

RS2000 USER MANUAL

REGULATORY COMPLIANCE

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING STATEMENT

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Requirement

You can use smartphones or contactless cards to unlock this lock. The incorporated NFC module allows the RS2000 to be unlocked from NFC compatible smartphones or MIFARE compatible contactless cards. This gives users access easier, safer, and more convenient.

NFC Compatible Smartphone

RS2000 is designed to communicate with NFC interface, so please choose smartphones which support NFC function to be a client or an administrator.

MIFARE Compatible Contactless Card

RS2000 can also be unlocked by contactless cards. The cards must be compatible with MIFARE standards.

Administrator& Client

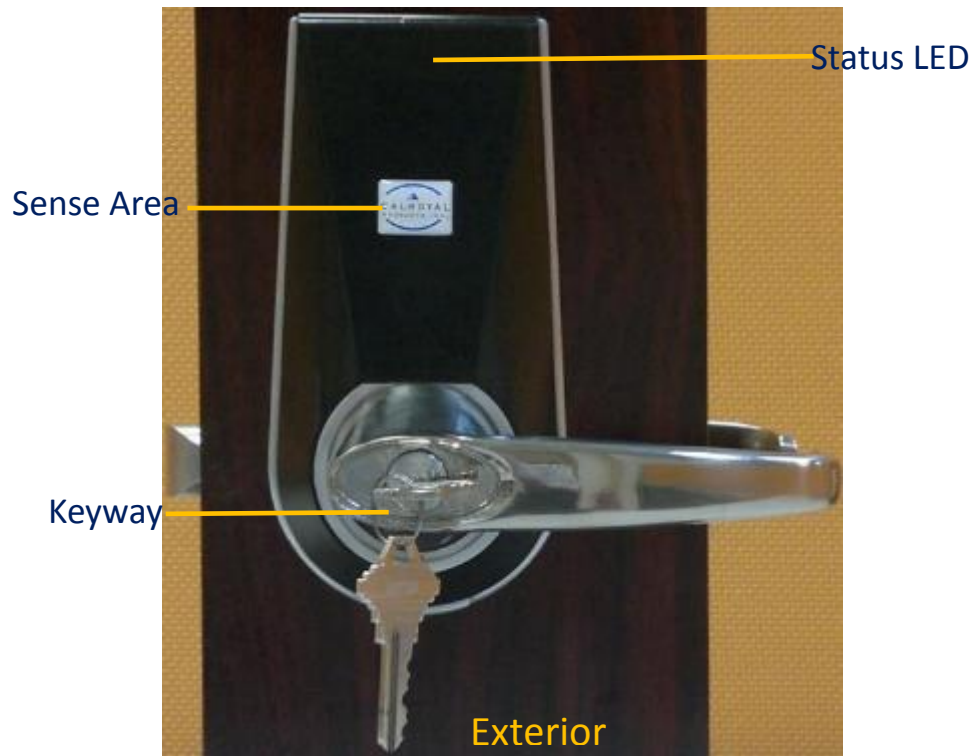
A NFC smartphone with Key Butler installed, or a contactless card, is called a User. For a User to unlock a lock, it must become a Valid User of the lock. Only Valid Users can unlock the lock.

There are two kinds of Valid Users. The first one is Administrator.

A lock has only one Administrator at a time. Besides unlock, the Administrator is also responsible for managing the lock and all the Clients. Only smartphones can be used as Administrators.

The second kind of Valid Users is Client. A lock can have multiple Clients. A Client can unlock the lock. Both smartphones and contactless cards can be used as Clients.

RS2000 Parts



Status LED

The Status LED indicator located on the head of the lock which indicates the operating status of the lock.

Flashing **Red** LED

When an invalid user try to unlock, the status LED will flash red, and generate warning beeps.

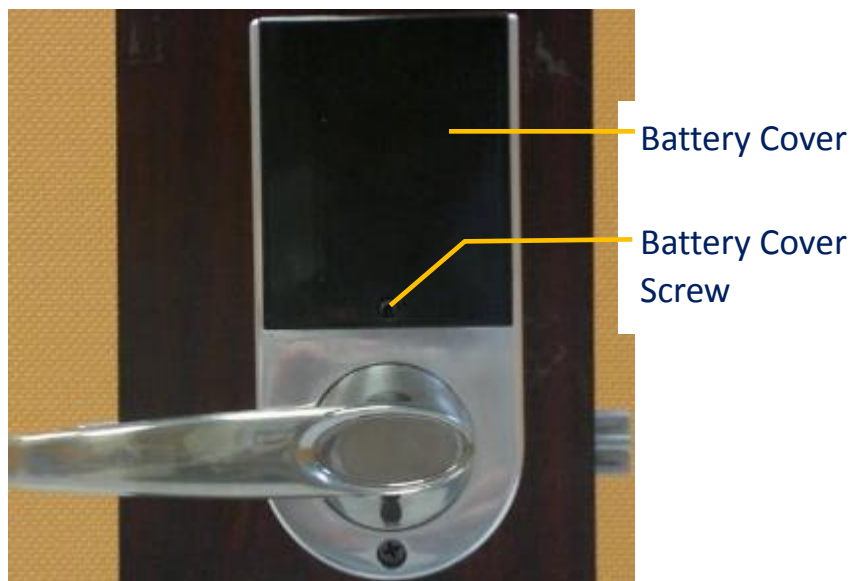
Flashing **Green** LED

When a Valid user try to unlock, the status LED will flash green, and you'll hear a unlock beeps.

(About beeps, please refer to page 14 'Events and Beeps')

Sensing Area

NFC is a kind of short distance wireless communication technology. Different smartphones' NFC antennas may not be at the same location. Please try to find your smartphone's best sensing area at first.



Interior

Battery Cover Screw

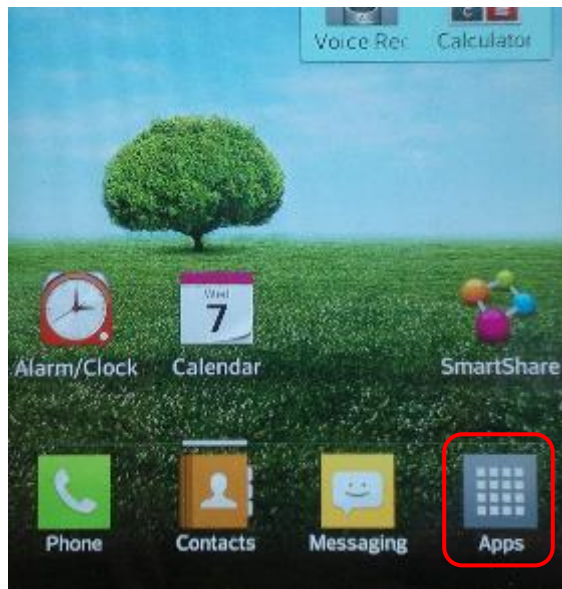
The location of Battery Cover Screw is not only just a screw, but also a Setup Button behind here. Please unload the screw if you want to push the Setup Button.

UserSmartphones

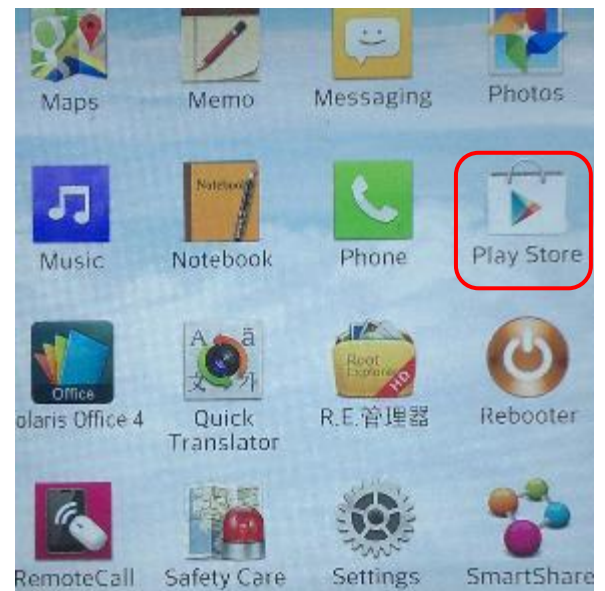
Whether it's an administrator or a client, all smartphone users need to install the app 'Key Butler'. Make sure your phone is already connected to internet before installing the app.

Install APP

Step 1.Open 'Apps' group

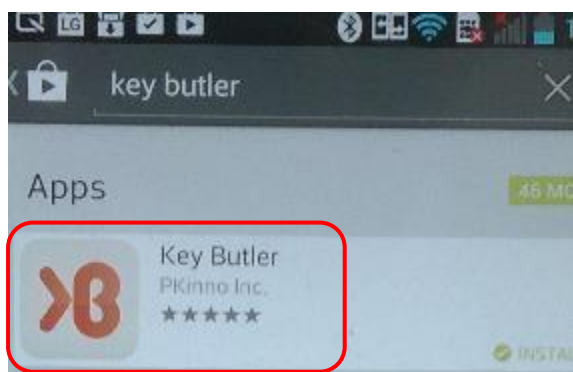


Step 2. Tap 'Play Store'



Step 3.Search and choose

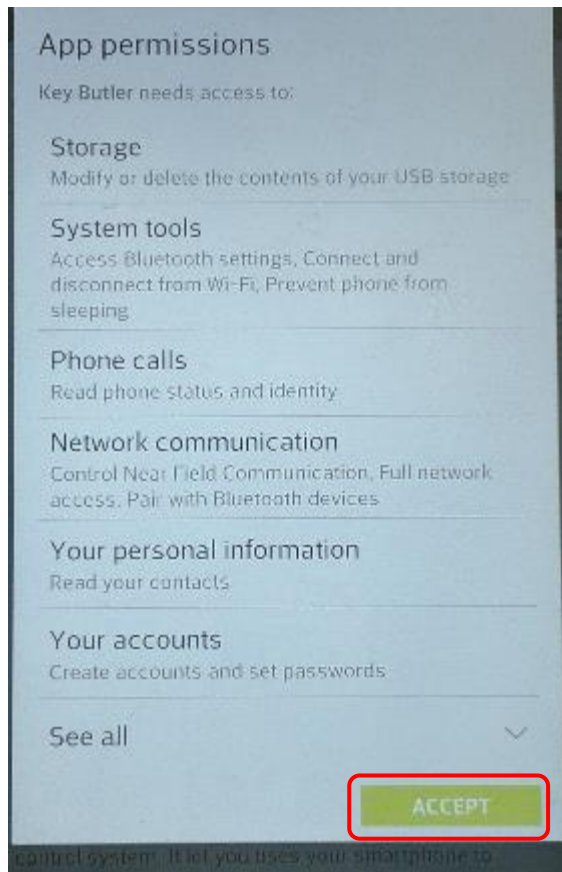
'Key Butler'



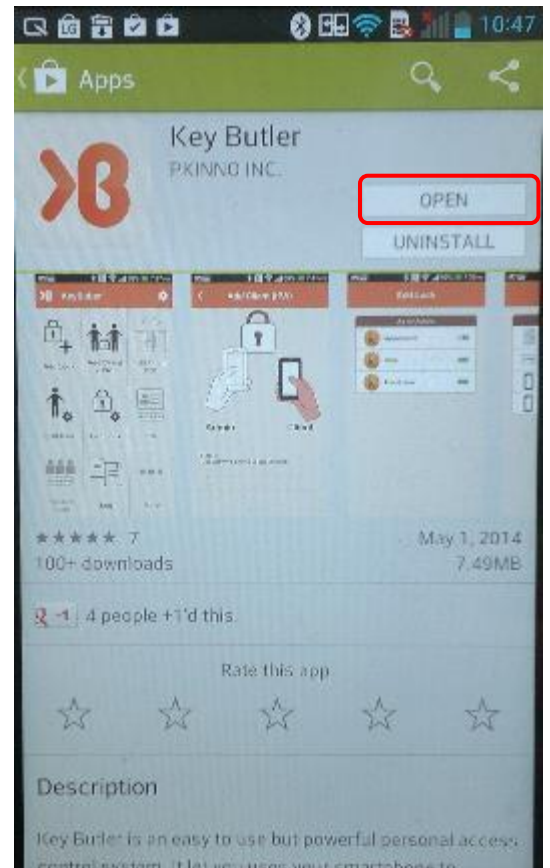
Step 4.Press 'INSTALL'



Step 5. After read permissions,
click 'ACCEPT'



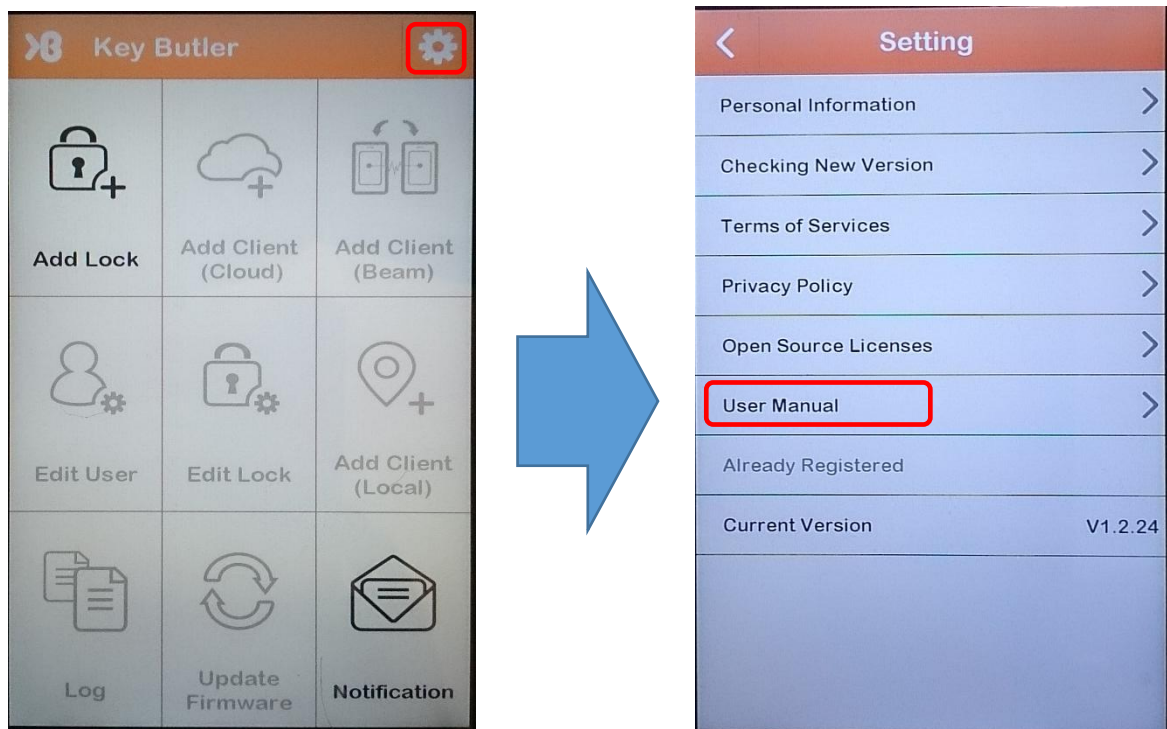
Step 6. Tip 'OPEN' to start app



Key Butler User Manual

About how to operate app on smartphone, please refer to the Key Butler user manual.

You can find the Key Butler user manual inside the app:



Or check the web site:

<http://www.keybutlerapp.com/manual.html>

Batch Mode

For a use-case that only cards are used and no one uses NFC smartphone, the lock provides a method to add/delete cards.

1. Click the Setup button on the inner side of the lock.



2. Before time-out, use a card to tap the lock. The card will become a Client of this lock. All the original clients will be deleted. And the original Administrator will be deleted, either.



3. Upon finish, click the Setup button again to finish the process. Or time-out will terminate the process, too. If there are multiple cards you want to add, tap them one by one continuously.

DIN

Correct DIN must be entered for start the pairing process. The DIN of RS2000 is lower case of model name 'rs2000'.

Low Battery

RS2000 has low battery caution function.

When the voltage is lower than safety power, RS2000 will give warnings while unlock every time.

During low-battery state, there are two kinds of sound for different status:

- (1) Unlock success: The sound is 1 beep, then 10 beeps for low battery warning.
- (2) Unlock fail: The sound is same as invalid user unlock fail.

Resetto Factory Default

STEP 1. Remove at least a battery.



STEP 2. Push the Setup Button.



Push the Setup Button

STEP 3. Fit in the battery while keeping pushing the Setup Button.



Push the Setup Button

STEP 4. Keep pushing Setup Button until it generates 4 beeps.

Release the Setup Button now. And the lock is restored to factory default now.



Events and Beeps

Events	Beeps
Phone or Card Unlock	3 raising tone beeps
Low Battery Unlock	1 beep, then 10 beeps for low battery warning
Phone or Card Unlock fail	1 long and 4 short beeps, the long beep pitch is higher
Low Battery Unlock fail	1 long and 4 short beeps, the long beep pitch is higher
Add User Success	4 beeps tone scale
Admin Pairing Success	4 beeps tone scale
Communicate Issue	2 low pitch beeps
Push Setup Button	2 short beeps
Exit Setup Mode	2 short and 1 long beeps

- If any invalid user tries to unlock and fails 3 times consecutively, the lock will alarm 10 beeps and stay idle for 2 minutes.

Trouble Shooting

Problems and Solutions

- **No response.**

If the lock does not have any response, change batteries and try again.

- **Lock work but no sound.**

If unlock function is normal, but there is not any sound, check the parameter is not in mute mode. Please check 'Lock Configuration' of Key Butler user manual for set lock parameter.

- **Administrator become an invalid user.**

An administrator will lost authority while

1. Another phone becomes a new administrator.
2. Use batch mode (one kind of setup button operation) to remove the old administrator
3. Reset to Factory Default.

Specification

Length = 200 mm

Exterior Width = 80 mm

Height = 50 mm

Length = 200 mm

Interior Width = 80 mm

Height = 35 mm

Communication

Type: NFC (Near Field Communication)

Radio Frequency: 13.56MHz