⊙ SECURITON

Mounting Instructions for Genius Hx®

Contents

1. General information

In the event of a fire, deadly smoke can spread quickly throughout an entire flat and often goes unnoticed. The Genius H® and Genius Hx® smoke detectors warn early before these gases has deadly consequences.

Thanks to the new smoke detector technology, false-alarm-proof smoke detection is achieved even when temperatures fluctuate. This is accomplished by the detector's capability to adapt automatically to normal changes in its environment and thus guarantees constant response sensitivity.

The Genius Hx® with its special software algorithms can even reliably detect fire smoke in, for example, frost-free basements and lofts and in stairwells. The electronics in both smoke detectors is so finely tuned that a smoke detector typically has a service life of 10 years with one battery.

Should you wish to have fire and smoke alarms relayed to the fire brigade, or if it is required, a fire alarm control panel compliant to DIN 14675 is available. Hekatron is not liable for expenses which may be incurred as a result of alarming a service point such as a security service or the fire brigade.

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2. Precautions

The purpose of smoke detectors is to warn you early about fire smoke and fires so that you can react quickly to danger with the appropriate measures.
Smoke detectors cannot prevent or extinguish fires.

These smoke detectors react early and reliably to smoldering fires as well as to open fires that develop smoke. The detector audibly outputs a loud alarm tone and visually a flashing red light when it detects smoke.

Ensure that a sufficient number of smoke detectors are mounted. Only in this way is it possible to achieve comprehensive monitoring and maximum security (see page 10).

It is not permitted to paint the smoke detector or cover the smoke inlet openings.

To ensure trouble-free operation of the smoke detector, the smoke detector must be mounted correctly and maintenance and care instructions must be observed.

Hekatron recommends DIN EN 14676 compliance for planning, mounting, commissioning and maintenance.

Please read these mounting instructions completely before mounting and commissioning the smoke detector and keep them in a safe place.

3. Warning notice

Mount the smoke detector only after all modifications, renovations and similar work have been completed.

If smoke detectors are already installed before beginning work, they either have to be removed or covered.

The removed smoke detectors must be protected from dust and similar substances during the work (e.g. store in plastic bags).

Important: Once all work is completed, the smoke detectors must be remounted and the coverings removed. A smoke detector which is not mounted or is still covered will not function and is therefore useless.

When smoke detectors are used in environments with high levels of dust and/or dirt, service life may be reduced due to faster soiling.

4. What to do when there is a fire

1 Save people
- Alert those who live with you.
- Immediately leave the room/building and close all doors behind you on the way out; this hinders the rapid spread of smoke and fire.
- Stay close to the floor if smoke is dense.
- Check whether all persons have vacated the room/building.
- If for any reason you are unable to leave the room/building, close all doors, seal all gaps and openings, and try to gain someone's attention from the window.

2 Call the fire brigade
- Call the fire brigade only after you are safe.

3 Extinguish fire
- Fight the fire yourself only if it does not put you in danger.

5. Properties of the Genius Hx®

- **Automatic operational readiness**
  After the smoke detector is screwed into the base, it starts operating automatically.

- **Alarm memory**
  If the smoke detector has an alarm, the LED visually indicates it until it is acknowledged. This means fast localisation.

- **Integrated real-time clock**
  Suppression of status reports which do not influence the operation of the smoke detector from 10 pm to 6 am CET* thanks to an integrated real-time clock. Your night time sleep is undisturbed.

- **Reduced light strength**
  Automatic reduction of LED brightness from 10 pm to 6 pm CET* by means of the integrated real-time clock.

- **Soiling compensation**
  The detector adjusts its base signal according to the detector's level of soiling and achieves a longer service life than smoke detectors without compensation. In the event that the maximum soiling level is reached through adjustments, a fault is signaled.

■ **Soiling prognosis**
Based on the level of soiling up to the present, the smoke detector calculates how long it can still be operated if the rate of soiling remains the same.

■ **Active service prognosis**
A function test automatically generates the soiling prognosis. If the prognosis is greater than 15 months, the test is confirmed as positive.

■ **Muting**
The horn of a smoke alarm device can be muted for 10 minutes by pressing the test button or by briefly unscrewing the device out of the base. As soon as the smoke alarm device no longer detects smoke, it returns to normal operation.

■ **Time-delayed deactivation**
Automatic, time-delayed deactivation after unscrewing the smoke detector from its base gives you enough time (5 minutes) to test the smoke detector out of its base.

■ **Integrated interface**
The interface enables you to network a number of smoke alarm devices using the Basic or Pro** radio module.

 * Central European wintertime
** The radio modules are available as accessories (see Section 17 "Ordering information"). You will find all information about the modules in Product Information (art. no. 7050491) and Mounting Instructions (art. no. 7002707).

6. Mounting location and planning

The minimum configuration consists of mounting at least one smoke detector in each bedroom, children's room and in the hallways.

For the **optimal configuration** mount at least one smoke detector in all rooms, hallways and entrance areas.
Mount the smoke detectors so that smoke from a fire can reach the detector unimpeded to ensure early detection.


Minimum configuration

Optimal configuration
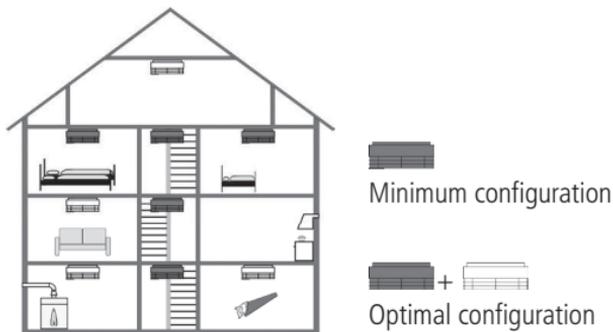
Notice: Please note that living rooms are often used for sleeping.

The smoke detector monitors a 60 m² area in a room with a maximum height of 6 m.

It must be mounted on the ceiling and centred in the room as much as possible. According to DIN 14676, the detector must be at least 0.5 m from other fittings on the ceiling and from the walls. These fittings also include switched power supplies, such as energy-saving lights, transmitters and similar. If the detector is mounted in a ceiling peak, the following applies concerning the ceiling angle:

- **for a ceiling angle of up to 20°**, the detector must be suspended 0.2 m - 0.5 m from the ceiling peak. The detector may be offset to the side and mounted directly on the ceiling or roof.
- **for a ceiling angle greater than 20°**, suspended horizontally 0.2 m - 0.5 m from the ceiling peak.
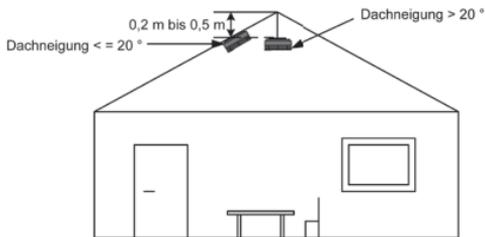

Smoke detectors are not intended for outdoor use.

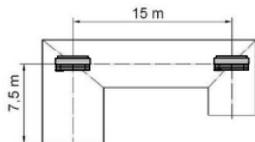## 6.1 Arrangement of smoke detectors in entrance areas, hallways and in rooms with unusual shapes

In entrance areas and hallways with a maximum width of 3 m, the distance between two smoke detectors may be up to 15 m. The distance to the front side of an entrance area may not be greater than 7.5 m.
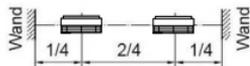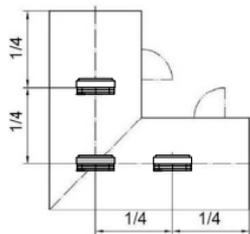

straight-line entrance area or hallway
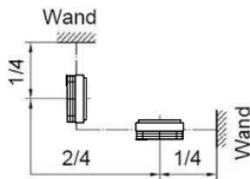
right-angle entrance area or hallway

in large entrance areas and hallways

in corner areas

7. Installing the smoke detector

Securiton recommends screw and dowel mounting for a reliable, continuous connection.

Screw and dowel mounting:

Use the supplied fastening materials when mounting the smoke detector. If other screws are used, they must not protrude more than 5.0 mm into the base.

We recommend using an oval head screw DIN ISO 7049, Phillips-head screw H, form C, 3.5 x 25 mm. The mounting surface must be flat.

Fastening with adhesive pad from Hekatron:

Use only the adhesive pad from Hekatron when mounting with an adhesive pad. It must be separately ordered (see Section 17 "Ordering information"). Surfaces on which the adhesive pad is to be mounted must be smooth, flat, undamaged, clean, and free of dust, grease and solvents. The adhesive pad must not be used on porous surfaces (e.g. plaster, gypsum, emulsion paint, plywood, particle board, hard board, chalky or loose/flaking paint, crumbling plaster or dirty surfaces).

⚠️ Adhesive pads may leave residues when removed! Use adhesive pads at your own risk. When using the adhesive pad, be sure to follow the adhesive pad mounting instructions for the Genius H® and Genius Hx® smoke alarm devices (art. no. 7002705).

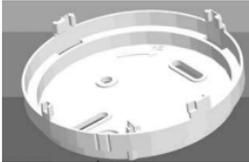| One-hole mounting	Two-hole mounting
1 Mark the place for the hole on the ceiling and drill the hole.	1 Mark the place for the holes on the ceiling and drill the holes.
2 Insert the dowel into the hole.	2 Insert the dowels into the holes.
3 Remove the protective foil from the adhesive pad.	3 Hold the base onto the ceiling.
4 Lightly screw the base onto the ceiling, press the base to the ceiling and then tighten the screw.	4 Screw the base onto the ceiling.
5 Place the detector onto the base (the test button of the smoke detector has to be aligned over the oblong hole in the base).	
6 Turn the detector clockwise until the base goes into the smoke detector and snaps into place (rotation of about 45°).	

* The adhesive pad is designed to act only as an anti-twist safeguard when inserting and removing the smoke alarm device. For adhesive mounting, the adhesive pad for Genius H® and Genius Hx® smoke alarm devices must be separately ordered.

8. Theft and removal protection (accessories)

To secure the smoke detector against removal by unauthorised persons, removal protection in the form of a seal can be fastened to the detector and base.
The seal is fastened to the detector in the housing wall opening.
Seals must be separately ordered (see Section 17 "Ordering information").

1	Break out the predetermined breaking point in the base and turn the smoke detector in the base.	Predetermined breaking point
2	Insert the seal in the opening.	
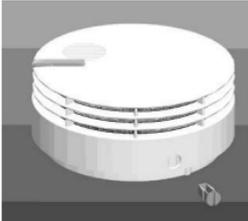
3	After the seal is inserted, the opening must be completely closed.	
4	To remove the seal, rotate it 90° using a screwdriver. This shears off the head of the seal and you can then rotate the detector out of the base normally.	
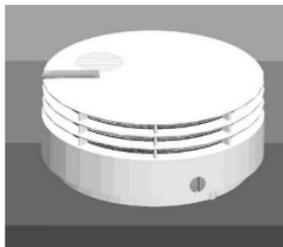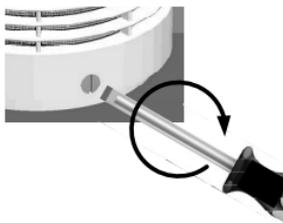
9. Operating and warning signals

If smoke alarm devices are radio networked, please follow the Basic/Pro radio module mounting instructions (art. no. 7002707).

9.1 Fire alarm

Horn	LED	Cause	What to do
Alternating, loud horn	Flashes every second	Smoke has been detected	Leave the building
Off	Double flash every 48 sec.	Alarm memory of this smoke detector detected a fire	Search the area for possible fire sources. Reset the alarm memory by pressing the test button.

9.2 Signalling during the day (6 am to 10 pm CET*)

Horn	LED	Cause	What to do
Off	Flashes every 48 sec.	Normal operation	----
Short signal tone every 48 sec.	Flashes every 8 sec.	Fault or weak battery	Replace smoke detector with a new one. Acknowledge by pressing the test button.

* Central European wintertime

9.3 Signaling at night (10 pm to 6 am CET*)

Horn	LED	Cause	What to do
Off	Flashes dimly every 48 sec.	Normal operation	----
Once every 48 sec.	Flashes every 8 sec.	Fault	Replace smoke detector with a new one. Acknowledge by pressing the test button.

* Central European wintertime

9.4 Signaling after acknowledgement

| Horn	LED	Cause	What to do
Off for 24 hours after pressing the test button	Flashes every 48 sec.	Weak battery	Smoke detector is still operational, but it should be replaced by a new one within 30 days at the latest (battery replacement not possible).
Off for 24 hours after pressing the test button	Off for 24 hours after pressing the test button	Fault (weak battery, no indication at night)	Smoke detector is no longer operational and must be replaced by a new one.

If a detector is completely switched off after a fault is acknowledged (unscrewed from the base longer than 5 minutes), the detector again signals the fault after it is put into operation again.

10. Functions of the test button

The test button initiates and acknowledges the various functions of the smoke detector.
By lightly pressing the button, you can ...

- start the functional test in normal operation
- acknowledge a fault
- acknowledge/mute an alarm
- clear the alarm memory.

Test button
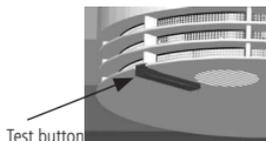
11. Properties of the base

When the smoke detector is screwed into the base, it begins operation automatically and carries out a self-test. When the smoke detector is removed from the base, it switches off after 5 minutes. If the Genius Hx® is removed from the base during an alarm, the alarm is muted (see also Properties of the Genius Hx® - Muting).

12. Maintenance and care

To guarantee the functional reliability of the detector, maintenance is required at least once a year in compliance with DIN EN 14676. Proceed as follows.

1	If needed, remove dust from the detector with a soft cloth.

2	If needed, remove soiling with a moist cloth. Do not use cleaning agents.

3	Press the test button and compare the results with the following:

Horn	LED	Cause	What to do
Test signal* (3 x horn tone)	3 x with horn	Smoke detector test positive	No action required.
Off	Every 48 sec.	Service prognosis < 15 months, detector still functional	Replace smoke detector as soon as possible.
Off	Every 48 sec.	Weak battery	See table 9.4
Off	Off	Detector defective	Replace smoke detector immediately.

* According to standard 14604, audible signalling is sufficient.

For radio networked smoke alarm devices, follow the Basic/Pro radio module mounting instructions (art. no. 7002707).

13. Note about disposal

It is not permitted to dispose of batteries in the domestic rubbish. As the end user you are legally obliged to return used batteries. Used batteries can be returned free of charge to the seller or brought to a designated recycling point (e.g. to a communal collection point or retailer). You may also send them back to the seller by post. The seller refunds the postage when you return your old batteries.

Securiton has covered the cost for disposal by paying the SWICO-ARF fee for you.

The smoke detector is produced in accordance with strict criteria of the quality and environmental management system in compliance with DIN ISO 9001. It fulfills the statutory RoHS requirements and does not contain any prohibited materials.

The battery is permanently built into the detector and cannot be replaced.

14. Technical data

VdS approval	DIN EN 14604 / G number 210149
EU certificate of conformity	0786-CPD-20856
Audible alarm	Sound pressure over 85 dB (3 m)
Audible alarm perception	Frequency optimisation for human hearing
Area of application	According to DIN 14676
Operation	Via test button
Expanded area of application	In difficult ambient conditions, such as frost-free basements and lofts and in stairwells
Automatic operating levels	Yes
Operating state display	Red
Fault suppression at night from	Automatic with real-time clock
Fault suppression during day	For 24 hours by pressing the test button
Reduced light strength of the LED at night from	Automatic with real-time clock
Voltage supply for detector	1 x lithium battery, 3.6 V, permanently built in *
Radio module voltage supply	1 x lithium battery, 3.6 V, permanently built in
Battery capacity	2.2 Ah
Detector battery service life	Typically 10 years

Radio module battery life	Typically 10 years
Automatic self-monitoring	Yes
Automatic adjustment if temperature fluctuations	By means of temperature sensors
Active soiling tracking	Yes
Alarm memory	Yes
Active soiling prognosis	Yes, signalling when test button pressed
Theft protection	Optial with seal (accessory)
Optical removal detection	Yes
Storage temperature	-10°C to +60°C
Integrated interface***	For Basic or Pro radio module
Ambient operating temperature	0°C to 55°C
Humidity ambient condition (continuous, without condensation)	at ≤ +40°C, 10 to 70% rel. hum.
Protection type	IP 40
Colour	Pure white, similar to RAL 9010
Material	PC ABS
Height / diameter dimensions	48 mm x 104 mm
Weight without base	approx. 143 g

Base weight	approx. 28 g
1-hole mounting / 2-hole mounting / Adhesion	Yes/Yes
RoHS/WEEE compliant	Yes

* From 10:00 p.m. to 6:00 a.m. central European wintertime..

** For reasen of safety,uninterrupted voltage supply is necessary for zhe smokedetector.

*** The interface is located under a cover in the detector. The cover must be broken out.
Installation and commissioning of the radio system are described in the Basic/Pro radio module mounting instructions (art. no. 7002707).

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No liability for errors or printing mistakes!

Battery life

Typical battery life of 10 years is possible under the following conditions:

Stand alone:
The smoke alarm device must be commissioned at latest one year after production. Twelve function tests may be performed each year, and there may one full alarm for 90 seconds per year.

Radio networked:
Same as the stand alone plus one commissioning and two coverage tests during the entire runtime and one line test per year may be performed.
The radio module must be installed at latest one year after the first-time commissioning of the smoke alarm device.

15. Genius H® and Genius Hx®"Real Alarm Guarantee" and 10-year device guarantee

Hekatron (a Swiss Securitas Group company) is a leading German manufacturer of smoke detectors and guarantees that based on the high product quality of the new smoke detector generation of Genius H® and Genius Hx® no false alarms will occur during normal use.

The Genius guarantee conditions apply.

The Genius guarantee conditions are found at www.hekatron.de.
Reference document: (7002594 MA Genius Hx, edition 14/01/2011)

16. Guarantee handling

For guarantee handling it is imperative that a return delivery note and a fault log are requested from Hekatron via the supplier.
The fault log is also available for downloading on our website at www.hekatron.de under "Smoke detectors".

17. Ordering information

Designation		Order number
Genius Hx	Smoke detector	239 160
FM Basis	Funkmodul Basis	239178
FM Pro	Funkmodul Pro	239186
Seal set	Genius H/Hx VE32 gr Seal set	31-4100003-01-01
Adhesive pad	Genius H/Hx 10 (10 piece)	31-4100001-01-02