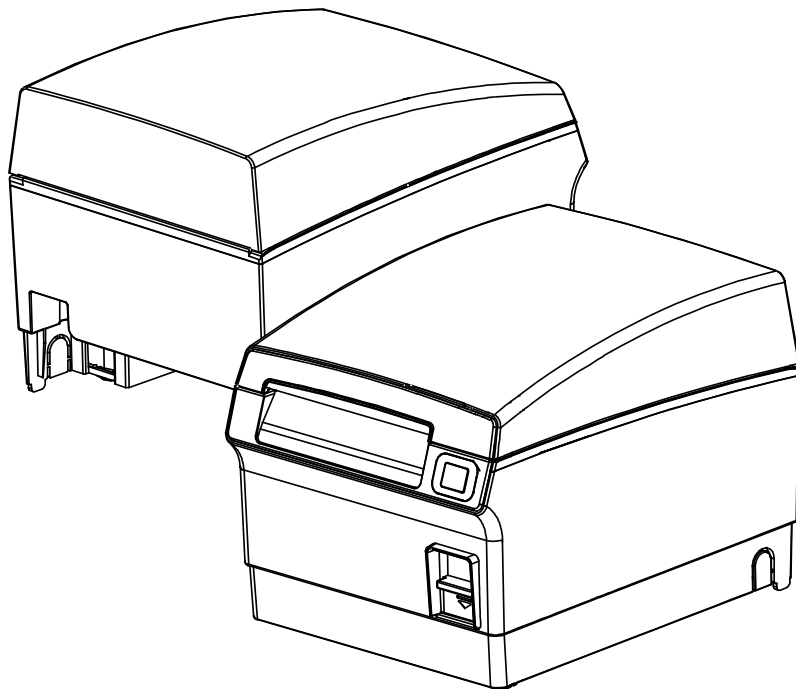




Windows Driver Manual

SRP-F312

Thermal printer
Rev. 1.03



<http://www.bixolon.com>

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1. Manual Information

This Windows Driver Installation Manual provides information on installation, detailed specifications, and usage of the printer's Windows Driver according to PC operating system (OS).

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

The following operating systems are supported for usage.

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

3. Windows Driver Preparation

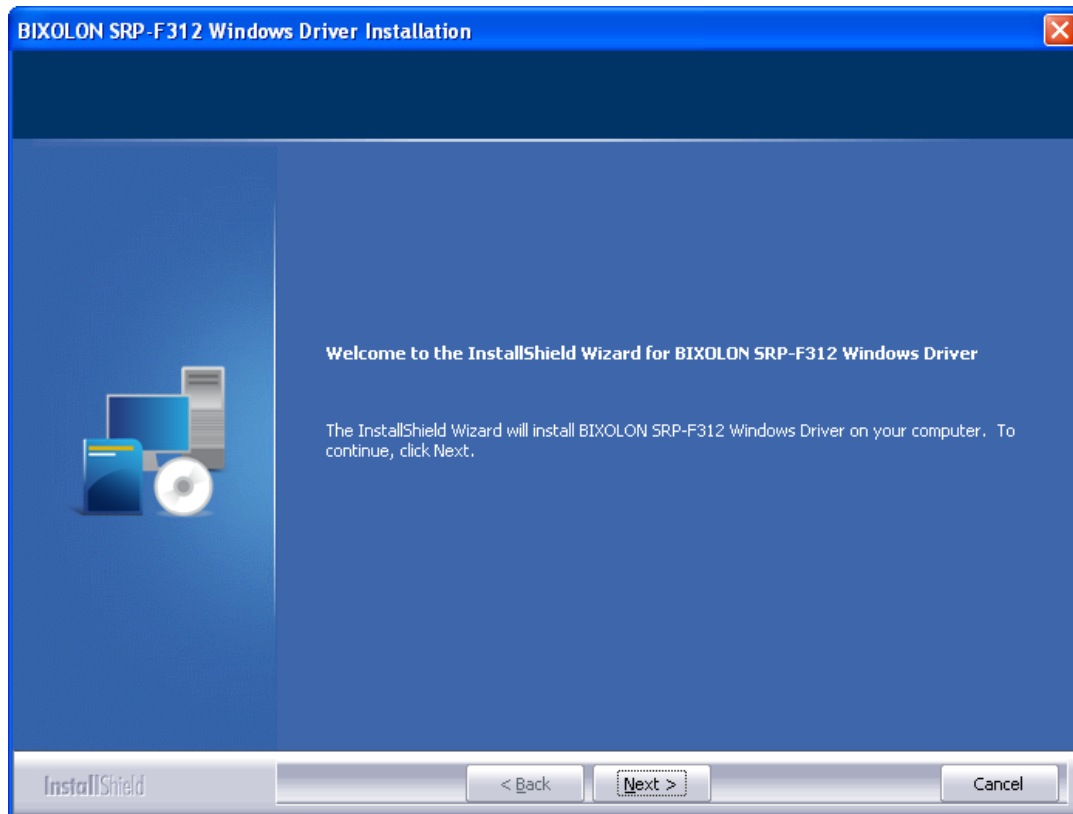
The Windows Driver is included in the enclosed CD, and Latest file versions can be downloaded from the BIXOLON website. (**www.bixolon.com**)

4. Windows Driver Installation

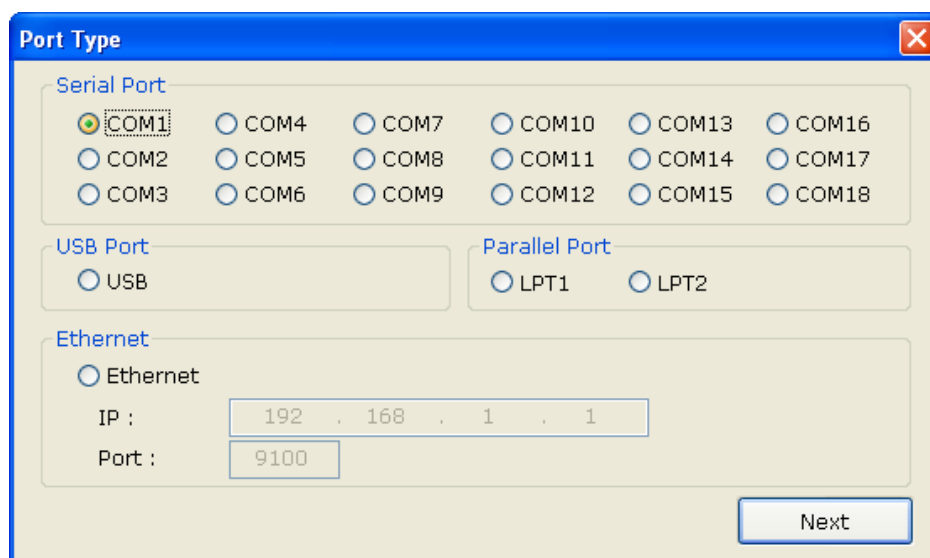
4-1 Installing on Windows XP / Server 2003

4-1-1 Via Serial Port or Parallel Port

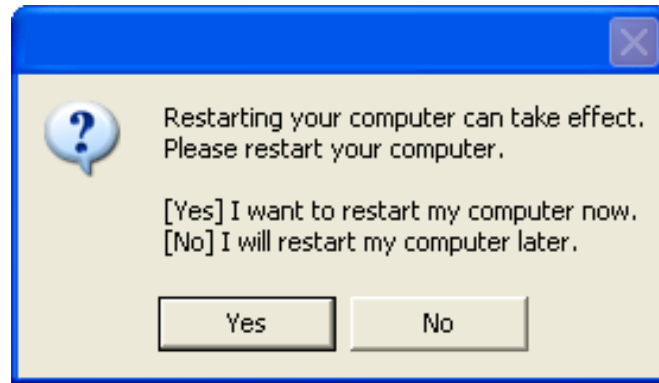
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select a COM or LPT port to be used, and then click **Next**.



4) Click **Yes** to reboot the PC.



5) Open the printer properties window in the Windows OS.

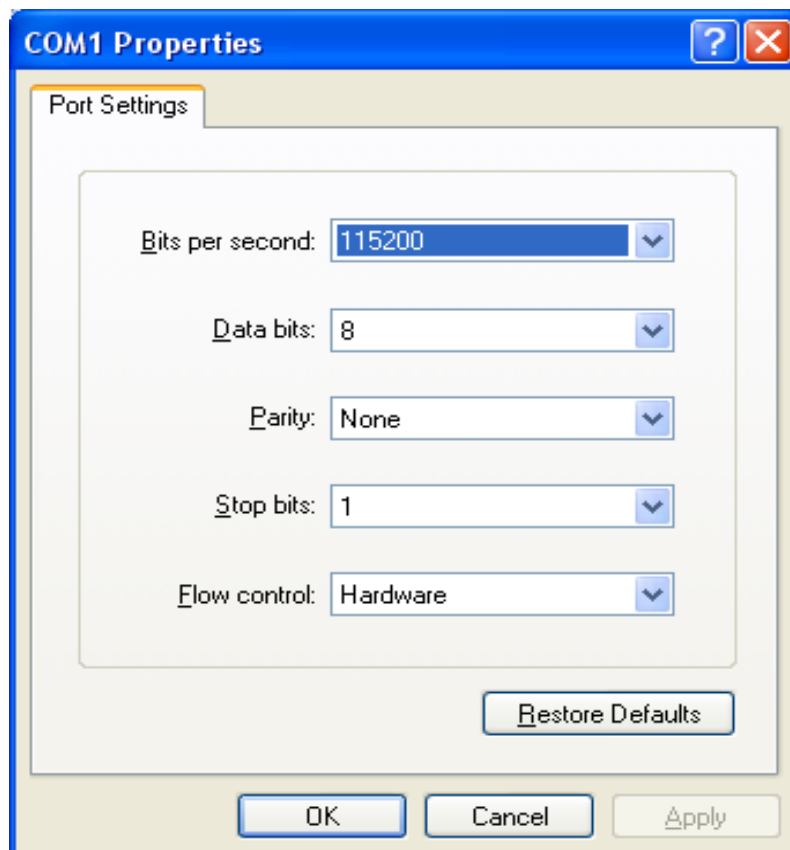
※ Control Panel – Printers and Faxes.

6) In the **Ports** tab, click **Configure Port**.

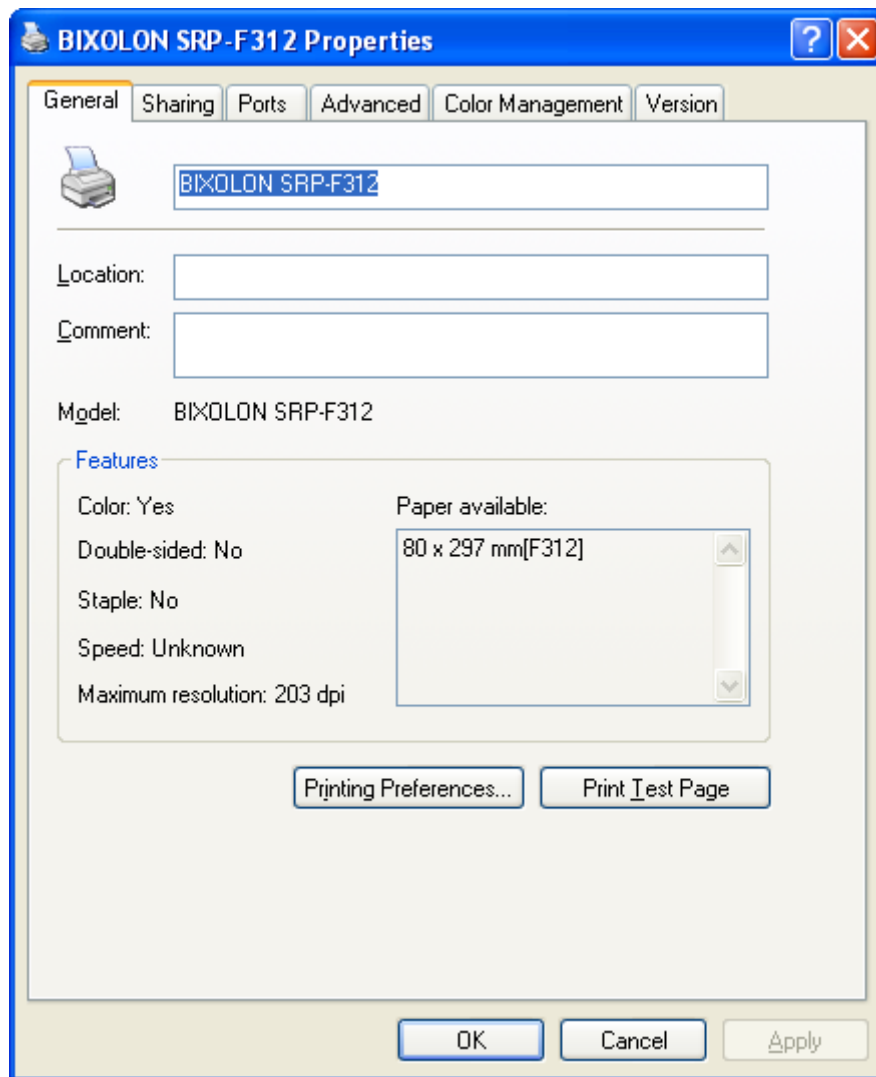
※ Skip this step if you selected a LPT port.

7) Match the communication settings to those of the printer. The communication settings of the printer can be performed by conducting a self-test.

※ Skip this step if you selected a LPT port.

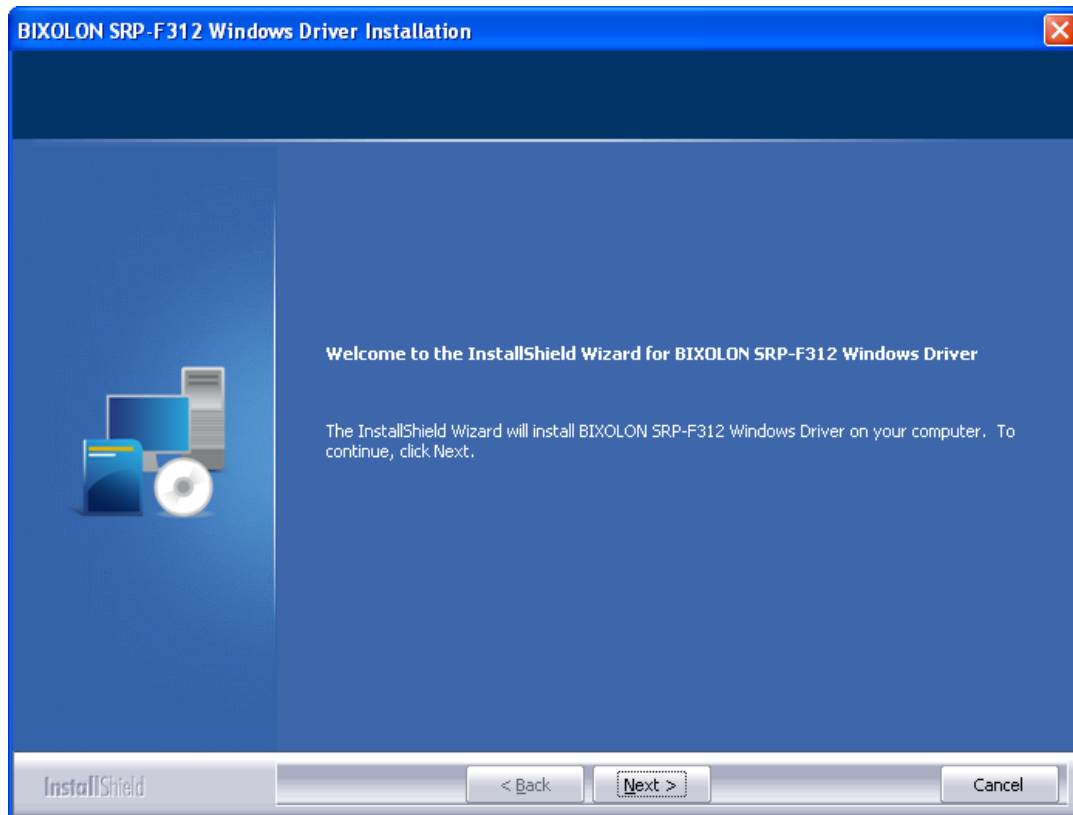


- 8) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.

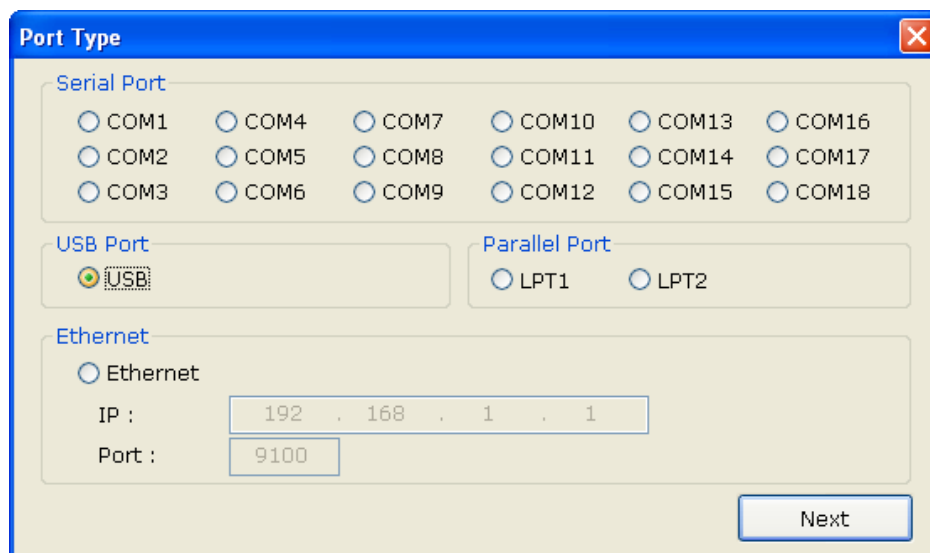


4-1-2 Via USB Port

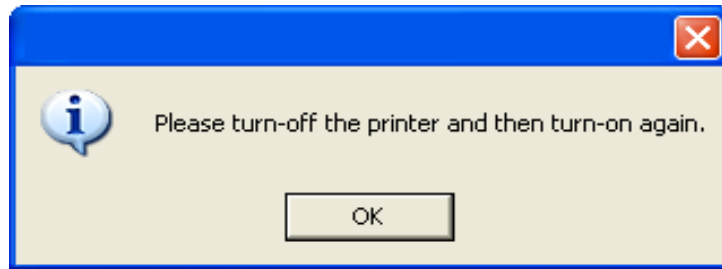
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select **USB** and then click **Next**.



4) Click **OK**.

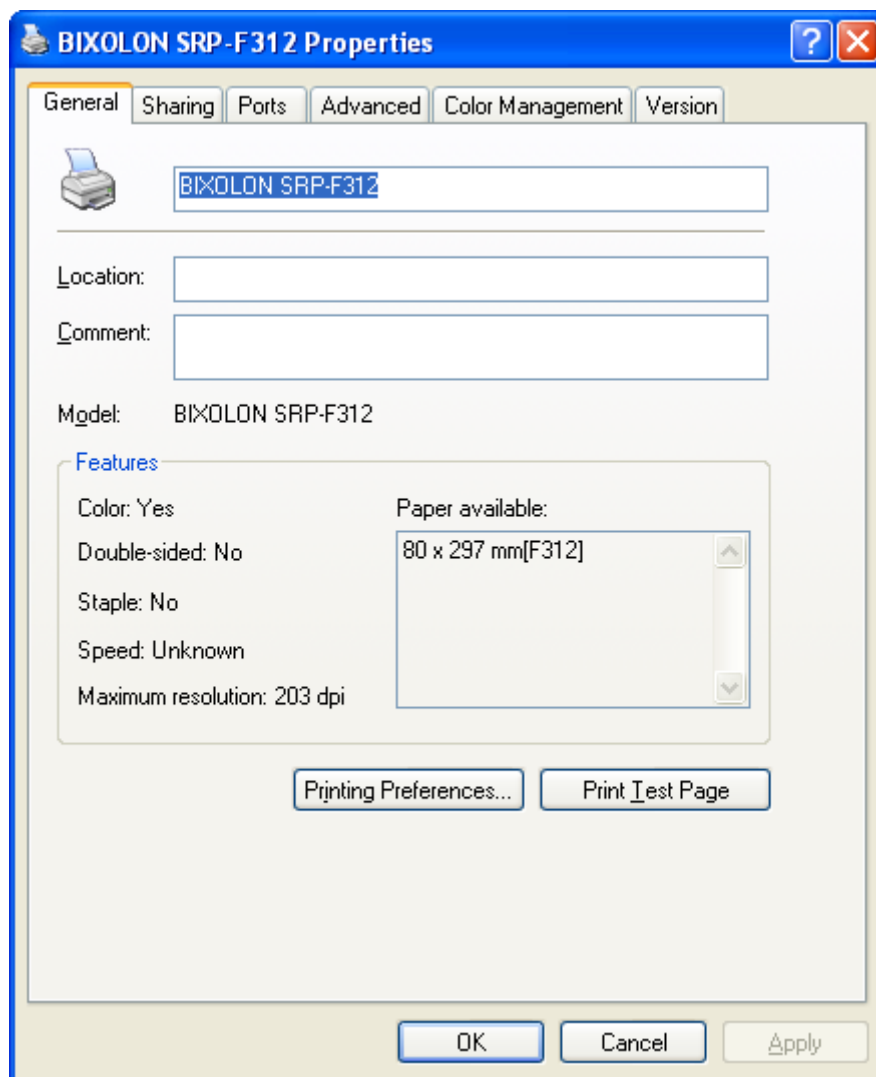


5) Turn off the printer and then turn it on. The printer driver will be installed automatically.

6) Open the printer properties window in the Windows OS.

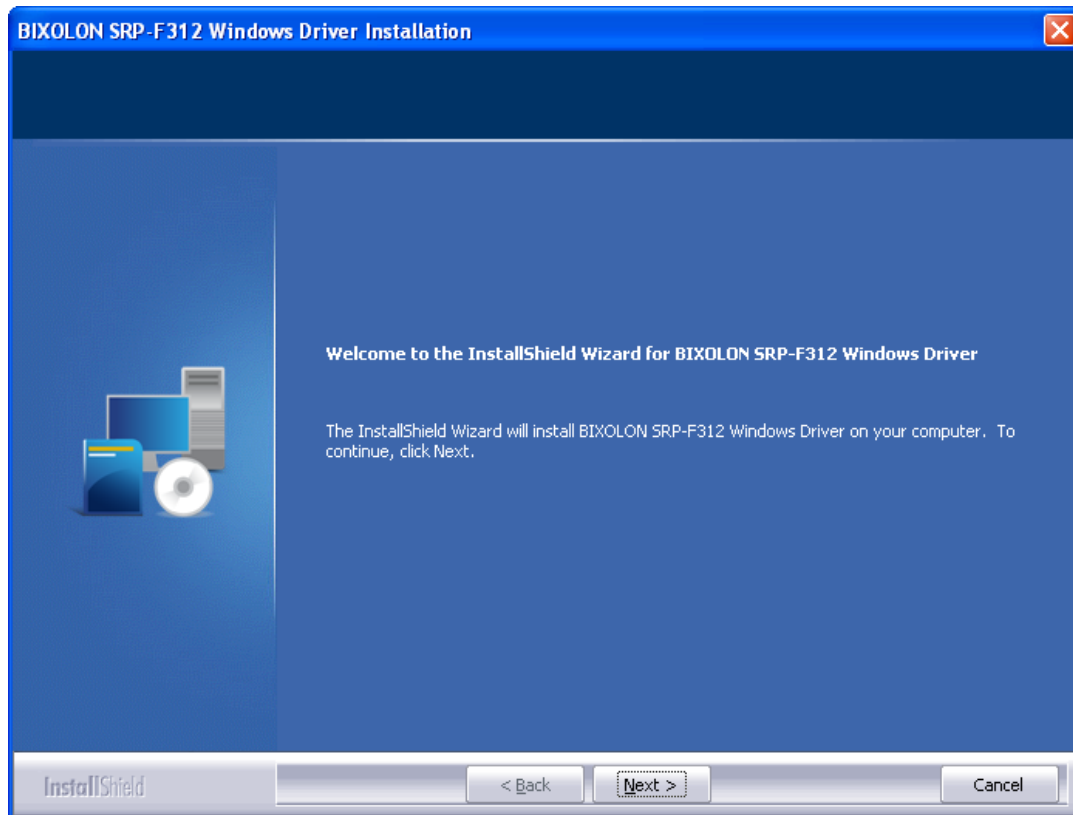
※ Control Panel – Printers and Faxes.

7) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.

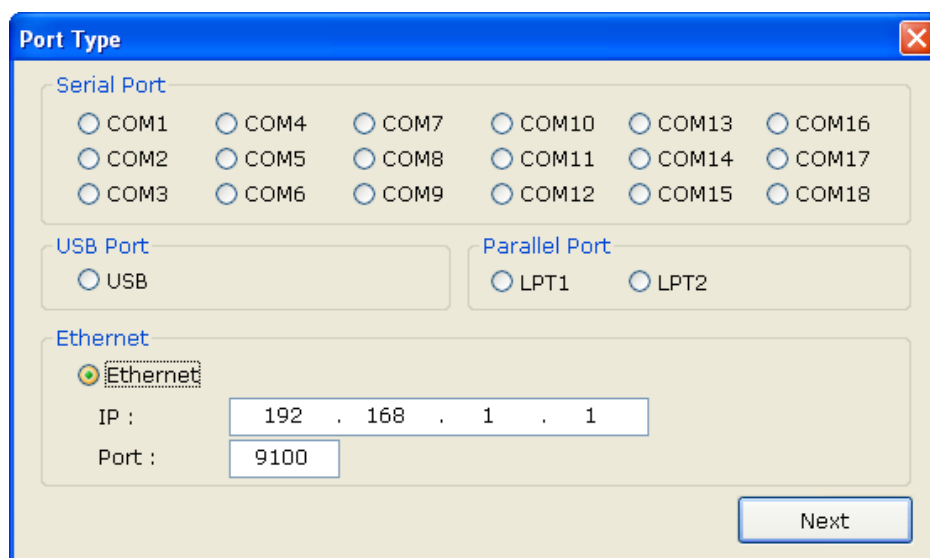


4-1-3 Via Ethernet Port

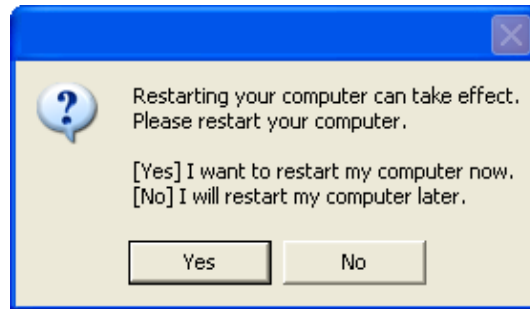
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select **Ethernet**.
- 4) Enter the IP address and port number, and then click **Next**.



5) Click **Yes** to reboot the PC.

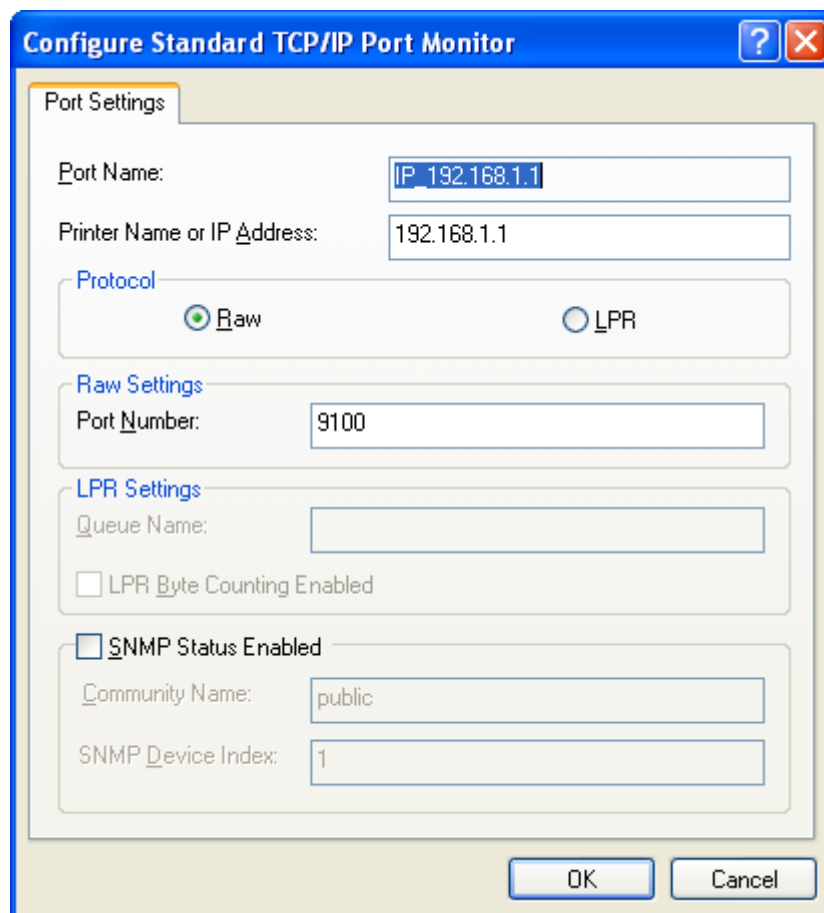


6) Open the printer properties window in the Windows OS.

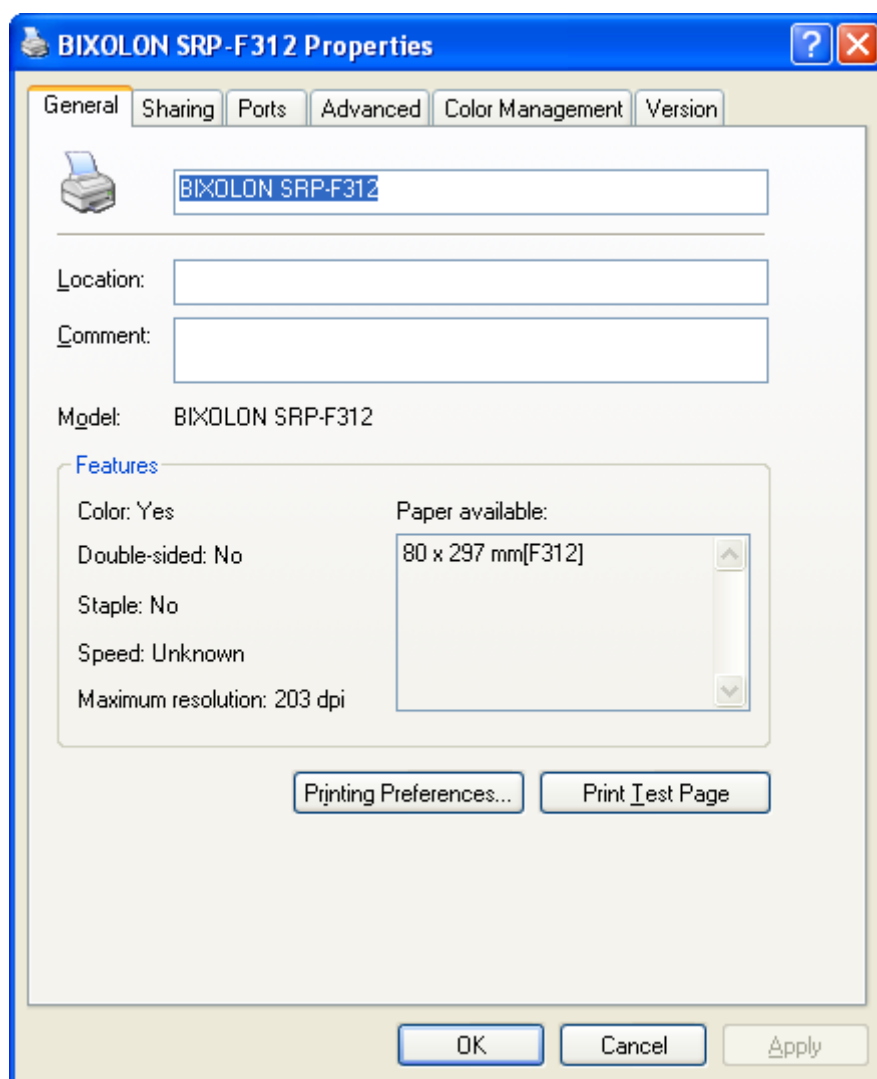
※ Control Panel – Printers and Faxes.

7) In the **Ports** tab, click **Configure Port....**

8) Match the communication settings to those of the printer.

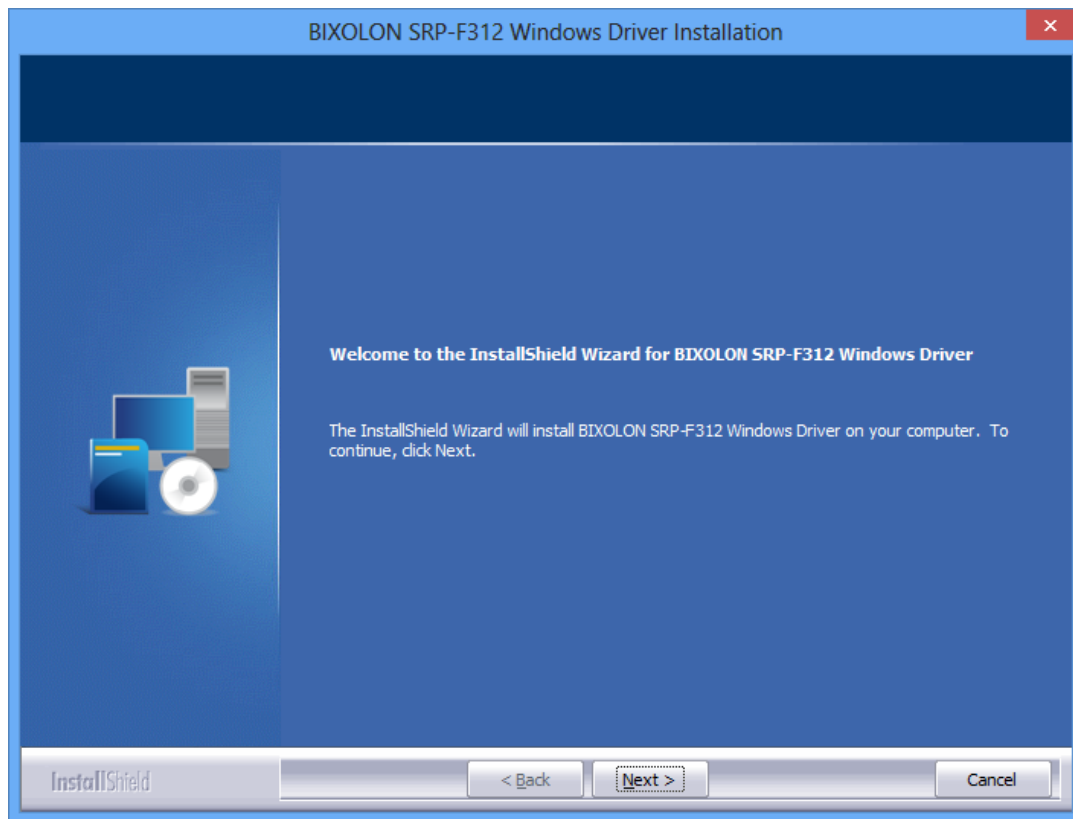


- 9) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.

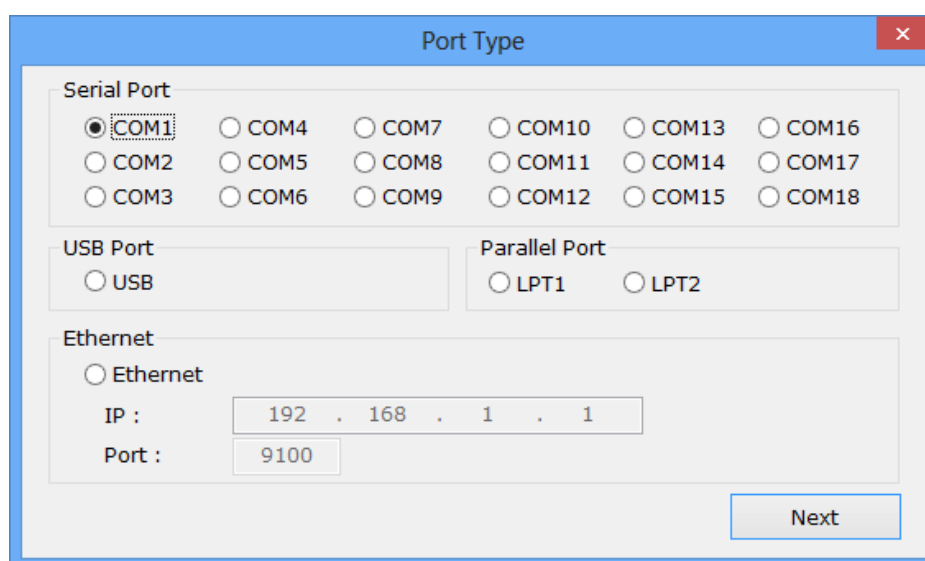


4-2 Installing on Windows VISTA / Server 2008 / 7 / 8 / Server 2012 / 10**4-2-1 Via Serial Port or Parallel Port**

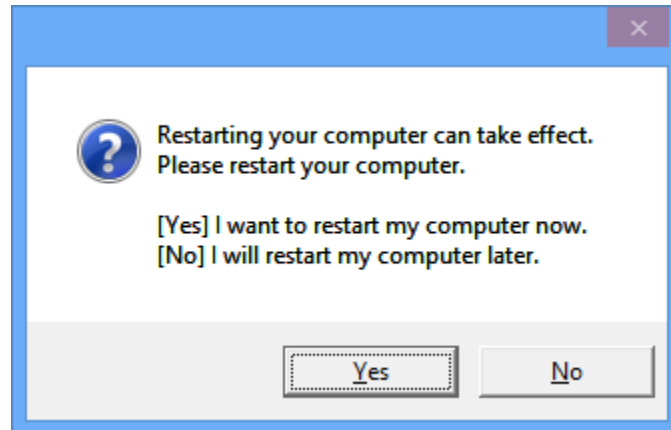
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select a COM or LPT port to be used, and then click **Next**.



4) Click **Yes** to reboot the PC.



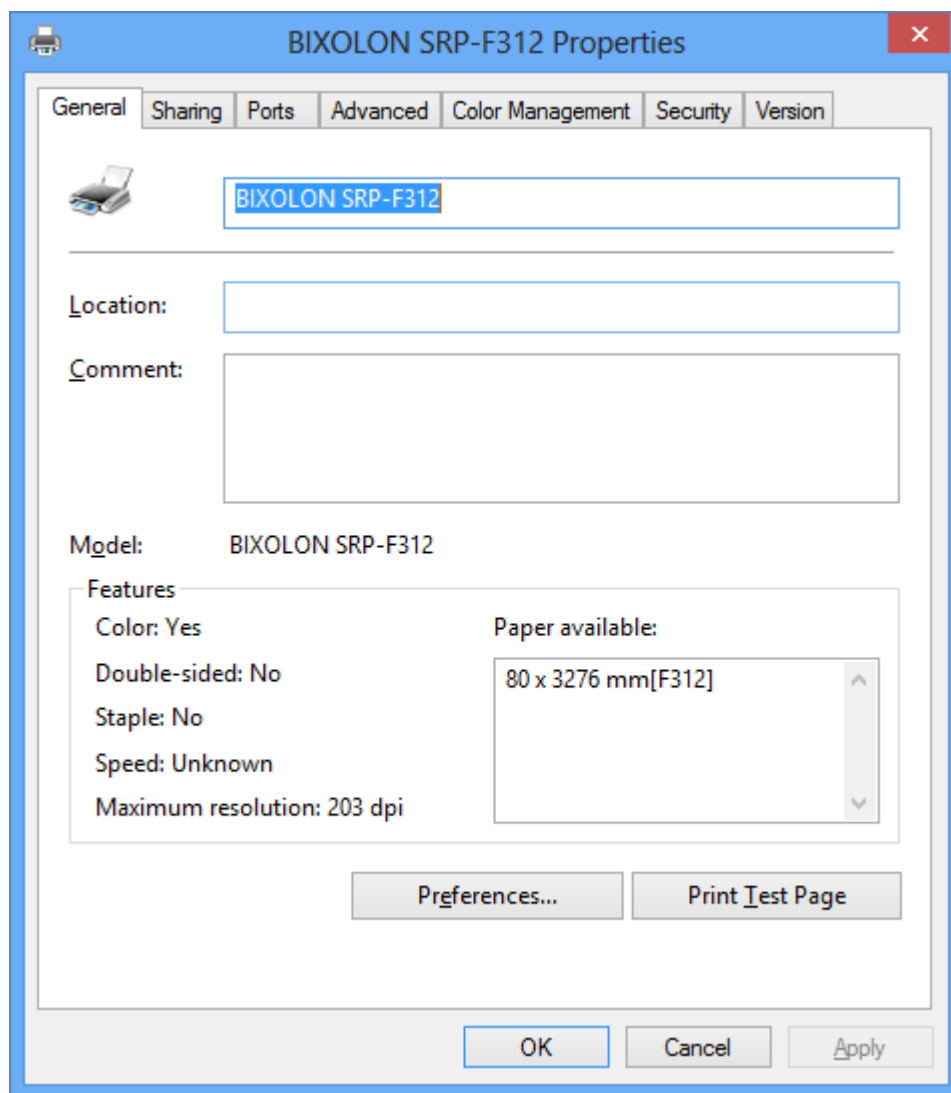
5) Open the printer properties window in the Windows OS.
※ Control Panel – Hardware and Sound – Device and Printers.

6) In the **Ports** tab, click **Configure Port**.
※ Skip this step if you selected a LPT port.

7) Match the communication settings to those of the printer. The communication settings of the printer can be performed by conducting a self-test.
※ Skip this step if you selected a LPT port.

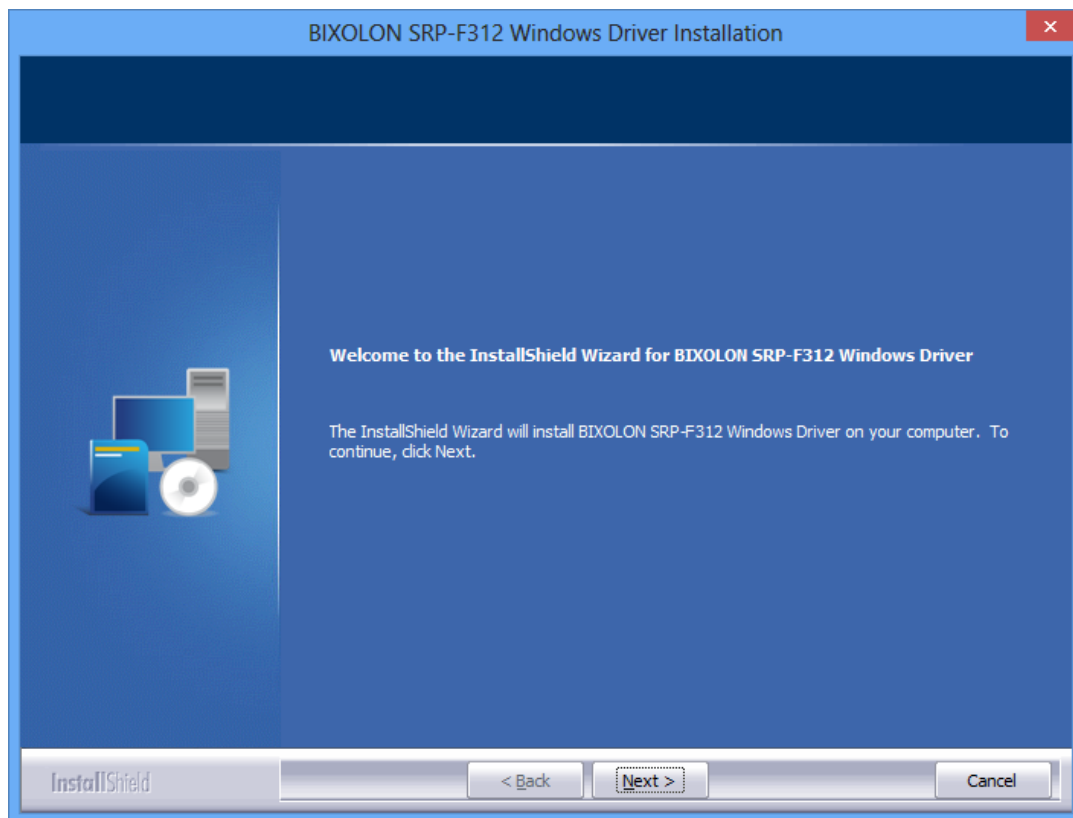


- 8) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.

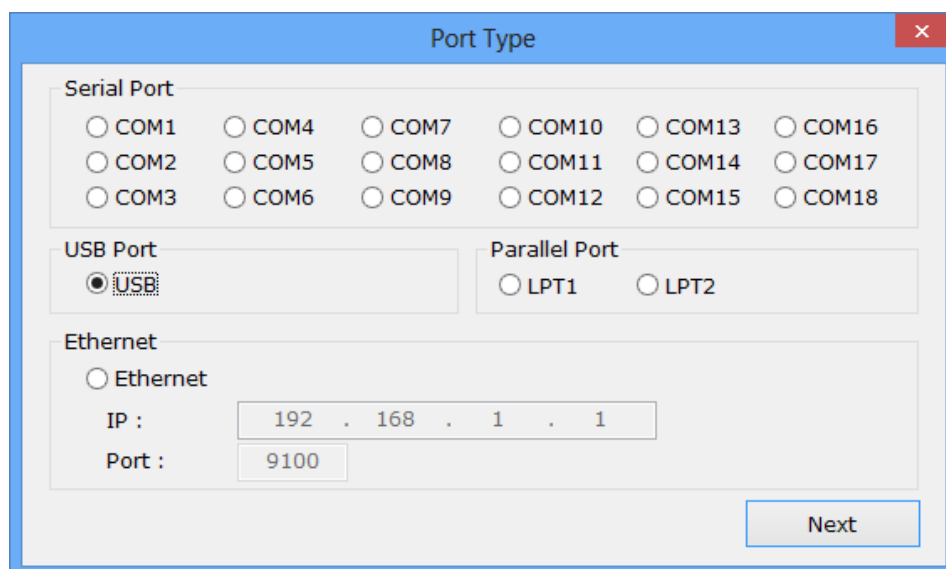


4-2-2 Via USB Port

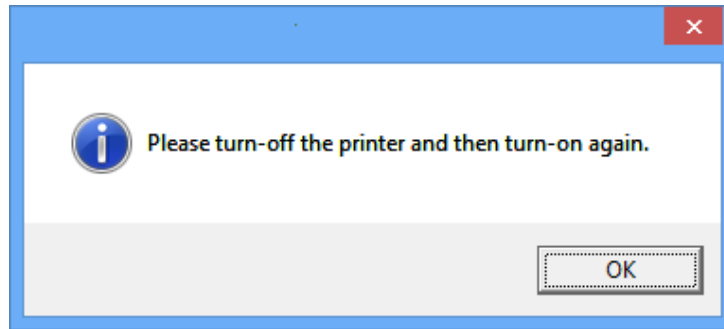
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select **USB** and then click **Next**.



4) Click **OK**.

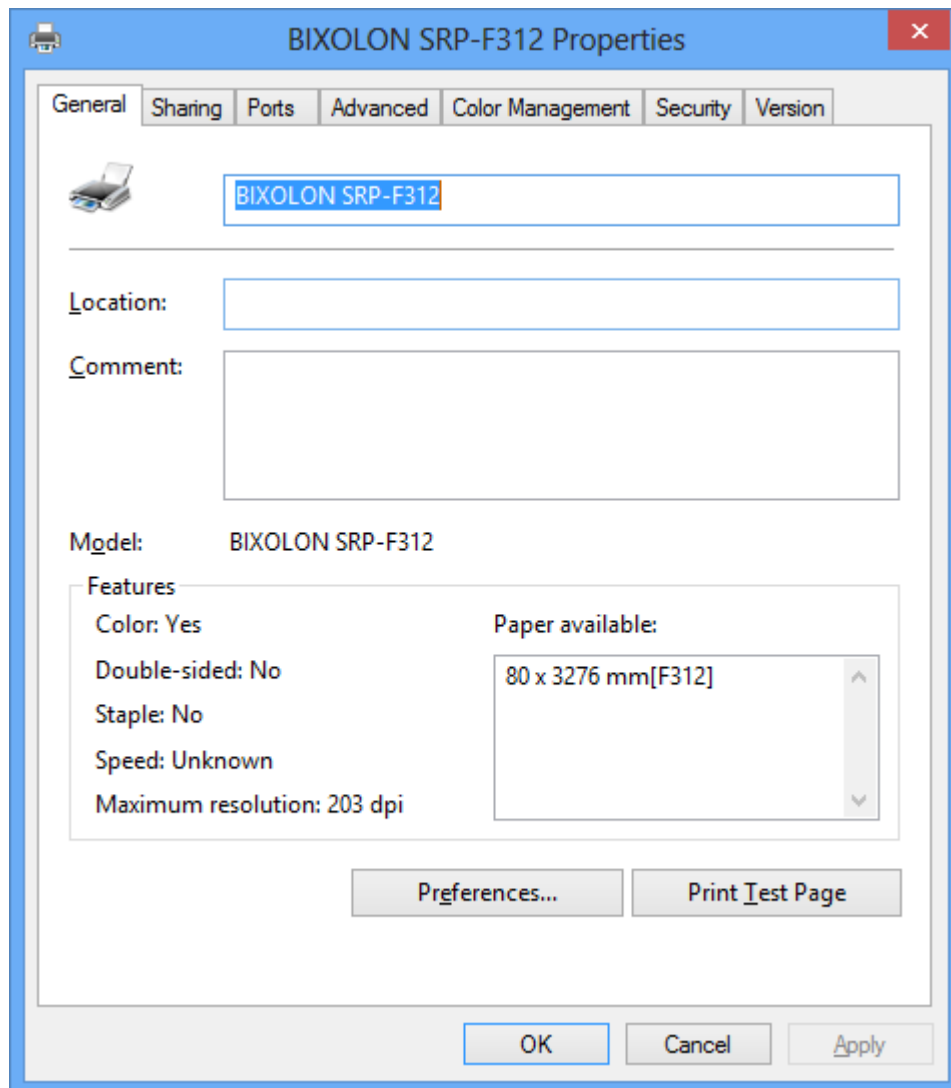


5) Turn off the printer and then turn it on. The printer driver will be installed automatically.

6) Open the printer properties window in the Windows OS.

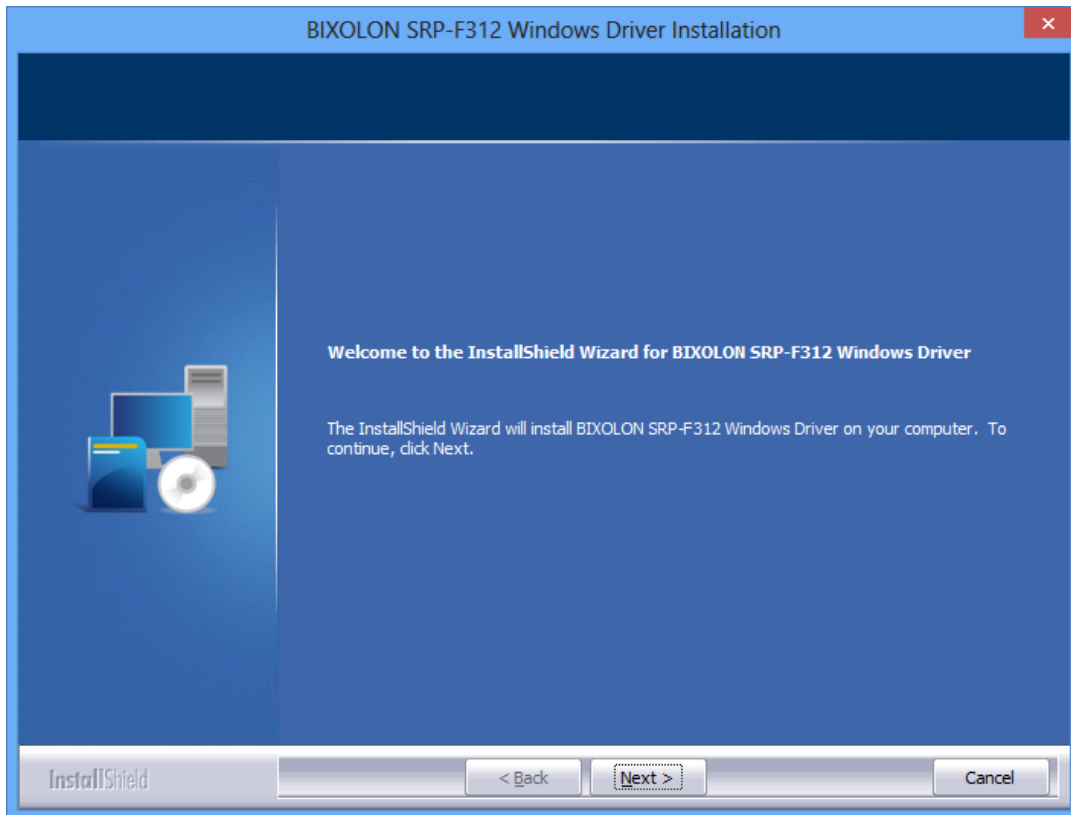
※ Control Panel – Hardware and Sound – Device and Printers.

7) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.

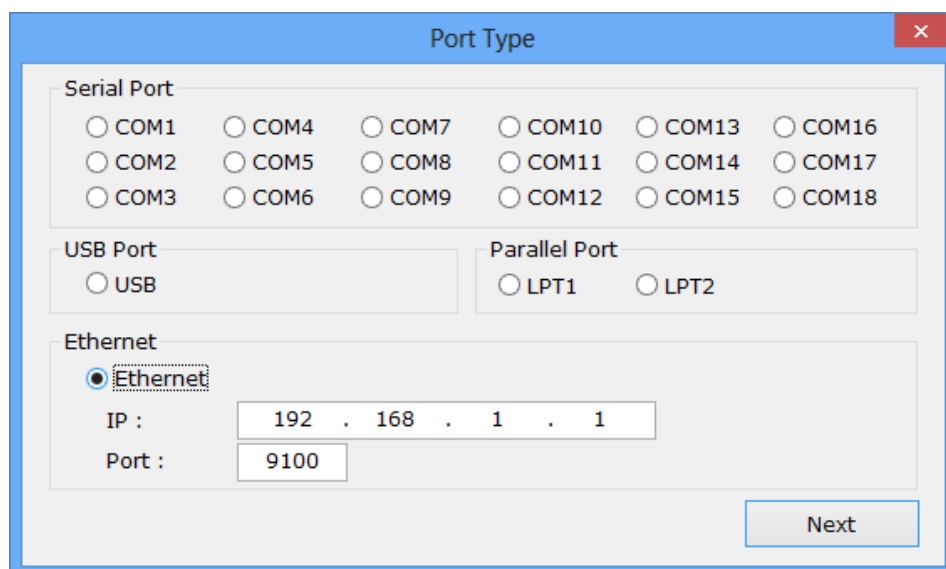


4-2-3 Via Ethernet Port

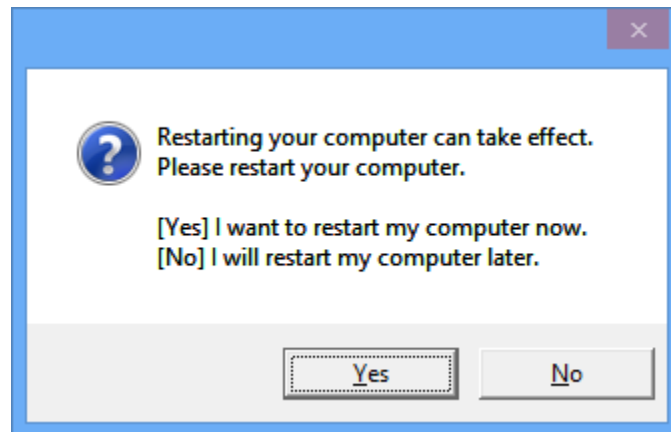
- 1) Double-click the Windows Driver installation file.
- 2) Click **Next**.



- 3) Select **Ethernet**.
- 4) Enter the IP address and port number, and then click **Next**.



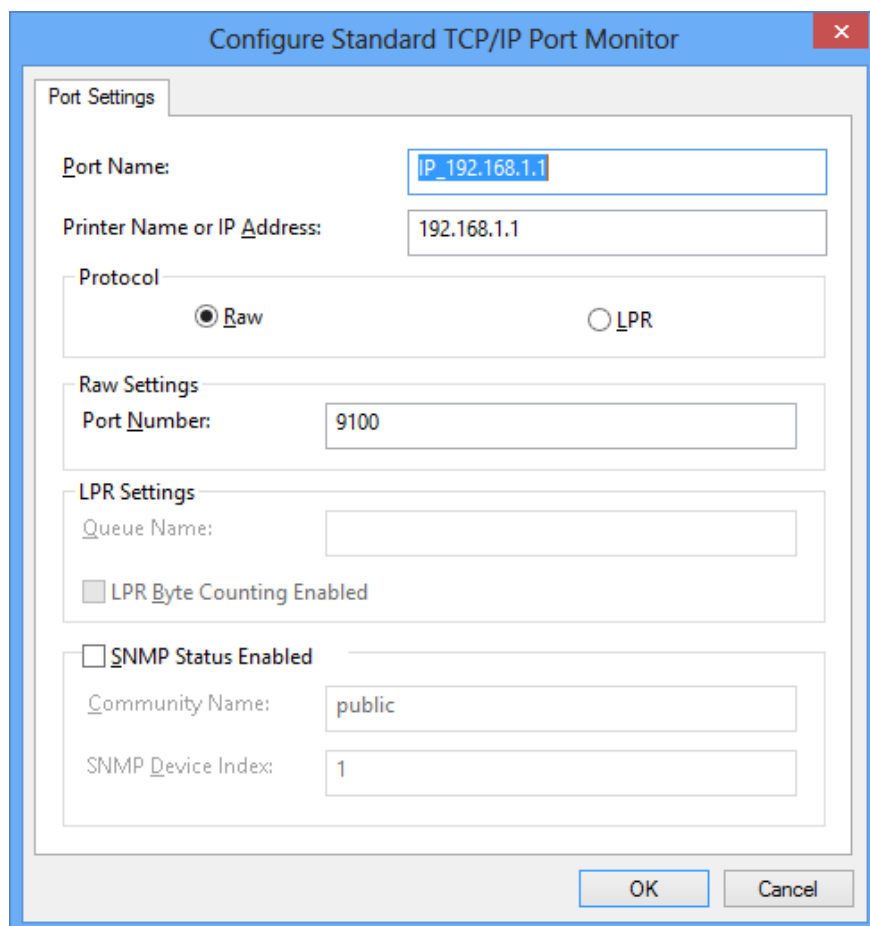
5) Click **Yes** to reboot the PC.



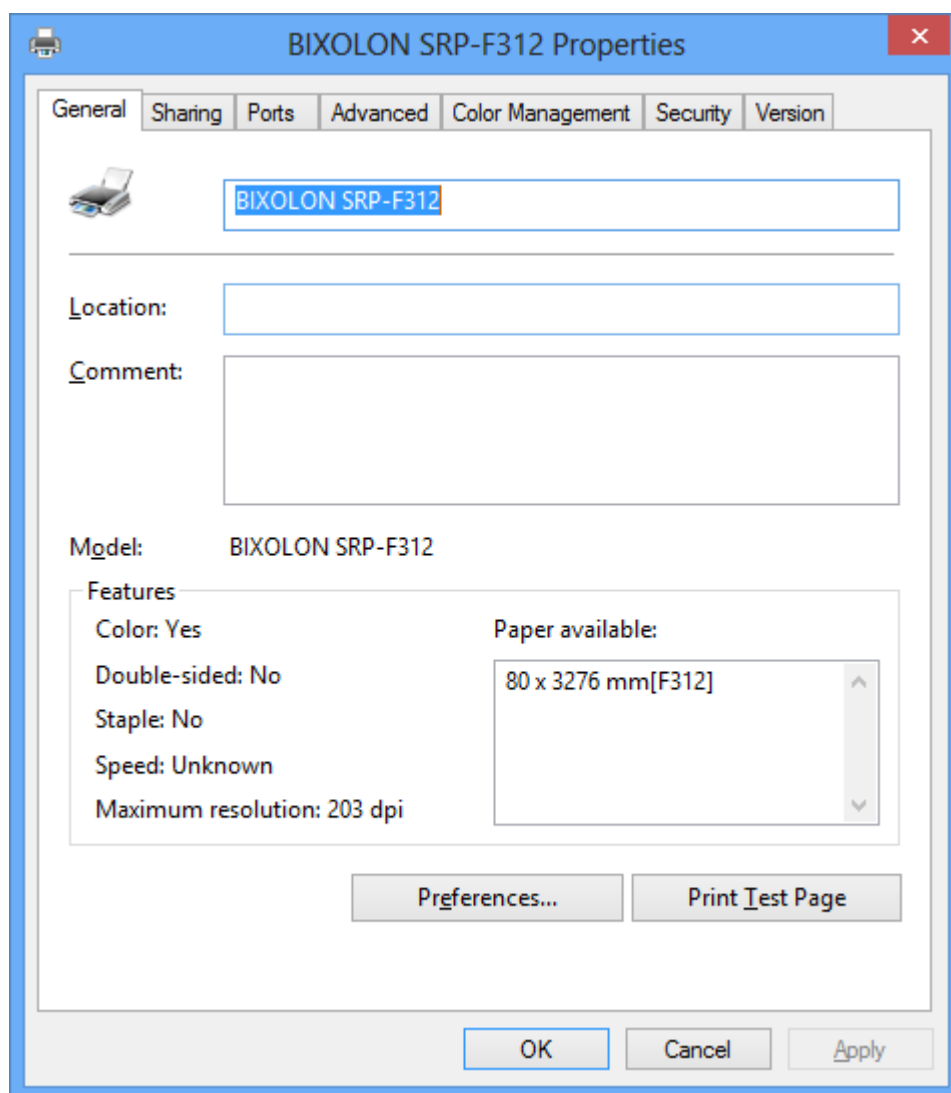
6) Open the printer properties window in the Windows OS.
※ Control Panel – Hardware and Sound – Device and Printers.

7) In the **Ports** tab, click **Configure Port....**

8) Match the communication settings to those of the printer.



- 9) Click **Print Test Page** and check printing status. Proper installation of the driver is indicated if the test page is printed normally.



5. Windows Driver Settings

The following functions can be configured after installing the Windows driver.

5-1 Layout

The screenshot shows the 'Layout' tab of the Windows Driver Settings window. The window has five tabs: 'Layout', 'Document Settings', 'NV Image', 'Barcode', and 'Utility'. The 'Layout' tab is active. It contains several sections for configuration:

- Paper:**
 - Paper Size: A dropdown menu showing '80 x 3276 mm' with a small '...' button to its right.
 - Paper Type: A dropdown menu showing 'Receipt'.
- Number of copies:**
 - Copies: A numeric input field showing '1' with up and down arrow buttons, and a range indicator '[1 .. 255]'.
- Color:**
 - Two radio buttons: 'Monochrome' (selected) and 'Color'.
- Orientation:**
 - Two radio buttons: 'Portrait' (selected) and 'Landscape'.
- Image Rotation:**
 - Four radio buttons: 'Normal' (selected), 'Rotation by 90 Degrees [CW]', 'Rotation by 180 Degrees [CW]', and 'Rotation by 270 Degrees [CW]'.
- Crop Function:**
 - Two checkboxes: 'Top Crop Length' and 'Bottom Crop Length'. Both are currently unchecked.
 - Each checkbox is followed by a numeric input field showing '0' with up and down arrow buttons, and a unit indicator '[mm]'.

- 1) Open the Printer Properties window for the corresponding OS.
- 2) In the **General** tab, click **Preferences** (Printing Preferences).
- 3) Click the **Layout** tab.

5-1-1 Paper Size

Paper size of **80 x 3276 mm** is selected by default, and the following sizes can be selected.

80 × 40 mm	80 × 160 mm	80 × 3276 mm
80 × 80 mm	80 × 200 mm	
80 × 120 mm	80 × 297 mm	

If a custom paper size is required, click “...” to add or update a custom paper size. Click **Save** after specifying the paper width/length and a paper name. If the specified paper name already exists on the system, you can update the paper width/length.

Valid Paper Width : 25.4 mm ~ 72.0 mm
Valid Paper Length : 25.4 mm ~ 3276.0 mm

The 'Paper Size' dialog box contains the following elements:

- Paper Size** (Title)
- List Box:** Contains 'NewPaperSize'.
- Delete** (Button)
- Paper Name:** Text field containing 'NewPaperSize'.
- Save** (Button)
- Valid Paper Width:** Spinner box showing '72.0' with range 'mm [25.4 - 72.0]'.
- Valid Paper Length:** Spinner box showing '297.0' with range 'mm [25.4 - 3276.0]'.
- Close** (Button)

You can choose the new paper size on the **Paper Size** combo-box after adding a paper size.

The 'Document Settings' tab shows the following configuration:

- Layout** (Tab)
- Document Settings** (Active Tab)
- NV Image** (Tab)
- Barcode** (Tab)
- Utility** (Tab)
- Paper** (Section Header)
 - Paper Size:** Dropdown menu showing 'NewPaperSize'.
 - Paper Type:** Dropdown menu showing 'Receipt'.
- Number of copies** (Section Header)
 - Copies:** Spinner box showing '1' with range '[1 .. 255]'.

Delete button : Deletes the paper size selected in the list.

Save button : Adds a new paper size or update the paper size selected in the list if the paper name already exists on the system.

5-1-2 Paper Type

You can choose **Receipt** or **Ticket** as paper types. Receipt allows flexible paper length according to the data length. Ticket print in fixed length even the print data is short. Default setting is “Receipt”.

Receipt : Receipt allows flexible paper length according to the data length.

Ticket : Ticket print in fixed length even the print data is short.

The screenshot shows the 'Document Settings' dialog box with the following settings:

- Paper**
 - Paper Size : 80 x 3276 mm
 - Paper Type : Receipt (selected from a dropdown menu showing Receipt and Ticket)
- Number of copies**
 - Copies : 1 (range [1 .. 255])
- Color**
 - ☒ Monochrome
 - ☐ Color
- Orientation**
 - ☒ Portrait
 - ☐ Landscape
- Image Rotation**
 - ☒ Normal
 - ☐ Rotation by 90 Degrees [CW]
 - ☐ Rotation by 180 Degrees [CW]
 - ☐ Rotation by 270 Degrees [CW]
- Crop Function**
 - ☐ Top Crop Length : 0 [mm]
 - ☐ Bottom Crop Length : 0 [mm]

5-1-3 Copies

Copies are printed by specifying the copy count. The copy count is set to 1 by default. Set this value bigger than 1 to set the number of copies to print. The value should be within the range of 1 to 255.

5-1-4 Color

The Color is set to **Monochrome** by default. Select **Color** if you are using two color thermal paper (i.e. Red & Black).

5-1-5 Image Rotation

Image rotation is available for image data only and available in “**Monochrome**” mode. Rotation for device fonts or barcodes font is not supported. The color type will be changed to “Monochrome” mode automatically if this function is used in the **color** mode.

5-1-6 Crop Function

This function crops the upper and lower end of the printing area by the specified number. It helps reduce the margin at the top and bottom when there is excessive margin. The value should be within the range of 1 to 99.

5-1-7 Orientation

Printing orientation can be set to **Portrait** (which is the default) or **Landscape**. It is not possible to use device fonts and device barcodes in landscape.

Portrait: Printing in the vertical direction.

Landscape: Printing in the horizontal direction.

5-2 Document Settings

The screenshot shows the 'Document Settings' tab of a printer's configuration window. The 'Send Command' section has input fields for 'Start Doc', 'Start Page', 'End Page', and 'End Doc', with an example '<1B4A00>' below. The 'Cash Drawer / Internal Beep' section has six checkboxes and corresponding time settings (all set to 50 ms): 'Open before printing #1', 'Open before printing #2', 'Open after printing #1', 'Open after printing #2', 'Beep sound before printing', and 'Beep sound after printing'. The 'Line Feed' section has a 'Line-feeds after printing' setting set to 0. The 'Paper Cut' section has three radio button options: 'Page / Job : No Cut / No Cut', 'Page / Job : No Cut / Partial Cut' (which is selected), and 'Page / Job : Partial Cut / Partial Cut'.

- 1) Open the Printer Properties window for the corresponding OS.
- 2) In the **General** tab, click **Preferences** (Printing Preferences).
- 3) Click the **Document Settings** tab.

5-2-1 Send Command

The Windows driver serves to receive the content for print from an application and send it to the printer. The "Send Commands" function allows for the addition of desired commands at the start or end of the print content.

Start Doc	:	Addition of command at the beginning of the document.
Start Page	:	Addition of command at the beginning of the page.
End Page	:	Addition of command at the end of the page.
End Doc	:	Addition of command at the end of the document.

For more information on the hexadecimal values that can be entered in "Start Doc", "Start Page", "End Page" and "End Doc", refer to the Control Commands Manual.

5-2-2 Cash Drawer / Internal Beep

To open a cash-drawer before printing, tick "Open before printing #1" or "Open before printing #2".

To open a cash-drawer after printing, tick "Open after printing #1" or "Open after printing #2".

To make a beep sound when printing, tick "Beep sound before printing" or "Beep sound after printing".

5-2-3 Line Feed

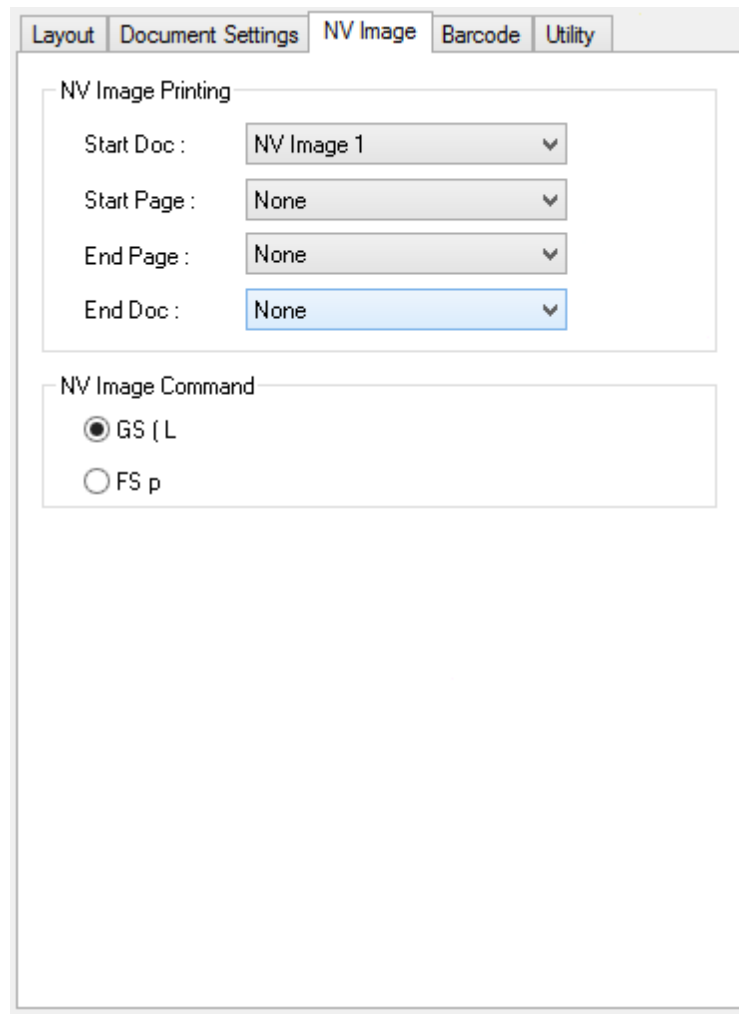
It is possible to set the number of line feeds between 0 and 99 for adding blank lines at the end of printing.

5-2-4 Cut

Paper can be cut at the end of each page or each document (job).

Page/Job : No Cut / No Cut	:	Paper is not cut after printing.
Page/Job : No Cut / Partial Cut	:	Paper is cut at the end of each document (Job).
Page/Job : Partial Cut / Partial Cut	:	Paper is cut at the end of each page.

5-3 NV Image



- 1) Open the Printer Properties window for the corresponding OS.
- 2) In the **General** tab, click **Preferences** (Printing Preferences).
- 3) Click the **NV Image** tab.

The position to print NV image stored in the printer can be set at the beginning and/or end of the document and beginning and end of each page. Also, there are two commands for NV Image printing. Take care of selecting one of the two commands because NV images cannot be printed depending on the selected command.

- ※ NV bit image: "FS p"
- ※ NV graphics: "GS (L"

Start Doc : Insert NV image at the top of the document.
 Start Page : Insert NV image at the top of the page.
 End Page : Insert NV image at the end of the page.
 End Doc : Insert NV image at the end of the document.

5-4 Barcode

The screenshot shows a software window with five tabs: Layout, Document Settings, NV Image, Barcode, and Utility. The Barcode tab is selected. It contains two sections: 1D-Barcodes and 2D-Barcodes. The 1D-Barcodes section has a 'Font Name' dropdown set to 'Barcode1', a 'Type' dropdown set to 'UPC-A', and a 'Properties' button. The 2D-Barcodes section has a 'Font Name' dropdown set to '2D-Code1', a 'Type' section with two radio buttons ('PDF417' is selected and 'QR Code' is unselected), and a 'Properties' button.

Section	Font Name	Type	Properties
1D-Barcodes	Barcode1	UPC-A	Properties
2D-Barcodes	2D-Code1	<input checked="" type="radio"/> PDF417 <input type="radio"/> QR Code	Properties

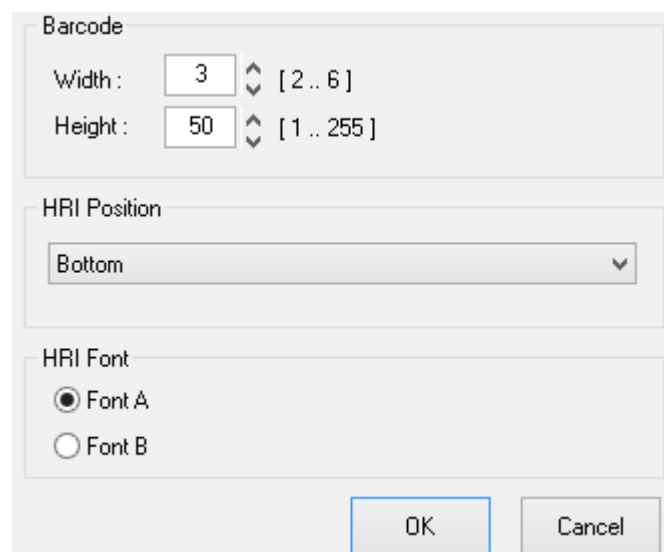
- 1) Open the Printer Properties window for the corresponding OS.
- 2) In the **General** tab, click **Preferences** (Printing Preferences).
- 3) Click the **Barcode** tab.

5-4-1 1d Barcodes

Windows driver supports one-dimensional barcode fonts as shown in the following table. Barcodes can be printed on the printer by using following font names.

Font Name	Type (Symbology)	Size (Point)	Supported Characters
Barcode1	UPC-A	18 / 35.5 / 53 / 71	Numeric: 0~9
Barcode2	UPC-E	18 / 35.5 / 53 / 71	Numeric: 0~9
Barcode3	JAN13 (EAN)	18 / 35.5 / 53 / 71	Numeric: 0~9
Barcode4	JAN8 (EAN)	18 / 35.5 / 53 / 71	Numeric: 0~9
Barcode5	Code39	18 / 35.5 / 53 / 71	Numeric: 0~9 Symbols: \$, +, -, ., / Letters: A~Z
Barcode6	ITF	18 / 35.5 / 53 / 71	Numeric: 0~9
Barcode7	Codabar	18 / 35.5 / 53 / 71	Numeric : 0~9 Symbols: \$, +, -, ., /, : Letters: A~D
Barcode8	Code93	18 / 35.5 / 53 / 71	ASCII CODE: 0x00 ~ 0x7F
Barcode9	Code128	18 / 35.5 / 53 / 71	ASCII CODE: 0x00 ~ 0x7F

If you want to change the default value of 1d barcode properties, select a **Font Name** and **Type** of one-dimensional barcode, and then click **Properties**. Click **OK** after changing the values of properties.



The image shows a 'Barcode' properties dialog box. It contains three main sections: 'Width' and 'Height' with input fields and ranges; 'HRI Position' with a dropdown menu; and 'HRI Font' with two radio button options. At the bottom are 'OK' and 'Cancel' buttons.

Barcode

Width : [2 .. 6]

Height : [1 .. 255]

HRI Position

▼

HRI Font

☒ Font A

☐ Font B

OK Cancel

5-4-2 2d Barcodes

Windows driver supports two-dimensional barcode fonts as shown in the following table. Barcodes can be printed on the printer by using following font names.

Font Name	Type (Symbology)	Size (Point)
2D-Code1	PDF417	8.5
2D-Code2	QR Code	8.5

If you want to change the default value of 2d barcode properties, select a **Font Name** and **Type** of two-dimensional barcode, and then click **Properties**. Click **OK** after changing the values of properties for PDF417 or QR Code.

PDF417

Column : 0 [0 .. 30]

Step : 0 [0, 3 .. 90]

Width : 3 [2 .. 8]

Height : 3 [2 .. 8]

Error Correction : Level 0

☐ Set the processing of simplified PDF417 symbol

OK Cancel

<PDF417>

QR Code

Size : 3 [1 .. 8]

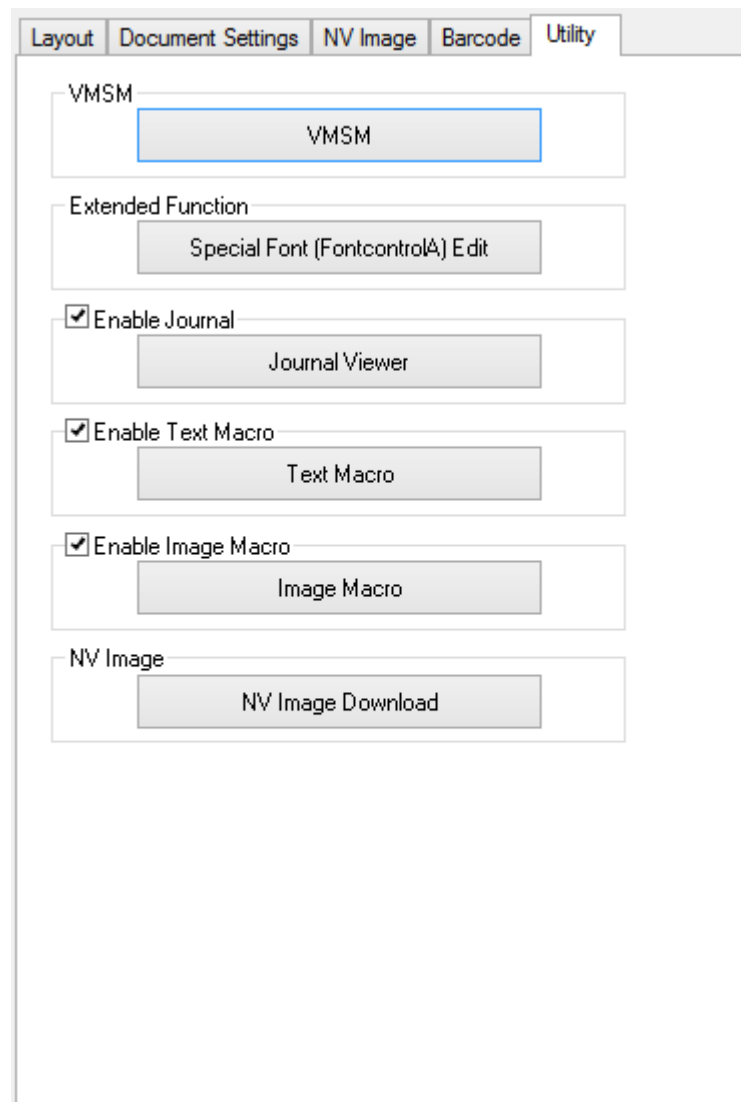
Model : Model 2

Error Correction : Level L

OK Cancel

<QR Code>

5-5 Utility



- 1) Open the Printer Properties window for the corresponding OS.
- 2) In the **General** tab, click **Preferences** (Printing Preferences).
- 3) Click the **Utility** tab.

5-5-1 VMSM

Refer to the **VMSM** manual contained in the CD for details.

5-5-2 Special Font Edit Utility

The purpose of **FontControlA** font is not for text printing. It is used to define the printer command, assign the defined printer command to a specific ASCII character, and send it to the printer. The range of ASCII code that the command can be assigned is from 0x20 to 0x7F, and the command can be easily assigned using this utility.

- 1) Click **Special Font Edit Utility**.
- 2) Select an ASCII code character and enter the print command. All values should be entered in hexadecimal number format.
- 3) Click **Apply** and then click **OK**.

Char	Hex	Command
	20	1B 3D 00
!	21	48 44 48 0A
"	22	
#	23	
\$	24	
%	25	
&	26	
'	27	
(28	
)	29	
*	2a	
+	2b	
,	2c	
-	2d	
.	2e	
/	2f	
0	30	
1	31	
2	32	
3	33	
4	34	
5	35	
6	36	
7	37	

Char: !

Hex: 21

Apply

Delete

OK

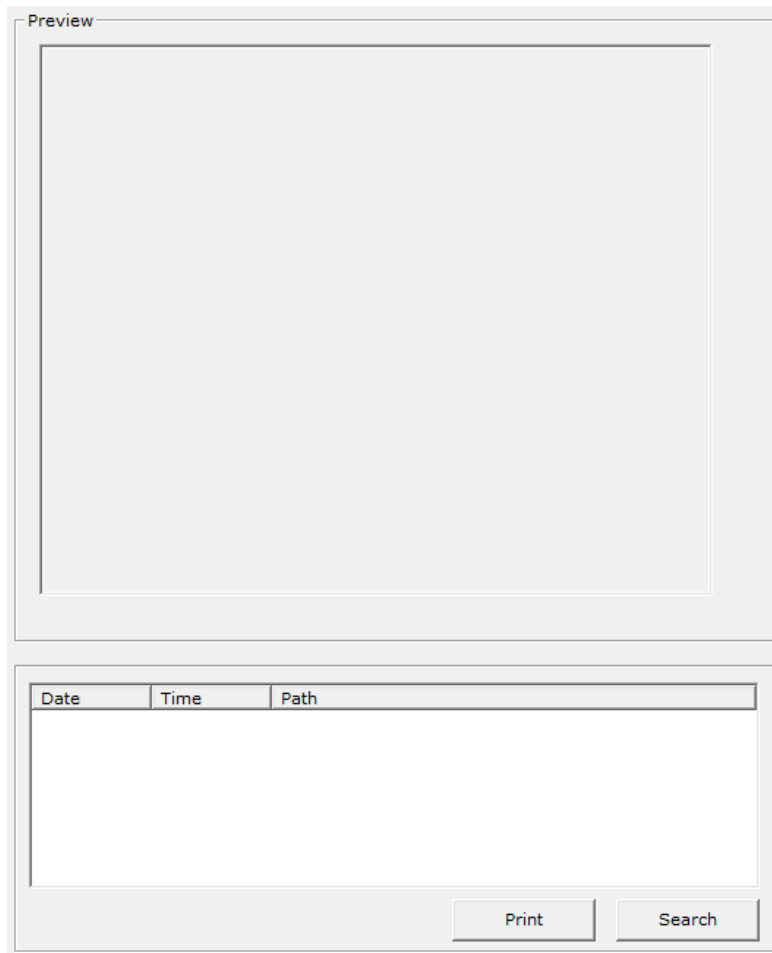
Cancel

Edit: 48 44 48 0A

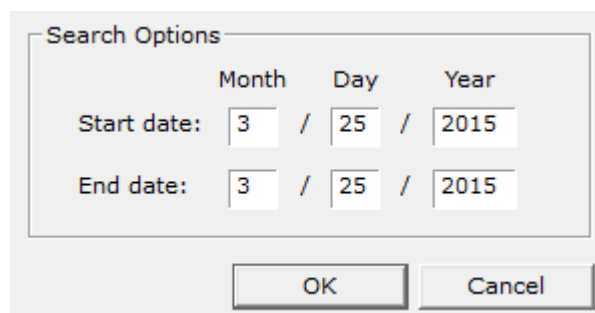
5-5-3 Journal Viewer

Journal is a function to save a copy of printed receipts. Copies can be saved without using journal printer with this function. Journal saves each printed document in a file and the saved file can be viewed by using this utility.

- 1) Tick **Enable Journal** to run **Journal Viewer**, and then click **Journal Viewer**.



- 2) Click **Search** to set search condition, and then enter **Start Date** and **End Date**.
- 3) Click **OK** to search the files created within the specified period.

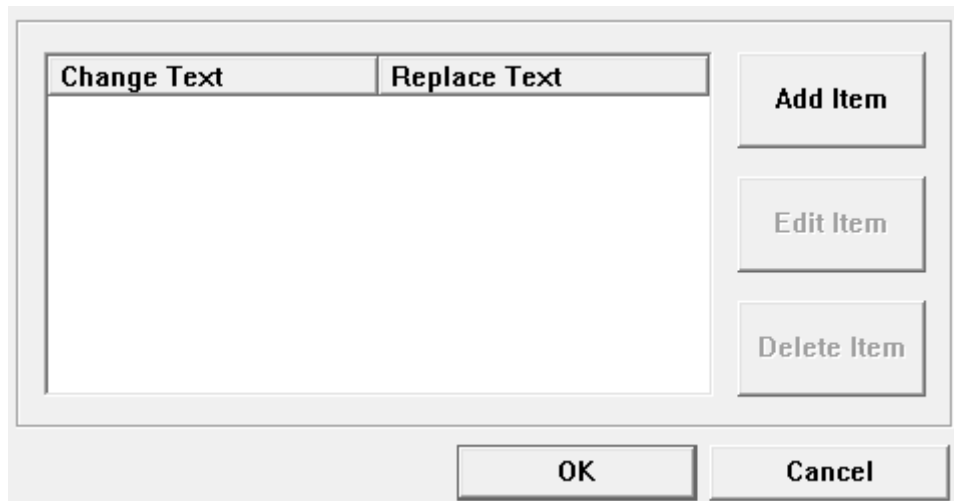


- 4) Select the file to print from the list and click **Print** to send the data stored in the file to the printer.

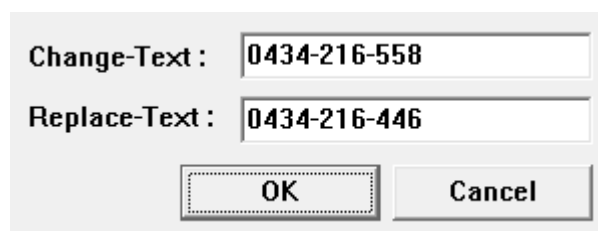
5-5-4 Text Macro

Text Macro is a utility to replace specific text with other text for printing. This function can be used only when using Device Fonts and it has no effect when using True Type Fonts. Detailed instructions are shown below.

- 1) Tick **Enable Text Macro** to run **Text Macro**, and then click **Text Macro**.



- 2) Click **Add Item** to enter the text to change in **Change-Text**, enter the text to place in **Replace Text**, and click **OK**.



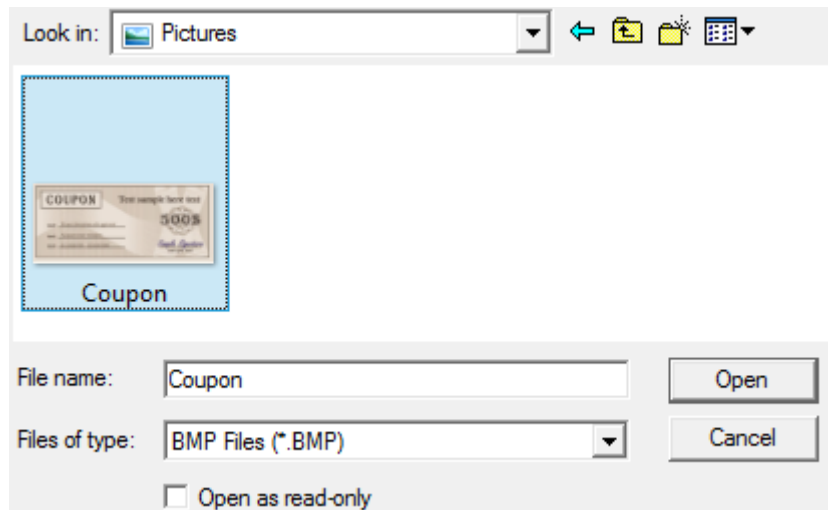
5-5-5 Image Macro

Image Macro is a utility to replace certain text with a specified image for printing. This function is applicable only when using Device Fonts and it has no effect when using TrueType Fonts. Detailed instructions are shown below.

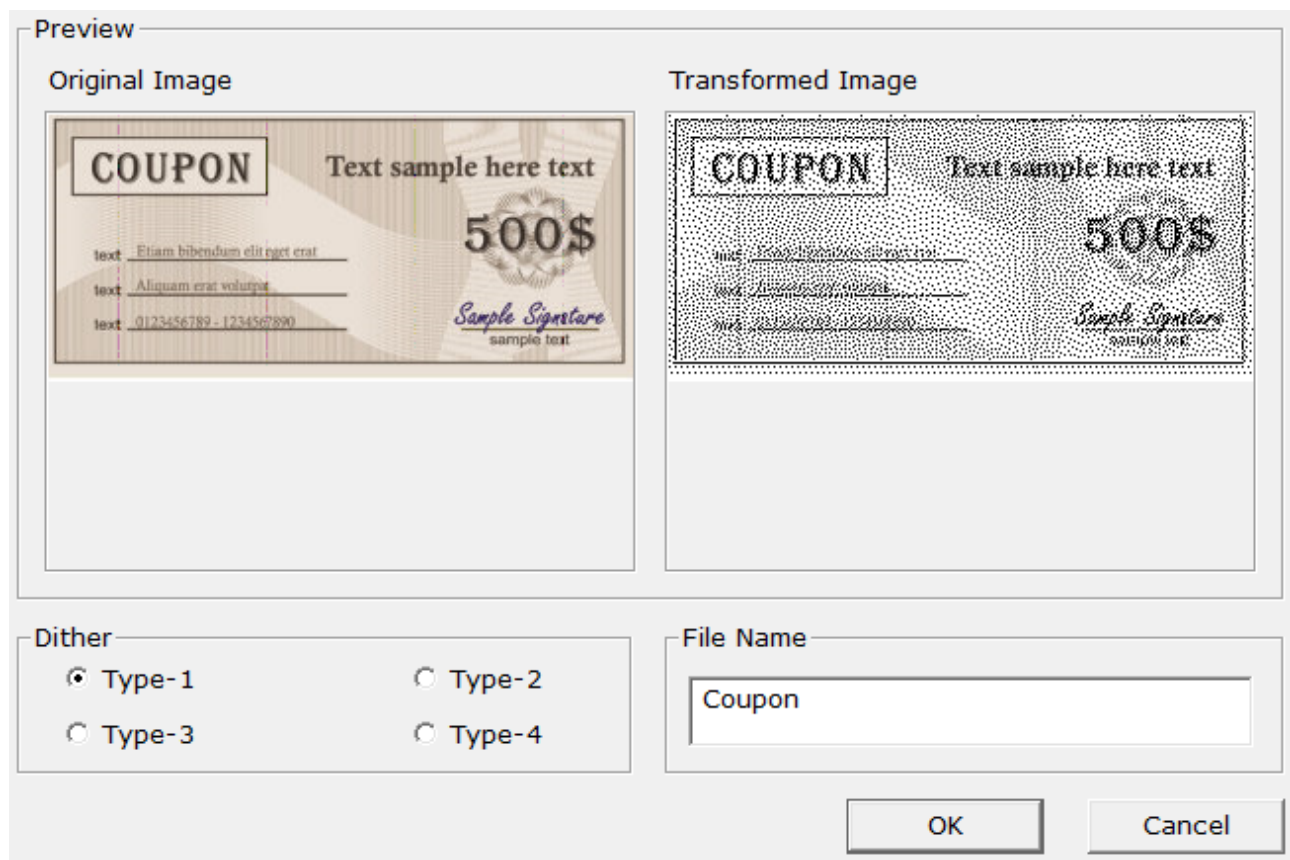
1) Tick **Enable Image Macro** to run **Image Macro**, and then click **Image Macro**.



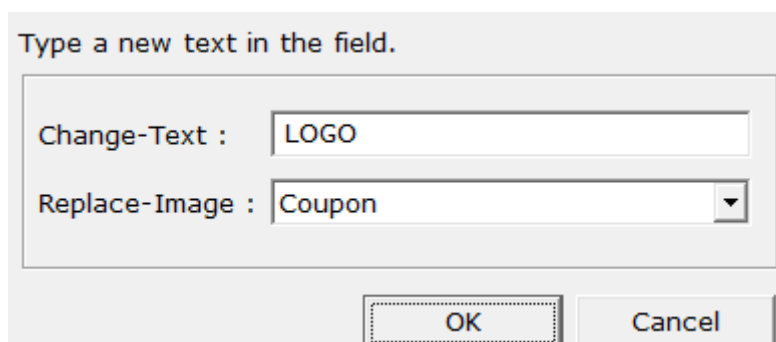
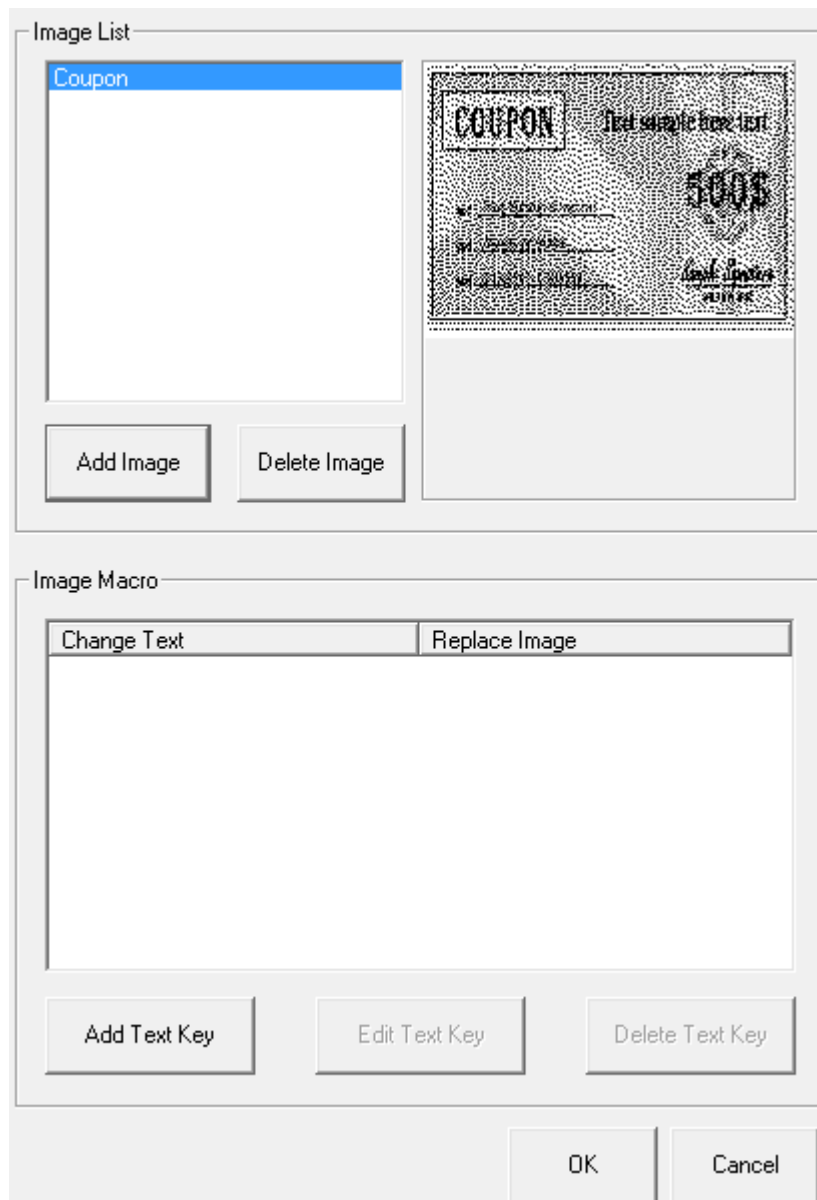
2) Click **Add Image**, select a bitmap file (*.bmp), and click **Open**.



3) Enter the name to be added to the list, select a dithering type, and click **OK**.



- 4) Click **Add Text Key** and set the image to replace the text key. Enter the text in **Change-Text** and select the image to replace the corresponding text in **Replace-Image**.



5) Click **OK**.



5-5-6 NV Image Download

Refer to the **NV Image Download Tool** manual contained in the CD for details.

6. Windows Driver Specifications

6-1 Font

This Windows driver supports various fonts in the following table. Printing using these fonts is faster than using Windows fonts provided by the operating system.

Printer Font (Device Fonts) Name			Font Size (dot)	Font Size (point)
FontA1x1	FontA1x1[Ext.]	FontA1x1[255]	FontA1x1(12x24)	8.5
FontA1x2	FontA1x2[Ext.]	FontA1x2[255]	FontA1x2(12x48)	17
FontA2x1	FontA2x1[Ext.]	FontA2x1[255]	FontA2x1(24x24)	8.5
FontA2x2	FontA2x2[Ext.]	FontA2x2[255]	FontA2x2(24x48)	17
FontA2x4	FontA2x4[Ext.]	FontA2x4[255]	FontA2x4(24x96)	34
FontA4x2	FontA4x2[Ext.]	FontA4x2[255]	FontA4x2(48x48)	17
FontA4x4	FontA4x4[Ext.]	FontA4x4[255]	FontA4x4(48x96)	34
FontA4x8	FontA4x8[Ext.]	FontA4x8[255]	FontA4x8(48x192)	68
FontA8x4	FontA8x4[Ext.]	FontA8x4[255]	FontA8x4(96x96)	34
FontA8x8	FontA8x8[Ext.]	FontA8x8[255]	FontA8x8(96x192)	68
FontB1x1	FontB1x1[Ext.]	FontB1x1[255]	FontB1x1(9x17)	6
FontB1x2	FontB1x2[Ext.]	FontB1x2[255]	FontB1x2(9x34)	12
FontB2x1	FontB2x1[Ext.]	FontB2x1[255]	FontB2x1(18x17)	6
FontB2x2	FontB2x2[Ext.]	FontB2x2[255]	FontB2x2(18x34)	12
FontB2x4	FontB2x4[Ext.]	FontB2x4[255]	FontB2x4(18x68)	24
FontB4x2	FontB4x2[Ext.]	FontB4x2[255]	FontB4x2(36x34)	12
FontB4x4	FontB4x4[Ext.]	FontB4x4[255]	FontB4x4(36x68)	24
FontB4x8	FontB4x8[Ext.]	FontB4x8[255]	FontB4x8(36x136)	48.5
FontB8x4	FontB8x4[Ext.]	FontB8x4[255]	FontB8x4(72x68)	24
FontB8x8	FontB8x8[Ext.]	FontB8x8[255]	FontB8x8(72x136)	48.5
FontC1x1	FontC1x1[Ext.]	FontC1x1[255]	FontC1x1(9x24)	8.5
FontC1x2	FontC1x2[Ext.]	FontC1x2[255]	FontC1x2(9x48)	17
FontC2x1	FontC2x1[Ext.]	FontC2x1[255]	FontC2x1(18x24)	8.5
FontC2x2	FontC2x2[Ext.]	FontC2x2[255]	FontC2x2(18x48)	17
FontC2x4	FontC2x4[Ext.]	FontC2x4[255]	FontC2x4(18x96)	34
FontC4x2	FontC4x2[Ext.]	FontC4x2[255]	FontC4x2(36x48)	17
FontC4x4	FontC4x4[Ext.]	FontC4x4[255]	FontC4x4(36x96)	34
FontC4x8	FontC4x8[Ext.]	FontC4x8[255]	FontC4x8(36x192)	68
FontC8x4	FontC8x4[Ext.]	FontC8x4[255]	FontC8x4(72x96)	34
FontC8x8	FontC8x8[Ext.]	FontC8x8[255]	FontC8x8(72x192)	68

Printer Fonts are defined as follows.

1) FontA1x2

- ANSI Character code support (Code Page 1252)
- Character size (dot): 12 x 48 (double height)
- Sizes (point): 17

2) FontA1x2[Ext.]

- IBM expansion Character code support (Code Page 437)
- Character size (dot): 12 x 48 (double height)
- Sizes (point): 17

3) FontA1x2[255]

- Buyer exclusive code support (User Code page)
- Character size (dot): 12 x 48 (double height)
- Sizes (point): 17

6-2 Special functions

This Windows driver supports the special functions as shown in the following table. Select **FontControl** font first and use the characters in the table to use the special functions. Take care as this function is not for printing general texts.

Character	Special Function
5	Prints HT (0 x 09)
6	Prints LF (0 x 0A)
7	Prints CR (0 x 0D)
a	Open Drawer 2 (50ms drive pulse width)
b	Open Drawer 2 (100ms drive pulse width)
c	Open Drawer 2 (150ms drive pulse width)
d	Open Drawer 2 (200ms drive pulse width)
e	Open Drawer 2 (250ms drive pulse width)
f	Open Drawer 2 without paper feeding (50ms driver pulse width)
g	Cut Receipt (partial cut) without paper feeding
i	Prints the NV Image saved in the 00 address (double-size)
j	Prints the NV Image saved in the 01 address (double-size)
k	Prints the NV Image saved in the 02 address (double-size)
l	Prints the NV Image saved in the 03 address (double-size)
m	Prints the NV Image saved in the 04 address (double-size)
p	Does not add HRI characters to the barcode
q	Adds HRI characters in Font A above the barcode
r	Adds HRI characters in Font A below the barcode
s	Adds HRI characters in Font B above the barcode
t	Adds HRI characters in Font B below the barcode
u	Turns white/black reverse printing mode on
v	Turns white/black reverse printing mode off
w	Aligns text to the left
x	Aligns text to the center
y	Aligns text to the right
A	Open Drawer 1 (50ms drive pulse width)
B	Open Drawer 1 (100ms drive pulse width)
C	Open Drawer 1 (150ms drive pulse width)
D	Open Drawer 1 (200ms drive pulse width)
E	Open Drawer 1 (250ms drive pulse width)
F	Open Drawer 1 without paper feeding (50ms driver pulse width)
G	Prints the NV bitmap saved in the 00 address
H	Prints the NV bitmap saved in the 01 address
I	Prints the NV bitmap saved in the 02 address
J	Prints the NV bitmap saved in the 03 address
K	Prints the NV bitmap saved in the 04 address
P	Cut Receipt (partial cut)
R	Prints the NV Image saved in the 00 address
S	Prints the NV Image saved in the 01 address
T	Prints the NV Image saved in the 02 address
U	Prints the NV Image saved in the 03 address
V	Prints the NV Image saved in the 04 address
[Prints the NV bitmap saved in the 00 address (double-size)
]	Prints the NV bitmap saved in the 01 address (double-size)
^	Prints the NV bitmap saved in the 02 address (double-size)
_	Prints the NV bitmap saved in the 03 address (double-size)
`	Prints the NV bitmap saved in the 04 address (double-size)

1) Example

Select **FontControl** font and send 6 for “LF” (Line Feed) operation (instead of printing character “6”).

2) **FontControl** font functions.

Font Name	Special Functions	Font Size (point/dot)
FontControl	Open Drawer 1/2 Cut receipt Cut receipt(without paper feeding) Justification (Left/Center/Right) Output HT, Output LF, Output CR Barcode Printing Print NV Graphic Data	(8.5 / 12x24)

7. Use of Windows Driver

7-1 Use of Visual Basic

This section contains example codes to control the printer using Windows driver with Visual Basic. Sample programs are included in the CD.

7-1-1 Windows Driver Selection

The following example code explains how to select “BIXOLON SRP-F312” Windows driver.

```
For Each prnPrinter In Printers
    If prnPrinter.DeviceName = “BIXOLON SRP-F312” Then
        Set Printer = prnPrinter
    Exit For
End If
Next
```

7-1-2 Text Printing

The following example code explains how to print texts using Windows Fonts and Device Fonts.

```
‘Print in Windows font
Printer.FontSize = 9
Printer.FontName = “Arial”
Printer.Print “Arial Test”

‘Print in printer font
Printer.FontSize = 8.5
Printer.FontName = “FontA1x1”
Printer.Print “FontA1x1 Font”

Printer.EndDoc
```

7-1-3 Barcode Printing

The following example code explains how to print the barcode (JAN8 (EAN)).

```
'Print Bar Code.  
Printer.FontSize = 18  
  
Printer.FontName = "Barcode4"  
Printer.Print "1234567"  
  
Printer.EndDoc
```

The following example code explains how to print the 2D barcode (PDF417).

```
'Print Two-dimensional Codes.  
Printer.FontSize = 8.5  
  
Printer.FontName = "2D-Code1"  
Printer.Print "Print Test PDF417"  
  
Printer.EndDoc
```

7-2 Use of WordPad

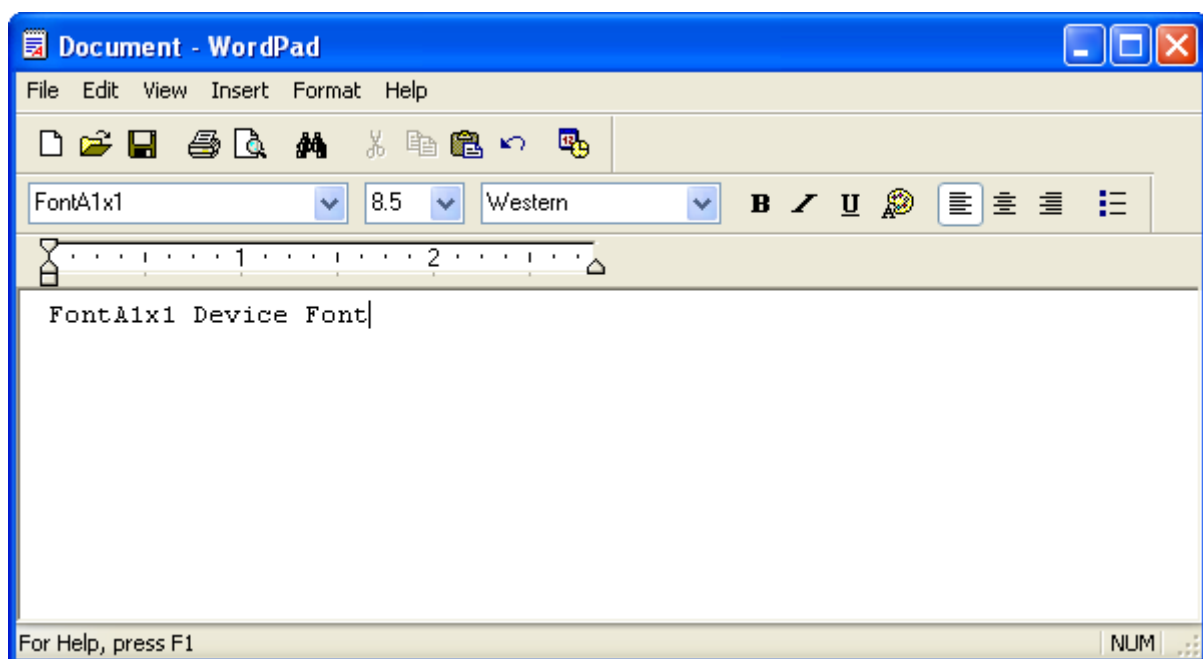
7-2-1 WordPad Environment Settings

Launch WordPad, set the printing related options as follows, and test the printer with WordPad.

- Select printer
Select "Print" from the "File" menu, and select the printer (BIXOLON SRP-F312).
- Set paper size, orientation, margin, etc.
Select the "Page Setting" from "File" menu, and set paper size, orientation, and margin.

7-2-2 Text Printing

Print the text from WordPad using the Windows driver of the printer.



- 1) Select the font from the font selection box (FontA1x1).
- 2) Select the point size from the point selection box (8.5).
- 3) Enter the text to print.
- 4) Click the Print icon in the toolbar to print the text.