Android CPCL SDK Manual

1. SDK Load AND USED

1.1 Load the SDK jar package of our printer in Android studio.
Compile files('libs/CPCL_V1.01.01PRO.jar')
1.2 The interfaces we use are all static in the PrinterHelper class and can be called directly.

2. Connection Function

2.1 Bluetooth Connection

public static int **PortOpenBT**(String mac)

Parameter：
mac：Bluetooth address

Return：
0：connection success, -1：connection failure, -2：Bluetooth address error,
-3：printer mismatches with SDK (handshake command error).

Example：
if(PrinterHelper .PortOpenBT(Bluetooth address)==0){
//connection succeeded
}

2.2 WIFI Connection

public static int **PortOpenWIFI**(String printIP)

Parameter：
printIP： Printer IP address (see self-test page)

Return：
0：connection success, -1：connection failure, -2：address format error,
-3：printer mismatches with SDK (handshake command error).

Example：
if(PrinterHelper .PortOpenWIFI(IP)==0){
//connection succeeded
}

2.3 Disconnection

int **PortClose**()

Parameter：

None

Return：

=0：connection success, -1 connection failure

Example：

PrinterHelper .PortClose()

2.4 Whether is connected

boolean **IsOpened**()

Parameter：

None

Return：

true：connected, false：unconnected

Example：

PrinterHelper .IsOpened()

3 Label Print Mode Command

3.1 Page label start

int **printAreaSize**(String **offset**,String **Horizontal**, String **Vertical**,String **height**,String **qty**)

Parameter：

offset： The horizontal offset for the entire label. This value causes all fields to be offset horizontally by the specified number of UNITS.

Horizontal： dpi in horizontal direction（According to the printer's dpi setting, 200dpi printer: 8px=1mm）

Vertical： dpi in vertical direction（Ibid）

Height： height of the whole label （Unit: px）

Qty： times of printing

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()//For positioning of printing label(Exclude continuous paper)
PrinterHelper .Print()
```

3.2 Page label end

Note： except for line mode

int **Print**()

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()//For positioning of printing label(Exclude continuous paper)
PrinterHelper .Print()
```

3.3 Encoding

int **Encoding**(String **code**):

Parameter：

Code：encoding

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Encoding(GB18030)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”Simple Chinese”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.4 Paper feed to next sheet of label

Note：only effective together with PRINT, the command is only effective for the label.

int **Form**()

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()//For positioning of printing label(Exclude continuous paper)
PrinterHelper .Print()
```

3.5 Note

int **Note**(String **note**)

Parameter：

note：the content of note

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Note(“Note：”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()

3.6 Terminate

int **Abort**()

Return：

>0：normal, and vise versa.

3.7 Text print

Note：there are three ports for text print: **PrintTextCPCL** 、**Text**、**PrintCodepageTextCPCL**

PrintTextCPCL For Chinese firmware。

PrintCodepageTextCPCL For English firmware。

Text Both firmware can be used。

(1)int **PrintTextCPCL**(String **command**,int **font** ,String **x**,String **y**,String **data**,int **n**,boolean **Iscenter**,int **width**)

Parameter：

Command：the direction of text, totally 2 kinds：

PrinterHelper.TEXT：horizontal

PrinterHelper.TEXT270：vertical

Font：size of font dot matrix(unit:px)

1：print traditional Chinese font (24x24 or 12x24, depends on Chinese and English)

16：16x16 or 8x16, depends on Chinese and English

24：24x24 or 12x24, depends on Chinese and English

32：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

X：x-coordinate of start point

Y：y-coordinate of start point

Data：text data

N：special effect of font

Bit of N	3	2	1	0
Bold	-	-	-	1
Inverse	-	-	1	-
Double width	-	1	-	-
Double height	1	-	-	-

Iscenter：whether center

True：yes

False：no

Width：the centering range (Effective when Iscenter=true) Unit：px

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)
//15 indicates with all the special effects
PrinterHelper .PrintTextCPCL(PrinterHelper.TEXT,24,”10”,”10”,”TEXT”,15,false,0)
PrinterHelper .Form()
```

PrinterHelper .Print()

(2) int **Text**(String **command**,String **font**,String **size** ,String **x**,String **y**,String **data**)

Parameter：

Command：the direction of text, totally 4 kinds：

PrinterHelper.TEXT：horizontal

PrinterHelper.TEXT90：rotate 90° CCW

PrinterHelper.TEXT180：rotate 180° CCW

PrinterHelper.TEXT270：rotate 270° CCW

font：size of font dot matrix:(unit:px)

Note: English firmware only supports (0 and 1).

0：12x24

1：12x24 (print traditional Chinese)The font in English mode becomes (9x17)

2：8x16

3：20x20

4：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

7：24x24 or 12x24, depends on Chinese and English

8：24x24 or 12x24, depends on Chinese and English

20：16x16 or 8x16, depends on Chinese and English

24：24x24 or 12x24, depends on Chinese and English

55：16x16 or 8x16, depends on Chinese and English

Others default 24x24 or 12x24,depends on Chinese and English

size：size of font (This function is being blocked, parameter transmits 0)

X：x-coordinate of start point(unit:px)

Y：y-coordinate of start point(unit:px)

Data：text data

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)

PrinterHelper .SetBold(“1”)//Make the following fonts bold (if unnecessary, no need to add)

PrinterHelper .SetMag(“2”,”2”)//Make the following fonts magnified (if unnecessary, no need to add)

PrinterHelper .Text(PrinterHelper.TEXT,”7”,”0”,”10”,”10”,”TEXT”)

PrinterHelper .SetMag(“1”,”1”)//Turn off magnification

PrinterHelper .SetBold(“0”)//Turn off bold

PrinterHelper .Form()

PrinterHelper .Print()

(3)int **PrintCodepageTextCPCL**(String **command**,int **font** ,String **x**,String **y**,String **data**,int **n**)

Parameter：

Command： the direction of text, totally 2 kinds：

PrinterHelper.TEXT： horizontal

PrinterHelper.TEXT270： vertical

Font：size of font dot matrix (unit:px)

0：12x24

1：9x17

X：x-coordinate of start point

Y：y-coordinate of start point

Data：text data

N：special effect of font

Bit of N	3	2	1	0
Bold	-	-	-	1
Inverse	-	-	1	-
Double width	-	1	-	-
Double height	1	-	-	-

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)
PrinterHelper.Country(“ISO8859-1”);//set printer codepage
PrinterHelper.LanguageEncode=”iso8859-1”;//set SDK codepage
//15 indicates with all the special effects
PrinterHelper .PrintCodepageTextCPCL(PrinterHelper.TEXT,24,”10”,”10”,”TEXT”,15)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.8 Count

int **Count**(String **ml**)

Parameter：

ml：next added or minus value

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”2”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”10086”)
PrinterHelper .Count(“10”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”10000”)
PrinterHelper .Count(”-10”)
PrinterHelper .Form()
PrinterHelper .Print()

3.9 Set magnification times of character width and height

Note: remember to turn off after use.

int **SetMag**(String **width**,String **height**)

Parameter：

Width：magnification times of width
Height：magnification times of height

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)
PrinterHelper .SetBold(“1”)//Make the following fonts bold (if unnecessary, no need to add)
PrinterHelper .SetMag(“2”,”2”)//Make the following fonts magnified (if unnecessary, no need to add)
PrinterHelper .Text(PrinterHelper.TEXT,”7”,”0”,”10”,”10”,”TEXT”)
PrinterHelper .SetMag(“1”,”1”)//Turn off magnification
PrinterHelper .SetBold(“0”)//Turn off bold
PrinterHelper .Form()
PrinterHelper .Print()

3.10 Alignment

int **Align**(String **align**)

Parameter：

Align：there are three alignments:

PrinterHelper.CENTER：center

PrinterHelper.LEFT：left alignment

PrinterHelper.RIGHT：right alignment

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Align(PrinterHelper.CENTER)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.11 Bar code

int **Barcode**(String **command**,String **type**,String **width**, String **ratio**,String **height**,String **x**,String **y**,boolean **undertext**,String **number**,String **size**,String **offset**, String **data**)

Parameter：

Command：the direction of bar code:

PrinterHelper.BARCODE：horizontal direction

PrinterHelper.VBARCODE：vertical direction

Type：type of bar code:

PrinterHelper.UPCA,PrinterHelper.UPCA2,
PrinterHelper.UPCA5,PrinterHelper.UPCE,
PrinterHelper.UPCE2,PrinterHelper.UPCE5 ,
PrinterHelper.EAN13,PrinterHelper.EAN132,
PrinterHelper.EAN135,PrinterHelper.EAN8,
PrinterHelper.EAN82,PrinterHelper.EAN85,
PrinterHelper.code39, PrinterHelper.code39C,
PrinterHelper.F39,PrinterHelper.F39C,
PrinterHelper.code93,PrinterHelper.I2OF5,
PrinterHelper.I2OF5C,PrinterHelper.I2OF5G,

PrinterHelper.code128,PrinterHelper.UCCEAN128,
PrinterHelper.CODABAR,PrinterHelper.CODABAR16,
PrinterHelper.MSI, PrinterHelper.MSI10,
PrinterHelper.MSI1010,PrinterHelper.MSI1110,
PrinterHelper.POSTNET,PrinterHelper.FIM

Width：the unit width of narrow bar

Ratio：the ratio of wide bar and narrow bar, as below:

0 = 1.5 : 1	20 = 2.0:1	26 = 2.6:1
1 = 2.0 : 1	21 = 2.1:1	27 = 2.7:1
2 = 2.5 : 1	22 = 2.2:1	28 = 2.8:1
3 = 3.0 : 1	23 = 2.3:1	29 = 2.9:1
4 = 3.5 : 1	24 = 2.4:1	30 = 3.0:1
	25 = 2.5:1	

Height：height of bar code

X：start x-coordinate of bar code(unit:px)

Y：start y-coordinate of bar code(unit:px)

Undertext：whether the data below bar code is visible. Ture: visible, false: invisible.

Number：type of font

Size：size of font

Offset：distance between bar code and text

Data：data of bar code

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Barcode(PrinterHelper.BARCODE,PrinterHelper.128,”1”,”1”,”50”,”0”,”0”,
true,”7”,”0”,”5”,”123456789”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.12 Print QR code

int **PrintQR**(String **command**, String **x**, String **y**, String **M** , String **U**, String **data**)

Parameter：

Command：print direction：

PrinterHelper.BARCODE：horizontal direction

PrinterHelper.VBARCODE：vertical direction

X：start x-coordinate of QR code

Y：start y-coordinate of QR code

M：Type of QR: type 1 and type 2; type 2 has added particular symbols and provide extra functions.

U：unit width/unit height of module

Range is from 1 to 32, default is 6.

Data：data of QR code

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .PrintQR(PrinterHelper.BARCODE, “0”, “0”, “2” , “6”, “123ABC” )
PrinterHelper .Form()
PrinterHelper .Print()
```

3.13 Print PDF417code

int **PrintPDF417**(String **command**, String **x**, String **y**, String **XD** , String **YD**, String **C**, String **S** , String **data**)

Parameter：

Command：print direction：

PrinterHelper.BARCODE：horizontal direction

PrinterHelper.VBARCODE：vertical direction

X：start x-coordinate of PDF417 code

Y：start y-coordinate of PDF417 code

XD：unit width of narrowest element, range is from 1 to 32, default is 2.

YD：unit height of narrowest element, range is from 1 to 32, default is 6.

C： number of column that used, data column excludes start/stop character and left/right index. Range is from 1 to 30, default is 3.

S： Security level indicates the maximum value and/or calibration of error to detect. Range is from 0 to 8, default is 1.

Data：data of PDF417 code

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .PrintPDF417(PrinterHelper.BARCODE, “0”, “0”, “2” , “6”,
“3”,”1”,“123ABC” )
PrinterHelper .Form()
PrinterHelper .Print()
```

3.14 Draw rectangular frame

int **Box**(String **X0**,String **Y0**,String **X1**,String **Y1**,String **width**)

Parameter：

X0：x-coordinate of top left corner (unit:px)

Y0：y-coordinate of top left corner (unit:px)

X1：x-coordinate of top right corner (unit:px)

Y1：y-coordinate of top right corner (unit:px)

Width：unit width of the line

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”200”,”1”)
PrinterHelper .Box(“0”,”0”,”150”,”150”,”1”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.15 Draw straight line

int **Line**(String **X0**,String **Y0**,String **X1**,String **Y1**,String **width**)

Parameter：

X0：start x-coordinate (unit:px)

Y0：start y-coordinate (unit:px)

X1：end x-coordinate (unit:px)

Y1：end y-coordinate (unit:px)

Width：unit width of the line

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”200”,”1”)
PrinterHelper .Line(“10”,”10”,”150”,”10”,”1”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.16 Inverse line

int **InverseLine**(String **X0**,String **Y0**,String **X1**,String **Y1**,String **width**)

Parameter：

X0：start x-coordinate (unit:px)

Y0：start y-coordinate (unit:px)

X1：end x-coordinate (unit:px)

Y1：end y-coordinate (unit:px)

Width：unit width of the line

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”200”,”1”)

PrinterHelper .InverseLine(“10”,”10”,”150”,”10”,”1”)

PrinterHelper .Form()

PrinterHelper .Print()

3.17 Print image

Note: there are two connectors for printing image.

1) int **Expanded**(String **x**, String **y**, String **url**)

Parameter：

X：start x-coordinate of image (unit:px)

Y：start y-coordinate of image (unit:px)

Url：path of image

Return：

>0: normal

=-1: the width or the height of image exceeds the range of printer.

2) int **Expanded**(String **x**, String **y**, Bitmap **bmap**,int **type**,int **light**)

Parameter：

X：start x-coordinate of image (unit:px)

Y：start y-coordinate of image (unit:px)

bmap：the object of Bitmap of image

type：type of printing image 0：black and white；1：halftone

light: brightness (default 0).

Return：

>0: normal

=-1: the width or the height of image exceeds the range of printer.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)

PrinterHelper .Expanded(“0”,”0”,url)

PrinterHelper .Form()

PrinterHelper .Print()

3.18 Print density

int **Contrast**(String **contrast**)

Parameter：

Contrast： type of density, totally 4 kinds:

Default =0

Medium =1

Dark =2

Very dark =3

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Contrast(“1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.19 Print speed

int **Speed**(String **speed**)

Parameter：

speed : 5 types: from 0 to 5, the speed is increasing; 5 is the fastest speed in ideal state.

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Speed(“4”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.20 Set the character spacing

int **SetSp**(String **setsp**)

Parameter：

Setsp： spacing

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .SetSp(1)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”50”,”TEXT”)
PrinterHelper .SetSp(5)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”90”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.21 Print after paper feed

int **Prefeed**(String **prefeed**)

Parameter：

Prefeed： the distance of paper feed. (unit:px)

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Prefeed(“40”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.22 Paper feed for a distance after printing

int **Postfeed**(String **posfeed**)

Parameter：

Posfeed： the distance of paper feed, unit: px

Return：

>0： normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Postfeed(“40”)
PrinterHelper .Print()
```

Note: It should be after FORM command

3.23 Set the beeping time of beeper

int **Beep**(String **beep**)

Parameter：

beep： the lasting time of beeper, (1/8) second is the specified unit

Return：

>0： normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Beep(“16”)
PrinterHelper .Form()
PrinterHelper .Print()

3.24 Underline

int **Underline**(boolean **UL**)

Parameter：

UL：true：add underline, false：cancel underline

Return：

>0： normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Underline(true)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()

3.25 Time delay after printing a page of label

int **Wait**(String **wait**)

Parameter：

Wait：unit of delay time：1/8 second

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Wait(“80”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.26 Print width

int **PageWidth**(String **pw**)

Parameter：

Pw：specify page width (unit:px)

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .PageWidth(“100”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.27 Set line spacing in page mode

int **SetIf**(String **SF**)

Parameter：

SF：spacing

Return：

>0：normal, and vise versa.

Note: the effect is same to SETLP, if both coexist, subject to the value of Parameter set at last.

3.28 Set the character font, character size and line spacing

int **SetIp**(String **font**,String **size**,String **spacing**)

Parameter：

Font：character mode

Size：size

Spacing：character height

Return：

>0：normal, and vise versa.

3.29 Write data

int **WriteData**(byte[] **bData**)

Parameter：

bData：data that requires to send to the printer

Return：

>0：normal, and vise versa.

3.30 Read data

byte[] **ReadData**(int **second**)

Parameter：

second：time of read (unit：second).

Return：

Read the data.

3.31 Set bold

int **SetBold**(String **bold**)

Parameter：

bold： value of bold ((range：1-5)

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”500”,”1”)

PrinterHelper .SetBold(“1”)//Make the following fonts bold (if unnecessary, no need to add)

PrinterHelper .SetMag(“2”,”2”)//Make the following fonts magnified (if unnecessary, no need to add)

PrinterHelper .Text(PrinterHelper.TEXT,”7”,”0”,”10”,”10”,”TEXT”)

PrinterHelper .SetMag(“1”,”1”)//Turn off magnification

PrinterHelper .SetBold(“0”)//Turn off bold

PrinterHelper .Form()

PrinterHelper .Print()

Note: remember to turn off bold after use.

3.32 Get the printer status

int **getstatus**()

Parameter：

None

Return：

0：printer is ready

1：printer is printing

2：printer is out of paper

6：printer cover is open

Others: error

3.33 Text line wrap

Note：The two interfaces for this function are **AutLine** and **AutLine2**. The former cannot use Thai. The latter printer firmware must be above V1.01.40.01 and the number of text bytes must not exceed 1024. The excess is automatically ignored(NO Support 4 Inch Printer).

1）int **AutLine**(String **x**,String **y**,int **width**,int **size**,boolean **isbole**,boolean **isdouble**,String **str**)

Parameter：

X：start x-coordinate of text (unit:px)

Y：start y-coordinate of text (unit:px)

Width：print width of one line (unit:px)

Size：size of font

3：20x16 or 10x20, depends on Chinese and English

4：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

8：24x24 or 12x24, depends on Chinese and English

55：16x16 or 8x16, depends on Chinese and English

isbole：bold

true：bold

false：not bold

isdouble：double the font

true：magnify

false：not magnify

Str：text to print

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)

PrinterHelper .AutLine(“0”,”0”,100,4,true,true”Text”)

PrinterHelper .Form()

PrinterHelper .Print()

2） int **AutLine2**(String **x**,String **y**,int **width**,int **size**,boolean **isbole**,boolean **isdouble**,String **str**)

Parameter：

X： start x-coordinate of text

Y： start y-coordinate of text

Width： print width of one line (unit: 8=1mm)

Size： size of font

0：24x24 or 12x24, depends on Chinese and English. (Thai: 24x48)

1：7x19 (English), 24x24 (Traditional)

3：20x20 or 10x20, depends on Chinese and English

4：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

8：24x24 or 12x24, depends on Chinese and English

55： 16x16 or 8x16, depends on Chinese and English

isbole： bold

true： bold

false： not bold

isdouble： double the font

true： magnify

false： not magnify

Str： text to print

Return：

>0：normal, and vise versa.

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)

PrinterHelper .AutLine2(“0”,”0”,100,4,true,true”Text”)

PrinterHelper .Form()

PrinterHelper .Print()

3.34 Text showed center in the textbox

int **AutCenter**(String **command**, String **x**,String **y**,int **width**,int **size**,String **str**)

Parameter：

Command： the direction of text, totally 2 kinds:

PrinterHelper.TEXT：horizontal

PrinterHelper.TEXT270：vertical

X： start x-coordinate of textbox

Y： start y-coordinate of textbox

Width： width of textbox (Unit：8=1mm)

Size： size of font

3：20x20 or 10x20, depends on Chinese and English

4：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

8：24x24 or 12x24, depends on Chinese and English

55：16x16 or 8x16, depends on Chinese and English

Str： text to print

Return：

>0：normal, and vise versa.

Example：

```
PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .AutCenter(PrinterHelper.TEXT,“0”,”0”,100,4,”Text”)
PrinterHelper .Form()
PrinterHelper .Print()
```

3.35 Set paper type of printer

1）void **papertype_CPCL**(int **page**)

page	**0**	**1**	**2**	**3**	**4**	**5**
A300	**Receipt**	**Lebal**	**Black BM**	**Before BM**	**3 Inch BM**	**2 Inch BM**
T300	**Receipt**	**3 Inch BM**	**2 Inch BM**	**Black BM**	**Lebal**	**Before BM**

0

2）void **papertype_CPCL_TWO**(int **page**)

Note： This interface is applicable to A300 V1.01.38.01 and T300 V1.0.11 and above.

Parameter： page

PrinterHelper .PAGE_STYPE_RECEIPT ： Receipt.

PrinterHelper .PAGE_STYPE_LABEL： Lebal.

PrinterHelper .PAGE_STYPE_LEFT_TOP_BM： 3 Inch left top BM.

PrinterHelper .PAGE_STYPE_LEFT_BEL_BM： 3 Inch left below BM.

PrinterHelper .PAGE_STYPE_RIGHT_TOP_BM： right top BM.

PrinterHelper .PAGE_STYPE_RIGHT_BEL_BM： right below BM.

PrinterHelper .PAGE_STYPE_CENTRAL_TOP_BM： Middle top BM.

PrinterHelper .PAGE_STYPE_CENTRAL_BEL_BM： Middle below BM.

PrinterHelper .PAGE_STYPE_2INCH_LEFT_TOP_BM： 2 Inch left top BM.

PrinterHelper .PAGE_STYPE_2INCH_LEFT_BEL_BM： 2 Inch left below.

3）**setPaperFourInch**(int type)

Note: This connector is used to set the paper type for 4-inch models.

Parameter： type：

PrinterHelper .Paper_FourInch_Receipt ： Receipt.

PrinterHelper .Paper_FourInch_Label ： Lebal.

PrinterHelper .Paper_FourInch_TWO_BM ： 2 Inch BM.

PrinterHelper .Paper_FourInch_THREE_BM ： 3 Inch BM.

PrinterHelper .Paper_FourInch_FOUR_BM ： 4 Inch BM.

3.36 Self-test page

void **setSelf**()

Parameter

None

Return：

None

Example：

PrinterHelper .setSelf()//Pinter will print some of its parameter.

3.37 Rotate 180° to print

int **PoPrint**()

Parameter：

None

Return：

>0：normal, and vise versa.

Example：

HPRTPriterHelper.PoPrint()

Example：

PrinterHelper .printAreaSize(“0”,”200”,”200”,”100”,”1”)
PrinterHelper .Text(PrinterHelper.TEXT,”4”,”0”,”0”,”0”,”TEXT”)
PrinterHelper .Form()//For positioning of printing label(Exclude continuous paper)
PrinterHelper .PoPrint()

Note：

It cannot be used with Print() at the same time.

3.38 ON/OFF getting the status when print completed

void **openEndStatic**(boolean **isopen**)

Parameter:

isopen

true：on
false：off

Return:

None

Example:

```
PrinterHelper.openEndStatic(true);//On
PrinterHelper.PrintData(data);//Printer is printing
int endStatus = PrinterHelper.getEndStatus(16);//Get the print status
PrinterHelper.openEndStatic(false);//Off
```

Note:

It requires to use with getEndStatus(), and remember to turn off after use (printer firmware version should be aboveV1.01.27.01).

3.39 Get the status when print completed

int **getEndStatus**(int **time**)

Parameter:

time：timeout time of getting the status (unit: second)

Return:

0：print success

1：print failure (out of paper)

2：print failure (cover opened)

-1：getting status timeout

Example:

```
PrinterHelper.openEndStatic(true);//On
PrinterHelper.PrintData(data);//Printer is printing
int endStatus = PrinterHelper.getEndStatus(16);//Get the print status
PrinterHelper.openEndStatic(false);//Off
```

Note:

It requires to use with openEndStatic(boolean isopen (printer firmware version should be aboveV1.01.27.01.).

3.40 Printer go back

int **ReverseFeed**(int **feed**)

Parameter:

feed：Fallback distance. (unit/row, range: 1-255).

Return:

>0：normal, and vise versa.

Example:

PrinterHelper.ReverseFeed(50);

3.41 Print Background

int **PrintBackground**(int x,int y,int size,int background,String data)

Parameter:

x：X-axis（px）。

y：Y-axis（px）。

size：font size。

55：16（px）。

24：24（px）。

56：32（px）。

other：24（px）。

background：Background blackness（0-255）。

data：data。

Return:

>0：normal, and vise versa.

Example:

```
PrinterHelper.printAreaSize("0","200","200","500","1");
PrinterHelper.SetMag("8","8");//Font size up to 8 times
PrinterHelper.PrintBackground(0,0,56,150,”A508”);
PrinterHelper.SetMag("1","1");//Restore font size
PrinterHelper.Print();
```

3.42 Get SN

String **getPrintSN**()

Parameter:

None

Return:

Printer SN

Example:

PrinterHelper.getPrintSN();

3.43 Set Codepage

int **Country**(String codepage)

Parameter:

codepage:

ISO8859-1 ： Western European.

PrinterHelper.LanguageEncode=”iso8859-1”

ISO8859-2 ： Latin（2）

PrinterHelper.LanguageEncode=”iso8859-2”

ISO8859-3 ： Latin（3）

PrinterHelper.LanguageEncode=”iso8859-3”

ISO8859-4 ： Baltic

PrinterHelper.LanguageEncode=”iso8859-4”

ISO8859-5 ： Cyrillic

PrinterHelper.LanguageEncode=”iso8859-5”

ISO8859-6 ： Arabic

PrinterHelper.LanguageEncode=”iso8859-6”

ISO8859-8 ： Hebrew

PrinterHelper.LanguageEncode=”iso8859-8”

ISO8859-9 ： Turkish

PrinterHelper.LanguageEncode=”iso8859-9”

ISO8859-15 ： Latin（9）

PrinterHelper.LanguageEncode=”iso8859-15”

WPC1253 ： Greek（windows）

PrinterHelper.LanguageEncode=”iso8859-11”

KU42：Greek（ISO）

PrinterHelper.LanguageEncode=”iso8859-7”

TIS18：Thai

PrinterHelper.LanguageEncode=”windows-874”

Khemr:

PrinterHelper.LanguageEncode=”UnicodeBigUnmarked”

Return:

>0：normal, and vise versa.

Example:

```
PrinterHelper.printAreaSize("0","200","200","500","1");
PrinterHelper.Country(“ISO8859-1”);
PrinterHelper.LanguageEncode=”iso8859-1”;
PrinterHelper .PrintCodepageTextCPCL(PrinterHelper.TEXT,0,”10”,”10”,”TEXT”,15)
PrinterHelper .Print()
```

3.44 Set QRcode Version

Note: This interface is used to set the version number of the QR code. After setting, it will not change the size due to the content of the QR code.
Only some models and versions are supported (you can ask customer service).

int **setQRcodeVersion**(int version)

parameter:

version：Version number (range 0-40)

The QR version defaults to 00. When the QR version is 00, the QR code has the same effect as the old version, and the width and height will vary with the amount of data.The version number is set to have a range requirement for the data amount of the two-dimensional code, and the out-of-range QR code is not printed.

See the end of Table 1-1.

Return:

>0：normal。

-1：disconnection。

-2：parameter error。

example:

PrinterHelper .setQRcodeVersion(20);

3.45 Get QRcode Version

String **getQRcodeVersion**()

parameter:

none

Return:

QRcode version

example:

PrinterHelper .getQRcodeVersion();

3.46 Close Khemr

int **setKhemrEnd**()

parameter:

无。

Return:

大于 0：正常。

-1：断开连接。

example:

PrinterHelper .setKhemrEnd();

3.47 Get the height of text wrap

int **getAutLineHeight**(String **x**,String **y**,int **width**,int **size**,boolean **isbole**,boolean **isdouble**,String **str**)

Parameter：

X： start x-coordinate of text (unit:px)

Y： start y-coordinate of text (unit:px)

Width： print width of one line (unit:px)

Size： size of font

3：20x16 or 10x20, depends on Chinese and English

4：32x32 or 16x32, magnifies the width and height of ID3 font by 2 times

8：24x24 or 12x24, depends on Chinese and English

55：16x16 or 8x16, depends on Chinese and English

isbole： bold

true：bold

false：not bold

isdouble： double the font

true：magnify

false：not magnify

Str： text to print

Return：

The total height of the printed text. (Unit: PX)

Example：

int textHeight=PrinterHelper .getAutLineHeight(“0”,”0”,100,4,true,true”Text”)

//textHeight：The total height of the printed text.

4. Line print mode

Note: Line print mode applies to print the receipt. It can only print text, when it comes to image and bar code, it requires to combine with label mode and line mode.

4.1 Set font type in line print mode

int **Setlp**(String **font**,String **size**,String **spacing**)

Parameter：

font：type of font (Default：5)

size：size of font

spacing：height of line

Return：

>0 send success

Example：

PrinterHelper.Setlp(“5”,”2”,”46”)

PrinterHelper.PrintData(“text to print\r\n”)

4.2 Print text in line print mode

int **PrintData**(String **str**)

Parameter：

str：content of text (ends with \r\n)

Return：

>0 send success

Example：

PrinterHelper.Setlp(“5”,”2”,”46”)

PrinterHelper.PrintData(“text to print\r\n”)

4.3 Bold font in line print mode

int **RowSetBold**(String **bold**)

Parameter：

bold： multiple of bold

Return：

>0 send success

Example：

PrinterHelper.Setlp(“5”,”2”,”46”)

PrinterHelper.RowSetBold(“2”)

PrinterHelper.PrintData(“text to print\r\n”)

PrinterHelper.RowSetBold(“1”)//Note to turn off bold in case of affecting the following print text

4.4 Set x-coordinate of line mode

int **RowSetX**(String **X**)

Note: It should be placed before Setlp function.

Parameter：

X: x-coordinate

Return：

>0: send success

Example：

```
PrinterHelper.RowSetX("200");
PrinterHelper.Setlp("5","2","32");
PrinterHelper.RowSetBold("2");
PrinterHelper.PrintData("text to print\r\n");
PrinterHelper.RowSetBold("1");
```