

# Bluetooth SDK package User Guide

## 一. Summary

This SDK package is for Android application, communicate the printer with Bluetooth connections. It can be divided into 2 main types. One is bluetooth operation Type and other for Image printing and processing.

### ➤ com.zj.btsdk

## Type BluetoothService

java.lang.Object

└ **com.zj.btsdk.BluetoothService**

BluetoothService Type for Bluetooth operation ( e.g. Bluetooth connection, Bluetooth data transmitting, Bluetooth device searching etc. )

### ➤ com.zj.btsdk

## Type PrintPic

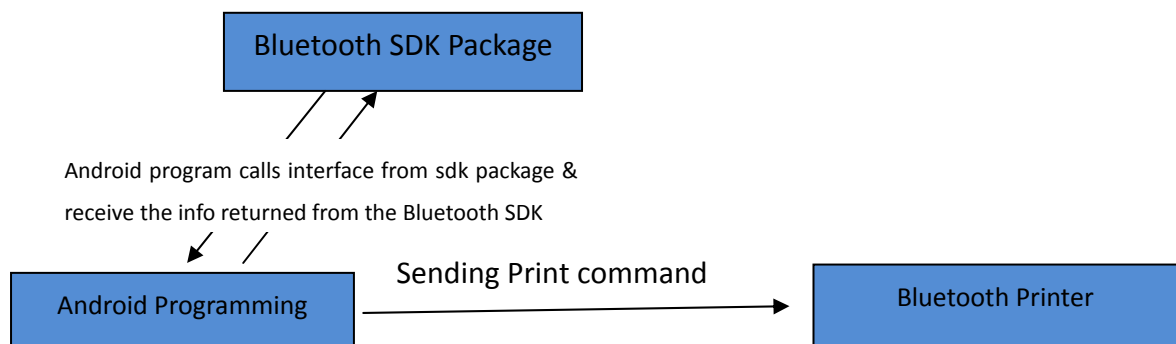
java.lang.Object

└ **com.zj.btsdk.PrintPic**

PrintPic Type for image printing and processing (decompose the desired images into easily recognizable data stream )

## ➤ Schematic Diagram

Android application programming calls the corresponding interface from Bluetooth SDK package( e.g. connecting the Bluetooth interface ), and meanwhile receiving the messages sent back from the bluetooth SDKpackage( e.g. connecting failure notice). Android application programming could calls the sending print function, and sending the printing command to Bluetooth Printer in one-way.



### 三. Description in detail for the interface type

#### ➤ Type BluetoothService

✧ Field description

Field	Description
BluetoothService.MESSAGE_STATE_CHANGE	Returning the Bluetooth connection info to Android programming
BluetoothService.MESSAGE_CONNECTION_LOST	Feed back the Bluetooth disconnected info to android programming
BluetoothService.MESSAGE_UNABLE_CONNECT	Feedback the Bluetooth connection failure to android programming
BluetoothService.STATE_NONE	This sign indicates none operations for this Bluetooth device
BluetoothService.STATE_LISTEN	indicates this BT device are listening the Bluetooth communication
BluetoothService.STATE_CONNECTED	Indicates already connected with a Bluetooth device
BluetoothService.STATE_CONNECTING	means the android BT are connecting another Bluetooth device

#### ● Interface description

##### ● Constructed function

**public** BluetoothService(Context context, Handler handler)

Function description:

Initialization of class field

##### Parameter description:

Handler: Afferent a Handler instance, used for SDK package return the messages to android application programming.

#### ● Ordinary function

##### a. isAvailable

Function Prototype: **public synchronized boolean** isAvailable()

Function Description:

Judge and ensure the android device & Bluetooth hardware is usable.

Return value description:

True: Bluetooth available

False: Bluetooth not available

##### b. isBTOpen

Function Prototype: **public synchronized boolean** isBTOpen()

Function description:

Judge and ensure the android bluetooth device is turned on.

Return value description:

True: Bluetooth turns on

False: Bluetooth isn't turned on

#### **c. getDevByMac**

Function Prototype: **public synchronized** BluetoothDevice getDevByMac(String mac)

Function Description:

Get a device instance according to the device mac address

Parameter Description: mac: Bluetooth printer mac address

Return Value Description:

True: return a BluetoothDevice instance

False: null

#### **d. sendMessage**

Function Prototype: **public synchronized void** sendMessage(String message,String charset)

Function Description:

Transcoding the printing information according to desired character set, and send the printing command to printer .

Message: Printing information character string

Charset: Character set encoding e.g. "GBK"

#### **e. write**

Function Prototype: **public void** write(byte[] out)

Function Description:

Sending of byte stream data to bluetooth printer ( e.g. we can use this function when we have to send the printer control instruction )

Function Description:

Out: Byte stream datas to be send

#### **f. getPairedDev**

Function Prototype: **public synchronized** Set<BluetoothDevice> getPairedDev()

Function Description:

Get the connected device's set

Return Value Description:

Get the connected device's set

#### **g. cancelDiscovery**

Function Prototype: **public synchronized boolean** cancelDiscovery()

Function Description:

Cancelling of the "device searching" operation.

Return Value Description:

True : success returned

False : failed

#### **h. startDiscovery**

Function Prototype: **public synchronized boolean** startDiscovery()

Function Description:

Starting of a “ searching “ operation

Return Value Description:

Success returned : true, Failed: false

#### **i. getState**

Function Prototype: **public synchronized int** getState()

Function Description:

Get the on time bluetooth connection status.

Return Value Description:

BluetoothService.STATE\_NONE: No Connection

BluetoothService.STATE\_LISTEN: Listening to the connection

BluetoothService.STATE\_CONNECTED: Already Connected

BluetoothService.STATE\_CONNECTING: Connecting Process

#### **j. connect**

Function Prototype: **public synchronized void** connect(BluetoothDevice device)

Function Description:

Bluetooth Connecting requested.

Parameter Description:

Device: Afferent Bluetooth Device

#### **k. stop**

Function Prototype: **public synchronized void** stop()

Function Description:

Disconnecting the bluetooth and release the occupied datas.

### ➤ **Type PrintPic**

#### ✧ **Ordinary function**

##### **a. initCanvas**

Function Prototype: **public void** initCanvas(int w)

Function Description:

Initialize canvas

Parameter Description:

W: Value 384px for 58 series printer , Value 576px for 80 series printer

##### **b. initPaint**

Function Prototype: **public void** initPaint()

Function Description:

Initialize brush

#### c. **drawImage**

Function Prototype: **public void** drawImage(**float** x, **float** y, String path)

Function Description:

Painting the path specified image on the canvas

Parameter Description:

Path: Image path

(x,y): Left vertex coordinates

#### d. **printDraw**

Function Prototype: **public byte[]** printDraw()

Function Description: returning of the image byte stream on the canvas (easily recognizable data stream for the printer )

e.g. :

```
byte[] sendData = null;  
PrintPic pg = new PrintPic();  
pg.initCanvas(384);  
pg.initPaint();  
pg.drawImage(0, 0, "/mnt/sdcard/icon.jpg");  
sendData = pg.printDraw();
```

Finally forward the sendData to bluetooth Printer for image printing.

## 四. Demo Program

Please refer to PrintDemo for bluetooth printer for Detail( Demo program for this SDK )

Development tool: Android Developer Tools ( Build: v21.0.1-543035 )