Installation instructions and user guide

wAppLoxx Pro

WLX PRO – Access and Intrusion

WLX-PRO-L*

Contents

I. General

This product complies with current domestic and European regulations. Conformity has been certified, and all related certifications are available from the manufacturer on request. To ensure the condition of this product is maintained and that safe operation is guaranteed, this user guide must be observed. No part of the product may be changed or modified in any way, with the exception of adjusting the cylinder body to the door thickness as described in Chapter III.3.

ABUS Security-Center GmbH & Co. KG shall not be held liable for loss or damage caused – or alleged to have been caused – either directly or indirectly by this manual. We reserve the right to make changes to this manual without prior notice.

ABUS Security-Center hereby declares that the radio system type 505272 and all WLX cylinders comply with RED Directive 2014/53/EU. The full EU Declaration of Conformity text can be found at:

https://www.abus.com/ger/Objektsicherheit /Zutrittskontrolle/wAppLoxxPro

Safety information

Explanation of symbols:

⚠	The triangular warning symbol indicates important notes in this user guide which must be observed.
⚡	The triangular high voltage symbol is used to warn of the risk of injury or health hazards (e.g. caused by electric shock).
ⓘ	This symbol indicates special tips and notes on the operation of the unit.

Information on the wireless range:

⚠ It is essential to check whether there is an adequate wireless connection prior to installation and commissioning.

Information on the battery:

The wAppLoxx Pro Cylinder is powered with direct current via a 3 V CR2 lithium battery that is included in the scope of delivery.

In order to ensure a long lifespan and to prevent fire and injury, comply with the following instructions:

- When inserting the battery, ensure the polarity is correct.

- Batteries must not be exposed to direct sunlight or other heat sources or stored in places exposed to very high temperatures.

- Keep batteries away from children.

- Batteries are not rechargeable.

- Batteries must not be dismantled, pierced or otherwise damaged. They must not be burned, come into contact with water or be short-circuited.

- When replacing the batteries, the respective temperature specifications of the manufacturer must be observed

To ensure a long lifespan and safe operation, you must use the following high-quality batteries:
VARTA CR2 / CR17355 3 V lithium battery

If you do not use a Varta CR2 battery, the specified lifespan cannot be guaranteed and it is not possible to ensure that the battery warning display of the WLX Pro Control will be correctly displayed.

II. Technical data

Cylinder variants:	**LA**	Double-knob cylinder, reader outside
	LB	Double-knob cylinder, reader both sides
	LA-P	Double-knob cylinder, panic
	HZ	Half cylinder
	OPZ	Double-knob cylinder for doors without PZ perforation
Scope of delivery:		Locking cylinder, quick guide, forend screw, VARTA 3 V CR2 lithium battery
Required accessories:		ABUS Mifare DESfire EV1 Tag, WLX Pro Tool Set (small)
Optional accessories:		WLX card reader WLX Pro tool set (large)
Tags:		ABUS Mifare DESfire EV1 Tag
		4-byte/7-byte Mifare Classic tags (we accept no liability for the use of other tags)
Areas of usage:		Doors with PZ mortise lock, multiple locking, panic locks in line with EN 179 and EN 1125
Configuration:		Via wAppLoxx Pro Control
Power supply:		3 V CR2 lithium battery
Conditions of use:		-25 °C to +65 °C
Standard length:		30 mm outside / 30 mm inside
Adaptable length:		Can be lengthened in 5 mm increments from 30 mm outside / 30 mm inside to 90 mm outside / 90 mm inside. Extension pieces available in the lengths 5 mm, 10 mm, 15 mm and 30 mm
Drilling protection		Standard Security with extra-reinforced anti-drill pins in the shaft and cylinder body
IP protection class:		IP 66
Outer knob dimensions:		Diameter 38 mm, length 48 mm
Inner knob dimensions:		Diameter33 mm, length 27 mm (Standard) Diameter 26/30 mm, length 27 mm (Narrow-frame doors)
Inner knob variant:		Standard, inner knob for narrow-frame doors

| Material: | Knob: Stainless steel |
| | Reading cap: plastic |

| **Outer knob colour variants:** | black, white, grey |

| **Delivery status:** | Coupled |

(Decoupling is not carried out until it has been successfully programmed into the wAppLoxx Pro Control)

Functions:	Opening period can be set to 6 or 12 seconds
	Tag reader
	Remote access

III. Installing wAppLoxx Pro Double-Knob Cylinder

1. Individual parts
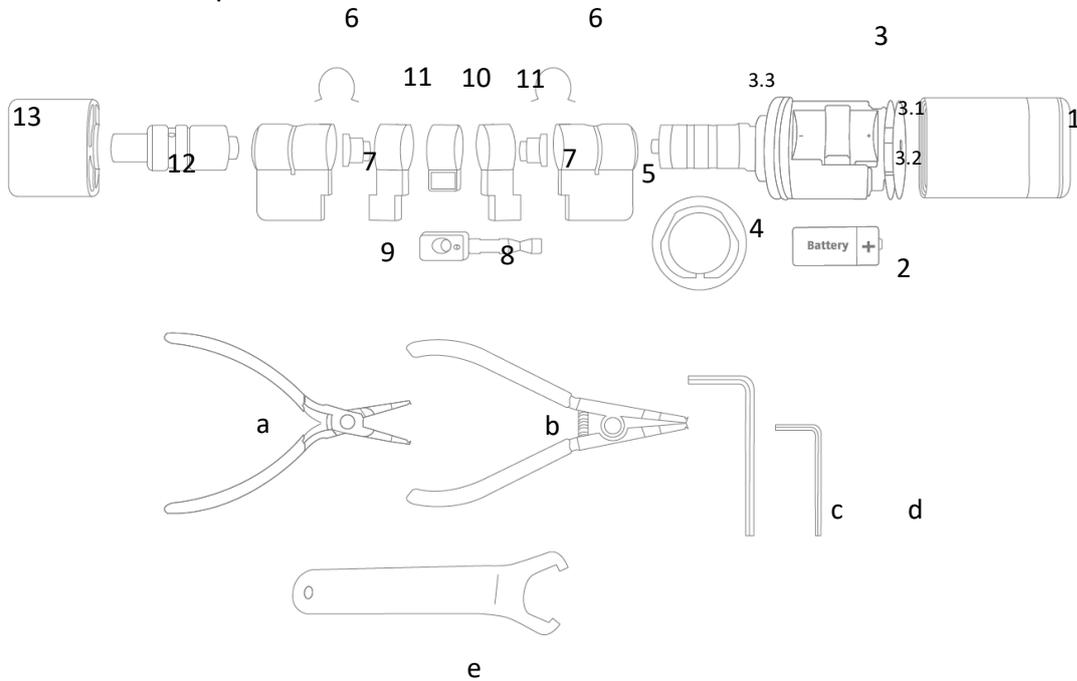
1. Outer cap
2. Battery
3. Electronic knob with 30-mm shaft
    - 3.1. PCB holder
    - 3.2. Basket
    - 3.3. Shaft with motor
4. Mounting plate
5. Outer cylinder body
6. Core retaining ring
7. Shaft extension
8. Outer extension bridge (the mark next to the forend screw marks the outside)
9. Inner extension bridge
10. Cam
11. Body extension
12. Shaft for mechanical inner knob
13. Mechanical inner knob

Tools required (must be ordered separately):

a. Closing pliers
b. Opening pliers
c. 1.5-mm hexagon key, inner knob, WLX Pro
d. 2.5-mm hexagon key, modular, WLX Pro
e. Outer cap opening key

Two different tool sets are available.

ACWZ00001 - WLX Pro tool set, large for extensions

- Closing pliers
- Opening pliers
- 1.5-mm hexagon key, inner knob, WLX Pro
- 2.5-mm hexagon key, modular, WLX Pro
- Outer cap opening key

ACWZ00002 - WLX Pro tool set, large for installation and battery replacement

- 1.5-mm hexagon key, inner knob, WLX Pro
- Outer cap opening key

2. Installation

2.1 Installation from the outside

WLX-PRO-LA

WLX-PRO-HZ (from Step 3)
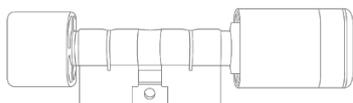
wAppLoxx Pro as delivered

Outer cap (1) and inner knob (13) are installed. The battery (2) is not yet inserted. The cam is coupled to prevent accidental locking.
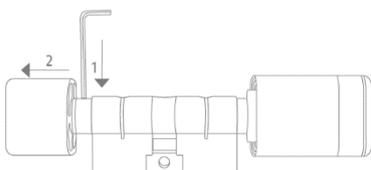
Removing the inner knob

The inner knob (13) must be removed in order to insert the wAppLoxx Pro into the lock from the outside.
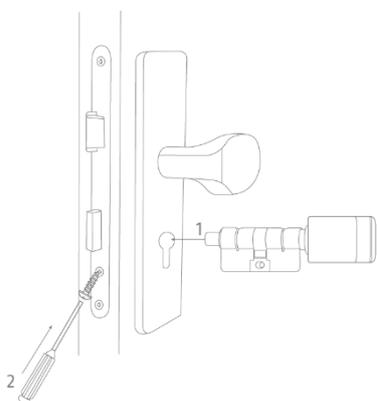
Fitting the wAppLoxx Pro in the door

Once the inner knob (13) has been removed,
the wAppLoxx Pro can be pushed through the door leaf from the outside (#1).
Fix the wAppLoxx Pro in the lock case with the forend screw like a mechanical locking cylinder. (#2)
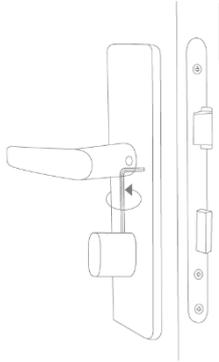
Installing the inner knob

Screw the inner knob (13) into the thread in the shaft end piece (12) using a 1.5-mm hexagon key (c).
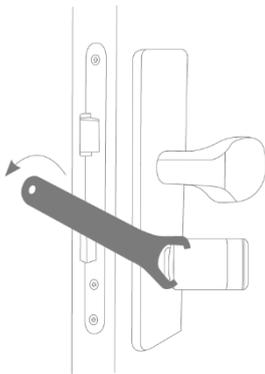
Removing the outer cap 1

The outer cap (1) has to be removed in order to insert the battery (2). Using the opening key (e), fix the mounting plate (4) onto its notch and unscrew the outer cap (1).
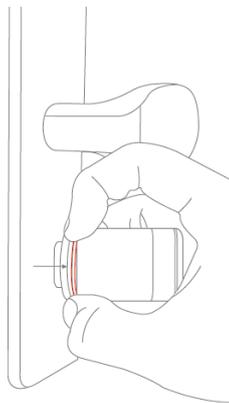
Removing the outer cap 2

The sealing ring (marked red) of the knob is located just behind the mounting plate (4).

Carefully pull the outer cap (1) over the sealing ring using your fingers
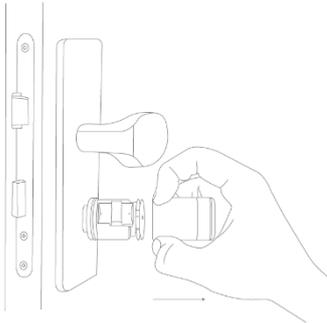
Removing the outer cap 3

Once the outer cap (1) has been pulled over the sealing ring, the outer cap can be completely pulled off the knob.

Make sure that the outer cap (1) is straight when pulled off. If not, you risk damaging the antenna circuit board.
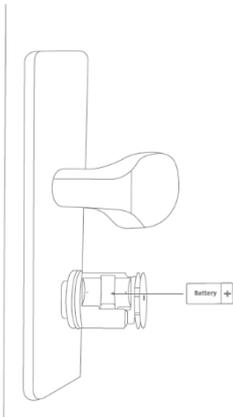
Inserting the battery

Make sure that the battery (2) is placed on the white battery flag. When inserting the battery, make sure that the polarity is correct (positive terminal facing antenna circuit board).
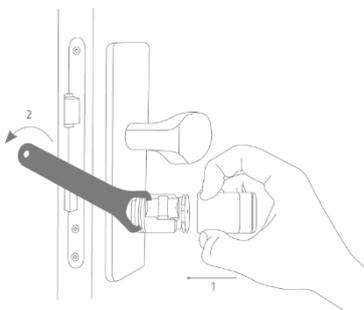
Installing the outer cap

Screw the outer cap (1) back on by securing the mounting plate using the opening key (e).

There is a marking on the outer cap (1) that makes it easier to position the outer cap correctly on the groove of the knob (3).

When installing the outer cap (1), it is essential to ensure that the orange O-ring lies flush between the mounting plate and the knob.

2.2 Installation from the inside

The cylinder must be installed from the inside for the following variants:
- **WLX-PRO-LB**
- **WLX-PRO-LA-P**
- **WLX-PRO-LA OPZ**
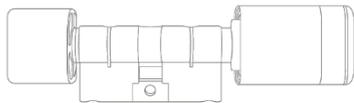
wAppLoxx Pro as delivered

Outer cap (1) and inner knob (13) are installed. The battery (2) is not yet inserted. The cam (10) is coupled to prevent accidental locking. There are 8 electronic screws in the scope of delivery, which are used to attach the knob.
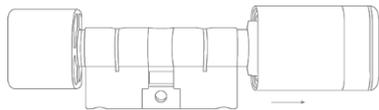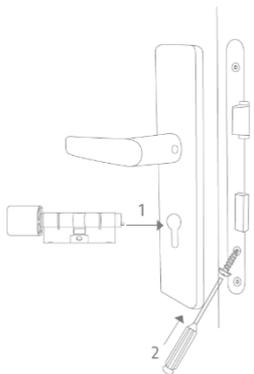
Removing the outer cap

The entire outer knob (1+3) must be removed in order to insert the wAppLoxx Pro into the lock from the outside. Firstly, remove the outer cap (1)
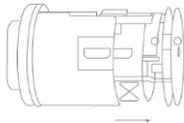
Removing the electronic knob 1

After removing the outer cap, the electronic knob (3.1) must be removed. After this, remove the PCB bracket (3.1) from the basket (3.2) and remove the basket (3.2) from the shaft including the mounting plate (4).

Fitting the wAppLoxx Pro in the door

Once the outer knob (1) has been removed, the wAppLoxx Pro can be pushed through the door leaf from the inside. Fix the wAppLoxx Pro in the lock case with the forend screw like a mechanical locking cylinder.
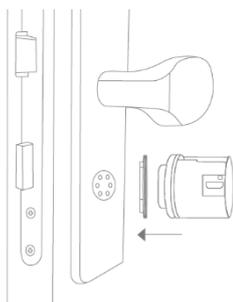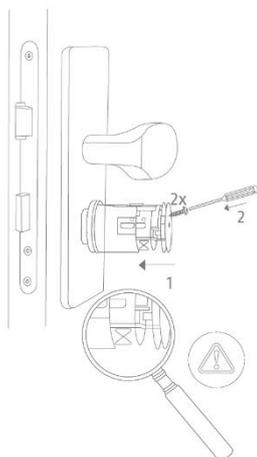
Installing the basket

During installation, make sure that the mounting plate (4) between the basket (3.2) and the shaft with the motor (3.3) is inserted in the correct order.

When the cylinder body has been installed in the lock, secure the basket (3.2) to the shaft with the motor (3.3) using 6 screws.

In order to ensure that the cylinder is tight, it must be ensured that sufficient screw glue is applied to the electronic screws.
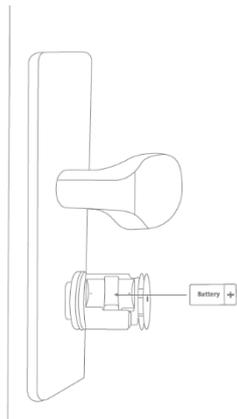
Installing the PCB holder

Place the PCB holder (3.1) in the basket and secure using two small electronic screws.

When inserting the holder, ensure that the EMC contact is not bent (see figure on the left).

Inserting the battery

Make sure that the battery (2) is placed on the white battery flag. When inserting the battery, ensure the polarity is correct (positive terminal facing antenna circuit board).
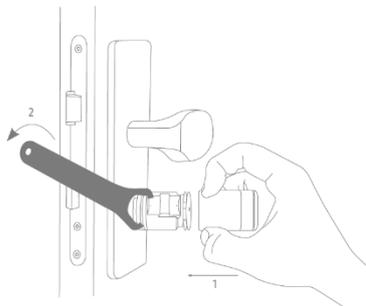
Installing the outer cap

Screw the outer cap (1) back on by securing the mounting plate (4) using the opening key (e).

There is a marking on the outer cap (1) that makes it easier to position the outer cap correctly on the groove of the knob (3).

When installing the outer cap, it is essential to ensure that the orange O-ring lies flush between the mounting plate (4) and the knob (3).

3. Installation: Adjusting the cylinder body to the door thickness

3.1 Extending the inside
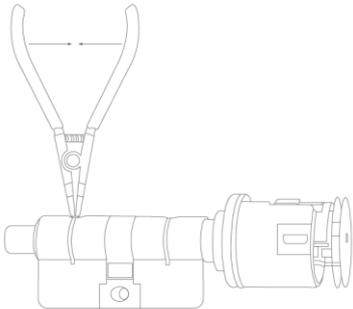
Removing the core retaining ring

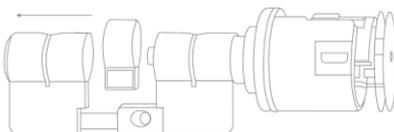Remove the core retaining ring (6) on the outer cylinder body (5) using the WLX Pro opening pliers (a).
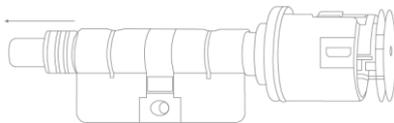
Removing the shaft

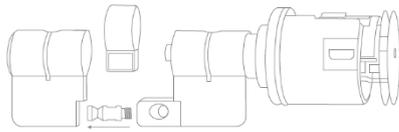Remove the shaft end piece (12) from the outer cylinder body (5)
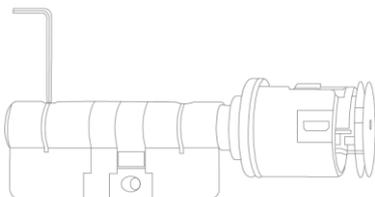
Releasing the cylinder body

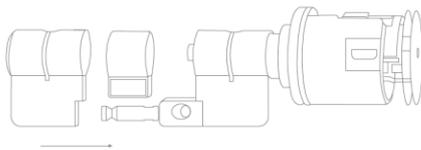Remove the grub screw in the outer cylinder body (5) using the hexagon key (d)

Removing the cylinder body

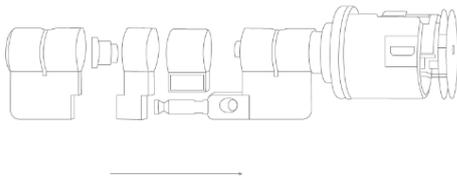Remove the outer cylinder body (5) from the inner extension connector (8)

Changing the inner extension connector

Twist the inner extension connector (8) out of the outer extension connector (11)

Changing the inner extension connector

Screw the desired inner extension connector (8) into the outer extension connector (11). There is a specific extension connector (30 mm–90 mm) (8) for every inner length.
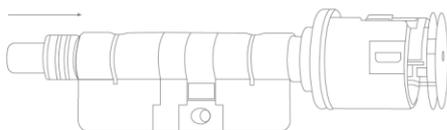
Fitting the extension pieces

Push the desired extension piece (9) together with the corresponding shaft extension (7) onto the extension connector (8) until it makes contact with the outer extension connector (11), and thereby secure the cam (10).
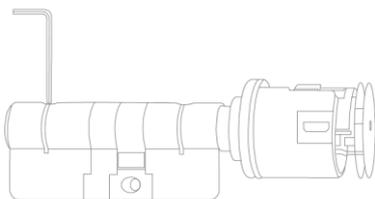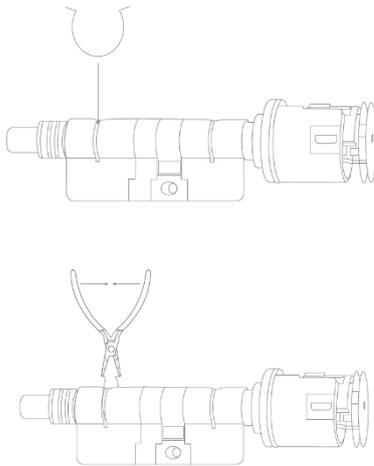
Tightening the cylinder body

Secure the grub screw in the outer cylinder body (5).

Pushing on the shaft for the mechanical inner knob

Slide the shaft end piece (12) or outer knob (1) into the outer cylinder body (5).
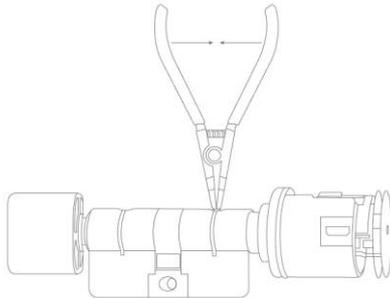
Securing the shaft

Fit a new core retaining ring using the closing pliers to secure the shaft.

Make sure that the various shaft extensions interlock and that the corresponding groove is positioned at the opening of the core retaining ring.
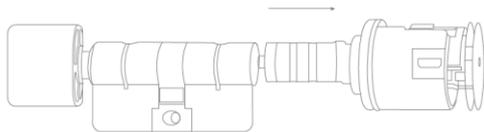
Make sure that a new core retaining ring (6) is used each time the length is adjusted during installation. Only then can correct installation be ensured
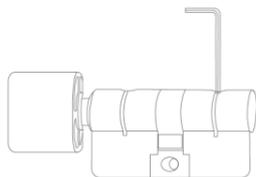
3.2 Extending the outside

Removing the core retaining ring

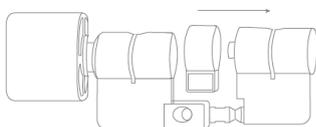Remove the core retaining ring (6) on the outer cylinder body (5) using the WLX Pro opening pliers (a).

Removing the shaft

Remove the shaft end piece (12) from the outer cylinder body (5)
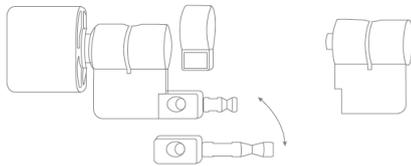
Releasing the cylinder body

Remove the grub screw in the outer cylinder body (5) using the hexagon key (d)

Removing the cylinder body

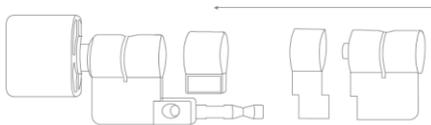Remove the outer cylinder body (5) from the extension connector (8)

Changing the outer extension connector

Twist the inner extension connector (8) out of the outer extension connector (11). To do this, first remove the core retaining ring on the inside (see above). Screw the inner extension connector into the desired outer extension connector.

There is a specific extension connector (30 mm–90 mm) (8) for every outer length.
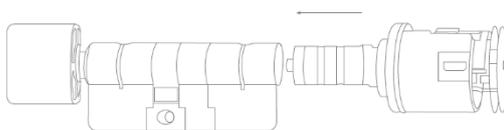
Fitting the extension pieces

Push the desired extension piece (9) together with the corresponding shaft extension (7) onto the extension connector (8) until it makes contact with the outer extension connector (11), and thereby secure the cam (10).
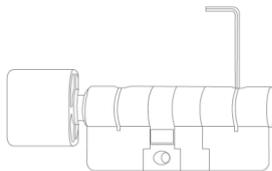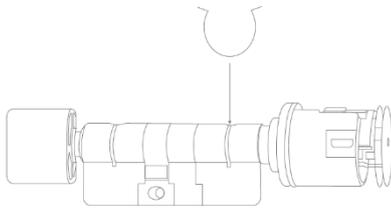
Tightening the cylinder body
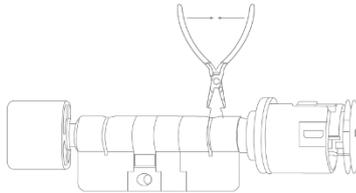
Secure the grub screw in the outer cylinder body (5).

Sliding on the electronic knob with shaft

Slide the shaft end piece (12) or outer knob (1) into the outer cylinder body (5).

Securing the electronic knob with shaft

Fit a new core retaining ring (6) using the closing pliers (a) to secure the shaft.

Make sure that the various shaft extensions interlock and that the corresponding groove is positioned at the opening of the core retaining ring.

Make sure that a new core retaining ring (6) is used each time the length is adjusted during installation. Only then can correct installation be ensured.

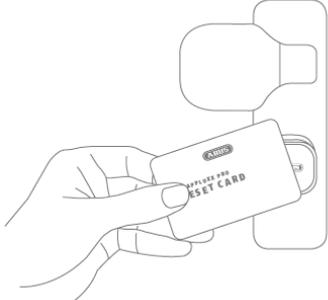## IV. Logging the wAppLoxx Pro Cylinder into and out of the wAppLoxx Control

Logging a wAppLoxx Pro Cylinder in:
Create a new wAppLoxx Cylinder via the wAppLoxx Control Pro user interface and click on "Register" – for more information, please see the user guide of the wAppLoxx Pro Control. Now hold the wAppLoxx Pro System Card in front of the cylinder to be registered.
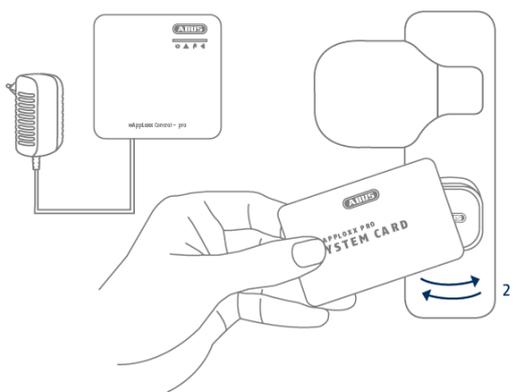
Logging a wAppLoxx Pro Cylinder out
In order to log a cylinder out of the WLX Pro system, proceed as follows.
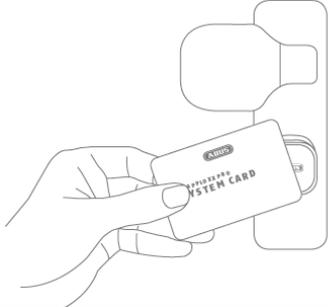
	Hold the wAppLoxx Pro System Card in front of the cylinder to be logged out.
●●●●●●●●●● 10 × red	A flashing red signal will come on.
	While this flashing red signal is on, you must hold the WLX Pro Reset Card in front of the cylinder to be deregistered.

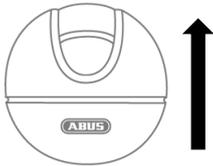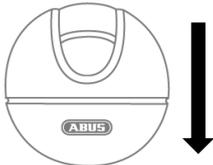|	
1 × green	When the cylinder has recognised the reset card, it will flash green briefly.
1 × green	Once the cylinder has been successfully logged out, the cylinder will light up green and return to its original state.

⚠ Both cards are included in the scope of delivery of the wAppLoxx Pro Control

V. Operating the wAppLoxx Pro Cylinder

1 × green	A brief green flash signals that the tag is being read and sent.

Unlocking/opening/locking:

	1. Present a valid tag to the reader.
2 × green	2. After presenting the tag: **2 × rapid** green flashes.
	3. Remove tag. The system is coupled for 6 or 12 seconds. The door lock is actuated with the outer knob.

Disarming:
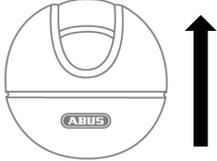
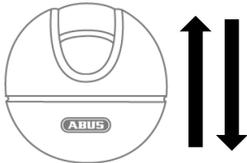|	
	1. Present a valid tag to the reader.
 1 × green	2. After presenting the tag: **1 ×** green flash.
	3. Remove tag. The system is coupled for 6 or 12 seconds. The door lock is actuated with the outer knob.
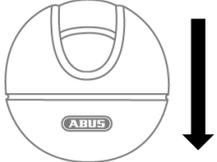
Arming:

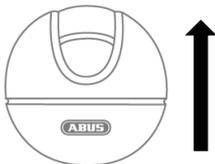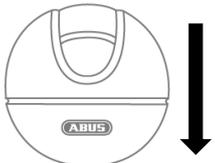|	
	1. Present a valid tag to the reader.
 2 × green	2. After presenting the tag: **2 × rapid** green flashes.
	3. Remove tag. The system is coupled for 6 or 12 seconds. The door lock is actuated with the outer knob.

	4. Present the tag to the reader again while coupled and then remove it.
1 × red	5. The cylinder acknowledges the successful arming process with a red light.

Using the fallback tag:

	1. Present a valid fallback tag to the reader.
1 × red, 2 × green	2. After presenting the tag: **rapid** red and green flashing.
	3. Remove tag. Repeat process twice. The system is coupled for 6 or 12 seconds. The door lock is actuated with the outer knob.

Possible acknowledgements of the wAppLoxx Pro Cylinder:

2 × green	Access
3 x red	Access denied
1 × red	System is armed
1 × green	System is disarmed
3 × red, 2 × green	Battery Warning
1 × red, 2 × green	Authorised fallback transponder was presented
4 × red	Unauthorised fallback transponder was presented
1 × red	No wireless connection to the wAppLoxx Control
6 × red	The wAppLoxx Control is not ready for arming The wAppLoxx Control Pro is not ready for disarming The wAppLoxx Control receives no feedback from the alarm panel

Possible acknowledgements of the wAppLoxx Cylinder login/logout process:

2 × green	Login successful
3 × red	Logout successful
1 × red	Login failed
10 × red	Fallback tag/reset card required to log out

Possible acknowledgements of the wAppLoxx Cylinder initialisation process:

2 × red	Communication with the outer knob possible
2 × green	Communication with the wAppLoxx Control Pro possible
1 x green, 1 × red, 1 × green 1 × red	Initialisation of WLX Pro

Disposal

Devices displaying this symbol may not be disposed of with domestic waste. At the end of its lifespan, dispose of the product according to the applicable legal requirements. Please contact your dealer or dispose of the products at the local collection point for electronic waste.

ABUS Security Center GmbH & Co. KG

Linker Kreuthweg 5

86444 Affing

If you have any technical questions, please contact your specialist dealer.