



ATID Co.,Ltd

Barcode Scanner Programming Guide

Developer Guide

S/W Team

2021-04-02



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Developer Guide				Company		ATID Co.,Ltd	
Document name		Written by	S/W Team	Date	2021-04-02	Version	V0.1

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V0.1	2021-04-02	1st Draft	New	S/W Team

¹ Reason for revision: specifies whether enacted or revised content is added/modified/deleted from the previous document

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1. Intro

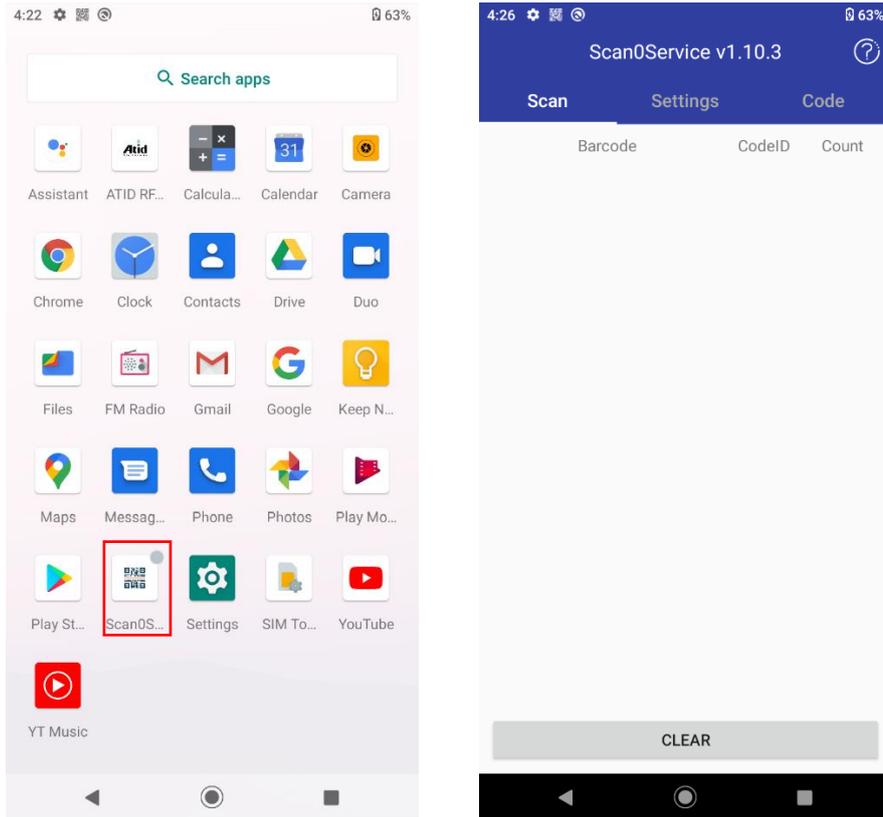
The purpose of this document is to describe how to develop application using the "Intent and Intent filter"

In the description of this document, Android Studio is used as the development tool, and the target platform supports Android 10.

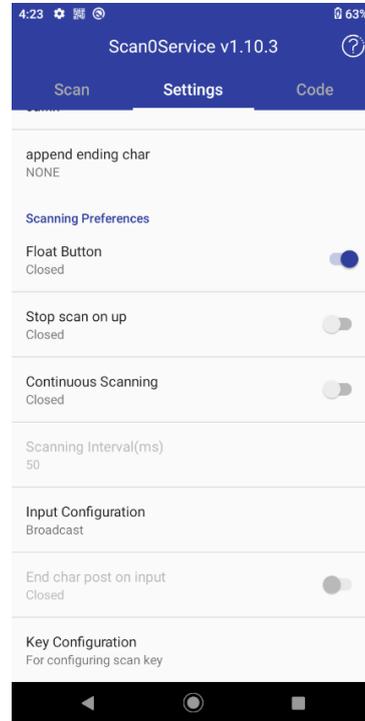
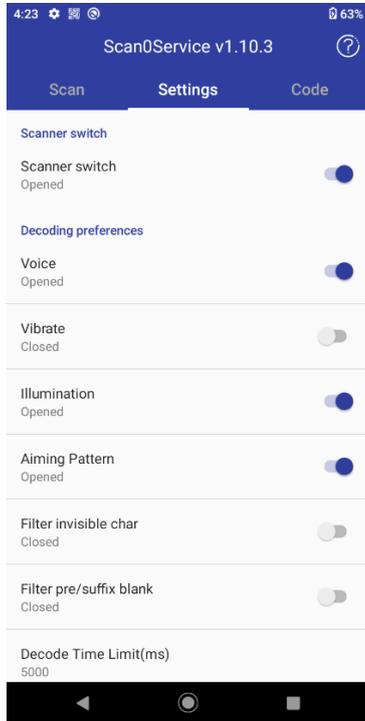
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2. Barcode reading of demo software

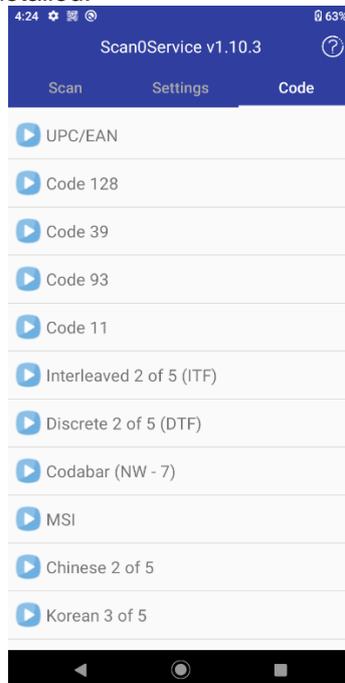
Enter the barcode Demo interface and click floating scan icon(only can show in case of “Float Button” has opened)or gun trigger or side button to read the bar code, as shown below



The scan demo is provided setting menu that can changes the preferences of module. Refer the figure of below.



You can also change the preferences of symbology in the code. If you select the symbol that you want to set, demo will show the settings detailed.



All the preferences only can change with scan service demo.



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In order to ensure the correct reading rate and reading response time, please ensure the barcode window of AT907 portable reader is 20-30cm from the target barcode. When the barcode is printed on a smooth reflective object, keep the barcode window and the target barcode at an angle of 15 to 30° before reading; Otherwise, it may have a certain impact on the speed of reading.

Remarks:

Before using this function module, make sure that AT907 portable reader has installed this optional function module; If it is not installed, you may contact the salesman of ATID for further support.



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3. User Instruction

There are two ways to enter the scan result

HID

Enter the scan data directly at the cursor (Set the Input Configuration into "Focus" in the Scanning Service software)

Application

Obtain the data from the Application, it is called Integrated development (Set the Input Configuration into "Broadcast Receive" in the Scanning Service software), for specific receiving methods, please check the sample.

4. Development Instruction

If the Customer Application does not have to control the barcode scanner, only to obtain scan data, then the following steps need to be followed:

- 1) Start the scan service, and set the "Input Configuration" as "Broadcast Receive"
- 2) Within the application, please refer to "HwScanTest" sample app, register broadcast in order to receive scan data.

MainActivity.java

```
private BroadcastReceiver receiver = new BroadcastReceiver() {  
    @Override  
    public void onReceive(Context context, Intent intent)  
    ...  
};
```

If the Customer Application is required to control the bar-code scan service, please initiate the bar-code scanning refer to below methods, alternatively, to utilize the "ScanUtil.java" which is included in the HwScanTest. It is possible to initiate, to call, and to close the bar-code scan service. We provide 6 broadcast message that you can use to develop. You can make action with this 6 message. However, please do not change the perimeter type and name):

We provide 6 broadcast message that you can use to develop

4.1 Initiate bar-code scan service :

```
private final String ACTION_SCAN_INIT = "com.rfid.SCAN_INIT";  
Intent intent = new Intent();  
intent.setAction(ACTION_SCAN_INIT);  
context.sendBroadcast(intent);
```

4.2 Set the scan result output method to "BroadcastReceiver"

```
private final String ACTION_SET_SCAN_MODE = "com.rfid.SET_SCAN_MODE";  
Intent intent = new Intent();  
intent.setAction(ACTION_SET_SCAN_MODE);
```



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```
intent.putExtra("mode", mode);  
context.sendBroadcast(intent);
```

4.3 Set the bar-code scan time limit (default 5 seconds)

```
private final String ACTION_SCAN_TIME = "com.rfid.SCAN_TIME";  
Intent intent = new Intent();  
// timeout is a String, Value:1000,2000,3000,4000,5000,6000,7000,8000,9000,10000  
intent.setAction(ACTION_SCAN_TIME);  
intent.putExtra("time", 3000);  
context.sendBroadcast(intent);
```

4.4 Call bar-code scan service

```
private final String ACTION_SCAN = "com.rfid.SCAN_CMD";  
Intent intent = new Intent();  
intent.setAction(ACTION_SCAN);  
context.sendBroadcast(intent);
```

4.5 Stop bar-code scan service

```
private final String ACTION_STOP_SCAN = "com.rfid.STOP_SCAN";  
Intent intent = new Intent();  
intent.setAction(ACTION_STOP_SCAN);  
context.sendBroadcast(intent);
```

4.6 Close bar-code scan service.

After close, it will not be possible to call the bar-code service again. If service is required, the App will have to initiate the bar-code service again

```
private final String ACTION_CLOSE_SCAN = "com.rfid.CLOSE_SCAN";  
Intent toKillService = new Intent();  
toKillService.setAction(ACTION_CLOSE_SCAN);  
context.sendBroadcast(toKillService);
```