BIXOLON

Application Programming Guide

JavaPOS Driver

Ver. 1.07

http://www.bixolon.com

Table of Contents

Copyright

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

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”.

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

1. Development environment

1-1 Communication Configuration

• Communication Configuration for serial interface.

• You will set communication configuration in JCL Utility.

Printer Model	Baud Rate	Printer Type	etc
SLP-TX220, SLP-TX400 SLP-TX420, XT5-40 XD5-40t, XT3-40	9600/19200/38400/57600/115200	Thermal Transfer	203 dpi
SLP-TX223, SLP-TX403 SLP-TX423, XT5-43 XD5-43t, XT3-43	9600/19200/38400/57600/115200	Thermal Transfer	300 dpi
XT5-46	9600/19200/38400/57600/115200	Thermal Transfer	600 dpi
SLP-DX220, SLP-DX420 SLP-DL410 XD5-40d, XL5-40CT SRP-S3000_LABEL	9600/19200/38400/57600/115200	Direct Thermal	203 dpi
SLP-DX223 SLP-DX423, SLP-DL413 XD5-43d, XL5-43CT	9600/19200/38400/57600/115200	Direct Thermal	300 dpi
SPP-L310, SPP-L410 SPP-L3000, XM7-40 XM7-20, XM7-30	9600/19200/38400/57600/115200	Direct Thermal	203 dpi

• Check the default communication setting.
For more details refer to the user manual included in the printer package.
• A printer which does not support Serial Interface is not indicated.

2. Properties / Methods

2-1 Printer Type

• Property value will be determined by the printer type, as shown in the below table.
(Some property values related to Receipt may be different depending on printer model.)

Thermal transfer printer list	SLP-TX220, SLP-TX223 SLP-TX400, SLP-TX403 SLP-TX420, SLP-TX423 XT5-40, XT5-43, XT5-46 XD5-40t, XD5-43t XT3-40, XT3-43
Direct thermal printer list	SLP-DX220, SLP-DX223 SLP-DX420, SLP-DX423 SLP-DL410, SLP-DL413 XD5-40d, XD5-43d XL5-40CT, XL5-43CT SPP-L3000 SPP-L310, SPP-L410 XM7-40, XM7-30, XM7-20 SRP-S3000_LABEL

2-2 Properties Range / Default Value

2-2-1 Capability properties setting value

Capability Property	Label Printer
CapCompareFirmwareVersion	false
CapPowerReporting	true
CapStatisticsReporting	false
CapUpdateFirmware	false
CapUpdateStatistics	false
CapTransaction	true
CapCoverSensor	true
CapConcurrentRecSlp	false
CapConcurrentJrnSlp	false
CapConcurrentJrnRec	false
CapCharacterSet	true
CapRecUnderline	false
CapRecPageMode	true
CapCuncurrentPageMode	false
CapRecStamp	false
CapRecRotate180	true
CapRecRight90	true
CapRecPapercut	true
CapRecNearEndSensor	false
CapRecMarkFeed	true
CapRecLeft90	true
CapRecItalic	true
CapRecEmptySensor	true
CapRecDwideDhigh	true
CapRecDwide	true
CapRecDhigh	true
CapRecColor	false
CapRecCartridgeSensor	false
CapRecBold	true
CapRecBitmap	true
CapRecBarCode	true
CapRec2Color	false
CapRecPresent	true

May be capability setting values are different depending on the printer model.

2-2-2 Properties default value / range

1) List Properties

Property	Label Printer
FontTypefaceList	0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
RecBitmapRotationList	0,L90,R90,180
RecBarCodeRotationList	0,L90,R90,180
CharactersetList	437,850,852,860,863,865,1252,8651252 (Combined),857,737,1250,1253,1254,855,862,866,1251,1255,928,864,775,1257,858,949,932,950,936

2) Paper width properties

Model	Max Width
XM7-20	384
SLP-TX220, SLP-DX220	432
SLP-TX223, SLP-DX223	672
SLP-TX400, SLP-TX420 SLP-DX420, SLP-DL410 XD5-40d, XL5-40CT, XD5-40t XT3-40	864
SLP-TX403, SLP-TX423 SLP-DX423, SLP-DL413	1248
SPP-L3000, SPP-L310 SRP-S3000_LABEL XM7-30	576
SPP-L410, XT5-40, XM7-40	832
XT5-43, XD5-43d XL5-43CT, XD5-43t XT3-43	1248
XT5-46	2496

2-2-3 Description of Main Properties

1) DeviceEnabled
- Description: Indicates whether to use the printer. You should set this value to true to use the printer after calling the Open, claim method.
- Related method: void setDeviceEnabled(boolean)

2) AsyncMode
- Description: When it is set to true, the print-related method operates in asynchronous mode.
  If set to false, the print-related method operates in synchronous mode.
  In asynchronous mode, you can check the completion of printing with OutputCompleteEvent.
- Related method : void setAsyncMode(boolean)

3) CharacterSetList
- Description: Gets a list of the character sets supported by the printer.
- Related method: String getCharacterSetList()

4) CharacterSet
- Description: The character set to use when printing the printer.
  You can set any of the values in the CharacterSetList list.
  Set after setting DeviceEnabled to true.
- Related method: void setCharacterSet(int)
- Examples

```
posPrinter.setCharacterSet(932);                // Shift-JIS – Set to Japanese

posPrinter.setCharacterSet(949);                // KSC5601 – Set to Korean

posPrinter.setCharacterSet(936);                // GB2312 – Set of Simplified Chinese

posPrinter.setCharacterSet(950);                // BIG5 – Set to Traditional Chinese
```

Refer to '5-2-1 Basic Code Page' for information on supported code pages.

5) RecLineCharsList
- Description: Gets a list of the number of characters that can be printed on one line.
- Related method : String getRecLineCharsList()

6) RecLineChars

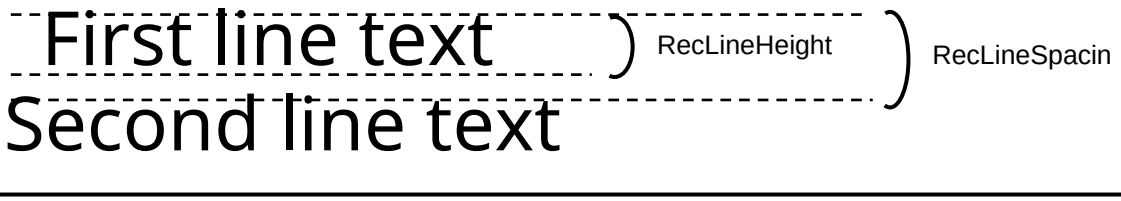
- Description: The number of characters printed on one line
  If the value is less than or equal to the preceding value in the list of RecLineCharsList, it is set to A Font(12x20), and if it is greater than the preceding value, it is set to B Font (9x15).
  You should set after setting DeviceEnabled to true.
- Related method: void setRecLineChars(int)
- Examples

```
// Gets a list of the number of characters that can be printed on one line.
String strRecLineCharsList = posPrinter.getRecLineCharsList();

//If RecLineCharsList value is 69,92
posPrinter.setRecLineChars(69);                    //Set to A Font

posPrinter.setRecLineChars(92);                    //Set to B Font
```

7) RecLineSpacing

- Description: You can set the interval between line and line.
  This value can change depending on the MapMode or the selected font.
- Related method : int getRecLineSpacing(), int setRecLineSpacing(int)

※ RecLineHeight vs. RecLineSpacing



2-2-4 Methods

Method	Value
beginInsertion	X
beginRemoval	X
changePrintSide	X
clearPrintArea	O
cutPaper	O
drawRuledLine	X
endInsertion	X
endRemoval	X
markFeed	O
pageModePrint	O
printBarCode	O
printBitmap	O
printImmediate	O
printMemoryBitmap	O
printNormal	O
printTwoNormal	X
rotatePrint	O
setBitmap	O
setLogo	O
transactionPrint	O
validateData	O

O: Supported X: Not supported

2-2-5 Description of Main Methods

1) cutPaper
- Description: In the model provided with Auto Cutter, this function cuts the paper.
- Method prototype : void cutPaper(int percentage)
- Example

```
posPrinter.cutPaper(90);                                    //Cut the paper
```

2) printBarcode
- Description: Prints the barcode
- Method prototype : int printBarCode(int station, String data, int symbology, int height, int width, int alignment, int textPostition)
- parameter information
  - int station: The type of printer. Set to PTR_S_RECEIPT
  - String data: Sets the data of the barcode to be printed
  - int symbology: Specifies the type of barcode (See JPOS constant value)
  - int height: Specifies the height of the barcode
  - int width: Specifies the width of the barcode
  - int alignment: Specifies the alignment position of the bar code (See JPOS constant value)
  - int textPosition: Specifies the position of the Human Readable Interpretation (HRI). (See JPOS constant value)
- Example

```
//Print a 100 x 100 QR Code in the center of the paper
posPrinter.printBarCode(PTR_S_RECEIPT, "www.bixolon.com",
   PTR_BCS_QRCODE, 100, 100, PTR_BC_CENTER, PTR_BC_TEXT_NONE);
```

3) printNormal
- Description: Prints the text. The Escape Sequence string is also available
- Method prototype : int printNormal(int station, String data)
- parameter information
  - int station: The type of printer. Set to PTR_S_RECEIPT.
  - String data: Sets the text to be printed
- Example

```
//Print Test Text print
String CRLF = "\r\n";
posPrinter.printNormal(PTR_S_RECEIPT, “Print test” + CRLF);
```

4) transactionPrint

• Description: Starts or ends transaction mode.
A series of actions consisting of transactions are performed as if they were a single action.

• Method prototype: int transactionPrint(int station, int control)

• parameter information

- int station: The type of printer. Set to PTR_S_RECEIPT
- int control: Sets the start and end of transaction mode (See JPOS constant value)

• Examples

```
//Transaction mode start
posPrinter.transactionPrint(PTR_S_RECEIPT, PTR_TP_TRANSACTION);

// Stack text print, image print, paper cutting actions in transaction buffer
posPrinter.printNormal(PTR_S_RECEIPT, "Transaction test" + CRLF);
posPrinter.printBitmap(PTR_S_RECEIPT, "Logo.bmp"),
   PTR_BM_ASIS, PTR_BM_CENTER);
posPrinter.cutPaper(90);

//Transaction mode end. This time, all actions are performed
posPrinter.transactionPrint(PTR_S_RECEIPT, PTR_TP_NORMAL);
```

5) printBitmap

• Description: Prints the image

• Method prototype : int printBitmap(int station, String fileName, int width, int alignment)

• parameter information

- int station: The type of printer. Set to PTR_S_RECEIPT
- String fileName: Specifies the path to the image file to be printed
- int width: Specifies the width of the image to be printed
- int alignment: Specifies the alignment position of the image (See JPOS constant value)

• Example

```
// Print the image of Logo.bmp file in the center of the paper
//PTR_BM_ASIS: Print the image at the given size
posPrinter.printBitmap(PTR_S_RECEIPT, "Logo.bmp",
   PTR_BM_ASIS, PTR_BM_CENTER);
```

6) setBitmap

• Description: Stores the image information to be printed later

• Method prototype : int setBitmap(int bitmapNumber, int station, String fileName, int width, int alignment)

• parameter information

- int bitmapNumber: Assigns a number to the image to be stored
- int station: The type of printer. Set to PTR_S_RECEIPT
- String fileName: Specifies the path to the image to be stored
- int width: Specifies the width of the image
- int alignment : Specifies the alignment position of the image (See JPOS constant value)

• Examples

```
String CRLF = "\r\n";
String ESC = "\u001B";

//Store Logo.bmpfile as no. 1
posPrinter.setBitmap(1, PTR_S_RECEIPT, "Logo.bmp",
   PTR_BM_ASIS, PTR_BM_CENTER);

// Print the image stored as no.1 using Escape Sequence
posPrinter.printNormal(PTR_S_RECEIPT, ESC + "|1B" + CRLF);
```

2-2-6 Escape Sequences

Escape Sequence	Setting value	Description
[#]P	O (value range: 0~100)	Cut the paper
[#]fP	O (value range: 0~100)	Feed and cut the paper
[#]sP	X	This function is not supported
sL	X	This function is not supported
[#]B	O (value range: 1~20)	Print images saved with the setBitmap method
tL	O	Print the saved logo with the setLogo method
bL	O	Print the saved logo with the setLogo method
[#]lF	O (value range: 0~9999)	Feed the paper by the set value. The # value is in line units
[#]uF Base Pitch [inch]	O	Feed the paper by the set value. The # value is in dot units.
[#]rF Maximum [inch]	X	This function is not supported
#E	O	Transmit the data as int as the length of the # number.
#R	X	This function is not supported
#dL	X	This function is not supported
#fT	O	Select the font
[!]bC	O	Print in bold font (! for cancellation)
[!][#]uC	O	Print with underline (! for cancellation)
[!]iC	X	This function is not supported
[#]rC	O	Print using custom colors
[!]rvC	O	Print in reverse style (! for cancellation)
[#]sC	X	This function is not supported
1C	O	Print in normal size
2C	O	Print in double width
3C	O	Print in double height
4C	O	Print in double width and height
#hC	O	Prints in the width of the font at # times magnification
#vC	O	Prints in the height of the font at # times magnification
[#]fC	X	This function is not supported
[!]tbC	X	This function is not supported
[!]tpC	X	This function is not supported

cA	O	Align in the center
rA	O	Align to the right
lA	O	Align to the left
[!][#]stC	X	This function is not supported
N	O	Initialize the status of the printer

O: Supported X: Not supported

To know more about Escape Sequence, please refer to UPOS 1.13.

3. Extended Functions

This section is to explain DirectIO method.
This method will operate properly only with BIXOLON POS printer.

3-1 DirectIO Method

Argument	Explanation	Type
Command	Pre-define constant	Int
data	Number of output data / Value defined by command	Int[]
object	Output Data	String

3-1-1 BIXOLON JPOS DirectIO Commands Description

Command	Constant	Description
PTR _DI_OUTPUT	0	Output the object data
PTR _DI_INTERNATIONAL_CHAR	1	Define the international characterset

3-2 DirectIO Command

3-2-1 Direct Output

Argument	Command	PTR_DI_OUTPUT
	data	Null
	object	Output data
Description	Sends data without any process after checking printer status.	
Return	Result Code	ResultCodeExtended
	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_BUSY	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	0

3-2-2 International characterset setting

Argument	Command	PTR _DI_INTERNATIONAL_CHAR
	data	constant value which pre-defined PRN_DI_CHAR_USA: 0 PRN_DI_CHAR_FRANCE: 1 PRN_DI_CHAR_GERMANY: 2 PRN_DI_CHAR_UK: 3 PRN_DI_CHAR_DENMARK1: 4 PRN_DI_CHAR_SWEDEN: 5 PRN_DI_CHAR_ITALY: 6 PRN_DI_CHAR_SPAIN1: 7 PRN_DI_CHAR_NORWAY: 8 PRN_DI_CHAR_DENMARK2: 9 PRN_DI_CHAR_JAPAN: 10 PRN_DI_CHAR_SPAIN2: 11 PRN_DI_CHAR_LATIN_AMERICA: 12 PRN_DI_CHAR_KOREA: 13 PRN_DI_CHAR_SLOVENIA_CROATIA: 14 PRN_DI_CHAR_CHINA: 15
	object	Empty string
Description	Sets International characterset. Certain characters change according to the data argument value. Refer to International characterset code table and related method. If CharacterSet property value is changed, International character set will be reset.	
Return	Result Code	ResultCodeExtended
	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_BUSY	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	0

3-3 DirectIOEvent

• Not used.

4. Error Information

This section is to explain returned error information when use POSPrinter methods.
For more details, please refer to the UPOS specifications.

4-1 ResultCode List

4-1-1 claim method

Method	Result Code	ResultCodeExtended
claim	JPOS_E_ILLEGAL	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_CUTTER
		JPOS_EPTR_OVERHEAT
		JPOS_EPTR_REC_EMPTY
		JPOS_EPTR_JRN_EMPTY

4-1-2 checkHealth method

Method	Result Code	ResultCodeExtended
checkHealth	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT

4-1-3 clearOutput method

Method	Result Code	ResultCodeExtended
clearOutput	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0

4-1-4 directIO method

Method	Result Code	ResultCodeExtended
directIO	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY

4-1-5 printNormal method

Method	Result Code	ResultCodeExtended
printNormal	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY

4-1-6 printImmediate method

Method	Result Code	ResultCodeExtended
printImmediate	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY

4-1-7 cutPaper method

Method	Result Code	ResultCodeExtended
cutPaper	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY

4-1-8 rotatePrint method

Method	Result Code	ResultCodeExtended
rotatePrint	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY

4-1-9 printBitmap method

Method	Result Code	ResultCodeExtended
printBitmap	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_NOEXIST	0
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY
		JPOS_EPTR_SLP_EMPTY
		JPOS_EPTR_TOOBIG
		JPOS_EPTR_BADFORMAT

4-1-10 setBitmap method

Method	Result Code	ResultCodeExtended
setBitmap	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_NOEXIST	0
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY
		JPOS_EPTR_SLP_EMPTY
		JPOS_EPTR_TOOBIG
		JPOS_EPTR_BADFORMAT

4-1-11 setLogo method

Method	Result Code	ResultCodeExtended
setLogo	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0

4-1-12 transactionPrint method

Method	Result Code	ResultCodeExtended
transactionPrint	JPOS_SUCCESS	0
	JPOS_E_CLOSED	0
	JPOS_E_CLAIMED	0
	JPOS_E_NOTCLAIMED	0
	JPOS_E_DISABLED	0
	JPOS_E_ILLEGAL	0
	JPOS_E_OFFLINE	0
	JPOS_E_FAILURE	JPOS_EPTR_UNRECOVERABLE
		JPOS_EPTR_CUTTER
		JPOS_EPTR_MECHANICAL
		JPOS_EPTR_OVERHEAT
	JPOS_E_NOEXIST	0
	JPOS_E_EXTENDED	JPOS_EPTR_COVER_OPEN
		JPOS_EPTR_JRN_EMPTY
		JPOS_EPTR_REC_EMPTY
		JPOS_EPTR_SLP_EMPTY

5. Resources

5-1 JPOS Value (defines)

5-1-1 Barcode type

Code define	Description
PTR_BCS_UPCA:	UPC-A
PTR_BCS_UPCE	UPC-E
PTR_BCS_JAN8	JAN 8 (= EAN 8)
PTR_BCS_JAN13	JAN 13 (= EAN 13)
PTR_BCS_ITF	Interleaved 2 of 5
PTR_BCS_Codabar	Codabar
PTR_BCS_Code39	Code 39
PTR_BCS_Code93	Code 93
PTR_BCS_Code128	Code 128
PTR_BCS_Code128_Parsed	Code 128 with parsing
PTR_BCS_GS1DATABAR	GS1 DataBar Omnidirectional
PTR_BCS_GS1DATABAR_E	GS1 DataBar Expanded
PTR_BCS_GS1DATABAR_S	GS1 DataBar Stacked Omnidirectional
PTR_BCS_GS1DATABAR_E_S	GS1 DataBar Expanded Stacked
PTR_BCS_PDF417	PDF 417
PTR_BCS_MAXICODE	MAXI Code
PTR_BCS_DATAMATRIX	Data Matrix
PTR_BCS_QRCODE	QR Code
PTR_BCS_AZTEC	Aztec

5-1-2 Barcode alignment

Code define	Description
PTR_BC_LEFT	Left alignment
PTR_BC_CENTER	Center alignment
PTR_BC_RIGHT	Right alignment

5-1-3 Barcode HRI alignment

Code define	Description
PTR_BC_TEXT_NONE	Do not print HRI
PTR_BC_TEXT_ABOVE	Print HRI on top of barcode
PTR_BC_TEXT_BELOW	Print HRI at the bottom of barcode

5-1-4 Image alignment

Code define	Description
PTR_BM_LEFT	Left alignment
PTR_BM_CENTER	Center alignment
PTR_BM_RIGHT	Right alignment

5-1-5 TransactionPrint

Code define	Description
PTR_TP_TRANSACTION	Initializes the buffer to empty and starts the transaction mode.
PTR_TP_NORMAL	Exit transaction mode and output the stacked data in Buffer.

5-2 Code page

5-2-1 Basic code page

Code page number	Description
PC437	U.S.A
PC850	LATIN 1
PC852	LATIN 2
PC860	PORTUGUESE
PC863	CANADIAN FRENCH
PC865	NORDIC
PC1252	WINDOWS LATIN 1
PC865 + PC1252	EUROPEAN COMBINED
PC857	TURKISH
PC737	GREEK
PC1250	WINDOWS LATIN 2
PC1253	GREEK
PC1254	TURKISH
PC855	CYRILLIC
PC862	HEBREW
PC866	CYRILLIC
PC1251	CYRILLIC
PC1255	HEBREW
PC928	GREEK
PC864	Arabic
PC775	Baltic
PC1257	Baltic
PC858	Latin 1 + Euro
PC932	Shift-JIS
PC936	GB2312
PC949	KSC5601
PC950	BIG5

5-2-2 International characterset code table

Country	International Character Set												
	Hex	23h	24h	40h	5Bh	5Ch	5Dh	5Eh	60h	7Bh	7Ch	7Dh	7E
	Dec	35	36	64	91	92	93	94	96	123	123	125	126
U.S.A		#	$	@	[	\	]	^	`	{	|	}	~
France		#	$	à	°	ç	§	^	`	é	ù	è	¨
Germany		#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	β
U.K.		£	$	@	[	\	]	^	`	{	|	}	~
Denmark I		#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
Sweden		#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy		#	$	@	°	\	é	^	ù	à	ò	è	ì
Spain		Pts	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
Norway		#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Denmark II		#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Japan		#	$	@	[	¥	]	^	`	{	|	}	~
Spain II		#	$	á	¡	Ñ	¿	é	`	í	ñ	ó	ú
Latin America		#	$	á	¡	Ñ	¿	é	ü	í	ñ	ó	ú
Korea		#	$	@	[	₩	]	^	`	{	|	}	~
Slovenia/Croatia		#	$	Ž	Š	Đ	Ć	Č	ž	š	đ	ć	č
China		#	¥	@	[	\	]	^	`	{	|	}	~

5-2-3 Examples of international characterset

```
String CRLF = "\r\n";
final int PRN_DI_INTERNATIONAL_CHAR = 1;
final int PRN_DI_CHAR_JAPAN = 10;
final int PRN_DI_CHAR_KOREA = 13;

//Select Korea international characterset
int[] data = { PRN_DI_CHAR_KOREA };
posPrinter.directIO(PRN_DI_INTERNATIONAL_CHAR, data, null);

// '\' characater is converted to '₩'
// result : coffee :  ₩2,400
posPrinter.printNormal(PTR_S_RECEIPT, "coffee : \\2,400" + CRLF);
posPrinter.markFeed(PTR_MF_TO_TAKEUP);

//Select Japan international characterset
data[0] = PRN_DI_CHAR_JAPAN;
posPrinter.directIO(PRN_DI_INTERNATIONAL_CHAR, data, null);

// '\' characater is converted to '¥'
// result : coffee : ¥2,400
posPrinter.printNormal(PTR_S_RECEIPT, "coffee : \\2,400" + CRLF);
posPrinter.markFeed(PTR_MF_TO_TAKEUP);
```

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

Revision history

Rev.	Date	Description
1.00	2019-07-09	New
1.01	2019-10-23	Chainging of the label printer model name
1.02	2019-11-21	Add model XD5-40t, XD5-43t, XM7-40
1.03	2019-03-10	Add model XM7-20
1.04	2020-09-16	Add model SRP-S3000
1.05	2021-02-26	Change the font in the manual
1.06	2021-08-26	Add model XT3-40, XT3-43
1.07	2022-04-26	Add model XM7-30