

# EscCommand API

Package: com.gprinter.command

Name: EscCommand.java

## Note

Details: All of Gp58 series printers resolution is 203dpi, 1mm is for 8 dots, actual print width is 48mm for 384 dots. hor\_motion\_unit is for 1dot and ver\_motion\_unit is for 0.5 dot as default, set horizontal motion units using by addSetHorAndVerMotionUnits().

Simplified/Traditional Chinese: 24\*24 dots

Font A: 12\*24 dots

Font B: 9\*17 dots

## ● Print commands

### void addHorTab()

**Function:** Add horizontal tab

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual HT

### void addText(String text)

**Function:** Add text

**Parameter:** String text

**Return value:** None

**Related command:** None

### void addText(String text, String charsetName)

**Function:** Add text

**Parameter:** Text: String text

charsetName: Character set type, GBK or GB2312 or BIG5

**Return value:** None

**Related command:** None

### void addPrintAndLineFeed()

**Function:** print and line feed

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual LF

### void addGeneratePluseAtRealtime(FOOT foot, byte t)

**Function:** Generate Pulse at real-time

**Parameter:** enum FOOT {

F2 (0),

F5 (1);

}

foot : Select Drawer kick-out connector pin 2 or pin 5.

t: 1<=t<=8 Pulse ON time is (t x 100ms), and OFF time is (t x 100ms)

**Return value:** None

**Related command:** GP-58mm programming manual DLE DC4 n m t

**void** addSetRightSideCharacterSpacing(**byte** n)

**Function:** Set right side character spacing

**Parameter:** n: right side spacing is n\* hor\_motion\_unit dots

**Return value:** Error status

**Related command:** GP-58mm programming manual   ESC SP n

**void** addSelectPrintModes(FONT font,  
    ENABLE emphasized,  
    ENABLE doubleheight,  
    ENABLE doublewidth,  
    ENABLE underline)

**Function:** Set print mode

**Parameter:** emphasized : **Emphasized mode selected or not selected.**

doubleheight: **Double-height mode selected or not selected.**

doublewidth: **Double-width mode selected or not selected.**

underline: **Underline mode selected or not selected.**

**Return value:** None

**Related command:** GP-58mm programming manual   ESC ! n

**void** addSetAbsolutePrintPosition(**short** n)

**Function:** Set absolute print position

**Parameter:** n: the distance from the current print position to the beginning of the line: n\* hor\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual   ESC \$ nl nh

**void** addTurnUnderlineModeOnOrOff(UNDERLINE\_MODE underline);

**Function:** Turn underline mode on/off

**Parameter:** **enum** UNDERLINE\_MODE {

    OFF(0), // Turn underline off

    UNDERLINE\_1DOT(1), // Turn underline on (1 dot thick)

    UNDERLINE\_2DOT(2); // Turn underline on (2 dots thick)

}

**Return value:** None

**Related command:** GP-58mm programming manual   ESC – n

**void** addSelectDefaultLineSpacing ();

**Function:** Set default line spacing to 3.75mm, approximately 30dots

**Parameter:** **None**

**Return value:** None

**Related command:** GP-58mm programming manual   ESC 2

**void** addSetLineSpacing(**byte** n)

**Function:** Set line spacing

**Parameter:** n: the line spacing as n\* ver\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual   ESC 3 n

## **void** addInitializePrinter()

**Function:** Initialize printer

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual    ESC @

## **void** addTurnEmphasizedModeOnOrOff(ENABLE enabel)

**Function:** Turn emphasized mode on/off

**Parameter:** **enum** ENABLE {  
    OFF(0),    Turn emphasized mode off  
    ON(1);    Turn emphasized mode on  
}

**Return value:** None

**Related command:** GP-58mm programming manual    ESC n

## **void** addTurnDoubleStrikeOnOrOff(ENABLE enabel)

**Function:** Turn double-strike mode on/off

**Parameter:** **enum** ENABLE {  
    OFF(0),    Turn double-strike mode off  
    ON(1);    Turn double-strike mode on  
}

**Return value:** None

**Related command:** GP-58mm programming manual    ESC E

## **void** addPrintAndFeedPaper(**byte** n)

**Function:** Print and feed paper

**Parameter:** n: feeds the paper as n\* ver\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual    ESC J n

## **void** addSelectCharacterFont(FONT font)

**Function:** Select character font 12×24 or 9×17

**Parameter:** **enum** FONT {  
    FONTA(0),    //12×24  
    FONTB(1);    // 9×17  
}

**Return value:** None

**Related command:** GP-58mm programming manual    ESC M n

## **void** addSelectInternationalCharacterSet(Character\_Set set)

**Function:** Select an international character set

**Parameter:** **enum** CHARACTER\_SET{  
    USA(0),            //USA  
    FRANCE(1),        //France  
    GERMANY(2),        //Germany  
    UK(3),            //U.K.  
    DENMARK\_I(4),     //Denmark I  
    SWEDEN(5),        // Sweden

```

    ITALY(6),          //Italy
    SPAIN_I(7),        //Spain I
    JAPAN(8),          //Japan
    NORWAY(9),         //Norway
    DENMARK_II(10),    //Denmark II
    SPAIN_II(11),      //Spain II
    LATIN_AMERICA(12), //Latin
    KOREAN(13),         //Korean
    SLOVENIA(14),       //Slovenia/Croatia
    CHINA(15);          //Chinese
}

```

**Return value:** None

**Related command:** GP-58mm programming manual    ESC R n

**void** addTurn90ClockWiseRotatin(ENABLE enabel)

**Function:** Turn 90° clockwise rotation mode on/off

**Parameter:** **enum** ENABLE {

```

    OFF(0),   Turn 90° clockwise rotation mode off
    ON(1);    Turn 90° clockwise rotation mode on
}

```

**Return value:** None

**Related command:** GP-58mm programming manual    ESC V n

**void** addSetRelativePrintPositon(**short** n)

**Function:** Set relative print position

**Parameter:** Set the print position based on from the current position to n dots

**Return value:** None

**Related command:** GP-58mm programming manual    ESC\ nL nH

**void** addSelectJustification(JUSTIFICATION just)

**Function:** Select justification

**Parameter:** **enum** JUSTIFICATION{

```

    LEFT(0),    // Left justification
    CENTER(1),  // Center justification
    RIGHT(2);   // Right justification
}

```

**Return value:** None

**Related command:** GP-58mm programming manual    ESC a n

**void** addPrintAndFeedLines(**byte** n)

**Function:** Print and feed n lines

**Parameter:** n : feed n lines \* line spacing

**Return value:** None

**Related command:** GP-58mm programming manual    ESC d n

**void** addGeneratePlus(FOOT foot,**byte** t1,**byte** t2)

**Function:** Generate pulse

**Parameter:** **enum** FOOT {

```

    F2(0),
    F5(1);

```

```

}
foot: Select Drawer kick-out connector pin
t1: the pulse ON time is (t1 x 2 ms)
t2: the pulse OFF time is (t2 x 2 ms)
Return value: None
Related command: GP-58mm programming manual ESC p m t1 t2

```

**public void** addSelectCodePage (CODEPAGE page)

**Function:** Select character code page. Need to disable Kanji character mode.

**Parameter:** **enum** CODEPAGE{

```

    PC437(0),
    KATAKANA(1),
    PC850(2),
    PC860(3),
    PC863(4),
    PC865(5),
    WEST_EUROPE(6),
    GREEK(7),
    HEBREW(8),
    EAST_EUROPE(9),
    IRAN(10),
    WPC1252(16),
    PC866(17),
    PC852(18),
    PC858(19),
    IRANII(20),
    LATVIAN(21),
    ARABIC(22),
    PT151(23),
    PC747(24),
    WPC1257(25),
    VIETNAM(27),
    PC864(28),
    PC1001(29),
    UYGUR(30),
    THAI(255),
}

```

**Return value:** None

**Related command:** GP-58mm programming manual ESC t n

**void** addTurnUpsideDownModeOnOrOff(ENABLE enable)

**Function:** Turn upside-down print mode on/off

**Parameter:** **enum** ENABLE {

```

    OFF(0), Turn upside-down print mode off
    ON(1); Turn upside-down print mode on
}

```

**Return value:** None

**Related command:** GP-58mm programming manual ESC { n

**void** addSetCharcterSize(WIDTH\_ZOOM width,HEIGHT\_ZOOM height)

**Function:** Select character size enlarged in Horizontal and Vertical direction

**Parameter:** 1-8 times

**Return value:** None

**Related command:** GP-58mm programming manual GS ! N

**void** addTurnReverseModeOnOrOff(ENABLE enable)

**Function:** Turn white/black reverse printing mode on/off

**Parameter:** **enum** ENABLE {  
    OFF(0), Turn white/black reverse printing mode off  
    ON(1); Turn white/black reverse printing mode on  
}

**Return value:** None

**Related command:** GP-58mm programming manual GS B n

**void** addSelectPrintingPositionForHRICharacters (HRI\_POSITION position)

**Function:** Select print position for HRI characters (HRI indicates Human Readable Interpretation)

**Parameter:** **enum** HRI\_POSITION{  
    NO\_PRINT(0), // Not printed  
    ABOVE(1), // Above the bar code  
    BELOW(2), // Below the bar code  
    ABOVE\_AND\_BELOW(3); // Both above and below the bar code  
}

**Return value:** None

**Related command:** GP-58mm programming manual GS H n

**void** addSetLeftMargin(**short** n)

**Function:** Set left margin

**Parameter:** n: left margin as n \*hor\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual GS L nL nH

**void** addSetHorAndVerMotionUnits(**byte** x,**byte** y)

**Function:** Set horizontal and vertical motion units, default hor\_motion\_unit=1 dot, ver\_motion\_unit=0.5 dot

**Parameter:** default x=0 y= 0

Computing method: horizontal: hor\_motion\_unit = x/200 dots, (x=0,then horizontal motion units is 1dot.)

Vertical: ver\_motion\_unit = y/200 dots, (y=0, the vertical motion units is 0.5 dot, but be noted that **default 1 dot for GF-2120TF**)

**Return value:** None

**Related command:** GP-58mm programming manual GS P x y

**void** addCutAndFeedPaper(**byte** length)

**Function:** partial cut and feed paper, this command is effective only processed at the beginning of a line.

**Parameter:** length: after cutting and then feed paper as length\*ver\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual GS V m n

**void** addCutPaper()

**Function:** partial cut paper, this command is effective only processed at the beginning of a line.

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual GS V m

**void** addSetPrintingAreaWidth(**short** width)

**Function:** Set printing area width, 384 dots as default.

**Parameter:** width: printing area width as width \* hor\_motion\_unit

**Return value:** None

**Related command:** GP-58mm programming manual GS W nL nH

**void** addSelectKanjiMode()

**Function:** Select Kanji character mode, print Chinese when turn Kanji mode on, Kanji mode is selected at default once printer is power on.

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual FS &

**void** addSetKanjiUnderLineMode(UNDERLINE\_MODE underline)

**Function:** Turn underline mode on/off for Kanji characters

**Parameter:** **enum** UNDERLINE\_MODE {

OFF(0), // None

UNDERLINE\_1DOT(1), // 1-dot thick

UNDERLINE\_2DOT(2); // 2-dot thick

}

**Return value:** None

**Related command:** GP-58mm programming manual FS – n

**void** addCancelKanjiMode()

**Function:** Cancel Kanji character mode, When Kanji mode is canceled, Chinese can not be printed, international code page can be printed.

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual FS .

**void** addSetKanjiLeftAndRightSpacing(**byte** left,**byte** right)

**Function:** Set Kanji left and right spacing

**Parameter:** Left side spacing as: left \* hor\_motion\_unit

Right side spacing as: right \* hor\_motion\_unit

**Return value:** None

**Related command:** GP-58mm programming manual FS S n1 n2

**void** addSetQuadrupleModeForKanji(ENABLE enable)

**Function:** Set quadruple-size mode for Kanji characters

**Parameter:** **enum** ENABLE {

OFF(0), Off

ON(1); On

}

**Return value:** None

**Related command:** GP-58mm programming manual FS W n

## ● Image printing

**void** addRastBitImage(Bitmap bitmap, **int** nWidth, **int** nMode)

**Function:** Print raster bit image

**Parameter:** bitmap: bit image

nWidth: Print width (used for scaling the image)

nMode: Print mode 0: Normal 1: Double-width 2: Double-height

3: Double-width and Double-height

**Return value:** None

**Related command:** GP-58mm programming manual GS a n

## ● 1D Bar code

**If the bar code width exceeds the printable width, the bar code won't be printed. Reduce the numbers of the Character data if this situation occurs.**

**void** addSelectPrintingPositionForHRICharacters (HRI\_POSITION position)

**Function:** Select print position for HRI characters, HRI indicates Human Readable Interpretation

**Parameter:** **enum** HRI\_POSITION{

NO\_PRINT(0), // Not printed

ABOVE(1), // Above the bar code

BELOW(2), // Below the bar code

ABOVE\_AND\_BELOW(3); // Both above and below the bar code

}

**Return value:** None

**Related command:** GP-58mm programming manual GS H n

**void** addSetFontForHRICharacter(FONT font)

**Function:** Select font for HRI characters

**Parameter:** **enum** FONT {

FONTA(0), //12\*24

FONTB(1); // 9\*17

}

**Return value:** None

**Related command:** GP-58mm programming manual GS f n

**void** addSetBarcodeHeight(**byte** height)

**Function:** Set bar code height

**Parameter:** height: bar code height as: height\* ver\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual GS h n

**void** addSetBarcodeWidth(**byte** width)

**Function:** Set bar code width

**Parameter:** width: barcode width as: width\* hor\_motion\_unit dots

**Return value:** None

**Related command:** GP-58mm programming manual GS k



### **void** addUPCA(String content)

**Function:** print UPCA

**Parameter:** content range 0-9

Number of Characters: 11

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **void** addUPCE(String content)

**Function:** print UPCE

**Parameter:** content range 0-9

Number of Characters: 11, need to begin with 0

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **public void** addEAN13(String content)

**Function:** print EAN13

**Parameter:** content range 0-9

Number of Characters: 12

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **public void** addEAN8(String content)

**Function:** print EAN8

**Parameter:** content range 0-9

Number of Characters: 7

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **public void** addCODE39(String content)

**Function:** print CODE39

**Parameter:** content range 0-9 A-Z SP \$ % + - . /

The number of data unlimited.

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **public void** addITF(String content)

**Function:** print ITF

**Parameter:** content range 0-9

The number of data for ITF bar code must be even numbers.

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

### **public void** addCODEBAR(String content)

**Function:** print CODEBAR

**Parameter:** content range 0-9 \$ + - . / :

A-D insertion in front and behind of the data, the number of data unlimited.

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

**public void** addCODE93(String content)

**Function:** print CODE93

**Parameter:** content range 0x00 – 0x7f

The number of data unlimited.

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

**public void** addCODE128(String content)

**Function:** print CODE128

**Parameter:** content range 0x00 – 0x7f

The number of data unlimited.

print CODEB as default, if need to print CODE A and CODE C, please refer the rule

as blow:

● when using CODE 128, coding as follows:

① Starting character must select character set from (any of CODE A, CODE B, or CODE C) firstly.

② Selecting the character set is by sending “{” combined with the other character to execute, ASCII character “{” is set by sending “{{” two times.

special character	Sending data		
	ASCII	Hex	Decimal
SHIFT	{S	7B, 53	123, 83
CODE A	{A	7B, 41	123, 65
CODE B	{B	7B, 42	123, 66
CODE C	{C	7B, 43	123, 67
FNC1	{1	7B, 31	123, 49
FNC2	{2	7B, 32	123, 50
FNC3	{3	7B, 33	123, 51
FNC4	{4	7B, 34	123, 52
"{"	{{	7B, 7B	123, 123

**Return value:** None

**Related command:** GP-58mm programming manual GS k m d1...dk NUL

## ● QRCode commands

**void** addSelectSizeOfModuleForQRCode(**byte** n)

**Function:** Set the size of module for QR code

**Parameter:** n: the size of the module for QR Code to n dots. 3 dots as default.

**Return value:** None

**Related command:** GP-58mm programming manual GS ( k <Function 167>

**void** addSelectErrorCorrectionLevelForQRCode(**byte** n)

**Function:** Select the error correction level for QR code

**Parameter:** n: 0x30 Level L  
0x31 Level M  
0x32 Level Q  
0x33 Level H

**Return value:** None

**Related command:** GP-58mm programming manual GS ( k <Function 169>

**void** addStoreQRCodeData(String content)

**Function:** Store the QR code symbol data into the printer.

**Parameter:** content: Qrcodes symbol data

**Return value:** None

**Related command:** GP-58mm programming manual GS ( k <Function 180>

**void** addPrintQRCode ()

**Function:** print QRCode

**Parameter:** None

**Return value:** None

**Related command:** GP-58mm programming manual GS ( k <Function 181>

**void** addUserCommand(byte []command)

**Function:** Add user-defined command

**Parameter:** command: user-defined command data

**Return value:** None

**Related command:** GP-58mm programming manual

Example: add command of Initialize printer, refer to GP-58mm programming manual as 0x1b 0x40  
Then:

```
EscCommand esc = new EscCommand();
```

```
byte [] command ={0x1b, 0x40};
```

```
esc.addUserCommand(command);
```