Smoke detector

Art. Nr.: 0869 00 / 04

Product characteristics at a glance

- Battery-operated smoke detector with photoelectric scattered light principle
- Automatic self test of the smoke evaluation
- Ability to link up to 40 smoke detectors
- Loud, pulsing warning signal at approx. 85 dB (A)
- Battery change indicator
- Contamination/disturbance indicator
- Integrated test button for testing the function
- Battery compartment check: if no battery is installed in the smoke detector, it cannot be locked into the socket
- Polarity reversal protection: the device cannot be destroyed due to incorrect battery connection
- VdS-recognition: G 200 121

Safety Indications

- Never paint over the smoke detector.
- Smoke detectors only detect the smoke of a fire, but not the flames themselves.
- Smoke detectors do not extinguish a fire. When the alarm sounds, search for the source of the fire and call the fire department if necessary.
- Do not use rechargeable batteries (accumulators) or power packs for power supply. They can cause disruptions or the premature failure of the device.
- The smoke detector produces a very loud and shrill sound, which can damage hearing. For this reason, please observe a safety distance of 50 cm during the function test.
- The smoke detector only monitors a defined area in the vicinity of the installation site. Install enough detectors to cover the entire living area and ensure optimum protection.
- People under the influence of alcohol or drugs may not be awakened by the signal sound.

Installation site

Smoke detectors should preferably be installed outside the door of or in bedrooms so that you will be awakened by the smoke alarm at night. In buildings with several floors, at least one smoke detector should be located on each floor.

The smoke detector will have optimum detection characteristics if it is installed under the ceiling in the center of the room. If this is not possible, keep a distance of at least 50 cm from the wall.
If the smoke detector is installed in the kitchen, you should locate the device as far away from the cooking zone as possible to prevent false alarms due to steam.

In large houses, you should use several, linked smoke detectors to cover the entire living area. If smoke is detected by one smoke detector, it sets off an alarm and activates all connected smoke detectors, which then also sound the alarm. Thus, you will be awakened during the night by your linked smoke detector in the bedroom if the smoke detector in the cellar detects smoke.

Minimum protection: one smoke detector in the hallway or in the stairwell of each floor

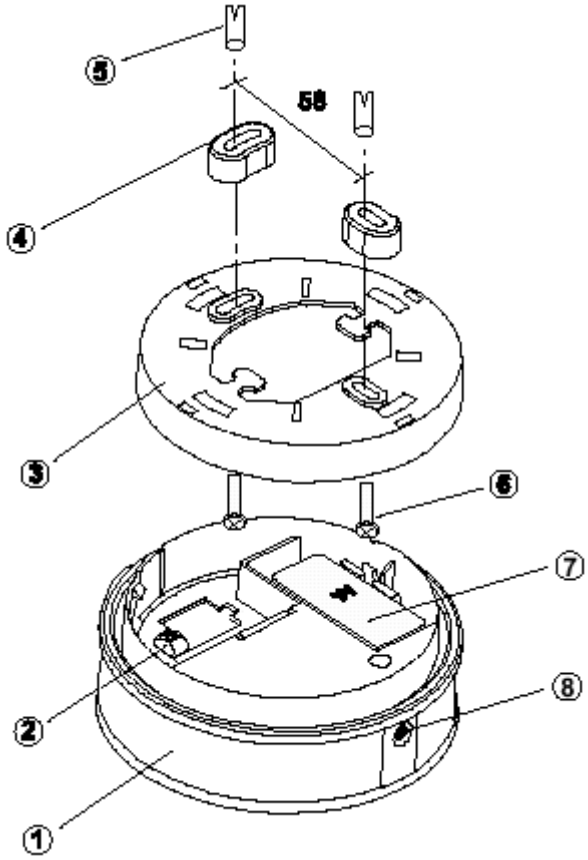
Optimum protection: one smoke detector in each bedroom and living room

Unsuitable installation sites

In order to prevent false alarms and malfunctions, do not install the smoke detector:

- in rooms where a large amount of steam, dust, or smoke are produced under normal circumstances.
- near hearths and open fireplaces.
- near ventilation shafts, since the stream of air could possibly prevent smoke from reaching the detector.
- near fluorescent and energy-saving lamps, since the starter can trigger false alarms due to the electrical fields caused by turning the lamp on (minimum distance: 50 cm).
- in rooms where temperatures are below +5°C or above +45°C.

Installation and commissioning



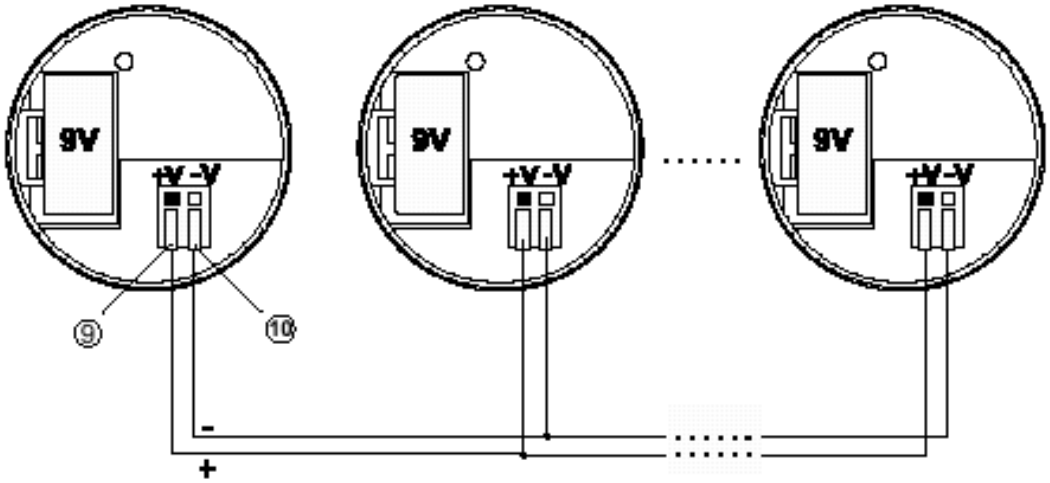
① Smoke detector
② Connection block
③ Socket
④ Spacers
⑤ Plug
⑥ Screw
⑦ Battery (9V)
⑧ Test button

Remove the two spacers from the socket. Otherwise, locking of the smoke detector is not possible.

1. Install the socket ③ with the included installation material.
2. Use the spacers ④, if the linking line of several smoke detectors is "surface-mounted".
3. If needed, carry out the appropriate steps to link several smoke detectors.
   For this, read the chapter "Linking smoke detectors".
4. Connect the 9V block battery ⑦ to the battery connection and insert the battery into battery bracket.
5. Stick the smoke detector ① into the socket and lock it by turning slightly clockwise.
   Caution: If no battery is inserted, the smoke detector cannot be fixed in the socket.
6. Carry out a function test.

Linking smoke detectors

You can link up to 40 Gira smoke detectors with one another. The connection of the detectors is achieved parallel with a two-core cable (e.g. telephone cable: J-Y(St)Y 2x2x0.6 mm). The total cable length of the detector network may not exceed 450 m.



⑨ + Linking
⑩ - Linking

To link the smoke detectors, proceed as follows:

1. Pull the connection block from the smoke detector board.
2. Connect the color-coded clamps (green = plus; gray = minus) to the line as portrayed in the illustration.
   To do this, insert the stripped cores into the opened spring clamps and close the clamps by pressing down on the handle.
3. Place the connection block on the board again.

Method of operation, self-test and battery test

The smoke detector recognizes a fire early on by its smoke development. It works according to the principle of scattered light: light transmitters and receivers are arranged in the measurement chamber so that the light signal emitted by the transmitter cannot directly hit the receiver (photocell). If smoke enters the smoke chamber, the light signal is scattered by the floating particles contained in the smoke. The scattered light rays hit the photocell and are transformed into an electrical signal there, which triggers the alarm.

The function of the smoke evaluation is constantly checked by a self-test. Any errors are reported by a disturbance signal (signal sound and light diode).

The battery test continuously checks the supply voltage. If the battery voltage sinks below a defined level, the smoke detector reports for 30 days that battery must be changed. During these 30 days, the smoke detector is fully functional.

Operating and alarm signals

Signal		Meaning
Signal sound	**Light diode**	
Loud intermittent sound	Blinks	Local smoke alarm
Loud intermittent sound	—	Smoke alarm to linked smoke detector
Short signal sound at 45 sec. intervals	Blinks alternately to the signal sound	Disturbance/soiling
Short signal sound at 45 sec. intervals	Blinks parallel to the signal sound	Battery change display
—	Blinks at 45 sec. intervals	Automatic self-test, normal operating condition
Loud intermittent sound	Blinks	Function test, trigger by test button

Function test

Caution:
The smoke detector produces a very loud and shrill sound, which can damage hearing. For this reason, please observe a safety distance of 50 cm during the function test.

Carry out the function test on a monthly basis. To do this, proceed as follows:

1. Press the test buttons:
   If the audible signal sounds, the smoke detector is working correctly.
   If no audible signal sounds, please replace the battery with a new one.
2. Then, carry out the function test again.
   If the audible signal still does not sound, the smoke detector is defective and must replaced with a new unit.

For linked smoke detectors, all connected smoke detectors must produce an acoustic alarm during the function test. If this does not occur, please check the following things: battery dead, cable correctly connected, cable defective!

Maintenance and care

In order to ensure the proper function of the smoke detector for a long period, you should carry out maintenance approx. biannually (or in case of a disturbance notice). To do this, proceed as follows:

1. Remove the smoke detector from the socket (turn counter- clockwise) and remove dust.
2. Wipe the smoke detector off with a moist towel.
3. Stick the smoke detector into the socket again and turn it clockwise until it locks into place.
   Caution: If no battery if present, the smoke detector cannot be locked in the socket.
4. Check whether the automatic self-test (smoke detector blinks every 45 seconds) is carried out.
5. Carry out a function test.

Exchange all smoke detectors after about 10 years.

Technical data

Nominal voltage:	9 VDC
Operating voltage:	+6 VDC up to +11 VDC
Power consumption	
at rest:	max. 5 µA (typical)
during alarm:	approx. 6 mA (average value)
Linking connection:	max. 4 mA (more during activation)
Battery:	Block battery, IEC 6 LR 61, 9 V
Battery failure signal:	45 sec. intervals, 30 days
Optical display:	LED, red
Acoustic alarm notice:	
Piezoelectric signal generator:	intermittent
Volume:	approx. 85 dB(A) at 3 m
Housing measurements:	110 x 45 mm (Ø x H)
Plastic material:	PC
Operating temperature:	+5 °C up to +45 °C
Storage temperature:	-5 °C up to +60 °C
Weight (without battery):	approx. 120 g
Degree of protection:	IP 42

Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald

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

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