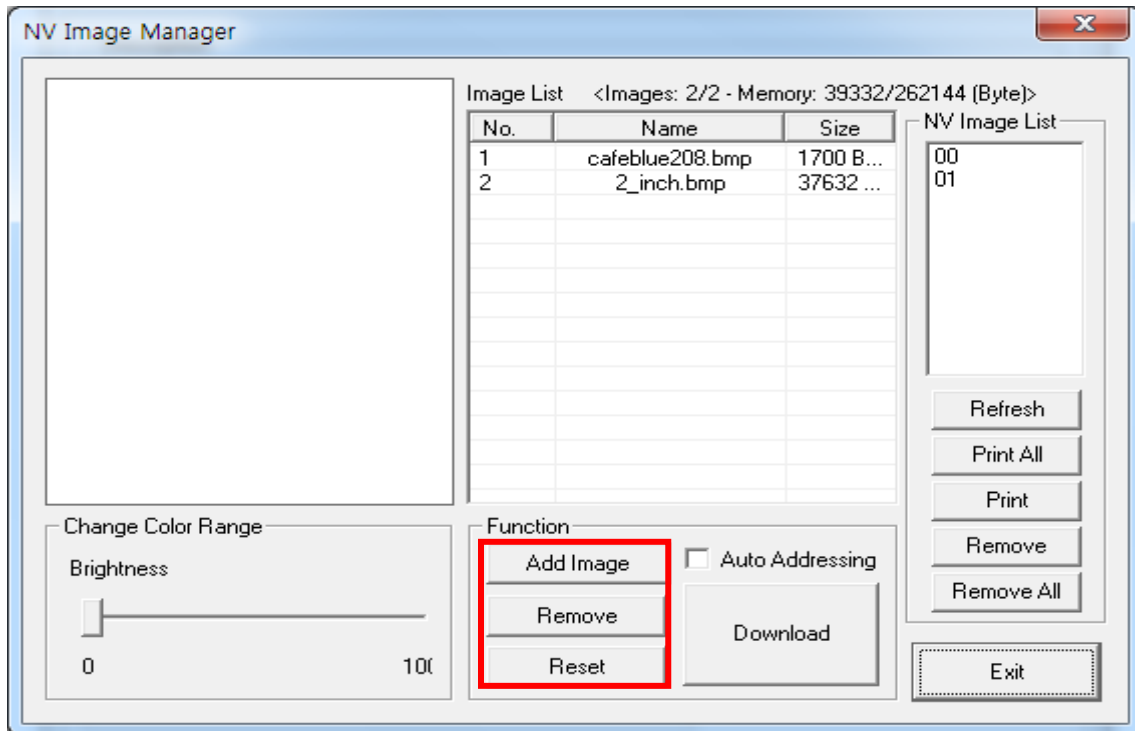
5. NV Image Download Manager Usage

5-1 When Using on a PC

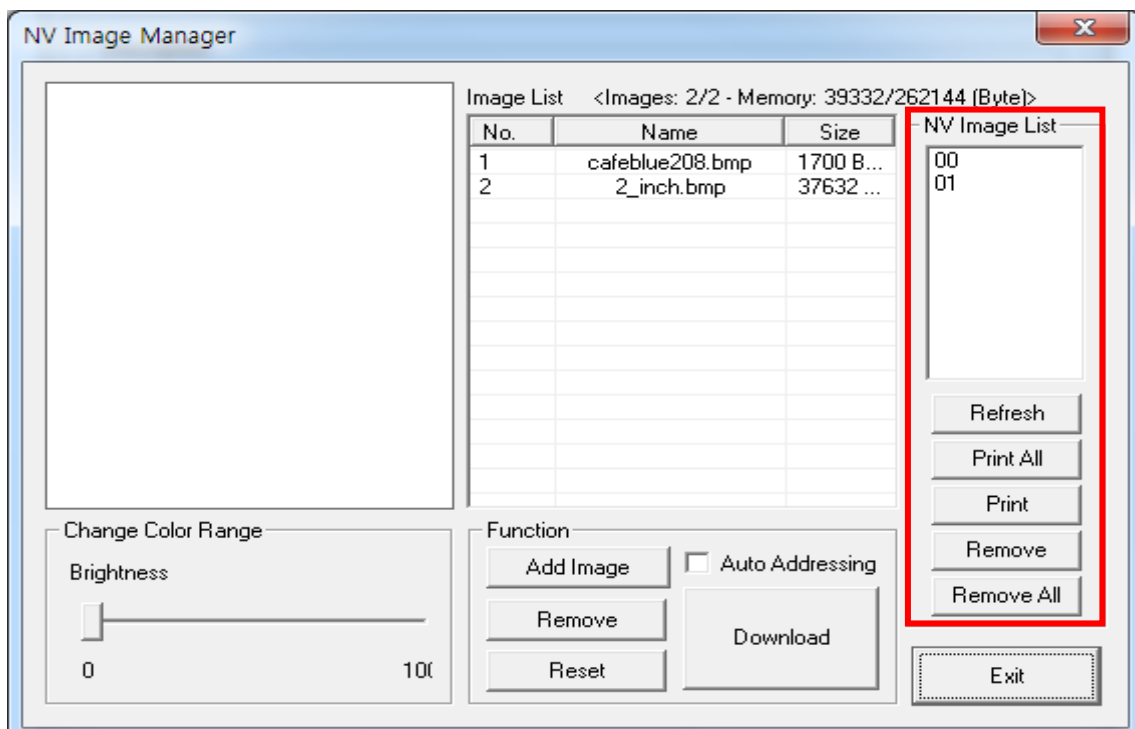
- 1) Printer connection method and instructions for running Unified Utility executable file are described in Section 4. Virtual Memory Switch Manager Usage.
- 2) Prepare the image file (e.g. Main.bmp)
- 3) Select “Interface” and click “NV Image Manager” button.
To connect via Bluetooth or WLAN, please refer to Section 3. Wireless interface settings.



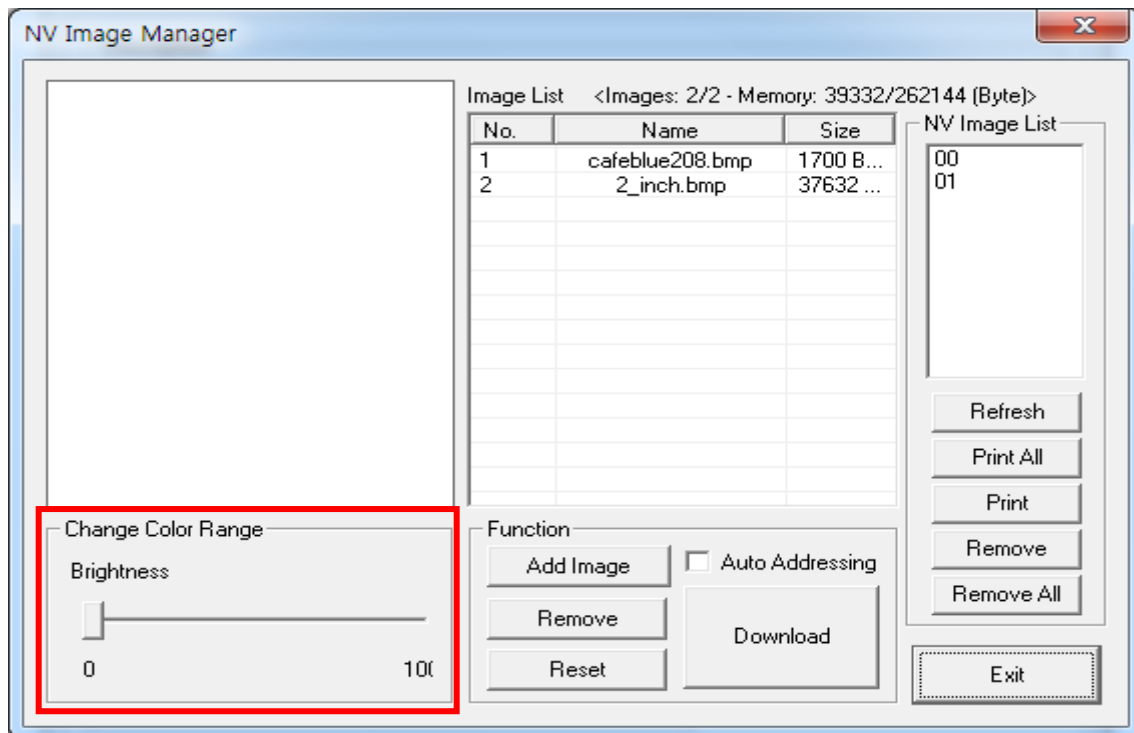
- 4) Click “Add Image” button to add image(s) to image list.
Click “Remove” button to delete selected image(s), and click “Reset” button to delete entire image list.



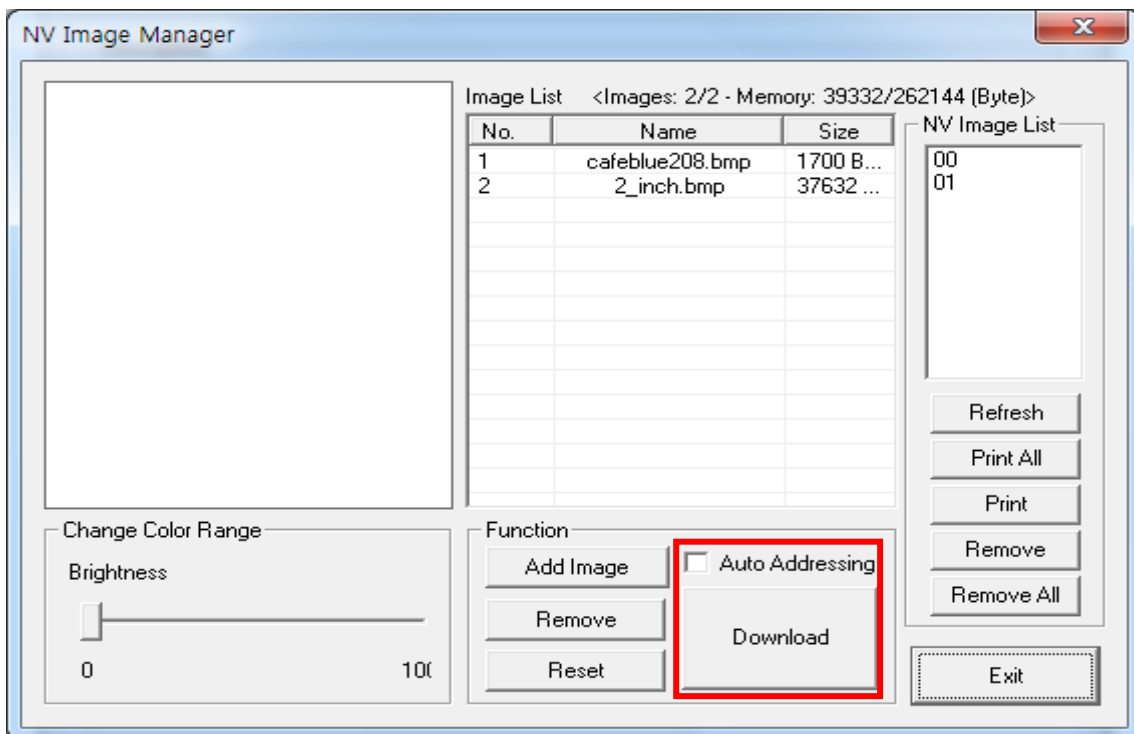
- 5) “Used address list” contains the address numbers of saved images.
Following buttons is used for saving images.
- “Refresh” Button: Update the list of image stored in the printer
 - “Print All” Button: Prints all images in the list
 - “Print” Button: Prints selected image(s)
 - “Remove” Button: Delete selected images in NV memory
 - “Remove All” Button: Delete all images in NV memory



- 6) After selecting an image from the image list, adjust the brightness level before downloading



- 7) Click "Download" button to download the image(s).
Start address is "00".
Checking "Auto Addressing" will assign the address automatically.



- 8) When downloading is complete, saved address numbers appear in "Used address list".

5-2 When Using on a PDA

- 1) Turn on printer power.
- 2) Prepare image file on PDA (e.g. Main.bmp)
- 3) Run Unified Utility executable file.

※ Latest file versions can be downloaded from the BIXOLON website.
(www.bixolon.com)

- 4) Select "TCP/IP Communication" and click "NV Manager" button.
Refer to Network Connection Manual regarding the TCP/IP setting (may vary according to device).

Communication Setting

☐ TCP/IP Communication

Port : COM6: ▼

Baudrate : 115200 ▼

Virtual Memory Switch Manager

NV Manager

Exit

- 5) Click “Add Image” button to image(s) to the image list.
Click “Remove” button to delete selected image(s), and click “Reset” button to make modifications.

Image File List	Address
Bixolon_logo.bmp	00 01
Add Image	Refresh
Remove	Print All
Reset	Print
<input type="checkbox"/> Auto addressing	Remove
Download	Remove All
Exit	

- 6) “Address” shows address numbers for saved images.
Following buttons can be used to handle saved images.
- “Refresh” Button: Update the list of image stored in the printer
 - “Print All” Button: Print all images in the list
 - “Print” Button: Print selected image(s)
 - “Remove” Button: Delete selected images in NV memory
 - “Remove All” Button: Delete all images in NV memory

Image File List	Address
Bixolon_logo.bmp	00 01
Add Image	Refresh
Remove	Print All
Reset	Print
<input type="checkbox"/> Auto addressing	Remove
Download	Remove All
Exit	

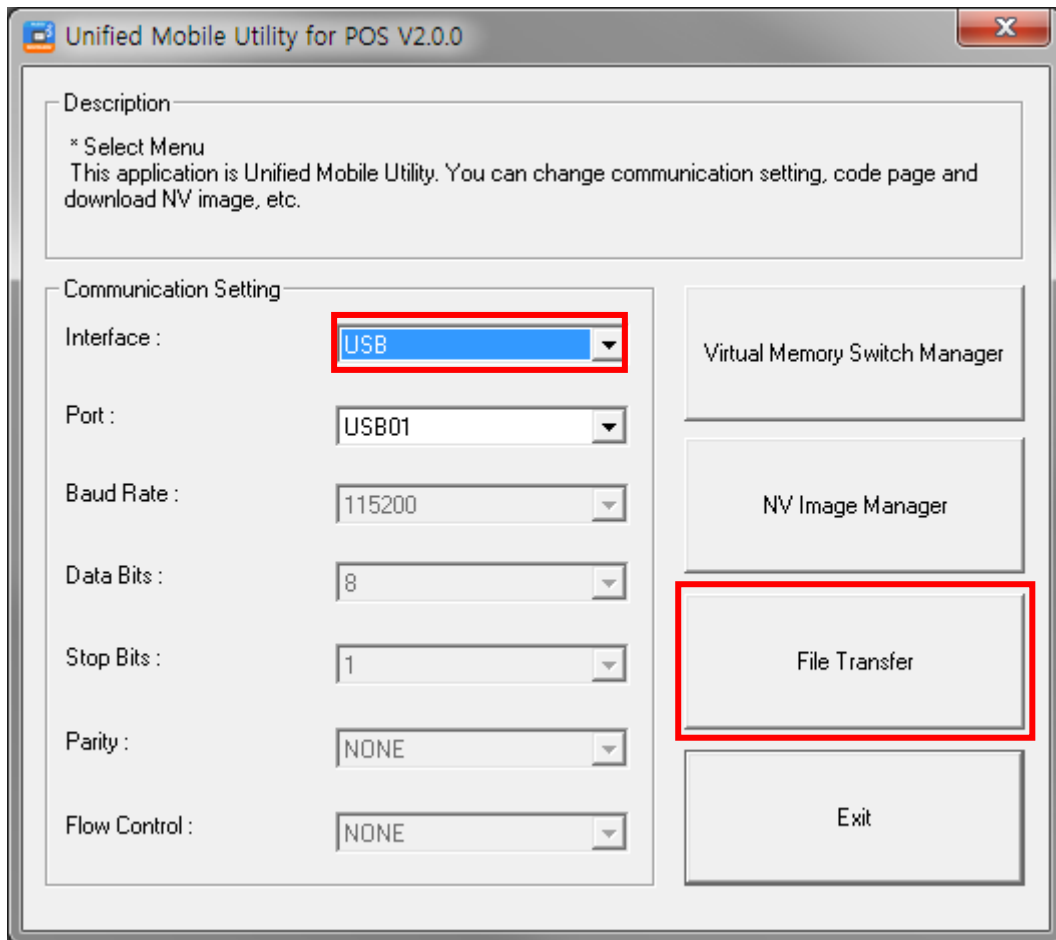
7) Click “Download” button to download image(s).
Start address is “00”.

Image File List	Address
Bixolon_logo.bmp	00
	01
Add Image	Refresh
Remove	Print All
Reset	Print
<input type="checkbox"/> Auto addressing	Remove
Download	Remove All
Exit	

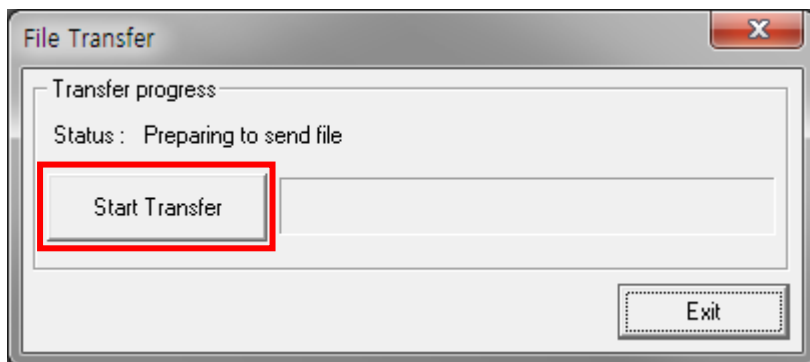
8) When downloading is complete, the saved address numbers appear in “Address”.

6. File Transfer Usage

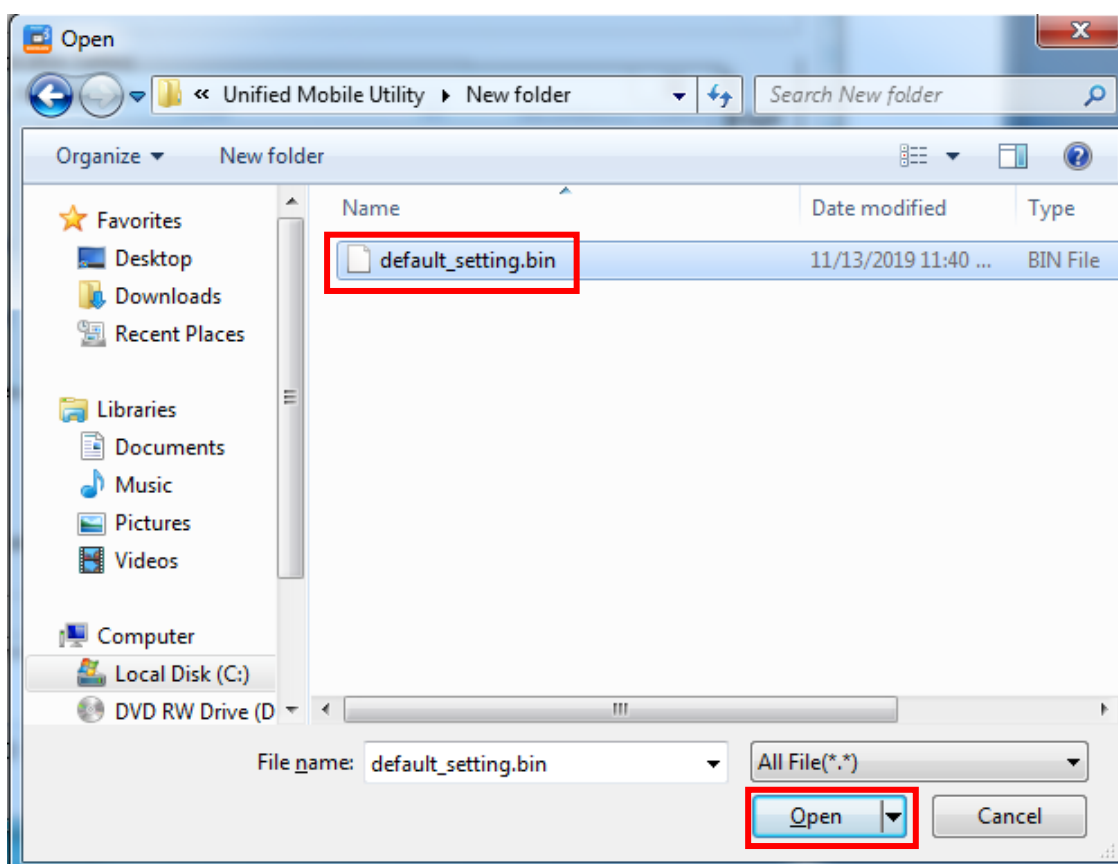
- 1) Printer connection method and instructions for running Unified Utility executable file are identical to those provided in Section 4. Virtual Memory Switch Manager.
- 2) Prepare the file to transfer on PC.
- 3) Select “Interface” and click “NV Image Manager” button.
To connect via Bluetooth or WLAN, please refer to Section 3. Wireless interface settings”.



4) If file transfer window is popped up, click the “Start transfer” button.



5) Select a file to be transferred, and click the “Open” button.



6) File transfer will be started. And reboot the printer after finishing the progress.

