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:
(BMPType)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:(UIImage *)image
type:(BMPType)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:(UIImage *)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:(POSBarcodeType)type
andContent:(NSString *)content;
```

Parameters

- `type`
  The barcode type. Options include:

Variable	Description
POSBarcodeTypeUPCA	UPC A
POSBarcodeTypeUPCE	UPCE
POSBarcodeTypeJAN13_EAN13	JAN-13
POSBarcodeTypeJAN8_EAN8	JAN-8
POSBarcodeTypeCode39	Code 39
POSBarcodeTypeITF	ITF
POSBarcodeTypeCodabar	Codabar
POSBarcodeTypeCode93	Code 93
POSBarcodeTypeCode128	Code 128

- `content`
  The barcode content to print.

Return Value

- XPOSCommand object.

---

selectHRICharacterPrintPosition:

Select HRI Character Print Position

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

Parameters

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

Return Value

- XPOSCommand object.

---

selectHRIFont:

Select HRI Font

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

Parameters

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

Return Value

- XPOSCommand object.

---

selectBarcodeHeight:

Select Barcode Height

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

Parameters

- `height`
  The barcode height to set.

Return Value

- XPOSCommand object.

---

setBarcodeWidth:

Set Barcode Width

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

Parameters

- `width`
  The barcode width to set.

Return Value

- XPOSCommand object.

---

printQRCodeWithContent:

Print QR Code

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

Parameters

- `content`
  The QR code content to print.

Return Value

- XPOSCommand 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

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

Parameters

- `mode`
  Mode parameter.

Return Value

- XPOSCommand object.

---

setLeftMargin:

Set Left Margin

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

Parameters

- `left`
  Left margin.

Return Value

- XPOSCommand object.

---

cutPaper:

Select Paper Cut Mode and Cut Paper

```
- (XPOSCommand *)cutPaper;
```

Return Value

- XPOSCommand 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

- XPOSCommand object.

---

printerBeep:

Printer Receives Order Beep

```
- (XPOSCommand *)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

- XPOSCommand object.

---

printerBeepAndFlashAlarm:

Printer Receives Order Beep and Alarm Light Flashing

```
- (XPOSCommand *)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 (onTime * 2ms), range [0, 255]. Default is 30.
- `offTime`
  Cash drawer pulse end time (offTime * 2ms), range [0, 255]. Default is 255. If onTime > offTime, the end time is onTime * 2ms.

Return Value

- XPOSCommand object.
