

# iOS ZPL Program Manual

## Bluetooth

### 1. Defined in the TSCBLEManager Class

#### 1.1 sharedInstance

Singleton.

- (void) sharedInstance

#### 1.2 startScan

Search for bluetooth printers.

- (void) startScan

#### 1.3 stopScan

Stop searching for bluetooth printers.

- (void) stopScan

#### 1.4 connectDevice

Connect a Printer.

- (void) connectDevice:(CBPeripheral \*)peripheral

[Parameter]

-peripheral: Device.

#### 1.5 disconnectRootPeripheral

Disconnect a Printer.

- (void) disconnectRootPeripheral

#### 1.6 writeCommandWithData

Data printing.

- (void) writeCommandWithData: (NSData \*) data

[Parameter]

- data: Data to print.

## TSCBLEManagerDelegte

### ★ TSCbleUpdatePeripheralList

Discover peripherals.

- (void) TSCbleUpdatePeripheralList: (NSArray \*) peripherals RSSIList:  
(NSArray \*) rssiList

[Parameter]

- peripherals: Peripheral List.

- rssiList: Rssi List.

### ★ TSCbleConnectPeripheral

Peripheral connected succeeded.

- (void) TSCbleConnectPeripheral: (CBPeripheral \*) peripheral

[Parameter]

- peripheral: Device.

### ★ TSCbleFailToConnectPeripheral

Peripheral connected failed.

- (void) TSCbleFailToConnectPeripheral: (CBPeripheral \*) peripheral  
error: (NSError \*)error

[Parameter]

- peripheral: Device.

- error: Connect error.

### ★ TSCbleDisconnectPeripheral

Peripheral disconnected.

- (void) TSCbleDisconnectPeripheral: (CBPeripheral \*) peripheral

[Parameter]

- peripheral: Device.

### ★ TSCbleWriteValueForCharacteristic

Send data succeeded.

- (void) TSCbleWriteValueForCharacteristic: (CBCharacteristic \*) character error: (NSError \*) error

[Parameter]

- character: Device attributes.

- error: Send error.

## ★ TSCbleReceiveValueForCharacteristic

Receive data from printer.

- (void) TSCbleReceiveValueForCharacteristic: (CBCharacteristic \*) character error: (NSError \*) error

[Parameter]

- character: Device attributes.

- error: Receive error.

# WiFi

## 2. Defined in the TSCWIFIManager Class

### 2.1 sharedInstance

Singleton.

- (void) sharedInstance

### 2.2 connectWithHost

Connect a Printer.

- (void) connectWithHost: (NSString \*) hostStr port: (UInt16 \*) port

[Parameter]

- hostStr: Connect printer ip address.

- port: Port Number.

### 2.3 disconnect

Disconnect a Printer.

- (void) disconnect

## 2.4 writeCommandWithData

Data printing.

- (void)writeCommandWithData: (NSData \*) data

[Parameter]

- data: Data to print.

## TSCWIFIManagerDelegate

### ★ TSCwifiConnectedToHost

Connected a Printer.

- (void) TSCwifiConnectedToHost: (NSString \*) host port: (UInt16) port

[Parameter]

- host: IP Address.

- port: Port Number.

### ★ TSCwifiDisconnectWithError

Disconnected a Printer.

- (void) TSCwifiDisconnectWithError: (NSError \*) error

[Parameter]

- error: error.

### ★ TSCwifiWriteValueWithTag

Print successful.

- (void) TSCwifiWriteValueWithTag:(long)tag

### ★ TSCwifiReceiveValueForData

Receive data from printer.

- (void) TSCwifiReceiveValueForData:(NSData \*)data

[Parameter]

- data: Printer data.

# TSPL

## 3. Defined in the ZPLCommand Class

### 3.1 XA

label begin

+ (NSData \*)XA

\* @return data

### 3.2 XZ

label end

+ (NSData \*)XZ

\* @return data

### 3.3 setLabelWidth

set label width

+ (NSData \*)setLabelWidth:(int)width

\* @param width: label width.

\* @return data

### 3.4 setLabelHeight

set label width

+ (NSData \*)setLabelHeight:(int)height

\* @param height: label height.

\* @return data

### 3.5 setPageCount

set page count

+ (NSData \*)setPageCount:(int)count

\* @param count: copies.

\* @return data

### 3.6 setCustomFont

set custom font

+ (NSData \*)setFont:(NSString \*)fontName extension:(NSString \*)extension alias:(NSString \*)alias codePage:(CodePage)codePage

\* @param fontName: font name.

\* @param extension: extension name

\* @param alias: alias name

\* @param codePage

CODE_PAGE_USA1	USA 1
CODE_PAGE_USA2	USA 2
CODE_PAGE_UK	England
CODE_PAGE_NL	Netherland
CODE_PAGE_DK	Denmark/Norway
CODE_PAGE_SWEDE	Sweden/Finland
CODE_PAGE_GER	Germany
CODE_PAGE_FR1	French 1
CODE_PAGE_FR2	French 2
CODE_PAGE_ITA	Italy
CODE_PAGE_ES	Spain
CODE_PAGE_JA	Japan
CODE_PAGE_UTF8	UTF-8
CODE_PAGE_UTF16_BIG	UTF-16 Big-Endian
CODE_PAGE_UTF16_LITTLE	UTF-16 Little-Endian

\* @return data

### 3.7 drawTextWithx (FNT type)

Draws text.

+ (NSData \*)drawTextWithx:(int)x y:(int)y fontName:(FontName)fontName content:(NSString \*)content

+ (NSData \*)drawTextWithx:(int)x y:(int)y fontName:(FontName)fontName hRatio:(int)hRatio wRatio:(int)wRatio content:(NSString \*)content

+ (NSData \*)drawTextWithx:(int)x y:(int)y fontName:(FontName)fontName  
rotation:(RotationType)rotation hRatio:(int)hRatio wRatio:(int)wRatio  
content:(NSString \*)content

\* @param x x-coordinate

\* @param y y-coordinate

\* @param fontName

Type	Font	Matrix
FNT_9_5	A	9 * 5
FNT_11_7	B	11 * 7
FNT_18_10	C,D	18 * 10
FNT_42_20	E	42 * 20
FNT_26_13	F	26 * 13
FNT_60_40	G	60 * 40
FNT_34_22	H	34 * 22
FNT_24_24	GS	24 * 24
FNT_20_18	P	20 * 18
FNT_28_24	Q	28 * 24
FNT_35_31	R	35 * 31
FNT_40_35	S	40 * 35
FNT_48_42	T	48 * 42
FNT_59_53	U	59 * 53
FNT_80_71	V	80 * 71
FNT_15_12	O	15 * 12

\* @param rotation

ROTATION_0	0
ROTATION_90	90
ROTATION_180	180
ROTATION_270	270

\* @param hRatio Integral multiples

\* @param wRatio Integral multiples

\* @param content text

\* @return data

### 3.8 drawTextWithx (Custom font)

Draws text.

+ (NSData \*)drawTextWithx:(int)x y:(int)y customFontName:(NSString \*)customFontName hSize:(int)hSize wSize:(int)wSize content:(NSString \*)content

+ (NSData \*)drawTextWithx:(int)x y:(int)y customFontName:(NSString \*)customFontName rotation:(RotationType)rotation hSize:(int)hSize wSize:(int)wSize content:(NSString \*)content

\* @param x x-coordinate

\* @param y y-coordinate

\* @param customFontName custom font

\* @param rotation

ROTATION_0	0
ROTATION_90	90
ROTATION_180	180
ROTATION_270	270

\* @param hSize Integral multiples

\* @param wSize Integral multiples

\* @param content text

\* @return data

### 3.9 drawTextWithx (Default: FNT\_26\_13)

Draws text.

+ (NSData \*)drawTextWithx:(int)x y:(int)y content:(NSString \*)content

\* @param x x-coordinate

\* @param y y-coordinate

\* @param content text

\* @return data

### 3.10 drawBarcodeWithx

Draws 1D barcode.



+ (NSData \*)drawBarcodeWithx:(int)x y:(int)y codeType:  
(CodeType)codeType text:(NSString \*)text

+ (NSData \*)drawBarcodeWithx:(int)x y:(int)y codeType:  
(CodeType)codeType height:(int)height text:(NSString \*)text

+ (NSData \*)drawBarcodeWithx:(int)x y:(int)y orientation:  
(ZPLRotation)orientation codeType:(CodeType)codeType width:(int)width  
height:(int)height hriText:(HriText)hriText text:(NSString \*)text

\* @param x: x-coordinate

\* @param y: y-coordinate

\* @param codeType:

CODE_TYPE_11	Code 11
CODE_TYPE_25	Interleaved 2 of 5
CODE_TYPE_39	Code 39
CODE_TYPE_49	Code 49
CODE_TYPE_PLANET	Planet
CODE_TYPE_EAN8	EAN 8
CODE_TYPE_UPCE	UPC-E
CODE_TYPE_93	Code 93
CODE_TYPE_128	Code 128
CODE_TYPE_EAN13	EAN 13
CODE_TYPE_CODA	Codabar
CODE_TYPE_MSI	MSI
CODE_TYPE_PLESSEY	PLESSEY
CODE_TYPE_UPCEAN	UPC/EAN
CODE_TYPE_UPCA	UPC-A

\* @param orientation:

ROTATION_0	0
ROTATION_90	90
ROTATION_180	180

ROTATION_270	270
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- \* @param width: 1~10 default:2
- \* @param height: barcode height
- \* @param hriText:

HRI_TEXT_NONE	NONE
HRI_TEXT_BELOW	BELOW
HRI_TEXT_ABOVE	ABOVE

- \* @param text: barcode content
- \* @return data

### 3.11 drawQRCodeWithx

Draws qr code.

+ (NSData \*)drawQRCodeWithx:(int)x y:(int)y factor:(int)factor text:  
(NSString \*)text

- \* @param x: x-coordinate
- \* @param y: y-coordinate
- \* @param factor: Magnification factor: 1 ~ 10
- \* @param text: qr content
- \* @return data

### 3.12 drawImageWithx

Draws image.

+ (NSData \*)drawImageWithx:(int)x y:(int)y image:(UIImage \*)image  
+ (NSData \*)drawImageWithx:(int)x y:(int)y wRatio:(int)wRatio hRatio:  
(int)hRatio image:(UIImage \*)image

- \* @param x x-coordinate
- \* @param y y-coordinate
- \* @param wRatio width ratio 1~10
- \* @param hRatio height ratio 1~10
- \* @param image bitmap
- \* @return data

### 3.13 drawReverseColorWithx

Draws the label in reverse color.

+ (NSData \*)drawReverseColorWithx:(int)x y:(int)y width:(int)width height:(int)height radius:(int)radius

- \* @param x x-coordinate
- \* @param y y-coordinate
- \* @param width width scope
- \* @param height height scope
- \* @param radius corners 0~8 default:0
- \* @return data

### 3.14 drawBoxWithx

Draws rectangle.

+ (NSData \*) drawBoxWithx:(int)x y:(int)y width:(int)width height:(int)height thickness:(int)thickness

+ (NSData \*)drawBoxWithx:(int)x y:(int)y width:(int)width height:(int)height thickness:(int)thickness radius:(int)radius

- \* @param x x-coordinate
- \* @param y y-coordinate
- \* @param width width scope
- \* @param height height scope
- \* @param thickness line width
- \* @param radius corners 0~8 default:0
- \* @return data

### 3.15 setStringEncoding

Sets the character encoding.

+ (void)setStringEncoding:(NSStringEncoding)encoding

- \* @param encoding NSStringEncoding