



VERTO zero NFC

Operating Instructions

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GENERAL DESCRIPTION

The VERTO zero NFC locking system is an electronic knob lock based on NFC technology, designed for indoor use. This user manual provides the information required for correct operation of the locking system. Keep the user manual in an easily accessible place. Improper use may damage the locking system and will void any warranty claims.

Be sure to observe all warnings and read the user manual completely before starting installation, commissioning, and programming.

The use of this locking system in combination with additional mechanical or electronic solutions from other manufacturers must be checked for compatibility. No liability is accepted for damage resulting from incompatibility.

Text and graphics have been prepared with care. However, no liability is accepted for any errors that may still occur. Changes to the scope of delivery and technical specifications may be made without prior notice.

CAUTION: The locking system is configured using the LEHMANN Config App and operated exclusively with the LEHMANN Transponder App. The Transponder App is available for iPhones and Android smartphones in the respective app store. The Config App is currently available for Android smartphones (the iOS version will follow shortly). Ensure that NFC transmission is enabled on your smartphone. The quality of NFC transmission may vary depending on the device.

TECHNICAL SPECIFICATIONS

Frequency	13,56 MHz National legislation about permissible radio frequencies must be observed.
Technologie	NFC
Supported Apps	- Configuration: LEHMANN Config App - Operation: LEHMANN Transponder App Please make sure that the smartphones being used support NFC technology and supply the lock with sufficient voltage.
Energy supply	Via smartphone
Operating temperature	-5 °C bis +60 °C
Storage temperature	-25 °C bis +70 °C
Type designation	L7NF13V1



SAFETY PRECAUTIONS

- Pack the lock for transport in such a way that it cannot be damaged.
- Dispose of packaging material in accordance with applicable national regulations (see Disposal).
- Do not heat, disassemble, or short-circuit the lock.
- Never throw the lock into open fire.
- Keep the lock, supplied components, and packaging materials away from children.
- Damaged components may cause injury.

CARE AND MAINTENANCE

- Protect the components of the locking system from moisture.
- Clean the locking system only with a clean, soft, and slightly damp cloth.
- Do not use harsh cleaning agents containing abrasive substances or solvents. Glass cleaners, thinners, alcohol, gasoline, or liquids containing ammonia are not suitable for cleaning.
- Improper handling of all electronic and mechanical components, deviating from this user manual, may lead to malfunctions.

FACTORY SETTINGS

At this stage, the locking system can be locked and unlocked using the "Installation Test" function in the LEHMANN Config App. After a profile has been taught in using the LEHMANN Config App, the locking system is set to "Assigned Use" mode. Operation of the lock via the "Installation Test" function is no longer possible.

FUNCTIONAL DESCRIPTION

With the VERTO zero NFC locking system, you can conveniently lock and unlock your furniture. The knob on the lock is operated manually by the user. Contactless NFC technology is used as the "key." Two operating modes are available:

Lock operating mode	Description
Assigned Use	There is a fixed assignment between the LEHMANN Transponder App (comparable to a user card) and the locking system. The Transponder App is programmed or deleted at the lock using the LEHMANN Config App. The locking system allows selective access authorization, ensuring that only authorized persons are granted access. The Transponder App can be programmed simultaneously on multiple locks in "Assigned Use" mode.
Shared Use	A user can use any lock of their choice with the LEHMANN Transponder App. Programming the Transponder App using the LEHMANN Config App is not possible. When a lock is locked using the Transponder App, the Transponder App and the lock are linked. The Transponder App cannot be used on any other lock in "Shared Use" mode, and the lock will not accept any additional users. This link is only released when the user unlocks the lock again using their Transponder App. The Transponder App can then be used again for another lock in "Shared Use" mode. In the additional mode "Unlimited Shared Use," a user can lock multiple locks simultaneously with the Transponder App (note: even all locks), instead of only one lock per Transponder App.
Unlimited Shared Use	With the LEHMANN Transponder App, the user can operate any lock of their choice. When a lock is locked using the Transponder App, the app and the lock become linked. This link remains active until the user unlocks the lock again using their transponder. In "Unlimited Shared Use" mode, multiple locks can be locked simultaneously with a single Transponder App. WARNING: A single Transponder App can lock all locks configured in this mode. Therefore, the intended use should be carefully evaluated and adapted to the specific application requirements.

OVERVIEW OF THE SMARTPHONE APPS

App	Description
LEHMANN Config App	The LEHMANN Config App includes, among other features, the “Installation Test” function, which allows the basic functions (locking / unlocking) of the lock to be tested. As long as a lock is in the factory default state, the “Installation Test” function can be performed universally from any smartphone with the Config App. For full commissioning, a profile must be created in the Config App and transferred to the lock. The profile is required to carry out programming procedures on the lock. This also includes teaching in users or smartphones with the LEHMANN Transponder App in “Assigned Use” mode. The Config App with a profile also enables an electronic emergency opening of the lock. A maximum of one profile can be assigned per lock. One profile can be used for multiple locks. After creating and transferring a profile to the lock, the lock can only be configured in the Config App using the corresponding password and project ID. Store the password and the project ID of the profile carefully in a secure place.
LEHMANN Transponder App	The LEHMANN Transponder App functions like a transponder or user card at the lock and is used to lock and unlock the lock. Multiple users can be programmed on a lock in “Assigned Use” mode. In “Shared Use” mode, the Transponder App can only lock one lock at a time. It is possible to use the Transponder App on multiple locks in “Assigned Use” mode and at the same time on one lock in “Shared Use” mode.

IMPORTANT: Smartphones have varying NFC transmission strengths. Transmission quality and speed depend on the smartphone and should be checked in advance if necessary.

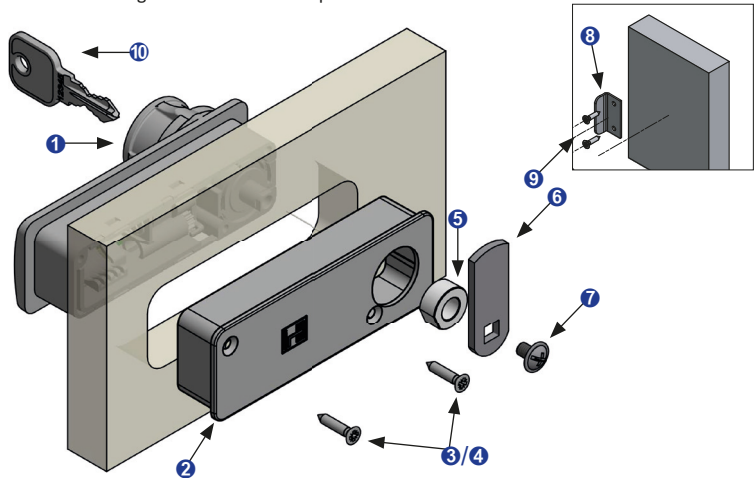
Store the password of the profile carefully in a secure place. Programming procedures and resetting the lock are not possible without the password.



SYSTEM COMPONENTS AND PACKAGE CONTENTS

Please note that these operating instructions apply to different product versions. The package content therefore depends on the respective product variant. The product variants and mounting recommendations shown here are intended for wooden furniture with a thickness of 16-21 mm. In the case of deviating thicknesses and materials, the screws for mounting the lock and the fixing element must be adapted.

Mounting on wood

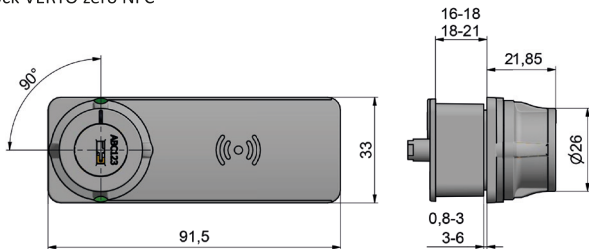


Components:

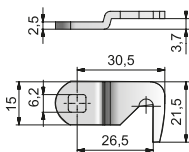
- | | |
|--|--|
| 1. VERTO zero NFC | 6. Bolt 477 (optional) |
| 2. case back | 7. Screw for fastening the bolt |
| 3. 2x countersunk chipboard screw 3x20
for material thicknesses 3 - 6 mm and 18 - 21 mm | 8. Striker plate 3077 (optional) |
| 4. 2x countersunk chipboard screw 3x15
for material thicknesses 0,8 - 3 mm and 16 - 18 mm | 9. 2x countersunk chipboard screw 3x15
or angle bracket 3077 (optional) |
| 5. Washer | 10. Service key (optional) |

DIMENSIONS

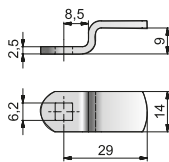
Lock VERTO zero NFC



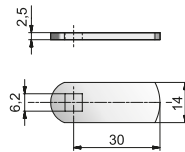
Bolt 2-027 right



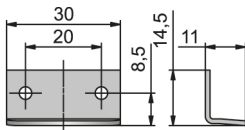
Bolt 460



Bolt 477



Striker plate 3011

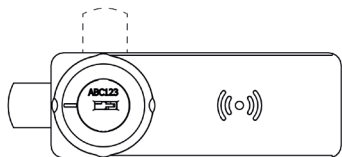


All dimensions in mm.

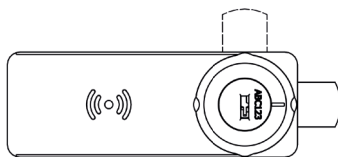
DIRECTION OF ROTATING

The lock can be used for right hand doors and left hand doors.

For right hand doors:



For left hand doors:

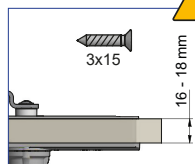
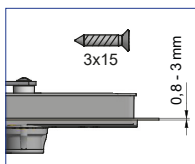
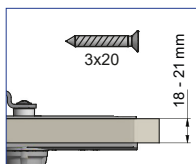
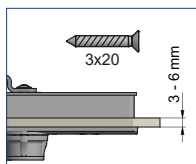


ATTENTION: Determine the appropriate screw length (see items 5 and 6 in the component overview) based on the material thickness:

- 3x20 screws (component 5) for material thicknesses of 3 - 6 mm and 18 - 21 mm.
- 3x15 screws (component 6) for material thicknesses of 0,8 - 3 mm and 16 - 18 mm.
- The required screw type for material thicknesses of 6 – 16 mm in combination with spacers can be found in the table on p. 8 under „Mounting on HPL”.

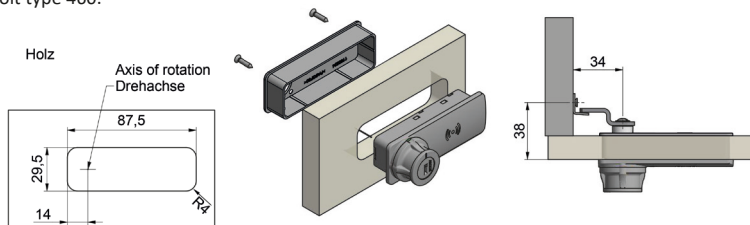
Please also note the different milling patterns for different material thicknesses.

Tighten screws by hand only, max. 0.5 Nm.



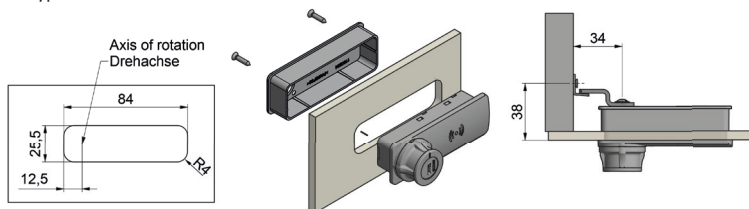
MOUNTING ON WOOD (16 - 21 mm)

Dimensions refer to bolt type 460.



MOUNTING ON GLAS (3 - 6 mm)

Dimensions refer to bolt type 460.

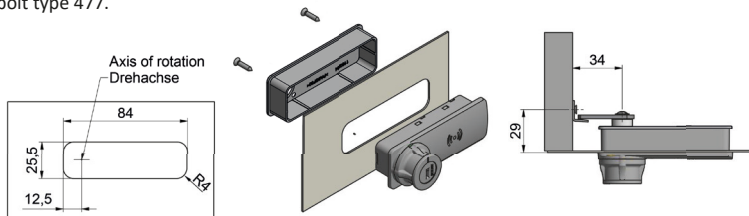


All dimensions in mm.

Continue on page 8

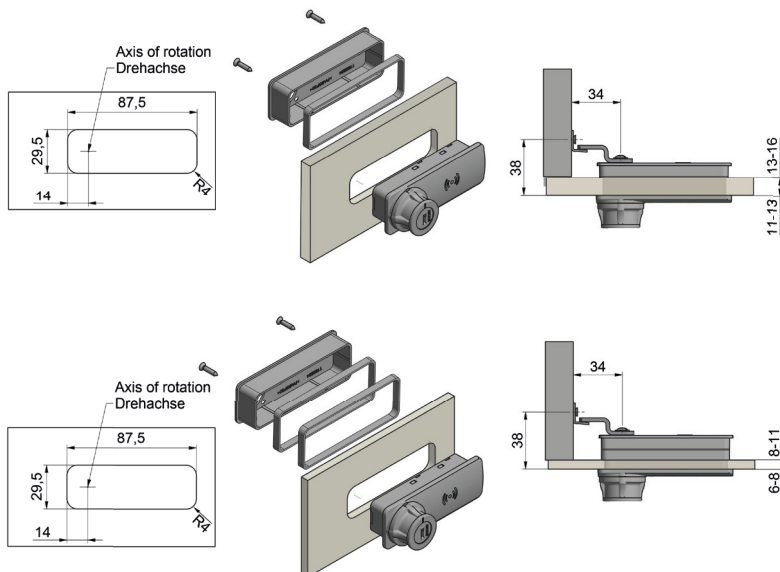
MOUNTING ON STEEL (0,8 - 3 mm)

Dimensions refer to bolt type 477.



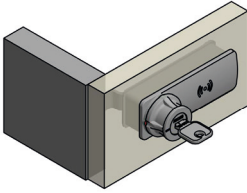
MOUNTING ON HPL (6 - 16 mm)

Dimensions refer to bolt type 460 in combination with spacer 062.

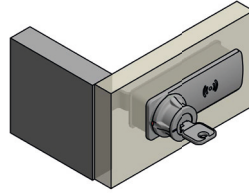


Material thickness	Spacer	Screw type
6 - 8 mm	2 pieces	3x15 
8 - 11 mm	2 pieces	3x20 
11 - 13 mm	1 piece	3x15 
13 - 16 mm	1 piece	3x20 

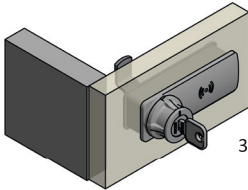
MECHANICAL EMERGENCY OPENING USING A SERVICE KEY



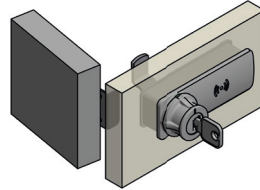
1. Turn the key 180° to clockwise



2. Turn the turn knob by 90°



3. Turn the key 180° to anti-clockwise



4. Lock is open

IMPORTANT: After an emergency opening using the service key, the lock remains electronically locked. If the knob is turned back after the emergency opening with the service key, the lock remains locked. Authorizations granted previously remain valid in all operating modes after a mechanical emergency opening.

NOTES FOR THE FOLLOWING PROGRAMMING STEPS

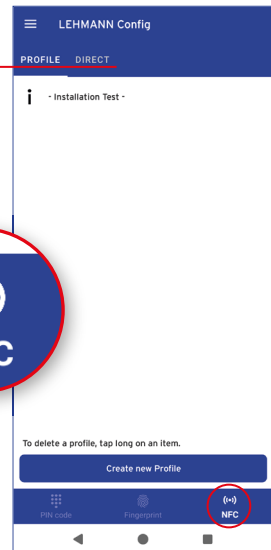
The LEHMANN Config App is used to configure not only NFC locks, but also keypad and fingerprint locks. Therefore, select "NFC" in the bottom right of the app. Please note that the app is divided into two sections: "Profile" and "Direct."

After activating programming mode on the lock using the Config App, this mode remains active for 30 seconds. End the programming mode using the Config App. Alternatively, the programming mode ends automatically after 30 seconds. Users (Transponder Apps) taught in or deleted within these 30 seconds will be saved.

Both the Config App and the Transponder App must be open / active during use.

During data transfer from the smartphone to the lock, hold the smartphone's NFC antenna directly against the lock's reading area. Data transfer does not work with distance between the smartphone and the lock! Wait for the confirmation on the display. Repeat the process if necessary. This is especially important in "Shared Use" mode.

Carry out all programming procedures and functional checks with the cabinet door open.

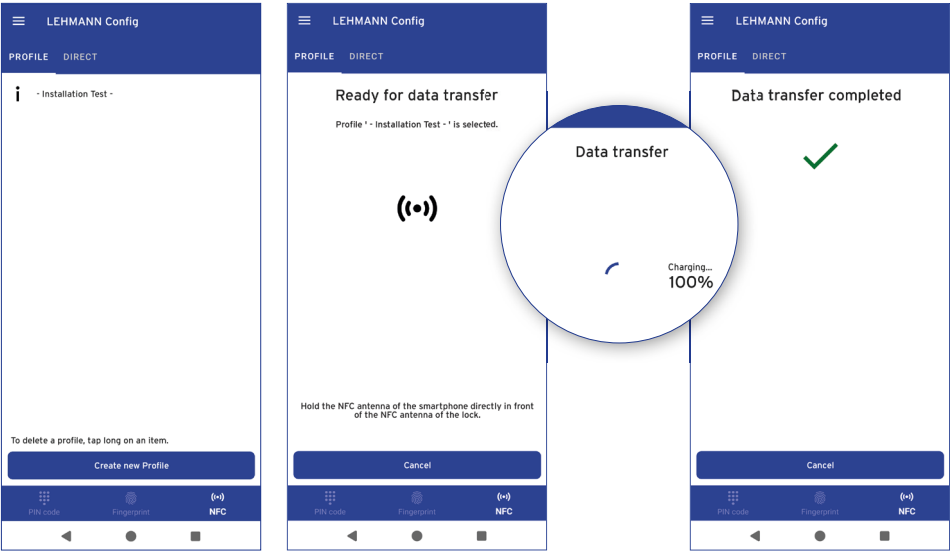


BOLT END POSITION MONITORING

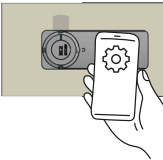
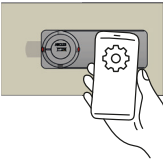
The lock is equipped with a bolt end position monitoring system. If the knob is not in one of the two end positions, an error message will be displayed in the LEHMANN Transponder App as well as in the LEHMANN Config App during the locking process. The lock is not locked.

USING THE INSTALLATION TEST FUNCTION IN THE LEHMANN CONFIG APP

During installation, you have the option to use the “Installation Test” function with the LEHMANN Config App. For this purpose, the lock must be in the factory default state, i.e. no profile must have been transferred. With the “Installation Test” function, the basic functions (locking and unlocking) can be performed on the lock. The “Installation Test” function can no longer be used on a lock once a profile has been transferred to the lock using the Config App.



1. In the LEHMANN Config App, click on “Installation Test” under “Profile.” The app is then ready for data transfer.
2. Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen.

Locking	 Turn the knob to the closed position. To transfer the data, hold the Config App with the installation function enabled in front of the lock.	Refer to the instructions on the display. Always hold the smartphone's NFC antenna directly against the lock
Unlocking	 Hold the Config App with the installation function enabled in front of the lock. After the data transfer, turn the knob to the open position.	

TRANSFERRING A PROFILE WITH THE LEHMANN CONFIG APP

Regardless of the selected operating mode, a profile must be created with the LEHMANN Config App and transferred to the lock before any further programming and operation. Only one profile can be transferred per lock.

1. In the LEHMANN Config App, click on “Create New Profile” under “Profiles.” Assign a profile name. Enter a project password (3–10 characters) and repeat the password. Assign an 8-digit project ID. The app suggests a secure project ID if you click on the dice icon next to the Project ID field.

Store the password of the profile carefully in a secure place. Without the password, no configuration or authorization changes can be made to the lock. The lock cannot be reset without the password.

2. Then click on the save icon at the bottom left next to the “Transmit” field.
3. Click on “Transmit” to transfer the profile to the lock. Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen.



Transfer profile	
Hold the Config App with data transmission enabled in front of the lock	Refer to the instructions on the display.

LEHMANN Config

PROFILE DIRECT

Data transfer completed

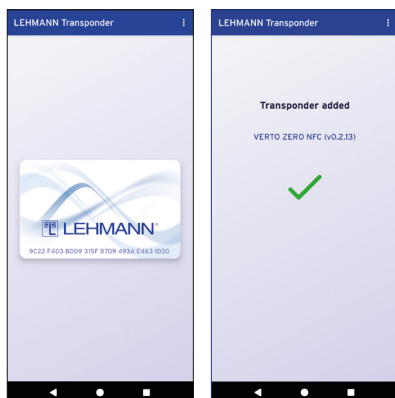
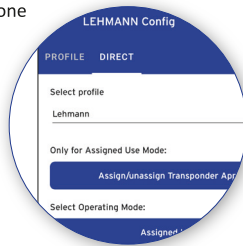
After transferring the profile, the locking system is set to “Assigned Use” mode. If you want to use the lock in “Shared Use” mode, please change the operating mode next.

Follow the instructions on page 12 and then continue with “Closing and Opening” on page 13.

PROGRAMMING THE LEHMANN TRANSPONDER APP (only for assigned use mode)

To teach in a user, the lock must be in the open position. Programming a Transponder App is not possible in “Shared Use” mode. In “Shared Use” mode, the lock is opened and closed without prior teaching-in of the Transponder App (see Closing and Opening, p. 13).

1. Click on “Direct” in the LEHMANN Config App.
2. Under “Direct,” select the desired profile if it is not already preset, and click on “Assign/unassign Transponder App.” Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen. You now have 30 seconds to teach in a user (LEHMANN Transponder App).
3. Hold the smartphone to be taught-in with the LEHMANN Transponder App open in front of the lock. Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the programming process will be displayed on the smartphone screen.

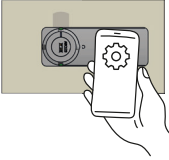
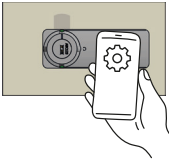


4. The programming mode can be ended using the Config App (“Assign/unassign Transponder App”). Alternatively, the programming mode ends automatically after 30 seconds.

Note on using the LEHMANN Transponder App on iPhones:

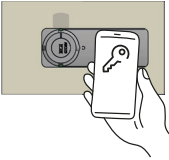
To use the LEHMANN Transponder App with an iPhone on a VERTO zero NFC lock, NFC must be enabled within the app. Before each use, the user must tap the “Activate” button in the app



Programming the Transponder App	
 Hold the Config App with data transmission enabled in front of the lock.	Refer to the instructions on the display.
 Hold the Transponder App in front of the lock. The Transponder App is accepted and taught-in. This process can be repeated to teach in multiple users. The Transponder App is not accepted.	✓ 🔊 ✗
 Hold the Config App with data transmission enabled in front of the lock. Alternatively, the programming mode ends automatically after 30 seconds.	Refer to the instructions on the display.

After being taught-in, the Transponder App can lock and unlock the lock.

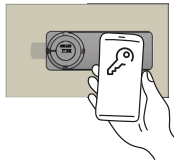
LOCKING AND UNLOCKING WITH THE LEHMANN TRANSPONDER APP

Locking	
 Turn the knob to the closed position. Then hold the Transponder App in front of the lock.	🔒 🔊
Unlocking	
 Hold the Transponder App in front of the lock. Then turn the knob to the open position.	🔓 🔊

Note on using the LEHMANN Transponder App on iPhones:
 To use the LEHMANN Transponder App with an iPhone on a VERTO zero NFC lock, NFC must be enabled within the app. Before each use, the user must tap the **"Activate"** button in the app

UNAUTHORISED TRANSPONDER APP

Rejection of an unauthorised user



An unauthorized Transponder App is held in front of the lock. The Transponder App is rejected.

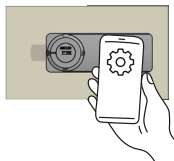


EMERGENCY OPENING VIA LEHMANN CONFIG APP

If one or all authorized users are currently unavailable, an emergency opening can be performed using the LEHMANN Config App. If an emergency opening is carried out the previously used Transponder App in "Shared Use" mode will be blocked after opening and can no longer be used. A programmed Transponder App in "Assigned Use" mode can continue to be used normally after the emergency opening.

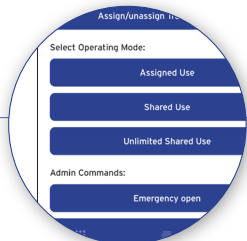
1. Click on "Direct" in the LEHMANN Config App.
2. Under "Direct," select the required profile if it is not already preset, and click on "Emergency Opening." Hold the smartphone with the NFC antenna directly in front of the lock's reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen. The lock opens.

Emergency opening



Hold the Config App with data transmission enabled in front of the lock. Then turn the knob to the open position.

Refer to the instructions on the display.



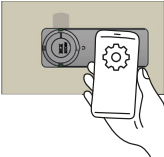
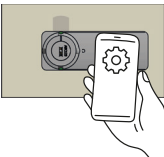
DELETING INDIVIDUAL TRANSPONDER CARDS (only for "assigned use" mode)

If multiple users / Transponder Apps have been assigned to the lock, they can continue to be used after deleting an individual Transponder App. The lock must be in the open position for the deletion process.

1. Click on "Direct" in the LEHMANN Config App.
2. Under "Direct," select the desired profile if it is not already preset, and click on "Assign/unassign Transponder App." Hold the smartphone with the NFC antenna directly in front of the lock's reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen. You now have 30 seconds to delete a user (LEHMANN Transponder App).
3. Hold the smartphone to be deleted with the LEHMANN Transponder App open in front of the lock. Hold the smartphone with the NFC antenna directly in front of the lock's reading area throughout the entire data transfer. The completion of the deletion will be displayed on the smartphone screen.



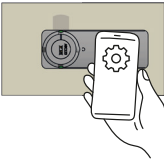
4. The programming mode can be ended using the Config App (“Assign/unassign Transponder App”).
Alternatively, the programming mode ends automatically after 30 seconds.

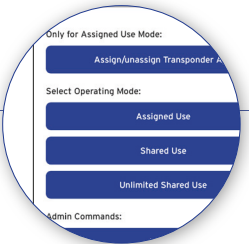
Deleting individual transponder cards	
	Hold the Config App with data transmission enabled in front of the lock.
Refer to the instructions on the display.	
	Hold the Transponder App in front of the lock.
	
	Hold the Config App with data transmission enabled in front of the lock. Alternatively, the programming mode ends automatically after 30 seconds.
Refer to the instructions on the display.	

CHANGING THE OPERATING MODE

The lock has two modes: “assigned use” and “shared use”. After the initial transfer of the profile, the “assigned use” mode is set automatically. You have the option to change the operating mode using the LEHMANN Config App while the lock is open.

- 1. Click on “Direct” in the LEHMANN Config App.
- 2. Under “Direct,” select the desired profile if it is not already preset, and click on the required operating mode. When changing the operating mode, select the desired mode in the app. Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen.

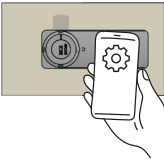
Changing the operating mode	
	Hold the Config App with data transmission enabled in front of the lock. Refer to the instructions on the display.



DEACTIVATING AND ACTIVATING ACOUSTIC SIGNALS

In the factory default setting, acoustic signaling in the LEHMANN Transponder App is enabled. You have the option to deactivate the acoustic signals using the LEHMANN Config App.

- 1. Click on “Direct” in the LEHMANN Config App.
- 2. Under “Direct,” select the desired profile if it is not already preset, and click on “Sound On Transponder App” or “Sound Off Transponder App.” Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen..
- 3. In the LEHMANN Transponder App, open the menu and select “Settings.”

Deactivating and activating acoustic signals	
	Hold the Config App with data transmission enabled in front of the lock. Refer to the instructions on the display.

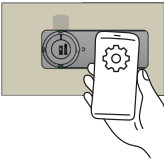
- 4. Enable or disable the “Audio feedback” option in the Settings.

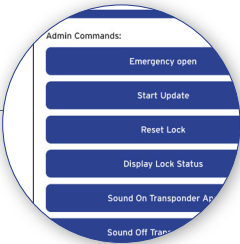


RESETTING TO FACTORY SETTING (RESET)

After a potentially required reset to factory default settings, all users and Transponder Apps are deleted. Using the LEHMANN Config App, the basic functions (locking / unlocking) can be performed via the “Installation Test” function.

- 1. Click on “Direct” in the LEHMANN Config App.
- 2. Select the desired profile if it is not already preset, and click on “Reset Lock.” Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen.

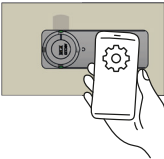
Reset to factory settings	
	Hold the Config App with data transmission enabled in front of the lock. Refer to the instructions on the display.



ACTIVATION AND DEACTIVATION OF UNLIMITED SHARED USE

The “Unlimited Shared Use” function can be activated using the LEHMANN Config App. Once activated, a LEHMANN Transponder App can lock multiple locks in “Unlimited Shared Use” mode simultaneously (note: even all locks), instead of just one lock per Transponder App. To activate this function, the lock must be in the open position.

- 1. Click on “Direct” in the LEHMANN Config App.
- 2. Under “Direct,” select the desired profile if it is not already preset, and click on „Unlimited Shared Use / Shared Use“. Hold the smartphone with the NFC antenna directly in front of the lock’s reading area throughout the entire data transfer. The completion of the data transfer will be displayed on the smartphone screen.

Activate Unlimited Shared Use	
	Hold the Config App with data transmission enabled in front of the lock. Refer to the instructions on the display.



FCC COMPLIANCE STATEMENT

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.

Caution! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

FIRMWARE UPDATE

You have the option of updating the firmware of the lock. A special adapter is required for this. Firmware updates for this lock are only made available on the website www.lehmann-locks.com if required (e.g. for technical reasons). You will receive further information on the implementation and installation together with the firmware update.

DISPLAY OF LOCK STATUS IN THE LEHMANN CONFIG APP

You have the option to view the lock status in the LEHMANN Config App. This includes information such as firmware version, operating mode, bolt status, and project ID. In the LEHMANN Config App, click on "Direct" and then select "Display Lock Status." Then hold your smartphone with the Config App in front of the lock's reading area.



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Dispose the locking system in accordance with local regulations and guidelines.

LEHMANN Vertriebsgesellschaft mbH & Co. KG
Postfach 26 20 • D-32383 Minden
Fon +49 571/50 599-0 • Fax +49 571/50 599-822
info@lehmann-locks.com • www.lehmann-locks.com
DIN EN ISO 9001:2015 zertifiziert