Operating instructions for the wireless smoke alarm detector type: GS558

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Thank you for choosing a product of SEBSON. Please read the instructions carefully and keep them for looking up before start-up this product. A long and failure-free operation can only be guaranteed if the installation and start-up is done properly.

Note: Please read all warnings and instructions before using this equipment!

This photoelectric wireless smoke alarm detector is used for early warning of dangerous smoke. As soon as smoke enters the interior of the equipment, a loud alarm will sound. The smoke alarm detector identifies the smoke and not the flame of a fire. The smoke alarm detector is also reacting from a heat of 54 to 70°C.

- This wireless smoke alarm detector type GS558 may only be used in private rooms.
- After a maximum of 10 years as well this device must be replaced.
- The wireless smoke alarm detector can detect a fire early by recognizing the smoke or the burning articles. This device is not suitable for preventing a fire!
- This detector does not react to flames or gas!
- This smoke detector can monitor a range of 20 to 40m².

Scope of delivery:

- Wireless smoke alarm detector Type GS558
- 2 x 1,5V DC Type: AA batteries
- 2 screws and 2 dowels

Model-number: GS558   **DoP**: 558-CPR-0002
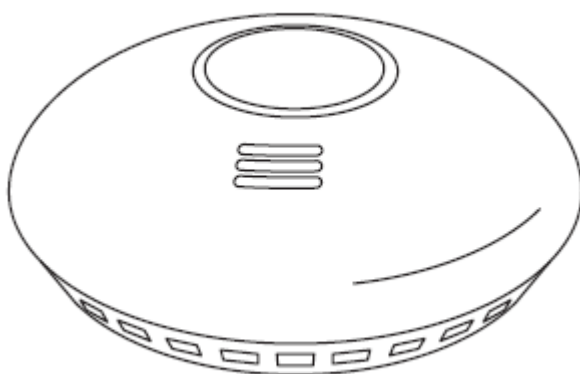
Wireless smoke alarm detector GS558

1. Safety instructions ⚠

- **Note:** The alarm sound is very noisy! Your hearing can be damaged if you are exposed to the loud alarm sound over a longer period of time!
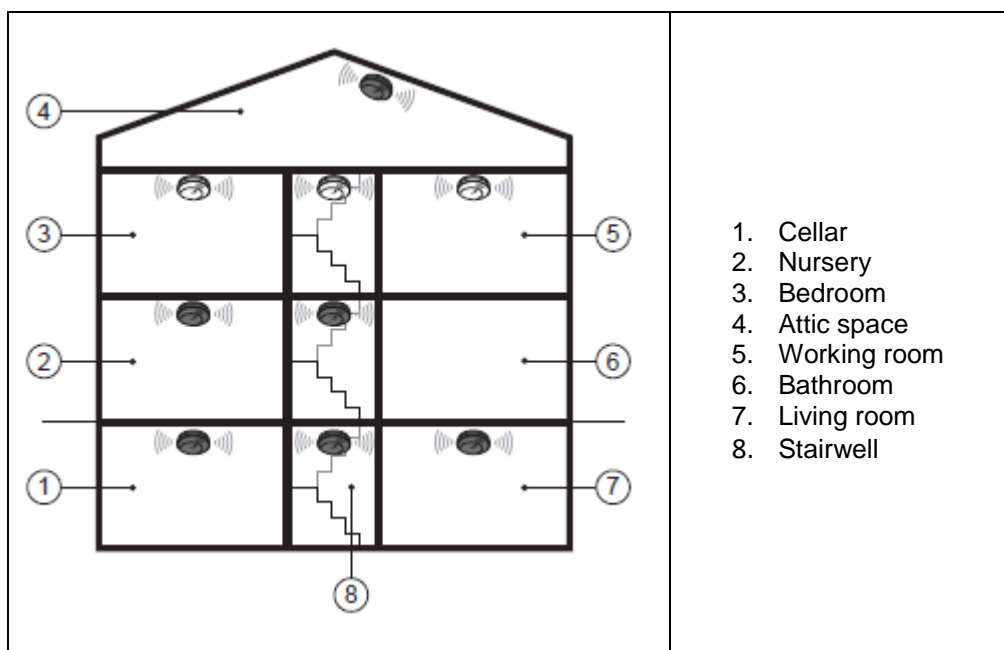- Please do not paint over the wireless smoke alarm detector with paint or similar!
- Do not install the detector in difficult to access areas! The detector must be checked regularly for its function!
- **Caution:** Never test the wireless smoke alarm detector with an open flame, e.g. by a candle or a lighter! This will damage the built-in sensor!
- Get rid of the smoke alarms regularly (at least every six months) of dust and other deposits of dirt! Please use a paint brush or a slightly cloth moistened with water. In dusty conditions, the wireless smoke alarm detector should be cleaned monthly.
- Please note that certain groups of people can not hear the alarm because they are under heavy medications, drugs or alcohol influence, are hard of hearing or sleep very deeply. In this case, take further measures so that these persons are warned accordingly by the alarm.
- Do not drop the device as this may damage it!
- The conversion of this product is not allowed!
- Another use than described may damage the product.
- This product is only suited for indoor-use and not for outdoor-use. Protect it against humidity and moisture, splashing or dripping!
- Damaged wireless smoke alarm detectors must be replaced immediately!

2. Mounting location in rooms of the wireless smoke alarm detectors

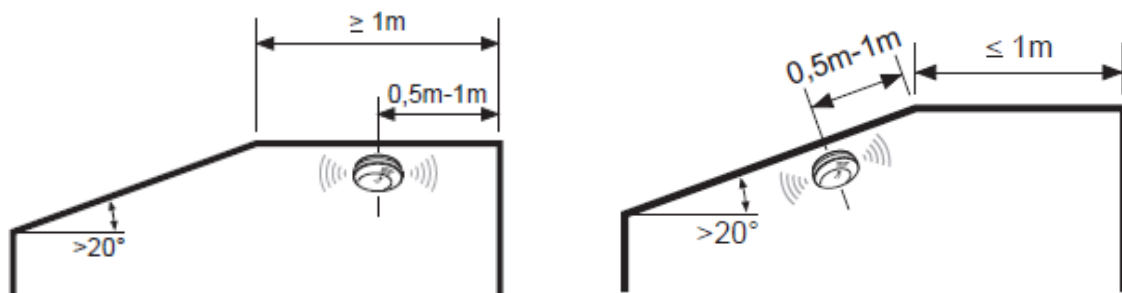### 2.1 Wireless smoke alarm detectors should be installed in the following rooms:

1. Cellar
2. Nursery
3. Bedroom
4. Attic space
5. Working room
6. Bathroom
7. Living room
8. Stairwell

- *Bedrooms*: If several bedrooms are in the house, then the attachment of wireless smoke alarm detectors in each bedroom are advised.
- *Corridors:* Install a device in each corridor that leads to a bedroom. If the corridor is longer than 9m, install a device at the beginning and end of the corridor.
- *Stairwell*: Because stairwells easily serve as chimneys for smoke and fire, they contribute to the further spreading. Therefore it is recommended to install on each floor at least one wireless smoke alarm detector!
- *Living and working rooms as well as storage areas.*
- *Cellar:* Mount a smoke alarm detector in the entrance area to the basement.
- *Attic space*: With the attic space a distance should be kept to the roof point of at least 50 cm (*see Figure1*).
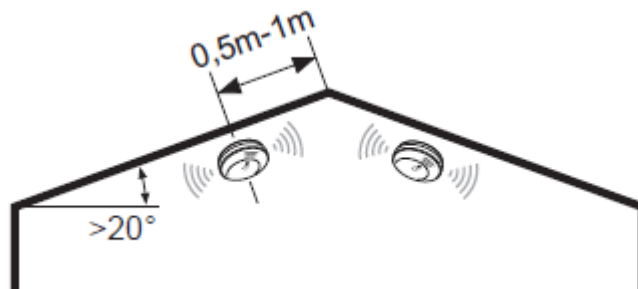
Figure 1: Mounting the wireless smoke alarm detector on the roof slope

- Rooms are equipped with electrical appliances.
- For rooms that have sloping ceilings, the following must be considered: With the assembly a distance of from 50 to 100 cm to the roof point must be kept

If the horizontal ceiling is less than 1 m wide, then the wireless smoke alarm detector must be installed in rooms with sloping ceilings as shown in Figure 2. If the ceiling is greater than 1m, then the wireless smoke alarm detector is placed on the horizontal ceiling

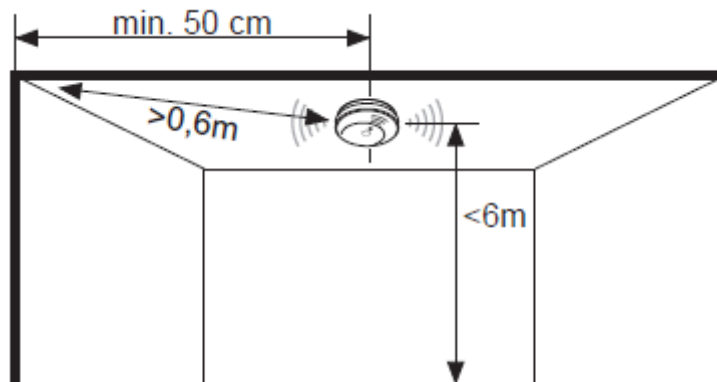**Figure 2:** Mounting the wireless smoke alarm detector on the ceiling

Note: If you are unsure about the mounting of the wireless smoke alarm detector in your rooms, please advised by a qualified electrician!

The wireless smoke alarm detector must be installed on the ceiling in the middle of the room, because smoke rises to the ceiling of the room and spread horizontally. The wireless smoke alarm

detector should be placed possible so that this is at least 50cm from the side wall and 61cm mounted away from the corner of the room (*see Figure 3*).

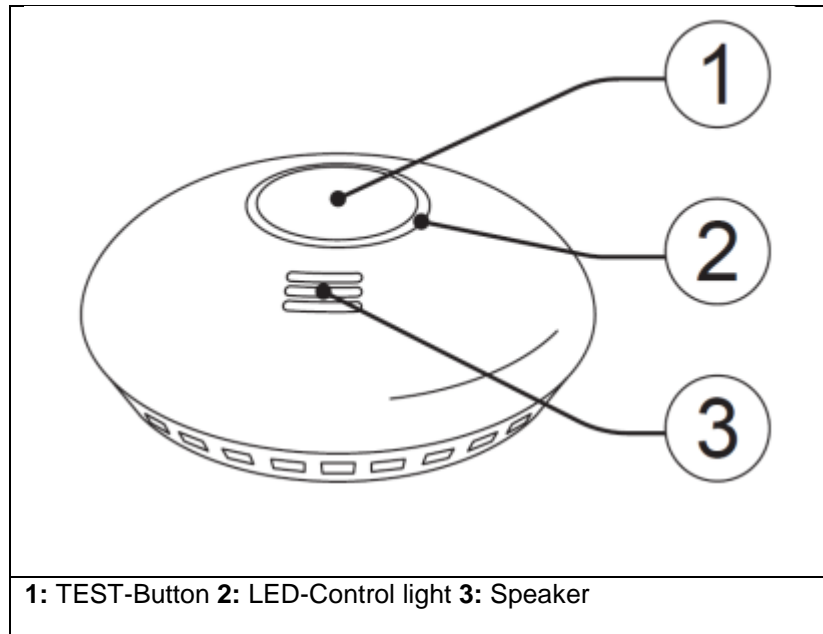**Figure 3:** Mounting the wireless smoke alarm detector on the ceiling

- On ceiling beams, which are thicker than 20 cm, no installation of wireless smoke alarm detector should be done. A minimum distance of 50 cm is urgently recommended.
- The wireless smoke alarm detector should be mounted at least 50 cm away from lamps and fluorescent lamps.
- An installation height of 6m maximum should not be exceeded. If the installation height is more than 6m, the wireless smoke alarm detector must be installed on several levels.
- The wireless smoke alarm detector can supervise a maximum area of 60m².
- The maximum distance of wireless smoke alarm detectors in extensive corridors can be up to 15 m. To the end side of corridors the wireless smoke alarm detectors should be applied in the distance of maximum 7. 5 m.
- In small corridors and rooms which are not wider than 1m, the wireless smoke alarm detector must be mounted in the middle of the ceiling.

2.2 Rooms where no wireless smoke alarm detector should be installed

- Rooms which have a high air humidity - for example in the bathroom.
- In garages or kitchens. A wireless smoke alarm detector in the kitchen should only be installed, if the distance to the stove is at least 4m.
- Wireless smoke alarm detectors should not be installed close to heaters, heating-, cooling- and ventilation-shafts. Also, they may not be mounted on open fires or fireplaces.
- In very dusty rooms.
- With A-shaped roofs the wireless smoke alarm detectors may not be mounted at the highest point.
- Rooms having a room temperature of below 5 ° C or above 45 ° C.
- In caravan or similar rooms. In these living areas, the attachment to the inside of parts are advised. The air in the upper part of these areas as well as the ceiling is strongly warmed up by intense solar irradiation. This can result that the strongly warmed up air keeps the smoke from reaching to the wireless smoke alarm detector.

3. Startup

Before starting up this product, please check for external damage. In case of visible external damage we immediately dis-advise the start-up of this product! Please remove all packaging material of this product before the first start-up.

1: TEST-Button **2:** LED-Control light **3:** Speaker

3.1   Activation the wireless smoke alarm detector

Remove the mounting base by turning it clockwise (counterclockwise) and insert the batteries into the battery compartment (*see figure 4*). If the batteries are correctly inserted (observe polarity!), the red LED flashes briefly and flashes 3 times. Test the operational readiness now, by pressing the TEST button until the alarm sounds briefly 3 times while LED is flashing. ***Attention:*** Keep the wireless smoke alarm detector at least an arm's length away from your body while pressing the TEST button!
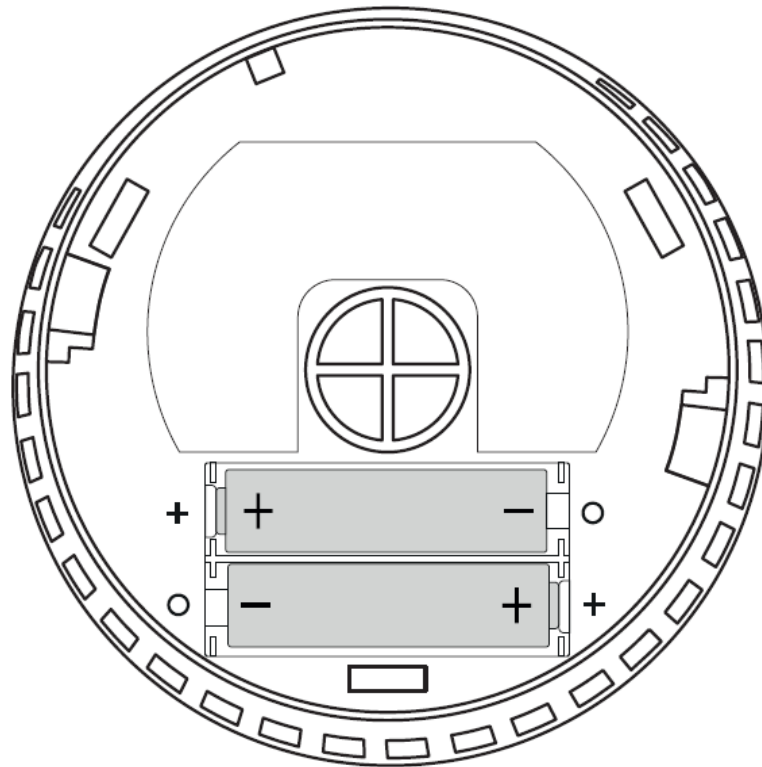
Figure 4: Battery case on the back of the wireless smoke alarm detector

3.2 Function control

The TEST button is used to check the function of the wireless smoke alarm detector. After pressing the key a very loud alarm will sound! Keep the wireless smoke alarm detector at least an arm's length away from your body while pressing the TEST button. Afterwards the alarm sounds briefly 3 times and the LED flashes. In this case the function of the electronics, the alarm device of the wireless smoke alarm detector and the battery is checked. After releasing the TEST button, the alarm will turn off automatically.

Attention: Test the wireless smoke alarm detector weekly to its function by pressing the TEST button. It even beeps once and the alarm stops automatically after releasing the TEST button. Test the alarm after every battery replacement!

3.3 Temporary muting the alarm

In a false alarm, which was not caused by a fire, the alarm can be switch off for about 10 minutes. However you must absolutely make sure that the alarm was not activated by a fire, but rather e.g, by strong smoke during the cooking or by strong smoking of cigarettes or cigars in small rooms! To temporarily turn off the alarm, press the TEST button. Then open doors and windows to clean the air. Should the air still have a high number of combustion particles after 10 minutes, the alarm sounds again. By pressing the test button, the mute function can be repeated as often as desired.

The mute function can be simply deactivated by pressing again the start button. At an excessively large amounts of smoke, this function is not adjustable.

3.4 Recurrent self-test of the wireless smoke alarm detector on its function

The wireless smoke alarm detector performs every 40 seconds a self-test. You can see this by a short blink of the LED.

Note: In case of improper function of the wireless smoke alarm detector, please contact the manufacturer!

4. Networking of smoke alarms among each other

In order to network the wireless smoke alarm detectors you need at least two wireless smoke alarm detectors. Each wireless smoke alarm detector is provided with a code by the manufacturer. There are a total of over 60,000 encodings. If a wireless smoke alarm detector is connected to another one, it will accept the code of the other. An already networked wireless smoke alarm detector, which is to be connected to a new wireless smoke alarm detector, takes over the code of the new device. Please note that wireless smoke alarm detector may only be interlinked within an apartment or a family home!

Note: To prevent damage to your hearing, keep the wireless smoke alarm detector at least one arm's length away from your body while pressing the TEST button!

Please perform a RESET with every device you want to network before! Please proceed as described:

4.1 RESET Mode

To assign a new random code, you must switch the wireless smoke alarm detector into the RESET mode. Press the TEST button for approx. 16 seconds until the LED flashes quickly. (While pressing the TEST button, the LED will flash red and the alarm sounds.) After the LED begins flashing fast, release the TEST-button immediately. Press the TEST button (the LED will light up red) twice in the sequence. After a short beep has elapsed, the activation of the RESET mode has been successful. A video illustrating the RESET mode can be found here: *sebson-media.firma.cc/downloads/SD_GS558-RESET.3gp*

Note: Always switch the wireless smoke alarm detector from standby mode to RESET mode!

4.2 Networking

Note: A video illustrating the networking can be download here:

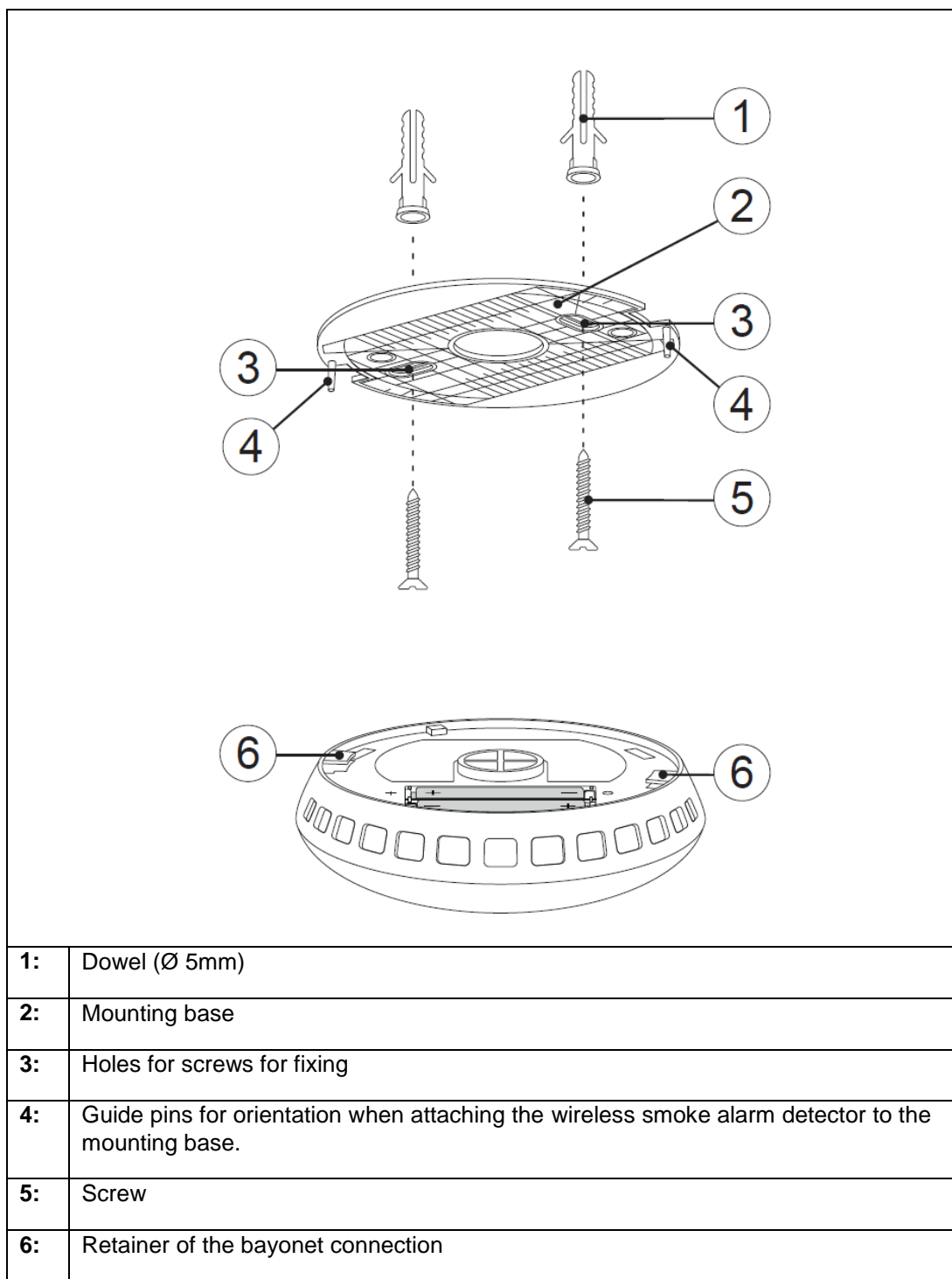*sebson-media.firma.cc/downloads/SD_GS558-Networking.mp4*

1. Take a wireless smoke alarm detector and place it in *transmit mode*. Press and hold the TEST button for approx. 15s until the LED is red. (The wireless smoke alarm detector will beep and the LED will flash while pressing the TEST button.) Then release the TEST button immediately. The LED lights up for approx. 30s. During this time you can network up to 15 wireless smoke alarm detectors with this one wireless smoke alarm detector. ***Note:*** If you want to terminate *transmit mode* prematurely, briefly press the TEST button: the LED will stop flashing and a short beep will sound.

2. While the first wireless smoke alarm detector is in transmit mode, take another wireless smoke alarm detector and place it in the *learning mode*. To do this, hold down the TEST button until the LED turns red. Release the TEST button immediately. If the smoke alarm does not light up red, please carry out a RESET.

3. After successful networking of the two wireless smoke alarm detectors, the LEDs of the two devices flash for approx. 2 seconds.

4. The first wireless smoke alarm detector automatically returns to the *transmit mode* after successful networking (LED is solid red).

5. To connect additional wireless smoke alarm detectors to the first wireless smoke alarm detector, press the TEST button on these wireless smoke alarm detectors until the LED lights turn red. Then release the TEST button immediately. The LEDs of the two wireless smoke alarm detectors flash for approx. 2s after successful networking.

6. After a short pause, the wireless smoke alarm detectors, which were previously switched in the *learning mode,* start to beep for about a minute. This is a test alarm. Please do not mute the test alarm! This prevents the wireless connection from being checked for it´s function.

7. If there is no feedback from another wireless smoke alarm detector device within 30 seconds, the light from the LED stops flashing and the wireless smoke alarm detector, which is in the *transmit mode*, will go into standby mode with a short beep.

8. As a last step you must make sure that all wireless smoke alarm detectors are connected together! Check networking only after 30 seconds at the end of the last test alarm and last *transmit mode*. Press the TEST button for 30 seconds if the wireless smoke alarm is connected. While pressing the TEST button, the LED will turn red and the alarm will sound. After approx. 30s, all networked wireless smoke alarm detectors, which are within radio range, also begin to beep. This is a test alarm, which turns itself off after about a minute. If you want to terminate the test alarm prematurely, briefly press the TEST button of each wireless smoke alarm detector.

5. Installation

1. Disconnect the mounting base by turning it counterclockwise from the case.
2. Hold the mounting base to this position on the ceiling, where you want to mount the wireless smoke alarm detector. Draw with a pencil the holes for the bores to the ceiling.
3. Then drill two holes (Ø 5mm).
4. Now take the two in the scope of delivery supplied dowels and put them in the bores.
5. Screw the mounting base to the ceiling. The screws are included in scope of delivery.

6. Then hold the wireless smoke alarm detector on the mounting base so that the two guide pins engage in the openings next to the retaining clips on the bayonet connection (*see in the mounting diagram*).
7. Through a short rotation of the housing clockwise and overcoming a slight resistance, the smoke detector can be securely fixed to the ceiling

1:	Dowel (Ø 5mm)
2:	Mounting base
3:	Holes for screws for fixing
4:	Guide pins for orientation when attaching the wireless smoke alarm detector to the mounting base.
5:	Screw
6:	Retainer of the bayonet connection

6. Replacing batteries

The wireless smoke alarm detector makes a recurring beep sound in 30 second intervals for 30 days. With this it points out that the battery must be changed. Additionally the LED flashes. The wireless smoke alarm detector is still fully functional at this time. However, it is recommended to replace the battery, as soon as the wireless smoke alarm detector is warning about the empty state of the battery! Please always replace the battery with an identical battery type, which is having the same technical specifications as the used battery. Never use batteries or power supplies for operation of the wireless smoke alarm detector. These can cause false alarms or lead to a complete failure of this product.

1. Turn the alarm case to the left, (against clockwise), and solve the housing from the mounting plate.
2. Remove the old batteries.
3. Insert the new batteries into the battery compartment. Pay attention to the correct polarity!
4. Reattach the mounting base by turning it clockwise to the housing.
5. After replace the Batteries please carry out a function-test by pressing the TEST-Button. Keep the wireless smoke alarm detector at least an arm's length away from your body. While holding down the TEST Button, three short alarms should sound at 1.5 seconds intervals, and the LED should flash.
6. The smoke detector is now ready for use again!
7. *Attention:* For safety reasons, please replace the batteries at least once a year**!**

7. Notes to the use of batteries

- Non-rechargeable batteries are not to be re-charged!
- New batteries should not be used together with used batteries. Please always use batteries with the same type.
- Please always pay attention to the correct polarity when inserting the battery!
- The connection terminals never short-circuit!
- Throw batteries never into the fire!
- Keep batteries away from children and animals!
- Please make sure that the batteries are not swallowed especially of infants. Here is danger to life!
- Dispose leaking batteries immediately as described in chapter: „ Disposal of waste batteries".
- Avoid in any case direct skin contact of leaking batteries. If you have come into contact with battery acid, wash your hands immediately. Please make sure that the battery acid does not come into contact with skin, eyes and / or mucous membranes!

8. Technical Data

Power supply: 2 x AA 1,5VDC batteries

Alarm Volume: ≥ 85dB (A) within 3m

Warmth sensitivity: 54–70°C

Radio frequency:	433MHz
Smoke alarm signal local:	Peep 0,5s –Pause 0,5s - Peep 0,5s – Pause 0,5s - Peep 0,5s – Pause 1,5s LED flashes – repetition of the signal
Warm alarm local:	Peep 0,2s – Pause 0,1s – LED flashes – repetition of the signal
Radio alarm signal:	Peep – Peep – Pause 1,2s – LED flashes – repetition of the signal
Networking:	Up to 15 networking wireless smoke alarm detectors
Radio range:	Up to 20m (depending on local occurrences)

9. Reasons for triggering a false alarm

The following may be causes of a false alarm:

- Water and kitchen steam
- high air humidity
- dust
- Strong drafts etc.

Usually the smoke of cigarettes does not trigger the alarm. If the alarm still be triggered, please make sure that not a fire has activated the wireless smoke alarm detector! If no fire is detected in one of the rooms, you can set the alarm of the smoke detector temporarily mute (*see chapter: 3.3*).

10. Behavior in case of fire

The installation of a heat or wireless smoke alarm detector is only one of many fire protection measures. Other fire protection measures are e.g. the provision of a fire extinguisher or a fire blanket. Another measure is the creation of an escape plan and the subsequent discussion with your roommates or your family.

If the fire cannot be extinguished with a fire extinguisher or a fire blanket by yourself, then leave the house immediately! Do not waste time to put clothes on or by transportation of personal objects - because every second counts!

After leaving the house please inform the fire department immediately!

When leaving the burning room, please check first the surface of the door to its temperature. Should the door be hot or under the door smoke rising up, do not open the door! If possibly please use another door or a window to escape from the room. If the surface of the door is cold, then brace yourselves with the shoulder against the door and open it a small gap. Be always careful and ready to slam the door quickly, if heat or produced penetrates from the next door.

With strong production of smoke please keep close to the ground and breathe - if possibly - through a cloth. Better still by a damp cloth!

You may enter the house again only after release or permission of the fire brigade!

11. Maintenance and cleaning

This device is maintenance free. Please remove the housing regularly from dirt, dust or spider webs! For this, use the best vacuum cleaner with soft suction brush or a soft cleaning cloth. Ensure that the housing and the air slots are free from contamination at all times, in order to ensure proper functioning.

Note: Never open the housing to clean the unit from the inside. This can impair the functionality and the warranty guarantee will be extinguished!

12. Disposal of waste batteries

Batteries and rechargeable batteries may not be disposed in the household waste. The end-consumer are legally obligated to the return of all used batteries and/or accumulators. After usage you can return batteries and / or accumulators gratuitous in the sales point or in their direct vicinity (for example at municipal collection points and trade). Otherwise, you can also return the batteries and / or accumulators by post to us: SEBSON - Gernotstr.17-44319 Dortmund – Germany

Batteries and / or accumulators which contain harmful substances are marked with the symbol of a crossed-out waste bin and may not be disposed of with household waste Under the dustbin symbol is the chemical name of the harmful substance - in the example below - "CD" for cadmium, "Pb" stands for lead, "HG" for mercury .

Meaning of symbols:

Cd[1]   Hg[2]   Pb[3]
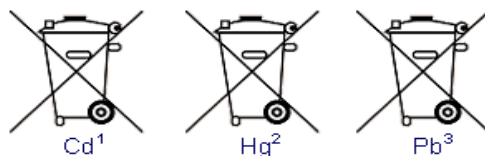
    1 Battery containing more than 0,002 mass percent of cadmium
    2 Battery containing more than 0,0005 mass percent of mercury
    3 Battery containing more than 0,004 mass percent of lead

The harmful Substances which are contained in the batteries, may cause danger to health and the environment in case of improper disposing.

13. General Disposal

This product may not be disposed of with household waste. At the end of its useful life, the product must be returned to a point of acceptance for the recycling of electric and electronic device. Please ask your local municipality for the point of acceptance! As the devices contain valuable recyclable materials, they should be sent for recycling, in order not to harm the environment or human health from uncontrolled waste disposal.

14. CE Declaration of Conformity

This product has been prepared according to the listed below guidelines:

- EMC 2014/30/EU

- RoHS 2011/65/EU

- RED 2014/53/EU

CE 16
GS558
Brandschutz 0359
Dop:558-CPR-0002
EN14604:2005/AC:2008

Siterwell Electronics Co., Limited
No.666 Qingfeng Road, Jiangbei District,
Ningbo, Zhejiang Province, 315034 China

Essential characteristics	Perfomance	Harmonised technical specification
Nominal activation conditions/ Sensitivity. Response delay (response time) and Performance under fire conditions	PASS	EN 14604:2005/AC:2008
Operational reliability	PASS	
Tolerance to supply voltage	PASS	
Durability of operational reliability and response delay; temperature resistance	PASS	
Durability of operational reliability; vibration resistance	PASS	
Durability of operational		

reliability; humidity resistance	PASS	
Durability of operational reliability; corrosion resistance	PASS	
Durability of operational reliability; electrical stability	PASS	

The declaration of performance for this product can be found under the following link:

www.sebson.de/DOP_GS558_EN_N.pdf

SEBSON: Sebastian Sonntag - Gernotstr.17 - 44319 Dortmund – Germany - www.sebson.de