

Montage- und Bedienungsanleitung

Mounting instruction and operating manual

Rauchwarnmelder mit Q-Label **S. 2**

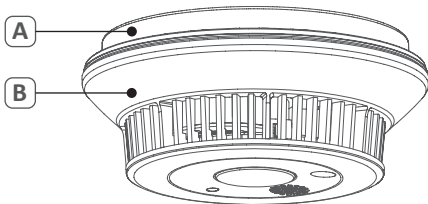
Smoke Alarm with Q label **p. 36**



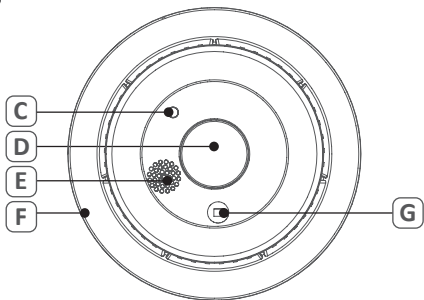
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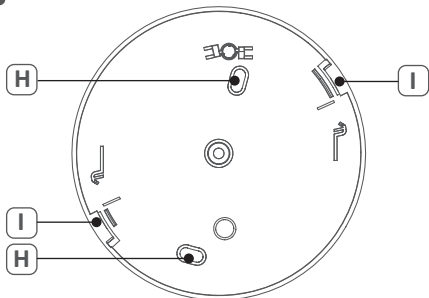
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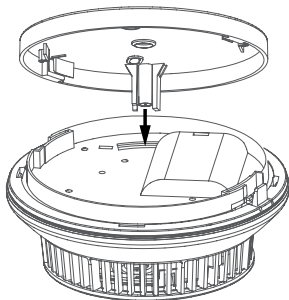
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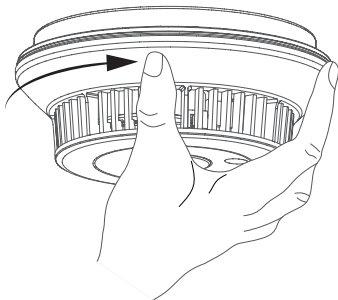
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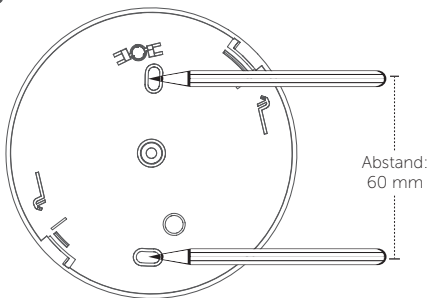
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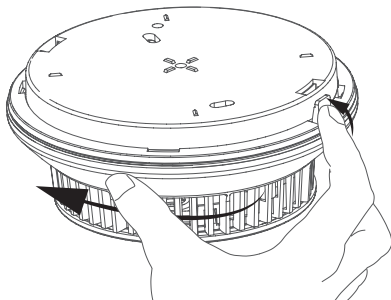


4b



5





Package contents

Quantity	Description
1	Homematic IP Smoke Alarm
1	Ceiling bracket
2	Screws 3.0 x 30 mm
2	Plugs 5 mm
1	Operating manual

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1 Information about this manual

Please read this manual carefully before beginning operation with 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.



Please note:

This section contains important additional information.

2 Hazard information



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 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.



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



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



The device may only be operated indoors 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.



The smoke alarm must not be painted over or covered with wallpaper. The smoke inlet openings may not be covered or concealed.



To prevent injury, the device has to be reliably mounted to the ceiling, according to the installation instructions.



Smoke alarms detect smoke, no flames.



Protect the batteries and the device from excessive heat e.g. caused by sunlight, fire or similar. Do not throw the batteries into a fire. Doing so will present a risk of explosion.



The smoke alarm may not be used in environments where the transmission of wireless signals may interfere with equipment, for example, in medical facilities containing life-saving systems or other similar environments.



The smoke alarm only monitors a specific zone in the surrounding of where it is fitted.



Use a dry linen cloth to clean the device. If the device is particularly dirty, you can slightly dampen the cloth to clean it. Do not use any detergents containing solvents for cleaning purposes. Make sure that no moisture will ingress into the housing.



The loud warning sound may damage your hearing. Protect your hearing during the function test.



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. This also applies to any conversion or modification work. The device is intended for private use only.



The device may only be operated within residential buildings.

3 Function and device overview

The Homematic IP Smoke Alarm monitors a room for smoke emissions. Operation of the device is based on the photoelectric scattered light principle. This enables a fire to be detected at an early stage and a warning to be given in good time that dangerous smoke gases are present.

When an alarm has been triggered, the integrated siren sounds and the warning LED will start to flash red. A white LED acts as emergency lighting for easy orientation also in the event of power failure.



The integrated LED only serves as emergency light and is not to be used as room lighting.

Wireless connection to other smoke alarm devices

The smoke alarm HMIP-SWSD is intended for use in a network with other smoke alarms of the same type. The device can be connected to a maximum number of 40 smoke alarm devices, using the Homematic IP Access Point.

This provides an extra level of safety: In the event of fire the smoke alarm simultaneously sends an alarm to all devices of the same type that are located within wireless range. Thus, you can react early enough to a fire that may still be some distance away, perhaps in another room on a different floor of the building.

In order to prevent overlaps with other wireless services in the 868 MHz band, the system works with individual wireless addresses, thus protecting it from false alarms sent by other wireless transmitters in this frequency range.

The smoke alarm is powered by a permanently sealed lithium battery with a typical lifetime of 10 years which enables a low-maintenance operation.

Device overview (*figure 1*):

- (A) ceiling bracket
- (B) smoke alarm

Device overview from below (*figure 2*):

- (C) device LED (status display)
- (D) operating button (test and teaching-in)
- (E) audible signal (triggered in alarm mode and during function test)
- (F) release lever
- (G) optical signal (escape light, lights if alarm is triggered and during function test)

Device overview ceiling bracket (*figure 3*):

- (H) bore holes (for mounting with two screws)
- (I) housing latches

4 General system information

This device is part of the Homematic IP smart home system and works with the HmIP radio protocol. All Homematic IP devices can be configured comfortably and individually with a smartphone via the Homematic IP app. The available functions provided by the Homematic IP system in combination with other components are described in the Homematic IP User Guide. All current technical documents and updates are provided at www.eQ-3.de.

5 Start-up

5.1 Installation and teaching-in



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



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.



During teach-in, please make sure you maintain a distance of at least 1 m between the Homematic IP Access Point and the smoke alarm to avoid interferences of the radio signal.

To integrate the smoke alarm 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.

- Open the Homematic IP app on your smartphone.
- Select the menu item **“Teach-in device”**.
- Turn the smoke alarm in a clockwise direction into the ceiling bracket until it clicks into place (*see figure 4a and 4b*).
- Teach-in mode remains activated for 3 minutes.



You can manually start the teach-in mode for another 3 minutes by pressing the operating button **(D)** briefly.

- 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 lights up green. The device is now ready for use.
- If the LED lights up red, please try again.
- Select the desired solution for your device.

- In the app, give the device a name and allocate it to a room.

5.2 General information about the installation location



The installation notes of this manual must be observed in order to ensure proper functioning. Please read this entire section before mounting the smoke alarm.



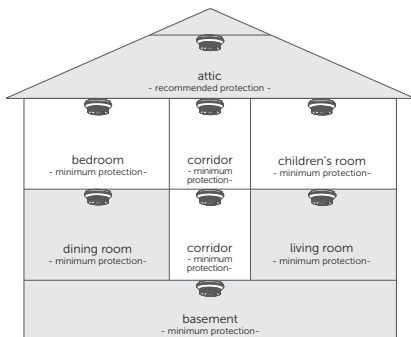
The smoke alarm monitors an area of up to 60 m² at a maximum ceiling height of 6 m.

5.2.1 Minimum protection

For minimum protection, sleeping areas such as children's rooms or bedroom, as well as corridors must be controlled by smoke alarms. In buildings where ceilings are extended over multiple floors at least one smoke alarm has to be installed on the upper floor.

5.2.2 Recommended protection

It is always recommended to install several smoke alarms in your house or flat and if possible in every room (except those mentioned below as unsuitable installation locations). This is the only way to ensure that a timely and, as a result, an effective warning can be given in the early stages of a fire.



At its installation location each smoke alarm must be thoroughly tested to ensure that it can access other smoke alarms of the wireless network and the Access Point via radio in all circumstances (see sec. „6.2 Communication test“ on page 53). Furthermore, please check if the installation location is acceptable in terms of the audible alarm (see sec. „6.1 Function test“ on page 52).

5.2.3 Unsuitable installation locations

- kitchen and bathroom (steam)
- rooms with open fireplaces (smoke)
- in the immediate vicinity of halogen lamps,

transformers or halogen lamp cable systems, as well as fluorescent lamps or energy-saving lamps and in particular to its ballasts (minimum distance 50 cm)

- garages (exhaust emissions)
- dusty and dirty rooms (measuring chamber gets dirty quickly or false alarms are triggered)
- in the vicinity of windows, ventilators, fans or any other locations where the air moves around a lot
- in the vicinity of areas where people smoke
- in the vicinity of solid steel beams, large metal surfaces, etc. as they could significantly inhibit the transmission or receipt of the wireless signal. Moving the alarm by just a few centimetres can often help.

5.2.4 Flat ceilings

The smoke alarm must be mounted on the ceiling in the centre of a room. Keep a minimum distance of 50 cm to the walls and corners of the room to avoid a build-up of air that stops the rising smoke.

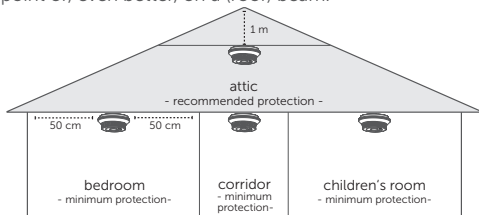
If rooms are separated by joists (divisions) into ceiling panels with a height greater than 20 cm, one smoke alarm per ceiling surface has to be installed if the area is greater than 36 m².



The smoke alarm may only be mounted to the ceiling. Another type of installation, e.g. side wall mounting, is not allowed.

5.2.5 Pitched ceiling

When mounting the smoke alarm in attic rooms with pitched roofs the device must not be installed at the apex of the roof. If it is to be installed on the pitched roof, it must be mounted around 1 m below the rooms highest point or, even better, on a (roof) beam.



The smoke alarm has to be installed horizontally in any case. Contrary to DIN 14676 4.3.5.4, the installation on sloping ceilings is not allowed.

5.2.6 Corridors

In corridors with a maximum width of 3 m the distance between two smoke alarm devices may not exceed 15 m. Keep a distance of less than 7.5 m between the smoke alarm and the front surface of the corridor. One smoke alarm has to be installed in each of intersection, junction and corner areas of corridors.

5.2.7 Platforms and galleries

If the height of a room is divided by a platform or gallery with an area greater than 16 m² as well as a length and width of 2 m, a smoke alarm has to be installed below these constructions.

5.3 Mounting the smoke alarm

Following careful selection of the installation location, the ceiling bracket has to be mounted first.

You can mount the smoke alarm to the ceiling using two screws and plugs.



If you have already taught-in the smoke alarm to other devices, please remove the ceiling bracket first by unlocking the release lever. Turn the smoke alarm anticlockwise and pull it from the ceiling bracket.

- Use the opposite bore holes to fasten the ceiling bracket with two screws.
- Use a pen to mark the bore hole positions of the ceiling bracket to the ceiling (*see figure 5*).
- Drill the bore hole. When using the supplied plug you will need a 5 mm drill.



If you want to mount the device to a wooden ceiling, you can pre-drill 2 mm using a wood drill bit to make screws easier to insert.

- Use the screws supplied and the previously inserted plugs to fasten the ceiling bracket to the ceiling.
- Before inserting the smoke alarm device into the ceiling bracket, briefly press the test button first.
- Turn the smoke alarm in a clockwise direction into the ceiling bracket until it clicks into place (*see figure 4a and 4b*).



The smoke alarm can also be mounted with a standard installation box. Therefore, please use the two bore holes with a distance of 60 mm and fasten the ceiling bracket by inserting appropriate screws.

5.3.1 Removing from the ceiling bracket

If you want to remove the device from the ceiling bracket, please press the release lever and turn the device out of the ceiling bracket (see *figure 6*).

6 Operation

After latching and teaching-in the device, simple operating functions are available directly on the device:

- Press the operating button **(D)** one time briefly (< 4 s) to trigger the function test of the smoke alarm.
- Press and hold down the operating button **(D)** one time for longer than 4 s to trigger the communication test with other connected smoke alarms.

6.1 Function test

If you have installed and taught-in the smoke alarm successfully, you have to perform a function test first. It is also recommended to perform a function test once a month after installation to ensure correct operation of the device.

To perform the function test, proceed as follows:

- Press the operating button **(D)** of the device one

- time briefly.
- If the alarm sound is triggered 3 times, the LED flashes red and the escape light flashes during the function test, the smoke alarm is working correctly.
 - If no alarm sound is triggered or no visual signal can be detected, the device is defective and has to be replaced.



After the functional test, the smoke detection is deactivated for 10 minutes. During this time, no alarm can be triggered.

6.2 Communication test

The correct integration of the smoke alarm into the wireless network and the error-free communication to other smoke alarms can be tested by sending a radio signal to the smoke alarm. To send a radio test signal, proceed as follows:

- Press and hold down the operating button **(D)** for longer than 4 seconds. The communication test starts and a radio test signal is sent. The status LED lights up orange.
- All smoke alarms that are part of the radio network will react to the radio signal.
- If transmission has been successful, the LEDs of smoke alarms that have received the signal will

flash orange for 5 minutes. This confirms the correct communication between the smoke alarms within one wireless network.

- If the LED of one smoke alarm is not flashing, the device is either not integrated into the wireless network or the distance between the devices is too large.

6.3 Muting an alarm

If an unintended alarm is triggered, it can be muted for 10 minutes.

For muting the alarm, please proceed as follows:

- Press the operating button **(D)** one time briefly.

The alarm is muted and the device is deactivated for 10 min.

6.4 Muting in observation mode

In observation mode, you can mute the alarm for 10 minutes precautionary if you want to avoid that an alarm is triggered.

For muting the alarm in observation mode, please proceed as follows:

- Press the operating button **(D)** one time briefly.

Afterwards, the alarm is muted and the device is deactivated for 10 min. By pressing the operating button, a function test including audible and optical signals is performed.

7 Troubleshooting

The current mode of the smoke alarm is indicated optically and audibly by the following signals:

Operating mode

Operating status	LED display	Audible alarm
Observation mode	red flashing every 43 s.	-
Local smoke alarm	red flashing and emergency light with subsequent LED follow-up time of 24 h (fast single flashing for 30 min, afterwards double flashing every 43 s. Fast flashing can be aborted by pressing the operating button.)	intermittent alarm signal

Alarm transmitted by other smoke alarm of the wireless network	emergency lighting	intermittent alarm signal
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Functional test

Operating status	LED display	Audible alarm
Function test OK	fast red flashing and emergency lighting while function test is active with subsequent muting for 10 min	3 x short alarm sound
Alarm muted (for 10 min)	red flashing every 10 seconds for 10 min	
Function test not OK	-	-
Communication test OK	all smoke alarms flashing orange for 5 min	-

Communication test not OK	-	-
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Error messages

Operating status	LED display	Audible alarm
Weak battery	1 x red flashing every 43 s	Short beep every 43 s
Weak battery at different smoke alarm (the alarm of devices that are receiving signals can not be deactivated)	1 x red flashing every 3 h	Short beep every 3 h
Smoke chamber polluted (the information is not transferred to further smoke alarm devices, but the status information is send to the Homematic IP app)	3 x red flashing every 43 s	3 short signal sounds every 43 s



Devices with weak or empty battery or degraded smoke chamber may not be used and have to be replaced!

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 teach-in 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 long 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).

8 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 smoke alarm, please proceed as follows:

- Turn the smoke alarm in an anticlockwise direction and press the release lever to pull it from the ceiling bracket (*see figure 6*).
- Press the operating button **(D)** and turn the smoke alarm into the ceiling bracket at the same time. Press and hold down the button until the status LED starts flashing orange.
- Now release the operating button **(D)**.
- Press and hold down the operating button **(D)** again for 4s, until the device LED **(C)** lights up green.
- Release the operating button **(D)** to finish the reset procedure.

The device will perform a restart and activates the teach-in procedure.

9 Maintenance and cleaning

To ensure operational liability of the smoke alarm the device has to be maintained at least once a month. To do this, proceed as follows:

- Wipe the housing with a slightly damp cloth if necessary.
- Press the operating button **(D)** one time briefly to trigger the function test.
- If the alarm sound is triggered 3 times, the LED flashes red and the escape lights up permanently at the same time, the smoke alarm is working correctly.
- If no alarm is triggered after pressing the operating button **(D)**, the device is defective and has to be replaced.

10 Battery life

The smoke alarm is powered by a permanently sealed lithium battery with a typical lifetime of 10 years. Batteries cannot be replaced.



The smoke alarm has to be replaced 10 years after the first installation.

The battery life of typically 10 years can only be enabled under the following conditions:

- A max. number of 52 function tests and one full-alarm for 60 seconds may be performed per year.
- During the entire lifetime, one start-up procedure and two range tests may be performed and the device may be taught-in to a group once.
- The potential interference of other radio transmitters in the 868/869 MHz range may not be above 15 seconds per day.
- The operating ambient temperature of 5 to 30 °C has to be maintained.

11 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 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.

eQ-3 AG hereby declares that this device complies with the essential requirements and other relevant regulations of Directive 1999/5/EC. You can find the full declaration of conformity at www.eQ-3.de.

12 Technical specifications

Device short description:	HMIP-SWSD
Supply voltage:	2 x permanently installed 3 V lithium battery
Battery life:	10 years (typ.)
Degree of protection:	IP20
Degree of pollution:	2
Ambient temperature:	5 to 30 °C
Storage temperature:	-5 to +30 °C
Humidity:	max. 93 % (non-condensing)
Radio frequency:	868.3 MHz/869.525 MHz
Receiver class:	SRD Class 2
Typ. open area RF range:	200 m
Duty cycle:	< 1 % per h
Alarm type:	scattered-light smoke alarm
Alarm output:	Piezo signal device (>85 dB in 3 m distance), status LED, radio
Display:	Duo status LED

Mark of conformity:	CE, Q label
Type of installation:	Ceiling mounting with two screws in 60 mm distance
Housing dimensions (D x H):	approx. 115 x 45 mm ²
Weight:	148 g

Subject to technical changes.

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



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.

CE1772

Manufacturer: eQ-3 AG
Maiburger Straße 29
26789 Leer/Germany
16
DoP: DoP_HMIP_SWSD

EN 14604:2005
vfdb 14/01:2010-05
HMIP-SWSD

Intended for use as smoke alarm in households or similar residential application.

Declared performance:

Essential characteristics: Smoke alarm in accordance with EN 14604:2005

Performance: passed

You can find the full declaration of conformity at
www.eQ-3.de.

Kostenloser Download der Homematic IP App! Free download of the Homematic IP app!



Bevollmächtigter des Herstellers:
Manufacturer's authorised representative:



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