

**User Manual**

**EFRConnect Door Lock Mobile Application**

|  |  |
| --- | --- |
| **Version**  **Status**  **Date** | 0.1  Draft  21-August-2020 |

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# Document Details

## Document History

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| --- | --- | --- | --- | --- | --- | --- |
| **Version** | **Author** | | **Reviewer** | | **Approver** | |
| **Name** | **Date**  **(DD-MM-YYYY)** | **Name** | **Date**  **(DD-MMM-YYYY)** | **Name** | **Date**  **(DD-MM-YYYY)** |
| Draft 0.1 | Vipul Kole | 21-08-2020 |  |  |  |  |
|  |  |  |  |  |  |  |

| **Version** | **Description of Change** |
| --- | --- |
| Draft 0.1 | Created initial draft version |
|  |  |

Table 1: Document History

## Definition, Acronyms and Abbreviations

|  |  |
| --- | --- |
| Definition/Acronym/Abbreviation | Description |
| User | User of EFRConnect Mobile application |
| OTA | Over the Air |
| BLE | Bluetooth Low Energy |
|  |  |

Table 2: Definition, Acronyms and Abbreviations

## References

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Document | Version | Remarks |
| 1 |  |  |  |
| 2 |  |  |  |

Table 3: References

# introduction

## About EFR32 Door Lock System

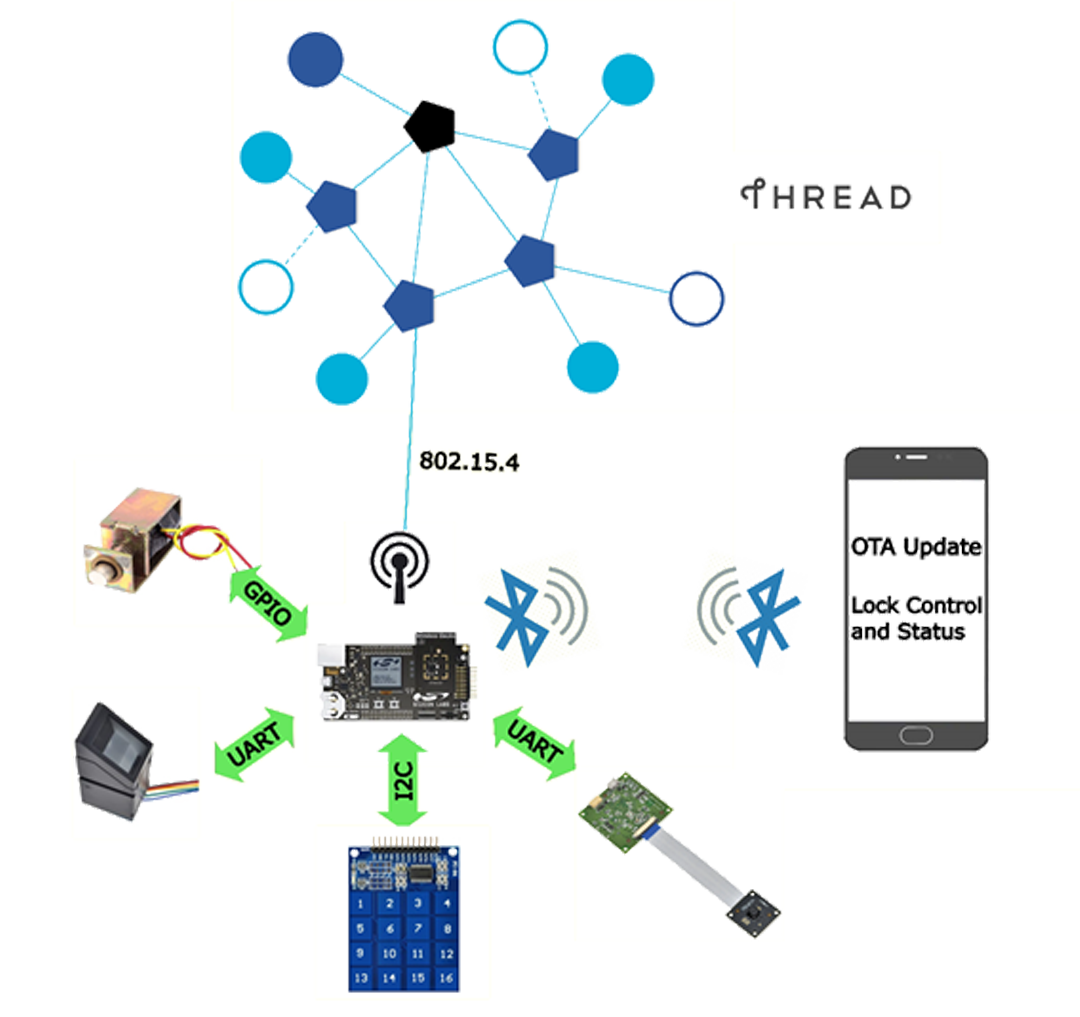


Figure 1: Top Level EFR32 Door Lock System Diagram

OpenWeave door lock application based on open source OpenWeave application layer framework is used to achieve the smart locking of home, building and commercial space. This reference platform provides locking and unlocking of door using authentication. It has 1 step and 2 step authentications to open/close the door.

### Key Features

* Door lock /unlock operations.
* Viewing door state
* OTA provisioning.

## Kit Contents

NA.

# System Requirements

## Typical Setup Requirements

* User’s permission like Bluetooth and Location services is required.

## Special Configuration and environment

* User should be nearer to the EFR32 device (around 20ft radius)

## Support Documentation list

NA

## Considerations:

* Android device must have android 7 or later.
* Android device time must be set to current time.
* Android device should have support for Bluetooth version 4+ (Bluetooth LE)
* GPS must be enabled

# Getting Started

## Installation

* Copy the **EFRConnect Door Lock-v x.x.x.apk** file into your Android Mobile Phone.
* Install the application by running apk file.
* If the installation permission needed, then android will automatically navigate to allowing the “UNKNOWN SOURCE INSTALLTION” setting

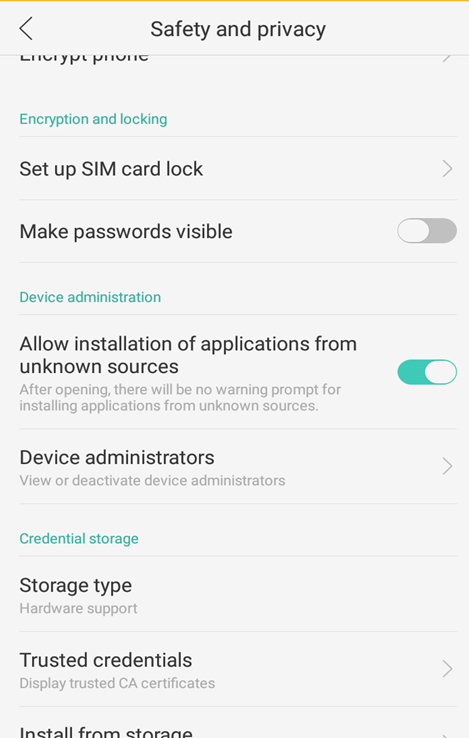


Figure 2: Unknown source installation setting

* + Allow the system to install the application
  + It may ask for google play protect security check. Click on “Install anyway”

## Splash Screen

* Launch EFRConnect Door Lock Application from Mobile Device.
* User will see the splash screen of silicon labs logo. Once loading completed user will see “Home screen.



Figure 3: Splash Screen

## Granting permissions.

* Allow all the permission asked by the application.

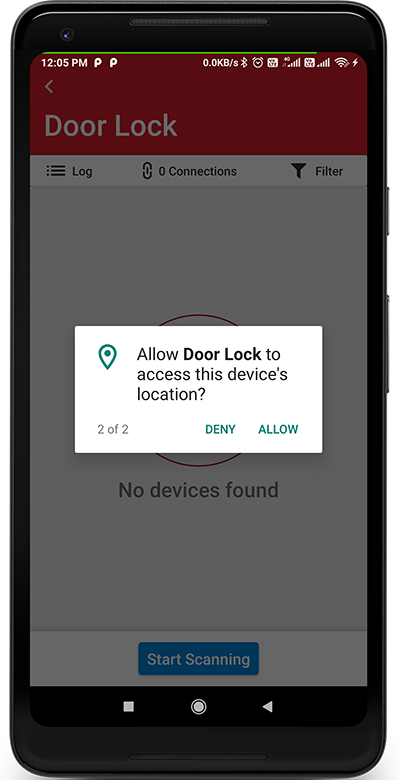
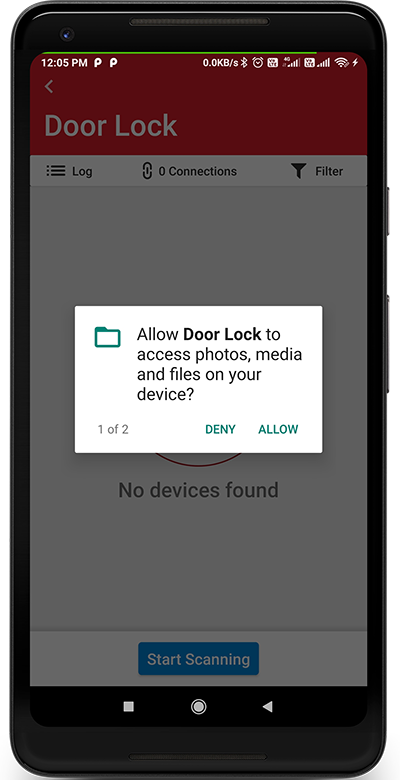


Figure 2: Permission Screen

## Home Page

Click on scan button to display the list of available Bluetooth devices

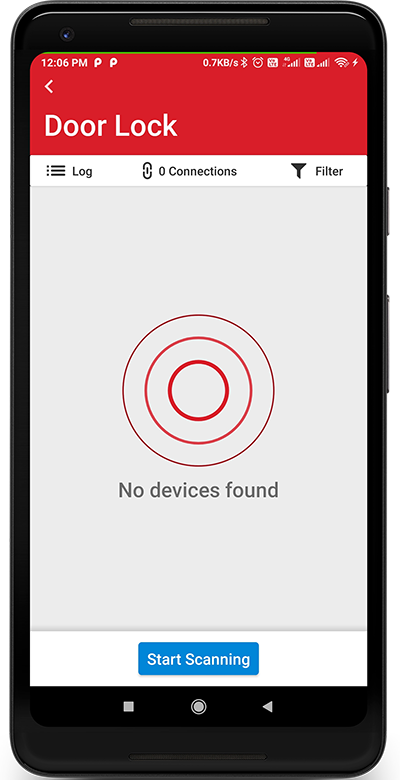


Figure 4: Home Screen

## Device Scanning and Discovery Screen

After clicked on scan button it will display scanning animation and shows the nearby Bluetooth devices

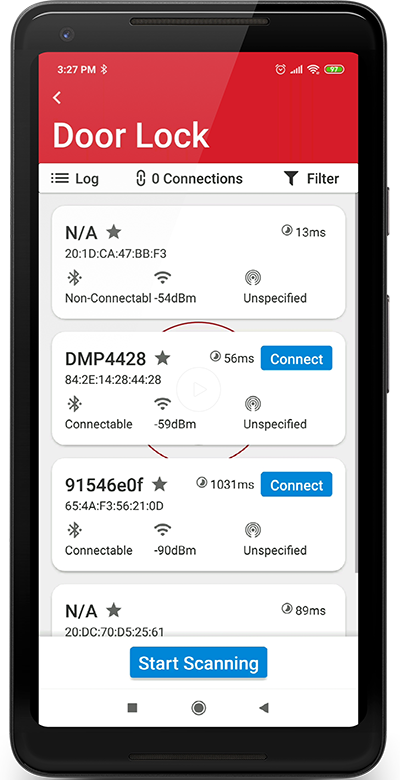


Figure 5: Scanning / Discovery of nearby devices

## Door Lock Parameter Screen

It will show the EFR32 connection status, door status, device name and actions performed by the user.

Also, it has a menu option button and refresh button to get the latest device state. (syncing with device)

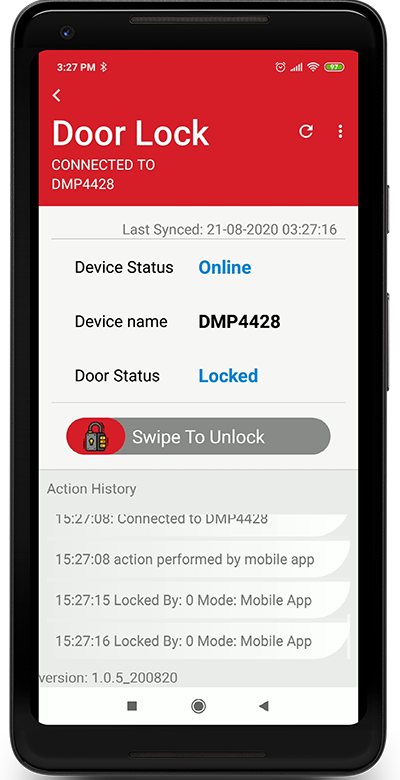


Figure 7: Door Locked /Unlocked Status

## Door Lock Option Menus

Currently it has two option menus as OTA and Exit. OTA will used for updating the firmware application. Exit will navigate to home screen.

By Pressing the 3 dots icon at top right corner the option menu will visible.

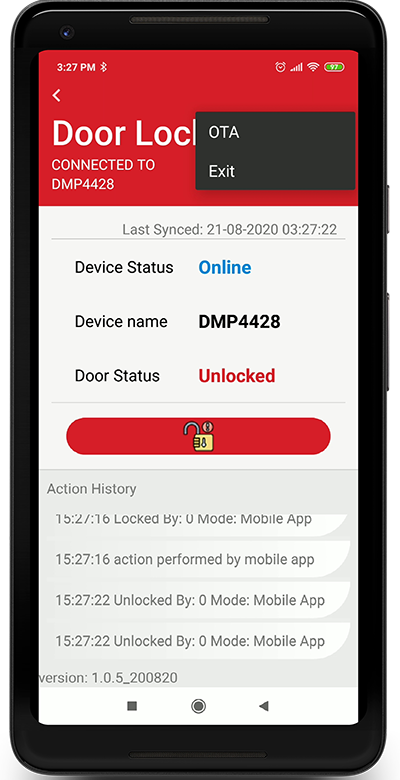


Figure 9: Door Lock Option Menus

## 3x4 Matrix Keypad Screen

When lock/unlock operation is going to happen from mobile app, then mobile app user needs to provide a secret key to perform the operation. This screen will pop up when lock or unlock event is triggered.

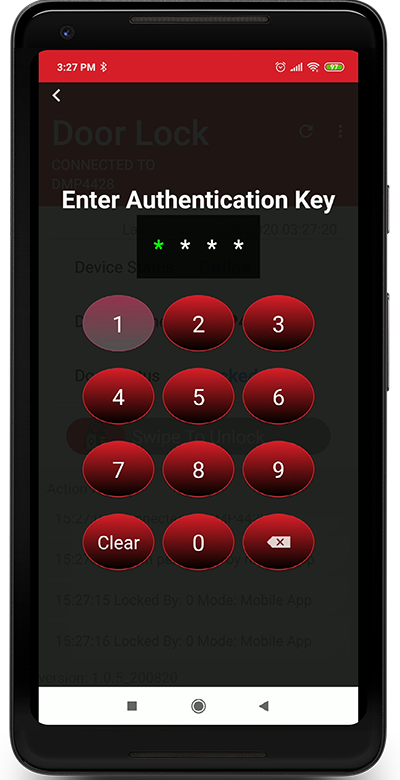


Figure 10: 3x4 Matrix Keypad Screen

## OTA Provisioning Service Screen

After selecting the OTA option from the menu, the below screen will appear and the option menus are changed as respect to the service.

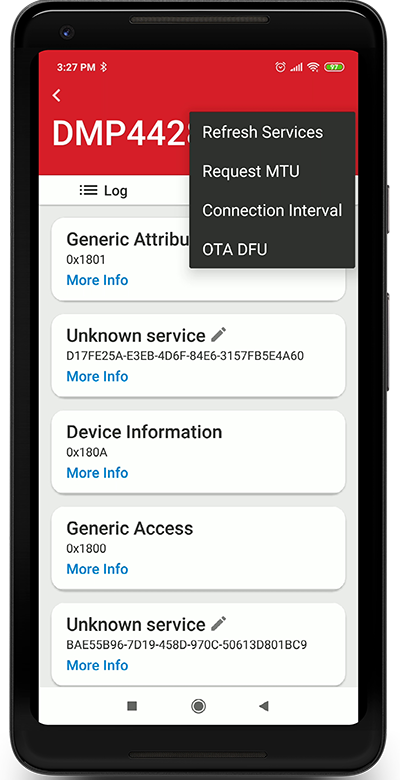


Figure 11: OTA Provisioning Service

## OTA Processing Screen

After selecting the OTA, popup dialog will appear to provide an application file for firmware as shown in picture. Then user need to provide a firmware application file.

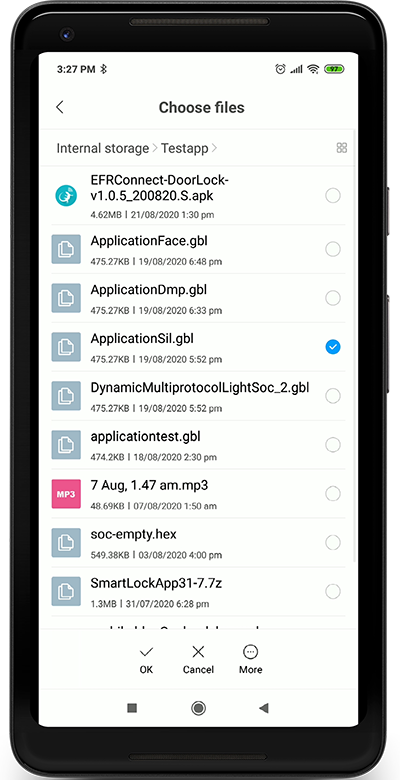
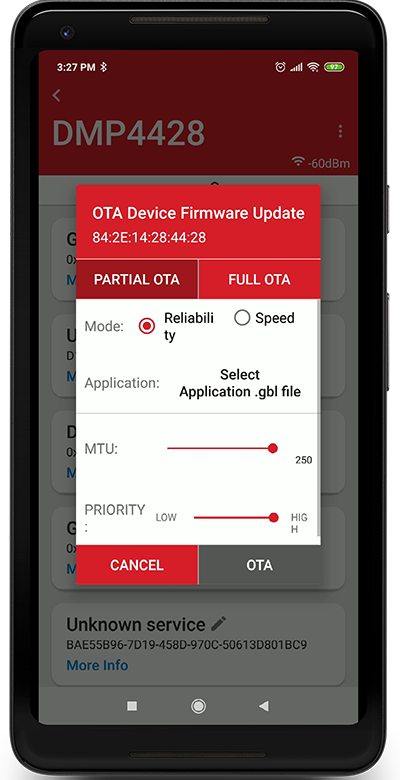


Figure 12: OTA Selection Dialog / Update File Selection

## Instructions/Conventions/Errors

### Navigation for Door Lock/Unlock

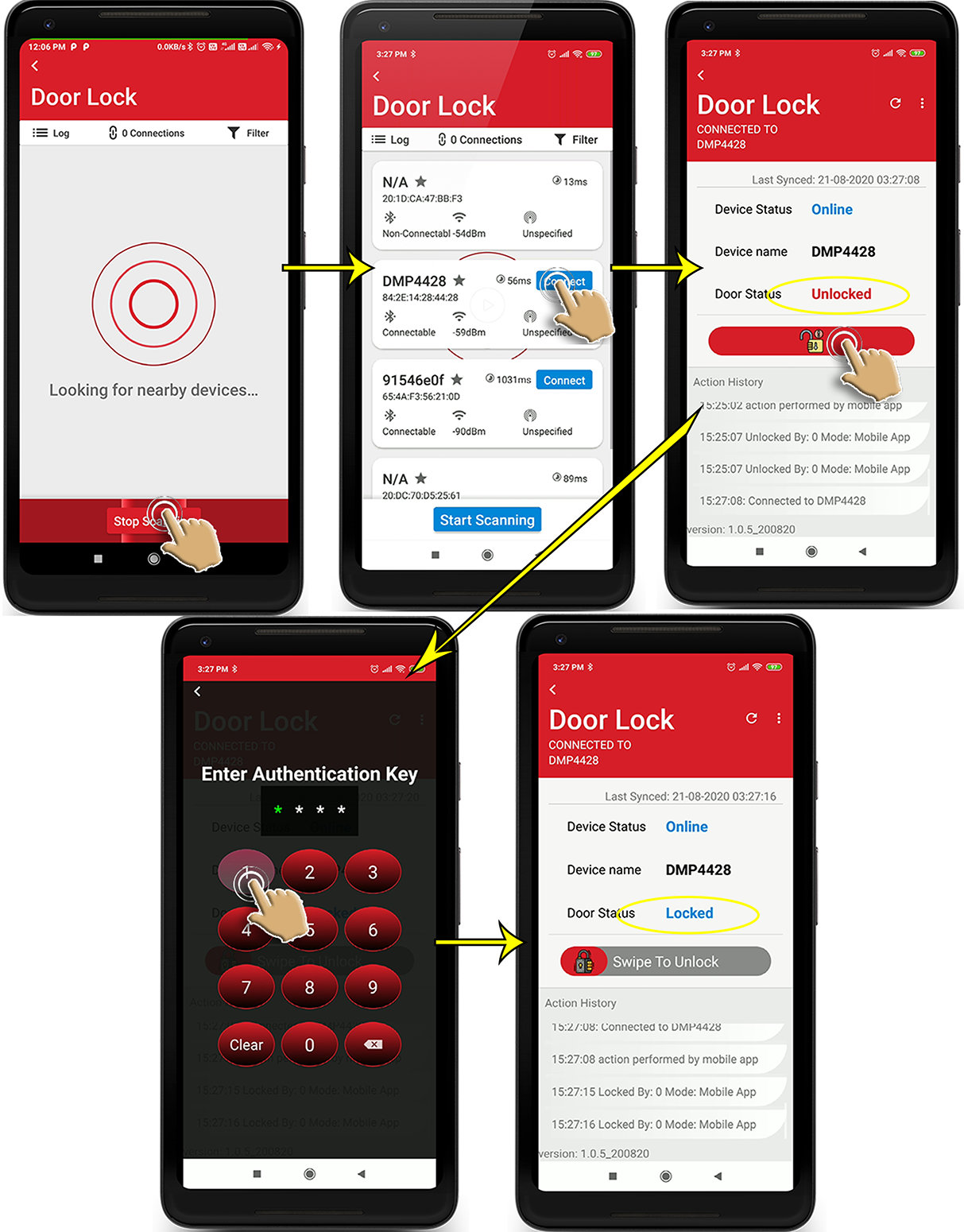


Figure 14: Lock/Unlock Operation Navigation

### Navigation for OTA

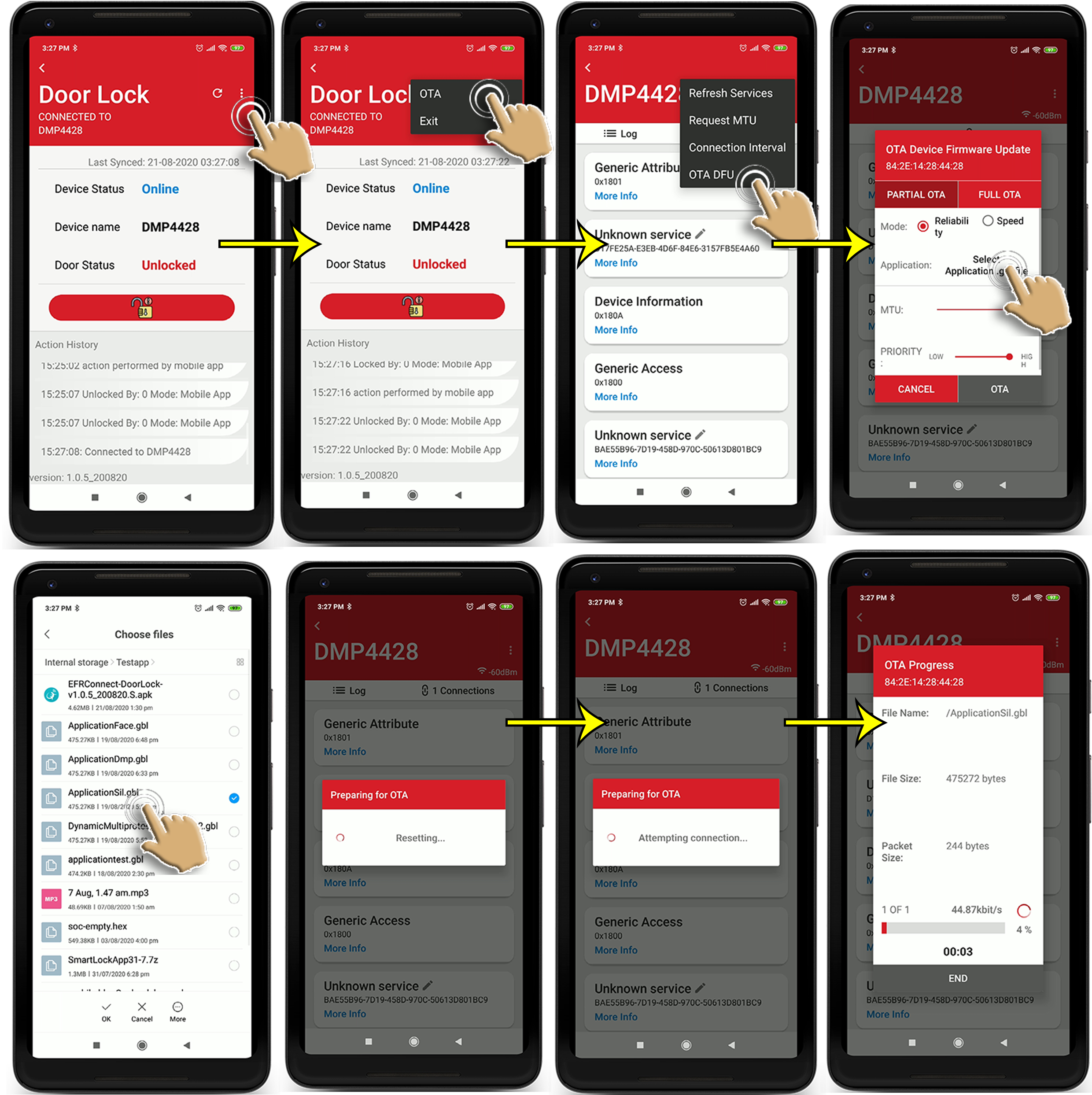


Figure 15: OTA Provisioning Navigation

# Known Issues

# Limitations and constraints

# Warranty And Support

NA.

# Upgrade and Add On Modules

NA.

# Technical Support

Please contact eInfochips EFR32 Door Lock team for support

# Appendix