

## Class

---

# XPOSCommand

---

```
@interface XPOSCommand : NSObject
```

## getCommand

---

### Get the Printing Command

```
- (NSData *)getCommand;
```

#### Return Value

- NSData object representing the current ESC object's printing data.

## addData:

---

### Add Custom Data

```
- (XPOSCommand *)addData:(NSData *)customData;
```

#### Parameters

- `customData`  
The custom data content to be added.

#### Return Value

- XPOSCommand object.

## setCharEncoding:

---

### Set Character Encoding

```
- (XPOSCommand *)setCharEncoding:(NSStringEncoding)encoding;
```

## Parameters

- `encoding`  
The encoding format, default is GB\_18030\_2000.

## Return Value

- XPOSCommand object.
- 

# initializePrinter

---

## Initialize the Printer

```
- (XPOSCommand *)initializePrinter;
```

## Return Value

- XPOSCommand object.
- 

# lineFeed

---

## Print and Line Feed

```
- (XPOSCommand *)lineFeed;
```

## Return Value

- XPOSCommand object.
- 

# printAndFeedLines:

---

## Print and Feed n Lines

```
- (XPOSCommand *)printAndFeedLines:(int)lines;
```

## Parameters

- `lines`  
The number of lines to feed after printing.

## Return Value

- XPOSCOMMAND object.

---

## setHorizontalTab

### Horizontal Tab

```
- (XPOSCOMMAND *)setHorizontalTab;
```

## Return Value

- XPOSCOMMAND object.

---

## selectAlignment:

### Select Alignment

```
- (XPOSCOMMAND *)selectAlignment:(POSALIGNMENT)alignment;
```

## Parameters

- alignment

The alignment mode to be set, which can be one of the following:

Variable	Description
POSALIGNMENTLeft	Left alignment
POSALIGNMENTCenter	Center alignment
POSALIGNMENTRight	Right alignment

## Return Value

- XPOSCOMMAND object.

---

## addText:

### Add Text

```
- (XPOSCOMMAND *)addText:(NSString *)text;
```

## Parameters

- `text`

The text content to be added. The default character encoding format is GB\_18030\_2000.

## Return Value

- XPOSCOMMAND object.
- 

# selectTextSize:

---

## Set Text Size

```
- (XPOSCOMMAND *)selectTextSize:(int)textSize;
```

## Parameters

- `textSize`

The text font size, default is TextWidth1 | TextHeight1.

## Return Value

- XPOSCOMMAND object.
- 

# addText:alignment:attribute:textSize:

---

## Compound Add Text

```
- (XPOSCOMMAND *)addText:(NSString *)text alignment:(POSAlignment)align attribute:(POSFontType)attribute textSize:(int)textSize;
```

## Parameters

- `text`

The text content to be added.

- `align`

The text alignment, default is POSAlignmentLeft.

- `attribute`

The text attribute, default is FntDefault. Options include:

Variable	Description
FntDefault	Standard font
FntFontB	FontB
FntBold	Bold
FntReverse	Reverse printing
FntUnderline	Underline
FntUnderline2	Double underline

- `textSize`  
The text font size, default is TextWidth1 | TextHeight1.

## Return Value

- XPOSCOMMAND object.

## addTextSize:textSize:

### Add Text with Size

```
- (XPOSCOMMAND *)addTextSize:(NSString *)text textSize:(int)textSize;
```

## Parameters

- `text`  
The text content to be added.
- `textSize`  
The text size, default is TextWidth1 | TextHeight1.

## Return Value

- XPOSCOMMAND object.

## addTextAttribute:

### Add Text with Attribute

```
- (XPOSCOMMAND *)addTextAttribute:(NSString *)text attribute:(POSFontType)attribute;
```

## Parameters

- `text`  
The text content to be added.
- `attribute`  
The text attribute, default is FntDefault.

## Return Value

- XPOSCommand object.

# addTextAlignment:

## Add Text with Alignment

```
- (XPOSCommand *)addTextAlignment:(NSString *)text alignment:(POSAlignment)align;
```

## Parameters

- `text`  
The text content to be added.
- `align`  
The text alignment, default is POSAlignmentLeft.

## Return Value

- XPOSCommand object.

# selectFont:

## Select Font

```
- (XPOSCommand *)selectFont:(FontSelection)font;
```

## Parameters

- `font`  
The font selection. Options include:

Variable	Description
FontStandardASCII	n = 0, 48 Select standard ASCII font (12 x 24)
FontCompressedASCII	n = 1, 49 Select compressed ASCII font (9 x 17)

## Return Value

- XPOSCommand object.

## selectCharacter:

### Select International Character Set

```
- (XPOSCommand *)selectCharacter:(POSCharacterSet)charset;
```

## Parameters

- `charset`  
The character set number (0~15). Options include:

Variable	Description
CharacterSetUSA	USA
CharacterSetFrance	France
CharacterSetGermany	Germany
CharacterSetUK	UK
CharacterSetDenmarkI	Denmark I
CharacterSetSweden	Sweden
CharacterSetItaly	Italy
CharacterSetSpainI	Spain I
CharacterSetJapan	Japan
CharacterSetNorway	Norway
CharacterSetDenmarkII	Denmark II
CharacterSetSpainII	Spain II
CharacterSetLatinAmerica	Latin America
CharacterSetKorea	Korea
CharacterSetSloveniaCroatia	Slovenia/Croatia
CharacterSetChina	China

## Return Value

- XPOSCommand object.
- 

## selectOrCancelUnderlineMode:

---

### Select/Cancel Underline Mode

```
- (XPOSCommand *)selectOrCancelUnderlineMode:(int)mode;
```

## Parameters

- `mode`  
The underline mode to select or cancel.

## Return Value

- XPOSCommand object.
- 

## setDefaultLineSpacing:

---

### Set Default Line Spacing

```
- (XPOSCommand *)setDefaultLineSpacing;
```

## Return Value

- XPOSCommand object.
- 

## setLineSpacing:

---

### Set Line Spacing

```
- (XPOSCommand *)setLineSpacing:(int)spacing;
```

## Parameters

- `spacing`  
The line spacing to set.



## Return Value

- XPOSCommand object.
- 

## selectOrCancelBoldMode:

---

### Select/Cancel Bold Mode

```
- (XPOSCommand *)selectOrCancelBoldMode:(int)mode;
```

## Parameters

- `mode`  
The bold mode to select or cancel.

## Return Value

- XPOSCommand object.
- 

## setCharacterRightSpacing:

---

### Set Character Right Spacing

```
- (XPOSCommand *)setCharacterRightSpacing:(int)spacing;
```

## Parameters

- `spacing`  
The right spacing of the character.

## Return Value

- XPOSCommand object.
- 

## printImage:

---

### Print Image

```
- (XPOSCommand *)printImage:(UIImage *)image type:(BMPTType)type mode:(BmpScaleType)mode;
```

## Parameters

- `image`  
The image source to print.
- `type`  
The image effect: Binarization, Dithering algorithm.
- `mode`  
The image scaling mode: Normal/Double Width/Double Height/Double Width and Height.

## Return Value

- XPOSCommand object.

---

## compressionPrintImage:

### Print Image via Compression Algorithm

```
- (XPOSCommand *)compressionPrintImage:(NSImage *)image type:(BMPTType)type mode:(BmpScaleType)mode;
```

## Parameters

- `image`  
The image source to print.
- `type`  
The image effect: Binarization, Dithering algorithm.
- `mode`  
The image scaling mode: Normal/Double Width/Double Height/Double Width and Height.

## Return Value

- XPOSCommand object.

---

## selectBitmapMode:

### Select Bitmap Mode

```
- (XPOSCommand *)selectBitmapMode:(int)mode width:(int)width image:(NSImage *)image;
```

## Parameters

- `mode`  
The bitmap mode to select.
- `width`  
The width of the bitmap.
- `image`  
The bitmap image.

## Return Value

- XPOSCommand object.
- 

# definedFlashBmpWithImage:

---

## Define Flash Bitmap

```
- (XPOSCommand *)definedFlashBmpWithImage:(NSArray <UIImage *> *)images;
```

## Parameters

- `images`  
An array containing bitmaps to define.

## Return Value

- XPOSCommand object.
- 

# printBitmapToFlashWithN:andM:

---

## Print the Bitmap Downloaded to FLASH

```
- (XPOSCommand *)printBitmapToFlashWithN:(int)n andM:(int)m;
```

## Parameters

- `n`  
Mode parameter.
- `m`  
Mode parameter.

## Return Value

- XPOSCommand object.
- 

## clearFlashBmp:

### Clear the BMP Stored in Flash

```
- (XPOSCommand *)clearFlashBmp;
```

## Return Value

- XPOSCommand object.
- 

## defineDownloadedRAMBmp:

### Define the Bitmap Downloaded to RAM

```
- (XPOSCommand *)defineDownloadedRAMBmp:(UIImage *)image bmpType:(BMPType)type;
```

## Parameters

- `image`  
The bitmap image to define.
- `type`  
The image effect.

## Return Value

- XPOSCommand object.
- 

## printDownloadRAMBmp:

### Print the Bitmap Downloaded to RAM

```
- (XPOSCommand *)printDownloadRAMBmp:(BmpScaleType)mode;
```

## Parameters

- `mode`  
The print mode. Options include:

Variable	Description
BmpNormal	Original size
BmpWidthDouble	Double width
BmpHeightDouble	Double height
BmpWidthHeightDouble	Double width and height

## Return Value

- XPOSCommand object.

# printBarcodeWithType:andContent:

## Print Barcode

```
- (XPOSCommand *)printBarcodeWithType:(BarcodeType)type andContent:(NSString *)content;
```

## Parameters

- `type`

The barcode type. Options include:

Variable	Description
BarcodeTypeUPCA	UPC A
BarcodeTypeUPCE	UPCE
BarcodeTypeJAN13_EAN13	JAN-13
BarcodeTypeJAN8_EAN8	JAN-8
BarcodeTypeCode39	Code 39
BarcodeTypeITF	ITF
BarcodeTypeCodabar	Codabar
BarcodeTypeCode93	Code 93
BarcodeTypeCode128	Code 128

- `content`

The barcode content to print.

## Return Value

- XPOSCCommand object.
- 

## selectHRICharacterPrintPosition:

### Select HRI Character Print Position

```
- (XPOSCCommand *)selectHRICharacterPrintPosition:(NSInteger)position;
```

## Parameters

- `position`  
The position parameter for HRI character printing.

## Return Value

- XPOSCCommand object.
- 

## selectHRIFont:

### Select HRI Font

```
- (XPOSCCommand *)selectHRIFont:(NSInteger)font;
```

## Parameters

- `font`  
The font parameter for HRI character printing.

## Return Value

- XPOSCCommand object.
- 

## selectBarcodeHeight:

### Select Barcode Height

```
- (XPOSCCommand *)selectBarcodeHeight:(NSInteger)height;
```

## Parameters

- `height`  
The barcode height to set.

## Return Value

- XPOSCCommand object.
- 

## setBarcodeWidth:

### Set Barcode Width

```
- (XPOSCCommand *)setBarcodeWidth:(NSInteger)width;
```

## Parameters

- `width`  
The barcode width to set.

## Return Value

- XPOSCCommand object.
- 

## printQRCodeWithContent:

### Print QR Code

```
- (XPOSCCommand *)printQRCodeWithContent:(NSString *)content;
```

## Parameters

- `content`  
The QR code content to print.

## Return Value

- XPOSCCommand object.
- 

## printQRCodeWithContent:moduleSize:

# Print QR Code with Module Size

```
- (XPOSCommand *)printQRCodeWithContent:(NSString *)content moduleSize:
(NSInteger)moduleSize;
```

## Parameters

- `content`  
The QR code content to print.
- `moduleSize`  
The module size, range [1, 16], default is 8.

## Return Value

- XPOSCommand object.

---

# printQRCodeWithContent:moduleSize:ecLevel:

## Print QR Code with Error Correction Level

```
- (XPOSCommand *)printQRCodeWithContent:(NSString *)content moduleSize:
(NSInteger)moduleSize ecLevel:(QRErrorCorrectionLevel)ecLevel;
```

## Parameters

- `content`  
The QR code content to print.
- `moduleSize`  
The module size, range [1, 16], default is 8.
- `ecLevel`  
The error correction level, default is QRErrorCorrectionLevelL. Options include:

Variable	Description
QRErrorCorrectionLevelL	Error correction level L (7%)
QRErrorCorrectionLevelM	Error correction level M (15%)
QRErrorCorrectionLevelQ	Error correction level Q (25%)
QRErrorCorrectionLevelH	Error correction level H (30%)



## Return Value

- XPOSCommand object.
- 

## formFeed:

### Print and Return to Standard Mode

```
- (XPOSCommand *)formFeed;
```

## Return Value

- XPOSCommand object.
- 

## cancelPrintData:

### Cancel Print Data in Page Mode

```
- (XPOSCommand *)cancelPrintData;
```

## Return Value

- XPOSCommand object.
- 

## pageModePrint:

### Print in Page Mode

```
- (XPOSCommand *)pageModePrint;
```

## Return Value

- XPOSCommand object.
- 

## selectPageMode:

### Select Page Mode

```
- (XPOSCommand *)selectPageMode;
```

## Return Value

- XPOSCommand object.
- 

## selectStandardMode:

### Select Standard Mode

```
- (XPOSCommand *)selectStandardMode;
```

## Return Value

- XPOSCommand object.
- 

## selectPrintDirection:

### Select Print Direction in Page Mode

```
- (XPOSCommand *)selectPrintDirection:(int)direction;
```

## Parameters

- `direction`  
The direction to set for printing.

## Return Value

- XPOSCommand object.
- 

## setAbsolutePrintPositionWithLow:high:

### Set Absolute Print Position

```
- (XPOSCommand *)setAbsolutePrintPositionWithLow:(int)nL high:(int)nH;
```

## Parameters

- `nL`  
The low byte.
- `nH`  
The high byte.

## Return Value

- XPOSCOMMAND object.

---

## printAndFeedPaper:

### Print and Feed Paper

```
- (XPOSCOMMAND *)printAndFeedPaper:(int)lines;
```

## Parameters

- `lines`  
The number of lines to feed after printing.

## Return Value

- XPOSCOMMAND object.

---

## selectOrCancelRotation:

### Select/Cancel 90-degree Clockwise Rotation

```
- (XPOSCOMMAND *)selectOrCancelRotation:(int)rotation;
```

## Parameters

- `rotation`  
The rotation flag (0 for cancel, 1 for select).

## Return Value

- XPOSCOMMAND object.

---

## setPrintArea:

### Set Print Area in Page Mode

```
- (XPOSCOMMAND *)setPrintArea:(int)x y:(int)y width:(int)width height:(int)height;
```

## Parameters

- `x`  
The horizontal starting position, default is 0.
- `y`  
The vertical starting position, default is 0.
- `width`  
The area width.
- `height`  
The area height.

## Return Value

- XPOSCommand object.

---

## enableOrDisableKeys:

### Enable/Disable Keys

```
- (XPOSCommand *)enableOrDisableKeys:(int)flag;
```

## Parameters

- `flag`  
The flag to enable or disable keys.

## Return Value

- XPOSCommand object.

---

## selectCodePage:

### Select Character Code Table

```
- (XPOSCommand *)selectCodePage:(CharacterCodePage)charset;
```

## Parameters

- `charset`  
The code page number to select.

## Return Value

- XPOSCommand object.
- 

## selectOrCancelInvertedPrint:

### Select/Cancel Inverted Print Mode

```
- (XPOSCommand *)selectOrCancelInvertedPrint:(int)mode;
```

## Parameters

- `mode`  
The mode to select or cancel.

## Return Value

- XPOSCommand object.
- 

## setRelativeHorizontal:

### Set Relative Horizontal Print Position

```
- (XPOSCommand *)setRelativeHorizontal:(int)xPosition;
```

## Parameters

- `xPosition`  
The horizontal relative displacement to set.

## Return Value

- XPOSCommand object.
- 

## setAbsoluteVertical:

### Set Absolute Vertical Position in Page Mode

```
- (XPOSCommand *)setAbsoluteVertical:(NSInteger)yPosition;
```

## Parameters

- `yPosition`  
Absolute vertical position.

## Return Value

- XPOSCommand object.
- 

## setRelativeVertical:

### Set Relative Vertical Position in Page Mode

```
- (XPOSCommand *)setRelativeVertical:(NSInteger)yPosition;
```

## Parameters

- `yPosition`  
Relative vertical position.

## Return Value

- XPOSCommand object.
- 

## setMotionUnitsWithHorizontal:vertical:

### Set Horizontal and Vertical Motion Units

```
- (XPOSCommand *)setMotionUnitsWithHorizontal:(NSInteger)x vertical:(NSInteger)y;
```

## Parameters

- `x`  
Horizontal motion unit.
- `y`  
Vertical motion unit.

## Return Value

- XPOSCommand object.
- 

## selectCancelBWReversePrintMode:

## Select/Cancel Black/White Reverse Print Mode

```
- (XPOSCCommand *)selectCancelBWReversePrintMode:(NSInteger)mode;
```

### Parameters

- `mode`  
Mode parameter.

### Return Value

- XPOSCCommand object.
- 

## setLeftMargin:

### Set Left Margin

```
- (XPOSCCommand *)setLeftMargin:(NSInteger)left;
```

### Parameters

- `left`  
Left margin.

### Return Value

- XPOSCCommand object.
- 

## cutPaper:

### Select Paper Cut Mode and Cut Paper

```
- (XPOSCCommand *)cutPaper;
```

### Return Value

- XPOSCCommand object.
- 

## cutPaperWithMode:

# Select Paper Cut Mode and Cut Paper

```
- (XPOSCommand *)cutPaperWithMode:(PaperCutMode)mode;
```

## Parameters

- `mode`  
Paper cut mode. Options include:

Variable	Description
PaperCutModeFullCut	Full cut (0, 48)
PaperCutModeFullCutAlt	Full cut (0, 48) alternate
PaperCutModePartialCut	Partial cut (1, 49)
PaperCutModePartialCutAlt	Partial cut (1, 49) alternate

## Return Value

- XPOSCommand object.

# cutPaperWithDistance:

## Select Paper Cut Mode and Cut Paper with Distance

```
- (XPOSCommand *)cutPaperWithDistance:(NSInteger)distance;
```

## Parameters

- `distance`  
Feed distance, feed distance × (vertical motion unit) inches and partial cut.

## Return Value

- XPOSCommand object.

# setPrintAreaWidth:

## Set Print Area Width

```
- (XPOSCommand *)setPrintAreaWidth:(int)width;
```



## Parameters

- `width`  
Print area width.

## Return Value

- XPOSCOMMAND object.

# realTimeStatus:

## Real-time Status Transmission

```
- (XPOSCOMMAND *)realTimeStatus:(PrinterAllStatusType)status;
```

## Parameters

- `status`  
Status. Options include:

Variable	Description
PrinterStatusTypePrint	Printing status
PrinterStatusTypeOffline	Offline status
PrinterStatusTypeError	Error status
PrinterStatusTypePaper	Paper status

## Return Value

- XPOSCOMMAND object.

# returnStatus:

## Return Status

```
- (XPOSCOMMAND *)returnStatus:(NSInteger)statusType;
```

## Parameters

- `statusType`  
Status type.

## Return Value

- XPOSCCommand object.
- 

## printerBeep:

### Printer Receives Order Beep

```
- (XPOSCCommand *)printerBeep:(NSInteger)count time:(NSInteger)time;
```

## Parameters

- `count`  
Buzzer beep count, range (1~9).
- `time`  
Beep duration for each time, range (1~9), each beep duration is time \* 50ms.

## Return Value

- XPOSCCommand object.
- 

## printerBeepAndFlashAlarm:

### Printer Receives Order Beep and Alarm Light Flashing

```
- (XPOSCCommand *)printerBeepAndFlashAlarm:(NSInteger)count count:(NSInteger)interval  
time:(AlarmState)mode;
```

## Parameters

- `count`  
Range 1~20, indicating the number of alarm light flashes or buzzer beeps.
- `interval`  
Range 1~20, indicating the alarm light flash interval time is interval \* 50ms, or the buzzer beep time is interval \* 50ms.
- `mode`  
Mode. Options include:

Variable	Description
AlarmStateNone	Buzzer does not beep, and the alarm light does not flash
AlarmStateBuzzer	Buzzer beeps
AlarmStateLight	Alarm light flashes
AlarmStateBoth	Buzzer beeps, and the alarm light flashes

## Return Value

- XPOSCOMMAND object.

## openCashBoxWithPinNumber:

### Open the Cash Drawer

```
- (XPOSCOMMAND *)openCashBoxWithPinNumber:(CashDrawerPin)pinNum;
```

## Parameters

- pinNum

Pin number connected. Options include:

Variable	Description
CashDrawerPin2	Cash drawer socket pin 2 (0, 48)
CashDrawerPin2Alt	Cash drawer socket pin 2 (0, 48) alternate
CashDrawerPin5	Cash drawer socket pin 5 (1, 49)
CashDrawerPin5Alt	Cash drawer socket pin 5 (1, 49) alternate

## Return Value

- XPOSCOMMAND object.

## openCashBoxWithPinNumber:onTime:offTime:

### Open the Cash Drawer with Timing

```
- (XPOSCOMMAND *)openCashBoxWithPinNumber:(CashDrawerPin)pinNum onTime:(int)onTime  
offTime:(int)offTime;
```

## Parameters

- `pinNum`  
Pin number connected.
- `onTime`  
Cash drawer pulse start time ( $\text{onTime} * 2\text{ms}$ ), range [0, 255]. Default is 30.
- `offTime`  
Cash drawer pulse end time ( $\text{offTime} * 2\text{ms}$ ), range [0, 255]. Default is 255. If  $\text{onTime} > \text{offTime}$ , the end time is  $\text{onTime} * 2\text{ms}$ .

## Return Value

- XPOSCommand object.
-