iLOQ S50 Android and Huawei Application User Guide

1. Introduction

The iLOQ S50 app for Android or Huawei is a digital key that allows you to use your Android or Huawei phone to open the iLOQ S50 NFC locks that you have valid access to. The access rights are sent to your phone and managed remotely over the air by a locking system administrator. This guide helps you get started with the app and walks you through its functions.

2. Installing the app

The iLOQ S50 app for Android or Huawei works in most NFC-enabled Android phones or Huawei phones running the Android OS. However, considering the great variety of form factors and designs in different phone models affecting NFC performance, it is not guaranteed that the app works seamlessly in all NFC-enabled Android or Huawei phones. Therefore, it is recommended to test the application on your phone before taking it into full use.

Before installing the app, make sure that:

- 1. Your phone is NFC compatible.
 - a. NFC is required for lock opening. The app cannot be installed from Google Play on phones that do not support NFC.
- 2. You know where the NFC antenna is in your phone.
 - a. This application uses the wireless energy harvesting capability of NFC technology for lock opening. To ensure smooth and efficient energy flow between the phone and lock during opening, the NFC antenna on the phone must be placed accurately against the lock's antenna knob. The NFC antenna may be in different places depending on the phone model. To check the location of the NFC antenna, refer to your phone's operating instructions or contact the manufacturer. Please keep in mind that NFC performance may be affected if your phone has a cover.
- 3. Your phone is not rooted.
 - a. Rooting exposes devices to security threats. The iLOQ S50 app cannot be installed and used in rooted devices.
- 4. Your phone operating system is running the latest available version.
 - a. This is to ensure your phone is protected by the latest security patches. For security reasons, it is important to always keep the operating system updated to the latest version.

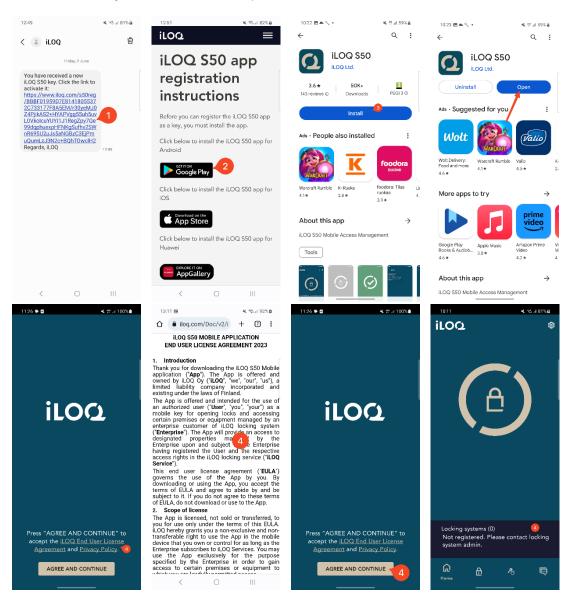
The iLOQ S50 app is free to install from Google Play or Huawei AppGallery. Note: you must have a Google account on your device to install apps from Google Play or a Huawei account on your device to install apps from AppGallery. After installation, the app must be registered as a key to a locking system before it can be used.



2.1 Installing the app from iLOQ's registration message (SMS or email)

Android phones:

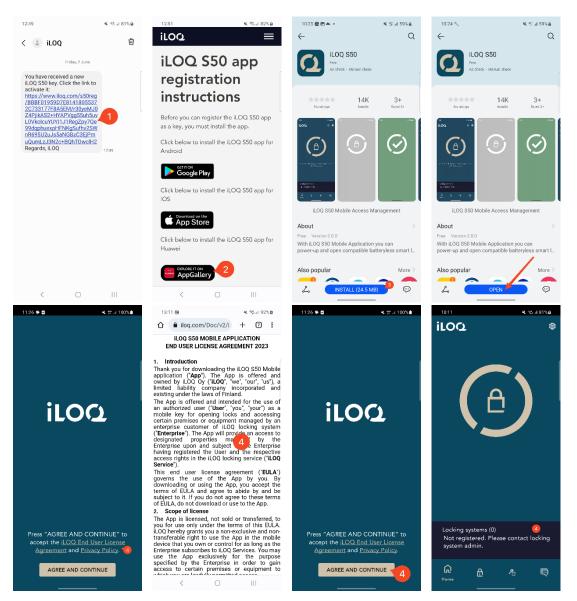
- 1. Open the iLOQ registration message sent to you by SMS or email and press the link. The instruction page opens in your default browser.
- 2. Press the *GET IT ON Google Play* button. You will be directed to the iLOQ S50 app installation page on Google Play.
- 3. Press the *Install* button. Once the app has been installed, press the *OPEN* button.
- 4. Read the EULA (End User License Agreement) and Privacy Policy. After reading both documents, navigate back to the app and press AGREE AND CONTINUE to accept the terms and proceed to the app. The app opens and shows Not registered. This is because the app is installed but has not yet been registered as a key to any locking system. Continue to chapter 4.



Huawei phones:



- 1. Open the iLOQ registration message and press the link. The instruction page opens in your default browser.
- Press the *EXPLORE IT ON AppGallery* button. You will be directed to the iLOQ S50 app installation page on AppGallery.
- 3. Press the *INSTALL* button. Once the app has been installed, press the *OPEN* button.
- 4. Read the EULA and Privacy Policy. After reading both documents, navigate back to the app and press AGREE AND CONTINUE to accept the terms and proceed to the app. The app opens and shows Not registered. This is because the app is installed but has not yet been registered as a key to any locking system. Continue to chapter 4.





2.2 Installing the app directly from Google Play

You can also install the app directly from Google Play instead of installing it from the registration message.

- 1. Open Google Play
- 2. Search for "iLOQ S50" and click the app icon
- 3. Follow steps 3 5 described in chapter 2.1

2.3 Installing the app directly from AppGallery

You can also install the app directly from AppGallery instead of installing it from the registration message.

- 1. Open AppGallery
- 2. Search for "iLOQ S50" and click the app icon
- 3. Follow steps 3 5 described in chapter 2.1



3. Location permissions

Your locking system administrator can enable a location requirement for your phone key. This is a security feature where a user's location is saved to key audit trails for every lock opening or closing event.

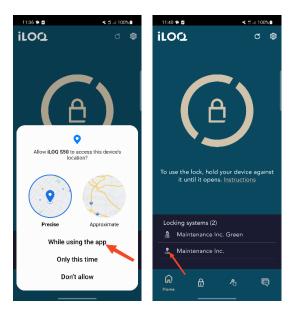
When the location requirement is enabled for your phone key, the iLOQ S50 app will ask permission to use location data.

For optimal results, make sure the following settings are set up on your phone:

- Location services enabled
- Location permission enabled for the iLOQ S50 app
- Precise location enabled for the iLOQ S50 app (Android 12 and newer)

The iLOQ S50 app checks the location only when an NFC connection is established with the lock.

A small indicator is shown next to the locking system name indicating that your location will be noted on every lock opening/closing event.



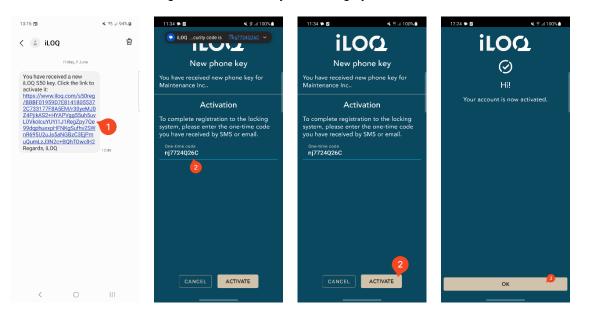


4. Registering the app as a key to a locking system

Before the installed app can be used, the app must be registered as a key to a locking system. The registration is always initiated by a locking system administrator who sends you a registration SMS or email. In addition to the registration message, you will also receive an activation code by SMS or email. When you have received the registration message, follow the steps below:

- 1. Open the iLOQ registration message and press the link. The app opens and starts registration.
- 2. The app will ask for an activation code. Enter the one-time activation code that you received in a separate SMS or email and press *Activate*.
 - a. If you are registering via SMS, the iLOQ S50 app will enter the one-time activation code automatically.
- 3. If the one-time code entered was valid, your phone key is now activated. Press **OK**. The app is now ready for use.

If the activation code is entered incorrectly too many times, the link and code will become invalid. You will need to order a new registration link from your locking system administrator.





4.1 Registering the app to multiple locking systems

The app can be registered as a key to multiple locking systems. Additional locking systems can be registered in the same way as the first by following the steps described above. The *Locking systems* view, at the bottom of the screen, shows the list of locking systems where the app is registered as a key.

In the *Locking systems* view, the first four locking systems are active, i.e., the locks in them can be opened with the app. The other locking systems on the list are in standby status. The first attempt to open a lock in a standby locking system will fail, but the app will then promote the locking system to active status, and the next attempt to open the lock will succeed.

Please note that a maximum of four locking systems can be active at one time. If a standby locking system is promoted to active status, the app will move one of the active systems to standby status.





5. Opening locks with the app

Access rights determine which locks can be opened with the app, at what times and with what conditions. A user's access rights are defined by the administrator in the locking system management software and given to the app during registration. The administrator can trigger forced updates to access rights at any time. For security reasons, the app does not show which locks it has access to. You can get this information from your locking system administrator.

To open a lock with the app:

- 1. Make sure your phone's NFC is switched on.
- 2. Open the iLOQ S50 app.
- 3. Place your phone's NFC antenna area close to the lock's antenna knob.
 - a. If you need more assistance or support about opening a lock, press the *Instruction* link.
- 4. When the app starts to communicate with the lock, the screen turns gray. Hold the phone still until the app shows the green opening screen indicating successful opening. The internal locking mechanism of the lock is now activated, and you can open the lock by turning the knob.



Notes:

The communication time (gray screen) may be a little longer if the app has a programming task, an audit trail fetching task for the lock, or if the lock is configured to require server validation from the key during opening. If the lock is configured to require server validation from the key, the phone must have a network connection.

Locks can be opened with the app also when the app is in the background, i.e., without bringing the app to the foreground. However, there are some scenarios where it is necessary to open the app and refresh keys from the server before opening the lock.



These scenarios are:

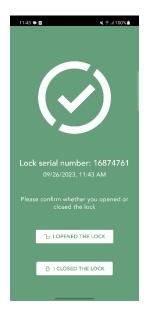
- The phone has been restarted.
- The key expiry interval has elapsed. Read more about the key expiry interval in chapter 7.

In the above scenarios, open the app and press the name of the locking system in the *Locking Systems* view to go to the *Locking System Details* view, and refresh the key from the server and reset the expiry interval counter for the displayed locking systems by pressing *REFRESH*.

6. Lock opening/closing confirmation

The locking system administrator may set a lock opening/closing confirmation requirement for the locking system. If enabled, when opening or closing locks that require user credentials and NFC reading for both opening and closing (e.g., certain padlocks), you will be asked to confirm which action (opened or closed) you performed. To confirm, select the correct option on the display.

Note that this selection does not affect the lock itself in any way, it is only used for lock event logging purposes.





7. Key expiry intervals

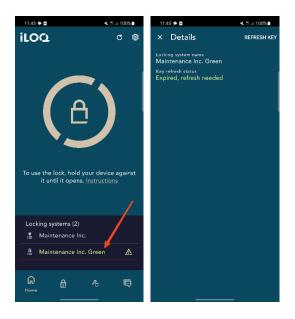
The locking system administrator may set a key expiry interval for your key. The key expiry interval is a security feature that requires the user to refresh keys from the server at regular intervals to ensure that the access rights are always up to date.

The key expiry interval is a locking-system-specific setting. If the app has been registered as a key to multiple locking systems, some locking systems may have key expiry intervals set whereas others may not. There can also be different expiry intervals set in different locking systems. If your key is expired (needs to be refreshed), the name of the locking system is shown in yellow followed by a yellow triangle.

To check the key expiry details for a locking system, press the name of the locking system in the *Locking Systems* view to go to the *Locking System Details* view. In this view the *Key Refresh Status* tells you if you need to refresh your key right now or shows the time remaining after which you need to refresh it.

To return to the main screen without refreshing keys from the server, press Close.

To refresh the key from the server and reset the expiry interval counter for the displayed locking systems, press **REFRESH**.





8. Locking system details

To go to the *Locking System Details* view, press the name of the locking system in the *Locking Systems* view.



The Locking System Details view displays the following information:

- Locking System Name: Name of the locking system.
- *Key Refresh Status*: Tells you if you need to refresh your key right now or shows the date on which it must be refreshed at the latest. If the time remaining is less than 24 hours, you'll see the hours and minutes remaining until it must be refreshed.
- **Opening Event Location Logging**: This is a security feature where a user's location is saved to lock audit trails for every lock opening or closing event.

Note that *Key Refresh Status* and *Opening Event Location Logging* are only displayed if either or both have been set to your key by the administrator.



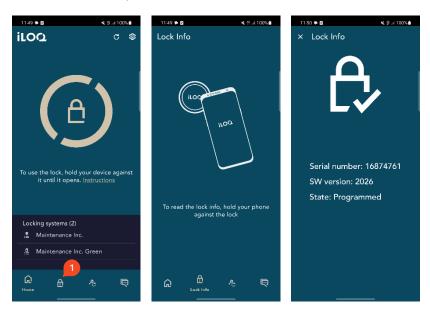


9. Reading lock information with the app

In addition to opening locks, you can also use the app for reading lock information such as the lock's serial number, software version and programming state. Note that lock information can only be read from iLOQ S50 locks.

To read lock information:

- 1. Press the Lock info button (lock icon).
- 2. Place your phone's NFC antenna area close to the lock's antenna knob. Hold the phone still until the app shows the lock information.
- 3. Press **X** to exit from reading the lock information or scan another lock by repeating step 2.





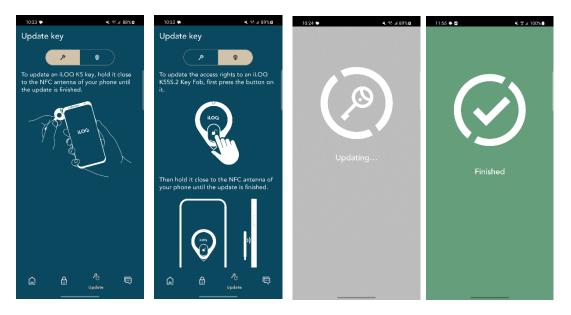
10. Update Key

The iLOQ S50 application can also be used to update access rights to iLOQ K55S.2 Key Fobs and iLOQ K5 keys. The access rights are managed by an administrator, and only they can send access right updates to your Key Fob or key.

Press the **Update Key** button at the bottom of the display to go to the **Update Key** view. In the **Update Key** view, choose the key icon or the Key Fob icon depending on which one you want to update. Then, follow the instructions on the phone display to perform the update.

Note that when using Android phones, key and Key Fob updates can be performed while the S50 app is running in the background. To update a key, hold it close to the NFC area of your phone while the app is running in the background. To update a Key Fob, press the button on it and hold it close to the NFC area of your phone while the app is running in the background.

Note that iLOQ K55S.1 Key Fobs need to be updated with the iLOQ FobApp.





11. Locking system admin messages

The locking system administrator can send messages to phone key users from the management system. This requires runtime permission from the user (Android versions 12 and 13).

Messages can be, for example, general information sharing, additional info related to received keys, etc. Messaging in the app is one-way, which means that the app can receive admin messages from the management system, but you cannot reply to them.

To view received messages:

- 1. Open the app.
- 2. Press the *Messages* button to view a received message.

You can delete messages by pressing the trash can button on the top right corner of the messages view. Note: all messages will be deleted at once.

