IMAporter MobileAccess Key

Application for RSW.0x readers

with NFC and BLE technology

Android version

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1 About the app IMAporter MobileAccess Key

IMAporter MobileAccess Key is a user identification application used to communicate with the reader to identify the user.

The app is available for Android and iOS mobile platforms. Please find download link for app on the last page of this guide.

Android app variant enables these types of identification:

NFC	light up the display and tap the reader with your mobile device (app running in the background; device can stay locked)
BLE (inside the app)	necessary to open the app and choose an available door/reader
BLE (notification bar)	click on the Open door button on the notification bar / widget; the mobile device scans for 5 seconds and then establishes communication with a known reader in range
BLE (automatic)	automatic identification based on just lighting up the display; the same process as with the notification bar / widget

After installing the app, it is necessary to introduce the IMAporter MobileAccess Key, which the user receives from the system administrator.

1.1 Receiving the IMAporter MobileAccess Key

The IMAporter MobileAccess Key is created by the ACS administrator and sent to users via email. The variant communication platforms for system administrators to enter mobile keys depend on the access control system installed.

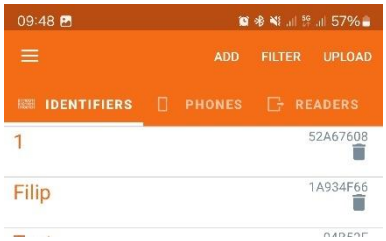


Figure 1: Mobile Admin Platform on your mobile phone

Figure 2: CSI Platform on your PC

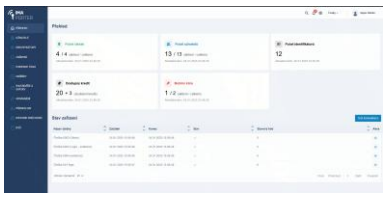


Figure 3: IDcloud Platform on your PC

The user receives an email message with an activation code, a link to download the IMAporter MobileAccess Key app (with automatic platform recognition) and a simple description.

If the user enters a contact phone number instead of an email, they will receive a one-time activation code after entering it in the IMAporter MobileAccess Key application.

Enrolment of a prepared key is very intuitive, and the app will guide the user through the process. The procedure is fully described in the respective chapters of this manual.

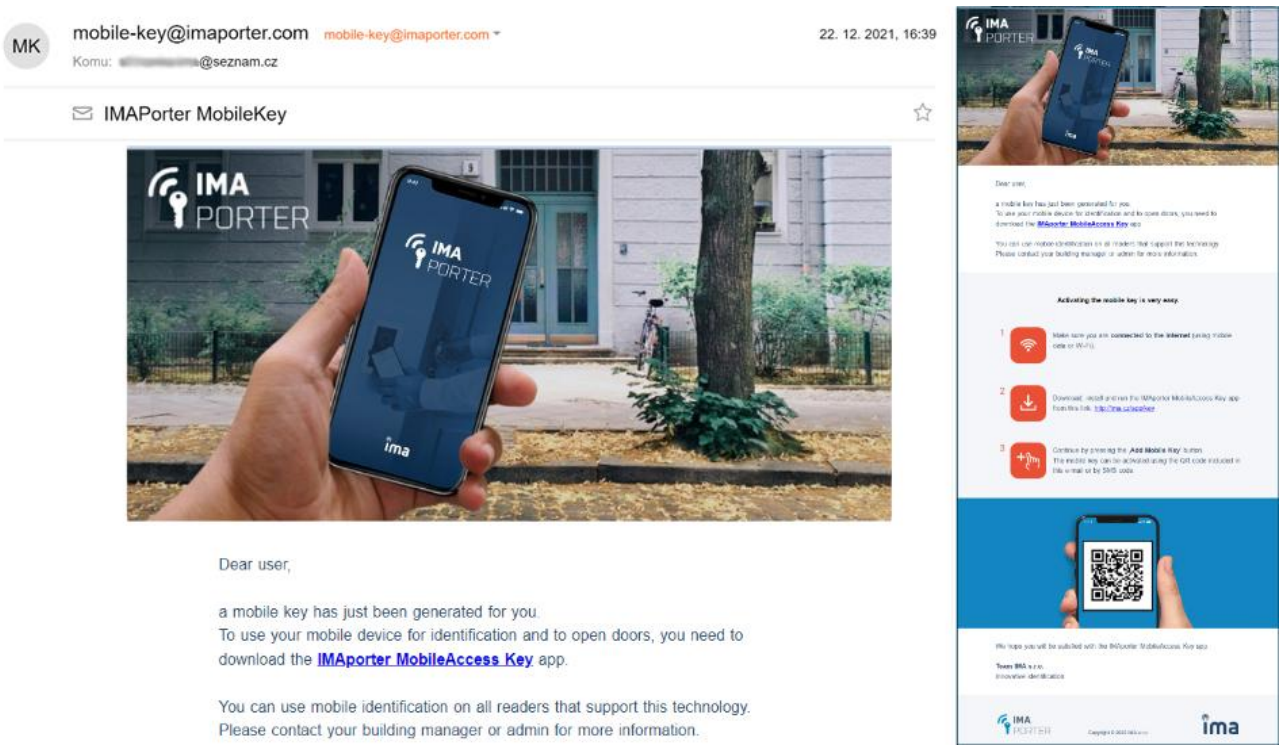


Figure 4: E-mail informing the user about the mobile key and its activation code

Figure 5: Activation code in the form of a QR code for easy scanning

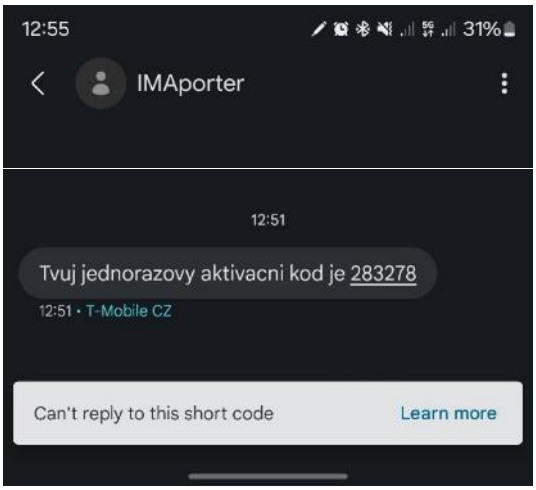


Figure 6: Text message (SMS) with one-time activation code

If you have received an **email** or **SMS** notification of a ready mobile key, you can proceed to download the **IMAporter MobileAccess Key app**.

The first time you launch the app, you will see the home screen, continue the app by clicking **ADD MOBILE KEY** on the next screen.

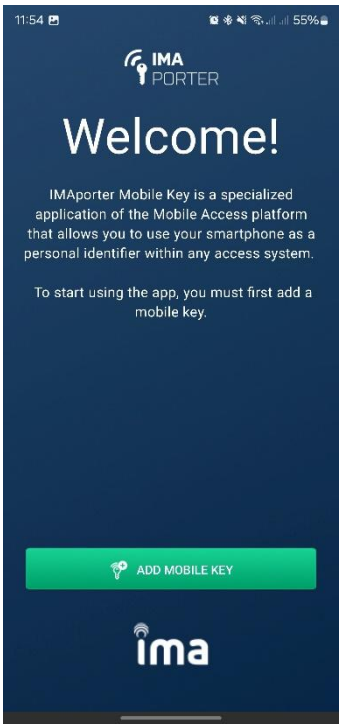


Figure 7: Home screen

When you first launch the app, you will be prompted to enable IMAporter MobileAccess Key to send notifications, enable location tracking, enable camera access and enable nearby device detection (these are access readers only). If you do not enable this, the app will not function properly and will not be able to receive mobile keys.

As a next step, we kindly ask you to agree to the license agreement and privacy policy.

1.2 Booting the mobile key

1.2.1 Booting a mobile key in a newly installed application

Users with a newly installed application are automatically redirected to the Mobile Key Download screen (*Figure 8: Mobile Key Download screen*) by clicking the **Go to Mobile Key Download** button on the Home screen (*Figure 7: Home screen*).

On the Mobile Key Download screen, the app allows the user to enter the mobile key activation code in one of the following ways:

1) Scan the QR code with your camera

When selecting this option, click on the "scan QR code" icon and simply point the camera square at the QR code

2) By entering a one-time activation code from a text message (SMS).

To obtain a one-time activation code, first enter your phone number and then the numeric code from the SMS message (*Figure 9*, *Figure 10*)

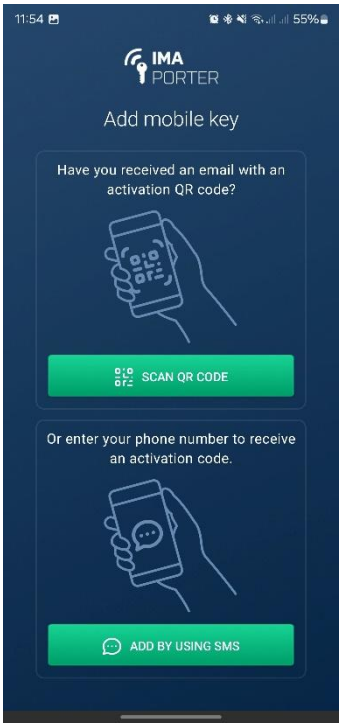


Figure 8: Mobile Key Download screen

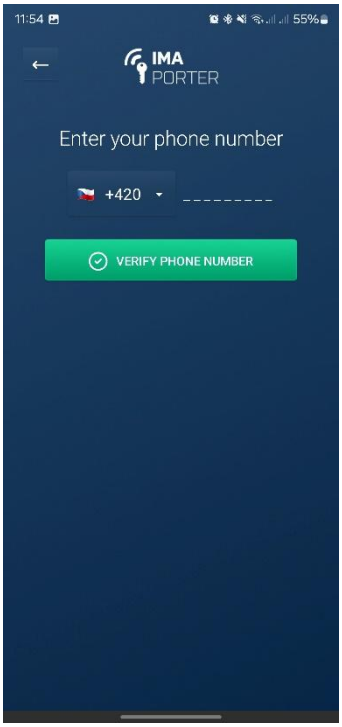


Figure 9: Enter your phone number

Figure 10: Enter the numeric code from the SMS message

After scanning the QR code or entering the one-time activation code from the SMS, a new mobile key is automatically downloaded.

By adding a mobile key, you agree to the terms of use and GDPR policy.

Figure 11: Agree to the Terms of Use

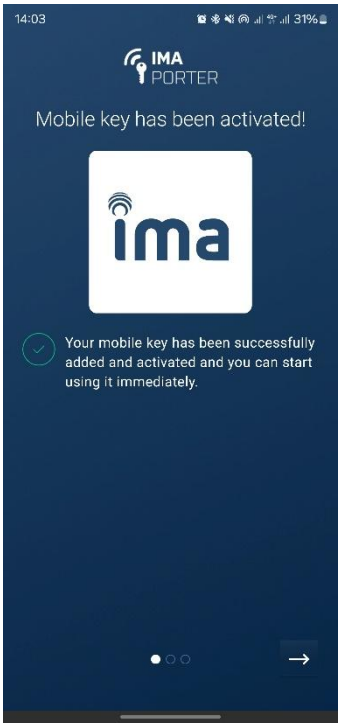


Figure 12: Confirm mobile key activation

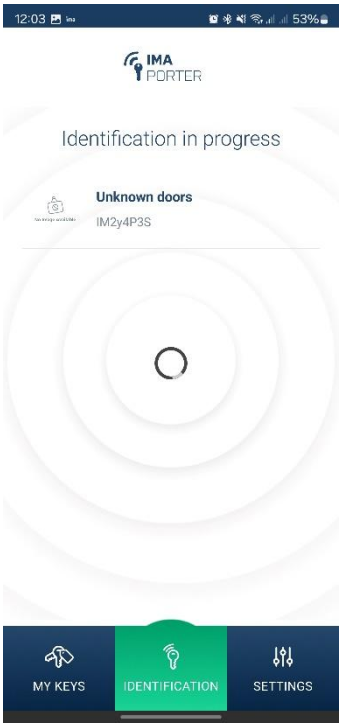


Figure 13: Communication with the reader

Both the activation code and the attached QR code are time-limited and can only be used once. Please take extra care when registering. A new mobile key must be created by the system administrator when the code expires or in the event of an error.

1.2.2 Adding another key in an already installed application

Users who have been using the **IMAporter MobileAccess Key app** for some time, and want to add another mobile key, need to go to the **My Keys** tab in the app menu and tap the **green + icon** in the top right corner of the screen (*Figure 14: My Keys tab with + icon*).

Figure 14: My Keys tab with + icon

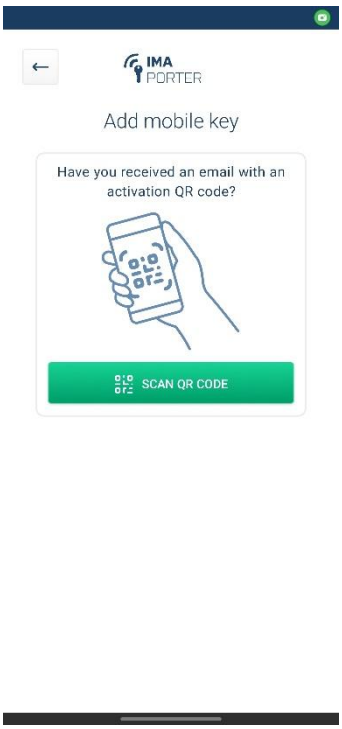


Figure 15: Adding the mobile key

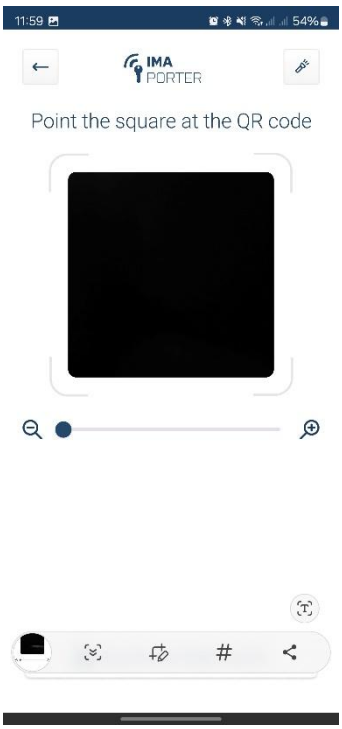


Figure 16: Loading the QR code

The following procedure is similar to entering the mobile key when the app is initially launched (see *Figure 15: Adding the mobile key* and *Figure 16: Loading the QR code*).

1.3 Identification with BLE technology

To test the correct BLE identification function, go to **Identification** in the menu.

In this mode, the application will scan the available readers near their ID.

Clicking on a reader sends the Mobile Key and a communication window appears for about 1 second, the reader beeps and the green or red LED on it lights up depending on the user permissions set in the access system (ACS variants – IMAporter Mobile Admin, CSI, IDcloud).

Figure 17: Scanning available readers

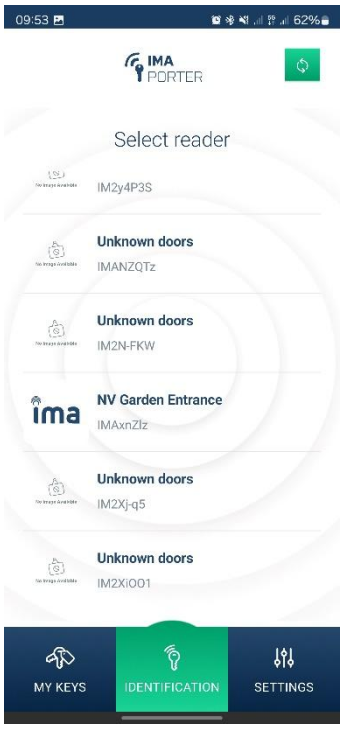


Figure 18: List of available readers

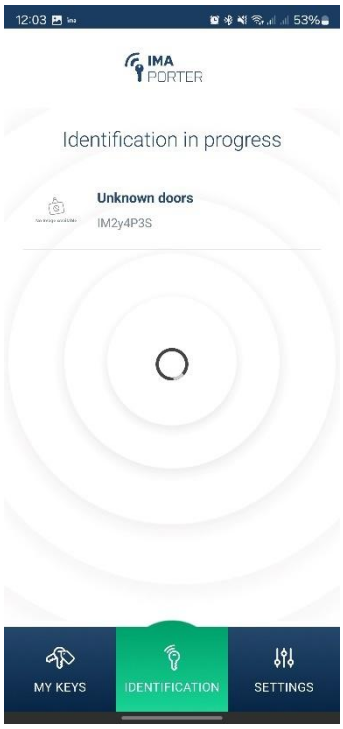


Figure 19: Communication with the selected reader

1.3.1 BLE reader pairing

In order for readers to be recognized by name, the readers must be pre-paired with the mobile key.

BLE readers are paired with the mobile key in IMAporter MobileAccess by an administrator (administrator) via the IDcloud or CSI platform.

The paired reader with the mobile key is visible in the "My Keys" section and when you click on a specific mobile key.

This option is automatically available to users who have mobile keys **registered in IDcloud**.

Readers paired with an administrator have special features:

- They are **automatically downloaded** from the server when the mobile key is downloaded to the device.
- Any changes made to an **IDcloud** or **CSI platform** are updated in the IMAporter MobileAccess Key.
- Readers do **not need to be manually paired**
- Readers downloaded from IDcloud **cannot be deleted or renamed by the user**

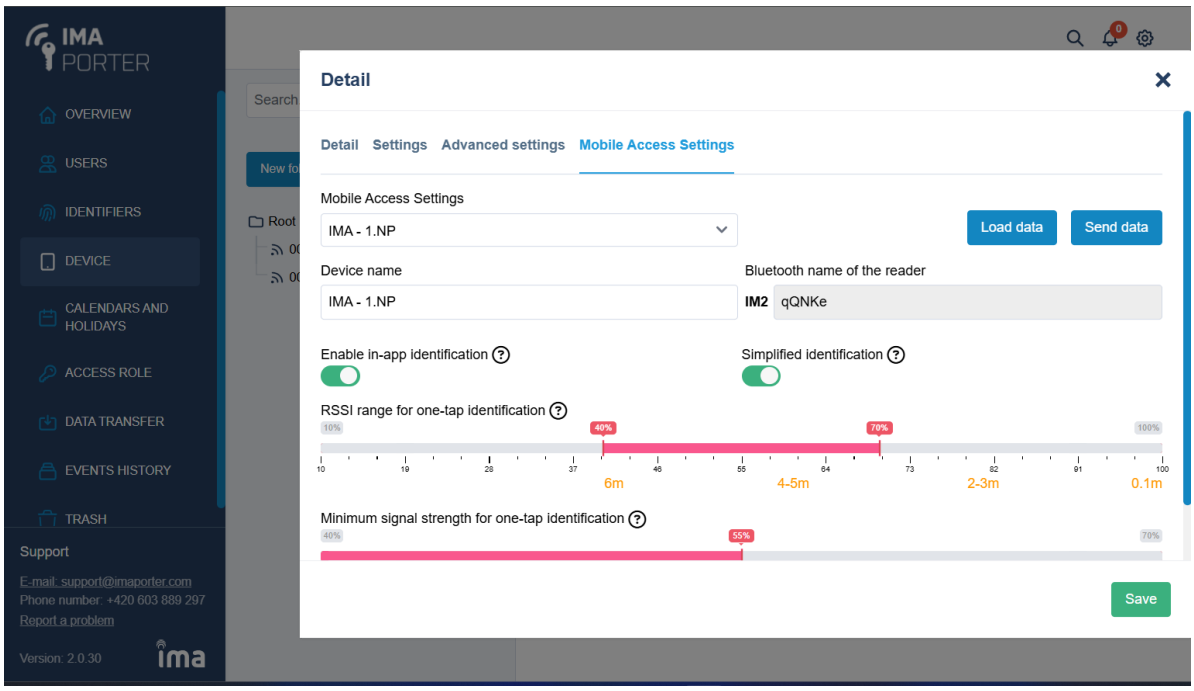


Figure 20: Setting up a reader by an administrator via the IDcloud platform

As shown in the screenshot above, the administrator can limit the functionality of the readers. While the standard signal range for simplified identification is from 10% (closest to the reader; about 10 cm) to 100% (farthest; about 10 m), as shown in *Figure 20*.

To change existing settings, go to the **My Keys** tab in the application menu and click **Detail of Reader**. Changes can only be made to the extent specified by the system administrator.

Figure 21: My Keys tab

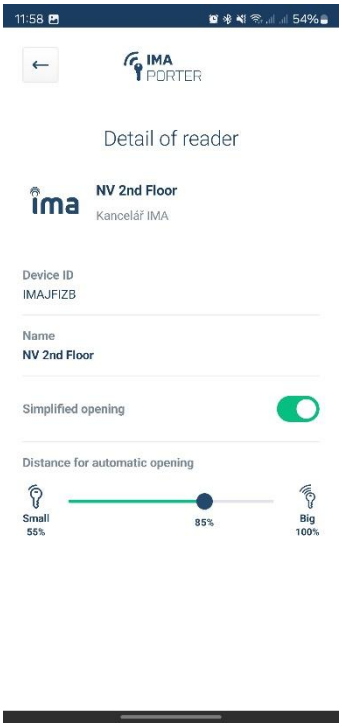


Figure 22: Distance settings

1.3.2 Simplified opening of paired BLE reader

If necessary (and with the administrator's permission), the user can change the reader settings within a predefined range or disable some enabled functions. For readers that have this feature enabled, it is therefore always possible to disable or limit the scope of simplified identification.

Now go to the **Settings** tab and enable **Experimental features**, which include one-tap identification (from the notification bar) or automatic identification (by lighting up the display).

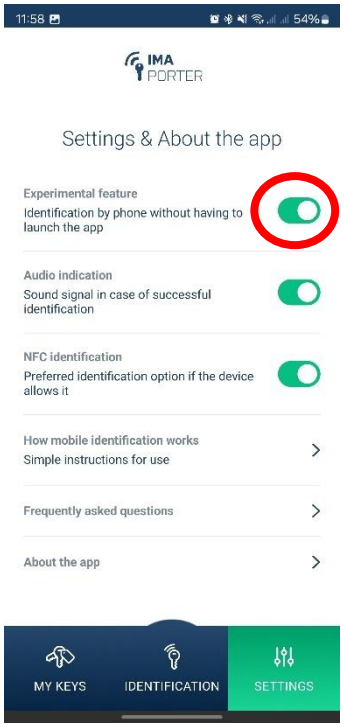


Figure 23: Settings tab

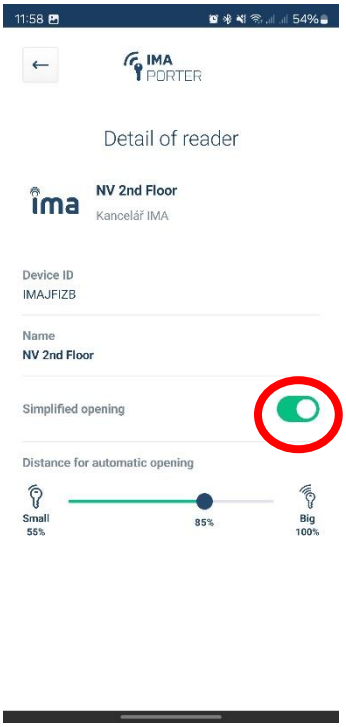


Figure 24: Detail of reader

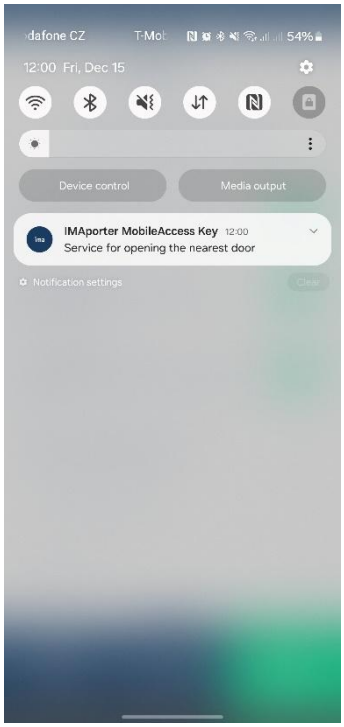


Figure 25: Mobile Key service on the notification bar

For simplified BLE identification from the notification bar or by lighting the display, this feature must be enabled both in the global application settings (*Figure 23*)and in the configuration of each individual reader - via the **My Doors** tab (*Figure 24*).

For readers paired with an administrator, this setting can be enabled automatically.

When you tap the **Open Door** button (*Figure 25*) in the **notification bar** or when the phone display lights up for approximately 5 seconds, it searches for available readers.

If during this time it finds a reader that is authorised to open and this reader indicates sufficient signal strength (depending on the custom signal strength setting on the **My Doors** tab of each individual reader), communication is established and the reader unlocks after approximately 1 second..

*If the reader doesn't respond when you turn on your Android phone's display, make sure you have **battery optimization turned** on for the **IMAporter MobileAccess Key app**. (setup instructions. Chapter 2 Support and error states).*

*When the **Android auto** function is activated (when the vehicle and mobile phone are paired), the "**simplified opening on display only**" function in IMAporter MobileAccess cannot be used.*

1.4 Identification with NFC technology

Once the Mobile Keys are in place, you can proceed to test the identification.

Android mobile devices equipped with NFC technology allow easy identification by placing the phone against the reader.

Verify that NFC is active on your phone and with the display lit, bring the phone to the reader.

To identify using NFC technology, simply turn on the display (or unlock the device) and there is no need to launch the app.

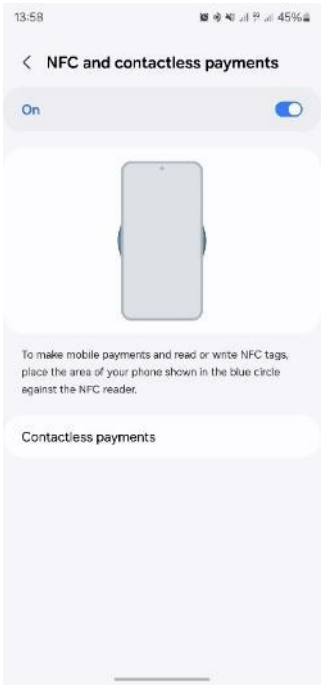
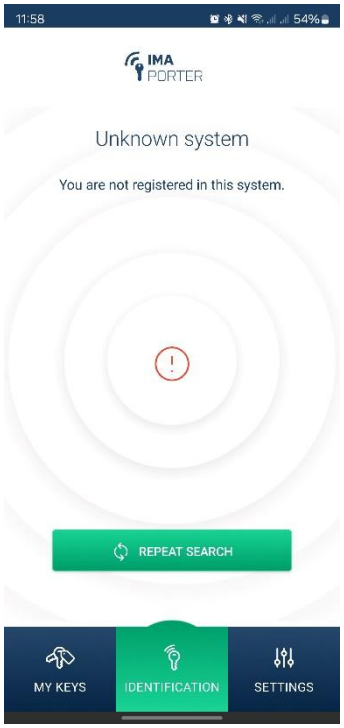


Figure 26: Make sure the NFC function on the device is switched on

For error-free and fast identification, you need to know the antenna location point on the phone. Each phone has a different antenna with different performance, so it takes some testing to find the right spot. The antenna is usually located on the back of most phones.

2 Support and error states

During identification using BLE or NFC communication, the app reports a problem, and the reader does not respond.



Contact the system administrator.

The mobile app says that the identifier has been successfully sent, but the reader is not responding/glowing red.

The user is not allowed to enter; their user ID is not entered into the reader controller.

If you are sure the authorization is valid, try re-opening the door with the mobile key.

The BLE reader doesn't respond when the display of your Android phone lights up

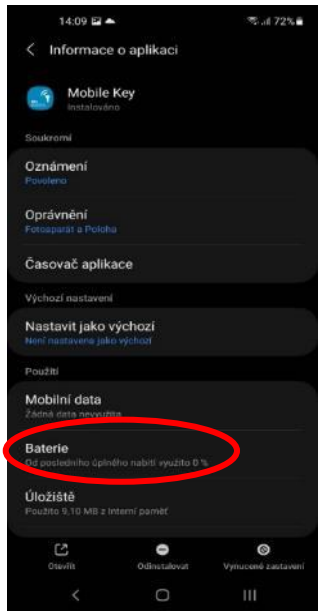
If the reader does not respond when your Android phone's display lights up, make sure you have enabled **battery optimization** for the **IMAporter MobileAccess Key** app.

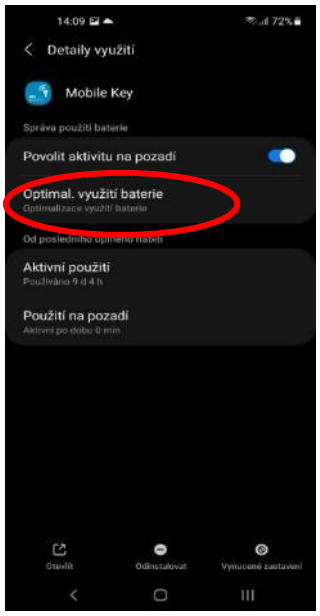
For Android phones running Android 11 and above, you must have **battery optimization** enabled for functional simplified identification when the display lights up.

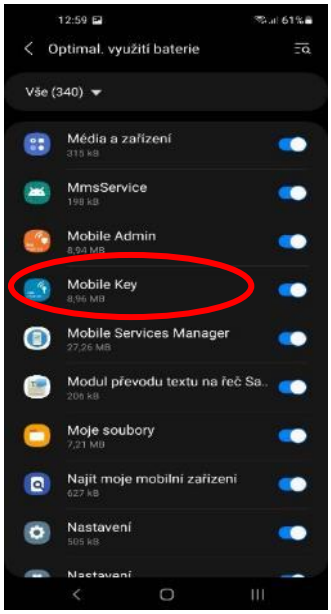
*The general procedure for optimizing the battery can be found **HERE** (https://support.google.com/pixelphone/answer/7015477?hl=en)*

Variant paths to set battery optimization for the application:

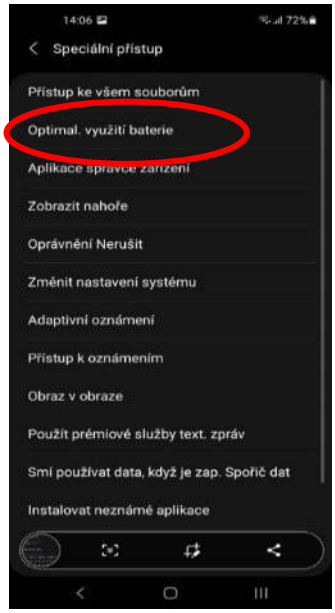
1. Settings -> Applications -> select IMAporter MobileAccess Key application -> Application Information -> Battery -> Optimize Battery Usage -> TURN ON

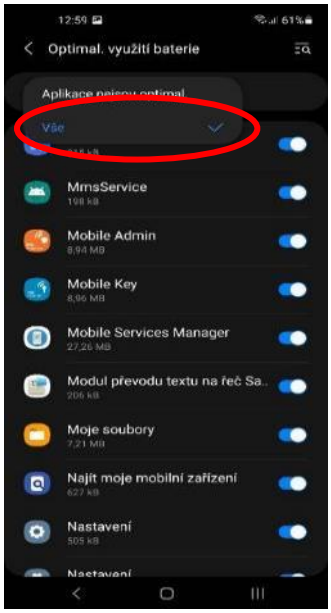


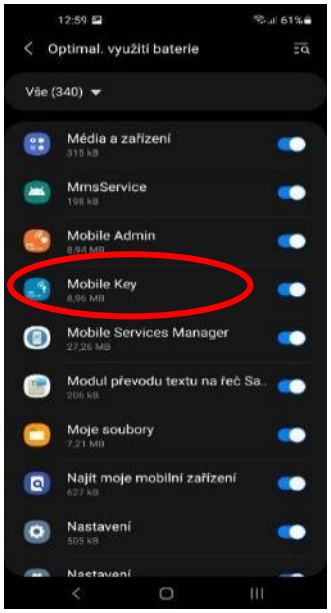




2. Settings -> Search for "battery" -> select Optimal battery usage -> view all apps -> select IMAporter MobileAccess Key -> TURN ON







3 Download the app for Android

To download the IMAporter MobileAccess Key identification app, scan the QR code with your mobile phone.

Android

www.ima.cz/app/key/andro

4 Contact information

Supplier and support

Institute of Microelectronic Applications

Na Valentince 1003/1

Prague 5 - Smíchov

www.ima.cz

Document history

Revision	Date	Author	Description
v 1.5	16.2.2018	Karel Kalivoda	First published version of the manual
v 1.6	14.5.2021	Hanka Šifnerová	Update for BLE
v 1.7	19.5.2021	Karel Kalivoda	iOS manual and reader download from IDcloud
v 1.8	30.7.2021	Hanka Šifnerová	Battery optimization for BLE identification
v 1.9	9.8.2021	Hanka Šifnerová	Setting up widgets for iOS
v 2.0	2.2.2022	Hanka Šifnerová	Update email info
v 3.0	11.11.2023	Hanka Šifnerová	New version of IMAporter MobileAccess Key 2023
v 3.1	4.4.2024	Hanka Šifnerová	Update reader distance settings
v 4.0	1.5.2025	Filip Kylar	Addition of NFC functionality for iOS; splitting of iOS and Android manuals

First release: february 2018