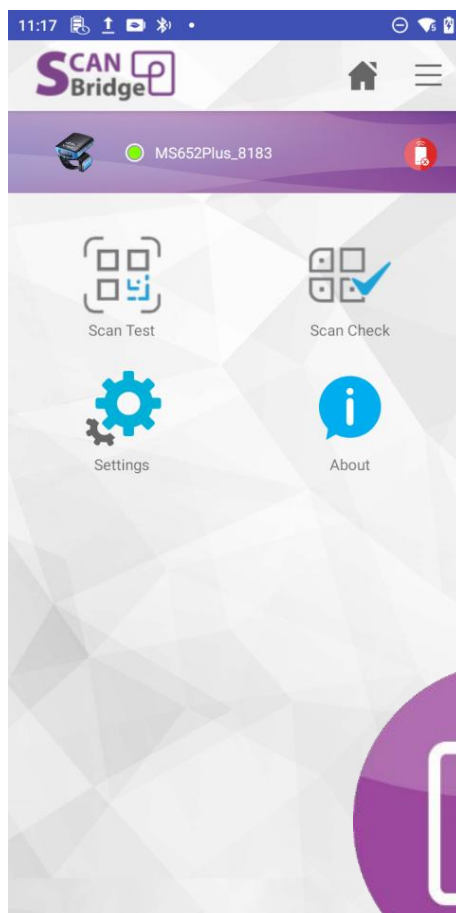


ScanBridge Android

Version 1.0



User's Manual

Issue 1

Revision History

Issue	Revision	Date	Change Description
1	0	2024/11/29	First Published Version (ScanBridge Android 1.0.4)
1	1	2025/1/24	V1.0.7 release: <ul style="list-style-type: none">● Support MS633LR

Note: Dates are expressed in YYYY/MM/DD

Preface

About This Manual

This manual is intended for users of the **ScanBridge Android** Version 1.0-series in Android operation system (Android 10 - 14).

Throughout this manual, the term "**ScanBridge Android**" may be referred to simply as "**ScanBridge**."

ScanBridge consists of following main features:

- **Quick Configuration:** Easily configure Unitech barcode scanners.
- **Effortless Pairing:** Simple pairing with Unitech barcode scanners.
- **Powerful Editing Tool:** Allows users to manage data output for different working situations.
- **Data Wedge Methods:** Provides two types of data input methods: Copy & Paste and Keyboard Emulation.
- **Scan Test:** Helps users verify scanned data and output results.
- **Scan Check:** Offers different modes for comparing and verifying scanned barcodes. Includes a Scan Check History feature for reviewing past scans.
- **Device Management:** Sync device settings, share profiles, and update firmware for supported models within the app.
- **ScanBridge Keyboard:** A virtual keyboard that allows users to trigger scans using an on-screen button.

Note: The ScanBridge Keyboard must be configured before use.

To Configure the ScanBridge Keyboard:

1. Go to: **Settings** → **System** → **Languages & Input** → **Virtual Keyboard** → **Manage Keyboards** → Enable **ScanBridge Keyboard**.
2. Open the **ScanBridge** app → Select **Input Method Picker** → Choose **ScanBridge Keyboard**.

Worldwide Support

unitech's professional support team is available to quickly answer questions or assist with technical-related issues. Should an equipment problem occur, please contact the nearest unitech regional service representative.

For complete contact information please visit the Web sites listed below:

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Tel: +886-2-89121122 E-mail: info@hq.ute.com Address: 5F, No. 136, Lane 235, Baoqiao Road, Xindian District, New Taipei City 231, Taiwan (R.O.C.) Website: http://www.ute.com	Tel: +31-13-4609292 E-mail: info@eu.ute.com Address: Kapitein Hatterasstraat 19, 5015 BB, Tilburg, the Netherlands Website: http://eu.ute.com
China	Japan
Tel: +86-59-2310-9966 E-mail: info@cn.ute.com Address: Room401C, 4F, RIHUA International Mansion, Xinfeng 3nd Road, Huoju Hi-tech District, Xiamen, Fujan , China Website: http://cn.ute.com	Tel: +81-3-35232766 E-mail: info@jp.ute.com Address: Kayabacho Nagaoka Building 8F.,1-5-19 Shinkawa, Chuo-Ku, Tokyo, 104-0033, Japan Website: http://jp.ute.com
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North America	Please scan QR Code to visit us :
Tel: +1-714-8916400 E-mail: info@us.ute.com / info@can.ute.com Address: 6182 Katella Ave, Cypress, CA 90630, USA Website: http://us.ute.com	

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Chapter 1 - Introduction

ScanBridge is a powerful **Android application** designed to streamline the connection and configuration of supported Unitech Scanners (**hereinafter called “scanner”**) for users. It efficiently transmits scanned data to the user's designated applications. Moreover, the application allows users to customize the scanned data as needed before transmission.

1.1 Supported Models

ScanBridge Android supports the following Unitech Scanner:

Scanner Device Models	ScanBridge Android Version	Notes
MS633LR (FW: 0.1.5 or above)	1.0.7	<ul style="list-style-type: none">MS633LR does not share same FW with MS633For Unitech devices dependencies:<ol style="list-style-type: none">DMServices v1.2.45AppCtrlService V1.0.25
MS633 (FW: 0.1.2 or above)	1.0.4	<ul style="list-style-type: none">For Unitech devices dependencies:<ol style="list-style-type: none">DMServices v1.2.45AppCtrlService V1.0.25
MS652+ (FW: 3.07 or above+)		

1.2 Supported Language

ScanBridge Android supports the following languages:

English, Japanese, Traditional Chinese, and Simplified Chinese.

Chapter 2 – Feature Highlights

2.1 Key Features of ScanBridge

- **Multiple Pairing for Use with Android mobile device**
 - Offers different pairing methods to accommodate various Android mobile device environments.
- **Display Scanner Information**
 - Shows scanner details, including the scanner name, serial number, firmware version, and battery status.
- **Scanner Configuration / Mass Setup**
 - Allows users to customize scanner settings based on the working environment.
 - Enables configuration of barcode reading settings according to barcode types.
 - Supports quick setup of multiple scanners with the same configuration.
- **Data Wedge with Data Output Editing**
 - Provides two data input methods: Copy & Paste, and Keyboard Emulation, to work with different applications.
 - Users can create basic or advanced rules to edit scanned data before output, including options like inserting, replacing, changing case, and applying timestamps or regular expressions.
 - Rules can be created under different profiles for various working situations. Each rule can target specific barcode types.
- **Profile Management**
 - Users can create multiple profiles.
 - Each profile includes Data Output option and Data Editing Rules
 - Data Editing includes Basic/Advanced Data Editing
 - Different profiles can apply for different app
- **Scan Test**
 - Users can run scan tests to verify the outcome of created rules and check the accuracy of scanned results.

- **Scan Check**
 - Offers three methods (Single Check, Multi Check, Filter Rule) for barcode comparison. Additionally, users can create lookup tables or apply regular expressions in filter checks to identify barcodes.
 - Includes a full check history for users to review.
- **Firmware Update** (for certain supported Unitech models)
 - Supports firmware updates for scanners directly within ScanBridge, without needing to connect to other devices.
- **ScanBridge Keyboard**
 - Converts scanned data into keyboard input, allowing users to output data to any text field in any app, not just within ScanBridge.
 - Additionally, ScanBridge supports data output via Copy & Paste or Keyboard Emulation methods.

Chapter 3 – Initial Setting & Introduction

In this chapter, three parts will be introduced:

1. Initial Setting
2. Homepage Introduction
3. Menu Introduction

Note1: If you were USU(Unitech Scanner Utility) user, please ensure to completely Exit Scanner Utility before using ScanBridge. USU and ScanBridge does not work functional together.

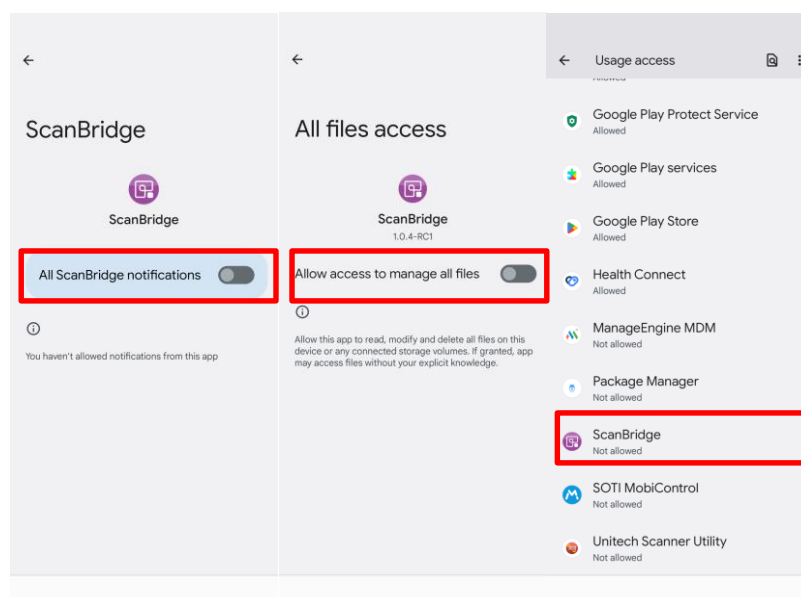
Note2: If you like migrate USU settings to ScanBridge, please see Chapter 9.5

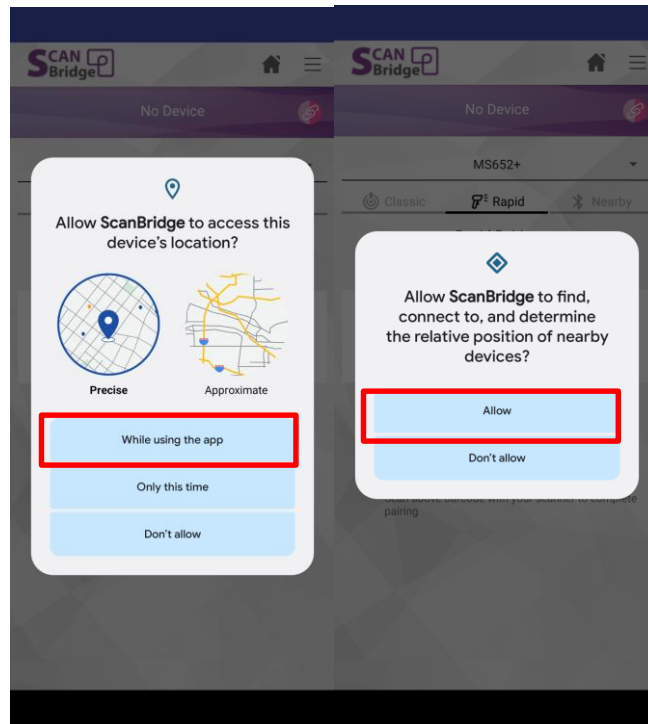
Non Unitech Android Devices:

ScanBridge require below Android permissions inorder to perform below features:

- Notifications
- Scan data import/exporting
- Scan data read/write
- App Settings import/export
- Bluetooth device connection

Please ensure to grand below below permissions





* ScanBridge operates offline and **DOES NOT** collect or transmit any user data to Unitech servers. All scanned data and app information are stored locally on your device.

3.1 Initial Setting

Due to security considerations within the Android system, ScanBridge Keyboard requires user permission to enable all its functionalities

The steps of setting are:

1. Enable ScanBridge Keyboard
2. Set "ScanBridge Keyboard"

3.1.1 Add ScanBridge Keyboard

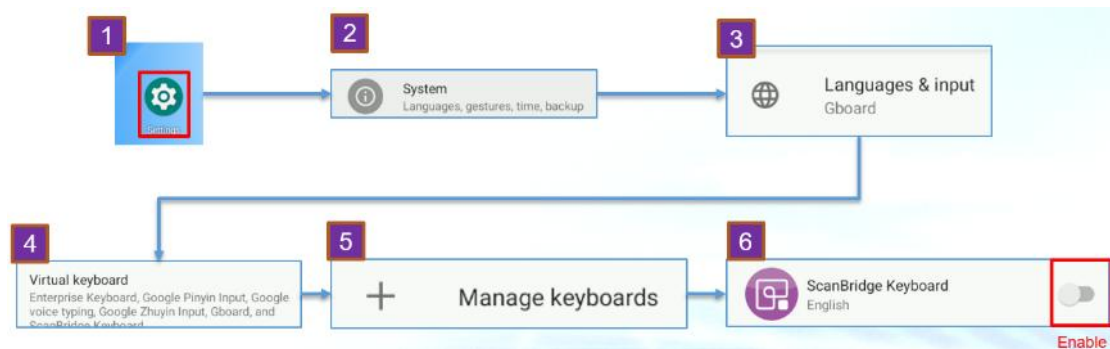


Figure 3.1.1.1

ScanBridge Keyboard is a keyboard extension comes with ScanBridge. It helps user to perform scans, show current profile and status of the scanner. It is required user to add ScanBridge Keyboard before using. Please follow the steps shown in Figure 3.1.1.1

3.1.2 Choose Input method to ScanBridge Keyboard

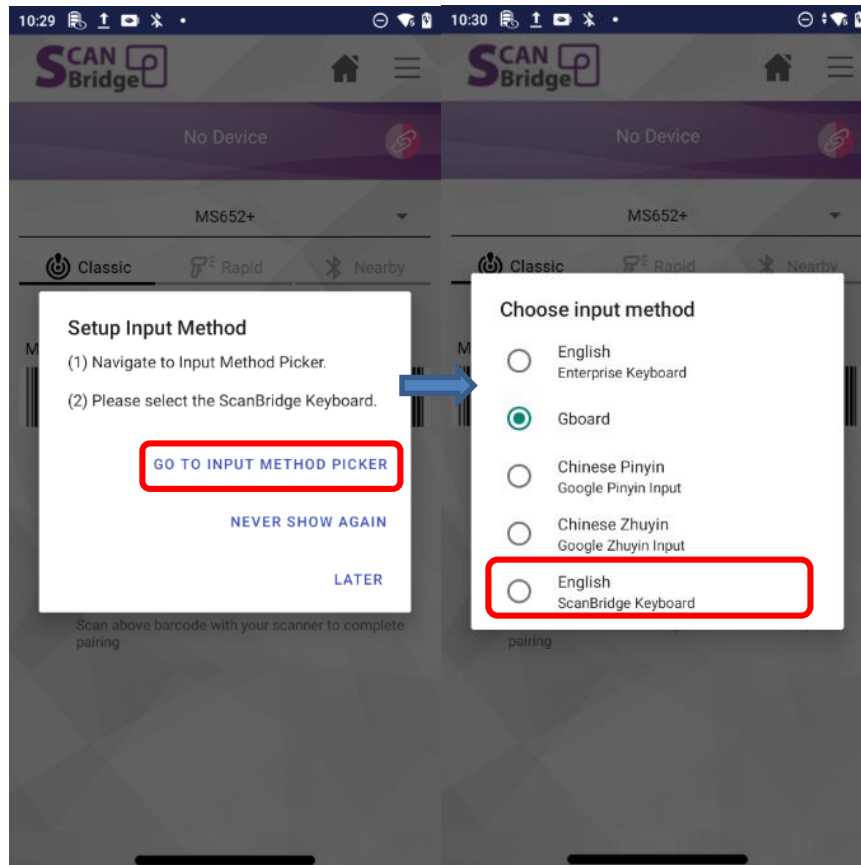


Figure 3.1.2.1

Figure 3.1.2.2

It requires user to manually switch input method to ScanBridge Keyboard. Once you've done 3.1.1, when you launch ScanBridge, will guide you to choose Input method to ScanBridge Keyboard.

1. Tap on "GO TO INPUT METHOD PICKER" in Figure 3.1.2.1.
2. Tap on "ScanBridge Keyboard" in Figure 3.1.2.2

3.1.3 Set “ScanBridge Keyboard” in other Apps

The ScanBridge keyboard is a customized keyboard created by Unitech for operating with data wedge. By using the ScanBridge keyboard, users can use it as a general keyboard or trigger scans in a more convenient way. This keyboard must be activated if you wish to use the Data Wedge function with your enterprise application.

*Using “UNote” as an example of an enterprise app used in a work environment:

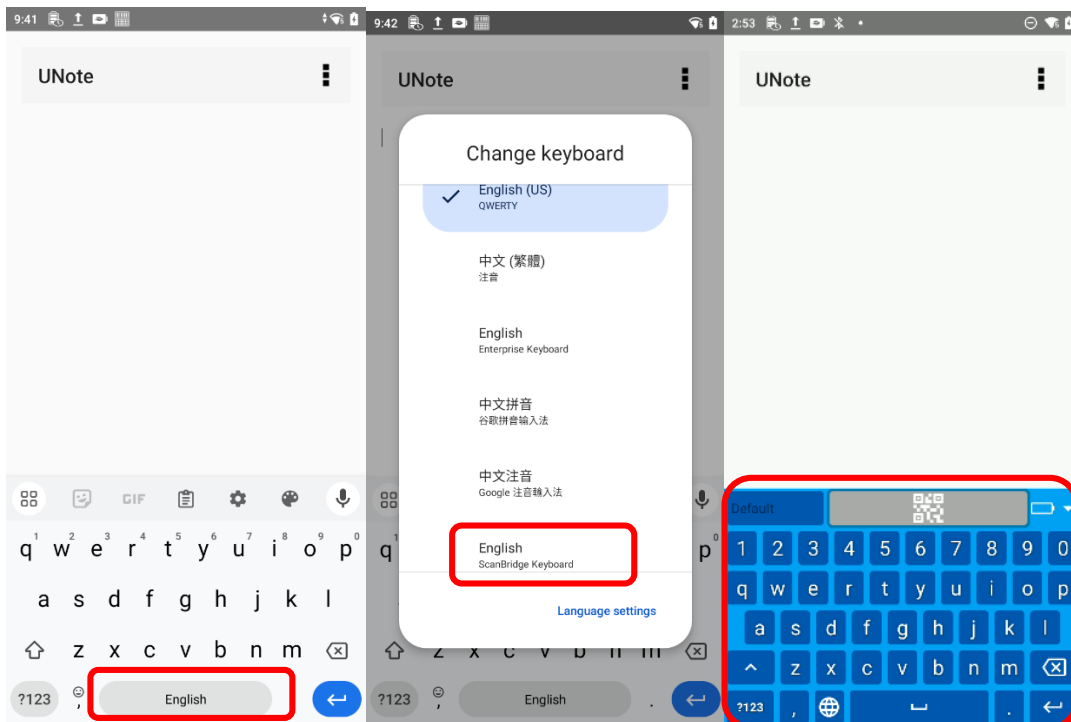


Figure 3.1.3.1

Figure 3.1.3.2

Figure 3.1.3.3

Follow These Steps:

1. **Long Press on the Space Key:** As shown in Figure 3.1.3.1.
2. **Select "ScanBridge Keyboard":** As shown in Figure 3.1.3.2.
3. **As Long as Setup Is Successful, the Default Keyboard Will Turn into a ScanBridge Keyboard:** (See keyboard in Figure 3.1.3.3).

3.2 Homepage Introduction

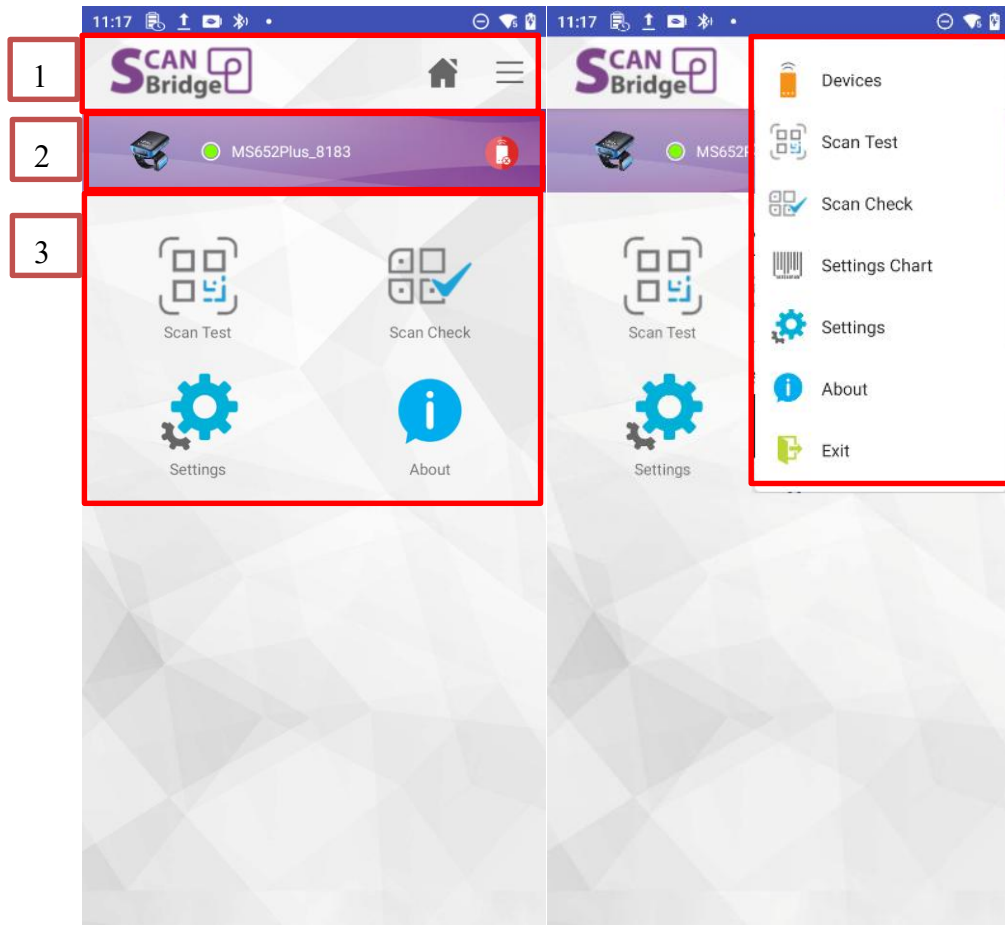


Figure 3.2.1

Figure 3.2.2

In ScanBridge (when paired), there are three main parts in homepage (Figure 3.2.1):

1. Navigation bar - home button and menu button
2. Device info bar - status of scanner
3. Main functions - Features entry

As, shown in the left screenshot in Figure 3.2.2, contents in “Main functions” part is as same as menu (in the right screenshot), so that user is able to switch to specified function without going back to homepage.

3.3 Menu Introduction

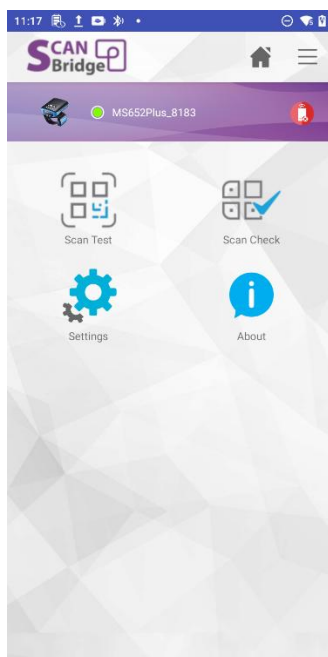


Figure 3.3.1

In menu, there are 4 major modules and introduced in Table 3.3.1:

Module name	Module function
Scan Test	Perform scans and check results.
Scan Check	Check scanned results.
Settings	To configure app or scanner.
About	To show copyright and version.

Table 3.3.1

Chapter 4 – Activate/Deactivating

4.1 Activate a scanner

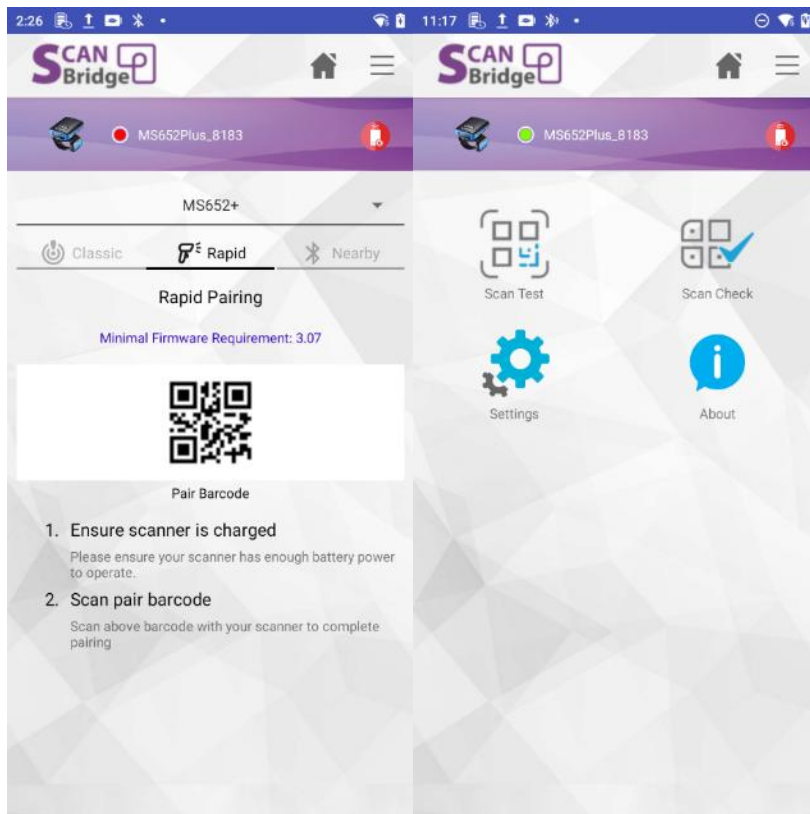


Figure 4.1.1

Figure 4.1.2

There are 3 pairing methods for user to choose (Figure 4.1.1), once device is connected the home page will appear. (As shown in Figure 4.1.2).

Each scanner model has different supported pairing method. When scanner model is selected, pairing method will be shown.

Note: USU will cause pairing issue with ScanBridge, when using ScanBridge please ensure to “Uninstall Unitech Scanner Utility (USU)”. If you like to migrate USU settings to ScanBridge, please see Chapter 9.5

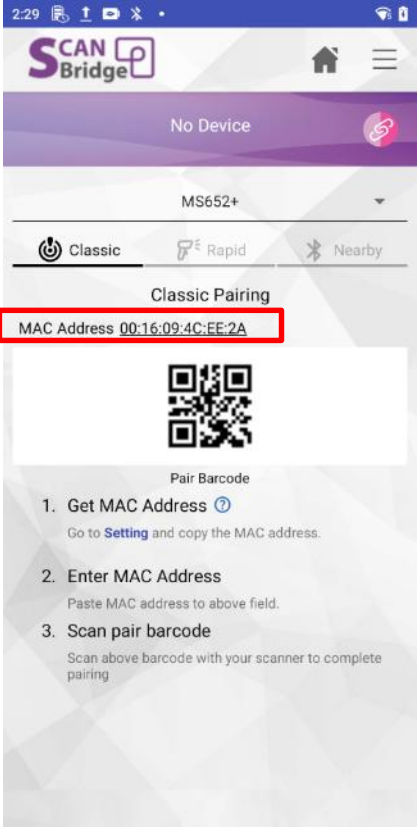
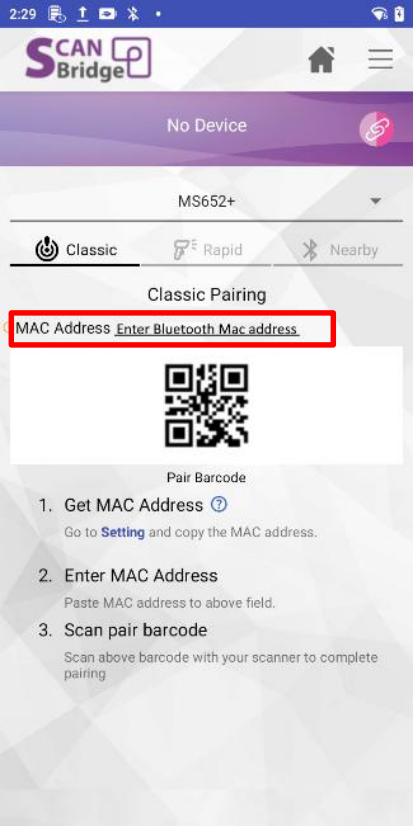
Pairing method differences as shown in below table

Pairing Method	Description	Supported Model
Classic Pairing (2D & 1D pairing barcode)	<ul style="list-style-type: none"> It automatically uses BT MAC address from Android mobile device to pair. However, some Android device might not be able to get MAC Address; Then it is requiring user to manually input. MS652+ and MS633 support this pairing method 	<ul style="list-style-type: none"> MS652+ MS633 MS633LR
Rapid Pairing (2D & 1D pairing barcode)	Pairing method without need of input BT MAC Address. Simply scan the barcode and accept the pair.	<ul style="list-style-type: none"> MS652+
Nearby Devices	Search nearby selected model scanner, user will need manual choose which scanner to pair.	<ul style="list-style-type: none"> MS652+ MS633 MS633LR

Which pairing method suits me?

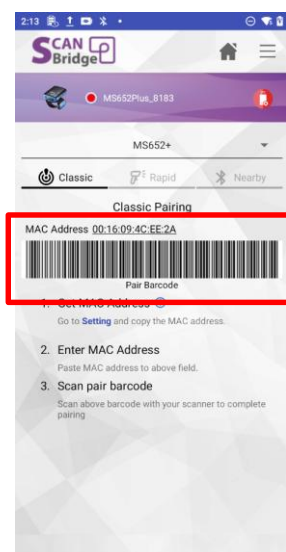
MS652+	
FW V3.07 or above	Suggest to use “Rapid Pairing” or “Nearby Devices”. You do not need to input BT MAC Address, simply scan or tap for pairing.
FW V3.07 below	<p>Able to auto get BT MAC Address Suggest to use “Classic Pairing” or “Nearby Devices” simply scan or tap for pairing.</p> <p>Not able to auto get BT MAC Address Suggest to use “Nearby Devices”, simply tap on “Activate” to pair. This method you do not need to manually input BT MAC Address</p>

MS633	
Able to auto get BT MAC Address	Suggest to use “Classic Pairing” or “Nearby Devices”. Simply scan or tap for pairing.
Not able to auto get BT MAC Address	Suggest to use “Nearby Devices”, simply tap on “Activate” to pair. This method you do not need to manually input BT MAC Address
MS633LR	
Able to auto get BT MAC Address	Suggest to use “Classic Pairing” or “Nearby Devices”. Simply scan or tap for pairing.
Not able to auto get BT MAC Address	Suggest to use “Nearby Devices”, simply tap on “Activate” to pair. This method you do not need to manually input BT MAC Address

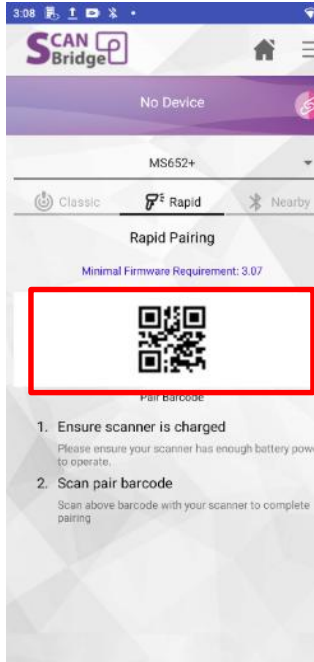
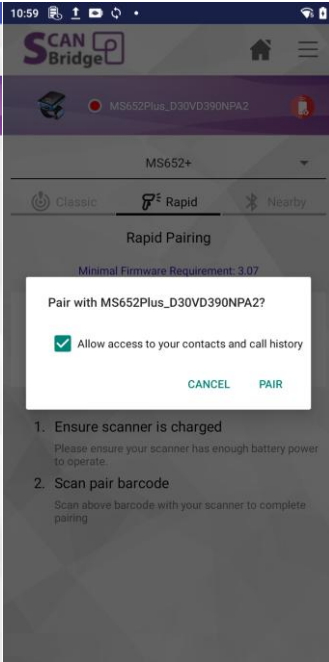
Classic Pairing	
	
<ol style="list-style-type: none"> 1. This pairing method require getting MAC Address from Android mobile device. If success get BT MAC Address, you will see it appear in highlight area. 2. Simply scan the barcode on screen and confirm the pair to complete pairing 	<ol style="list-style-type: none"> 1. This pairing method require getting MAC Address from Android mobile device. If failed to get BT MAC Address, user will need manually copy in to field. 2. Tap on “Enter Bluetooth Mac Address” 3. Tap on Click Here which will direct you to system page. 4. Find “Bluetooth address”, and long press to copy 5. Head back to ScanBridge and paste it to text field, then press

	<p>“OK”.</p> <p>6. Scan the barcode on screen and confirm the pair to complete pairing</p>
--	--

In Classic Pairing, default pairing uses a 2D barcode, but a 1D barcode is also supported. Users can swipe the barcode area left or right to switch between the two formats.



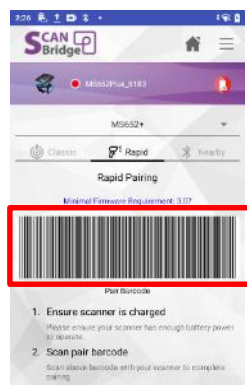
Rapid Pairing


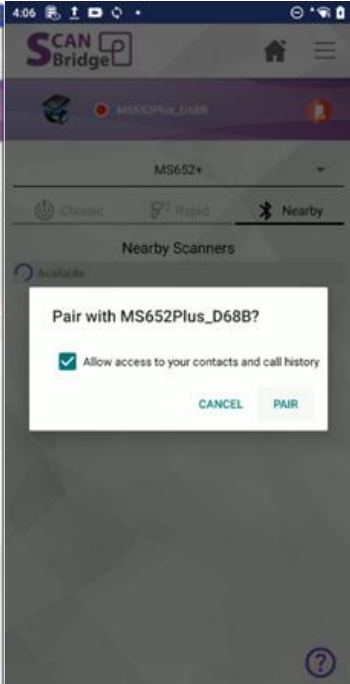
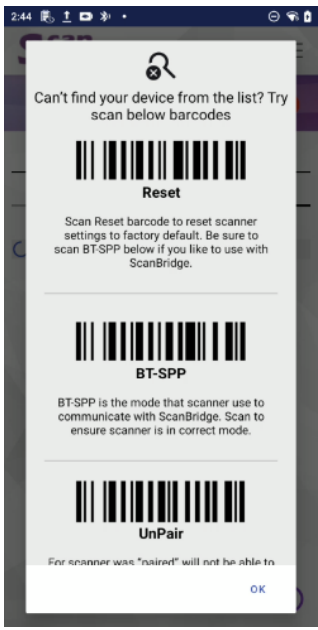




1. Make sure your scanner is updated to FW at least 3.07
2. Scan the Pair Barcode and confirm the pair to complete pairing.

Note: Require MS652+ FW V3.07 or above for this pairing method

In Rapid Pairing, default pairing uses a 2D barcode, but a 1D barcode is also supported. Users can swipe the barcode area left or right to switch between the two formats.



Nearby Scanners		
		
<div><div>1. Connected device info</div><div>2. List of scanner can be activated</div><div>3. Device info (Device name/Serial Number/Last connect time)</div><div>4. Activate the device</div><div>5. Guide when can't find scanner in list</div></div>	<div><div></div><div><div>1. Reset: Reset scanner to factory default settings</div><div>2. BT-SPP: this is the mode that scanner use to communicate with ScanBridge</div><div>3. Unpair scanner</div></div></div>	
<p>Note: If a scanner is current paired with <u>Device1</u> and you want to pair it with <u>Device2</u> using the "Nearby Scanner" method, you must first scan the Unpair barcode to fully disconnect the scanner from Device1. Otherwise, the scanner will remain "paired" with Device1, and you won't be able to discover it on Device2.</p> <p>This step is not required when using the Classic or Rapid pairing methods.</p>		

4.2 Deactivate a Scanner

If wish to deactivate connected scanner, there are 2 methods:



- Tap on  from device banner to deactivate scanner.4.2.1.



Figure 4.2.1

- Scan the Unpair barcode in  under “Nearby” tab.

Note: Power off Android mobile device or scanner does not deactivate or unpair.

Chapter 5 – Scanner Information & Configuration

When the devices are activated, ScanBridge is able to interact with scanner. In this chapter, there are two parts to be introduced:

1. Display scanner information
2. Scanner configuration

5.1 Display Scanner Information

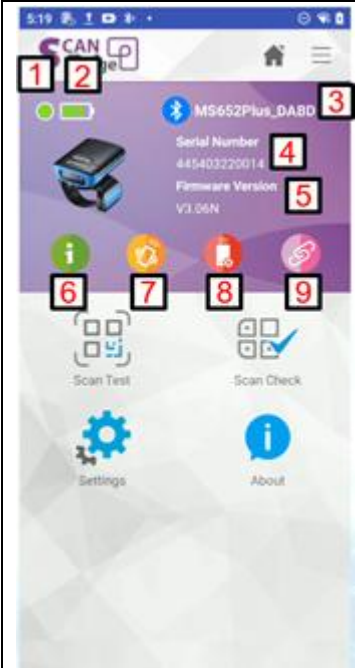
	1: Connection Status (Green: Connected. Red: Disconnected)
	2: Battery Level
	3: Device Name
	4: Serial Number
	5: Firmware Version
	6: Detail: the “i” icon shows the detail of the reader.
	7: Find Device: It will make scanner make sound
	8: Deactivate: To unpair and deactivate the scanner.
	9: Devices: To navigate to pairing page.

Table 5.1.1

The scanner info includes the current status of the scanner, refer to Table 5.1.1. Moreover, user can click the green info icon to check detail information.

The ‘i’ detail will show a more detailed info shown in Table 5.1.2



Detail 	
	1. Device Name
	2. Engine Model
	3. Serial Number
	4. BT Address
	5. Battery Status
	6. Firmware

Table 5.1.2

5.2 Scanner Configuration

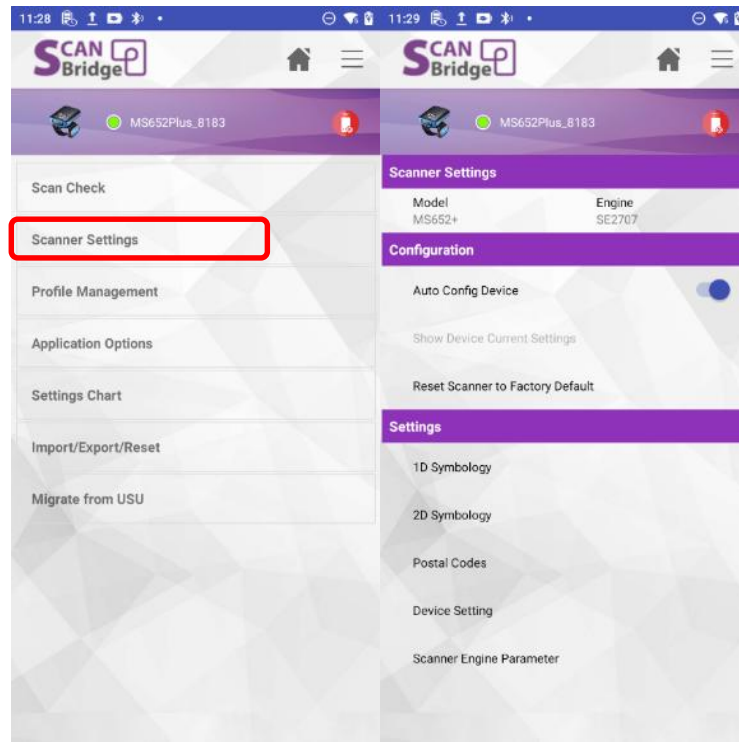
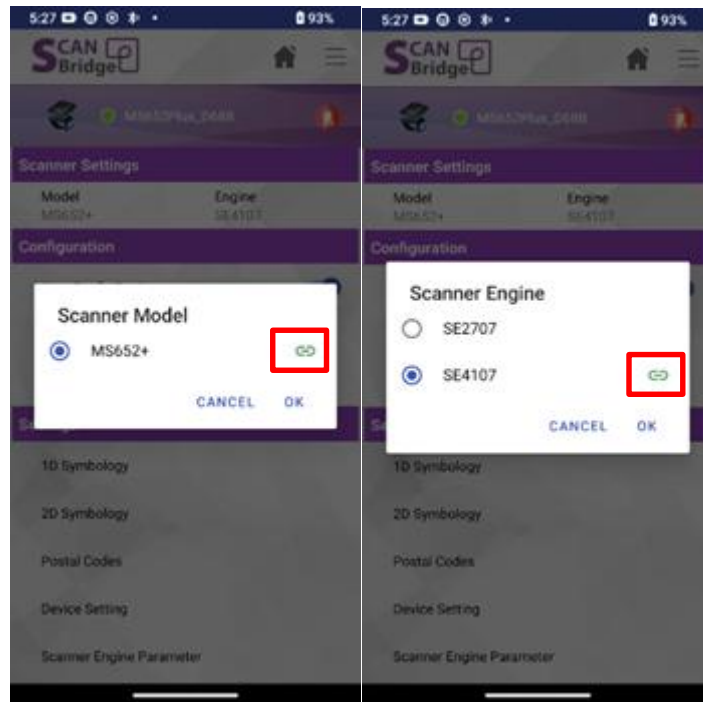


Figure 5.2.1

On this settings page, users can configure and manage scanner settings.

Even without connecting to a scanner, users can pre-configure scanner settings by selecting the model and engine. This allows for offline configuration of the targeted scanner. However, to sync these settings with the scanner once it is paired, users must enable the "Auto Config Device" option in **Scanner Settings**. This feature will automatically apply the pre-configured settings to the scanner when it is connected (see **Auto Config Device** for more details).

The **Scanner Settings** page will display the currently connected scanner model and engine. Users can also switch to another model or engine to perform offline configuration if needed.



If a user switches to a model or engine that is not currently paired, changing the **Scanner Settings** will not impact the model and engine that are already paired. The **Scanner Settings** are organized separately for each model and engine.

- **Auto Config Device**

This feature automatically applies the scanner settings configured in ScanBridge to any connected scanner. It's especially useful when setting up multiple devices. With this feature enabled, users only need to configure settings once in ScanBridge, and the same settings will be applied to other scanners when connected.

- **Show Device Current Settings**

This feature allows users to compare the settings in the application with those of the connected device (see Figure 5.2.2).

Note: Disable **Auto Config Device** if you want to view the differences between the settings, else, the scanner settings will always match those configured in ScanBridge.

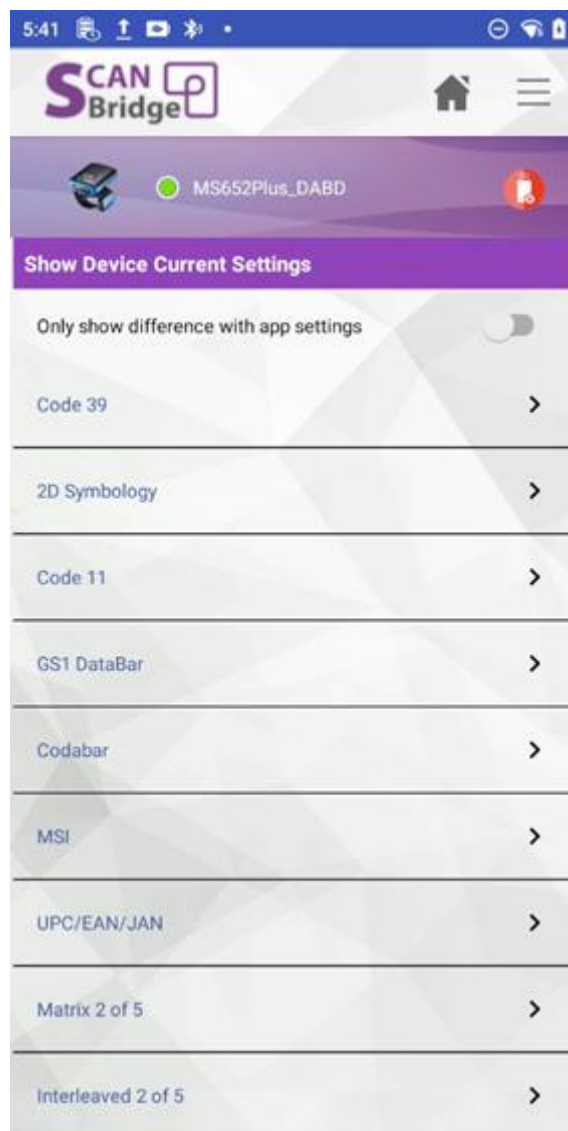


Figure 5.2.2

- **Reset Scanner to Factory Default** (Only when device connected)

Reset the connected scanner settings to its factory default settings.

- **Available Scan Settings**

These settings allow users to modify scanner behavior based on specific symbologies. Refer to Table 5.2.3 for a list of supported symbologies.

<div>Settings</div> <div> 1D Symbology 2D Symbology Postal Device Setting Scanner Engine Parameter </div>	Model: MS65+
	1D Symbologies <ul style="list-style-type: none"> ● UPC/EAN/JAN ● Code 128 ● Code 39 ● Code 93 ● Code 11 ● Interleaved 2 of 5 ● Discrete 2 of 5 ● Codabar ● MSI ● Chinese 2 of 5 ● Matrix 2 of 5 ● Korean 3 of 5 ● Inverse 1D ● GS1 DataBar ● Specific Security Features ● Composite
	2D Symbologies <ul style="list-style-type: none"> ● PDF417 ● MicroPDF417 ● Code 128 Emulation ● Data Matrix ● Data Matrix Inverse ● Decode Mirror Images ● GS1 Data Matrix ● Maxicode ● QR Code ● MicroQR ● GS1 QR Code ● Linked QR Mode ● Aztec ● Aztec Inverse ● Han Xin

	<ul style="list-style-type: none"> ● Han Xin Inverse ● Grid Matrix ● Grid Matrix Inverse ● Grid Matrix Mirror ● Engine Orientation ● Continuous Bar Code Read
	Postal Code
	<ul style="list-style-type: none"> ● US Postnet ● US Planet ● Transmit US Postal Check Digit ● UK Postal ● Transmit UK Postal Check Digit ● Japan Postal ● Australia Post ● Australia Post Format ● Netherlands KIX Code ● USPS 4CB/One Code/Intelligent Mail ● UPU FICS Postal ● Mailmark
	Device Settings
	<ul style="list-style-type: none"> ● Trigger Key Status ● Bluetooth Singal Check Level
	Scanner Engine Parameter
	<ul style="list-style-type: none"> ● Picklist Mode ● Decode Aiming Illumination ● Decoding Aiming Pattern ● Trigger Mode ● Decode Session Timeout ● Low Light Motion Detection Assist ● Transmit Code ID Character ● Transmit No Read Message

Table 5.2.3

Chapter 6 – Profile Repository & Data

Output/Editing

6.1 Profile Repository

A **Profile** contains editing rules that apply to scanned data (as shown in Figure 6.1). These profiles can be created for different environments, allowing users to insert, replace, switch cases, or validate/replace data using regular expressions before output.

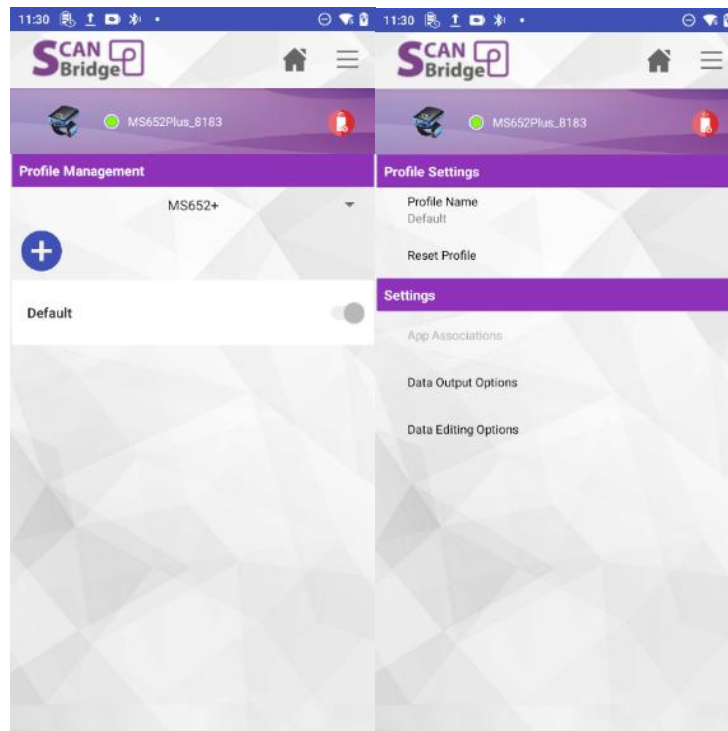


Figure 6.1

Profile Repository:

1. Users can create individual profiles for different scenarios, each with its own **Output Options** and **Data Editing Options** for associated apps (see Chapter 6.2 for details).
 - For apps not included in a specific profile, the "Default" profile will be used.
2. Users can apply profiles in two ways:
 - a. **Scan Test** – Applies the selected profile (see details in Chapter 7).
 - b. **App Associations** – Automatically applies the selected profile when using specific apps (see details in Chapter 6.4).

6.2 Data Outputting

Within each profile repository, users can configure data output methods and define scanner behavior during a scan.

ScanBridge offers the following options under **Data Output Options** (Figure 6.2.1):

- Enable Data Wedge
 - Allows ScanBridge to process scanned data. This feature can be enabled for use with the ScanBridge Keyboard (see Chapter 8 for details).
- Save Data To Clipboard
 - Temporary saves scanned data to system clipboard
- Beep on Read
 - Emits a beep sound when the scanner completes a scan.
- Vibrate on Read
 - Causes the device to vibrate when a scan is completed.

ScanBridge provides two data output methods, and users can also set the delay between each output:

- Key Emulation
 - Simulates input by typing the data, useful in environments where copy and paste is not effective and a delay is required between characters.
- Copy & Paste
 - Copies the data and pastes it into an enterprise application.
- Data Intent Settings
 - Provides intents for developers to use.

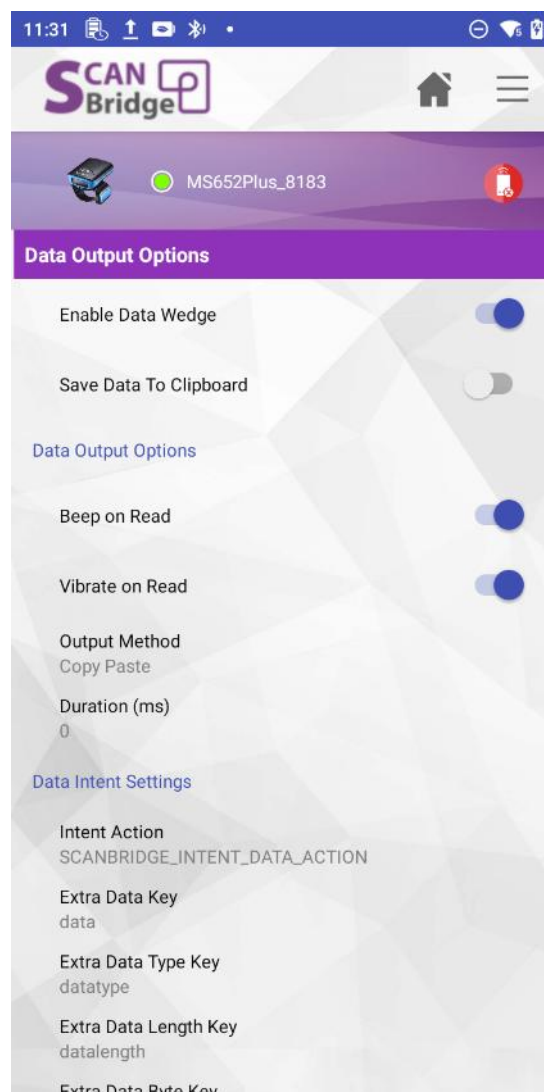


Figure 6.2.1

Note: Enable Data Wedge must be on for ScanBridge Keyboard to output data to application

6.3 Data Editing

Scan Bridge provide Basic (Figure 6.3.1) and Advanced Data Editing; each profile repository can choose to apply between Basic or Advanced Data Editing.

Basic Data Editing:

For the basic data editing options, please refer to Table 6.3.1.

Item	Description
Time Stamp	Time Stamp formatting
Data Editing Encoding	Select encoding when editing scanned data <ul style="list-style-type: none"> ● UTF-8 ● GBK ● BIG5 ● Shift_JIS
Remove Non-Printable Character	Enable to remove non printable characters when editing
Prefix	Insert content at beginning of the scanned data
Suffix	Insert content at end of the scanned data
Terminator	Insert data terminator at the end of the scanned data
Data Replace	Find specific data, and then replace by desired content

Table 6.3.1

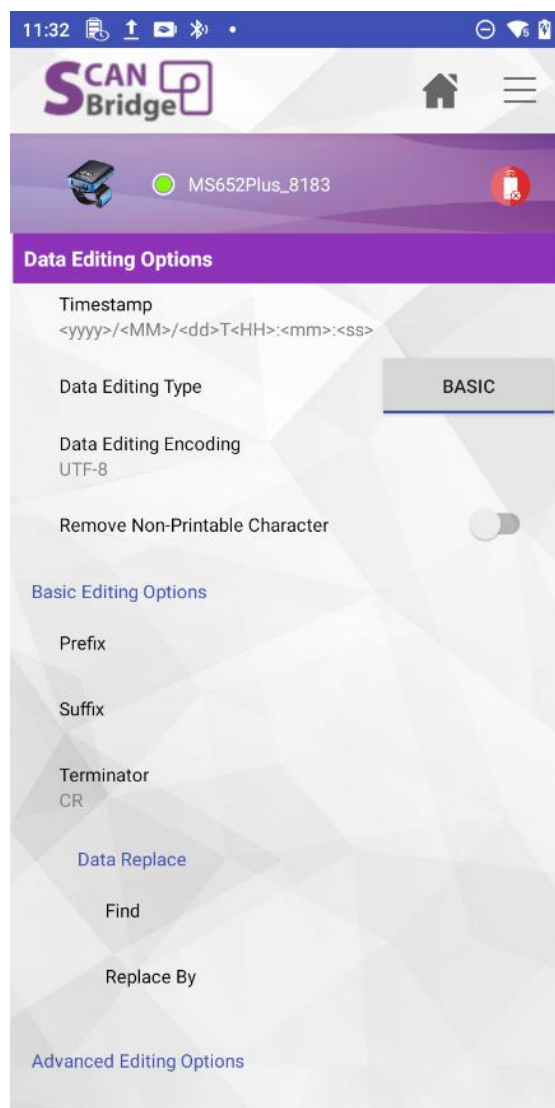


Figure 6.3.1

Advanced Data Editing:



Figure 6.3.1

Advanced Data Editing (Figure 6.3.1) provides users with more powerful options for configuration. To enable Advanced Data Editing mode, users must change the **Data Editing Type** to **Advanced** Data Editing Type ADVANCED, then tap on **“Advanced Editing Options”** (Figure 6.3.2). On the following page, you will be able to create rules for specific symbologies (Figure 6.3.3). The created symbology rules will be applied when a scanned item matches the symbology; otherwise, the **Default** rule will be applied.

Note: Each profile and its rules can be enabled or disabled individually.

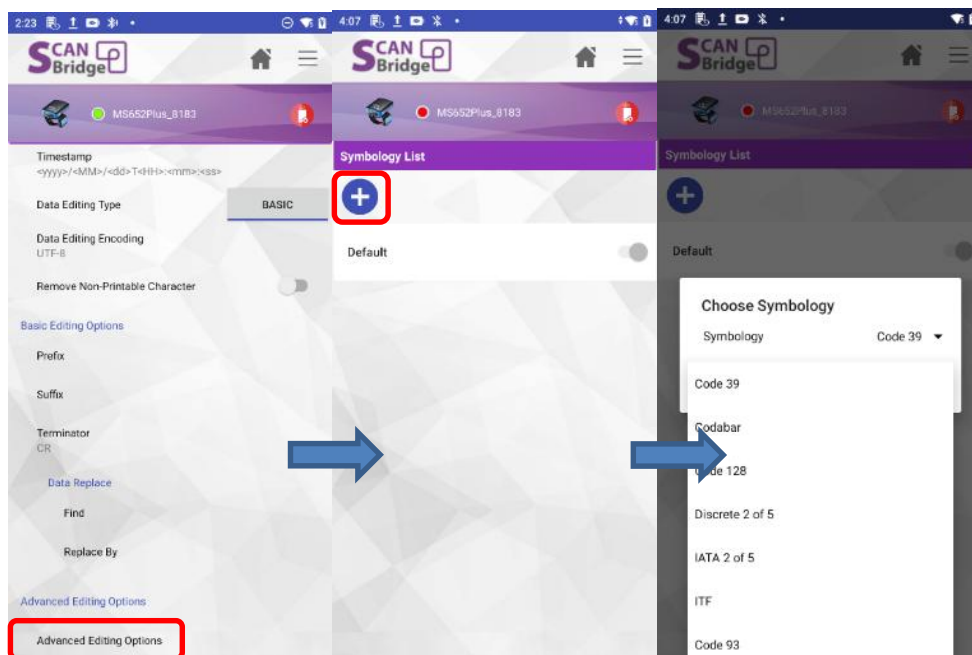



Figure 6.3.2

Figure 6.3.3

Advanced Data Editing Settings

Users can create as many actions as needed under a symbology rule, and these rules can be freely enabled or disabled within a profile. The basic outcome can also be previewed while editing. Please refer to Table 6.3.2 for more details.

	<ol style="list-style-type: none"> 1: Name of the profile 2: Hide preview 3: Input test data 4: Result after applied rules 5: Insert data 6: Switch between cases 7: Replace data 8: Validate data with regular expression 9: Substitution data with regular expression 10: Rule card with info
---	---

	11: On/Off of the rule
	12: Cancel editing profile
	13: Confirm the profile
	Notes: <ul style="list-style-type: none"> ● ScanBridge will apply the enabled rules from top to bottom. ● Rule card can be dragged to change order

Table 6.3.2

Following are the options explanations for advance setting (Table 6.3.3).

Item	Description
Insert	Insert content to scanned data; by defining starting index
Switch Case	Switch lower or upper cases to scanned data; by defining starting index and the length will be replaced.
Replace	Replace content to scanned data; by defining starting index and the length will be replaced.
Regular Expression – Validation	<ul style="list-style-type: none"> ■ Find matched data with regular, then user will have following options to create own combination: <ul style="list-style-type: none"> ◆ If valid failed, then <ul style="list-style-type: none"> ● Stop apply the rest of the rules ● Keep apply the rest of the rules ◆ And return <ul style="list-style-type: none"> ● Processing Data <ul style="list-style-type: none"> ■ Processing Data means the data from pervious step ● Custom String ◆ If valid true, then retun <ul style="list-style-type: none"> ● Processing Data <ul style="list-style-type: none"> ■ Processing Data means the data from pervious step

	<ul style="list-style-type: none"> ● Extract Data <ul style="list-style-type: none"> ■ Extract Data means the matched data with RegExp ● Custom String
Regular Expression – Substitution	Find matched data with regular expression and replace with content set

Table 6.3.3

See Appendix (Table 1.1 and 1.2) for editing option example.

6.4 App Association

App Association allows users to quickly apply predefined profiles without having to select them each time. Simply open the target app, and the associated profile will be activated automatically.

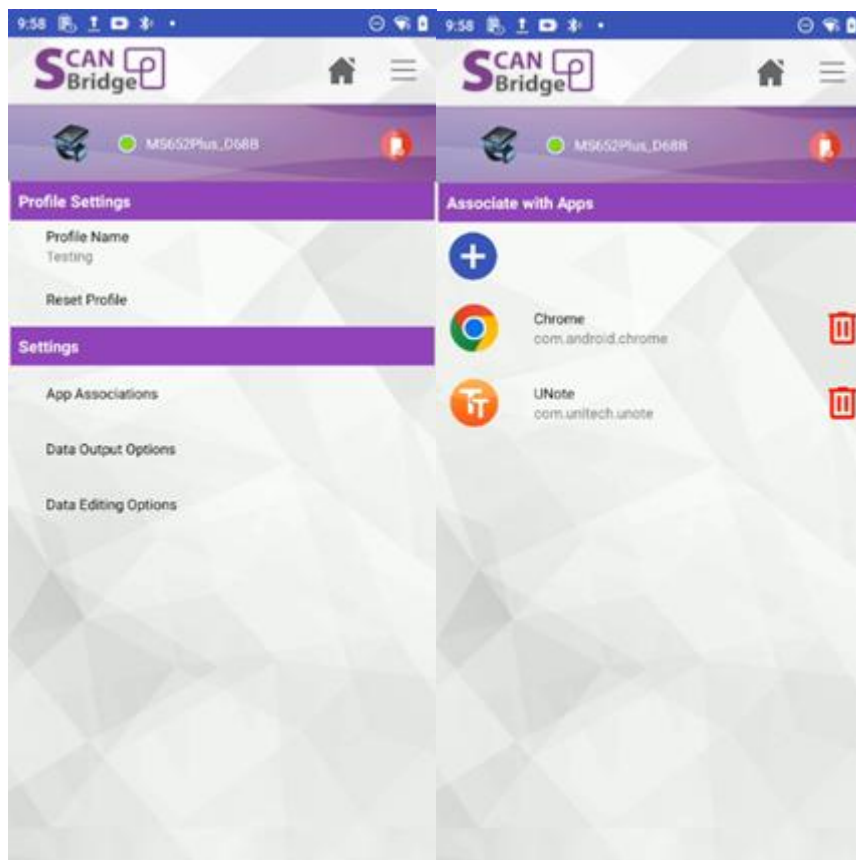
When setting up **App Association**, users can choose which profile will take effect in the selected apps. Note that you cannot set an App Association for the **Default** profile, as it is used for apps that are not configured with specific profiles.

See Example:

App List: App 1, App 2, App 3

Profile	Associated App
Default	N/A
Testing	App 1, App 2

In above case, App 1 and App 2 will be applied with “**Testing**” profile. When using App 3, it will be applying “Default” profile.



Chapter 7 – Scan Test / Scan Check

ScanBridge provides a place for users to perform scan tests, allowing them to view scanned results directly in the app. Additionally, users can apply profiles created in Chapter 6 to see the output data results.

7.1 Scan Test

Before starting work with an enterprise application, users can run quick tests on scanned results or configured profiles.



Figure 7.1.1


The number of tags in Figure 7.1.1 is corresponding to the number in Table 7.1.1.

Tag	Tag name	Description
1	Selected Profile	The profile will be applied to scanned data
2	Result field	The output data will be shown here
3	Save	Export scanned result Export path: Internal Storage/Unitech/ScanBridge/ScanTest Export File Name Explain: ● ST refer to ScanTest
4	Scan	Virtual button to trigger scan
5	Clear	Clear current result

Table 7.1.1

By default, the "Default" profile is selected. Tapping on the profile file allows users to select a profile from the dropdown list.

To initiate a scan, users can choose from two methods:

- Press and hold the blue trigger key on the scanner.
- Press the  **Scan** button on the ScanBridge app screen (Scanner must be connected; otherwise, the button will appear gray).

The scanned result will be shown on the ScanBridge app screen.

7.2 Scan Check – Single Check

ScanBridge provides a utility for users to perform checks between barcodes. The **Single Check** feature compares a reference barcode to another barcode (Figure 7.2.1). If the barcodes are identical, it will indicate a correct match (Figure 7.2.2); otherwise, it will show that the match is false (Figure 7.2.3).



7.2.1

7.2.2

7.2.3

Note:

Export path: *Extnal Storage/Unitech/ScanBridge/ScanCheck*

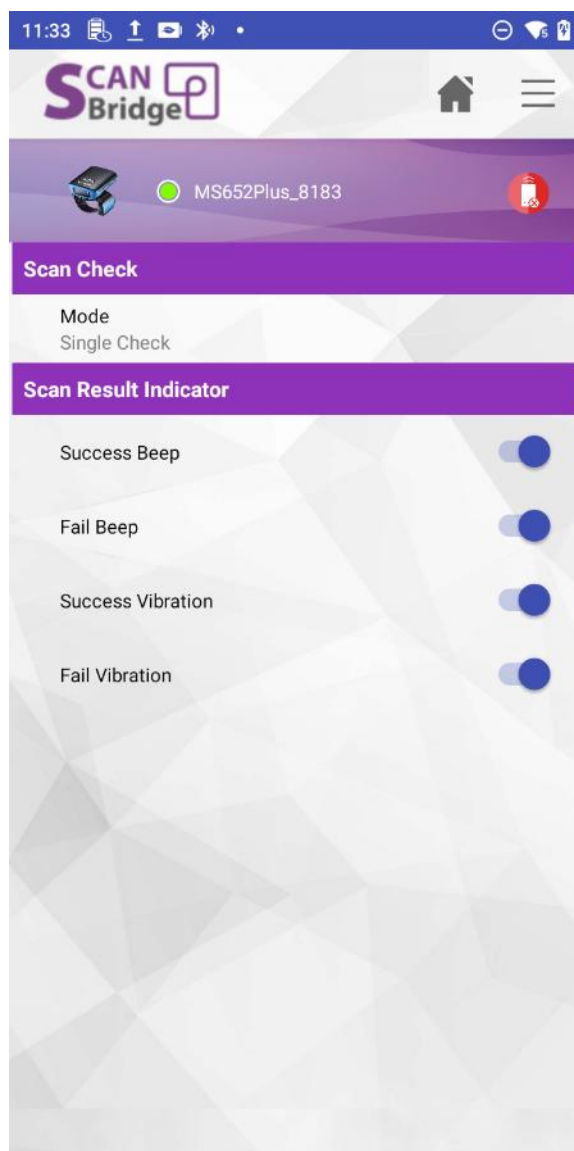
Export File Name Explain: SC refer to SingleCheck

Additional Single Check Setting can be config through **Scan Check Setting** (Figure 7.2.4)

User is able to set scan result indicator with following:

- ◆ Success Beep
Beep when the read is success
- ◆ Fail Beep
Beep when the read is fail

- ◆ Success Vibration
Vibrate when the read is success
- ◆ Fail Vibration
Vibrate when the read is fail



7.2.4

7.3 Scan Check – Multi Check

ScanBridge provides utility for users to perform checks between barcodes. The **Multi Check** feature will **compare a reference barcode to multiple barcodes** (Figure 7.3.1). It will show correct match, if the barcodes are identical, else it will then show false (Figure 7.3.2).

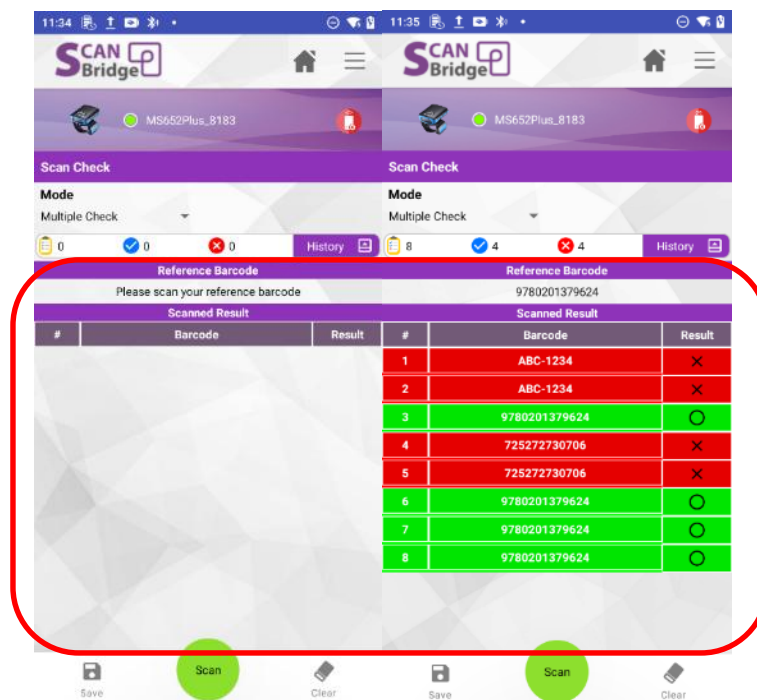


Figure 7.3.1

Figure 7.3.2

Note:

Export path: *Internal Storage/Unitech/ScanBridge/ScanCheck*

Export File Name Explain: MC refer to MultipleCheck

Addition Single Check Setting can be config through **Scan Check Setting** (Figure 7.2.5)

User is able to set scan result indicator with following:

- ◆ Success Beep
Beep when the check is success
- ◆ Fail Beep

- Beep when the check is false
- ◆ Success Vibration
Vibrate when the check is success
- ◆ Fail Vibration
Vibrate when the check is false

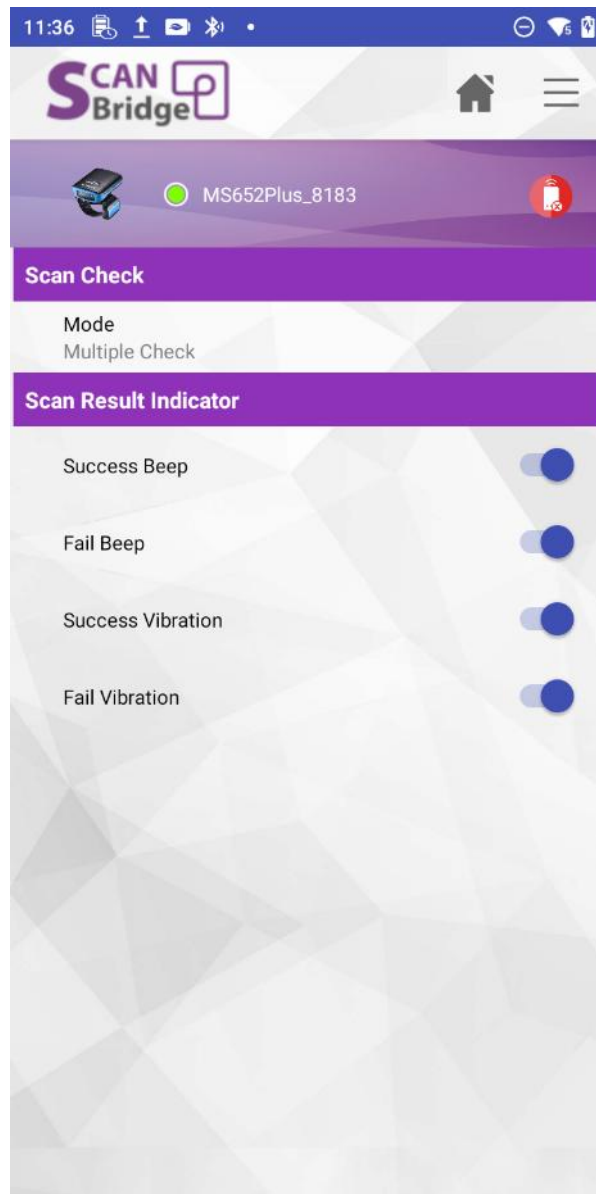


Figure 7.2.5

7.4 Scan Check – Filter Rule

ScanBridge provides a utility for users to perform checks between barcodes.

The **Filter Rule** feature will allow user to create filter rule from 2 options:

◆ Lookup Table

This will perform an exact match, by comparing the scanned result with the data entered in Lookup Table.

- User can add data wish to be matched in to Lookup Table by entering Filter Rules Editing under Scan Check Setting (Figure 7.4.1).

- ◆ Tap on “+” (Figure 7.4.2), and then enter the data.

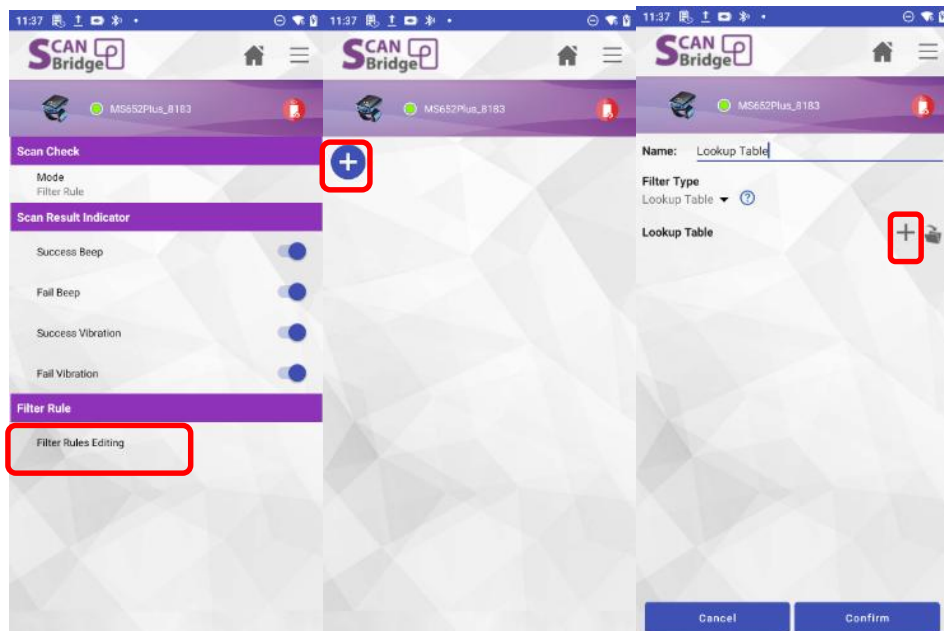


Figure 7.4.1

Figure 7.4.2

- User can import text file which contain the data to be matched in to Lookup Table by tap on the folder icon (Figure 7.4.3)

- ◆ Note: The file should follow csv structure.

Example:

ABC-123,123-ABC, will result adding 2 data in to lookup table.

“ABC-123,123-ABC,” will result adding 3 data in to lookup table:

1. “ABC-123
2. 123-ABC
3. “

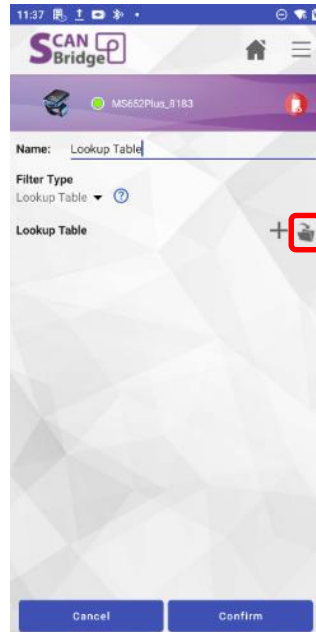


Figure 7.4.3

◆ Symbology + Regular Expression

This will perform an exact match on the barcode type of the scanned data, and then perform check if the scanned data matches the regular expression

- User will need to set the Filter Type to “Symbology + RegExp” under Filter Rule Setting (Figure 7.4.4).

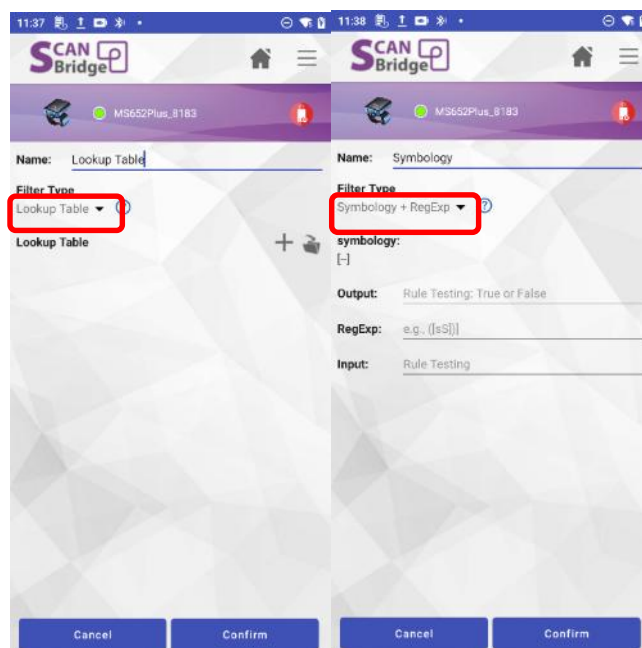


Figure 7.4.4

- To set barcode type, simply tap on [--] under Symbology (Figure 7.4.5), then select from the list shown up (Figure 7.4.6).

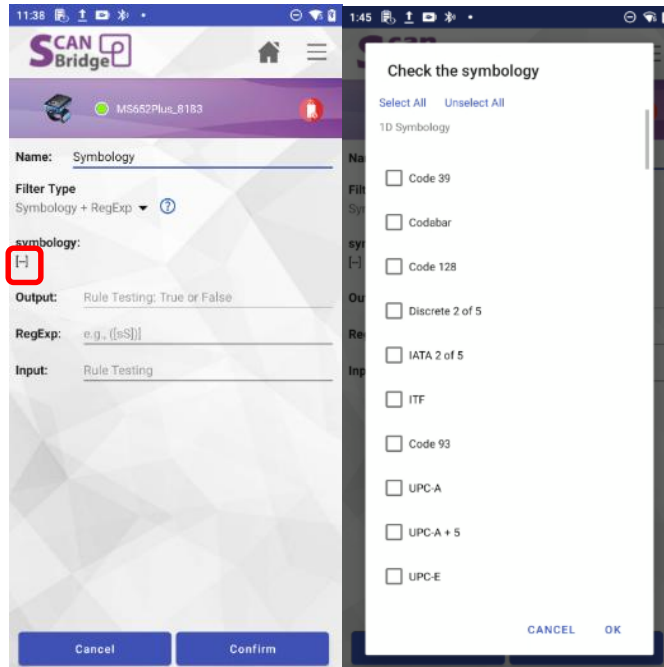


Figure 7.4.5

Figure 7.4.6

- To set regular expression, simply enter in RegExp text field. Additionally, user can use the "Input" field to run quick test. In below example (Figure 7.4.7), it will perform partial match to scanned result which contain 'ABC', if there is a partial match will consider as match. You can see the check with when symbology is also checked in Figure 7.4.8
Note: The preview does not check symbology

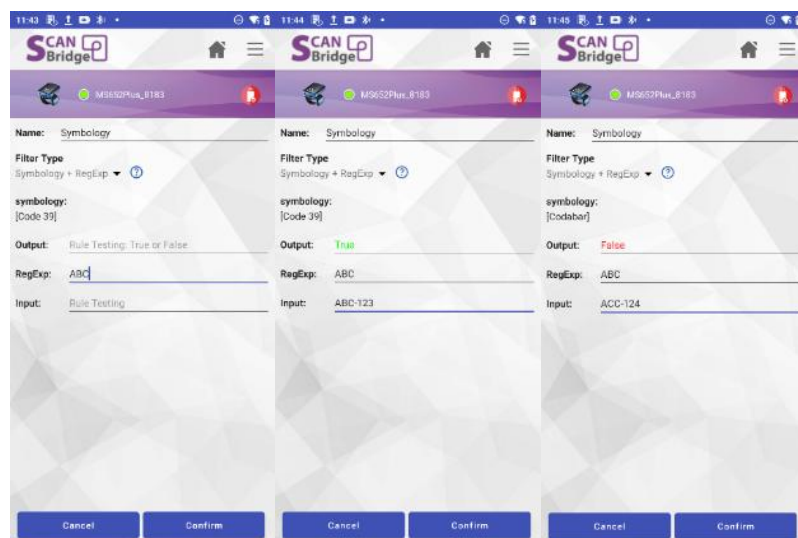


Figure 7.4.7

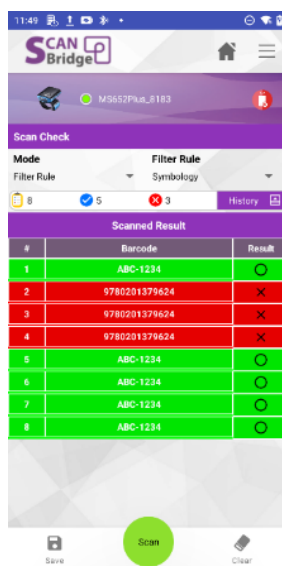


Figure 7.4.8

Note:

Export path: *Internal Storage/Unitech/ScanBridge/ScanCheck*

Export File Name Explain: FR refer to FilterRheck

7.5 Scan Check History

During a **Scan Check**, all scanned data is saved automatically. Users can review past scans or export the scan history to ensure work quality. This feature can be enabled or disabled in **ScanBridge Settings**.

Note: The history file is stored in *Internal Storage/Unitech/ScanBridge/history*.

The **Scan Check History** can be filtered by **Date**, **Time**, **Scan Check Mode**, and **Result**.

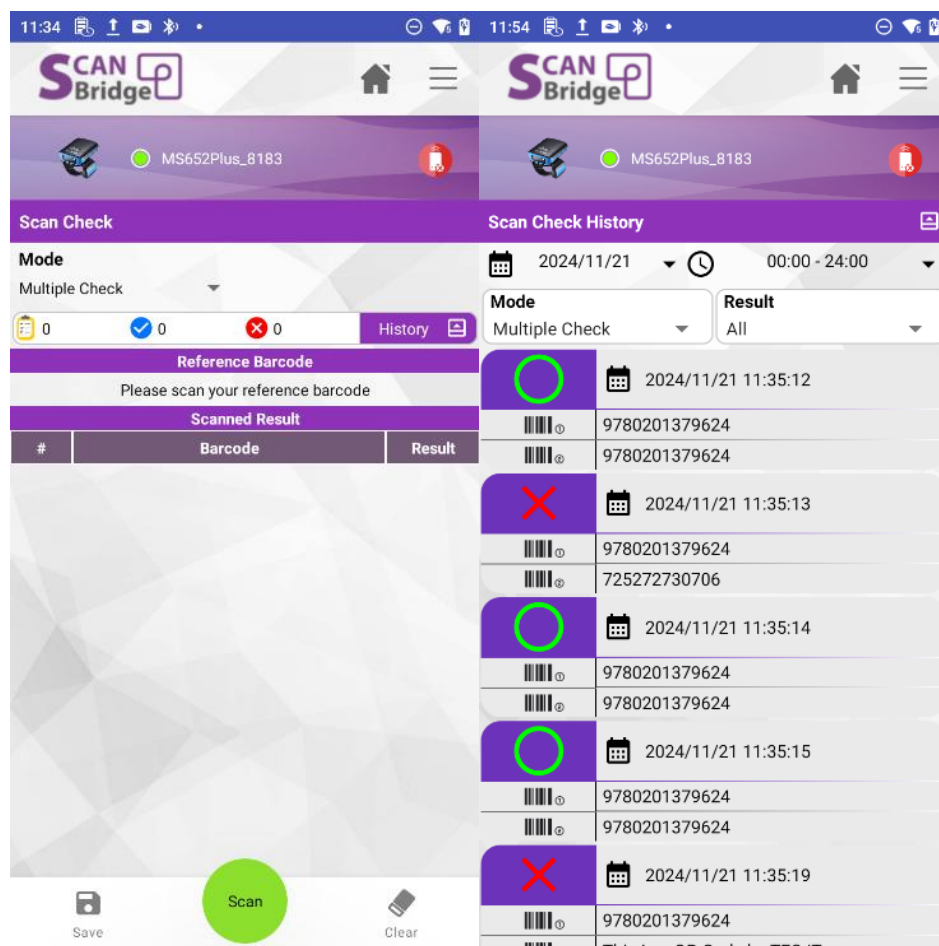


Figure 7.5.1

Users can quickly check if a specific date contains any scan records by

looking for  icon. If the icon appears under a date, it indicates that

records exist for that date (Figure 7.5.2). Users can then select a time range to further filter the results.

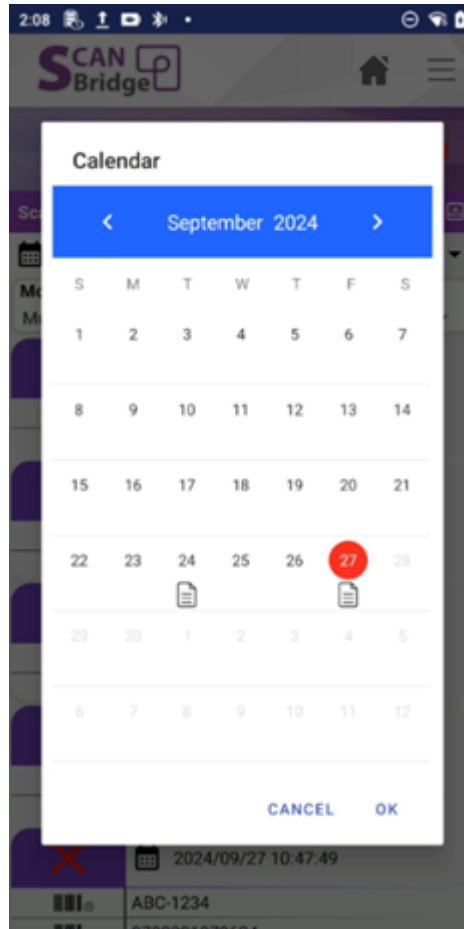


Figure 7.5.2

Additionally, users can view scan history by mode and filter the results to display only "True" or "False" outcomes. "True" indicates that both scans are identical, while "False" indicates they are not. In **Filter Mode**, users can further refine the results by applying a **Filter Rule** (Figure 7.5.3).

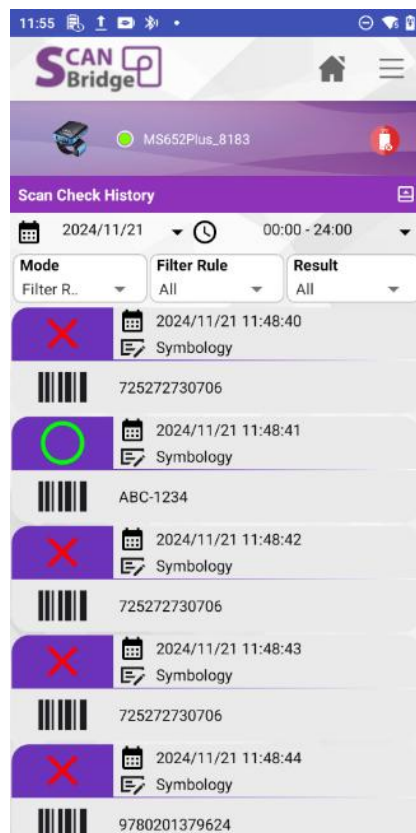


Figure 7.5.3

Chapter 8 – ScanBridge Keyboard

In industrial, warehouse, or medical environments, it's more convenient for users to output data directly, rather than typing characters one by one. **Data Wedge** is a powerful feature that simplifies data processing.

Users can enable **Data Wedge** and process data using the **ScanBridge Keyboard**.

8.1 Data Wedge Setting

Before using Data Wedge, ensure that the setting is enabled (Figure 8.1.1) under the selected profile. (Path: **Selected profile** → **Data Output Options** → **Enable Data Wedge**. See Chapter 6.1 for profile details). Additionally, ensure that the **App Association** is set up if needed.

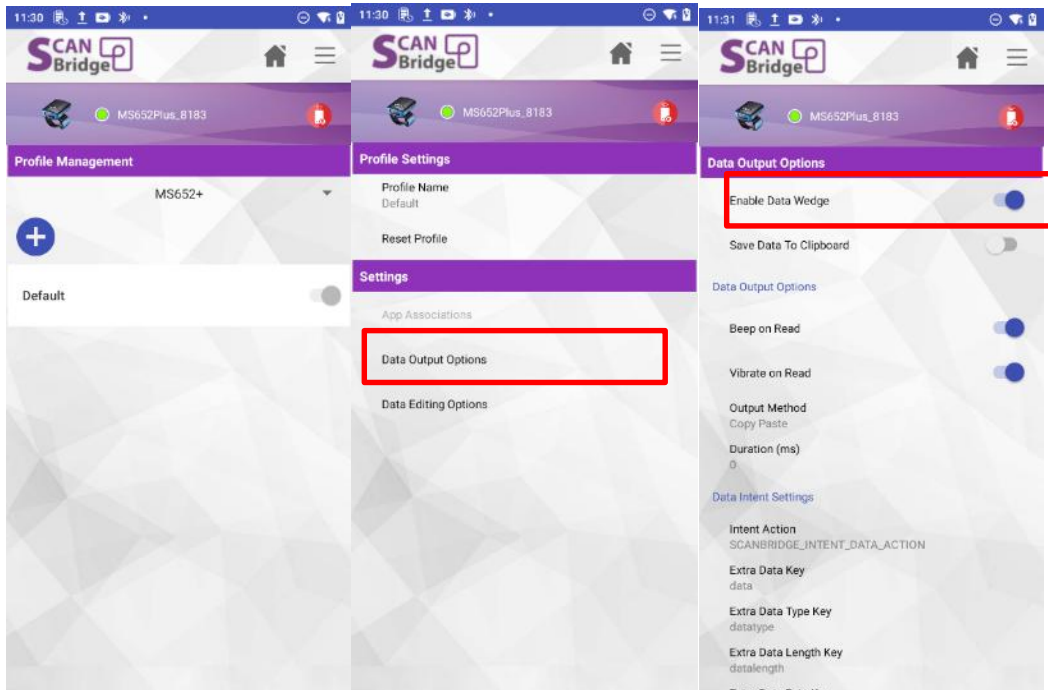


Figure 8.1.1

8.2 ScanBridge Keyboard

With Data Wedge, users can use the physical trigger key to scan data into an app (Figure 8.2.1). Alternatively, using the **ScanBridge Keyboard**, users can press the virtual scan button on the screen to trigger a scan. Ensure the correct data editing profile is selected, and use the keyboard as a normal input tool.

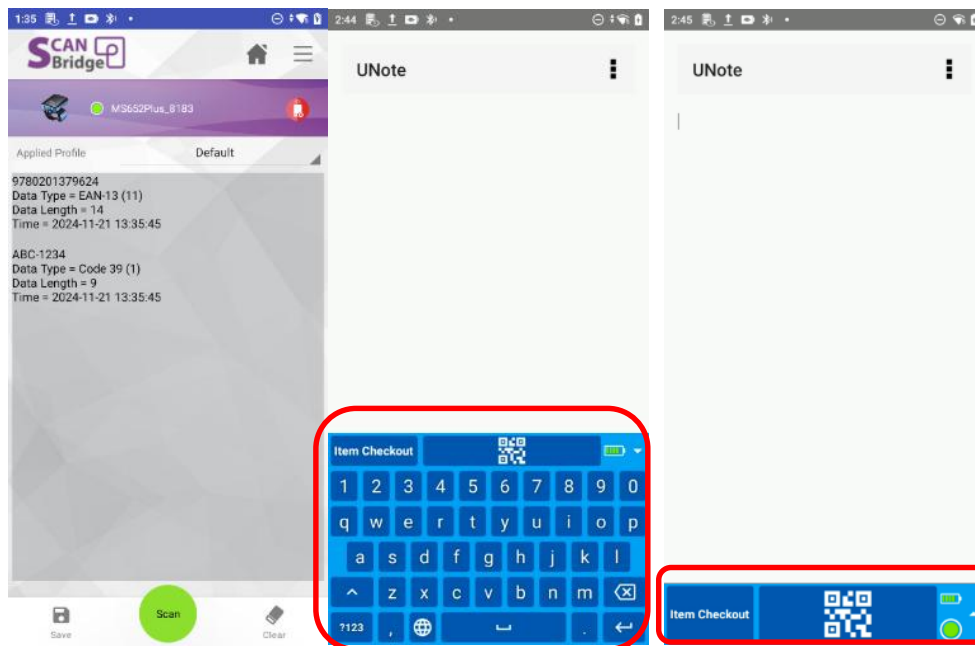


Figure 8.2.1

Figure 8.2.2

Note: Figure 8.2.2 demonstrates the full/mini keyboard layout using the **UNote** enterprise app.

8.2.1 ScanBridge Keyboard Details

This chapter will only cover how the ScanBridge Keyboard is used. For initial setup, please refer to Chapter 3.

There are 4 sections in the **ScanBridge Keyboard** (Figure 8.2.1.1), described below:

1. **Profile in Use**
2. **Virtual Scan Button**
3. **Battery/Connection Status**
4. **Layout Switch**
5. **Keyboard (English)** (available only in full-size layout)

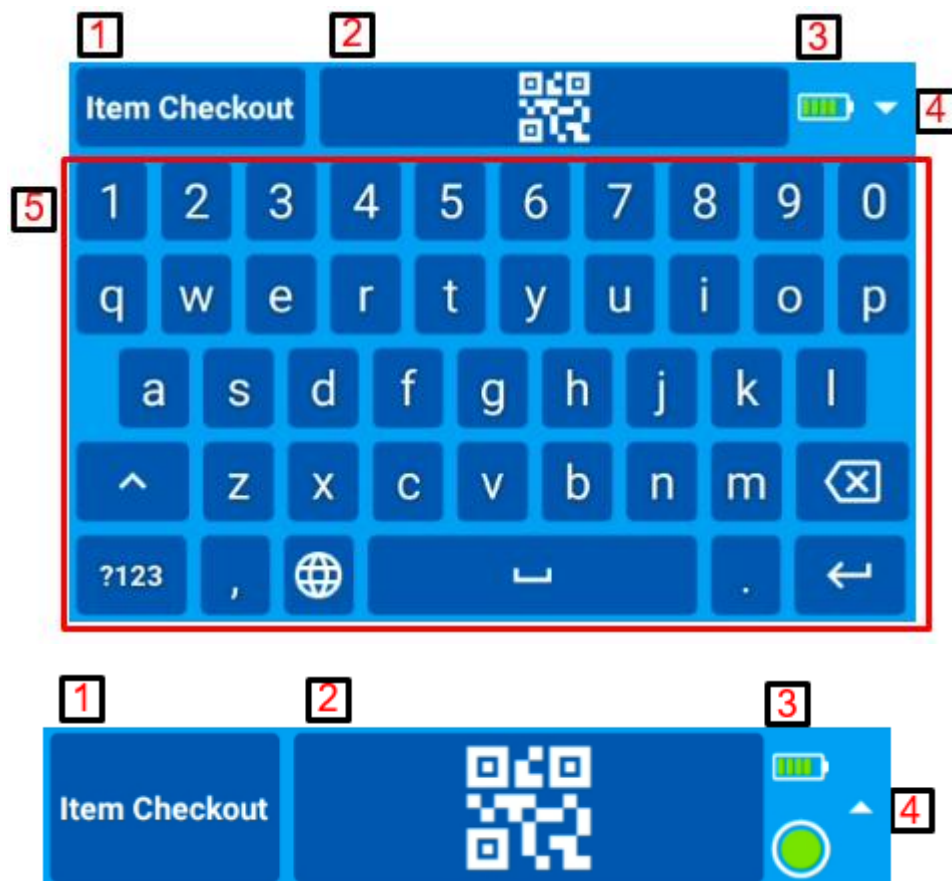


Figure 8.2.1.1

Profile

Users can create multiple profiles for different work situations (refer to Chapter 6). On the ScanBridge Keyboard, users can check the profile area to ensure the correct profile is being applied (Figure 8.2.1.2).



Figure 8.2.1.2

Virtual Scan Button






The **ScanBridge Keyboard** provides a virtual scan button (Figure 8.2.1.3), allowing users to trigger a scan by tapping on the screen instead of pressing the physical button.



Figure 8.2.1.3

Battery Status

The **ScanBridge Keyboard** also displays the current battery status of the scanner, with different icons indicating various battery levels.

Battery Status	Icon
No Device	
Very Low	
Low battery	
Normal battery	
Full charged	

Layout Switch

The **ScanBridge Keyboard** offers two different layouts. The default layout includes an English keyboard for input. The mini layout (Figure 8.2.1.5) takes up less screen space and contains the following elements:

- Profile
- Virtual scan button
- Battery status & layout switch

The mini layout (Figure 8.2.1.5) take less space on screen



Figure 8.2.1.5

Chapter 9 – Others

This chapter introduces additional features of ScanBridge not covered in previous sections:

1. Application Options
2. Import/Export/Reset/Import from USU

9.1 Password Setting

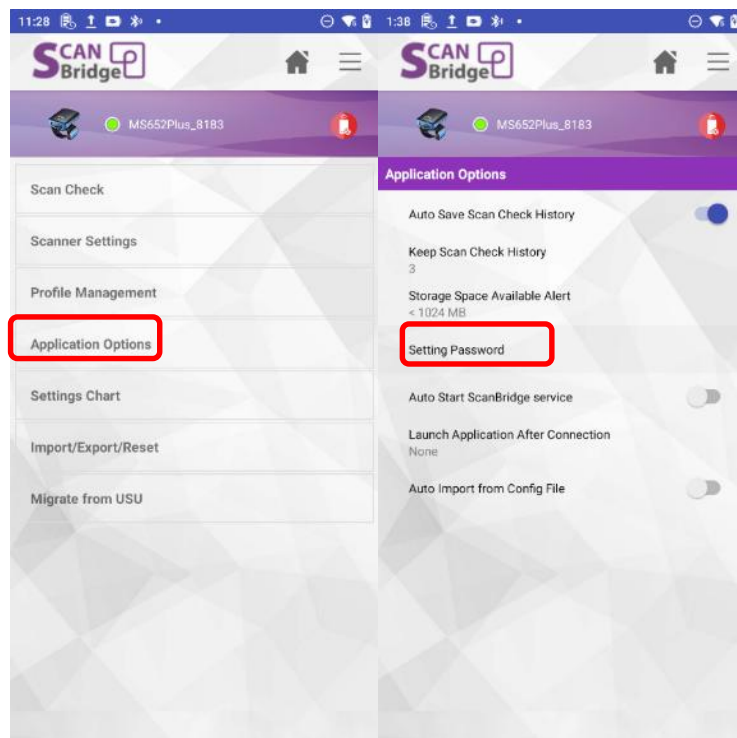


Figure 9.1.1

ScanBridge offers an admin password setting to prevent unauthorized users from accessing system configurations.

The password can be set through:

Settings → **Application Options** → **Set Password** (Figure 9.1.1).

Once set, a password will be required when entering the "Settings" page (Figure 9.1.2).

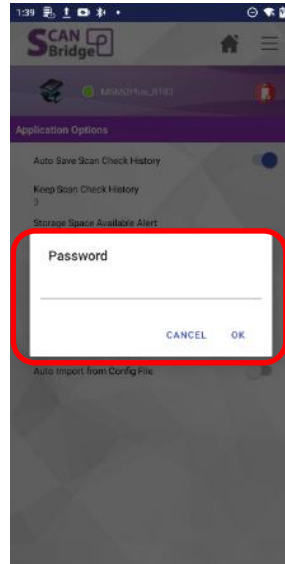


Figure 9.1.2

Remove Password

To remove the password, the user must go to **Set Password**, leave the password field empty, and tap "Confirm" (Figure 9.1.3).

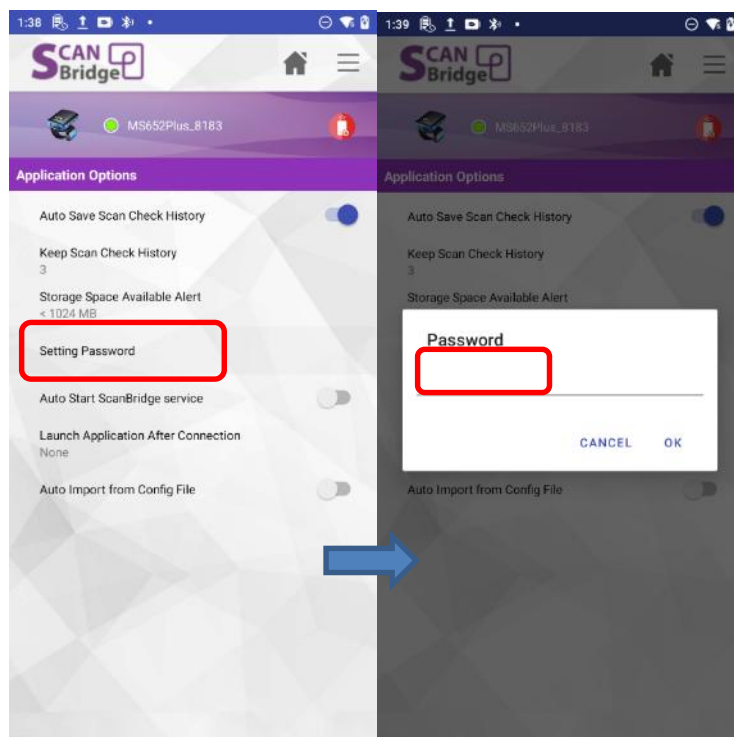


Figure 9.1.3

9.2 Scan Check History Options

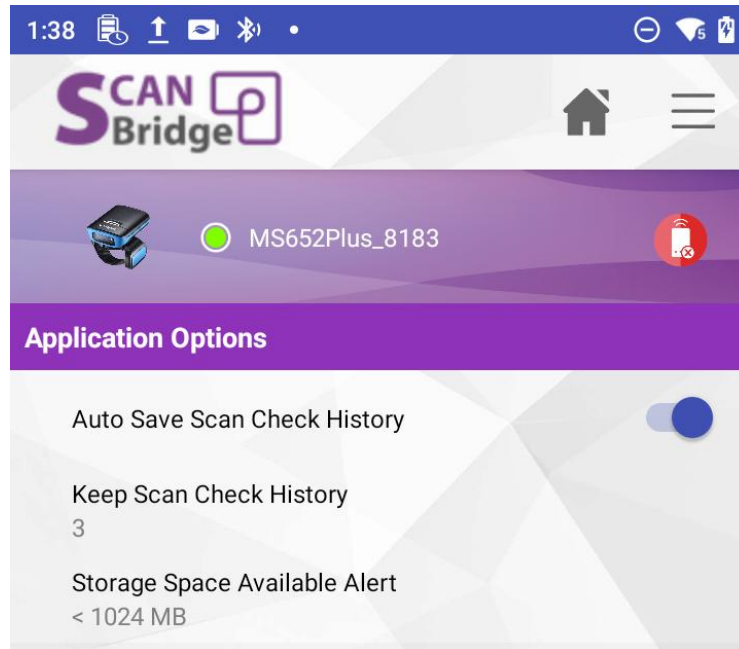


Figure 9.2.1

Auto Save Scan Check History

By default, ScanBridge enables **Scan Check History** (refer to Chapter 7.5). Users can manually turn this off in **Application Options** (Figure 9.2.1), resulting in Figure 9.2.2.

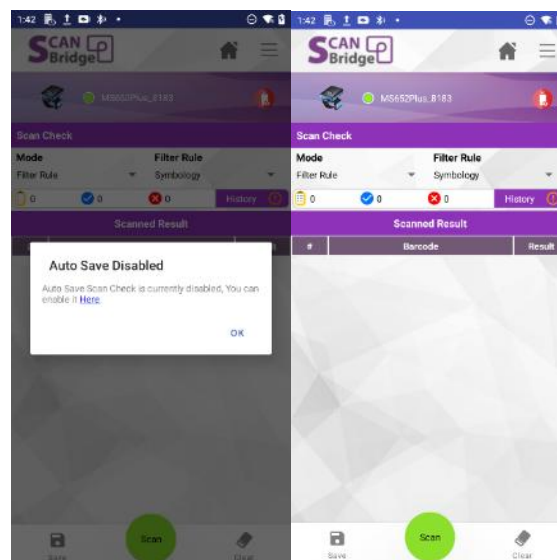


Figure 9.2.2

Keep Scan Check History

Users can decide how many days of scan history to keep. The default setting is 3 days. For example, if you set it to 2 days and already have 3 days of data, the oldest data will be deleted automatically.

Device Storage Alert

If a storage alert is set, ScanBridge will check if your remaining storage exceeds the set threshold when you enter Scan Check. If not, it will automatically disable **Auto Save Scan Check History** and issue an alert. You can still use the Scan Check feature, but new scan results will not be saved in the history (Figure 9.2.3).

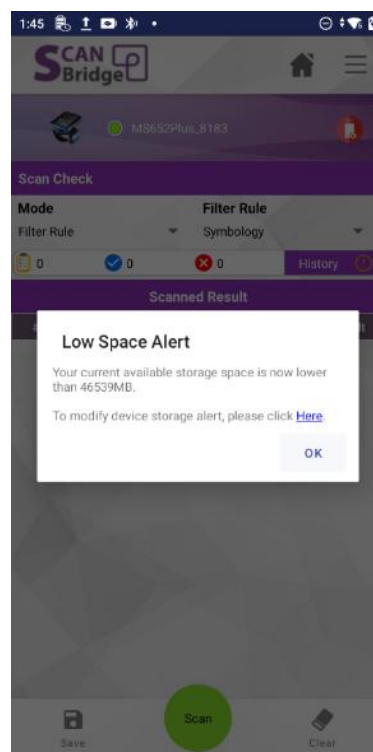


Figure 9.2.3

9.3 Auto Start Service & Launch App

To ensure smooth operation, ScanBridge allows users to automatically start the app and wait for a scanner to connect. Once connected, it can also automatically launch a designated app.

- **Auto Start ScanBridge Service**

Automatically starts ScanBridge when the Android mobile device is turned on (Figure 9.3.1).

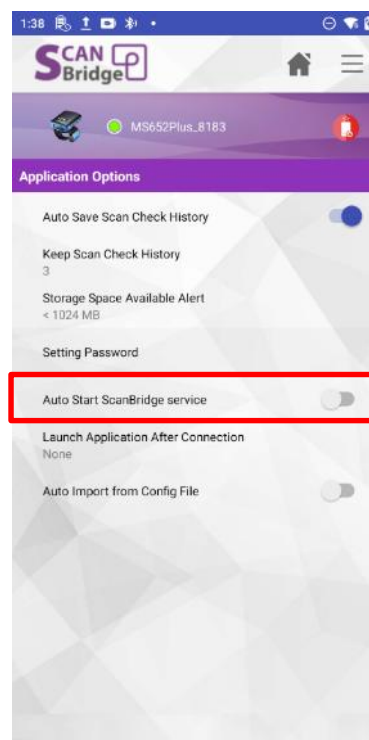


Figure 9.3.1

- **Launch Application After Connection**

Automatically launches a selected app when the Android mobile device is turned on (Figure 9.3.2).

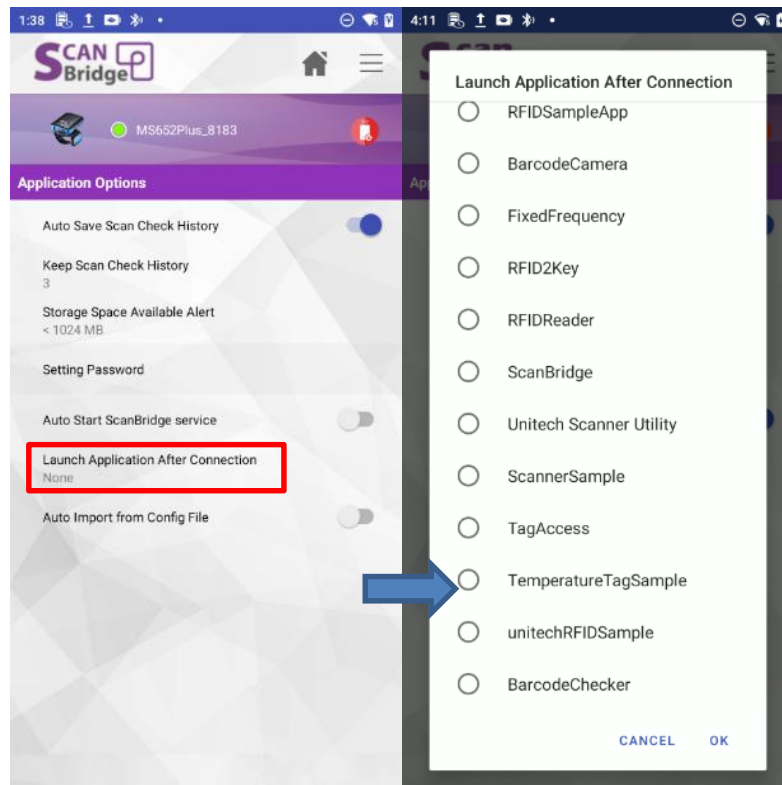


Figure 9.3.2

9.4 Import/ Export/ Reset

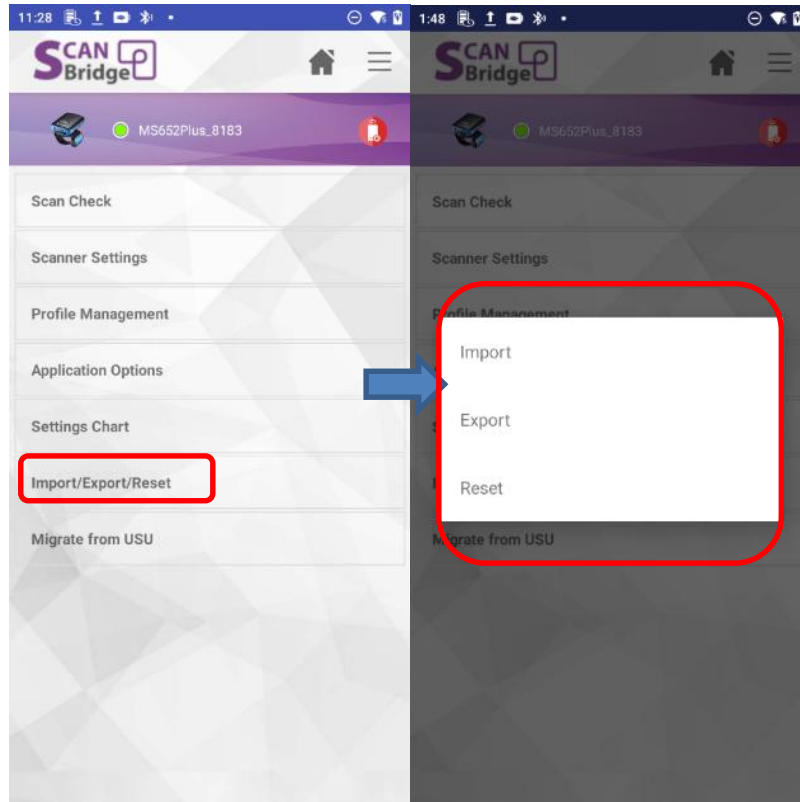


Figure 9.3.1

In **Settings** → **Import/Export/Reset** (Figure 9.3.1), there are 3 options:

1. **Import:** Imports the configuration file into the ScanBridge folder. (Make sure to export first).
2. **Export:** Exports the current configuration of ScanBridge to the ScanBridge folder.
Path: Internal Storage/Unitech/ScanBridge/ScanBridge.conf
3. **Reset:** Resets the ScanBridge app to its default settings.

Note 1: The **Import** function only imports configuration settings into the ScanBridge app. If you have enabled **Auto Config Device**, the settings will

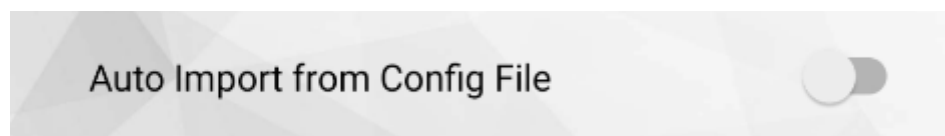
not sync after the import. To sync settings, manually turn **Auto Config Device** off, then on again.

Note 2: If you want to import a configuration and have **Auto Config Device** take effect, use **Auto Import from Config File**, ensuring that **Auto Config Device** is enabled.

Auto Config from Config File

For users who wish to auto-import an existing ScanBridge config file and sync it with the scanner:

Auto Config Device is not enabled after a general import to avoid automatically applying incorrect configurations. However, with **Auto Config from Config File**, once the user confirms the config file is correct, they can quickly load and sync the settings to the connected scanner.



9.5 Migrate from USU

If you are a previous USU user, ScanBridge supports migrating your USU settings into ScanBridge. However, this requires you to manually export from USU if you using **non-Unitech Android device**. For **Unitech Android devices**, migration will be atomically completed.

We currently only support migrate from USU v1.4

For users who using 1.3.5, can upgrade USU 1.4 or above, then perform migration to ScanBride.

For users who using below 1.3.5 are not supported.

Non-Unitech Android device:

The migration popup will appear if USU is installed, it is required for user to complete the migrate and then uninstall USU.

Steps to manually Migrate from USU Migrate window:

1. Export the config from USU (Figure 9.5.1)

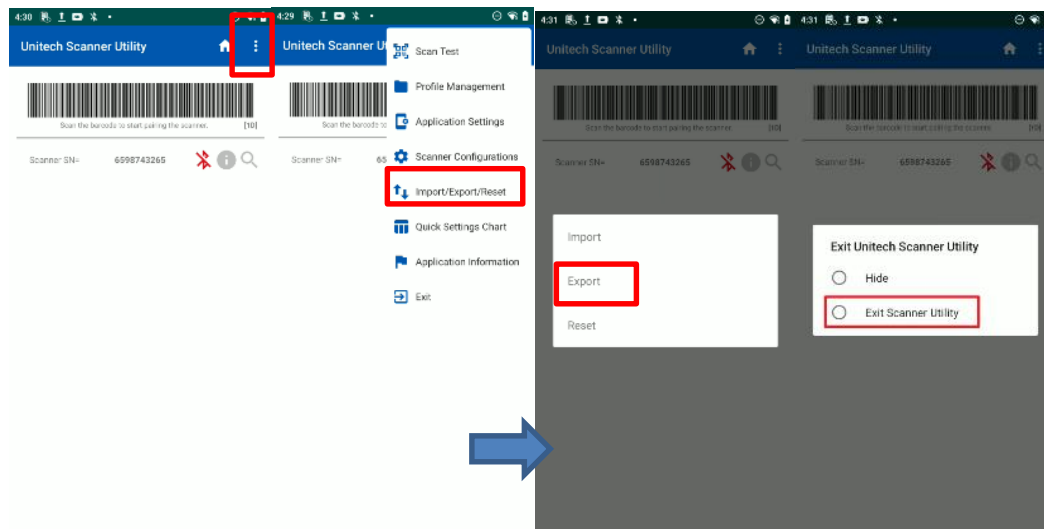


Figure 9.5.1

Note: Make sure to **“Exit Scanner Utility”** after export

2. Launch ScanBridge and tap on **START MIGRATE** (Figure 9.5.2).

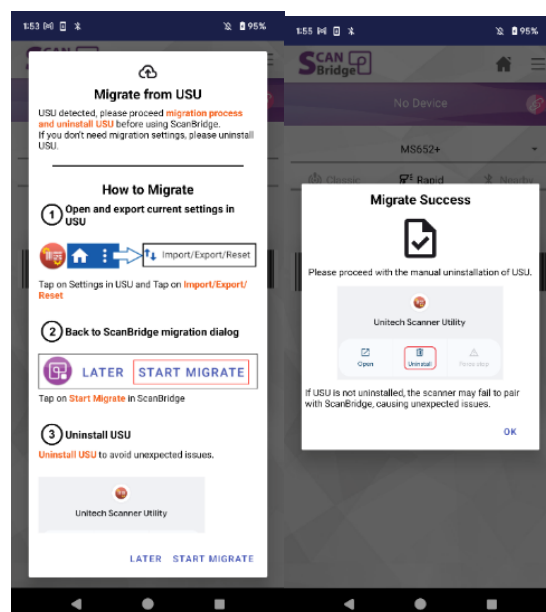


Figure 9.5.2

3. When you see “Migrate Success”, you must proceed to **uninstall USU to avoid pairing or other unexpected issues**

If you see Migrate Fail (Figure 9.5.3), make sure you have done Step 1 to export settings from USU.

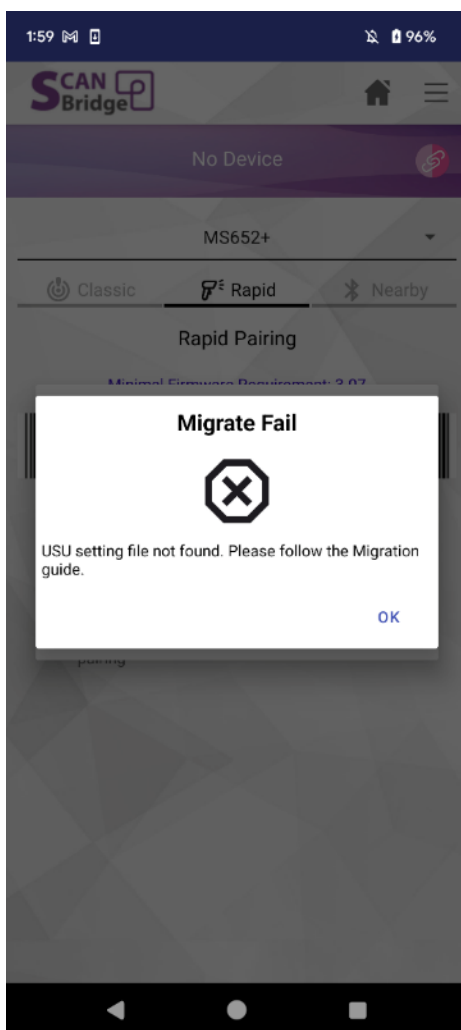


Figure 9.5.3

Unitech Android devices:

For Unitech devices, the migration process will have done automatically, user just need to tap on “PROCEED”. (Figure 9.5.4)

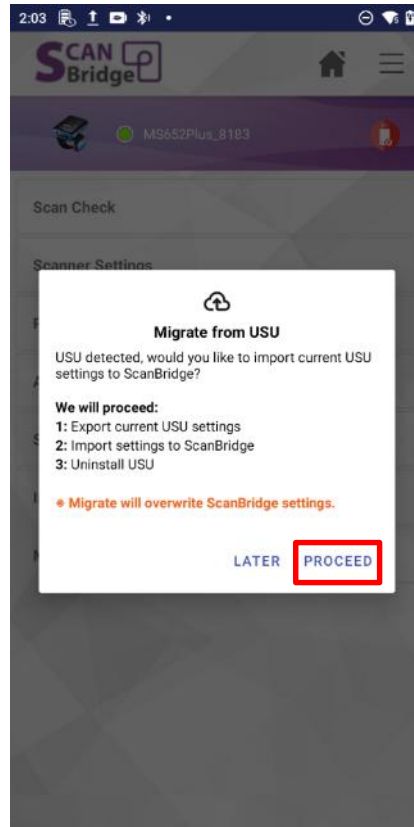


Figure 9.5.4

USU will be disabled in the end of migration. This is due to ScanBridge does not work with USU, it will cause connection issues or other unexpected issues.

Note1: Migrate from USU will overwrite your current ScanBridge settings.

Note2: If you tap on “LATER”, you can always come back in “**Settings -> Migrate from USU**”.

9.6 Setting Chart

In Setting Chart (Figure 9.6.1), we provide some handy setting labels for user to scan. It does not require scanner to be connected, simply scan the barcode to take effect.



Figure 9.6.1

Chapter 10 – Q&A

Settings Below are some general questions and answers that might be helpful.


10.1 General questions

Q	Scanner can't pair with ScanBridge
A	<p>There could be several possible reasons for this issue. Please check the following:</p> <ul style="list-style-type: none"> ● USU is not completely exited <ul style="list-style-type: none"> • USU may also try to connect to the supported scanner. Do not use USU and ScanBridge at the same time. • Make sure to tap "Exit" in USU to fully close the app. ● Scanner does not have enough battery <ul style="list-style-type: none"> • The scanner may have a very low battery, preventing it from completing the pairing process. ● Scanner is not in BTSP mode <ul style="list-style-type: none"> • By default, the scanner is set to HID mode. You can scan the BTSP barcode to switch modes. ● Firmware is not supported <ul style="list-style-type: none"> • For Rapid Pairing, the minimum firmware version supported for MS652+ is 3.07. • Rapid Pairing only supported on MS652+ for now.

	<ul style="list-style-type: none"> ● Pairing confirmation hasn't been selected <ul style="list-style-type: none"> • Depending on the pairing method and device model, the system pairing confirmation might take some time to appear. <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">Pair with MS652Plus_D68B?</p> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> <input checked="" type="checkbox"/> Allow access to your contacts and call history </div> <div style="display: flex; justify-content: flex-end; margin-top: 10px;"> Cancel Pair </div> </div>
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Q	When Scanner is turned on, Android mobile device will ask for pair again
A	<ul style="list-style-type: none"> ● If you see the scanner's info displayed on the banner, but ScanBridge is not exited, it will continuously attempt to reconnect to the scanner. As a result, when the scanner is turned on, the system may prompt you to pair the device again. ● If you no longer wish to use the scanner with the Android mobile device, scan the Unpair barcode or reset the scanner to factory default.

Q	Need to pair twice when MS633 scanned with Classic Pairing
A	<ul style="list-style-type: none"> ● It is normal when you see pairing dialog twice, it is to ensure scanner is connect and then pair with desired Android mobile device.

Q	Where can I find quick setting chart
A	You can find in Pairing page → Nearby → the  mark icon will have some handy setting barcodes.

Q	Currently paired with a scanner, can I configure another scanner model?
A	Yes, you can switch model or engine under Scanner Settings page. Furthermore, scanner settings are separated by model and engine.

Q	Data are not aligned in Scan Check History
A	This could be a comma exist in scanned data. Scan Check History is using csv structure, a comma could affect the outcome.

Q	Scan Check History Data seems missing some digits if open in Excel
A	The nature of Excel might ignore some digits. For example, data of '0123' will result as '123' in Excel, or even data are not aligned. Suggest to open the history data in other text editor applications.

Q	Set up Advance Editing in profile, but it is applying Basic Editing
A	Make sure to check if your Data Editing Type is set to "Advanced" in your profile

Q	Show Unkown symbology type while editing rule
A	<p>ScanBridge supports insert/replace/substitution configurations with symbology types in Advanced Settings. However, if you input a rule for testing while editing, ScanBridge will not be able to determine the symbology type, which is why "Unknown" will be shown in the output preview.</p> <p>To preview the actual symbology type, please test it using ScanTest.</p>

Q	Why Data Length is always 1 digit more
A	By default, ScanBridge adds a Carriage Return (CR) at the end of scanned data, making the total data length one digit longer. You can turn this off by going to your Profile → Data Editing Options → Terminator → None .

Q	What is the difference between Reset and Reset Scanner to Factory Default
A	Reset only reset the ScanBridge settings; Reset Scanner to Factory Default only reset Scanner itself.

Q	How to migrate settings from USU
A	<p>Non Unitech Android devices</p> <ol style="list-style-type: none"> 1: Go to USU and tap on Export 2: Tap on “Exit Scanner Utility” 3: Launch ScanBridge → Settings → Migrate from USU 4: Once success, uninstall USU. <p>Unitech Android devices</p> <ol style="list-style-type: none"> 1: Launch ScanBridge 2: Tap on Proceed from Migration dialog

Appendix

Data Editing Option	Description	Example
Prefix	Add in front of data	Data: ABC-123 Prefix: Code: Result: Code : ABC-123
Suffix	Add at the end of data	Data: ABC-123 Suffix: - Code Result: ABC-123 - Code
Find / Replace By	Find X from data and replace by Y	Data: ABC-123 Find: ABC Replace By: BCD Result: BCD -123

Table 1.1

Data Editing Option	Description	Example
Insert	Insert in to data by index	Data: ABC-123 Index: 4 Insert: 2023 Result: ABC 2023 -1234
Switch Case	Switch cases by index and its' length	Data: ABCD-123 Index: 1 Replace Length: 3 Case: Lower case Result: abc D-123
Replace	Replace by index and its' length	Data: ABCD-123 Index: 1 Content: BCD Replace Length: 4 Result: BCD -123 D is removed due to the replace length is 4
RegExp – Validation	Valid data by regular expression, and decide next action when valid a fail	
RegExp – Substitution	Substitute data by regular expression	

Table 1.2