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## 1.Enum

---

### 1.1 PTCPCLPaperType

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLPaperType) {  
    PTCPCLPaperContinue = 0, ///  
    PTCPCLPaperLabel = 1, ///  
    PTCPCLPaperBackBlackMark = 2, ///  
    PTCPCLPaperFrontBlackMark = 3, ///  
    PTCPCLPaperBlackMarkInch3 = 4, ///  
    PTCPCLPaperBlackMarkInch2 = 5, ///  
};
```

### 1.2 PTCPCLNewPaperType

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLPaperType) {
    PTCPCLPaperContinuous = 0, ///< continuous paper
    PTCPCLPaperLabel = 2, ///< label paper
    PTCPCLPaperBlackMarkInch2 = 4, ///< 2 inch black mark
    PTCPCLPaperBlackMarkInch3 = 5, ///< 3 inch black mark
    PTCPCLPaperBlackMarkInch4 = 6 ///< 4 inch black mark
};
```

## 1.3 PTCPCLLabelResolution

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLLabelResolution) {
    PTCPCLLabelResolution100 = 100, ///< 100
    PTCPCLLabelResolution200 = 200 ///< 200
};
```

## 1.4 PTCPCBarcodeStyle

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCBarcodeStyle) {
    PTCPCBarcodeStyleUPCA = 0,
    PTCPCBarcodeStyleUPCE = 1,
    PTCPCBarcodeStyleEAN13 = 2,
    PTCPCBarcodeStyleEAN8 = 3,
    PTCPCBarcodeStyleCode39 = 4,
    PTCPCBarcodeStyleCode93 = 5,
    PTCPCBarcodeStyleCode128 = 6,
    PTCPCBarcodeStyleCodeBAR = 7
};
```

## 1.5 PTCPCBarcodeBarRatio

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCBarcodeBarRatio) {
    PTCPCBarcodeBarRatio0 = 0,
    PTCPCBarcodeBarRatio1 = 1,
    PTCPCBarcodeBarRatio2 = 2,
    PTCPCBarcodeBarRatio3 = 3,
    PTCPCBarcodeBarRatio4 = 4,
    PTCPCBarcodeBarRatio20 = 20,
    PTCPCBarcodeBarRatio21 = 21,
    PTCPCBarcodeBarRatio22 = 22,
    PTCPCBarcodeBarRatio23 = 23,
    PTCPCBarcodeBarRatio24 = 24,
};
```

```

PTCPCLBarcodeBarRatio25    = 25,
PTCPCLBarcodeBarRatio26    = 26,
PTCPCLBarcodeBarRatio27    = 27,
PTCPCLBarcodeBarRatio28    = 28,
PTCPCLBarcodeBarRatio29    = 29,
PTCPCLBarcodeBarRatio30    = 30
};

```

## 1.6 PTCPLQRCodeModel

- Code

```

typedef NS_ENUM(NSUInteger, PTCPLQRCodeModel) {
    PTCPLQRCodeModel1    = 1,
    PTCPLQRCodeModel2    = 2    ///< default
};

```

## 1.7 PTCPLQRCodeUnitWidth

- Code

```

typedef NS_ENUM(NSUInteger, PTCPLQRCodeUnitWidth) {
    PTCPLQRCodeUnitWidth_1 = 1,
    PTCPLQRCodeUnitWidth_2,
    PTCPLQRCodeUnitWidth_3,
    PTCPLQRCodeUnitWidth_4,
    PTCPLQRCodeUnitWidth_5,
    PTCPLQRCodeUnitWidth_6,    ///< default
    PTCPLQRCodeUnitWidth_7,
    PTCPLQRCodeUnitWidth_8,
    PTCPLQRCodeUnitWidth_9,
    PTCPLQRCodeUnitWidth_10,
    PTCPLQRCodeUnitWidth_11,
    PTCPLQRCodeUnitWidth_12,
    PTCPLQRCodeUnitWidth_13,
    PTCPLQRCodeUnitWidth_14,
    PTCPLQRCodeUnitWidth_15,
    PTCPLQRCodeUnitWidth_16,
    PTCPLQRCodeUnitWidth_17,
    PTCPLQRCodeUnitWidth_18,
    PTCPLQRCodeUnitWidth_19,
    PTCPLQRCodeUnitWidth_20,
    PTCPLQRCodeUnitWidth_21,
    PTCPLQRCodeUnitWidth_22,
    PTCPLQRCodeUnitWidth_23,
    PTCPLQRCodeUnitWidth_24,
    PTCPLQRCodeUnitWidth_25,
    PTCPLQRCodeUnitWidth_26,
};

```

```
PTCPCLQRCodeUnitwidth_27,
PTCPCLQRCodeUnitwidth_28,
PTCPCLQRCodeUnitwidth_29,
PTCPCLQRCodeUnitwidth_30,
PTCPCLQRCodeUnitwidth_31,
PTCPCLQRCodeUnitwidth_32
};
```

## 1.8 PTCPLQRCodeCorrectionLevel

- Code

```
typedef NS_ENUM(NSUInteger, PTCPLQRCodeCorrectionLevel) {
    PTCPLQRCodeCorrectionLevelH = 0, ///< Ultra high reliability level
    PTCPLQRCodeCorrectionLevelQ = 1, ///< High reliability level
    PTCPLQRCodeCorrectionLevelM = 2, ///< Standard level
    PTCPLQRCodeCorrectionLevelL = 3 ///< High density level
};
```

## 1.9 PTCPLQRCodeDataInputMode

- Code

```
typedef NS_ENUM(NSUInteger, PTCPLQRCodeDataInputMode) {
    PTCPLQRCodeDataInputModeA = 0, ///< Automatic(default)
    PTCPLQRCodeDataInputModeM = 1 ///< manual(ignore it,pls select ModeA)
};
```

## 1.10 PTCPLTextFontName

- Code

```
typedef NS_ENUM(NSUInteger, PTCPLTextFontName) {
    PTCPLTextFont1 = 1, ///< chinese:24x24 english:9x17
    PTCPLTextFont2 = 2, ///< chinese:24x24 english:12x24
    PTCPLTextFont3 = 3, ///< chinese:20x20 english:10x20
    PTCPLTextFont4 = 4, ///< chinese:32x32 english:16x32
    PTCPLTextFont5 = 5, ///< chinese:24x24 english:12x24
    PTCPLTextFont7 = 7, ///< chinese:24x24 english:12x24
    PTCPLTextFont8 = 8, ///< chinese:24x24 english:12x24
    PTCPLTextFont20 = 20, ///< chinese:16x16 english:8x16
    PTCPLTextFont28 = 28, ///< chinese:28x28 english:14x28
    PTCPLTextFont55 = 55 ///< chinese:16x16 english:8x16
};
```

## 1.11 PTCPCLScaledFontName

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLScaledFontName) {  
    PTCPCLScaledFontNameTTF      = 0,    ///< default  
    PTCPCLScaledFontNameCSF      = 1,  
    PTCPCLScaledFontNameFNT      = 2  
};
```

## 1.12 PTCPCLFontGroupNumber

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLFontGroupNumber) {  
    PTCPCLFontGroupNumber0       = 0,  
    PTCPCLFontGroupNumber1       = 1,  
    PTCPCLFontGroupNumber2       = 2,  
    PTCPCLFontGroupNumber3       = 3,  
    PTCPCLFontGroupNumber4       = 4,  
    PTCPCLFontGroupNumber5       = 5,  
    PTCPCLFontGroupNumber6       = 6,  
    PTCPCLFontGroupNumber7       = 7,  
    PTCPCLFontGroupNumber8       = 8,  
    PTCPCLFontGroupNumber9       = 9,  
    PTCPCLFontGroupNumber10      = 10  
};
```

## 1.13 PTCPCLTextBold

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLTextBold) {  
    PTCPCLTextBold0      = 0, ///< default, not bold  
    PTCPCLTextBold1      = 1,  
    PTCPCLTextBold2      = 2,  
    PTCPCLTextBold3      = 3,  
    PTCPCLTextBold4      = 4,  
    PTCPCLTextBold5      = 5  
};
```

## 1.14 PTCPCLStyleRotation

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLStyleRotation) {
    PTCPCLStyleRotation0    = 0,    ///< Counterclockwise rotation,default
    PTCPCLStyleRotation90   = 90,    ///< Counterclockwise rotation 90
    PTCPCLStyleRotation180  = 180,   ///< Counterclockwise rotation 180
    PTCPCLStyleRotation270  = 270    ///< Counterclockwise rotation 270
};
```

## 1.15 PTCPCLFontScale

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLFontScale) {
    PTCPCLFontScale_1  = 1,
    PTCPCLFontScale_2,
    PTCPCLFontScale_3,
    PTCPCLFontScale_4,
    PTCPCLFontScale_5,
    PTCPCLFontScale_6,
    PTCPCLFontScale_7,
    PTCPCLFontScale_8,
    PTCPCLFontScale_9,
    PTCPCLFontScale_10,
    PTCPCLFontScale_11,
    PTCPCLFontScale_12,
    PTCPCLFontScale_13,
    PTCPCLFontScale_14,
    PTCPCLFontScale_15,
    PTCPCLFontScale_16
};
```

## 1.16 PTCPCLThaiFontStyle

- Code

```
typedef NS_ENUM(NSUInteger, PTCPCLThaiFontStyle) {
    PTCPCLThaiFontStyle0    = 0,    ///< big font
    PTCPCLThaiFontStyle1    = 1     ///< small font
};
```

## 1.17 PTCPCLPDF417ErrLevel

- Code



```
typedef NS_ENUM(NSUInteger, PTCPLPDF417ErrLevel) {
    PTCPLPDF417ErrLevel_0 = 0,
    PTCPLPDF417ErrLevel_1 = 1,    //default
    PTCPLPDF417ErrLevel_2,
    PTCPLPDF417ErrLevel_3,
    PTCPLPDF417ErrLevel_4,
    PTCPLPDF417ErrLevel_5,
    PTCPLPDF417ErrLevel_6,
    PTCPLPDF417ErrLevel_7,
    PTCPLPDF417ErrLevel_8
};
```

## 1.18 PTCPLPDF417Direction

- Code

```
typedef NS_ENUM(NSUInteger, PTCPLPDF417Direction) {
    PTCPLPDF417DirectionH = 0,    ///< horizontal
    PTCPLPDF417DirectionV = 1    ///< vertical
};
```

## 1.19 PTCPLPDF417Binary

- Code

```
typedef NS_ENUM(NSUInteger, PTCPLPDF417Binary) {
    PTCPLPDF417BinaryA = 0,    ///< automatic
    PTCPLPDF417BinaryF = 1    ///< forced
};
```

## 2.Property

---

### 2.1 cmdData

- Code

```
@property (nonatomic, strong) NSMutableData * _Nonnull cmdData;
```

- Specification

▮ Data sent to the printer.

### 2.2 isZTO

- Code

```
@property (nonatomic, assign) BOOL isZTO;
```

- Specification

Whether Zhongtong Express,default is NO

## 2.3 encoding

- Code

```
@property (nonatomic, assign) NSStringEncoding encoding;
```

- Specification

encode, default is GBK.

## 3.Method

### 3.1 append command.

- Description

append command.

- Paramater

Paramater	Description
cmd	command text. encode with encoding property.

- Code

```
- (void)appendCommand:(NSString * _Nonnull)cmd;
```

### 3.2 append command.

- Description

append command.

- Paramater

Paramater	Description
cmd	command data.

- Code

```
- (void)appendCommandData:(NSData * _Nonnull)data;
```

### 3.3 selfTest.

- Description

selfTest.

- Code

```
- (void)printSelfInspectionPage;
```

### 3.4 firmware version.

- Description

firmware version.

- Code

```
- (void)getFirmwareVersion;
```

### 3.5 Turn on/off print status callback.

- Description

Turn on/off print status callback.

- Code

```
- (void)cpc1TurnOnPrintStatusCallback:(BOOL)flag;
```

### 3.6 Turn on underline.

- Description

Turn on underline.

- Code

```
- (void)cpc1UnderlineON;
```

### 3.7 Turn off underline.

- Description

Turn off underline.

- Code

```
- (void)cpc1UnderlineOFF;
```

## 3.8 start label session.

- Description

start label session.

- Paramater

Paramater	Description
offset	The number of units to offset all fields from the left side of the label horizontally. 0-65535
hRes	The horizontal resolution of this label, expressed in dots per inch. 100 or 200
vRes	The vertical resolution of this label, expressed in dots per inch. 100 or 200
height	The height of the label in units. 0-65535
quantity	The number of copies of the label to print. 0-1024

- Code

```
- (void)cpc1LabelWithOffset:(NSInteger)offset  
    hRes:(PTCPCLLabelResolution)hRes  
    vRes:(PTCPCLLabelResolution)vRes  
    height:(NSInteger)height  
    quantity:(NSInteger)quantity;
```

## 3.9 used to specify the width a label session.

- Description

used to specify the width a label session.

- Paramater

Paramater	Description
pageWidth	width of a label session in dots.

- Code

```
- (void)cpc1Pagewidth:(NSInteger)pagewidth;
```

## 3.10 horizontal barcode.

- Description

horizontal barcode.

- Paramater

Paramater	Description
type	The type of barcode to print. UPCA/UPCE/EAN13/EAN8/39/93/128/CODABAR
width	The width of a narrow bar.
ratio	The ratio of wide to narrow bars. 0-4, 20-30
height	The height of the barcode.
x	The X position where the barcode begins
y	The Y position where the barcode begins
barcode	The data to be encoded into a barcode

- Code

```
- (void)cpclBarcode:(PTCPCLBarcodeStyle)type
    width:(NSInteger)width
    ratio:(PTCPCLBarcodeBarRatio)ratio
    height:(NSInteger)height
    x:(NSInteger)x
    y:(NSInteger)y
    barcode:(NSString * _Nonnull)barcode;
```

## 3.11 vertical barcode.

- Description

vertical barcode.

- Paramater

Paramater	Description
type	The type of barcode to print.
width	The width of a narrow bar.
ratio	The ratio of wide to narrow bars. 0-4, 20-30
height	The height of the barcode.
x	The X position where the barcode begins
y	The Y position where the barcode begins
barcode	The data to be encoded into a barcode

- Code

```
- (void)cpc1BarcodeVertical:(PTCPCLBarcodeStyle)type
    width:(NSInteger)width
    ratio:(PTCPCLBarcodeBarRatio)ratio
    height:(NSInteger)height
    x:(NSInteger)x
    y:(NSInteger)y
    barcode:(NSString * _Nonnull)barcode;
```

## 3.12 Specify the barcode below the text format

- Description

used to specify if a human-readable text representation of barcode data should be printed below 1D barcodes.

- Paramater

Paramater	Description
font	A font name or number to create the representation
fontSize	The size of the font: 0-999
offset	How far in units the text is from the barcode:0-999

- Code

```
- (void)cpc1BarcodeTextWithFont:(PTCPCLTextFontName)font
    fontSize:(NSInteger)fontSize
    offset:(NSInteger)offset;
```

## 3.13 Specify the barcode below the text format

- Description

used to specify if a human-readable text representation of barcode data should be printed below 1D barcodes.

- Paramater

Paramater	Description
font	The filename of the TTF font with extension.
xScale	The X size of the font, in dots: 0-999.
yScale	The Y size of the font, in dots: 0-999.
offset	How far in units the text is from the barcode:0-999.

- Code

```
- (void)cpc1BarcodeTextWithTrueTypeFont:(PTCPCLTextFontName)font
    xScale:(NSInteger)xScale
    yScale:(NSInteger)yScale
    offset:(NSInteger)offset;
```

### 3.14 turn off the addition of the text representation.

- Description

turn off the addition of the text representation.

- Code

```
- (void)cpc1BarcodeTextOff;
```

### 3.15 horizontal QR barcode.

- Description

horizontal QR barcode.

- Paramater

Paramater	Description
xPos	The X position where the barcode begins
yPos	The Y position where the barcode begins
model	Specifies the model of QR code to print.1 or 2
unitWidth	Unit-width of the barcode in dots. 1-32,default: 6.

- Code

```
- (void)cpc1BarcodeQRcodewithXPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    model:(PTCPCLQRCodeModel)model
    unitwidth:(PTCPCLQRCodeUnitwidth)unitwidth;
```

### 3.16 vertical QR barcode.

- Description

vertical QR barcode.

- Paramater

Paramater	Description
xPos	The X position where the barcode begins
yPos	The Y position where the barcode begins
model	Specifies the model of QR code to print.1 or 2
unitWidth	Unit-width of the barcode in dots. 1-32,default: 6.

- Code

```
- (void)cpc1BarcodeVerticalQRcodeWithXPos:(NSInteger)xPos
                                yPos:(NSInteger)yPos
                                model:(PTCPCLQRCodeModel)model
                                unitwidth:
                                (PTCPCLQRCodeUnitwidth)unitwidth;
```

## 3.17 QR Data.

- Description

QR Data.

- Paramater

Paramater	Description
level	Error Correction
characterMode	Data Input Mode
context	Data for barcode

- Code

```
- (void)cpc1BarcodeQRCodeCorrectionLevel:
(PTCPCLQRCodeCorrectionLevel)level characterMode:
(PTCPCLQRCodeDataInputMode)characterMode context:(NSString
*_Nonnull)context;
```

## 3.18 The QR code terminator.

- Description

The QR code terminator.

- Code

```
- (void)cpc1BarcodeQRcodeEnd;
```



### 3.19 Config PDF417 parameters

- Description

Config PDF417 parameters

- Paramater

Paramater	Description
directon	horizontal or vertical
xPos	The X position where the barcode begins (0 to 65535 units)
yPos	The Y position where the barcode begins (0 to 65535 units)
xDot	The X size of a single element in dots,the default value is 2 (0 to 65535)
yDot	The Y size of a single element in dots,the default value is 6(0 to 65535)
columns	Specifies the number of columns to use,the default value is 3 (1 to 30)
rows	Specifies the number of rows to use,the default value is 0 (0 to 90)
ecc	Specifies the error recovery level,the default value is 1 (0 to 8)
binaryModel	Force binary compaction mode,the default value is 0 (0 or 1)

- Code

```
- (void)cpc1PDF417CodewithDirection:(PTCPCLPDF417Direction)directon
    xPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    xDot:(NSInteger)xDot
    yDot:(NSInteger)yDot
    columns:(NSInteger)columns
    rows:(NSInteger)rows
    ecc:(PTCPCLPDF417ErrLevel)ecc
    binaryModel:(PTCPCLPDF417Binary)binaryModel;
```

### 3.20 PDF417 Data.

- Description

PDF417 Data.

- Paramater

Paramater	Description
context	data

- Code

```
- (void)cpc1PDF417CodeAddContext:(NSString *_Nullable)context;
```

## 3.21 The PDF417 code terminator.

- Description

The PDF417 code terminator.

- Code

```
- (void)cpc1PDF417codeEnd;
```

## 3.22 draw box.

- Description

draw box.

- Paramater

Paramater	Description
xPos	The X origin of the box.(0~65535)
yPos	The Y origin of the box.(0~65535)
xEnd	The X coordinate where the box ends.(0~65535)
yEnd	The Y coordinate where the box ends.(0~65535)
thickness	The thickness of the lines in the box.(0~65535)

- Code

```
- (void)cpc1BoxwithXPos:(NSInteger)xPos  
    yPos:(NSInteger)yPos  
    xEnd:(NSInteger)xEnd  
    yEnd:(NSInteger)yEnd  
    thickness:(NSInteger)thickness;
```

## 3.23 draw line.

- Description

draw line.

- Paramater

Paramater	Description
xPos	The X origin of the line.
yPos	The Y origin of the line.
xEnd	The X coordinate where the line ends.
yEnd	The Y coordinate where the line ends.
thickness	The thickness of the line.

- Code

```
- (void)cpc1LinewithXPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    xEnd:(NSInteger)xEnd
    yEnd:(NSInteger)yEnd
    thickness:(NSInteger)thickness;
```

## 3.24 draw inverse line.

- Description

 draw inverse line.

- Paramater

Paramater	Description
xPos	The X origin of the box.(0~65535)
yPos	The Y origin of the box.(0~65535)
xEnd	The X coordinate where the box ends.(0~65535)
yEnd	The Y coordinate where the box ends.(0~65535)
thickness	The thickness of the lines in the box.(0~65535)

- Code

```
- (void)cpc1InverseLinewithXPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    xEnd:(NSInteger)xEnd
    yEnd:(NSInteger)yEnd
    thickness:(NSInteger)thickness;
```

## 3.25 Print Image

- Description

## Print Image

- Paramater

Paramater	Description
Xpos	Horizontal starting position.
Ypos	Vertical starting position.
image	Print image
bitmapMode	Bitmap type
compress	The type of compression supported by the printer

- Code

```
- (void)cpclPrintBitmapWithXPos:(NSInteger)xPos  
    yPos:(NSInteger)yPos  
    image:(CGImageRef _Nullable )image  
    bitmapMode:(PTBitmapMode)bitmapMode  
    compress:(PTBitmapCompressMode)compress;
```

## 3.26 Horizontal text series

- Description

concatenate multiple fonts and sizes of text on to a single line, and to align their top-lines in a specific way.

- Paramater

Paramater	Description
xPos	The X origin of the text string.
yPos	The Y origin of the text string.

- Code

```
- (void)cpclConcatStartWithXPos:(NSInteger)xPos yPos:(NSInteger)yPos;
```

## 3.27 Vertical text series.

- Description

concatenate multiple fonts and sizes of text on to a single line, and to align their top-lines in a specific way.

- Paramater

Paramater	Description
xPos	The X origin of the text string.
yPos	The Y origin of the text string.

- Code

```
- (void)cpc1ConcatVerticalStartWithXPos:(NSInteger)xPos yPos:
(NSInteger)yPos;
```

## 3.28 concat text.

- Description

concat text.

- Paramater

Paramater	Description
font	font.
fontSize	font size.
offset	How far from Y is the top of this text.
text	The text data to be concatenated.

- Code

```
- (void)cpc1ConcatTextWithFont:(PTCPCLTextFontName)font
fontSize:(NSInteger)fontSize
offset:(NSInteger)offset
text:(NSString * _Nonnull)text;
```

## 3.29 concat scaled text.

- Description

concat scaled text.

- Paramater

Paramater	Description
scaledFont	A scaled font used to create the text.
xScale	The X size of the scaled font, in points.
yScale	The Y size of the scaled font, in points.
offset	offset How far from Y is the top of this text.
text	The text data to be concatenated.

- Code

```
- (void)cpc1ConcatScaleTextWithScaledFont:(NSInteger)scaledFont
    xScale:(NSInteger)xScale
    yScale:(NSInteger)yScale
    offset:(NSInteger)offset
    text:(NSString * _Nonnull)text;
```

### 3.30 concat scaled Vertical text.

- Description

concat scaled Vertical text.

- Paramater

Paramater	Description
scaledFont	A scaled font used to create the text.
xScale	The X size of the scaled font, in points.
yScale	The Y size of the scaled font, in points.
offset	offset How far from Y is the top of this text.
text	The text data to be concatenated.

- Code

```
- (void)cpc1ConcatVerticalScaleTextWithScaledFont:(NSInteger)scaledFont
    xScale:(NSInteger)xScale
    yScale:(NSInteger)yScale
    offset:(NSInteger)offset
    text:(NSString *
_Nonnull)text;
```

### 3.31 concat font group.

- Description

| concat font group.

- Paramater

Paramater	Description
fontGroup	Font group number.(0-10)
offset	offset How far from Y is the top of this text.
text	The text data to be concatenated.

- Code

```
- (void)cpc1ConcatTextWithFontGroup:(PTCPCLFontGroupNumber) fontGroup
    offset:(NSInteger)offset
    text:(NSString * _Nonnull)text;
```

### 3.32 terminate concat command.

- Description

| terminate concat command.

- Code

```
- (void)cpc1ConcatEnd;
```

### 3.33 The tag end of the session

- Description

| terminate a CPCL label session, and create the resulting print out.

- Code

```
- (void)cpc1Print;
```

### 3.34 Reverse print,Rotate the label 180.

- Description

| Reverse print,Rotate the label 180.

- Code

```
- (void)cpc1PoPrint;
```

### 3.35 center justification.

- Description

center justification.

- Paramater

Paramater	Description
range	The width of the area to center on from the left side.

- Code

```
- (void)cpc1CenterWithRange:(NSInteger)range;
```

### 3.36 center justification.

- Description

center justification.

- Code

```
- (void)cpc1Center;
```

### 3.37 left justification.

- Description

left justification.

- Paramater

Paramater	Description
range	When used with LEFT, the only function Range performs is a field specification function for FONT-GROUP.

- Code

```
- (void)cpc1Left:(NSInteger)range;
```

### 3.38 left justification.

- Description

left justification.

- Code



```
- (void)cpc1Left;
```

### 3.39 right justification.

- Description

right justification.

- Paramater

Paramater	Description
right	the location of the right side to justify to.

- Code

```
- (void)cpc1Right:(NSInteger)right;
```

### 3.40 right justification.

- Description

right justification.

- Code

```
- (void)cpc1Right;
```

### 3.41 moves the origin of a label.

- Description

moves the origin of a label. persistent between labels, but is reset when the printer is power cycled.

- Paramater

Paramater	Description
right	How far to move the label to the right.(0 to 65535)
up	How far to move the label up.(0 to 65535)

- Code

```
- (void)cpc1MovewithRight:(NSInteger)right up:(NSInteger)up;
```

### 3.42 moves the origin of a label. only applies to the next or current label session.

- Description

moves the origin of a label. only applies to the next or current label session.

- Paramater

Paramater	Description
right	How far to move the label to the right.(0 to 65535)
up	How far to move the label up.(0 to 65535)

- Code

```
- (void)cpc1TempMoveWithRight:(NSInteger)right up:(NSInteger)up;
```

### 3.43 Start multiline text printing.

- Description

print a number of lines of text using the same font without having to manually specify the spacing or positioning of each line.

- Paramater

Paramater	Description
lineHeight	Spacing between each line in units.

- Code

```
- (void)cpc1MultiLineStartWithLineHeight:(NSInteger)lineHeight;
```

### 3.44 terminated multi line command.

- Description

terminated multi line command.

- Code

```
- (void)cpc1MultiLineEnd;
```

### 3.45 specify the rotation of a scalable or TrueType font within the printer.

- Description

specify the rotation of a scalable or TrueType font within the printer.

- Paramater

Paramater	Description
degrees	The number of degrees to rotate counter-clockwise.

- Code

```
- (void)cpc1Rotate:(NSInteger)degrees;
```

### 3.46 print scaled text in CPCL from either a scaled or TrueType font.

- Description

print scaled text in CPCL from either a scaled or TrueType font.

- Paramater

Paramater	Description
scaledFont	A scaled font used to create the text.
xScale	The X size of the scaled font, in points.
yScale	The Y size of the scaled font, in points.
x	The X origin of the scaled text in units.
y	The Y origin of the scaled text in units.
text	The text data to be printed.

- Code

```
- (void)cpc1ScaleText:(PTCPCLScaledFontName)scaledFont
    xScale:(NSInteger)xScale
    yScale:(NSInteger)yScale
    x:(NSInteger)x
    y:(NSInteger)y
    text:(NSString * _Nonnull)text;
```

### 3.47 print scaled text in CPCL from either a scaled or TrueType font. rotated 90 degrees.

- Description

print scaled text in CPCL from either a scaled or TrueType font. rotated 90 degrees.

- Paramater

Paramater	Description
scaledFont	A scaled font used to create the text.
xScale	The X size of the scaled font, in points.
yScale	The Y size of the scaled font, in points.
x	The X origin of the scaled text in units.
y	The Y origin of the scaled text in units.
text	The text data to be printed.

- Code

```
- (void)cpc1ScaleTextVertical:(PTCPCLScaledFontName)scaledFont
    xScale:(NSInteger)xScale
    yScale:(NSInteger)yScale
    x:(NSInteger)x
    y:(NSInteger)y
    text:(NSString * _Nonnull)text;
```

## 3.48 print scaled text which is to fit within a particular bounding box

- Description

print scaled text which is to fit within a particular bounding box. It can be used with TrueType or scaled fonts.

- Paramater

Paramater	Description
scaledFont	A scaled font used to create the text.
width	The width of the box to contain the text.
height	The height of the box to contain the text.
x	The X origin of the scaled text in units.
y	The Y origin of the scaled text in units.
text	The text data to be printed.

- Code

```
- (void)cpc1ScaleToFit:(PTCPCLScaledFontName)scaleFont
    width:(NSInteger)width
    height:(NSInteger)height
    x:(NSInteger)x
    y:(NSInteger)y
    text:(NSString * _Nonnull)text;
```

### 3.49 add a faux bolding effect to pre-scaled fonts.

- Description

add a faux bolding effect to pre-scaled fonts.

- Paramater

Paramater	Description
boldness	the boldness of the text.

- Code

```
- (void)cpc1SetBold:(PTCPCLTextBold)boldness;
```

### 3.50 set the horizontal spacing between characters.

- Description

set the horizontal spacing between characters.

- Paramater

Paramater	Description
spacing	the spacing between characters of a font.

- Code

```
- (void)cpc1SetSpacing:(NSInteger)spacing;
```

### 3.51 set the output scaling of pre-scaled fonts

- Description

set the output scaling of pre-scaled fonts

- Paramater

Paramater	Description
width	the width multiplier of the font, 1-16.
height	the height multiplier of the font, 1-16.

- Code

```
- (void)cpc1SetMagwithwidth:(PTCPCLFontScale)width height:
(PTCPCLFontScale)height;
```

## 3.52 print text that feed line automatically.

- Description

| print text that feed line automatically.

- Paramater

Paramater	Description
rotate	text rotate.
font	text font.
fontSize	text font size.
x	orgin x of text.
y	origin y of text.
safeHeight	height of text field.Part will not print more than height
width	width of text field.if width is 0,not auto line
lineSpacing	line space.
fontScale	Font magnification factor
text	text.

- Code

```
- (NSInteger)cpc1AutoTextWithRotate:(PTCPCLStyleRotation)rotate
    font:(PTCPCLTextFontName)font
    fontSize:(NSInteger)fontSize
    x:(NSInteger)x
    y:(NSInteger)y
    safeHeight:(NSInteger)safeHight
    width:(NSInteger)width
    lineSpacing:(NSInteger)lineSpacing
    fontScale:(PTCPCLFontScale)fontScale
    text:(NSString * _Nonnull)text;
```

## 3.53 print text that feed line automatically

- Description

print text that feed line automatically.rotate 90\270,the cpc1Center interface is invalid

- Paramater

Paramater	Description
rotate	text rotate.
font	text font.
fontSize	text font size.
xPos	orgin x of text.
yPos	origin y of text.
center	Whether in the middle
safeHeight	height of text field.Part will not print more than height
width	width of text field.if width is 0,not auto line
lineSpacing	line space.
fontScale	Font magnification factor.
text	text.

- Code

```
- (NSInteger)cpc1AutoTextWithRotate:(PTCPCLStyleRotation)rotate
    font:(PTCPCLTextFontName)font
    fontSize:(NSInteger)fontSize
    xPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    center:(BOOL)center
    safeHeight:(NSInteger)safeHight
    width:(NSInteger)width
    lineSpacing:(NSInteger)lineSpacing
    fontScale:(PTCPCLFontScale)fontScale
    text:(NSString * _Nonnull)text;
```

## 3.54 print Thai that feed line automatically

- Description

print Thai that feed line automatically

- Paramater

Paramater	Description
font	text font.
fontSize	text font size.
x	orgin x of text.
y	origin y of text.
lineSpace	Line spacing for automatic line feed.default 30
width	width of text field.
text	text.

- Code

```
- (void)cpc1AutoThaiTextWithFont:(PTCPCLThaiFontStyle)font
    fontSize:(NSInteger)fontSize
    x:(NSInteger)x
    y:(NSInteger)y
    lineSpace:(NSInteger)lineSpace
    width:(NSInteger)width
    text:(NSString * _Nonnull)text;
```

## 3.55 Print center text

- Description

Print center text



- Paramater

Paramater	Description
rotate	text rotate.
font	text font.
fontSize	text font size.
x	orgin x of text.
y	origin y of text.
width	width of textbox
text	content of text.

- Code

```
- (void)cpc1CenterTextWithRotate:(PTCPCLStyleRotation)rotate
    font:(PTCPCLTextFontName)font
    fontSize:(NSInteger)fontSize
    x:(NSInteger)x
    y:(NSInteger)y
    width:(NSInteger)width
    text:(NSString * _Nonnull)text;
```

## 3.56 print text.

- Description

 print text.

- Paramater

Paramater	Description
rotate	text rotate.
font	text font.
fontSize	text font size.
x	orgin x of text.
y	origin y of text.
text	text.

- Code

```
- (void)cpc1TextWithRotate:(PTCPCLStyleRotation)rotate
    font:(PTCPCLTextFontName)font
    fontSize:(NSInteger)fontSize
    x:(NSInteger)x
    y:(NSInteger)y
    text:(NSString * _Nonnull)text;
```

## 3.57 print reverse bold text.

- Description

print reverse bold text.

- Paramater

Paramater	Description
font	text font.
rotate	text rotate.
fontSize	text font size.
reverse	Whether it is reversed
bold	bold
x	origin x of text.
y	origin y of text.
text	text.

- Code

```
- (void)appendTextWithFont:(PTCPCLTextFontName)font
    rotate:(PTCPCLStyleRotation)rotate
    fontSize:(NSInteger)fontSize
    reverse:(BOOL)reverse
    bold:(PTCPCLTextBold)bold
    x:(NSInteger)x
    y:(NSInteger)y
    text:(NSString * _Nonnull)text;
```

## 3.58 Set the background blackness value

- Description

Set the background blackness value.(0-255) 0: normal

- Paramater

Paramater	Description
value	Set the background blackness value

- Code

```
- (void)cpc1SetBackgroundBlacknessvalue:(NSInteger)value;
```

## 3.59 set back text.

- Description

set back text.

- Paramater

Paramater	Description
font	text font.
rotate	text rotate.
fontSize	Size identifier for the font
xPos	x-coordinate of start point
yPos	y-coordinate of start point
text	The text data to be printed

- Code

```
- (void)cpc1BackTextWithFont:(PTCPCLTextFontName)font
    rotate:(PTCPCLStyleRotation)rotate
    fontSize:(NSInteger)fontSize
    xPos:(NSInteger)xPos
    yPos:(NSInteger)yPos
    text:(NSString *_Nonnull)text;
```

## 3.60 get printer serial number.

- Description

get printer serial number.

- Code

```
- (void)cpc1GetPrinterSN;
```

## 3.61 set the paper type1.

- Description

set the paper type1.

- Paramater

Paramater	Description
type	paper type.

- Code

```
- (void)cpc1PaperTypeWithType:(PTCPCLPaperType) type;
```

## 3.62 set the paper type2

- Description

set the paper type2. A400\A300S

- Paramater

Paramater	Description
type	paper type.

- Code

```
- (void)setPrinterPaperTypeFor4Inch:(PTCPCLNewPaperType) type;
```

## 3.63 set the darkness of the printout from the printer

- Description

set the darkness of the printout from the printer

- Paramater

Paramater	Description
density	0-2

- Code

```
- (void)setPrinterDensity:(NSInteger)density;
```

## 3.64 get printer density.

- Description

get printer density.

- Code

```
- (void)getPrinterDensity;
```

### 3.65 get Printer Battery,<000902> is 92%

- Description

get Printer Battery.

- Code

```
- (void)getPrinterBattery;
```

### 3.66 start utilities sessions.

- Description

start utilities sessions.

- Code

```
- (void)cpc1UtilitySession;
```

### 3.67 prefix if a single line utilities session.

- Description

prefix if a single line utilities session.

- Code

```
- (void)cpc1LineMode;
```

### 3.68 turn the rewind (or take-up) motor off

- Description

turn the rewind (or take-up) motor off

- Code

```
- (void)cpc1RewindOFF;
```

### 3.69 Set margin

- Description

Set margin

- Paramater

Paramater	Description
offset	Specifics the distance from the left edge in units

- Code

```
- (void)cpc1LineMargin:(NSInteger)offset;
```

## 3.70 feed

- Description

feed

- Code

```
- (void)cpc1LineFeed;
```

## 3.71 Set feed

- Description

Set feed

- Paramater

Paramater	Description
amount	How much to feed in units.-4000~4000dots

- Code

```
- (void)cpc1Feed:(NSInteger)amount;
```

## 3.72 Used to perform additional media movements after printing on a label or line print portion

- Description

is used to perform an additional media movement after a label or line print section is printed.

- Paramater

Paramater	Description
amount	How much to feed in units.-4000~4000dots

- Code

```
- (void)cpc1PostFeed:(NSInteger)amount;
```

### 3.73 Used to perform additional media moves before the label or line print portion is printed

- Description

is used to perform an additional media movement before a label or line print section is printed.

- Paramater

Paramater	Description
amount	How much to feed in units.-4000~4000dots

- Code

```
- (void)cpc1PreFeed:(NSInteger)amount;
```

### 3.74 Set the print label before the offset

- Description

when used in a label session, is used to perform an additional media movement before a label is printed

- Paramater

Paramater	Description
amount	How much to feed in units.0~4000dots

- Code

```
- (void)cpc1Reverse:(NSInteger)amount;
```

### 3.75 is used to configure the length of a feed operation.

- Description

is used to configure the length of a feed operation.

- Paramater

Paramater	Description
length	How long is a form feed operation in units(0-20000dots)
skip	How long to move after a mark or gap ends(5-50dots)

- Code

```
- (void)cpc1SetFeed:(NSInteger)length skip:(NSInteger)skip;
```

### 3.76 set the maximum speed at which printout occurs.

- Description

set the maximum speed at which printout occurs.

- Paramater

Paramater	Description
value	speed to print in an arbitrary scale,0-5.

- Code

```
- (void)cpc1Speed:(NSInteger)value;
```

### 3.77 Positioning label

- Description

the printer should attempt to synchronize to a mark or gap on the media after the label is printed.

- Code

```
- (void)cpc1Form;
```

### 3.78 set the darkness of the printout from the printer

- Description

set the darkness of the printout from the printer.default:0

- Paramater

Paramater	Description
value	darkness of the printout, -100~200.

- Code



```
- (void)cpc1Tone:(NSInteger)value;
```

### 3.79 changes the orientation of the printed label or of line print text

- Description

changes the orientation of the printed label or of line print text

- Paramater

Paramater	Description
degrees	The orientation of the label, 0 or 180.

- Code

```
- (void)cpc1Turn:(NSInteger)degrees;
```

### 3.80 specifies what occurs when the user presses the feed button

- Description

specifies what occurs when the user presses the feed button. Paper is fed to mark or gap as described above. This is the default behavior.

- Code

```
- (void)cpc1OnFeed_Feed;
```

### 3.81 specifies what occurs when the user presses the feed button

- Description

specifies what occurs when the user presses the feed button. The last label printed is printed again.

- Note

If no label has been printed since power on, no motion occurs.

- Code

```
- (void)cpc1OnFeed_Reprint;
```

## 3.82 specifies what occurs when the user presses the feed button

- Description

specifies what occurs when the user presses the feed button. The key press is ignored, and no motion occurs.

- Code

```
- (void)cpc1onFeed_Ignore;
```

## 3.83 Paper learning instructions

- Description

Paper learning instructions. If the printer shows that the paper is out of paper, send the instruction in the state of closing the paper

- Code

```
- (void)setPaperLearn;
```

## 3.84 Set the QRCode version

- Description

Set the version of QRCode, the range of version is 0-25, when it is equal to 0, it means that the program uses automatic; 1-25, it means that the size set now, Need corresponding models and firmware support

- Paramater

Paramater	Description
density	0-25

- Code

```
- (void)setQRCodeVersion:(NSInteger)version;
```

## 3.85 Get the QRCode version

- Description

Get the QRCode version

- Code

```
- (void)getQRCodeVersion;
```

## 3.86 Set Character CodePage

- Description

Set Character CodePage

- Paramater

Paramater	Description
codepage	"USA" "FRANCE" "GERMANY" "UK" "DENMARK" "SWEDEN" "ITALY" "SPAIN" "JAPAN-S" "NORWAY" "DENMARK II" "SPAIN II" "LATIN9" "KOREA" "SLOVENIA" "CHINA" "BIG5" "CP874" "CP850" "CP437" "CP860" "CP863" "CP865" "CP866" "CP852" "CP858" "CP857" "CP737" "CP720" "CP775" "CP855" "CP862" "CP864" "ISO8859-6" "ISO8859-8" "ISO8859-9" "ISO8859-15" "WPC1252" "WPC1250" "WPC1251" "WPC1252" "WPC1254" "WPC1255" "WPC1256" "ISO8859-1" "ISO8859-2" "ISO8859-3" "ISO8859-4" "ISO8859-5" "TIS11" "TIS18"

- Code

```
- (void)cpc1SetCharacterCodePage:(NSString *_Nonnull)codepage;
```

## 3.87 Arabic transform

- Description

Arabic transform

- Paramater

Paramater	Description
function	48: close; 49: Sort by word; 50: Phrase sort; 51: Sort by complete rules

- Code

```
- (void)cpc1SetArabicTransformFunction:(NSInteger)function;
```

## 3.88 get Arabic status

- Description

get Arabic status:00 00: close; 01 00: Sort by word; 02 00: Phrase sort; 03 00: Sort by complete rules

- Code

```
- (void)cpc1GetArabicTransformStatus;
```

## 3.89 Thai transform status

- Description

Thai transform status

- Paramater

Paramater	Description
status	48: close 49:open

- Code

```
- (void)cpc1SetThaiTransformStatus:(NSInteger)status;
```

## 3.90 Set Vietnamese Transform

- Description

Set Vietnamese Transform

- Paramater

Paramater	Description
function	48: close; 49: ASCII; 50: UTF-8

- Code

```
- (void)cpc1SetVietnameseTransformFunction:(NSInteger)function;
```

## 3.91 get Vietnamese status

- Description

get Vietnamese status:00 00: close; 01 00: ASCII; 02 00: UTF-8;

- Code

```
- (void)cpc1GetVietnameseTransformStatus;
```

## 3.92 update firmware.

- Description

update firmware.

- Paramater

Paramater	Description
data	the firmware data.

- Code

```
- (void)updatePrinterFirmwarewithData:(NSData *_Nonnull)data;
```