## Smoke detector user's manual

# Type number: GS506G digit:ST506G

Thank you for purchasing this smoke detector. Please read the user's manual for use carefully before putting the smoke detector into operation. Keep the manual so that you can refer to it in the event of a problem.



#### Description of the product

Power supply: DC9V

(Zinc-carbon battery: Gold Peak: GP 1604S)

Power consumption: in monitoring mode: < 10 µA

with alarm < 30 mA

**Alarm loudness:** > 85 dB(A) in a 3 meters radius

Alarm sensitivity 0.10–0.19 dB/m

#### **Description:**

This product is a photoelectric smoke detector operated on a 9V battery (GP 1604S). The battery life is at least 1 year. A photoelectric smoke detector is sensitive to slow smouldering fires, which generally produce thick, black smoke at low heat and smoulder for hours before developing open flames. This smoke detector does not contain any radioactive or polluting material.

At least 1 smoke detector should be installed in every room (except the bathroom) and in every other area of the house. It must be ensured that the people in the house can hear the alarm signal and react to it. For a minimum of security, one smoke detector should be installed in the corridor between the living and sleeping areas and one smoke detector in each bedroom.

For a typical one-story dwelling, it is recommended that a smoke detector be mounted on the ceiling of each bedroom and in the corridor in front of each individual sleeping area. If the corridor to the various bedrooms is more than 9 m long, install a smoke detector at each end of the corridor.

For a typical multi-story dwelling, it is recommended that one smoke alarm be mounted in the ceiling of each bedroom and one in the corridor before each sleeping area. If the corridor to the various bedrooms is more than 9 m long, install a smoke detector at each end of the corridor. Furthermore, mount a detector at the top of the stairs from the first to the second floor. If there is a basement, also mount a detector on the basement ceiling at the foot of the basement stairs.

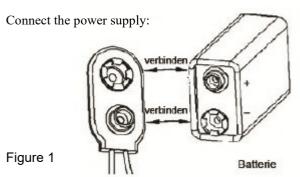
## **Important safety information**

- 1: With the test button you can check the correct function of the smoke detector. Do not use any other test method. Check the detector once a week to ensure proper operation.
- 2: Do not remove or disconnect the battery as this would render the smoke alarm inoperable.
- 3: This smoke alarm should only be installed by a licensed, qualified electrician. During installation, all national installation and building regulations must be observed and followed.
- 4: This smoke detector is designed to be used in apartments or houses only where people are living. In apartment buildings, each individual residential unit must be equipped with its own smoke detectors. Do not install the smoke detector in any non-residential building. Use of this smoke detector is not a substitute for a complete alarm system.
- 5: A smoke detector can only detect a fire early in its immediate vicinity. If a fire starts in a remote part of the house, on another level not equipped with detectors, in a chimney, a roof, or on the opposite side of a closed door, the smoke cannot reach the smoke detector in time and the detector cannot trigger the alarm in time.

- 6: Despite the loudness of the alarm signal, there may be situations in which individuals do not hear the alarm, e.g., because of noise inside or outside the house, when they are in a deep sleep, after taking medication, drugs, or alcohol, or in the case of hearing impairment or any other restriction. If you suspect that the GS506G smoke detector cannot adequately warn a member of the household, use a special detector instead that meets higher alarm requirements. The person concerned must be able to react quickly to the alarm to reduce the risk of damage, injury, or death in the event of a fire. If a member of the household is hard of hearing, install a special smoke detector that reliably warns the person concerned using light signals or vibrations.
- 7: The GS506G smoke detector can only trigger an alarm if it detects smoke or combustion particles in the air. The detector does not respond to heat, flame, or gas. The warning function of this smoke detector is based on the emission of an acoustic warning signal. In unfavourable cases, however, fires can spread very quickly or explosively. Likewise, a fire may have been started intentionally or through carelessness. In such cases, there may be situations where the detector does not trigger an alarm FAST ENOUGH and a safe escape is therefore not guaranteed.
- 8: Careful handling is a prerequisite for the correct functioning of the smoke detector. This also means that the detector must not be manipulated and that it must not be misused either intentionally or negligently. A smoke alarm does not guarantee the prevention of bodily harm or property damage and should never be considered a substitute for life and property insurance. Like any technical product, a smoke detector can also fail. You must therefore check every detector weekly and replace it completely after 10 years at the latest.
- 9: The area monitored by a single detector must not be larger than 60 m<sup>2</sup>.
- 10: If the room height is more than 6 m, use an additional smoke detector.
- 11: If there are ceiling beams with a height of more than 20 cm

and the individual ceiling areas between the beams have an area of more than 36 m<sup>2</sup>, additional smoke detectors must be installed in the ceiling areas. If the ceiling beams height is less than 20 cm, install a detector in the middle of the ceiling and not on a beam.

# Inserting the battery:



(verbinden = connect; Batterie = battery)

# **Battery specifications**

#### Nominal voltage:

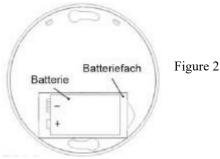
DC 9V (zinc-carbon battery: Gold Peak: GP 1604S)

# Replacing the battery

- 1. Turn the smoke alarm anti-clockwise. Then take out the alarm part.
- 2. Take out the battery. Insert the new battery correctly (see fig. 1).
- 3. Place the new battery in the battery holder. Re-install the alarm part. Turn it clockwise (see fig. 2).
- 4. Press the test button for at least 5 seconds to test the smoke detector. The sound pattern consists of 3 short signal tones, a pause of 1.5 seconds, and the repetition of the signal tones. If the smoke detector does not sound during the test, there is either a fault or it has been installed incorrectly. In this case, read the "Troubleshooting" section.
- 5. After each battery change, the proper function of the smoke detector must be checked using the test method.

#### WARNING:

Neither the smoke detector nor the battery must be heated directly, and any contact with liquids must be avoided.



(Batterie = battery; Batteriefach = battery compartment)

# The smoke detector must not be used in the following areas:

- Near flammable electrical appliances or in areas such as in the kitchen, near furniture, or water heaters. If necessary, you must install a suitable special smoke detector in such areas.
- 2. In areas with high temperatures e.g., near dishwashers or washing machines the smoke detector must be installed at a distance of at least 3 meters from these machines.
- 3. The smoke detector must be installed at a distance of at least 1 meter near air conditioning systems or exhaust/supply ventilation or fans. Smoke disperses very quickly in the immediate vicinity of these machines. The smoke detector cannot react reliably to smoke under these environmental conditions.
- 4. In rooms with an ambient temperature below 4 °C or above 37 °C.
- 5. In very dusty or dirty areas and in areas where there are a lot of insects.

#### **Testing the smoke detector:**

Test each detector regularly to ensure that it is correctly installed and is working properly.

- 1: Do not use an open flame to test the detector (risk of fire!).
- 2: Test each smoke detector once a week. Also check the detector immediately after returning if you have been away from home for a few days or weeks.
- 3: Keep an arm's length away from the detector during the test.

Test the smoke alarm by performing the following steps:

4: Press the test button for at least 5 seconds. The alarm sounds in the form of 3 short tones. After a 1.5-seconds

pause, the signal sounds again. This repeats itself until you release the button. The alarm signal may continue to sound for a few seconds after releasing the test button.

**ATTENTION:** If the alarm sounds without the test button being pressed, the device detects smoke.

THE ALERT SIGNAL REQUIRES YOUR IMMEDIATE ATTENTION AND REACTION.

## **Maintaining and cleaning**

In addition to the weekly checks, the battery must be replaced annually. Use high quality batteries. The necessary steps can be found in the "Replacing the battery" section.

The detector must be cleaned at least once a month. Before cleaning, remove the battery.

Use a soft brush to clean the smoke detector. Make sure that the ventilation slots are free of dust. If necessary, clean the cover of the smoke detector with a damp cloth.

Make sure that the battery compartment is properly closed and that no water can get into the device.

After cleaning, reinsert the battery and then carry out a function test by pressing the test button.

#### **Important instructions:**

- 1: Never open the housing to clean the interior. This can cause damage or shorten the life of the smoke detector.
- 2: Replace smoke alarms every 10 years.

#### Repair

Caution: Never repair a defective smoke detector yourself. If the smoke alarm should no longer work within the warranty period, return it in the original box to the dealer from whom you purchased it. If the smoke detector stops working after the warranty period has expired, have it repaired by a professional or replace the device.

#### **Train fire safety measures:**

If the alarm sounds without the test button being pressed, this is a warning of a dangerous situation. You must react to it IMMEDIATELY. To be prepared for such an event, you should think over escape plans for your family. Discuss the

plans with all household members and do exercises regularly.

- 1: Inform all residents about the function of the smoke detector. Trigger the alarm signal with the test button and explain what the alarm means.
- 2: Identify two exits from each room and an escape route from each room exit to the outside.
- 3: Teach all residents to use an alternate exit if the door becomes unusable. Make it clear that hot or burning doors must not be opened.
- 4: Teach all household members to crawl on the floor to stay below hazardous smoke, fumes, and gases.
- 5: Designate a safe meeting place for all residents outside of the building.

## How to react in case of fire:

- 1. Do not panic, keep presence of mind!
- 2. Get out of the burning building as quickly as possible. Check the temperature of a door before opening it. If the door has a high temperature, leave the room through another safety exit. Walk calmly, and do not try to take anything with you.
- 3. Meet at the agreed meeting point.
- 4. Call the fire brigade immediately after leaving the scene of the fire.
- 5. Never return to the burning building. Wait until the fire has been extinguished.

**Note:** This information can help you to escape from the scene of the fire. To generally reduce the risk of a fire, you should carry out regular fire safety training.

#### Rectification of a fault

Do not under any circumstances disassemble the smoke detector components to stop the alarm while checking or in the event of a false alarm. Immediately open the window or turn on a fan to expel any harmless smoke that may be present.

Problem	Solution
You have pressed the	1. Check if the battery is
test button, but the	inserted correctly.
alarm does not sound.	2. Replace the battery.
<b>Note:</b> When testing, press	3. Replace the entire smoke
and hold the test button for	detector.
at least 5 seconds.	
The smoke detector beeps	Replace the battery (see
once every 32 seconds and the	section "Replacing the
red LED flashes.	battery").
The alarm sounds	1. Clean the smoke alarm
when cooking or	according to the instruc-
showering.	tions for use.
	2. Have the smoke alarm
	installed by a profession-
	al at a different spot.
The alarm sounds, but not	1. Check if there is an oper-
in the form of a normal	ation error.
check.	2. Clean the smoke alarm
	according to the instruc-
	tions for use.

#### Warranty period of the smoke detector:

The warranty period for the smoke detector is limited to 3 years. The manufacturer provides a 3-year warranty from the date of purchase. During this time, the manufacturer is responsible for any technical problems that occur with the device.

After the warranty period has expired, the manufacturer is no longer responsible for technical problems with the smoke detector. If your smoke detector does not work properly within the warranty period, return it to your dealer with a description of the fault. Read the instructions for use completely and carefully before installing the smoke detector.

## **Determining the appropriate mounting locations:**

- · Install a smoke detector in the bedroom and on the escape route. If there are more than one bedroom, install a smoke detector in each bedroom.
- · Also install a smoke alarm in the stairwell or on each floor.
- · Mount the detectors in the middle of the ceiling so that the alarm can be heard throughout the room.
- · If the smoke detector cannot be mounted in the middle of

the ceiling, it should be installed at least 50 cm from a corner.

- ·If the length of the room or corridor is more than 9 m, install several smoke detectors.
- Your corridor having an L shape, mount a smoke detector in the mitre line or one detector in each wing of the corridor.
- ·In the case of round or pointed ceilings, install the smoke detector between 50 cm and 100 cm below the top of the ceiling (see Fig. 4, upper part). On sloping ceilings, whose height difference is more than 1 over a length of 6 m, mount the detector on the lower half of the ceiling of the room (see Fig. 4, lower part).
- · If the length and width of a gallery are more than 2 m and the gallery has a total area of more than 16 m², an additional detector is required under the gallery (see Fig. 5).
- The following applies to rooms with a partially sloping roof: if the horizontal ceiling is less than 1 m wide, mount the detector as shown in Fig. 6. If the horizontal ceiling is wider than 1 m, mount the detector in the middle of the horizontal ceiling.

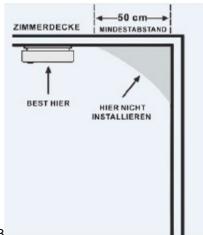


Figure 3

(Zimmerdecke = ceiling; Mindestabstand = minimum distance; best hier = best here; hier nicht installieren = do not install here)

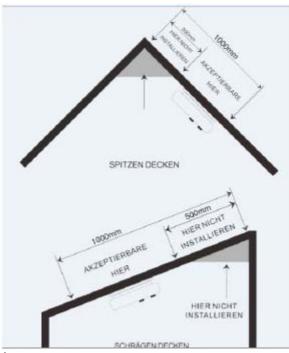


Figure 4

(hier nicht installieren = do not install here; akzeptierbare hier = acceptable here; spitzen Decken = pointed ceilings; schrägen Decken = sloping ceilings)

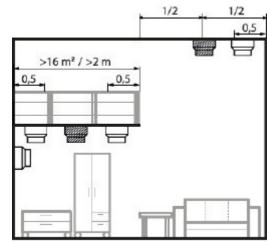
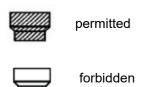


Figure 5 rooms with a platform or gallery



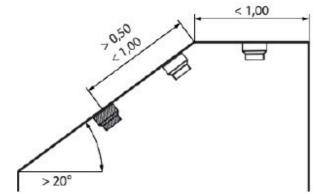


Figure 6, horizontal ceiling, less than 1 m wide

forbidden





- Turn the smoke detector anti-clockwise. Take off the mounting plate.
- · Hold the mounting plate at the position where you want to mount the smoke detector. Mark the holes with a pencil. These positions are necessary for the mounting holes.
- · Drill 2 holes in the positions marked. The diameter of the holes must be 5 mm. Insert a plastic dowel into each of the 2 drill holes.
- · Position the mounting plate appropriately and fasten the plate with the two screws (see Fig. 7) in the dowels.
- · Insert the battery into the battery compartment.
- · Place the smoke detector on the mounting plate. Turn the smoke detector clockwise until it clicks into place.
- · Check the smoke detector with the test button. As long as the test button is pressed, the alarm sounds in the form of 3 beeps. After a 1.5-seconds pause, the beeps will sound again. After releasing the test button, the smoke alarm stops the alarm signal within a few seconds.
- · In normal operation, the red LED flashes once every 32 seconds.

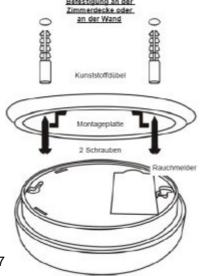


Figure 7

(Befestigung an der Zimmerdecke oder an der Wand = ceiling- or wall-fastening; Kunststoffdübel = plastic dowel; Montageplatte = fastening plate; 2 Schrauben = 2 screws; Rauchmelder = smoke detector)

## **Warning**

The smoke detector must not be covered or painted.

To avoid accidents, the smoke detector must be securely fastened to the ceiling in accordance with the installation instructions.

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Note: This user's manual is a translation of the original document.