

Smoke Alarm User Manual

Model number: GS511E

Ref: ST511E

Thank you for purchasing our smoke alarm with radio link function. Please take a few minutes to read the user's manual thoroughly and familiarize yourself and your family with its operation. And save it for future reference.



AS 3786:2014

Product Specifications:

Power : built-in DC3V(CR17450) Lithium battery (**battery not replaceable**)

Operation current : <70mA

Alarm volume : >85dB(A) at 3 meters.

Smoke sensitivity : 0.09-0.15dB/m

Interconnection: up to 40 devices

Local smoke alarm sound pattern: ISO 8201

BI 0.5s - pause 0.5s – BI 0.5s – pause 0.5s – BI 0.5s – pause 1.5s, with the red LED flash, repeat this alarm pattern.

Wireless alarm sound pattern:

Bi - Bi - pause 1s, with the red LED flash, repeat this alarm pattern.

Description:

The unit is a photoelectric smoke alarm device. With the photoelectric technology, it is more sensitive to detecting slow smolder fires which general thick, black smoke, a little heat and may smolder for hours before bursting into flames. The smoke alarm device does not contain the radioactive material which is harmless to the environment.

The smoke alarm device should be installed in every room (except the bathroom and kitchen), and every other area of the home, making sure the people in the home will be able to

hear and respond to the alarm sound.

For minimum protection, you should fit an alarm respectively for the hallways, living room, bedrooms and child rooms, each unit shall be placed in the middle of the ceiling of each room to protect.

Typical single storey dwelling with recommended:

Install a smoke alarm device on the ceiling inside each bedroom and in the hallway outside each separate sleeping area. If a bedroom area hallway is more than 30 feet long, install a smoke alarm device at each end. If there is a basement: install a smoke alarm device on the basement ceiling at the bottom of the stairwell.

Typical multi-storey dwelling with recommended protection.

Install a smoke alarm device on the ceiling inside each bedroom and in the hallway outside each separate sleeping area. If a bedroom area hallway is more than 30 feet long, install a smoke alarm at each end install a smoke alarm at the top of a first – to- second floor stairwell.

Important Safety Information:

- 1: The test button accurately tests smoke alarm functions. Do not use any other test method. Test smoke alarm monthly to ensure proper operation.
- 2: If you're sure it isn't a really alarm, Open windows or fan the air around smoke alarm for silence it.
- 3: Observe and follow all local and national electrical and building codes for installation.
- 4: This smoke alarm is designed to be used inside a single family only. In multifamily buildings, each individual living unit should have its own smoke alarms. Do not install in non-residential buildings. And this smoke alarm is not a substitute for a complete alarm system.
- 5: Install a smoke alarm in every room and on every level of the home. Smoke may not reach the smoke alarm for many reasons. For example, if a fire starts in a remote part of the home, on another level, in a chimney, wall, roof, or on the other side of a closed door, smoke may not reach the smoke alarm in time to alert household members. A smoke alarm will not promptly detect a fire except in the area or room in which it is installed.
- 6: Smoke alarm may not alert every household member every time. The alarm horn is loud in order to alert individuals to a potential danger. However, there may be some circumstances where a household member may not hear the alarm (i.e. outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing, etc.). If you suspect that this smoke alarm may not alert a household member, install and maintain specialty smoke alarms. Household member must hear the alarm's warning sound

and quickly respond to it to reduce the risk of damage, injury, or death that may result from fire, If a household member is hard of hearing, install special smoke alarms with lights or vibrating devices to alert occupants.

- 7: Smoke alarms can only sound their alarms when they detect smoke or detect combustion particles in the air. They do not sense heat, flame, or gas. This smoke alarm is designed to give audible warning of a developing fire. However, many fires are fast - burning, explosive, or intentional, and others are caused by carelessness or safety hazards. In this circs, Smoke may not remake the unit alarm **QUICKLY ENOUGH** to ensure safe escape.
- 8: Smoke alarms have limitations. This smoke alarm is not foolproof and is not warranted to protect lives or property from fire. Smoke alarms are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the smoke alarm to fail at any time. For this reason, you must test the smoke alarm device monthly and replace unit every 10 years.

Do Not Install Smoke Alarms in the Following Places:

- 1: Near appliances or areas where normal combustion Regularly occurs (kitchens, near furnaces, hot water heaters). Use specialized smoke alarm with unwanted alarm control for this areas.
- 2: In areas with high humidity, like bathrooms or areas near dishwashers or washing machines. Install at least 10feet away from these areas.
- 3: Near air returns or heating and cooling supply vents. Install at least 3 feet away from these areas. The air could blow smoke away from the detector, interrupting its alarm.
- 4: In rooms where temperatures may fall below 0°C or rise above 40 °C or in humidity higher than 93%. These conditions will reduce battery life or cause a fault alarm.
- 5: In extremely dusty, dirty, or insect – infested areas influence particles interfere with smoke alarm operation.
- 6: In the vicinity of areas where people smoke.

Operation:

Activation

To activate the smoke alarm device, just put it on the mounting plate and turn it clockwise untill it is noticeably snapping into place.

Testing

Test the unit to ensure proper operation by pressing the test button, this will sound the alarm if the electronic circuitry, horn, and battery are working. If no alarm sounds, there is a defective battery or other failure, you can refer to “Trouble.

shooting” section for solution.

DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustibile materials and start a fire.

NOTE: Because the unit send the wireless signal, once release the test button, may the other radio linked smoke detector red led will flash twice per second, the status will stop after 5 minutes late or it will stop flashing immediately when you press the button for other products.

LED indicator

- 1: When the alarm is running normally, the red LED will flash once per 40 seconds.
- 2: When the battery failure or low battery is detected, the alarm will “chirp” once and with a corresponding red LED flashing once per 40 seconds.
- 3: When the unit is fault, the alarm will “chirp” once per 40 seconds.
- 4: When the unit is running in the silence mode, the red LED will flash once every 8 seconds.

Note: When the units chirp once per 40 second, Press the test button, it will be paused for this warning tone for 10 hours. It can still normally detect smoke during this period, it only remove nuisance warning tone.

You can refer to “Trouble shooting” for solution, if there are still failures, **you MUST replace it with a new alarm at once** or contact you retailer during warranty.

Alarm silence (silence mode)

During the unit is alarming, push the test button, it will be paused the unit alarming for approx 10 minutes. The red LED will flash once every 8 seconds, it indicates the smoke alarm is running into the silence mode. Smoke alarms are designed to minimize nuisance alarms. Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. Large quantities of combustibile particles are generated from spills or when grilling/frying. Using the fan on a range hood that vents to outside (non-recirculating type) will also help remove these combustibile particles from the kitchen. The alarm silence (test button) is extremely useful in a kitchen area or other areas prone to nuisance alarms.

The silence feature is to be used only when a known alarm condition, such as smoke from cooking activates the alarm.

The smoke alarm will automatically reset after approximately 10 minutes, if after this period, particles of combustion are still present, the alarm will sound again.

The alarm silencer (silence mode) can be repeatedly until the air has been cleared of the condition causing the alarm.

Technical data:

| | |
|--------------------------------|--|
| Model | GS511E |
| Power supply | CR17450 non-replaceable LiMnO2 |
| Battery Service Life | >10 years |
| Operation temperature | 0°C...45°C |
| Operation humidity | <93%RH |
| Alarm Current | < 70mA |
| Alarm Volume | >85dB(A) @ 3 meters |
| Quiescent Current | <11uA |
| Low Voltage Thresholds | DC 2.65V ±4% |
| Hush Time (silence mode) | 10 minutes ±10% |
| Don't disturb time | 10 hours |
| Smoke Alarm Sound Pattern | ISO 8201 |
| Radio Link Alarm Sound Pattern | Bi - Bi - pause 1 s, with the red LED flash. |
| Interconnection | up to 40 devices |
| Wireless Frequency | 433.42MHz |
| Wireless Distance | > 100 meters in free field |
| Receiver category (SRD Class) | 2 |
| Duty cycle (%/h) | 1 |
| Wireless Response Time | < 30 seconds. |
| Comply With Standard | AS3786:2014 |
| Dimensions | 114mm in diameter x 37.9mm in depth. |

Signal indication:

| Mode | LED | Audible |
|--------------------------------|--|-----------------------------|
| Standby | Flash once every 40 seconds. | - |
| Silence | Flash once every 8 seconds. | - |
| Weak battery | Flash once every 40 seconds. | Beep once every 40 seconds. |
| Fault alarm | - | Beep once every 40 seconds. |
| Smoke alarm | Flash once every second. | 3 beeps every 4 seconds |
| Test | Flash once every second. | 3 beeps every 4 seconds |
| Radio link test | Flash twice every second for 5 minutes | - |
| Weak battery of another device | Flash once every 3 hours. | Beep once every 3 hours. |
| Alarm from another device | - | Beep twice every 1 second. |

Wireless function description:

Wireless frequency: 433.42MHz

Operation current:

RF Receiver: <6mA

RF emitter: <30mA

Wireless distance: >100 meters in free field

1: Send wireless code mode

Note: Before operation, the unit must be in normal working mode.

Press the button for 3 times within 2 seconds, the red NET LED is lit for a while (No network yet) or green NET LED is lit for a while (Already networking), then the blue NET LED is lit for 30 seconds, the detector enter "**send wireless code mode**".

Note: If successfully paired with another detector in "learning mode", the green NET LED is lit for 3 seconds, then enter "send wireless code mode" again. If there is no pairing for continuous 30 seconds or press the button for 3 times within 2 seconds again, the detector will enter standby status.

2: Learning mode

Note: Before operation, the unit must be in normal working mode.

Press the button for 3 times within 2 seconds, the unit first enter "**Learning mode**" and the red NET LED (No

networking yet) or green NET LED (Already networking) is lit for a while. Then, if the color of the NET LED is same as another detector in "send wireless code mode" (Green led on 5s), it indicates the radio link is successfully paired. The green LED will be off after 3 seconds.

NOTE: Products can be learned repeatedly, but all products must be studied with the same product. Please remember this product.

3: Clear code mode

If you want to cancel networking:

- 1): Ensure the power is be disconnected. you can check it by press the button.
- 2): Press the button and hold on (do not release), And then install the bracket on the alarm body, ensure the unit is powered.
- 3): The red LED is lit for 3 seconds, and release the test button when the red LED is off.
- 4). When the button is released, the red LED is lit for 3 seconds. In these 3 seconds, press the button, you can clear the network, the red led flash for a while. When the red LED stop flashing, clear network success, the product into the initial state.

4: Radio link test

To ensure that all the products have been successful learning.

- 1): Select one device, press and hold the button for about 2 seconds until the device into "test alarm mode" and then release the button, the device will auto send "radio link test" information.
- 2): After short delay, all other devices into "radio link test" status 5 minutes (red led flash twice every second, no audible signal). If not, the device network Learning failure or the distance between the connected devices is too large (the connected devices cannot reach each other).

NOTE: In "radio link test" status device, press the button and the device immediately enter the normal standby mode.

NOTE: Before installing, place the product in each installed room and select the device in the farthest room for this test, to ensure that other products successfully enter the "radio link test" status.

Trouble shooting:

| Problem | Method of disposal |
|--|---|
| Smoke alarm device does not sound when tested. | <ol style="list-style-type: none"> 1. Fit the alarm on the bracket and turn the alarm body clockwise for POWER ON. 2. Clean smoke alarm device. Please refer to the "maintenance and cleaning" section. 3. If there are still failures during warranty, you can return to your retailer. 4. If the unit is out of warranty, please replace another new alarm. |
| The alarm "chirp" with red LED flashes once every 40 seconds. | The battery is under low battery status, please replace the smoke alarm device. |
| Smoke alarm device chirp occurs every 40 seconds (alarm goes into fault mode) . | Clean smoke alarm device. Please refer to the "maintenance and cleaning" section. Purchase and change another smoke alarm device if the problem still exist |
| Smoke alarm device sounds unwanted alarms intermittently or when residents are cooking, taking showers, etc. | <ol style="list-style-type: none"> 1. Press test button to pause alarm. 2. Clean smoke alarm device. Please refer to the "maintenance and cleaning" section. 3. Move smoke alarm device to new location and press test button. |
| The alarm sounds different from it is used to. It starts and stops. | <ol style="list-style-type: none"> 1. Clean smoke alarm device. Please refer to the "maintenance and cleaning" section. 2. If there are still failures during warranty, you can return to your retailer. 3. If the unit is out of warranty, please replace another new alarm. |

Maintenance and Cleaning:

The alarm requires periodic cleaning to remove dust, dirt, and debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

This alarm has a low battery monitor which will cause the alarm to "chirp" approx every 40 seconds and the red LED flash once at the same time for a minimum of thirty days when the battery gets low.

If there is a defective battery or other failures, you can refer to "Trouble shooting" for solution, if there are still failures

during warranty, you can return to your retailer.

WARNING: The battery is sealed in cover and not replaceable. Please replace another new alarm if the low battery chirp occurs.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

Repair:

Caution: Do not attempt to repair the alarm. It will affect your warranty.

If the alarm is not operating properly, and is still under warranty, return it to the original place you buy. Pack it in a well-padded carton, and ship to the original place you buy.

If the alarm is no longer under warranty, have a licensed electrician replace it immediately with a comparable alarm.

Practice Fire Safety:

If the alarm sounds, and you have not pushed the test button, it is warning of a dangerous situation, your immediate response is necessary. To prepare for such occurrences, develop family escape plans, discuss them with all household members, and practice them regularly.

- 1: Expose everyone to the sound of a smoke alarm and explain what the sound means.
- 2: Determine two exits from each room and an escape route to the outside from each exit.
- 3: Teach all household members to touch the door and use an alternate exit when the door is hot, instruct them not to open the door if the door is hot.
- 4: Teach household members to crawl along the floor to stay below dangerous smoke, fumes and gases.
- 5: Determine a safe meeting place for all members outside the building.

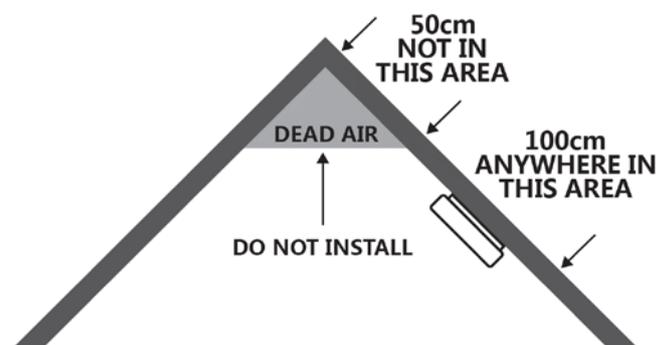
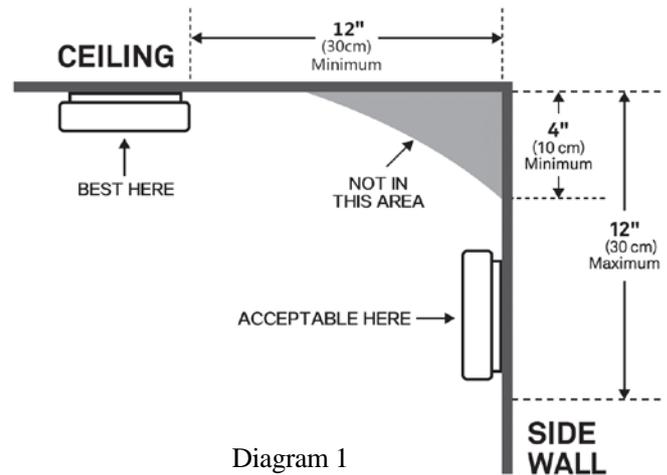
What to Do in Case of Fire:

- 1: Do not be panic; stay calm.
- 2: Leave the building as quickly as possible. Touch doors to feel if they were hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and do stop to collect anything.
- 3: Meet at a pre-arranged meeting place outside the building.
- 4: Call the fire department form outside the building.
- 5: Do not go back inside a burning building. Wait for the fire department to arrive.

Note: These guidelines will assist you in the event of a fire, however, to reduce the chance that fires will start, practice fire safety rules and prevent hazardous situations.

Where is the best to be Installed:

- At first you need install one unit in the bedroom and route way, if you have several bedrooms, you'd better install each alarm in every room.
- Install it in the stairway and in every floor.
- Smoke, heat and burning things will spread horizontally after rising to the ceiling, so install the alarm on middle of the ceiling of ordinary structure house .let the alarm induce every corner.
- If alarm couldn't be installed in the middle of the ceiling for some reasons, the distance which the alarm away from the wall corner should be beyond 30cm. (see the diagram 1).
- If installed the alarm on the wall, it should be in 10cm and 30cm below the ceiling (see the diagram 1).
- If the length of the room or the hall is beyond 30 foot, you need install several alarms in the hall.
- When the ceiling is slanting, the alarm needs to be installed 50cm away from the highest ceiling point in the room (see the diagram 2).



Installation:

- According to the **“Wireless function description”** Section to operate the smoke alarm. Ensure the wireless function is ok.
- Then press the bracket on the installation position, mark installation hole of bracket with pencil.
- Bore two installation hole on the sign with electric drill. Make diameter of holes is 5mm, Strike the two plastic plugs into holes with hammer.
- Attach the bracket to the plastic plugs and fix tightly the screws (3*25mm) into the plastic plugs. (refer to Diagram 3).
- Fit the alarm on the bracket and turn the alarm body clockwise, until matching well on the bracket.
- Test smoke alarm using test button. The alarm will sound 3 short beeps – 1.5 seconds pause, then repeat it until release the button.
- if no sound, it indicates a defective alarm, you can refer to “Trouble shooting” for solution or return to your retailer during warranty.
- If you have any questions on installation, you can contact your retailer.
- During testing, may the other smoke detector will alarm. Once release the button, others will stop alarming in 1 minute. In such a way, you can check the wireless function.

WARNING:

To prevent injury, this unit must be securely attached to the ceiling in accordance with the installation instructions.

Warranty Information:

Company warrants to the original consumer.

Purchase each new smoke alarm to be free from defects in material and workmanship under normal use and service for a period of 3 years from the date of purchase. This warranty does not cover damage resulting from accident, misuse or abuse or lack of reasonable care of the product.

In no case shall company be liable for any incidental or consequential damages for breach of this or any other warranty express or implied, whatsoever. The bad product can be mailed to the following address with a detail explanation of problem.

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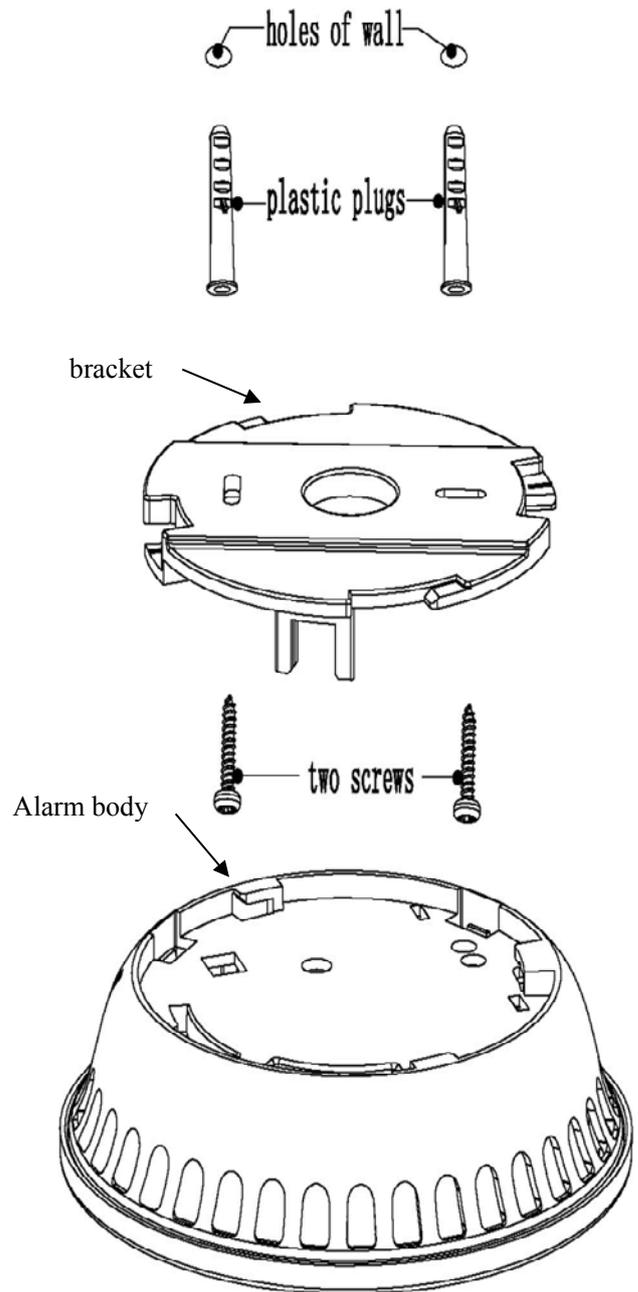


Diagram 3