

# iOS CPCL Program Manual

## Bluetooth

### 1. Defined in the TSCBLEManager Class

#### 1.1 sharedInstance

Singleton Object.

- (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

Send data to printer (Write with Response)

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

- (void)writeCommandWithData:(NSData \*)data writeCallBack:  
(TSCBLEManagerWriteCallBackBlock)writeBlock;

- (void)writeCommandWithData:(NSData \*)data receiveCallBack:  
(TSCBLEManagerReceiveCallBackBlock)receiveBlock;

[Parameter]

- data: Data to print.
- writeBlock: Write result callback
- receiveBlock: Callback to receive data

## 1.7 sendDatawithPackageSize

Sends data in specified package sizes and reports (Write with Response)

- (void)sendData:(NSData \*)data withPackageSize:(NSUInteger)packageSize  
completion:(void (^)(BOOL success, NSUInteger totalBytesSent, NSUInteger  
currentPackageIndex, NSError \*error))completion;

[Parameter]

- data:Data to print.
- packageSize:The size of each data package to be sent, in bytes.
- completion:
  - success: A Boolean indicating whether the data was sent successfully.
  - totalBytesSent: The total number of bytes that have been sent.
  - currentPackageIndex: The index of the current package being sent.
  - error: An NSError object that describes the problem, if any.

## 1.8 writeCommandDataWithoutResponse

Send data to printer (Write without Response)

- (void)writeCommandDataWithoutResponse:(NSData \*)data;

[Parameter]

- data:Data to print.

## 1.9 printerStatus

Get printer status

- (void)printerStatus:(TSCBLEPrinterStatusBlock)statusBlock;

[Parameter]

- statusBlock: Status callback result.

## 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.

## ★ TSCbleCentralManagerDidUpdateState

App Bluetooth status update.

- (void) TSCbleCentralManagerDidUpdateState:(NSInteger)state;

[Parameter]

- state: Bluetooth status value

CBManagerStateUnsupported	The platform/hardware doesn't support Bluetooth Low Energy.
CBManagerStateUnauthorized	The app is not authorized to use Bluetooth Low Energy.

CBManagerStatePoweredOff	Bluetooth powered off.
CBManagerStatePoweredOn	Bluetooth power on.

## 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.

# CPCL

## 3. Defined in the CPCLCommand Class

### 3.1 initLabelWithHeight

Init label

- + (NSData \*)initLabelWithHeight:(int)height
- + (NSData \*)initLabelWithHeight:(int)height count:(int)count

+ (NSData \*)initWithHeight:(int)height count:(int)count offsetx:(int)offsetx  
\* @param height: label height  
\* @param count: label count  
\* @param offsetx: x-coordinate offset position  
\* @return data

## 3.2 setmagWithw

Font magnification

+ (NSData \*)setmagWithw:(int)w h:(int)h  
\* @param w: width amplification 1~16  
\* @param h: height amplification 1~16  
\* @return data

## 3.3 setAlignment

Sets the alignment mode

+ (NSData \*)setAlignment:(CPCLAlignment)alignment  
+ (NSData \*)setAlignment:(CPCLAlignment)alignment end:(int)end  
\* @param alignment:

ALIGNMENT_LEFT	Left align
ALIGNMENT_CENTER	Middle
ALIGNMENT_RIGHT	Right align

\* @param end: End point align  
\* @return data

## 3.4 setSpeedLevel

Sets print speed

+ (NSData \*) setSpeedLevel:(int)level  
\* @param level: speed level, 0~5.  
\* @return data

## 3.5 setPageWidth

Sets print page width

+ (NSData \*)setPageWidth:(int)width  
\* @param width: page width

\* @return data

### 3.6 setBeepLength

Sets beeps length

+ (NSData \*)setBeepLength:(int)length

\* @param length beeps duration, 1/8s, eg. 16 means 2s

\* @return data

### 3.7 drawTextWithx

Draws text

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

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

+ (NSData \*)drawTextWithx:(int)x y:(int)y rotation:(CPCLRotation)rotation font:(CPCLFont)font content:(NSString \*)content

\* @param x x-coordinate

\* @param y y-coordinate

\* @param font

FNT_0	0
FNT_1	1
FNT_2	2
FNT_3	3
FNT_4	4
FNT_5	5
FNT_6	6
FNT_7	7
FNT_24	24
FNT_55	55

\* @param rotation

ROTA_0	0
--------	---



ROTA_1	90
ROTA_2	180
ROTA_3	270

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

### 3.8 form

Switch to the top of the next page

- + (NSData \*)form
- \* @return data

### 3.9 print

Command over, and print

- + (NSData \*)print
- \* @return data

### 3.10 drawBarcodeWithx

Draws Barcode Horizontal

- + (NSData \*)drawBarcodeWithx:(int)x y:(int)y codeType:  
(CPCLBarCode)codeType height:(int)height content:(NSString \*)content
- + (NSData \*)drawBarcodeWithx:(int)x y:(int)y codeType:  
(CPCLBarCode)codeType height:(int)height ratio:  
(CPCLBarCodeRatio)ratio content:(NSString \*)content

Draws Barcode Vertical

- + (NSData \*)drawBarcodeVerticalWithx:(int)x y:(int)y codeType:  
(CPCLBarCode)codeType height:(int)height content:(NSString \*)content
- + (NSData \*)drawBarcodeVerticalWithx:(int)x y:(int)y codeType:  
(CPCLBarCode)codeType height:(int)height ratio:  
(CPCLBarCodeRatio)ratio content:(NSString \*)content
- \* @param x: x-coordinate
- \* @param y: y-coordinate
- \* @param codeType:

BC_128	Code 128
--------	----------

BC_UPCA	UPC-A
BC_UPCE	UPC-E
BC_EAN13	EAN/JAN-13
BC_EAN8	EAN/JAN-8
BC_39	Code 39
BC_93	Code 93/Ext.93
BC_CODABAR	Codabar

\* @param height: barcode height

\* @param ratio: Ratio of wide to narrow, default: BCR\_RATIO\_1

\* @param hriText:

HRI_TEXT_NONE	NONE
HRI_TEXT_BELOW	BELOW
HRI_TEXT_ABOVE	ABOVE

\* @param content: barcode content

\* @return data

### 3.11 barcodeText

Barcode text offset x-coordinate

+ (NSData \*)barcodeText: (int)offsetx

\* @param offsetx: offset x-coordinate

\* @return data

### 3.12 barcodeTextOff

Cancel barcode annotation

+ (NSData \*)barcodeTextOff: (int)offsetx

\* @param offsetx: offset x-coordinate

\* @return data

### 3.13 drawQRCodeWithx

Draws QR Code

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

+ (NSData \*)drawQRCodeWithx:(int)x y:(int)y codeModel:

(CPCLQRCodeMode)codeModel cellWidth:(int)cellWidth content:

(NSString \*)content

- \* @param x: x-coordinate
- \* @param y: y-coordinate
- \* @param codeModel:

CODE_MODE_ORG	Original
CODE_MODE_ENHANCE	Enhance

- \* @param cellWidth: cell width: 1~32, default:6
- \* @param content: QR code content
- \* @return data

### 3.14 drawImageWithx

Draws image

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

- \* @param x x-coordinate
- \* @param y y-coordinate
- \* @param UIImage
- \* @return data

### 3.15 drawBoxWithx

Draws rectangle

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

- \* @param x x-coordinate
- \* @param y y-coordinate
- \* @param width rectangle width
- \* @param height rectangle height
- \* @param thickness rectangle line width
- \* @return data

### 3.16 drawLineWithx

Draws line

+ (NSData \*)drawLineWithx:(int)x y:(int)y xend:(int)xend yend:(int)yend  
width:(int)width

- \* @param x x-coordinate by dot
- \* @param y y-coordinate by dot
- \* @param xend end x-coordinate by dot

- \* @param yend end y-coordinate by dot
- \* @param width line width by dot
- \* @return data

### 3.17 drawInverseLineWithx

The specified area is displayed in black and white reverse

+ (NSData \*)drawInverseLineWithx:(int)x y:(int)y xend:(int)xend yend:(int)yend width:(int)width

- \* @param x x-coordinate by dot
- \* @param y y-coordinate by dot
- \* @param xend end x-coordinate by dot
- \* @param yend end y-coordinate by dot
- \* @param width line width by dot
- \* @return data

### 3.18 setStringEncoding

Set character encoding

+ (void)setStringEncoding:(NSStringEncoding)encoding

- \* @param encoding: NSStringEncoding