

# SunmiScanner User Guide

## 文档更新说明

编号	更新日期	组件版本	更新内容	撰写人
1.0.0	2018/04/24	v1.1.6	原始版本	Darren、徐贇庭
1.0.1	2018/0607	v1.1.19	添加：获取扫码头接口	Darren、Arthur

# 1. Introduction

Sunmi L2, P2Lite and other scan code special equipment, can be used for commercial super, industrial, medical, agricultural trade, law enforcement, etc., L2 has two kinds of scan specs:



NewLand: New NewLand Sweeping Pier, support code see Schedule 1 ;



Zebra: Zebra Sweeping Pier, support code see Schedule 1 ;

Scan Engine is a development-free scanning device. By default, the side key triggers the scan code function. There are three scan code output results. The default is the analog keyboard output. The user opens any edit box. After the scan is successful, the scan result is automatically entered in the edit box.

If the user needs the software to trigger the scan code or needs to customize the scan code button, it can be set through the interface provided by the scan code service.

The following describes the interface documentation related to the scan code service (currently support Aidl way and service connection).

## 2. Connect Service (AIDL)

### 2.1. AIDL

AIDL is the abbreviation of Android Interface Definition language. It is a description language of Android's internal process communication interface. Through it, we can define the communication interface between processes.

### 2.2. Use AIDL

Establishing a connection can be divided into the following 5 steps:

1. Add the [AIDL](#) file included in the resource file to your project.
2. Implement ServiceConnection in the code class that controls scan code.
3. Call ApplicationContext.bindService() and pass it in the ServiceConnection implementation. Note: bindservice is a non-blocking call, meaning that the call is not completed immediately after the call is completed. ServiceConnected must prevail.
4. In the ServiceConnection.onServiceConnected() implementation, you receive an IBinder instance (the invoked Service). Call IScanInterface.Stub.asInterface(service) to convert the argument to IScanInterface type.
5. Now you can call the methods defined in the IScanInterface interface.

绑定服务示例:

```
private static ServiceConnection conn = new ServiceConnection() {
    @Override
    public void onServiceConnected(ComponentName name, IBinder service) {
        scanInterface = IScanInterface.Stub.asInterface(service);
        Log.i("setting", "Scanner Service Connected!");
    }

    @Override
    public void onServiceDisconnected(ComponentName name) {
        Log.e("setting", "Scanner Service Disconnected!");
        scanInterface = null;
    }
};

public void bindScannerService() {
```

```
Intent intent = new Intent();
intent.setPackage("com.sunmi.scanner");
intent.setAction("com.sunmi.scanner.IScanInterface");
bindService(intent, conn, Service.BIND_AUTO_CREATE);
}
```

## 2.3. AIDL Interface

No.	Fuction
1	void <b>sendKeyEvent</b> (KeyEvent key) Custom the trigger key
2	void <b>scan</b> ( ) start scan
3	void <b>stop</b> ( ) stop scan
4	int <b>getScannerModel</b> () Get scanner type

### 1. Custom the trigger key

**fuction:** void **sendKeyEvent**(KeyEvent key)

**parameter:**

key → KeyEvent

action=KeyEvent.ACTION\_UP: start scan

action=KeyEvent.ACTION\_DOWN: stop scan

**Example:**

```
@Override
public boolean dispatchKeyEvent(KeyEvent event) {
    // example: Use the home key as a trigger scan code button
    if (event.getKeyCode() == KeyEvent.KEYCODE_HOME) {
        scanInterface.sendKeyEvent(event);
    }
    return super.dispatchKeyEvent(event);
}
```

### 2. Start scan

**fuction:** void **scan**( )

**Note:** Need to work with the stop() method to start identifying scan codes.

**Example:**

```
scanInterface.scan();
```

### 3. Stop scan

**fuction:** void **stop()**

**Note:** Need to work with the scan() method to stop identifying scan codes.

**Example:**

```
scanInterface.stop();
```

### 4. Get scan type

**fuction:** int **getScannerModel()**

**Return:** Type:

100 → NONE

101 → P2Lite

102-->l2-newland

103-->l2-zabra

**Example:**

```
scanInterface.getScannerModel();
```

## 3. Setting

### 3.1. Character set selection

Default: UTF-8

Options: UTF-8, GBK, ISO-8859-1, SHITF-JIS

Character Set Selection	
UTF-8	<input checked="" type="radio"/>
GBK	<input type="radio"/>
ISO-8859-1	<input type="radio"/>
SHIFT-JIS	<input type="radio"/>
Cancel	Confirm

### 3.2. Prompt mode

Acoustic and vibration alerts are turned on by default.

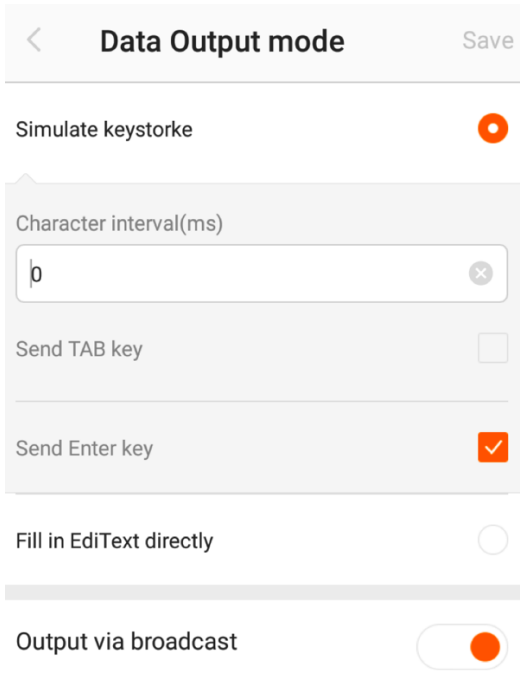
Prompt mode	
beep voice	<input checked="" type="checkbox"/>
vibrating	<input checked="" type="checkbox"/>
Cancel	Confirm

### 3.3. Data Output mode

Simulated keyboard output is selected by default

Broadcast output is turned on by default





### 1. Broadcast introduce

Listening broadcast: "com.sunmi.scanner.ACTION\_DATA\_CODE\_RECEIVED"

#### Example:

```
private static final String ACTION_DATA_CODE_RECEIVED =
"com.sunmi.scanner.ACTION_DATA_CODE_RECEIVED";
private static final String DATA = "data";

private BroadcastReceiver receiver = new BroadcastReceiver() {
    @Override
    public void onReceive(Context context, Intent intent) {
        String code = intent.getStringExtra(DATA);
        if (code != null && !code.isEmpty()) {
            mCode.setText(code);
        }
    }
};

private void registerReceiver() {
    IntentFilter filter = new IntentFilter();
    filter.addAction(ACTION_DATA_CODE_RECEIVED);
    registerReceiver(receiver, filter);
}
```



### 3.4. Scan mode

Default: trigger mode

触发模式设置		保存
短按触发，松开停止	<input checked="" type="radio"/>	
短按触发，连续扫码	<input type="radio"/>	
短按触发扫码至超时...	<input type="radio"/>	

### 3.5. Decoders

The user can choose to enable or disable the identification code in setting .

Default : fully enabled.

选择可识别码		全不选
AustralianPostal	<input checked="" type="checkbox"/>	
Aztec	<input checked="" type="checkbox"/>	
Canadian	<input checked="" type="checkbox"/>	
chinese2of5	<input checked="" type="checkbox"/>	
codabar	<input checked="" type="checkbox"/>	
code11	<input checked="" type="checkbox"/>	
code12	<input checked="" type="checkbox"/>	
code30	<input checked="" type="checkbox"/>	
code32	<input checked="" type="checkbox"/>	
code32	<input checked="" type="checkbox"/>	

## 4. Appendices

### 4.1. table1

Code	Newland	Zebra
Code128	√	√
UCC-EAN128	√	√
ISBT 128		√
EAN8	√	√
EAN13	√	√
UPC-E	√	√
UPC-E1		√
UPC-A	√	√
Interleaved 2 of 5 (ITF)	√	√
Matrix 2 of 5	√	√
Code39	√	√
Codabar	√	√
Code93	√	√
GS1 DataBar(RSS)	√	√
Composite-UCC	√	√
Composite-UPC	√	√
Code11	√	√
ISBN	√	√
Industrial 2 of 5	√	
Standard 2 of 5	√	
Discrete 2 of 5 (DTF)		√
Chinese 2 of 5		√
Korea 3 of 5		√

Plessey	√	
MIS-Plessey	√	√
Composite A/B		√
Composite C		√
ISSN EAN		√
PDF417	√	√
QR Code	√	√
Aztec		√
DataMatrix	√	√
Hanxin	√	√
MaxiCode		√
AustralinPostal		√
US Postnet		√
US Planet		√
Uk Postal		√
Japan Postal		√