

# JXIT MY58 iOS SDK Developer guide–V3.1

## 1. Overviews

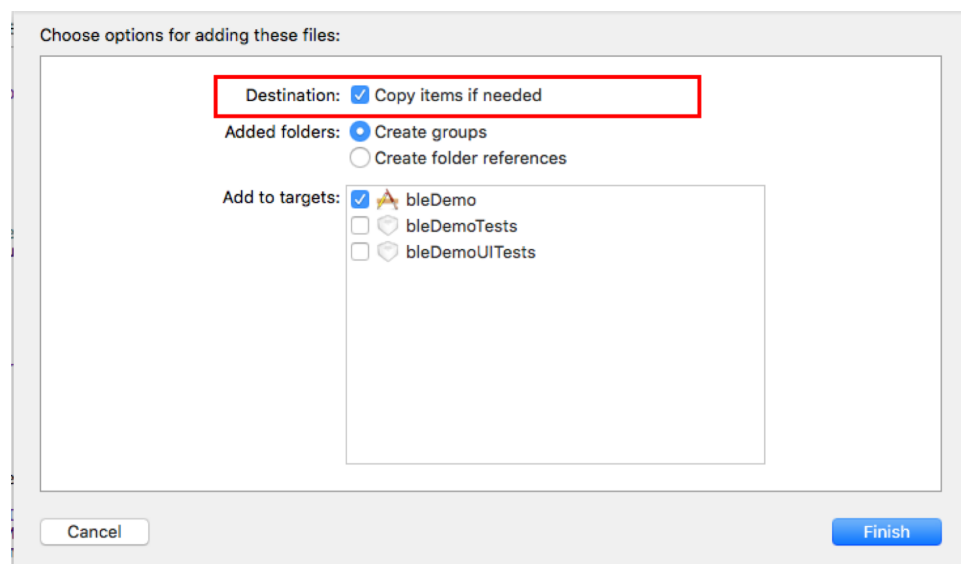
### 1.1. The SDK supports mobile versions

iPhone/iPad with iOS 9 and above, processor support for x86、armv7 and ARM64.

### 1.2. SDK import

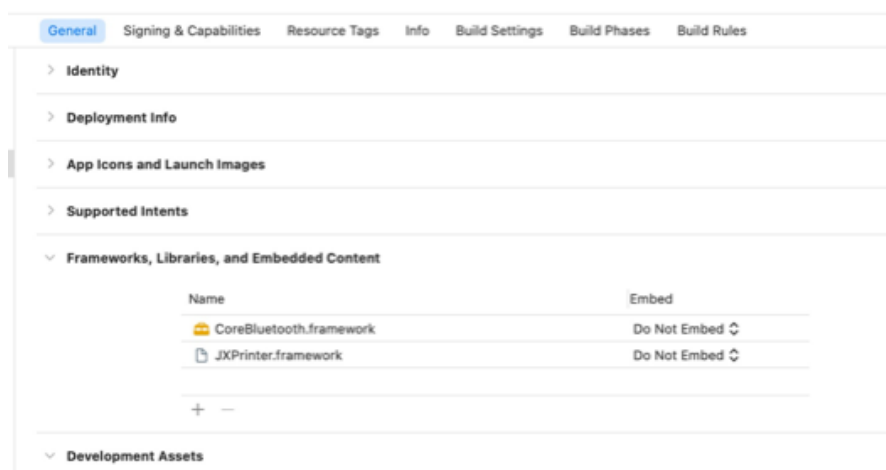
#### 1.1.1. Add JXPrinter.framework

Drag the JXPrinter.framework into your project and check the”Copy items if needed”.



#### 1.2.1. Dependency configuration

After importing the SDK, switch to the Build Phases TAB and add CoreBluetooth.framework in Link Binary With Libraries.



Add ZXingObjC, project at <https://github.com/zxingify/zxingify-objc>

#### 1.2.2. Permission configuration

Configure for Bluetooth permissions,  
NSBluetoothPeripheralUsageDescription and  
NSBluetoothAlwaysUsageDescription in info.plist.  
If you want to support Wi-Fi printing, configure local network permissions  
NSLocalNetworkUsageDescription.

General

Signing & Capabilities

Resource Tags

Info

Build Settings

Build Phases

Build Rules

Custom iOS Target Properties

Key	Type	Value
Bundle name	String	\$(PRODUCT_NAME)
Bundle identifier	String	\$(PRODUCT_BUNDLE_IDENTIFIER)
InfoDictionary version	String	6.0
Main storyboard file base name	String	Main
Bundle version	String	\$(CURRENT_PROJECT_VEF
Launch screen interface file base name	String	LaunchScreen
Privacy - Bluetooth Peripheral Usage Description	String	用于搜索蓝牙打印机
Executable file	String	\$(EXECUTABLE_NAME)
Application requires iPhone environment	Boolean	YES
Supported interface orientations (iPhone)	Array	(3 items)
Application supports indirect input events	Boolean	YES
Privacy - Local Network Usage Description	String	用于搜索 Wi-Fi 打印机
App Transport Security Settings	Dictionary	(1 item)
Bundle OS Type code	String	\$(PRODUCT_BUNDLE_PAC
Privacy - Bluetooth Always Usage Description	String	用于搜索蓝牙打印机
Localization native development region	String	\$(DEVELOPMENT_L...
Supported interface orientations (iPad)	Array	(4 items)
Bundle version string (short)	String	\$(MARKETING_VERSION)

Document Types (0)

1.3. Use the SDK

Import the SDK header `#import <JXPrinter/JXPrinter.h>`  
Bluetooth printer scanning, connection using JXBleManager class;  
Print related Select the printing method corresponding to the JXPrinterManager  
class according to the printer support instruction type.

2. Bluetooth device management class (JXBleManager)

2.1. Management method of Bluetooth device

2.1.1. Get the Bluetooth device management singleton object

- Description

```
1 Get the Bluetooth device management singleton object
```

- Parameters

Parameters	Description
None	

- Method

```
1 + (instancetype)bleManager;
```

2.1.2. Scanning for Bluetooth devices

- Description

```
1 Scanning for Bluetooth devices ,
2 Get the scanned printer device in JXBleManagerDelegate.
```

- Parameters

Parameters	Description
timeout	Scan timeout
failure	Scan failed call back

- Method

```

1 - (void)scanPeripheralsWithTimeout:(NSTimeInterval)timeout
2         failure:(nullable void (^)(NSError *error))failure;

```

### 2.1.3. Begins scanning Bluetooth devices that provide the specified service

- Description

```

1 Begins scanning Bluetooth devices that provide the specified service.
2 Get the scanned printer device in JXBleManagerDelegate.

```

- Parameters

Parameters	Description
services	An array of CBUUID objects representing the services to be scanned
options	An optional dictionary specifying scan options
timeout	Scan timeout
failure	Scanning failed callback

- Method

```

1 - (void)scanPeripheralsWithServices:(nullable NSArray<CBUUID *> *)services
2                                options:(nullable NSDictionary<NSString *,
3                                id> *)options
4                                timeout:(NSTimeInterval)timeout
                                failure:(nullable void (^)(NSError *error))failure;

```

### 2.1.4. Stop scanning

- Description

```

1 Stop scanning

```

- Parameters

Parameters	Description
None	

- Method

```

1 - (void)stopScan;

```

### 2.1.5. Connect the Bluetooth device

- Description

```
1 Connect bluetooth device (default setting: 60s timeout).
2 2.2.3 and 2.2.5 get connection status in JXBleManagerDelegate.
```

- Parameters

Parameters	Description
peripheral	Bluetooth device Object
timeout	timeout

- Method

```
1 - (void)connectPeripheral:(CBPeripheral *)peripheral;
2 - (void)connectPeripheral:(CBPeripheral *)peripheral
3     timeout:(NSTimeInterval)timeout;
```

### 2.1.6. Disconnect the Bluetooth device

- Description

```
1 Disconnect the Bluetooth device
```

- Parameters

Parameters	Description
peripheral	Bluetooth device Object

- Method

```
1 - (void)disconnectPeripheral:(CBPeripheral *)peripheral;
```

### 2.1.7. Determines whether or not to connect to a Bluetooth printer

- Description

```
1 Determines whether or not to connect to a Bluetooth printer
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (BOOL)isConnectBle;
```

## 2.2. Bluetooth device management agent protocol(JXBleManagerDelegate)

### 2.2.1. Found a Bluetooth printer

- Description

1 Found a Bluetooth printer

- Parameters

Parameters	Description
manager	JXBleManager object
peripheral	The Bluetooth printer object found
advertisementData	<b>advertisementData</b>
RSSI	RSSI
address	The MAC address of the Discovered Bluetooth printer object may be an empty string

- Method

1 - (void)manager:(JXBleManager \*)manager didDiscoverPeripheral:(CBPeripheral \*)peripheral advertisementData:(NSDictionary \*)advertisementData RSSI:(NSNumber \*)RSSI address:(NSString \*)address;

### 2.2.2. Scan Bluetooth printer timeout

- Description

1 Scan Bluetooth printer timeout

- Parameters

Parameters	Description
manager	JXBleManager object

- Method

1 - (void)scanTimeout:(JXBleManager \*)manager;

### 2.2.3. Bluetooth printer connected successfully

- Description

1 Bluetooth printer connected successfully

- Parameters

Parameters	Description
manager	JXBleManager object
peripheral	The Bluetooth printer object that is already connected

- Method

1 - (void)manager:(JXBleManager \*)manager didConnectPeripheral:(CBPeripheral \*)peripheral;

## 2.2.4. Bluetooth printer disconnected successfully

- Description

```
1 Bluetooth printer disconnected successfully
```

- Parameters

Parameters	Description
manager	JXBleManager object
peripheral	The Bluetooth printer object that has been disconnected

- Method

```
1 - (void)manager:(JXBleManager *)manager didDisconnectPeripheral:(CBPeripheral *)peripheral;
```

## 2.2.5. Failed to connect to Bluetooth printer

- Description

```
1 Failed to connect bluetooth printer
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (void)didFailToConnectPeripheral;
```

## 2.2.6. Bluetooth status update for mobile phone

- Description

```
1 Bluetooth status update for mobile phone
```

- Parameters

Parameters	Description
manager	JXBleManager object
central	CBCentralManager Object

- Method

```
1 - (void)manager:(JXBleManager *)manager centralManagerDidUpdateState:(CBCentralManager *)central;
```

## 3. Printer setting

```
1 Call [JXPrinterManager printerManager] to get the JXPrinterManager singlet on, and call the method below to set or get printer information.
```

### 3.1. Querying printer Status

- Description

```

1 Querying printer Status
2 typedef NS_ENUM(NSUInteger, PrintStatus) {
3     PrintStatusNoPaper = 0x01,           // No paper
4     PrintStatusOverHeat = 0x02,          // Printhead overheat
5     PrintStatusBatteryLow = 0x04,        // Low power
6     PrintStatusPrinting = 0x08,         // Printing
7     PrintStatusCoverOpen = 0x10,         // Printer open
8     PrintStatusNoError,                  // Other values, no error
9     PrintStatusOk,                       // Print completed
10 };

```

- Parameters

Parameters	Description
timeout	timeout
success	Success callback
fail	Description Failed to call back when the timeout period expired

- Method

```

1 - (void)readBlePrintStatus:(NSTimeInterval)timeout
2     success:(void (^)(PrintStatus blePrintStatus))success
3     fail:(void (^)(void))fail;

```

### 3.2. Set print blackness

- Description

```

1 Set print blackness

```

- Parameters

Parameters	Description
value	$0 \leq \text{value} \leq 4$

- Method

```

1 - (BOOL)setDarknessWithValue:(int)value;

```

### 3.3. Set print quality

- Description

```

1 Set print quality

```

- Parameters

Parameters	Description
value	$0 \leq \text{value} \leq 2$

- Method

```
1 - (BOOL)setQualityWithValue:(int)value;
```

### 3.4. Get the print blackness value

- Description

```
1 Return nil means fetch failed
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (NSString *)getDarkness;
```

### 3.5. Get the print quality value

- Description

```
1 Return nil means fetch failed
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (NSString *)getQuality;
```

### 3.6. Unlock pinter(lock version use)

- Description

```
1 Unlock pinter
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (BOOL)unlock;
```

### 3.7. Print check page

- Description

```
1 Print check page
```



- Parameters

Parameters	Description
None	

- Method

```
1 - (BOOL)printCheckPage;
```

## 4. Global Page Methods

```
1 Generally, it is used to print labels. Steps:
2 1. Obtain the print service singleton object
3 2. Set the print area by call the method of set the print paper size
4 3. Set the print content by call the method such as print text or image
5 4. Call the execute print method to print
```

### 4.1. Get the print service Singleton object

- Description

```
1 Get print service singleton object (default is Bluetooth send data JXConnectTypeBle)
```

- Parameters

Parameters	Description
<b>connectType</b>	Set the data sending mode to Bluetooth or Wi-Fi

- Code

```
1 + (instancetype)printerManager;
2 + (instancetype)printerManagerWithConnectType:(JXConnectType)connectType;
```

- The sample code

```
1 JXPrinterManager *manager = [JXPrinterManager printerManager];
```

### 4.2. Set the paper size

- Description

```
1 Set the size of the printed paper (print area). Print area must be set before printing. (8 dots are 1 mm)
```

- Parameters

Parameters	Description
width	Print area width
height	Print area height
paperType	Paper type 0 :gap paper; 1 :continuous paper; 2: black label

- Method

```
1 - (void)globalPageSetUpWidth:(int)width
2         height:(int)height
3         paperType:(int)paperType;
```

### 4.3. Execute print

- Description

```
1 Print in page mode
```

- Parameters

Parameters	Description
isUpsideDown	Rotate 180° to print
times	Print times 1–255

- Method

```
1 - (void)globalPagePrint:(BOOL)isUpsideDown times:(int)times;
```

### 4.4. Print border

- Description

```
1 Print border
```

- Parameters

Parameters	Description
startX	The top left x-coordinate of the rectangle
startY	The y-coordinate of the upper left corner of the rectangle
width	Rectangular frame width
height	Rectangular frame height
lineWidth	Border line width
fullLine	YES: solid line NO: dashed line

- Method

```
1 - (BOOL)globalDrawBoxWithStartX:(int)startX
2         startY:(int)startY
3         width:(int)width
4         height:(int)height
5         lineWidth:(int)lineWidth
6         fullLine:(BOOL)fullLine;
```

- The sample code

```
1 - (void)drawBox {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalPageSetUpWidth:575 height:100 paperType:1];
```

```

4      [manager globalDrawBoxWithStartX:50
5              startY:0
6              width:50
7              height:50
8              lineWidth:1
9              fullLine:YES];
10     [manager globalPagePrint:NO times:1];
11 }

```

- Printing effect



## 4.5. Print Line

- Description

1 Print Line

- Parameters

Parameters	Description
startX	The x coordinate of the starting point of the line
startY	The y coordinate of the starting point of the line
endX	The x coordinate where the line ends
endY	The y coordinate where the line ends
lineWidth	Border line width
fullLine	YES: solid line NO: dashed line

- Method

```

1 - (BOOL)globalDrawLineWithStartX:(int)startX
2           startY:(int)startY
3           endX:(int)endX
4           endY:(int)endY
5           lineWidth:(int)lineWidth
6           fullLine:(BOOL) fullLine;

```

## 4.6. Set the properties associated with text printing

- Description

1 Set the properties associated with text printing

- Parameters

Parameters	Description
None	

- Method

```

1 // Line spacing (unit: dot. 1mm=8dot)
2 - (void)globalTextLineSpace:(int)lineSpace;
3 // Letter spacing (unit: dot. 1mm=8dot)
4 - (void)globalTextLetterSpace:(int)letterSpace;
5 // Underline
6 - (void)globalTextIsUnderline:(BOOL)isUnderline;
7 // Bold
8 - (void)globalTextIsBold:(BOOL)isBold;
9 // Italy
10 - (void)globalTextIsItaly:(BOOL)isItaly;
11 // Black to white and white to black
12 - (void)globalTextIsReverse:(BOOL)isReverse;
13 // FontSize
14 - (void)globalTextFontSize:(int)fontSize;
15 // Font width scale
16 - (void)globalTextFontWidthScale:(int)fontWidthScale;
17 // Font height scale
18 - (void)globalTextFontHeightScale:(int)fontHeightScale;
19 // Rotation angle
20 - (void)globalTextRotate:(RotationAngle)rotate;
21 // Truncate in single-line mode, or wrap automatically
22 - (void)globalTextBreakLine:(BOOL)breakLine;

```

## 4.7. Restores text print Settings

- Description

```

1 Restore all Settings to default values

```

- Parameters

Parameters	Description
None	

- Method

```

1 - (BOOL)globalTextReset;

```

## 4.8. Print text

- Description

```

1 Print text

```

- Parameters

Parameters	Description
startX	Initial abscissa
startY	Initial ordinate
endX	End abscissa
endY	End ordinate
content	Printed text content
fontSize	Font size (unit: dot 1mm=8dot)
rotate	Rotation Angle: 0: no rotation; 1: 90°; 2: 180°; 3:270°
bold	Whether bold
reverse	NO: Do not reverse white; YES: Reverse white
underline	<b>NO</b> : no underline; <b>YES</b> : has underline
breakLine	Truncate in single-line mode, or wrap automatically

- Method

```

1  - (BOOL)globalDrawTextWithStartX:(int)startX
2      startY:(int)startY
3      endX:(int)endX
4      endY:(int)endY
5      content:(NSString *)content
6      fontSize:(int)fontSize
7      rotate:(int)rotate
8      bold:(BOOL)bold
9      reverse:(BOOL)reverse
10     underline:(BOOL)underline
11     breakLine:(BOOL)breakLine;

```

- The sample code

```

1  - (void)drawText {
2      JXPrinterManager *manager = [JXPrinterManager printerManager];
3      [manager globalPageSetUpWidth:575 height:100 paperType:1];
4      [manager globalDrawTextWithStartX:100
5          startY:40
6          endX:400
7          endY:100
8          content:@"Text print effect"
9          fontSize:24
10         rotate:0
11         bold:NO
12         reverse:NO
13         underline:NO
14         breakLine:NO];
15     [manager globalPagePrint:NO times:1];
16 }

```

- Printing effect

Text print effect

#### 4.9. Print one-dimensional bar code text

- Description

```
1 The function is used before {drawBarCode: start_y: width: height: content:
  rotate: format:} and prints the barcode text. The function takes effect on
  ly once
```

- Parameters

Parameters	Description
isPositionBelow	Whether to display it under the bar code
fontSize	The font size
isBold	Whether the bold
margin	And bar code spacing
breakLine	YES :truncates; NO: newline

- Method

```
1 - (void)globalSetBarcodeTextWithIsPositionBelow:(BOOL)isPositionBelow
2                               fontSize:(int)fontSize
3                               isBold:(BOOL)isBold
4                               margin:(int)margin
5                               breakLine:(BOOL)breakLin
```

#### 4.10. Print one-dimensional bar code

- Description

```
1 Print one-dimensional bar code
```

- Parameters

Parameters	Description
startX	Initial abscissa
startY	Initial ordinate
width	Bar code width
height	Bar code height
content	content, The default barcode type is code128
rotate	Rotation Angle
format	BarCode type

- Method

```
1 - (BOOL)globalDrawBarCodeWithStartX:(int)startX
2                               startY:(int)startY
3                               width:(int)width
4                               height:(int)height
```

```

5         content:(NSString *)content
6         rotate:(RotationAngle)rotate
7         format:(BarcodeFormat)format;

```

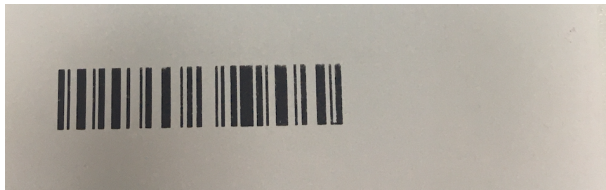
- The sample code

```

1 - (void)drawBarcode {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalPageSetUpWidth:575 height:100 paperType:1];
4     [manager globalDrawBarcodeWithStartX:40
5         startY:20
6         width:300
7         height:60
8         content:@"1234567890"
9         rotate:RotationAngle0];
10    [manager globalPagePrint:NO times:1];
11 }

```

- Printing effect



## 4.11. Print the QR code

- Description

```

1 Print the QR code

```

- Parameters

Parameters	Description
startX	Initial abscissa
startY	Initial ordinate
width	Width of QR code
height	Height of QR code
content	content
rotate	Rotation Angle
format	QR code type

- Method

```

1 - (BOOL)globalDrawQrCodeWithStartX:(int)startX
2         startY:(int)startY
3         width:(int)width
4         height:(int)height
5         content:(NSString *)content
6         rotate:(RotationAngle)rotate
7         format:(QRCodeFormat)format;

```

- The sample code

```

1 - (void)drawQrCode {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalPageSetUpWidth:575 height:100 paperType:1];
4     [manager globalDrawQrCodeWithStartX:40
5         startY:20
6         size:80
7         content:@"123456"
8         rotate:RotationAngle0];
9     [manager globalPagePrint:NO times:1];
10 }

```

- Printing effect

#### 4.12. Print image

- Description

1 Print image

- Parameters

Parameters	Description
startX	Initial abscissa
startY	Initial ordinate
image	image

- Method

```

1 - (void)cpclDrawGraphicWithStartX:(int)startX
2     startY:(int)startY
3     image:(UIImage *)image;

```

- The sample code

```

1 - (void)drawGraphic {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalPageSetUpWidth:575 height:400 paperType:1];
4     UIImage *image = [UIImage imageNamed:@"image_post.png"];
5     [manager globalDrawGraphicWithStartX:20 startY:20 image:image];
6     [manager globalPagePrint:NO times:1];
7 }

```

- Printing effect



#### 4.13. Find the label seam, feed paper





- The sample code

```

1 - (void)writeDataWithResponse {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     Byte cmd[] = {0x10, 0x04, 0x05};
4     NSData *data = [NSData dataWithBytes:cmd length:sizeof(cmd)];
5     [manager globalFlushReadBuffer];
6     NSData *response = [manager globalWriteWithResponseData:data
7                                     timeout:3];
8     NSLog(@"response = %@", response);
9 }

```

- Printing effect

```

1 response = {length = 2, bytes = 0x0000}

```

## 4.16. Clear read buffer

- Description

```

1 Clear read buffer

```

- Parameters

Parameters	Description
None	

- Method

```

1 - (void)globalFlushReadBuffer;

```

## 5. Global Line Methods

```

1 Generally used for continuous paper printing. Steps:
2 1. Obtain the print service singleton object
3 2. Set the print width by calling the method of set the maximum print width of printer
4 3. Call print text or image and other methods to set the print content, if the content width exceeds the width of a line will be printed, less than a line will be cached, concatenated with the content to be printed later, you can also call the method of forced print buffer, the cache content is forced to print out.

```

### 5.1. Get the print service Singleton object

- Description

```

1 Get print service singleton object (default is Bluetooth send data JXConnectTypeBle)

```

- Parameters

Parameters	Description
<b>connectType</b>	Set the data sending mode to Bluetooth or Wi-Fi

- Method

```

1 + (instancetype)printerManager;
2 + (instancetype)printerManagerWithConnectType:(JXConnectType)connectType;

```

- The sample code

```

1 JXPrinterManager *manager = [JXPrinterManager printerManager];

```

## 5.2. Set the properties associated with text printing

- Description

```

1 Set the properties associated with text printing

```

- Parameters

Parameters	Description
None	

- Method

```

1 // Line spacing (unit: dot. 1mm=8dot)
2 - (void)globalLineLineSpace:(int)lineSpace;
3 // Letter spacing (unit: dot. 1mm=8dot)
4 - (void)globalLineLetterSpace:(int)letterSpace;
5 // Underline
6 - (void)globalLineIsUnderline:(BOOL)isUnderline;
7 // Bold
8 - (void)globalLineIsBold:(BOOL)isBold;
9 // IsItaly
10 - (void)globalLineIsItaly:(BOOL)isItaly;
11 // Black to white and white to black
12 - (void)globalLineIsReverse:(BOOL)isReverse;
13 // FontSize
14 - (void)globalLineFontSize:(int)fontSize;
15 // Font width magnification scale
16 - (void)globalLineFontWidthScale:(int)fontWidthScale;
17 // Font height magnification scale
18 - (void)globalLineFontHeightScale:(int)fontHeightScale;

```

## 5.3. Clear the cache

- Description

```

1 Clear buffer data and restore all Settings to default values

```

- Parameters

Parameters	Description
None	

- Method

```
1 - (BOOL)globalLineReset;
```

## 5.4. Set the left margin

- Description

```
1 The left and right margins need to be considered. If you set both the left
  and right margins, the setting fails when the printable area is less than
  100
```

- Parameters

Parameters	Description
margin	0-65535

- Method

```
1 - (BOOL)globalLineLeftMargin:(int)margin;
```

## 5.5. Set the right margin

- Description

```
1 The left and right margins need to be considered. If you set both the left
  and right margins, the setting fails when the printable area is less than
  100
```

- Parameters

Parameters	Description
margin	0-65535

- Method

```
1 - (BOOL)globalLineRightMargin:(int)margin;
```

## 5.6. Set the relative print position

- Description

```
1 Set the relative print position
```

- Parameters

Parameters	Description
align	1 : Center, 2: right, other: left

- Method

```
1 - (BOOL)globalLineAlign:(int)align;
```

## 5.7. Set the maximum print width for the printer

- Description

```
1 The default is 384
```

- Parameters

Parameters	Description
maxWidth	Maximum print width of printer

- Method

```
1 - (BOOL)globalLineMaxPrintWidth:(int)maxWidth;
```

## 5.8. Forced print buffer

- Description

```
1 Print buffer
```

- Parameters

Parameters	Description
None	

- Method

```
1 - (BOOL)globalLinePrint;
```

## 5.9. feed

- Description

```
1 feed
```

- Parameters

Parameters	Description
n	Paper feed lines

- Method

```
1 - (BOOL)globalLineFeed:(int)n;
```

## 5.10. Print text

- Description

```
1 Print text
```

- Parameters

Parameters	Description
content	The text content

- Method

```
1 - (BOOL)globalLineDrawText:(NSString *)content;
```

- The sample code

```
1 - (void)printText {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalLineMaxPrintWidth:576];
4
5     [manager globalLineReset];
6     [manager globalLineDrawText:@"Text print effect"];
7     [manager globalLinePrint];
8     [manager globalLineAlign:0];
9     [manager globalLineDrawText:@"Left align effect abcABC123"];
10    [manager globalLinePrint];
11 }
```

- Printing effect

**Text print effect**  
**Left align effect abcABC123**

## 5.11. Print bitmap

- Description

```
1 Print bitmap
```

- Parameters

Parameters	Description
image	image

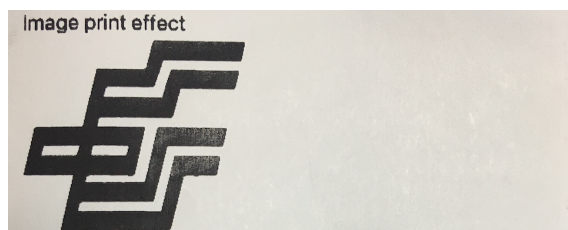
- Method

```
1 - (BOOL)globalLineDrawGraphicWithImage:(UIImage *)image;
```

- The sample code

```
1 - (void)drawGraphic {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalLineMaxPrintWidth:576];
4     [manager globalLineReset];
5     [manager globalLineDrawText:@"Image print effect"];
6     [manager globalLinePrint];
7     UIImage *image = [UIImage imageNamed:@"image_post"];
8     [manager globalLineDrawGraphicWithImage:image];
9     [manager globalLinePrint];
10 }
```

- Printing effect



## 5.12. Print Line

- Description

1 If the line length exceeds the maximum print length, print only the printable part, call globalLinePrint buffer can be forced to print

- Parameters

Parameters	Description
lineLength	The length of the line
lineWidth	Line width
isSolid	YES: solid line NO: dashed line

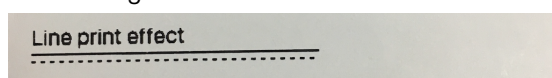
- Method

```
1 - (BOOL)globalLineDrawLineWithLineLength:(int)lineLength
2                               lineWidth:(int)lineWidth
3                               isSolid:(BOOL)isSolid;
```

- The sample code

```
1 - (void)drawLine {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalLineMaxPrintWidth:576];
4     [manager globalLineReset];
5     [manager globalLineDrawText:@"Line print effect"];
6     [manager globalLinePrint];
7     [manager globalLineDrawLineWithLineLength:300
8                               lineWidth:2
9                               isSolid:YES];
10    [manager globalLinePrint];
11    [manager globalLineDrawLineWithLineLength:300
12                               lineWidth:2
13                               isSolid:NO];
14    [manager globalLinePrint];
15 }
```

- Printing effect



## 5.13. Print one-dimensional bar code text

- Description

1 The function is used before {drawBarCodeWithWidth: height: Content: rotate: format:} and prints the barcode text. The function takes effect only on

ce

- Parameters

Parameters	Description
isPositionBelow	Whether to display it under the bar code
fontSize	The font size
isBold	Whether the bold
margin	And bar code spacing
breakLine	YES :truncates; NO: newline

- Method

```
1 - (void)globalLineSetBarcodeTextWithIsPositionBelow:(BOOL)isPositionBelow
2         fontSize:(int)fontSize
3         isBold:(BOOL)isBold
4         margin:(int)margin
5         breakLine:(BOOL)breakLine;
```

## 5.14. Print one-dimensional bar code

- Description

```
1 No text is displayed by default. If need to print words, need to call {set
BarcodeTextWithIsPositionBelow: fontSize: isBold: margin: breakLine:}
```

- Parameters

Parameters	Description
width	Bar code width
height	Bar code height
content	content
rotate	Rotation Angle
format	Bar code type

- Method

```
1 - (BOOL)globalLineDrawBarCodeWithWidth:(int)width
2         height:(int)height
3         content:(NSString *)content
4         rotate:(RotationAngle)rotate
5         format:(BarCodeFormat)format;
```

- The sample code

```
1 - (void)drawBarCode {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalLineMaxPrintWidth:576];
4     // 条形码
5     [manager globalLineReset];
```

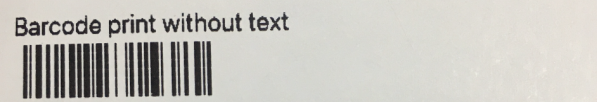


```

6      [manager globalLineDrawText:@"Barcode print without text"];
7      [manager globalLinePrint];
8      [manager globalLineDrawBarCodeWithWidth:200
9          height:50
10         content:@"0123456789"
11         rotate:RotationAngle0
12         format:BarcodeFormatCode128];
13      [manager globalLinePrint];
14  }

```

- Printing effect



## 5.15. Print the QR code

- Description

1 Print the QR code

- Parameters

Parameters	Description
width	width
height	height
content	content
rotate	Rotation Angle
format	Type of TWO-DIMENSIONAL code

- Method

```

1  - (BOOL)globalLineDrawQrCodeWithWidth:(int)width
2      height:(int)height
3      content:(NSString *)content
4      rotate:(RotationAngle)rotate
5      format:(QRCodeFormat)format;

```

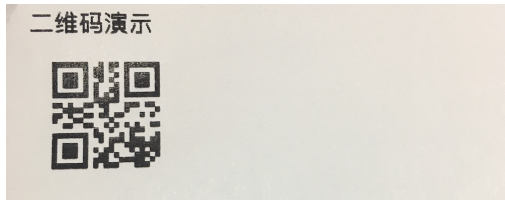
- The sample code

```

1  - (void)drawQrCode {
2      JXPrinterManager *manager = [JXPrinterManager printerManager];
3      [manager globalLineMaxPrintWidth:576];
4      [manager globalLineDrawText:@"二维码演示"];
5      [manager globalLinePrint];
6      [manager globalLineDrawQrCodeWithWidth:150
7          height:150
8          content:@"1234567890"
9          rotate:RotationAngle0
10         format:QRCodeFormatQR];
11      [manager globalLinePrint];
12  }

```

- Printing effect



## 5.16. Print curve segment

- Description

1 Print line segments of a curve (a curve is made up of continuous line segments, points can be interpreted as line segments of length 1)

- Parameters

Parameters	Description
xPos	Starting at 0 on the left, maximum 243 X1-X2,X3-X4... X2n-1-x2n Displays multiple line segments If only one point is printed, X2=X1, i.e. Parameters pass X,X

- Method

1 - (BOOL)globalLineDrawLineSegments:(NSArray<NSNumber \*> \*)xPos;

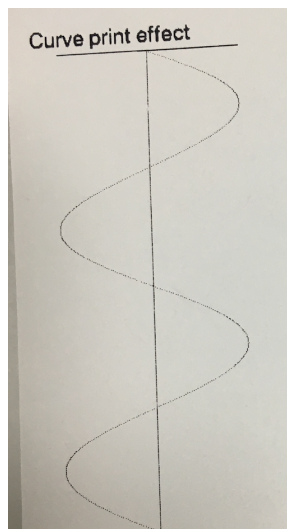
- The sample code

```

1 - (void)drawLineSegments {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     [manager globalLineMaxPrintWidth:576];
4     [manager globalLineReset];
5     [manager globalLineDrawText:@"Curve print effect"];
6     [manager globalLinePrint];
7
8     [manager globalLineDrawLineSegments:@[@30, @230]];
9     [manager globalLineDrawLineSegments:@[@130, @130]];
10    int x;
11    for (int i = 1; i <= 512; i++) {
12        x = (int) (sin(M_PI * i / 128) * 100 + 130);
13        [manager globalLineDrawLineSegments:@[@130, @130, @(x), @(x)]];
14    }
15 }

```

- Printing effect



## 5.17. Write data to the device

- Description

1 Write data to the device

- Parameters

Parameters	Description
data	Data to send

- Method

1 - (void)globalLineWriteData:(NSData \*)data;

- The sample code

```

1 - (void)writeData {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     Byte cmd[] = {0x10, 0x0C, 0x01, 0xA0, 0x00, 0x00, 0x00};
4     NSData *data = [NSData dataWithBytes:cmd length:sizeof(cmd)];
5     [manager globalLineWriteData:data];
6 }

```

## 5.18. Write an instruction with response

- Description

1 Write an instruction with response.  
 2 You can call 8.19 to clear the cache first to prevent reading the  
 3 previously cached data.

- Parameters

Parameters	Description
data	Data to send
timeout	Read return data timeout

- Method

```

1 - (NSData *)globalLineWriteWithResponseData:(NSData *)data
2         timeout:(NSInteger)timeout;

```

- The sample code

```

1 - (void)writeDataWithResponse {
2     JXPrinterManager *manager = [JXPrinterManager printerManager];
3     Byte cmd[] = {0x10, 0x04, 0x05};
4     NSData *data = [NSData dataWithBytes:cmd length:sizeof(cmd)];
5     [manager globalLineFlushReadBuffer];
6     NSData *response = [manager globalLineWriteWithResponseData:data
7                             timeout:3];
8     NSLog(@"response = %@", response);
9 }

```

- Printing effect

```

1 response = {length = 2, bytes = 0x0000}

```

## 5.19. Clear read buffer

- Description

```

1 Clear read buffer

```

- Parameters

Parameters	Description
None	

- Method

```

1 - (void)globalLineFlushReadBuffer;

```