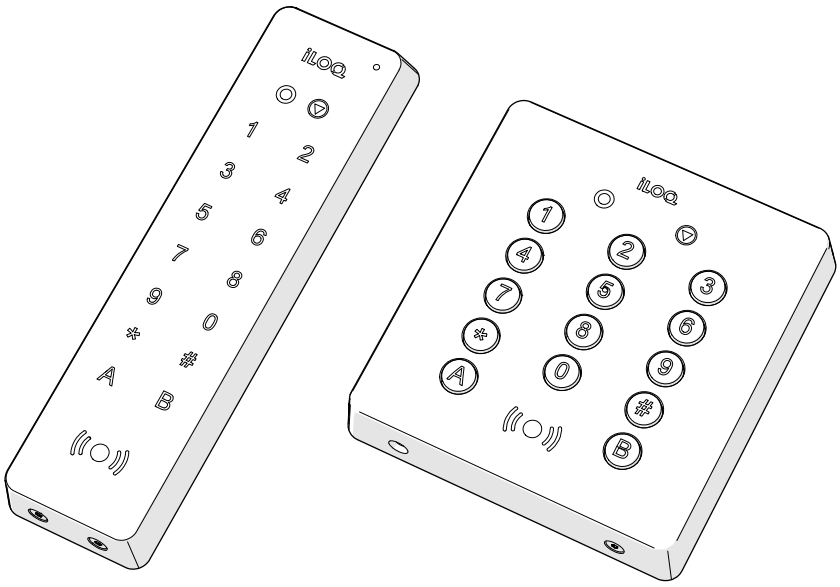
iLOQ 5 Series
iLOQ NFC Readers

iLOQ N504i NFC/PIN Door Reader
iLOQ N505i NFC/PIN Wall Reader

User guide



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iLOQ Oy
support.iloq.com

Contents

1. Safety information

1.1 Safety signs

Sign	Description
	General notice sign. Indicates particularly important information about the installation and deployment.
	Read these instructions carefully before installation. This information is to ensure your safety and the long lifetime of the products installed.

1.2 General warnings

	Do not use excessive force when using the devices.

2. Overview

iLOQ NFC Readers are used to read and write data to iLOQ Keys. A valid key will open the door, and each time the key is used, it will be updated with the latest data.

iLOQ NFC Readers are connected to the reader bus of the N501 Standalone Door Module, N501.1 Standalone Door Module, iLOQ N502 Online Door Module or the iLOQ N503 Offline Door Module, or to the chain bus of the iLOQ N507 Online I/O Module to control electronic devices. iLOQ NFC Readers can also be connected directly to the main bus of the iLOQ N500 Net Bridge to work as a hotspot for updating keys.

iLOQ NFC Readers use NFC technology to read and write data to iLOQ S5 and iLOQ S50 keys, but also Mifare RFID tags can be read. iLOQ N504i NFC/PIN Door Readers and iLOQ N505i NFC/PIN Wall Readers are equipped with a keypad that can be configured to demand a key + PIN-code combination or, for lower security, open the door with just an access code.

3. Care and maintenance

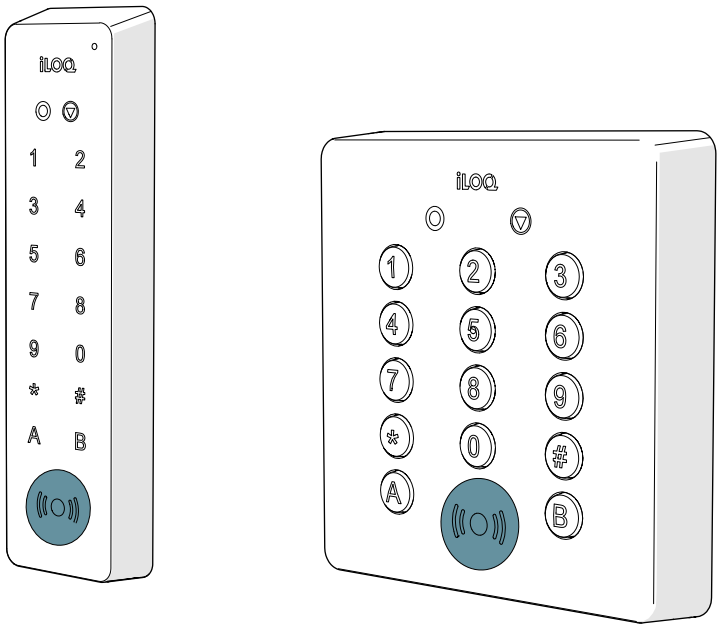
The product is designed to be maintenance free, but it is recommended to clean the keypad with a damp cloth and mild detergent.

4. Before first use

If using the iLOQ K55S.1 or K55S.2 Key Fob, charge the Key Fob before the first use.

5. iLOQ NFC Reader antenna location

The iLOQ NFC Reader antenna location is marked with an antenna icon. The location is highlighted in the following picture.



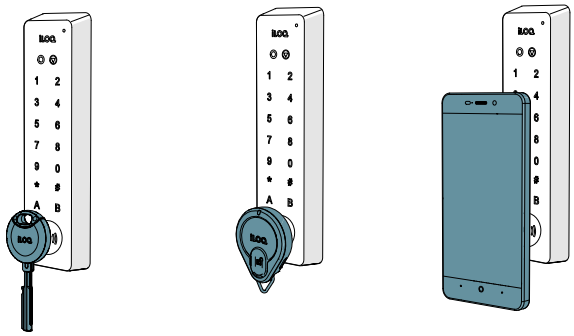
6. Using the iLOQ NFC Reader

6.1 Using the reader with a key

1. Touch the iLOQ NFC Reader antenna with the bottom of the K55S.1 or K55S.2 Key Fob, -antenna of the K5S.X key, Mifare RFID card or -NFC antenna of the iLOQ S50 Phone key.
2. Wait 1 - 3 seconds until the key reading is finished.

NOTE! When using the iLOQ K55S.2 Key Fob, press the button on the iLOQ K55S.2 Key fob to activate it. The LED will blink amber to indicate it is ready to be used.

NOTE! iLOQ S50 Phone key application must be active before use. Phone specific instructions must be applied.



NOTE! Before using the locks, please check the location of the NFC antenna in your phone to know the best position to hold the phone against the lock-reader knob. Information may be available in the datasheet of your phone.

If a valid key is used, the iLOQ NFC Reader communication LED shows a green light together with a sound to indicate that the door is unlocked. Non-valid key triggers a red LED and an error sound.

6.2 Using the reader with an access code

1. Enter your code on the keypad and press #.

If a valid code is entered, the iLOQ NFC Reader communication LED shows a green light to indicate that the door is unlocked. Non-valid code triggers a red LED and an error sound.

6.3 Using the reader with a Key + PIN-code

1. Touch the iLOQ NFC Reader antenna with the bottom of the K55S.1 or K55S.2 Key Fob, -antenna of the K5S.X key, Mifare RFID card or -NFC antenna of the iLOQ S50 Phone key.
2. Wait 1 - 3 seconds until the key reading is finished.

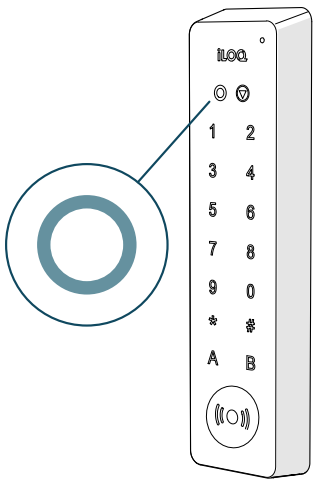
If a valid key is used and a key PIN-code calendar is active, the reader keypad will start to blink, prompting you to enter the key PIN-code. Non-valid key triggers a red LED and an error sound.

3. Enter the key PIN on the keypad and press #.

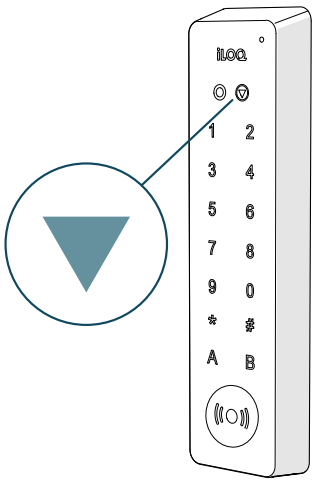
If a valid code is entered, the iLOQ NFC Reader communication LED shows a green light to indicate that the door is unlocked. A sound indication is given for valid access.

7. LED functions of the iLOQ NFC Reader

Connection status

	• Amber light	Connection to the server is temporarily lost. Reader and keys can be used normally, but the keys will not receive new updates from the server.
	• Red light	Maintenance required. Keys cannot be used.
	• Green light	Normal operation. Connection to iLOQ Cloud is OK.
	• Blue light	Indicates that the reader firmware is being updated. Update will take approx 2 min. Don't turn off the power! Reader cannot be used at this time.

Key communication status

	• Amber light	Key communication has started
	• Purple light	Phone key communication has started.
	• Red light	The key did not have a valid access right or the key communication has failed. Sound indication confirms the denied access.
	• Green light	Access granted - Lock will be opened. • A valid key with correct access rights was used • A valid access code was used Sound indication confirms the access granted event.

8. Replacement and disposal

If a product is defective, replace it with a new one using the installation instructions. If you are not sure how to replace or discard a certain product, contact the device manufacturer. Contact information can be found at support.iloq.com.

8.1 Disposal of decommissioned products

	Never discard an electrical appliance in household waste. Follow local laws and regulations for safe and environmentally friendly product disposal.
	Before discarding products, bear in mind that most iLOQ products are reusable. All programmable products can be reset to factory settings, after which they can be reused in another system.

Recycling instructions of decommissioned products are depicted below.

Decommissioned product	Sorting
Decommissioned iLOQ fittings, mounting accessories and thumb turn knobs can be recycled as scrap metal.	
Decommissioned iLOQ products containing electronics and circuit boards, such as iLOQ Lock Cylinders, keys, net bridges, door modules, key and NFC readers, and relay cards, must be recycled at an electrical and electronic equipment collection point.	
iLOQ products containing batteries and accumulators, such as key fobs, programming keys and clock circuits, should be recycled at a regional collection point for batteries and small accumulators.	
Most iLOQ packaging materials are suitable for cardboard and plastic recycling.	

9. Compliance

9.1 iLOQ N504i NFC Reader

9.1.1 CE

This product is compliant with Directives 2014/53/ EU, 2011/65/EU and 2015/863/EU. The full text of the declaration of conformity is available at https://www.iloq.com/en/declaration-of-compliance/.

9.1.2 FCC

FCC ID: 2A2HZN504I
This 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.

Note: 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.

Changes or modifications made to this equipment not expressly approved by iLOQ Oy may void the FCC authorization to operate this equipment.

9.1.3 ISED

IC: 30160-N504I
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s) and complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation of the device.

IC: 30160-N504I
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage.
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

9.1.4 Australia and New Zealand

R-NZ

9.2 iLOQ N505i NFC Reader

9.2.1 CE

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9.2.4 Australia and New Zealand

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