UROVO

UROVO SCANNER

USER GUIDE

Scope Link
BARCODE TECHNOLOGIES

https://www.scopelink.com.au

Urovo

Note:

This Guide is for general functions of urovo only. Your PDA device may not have some functions wherein or the Instruction gives no description to some functions in your device terminal.

There may be differences between the illustrations in this Guide and the actual product. And the actual product shall prevail.

Urovo Technology Co., Ltd.

BY PRODUCT DEPARTMENT

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History of preparation

Modification records are as follows:

Prepared by	Date	Description
Rev A	October 2019	First edition UROVO-Product Department

CONTENTS

Data Acquisition

● Introduction

Urovo device terminals support data acquisition in the following methods

- ✓ Scan engine decoding

Scan engine

- ✓ 2D scan engine can read various 1D/2D bar codes and 360° read various bar code systems, including the most prevalent linear bar code, postal code, PDF417, QR, DATAMATRIX, etc.

- ✓ By scanning techniques, 2D scan engine takes a photo for a bar code, saves the generated image in memory, and executes a top software decoding algorithm to extract bar code data from the image.

● Scan Settings

Scanning heads may differ from each other in the settings interface. N6603 is taken as example for illustration herein. For more details, please contact Urovo's technical staff for instruction.
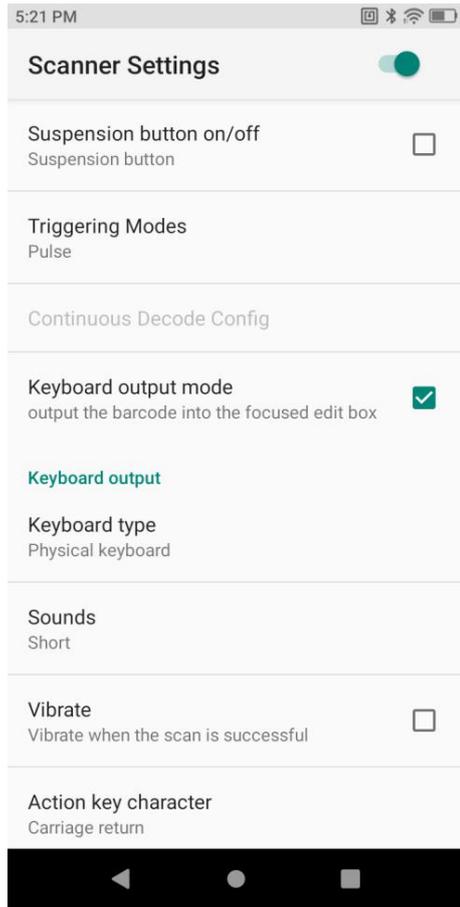
Figure 1-1 Scan Settings

● Floating action button

Open the virtual key scanning tool on the desktop--USCAN, which is available for dragging at will and touching to simulate the key scanning function;
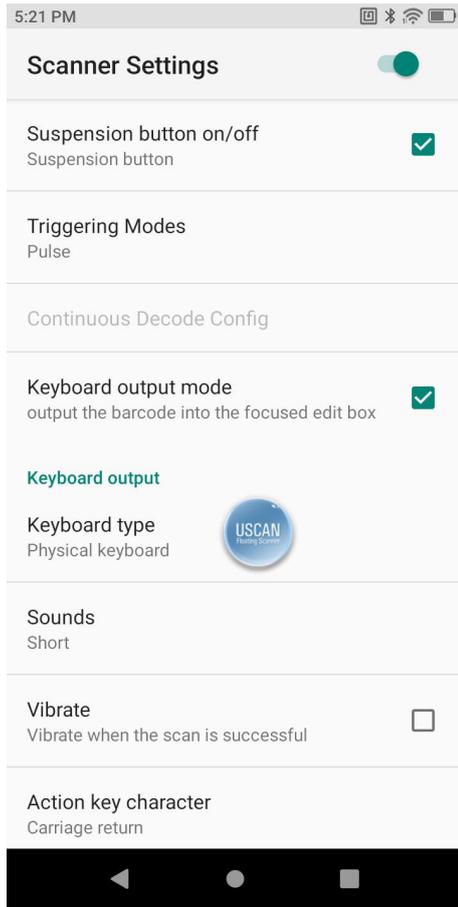
Figure 1-2 Floating Button Scanning Function

● Trigger mode

✓ Auto mode - manually trigger the scanning function. Press the scanning key and laser light or supplementary light will be shown. The light will not go out until decoding is completed or scanning times out;

✓ Continuous mode - manually trigger the scanning function. In the continuous scanning mode, the scanning laser or supplementary image light will not go out after decoding. Instead, decoding will sustain;

✓ Manual mode - manually trigger the scanning function. Press the scanning key and laser light or supplementary light will be shown. Release the key and the light will go out. In addition, the scanning light will also go out after decoding;

● Output by keyboard

Check this mode and the scanning results will be output to the app focus edit box in the foreground by keyboard. Cancel checking this mode and output will be done by broadcast.

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Figure 1-3 Scanning Output by Keyboard

✓ Keyboard Type - options include Physical Keyboard, Input Method Software and Physical Keyboard Only among others. Such options may cause a difference in scanning results. Please select with caution.

◇ Physical Keyboard - If a focus input box arises in any app interface in the foreground, it will directly show all the data, otherwise the device will output scanning results character by character through keyboard simulation;

◇ Input Method Software: the device directly displays all the data in the input box through input method software simulation;

◇ Physical Keyboard Only: the device outputs scanning data through physical key event simulation at any interface;

◇ Input Method Only: output through any non-Android input box, e.g., webpage or search box.

✓ Notification Tone - set the system's notification tone for scanning, which may be None, Instant (default) or Squeak.

✓ Vibrate - check to enable the function of vibrating after scanning.

✓ Operational Key Character - None, Carriage return, Line feed or Tab. Add operational key characters behind scanning results through keyboard simulation.

◇ None: no operation.

◇ Carriage return: add an enter behind scanning results through keyboard simulation;

◇ Line feed: add an OK operation behind scanning results through keyboard simulation;

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☆ Tab: add a Tab key operation behind scanning results through keyboard simulation;
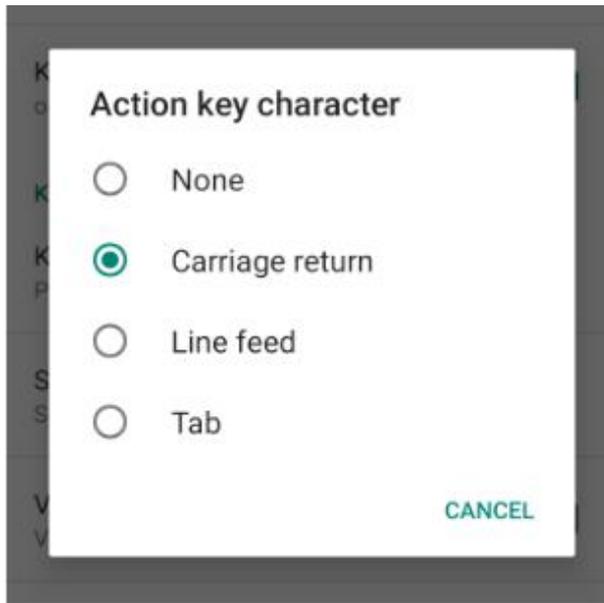

Figure 1-4 Operational Key Character

● **Output by Intent**

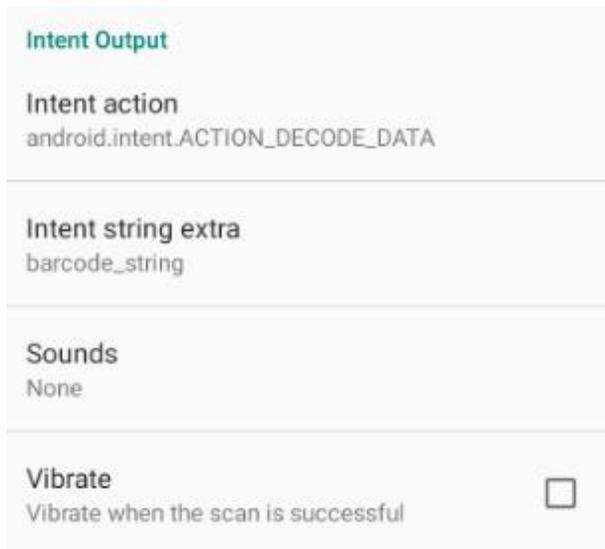Cancel checking output by keyboard and output will be done by Intent.

Figure 1-5 Output by Intent

Set broadcasting via a corresponding app to receive tag and motion data of the designated broadcast. If the scanned data match the app's broadcast tag and motion (tag and motion are editable), the data will be directly received by the Broadcast Receiver. Any intent transfer value may be separately output or handled in the background.

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● Chinese code type

The Chinese code type is UTF-8 by default. This option needs to correspond to the Chinese code type of 2D codes. Any mismatch between the two may lead to code garbling. Please use this function with care.
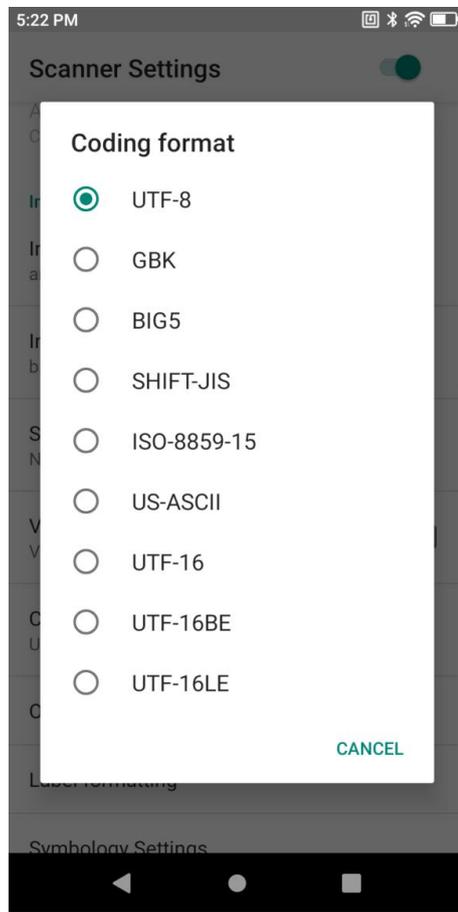

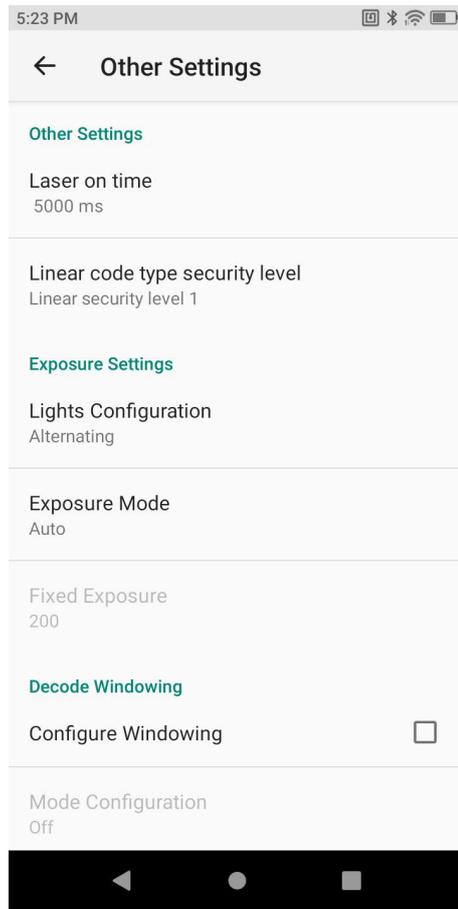Figure 1-6 Chinese Code Type

![Urovo logo]

● **Other settings**

Figure 1-7 Other Settings for Scanning Head

✓ Laser Duration - laser duration for failing in single scanning, range of 500-9900 ms, 5000 ms by default;

✓ Multiple Check - set the check level to lower the error rate. The higher the level is, the more accurate it will be but the slower decoding per time will be;

● **Exposure**

Fill light configuration

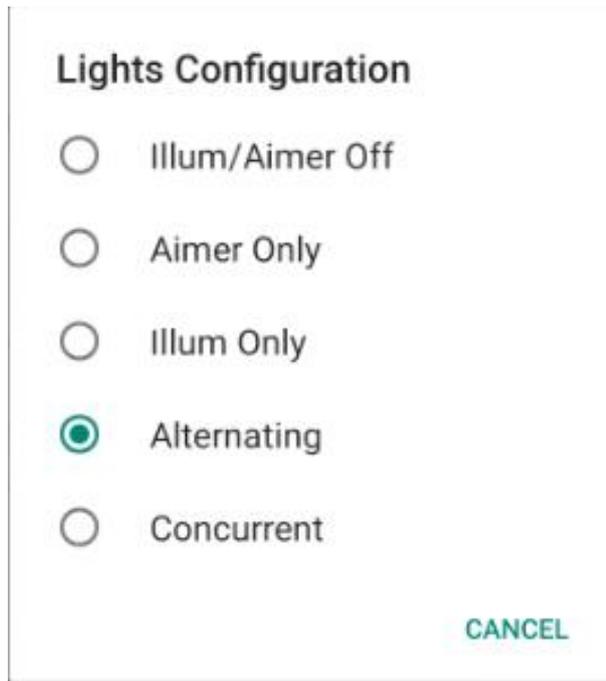Different scanning heads vary from each other in the settings. N6603 scan engine is taken as example for illustration.

Figure 1-8 Fill Light Settings

✓ Lights Configuration

◇ Off: turn off fill light;

◇ Aim Light Only: turn on aim light only;

◇ Floodlight Only: turn on floodlight only;

◇ Alternate: turn on floodlight and aim light in alternation;

◇ Simultaneous: turn on floodlight and aim light at the same time;

✓ Exposure Mode: auto/on. In the auto mode, the scanning head may automatically regulate the exposure value; in the on mode, the exposure value can be set;

✓ Exposure Value: 1~600. The higher the value is, the brighter it will be;

● **Decoding view finder**
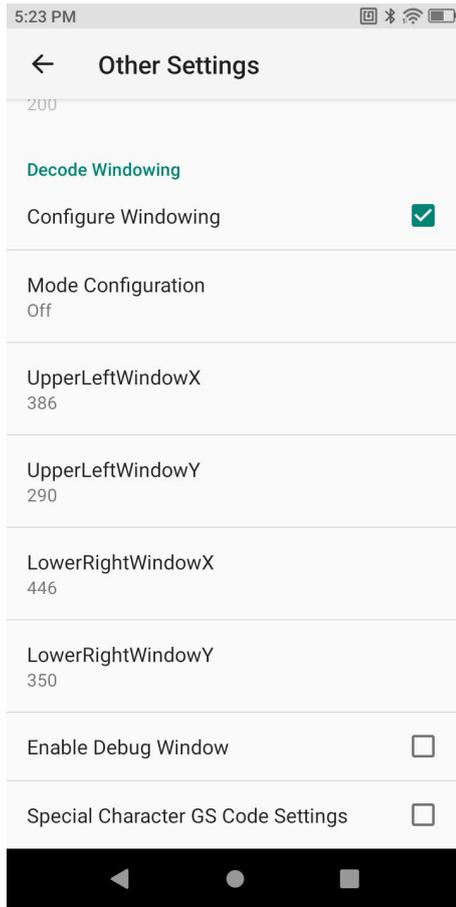
Figure 1-9 Decoding View Finder Settings

- ✓ Configure View Finder – set the range of bar codes from any photo taken;

- ✓ View Mode – Off, Around, Aimer, or Field Of View. To fit the view finder, select the Aimer mode;

- ✓ X Coordinate at the Top Left Corner

- ✓ Y Coordinate at the Top Left Corner

- ✓ X Coordinate at the Bottom Right Corner

- ✓ Y Coordinate at the Bottom Right Corner

- ✓ Set Special Characters in GS Code – check to operate (substitute) special characters in the GS code;

● Bar code formatting

Upon access of bar codes, the system may be available for additional functions: Formatting, Prefix, Suffix, Formatting, Substitute, Delete Non-printing Control Character, App Identifier, or Code Id Type.

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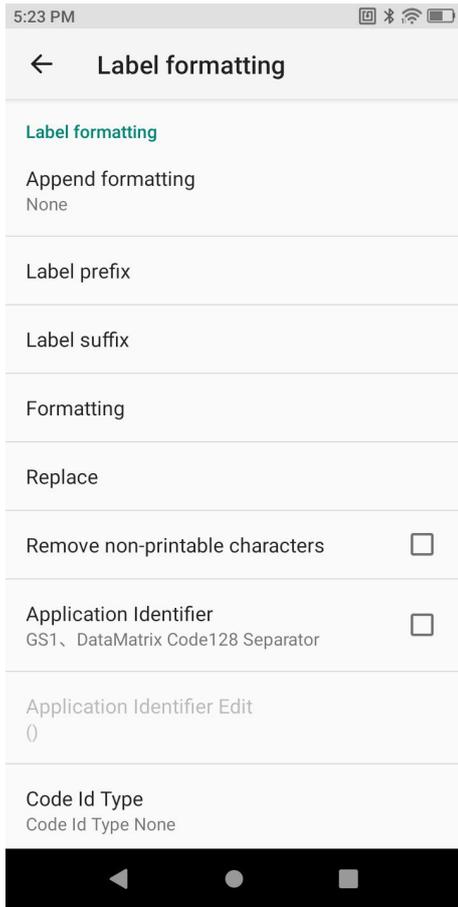
Figure 1-10Bar Code Formatting Settings

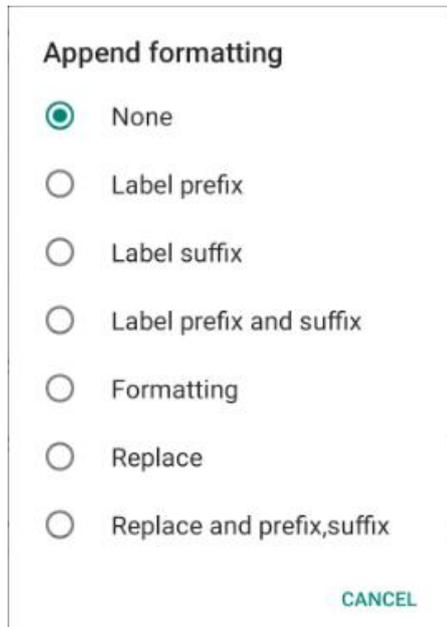✓ Open Bar Code Formatting and select the additional formatting type;

Figure 1-11Formatting Type Settings

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✓ Suffix: select the mode and modify the suffix content, e.g., select [CR] which indicates enter;
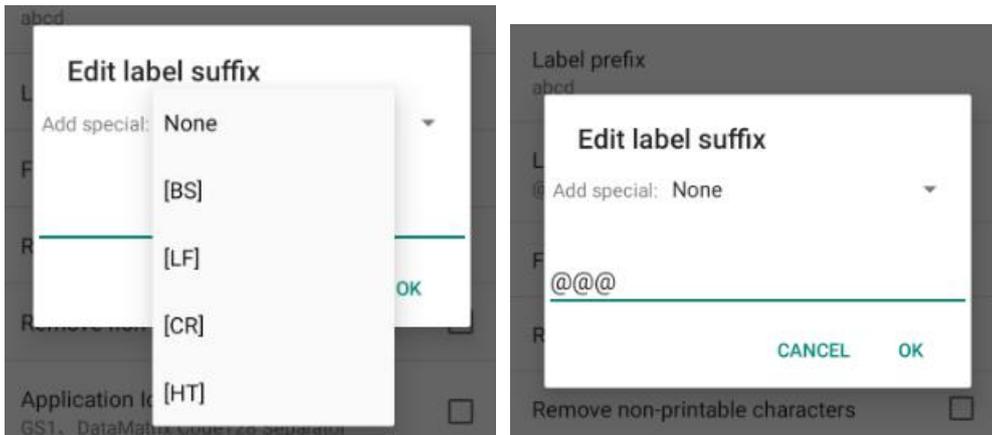

Figure 1-12Edit Suffix

✓ Select the default type from the drop-down list box or define any character as the prefix/suffix;

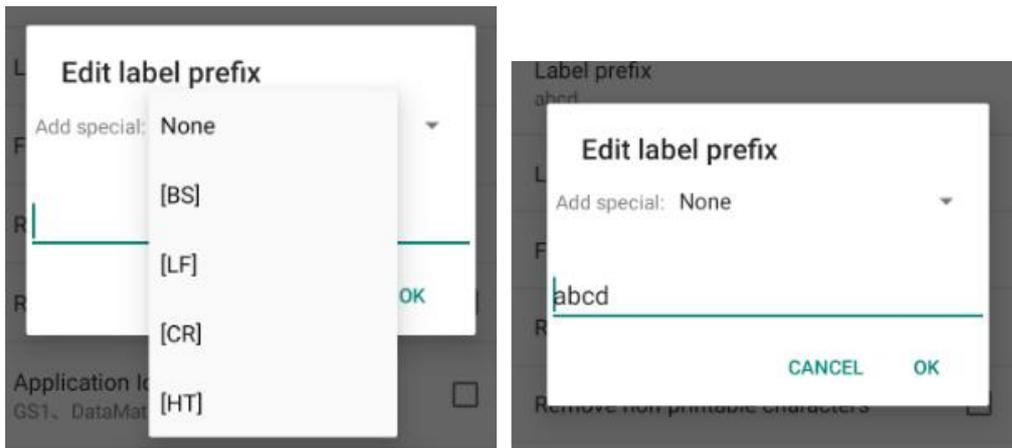✓ Prefix: select the mode and modify the prefix content, e.g., select [CR] which indicates enter;

Figure 1-13Edit Prefix

✓ Select the default type from the drop-down list box or define any character as the prefix/suffix;
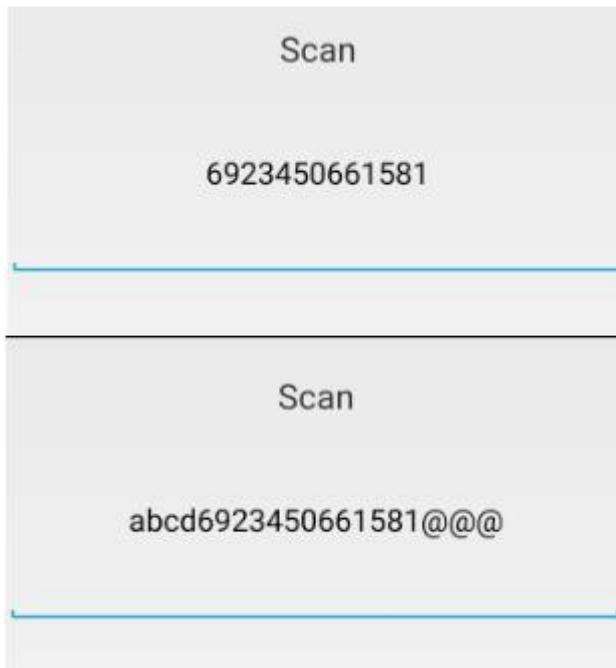
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Figure 1-14Test Prefix/Suffix

✓ Formatting: select the mode and modify the content, e.g., select [CR] which indicates enter;

Figure 1-15Edit Formatting
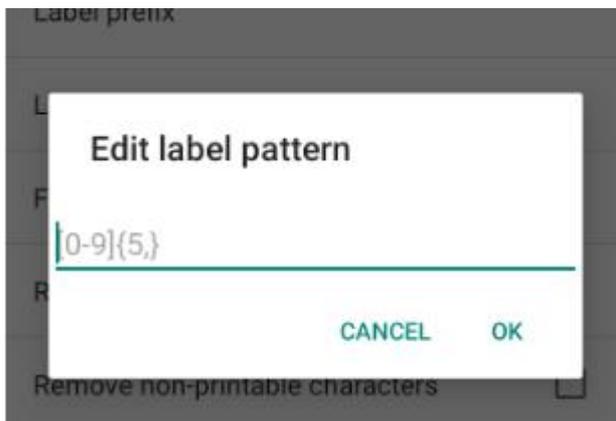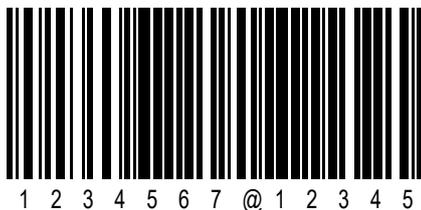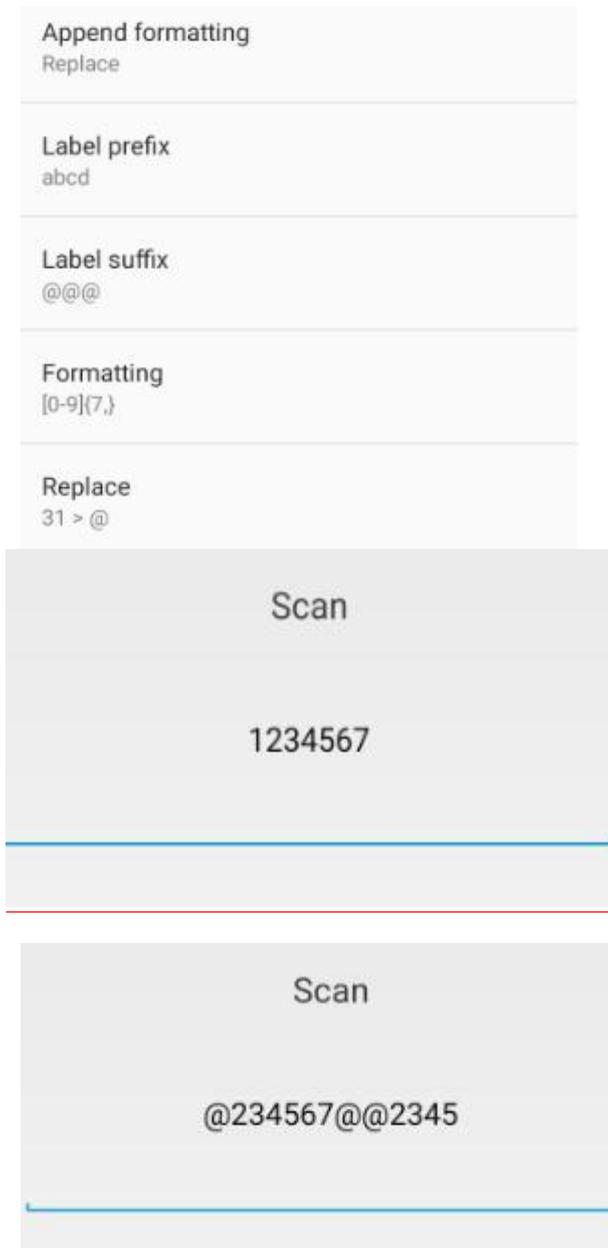
E.g.: Extract a longer section of bar code data

1 2 3 4 5 6 7 @ 1 2 3 4 5

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Append formatting
Replace

Label prefix
abcd

Label suffix
@@@

Formatting
[0-9]{7,}

Replace
31 > @

Scan

1234567

Scan

@234567@@2345

Figure 1-16Example Result

Bar code formatting is required of input by regular expression, \d{7,} or [0-9]{7,} . Figure≥7 rather than ＜7

✓ Substitute: select the mode and modify the former character to be substituted and the substitute character and set the value of the substituted and that of substitute. The former character needs to be input in ASCII code (e.g., if the former character "1" needs to be substituted, enter its corresponding ASCII code value "31");
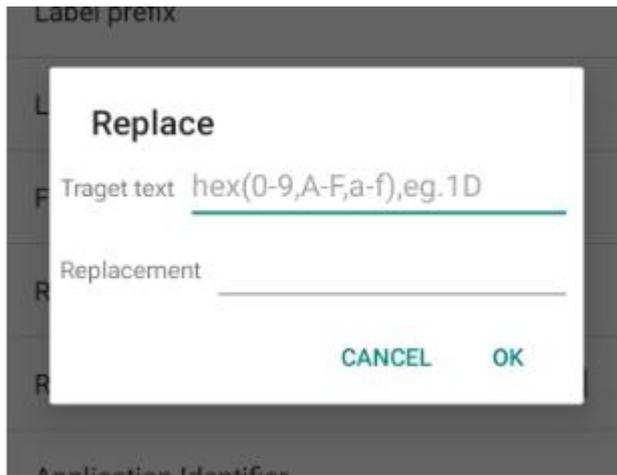
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Figure 1-17Edit Substitute

✓ Delete Non-printing Control Character: select the mode and delete any non-display character;

✓ App Identifier: select the mode and add an app identifier to some bar codes, e.g., Code 128;

✓ App Delimited Identifier: select the mode and set "()" as the app delimited identifier by default, which may be substituted by any other identifier;

✓ Code Id Type: select the mode and add a Code Id (Code Id Type None, Code Id Type Aim (add an Aim in front bar codes) or Code Id Type Symbol (add an identifier in front of bar codes)) to some bar codes;
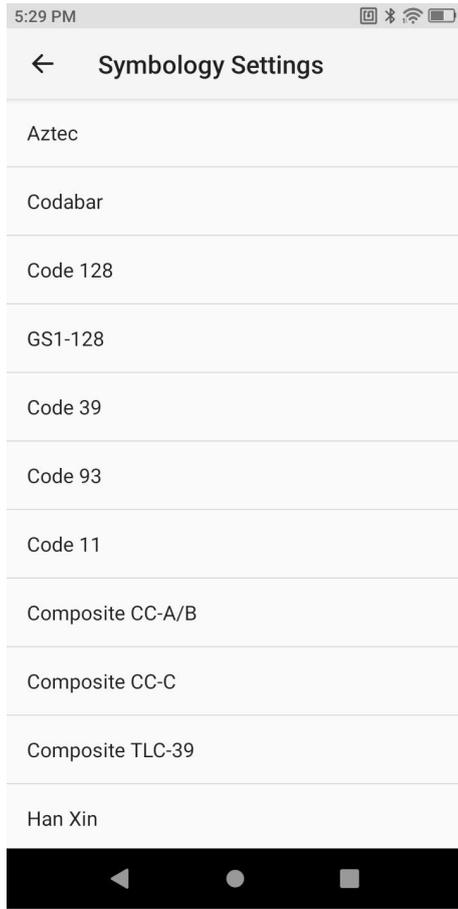
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● **Bar code settings**

Figure 1-18Bar Code Settings

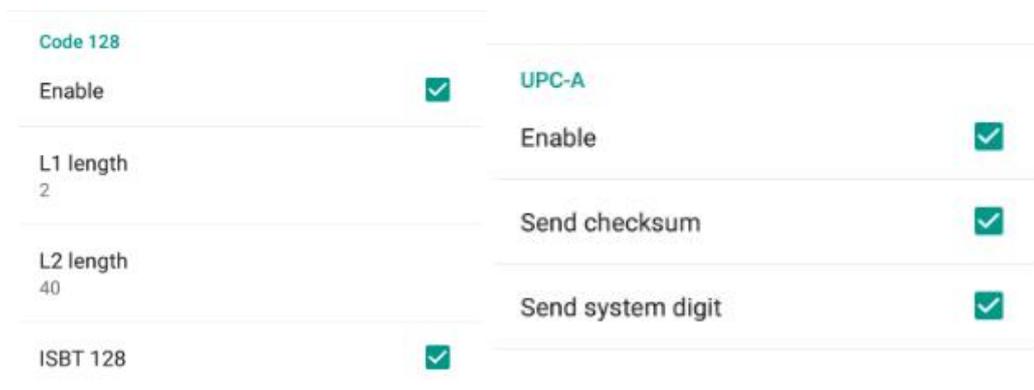✓ Modify code system type parameters in the list, e.g., bar code length, check bit or transfer character

Figure 1-19Code128 &UPC-A Settings

✓ Enable: enable

✓ L1 length: minimum length

- ✓ L2 length: maximum length

- ✓ ISBT128: book code

- ✓ Send checksum: check bit in transfer

- ✓ Send system digit: numeric character in transfer

Figure 1-20 ITF Settings

- ✓ Convert to EAN-13: transfer to EAN-13 code

If parameters needed are not found in the settings, please contact the manufacturer's technical staff for modification.
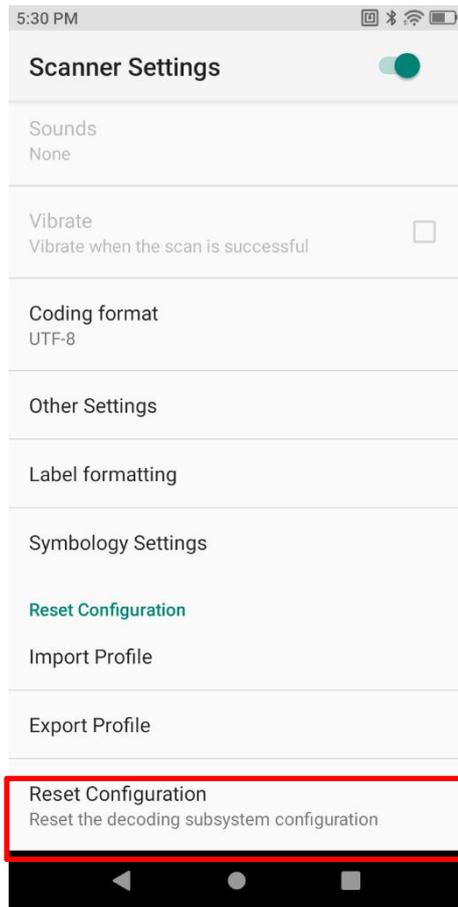
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● **Reset**

Figure 1-21Reset

Import Configuration File — import all settings in the scanner_property.xml file saved in the /sdcard root directory;
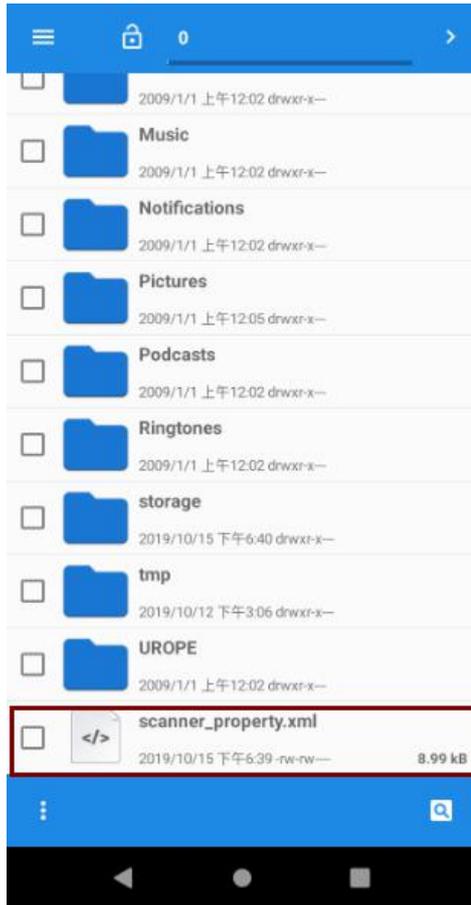
Figure 1-22Scanner_property.xml File

Export Configuration File – export and save all set values in the current status in the scanner_property.xml file saved in the /sdcard root directory by default;

Restore Scan Engine: if the scan engine needs to be reset, click this function option and reset and restore the scan engine. This function applies in spite of any unreadable or code garbling situation in scanning.

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