homematic IP HmIP-SWDM-2 Door and Window Sensor Instruction Manual

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Typographical and printing errors cannot be excluded. However, the information contained in this manual is reviewed on a regular basis and any necessary corrections will be implemented in the next edition. We accept no liability for technical or typographical errors or the consequences thereof.

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Changes may be made without prior notice as a result of technical advances.
157392 (web) | Version 1.3 (04/2024)

Contents

Package contents

- 1x Window/door contact with magnet
- 1x Magnet contact and spacer
- 2x Double-sided adhesive strips
- 2x Countersunk head screws 2.2 x 13 mm
- 2x Countersunk head screws 2.2 x 16 mm
- 2x 1.5 V LR03/Micro/AAA batteries
- 1x Operating manual

Information about this manual

Please read this manual carefully before operating your Homeostatic 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:

 **Important**! This indicates a hazard.

 **Please note**. This section contains important additional information!

Hazard information

 Never recharge standard 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.

 For safety and licensing reasons (CE), unauthorised change and/or modification of the device is not permitted.

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

 The device may only be operated in a dry and dust-free 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 accept no liability for damage to property or personal injury caused by improper use or the failure to observe the hazard warnings. In such cases, all warranty claims are void. We accept no liability for any consequential damage.

 The device must only be operated in residential settings.

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

Function and device overview

The Homeostatic IP Window / Door contact reliably detects open windows and doors by an integrated magnet sensor. The device can be easily mounted thanks to the supplied adhesive strips or screws.
You can directly connect the window and door contact to the Homematic IP Radiator Thermostat – basic to automatically lower the room temperature during ventilation. Alternatively, you can use the device in conjunction with a Homematic IP access point and integrate them comfortably into the Homematic IP smart home system via the free smartphone app and use it with comprehensive climate control and security applications. Open windows and doors are immediately displayed in the Homeostatic IP app – even while being out and about you can keep a close eye to your windows and doors.

Device overview:

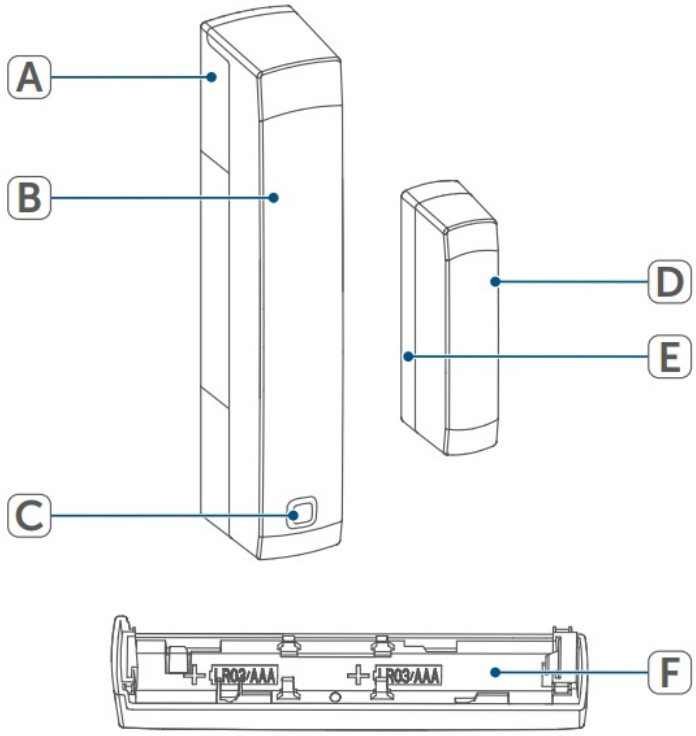

Figure 1
(A) Bracket
(B) Electronic unit
(C) System button (pairing button and LED)
(D) Magnet contact
(E) Spacer (6 mm) for magnet contact
(F) Battery compartment

General system information

This device is part of the Homematic IP Smart Home system and communicates via the Homematic IP wireless protocol. All devices in the Homematic IP system can be configured easily and individually with a smartphone using the Homematic IP app. Alternatively, you have the option of operating Homematic IP devices via the CCU3 or in conjunction with many partner solutions. The available functions provided by the system in combination with other components are described in the Homematic IP User Guide. All current technical documents and updates can be found at **www.homematic-ip.com**.

Start-up

Pairing
Please read this entire section before starting the pairing procedure.

You can pair the device either directly to a Homematic IP Radiator Thermostat – basic or to the Homematic IP Access Point (HmIP-HAP). After pairing, configuration has to be done directly on the device. After pairing with the Access Point, configuration is done via the Homematic IP app.

Direct pairing with a Homematic IP device

You can pair Homematic IP window and door contacts with magnet to a Homematic IP Radiator Thermostat – basic (HmIP-eTRV-B / HmIP-eTRV-B-2).

Please make sure you maintain a distance of at least 50 cm between the devices during pairing.

You can cancel the pairing procedure by briefly pressing the system button (C) again. This will be indicated by the device LED (C) lighting up red.

To connect the device with another Homematic IP device, the pairing mode of both devices must be enabled. To do this, proceed as follows:

- Remove the electronics unit **(B)** from the holder (A)by sliding it upwards and removing it forwards.

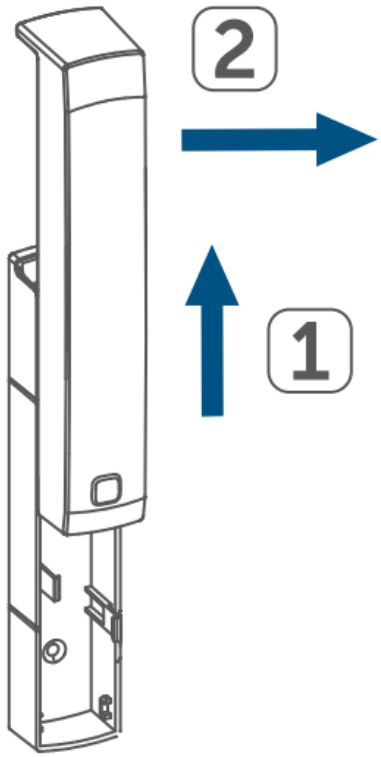

Figure 2

- Remove the insulation strip from the battery compartment **(F)** of the window / door contact.
- Press and hold the system button **(C)** for at least 4 seconds to enable the pairing mode. The device LED **(C)** starts to flash orange. The pairing mode is active for 3 minutes.
- Press and hold down the system button of the device you want to connect (e.g. the radiator thermostat – basic) for at least 4 seconds to activate the pairing mode. The device LED starts to flash orange.
  For further information, please refer to the operating manual of the corresponding device.

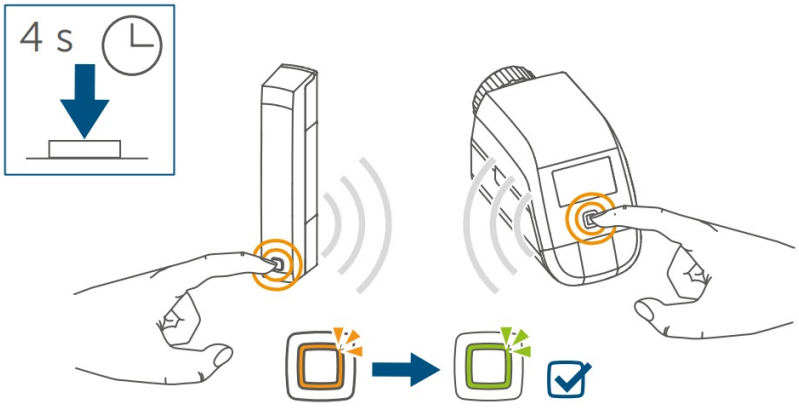

Figure 3

The device LED lights up green to indicate that pairing has been successful. If pairing has failed, the device LED lights up red. Please try again.

If no pairing operations are performed, pairing mode is exited automatically after 3 minutes.

If you want to add another device to the existing devices, first activate the pairing mode of the existing device and afterwards the pairing mode of the new device.

If you want to add another radiator thermostat, for example, you must first pair the new radiator thermostat to the existing radiator thermostat. Afterwards, you can pair the new radiator thermostat with the existing window / door contact.

If you are using several devices in one room, you should pair all devices with each other.

Pairing with the access point (alternative)

First set up your Homematic IP Access Point using the Homematic IP app so that you can use other Homematic IP devices in the system. For further information, please refer to the operating manual of the access point.

For more information on pairing and setting up the wall thermostat using a CCU3, please refer to the WebUI manual on our homepage at **www.homematic-ip.com**.

To integrate the device into your system and to enable control via the Homematic IP app, you must first add the device to your Homematic IP access point.

To add the window / door contact, please proceed as follows:

- Open the Homematic IP app on your smartphone.
- Select the menu item “Add device”.
- Remove the electronic unit **(B)** from the bracket **(A)** by sliding it upwards and pulling it forwards (see figure).
- Remove the insulation strip from the battery compartment **(F)** of the window / door contact. The pairing mode is active for 3 minutes.

You can manually start the pairing mode for another 3 minutes by briefly pressing the system button **(C).**

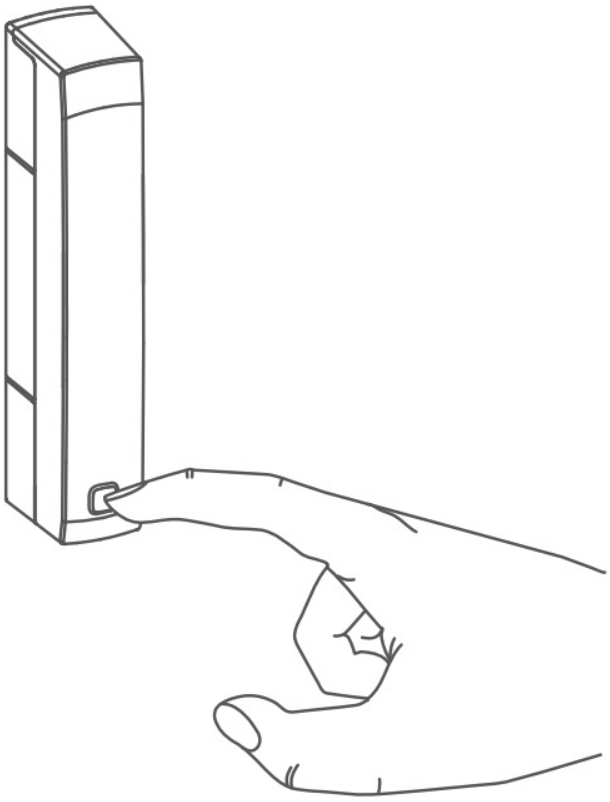

Figure 4
Your device will automatically appear in the Homematic IP app.

- To confirm, enter the last four digits of the device number (SGTIN) in your app, or scan the QR code. The device number is on the sticker in the package contents or attached to the device.
- Wait until pairing is completed.
- If pairing was successful, the LED (C) lights up green. The device is now ready for use.

If the LED lights up red, please try again.

- Please select, in which application (e.g. climate control and/or security) you would like to use the device.
- In the app, give the device a name and allocate it to a room

Installation

Please read this entire section before starting the installation.

Selecting a suitable mounting location

- Select a window or door for mounting the window / door contact.
- Fix one part of the window / door contact (magnet contact (D) or electronic unit (B)) to the moving part (door or window wing), the other one at the stationary part (frame) of the window or door.

Figure 5

- Fasten the window / door contact on the side of the window or door where the handle is located, in the upper third of the window/door frame(for fastening details, see (**see „6.2.2 Adhesive strip or screw mounting“ on page 23)).**
- The magnet contact can be mounted in a horizontal or vertical way, left or right to the electronic unit of the window / door contact.

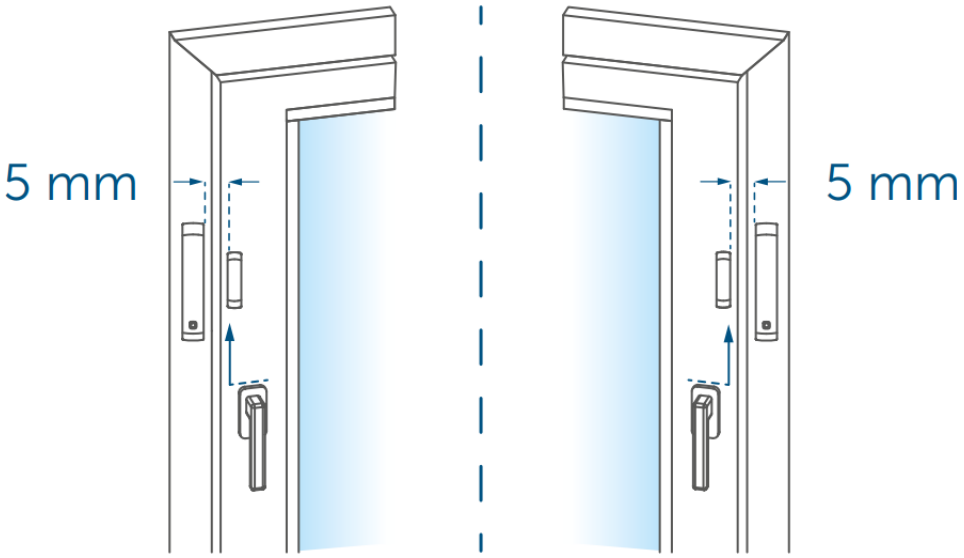

Figure 6

The electronic unit and the magnet contact should be mounted at the same height. As a spacer (E) can be

used for the magnet contact to raise the magnet contact, the electronic unit must be mounted on the higher part of the window.

The ideal spacing between the housing edge of the window/door contact and the window/door casement should be 5 mm (**see figure**).

Adhesive strip or screw mounting

You can mount the window / door contact with:

- the double-sided adhesive strip or
- countersunk head screws to the window/door frame.

Do not yet assemble the magnet contact before screw mounting.

Adhesive strip mounting
For mounting the window / door contact with the supplied adhesive strip, please proceed as follows:

- Attach the large double-sided adhesive strip to the back of the bracket (A) and press the device into the desired position on the window.

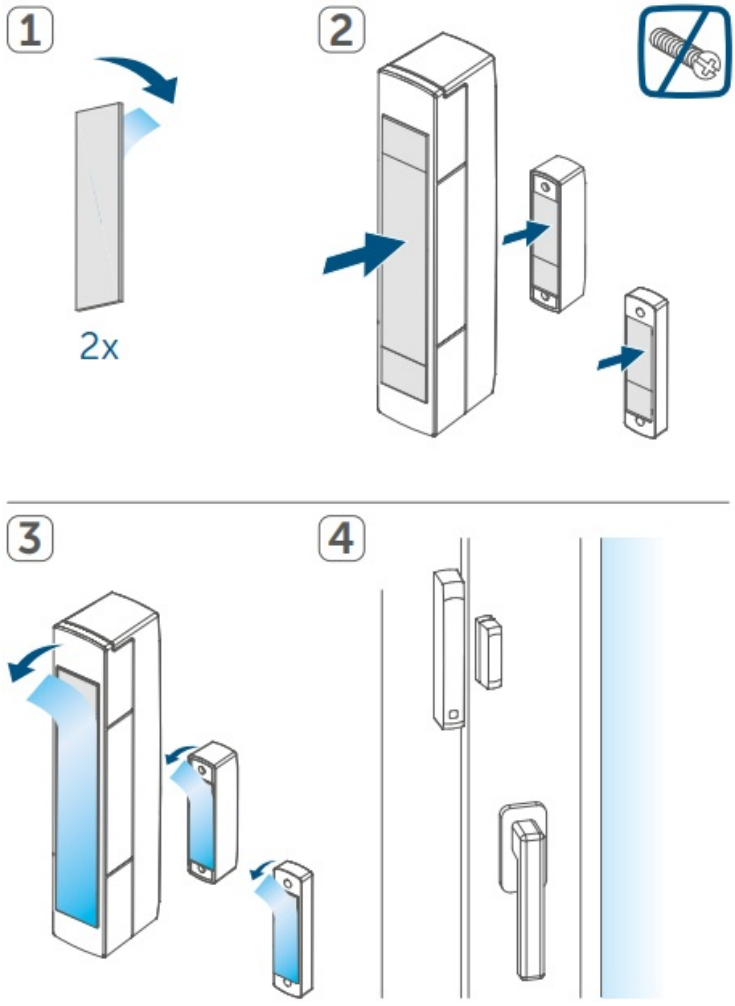

Figure 7

- Place the magnet in the bracket at the back side and place the back side into the housing of the magnetic

contact.

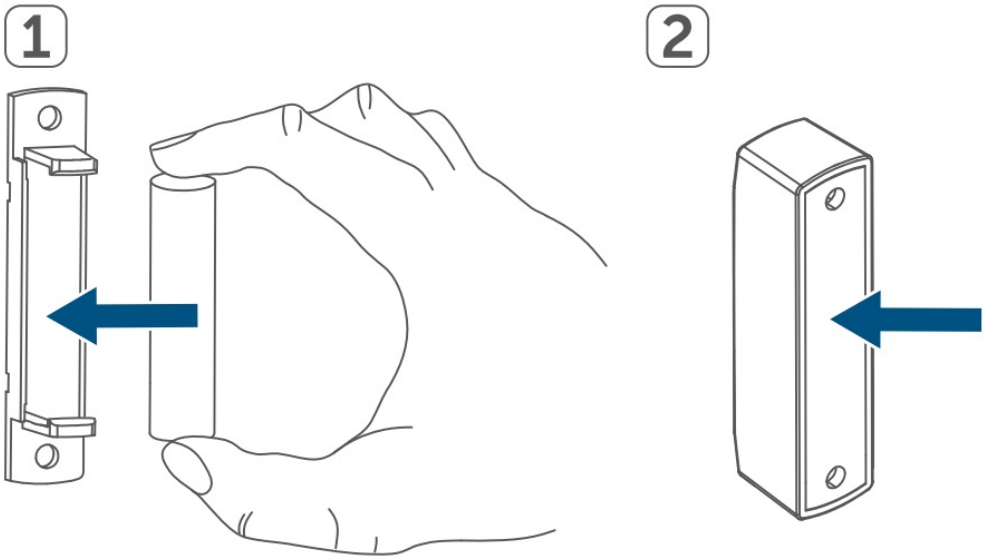

Figure 8

When using the spacer **(E),** fasten the smaller adhesive strip at the back side of the spacer (**see figure**) and attach it to the desired position on the window. Afterwards, place the magnet contact on to the spacer.

- Attach the small double-sided adhesive strip to the back side of the magnet contact (D) (**see figure**) and press the magnet contact onto the desired position of the window.

Make sure that the mounting surface is smooth, solid, non-disturbed, free of dust, grease and solvents and not too cold to ensure long-time adherence.

Screw mounting
Using screws will damage the window and/or door. For those living in rented accommodation, this could lead to a landlord making claim for compensation or holding back a tenant's deposit.

Do not yet assemble the magnet contact before screw mounting.
For mounting the window / door contact with the supplied screws, please proceed as follows:

- Pre-drill the screw holes in the bracket (A) using an appropriate drill.
- Mark the screw holes for the electronic unit (B) on the window with the aid of the bracket (A).
- Mark the screw holes for the magnet contact (D) or, if required, for the spacer (E) on the window.

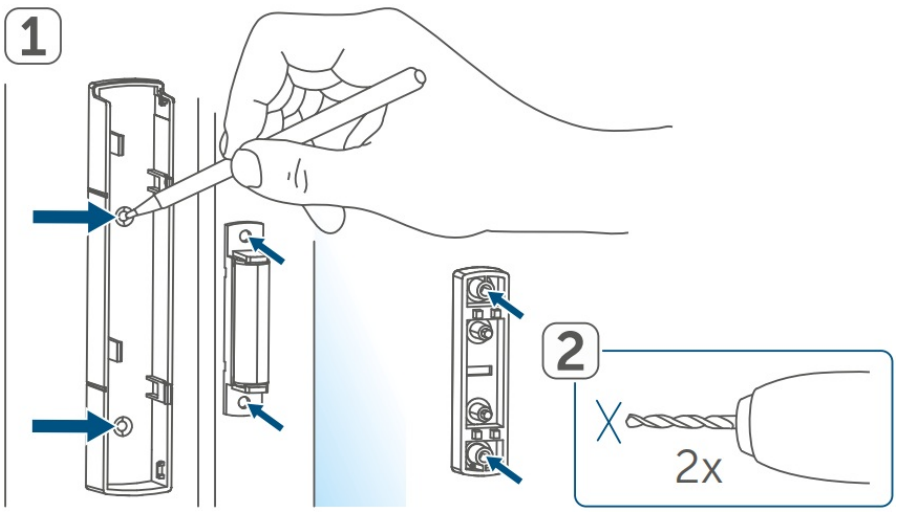

Figure 9

- If you are working with hard surfaces you should pre-drill the holes marked using a 1.5 mm drill (not necessary for soft surfaces).
- Hold the bracket of the electronic unit at the desired mounting position and screw the two longer countersunk screws (2.2 x 16 mm) through the screw holes.

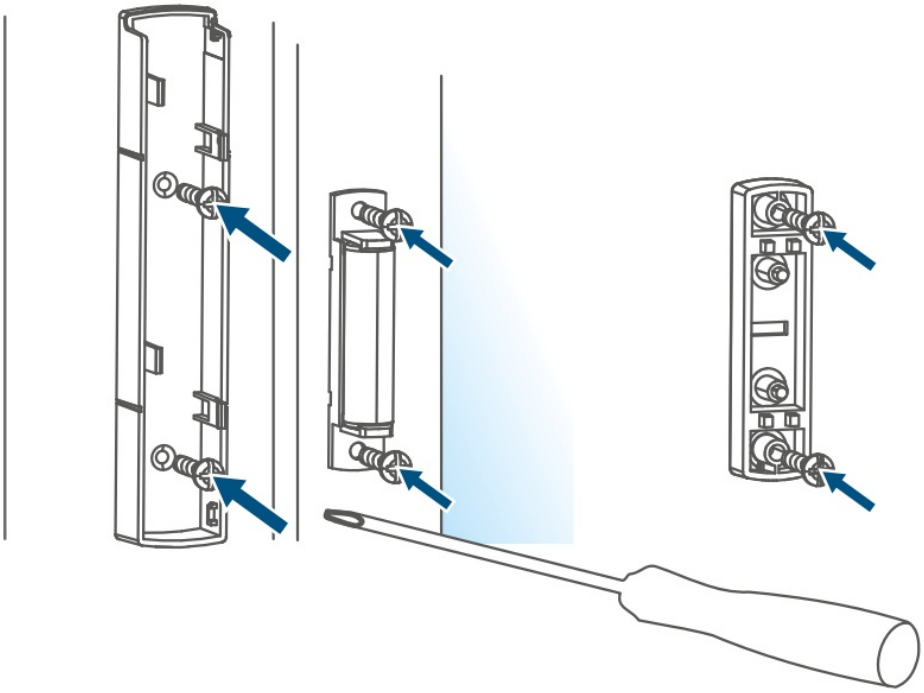

Figure 10

- Insert the electronic unit into the bracket.
- Hold the back of the magnetic contact or the spacer at the desired mounting point and screw in the two smaller countersunk screws (2.2 x 13 mm) through the screw holes (**see figure**).
- Place the magnet in the bracket at the back side and place the back side into the housing of the magnetic contact (**see figure**).

When using the spacer, you can simply attach the magnet contact after installation to the spacer.

Changing the batteries

If an empty battery is displayed in the app or on the device (see „8.4 Error codes and flashing sequences“ on page 27), replace the used batteries with two new LR03/micro/AAA batteries.
You must observe the correct battery polarity

To replace the battery of the window / door contact, please proceed as follows:

- Detach the bracket (A) from the electronic unit (B)by sliding it downwards and removing it to the rear (**see figure**).
- Insert two new 1.5 V LR03/micro/ AAA batteries into the battery compartment (F), making sure that you insert them the right way round (**see figure 9**)

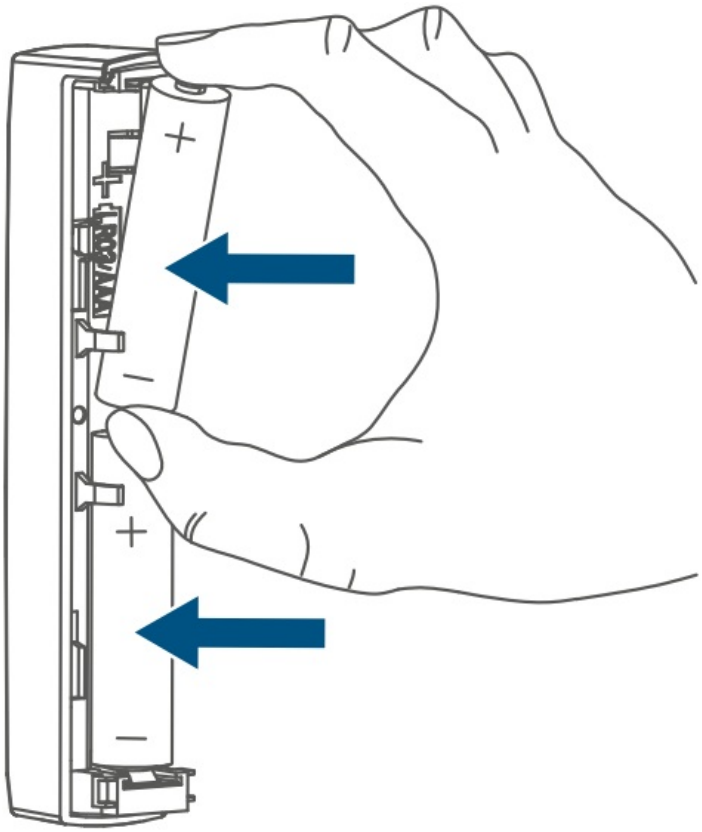

Figure 11

- after inserting the batteries, pay attention to the flashing sequences of the LED (F)(see „8.4 Error codes and flashing sequences“ on page 27).
- Put the bracket back on the electronic unit.

Once the battery has been inserted, the window / door contact 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.

Troubleshooting

Weak batteries
Provided that the voltage value permits it, the window / door contact will remain ready for operation also 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 again while sending, this will be displayed in the Homematic IP app and on the device(- see „8.4 Error codes and flashing sequences“ on page 27). In this case, replace the empty batteries with two new ones (see „7 Changing the batteries“ on page 25)

Command not confirmed
If at least one receiver does not confirm a command, the device LED lights up red at the end of the failed transmission process. The reason for the failed transmission may be radio interference, (see „11 General information about radio operation“ on page 28).

This may be caused by the following:

- Receiver cannot be reached,
- Receiver is unable to execute the command (load failure, mechanical blockade, etc.), or
- Receiver is faulty

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 pairing 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 three slow red flashes of the device LED, and may manifest itself in the device temporarily working incorrectly. The device starts working correctly again after a short period (max. 1 hour).

Error codes and flashing sequences

Flashing code	Meaning	Solution
Short orange flashes	Radio transmission/send attempt/data transmission	Wait until the transmission is completed.
1x long steady green light	Transmission confirmed	You can continue operation.
1x long red flash	Transmission failed or duty cycle limit reached	Please try again *(see „8.2 Command not confirmed“ on page 26)* or *(see„8.3 Duty cycle“ on page 26)*.
Short orange flashes (every 10 s)	Pairing mode active	Please enter the last four numbers of the device serial number for confirmation *(see „6.1 Pairing“ on page 20)*.
Fast orange flashing	Direct pairing mode active	Enable the pairing mode of the device you would like to add *(see „6.1.1 Direct pairing with a Homematic IP device“ on page 20)*.
Brief steady orange light (after green or red confirmation)	Batteries empty	Replace the batteries *(see„7 Changing the batteries“ on page 25)*.
Alternating long and short orange flashing	Device software updating (OTAU)	Wait until the update is completed.
6x long red flashes	Device defective	Please see your app for error message or contact your retailer.
1x orange, 1x green light- ing (after inserting batteries)	Test display	You can continue once the test display has stopped.

Restoring 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 window / door contact, please proceed as follows:

- Remove the electronic unit (B) from the bracket (A) by sliding it upwards and pulling it forwards (see **figure).**
- Remove one battery.
- Insert the battery ensuring that the polarity is correct and press and hold down the system button (C) for 4 s at

the same time, until the LED (C) will quickly start flashing orange.

- Release the system button.
- Press and hold the system button again for 4 seconds, until the LED lights up green.
- Release the system button to finish restoring the factory settings.

The device will perform a restart.

Maintenance and cleaning

The device does not require you to carry out any maintenance other than replacing the battery when necessary. Leave any maintenance or repair to a specialist.

Clean the device using a soft, clean, dry and lint-free cloth. You may dampen the cloth a little with lukewarm water to remove more stubborn marks. 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.

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

eQ-3 AG, Mai burger Strasse 29, 26789 Leer, Germany, hereby declares that the radio equipment type Homematic IP HmIP-SWDM-2 is compliant with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **www.homematic-ip.com**

Disposal

Instructions for disposal

 This symbol means that the device and the batteries or accumulators must not be disposed of with household waste, the residual waste bin or the yellow bin or yellow bag.
For the protection of health and the environment, you must take the product, all electronic parts included in the scope of delivery, and the batteries to a municipal collection point for old electrical and electronic equipment to ensure their correct disposal. Distributors of electrical and electronic equipment or batteries must also take back obsolete equipment or batteries free of charge.

By disposing of it separately, you are making a valuable contribution to the reuse, recycling and other methods of recovery of old devices and old batteries.

You must separate any old batteries and accumulators of old electrical and electronic devices from the old device if they are not enclosed by the old device before handing it over to a collection point and to dispose of them separately at the local collection points.

Please also remember that you, the end user, are responsible for deleting personal data on any old electrical and electronic equipment before disposing of it.

Information about conformity

CE The CE mark is a free trademark that is intended exclusively for the authorities and does not imply any assurance of properties.

For technical support, please contact your retailer.

Technical specifications

Device short description: HmIP-SWDM-2
Supply voltage: 2x 1.5 V LR03/micro/AAA
Current consumption: 35 mA max.
Battery life: 4 years (typical)
Protection rating: IP20
Ambient temperature: -10 to +50°C Dimensions
Electronic unit (W x H x D): 102 x 18 x 25 mm Dimensions
Magnet contact (W x H x D): 48 x 11 x 13 mm
Weight electronic unit: 48 g (including batteries)
Weight magnetic contact: 17 g (including magnet)
Radio frequency band: 868.0 – 868.6 MHz 869.4 – 869.65 MHz
Max. radio transmission power: 10 dBm
Receiver category: SRD category 2
Typical range in open space: 200 m
Duty cycle: < 1 % per h/< 10 % per h

Subject to modifications

Free download of the Homematic IP app!

Download on the App Store

Manufacturer's authorised representative:
eQ-3 AG
26789 Leer / GERMANY
www.eQ-3.de

Documents / Resources

	homematic IP HmIP-SWDM-2 Door and Window Sensor [pdf] Instruction Manual HmIP-SWDM-2, HmIP-SWDM-2 Door and Window Sensor, Door and Window Sensor, Window Sensor, Sensor

References

- Home page | Homematic IP
- Smart Home: Systeme und Geräte erleben | Homematic IP
- User Manual