

# Application Development Guide (ADG)

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## 1 POS PRINTER SERVICE OBJECT

The POS printer OPOS driver is created in accordance with “OLE for Retail POS Application Programmer’s Guide Japanese version, Rev. 1.6” (OLE POS Engineering Council).

For the details, method of use, etc. of each property method event, refer to “OLE for Retail POS Application Programmer’s Guide Japanese version, Rev. 1.6”.

Reference link (as of September 16, 2003)

<http://www.microsoft.com/japan/business/industry/retail/opos/oposapg.asp>

### 1.1 POS Printer Service Object Methods

Method	Notes	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
Open		○	○	○	○	○
Close		○	○	○	○	○
ClaimDevice		○	○	○	○	○
ReleaseDevice		○	○	○	○	○
CheckHealth	Only OPOS_CH_EXTERNAL (Test print) is supported.	△	△	△	△	△
ClearInput	Not applicable with OPOSPrinter					
ClearOutput	Data being transmitted cannot be stopped.	○	○	○	○	○
DirectIO	<p>Test printing: Starts test printing. Sets the pattern to print PTR_CBM_DI_TEST_PRINT for 1st parameter, and the following for 2nd parameter. Dump mode: PTR_CBM_DI_TEST_PRINT_DUMP Status print: PTR_CBM_DI_TEST_PRINT_STATUS Roll pattern: PTR_CBM_DI_TEST_PRINT_ROLL_PTN Memory switch: PTR_CBM_DI_TEST_PRINT_MEM_SW</p> <p>Direct printing: Sends data to printer directly. Conversion of escape sequence such as PrintNormal, etc. is never carried out. Accepts all ASCII codes (0x00 to 0xFF). * DirectIO is unrecommended method. Using it may result in malfunction of OPOS driver.</p>	<p>Test printing: PTR_CBM_DI_TEST_PRINT Dump mode: PTR_CBM_DI_TEST_PRINT_DUMP Status print: PTR_CBM_DI_TEST_PRINT_STATUS Roll pattern: PTR_CBM_DI_TEST_PRINT_ROLL_PTN</p> <p>Direct printing: PTR_CBM_DI_DIRECT_SEND</p>	<p>Test printing: PTR_CBM_DI_TEST_PRINT Dump mode: PTR_CBM_DI_TEST_PRINT_DUMP Status print: PTR_CBM_DI_TEST_PRINT_STATUS Roll pattern: PTR_CBM_DI_TEST_PRINT_ROLL_PTN</p> <p>Direct printing: PTR_CBM_DI_DIRECT_SEND</p>	<p>Test printing: PTR_CBM_DI_TEST_PRINT Dump mode: PTR_CBM_DI_TEST_PRINT_DUMP Status print: PTR_CBM_DI_TEST_PRINT_STATUS Roll pattern: PTR_CBM_DI_TEST_PRINT_MEM_SW</p> <p>Direct printing: PTR_CBM_DI_DIRECT_SEND</p>	<p>Test printing: PTR_CBM_DI_TEST_PRINT Dump mode: PTR_CBM_DI_TEST_PRINT_DUMP Status print: PTR_CBM_DI_TEST_PRINT_STATUS Roll pattern: PTR_CBM_DI_TEST_PRINT_ROLL_PTN</p> <p>Direct printing: PTR_CBM_DI_DIRECT_SEND</p>	
PrintNormal	NULL (0x00) cannot be used. If use of NULL (0x00) is required, use direct printing of DirectIO method.	○	○	○	○	○
PrintTwoNormal		×	×	×	×	○
PrintImmediate		○	○	○	○	○
BeginInsertion		×	×	×	×	×
EndInsertion		×	×	×	×	×
BeginRemoval		×	×	×	×	×
EndRemoval		×	×	×	×	×
CutPaper		○	○	○	○	○
RotatePrint	The value is changed dynamically based on print data up to RecSidewaysMaxChars property.	○	○	○	○	○

Method	Notes	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
PrintBarcode	<p>* UPC-E barcode printing This printer compresses the entered 11- or 12-digit data to 8 digits by using zero suppression of UPC-E standard and prints it. An example of data compression using zero suppression is shown below. Ex: Assume the original code to be "0-ABCDE-VWXYZ" (11 digits). Printable patterns are as shown below.</p> <ol style="list-style-type: none"> <li>When V to Y are all "0": "0-ABCDE-0000Z" → "ABCDEZ" where Z is limited to 5 to 9.</li> <li>When E and VWXY are all "0": "0-ABCD0-0000Z" → "ABCDZ4" where last 4 indicates that manufacturer codes A and D are not "0".</li> <li>When DE and VWX are "0": "0-ABC00-000YZ" → "ABCYZ3" where last 3 indicates that A and C are not "0" but that ABC is a 3-digit number.</li> <li>When DE and VW are "0" and C is "0" "1" "2": (1) When C = "0": "0-AB000-00XYZ" → "ABXYZ0" (2) When C = "1": "0-AB100-00XYZ" → "ABXYZ1" (3) When C = "2": "0-AB200-00XYZ" → "ABXYZ2"</li> </ol> <p>Check digit is automatically calculated in the printer. In other conditions than the above, printing is not possible due to printer mechanism and returns error.</p>	○	○	○	○	○
PrintBitmap	Prints raster Bitmap.	○	○	○	○	○
TransactionPrint		○	○	○	○	○
ValidateData		○	○	○	○	○
SetBitmap	<p>Registers Bitmap. Details by registration number are as shown below.</p> <p>Registration No. 1: Download Bitmap Registration No. 2: Raster Bitmap Registration No. 3: NV Bitmap</p> <p>* NV Bitmap, Download Bitmap Bitmap to be registered must not exceed the following: Size after enlargement or reduction is 1536 dots max. in both vertical and horizontal directions. When Bitmap exceeding 1536 dots is used, use raster bitmap.</p> <p>* NV Bitmap registration shall be used at a frequency of 10 times/day.</p>	○	○	○	○	○
SetLogo		○	○	○	○	○
ChangePrintSide		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
MarkFeed		×	×	×	×	×

1.2 POS Printer Service Object Properties

Property		Attribute	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
AutoDisable	Not applicable with OPOSPrinter						
BinaryConversion		R/W	× OPOS_BC_NONE	× OPOS_BC_NONE	× OPOS_BC_NONE	× OPOS_BC_NONE	× OPOS_BC_NONE
CapPowerReporting		R	○ OPOS_PR_ADVANCED	○ OPOS_PR_ADVANCED	○ OPOS_PR_ADVANCED	Δ Serial: OPOS_PR_NONE Parallel: OPOS_PR_ADVANCED	Δ Serial: OPOS_PR_NONE Parallel: OPOS_PR_ADVANCED
CheckHealthText		R	○	○	○	○	○
Claimed		R	○	○	○	○	○
DataCount	Not applicable with OPOSPrinter						
DataEventEnabled	Not applicable with OPOSPrinter						
DeviceEnabled		R/W	○	○	○	○	○
FreezeEvents		R/W	×	×	×	×	×
OpenResult		R	○	○	○	○	○
OutputID		R	○	○	○	○	○
PowerNotify		R/W	○	○	○	○	○
PowerState		R	○	○	○	○	○
ResultCode		R	○	○	○	○	○
ResultCodeExtended		R	○	○	○	○	○
State		R	○	○	○	○	○
ControlObjectDescription		R	-	-	-	-	-
ControlObjectVersion		R	-	-	-	-	-
ServiceObjectDescription		R	○ "CBM OPOS ServiceObject"	○ "CBM OPOS ServiceObject"	○ "CBM OPOS ServiceObject"	○ "CBM OPOS ServiceObject"	○ "CBM OPOS ServiceObject"
ServiceObjectVersion		R	○ 1006000	○ 1006000	○ 1006000	○ 1006000	○
DeviceDescription		R	○ "CBM CBM-1000 POSPrinter"	○ "CBM CBM-1000 Typell POSPrinter"	○ "CBM iDP3240 POSPrinter"	○ "CBM CT-S300 POSPrinter"	○ "CBM CBM-262II POSPrinter"
DeviceName		R	○ "CBM1000"	○ "CBM1000II"	○ "iDP3240"	○ "CT-S300"	○ "CBM-262II"
CapCharacterSet		R	○	○	○	○	○
CapConcurrentJrnRec		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapConcurrentJrnSlp		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapConcurrentRecSlp		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapCoverSensor		R	○	○	○	○	○
CapTransaction		R	○	○	○	○	○
CapJrnPresent		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	
CapJrn2Color		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapJrnBold		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnDhigh		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnDwide		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnDwideDhigh		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnEmptySensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnItalic		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapJrnNearEndSensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnUnderline		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnCartridgeSensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
CapJrnColor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapRecPresent		R	○	○	○	○	○
CapRec2Color		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapRecBarCode		R	○	○	○	○	○
CapRecBitmap		R	○	○	○	○	○
CapRecBold		R	○	○	○	○	○
CapRecDhigh		R	○	○	○	○	○
CapRecDwide		R	○	○	○	○	○
CapRecDwideDhigh		R	○	○	○	○	○
CapRecEmptySensor		R	○	○	○	○	○
CapRecItalic		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapRecLeft90		R	○	○	○	○	○
CapRecNearEndSensor		R	○	○	○	○	○

Property		Attribute	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
CapRecPapercut		R	○ Only partial cut (90) is supported.	○ Only partial cut (90) is supported.	○ Full and partial cuts (90) are supported.	○ Full and partial cuts (90) are supported.	○ Full and partial cuts (90) are supported.
CapRecRight90		R	○	○	○	○	○
CapRecRotate180		R	○	○	○	○	○
CapRecStamp		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapRecUnderline		R	○	○	○	○	○
CapRecCartridgeSensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapRecColor		R	○	○	○	○	○
CapRecMarkFeed		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	×
CapSlpPresent		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpFullslip		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlp2Color		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpBarCode		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpBitmap		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpBold		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpDhigh		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpDwide		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpDwideDhigh		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpEmptySensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpItalic		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpLeft90		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpNearEndSensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpRight90		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpRotate180		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpUnderline		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpBothSidesPrint		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpCartridgeSensor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CapSlpColor		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
AsyncMode		R/W	○	○	○	○	○
CartridgeNotify		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
CharacterSet		R/W	○ Default value Japanese version: Code 932 English version: Code 437	○ Default value Japanese version: Code 932 English version: Code 437	○ Default value Japanese version: Code 932 English version: Code 437	○ Default value Japanese version: Code 932 English version: Code 437	○ Default value Japanese version: Code 932 English version: Code 437
CharacterSetList		R	○ 437: Code 437 850: Code 850 Multilingual 860: Code 860 Portugal 863: Code 863 Canada-French 865: Code 865 Norway 852: Code 852 Eastern Europe 866: Code 866 Russia 857: Code 857 Turkey 932: KANA 998: ASCII 999: Windows Code	○ 437: Code 437 850: Code 850 Multilingual 860: Code 860 Portugal 863: Code 863 Canada-French 865: Code 865 Norway 852: Code 852 Eastern Europe 866: Code 866 Russia 857: Code 857 Turkey 932: KANA 998: ASCII 999: Windows Code	○ 437: Code 437 850: Code 850 Multilingual 860: Code 860 Portugal 863: Code 863 Canada-French 865: Code 865 Norway 852: Code 852 Eastern Europe 866: Code 866 Russia 857: Code 857 Turkey 932: KANA 998: ASCII 999: Windows Code	○ 437: Code 437 850: Code 850 Multilingual 860: Code 860 Portugal 863: Code 863 Canada-French 865: Code 865 Nordic 852: Code 852 Eastern Europe 866: Code 866 Russia 857: Code 857 Turkey 858: Code 858 864: Code 864 Arabic 874: Code 874 Thai code 12 932: KANA 998: ASCII 999: Windows Code	○ 437: Code 437 850: Code 850 Multilingual 860: Code 860 Portugal 863: Code 863 Canada-French 865: Code 865 Nordic 858: Code 858 932: KANA
CoverOpen		R	○	○	○	○	○
ErrorLevel		R	○	○	○	○	○
ErrorStation		R	○	○	○	○	○
ErrorString		R	○	○	○	○	○
FontTypefaceList		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
FlagWhenIdle		R/W	○	○	○	○	○
MapMode		R/W	○	○	○	○	○
RotateSpecial		R/W	○	○	○	○	○
JrnLineChars		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
JrnLineCharsList		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○ 58 mm paper 36/48 columns: "36, 48"
JrnLineHeight		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
JrnLineSpacing		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
JrnLineWidth		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
JrnLetterQuality		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○

Property		Attribute	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
JrnEmpty		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○
JrnNearEnd		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	○ DIP switch setting required.
JrnCartridgeState		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
JrnCurrentCartridge		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
RecLineChars	According to the value, the font size is changed. Value should be chosen from RecLineCharsList property.	R/W	○	○	○	○	○
RecLineCharsList		R	○ 58 mm paper 30/40 columns: "30, 40" 36/48 columns: "36, 48" 80 mm paper 42/56 columns: "42, 56" 48/64 columns: "48, 64"	○ 58 mm paper 30/40 columns: "30, 40" 36/48 columns: "36, 48" 80 mm paper 42/56 columns: "42, 56" 48/64 columns: "48, 64"	○ 112 mm paper 60/80 columns: "60, 80" 69/92 columns: "69, 92"	○ 58 mm paper 30/40/45 columns: "30, 40" 32/42/48 columns: "32, 42" 80 mm paper 42/56/63 columns: "42, 56" 48/64/72 columns: "48, 64"	○ 58 mm paper 36/48 columns "36, 48"
RecLineHeight	The value is changed according to the RecLineChars property.	R/W	○	○	○	○	○
RecLineSpacing	If the value is smaller than RecLineHeight, the value is changed according to the RecLineHeight property.	R/W	○	○	○	○	○
RecLineWidth		R	○	○	○	○	○
RecLetterQuality		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	○	○
RecEmpty		R	○	○	○	○	○
RecNearEnd		R	○	○	○	○	○ DIP switch setting required.
RecSidewaysMaxLines	The value is changed according to the value of RecLineSpacing property or RecLineChars property. In some case, the value may become smaller than the number of columns which actually can be printed..	R	○	○	○	○	○
RecSidewaysMaxChars	Initial value of RecLineChars fixed. It is calculated based on 1-byte characters. Multi byte character is handled as 2 characters but it may not match 2 characters with some font chosen by RecLineChars property.	R	○	○	○	○	○
RecLinesToPaperCut		R	○	○	○	○	○
RecBarCodeRotationList		R	○ 0 R90 180 L90	○ 0 R90 180 L90	○ 0 R90 180 L90	○ 0 R90 180 L90	○ 0 R90 180 L90
RecCartridgeState		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
RecCurrentCartridge		R/W	○	○	○	○	○
SlpLineChars		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLineCharsList		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLineHeight		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLineSpacing		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLineWidth		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLetterQuality		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpEmpty		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpNearEnd		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpSidewaysMaxLines		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpSidewaysMaxChars		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpMaxLines		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpLinesNearEndToEnd		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpBarCodeRotationList		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpPrintSide		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpCartridgeState		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
SlpCurrentCartridge		R/W	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported

### 1.3 POS Printer Service Object OPOS Escape Sequences

Escape Sequence		Notes	CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
Paper cut	ESC #P		○ Only 90 is supported.	○ Only 90 is supported.	○ Only 100/90 is supported.	○ Only 100/90 is supported.	○ Only 100/90 is supported.
Feed and paper cut	ESC #fP		○ Only 90 is supported.	○ Only 90 is supported.	○ Only 100/90 is supported.	○ Only 100/90 is supported.	○ Only 100/90 is supported.
Feed, cut, and stamp print	ESC #sP		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Bitmap print	ESC #B	* After Bitmap printing, print position returns to the initial state (left-justified). * For rotated printing of Bitmap, only Bitmap of register No. 1 is supported. * If the Rotate method is set for RIGHT90 or LEFT90, it may not print bitmap properly.	○	○	○	○	○
Top logo print	ESC tL		○	○	○	○	○
Bottom logo print	ESC bL		○	○	○	○	○
Stamp print	ESC sL		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Multi-line feed	ESC #fF		○	○	○	○	○
Unit feed	ESC #uF		○	○	○	○	○
Reverse feed	ESC #rF		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Font type specification	ESC #fT		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Bold	ESC bC		○	○	○	○	○
Underline	ESC #uC		○	○	○	○	○
Italic	ESC iC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Custom color	ESC #rC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Red	ESC rC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Reverse character	ESC rvC		○	○	○	○	○
Shaded character	ESC #sC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Standard	ESC 1C		○	○	○	○	○
Double width	ESC 2C		○	○	○	○	○
Double height	ESC 3C		○	○	○	○	○
Quadruple	ESC 4C		○	○	○	○	○
Horizontal magnification	ESC #hC		○	○	○	○	○
Vertical magnification	ESC #vC		○	○	○	○	○
Color specification	ESC #fC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Centering	ESC cA		○	○	○	○	○
Right adjustment	ESC rA		○	○	○	○	○
Normal	ESC N		○	○	○	○	○
Subscript	ESC tbC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Superscript	ESC tpC		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported

### 1.4 POS Printer Service Object Events

Event		CBM-1000	CBM-1000II	iDP3240	CT-S300	CBM-262II
DataEvent	Not applicable with OPOSPrinter.					
DirectIOEvent		×	×	×	×	×
ErrorEvent		○	○	○	○	○
OutputCompleteEvent		○	○	○	○	○
StatusUpdateEvent		○	○	○	○	○

### 1.5 POS Printer Service Object Other Precautions

Constant of DirectIO is defined in "Install Folder\Include\OposCBM.h".  
If printer is turned off during printing, the function related with power source may not work properly.

## 2 CASH DRAWER SERVICE OBJECT

The cash drawer OPOS driver is created in accordance with “OLE for Retail POS Application Programmer’s Guide Japanese version, Rev. 1.6” (OLE POS Engineering Council).

For the details, method of use, etc. of each property, method, and event, refer to “OLE for Retail POS Application Programmer’s Guide Japanese version, Rev. 1.6”.

### 2.1 Cash Drawer Service Object Methods

Method	Notes	CBM-1000 Drawer	CBM-1000II Drawer	iDP3240 Drawer	CT-S300 Drawer	CBM-262II Drawer
Open	* Status cannot be acquired unless the corresponding printer SO is printable (after Claim). * If the corresponding printer SO is closed, status cannot be acquired.	○	○	○	○	○
Close		○	○	○	○	○
ClaimDevice		○	○	○	○	○
ReleaseDevice		○	○	○	○	○
CheckHealth		× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
ClearInput	Not applicable with OPOSDrawer.					
ClearOutput	Not applicable with OPOSDrawer.					
DirectIO		×	×	×	×	×
OpenDrawer		○	○	○	○	○
WaitForDrawerClose		○	○	○	○	○

### 2.2 Cash Drawer Service Object Properties

Property	Notes	Attribute	CBM-1000 Drawer	CBM-1000II Drawer	iDP3240 Drawer	CT-S300 Drawer	CBM-262II Drawer
AutoDisable	Not applicable with OPOSDrawer.						
BinaryConversion	Not applicable with OPOSDrawer.	R/W					
CapPowerReporting		R	○ OPOS_PR_NONE	○ OPOS_PR_NONE	○ OPOS_PR_NONE	○ OPOS_PR_NONE	○ OPOS_PR_NONE
CheckHealthText		R	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported	× Hardware not supported
Claimed		R	○	○	○	○	○
DataCount	Not applicable with OPOSDrawer.						
DataEventEnabled	Not applicable with OPOSDrawer.						
DeviceEnabled		R/W	○	○	○	○	○
FreezeEvents		R/W	×	×	×	×	×
OpenResult							
OutputID	Not applicable with OPOSDrawer.						
PowerNotify		R/W	○	○	○	○	○
PowerState		R	○	○	○	○	○
ResultCode		R	○	○	○	○	○
ResultCodeExtended		R	○	○	○	○	○
State		R	×	×	×	×	×
ControlObjectDescription		R	–	–	–	–	–
ControlObjectVersion		R	–	–	–	–	–
ServiceObjectDescription		R	○ “CBM OPOS ServiceObject”	○ “CBM OPOS ServiceObject”	○ “CBM OPOS ServiceObject”	○ “CBM OPOS ServiceObject”	○ “CBM OPOS ServiceObject”
ServiceObjectVersion		R	○ 1006000	○ 1006000	○ 1006000	○ 1006000	○
DeviceDescription		R	○ “CBM CBM-1000 CashDrawer”	○ “CBM CBM-1000 TypeII CashDrawer”	○ “CBM iDP3240 CashDrawer”	○ “CBM CT-S300 CashDrawer”	○ “CBM CBM-262II CashDrawer”
DeviceName		R	○ “CBM1000.DRW.?”	○ “CBM1000II.DRW.?”	○ “iDP3240.DRW.?”	○ “CT-S300.DRW.?”	○ “CBM-262II.DRW.?”
CapStatus		R	○	○	○	○	○
CapStatusMultiDrawerDetect		R	○	○	○	○	○
DrawerOpened		R	○	○	○	○	○

### 2.3 Cash Drawer Service Object Events

Event	Notes	CBM-1000 Drawer	CBM-1000II Drawer	iDP3240 Drawer	CT-S300 Drawer	CBM-262II Drawer
DataEvent	Not applicable with OPOSDrawer.					
DirectIOEvent		x	x	x	x	x
ErrorEvent	Not applicable with OPOSDrawer.					
OutputCompleteEvent	Not applicable with OPOSDrawer.					
StatusUpdateEvent	* If the corresponding printer SO is closed, status cannot be acquired.	o	o	o	o	o

### 2.4 Cash Drawer Service Object Other Precautions