

# Android Application User Manual



## Revision

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Release date of version 1.0: Apr. 2020

- Initial distribution

Release date of version 2.0: May 2020

- Add M3 SpeedPack and Ring Scanner

Release date of version 2.1: June 2020

- Update of SpeedPack

Release date of version 2.2: Sep. 2020

- Update of StarUp

Release date of version 2.2: Sep. 2020

- Update of StarUp

Release date of version 2.3: Dec. 2020

- Update of StartUp Wifi preference
- Add the Heat the wire

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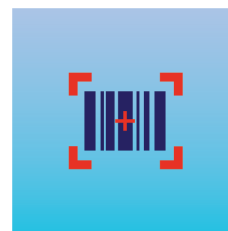
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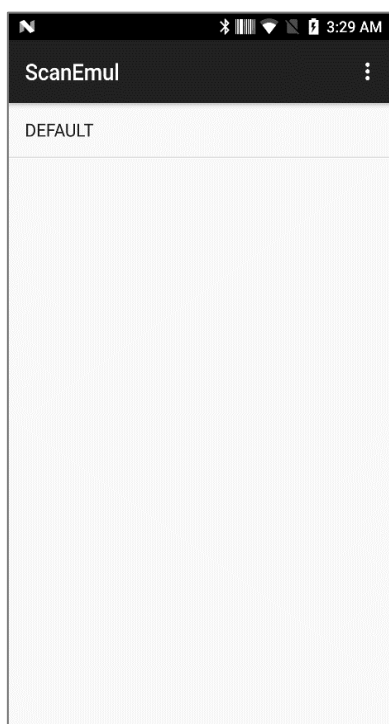
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## 1. ScanEmul

Model	Restriction
SM15	OS Higher than Nougat 1.2.0
UL20	OS Higher than Oreo 1.0.0
SL10	OS Higher than Oreo 2.0.0
SL10K	OS Higher than Oreo 2.0.0

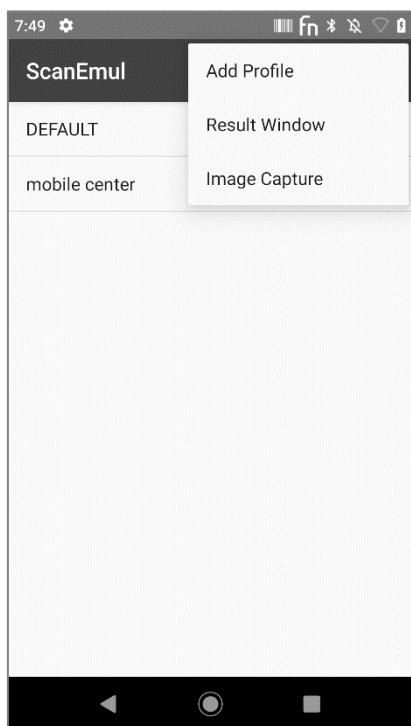


### 1 EDIT PROFILE



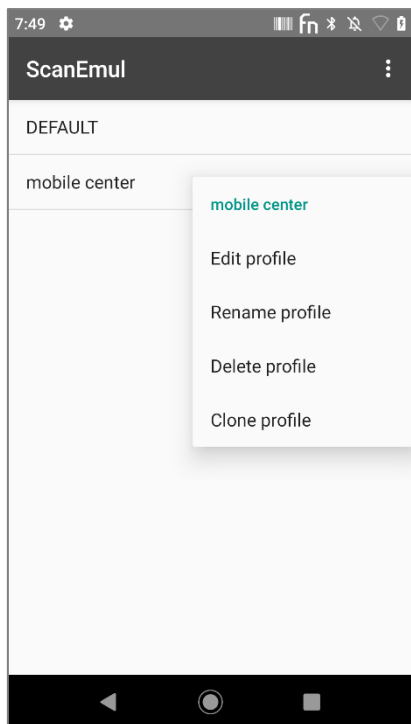
- Edit Profile
- ✓ The user can edit profile setting here.
- ✓ DEFAULT profile is created by default.
- ✓ In DEFAULT profile every app is included except those apps which are set in other profiles.
- ✓ Profile is managed as a database. You can copy the scanemul.db file from the following path to another device to use the settings.
- ✓ '/Android/data/net.m3mobile.app.scanemul/scanemul.db'

## 2 EDIT PROFILE - MENU



- Profile Menu
  - ✓ Add Profile: Profiles can be added.
  - ✓ Result Window: Barcode type and data will be shown based on DEFAULT set profile.
  - ✓ Image Capture: It can view Preview with 2D Scanner and take pictures.

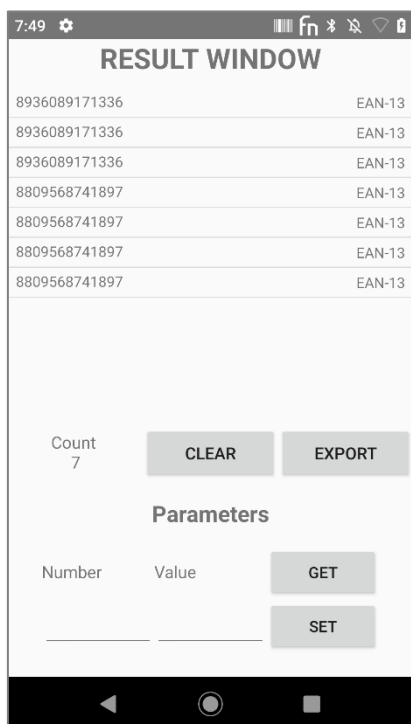
## 3 EDIT PROFILE – Pop Up Menu



- Delete Profile
  - ✓ Press & Hold the profile part. Then Delete menu will appear.
  - ✓ Edit Profile: Edit the settings for that profile.
  - ✓ Rename profile: Modify the name of the profile.
  - ✓ Delete profile: Select the item to delete the profile.
  - ✓ Clone profile: Clone the selected profile to create a new profile.



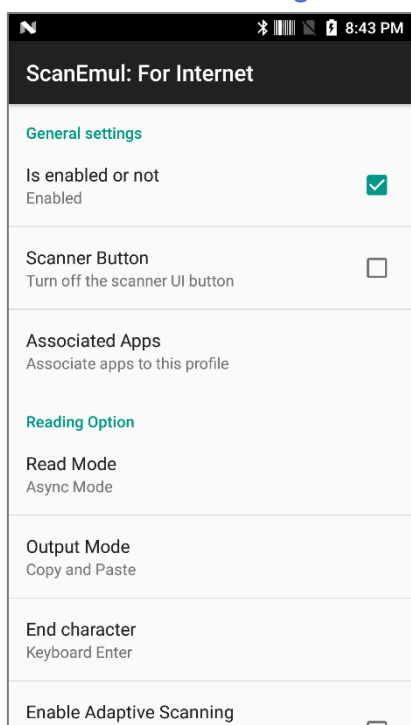
## 4 RESULT WINDOW



- Result Window
  - ✓ The user can test simple barcode reading here.
  - ✓ The result is given based on DEFAULT Profile and 'Intent enable' must be active.
  - ✓ EXPORT: Export the current results to a csv file.
  - ✓ You can test the settings using the scanner parameters. (Parameter information is disclosed in the SDK manual)

## 5 General Settings

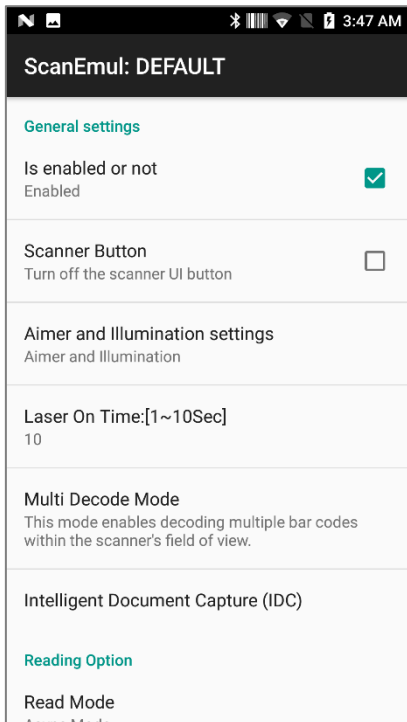
### 5.1 General Settings – 1D



- Is enabled or not: Scanner Activation or Deactivation.
- Scanner Button: UI button that can start Scanner decoding appears on screen.
- Associated Apps: Select apps that the profile will be applied.

(NOTE: 'Associated Apps' cannot be addressed in Default Profile. This function exists only when a new profile is created.)

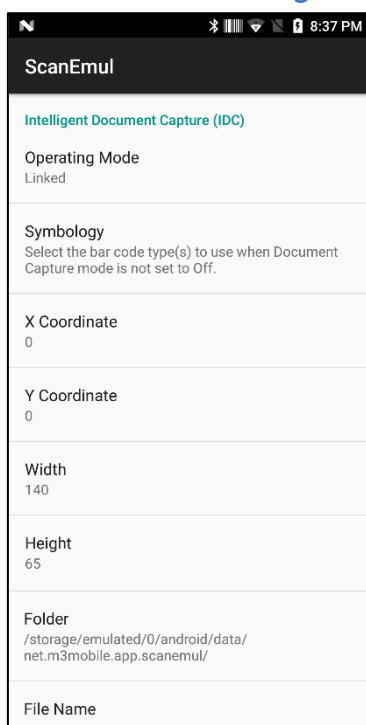
## 5.2 General Settings – Zebra 2D



- Aimer and Illumination settings:
  - ✓ Aimer and Illumination
  - ✓ Aimer only
  - ✓ Illumination only
- Laser On Time: Timeout period of beam emission. (1~10 Seconds)
- Multi Decode Mode: Enables decoding multiple bar codes
- Intelligent Document Capture (IDC) : Advanced image processing firmware for selecting imager-based decoders.
- Associated Apps: Select apps that the profile will be applied.

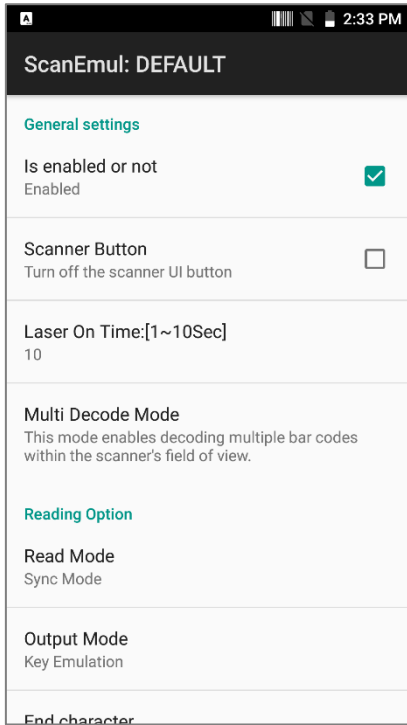
(NOTE: 'Associated Apps' cannot be addressed in Default Profile.)

### 5.3 General Settings – Zebra 2D - IDC



- Operating Mode : Select the operating mode of the Intelligent Document Capture firmware
  - ✓ Off : Disables the IDC feature.
  - ✓ Anchored : Requires a bar code decode. The image capture region is based on this bar code.
  - ✓ Linked : A printed border or page edge defines the image capture region. A bar code is required.
- Symbology : Select the bar code type(s) to use when Document Capture mode is not set to 'Off'..
- X, Y Coordinate : Set the horizontal offset to the top left corner of the region to capture relative to the center of the bar code. This parameter only applies when IDC Operating Mode is set to 'Anchored'.
- Width, Height : Set the width, height of the region to capture. This parameter only applies when IDC Operating Mode is set to 'Anchored'.
- Folder : Specifies the path where the image will be saved.
- File Name : Specifies the name of the file.
- Border Type : Select the style of the border used to determine the outline of the capture region in Free-Form and Linked modes.
  - ✓ None : Captures the largest rectangular region within the field-of-view.
  - ✓ Black : Indicates that the border must be black (such as a printed rectangular border).
  - ✓ White : Select 'White' to indicate that the border must be white (e.g., paper edge on a dark background).
- Advanced Edge Detection (AED) : All colors can be selected in edges.

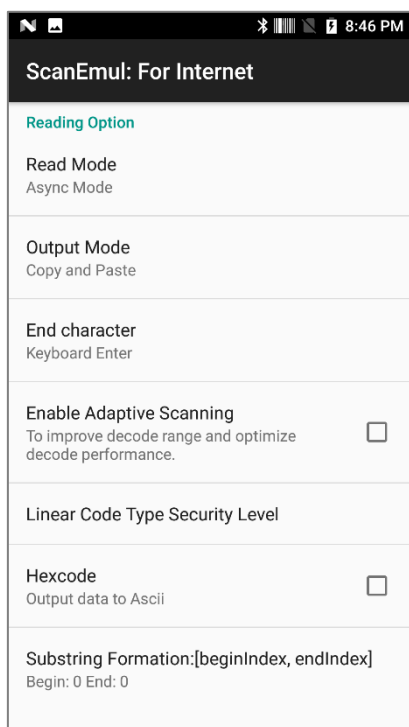
## 5.4 General Settings – Honeywell 2D



- Is enabled or not: Scanner Activation or Deactivation.
- Scanner Button: Scanner beam button appears on UI screen.
- Laser On Time: Timeout period of beam emission. (1~10 Seconds)
- Multi Decode Mode: Enables multiple bar codes scanning with single decoding.

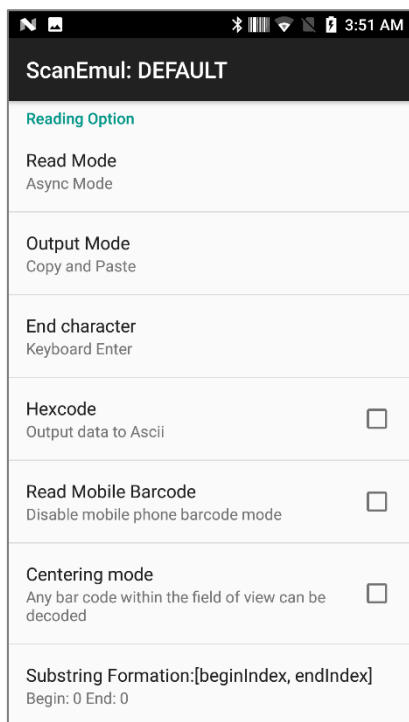
## 6 READING OPTION

### 6.1 READING OPTION – 1D



- Read Mode
  - ✓ Async : Emits beam while the scan button is pressed.
  - ✓ Sync : Emits beam for 3 sec and finishes when barcode is scanned..
  - ✓ Continue : Beam keeps emitting after a successful scan.
- OutPutMode : Output method after reading.
  - ✓ Copy and Paste : Outputs the result to clipboard and paste.
  - ✓ Key Emulation : Outputs the result as keyboard type.
  - ✓ None(Clipboard) : Outputs the result to clipboard.
- End character : End command at the end of barcode data.
  - ✓ Enter : In the case of Copy and paste in Output Mode, press Enter in the same way. In case of Key Emulation, Key Event is generated.
  - ✓ Keyboard Enter : After showing the reading result according to the Output Mode, it always shows the key event.
- Enable Adaptive Scanning : Depending on the distance to the barcode it adjusts beam output type automatically..
- Linear Code Type Security Level : Determines how many successful reading(s) confirm the result. Ex) 2 means it needs to successfully read the barcode twice to output the result.
- Hexcode : Output data result can be Hexcode.
- Custom data formatting : You can set the rules for text modification during barcode output.

## 6.2 READING OPTION – Zebra, Honeywell 2D



- Read Mode
  - ✓ Async: Emits beam while the scan button is pressed.
  - ✓ Sync: When the button is pressed, the beam is emitted during Laser On Time. Finishes when barcode is scanned.
  - ✓ Continue: Reads barcodes continuously while the button is pressed
- OutPutMode : Output method after reading.
  - ✓ Copy and Paste: Copy / paste the reading result to the clipboard and show it at the cursor position.
  - ✓ Key Emulation: The reading result is generated at the cursor position by generating a Keyboard Event.
- ✓ None (Clipboard): Copy the reading result to the clipboard and finish.
- End character: After the barcode output, set the finishing character.
  - ✓ Enter: In the case of Copy and paste in Output Mode, press Enter in the same way. In case of Key Emulation, Key Event is generated.
  - ✓ Keyboard Enter: After showing the reading result according to the Output Mode, it always shows the key event.
- Hexcode : Reading result is displayed in hexadecimal.
- Read Mobile Barcode: Enhanced reading performance for LCD screen in mobile phone.
- Centering mode: Only the bar code in the center of the image is decoded
- Substring Formation: Start at the specified position and get the character string of the specified length.
- Remove FNC : Remove Function Characters after bar-code reading.
- Translate Data : You can change a specific character among other reading results. If you input 1D, 5D with Ascii Hex Code in the setting field, the character corresponding to 1D (Group Separate) among barcode characters is output as 5D (']').
- Custom data formatting: You can set the rules for text modification when showing barcodes.

### 6.3 READING OPTION – Custom data formatting

**Custom data output**

Enable   
Enable/disable custom data formatting

**Rules**

New rule

1. Rule0 ☰

---

2. Rule1 ☰

---

3. My rule ☰

---

**Rule settings**

Rule enabled   
Enabled/disable this rule

**Filter**  
Set the filter for this rule

**Actions**

New action

1. Add prefix ☰

---

2. Duplicate code ☰

---

3. Replace string ☰

---

**String filter**

Data of the containing set string only  
Specify the string that must be present in the data

Starting position of the contained string  
0

Data of the set length only  
0

**Decoder filter**

All decoders enabled   
Allow all barcode symbologies

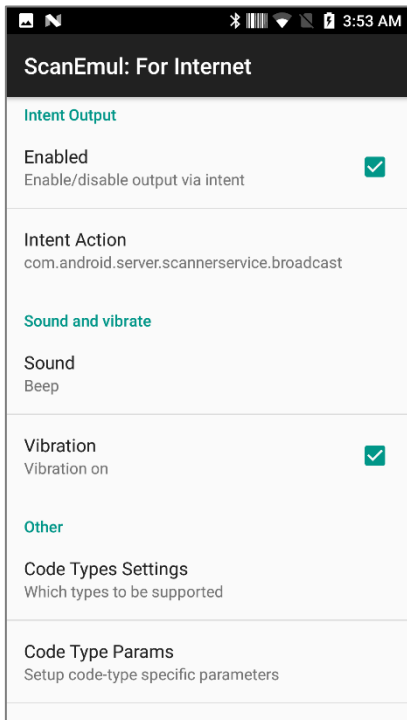
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Code 39

- Custom data Output
  - ✓ Enable : Turn the custom data output mode into enable and disable.
- Rules
  - ✓ New rule : You can create new rules. These rules are executed in order and the order can be changed. You can rename and delete a rule menu by long-pressing.
- Rule settings
  - ✓ Rule enabled : Each rule can be enabled and disabled
- Filter : You can set filter for this rule.
  - ✓ Data of the containing set string only : It only out only when the string that the user set is included in the code
  - ✓ Starting position of the contained string : Start position of string set from menu Data of the containing set string only'.
  - ✓ Data of the set length only : Only when the length of the code is the same as this set.
  - ✓ All decoders enabled : You can set the code type to which the rule applies. All specifies the entire code type.
- New action : You can create multiple actions in rules. Below are actions that you can create.
  - ✓ Duplicate code : Copy and paste the output code
  - ✓ Add prefix : Add in front of output code.
  - ✓ Add suffix : Add suffix in the end of output code.

- ✓ Remove string : Delete the string you want from the output code.
- ✓ Replace string : Replace the string you want to other string in the output code.

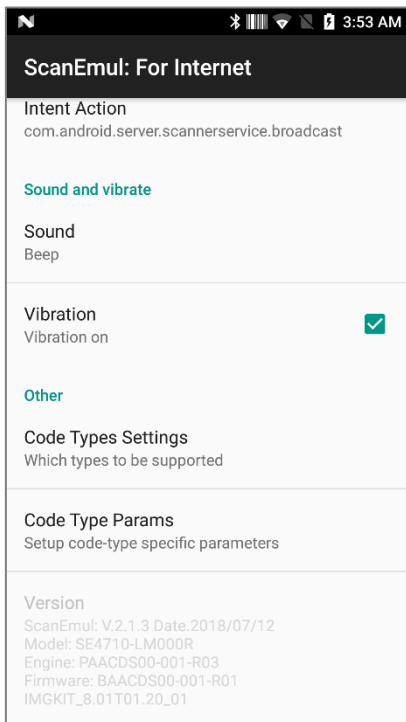
## 7 Intent Output



- Intent
  - ✓ Enabled : Users can receive reading results through Intent Broadcast.
  - ✓ Intent Action : Selects Actions that should receive Barcode Data.

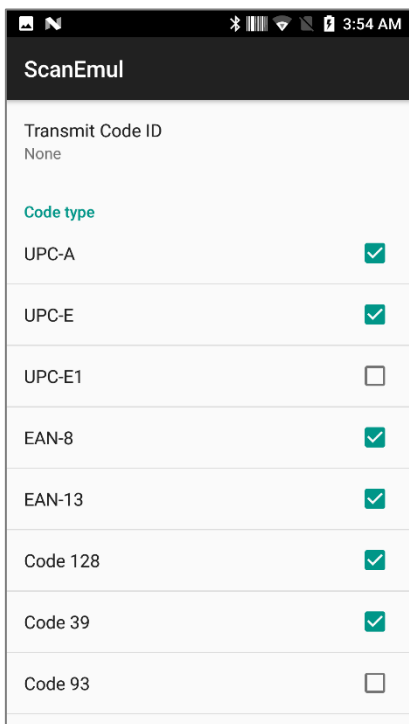


## 8 ETC



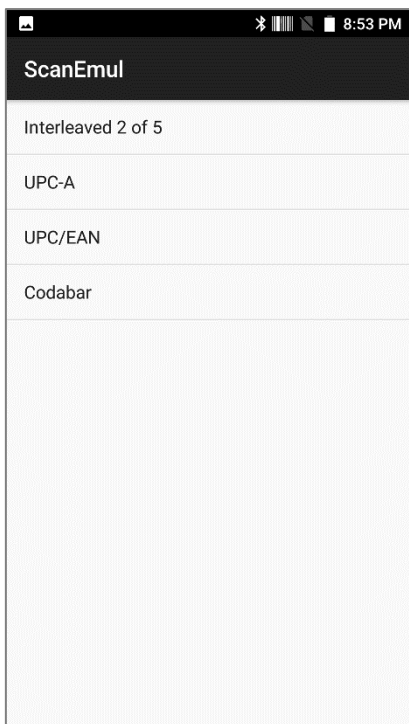
- Prefix and PostFix
  - ✓ Prefix and Postfix as Ascii Hex : Prefix or Postfix can be used for general control command as Ascii Code (/w Hexcode input) such as escape code.
    - ◆ Ex) 0A31 – 0A: line feed, 31:‘1’
    - ◆ Ascii code reference
- (<https://en.wikipedia.org/wiki/ASCII>)
  - ✓ Prefix and Postfix : Enter character at the front or end of barcode data.
- Sound and Vibrate
  - ✓ Sound : Reading sound after reading.
    - ◆ Ex) None, Beep, DingDong.
  - ✓ Vibration : Vibration after reading.

## 9 Code Type Settings



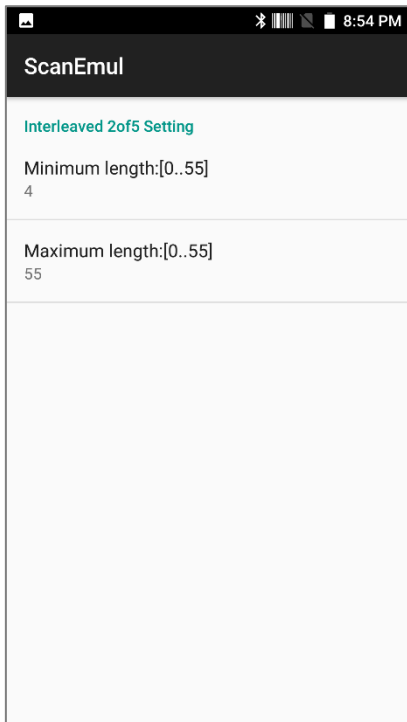
- Code Type : Select Code Type to use.

## 10 Code Type Params (1D)



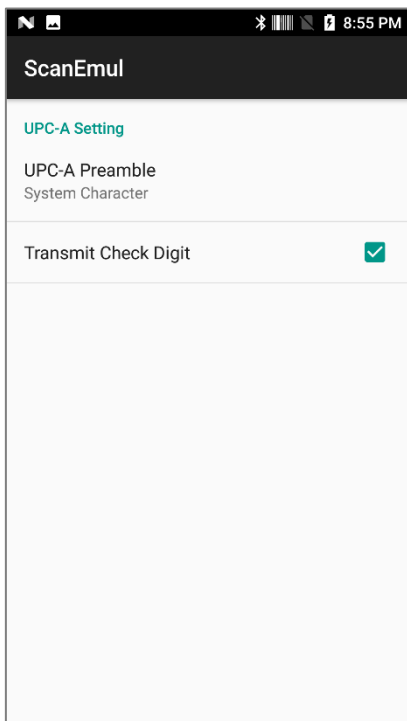
- Code Type Params can set each code types for parameters.

### 10.1 Interleaved 2 of 5 Setting



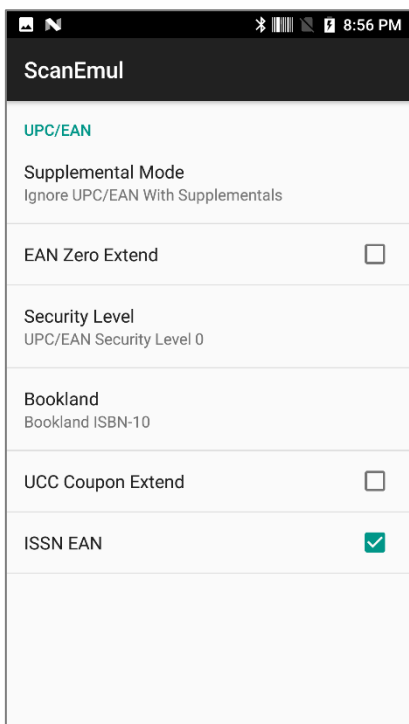
- Interleaved 2 of 5 : Specifies the length of the barcode to read (Min/Max length : 0-55).

### 10.2 UPC-A



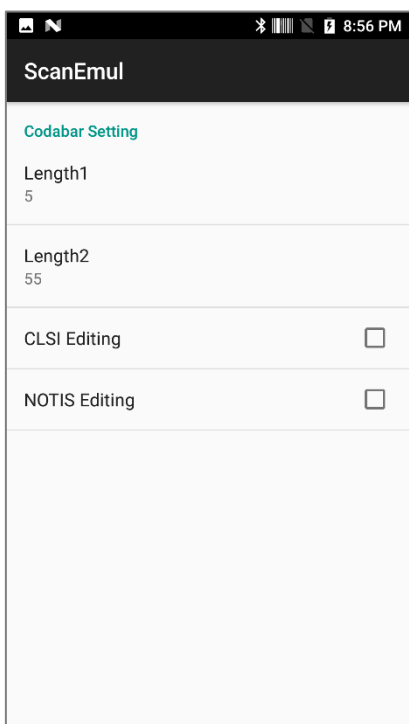
- UPC-A Preamble : Preamble characters include Country Code and System Character.
  - ✓ No Preamble
  - ✓ System Character
  - ✓ System Character Country Code
- Transmit Check Digit: The check digit is the last character of the symbol used to verify the integrity of the data. Decide whether to decode the barcode with Check Digit.

### 10.3 UPC/EAN



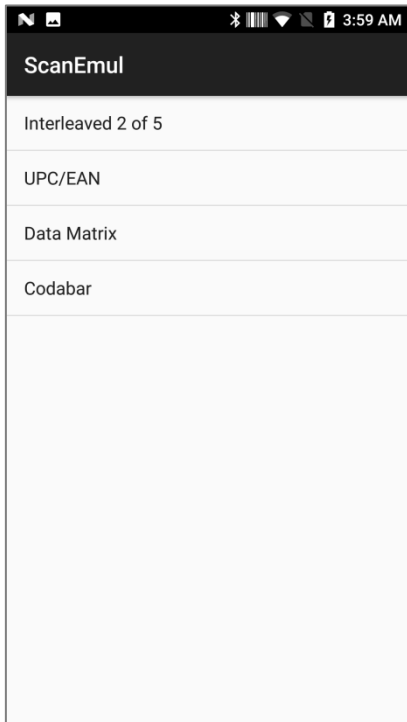
- Supplemental Mode: Supplementals are additional bars added in the end of the codes (e.g., UPC A+2, UPC E+2, EAN 13+2).
- You can select the barcode mode to be added.
- EAN Zero Extend: When enabled, this parameter adds five leading zeros to decoded EAN-8 symbols to make them in compatible format to EAN-13 symbols.
- Security Level: 4 levels of decode security for UPC/EAN bar codes. Increasing levels of security are provided for decreasing levels of bar code quality.

### 10.4 Codabar



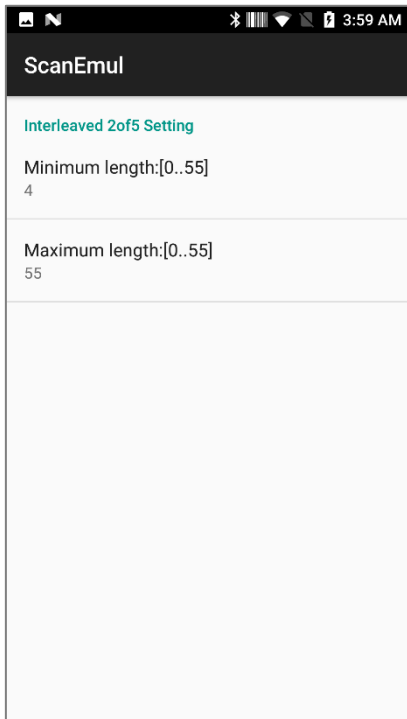
- Set Length: The length of a code refers to the number of characters, including checking digit(s) that the code contains.
- CLSI Editing: When enabled, this parameter strips the start and stop characters and inserts a space after the first, fifth, and tenth characters of a 14-character Codabar symbol.
- NOTIS Editing: When enabled, this parameter strips the start and stop characters from decoded Codabar symbol.

## 11 Code Type Params (Zebra 2D)



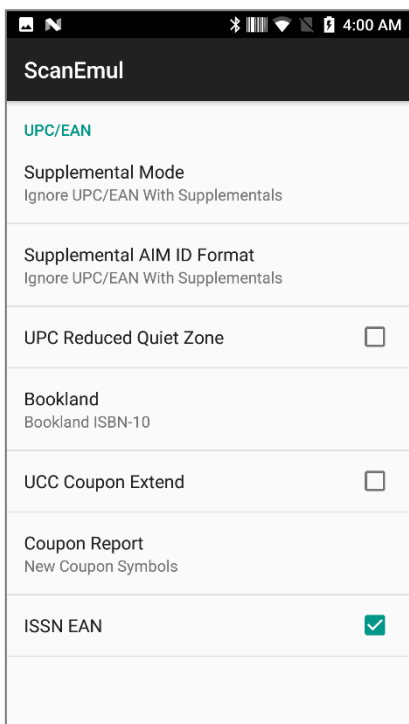
- Code Type Params can set each code types for parameters.

### 11.1 Interleaved 2 of 5 Setting



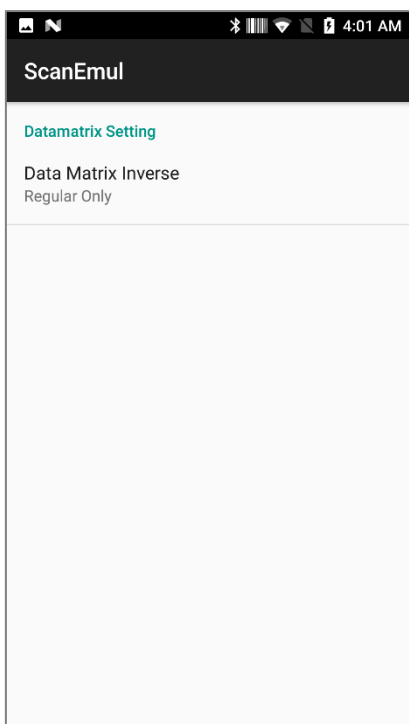
- Compatible barcode length can be specified (Min/Max length : 0-55)

### 11.2 UPC/EAN



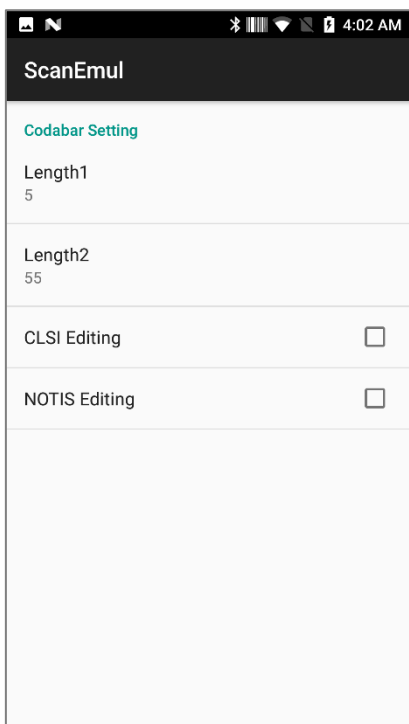
- Supplemental Mode: Supplementals are additional bar codes that are added in the end of the codes (e.g., UPC A+2, UPC E+2, EAN 13+2). You can select the barcode type to be added.
- Supplemental AIM ID Format: Select an output format when reporting UPC/EAN bar codes with Supplementals with Transmit Code ID Character.
- UPC Reduced Quiet Zone: Enable or disable decoding UPC bar codes with reduced quiet zones.
- Coupon Report: Previous coupon symbols (old coupon symbols) are composed of two bar codes: UPC/EAN and Code128. A new coupon symbol is composed of a single Databar Expanded bar code.

### 11.3 Data Matrix



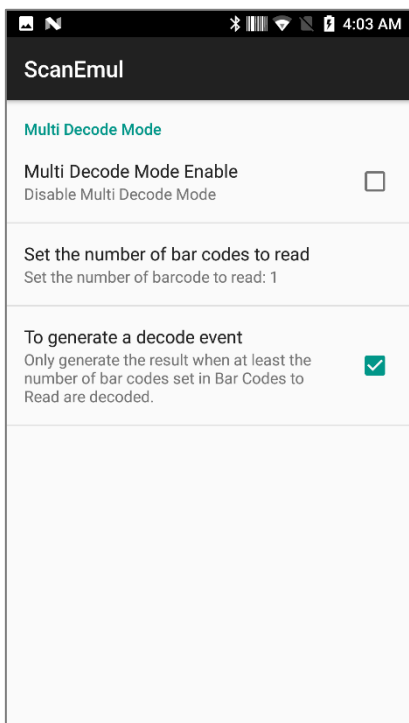
- Data Matrix has additional option.
  - ✓ Data Matrix Inverse mode
    - ◆ Regular Only
    - ◆ Inverse Only
    - ◆ Inverse Autodetect

### 11.4 Codabar



- Set Length: The length of a code refers to the number of characters, including check digit(s) the code contains.
- CLSI Editing: When enabled, this parameter strips the start and stop characters and inserts a space after the first, fifth and tenth characters of a 14-character Codabar symbol.
- NOTIS Editing: When enabled, this parameter strips the start and stop characters from decoded Codabar symbol.
- 

## 12 Multi Decode Mode



- Multi decode mode
  - ✓ Multi Decode Mode: Enables decoding multiple bar codes within the scanner's field of view
  - ✓ Set the number of bar codes to read: The range is 1 to 10 bar codes.
  - ✓ To generate a decode event
    - ◆ Enable: Generates the complete event only after the number of bar codes set in 'Set the number of bar codes to read' are decoded.
    - ◆ Disable: Generate a decode event after one or more bar codes are decoded

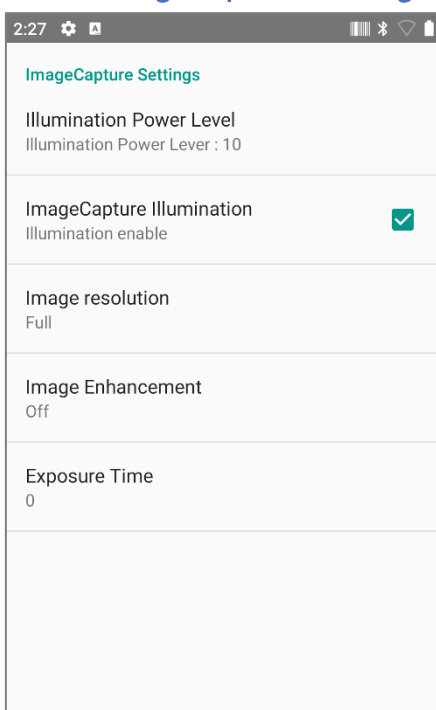
## 13 Image Capture

### 13.1 Image Capture - Capture



- ImageCapture
  - ✓ The camera functions by an image sensor embedded in the scanner.
  - ✓ Pressing the TakePicture button captures the image shown in the image sensor and saves it in the camera's default image folder.

### 13.2 Image Capture - Setting

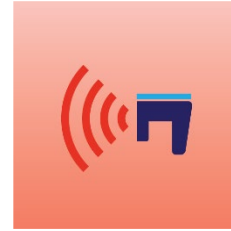


- ImageCapture Settings
  - ✓ Option settings for the captured image.
    - ◆ **Illumination Power Level**: The setting for Illumination brightness Control.
    - ◆ **Image Capture Illumination**: The setting for the illumination emission when capturing an image.
    - ◆ **Image Resolution**: The setting for image resolution.
    - ◆ **Image Enhancement**: Enhancement mode for picture image.
    - ◆ The setting for Exposure Time during image capture.



## 2. UHF Emul

Model	Restriction
SM15	OS Higher than Nougat 1.0.0
UL20	Not Supported
SL10	Not Supported
SL10K	Not Supported

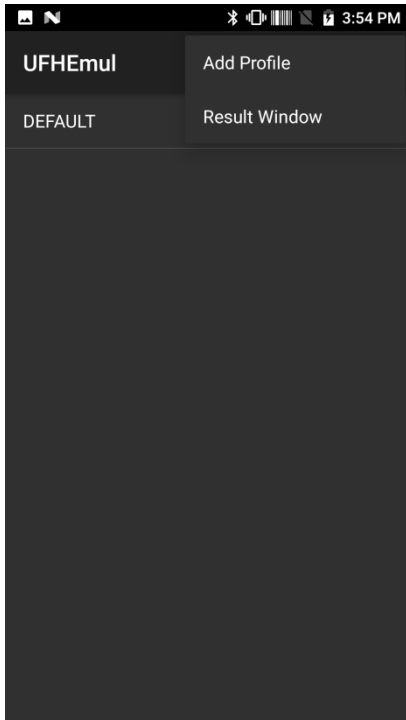


### 1 EDIT PROFILE



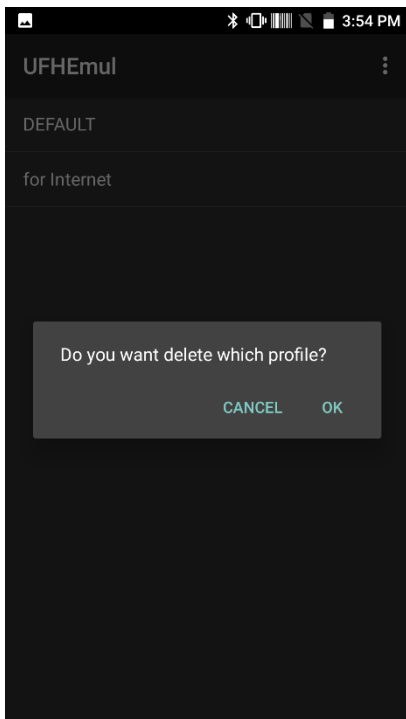
- Edit Profile
  - ✓ The user can edit profile setting here.
  - ✓ DEFAULT profile is created by default.
  - ✓ If all profiles are disabled, they will not run automatically at boot time.

## 2 EDIT PROFILE - MENU



- Profile Menu
  - ✓ Add Profile: Profiles can be added.
  - ✓ Result Window

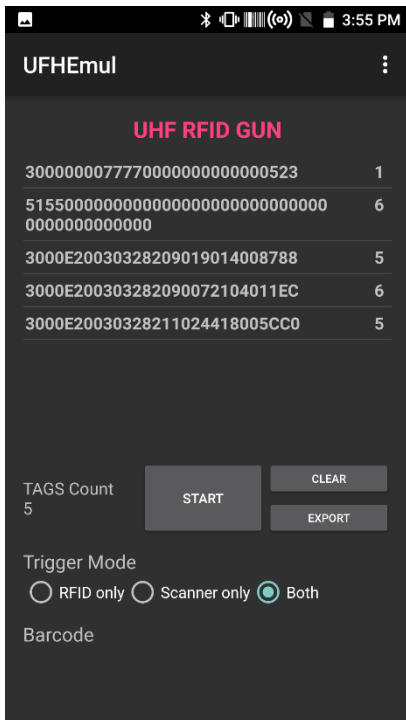
## 3 EDIT PROFILE – DELETE



- Delete Profile
  - ✓ Long-pressing a profile shows Delete menu.
  - ✓ Pressing “OK” deletes a selected Profile.

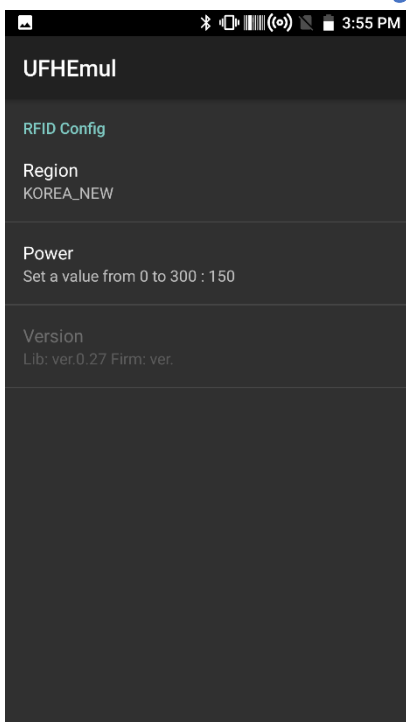
## 4 Result Window

### 4.1 Result Window - Inventory



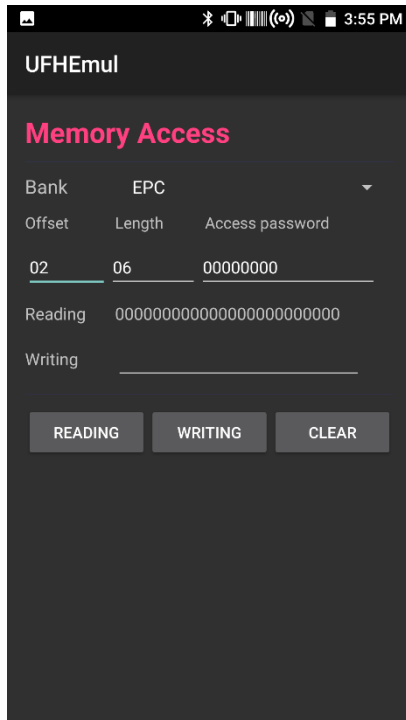
- It will show simple EPC read and count UI.
- START: Starts inventory reading. Continuously read EPC values of surrounding tags.
- CLEAR: Clear result.
- Trigger Mode: Selects trigger mode to either RFID(UHF tag) reader or Scanning barcode or using both.
- Barcode Reading: Barcode scanning result is shown under 'Barcode Result'

### 4.2 Result Window - Config



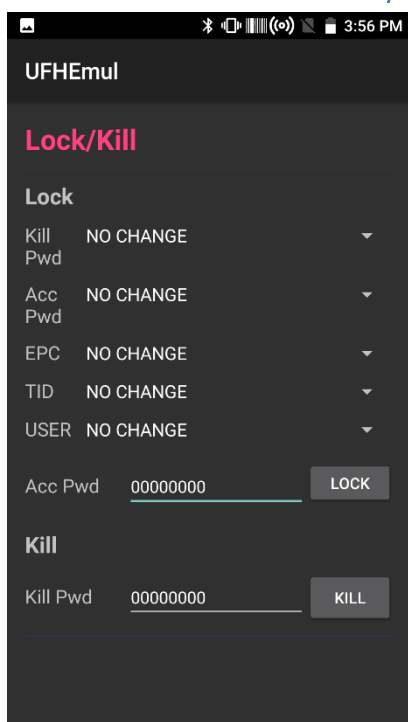
- Config Menu
- Region: Set frequency according to the country regulation. (make sure to select between 2 different Ant. type KC and CE)
- Power: Set output power. Maximum power is 300 Dbm.
- The correct value is 30 dBm (30dBm = 1W = 1000mW). The last 0 of `300` is a garbage value which is called from the module so you can ignore it.
- To check how dBm into mW is converted, please refer to below link:  
<https://en.wikipedia.org/wiki/DBm>

### 4.3 Result Window - Memory Access



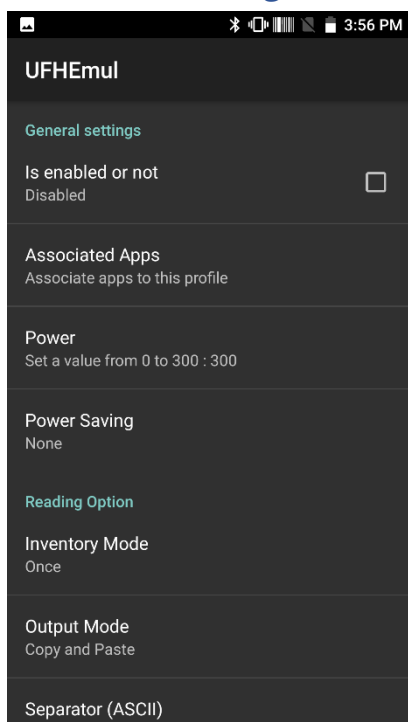
- Reading / Writing
- Bank (Reserved, EPC, TID, User) Select.
- Offset: Starting location of the memory. (Word unit)
- Length: Length of the data (Word unit)
- Password: If the tag is locked, it's required to input data in Access Password.
- Reading: Read data as configured and output data in the TextView.
- Writing: Data in the EditText will be written as configured.

#### 4.4 Result Window - Lock/Kill



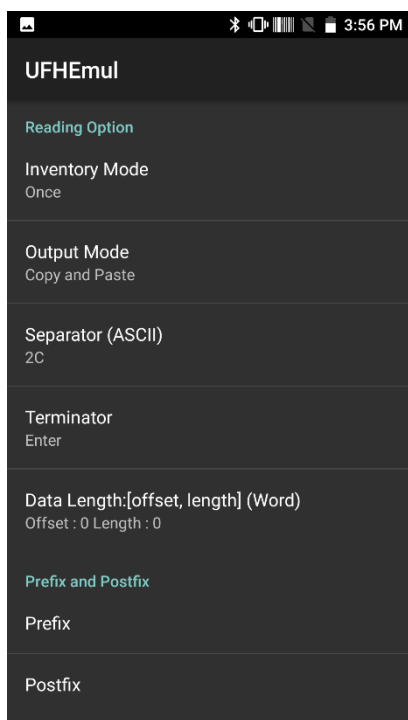
- Memory Lock / Tag Kill
  - ✓ Lock: Set password to access the tag memory. Access password is stored in reserved area. There are 4 access types:
    - ◆ Accessible: Both Reading and writing the password are available. Changing the permission setting is also available.
    - ◆ Always Accessible: Both Reading and writing the password are available. But changing the permission setting is not available.
    - ◆ Secured Accessible: Both Reading and writing the password are not available. But changing the permission setting is available.
    - ◆ Always Not Accessible: Both Reading and writing the password are not available. Changing the permission setting is also not available.
  - ✓ Reserved Bank: Read / Write accessibility setting is available.
  - ✓ EPC, USER bank: Reading is always available and Accessibility setting is available for writing.
  - ✓ TID Bank: Read Only.
  - ✓ Kill: Kill the tag. Once killed, the tag is no longer active. Kill password is in the reserved area.

## 5 General Settings



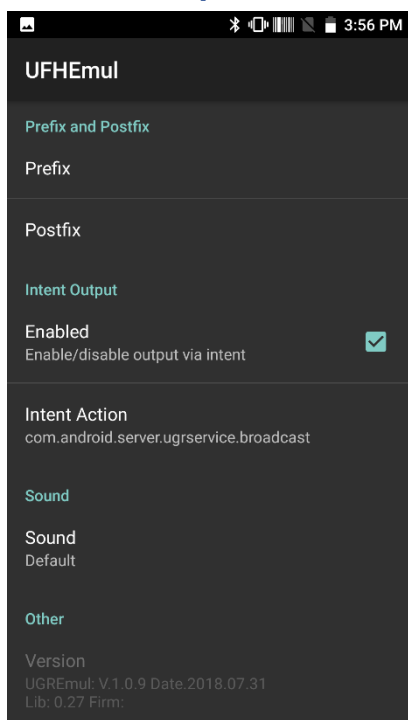
- Is enabled or not: Scanner Activate or Deactivate.
- Associated Apps: Certain apps can be addressed to profile.
- Power: Set output power. Maximum power is 300 Dbm.
- The correct value is 30 dBm (30dBm = 1W = 1000mW). The last 0 of `300` is a garbage value which is called from the module so you can ignore it.
- To check how dBm into mW is converted, please refer to below link:
- <https://en.wikipedia.org/wiki/DBm>
- Power Saving: Turn off the UHF Emul when the set time has elapsed.

## 6 READING OPTION



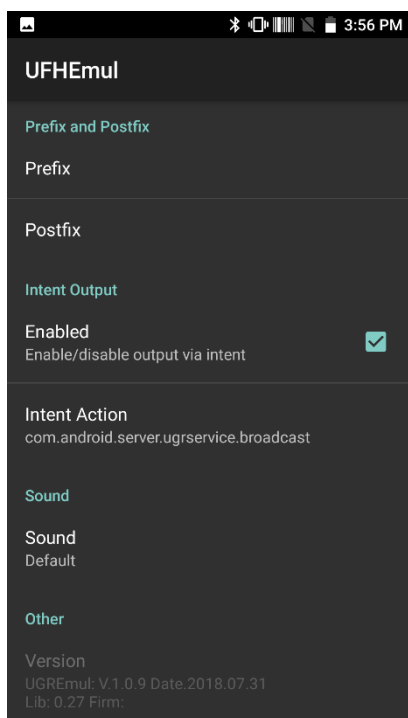
- Inventory Mode
  - ✓ Overlap : Inventory regardless of duplicate values
  - ✓ Multiple : Exclude duplicates
  - ✓ Once : Output 1 tag per once
- OutPutMode : Output method after reading
  - ✓ Copy and Paste : Outputs the result to clipboard and paste
  - ✓ None(Clipboard) : Copies the result to clipboard and finishes
- Separator (ASCII) : It is valid when Inventory Mode is Multiple or Overlap. It is entered between the scanned tag and the tag value. Enter Ascii Hex Code
- Example)
  - ✓ 0D : Enter
  - ✓ 2C : Comma
  - ✓ 09 : TAB
- Terminator : Specifies the value that is displayed only once at the end of Inventory.
- Data Length : Specifies the start and end points of the TAG.
  - ✓ By default, the PC value 1 word is included before the data. If you do not want to use the PC value, change the offset to 1.

## 7 Intent Output



- Intent
  - ✓ Enabled : User can receive the reading result via Intent.
  - ✓ Intent Action: Set action name of the Intent that will receive the reading result.

## 8 ETC



- Prefix and PostFix
  - ✓ Prefix and Postfix as Ascii Hex : Prefix or Postfix can be used for general control command as Ascii Code (/w Hexcode input) such as escape code.
    - ◆ Ex) 0A31 – 0A: line feed, 31:‘1’
    - ◆ Ascii code reference
- (<https://en.wikipedia.org/wiki/ASCII>)
  - ✓ Prefix and Postfix : Enter character at the front or end of UHF tag data.
  - ✓ Sound : Reading sound after reading.
    - ◆ Ex) None, Default.

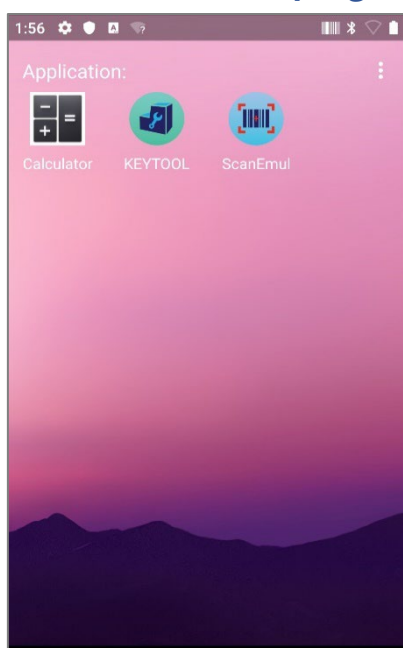


### 3. AppCenter

Model	Restriction
SM15	OS Higher than Nougat 1.1.0
UL20	OS Higher than Oreo 1.0.0
SL10	All supported
SL10K	All supported

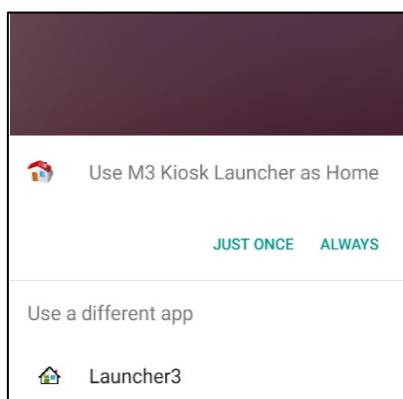


#### 1 First view of the program

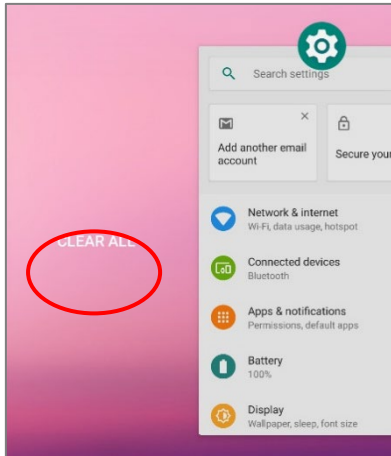


- Main Screen
  - ✓ Arrange those applications that are permitted by administrator by each app categories on Home Screen.
  - ✓ Inactivate drag down the status bar in User Mode. (System setting mode is untouchable)

#### 2 Default Setting



- Initial settings
  - ✓ Need setting during 'AppCenter' installation.
    - ◆ Press Home Button: 'M3 Kiosk Launcher' – Select as 'Always'.
    - ◆ If reboot, it will always run by 'M3 Kiosk Launcher'.

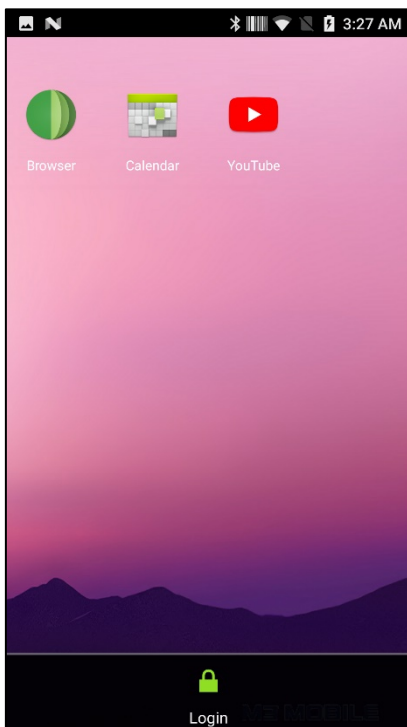


- ◆ If your OS version is more than PI(Android 9), you need to clear all.

- 1) Click the menu button(■)
- 2) Click the CLEAR ALL.

- \* Roll back: Settings - Apps - M3 Kiosk Launcher – Open by default - Clear defaults

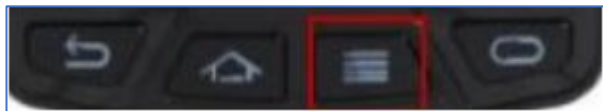
### 3 Login Menu in User



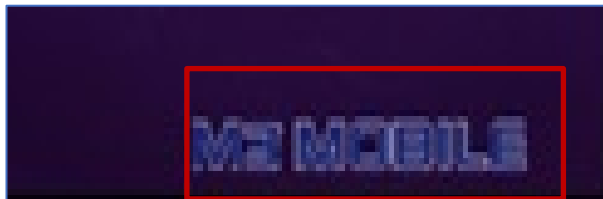
- User Menu

✓ Login in by pressing menu button

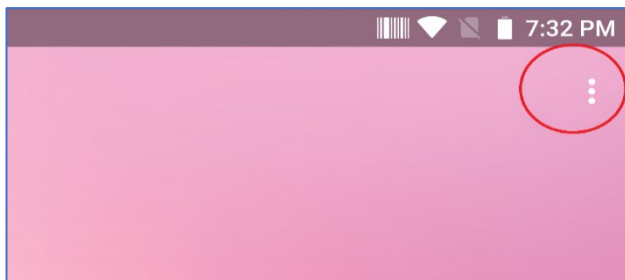
- Figure 3-1 (Before Appcenter Version 1.3.2)



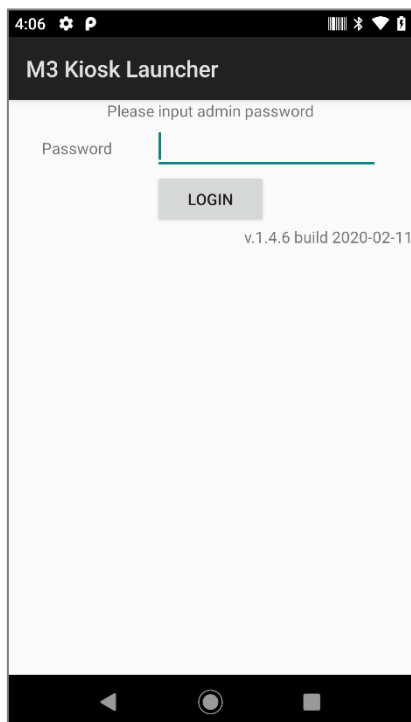
- Figure 3-2 (Appcenter Version 1.3.2)



- Figure 3-2 (Appcenter Version 1.3.3 or later)



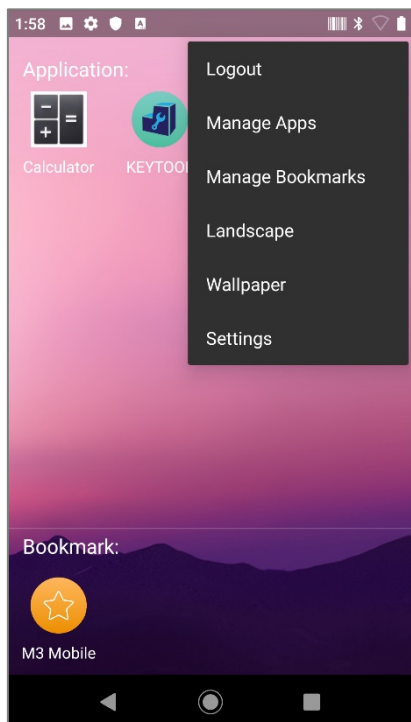
## 4 Login



- Login
  - ✓ Input the Password to enter Admin Mode.
  - ✓ Default Password is 'mobile'.
  - ✓ Password change – Modify and replace the xml file in the Internal storage as below
- 'Android/data/com.m3.appcenter/SettingsInfo.json'
- >> Reboot required to create above folder.

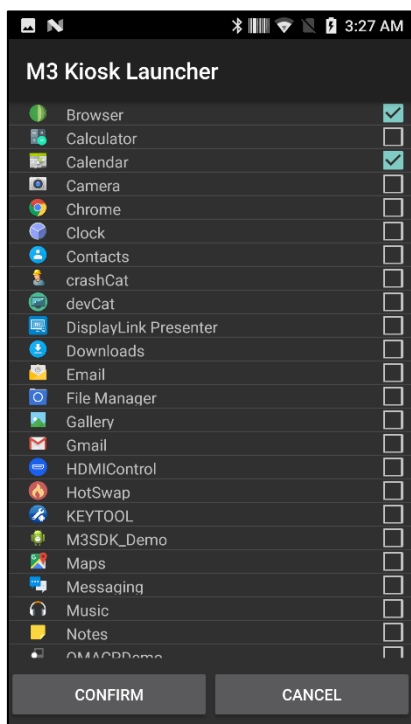
```
"  
.....,  
orientation": true,  
"password": "mobile",  
"shortcutInfos": [  
.....,
```

## 5 Admin Mode



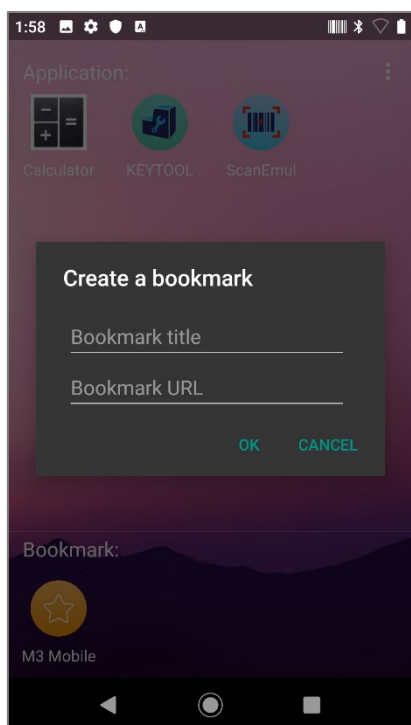
- Admin Mode
  - ✓ You can change below settings.
  - ✓ Logout: Back to user mode from Admin mode.
  - ✓ Manage Apps: Managing Apps on Home Screen.
  - ✓ Manage Bookmarks: Add Bookmarks.
  - ✓ Wallpaper: Change background image.
  - ✓ Settings: Launch Android setting app.
- NOTE: Statusbar is in activation during AdminMode. Statusbar is locked during User Mode.

## 6 Manage Apps



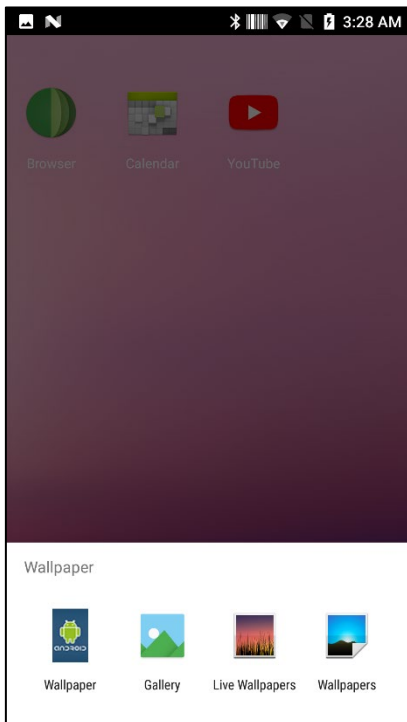
- Manage Apps
    - ✓ Managing Apps on Home Screen.
    - ✓ This setting is saved into Internal storage as below.  
'/Android/data/com.m3.appcenter/SettingsInfo.json'.
- If you'd like to deploy same configuration, you can copy this .json file to other units

## 7 Manage Bookmarks



- Manage Bookmarks
  - ✓ You can register a bookmark by entering the bookmark title and address.
  - ✓ When you register, an icon is created in the section below the home screen.

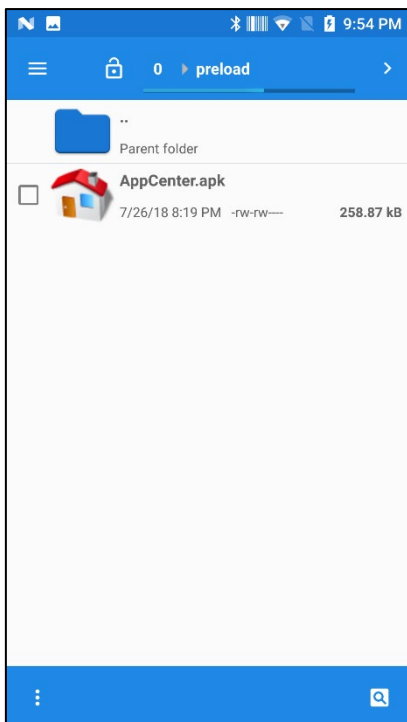
## 8 Wallpaper



### ■ Wallpaper

- ✓ Change the background of home screen.
- ✓ Gallery photos and default wallpaper can be used.  
(Live Wallpapers cannot be used)

## 9 Apk Path

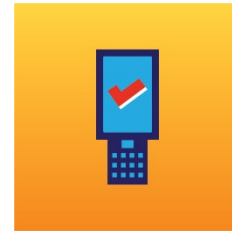


### ■ Apk Path

- ✓ AppCenter apk file is in the preload directory

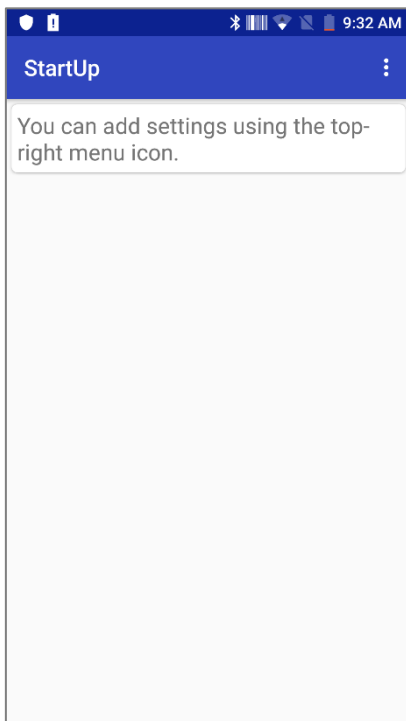
## 4. StartUp

Model	Restriction
SM15	OS Higher than Nougat 1.1.0
UL20	OS Higher than Oreo 1.0.0
SL10	OS Higher than Oreo 2.0.0
SL10K	OS Higher than Oreo 2.0.0



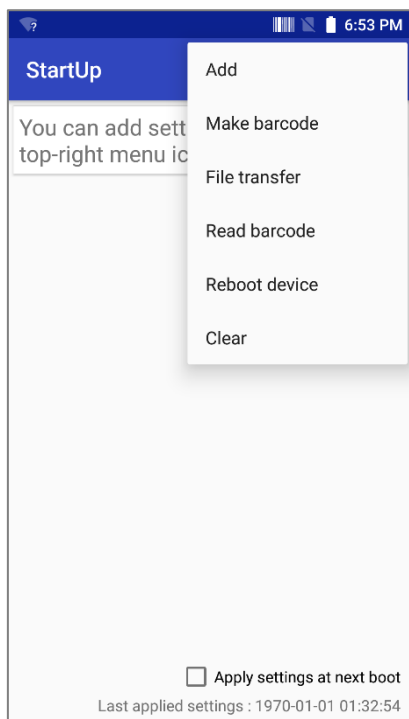
### 1 Main screen

#### 1.1 Main screen



- Main screen
  - ✓ Main screen of the StartUp Application.

## 1.2 Main screen – option menu



### ■ Option menu

- ✓ Add: Add provisioning settings.
- ✓ Make barcode: Can make a barcode, using settings already made on current device.
- ✓ File Transfer: Send configuration files of M3 app such as ScanEmul.db, UHFEmul.db to another device. (O: possible, X: impossible)

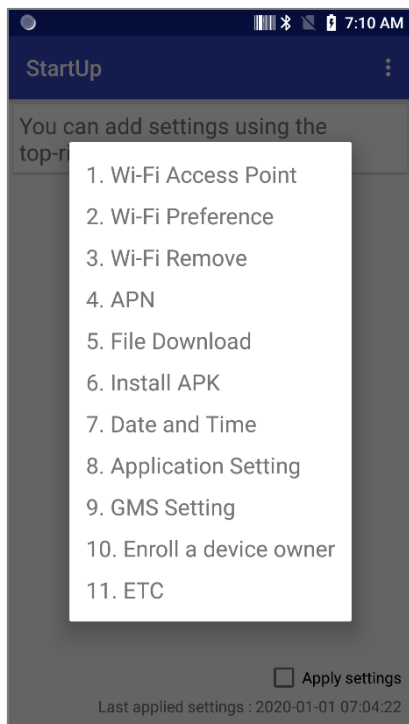
File name	SM15	UL20	SL10/SL10K
Keytool.xml	O	O	X
ScanEmul.db	O	O	O
LRScanEmul.db	O	X	X
UHFEmul.db	O	X	X
Keytool.json	X	X	O

- ✓ Read barcode: Can read a barcode made from other devices.
- ✓ Reboot device: After setting, the application needs to be rebooted for automated setting. When device is restarted the StartUp will be configured.
- ✓ Clear: Remove all added settings.

Configured settings are saved in 'Internal Storage/Android/data/com.m3.startup/StartUp.json'. If you'd like to deploy same configuration, you can copy this .json file to other units.

It is not compatible with the 2.x version of the xml file.

### 1.3 Main screen – add dialog

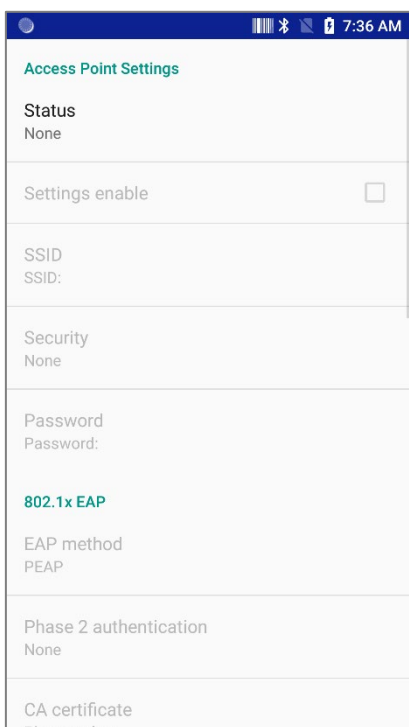


- Add dialog
  - ✓ Wi-Fi Access point : Setting Wireless LAN access point.
  - ✓ Wi-Fi Preference : Setting Wireless LAN details.
  - ✓ APN : Setting Access Point Name for Network.
  - ✓ File Download : It will download any files on Internet.
  - ✓ Install APK : APK files can be installed in this menu.
  - ✓ Date and Time : Can set the date and time and the NTP server.
  - ✓ Application Setting : Setting application that run on boot.
  - ✓ GMS Setting: You can disable the GMS package.
  - ✓ Enroll a device owner: You can set Device Owner.
  - ✓ ETC : Bluetooth, Display, Volume



## 2 Wi-Fi Access Point

### 2.1 Wi-Fi Access Point - Settings

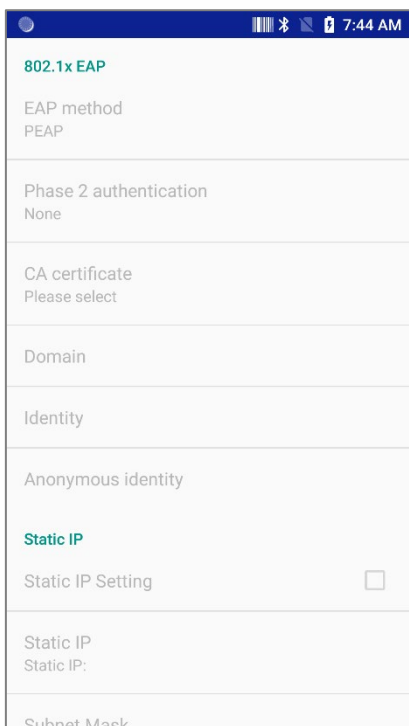


- Wi-Fi Access Point Settings
  - ✓ Status: Set the Wi-Fi status.
  - ✓ Wi-Fi Settings enable: Select whether to apply the settings.
  - ✓ SSID: Access to SSID(Be careful of Upper/Lower case letter.)
  - ✓ Security: Set up a security approach.
  - ✓ Password: : Input PW for the SSID.
  - ✓ Static IP Setting: Enable Static IP setting.
  - ✓ Static IP: Input Static IP address
  - ✓ Subnet Mask: Input Subnet Mask (0~32)

Notation	Netmask
0	0.0.0.0
8	255.0.0.0
16	255.255.0.0
24	255.255.255.0
25	255.255.255.128
32	255.255.255.255

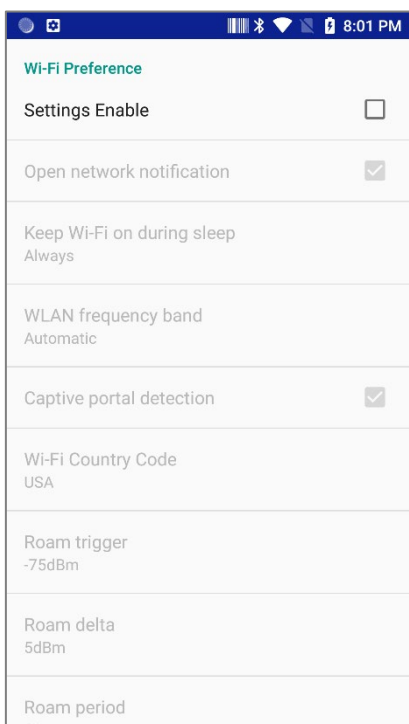
- ✓ Gateway: Input Gateway address.
- ✓ Domain Name Server: Input DNS address.

## 2.2 Wi-Fi Access Point – Settings – 802.1x EAP



- 802.1x EAP
  - ✓ EAP method : Support PEAP setting.

## 2.3 Wi-Fi Preference



- Wi-Fi Preference
  - ✓ Set detailed wireless LAN settings for common use.
  - ✓ Open network notification: Notify you when high-quality public network is available.
  - ✓ Keep Wi-Fi On during sleep: Set how long your device will remain Wi-Fi On during Sleep status.
  - ✓ WLAN frequency Band:
    - Automatic: Select 2.5Ghz or 5Ghz to connect.
    - 5Ghz only: Use only the 5Ghz band.
    - 2.5Ghz only: Use only the 2.5Ghz band.

- ✓ Captive portal detection: Specify whether to detect a Wi-Fi network that must be logged in to a webpage before allowing Internet access.
- ✓ Wi-Fi Country code: Set the Country.

- ✓ Roam trigger: If the current AP's signal strength becomes weaker than the Roam trigger when moving, search for the AP that is higher than the minimum Roam delta value.
- ✓ Roam delta: When the Roam trigger is enabled, it searches for APs that are at least Roam delta values stronger than the current AP's strength before connecting to a new AP.
- ✓ Roam period: Collect RSI scan data during the Roam period before roaming

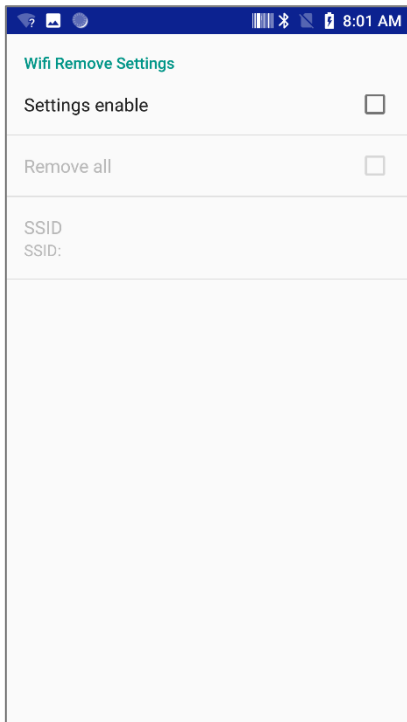
Note! From StartUp v.3.5.17 or later, the time to apply the Wi-fi preference has been changed.

- Before: Applied when rebooted
- After: Applied when pressing the back button or clicking the reboot button on the main screen of StartUp or overwriting the StartUp.json file, or reading the StartUp barcode

When using the Bypass setup wizard, refer to the code below to sendBroadcast after all StartUp is completed.

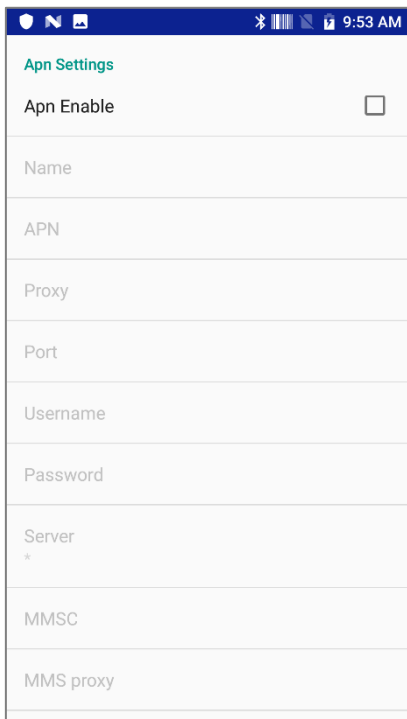
```
String SET_WITH_STARTUP = "m3mobile.co.kr.ACTION.SET_WITH_STARTUP";  
sendBroadcast(new Intent(SET_WITH_STARTUP));
```

## 2.4 Wi-Fi Remove



- Wi-Fi Remove
  - ✓ Settings enable: Check to remove access point.
  - ✓ Remove All: Remove all Wi-Fi information stored on your device.
  - ✓ SSID: Remove Wi-Fi information with a specific SSID.

## 3 APN Settings



- APN Setting
  - ✓ Set the value according to the network environment you want to set.
  - ✓ Mandatory information: Name, APN, MCC, and MNC.

## 4 File Download

File download

File download enable

Path  
/storage/emulated/0/android/data/com.m3.startup

URL

Rename enable

Rename value

- File Download
  - ✓ File Download enable : Check to use download function. It is automatically disabled for settings that have been downloaded.
  - ✓ Path : Select the destination folder on your device.
  - ✓ URL : Input correct URL that you want to download. Valid only for direct download and supports http protocol.
  - ✓ Rename enable : Check to change the file name.
  - ✓ Rename value : Input the filename to change.

## 5 Install APK

APK

Install apk

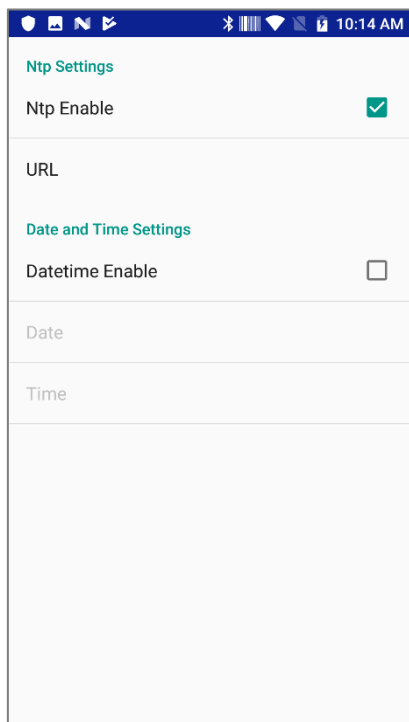
Type  
Local

Path

URL

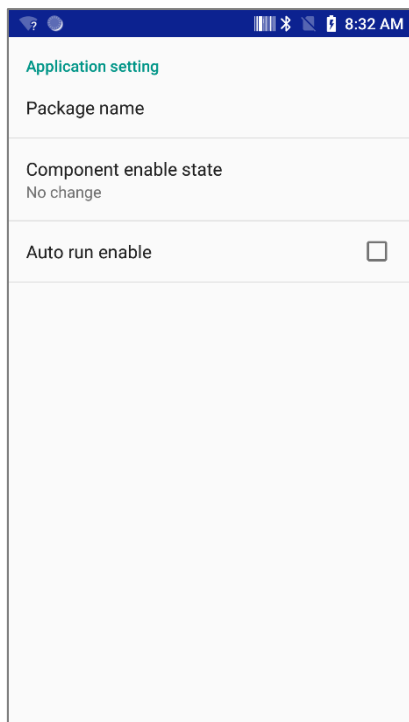
- Install APK
  - ✓ Install apk : Check to use an installation (or download and install) APK
  - ✓ Type  
Local : Select the APK on device.  
URL : Input URL if you want to download and install.

## 6 Date and Time



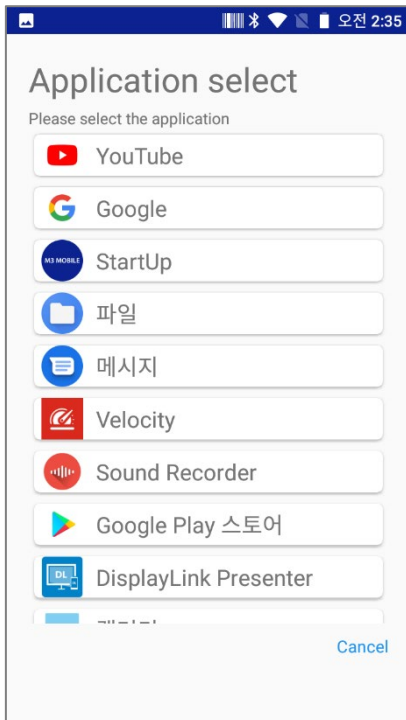
- Date and Time
  - ✓ Ntp
- Get time information from the entered NTP server
  - ✓ Date and Time
- Set the specified date and time manually.
- (Applies only once at next boot)

## 7 Application setting



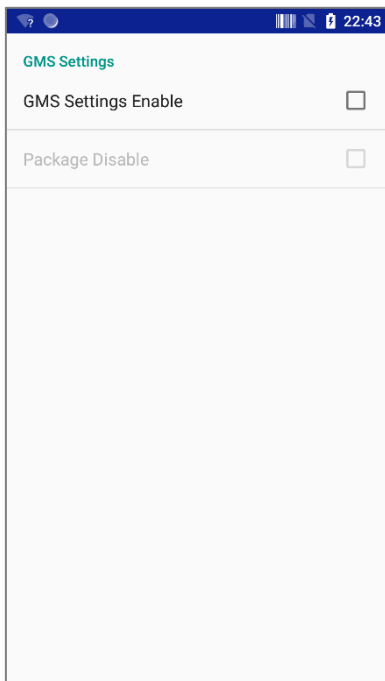
- Application Setting
  - ✓ Package name : Go to the Application select screen and select to enter automatically.
  - ✓ Component enable state : You can enable or disable it. Select “No change” if Auto run is set only.
  - ✓ Auto run enable : Run automatically when checked.

## 7.1 Application select



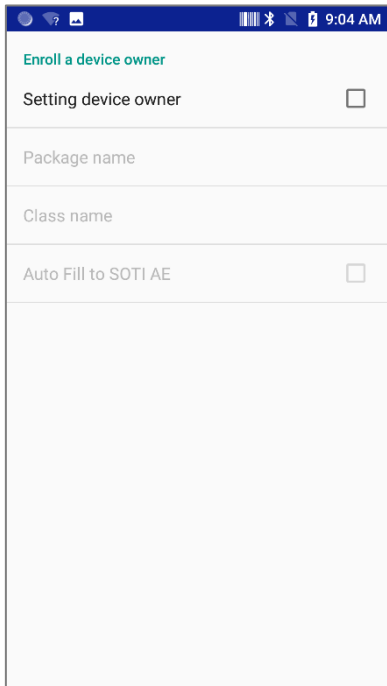
- Application select
  - ✓ When entering the package name, you can select from the application list

## 8 GMS Setting



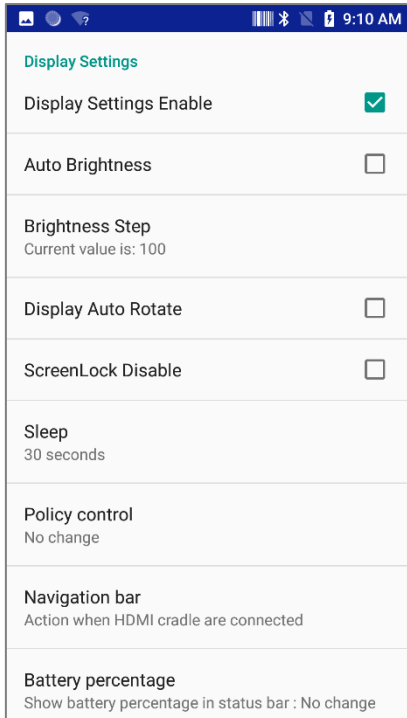
- GMS Settings(SM15/UL20 GMS OS Only)
  - ✓ If Package disable is selected, all applications that correspond to the GMS package will be disabled.
  - ✓ From the next boot, the operation status is shown in the StartUp notification. Do not operate the device until it is completed.

## 9 Enroll a device owner



- Enroll a device owner(SM15/UL20 GMS OS Only)
  - ✓ Setting device owner : Check to set the device owner.
  - ✓ Auto Fill to SOTI AE : If you use SOTI AE as Device Owner, the package/class name will be set when checked.
  - ✓ The device to which you apply the settings must read the QR code in order in the Setup wizard state after factory initialization.
  - ✓ See the “SOTI with M3 StartUp User Manual” document for detailed setup examples. (Download [link: http://www.m3mobile.net/download/file/746](http://www.m3mobile.net/download/file/746))

## 10 ETC - Display & Volume Settings



- Display Settings
  - ✓ Display Settings Enable: Allow Display Setting.
  - ✓ Auto Brightness: Brightness is adjusted by light condition automatically.
  - ✓ Brightness Step: Adjust Brightness.
  - ✓ Display Auto Rotate: Automatic display rotation between portrait and landscape.
  - ✓ ScreenLock Disable: Select to disable ScreenLock
  - ✓ Policy control: Set the status bar, navigation bar to show or hide.

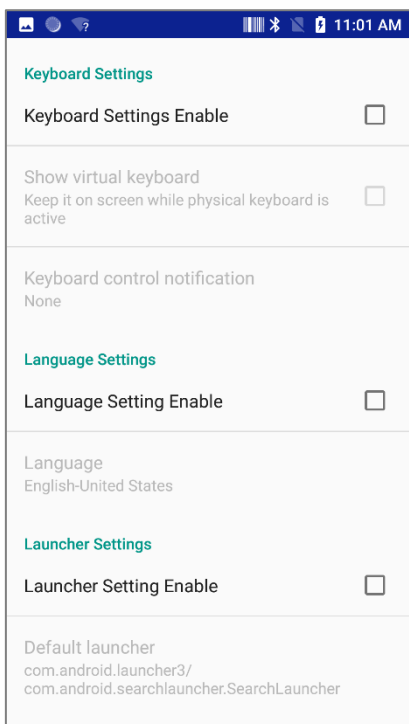
Controllable			
O: possible	SM15	UL20	SL10/SL10K
X: impossible			
Status bar	O	O	O



Navigation bar	X	O	O
-------------------	---	---	---

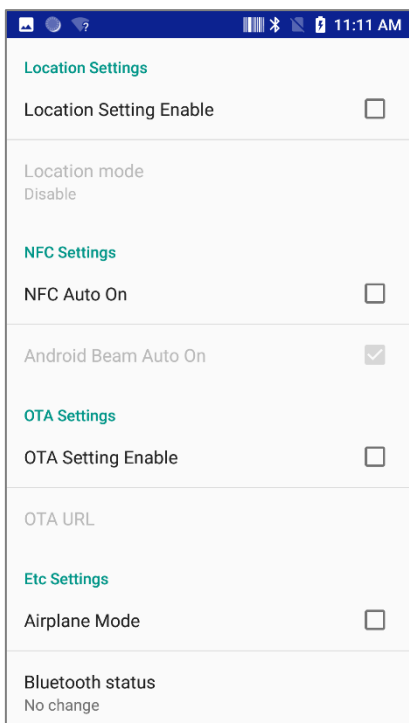
- ✓ Battery percentage: Display the remaining battery capacity of the status bar as a percentage.
- ✓ Screen saver: Set your screen saver.
- Volume Settings
  - ✓ Volume Settings Enable: Allows Volume Control when reboot.
  - ✓ Vibrator Enable: Enables Vibrator when reboot.
  - ✓ Media Volume: Media Volume can be controlled.
  - ✓ Ringtone Volume: Ringtone Volume can be controlled.
  - ✓ Alarm Volume: Alarm Volume can be controlled.

### 10.1 ETC – Keyboard, Language, Launcher



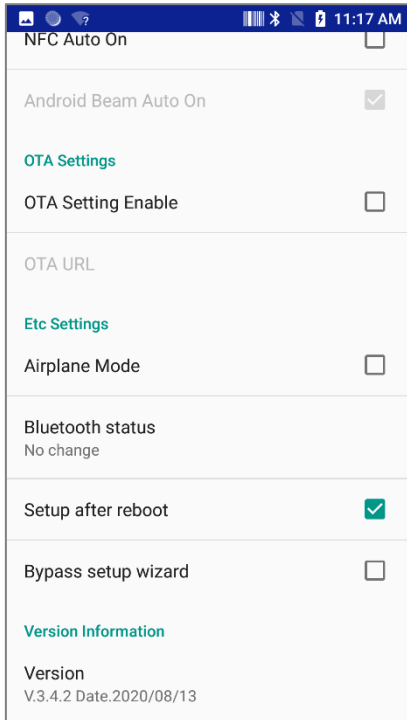
- Keyboard Settings
  - ✓ Show virtual keyboard : Check to see the virtual keyboard when the hardware keyboard is connected..
  - ✓ Keyboard control notification : Display alerts for enabling/disabling the keyboard.
- Language Settings
  - ✓ Language : Set the language of your device.
- Launcher Settings
  - ✓ Default launcher : Enter the package name to change the default launcher.

### 10.2 ETC - Location, NFC, OTA, Airplane, Bluetooth



- Location Setting: Select the setting for current location
- NFC Settings
  - ✓ NFC Auto On : Check to enable NFC.
  - ✓ Android Beam Auto On : Check to enable Beam.
- OTA Settings(SM15/UL20 only)
  - ✓ OTA URL : Enter a valid remote URL to make changes.
- Airplane Mode : Check to enable airplane mode..
- Bluetooth status : Bluetooth can be enabled/disabled.

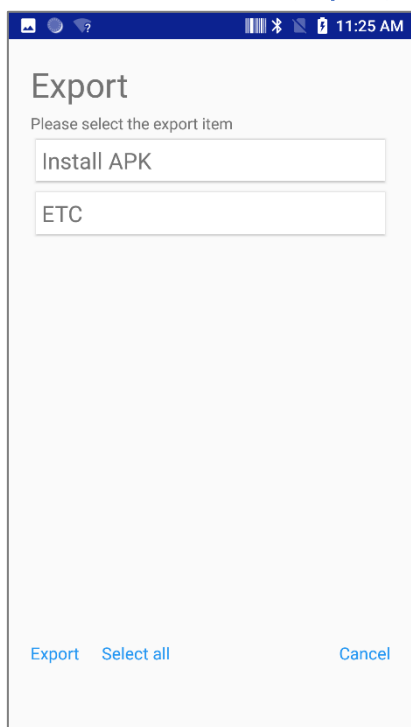
### 10.3 ETC – Setup after reboot, Bypass setup wizard, Unknown source



- 
- Setup after reboot: Uncheck to apply the settings of StartUp without reboot. When unchecked, all settings are applied to the Backward button on the main screen.
- Bypass setup wizard: Check to bypass setup wizard (the initial settings may be different for devices that do not perform setup wizard).
- Unknown source (SM15 Android 7.1 Only): Check to allow installation of application from unknown source.

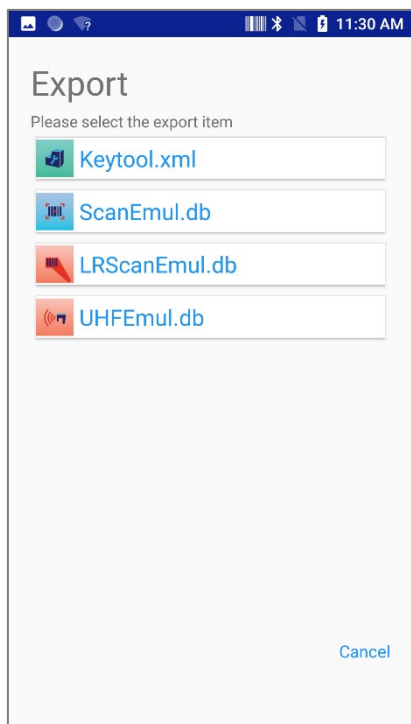
## 11 Make barcode(Export)

### 11.1 Make barcode(Export) - List



- StartUp Settings
  - ✓ Select the setting and click and hold to modify it.
  - ✓ Export : Exports the selected items to QR code.
  - ✓ Select all : Select all items.
  - ✓ Cancel : Stop exporting and go to the main screen.

### 11.2 File transfer(Export) - List



- File transfer
  - ✓ Sends the settings file of the M3 application to another device. The list of supported files is shown below.

File name	SM15	UL20	SL10/SL10K
O: supported			
X: Not supported			
Keytool.xml	O	O	X
ScanEmul.db	O	O	O
LRScanEmul.db	O	X	X
UHFEmul.db	O	X	X
Keytool.json	X	X	O

- ✓ Because the transmission is via Bluetooth, Bluetooth is automatically enabled when entering the screen. Also, do not disable Bluetooth until the transfer is complete.

### 11.3 Make barcode(Export) - Barcode



- Export barcode
  - ✓ Scan the barcode from other devices.
  - ✓ Swipe barcode to move to next barcode.
  - ✓ Check the number of pages at the bottom and scan the following barcode in order.

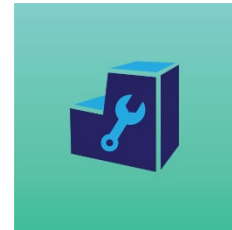
## 12 Read barcode(Import)



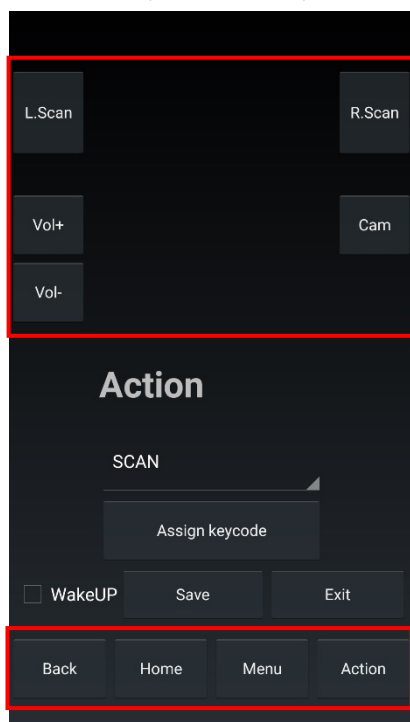
- Read barcode
  - ✓ To get the settings of another device, scan the barcode using the scanner. You can also scan barcodes using the camera with the 'Use camera' button below.

## 5. KeyTool

Model	Restriction
SM15	OS Higher than Nougat 1.1.0
UL20	OS Higher than Pie
SL10	OS Higher than Oreo 2.0.0
SL10K	OS Higher than Oreo 2.0.0

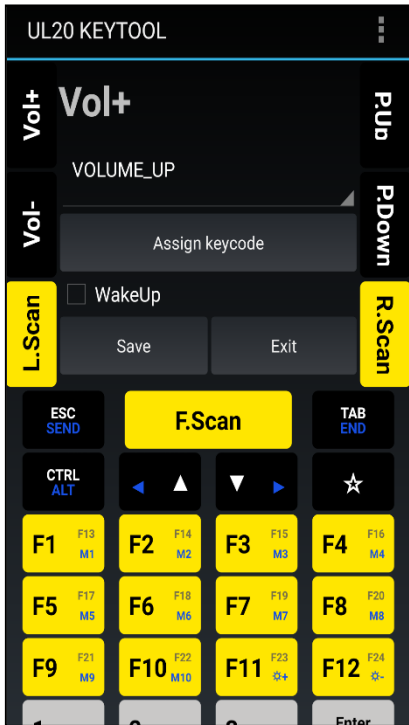


### 1 Select (For SM15)



- Select
  - ✓ Select the button to setting.
  - ✓ When selected, the name and function of the button are displayed in the center in the screen.
  - ✓ Assign Keycode: Temporary storage is available by selecting the function to be changed.
  - ✓ Save: Temporarily stored functions are saved.
  - ✓ WakeUp : If you select WakeUp after selecting a key, you can wake up the device through that key.
  - ✓ The setting data will be saved as “keyremap.xml” in below directory “Android/data/kr.co.m3mobile.keyremapper”

## 2 Select (For UL20)

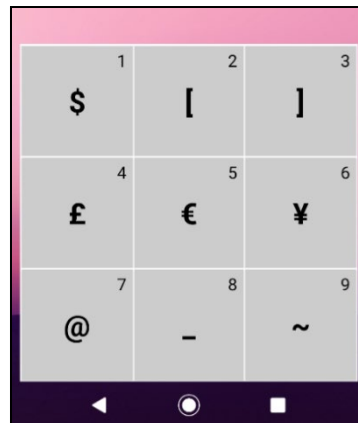


- Select
  - ✓ Select the button to setting.
  - ✓ When selected, the name and function of the button are displayed in the center in the screen.
  - ✓ Assign Keycode: Temporary storage is available by selecting the function to be changed.
  - ✓ Save: Temporarily stored functions are saved.
  - ✓ WakeUp : If you select WakeUp after selecting a key, you can wake up the device through that key.
  - ✓ The setting data will be saved as “keyremap.xml” in below directory
  - ✓ “Android/data/kr.co.m3mobile.keyremapper”

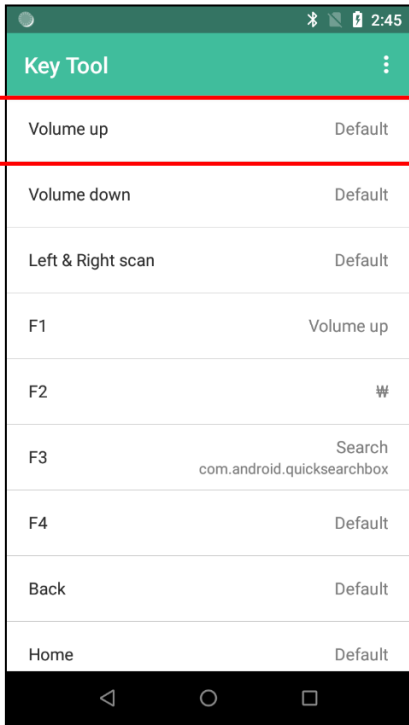
### 2.1 ☆ Key Setting (For UL20)



- ☆ Key Setting
  - ✓ ☆ If you press this key, you can setup Virtual Keypad.
  - ✓ Press the ☆ key to show PAD below.

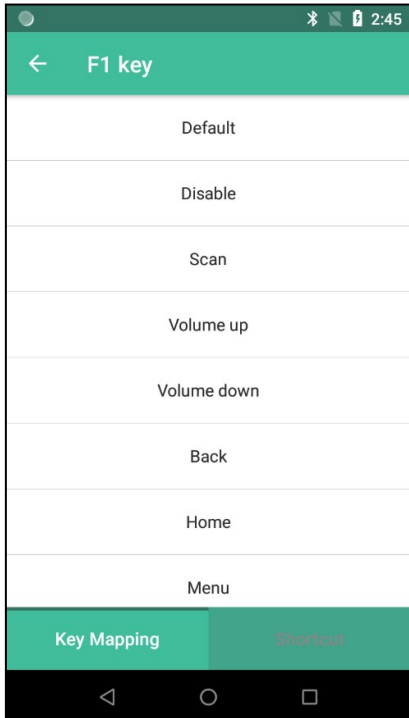


### 3 Select (For SL10 & SL10K)

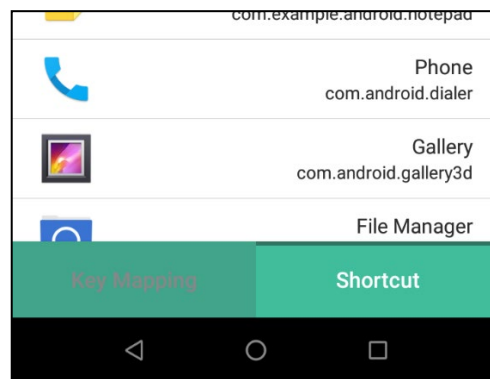


- Select
  - ✓ You can change the key to different function. And you can create shortcut for certain program.
  - ✓ SL10 Key List
    - Volume up, Volume down, Left & Right scan, F1, F2, F3, F4, Back, Home, Menu, Action
  - ✓ SL10K Key List
    - Volume up, Volume down, Left & Right scan, Front scan, Back, Home, Back space, Enter, \*, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0

#### 3.1 Settings (For SL10 & SL10K)



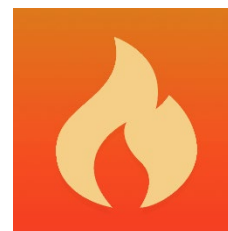
- Settings
  - ✓ You can change the selected key to different function.
  - ✓ You can set the shortcut by selecting in the bottom tab.



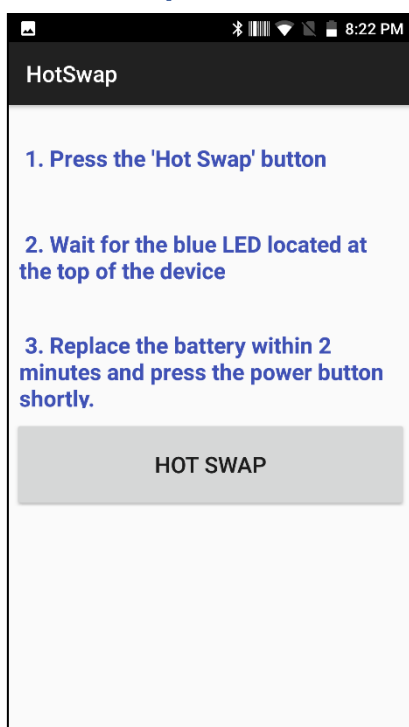


## 6. Hot Swap for SM15

Model	Restriction
SM15	OS Higher than Nougat 1.1.0
UL20	Not Supported
SL10	Not Supported
SL10K	Not Supported

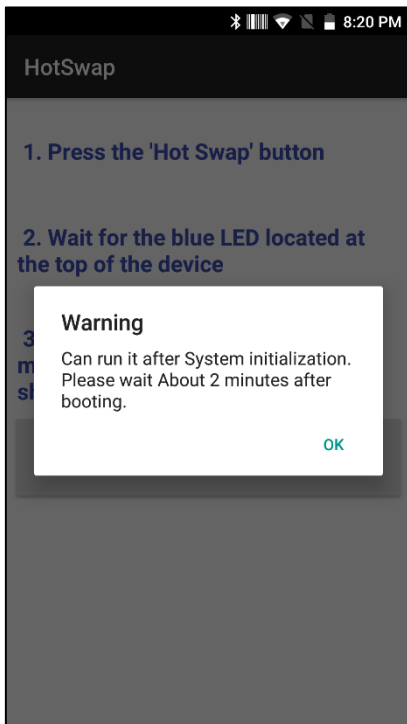


### 1 Hot Swap



- Hot Swap
  - ✓ Press the 'HotSwap' button.
  - ✓ Wait for the blue LED appears at the top of the device.
  - ✓ Need to replace the battery within 2 minutes after blue LED appears and press the power button shortly to WakeUp the device.

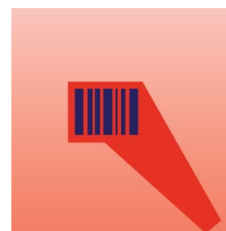
## 2 Restrictions



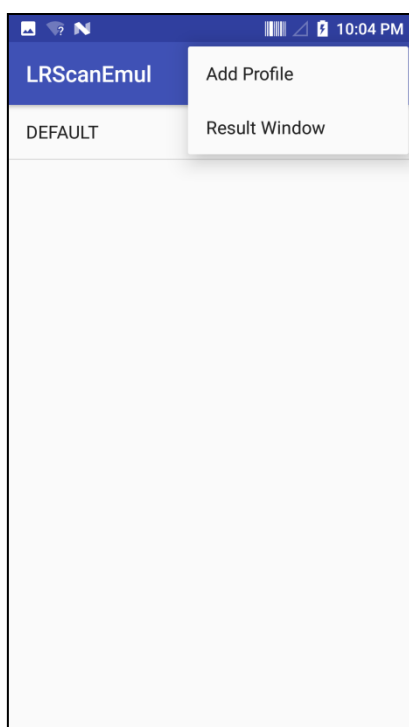
- Restrictions
  - ✓ You can start to use after 3 minutes after booting is completed.
  - ✓ You can use when the battery level is less than 60%.

## 7. LRScanEmul for SM15

Model	Restriction
SM15	OS Higher than Nougat 1.2.0
UL20	Not Supported
SL10	Not Supported
SL10K	Not Supported

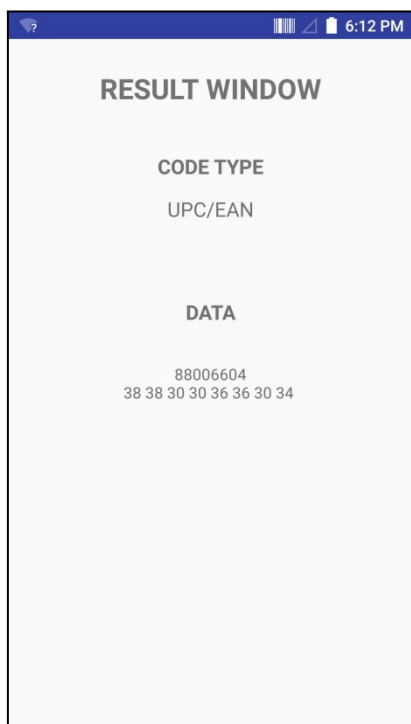


### 1 EDIT PROFILE



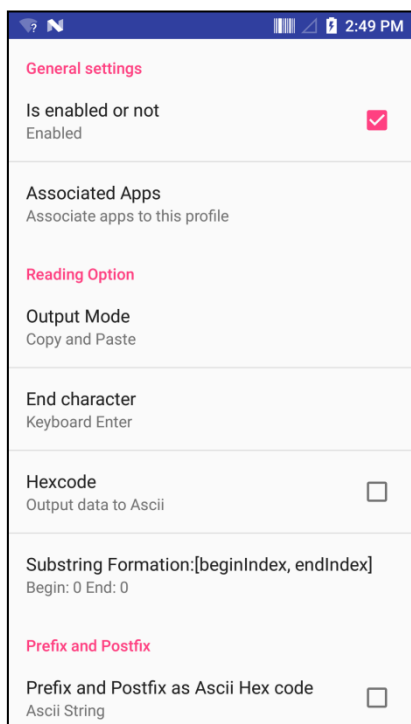
- Edit Profile
  - ✓ The user can edit profile setting here.
  - ✓ DEFAULT profile is created by default.
  - ✓ In DEFAULT profile every app is included except apps which are set for other profiles.
- Profile Menu
  - ✓ Add Profile: Profiles can be added.
  - ✓ Result Window: Barcode type and data will be shown based on DEFAULT set profile.
- Delete Profile
  - ✓ Long-pressing a profile shows Delete menu.

## 2 RESULT WINDOW

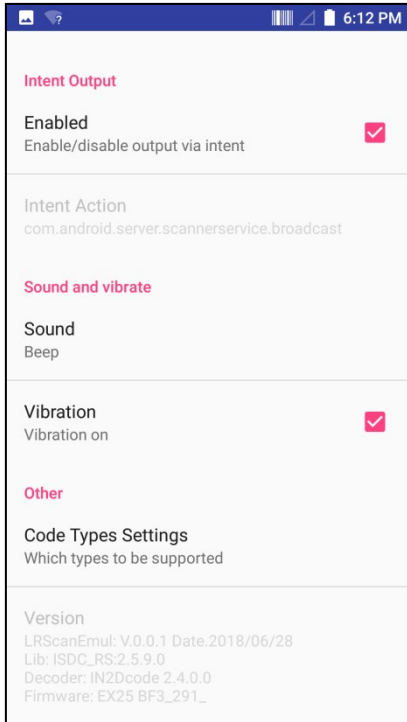


- Result Window
  - ✓ The user can try barcode reading test.
  - ✓ The result is given when 'Intent enable' in DEFAULT Profile is in active mode.

### 3 Settings



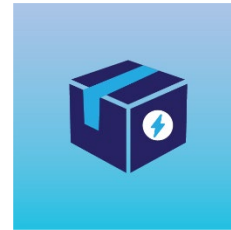
- Is enabled or not: Scanner Activation or Deactivation.
- Associated Apps: Certain apps can be addressed to profile.  
(NOTE: 'Associated Apps' cannot be addressed in Default Profile.)
- OutPutMode : Output method after reading.
  - ✓ Copy and Paste : Copy / paste the reading result to the clipboard and show it at the cursor position.
  - ✓ Key Emulation : The reading result is generated at the cursor position by generating a Keyboard Event.
  - ✓ None(Clipboard) : Copy the reading result to the clipboard and finish.
- End character : After output of the barcode, set the finishing character.
  - ✓ Enter : In the case of Copy and paste in Output Mode, press Enter in the same way. In case of Key Emulation, Key Event is generated.
  - ✓ Keyboard Enter : After showing the reading result according to the Output Mode, it always shows the key event.
- Hexcode : Reading result is displayed in hexadecimal
- Prefix and PostFix
  - ✓ Prefix and Postfix as Ascii Hex : Prefix or Postfix can be used for general control command as Ascii Code (/w Hexcode input) such as escape code.
    - ◆ Ex) 0A31 – 0A: line feed, 31:'1'
    - ◆ Ascii code reference
- (<https://en.wikipedia.org/wiki/ASCII>)
- Prefix and Postfix : Enter character at the front or end of barcode data.



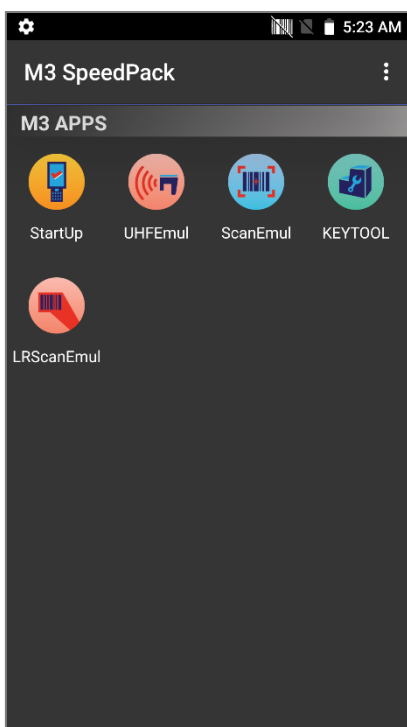
- Intent
  - ✓ Enabled : Users can receive reading results through Intent Broadcast.
  - ✓ Intent Action: Selects Actions that should receive Barcode Data.
- Sound and Vibrate
  - ✓ Sound : Reading sound after reading.  
Ex) None, Beep, DingDong.
  - ✓ Vibration : Vibration after reading.
- Code Type : Select Code Type to read.

## 8. M3 SpeedPack

Model	Restriction
SM15	OS Higher than Oreo 2.3.0
UL20	OS Higher than Pie 2.4.2
SL10	Scheduled
SL10K	Scheduled

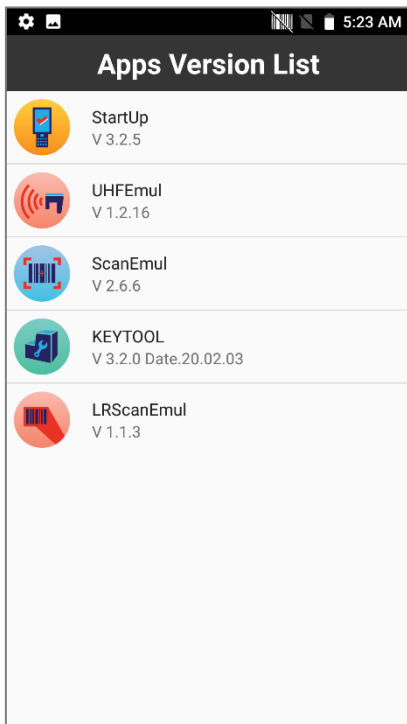


### 1 Main Screen



- M3 App Package
  - ✓ When running M3 SpeedPack, M3 apps are shown.
  - ✓ Select and run an app.

## 2 Apps Version List

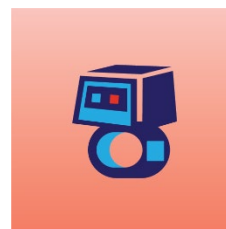


- Version information of M3 apps
  - ✓ Options menu – Enter 'Apps Version List' to display version information for M3 apps.
  - ✓ You can check the versions of apps currently installed on your device at once.

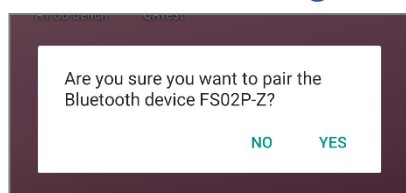


## 9. Ring Scanner

Model	Restriction
SM15	All Supported
UL20	All Supported
SL10	All Supported
SL10K	All Supported

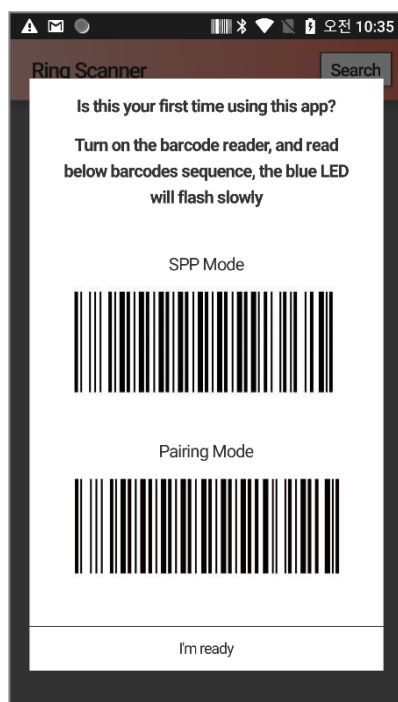


### 9 Bluetooth Pairing - NFC



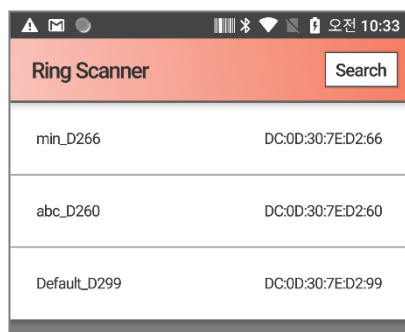
- BT Paring to NFC
  - ✓ After installing the M3 Ring Scanner app, bring the ring scanner device to the back of the device and an NFC pairing dialogue appears. (Password on first connection: 1234)

### 10 Bluetooth Pairing - General



- General BT Paring
  - ✓ A dialogue with SPP mode and pairing mode barcodes appears. Read these barcodes to wait for the ring scanner in pairing mode.

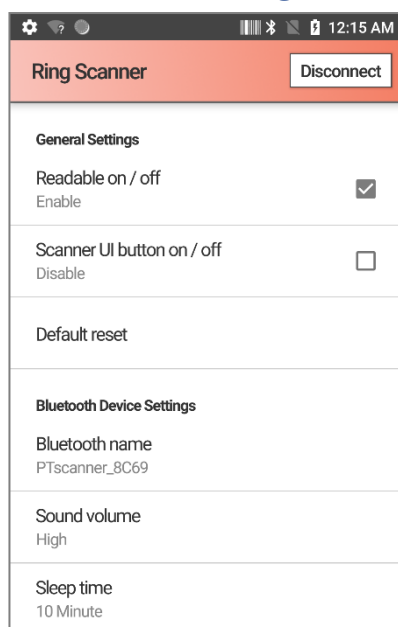
## 11 Ring Scanner list



Device Name	MAC Address
min_D266	DC:0D:30:7E:D2:66
abc_D260	DC:0D:30:7E:D2:60
Default_D299	DC:0D:30:7E:D2:99

- Ring Scanner list
  - ✓ Press the Search button to see a list of ring scanners. (Password on first connection: 1234)

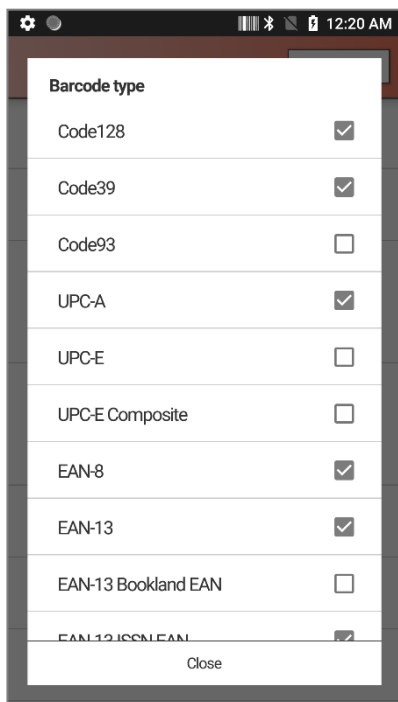
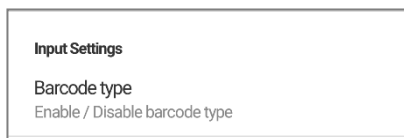
## 12 General Settings



Category	Setting Name	Value / Status
General Settings	Readable on / off	Enable <input checked="" type="checkbox"/>
	Scanner UI button on / off	Disable <input type="checkbox"/>
	Default reset	
Bluetooth Device Settings	Bluetooth name	PTscanner_8C69
	Sound volume	High
	Sleep time	10 Minute

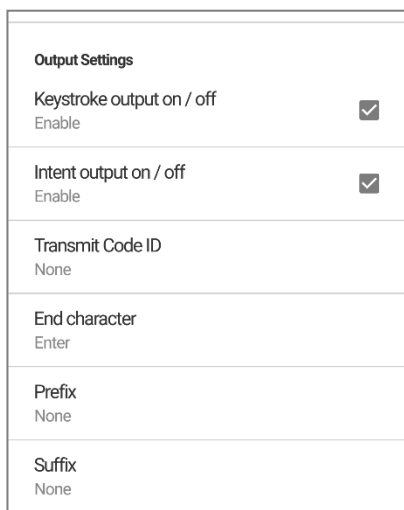
- General Settings
  - ✓ Readable on / off: Turn barcode reading on and off.
  - ✓ Scanner UI button on / off: Create and turn off the UI button.
  - ✓ Default reset: Initialize scanner setting.
- Bluetooth Device Settings
  - ✓ Bluetooth name: Rename Bluetooth.
  - ✓ Sound volume: Sets the sound output when scanning.  
Example: Off, High, Mid, Low
  - ✓ Sleep time: Sets the sleep time after scanning.  
Example: 1~240 minutes

### 13 Input Settings



- Input Settings
  - ✓ Barcode type: Set the barcode type to use with the Ring scanner

### 14 Output Settings



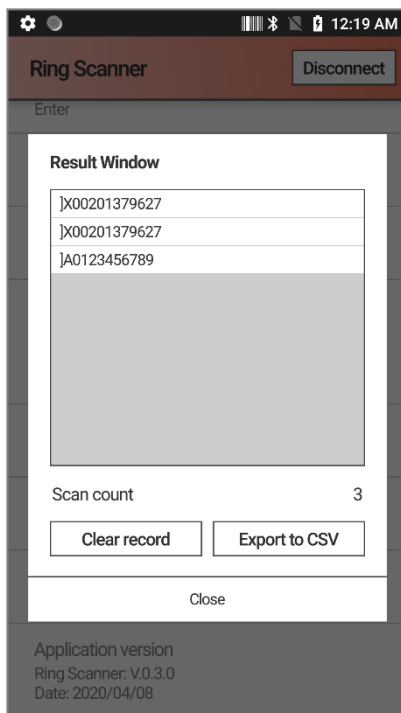
- Output Settings
  - ✓ Keystroke output on / off: Set whether to output scan data to Android devices.
  - ✓ Intent output on / off: Turn the Intent output on and off for other apps.
  - ✓ Transmit Code ID: You can set AIM Code ID and Symbol Code ID to Scan Data Prefix.
  - ✓ End character: Set the end character  
Example: Enter, Space, Tab, None
  - ✓ Prefix: Set the prefix of the output data.
  - ✓ Suffix: Set the suffix of the output data.

## 15 Other Settings

<b>Other</b>
Result window Scan test and export CSV
Scanner ID
Scanner battery
Scanner version
Application version Ring Scanner: V.0.3.0 Date: 2020/04/08

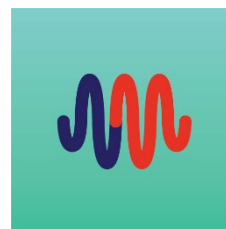
### ■ Other

- ✓ Result Window: Scan testing is available. You can export count and CSV files.
- ✓ Scanner ID: Check the scanner ID.
- ✓ Scanner battery: Check the scanner battery.
- ✓ Scanner version: Check the scanner version.
- ✓ Application version: Check the version of the ring scanner app.



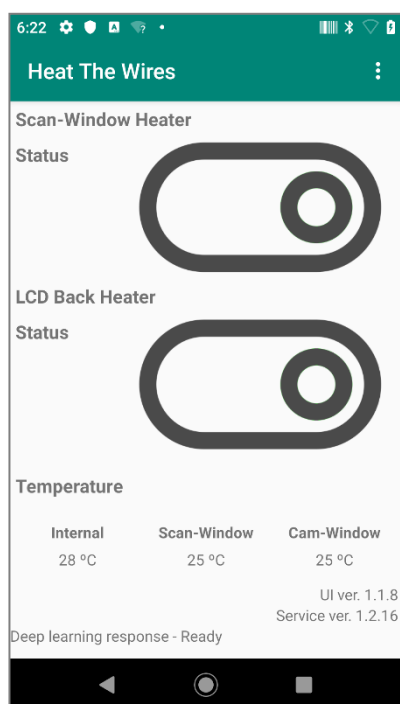
## 10. Heat the Wire

Model	Restriction
SM15	N/A
UL20	UL20F
SL10	N/A
SL10K	N/A



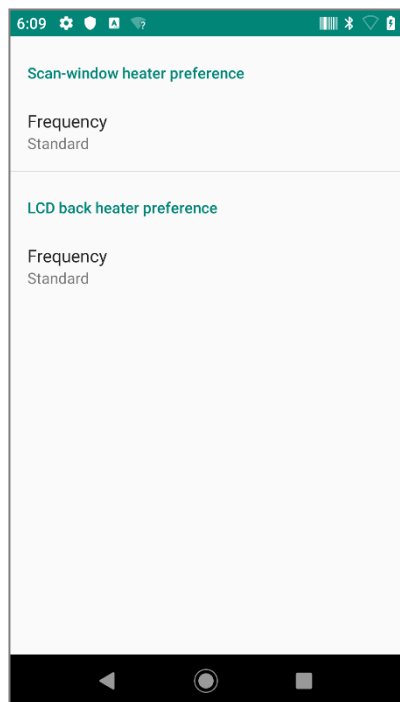
Specialized in low temperature environments, UL20F supports "Heat the Wire" applications. This app supports two areas. The first is a Scan-Window heater that preheats the scanner window, and the second is an LCD Back Heater that keeps the LCD screen warm so that the afterimages seen when switching the screen at low temperatures disappear.

### 1 Heater status and temperature



- Heat status
  - ✓ When the Scan-Window Heater operates, the button of Status changes to red.
  - ✓ When the LCD Back Heater operates, the button of Status changes to red.

## 2 Settings



- Heater preference
  - ✓ Frequency: Adjust the operating conditions of the heating wire. For detailed operating conditions, refer to the following. High mode consumes a lot of battery.

### **3 Operating condition**

#### ■ Scan-Window Heater

1) When the temperature of the scan-window reaches 0°C, the heating wire is turned on only once (2 minutes). This operation is initialized when exposed to an environment of 3°C or higher for a long time or when the terminal is rebooted.

#### 2) Setting - Frequency

2-1) Standard: When the temperature of the scan-window and cam-window is below 0°C, the heating wire turns on when the temperature of the scan window rises by 1°C.

2-2) High: When the temperature of the scan-window and cam-window is 3°C or less, the heating wire turns on when the temperature of the scan window rises by 1°C.

3) When the temperature of the Scan-window is over 34°C or 2 minutes have passed after the heating wire is activated, the heating wire is turned off.

#### ■ LCD Back Heater

#### 1) Setting - Frequency

1-1) Standard: When the battery is over 30% and the internal temperature is below -10°C, the heating wire turns on for 10 seconds and a cooldown of 60 seconds occurs.

1-2) High: When the battery is over 30% and the internal temperature is below -10°C, the heating wire is turned on for 60 seconds and a cooldown of 60 seconds occurs.

2) Scan-window heater and LCD back heater cannot operate at the same time, and Scan-window heater takes priority.

## **11. Services**

If you experience any trouble while using our product, you can visit M3 Service center or send enquires to our online support web page (<http://itc.m3mobile.net>), we will do our best to solve your trouble as soon as we can.

M3 FAQ document can help you with troubleshooting.

For any enquires about business program, please contact program provider for faster service.

### Contact details

#### Headquarter

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[www.m3mobile.net](http://www.m3mobile.net), [sales@m3mobile.co.kr](mailto:sales@m3mobile.co.kr)

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#### Online Support Web page

<http://itc.m3mobile.net>