

JposPrinter

JavaPOS Driver

- User Manual-

Bate 0.1

1. Introduction

**JposPrinter JavaPOS Driver is compatible with JavaPOS Standard 1.13.
It supports all the relevant POS80 products of JposPrinter**

Interface supported:

USB

Serial

Ethernet

**This software package provides the POSPrinter class driver support for JAVA POS,
containing the following files:**

jcl.jar

jpos.xml

jpos113-controls.jar

xercesimpl.jar

xml-apis.jar

JposPrinterJavaPOS.jar

JposPrinterJIOx32.dll

JposPrinterJIOx64.dll

2. Operating Environment

2.1 Operating system

All the following x86 structured system are supported.

Windows 10 64 Bit
Windows 10 32 Bit
Windows 8.1 64 Bit
Windows 8.1 32 Bit
Windows 8 64 Bit
Windows 8 32 Bit
Windows 7 64 Bit
Windows 7 32 Bit
Windows XP 32 Bit

2.2 Java Environmental Requirement

This software must be running in JRE Ver 1.42 or later version. JRE Ver1.5 or above versions recommended.

If you are a developer, please make sure your JDK environment is completed configured.
It should contain the below applications at least.

Javac.exe
Java.exe
Javadoc.exe

And they must be able to be run under command line.

```
C:\Users>java -version
java version "1.8.0_91"
Java(TM) SE Runtime Environment (build 1.8.0_91-b14)
Java HotSpot(TM) 64-Bit Server VM (build 25.91-b14, mixed mode)

C:\Users>javac -version
javac 1.8.0_77
```

3. JavaPOS Driver Setting

JposPrinter JavaPOS usually use jpos.xml file to set the properties.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN" "jpos/res/jcl.dtd">
<JposEntries>

  <JposEntry logicalName="JposPrinter_serial">
    <creation factoryClass="net.jposprinter.javaposdrv.ServiceInstanceFactory"
serviceClass="net.jposprinter.javaposdrv.POSPrinterService" />
    <vendor name="JposPrinter" url="www.JposPrinter.net" />
    <jpos category="POSPrinter" version="1.13" />
    <product description="JposPrinter receipt printer" name="JposPrinter POSPrinter controller"
url="www.JposPrinter.net" />
    <prop name="model" type="String" value="POS80" />
    <prop name="portName" type="String" value="COM1" />
    <prop name="portSettings" type="String" value="19200" />
    <prop name="ioTimeoutMillis" type="Integer" value="5000" />
    <prop name="DBCS" type="String" value="" />
  </JposEntry>

  <JposEntry logicalName="JposPrinter_USB">
    <creation factoryClass="net.jposprinter.javaposdrv.ServiceInstanceFactory"
serviceClass="net.jposprinter.javaposdrv.POSPrinterService" />
    <vendor name="JposPrinter" url="www.JposPrinter.net" />
    <jpos category="POSPrinter" version="1.13" />
    <product description="JposPrinter receipt printer" name="JposPrinter POSPrinter controller"
url="www.JposPrinter.net" />
    <prop name="model" type="String" value="POS80" />
    <prop name="portName" type="String" value="usb" />
    <prop name="portSettings" type="String" value="" />
    <prop name="ioTimeoutMillis" type="Integer" value="5000" />
    <prop name="DBCS" type="String" value="Big5" />
  </JposEntry>

  <JposEntry logicalName="JposPrinter_ethernet">
    <creation factoryClass="net.jposprinter.javaposdrv.ServiceInstanceFactory"
serviceClass="net.jposprinter.javaposdrv.POSPrinterService" />
    <vendor name="JposPrinter" url="www.JposPrinter.net" />
    <jpos category="POSPrinter" version="1.13" />
    <product description="JposPrinter receipt printer" name="JposPrinter POSPrinter controller"
url="www.JposPrinter.net" />
    <prop name="model" type="String" value="POS80" />
    <prop name="portName" type="String" value="tcp:192.168.1.110" />
    <prop name="portSettings" type="String" value="" />
    <prop name="ioTimeoutMillis" type="Integer" value="5000" />
    <prop name="DBCS" type="String" value="GB2312" />
  </JposEntry>


```

3.1 Port Setting

Please refer to the jpos.xml file which comes with the software package:

Serial:

<prop name="portName" type="String" value="COM1" /> -----Port name: COMx

<prop name="portSettings" type="String" value="19200" /> -----Baud rate

Only: 9600, 19200, 38400, 115200 these baud rate are supported by this driver otherwise the communication would not be successfully built.

<prop name="ioTimeoutMillis" type="Integer" value="5000" /> ---IO time out period, unit: ms

USB:

<prop name="portName" type="String" value="usb" /> ----Port name: fixed value: usb (it must be lowercase)

<prop name="portSettings" type="String" value="" /> -----no setting required

<prop name="ioTimeoutMillis" type="Integer" value="5000" />--- IO time out period, unit: ms

Ethernet:

<prop name="portName" type="String" value="tcp:192.168.1.123" /> ---Printer IP address

<prop name="portSettings" type="String" value="" /> -----no setting required

<prop name="ioTimeoutMillis" type="Integer" value="5000" /> ----- IO time out period, unit:ms

3.2Printer Character Properties Setting

Double Byte Setting:

<propname="DBCS" type="String" value="GB2312"/> Set double byte character encoding

The following values are supported according to the languages the printer supports:

SJIS	-----	Japanese
GB2312	-----	Simplified Chinese GB2312
GB18030	-----	Simplified Chinese GB18030
Big5	-----	Traditional Chinese
EUC_KR	-----	Korean

4. Test Routine

Please refer to the source code of JposPrinterReceiptTest.java in this software package and operate in following steps:

Make sure all the following files are in same folder:

jcl.jar jpos.xml
jpos113-controls.jar
xercesimpl.jar
xml-apis.jar
JposPrinterJavaPOS.jar
JposPrinterJIOx32.dll
JposPrinterJIOx64.dll
JposPrinterReceiptTest.java
posprinter.bmp

1. Configure the jpos.xml file according to the actual condition first.

*When configuration is done, use this command:

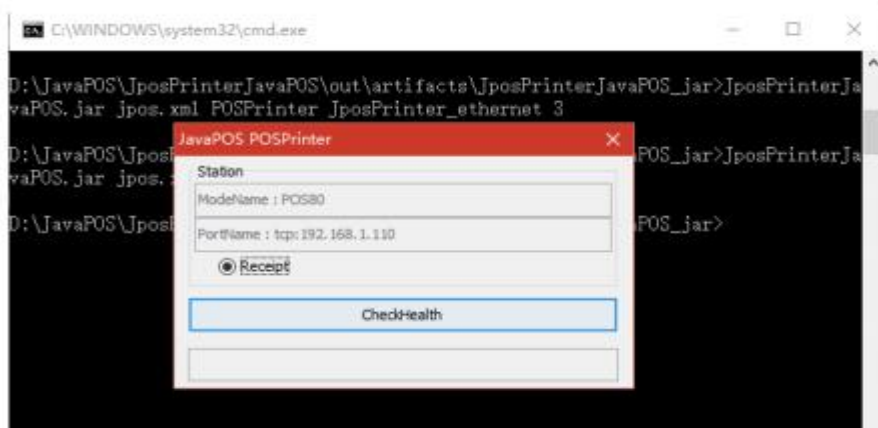
JposPrinterJavaPOS.jar jpos.xml POSPrinter JposPrinter_XXXXXX 3

Note: XXXXX stands for the value of <JposEntry logicalName="JposPrinter_XXXXX">

E.g.:<JposEntry logicalName="JposPrinter_ethernet">

The command should be:

JposPrinterJavaPOS.jar jpos.xml POSPrinter JposPrinter_ethernet 3



If all the configurations are correct and the printer is working properly, it will print the testing information

2. Edit JposPrinterReceiptTest.java, make sure the file path here must correctly assign "jpos.xml"

```
* If you want to place the jpos.xml file elsewhere on your local file
* system then uncomment the following line and specify the full path to
* jpos.xml.
*/
System.setProperty( JposPropertiesConst.JPOS_POPULATOR_FILE_PROP_NAME, "jpos.xml");
```

3. The description should be exactly the same as what is in "jpos.xml"

```
// open the printer object according to the entry names defined in jpos.xml
//printer.open("JposPrinter_USB");
//printer.open("JposPrinter_serial");
printer.open("JposPrinter_ethernet");
```

4. Save file after double confirmation and make sure the JDK environment is well configured, then use JAVAC command to compile the application.

Command:

```
javac-encoding utf-8-classpath jpos113-controls.jar;jcl.jar JposPrinterReceiptTest.java
```

(all files should be in same folder)

```
D:\JavaPOS\JposPrinterJavaPOS\out\artifacts\JposPrinterJavaPOS_jar>javac -encoding utf-8 -classpath jpos113-controls.jar;jcl.jar JposPrinterReceiptTest.java
```

5. Execute test application JposPrinterReceiptTest

```
java-classpath .;JposPrinterJavaPOS.jar;jpos113-controls.jar;jcl.jar;xercesimpl.jar;xml-apis.jar
```

JposPrinterReceiptTest

```
D:\JavaPOS\JposPrinterJavaPOS\out\artifacts\JposPrinterJavaPOS_jar>java -classpath .;JposPrinterJavaPOS.jar;jpos113-controls.jar;jcl.jar;xercesimpl.jar;xml-apis.jar JposPrinterReceiptTest
Async transaction print submitted: time = 1468509139249 output id = 1
OutputCompleteEvent received: time = 1468509139328 output id = 1
JposPrinterReceiptTest finished.
```

5. JavaPOS Programming Objects

This software is mainly developed based on JAVAPOS standard. For more details of JAVAPOS programming, please refer to the programming manual published by JAVAPOS. You can visit: <http://www.javapos.com> for the details.

PTR_BCS_UPCA, PTR_BCS_UPCE, PTR_BCS_JAN8, PTR_BCS_JAN13, PTR_BCS_ITF,

PTR_BCS_Codabar, PTR_BCS_Code39, PTR_BCS_Code93, PTR_BCS_Code128,

PTR_BCS_QRCODE,---*1

PTR_BCS_PDF417----*2

*Attention:

When using *1 and *2, the printing size setting will take no effect but it should be set within the normal printing size range.

1. In default setting, when you send "text", it will generate the QRCODE with the default parameters. If you need to set the unit size of QRCODE and error correction level, please use the following format:

HEX: **1b N1 N2 "text"**

N1: Unit dot size

N2: Error correction level

For more details please refer to the programming manual of the printer, check it in the QRCODE part.

2. In default setting, when you send "text", it will generate the PDF417 with the default parameters. If you need to set the parameters of PDF417 and error correction level, please use the following format:

HEX: **1b N1 N2 N3 N4 N5 N6 N7 "text"**

N1: Row number

N2: Line number

N3: Width

N4: Line Height

N5: Error correction description type

N6: Error correction level value

N7: Set/cancel truncation mode

For more details please refer to the programming manual of the printer, check it in the PDF417 part.