

Point of Sale Subsystem



# JavaPOS Cash Drawer, Fiscal Printer and Line Display for Italy

## Installation instructions

To use the FiscalPrinter, LineDisplay and CashDrawer services, specific for IBM 4610 printers, the following elements must be present on the system:

- **jpos.xml**, modified according to the following description

## JavaPOS configuration

### Creating base jpos.xml file

Create the base jpos.xml following the instructions from "UnifiedPOS User's Guide, Keyboards, and Code Pages" at chapter 3

### Adding Italy Cash Drawer, Line Display or Fiscal Printer JposEntry

To create a jpos.xml file using your favorite text editor, follow these steps:

1. Open the base jpos.xml created in previous steps
2. Copy from the sample XML file the JposEntry with "<Device Category> Italy" logical name to the jpos.xml
  - the logical names for each category are:
    - a) "FiscalPrinter-CashDrawer Italy" for Cash Drawer
    - b) "FiscalPrinter Italy" for Fiscal Printer
    - c) "FiscalPrinter-LineDisplay Italy" for Line Display
3. Edit the directIOJposEntryLogicalName property and update the value with the specific logical name of the fiscal printer to use from the base JposEntry.

For Example:

```
<prop name="directIOJposEntryLogicalName" type="String"
value="BaseFiscalPrinter"/>
```

The Line Display JposEntry contains an extra property to indicate the number of display to use ("1" or "2")

For Example:

```
<prop name="lineDisplayNumber" type="String" value="1"/>
```

# JavaPOS Fiscal Printer

## *Available properties and methods*

### Common properties

Properties	Availability	Value
<b>getAutoDisable</b>	Not supported	-
<b>setAutoDisable</b>	Not supported	-
<b>getBinaryConversion</b>	Not supported	-
<b>setBinaryConversion</b>	Not supported	-
<b>getCapCompareFirmwareVersion</b>	Supported	Pass-through IBM property (False)
<b>getCapPowerReporting</b>	Supported	Pass-through IBM property (JPOS_PR_STANDARD)
<b>getCapStatisticsReporting</b>	Supported	Pass-through IBM property (True)
<b>getCapUpdateFirmware</b>	Supported	Pass-through IBM property (False)
<b>getCapUpdateStatistics</b>	Supported	Pass-through IBM property (True)
<b>getCheckHealthText</b>	Supported	Pass-through IBM property (String)
<b>getClaimed</b>	Supported	Pass-through IBM property (True/False)
<b>getDataCount</b>	Not supported	-
<b>getDatEventEnabled</b>	Not supported	-
<b>setDatEventEnabled</b>	Not supported	-
<b>getDeviceEnabled</b>	Supported	Pass-through IBM property (True/False)
<b>setDeviceEnabled</b>	Supported	
<b>getDeviceControlDescription</b>	Supported	Pass-through IBM property (String)
<b>getDeviceControlVersion</b>	Supported	Pass-through IBM property (int)
<b>getDeviceServiceDescription</b>	Supported	Pass-through IBM property + " - Italy Plugin" (String)
<b>getDeviceServiceVersion</b>	Supported	Pass-through IBM property
<b>getFreezeEvents</b>	Supported	Pass-through IBM property (True/False)
<b>setFreezeEvents</b>	Supported	Pass-through IBM property
<b>getOutputID</b>	Supported	Pass-through IBM property (int)
<b>getPhysicalDeviceDescription</b>	Supported	Pass-through IBM property (String)
<b>getPhysicalDeviceName</b>	Supported	Pass-through IBM property (String)

<b>getPowerNotify</b>	Supported	Pass-through IBM property (int)
<b>setPowerNotify</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getPowerState</b>	Supported	Pass-through IBM property (int)
<b>getState</b>	Supported	Pass-through IBM property (int)

## Specific properties

Properties	Availability	Value
<b>getActualCurrency</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getAdditionalHeader</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setAdditionalHeader</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getAdditionalTrailer</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setAdditionalTrailer</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getAmountDecimalPlaces</b>	Supported	2 (int)
<b>getAsyncMode</b>	Supported	False
<b>setAsyncMode</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCapAdditionalHeader</b>	Supported	False
<b>getCapAdditionalLines</b>	Supported	True
<b>getCapAdditionalTrailer</b>	Supported	False
<b>getCapAmountAdjustment</b>	Supported	True
<b>getCapAmountNotPaid</b>	Supported	True
<b>getCapChangeDue</b>	Supported	False
<b>getCapCheckTotal</b>	Supported	True
<b>getCapCoverSensor</b>	Supported	True
<b>getCapDoubleWidth</b>	Supported	True
<b>getCapDuplicateReceipt</b>	Supported	False
<b>getCapEmptyReceiptsVoidable</b>	Supported	True
<b>getCapFiscalReceiptStation</b>	Supported	True
<b>getCapFiscalReceiptType</b>	Supported	True
<b>getCapFixedOutput</b>	Supported	False
<b>getCapHasVatTable</b>	Supported	False
<b>getCapIndependentHeader</b>	Supported	False
<b>getCapItemList</b>	Supported	False
<b>getCapJrnEmptySensor</b>	Supported	False
<b>getCapJrnNearEndSensor</b>	Supported	False
<b>getCapJrnPresent</b>	Supported	False
<b>getCapMultiContractor</b>	Supported	False

<b>getCapNonFiscalMode</b>	Supported	True
<b>getCapOnlyVoidLastItem</b>	Supported	False
<b>getCapOrderAdjustmentFirst</b>	Supported	False
<b>getCapPackageAdjustment</b>	Supported	False
<b>getCapPercentAdjustment</b>	Supported	False
<b>getCapPositiveAdjustment</b>	Supported	True
<b>getCapPositiveSubtotalAdjustment</b>	Supported	True
<b>getCapPostPreLine</b>	Supported	True
<b>getCapPowerLossReport</b>	Supported	False
<b>getCapPredefinedPaymentLines</b>	Supported	False
<b>getCapReceiptNotPaid</b>	Supported	True
<b>getCapRecEmptySensor</b>	Supported	True
<b>getCapRecNearEndSensor</b>	Supported	False
<b>getCapRecPresent</b>	Supported	True
<b>getCapRemainingFiscalMemory</b>	Supported	False
<b>getCapReservedWord</b>	Supported	True
<b>getCapSetCurrency</b>	Supported	False
<b>getCapSetHeader</b>	Supported	True
<b>getCapSetPOSID</b>	Supported	True
<b>getCapSetStoreFiscalID</b>	Supported	False
<b>getCapSetTrailer</b>	Supported	False
<b>getCapSetVatTable</b>	Supported	False
<b>getCapSlpEmptySensor</b>	Supported	True
<b>getCapSlpFiscalDocument</b>	Supported	False
<b>getCapSlpFullSlip</b>	Supported	True
<b>getCapSlpNearEndSensor</b>	Supported	False
<b>getCapSlpPresent</b>	Supported	True
<b>getCapSlpValidation</b>	Supported	True
<b>getCapSubAmountAdjustment</b>	Supported	True
<b>getCapSubPercentAdjustment</b>	Supported	False
<b>getCapSubtotal</b>	Supported	True

<b>getCapTotalizerType</b>	Supported	False
<b>getCapTrainingMode</b>	Supported	True
<b>getCapValidateJournal</b>	Supported	False
<b>getCapXReport</b>	Supported	False
<b>getChangeDue</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setChangeDue</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCheckTotal</b>	Supported	True
<b>setCheckTotal</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getContractorId</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setContractorId</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCountryCode</b>	Supported	FPTR_CC_ITALY
<b>getCoverOpen</b>	Supported	True / False
<b>getDateType</b>	Supported	FPTR_DT_RTC
<b>setDateType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getDayOpened</b>	Supported	True / False
<b>getDescriptionLength</b>	Supported	38 (int)
<b>getDuplicateReceipt</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setDuplicateReceipt</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getErrorLevel</b>	Supported	FPTR_EL_NONE
<b>getErrorOutID</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getErrorState</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getErrorStation</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getErrorString</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getFiscalReceiptStation</b>	Supported	FPTR_RS_RECEIPT
<b>setFiscalReceiptStation</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getFiscalReceiptType</b>	Supported	FPTR_RT_SALES / FPTR_RT_GENERIC (credit note) / FPTR_RT_REFUND (credit note)
<b>setFiscalReceiptType</b>	Supported	
<b>getFlagWhenIdle</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setFlagWhenIdle</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getJrnEmpty</b>	Supported	False
<b>getJrnNearEnd</b>	Supported	False

<b>getMessageLength</b>	Supported	38 (int)
<b>getMessageType</b>	Supported	FPTR_MT_FREE_TEXT
<b>setMessageType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getNumHeaderLines</b>	Supported	5 (int)
<b>getNumTrailerLines</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getNumVatRates</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getPostLine</b>	Supported	String
<b>setPostLine</b>	Supported	
<b>getPredefinedPaymentLines</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getPreLine</b>	Supported	String
<b>setPreLine</b>	Supported	
<b>getPrinterState</b>	Supported	FPTR_PS_MONITOR / FPTR_PS_FISCAL_RECEIPT / FPTR_PSFISCAL_RECEIPT_TOTAL / FPTR_PSFISCAL_RECEIPT_ENDING / FPTR_PS_NONFISCAL
<b>getQuantityDecimalPlaces</b>	Supported	3 (int)
<b>getQuantityLength</b>	Supported	7 (int)
<b>getRecEmpty</b>	Supported	True / False
<b>getRecNearEnd</b>	Supported	False
<b>getRemainingFiscalMemory</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getReservedWord</b>	Supported	"TOTAL"
<b>getSlpEmpty</b>	Supported	True / False
<b>getSlpNearEnd</b>	Supported	False
<b>getSlipSelection</b>	Supported	FPTR_SS_FULL_LENGTH
<b>setSlipSelection</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getTotalizerType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setTotalizerType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getTrainingModeActive</b>	Supported	True / False

## Common methods

Methods	Availability	Notes
<b>checkHealth</b>	Supported	Pass-through IBM method
<b>claim</b>	Supported	Pass-through IBM method
<b>clearInput</b>	Not supported	-
<b>clearOutput</b>	Not supported	-
<b>close</b>	Supported	Pass-through IBM method
<b>compareFirmwareVersion</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>directIO</b>	Supported	Pass-through IBM method (FISCAL_WRITE through the driver)
<b>open</b>	Supported	Pass-through IBM method
<b>release</b>	Supported	Pass-through IBM method
<b>resetStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>retrieveStatistics</b>	Supported	Pass-through IBM method
<b>updateFirmware</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>updateStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)

## Specific methods

Methods	Availability	Notes
<b>setCurrency</b>	Not supported	JPOS_E_ILLEGAL
<b>setDate</b>	Supported	
<b>setHeaderLine</b>	Supported	If text = "" a blank line is set
<b>setPOSID</b>	Supported	This method can be called while DayOpened is false. The text will be lost across power losses.
<b>setStoreFiscalID</b>	Not supported	JPOS_E_ILLEGAL
<b>setTrailerLine</b>	Not supported	JPOS_E_ILLEGAL
<b>setVatTable</b>	Not supported	JPOS_E_ILLEGAL
<b>setVatValue</b>	Not supported	JPOS_E_ILLEGAL
<b>beginFiscalReceipt</b>	Supported	The header lines are ALWAYS printed at this time
<b>endFiscalReceipt</b>	Supported	The header of the next receipt will NOT be printed
<b>printDuplicateReceipt</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecCash</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecItem</b>	Supported	vatInfo and unitName parameters not considered. If quantity=0 or 1000, corresponding line isn't printed. If description="" and price=0 will be printed a blank line. In case of Credit Note the syntax is printRecItem(description (string 24), amount (long 10), 0, 0, 0, RefundVoucherNumber (string 9))
<b>printRecItemAdjustment</b>	Supported	VatInfo not considered. ALWAYS 2 decimal places are used
<b>printRecItemAdjustmentVoid</b>	Supported	VatInfo not considered.
<b>printRecItemFuel</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecItemFuelVoid</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecItemRefund</b>	Supported	VatInfo and unitName parameters not considered. If quantity=0 or 1000, corresponding line isn't printed.
<b>printRecItemRefundVoid</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecItemVoid</b>	Supported	VatInfo and unitName parameters not considered. If quantity=0 or 1000, corresponding line isn't printed.
<b>printRecMessage</b>	Supported	
<b>printRecNotPaid</b>	Supported	
<b>printRecPackageAdjustment</b>	Not supported	JPOS_E_ILLEGAL

<b>printRecPackageAdjustVoid</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecRefund</b>	Supported	vatInfo not considered
<b>printRecRefundVoid</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecSubtotal</b>	Supported	Description is printed only if command is followed by a printRec. If software's total is different by printer's total the receipt is voided. CoverOpen and RecEmpty are not considered
<b>printRecSubtotalAdjustment</b>	Supported	ALWAYS 2 decimal places are used
<b>printRecSubtotalAdjustVoid</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecTaxID</b>	Not supported	JPOS_E_ILLEGAL
<b>printRecTotal</b>	Supported	If payment = 0 it doesn't send payment's command. If payment < 0 it sends a rectify payment's command
<b>printRecVoid</b>	Supported	Description not considered. Printer returns in monitor status
<b>printRecVoidItem</b>	Supported	quantity, adjustmentType, adjustment, vatInfo not considered
<b>beginFiscalDocument</b>	Supported	DocumentAmount not considered. Command processed even if CapSlpFiscalDocument=false. DayOpened is not set to true
<b>endFiscalDocument</b>	Supported	Command processed even if CapSlpFiscalDocument=false
<b>printFiscalDocumentLine</b>	Supported	Command processed even if CapSlpFiscalDocument=false. Max description length=47 chars
<b>beginItemList</b>	Not supported	JPOS_E_ILLEGAL
<b>endItemList</b>	Not supported	JPOS_E_ILLEGAL
<b>verifyItem</b>	Not supported	JPOS_E_ILLEGAL
<b>printPeriodicTotalsReport</b>	Supported	If parameters are invalid JPOS_E_ILLEGAL is passed (not EFPTR_BAD_DATE)
<b>printPowerLossReport</b>	Not supported	JPOS_E_ILLEGAL
<b>printReport</b>	Supported	This command can print electronic journal reports too(1)
<b>printXReport</b>	Not supported	JPOS_E_ILLEGAL
<b>printZReport</b>	Supported	If values set with setPOSID (printer ID and cashier ID) are != "0000" and != " ", they will be printed (non fiscal) at the beginning of report
<b>beginInsertion</b>	Supported	timeout not considered. If slip is empty, it doesn't return exception
<b>beginRemoval</b>	Supported	Timeout not considered. If slip is empty, it doesn't return exception
<b>endInsertion</b>	Not supported	JPOS_E_ILLEGAL
<b>endRemoval</b>	Not supported	JPOS_E_ILLEGAL

<b>beginFixedOutput</b>	Not supported	JPOS_E_ILLEGAL
<b>beginNonFiscal</b>	Supported	If CoverOpen or RecEmpty = true it doesn't return exception
<b>beginTrainig</b>	Supported	
<b>endFixedOutput</b>	Not supported	JPOS_E_ILLEGAL
<b>endNonFiscal</b>	Supported	
<b>endTraining</b>	Supported	
<b>printFixedOutput</b>	Not supported	JPOS_E_ILLEGAL
<b>printNormal</b>	Supported	It can be used also in fiscal receipts. If station=FPTR_S_SLIP, max description length=47 chars
<b>getData</b>	Supported	It can be used to print barcode(2) and downloaded graphics(3), to obtain specific informations(4), to set manual cut(5), to set emphasized font(6), to set printing of payment even if total is 0(7)
<b>getDate</b>	Supported	
<b>getTotalizer</b>	Not supported	JPOS_E_ILLEGAL
<b>getVatEntry</b>	Not supported	JPOS_E_ILLEGAL
<b>clearError</b>	Not supported	JPOS_E_ILLEGAL
<b>resetPrinter</b>	Supported	It voids fiscal and non-fiscal receipts, credit notes, fiscal invoices and close training mode

Notes:**1. printReport(int reportType, String startNum, String endNum)**

- to print all fiscal memory

```
reportType = 0
startNum = ""
endNum = ""
```

Example:

```
printReport(0, "", "");
```

- to print electronic journal by dates

```
reportType = 3
startNum = "ddmmyyyy"
endNum = "ddmmyyyy"
```

Example:

```
print from 24/01/06 to 27/01/06
printReport(3, "24012006", "27012006");
```

- to print electronic journal by fiscal closures

```
reportType = 4
startNum = "nnnn"
endNum = "nnnn"
```

Example:

```
print from closure n. 1 to closure n. 15
printReport(4, "0001", "0015");
```

- to print a fiscal receipt from electronic journal by number and date

```
reportType = 5
startNum = "nnnnnnnn" (first 4 numbers and next 4, represent the fiscal receipt number, that must
be repeated 2 times)
endNum = "ddmmyyyy"
```

Example:

```
print fiscal receipt n. 2 of 27/01/06
printReport(5, "00020002", "27012006");
```

- to print a set of fiscal receipts from electronic journal by numbers and date

```
reportType = 5
startNum = "nnnnnnnn" (first 4 numbers represent the first fiscal receipt and next 4 represent the last
fiscal receipt)
endNum = "ddmmyyyy"
```

Example:

```
print fiscal receipts from n. 1 to n. 65 of 24/01/06
printReport(5, "00010065", "24012006");
```

- to print a fiscal receipt from electronic journal by number inside the current sale period

```
reportType = 6
startNum = "nnnnnnnn" (first 4 numbers and next 4 represent the fiscal receipt number, that must be
repeated 2 times)
endNum = ""
```

Example:

```
print fiscal receipt n. 2 of current sale period
printReport(6, "00020002", "");
```

- to print a set of fiscal receipts from electronic journal by numbers and of current sale period

*reportType* = 6

*startNum* = "nnnnnnnn" (first 4 numbers represent the first fiscal receipt and next 4 represent the last fiscal receipt)

*endNum* = ""

Example:

print fiscal receipts from n. 1 to n. 65 of current sale period

```
printReport(6, "00010065", "");
```

- to print a fiscal receipt from electronic journal by number and fiscal closure

*reportType* = 7

*startNum* = "nnnnnnnn" (first 4 numbers and next 4 represent the fiscal receipt number, that must be repeated 2 times)

*endNum* = "nnnn" (the fiscal closure's number)

Example:

print fiscal receipt n. 5 of fiscal closure n. 153

```
printReport(7, "00050005", "0153");
```

- to print a set of fiscal receipts from electronic journal by numbers and fiscal closure

*reportType* = 7

*startNum* = "nnnnnnnn" (first 4 numbers represent the first fiscal receipt and next 4 represent the last fiscal receipt)

*endNum* = "nnnn" (the fiscal closure's number)

Example:

print fiscal receipts from n. 5 to n. 65 of fiscal closure n. 231

```
printReport(7, "00050065", "0231");
```

**2. getData(int *dataItem*, int[] *optArgs*, String[] *data*)**

to print the barcode:

```
dataItem = 600
```

```
optArgs = int[] (empty)
```

```
data = String[width, height, HRI font, HRI location, barcode type, barcode data]
```

First two *data* parameters determine the barcode's dimensions (C8 command)

- width:

```
    minimum = 2
```

```
    maximum = 4
```

```
    default = 3
```

- height:

```
    minimum = 001
```

```
    maximum = 255
```

```
    default = 162
```

If both parameters are set to "", C8 command isn't sent to the printer; barcode will be printed with default dimensions.

Next *data* parameters set HRI, barcode type, barcode data and the print (C9 command)

- HRI font:

```
    1 = 12 CPI
```

```
    0 = 15 CPI
```

- HRI location:

```
    11 = over and under the barcode
```

```
    10 = under the barcode
```

```
    01 = over the barcode
```

```
    00 = HRI not printed
```

- barcode type:

```
    1000 = CODE93
```

```
    0111 = CODE128 C
```

```
    0110 = CODABAR
```

```
    0101 = ITF
```

```
    0100 = CODE39
```

```
    0011 = JAN8
```

```
    0010 = JAN13
```

```
    0001 = UPC_E
```

```
    0000 = UPC_A
```

- barcode data:

```
    data that compose the barcode (final null character is automatically put by driver)
```

Example:

```
int[] optArgs = new int[1];
```

```
String[] data = new String[6];
```

```
data[0] = "2";           // width
```

```
data[1] = "080";       // height
```

```
data[2] = "0";         // HRI font (15 CPI)
```

```
data[3] = "10";        // HRI location (under the barcode)
```

```
data[4] = "01111";     // barcode type (CODE128 C)
```

```
data[5] = "12345";     // data
```

```
getData(600, optArgs, data);
```

**3. getData(int *dataItem*, int[] *optArgs*, String[] *data*)**

to print the graphic:

*dataItem* = 700

*optArgs* = int[graphic number, DPI]

*data* = String[] (empty)

*optArgs* parameters represent the downloaded graphic number, the resolution (DPI) and the print (CA command)

- graphic number:

downloaded graphic number (via DirectIO)

minimum = 1

maximum = 40

- DPI:

print resolution

100 (100 DPI)

200 (200 DPI)

Example:

```
int[] optArgs = new int[2];
```

```
String[] data = new String[1];
```

```
optArgs[0] = "10";
```

```
optArgs[1] = "100";
```

```
getData(700, optArgs, data);
```

```
// graphic number
```

```
// DPI
```

**4. getData(int *dataItem*, int[] *optArgs*, String[] *data*)**

to obtain specific informations:

- daily total of Credit Notes  
*dataItem* = 501

- daily number of Credit Notes  
*dataItem* = 500

- daily total of discounts  
*dataItem* = 502

**5. getData(int *dataItem*, int[] *optArgs*, String[] *data*)**

- to set manual cut:

```
dataItem = 801  
optArgs = int[enable/disable]  
data = String[] (empty)
```

*optArgs* parameter represent if manual cut is enabled or disabled:

```
enabled = 1  
disabled = 0
```

Default: manual cut is disabled (automatic cut)

Example:

```
int[] optArgs = new int[1];  
String[] data = new String[1];  
optArgs[0] = 1; // set manual cut  
getData(801, optArgs, data);
```

- to manually cut the receipt:

```
dataItem = 800
```

Example:

```
int[] optArgs = new int[1];  
String[] data = new String[1];  
getData(800, optArgs, data);
```

**6. getData(int dataItem, int[] optArgs, String[] data)**

to set emphasized font:

```
dataItem = 900
optArgs = int[enable/disable]
data = String[] (empty)
```

optArgs parameter represent if emphasized font is enabled or disabled:

```
enabled = 1
disabled = 0
```

Default: emphasized font is disabled (normal font)

If you set emphasized mode, the font remains emphasized until the disabled command will be sent.

Methods affected:

- printRecItem() : pre-line description, quantity description, item description, post-line description / credit note description
- printRecItemAdjustment() : pre-line description, item adjustment description
- printRecItemAdjustmentVoid() : pre-line description, item adjustment void description
- printRecItemRefund() : pre-line description, quantity description, item refund description
- printRecItemVoid() : pre-line description, quantity description, item void description, post-line description
- printRecMessage() : message description
- printRecNotPaid() : not paid description
- printRecRefund() : pre-line description, refund description
- printRecSubtotal() : post-line description
- printRecSubtotalAdjustment() : pre-line description, subtotal adjustment description
- printRecTotal() : payment description, post-line description
- printRecVoidItem() : item void description
- printNormal() : line description

Example:

```
int[] optArgs = new int[1];
String[] data = new String[1];
optArgs[0] = 1;           // set emphasized font
getData(900, optArgs, data);
```

**7. getData(int *dataItem*, int[] *optArgs*, String[] *data*)**

to set printing of payment even if total receipt is 0:

```
dataItem = 400  
optArgs = int[enable/disable]  
data = String[] (empty)
```

*optArgs* parameter represent if printing of payment is enabled or disabled:

```
enabled = 1  
disabled = 0
```

Default: printing of payment is disabled (no print)

Example:

```
int[] optArgs = new int[1];  
String[] data = new String[1];  
optArgs[0] = 1; // print payment even if total is 0  
getData(400, optArgs, data);
```

# JavaPOS Line Display

## *Available properties and methods*

### Common properties

Properties	Availability	Value
<b>getAutoDisable</b>	Not supported	-
<b>setAutoDisable</b>	Not supported	-
<b>getCapCompareFirmwareVersion</b>	Supported	Pass-through IBM property (False)
<b>getCapPowerReporting</b>	Supported	Pass-through IBM property (JPOS_PR_NONE)
<b>getCapStatisticsReporting</b>	Supported	Pass-through IBM property (False)
<b>getCapUpdateFirmware</b>	Supported	Pass-through IBM property (False)
<b>getCapUpdateStatistics</b>	Supported	Pass-through IBM property (False)
<b>getCheckHealthText</b>	Supported	Pass-through IBM property (String)
<b>getClaimed</b>	Supported	Pass-through IBM property (True/False)
<b>getDataCount</b>	Not supported	-
<b>getDatEventEnabled</b>	Not supported	-
<b>setDatEventEnabled</b>	Not supported	-
<b>getDeviceEnabled</b>	Supported	Pass-through IBM property (True/False)
<b>setDeviceEnabled</b>	Supported	
<b>getDeviceControlDescription</b>	Supported	Pass-through IBM property (String)
<b>getDeviceControlVersion</b>	Supported	Pass-through IBM property (int)
<b>getDeviceServiceDescription</b>	Supported	Pass-through IBM property + " - Italy Plugin" (String)
<b>getDeviceServiceVersion</b>	Supported	Pass-through IBM property
<b>getFreezeEvents</b>	Supported	Pass-through IBM property (False)
<b>setFreezeEvents</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getOutputID</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getPhysicalDeviceDescription</b>	Supported	Pass-through IBM property (String)
<b>getPhysicalDeviceName</b>	Supported	Pass-through IBM property (String)
<b>getPowerNotify</b>	Supported	Pass-through IBM property (JPOS_PN_DISABLED)
<b>setPowerNotify</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)

<b>getPowerState</b>	Supported	Pass-through IBM property (JPOS_PS_UNKNOWN)
<b>getState</b>	Supported	Pass-through IBM property (int)

## Specific properties

Properties	Availability	Value
<b>getCapBlink</b>	Supported	DISP_CB_NOBLINK
<b>getCapBitmap</b>	Supported	False
<b>getCapBlinkRate</b>	Supported	False
<b>getCapBrightness</b>	Supported	False
<b>getCapCharacterSet</b>	Supported	DISP_CCS_ASCII
<b>getCapCursorType</b>	Supported	DISP_CCT_NONE
<b>getCapCustomGlyph</b>	Supported	False
<b>getCapDescriptors</b>	Supported	False
<b>getCapHMarquee</b>	Supported	False
<b>getCapICharWait</b>	Supported	False
<b>getCapMapCharacterSet</b>	Supported	False
<b>getCapReadBack</b>	Supported	DISP_CRB_NONE
<b>getCapReverse</b>	Supported	DISP_CR_NONE
<b>getCapScreenMode</b>	Supported	False
<b>getCapVMarquee</b>	Supported	False
<b>getBlinkRate</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setBlinkRate</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCharacterSet</b>	Supported	DISP_CS_ASCII
<b>setCharacterSet</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCharacterSetList</b>	Supported	"998" (String)
<b>getColumns</b>	Supported	20 (int)
<b>getCurrentWindow</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setCurrentWindow</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCursorColumn</b>	Supported	0 – 19 (int)
<b>setCursorColumn</b>	Supported	
<b>getCursorRow</b>	Supported	0 – 1 (int)
<b>setCursorRow</b>	Supported	
<b>getCursorType</b>	Supported	DISP_CT_NONE
<b>setCursorType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)

<b>getCursorUpdate</b>	Supported	False
<b>setCursorUpdate</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getCustomGlyphList</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getDeviceBrightness</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setDeviceBrightness</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getDeviceColumns</b>	Supported	20 (int)
<b>getDeviceDescriptors</b>	Supported	0 (int)
<b>getDeviceRows</b>	Supported	2 (int)
<b>getDeviceWindows</b>	Supported	0 (int)
<b>getGlyphHeight</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getGlyphWidth</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getInterCharacterWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setInterCharacterWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMapCharacterSet</b>	Supported	False
<b>setMapCharacterSet</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMarqueeFormat</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setMarqueeFormat</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMarqueeRepeatWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setMarqueeRepeatWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMarqueeType</b>	Supported	DISP_MT_NONE
<b>setMarqueeType</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMarqueeUnitWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>setMarqueeUnitWait</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getMaximumX</b>	Supported	0 (int)
<b>getMaximumY</b>	Supported	0 (int)
<b>getRows</b>	Supported	2 (int)
<b>getScreenMode</b>	Supported	0 (int)
<b>setScreenMode</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getScreenModeList</b>	Supported	"2x20" (String)

## Common methods

Methods	Availability	Notes
<b>checkHealth</b>	Supported	Pass-through IBM method
<b>claim</b>	Supported	Pass-through IBM method
<b>clearInput</b>	Not supported	-
<b>clearOutput</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>close</b>	Supported	Pass-through IBM method
<b>compareFirmwareVersion</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>directIO</b>	Supported	Pass-through IBM method
<b>open</b>	Supported	Pass-through IBM method
<b>release</b>	Supported	Pass-through IBM method
<b>resetStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>retrieveStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>updateFirmware</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>updateStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)

## Specific methods

Methods	Availability	Notes
<b>clearText</b>	Supported	
<b>displayText</b>	Supported	
<b>displayTextAt</b>	Supported	
<b>scrollText</b>	Not supported	JPOS_E_ILLEGAL
<b>clearDescriptors</b>	Not supported	JPOS_E_ILLEGAL
<b>setDescriptor</b>	Not supported	JPOS_E_ILLEGAL
<b>createWindow</b>	Not supported	JPOS_E_ILLEGAL
<b>destroyWindow</b>	Not supported	JPOS_E_ILLEGAL
<b>refreshWindow</b>	Not supported	JPOS_E_ILLEGAL
<b>defineGlyph</b>	Not supported	JPOS_E_ILLEGAL
<b>readCharacterAtCursor</b>	Not supported	JPOS_E_ILLEGAL
<b>displayBitmap</b>	Not supported	JPOS_E_ILLEGAL
<b>setBitmap</b>	Not supported	JPOS_E_ILLEGAL

# JavaPOS Cash Drawer

## *Available properties and methods*

### Common properties

Properties	Availability	Value
<b>getAutoDisable</b>	Not supported	-
<b>setAutoDisable</b>	Not supported	-
<b>getCapCompareFirmwareVersion</b>	Supported	Pass-through IBM property (False)
<b>getCapPowerReporting</b>	Supported	Pass-through IBM property (JPOS_PR_NONE)
<b>getCapStatisticsReporting</b>	Supported	Pass-through IBM property (False)
<b>getCapUpdateFirmware</b>	Supported	Pass-through IBM property (False)
<b>getCapUpdateStatistics</b>	Supported	Pass-through IBM property (False)
<b>getCheckHealthText</b>	Supported	Pass-through IBM property (String)
<b>getClaimed</b>	Supported	Pass-through IBM property (True/False)
<b>getDataCount</b>	Not supported	-
<b>getDatEventEnabled</b>	Not supported	-
<b>setDatEventEnabled</b>	Not supported	-
<b>getDeviceEnabled</b>	Supported	Pass-through IBM property (True/False)
<b>setDeviceEnabled</b>	Supported	
<b>getDeviceControlDescription</b>	Supported	Pass-through IBM property (String)
<b>getDeviceControlVersion</b>	Supported	Pass-through IBM property (int)
<b>getDeviceServiceDescription</b>	Supported	Pass-through IBM property + "-Italy Plugin" (String)
<b>getDeviceServiceVersion</b>	Supported	Pass-through IBM property
<b>getFreezeEvents</b>	Supported	Pass-through IBM property (False)
<b>setFreezeEvents</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getOutputID</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)
<b>getPhysicalDeviceDescription</b>	Supported	Pass-through IBM property (String)
<b>getPhysicalDeviceName</b>	Supported	Pass-through IBM property (String)
<b>getPowerNotify</b>	Supported	Pass-through IBM property (JPOS_PN_DISABLED)
<b>setPowerNotify</b>	Not supported	Pass-through IBM property (JPOS_E_ILLEGAL)

<b>getPowerState</b>	Supported	Pass-through IBM property (JPOS_PS_UNKNOWN)
<b>getState</b>	Supported	Pass-through IBM property (int)

### Specific properties

Properties	Availability	Value
<b>getCapStatus</b>	Supported	False
<b>getCapStatusMultiDrawerDetect</b>	Supported	False
<b>getDrawerOpened</b>	Supported	False

## Common methods

Methods	Availability	Notes
<b>checkHealth</b>	Supported	Pass-through IBM method
<b>claim</b>	Supported	Pass-through IBM method
<b>clearInput</b>	Not supported	-
<b>clearOutput</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>close</b>	Supported	Pass-through IBM method
<b>compareFirmwareVersion</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>directIO</b>	Supported	Pass-through IBM method
<b>open</b>	Supported	Pass-through IBM method
<b>release</b>	Supported	Pass-through IBM method
<b>resetStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>retrieveStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>updateFirmware</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)
<b>updateStatistics</b>	Not supported	Pass-through IBM method (JPOS_E_ILLEGAL)

## Specific methods

Methods	Availability	Notes
<b>openDrawer</b>	Supported	
<b>waitForDrawerClose</b>	Not supported	JPOS_E_ILLEGAL