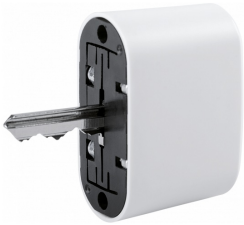


Homematic IP HmIP-DLS Door Lock Sensor User Manual

Homematic IP HmIP-DLS Door Lock Sensor User Manual

Contents

Package contents

Quantity	Description
1	Homematic IP Door Lock Sensor
2	Caps (white and silver)
1	Allen key
1	3 V CR2032 battery
1	Operating manual
1	Supplement sheet with safety instructions

Printed in Hong Kong
Changes may be made without prior notice as a result of technical advances.
155477 (web)

Version 1.0 (12/2021)

Information about this manual

Please read this manual carefully before operating your Homematic IP components. Keep the manual so you can refer to it at a later date if you need to.
If you hand over the device to other persons for use, please hand over this manual as well.

Symbols used

⚠ **Attention!**
This indicates a hazard.

i **Note.**
This section contains important additional information!

Hazard information

⚠Do not open the device. It does not contain any parts that can be maintained by the user. In the event of an error, please have the device checked by an expert.

⚠For safety and licensing reasons (CE), unauthorized changes and/or modifications of the device is not permitted.

⚠The device may only be operated in dry and dustfree environment and must be protected from the effects of moisture, vibrations, solar or other methods of heat radiation, cold and mechanical loads.

⚠The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around. Plastic films/bags, pieces of polystyrene, etc. can be dangerous in the hands of a child.

⚠We do not assume any liability for damage to property or personal injury caused by improper use or the failure to observe the hazard information. In such cases, any claim under warranty is extinguished! For consequential damages, we assume no liability!

⚠Do not use the device if there are signs of damage to the housing, for example, or if it demonstrates a malfunction. If you have any doubts, have the device checked by an expert.

⚠Only use lock cylinders with an emergency and hazard functionality. These can be locked and unlocked from the outside using a second key whether or not a key is inserted on the inside.

⚠Do not put on the cover if there is no key inserted in the device.

⚠Make sure that the light guide is not damaged when inserting or removing the key and attaching the cover.

⚠When attaching the cover, make sure that the light guide is positioned straight in the respective cap recess.

Otherwise, there is a risk of a break.

i The device may only be operated within a domestic environment, in business and trade areas as well as in small enterprises.

i Using the device for any purpose other than that described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability.

i eQ-3 AG is liable for the door lock sensor itself within the scope of product liability but not for damage in operation, e.g. calling the locksmith or other work.

Function and device overview

The Homematic IP Door Lock Sensor reliably detects whether the house door lock is engaged or not. The status of the house door can be checked at any time via the

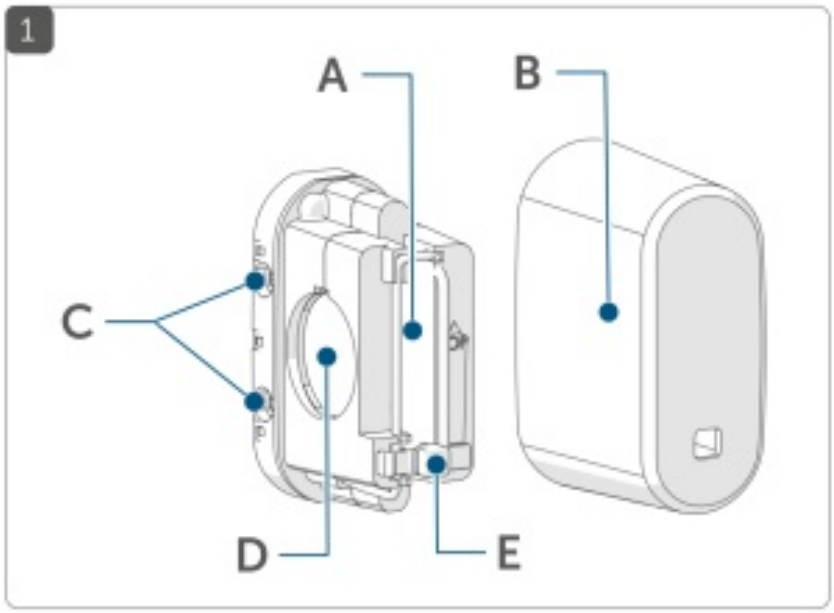
Homematic IP app – regardless of whether you are home or not. This not only makes things easier for you, but also provides you with a feeling of security at all times.

The door lock sensor is a universal application and compatible with most common keys and standard lock cylinders. You simply install it onto the existing key and it detects the status of the lock via the position of the key.

Thanks to the battery operation and the wireless communication, installation is extremely easy – without modifications to the door, lock cylinder or key. This makes it easy to retrofit the sensor and it is also well suited for rental flats. After installation, manual locking and/or unlocking also continues to be possible.

Any manipulations to the door lock sensor will be immediately reported via the internal position detection feature of the device.

Device overview (s. figure 1)



(A) Key clamp
(B) Cover
(C) Screw for opening the key clamp
(D) Battery compartment
(E) System button (teach-in button and LED)

General system information

This device is part of the Homematic IP smart home system and works with the Homematic IP protocol.
All devices of the system can be configured comfortably and individually with the user interface of the Central Control Unit CCU3 or flexibly via the Homematic IP smartphone app in connection with the Homematic IP cloud.
All available functions provided by the system in combination with other components are described in the Homematic IP Wired Installation Guide. All current technical documents and updates are provided at **www.homematic-ip.com.**

Start-up

Teaching-in

i Please read this entire section before starting the teach-in procedure.

i Only attach the supplied cover after the device has been put into operation!

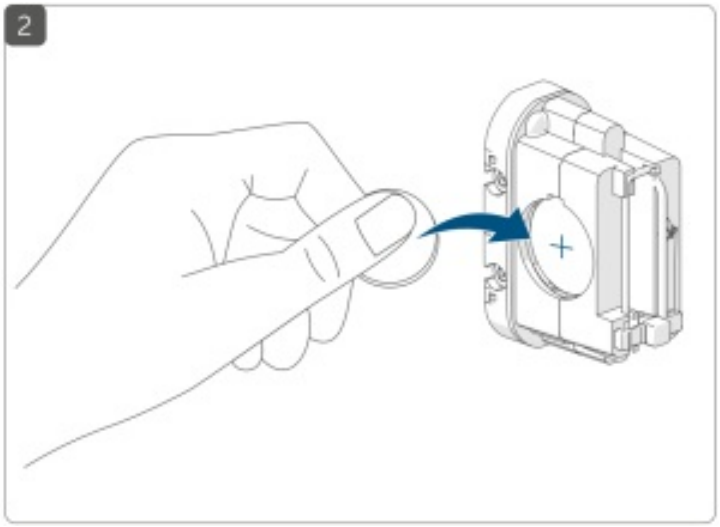
i First set up your Homematic IP Access Point via the Homematic IP app to enable operation of other Homematic IP devices within your system. For further information, please refer to the operating manual of the Access Point.

i You can connect the device either to the access point or to the Homematic Central Control Unit CCU2/CCU3. For detailed information, please refer to the Homematic IP User Guide, available for download in the download area of **www.homematic-ip.com.**

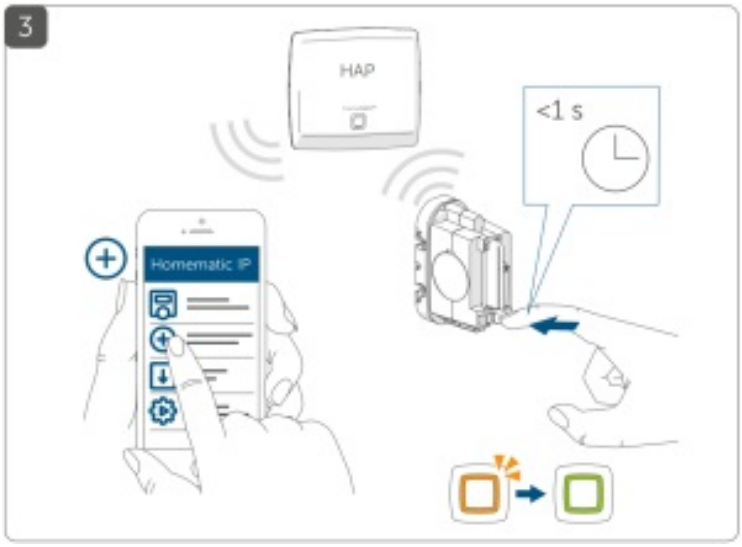
To integrate the door lock sensor into your system and enable it to communicate with other Homematic IP devices, you must teach-in the device to your Homematic IP Access Point first.

To teach-in the device, please proceed as follows:

- Open the Homematic IP app on your smart-phone.
- Select the menu item “Teach-in device”.
- Correctly insert the included 3 V CR2032 battery into the battery compartment (D) (s. figure 2). Teach-in mode remains activated for 3 minutes.



i You can manually start the teach-in mode for another 3 minutes by pressing the system button (E) briefly (see figure 3).



- Your device will automatically appear in the Homematic IP app.
- To confirm, please enter the last four digits of the device number (SGTIN) in your app or scan the QR code. Therefore, please see the sticker supplied or attached to the device.
- Please wait until teach-in is completed.
- If teaching-in was successful, the LED (E) lights up green. The device is now ready for use.
- If the LED lights up red, please try again.
- Allocate the device to a room and give the device a name.
- Using the app, select the applications you want to use with your device.
- Do not attach the cover yet.

Installation requirements

Installation is easy by simply inserting the available key into the door lock sensor. Because of its universal design, the door lock sensor fits in all common key types for cylinder locks. The door lock sensor is also suited for multi-point locking.

⚠Only use lock cylinders with an emergency and hazard functionality. These can be locked and unlocked from the outside using a second key whether or not a key is inserted on the inside.

You can print out a prepared key template in the original size and compare it to your key in order to check whether or not your key is the right size (s. figure 4). You will find this template in the download area of **www.homematic-ip.com.**
figure 4

You can go to the key template in the download area at **www.homematic-ip.com.**

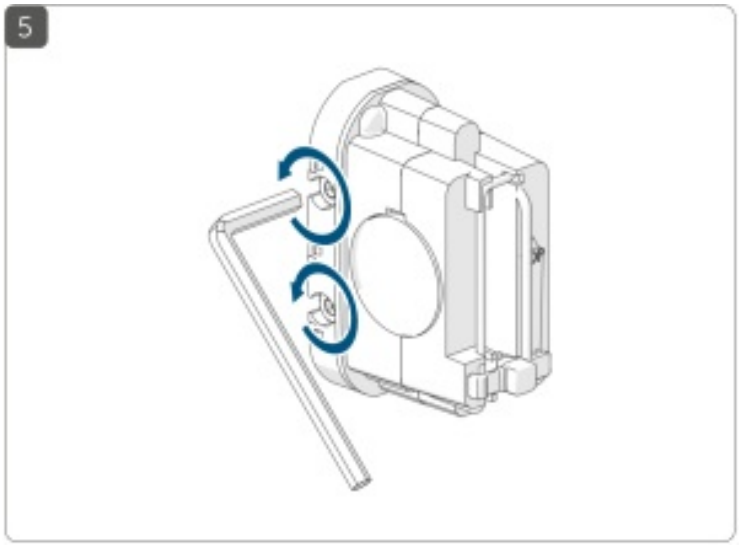
i The key may not be thicker than 2.5 mm

Installation

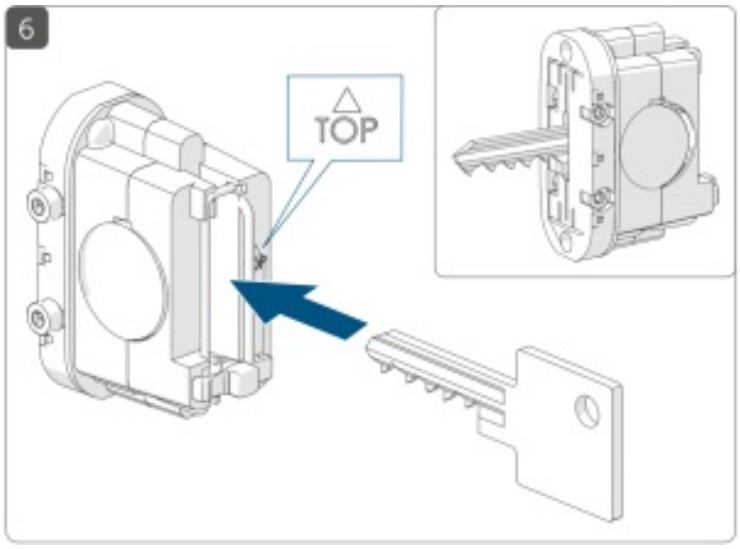
i Please read this entire section before starting to mount the device.

Proceed as follows to install the door lock sensor

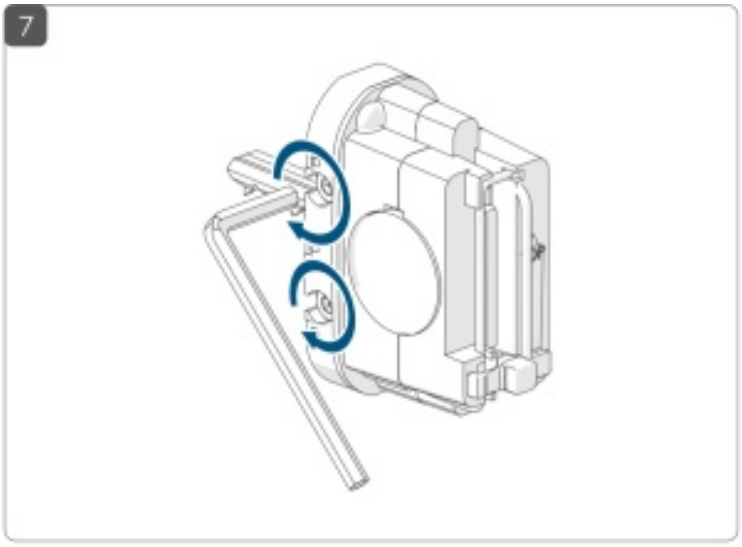
- Loosen the screws (C) to open the key clamp (A)
  so that you can slide your key in easily (s. figure 5).



- Insert the key completely into the key clamp (s. figure 6).

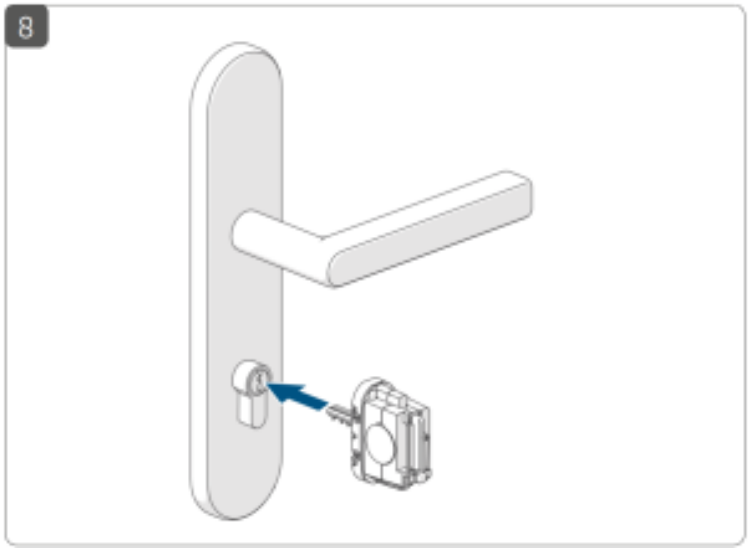


- Retighten the screws so that the door lock sensor fits securely on the key (s. figure 7).



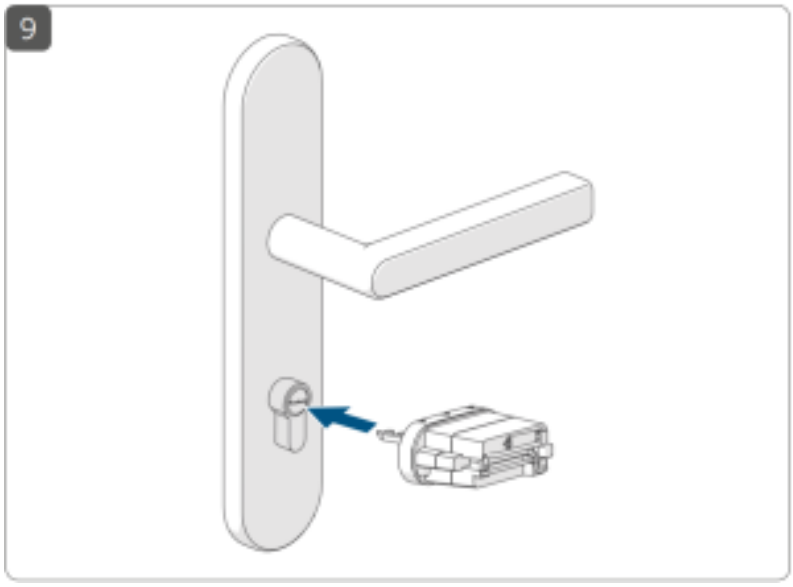
i However, the screws should not be tightened too much. The recommended tightening torque is 0.5 Nm.

- Insert the key together with the door lock sensor into the key hole (s. figure 8). Make sure that you can read the “TOP” lettering.

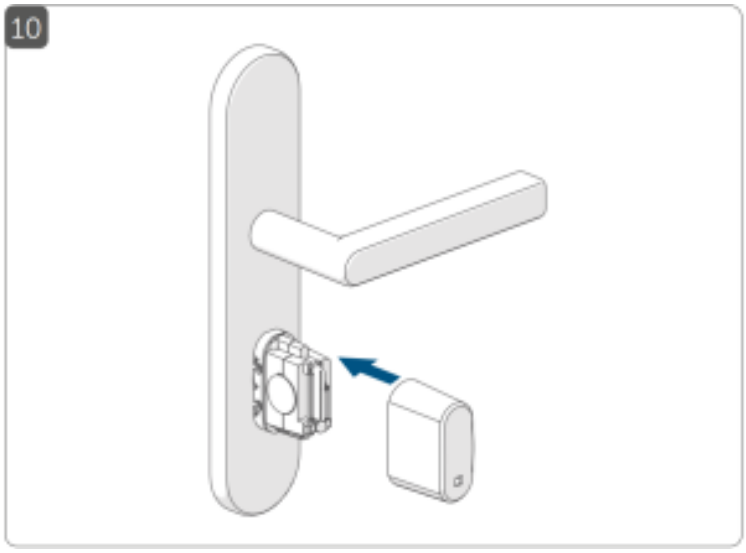


i When the neutral position of the lock cylinder is horizontal, the “TOP” lettering will be horizontal on the upper

side of the door lock sensor (s. figure 9).



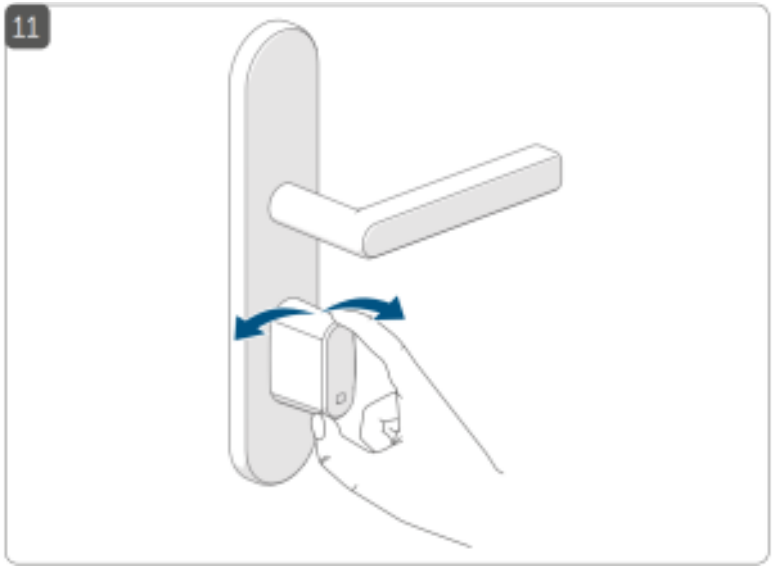
- Attach the desired cover (B) (white or silver) to the door lock sensor (s. figure 10).



- To ensure the correct detection of the end position of the lock cylinder, the door lock sensor must first be fully unlocked in the lock (with the lock latch) and then locked up to the stop.

i The Homematic IP app will take you through all other settings step-by-step for putting your door lock sensor into operation.

You can now turn the key with the door lock sensor to lock and unlock as normal (s. figure 11).



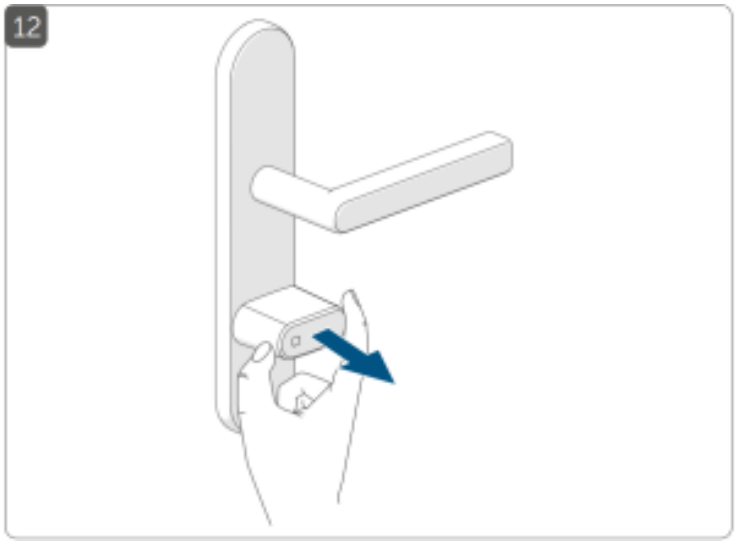
If the door lock sensor will be used in another lock/another door or the sensor was removed from the lock, you need to repeat the process once of inserting the sensor in the lock and then completely locking and unlocking (with the lock latch).

Changing battery

When a dead battery is displayed in the app and/or on the device (s. “7.4 Error codes and flashing sequences” on page 45), replace the used battery with a fresh type 3 V CR2032 battery. You must observe the correct battery polarity.

To replace the battery of the door lock sensor, please proceed as follows:

- Remove the cover of the door lock sensor (s. figure 12).



Note: The cover can be removed easily if the key is not in the neutral position.

- Remove the empty battery.
- Correctly insert a fresh 3 V CR2032 battery into the battery compartment (D)(s. figure 2).
- After inserting the battery, note the flashing signals of the LED (E) (s. “7.4 Error codes and flashing sequences” on page 45).
- Reattach the cover.

Once the battery has been inserted, the door lock sensor will perform a self-test (approx. 2 seconds). Afterwards, initialisation is carried out. The LED test display will indicate that initialisation is complete by lighting up orange and green.

⚠ **Caution!** There is a risk of explosion if the battery is not replaced correctly. Replace only with the same or equivalent type. Never recharge non-rechargeable batteries. Do not throw the batteries into a fire. Do not expose batteries to excessive heat. Do not short-circuit batteries. Doing so will present a risk of explosion.

 Used batteries should not be disposed of with regular domestic waste! Instead, take them to your local battery disposal point.

Troubleshooting

1. **Weak battery**

   Provided that the voltage value permits it, the door lock sensor will also remain ready for operation if the battery voltage is low. Depending on the particular load, it may be possible to send transmissions again repeatedly, once the batteries have been allowed a brief recovery period.

   If the voltage drops too far during transmission, this will be displayed on the device or via the Homematic IP app (see “7.4 Error codes and flashing sequences” on). In this case, replace the empty battery with a fresh one (see “6 Changing battery” on).
2. Command not confirmed

   If at least one receiver does not confirm a command, the device LED (E) lights up red at the end of the failed transmission process. The failed transmission may be caused by radio interference (see “10 General information about radio operation” on). This may be caused by the following:
   - Receiver cannot be reached.
   - Receiver is unable to execute the command (load failure, mechanical blockade, etc.).
   - Receiver is defective.
3. **Duty cycle**

   The duty cycle is a legally regulated limit of the transmission time of devices in the 868 MHz range. The aim of this regulation is to safeguard the operation of all devices working in the 868 MHz range.

   In the 868 MHz frequency range we use, the maximum transmission time of any device is 1% of an hour (i.e. 36 seconds in an hour). Devices must cease transmission when they reach the 1% limit until this time restriction comes to an end. Homematic IP devices are designed and produced with 100% conformity to this regulation.

   During normal operation, the duty cycle is not usually reached. However, repeated and radio-intensive teachin processes mean that it may be reached in isolated instances during start-up or initial installation of a system.

   If the duty cycle is exceeded, this is indicated by one long red flashing of the LED (E) and may manifest itself in the device temporarily working incorrectly. The device starts working correctly again after a short period (max. 1 hour).
4. **Error codes and flashing sequences**

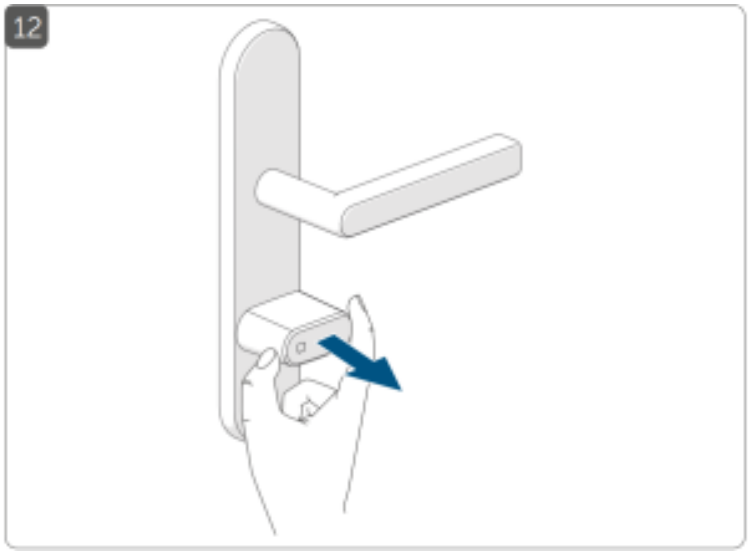
Flashing code	Meaning	Solution
Short orange flashing	Radio transmission/ attempting to transmit/data transmission	Wait until the transmission is comp leted.
1x long green lighting	Transmission confirmed	You can continue operation.
1x long red lighting	Transmission failed or duty cycle li mit is reached	Please try again (see sec. “7.2 Co mmand not confirmed” on page 43 or “7.3 Duty cycle” on).
Short orange lighting (after green or red confirmation)	Battery empty	Replace the device battery (see “6 Changing battery” on).
Short orange flashing (every 10 s)	Teach-in mode active	Please enter the last four numbers of the device serial number to conf irm (see “5.1 Teaching-in” on)
6x long red flashing	Device defective	Please see your app for error mes sage or contact your retailer.
1x orange and 1 x green lighting (after inserting batteries)	Test display	Once the test display has stopped, you can continue.

Restore factory settings

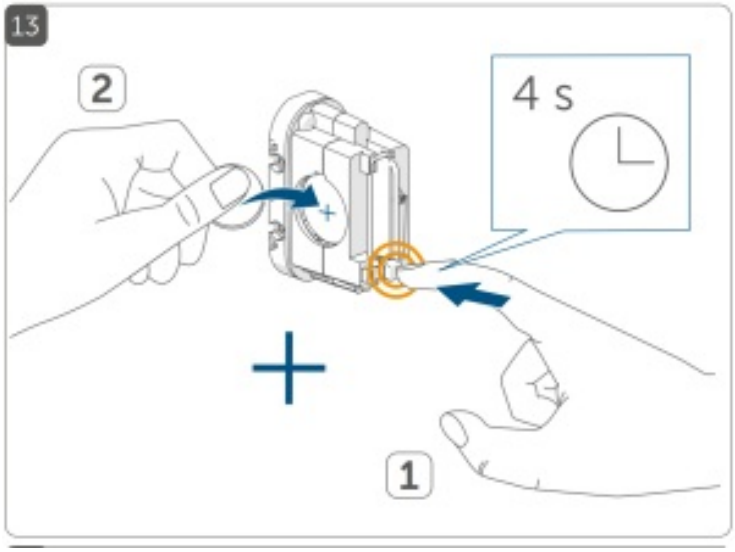
- The factory settings of the device can be restored. If you do this, you will lose all your settings.

To restore the factory settings of the device, please proceed as follows:

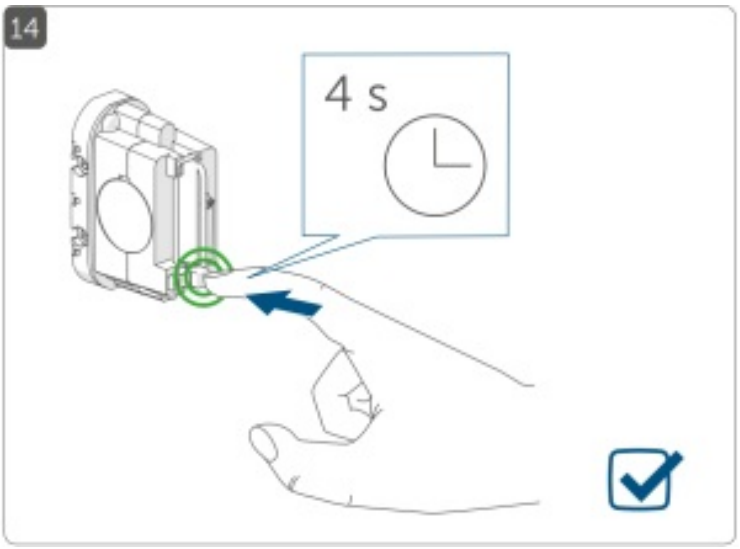
- Open the battery compartment (D) by removing the cover (B) (s. figure 12).



- **Note:** The cover can be removed easily if the key is not in the neutral position.
- Remove the old battery.
- Insert the fresh battery making sure that it is right way around while pressing the system button (E) at the same time. Press and hold down the system button until the device LED (E) starts to flash quickly orange (s. figure 13).



- Release the system button briefly and then press and hold the system button again until the orange flashing changes to a green light (s. figure 14).



- Release the system button to finish the procedure. The device will perform a restart.

Maintenance and cleaning

i The device does not require you to carry out any maintenance other than replacing the battery when necessary. Enlist the help of an expert to carry out any repairs.

Clean the device using a soft, lint-free cloth that is clean and dry. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

General information about radio operation

Radio transmission is performed on a non-exclusive transmission path, which means that there is a possibility of interference occurring. Interference can also be caused by switching operations, electrical motors or defective electrical devices.

i The range of transmission within buildings can differ greatly from that available in the open air. Besides the transmitting power and the reception characteristics of the receiver, environmental factors such as humidity in the vicinity have an important role to play, as do on-site structural/ screening conditions.

Hereby, eQ-3 AG, Maiburger Str. 29, 26789 Leer/ Germany declares that the radio equipment type Homematic IP HmIP-DLS is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **www.homematicip.com**

Technical specifications

Device short description: HmIP-DLS
Supply voltage: 1x 3 V CR2032
Current consumption: 30 mA (max.)
Battery life: 2 years (typ.)
Degree of protection: IP20
Ambient temperature: 5 to 35 °C
Dimensions (W x H x D): 26 x 56 x 38 mm (not including key)
Weight: 38 g (incl. battery, not including key)
Radio frequency band: 868.0-868.6 MHz
869.4-869.65 MHz
Maximum radiated power: 10 dBm

Receiver category: SRD category 2
Type open area RF range: 210 m
Duty cycle: < 1 % per h/< 10 % per h

Subject to modifications.

Instructions for disposal

Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.

Information about conformity

CE The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.

For technical support, please contact your retailer.

Documents / Resources

	Homematic IP HmIP-DLS Door Lock Sensor [pdf] User Manual HmIP-DLS, Door Lock Sensor, HmIP-DLS Door Lock Sensor