Instructions for Android TSC Bluetooth/Ethernet

library functions

1. openport()

- **Bluetooth**

  openport(a)

  Description: Start the printer spool.

  Parameter:

  a: String

  Input the Bluetooth Mac Address, example: “00:19:0E:A0:04:E1

- **Ethernet**

  openport(a,b)

  Description: Start the printer spool.

  Parameter:

  a: String

  Input the IP Address, for example: “192.168.1.50”

  b: String

  Input the printer port number, for example: “9100”

- **USB**

  openport(a,b)

  Description: Start the printer spool via OTG wire.

  Parameter:

  a: UsbManager

  Input UsbManager variable.

  b: UsbDevice

  Input UsbDevice variable.

2. closeport()

Description: Close Windows printer spool.

Parameter: None

Note: Default about delay 1.5 second.

3. closeport(a)

Description: Close Windows printer spool.

Parameter:

a: int, delay time, 1000 = 1 second.

Ex: closeport(5000)

4. setup(a,b,c,d,e,f,g)

Description: Set up label width, label height, print speed, print density, sensor type, gap/black mark vertical distance、gap/black mark shift distance

Parameter:

a: int, sets up label width; unit: mm

b: int, sets up label height; unit: mm

c: int, sets up print speed, (selectable print speeds vary on different printer models)

1.0: sets print speed at 1.0"/sec

1.5: sets print speed at 1.5"/sec

2.0: sets print speed at 2.0"/sec

3.0: sets print speed at 3.0"/sec

4.0: sets print speed at 4.0"/sec

6.0: sets print speed at 6.0"/sec

8.0: sets print speed at 8.0"/sec

10.0: sets print speed at 10.0"/sec

12.0: sets print speed at 12.0"/sec

d: int, sets up print density

0~15，the greater the number, the darker the printing

e: int, sets up the sensor type to be used

0: signifies that vertical gap sensor is to be used

1: signifies that black mark sensor is to be used

f: int, sets up vertical gap height of the gap/black mark; unit: mm

g: int, sets up shift distance of the gap/black mark; unit:: mm; in the case of the average label, set this parameter to be 0.

5. clearbuffer()

Description: Clear

Parameter: None

6. barcode(a,b,c,d,e,f,g,h,I)

Description: Use built-in bar code formats to print

Parameter:

a: int; the starting point of the bar code along the X direction, given in points (of 200 DPI, 1 point=1/8 mm; of 300 DPI, 1point=1/12 mm)

b: int; the starting point of the bar code along the Y direction, given in points (of 200 DPI, 1 point=1/8 mm; of 300 DPI, 1 point=1/12 mm)

c: string

128	Code 128, switching code subset A, B, C automatically
128M	Code 128, switching code subset A, B, C manually.
EAN128	Code 128, switching code subset A, B, C automatically
25	Interleaved 2 of 5
25C	Interleaved 2 of 5 with check digits
39	Code 39
39C	Code 39 with check digits
93	Code 93
EAN13	EAN 13
EAN13+2	EAN 13 with 2 digits add-on
EAN13+5	EAN 13 with 5 digits add-on
EAN8	EAN 8
EAN8+2	EAN 8 with 2 digits add-on
EAN8+5	EAN 8 with 5 digits add-on
CODA	Codabar
POST	Postnet
UPCA	UPC-A
UPCA+2	UPC-A with 2 digits add-on
UPCA+5	UPC-A with 5 digits add-on
UPCE	UPC-E
UPCE+2	UPC-E with 2 digits add-on
UPCE+5	UPC-E with 5 digits add-on

d: int; sets up bar code height, given in points

e: int, sets up whether to print human recognizable interpretation (text) or not.

0: prints no interpretation

1: prints interpretation

f: int; sets up rotation degrees

0: rotates 0 degree

90: rotates 90 degrees

180: rotates180 degrees
270: rotates 270 degrees

g: int; sets up narrow bar ratio, refer to TSPL user's manual
h: int; sets up wide bar ratio, refer to TSPL user's manual
I: string; bar code content

7. printerfont(a,b,c,d,e,f,g)

Description: Use printer built-in fonts to print
Parameter:

a: int; the starting point of text (character string) along the X direction, given in points (of 200 DPI, 1 point=1/8 mm; of 300 DPI, 1 point=1/12 mm)
b: int; the starting point of text (character string) along the Y direction, given in points (of 200 DPI, 1 point=1/8 mm; of 300 DPI, 1 point=1/12 mm)
c: string; built-in font type name, 12 kinds in sum

1: 8*/12 dots
2: 12*20 dots
3: 16*24 dots
4: 24*32 dots
5: 32*48 dots
TST24.BF2: Traditional Chinese 24*24 (Customized Font)
TST16.BF2: Traditional Chinese 16*16 (Customized Font)
TTT24.BF2: Traditional Chinese 24*24 (Telecommunication Code) (Customized Font)
TSS24.BF2: Simplified Chinese 24*24 (Customized Font)
TSS16.BF2: Simplified Chinese 16*16 (Customized Font)
K: Japan, Korean font 24*24, (Customized Font)
L: Japan Korean font 16*16 (Customized Font)

d: int; sets up the rotation degree of the text (character string)

0: rotates 0 degree
90: rotate 90 degrees
180: rotate 180 degrees
270: rotate 270 degrees

e: int; sets up the magnification rate of text (character string) along the X direction, range: 1~8
f: int; sets up the magnification rate of text (character string) along the Y direction, range: 1~8
g: string; prints the content of text (character string)

8. sendcommand(command)

Description: Sends built-in commands to the bar code printer
Parameter: Refer to TSPL for details

9. printlabel(a,b)

Description: Print label content
Parameter:
a: int; sets up the number of label sets
b: int, sets up the number of print copies

10. downloadpcx(a)

Description: Download mono PCX graphic files to the printer
Parameter:
a: string; file name (the file need save to Download folder path in handheld devices)

11. downloadbmp(a)

Description: Download mono BMP graphic files to the printer
Parameter:
a: string; file name (the file need save to Download folder path in handheld devices)

12. downloadttf(a)

Description: Download True Type Font file to the printer.
Parameter:
a: string; file name (the file need save to Download folder path in handheld devices)

13. formfeed()

Description: Skip to next page (of label); this function is to be used after setup Parameter: None

14. nobackfeed()

Description: disable the backfeed function
Parameter: None

15. sendfile(a)

Description: Send .txt files to the printer
Parameter:
a: string; file name (the file need save to Download folder path in handheld devices)

16. printerstatus(int timeout)

Description: Response the printer status. Please refer TSPL <ESC>!? command.

Parameter: int, delay time.

To use String variable to receive the data.

Note: 00 = Idle, 01 = Head Opened

17. smartbattery_status (a)

Description: Response the smart battery status.

Parameter: int, type of return status.

a: int; status type.

Note:

0 = serial number
1 = voltage
2 = capacity
3 = temperature
4 = discharged counts
5 = manufacture date
6 = replacement threshold
7 = health
8 = maximum capacity

Android Example for TSC Bluetooth

```
import com.example.tscdll.TSCActivity;


public class MainActivity extends Activity {
TSCActivity TscDll = new TSCActivity();


public void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);


TscDll.openport("00:19:0E:A0:04:E1");
TscDll.downloadpcx("UL.PCX");
TscDll.downloadbmp("Triangle.bmp");
TscDll.downloadttf("ARIAL.TTF");
TscDll.setup(70, 110, 4, 4, 0, 0, 0);
TscDll.clearbuffer();
TscDll.sendcommand("SET TEAR ON\n");
TscDll.sendcommand("SET COUNTER @1 1\n");
TscDll.sendcommand("@1 = \"0001\"\n");
TscDll.sendcommand("TEXT 100,300,\"3\",0,1,1,@1\n");
TscDll.sendcommand("PUTPCX 100,300,\"UL.PCX\"\n");

TscDll.sendcommand("PUTBMP 100,520,\"Triangle.bmp\"\n");

TscDll.sendcommand("TEXT 100,760,\"ARIAL.TTF\",0,15,15,\"THIS IS ARIAL FONT\"\n");

TscDll.barcode(100, 100, "128", 100, 1, 0, 3, 3, "123456789");

TscDll.printerfont(100, 250, "3", 0, 1, 1, "987654321");

String status = TscDll.printerstatus();

text1.setText(status);

TscDll.printlabel(2, 1);

//TscDll.sendfile("zpl.txt");

TscDll.closeport(5000);

    }

}
```

You need input below command line to AndroidMainfest.xml first.

```
<uses-permission android:name="android.permission.BLUETOOTH_ADMIN" />

<uses-permission android:name="android.permission.BLUETOOTH" />

<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"/>
```

Android Example TSC Ethernet

```
import com.example.tscwifidll.TscWifiActivity;


public class MainActivity extends Activity {

TscWifiActivity TscEthernetDll = new TscWifiActivity();


public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);


TscEthernetDll.openport("192.168.1.58", 9100);

TscEthernetDll.downloadpcx("UL.PCX");

TscEthernetDll.downloadbmp("Triangle.bmp");

TscEthernetDll.downloadttf("ARIAL.TTF");

TscEthernetDll.setup(70, 110, 4, 4, 0, 0, 0);

TscEthernetDll.clearbuffer();

TscEthernetDll.sendcommand("SET TEAR ON\n");

TscEthernetDll.sendcommand("SET COUNTER @1 1\n");

TscEthernetDll.sendcommand("@1 = \"0001\"\n");

TscEthernetDll.sendcommand("TEXT 100,300,\"3\",0,1,1,@1\n");
TscEthernetDll.sendcommand("PUTPCX 100,300,\"UL.PCX\"\n");

TscEthernetDll.sendcommand("PUTBMP 100,520,\"Triangle.bmp\"\n");

TscEthernetDll.sendcommand("TEXT 100,760,\"ARIAL.TTF\",0,15,15,\"THIS IS ARIAL FONT\"\n");

TscEthernetDll.barcode(100, 100, "128", 100, 1, 0, 3, 3, "123456789");

TscEthernetDll.printerfont(100, 250, "3", 0, 1, 1, "987654321");

String status = TscEthernetDll.printerstatus();

text1.setText(status);

TscEthernetDll.printlabel(2, 1);

//TscEthernetDll.sendfile("zpl.txt");

TscEthernetDll.closeport(5000);

      }

}
```

You need input below command line to AndroidMainfest.xml first.

```
<uses-permission android:name="android.permission.INTERNET"/>

<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"/>
```

Android Example TSC USB

```
import android.hardware.usb.UsbAccessory;
import android.hardware.usb.UsbConstants;
import android.hardware.usb.UsbDevice;
import android.hardware.usb.UsbDeviceConnection;
import android.hardware.usb.UsbEndpoint;
import android.hardware.usb.UsbInterface;
import android.hardware.usb.UsbManager;
import android.hardware.usb.UsbRequest;
import com.example.tscdll.TSCUSBActivity;

test.setOnClickListener(new OnClickListener() {

public void onClick(View v) {

if(mUsbManager.hasPermission(device))
{
TscUSB.openport(mUsbManager,device);
TscUSB.sendcommand("SIZE 3,1\r\n");
TscUSB.sendcommand("GAP 0,0\r\n");
TscUSB.sendcommand("CLS\r\n");

TscUSB.sendcommand("TEXT 100,100,\"3\",0,1,1,\"123456\"\r\n");

TscUSB.sendcommand("PRINT 1\r\n");

TscUSB.closeport(3000);

}

}

});
```

Note: The detail command line please refer sample code on website.