

Android Cordova Program Manual

ESC/POS

Mobile Printer

Rev. 1.000

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## **1. Instruction**

This Android cordova Program Manual describes the method which is exposed from javascript(.js) file needed in developing android cordova application.

## **2. Method.**

Defined in the CitizenEscpPrinter.js file.

### **2.1. getPairedBT**

This function used to get the paired Bluetooth list.

```
cordova.plugins.getPairedBT = function(successCallback, errorCallback);
```

[Parameter]

\* none

### **2.2. connect**

This function used to connect printer.

```
cordova.plugins.connect= function(successCallback, errorCallback,  
                                address, charSet);
```

[Parameter]

\* address

- Bluetooth mac address or IP of printer.

\* charset

- Character set name. [ Refer to "Charset for java.pdf" file ]

### **2.3. disconnect**

This function used to disconnect printer.

```
cordova.plugins.disconnect= function(successCallback, errorCallback);
```

[Parameter]

\* none

## 2.4. getStatus

This function used to get the status of printer.

```
cordova.plugins.getStatus= function(successCallback, errorCallback);
```

[Parameter]

\* none

[successCallback]

CMP\_STS\_NORMAL: Printer Status is No Error and MSR is not Ready.

CMP\_BATTERY\_LOW : Printer battery capacity is low.

CMP\_STS\_MSR\_READ : Currently MSR in read mode, printing is impossible.

[errorsCallback]

CMP\_PAPER\_EMPTY : Printer Status is no paper.

CMP\_COVER\_OPEN : Printer Cover is open.

CMP\_FAIL : This value returns when a function fails.

CMP\_STS\_PRINTEROFF : This value returns when printer is off.

CMP\_STS\_TIMEOUT : This value returns when printer is no response or power off.

( CMP\_STS\_PRINTEROFF is returned when getStatus function is used while printer is off.

CMP\_STS\_TIMEOUT is returned when getStatus function is used again )

## 2.5. printNormal

This function used for supporting text printing and OLE POS command.

```
cordova.plugins.printNormal= function(successCallback, errorCallback,  
    data);
```

[Parameter]

\* data

- Pointer to a null-terminated Unicode string. It is same as PrintNormal function in OLE POS Command.

## 2.6. printText

This function used for supporting text printing

```
cordova.plugins.printText= function(successCallback, errorCallback,
    data, alignment, attribute, textSize);
```

[Parameter]

\* data

- It sets text data to print.

\* alignment

- This value is alignment. It sets text alignment.

Variable	Description
CMP_ALIGNMENT_LEFT	Left alignment
CMP_ALIGNMENT_CENTER	Center alignment
CMP_ALIGNMENT_RIGHT	Right alignment

\* attribute

- This value is text attributes. It sets text attributes to print.

Variable	Description
CMP_FNT_DEFAULT	FontA, Set up as a standard
CMP_FNT_FONTB	Set up as FontB
CMP_FNT_BOLD	Set up as Bold attribute
CMP_FNT_UNDERLINE	Set up as Underline attribute (1dot)
CMP_FNT_UNDERLINE2	Set up as Underline attribute (2dot)
CMP_FNT_REVERSE	Set up as reverse print attribute

\* textSize

- This value is text size. It sets text size to print.

Variable (Set up width ratio)	Description
CMP_TXT_1WIDTH	Set up width ratio as x1
CMP_TXT_2WIDTH	Set up width ratio as x2
CMP_TXT_3WIDTH	Set up width ratio as x3
CMP_TXT_4WIDTH	Set up width ratio as x4
CMP_TXT_5WIDTH	Set up width ratio as x5
CMP_TXT_6WIDTH	Set up width ratio as x6
CMP_TXT_7WIDTH	Set up width ratio as x7
CMP_TXT_8WIDTH	Set up width ratio as x8

Variable (Set up height ratio)	Description
CMP_TXT_1HEIGHT	Set up height ratio as x1
CMP_TXT_2HEIGHT	Set up height ratio as x2
CMP_TXT_3HEIGHT	Set up height ratio as x3
CMP_TXT_4HEIGHT	Set up height ratio as x4
CMP_TXT_5HEIGHT	Set up height ratio as x5

CMP_TXT_6HEIGHT	Set up height ratio as x6
CMP_TXT_7HEIGHT	Set up height ratio as x7
CMP_TXT_8HEIGHT	Set up height ratio as x8

## 2.7. printBarCode

This function used for supporting 1D-barcode printing.

```
cordova.plugins.printBarCode= function(successCallback, errorCallback,
    data, symbology, height, width, alignment, hri);
```

[Parameter]

\* data

- Pointer to a null-terminated Unicode string. It sets the barcode data to print.

\* symbology

- This value is barcode symbol type. It sets barcode type to print.

Variable	Description
CMP_BCS_UPCA	Print UPC A BarCode
CMP_BCS_UPCE	Print UPC E BarCode
CMP_BCS_EAN8	Print EAN-8 BarCode
CMP_BCS_EAN13	Print EAN-13 BarCode
CMP_BCS_JAN8	Print JAN-8 BarCode
CMP_BCS_JAN13	Print JAN-13 BarCode
CMP_BCS_ITF	Print Interleaved 2 of 5
CMP_BCS_Codabar	Print Codabar BarCode
CMP_BCS_Code39	Print Code 3 of 9 BarCode
CMP_BCS_Code93	Print Code 93 BarCode
CMP_BCS_Code128	Print Code 128 BarCode

\* height

- This value is barcode height in Dot Units. It sets barcode height to print.

\* width

- This value is barcode width [2 <= value <= 6]. It sets total barcode width to print.

\* alignment

- This value is alignment. It sets barcode alignment.

Variable	Description
CMP_ALIGNMENT_LEFT	Left alignment
CMP_ALIGNMENT_CENTER	Center alignment
CMP_ALIGNMENT_RIGHT	Right alignment

\* hri

- This value is printing position of barcode HRI letters(barcode data).

Variable	Description
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CMP_HRI_TEXT_NONE	Do not print barcode data
CMP_HRI_TEXT_ABOVE	Print barcode data above the barcode
CMP_HRI_TEXT_BELOW	Print barcode data below the barcode

## 2.8. printImage

This function used for printing image files [BMP/JPEG/PNG/GIF].

```
cordova.plugins.printImage= function(successCallback, errorCallback,
    imagePath, alignment, size);
```

[Parameter]

\* imagePath

- This value is the bitmap file name with full path of bitmap file.

\* alignment

- This value is alignment. It sets image alignment..

Variable	Description
CMP_ALIGNMENT_LEFT	Left alignment
CMP_ALIGNMENT_CENTER	Center alignment
CMP_ALIGNMENT_RIGHT	Right alignment

\* size

- This value is image size. It sets image size to print.

Variable	Description
CMP_BITMAP_NORMAL	Normal size
CMP_BITMAP_DOUBLE_WIDTH	Double width
CMP_BITMAP_DOUBLE_HEIGHT	Double height
CMP_BITMAP_QUADRUPLE	Double size
Others	Printing size of image

[Return Values]

CMP\_SUCCESS : This value returns when a function succeeds.

CMP\_FAIL : This value returns when a function fails.

## 2.9. lineFeed

This function used for sending feeding command to printer.

```
cordova.plugins.lineFeed= function(successCallback, errorCallback,
    iLine);
```



[Parameter]

\* iLine

- This value is the number of lines for line feeding. It sets line feeding counter.

## 2.10. printQRCode

This function used for supporting QRCode barcode printing.

```
cordova.plugins.printQRCode= function(successCallback, errorCallback,  
    data, dataSize, cellSize, iECL, alignment);
```

[Parameter]

\* data

- Barcode data to print.

\* dataSize

- Length of barcode data.

\* cellSize

- Module size. (1 – 20)

\* iECL

- Error Correction Level.

Variable	Description
CMP_QRCODE_EC_LEVEL_L	Error correction Level L (7%)
CMP_QRCODE_EC_LEVEL_M	Error correction Level M (15%)
CMP_QRCODE_EC_LEVEL_Q	Error correction Level Q (25%)
CMP_QRCODE_EC_LEVEL_H	Error correction Level H (30%)

\* alignment

- This value is alignment. It sets barcode alignment.

Variable	Description
CMP_ALIGNMENT_LEFT	Left alignment
CMP_ALIGNMENT_CENTER	Center alignment
CMP_ALIGNMENT_RIGHT	Right alignment

## 2.11. printPDF417

This function used for supporting PDF417 barcode printing.

```
cordova.plugins.printPDF417= function(successCallback, errorCallback,  
    pdfData, dataSize, numberOfColumn, cellWidth, alignment);
```

[Parameter]

\* pdfData

- Barcode data to print.

\* dataSize

- Length of Barcode data.

\* numberOfColumn

- Number of Data Codewords. (1 – 20)

\* cellWidth

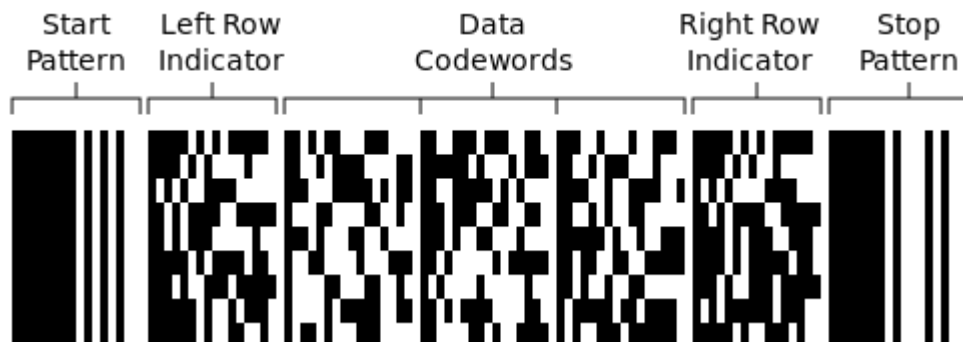
- Cell(Black or White bar) Width. (2 ~ 8)

\* alignment

- This value is alignment. It sets barcode alignment.

Variable	Description
CMP_ALIGNMENT_LEFT	Left alignment
CMP_ALIGNMENT_CENTER	Center alignment
CMP_ALIGNMENT_RIGHT	Right alignment

(Example) numberOfColumn = 3



numberOfColumn : number of Data Codewords

cellWidth : size of bar(black or White).

## 2.12. swipeMSR

This function used to read MSR track data.

```
cordova.plugins.swipeMSR= function(successCallback, errorCallback,
    selTrack);
```

[Parameter]

\* selTrack

- Select track for reading.

\* SelectTrack

SelectTrack	MSR Track
0x31[0011 0001)	Track 1
0x32[0011 0010)	Track 2
0x33[0011 0011)	Track 1,2
0x34[0011 0100)	Track 3
0x36[0011 0110)	Track 2,3

## 2.13. cancelMSR

This function used to changing MSR Ready status to normal status

```
cordova.plugins.cancelMSR= function(successCallback, errorCallback);
```

[Parameter]

\* none

## 2.14. searchBT

This function used to search a Bluetooth printers

```
cordova.plugins.searchBT= function(successCallback, errorCallback);
```

[Parameter]

\* none

## 2.15. getCountBT

This function used to get the number of searched printers.

```
cordova.plugins.getCountBT= function(successCallback, errorCallback);
```

[Parameter]

\* none

## 2.16. getListBTAddress

This function used to get the lists of searched printers.

```
cordova.plugins.getListBTAddress= function(successCallback, errorCallback);
```

[Parameter]

\* none

### 3. Command List supported by PrintNormal() function in OLE POS Command.

**One Shots**      Perform indicated action.

Name	Data	Remarks
Feed and Paper cut	ESC  #fP	Cuts receipt paper, after feeding the paper by the RecLinesToPaperCut lines. The character ' #' is defined by the " Paper cut" escape sequence.
Print bitmap	ESC  #B	Prints the pre-stored bitmap. The character ' #' is replaced by the bitmap number.
Feed lines	ESC  #fF	Feed the paper forward by lines. The character ' #' is replaced by an ASCII decimal string telling the number of lines to be fed. If ' #' is omitted, then one line is fed.
Feed units	ESC  #uF	Feed the paper forward by mapping mode units. The character ' #' is replaced by an ASCII decimal string telling the number of units to be fed. If ' #' is omitted, then one unit is fed.

**Print Mode**      Characteristics that are remembered until explicitly changed.

Name	Data	Remarks
Font typeface selection	ESC  #fT	Selects a new typeface for the following data. Values for the character ' #' are: 0 = Default typeface. 1 = Select first typeface from the FontTypefaceList property. 2 = Select second typeface from the FontTypefaceList property. And so on.

**Print Line** Characteristics that are reset at the end of each print method or by a “Normal” sequence.

Name	Data	Remarks
Bold	ESC  [ ]bC	Prints in bold or double-strike.
Underline	ESC  [ ][#]uC	Prints with underline. The character ‘ #’ is replaced by an ASCII decimal string telling the width of the underline in printer dot units. If ‘ #’ is omitted, then a printer-specific default width is used.
Reverse video	ESC   [ ]rvC	Prints in a reverse video format. If ‘ !’ is specified then reverse video is disabled
Single high and wide	ESC 1C	Prints normal size.
Double wide	ESC 2C	Prints double-wide characters.
Double high	ESC 3C	Prints double-high characters.
Double high and wide	ESC 4C	Prints double-high/double-wide characters.
Scale horizontally	ESC  #hC	Prints with the width scaled ‘ #’ times the normal size, where ‘ #’ is replaced by an ASCII decimal string.
Scale vertically	ESC  #vC	Prints with the height scaled ‘ #’ times the normal size, where ‘ #’ is replaced by an ASCII decimal string.
Center	ESC cA	Aligns following text in the center.
Right justify	ESC rA	Aligns following text at the right.
Left justify	ESC lA	Aligns following text at the left.
Normal	ESC N	Restores printer characteristics to normal condition.