

CipherLab

User Guide

Button Assignment For Android Mobile Computer

RK25
RK26
RK95
RS35
RS36
RS51
HERA51

Version 1.04



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RELEASE NOTES

Version	Date	Notes
1.04	Sep. 12, 2023	Add the new supported device models
1.03	April 6, 2021	Update all figures. Support RK95 mobile computer and RS35 mobile computer. Add new section “Wake Up the Display” to Chapter 3. Update “Keypad Lock” of Section 3.2 “Enabling/Disabling a Key in Profile”.
1.02	Jan. 4, 2019	Add “Keypad Lock” to section 3.2 “Enabling/Disabling a Key in Profile”.
1.01	Aug. 24, 2018	Update section 3.1.1 “Key Mapping”.
1.00	July 02, 2018	Initial release

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INTRODUCTION

The application “**Button Assignment**” can redefine the functions of physical keys so that they trigger different actions. Settings made to one or more keys can be saved as a profile, allowing users to switch conveniently in between different sets of settings.

FEATURES

- ▶ Supports CipherLab Android mobile computers:
 - Android 7.0 Nougat (RK25)
 - Android 9.0 Pie (RK25 & RK95)
 - Android 10 (RS35)
 - Android 11(RK25, RS35, RS51 & HERA51)
 - Android 12 (RK26, RK95 & RS36)

- ▶ Self-definable physical keys
- ▶ Supports importing and exporting key settings to configuration files
- ▶ Convenient for users to switch between different sets of key settings

Chapter 1

GETTING STARTED

This chapter guides to the launch of Button Assignment and the user interface of Button Assignment main screen.

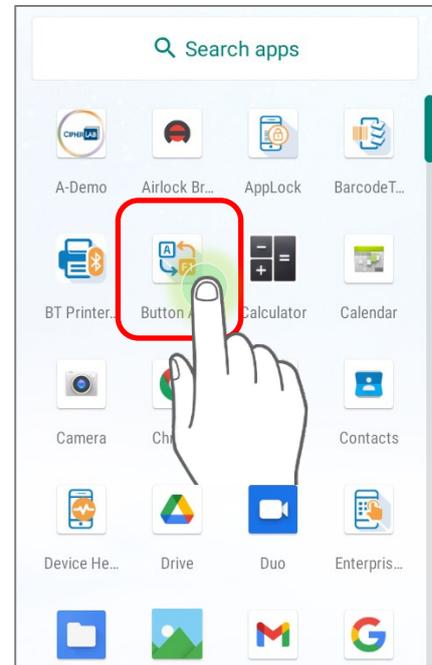
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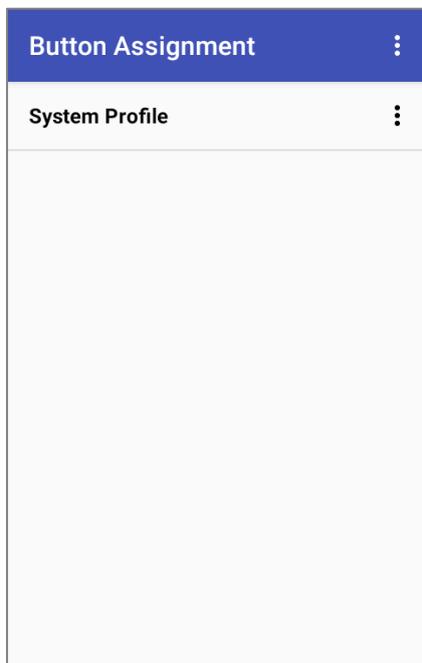
1.1 LAUNCH BUTTON ASSIGNMENT

Button Assignment, a built-in app for the Android devices equipped with physical keypad (or physical buttons), helps user to redefine the functions of physical keys to trigger different actions.

To launch **Button Assignment**, please go to App Drawer and tap the application “**Button Assignment**”

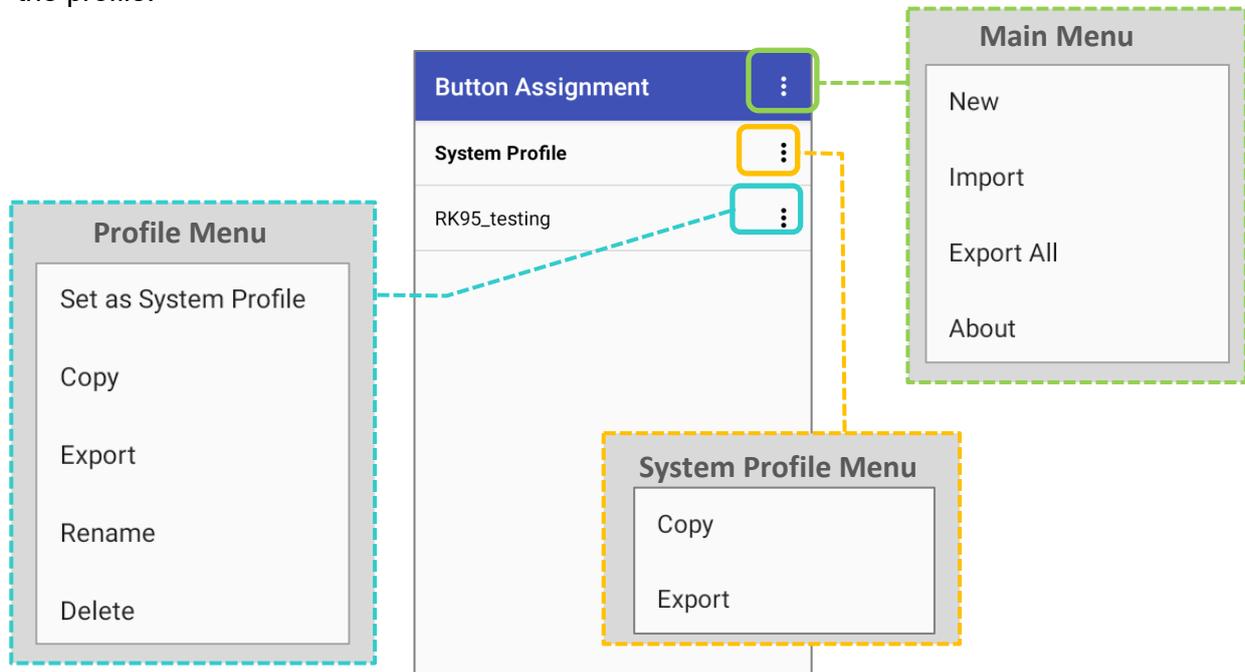


When first started, **Button Assignment** will create a system profile fixed in the first row. A profile contains definitions of key behavior or actions. Only one profile can be active at a time. To redefine the behavior of a key, please refer to [Chapter 3 Redefining Key Behavior](#).



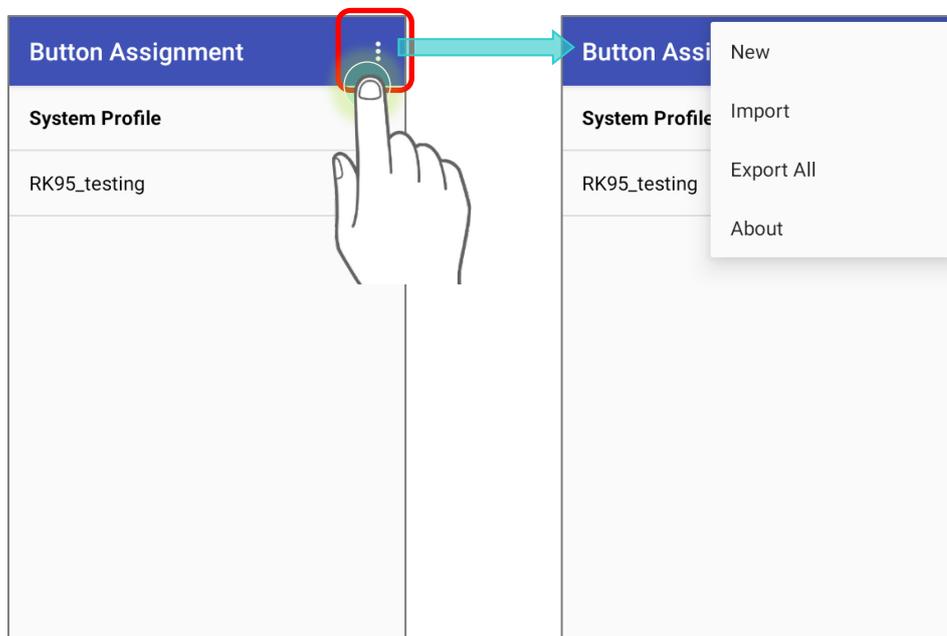
1.2 MAIN SCREEN

The main screen of **Button Assignment** consists of main menu and a list of profiles. Next to each profile, there is also a profile menu which includes a set of operations that are specific to the profile.



MAIN MENU

Tap more button  on the action bar to display the main menu.

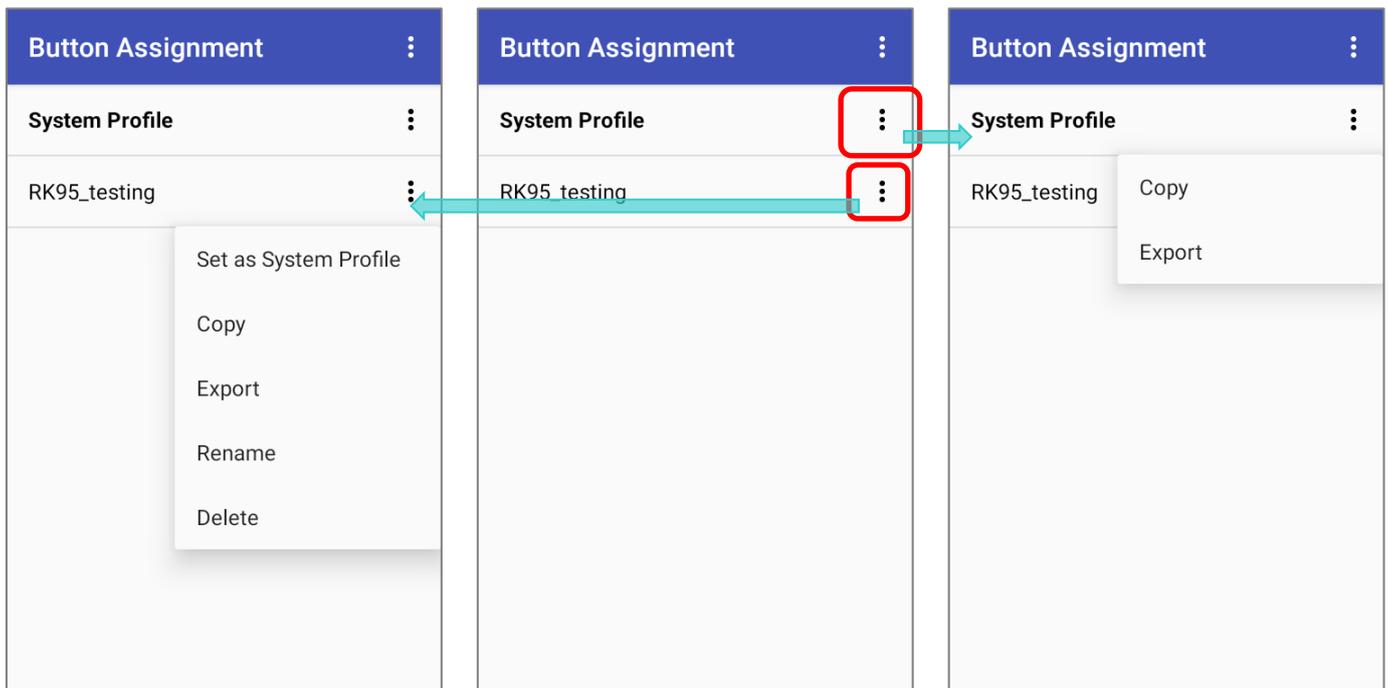


The options are described as below:

Item	Description
New	Create a new profile. Please refer to 2.2 Creating a Profile .
Import	Import a profile from the internal storage. Please refer to Import the Profile(s) .
Export All	Export all profiles to the internal storage. Please refer to Export All Profiles .
About	Tap to check the software version information.

PROFILE MENU

Tap more button  on the right of the profile to display the profile menu. The profile menu contains options that are specific to the profile.



The options are described in the following table:

Item	Description
Copy	Copy this profile. Please refer to 2.5 Copying a Profile .
Export	Export this profile to the internal storage. Please refer to Export a Profile .
Rename	Rename this profile. Please refer to 2.4 Renaming a Profile .
Delete	Delete this profile. Please refer to 2.7 Deleting a Profile .

PROFILE MANAGEMENT

This chapter specifies how to manage the profiles in Button Assignment, including creating a new profile, selecting the active profile, importing and exporting profiles, copying a profile, renaming a profile, and deleting profiles.

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2.1 SYSTEM PROFILE

The "System Profile" is fixed in the first row, and it cannot be deleted. The key behavior of your device is based on the System Profile. You can change the definitions of key behavior or actions of the System Profile by:

- ▶ Redefining the key behavior, please refer to [Chapter 3 Redefining Key Behavior](#).
- ▶ Setting a profile as system profile, and the key behavior or actions of the System Profile will change. Please refer to [Selecting the Active Profile](#).

Button Assignment	
System Profile	⋮
RK95_testing	⋮
Profile 01	⋮
Profile 02	⋮
Profile 03	⋮
Profile 04	⋮
Profile 05	⋮

Tap more button  on the right of the System Profile to display the system profile menu for more options:

Button Assignment	
System Profile	⋮
RK95_testing	⋮
Profile 01	⋮
Profile 02	⋮
Profile 03	⋮
Profile 04	⋮
Profile 05	⋮

Copy

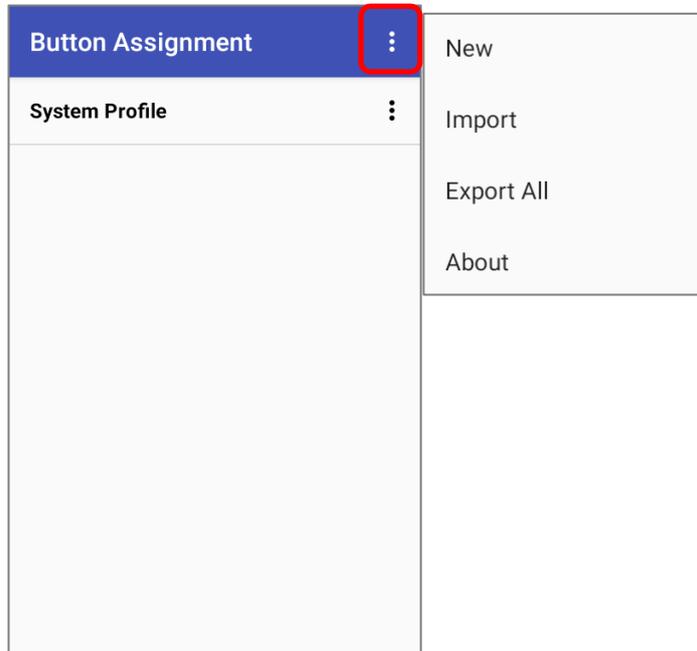
Export

Item	Description
Copy	Copy this profile. Please refer to 2.5 Copying a Profile .
Export	Export this profile to the internal storage. Please refer to Export a Profile .

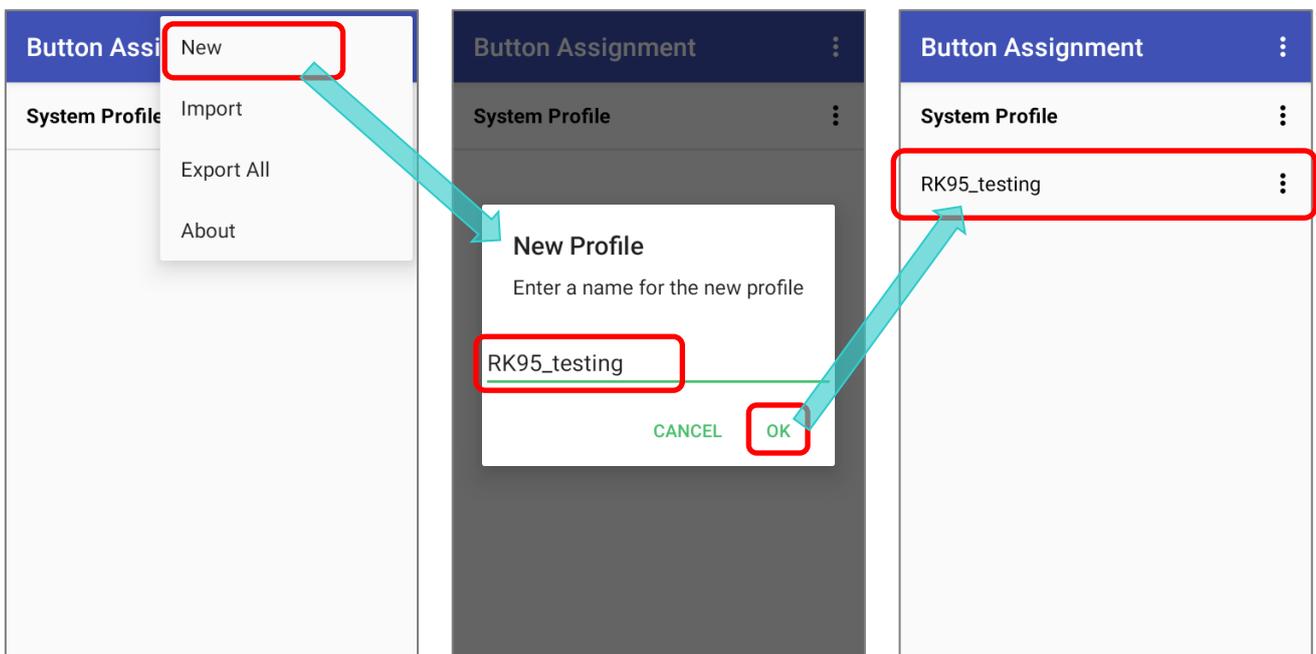
2.2 CREATING A PROFILE

To create a new profile, please:

- 1) Tap the more button  on the action bar to display the main menu.



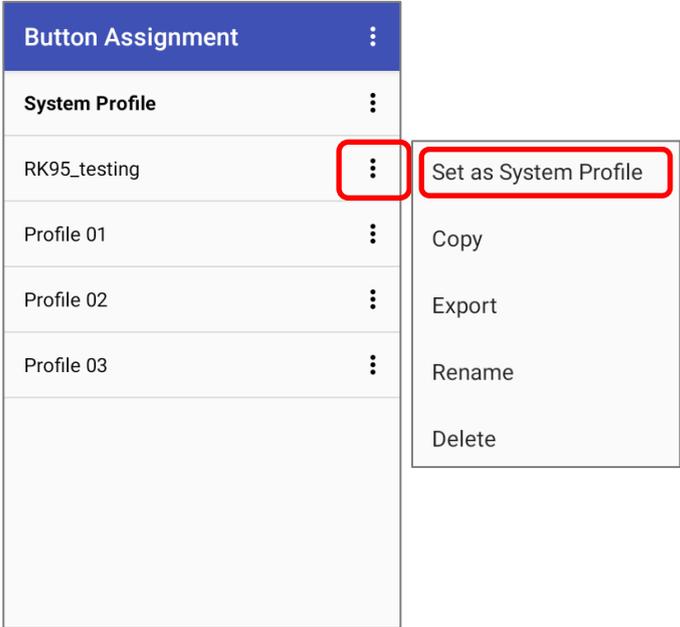
- 2) Tap **“New”** and enter a name for new profile in the pop-up dialog. Tap **“OK”** to create the profile.



2.3 SELECTING THE ACTIVE PROFILE

You can create different profiles for different work environments. All profiles are listed on the main screen, and only one profile can be active at a time.

Tap more button  on the right of a profile to display the profile menu, and select **“Set as System Profile”** to make the profile active.

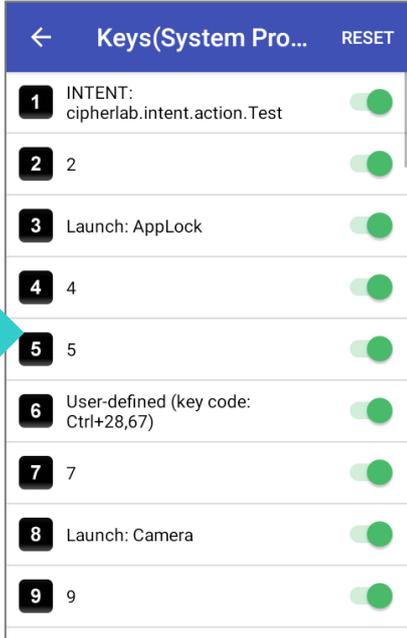
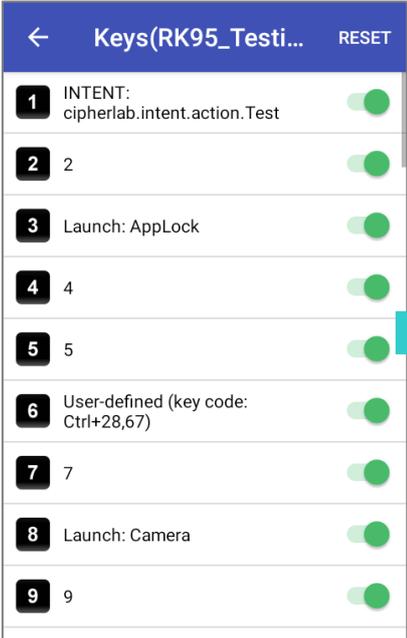
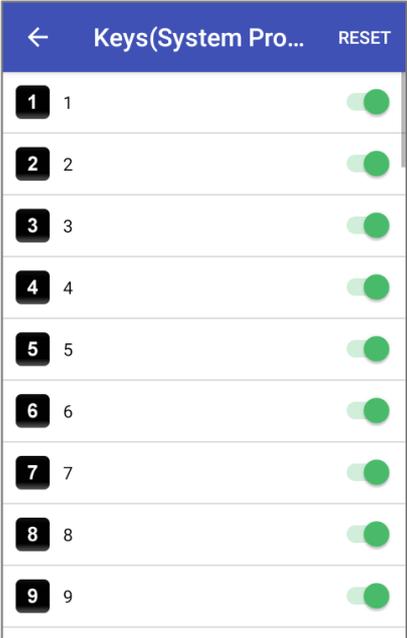


Once the profile is active, the key behavior of the **“System Profile”** will change to be the same with the active profile.

Original System Profile

The Profile to be Set as System Profile

System Profile Changes as the Active Profile

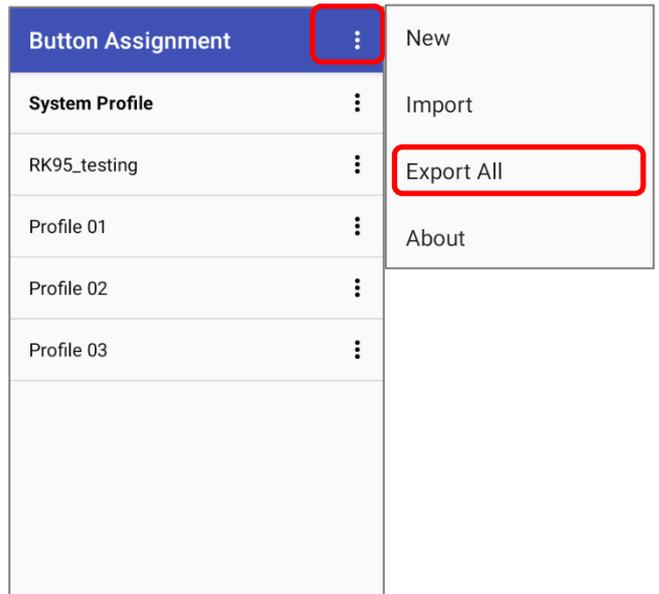


2.4 EXPORTING & IMPORTING PROFILES

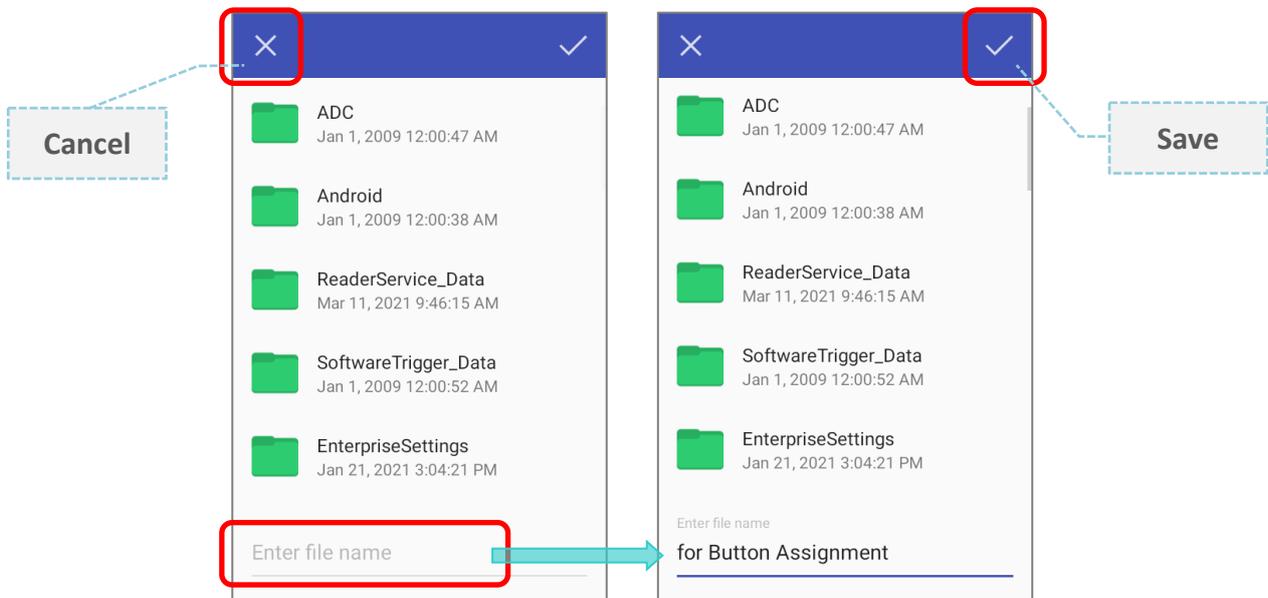
Button Assignment supports saving the profile settings and exporting them as a .json file. Previously exported profile(s) can be imported again on the mobile computer. This can also be used to implement the identical settings on multiple devices.

EXPORT ALL PROFILES

To export all your profiles, tap on the more button  on the right side of the action bar then select **“Export All”**.



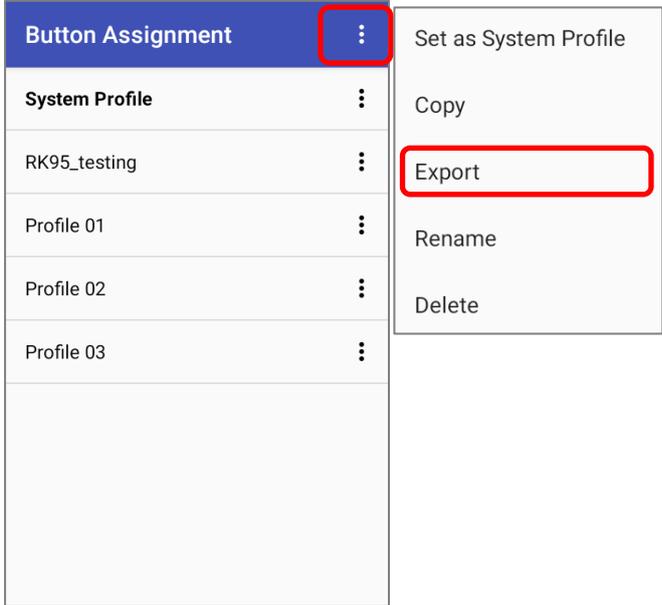
Enter a file name then tap the checkmark  on the action bar to save the file.



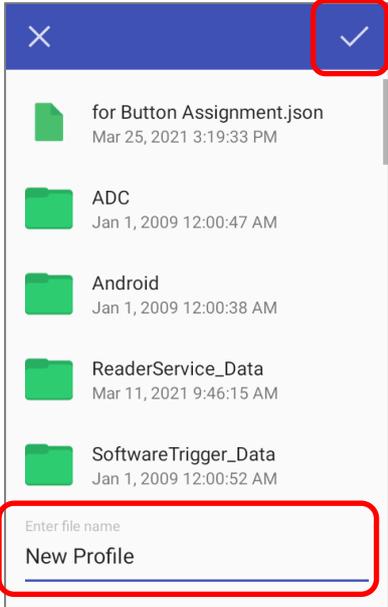
Note: Your profiles will be saved as a .json file.

EXPORT A PROFILE

To export a single profile, tap the more button  next to the profile that you would like to export and select **“Export”**.



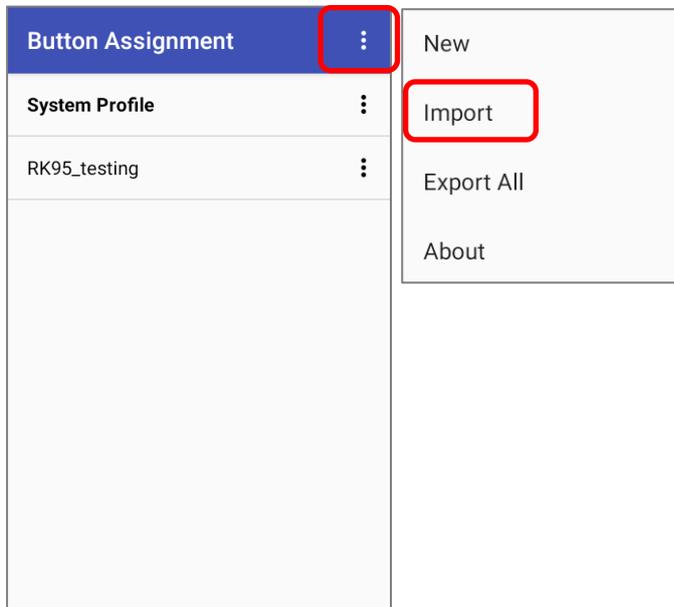
Enter a file name then tap the checkmark  on the action bar to save the file.



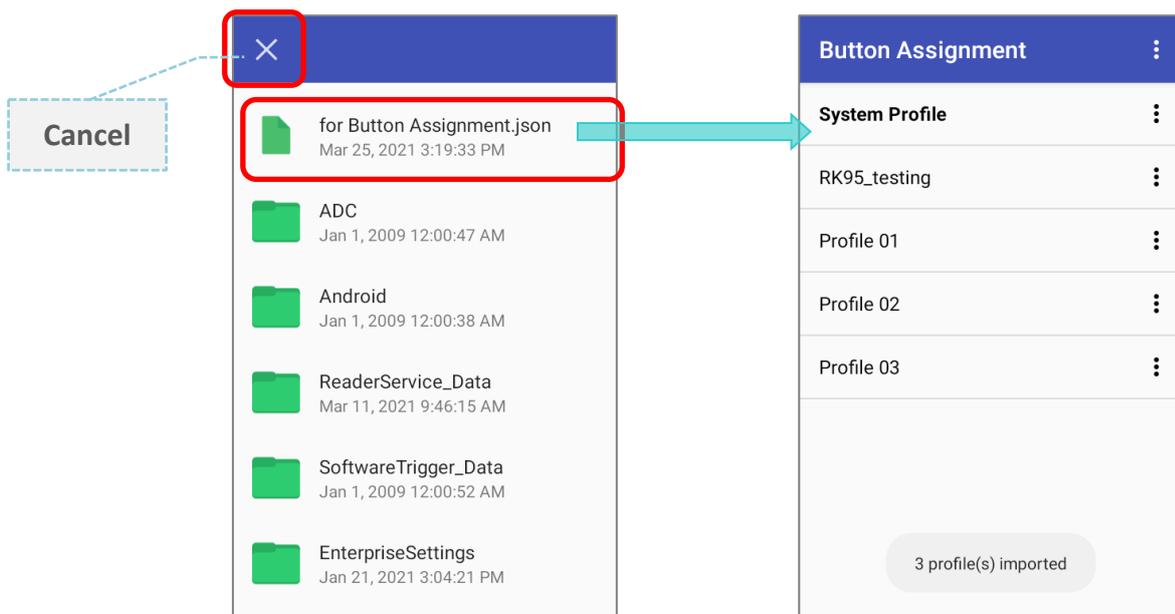
Note: Your profiles will be saved as a .json file.

IMPORT THE PROFILE(S)

To import a profile or a profile set, tap the more button  on the right side of the action bar then tap “Import”.



Select the .json file that contains your profile(s) to import.

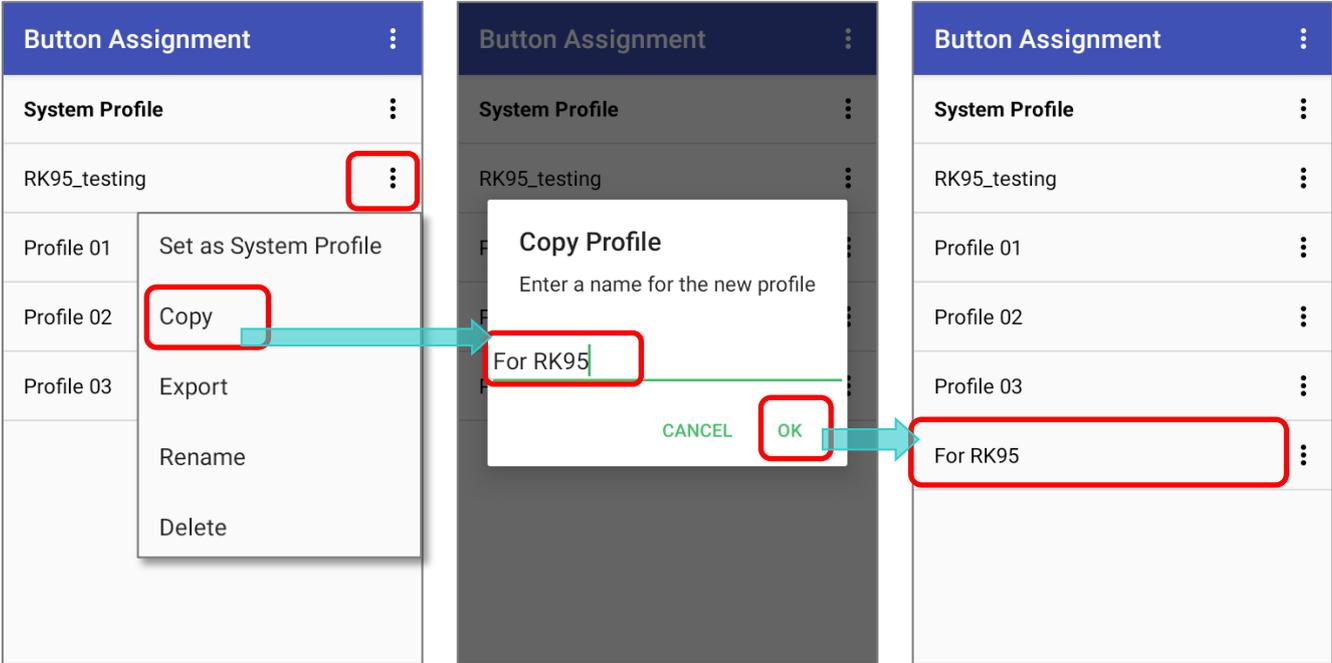


Note: Button Assignment will not import a profile that has the same name and key settings as an existing profile.

2.5 COPYING A PROFILE

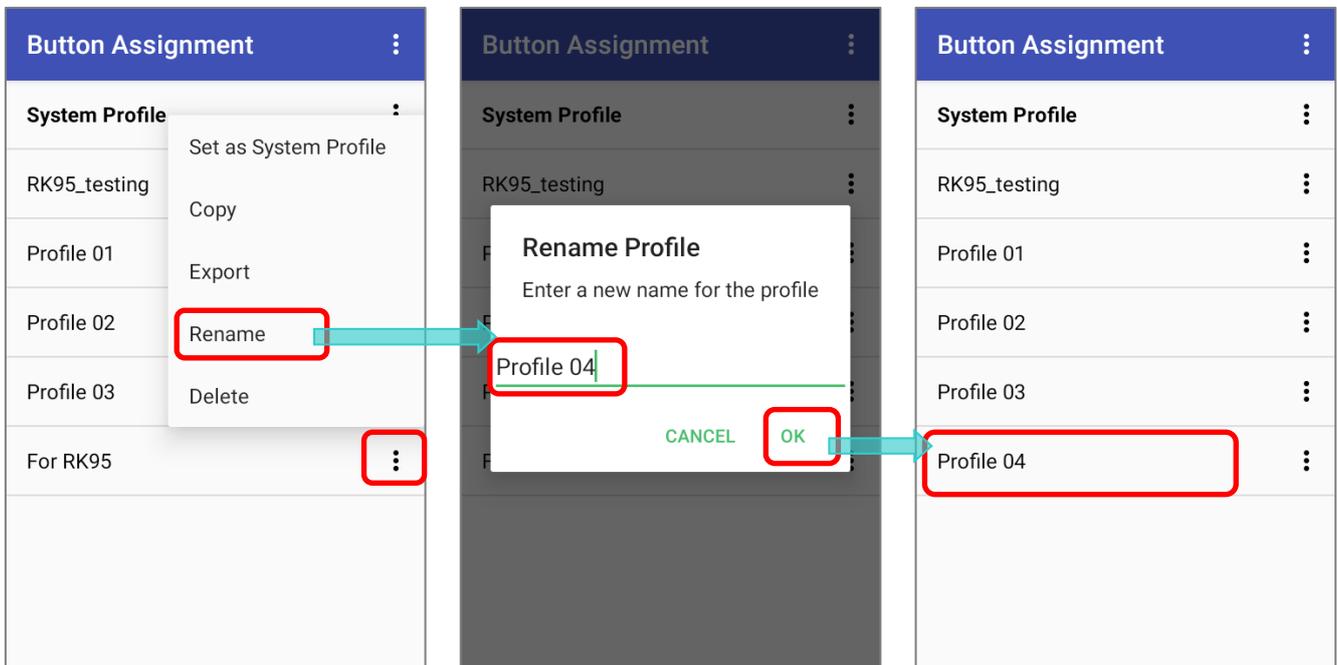
You can copy an existing profile and make changes from it. To copy a profile:

- 1) Tap the more button  next to the profile you would like to copy.
- 2) Select “**C**opy” and enter a name for the new profile.
- 3) Press the “**O**K” button to make a copy.



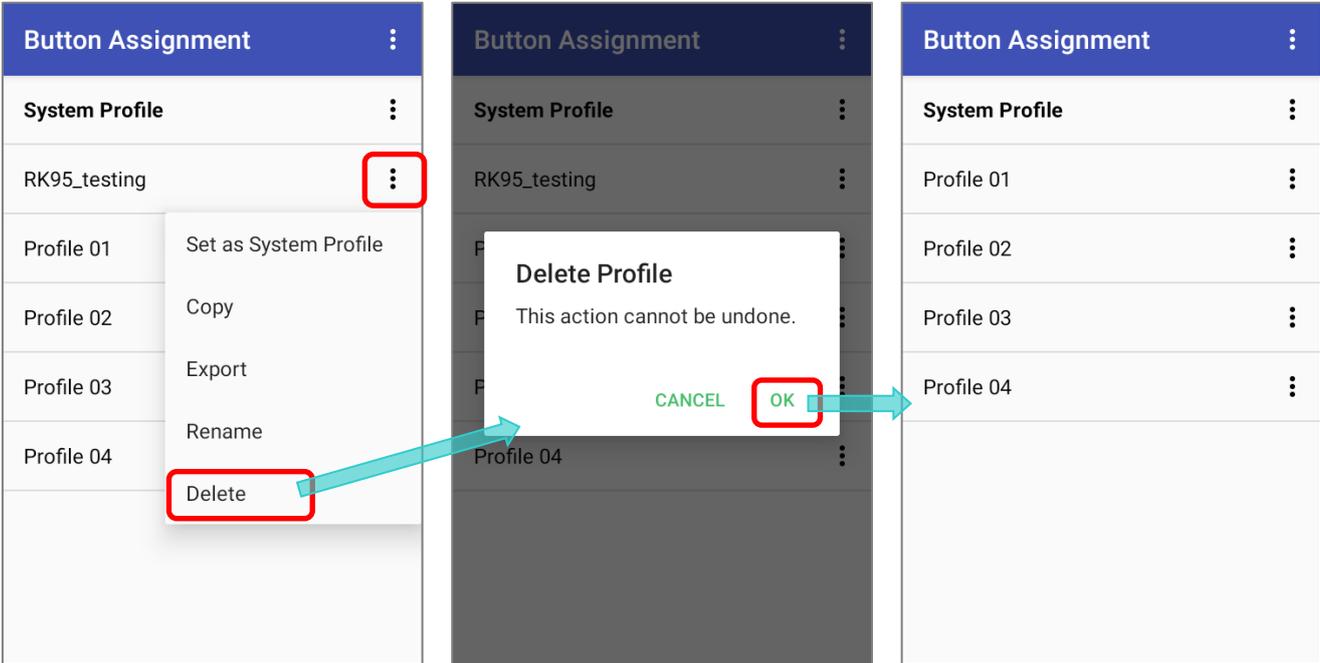
2.6 RENAMING A PROFILE

To rename an existing profile, simply tap on the more button  next to the profile you'd like to rename and select "**Rename**". Then, enter a new name for the profile. Finally, tap "**OK**" button to change its name.



2.7 DELETING A PROFILE

To delete a profile, simply tap on the more button  next to the profile you would like to delete and select **“Delete”**. Tap **“OK”** on the confirmation dialog to delete the profile.



Note:
The **“System Profile”** can not be deleted.

Chapter 3

REDEFINING KEY BEHAVIOR

This chapter gives the instruction about how to change key behavior by Button Assignment.

The keys which are available for changed differ based on the device model.

IN THIS CHAPTER

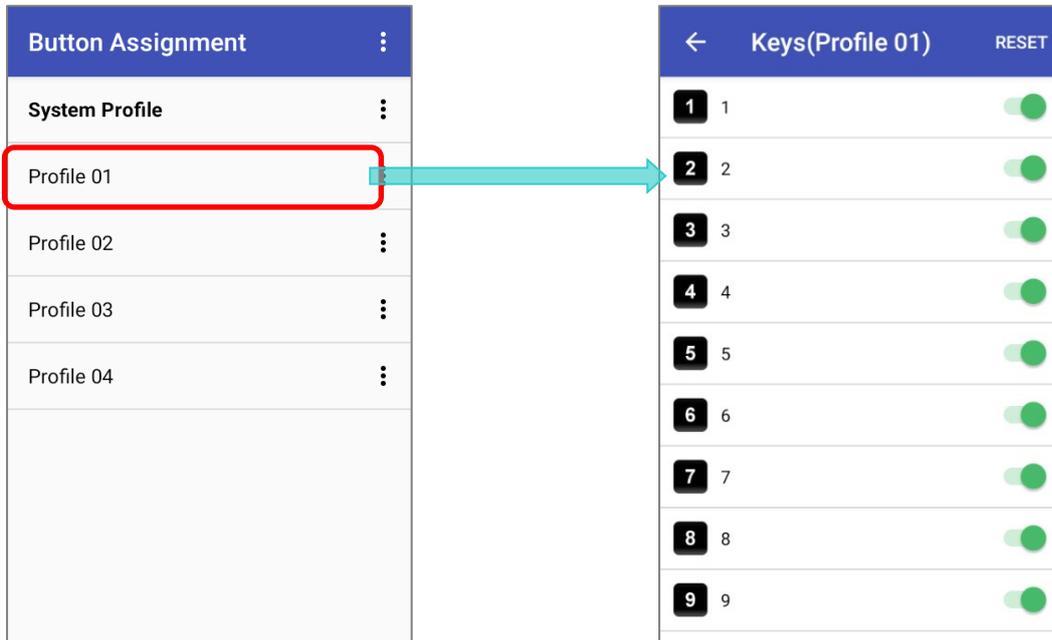
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3.1 REDEFINING KEYS

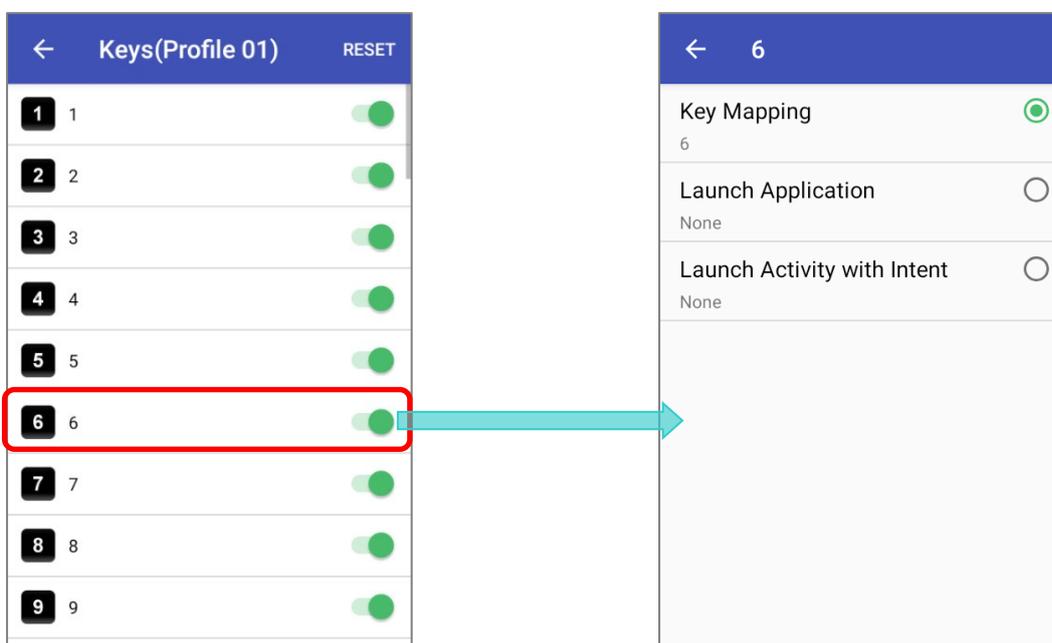
Users can change the key functions of the physical keys to meet their needs by Button Assignment. The keys listed on the profile keys page differ based on the device model.

To assign a new function for a re-definable key, please:

- 1) Tap on a profile to list all the keys it contains.

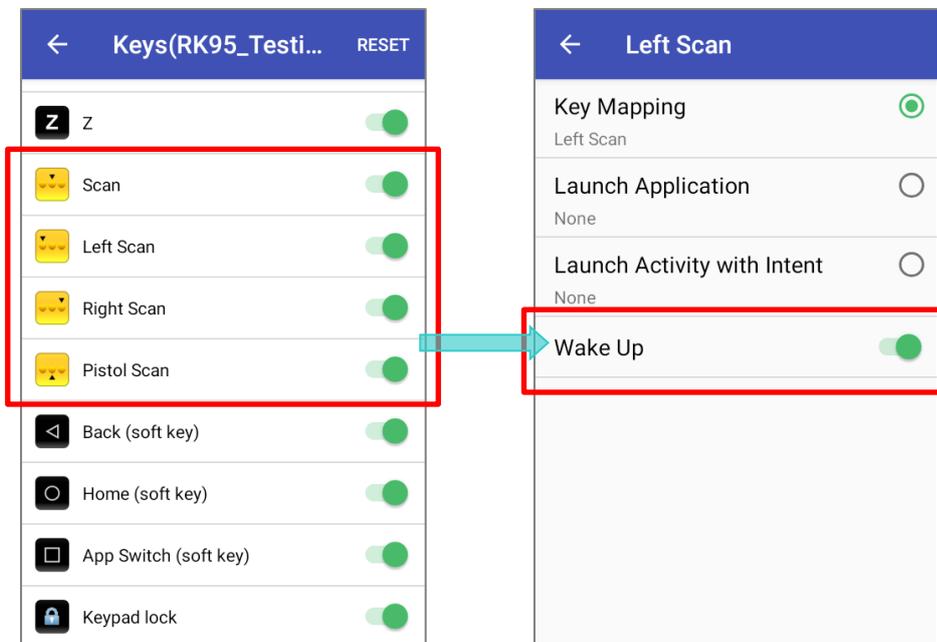


- 2) Tap on the key that you'd like to assign a new action.



Note:

For trigger keys (Scan, Left Scan, Right Scan, & Pistol Scan), you can also enable “Wake Up” to turn on the device display.

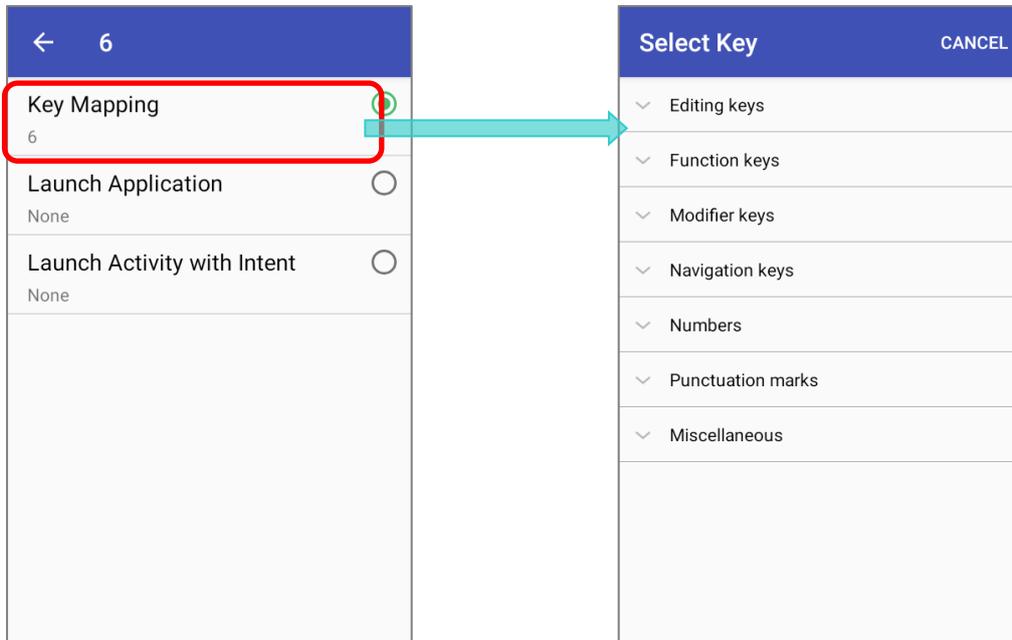


The actions to be selected are:

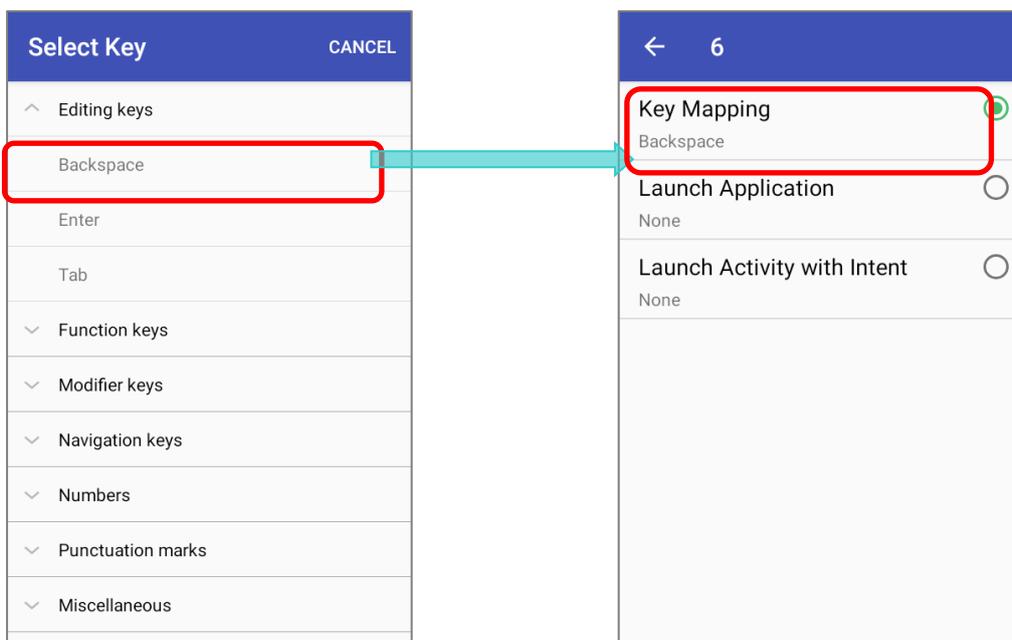
Item	Description
Key Mapping	Select “ Key Mapping ” to map the selected key to another key.
Launch Application	Select “ Launch Application ” if you’d like to launch an app with a key press.
Launch Activity with Intent	Select “ Launch Activity with Intent ” if your app supports launch by intent in its manifest. For details on how to support launch by intent in your app, please refer to 3.1.3 Supporting Launch by Intent in Your App .
Wake Up	Determine whether to wake up the device display from the off-screen state by pressing this scan key. The default setting is enabled.

3.1.1. KEY MAPPING

Select “**Key Mapping**” to map the selected key to another key:



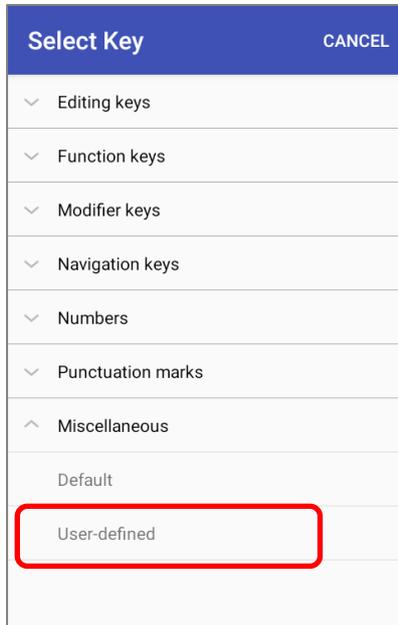
Unfold the key type and select the key function you would like to assign.



Tap **CANCEL** on the right side of the action bar to return to the previous page without any change directly.

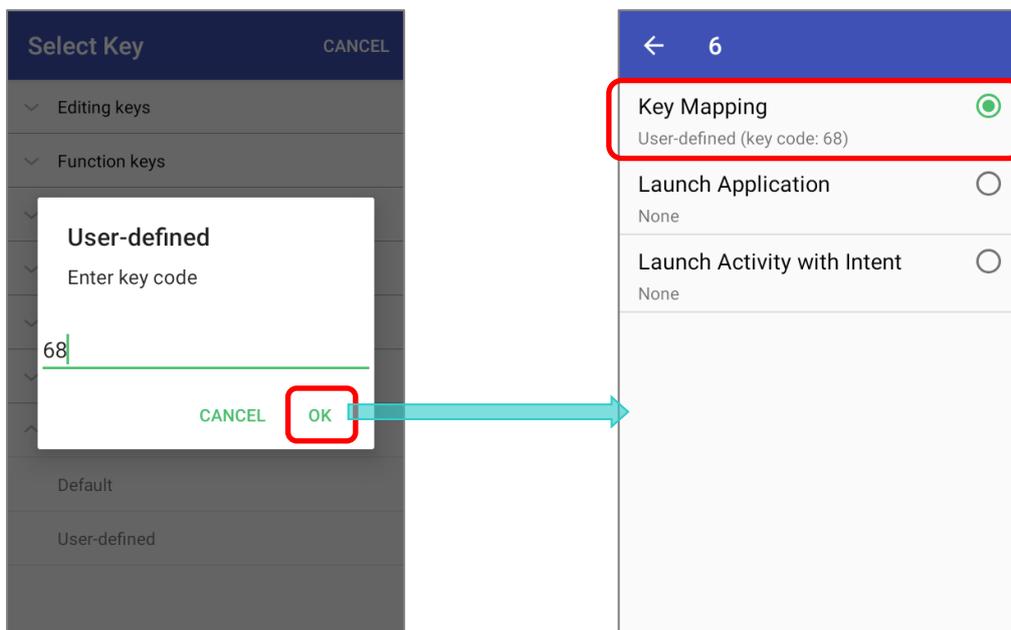
If a desired key is not listed, you can still map the key by entering the key code defined in the Android operating system (please refer to <https://developer.android.com/reference/android/view/KeyEvent>).

1) Expand the Miscellaneous category then tap User-defined.



2) Input key code in the dialog.

3) Tap **OK**.



Key codes can be combined with modifier keys. The following examples show how to combine a key code or key codes with modifier keys.

Shift+<key code>

Ctrl+<key code>

Alt+<key code>

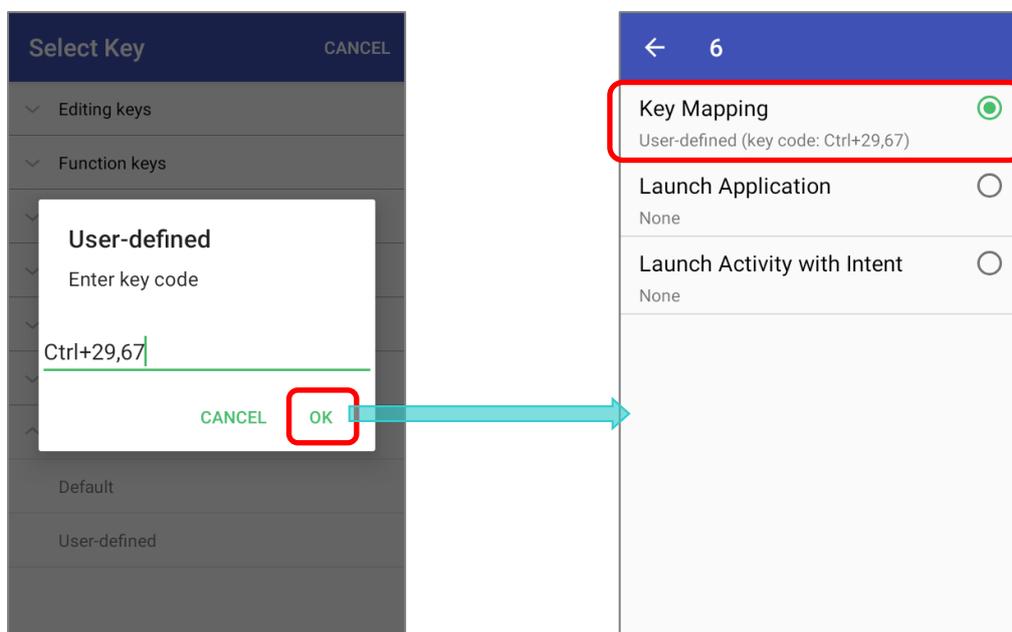
Ctrl+Shift+<key code>

Ctrl+Alt+<key code>

Multiple key codes can be combined with modifier keys also. For example:

Shift+<key code 1>,<key code 2>

Ctrl+Shift+<key code 1>,<key code 2>



Note:

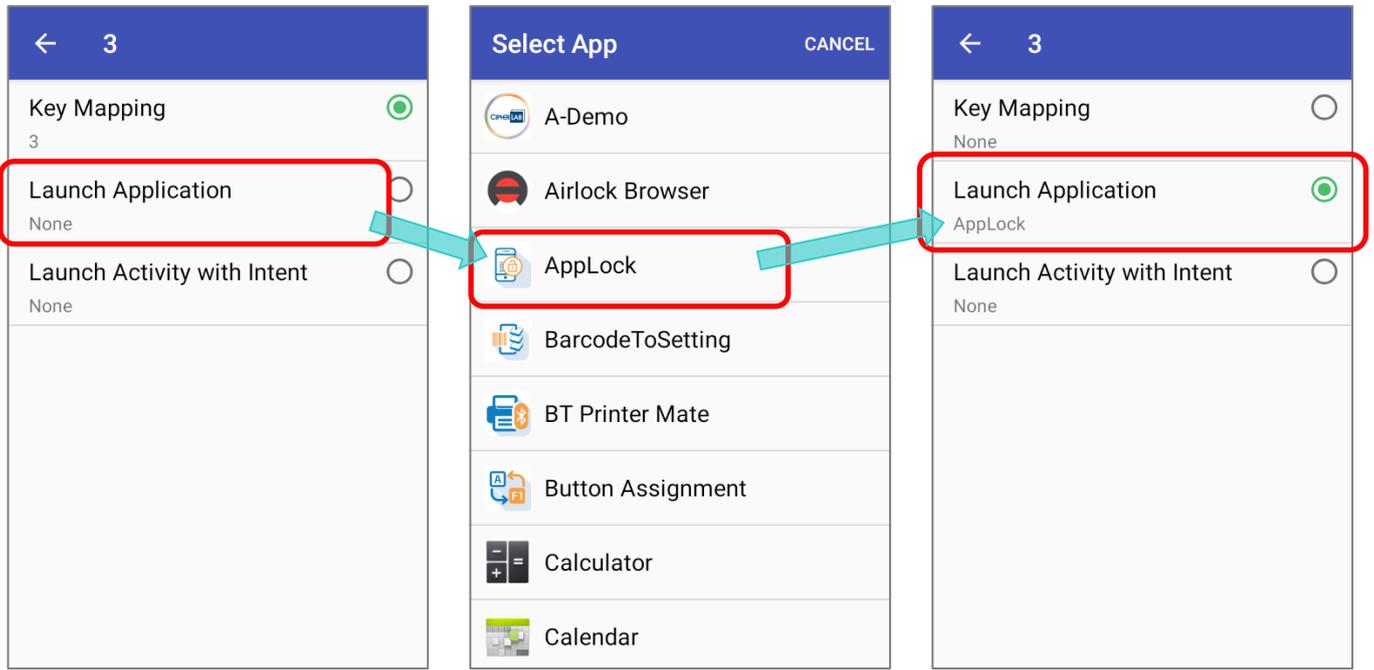
- (1) Key codes are separate by a comma.
- (2) A space character is not accepted in the entry. Do not enter space characters between key codes or modifier keys.

You can reset the device with a key or combination of keys by entering '**ERESET**' (without quotation marks) in the dialog.

3.1.2. LAUNCH APPLICATION

Select **“Launch Application”** if you’d like to launch an app with a key press.

Scroll down to view the entire applications list of and tap the app you would like to assign.



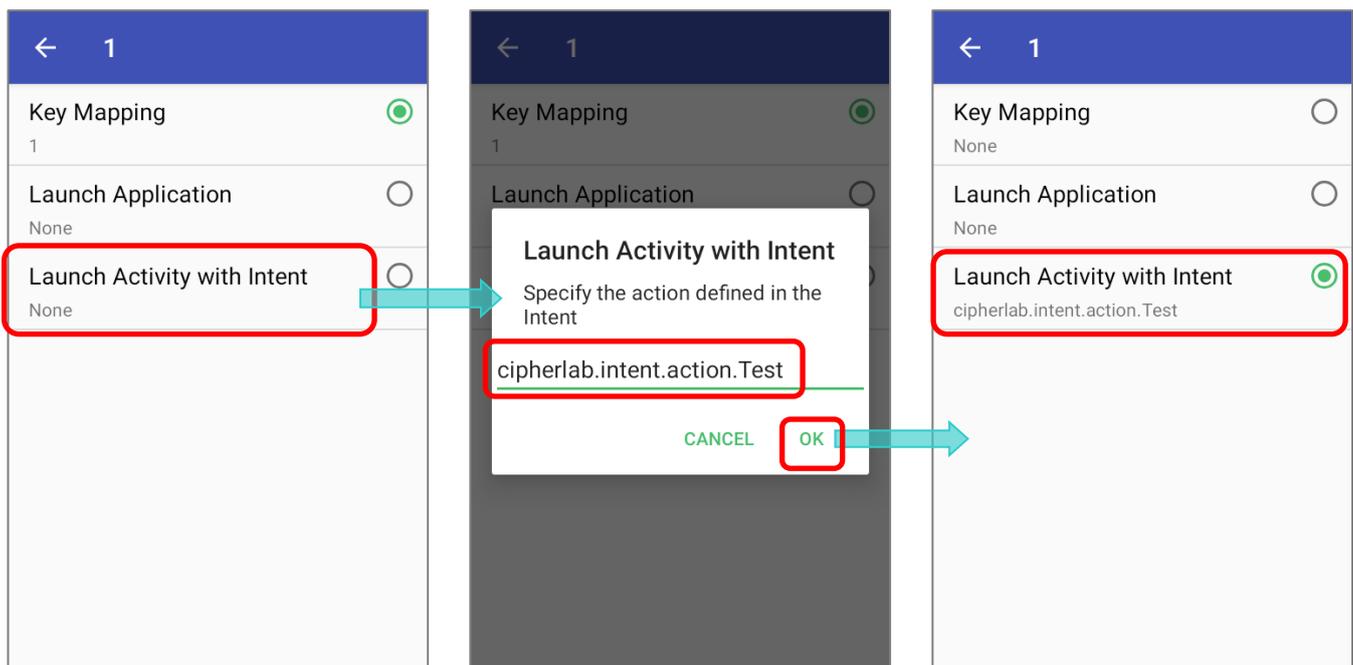
Tap **CANCEL** on the right side of the action bar to return to the previous page without any change directly.

3.1.3. SUPPORTING LAUNCH BY INTENT IN YOUR APP

In order to support launch by intent in your app, you need to add an intent-filter action in your app's AndroidManifest.xml file. The following example uses **"cipherlab.intent.action.Test"** as the name of the intent to be launched.

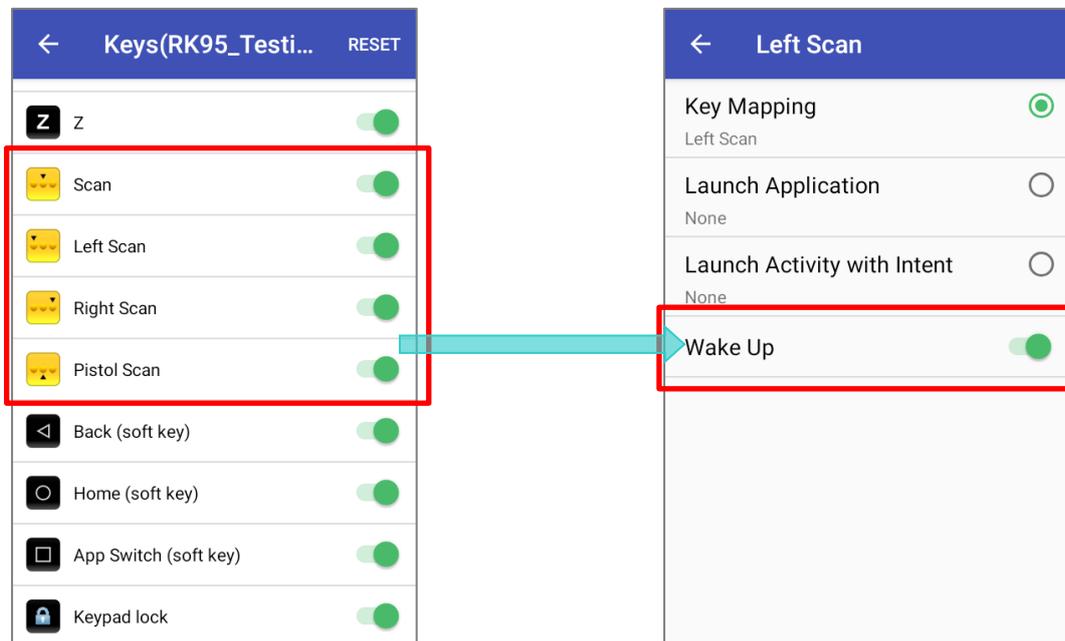
```
<activity
  android:name=".MainActivity"
  android:label="@string/app_name" >
  <intent-filter>
    <action android:name="android.intent.action.MAIN" />
    <action android:name="cipherlab.intent.action.Test" />
    <category android:name="android.intent.category.LAUNCHER" />
  </intent-filter>
</activity>
```

In Button Assignment, select Launch Activity with Intent as described in the previous section. Enter "cipherlab.intent.action.Test" in the dialog then press the **"OK"** button. Once the action is set, your application can be launched with a key press.



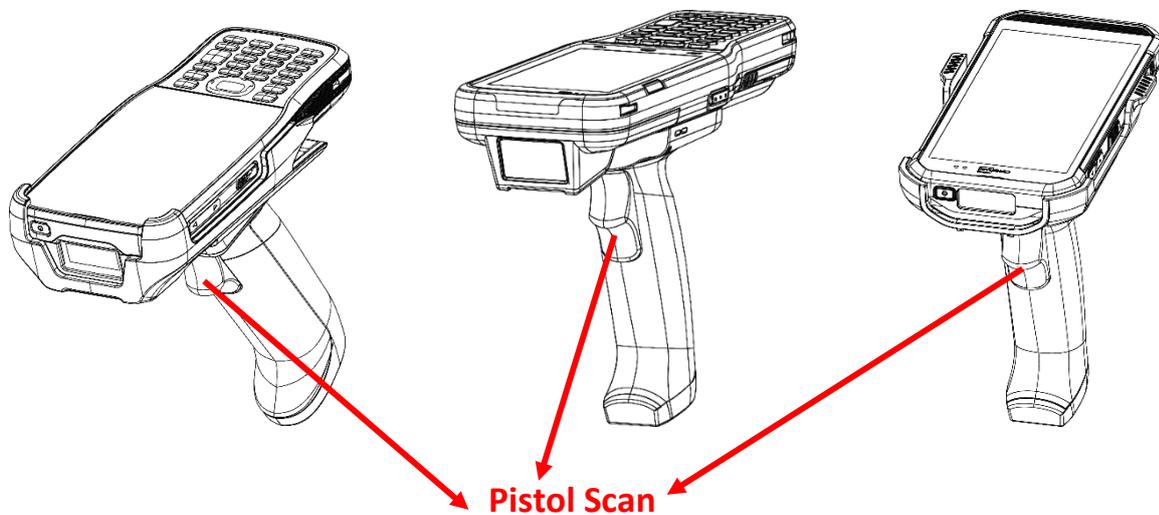
3.1.4. WAKE UP THE DISPLAY

Aside from being assigned with a new action, the scan key(s) can also be used for waking up the device display. Simply tap on the switch of “**Wake Up**” to determine whether turn on the device display from the off-screen state by pressing this scan key.



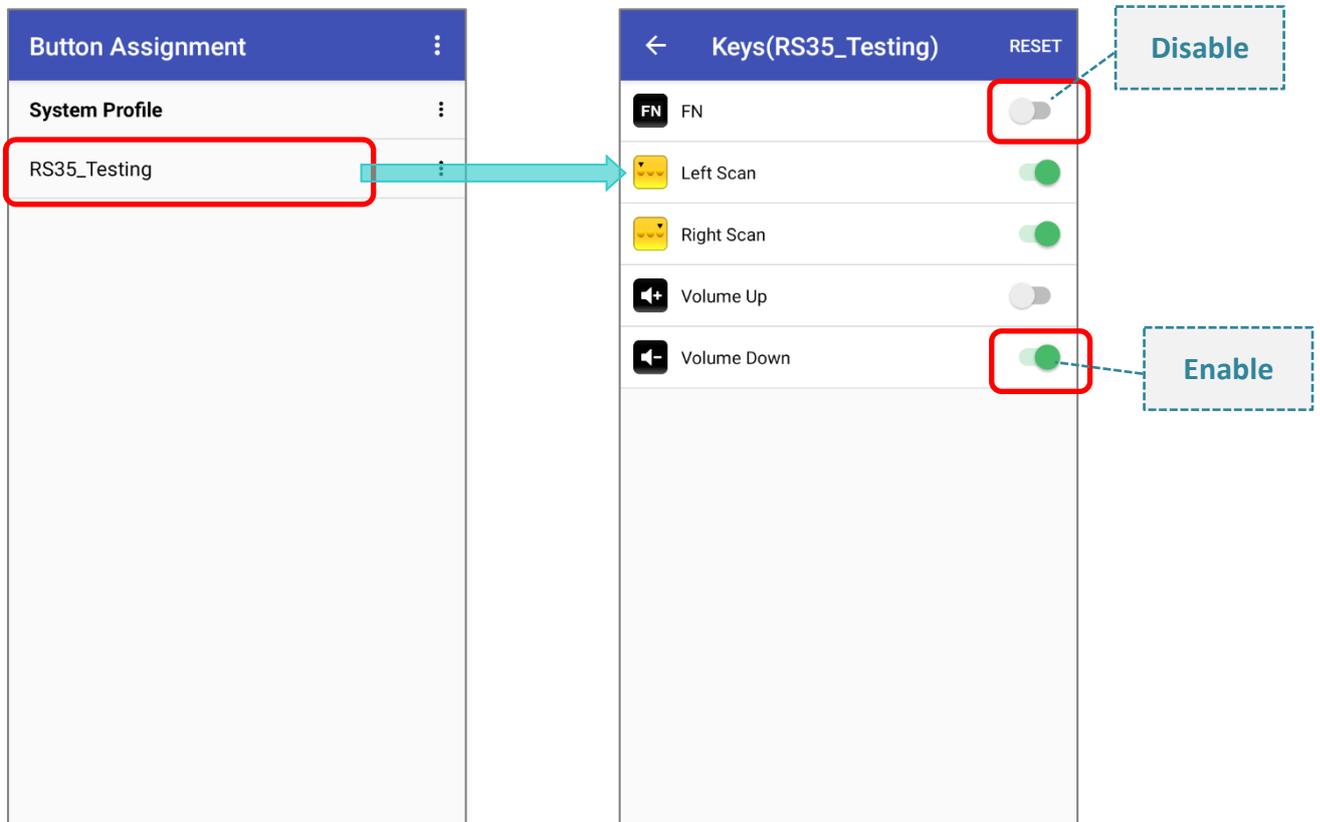
Note:

The key “Pistol Scan” is for RK25, RK95, & RS35 to work with its pistol.



3.2 ENABLING/DISABLING A KEY IN PROFILE

To enable or disable a key in a profile, simply select the profile to list all of its keys and tap the switch next to the key you'd like to enable or disable.



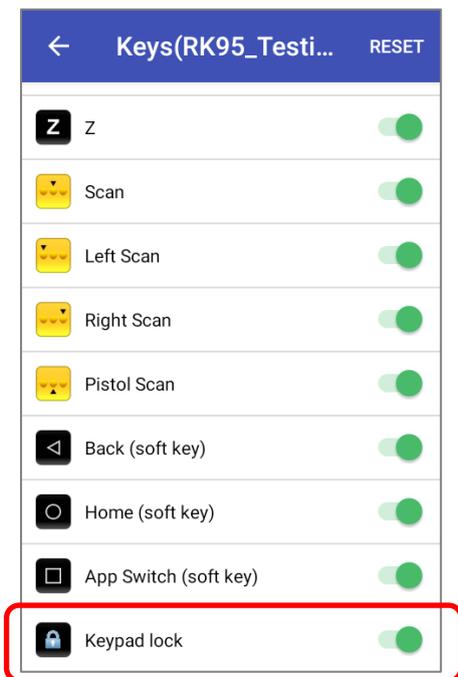
KEYPAD LOCK

To avoid pressing the keys accidentally, you can lock the physical keys by:

Device Model	Keypad Lock
RK95 38-Key Model	Pressing Function key and then Backspace key.
RK95 52-Key Model	Pressing Shift key and then Backspace key.
RK25 28-Key Model	Pressing Shift key and then Backspace key.
RK25 25-Key Model	Pressing Shift key and then Delete key.

If you would like to enable or disable the keypad lock function, you can:

- 1) Enter your system profile.
- 2) Scroll to find “**Keypad lock**”.
- 3) Tap the switch next to “**Keypad lock**” to enable or disable it.



Note:

The three soft keys, Back, Home, and App Switch, are never locked even if Keypad lock is enabled.

3.3 RESETTING A PROFILE

To reset all keys in a profile to their defaults, simply select the profile to list all of its keys and tap the **“Reset”** button on the action bar.

