

BIXOLON®

Installation Manual

JavaPOS Driver

Rev. 4.00

<http://www.bixolon.com>

Introduction

This manual provides information on the BIXOLON JavaPOS driver as well as on the usage POS printer products offered by BIXOLON.

The following are terms contained in this manual.

- JDK : Java Development Kit
- JRE : Java Runtime Environment
- JavaPOS : Java Point of Sale
- JCL Utility : JavaPOS Configuration Loader Utility

[Reference Websites]

- <http://www.javapos.com> : Java POS committee website
- <http://java.com> : Official Java website
- <http://www.bixolon.com> : BIXOLON printers website

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.

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1. Usage Environment

1-1 Features

- Using standard API functions, the POS System can be developed more quickly and easily, and applications can be developed independently from the operating system.

1-2 Supported Operating Systems

- Windows XP (32/64bit)
- Windows Server 2003 (32/64bit)
- Windows Vista (32/64bit)
- Windows 7 (32/64bit)
- Windows 8 (32/64bit)
- Windows 10 (32/64bit)

1-3 Java Environment

- JRE(Java Runtime Environment) 32bit Version 1.5 or higher

1-4 Supported Interface

1) POSPrinter

Model	S	U	E	B	W
STP-103III	O	O	X	X	X
SRP-275 / SRP-275II / SRP-275III	O	O	O	X	X
SRP-330 / SRP-330II / SRP-332II SRP-E300 / SRP-E302	O	O	O	X	X
SRP-340II / SRP-342II	O	O	O	X	X
SRP-350 / SRP-350II / SRP-350III / SRP-352III SRP-350plus / SRP-352plus SRP-350plusII / SRP-352plusII	O	O	O	X	X
SRP-350plusIII / SRP-352plusIII SRP-380 / SRP-382 SRP-F310II / SRP-F312II SRP-F313II / SRP-S300	O	O	O	O	O
SRP-F310 / SRP-F312	O	O	O	X	O
SRP-Q300 / SRP-Q302	X	O	O	O	O
SRP-QE300 / SRP-QE302	X	O	O	X	X
SPP-R200	O	O	X	O	X
SPP-R200II / SPP-R200III SPP-R300 / SPP-R310 SPP-R400 / SPP-R410	O	O	X	O	O
SPP-R210 / SPP-R220	X	O	X	O	O

* S: Serial, U: USB, E: Ethernet, B: Bluetooth, W: Wireless LAN

2) MSR(Magnetic Stripe Reader)

Model	S	U	E	B	W
SPP-R200_MSR	O	O	X	O	X
SPP-R200II_MSR / SPP-R200III_MSR	O	O	X	O	O
SPP-R210_MSR / SPP-R220_MSR	X	O	X	O	O
SPP-R300_MSR / SPP-R310_MSR SPP-R400_MSR	O	O	X	O	O

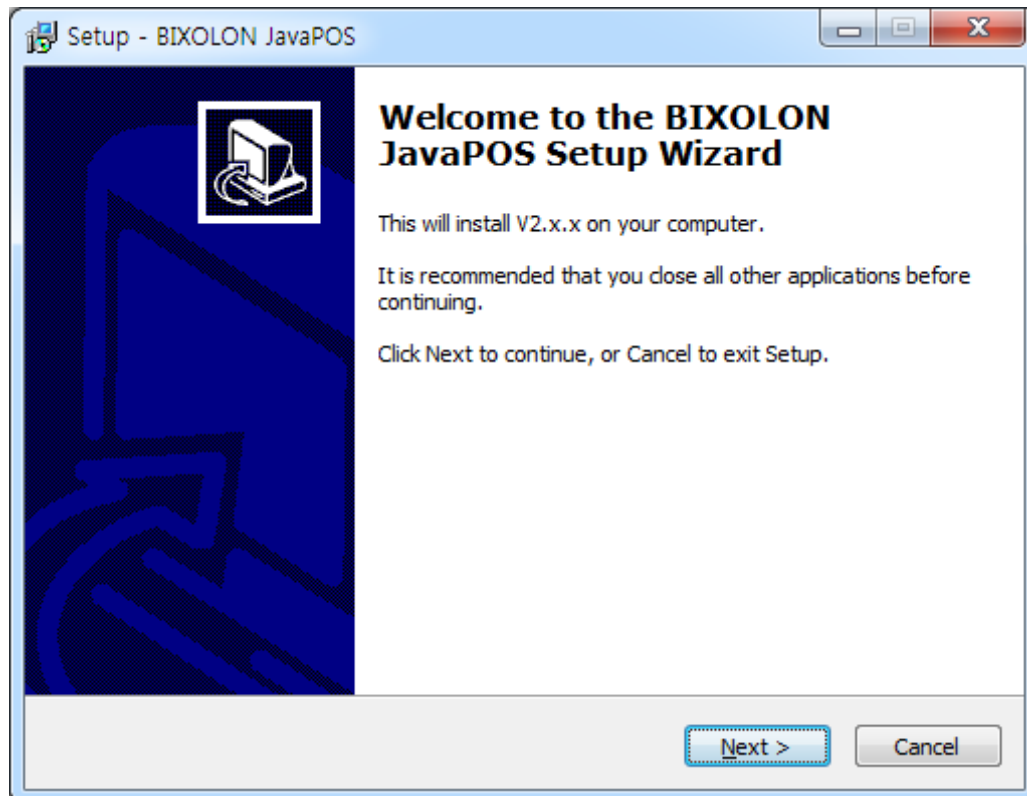
* S: Serial, U: USB, E: Ethernet, B: Bluetooth, W: Wireless LAN

2. Installation

- The BIXOLON JavaPOS driver includes the JavaPOS Device Control, JavaPOS Device Service, JCL(Java Configuration Loader) Utility, manual, test program, sample source, etc.

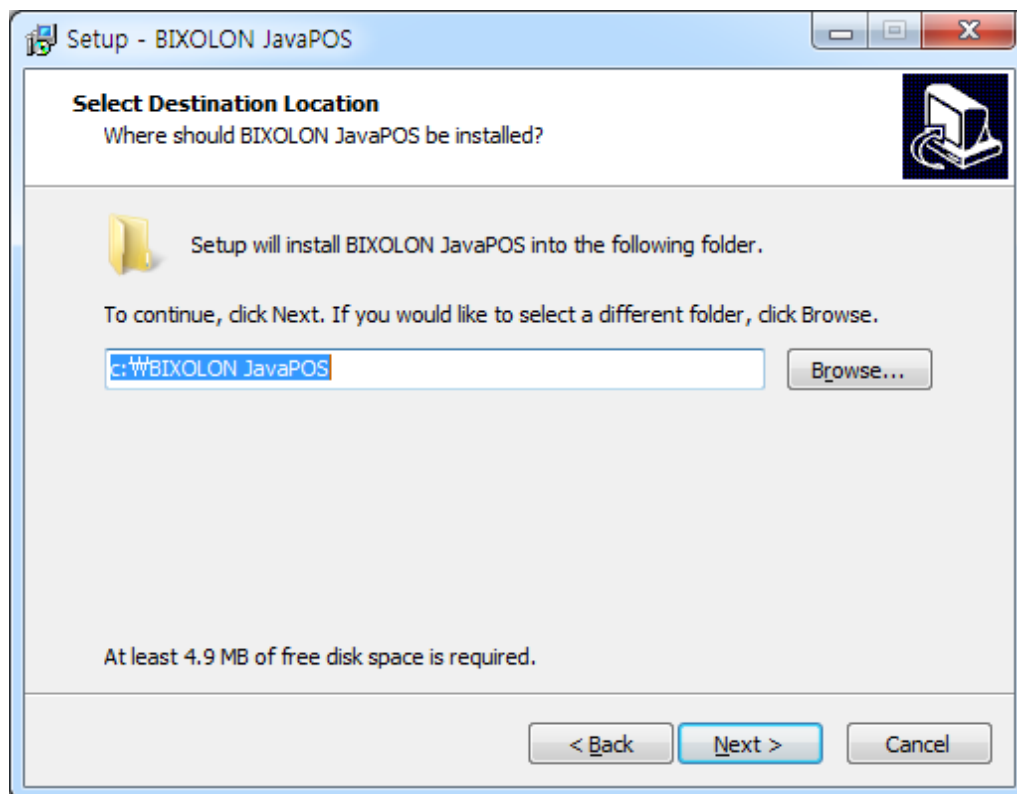
2-1 JavaPOS Driver Installation

- 1) Run the JavaPOS Driver installation file.
- 2) "Welcome" dialog is displayed.

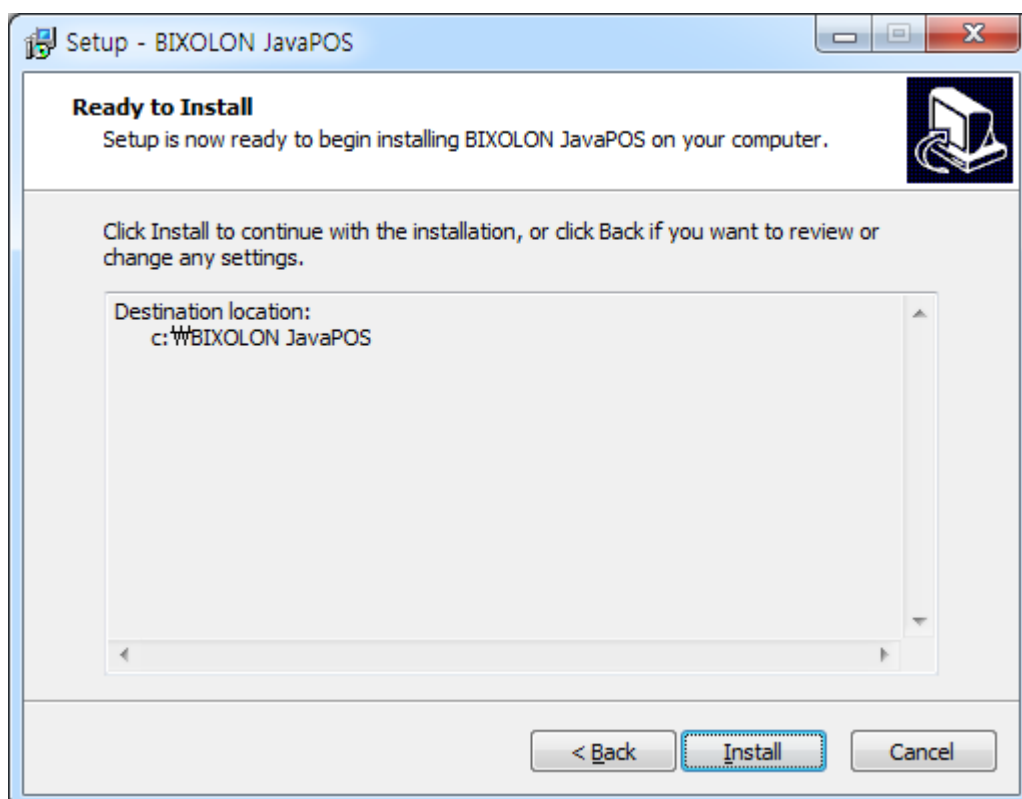


3) Select the installation folder.

The default folder: "C:\BIXOLON JavaPOS\"



4) Ready to install.



2-2 JDK & JRE installation

1) JDK & JRE Installation

Download the 1.5 or higher version of the JDK for Windows 32bit from
<http://java.sun.com/javase/downloads/index.jsp>

2) Run “jdk-XXX-windows-i586-X.exe” and install the JDK.

NOTE

- The JRE is installed automatically during JDK installation and thus no separate JRE installation is required.

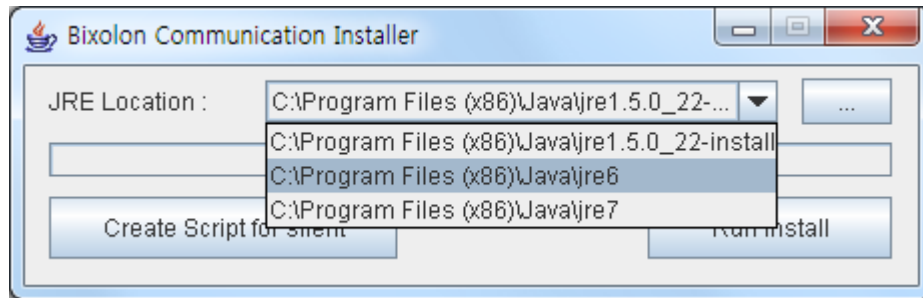
2-3 Java communication files installation

1) Run "CommInstaller.exe" file on installation path.

Warning

- Run as administrator.

2) Check the JRE(Java Runtime Environment) location.

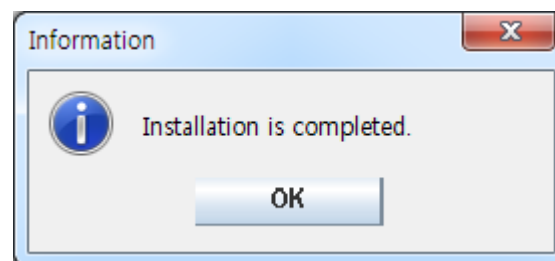


Note

- JRE location will be displayed. In case of various JRE installation, select one of the JRE location in Combo-box as above image.
- Unless JRE location does display in Combo Box, Click "Change install location" button. Then assign the correct JRE location.

3) Click "Run Install" button.

4) As soon as installation is complete, "Installation is completed" dialog message will be displayed.



Warning

- In case that "Installation is failed" message will be popped up, installation doesn't complete correctly.
JavaPOS driver can not be worked properly.

5) 2 files below will be installed in a folder which includes CommInstaller.exe file.

- bixolon-jclutility.bat : batch file for running JavaPOS Configuration Loader
- bixolon-testprogram.bat : batch file for running JavaPOS test program

2-4 Environment Variables configuration**Note**

- You can use bixolon-jclutility.Bat and bixolon-testprogram.Bat In BIXOLON JavaPOS Driver without the setting of the environment variables.

1) Select Start -> Settings -> Control Panel -> System.

Note

- System may not appear if using Windows XP. In such cases, click "Switch to Classic View" at the top left of the Control Panel, and the System icon should appear.

2) In the Advanced tab, click the "Environment Variables" button.

3) Add the following content in the path value of both the user environment variables and the system environment variables.

To Be Added: <JRE Location on CommInstaller>\bin

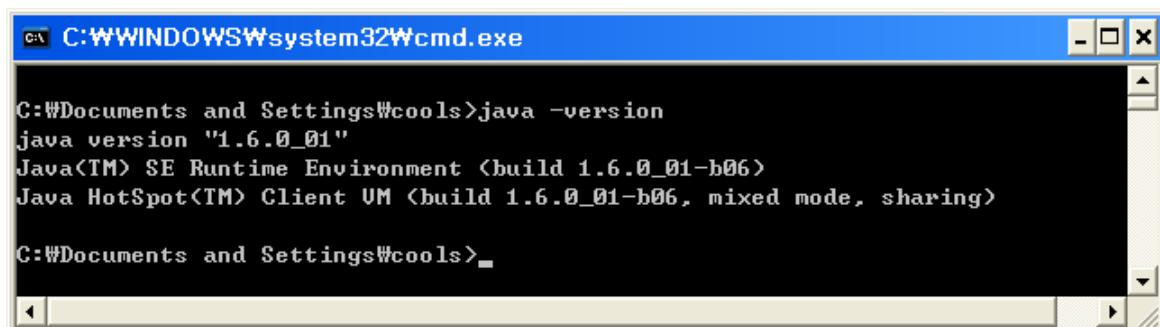
Ex) C:\Program Files\Java\jre1.6.0\bin

4) Reboot the computer.

5) Select Start -> Programs -> Accessories -> Command Prompt.

6) Enter "java -version" in the command prompt window.

7) If the following appears, installation has been completed successfully.



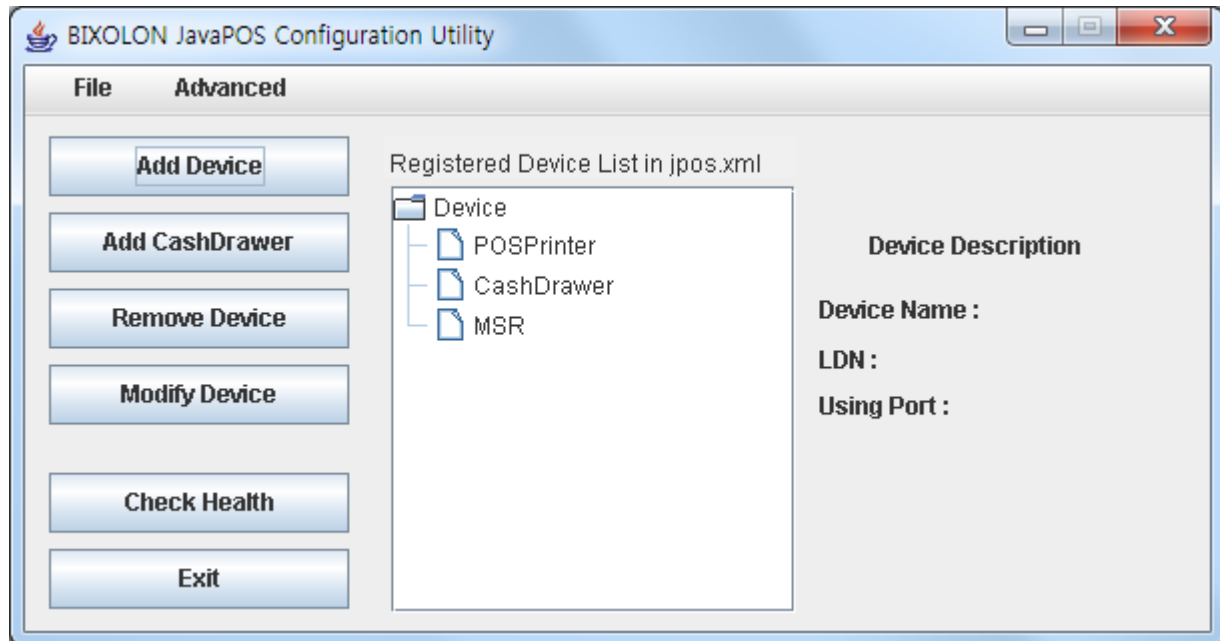
```
C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\Wcools>java -version
java version "1.6.0_01"
Java(TM) SE Runtime Environment (build 1.6.0_01-b06)
Java HotSpot(TM) Client VM (build 1.6.0_01-b06, mixed mode, sharing)

C:\Documents and Settings\Wcools>
```

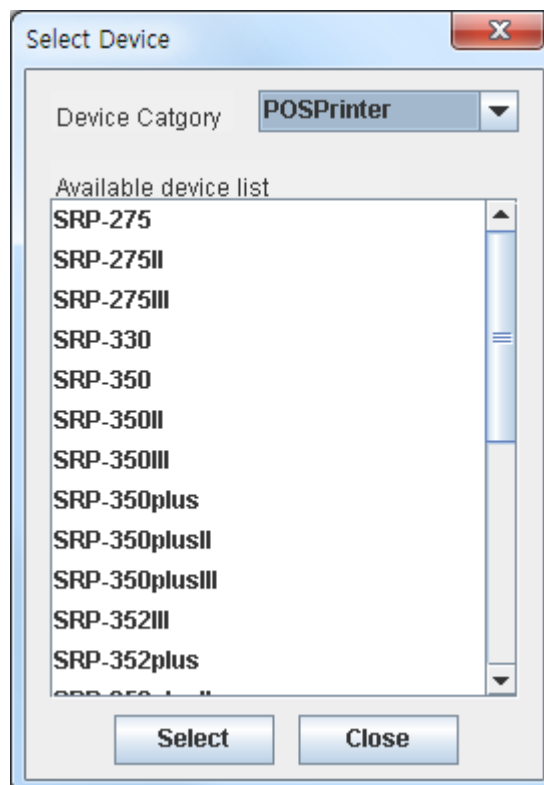
3. JavaPOS Configuration Utility Setting

- Double click “bixonon-jclutility.bat”. The JavaPOS Configuration Utility begins.

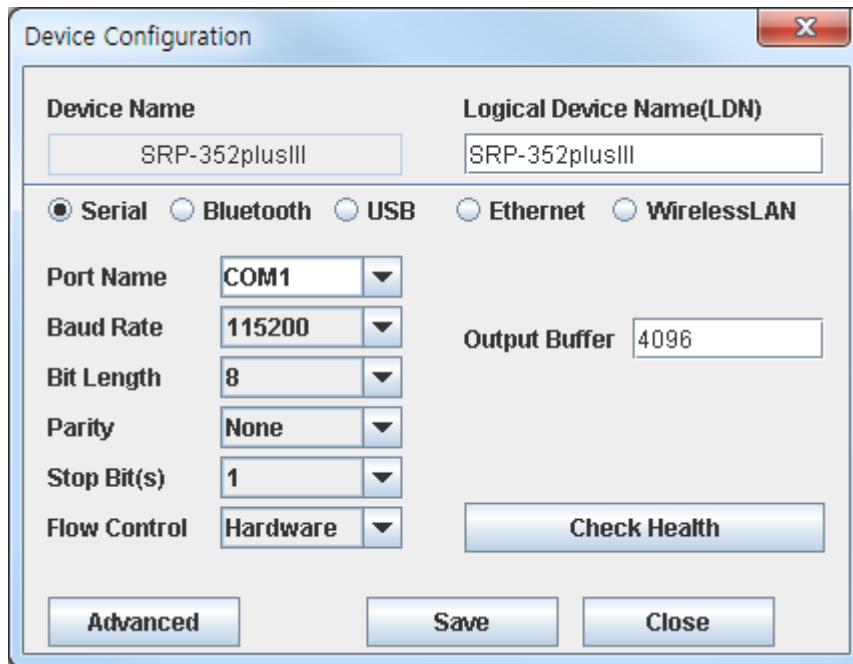


3-1 POSPrinter Registration

- 1) Click “Add Device” button and select ‘POSPrinter’ in Device Category.

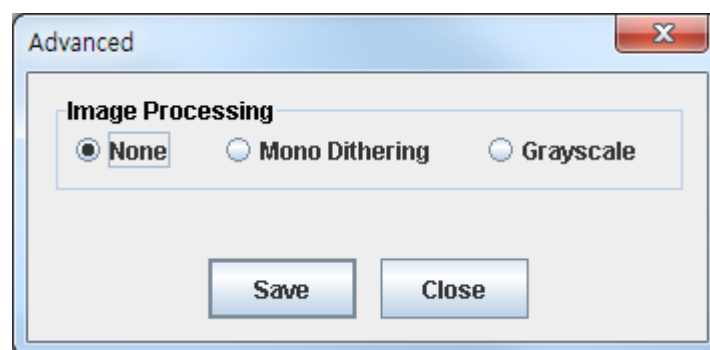


2) Click the “Select” button after choosing one of the available device lists.



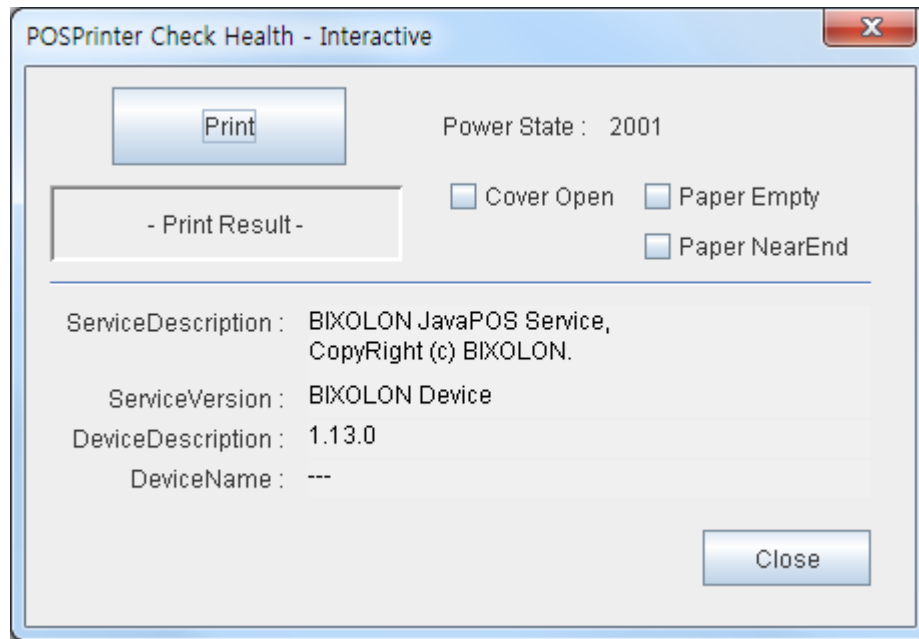
3) Set the communication environment of the connected printer and click “Save” button.

4) To apply the dithering or grayscale printing when you want to print the image, please select the following Advanced dialog.

**Note**

- The image processing options can only be applied to "PrintBitmap" function.
- Grayscale printing is only supported model.

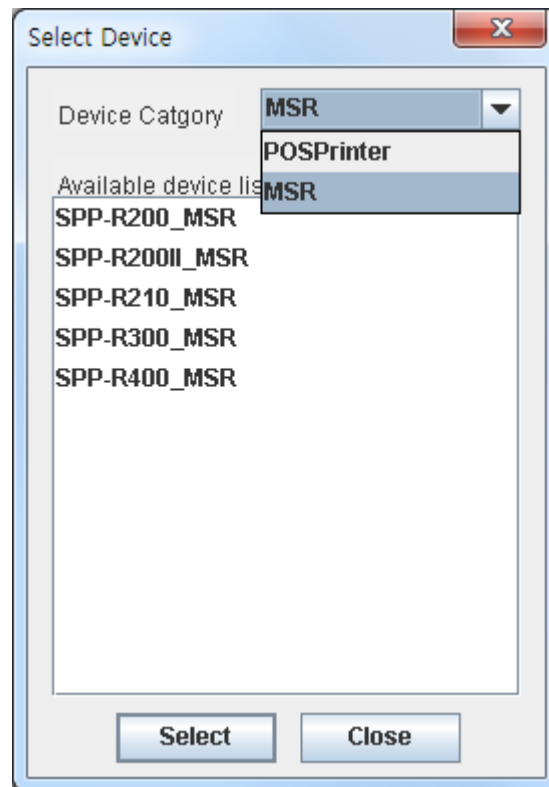
5) Click "Check Health" to see if the printer operates properly.



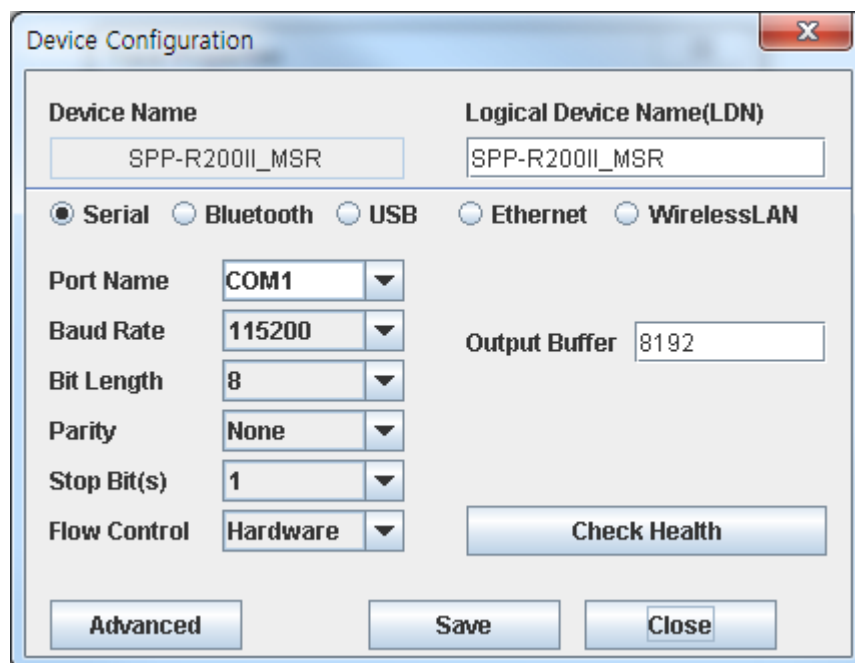
<POSPrinter - Check Health Dialog>

3-2 MSR Registration

1) Click “Add Device” button and select ‘MSR’ in Device Category.

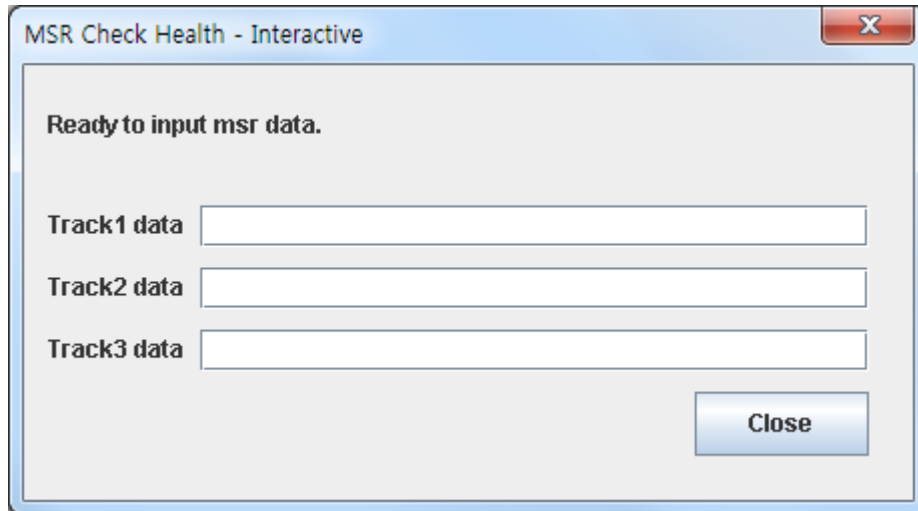


2) Click the “Select” button after choosing one of the available device lists.



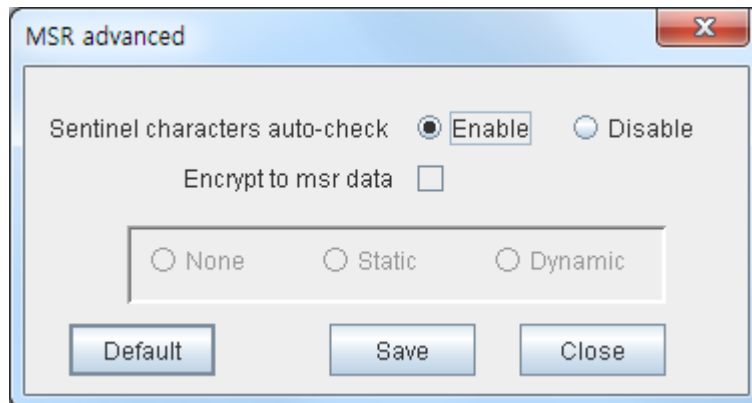
3) The communication environment of the connected device and click “Save” button.

4) Click “Check Health” to see if the device operates properly.



The dialog box is titled "MSR Check Health - Interactive" and has a close button (X) in the top right corner. The main text inside says "Ready to input msr data." Below this, there are three input fields labeled "Track1 data", "Track2 data", and "Track3 data". At the bottom right, there is a "Close" button.

5) Click the “Advance” button for setting MSR Data Encyption mode, Sentinel Character Auto-check mode.



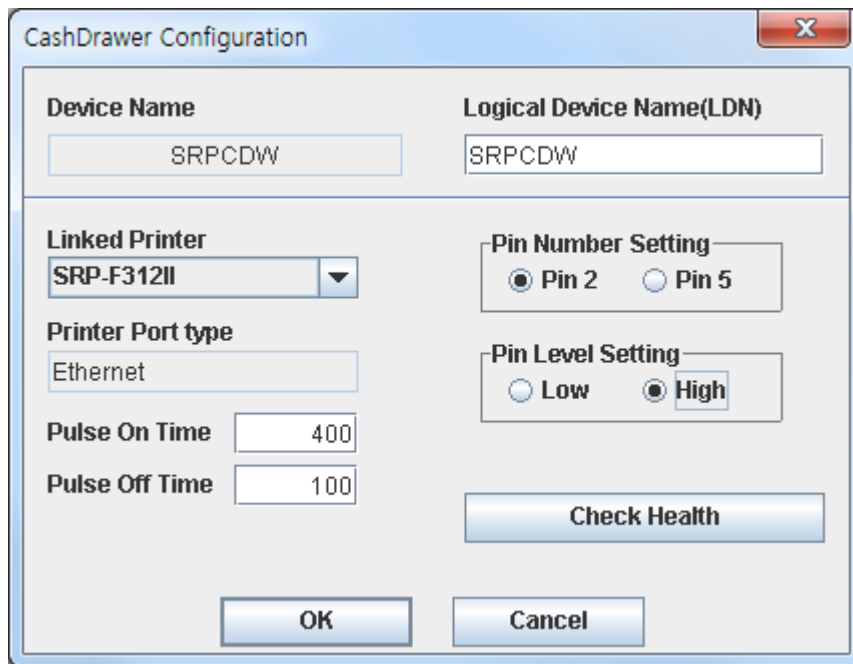
The dialog box is titled "MSR advanced" and has a close button (X) in the top right corner. It contains the following settings:
- "Sentinel characters auto-check" with radio buttons for "Enable" (selected) and "Disable".
- "Encrypt to msr data" with an unchecked checkbox.
- A group box containing three radio buttons: "None", "Static", and "Dynamic".
At the bottom, there are three buttons: "Default", "Save", and "Close".

Caution

**- MSR data can be recognized when MSR advanced setting option is same as printer actual setting.
If not MSR data can not be recognized.**

3-3 CashDrawer Registration

1) Click “Add CashDrawer” button.

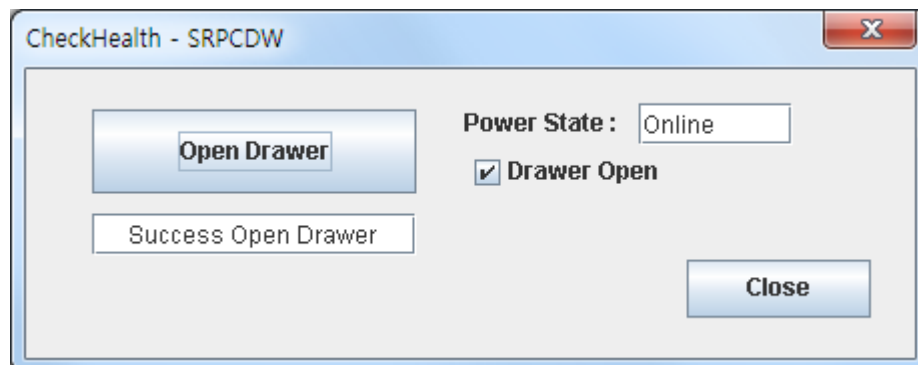


The 'CashDrawer Configuration' dialog box contains the following fields and controls:

- Device Name:** Text box containing 'SRPCDW'.
- Logical Device Name(LDN):** Text box containing 'SRPCDW'.
- Linked Printer:** Combo box showing 'SRP-F312II'.
- Printer Port type:** Text box showing 'Ethernet'.
- Pulse On Time:** Text box showing '400'.
- Pulse Off Time:** Text box showing '100'.
- Pin Number Setting:** Radio buttons for 'Pin 2' (selected) and 'Pin 5'.
- Pin Level Setting:** Radio buttons for 'Low' and 'High' (selected).
- Check Health:** A button to check the communication status.
- OK and Cancel:** Buttons at the bottom to save or discard changes.

2) Select the Printer which works with CashDrawer in ‘Linked Printer’ Combo-Box and set the Pin Number and Pin Level.

3) Save the settings by “OK” button click or check if communication status through the CashDrawer is normal by “CheckHealth” button.



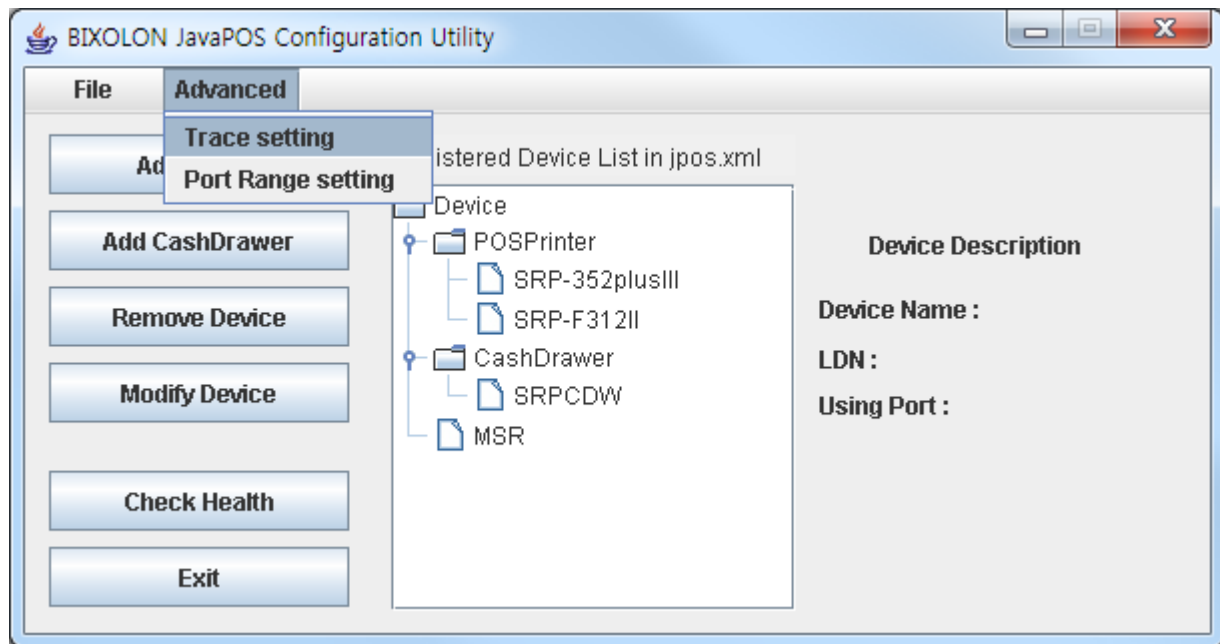
The 'CheckHealth - SRPCDW' dialog box displays the following information:

- Open Drawer:** A button to attempt opening the drawer.
- Power State:** A text box showing 'Online'.
- Drawer Open:** A checked checkbox indicating the drawer is open.
- Success Open Drawer:** A text box showing the result of the open attempt.
- Close:** A button to close the dialog.

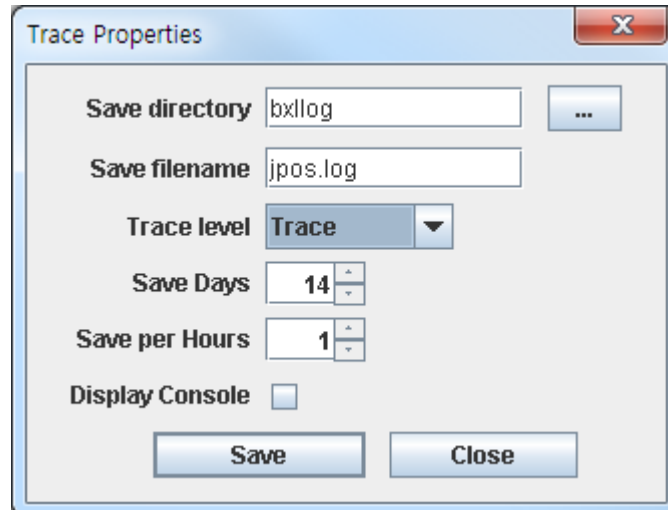
3-4 Trace Setting

Caution

- Please set the trace setting when it's necessary only. Otherwise Hard Drive capacity will be lack of containing other files due to the trace function.

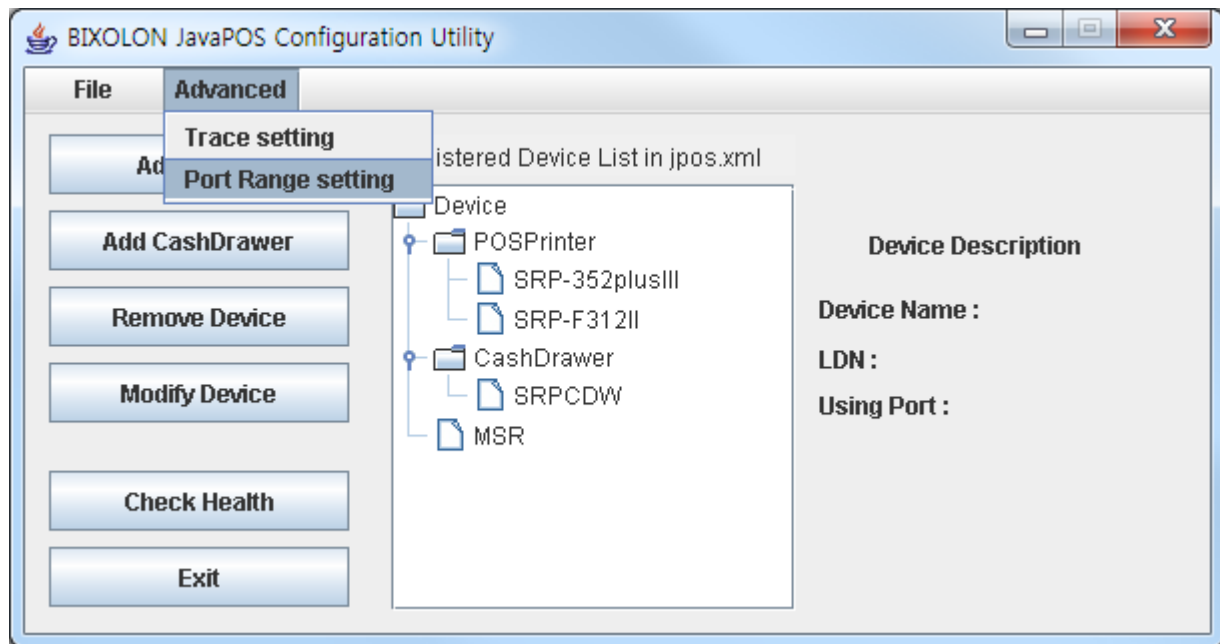


1) Select the trace level in combobox and click "Save" button.

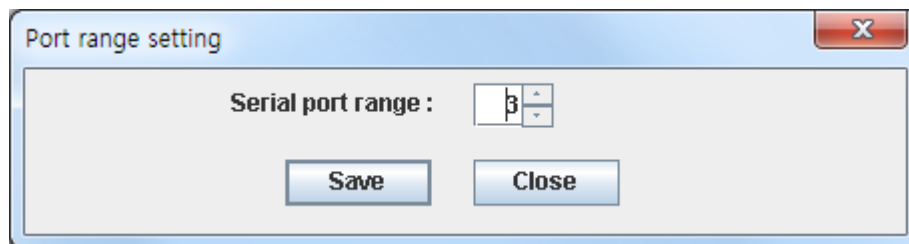


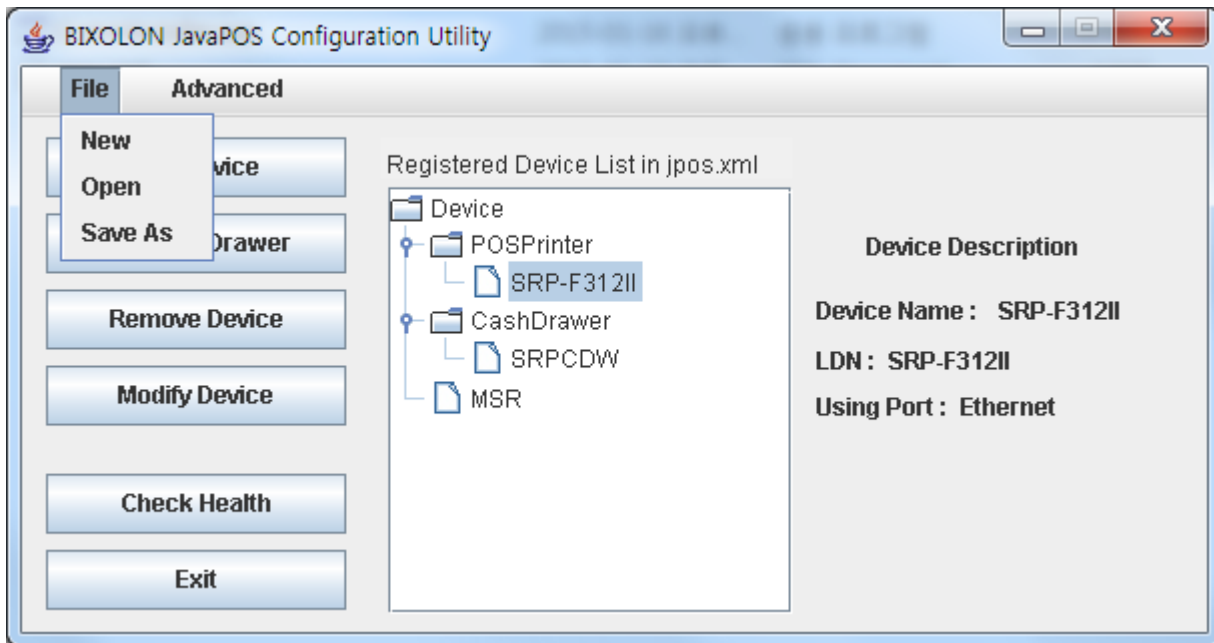
3-5 Port Range Setting

- 'Port Range setting' can be adjustable according to the Serial or Bluetooth communication setting option. So, adjust the port number if there's no available port in system.



- 1) Input the maximum COM port number for Serial or Bluetooth communication.

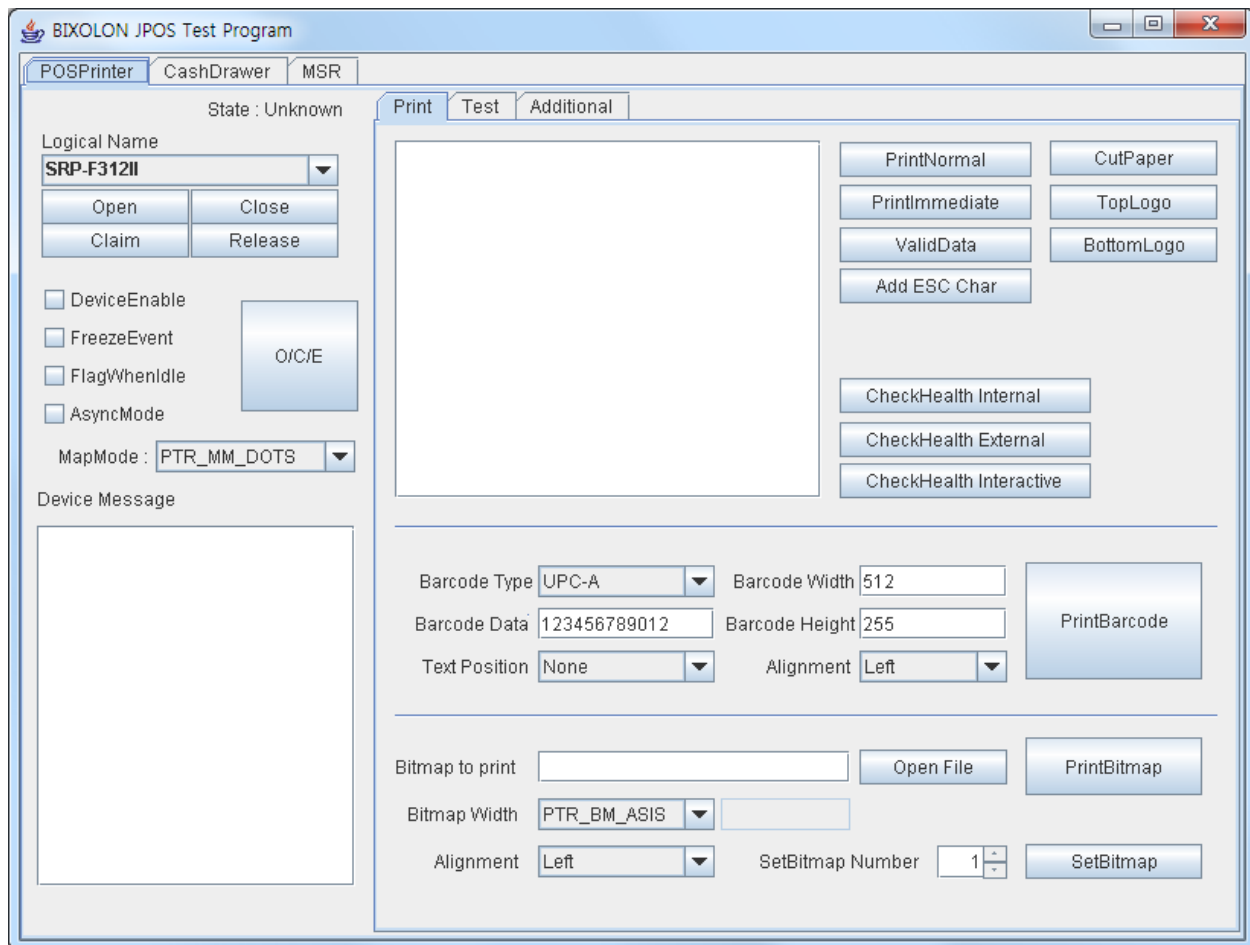


3-6 Jpos.xml New / Open / Sava As

- 1) New – Create the new jpos.xml file. New jpos.xml file is available.
Then previous registered device will be disappeared.
- 2) Open – Open the existed jpos.xml file.
Device information can be called by different jpos.xml file and device information will be displayed from the new jpos.xml file.
- 3) Save As – Save the present setting by different name.
Present setting can be saved as not jpos.xml file but other name.

4. Bixolon JPOS Test Program

- Double click “bixolon-testprogram.bat”. The JavaPOS test program begins.



- 1) Logical Name: Select the test device in the list.
- 2) Click “Open” button to open JavaPOS device service.
- 3) Click “Claim” button to check the status of device.
- 4) Check “Device enabled” check box.
- 4) You can test each function with each button.

5. Sample Source

- The content of the “Sample Source” folder is as follows.

- sampleimage.bmp : sample image
- *.java : java source file

5-1 POS Printer Samples

- | | |
|-------------------------------|--|
| 1) PrintNormalSample. java | PrintNormal function sample source |
| 2) PrintBitmapSample. java | PrintBitmap function sample source |
| 3) PrintBarcodeSample. Java | PrintBarcode function sample source |
| 4) CutPaperSample. java | CutPaper function sample source |
| 5) ESCSequenceSample. java | ESC Sequence sample source |
| 6) CheckHealthSample. java | CheckHealth function sample source |
| 7) POSPrinterEventSampe. java | POSPrinter-related event sample source |

5-2 CashDrawer Samples

- | | |
|---------------------------------|--|
| 1) OpenCashdrawerSample. java | Opendrawer function sample source |
| 2) CashdrawerEventsSample. java | Cashdrawer-related event sample source |

6. Precautions

- The BIXOLON JavaPOS software package that is installed supports devices offered by BIXOLON. Normal operation is not guaranteed when used with other devices.
- Errors in operation may occur if installed with another JavaPOS Driver.
- If an unknown issue occurs, either contact the dealer or submit an inquiry at the website below for fast response. www.bixolon.com

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The BIXOLON logo is the registered trademark of BIXOLON.

Warning - U.S.A

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Notice - Canada

This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations. Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

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Revision history

[illegible]