



# **PRINTER SDK GUIDE**

V1.0.7

## Summary

The document is mainly used to introduce how to work on D30, D60, D70 printer. Including the API methods of initiate and open printer, as well as how to print text, Image, barCode and so on by using API.

## Document Change History

Date	Version	Author	Description
2022/11/29	1.0.0	Qianmeng Chen	Initial Version
2022/12/05	1.0.1	Qianmeng Chen	Add the connection function for Printer
2022/12/09	1.0.2	Wanli OuYang	Modify the printer callback interface
2023/01/30	1.0.3	Wanli OuYang	Add D30 and MP5801 printing interface
2023/05/15	1.0.4	Yi Zhao	Interface optimization
2023/05/19	1.0.5	Wanli OuYang	Interface optimization
2023/10/08	1.0.6	Wanli OuYang	Optimize interface and add D60 Printer
2025/06/21	1.0.7	Wanli OuYang	Interface optimization

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## context

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## 1. How to integrate SDK

The Dspread print SDK can be obtained through a remote repository. You only need to add the dependency in the build.gradle of the calling module.

1. Gradle Groovy DSL install command

```
implementation 'com.dspread.print:dspread_print_sdk:1.5.5-beta'
```

2. Add Gradle Groovy DSL repository command

```
maven {  
    url 'https://gitlab.com/api/v4/projects/4128550/packages/maven'  
}
```

## 2. How to use SDK

After integrating the SDK, firstly you can use the `getPrinter()` method to get the printer.

```
PrinterDevice mPrinter = PrinterManager.getInstance().getPrinter();
```

### 1、D60、D70 device integration SDK.

```
mPrinter.initPrinter(context);
```

### 2、D30 device integration SDK.

```
mPrinter.initPrinter(context, new PrinterInitListener() {  
    @Override  
    public void connected() {  
    }  
    @Override  
    public void disconnected() {  
    }  
});
```

### 3、Initialize callback API

```
MyPrinterListener myPrinterListener = new MyPrinterListener();
```

```
mPrinter.setPrintListener(myPrinterListener);
```

```
class MyPrinterListener implements PrintListener{  
    @Override  
    public void printResult(boolean b, String status, int type)  
}
```

## 3. Demo Example

You can refer to the SDK to use the Demo source code for development. Click the links below to download the Demos.

**Link:** <https://github.com/DspreadOrg/android>

## 4. Printer SDK API

The printer object can use the following APIs to manage printers and meet different printing needs, including:

- `printText()`: Text printing API
- `printBitmap()`: Picture printing API
- `printBarCode()`: BarCode printing API
- `printQRCode()`: QRCode printing API
- `print()`: composite content printing API

### 4.1 Print Function

#### 4.1.1 Set Text Print Style

API	<code>public void setPrintStyle(PrintLineStyle style)</code>
Inputs	<ol style="list-style-type: none"><li>1. <code>PrintLineStyle</code>: <code>void setAlign(int align);</code> <code>void setFontSize(int fontSize);</code> <code>void setFontStyle (int bold);</code></li><li>2. <code>setAlign(int align)</code>: <code>PrintLine.LEFT</code> <code>PrintLine.CENTER</code> <code>PrintLine.RIGHT</code></li><li>3. <code>setFontStyle(int bold)</code>: <code>PrintStyle.FontStyle.NORMAL</code> <code>PrintStyle.FontStyle.BOLD</code> <code>PrintStyle.FontStyle.ITALIC</code> <code>PrintStyle.FontStyle.BOLD_ITALIC</code></li><li>4. <code>setFontSize(int fontsize)</code>: Custom Text Size</li></ol>
Description	Set the text alignment and font effect.
Callback	Null
Printer	D30、D60、D70

#### 4.1.2 Print Text

API	<code>public void printText(String text)</code>
-----	---

Inputs	text: Text that needs to be printed
Description	Print text.
Callback	void printResult(boolean isSuccess, String status, int type) isSuccess: true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70

#### 4.1.3 Print BarCode

API	public void printBarCode(Context context,String symbology, int width, int height, String content,int position)
Inputs	Width: Set the block width Symbology: Barcode1D.CODE_128.name(); Barcode1D.CODABAR.name(); Barcode1D.CODE_39.name(); Barcode1D.EAN_8.name(); Barcode1D.EAN_13.name(); Barcode1D.UPC_A.name(); Barcode1D.UPC_E.name(); Height: Set barcode height Content: Set barcode content Position: Set barcode alignment
Description	Print BarCode.
Callback	void printResult(boolean isSuccess, String status, int type) isSuccess: true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70

#### 4.1.4 Print QRCode

API	public void printQRCode(Context context,String errorLevel, int width, String content, int position)
Inputs	1.width: Set the size of the QR code block 2.errorLevel: Error correction level Barcode2D.ErrorLevel.L.name() Barcode2D.ErrorLevel.H.name() Barcode2D.ErrorLevel.M.name() Barcode2D.ErrorLevel.Q.name() 3.Content: Set up the QR code block content 4.Position: Set up the QR code block alignment
Description	Print QRCode.
Callback	void printResult(boolean isSuccess, String status, int type) isSuccess: true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70

#### 4.1.5 Print Bitmap

API	public void printBitmap(Context context, Bitmap bitmap)
Inputs	bitmap: bitmap data, (Format: PNG/JPG convert to bitmap, Size: width within 384 px, height undefined).
Description	Print Image.
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70



#### 4.1.6 Print Multiple Columns

API	<code>public void addTexts(String[] texts, int[] colsWidthArrs, int[] position, int[] fontStyle, int textSize)</code>
Inputs	1、texts: Each column to print, the array size is the number of columns 2、colsWidthArrs: The proportion of each column in a row, such as <code>int [] {1,1}</code> , will print each column by 1:1 3、position: set text position. 4、fontStyle: set text style 5、textSixe: set text size.
Description	Send print content to the printer in a row with fixed size fixed style content
Callback	<code>void printResult(boolean isSuccess, String status, int type);</code> isSuccess:true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70

#### 4.1.7 add text

API	<code>public void addText (String text)</code>
Inputs	text
Description	Add printed text
Callback	Null
Printer	D30、D60、D70

#### 4.1.8 add BarCode

API	<code>public void addBarCode(Context context, String Symbology, int width, int height, String content, int position)</code>
Inputs	1、Context 2、Symbology: <code>Barcode1D.CODE_128.name()</code> 3、Width: BarCode width 4、Height: BarCode height

	5、Content: BarCode Content 6、Position: PrintLine.CENTER, PrintLine.RIGHT, PrintLine.LEFT
Description	Add printed BarCode
Callback	Null
Printer	D30、D60、D70

#### 4.1.9 add addQRCode

API	public void addQRCode(int width, String qrCodeName, String content, int position)
Inputs	1、width: QRcode width 2、qrCodeName: Barcode2D.QR_CODE.name() 3、content: QRCode Content 4、position: PrintLine.CENTER, PrintLine.RIGHT, PrintLine.LEFT
Description	Add printed QRCode
Callback	Null
Printer	D30、D60、D70

#### 4.1.10 add Bitmap

API	public void addBitmao(Bitmap bitmap, int positio)
Inputs	1、bitmap: printed bitmap 2、position: PrintLine.CENTER, PrintLine.RIGHT, PrintLine.LEFT
Description	Add printed bitmap
Callback	Null
Printer	D30、D60、D70

#### 4.1.11 Print composite content

API	public void print(Context context)
Inputs	Before calling the method, you can call the following method to add content: <b>(Please check api 4.1.6-4.1.10)</b> addTexts(), addText(), addBarCode(), addQRCode(), addBitmap(),
Description	Print composite type files, First add the different types of files. Then call this interface to print
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false

	status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D30、D60、D70

#### 4.1.12 Set text line space

API	public void setLineSpace(int mlineSpace)
Inputs	mlineSpace, setting value 2.3.4.5.6..
Description	Set text line spacing
Callback	Null
Printer	D30、D60、D70

#### 4.1.13 Set bitmap space

API	public void setBitmapSpace (int bitmapSpace)
Inputs	bitmapSpace, setting value 2.3.4.5.6..
Description	Set bitmap line spacing
Callback	Null
Printer	D30、D60、D70

#### 4.1.14 addPrintLintStyle

API	public void addPrintLintStyle (PrintLineStyle style)
Inputs	style: PrintLineStyle example code: mPrinter.addPrintLintStyle(new PrintLineStyle(PrintStyle.FontStyle.NORMAL,PrintLine.CENTER, 14));
Description	the API sets the text font size, position, and font style for api addText
Callback	Null

Printer	D30、D60、D70
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#### 4.1.15 close Printer

API	public void close ()
Description	Close the printer after printing is complete
Callback	Null
Printer	D30、D60、D70

## 4.2 Printer Status Getting Function

### 4.2.1 Get Printer Status

API	public void getPrinterStatus()
Description	get printer status.
Call back	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false status: Normal; Printing; NoPaper; Overheated; Undefined type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60

### 4.2.2 Get Printer Density

API	public void getPrinterDensity()
Description	Get Printer Density
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false status: 1 to 5,5 is the highest type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE

	8 GET_STATUS
Printer	D60

#### 4.2.3 Get Printer Speed

API	public void getPrinterSpeed()
Description	Get Printer Speed
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false statue: 1 to 5,5 is the highest type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60

#### 4.2.4 Get Printer Temperature

API	public void getPrinterTemperature()
Description	Get Printer Temperature
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false statue: 1 to 5,5 is the highest type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60

#### 4.2.5 Get Printer Voltage

API	public void getPrinterVoltage()
Description	Get Printer Voltage
Callback	void printResult(boolean isSuccess, String status, int type); isSuccess:true/false

	statue: 1 to 5,5 is the highest type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60

## 4.3 Printer Setting

### 4.3.1 Set Printer Density

API	public void setPrinterDensity(int printerDensityLevel)
Inputs	printerDensityLevel: Printer concentration levels Concentration level: 1 to 5 (5 is the highest)
Description	Set Printer Density.
Callback	void printResult(boolean isSuccess, String value, int type) isSuccess: true/false value: Return the printer status value. type: 1 PRINT_RESULT 3 GET_DESITY 5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60

### 4.3.2 Set Printer Speed

API	public void setPrinterSpeed(int printerDensityLevel)
Inputs	printerSpeedLevel: Printer speed levels Speed level: 1 to 5 (5 is the highest)
Description	Set Printer Speed.
Call back	void printResult(boolean isSuccess, String value, int type) isSuccess: true/false value: Return the printer status value. type: 1 PRINT_RESULT 3 GET_DESITY

	5 GET_SPEED 6 GET_TEMPERATURE 7 GET_VOLTAGE 8 GET_STATUS
Printer	D60