Smoke Alarm User Manual

Model number: GS528A          Ref: ST528A
Thank you for purchasing our smoke alarm. 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.

Product Specifications:
- **POWER:** DC 9V battery
- **OPERATION CURRENT:** <11uA (standby), <30mA (alarm)
- **ALARM VOLUME:** >85dB(A) at 3 meters.
- **Low battery warning:** 6.5-7.8V
- **ALARM SENSITIVITY:** 1.51-2.64%/ft OBS
- **COMPLY WITH:** UL217 & CAN/ULC-S531

Description:
This unit is a photoelectric smoke alarm. The photoelectric technology, it is more sensitive in detecting slow smoldering fires which generate light smoke, little heat and may smolder for hours before bursting into flames. This smoke alarm does not contain any radioactive material. Smoke alarms should be installed in every room (except the bathroom and kitchen), finished attics and basements, making sure the people in the home will be able to hear and respond to the alarm sound. For minimum protection, you should install an alarm on every level of the home particularly outside sleeping rooms. Each alarm should be placed in the middle of the ceiling of each room to be protected. Typical single storey dwelling installation recommendations: Install a smoke alarm on the ceiling or wall 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 weekly to ensure proper operation.
2. If you're sure it isn’t a really alarm, open windows or fan the air around smoke alarm to test and silence it.
3. User to install this product needs to comply with all local and national electrical installation and building codes.
4. This smoke alarm is designed to be used inside a single family home only. In multifamily buildings, each individual living unit should have its own smoke alarms. Do not install in non-residential buildings as 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 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 such circumstances, Smoke may not reach the alarm QUICKLY ENOUGH to ensure safe escape. Therefore the installation of smoke alarms is not a substitute for practicing fire safety in the home.

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 have adequate insurance to protect 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 weekly and replace them every 10 years.

**Battery Connections:**

![Diagram 1](image)

**Battery Specification:**
Voltage: DC 9V (Alkaline, Carbon Zinc, Lithium battery)
Gold Peak: 1604P

**Replace Battery:**
1: Turn the alarm body counterclockwise and take out the alarm body from the bracket.
2: Take out the old battery and connect the new battery to power connector according to Diagram 1.
3: Fix the battery into battery box, fit alarm body on bracket and turn the alarm body clockwise (see Diagram 2).

![Diagram 2](image)

4: Test smoke alarm using test button. The sound pattern is 3 short beeps-pause 1.5 seconds, repeat it. If there’s no sound output, it means that the smoke alarm is faulty or the installing operation is wrong, and you can get helps from the section: “trouble shooting”.

**Do Not Install Smoke Alarms in the Following Places:**
- In the garage. Products of combustion are present when you start your automobile.
- Less than 4" (10cm) from the peak of an “A” frame type ceiling.
- In an area where the temperature may fall below 40ºF or rise above 100ºF, such as garages and unfinished attics.
- In dusty areas. Dust particles may cause nuisance alarm or failure to alarm.
- In very humid areas (greater than 85% R.H.). Moisture or steam can cause nuisance alarms.
- In insect-infested areas.
- Smoke alarms should not be installed within 3 ft (.9m) of the following: the door to a kitchen, the door to a bathroom containing a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas.
- Kitchens. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature or be a photoelectric type.
- Near fluorescent lights. Electronic “noise” may cause nuisance alarms.
- Smoke alarms are not to be used with detector guards
- Unless the combination (alarm and guard) has been evaluated and found suitable for that purpose.

**Operation:**

**Testing**
Test weekly by pushing the test button on the cover and holding it down for a minimum of 5 seconds. this will sound the alarm if the electronic circuitry, horn, and battery are working properly. If no alarm sounds, the battery may be depleted or another problem, refer to “Trouble shooting” section for a solution.

**DO NOT** use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a structure fire.
CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms-length away from the unit when testing. Test the alarm weekly to ensure proper operation. Erratic or low sound coming from your alarm may indicate a defective alarm. Refer to “Trouble shooting” section for a solution.

NOTE: WEEKLY TESTING IS REQUIRED

LED indicators
This smoke alarm is equipped with red LED indicators.

Standby Condition: The red LED will flash every 32 seconds to indicate that the smoke alarm is operating properly.

Alarm Condition: When the alarm senses products of combustion and goes into alarm, the red LED will flash rapidly (one flash per second). The rapid flashing LED and pulsating alarm will continue until the air is cleared or the test button is released.

Low battery trouble indication: An intermittent “chirp” accompanied by a red LED flash every 32 seconds indicates a low battery.

Fault indication: This chirp will occur between the flashes of the red LED indicator light.

SMOKE SENSING CHAMBER OPERATION: This alarm will “chirp” if any of the components in the smoke sensing chamber fail. This chirp will occur between the flashes of the red LED indicator light. (If the chirp occurs at the same time as the red LED flash, indicating a low battery information).

NOTE: WEEKLY TESTING IS REQUIRED.

DANGER: If the alarm sounds, and it is not being tested, it means the unit is sensing smoke, THE SOUND OF THE ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

Repair:
Caution: Do not attempt to repair the alarm. This will void your warranty. If the alarm is not operating properly, and is still under warranty, return it to the original place of purchase. 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.

DEVELOP AND PRACTICE A PLAN OF ESCAPE

• Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency.
• Make a floor plan indicating all doors and windows and at least two (2) escape routes from each room. Second story windows may need a rope or chain ladder.

• Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
• Determine a place outside your home where you all can meet if a fire occurs.
• Familiarize everyone with the sound of the smoke alarm and train them to leave your home when they hear it.
• Practice a fire drill at least every six months, including fire drills at night. Ensure that small children hear the alarm and wake when it sounds. They must wake up in order to execute the escape plan. Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.
• Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

WHAT TO DO WHEN THE ALARM SOUNDS
1. Alert small children in the home to quickly follow the family escape plan.
2. Leave immediately by your escape plan. Every second counts, so don’t waste time getting dressed or picking up valuables.
3. In leaving, don’t open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don’t open that door! Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
4. Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
5. Once outside, go to your selected meeting place and make sure everyone is there.
6. Call the fire department from your neighbor’s home—not from yours!
7. Don’t return to your home until the fire officials say that it is all right to do so. There are situations where a smoke alarm may not be effective to protect against fire as stated in the NFPA Standard 72.
8. For instance:
   a) Smoking in bed
   b) Leaving children home alone
   c) Cleaning with flammable liquids, such as gasoline

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.

**Trouble shooting:**

DO NOT disconnect battery to quiet an unwanted alarm. This will remove your protection. Fan the air or open a window to remove smoke or dust.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke alarm does not sound when tested. NOTE: Push test button for at least five seconds while testing!</td>
<td>1. Activate alarm before installation. 2. Clean smoke alarm. Please refer to the “maintenance and cleaning” section. 3. If problems persist and the unit is still under warranty, you can return to your retailer. 4. If the unit is out of warranty, please replace another new alarm.</td>
</tr>
<tr>
<td>An intermittent “chirp” accompanied by a red LED flash every 32 seconds</td>
<td>This indicates a low battery. Please replace battery according to “replace battery” section.</td>
</tr>
<tr>
<td>The alarm chirp occurs every 32 seconds only. (alarm goes into fault mode).</td>
<td>1. Clean smoke alarm. Please refer to the “maintenance and cleaning” section. 2. Purchase and change another smoke alarm if the problem persists.</td>
</tr>
<tr>
<td>Smoke alarm sounds unwanted alarms intermittently or when residents are cooking, taking showers, etc.</td>
<td>1. Clean smoke alarm. Please refer to the “maintenance and cleaning” section. 2. Move smoke alarm to a new location.</td>
</tr>
<tr>
<td>The alarm sounds different from it is used to. It starts and stops.</td>
<td>1. Clean smoke alarm. Please refer to the “maintenance and cleaning” section. 2. If the problem persists during warranty, you can return to your retailer. 3. If the unit is out of warranty, please replace another new alarm.</td>
</tr>
</tbody>
</table>

**Maintenance and Cleaning:**

In addition to weekly testing, the alarm requires yearly battery replacement and periodic cleaning to remove dust, dirt, and debris. Clean the alarm at least once a year to remove dust, dirt, or debris. Use a vacuum cleaner with a soft brush, vacuum all sides and covers of smoke alarm. Be sure all the vents are free of debris. Use a damp cloth to clean the alarm’s cover.

This smoke alarm uses a 9 volt battery. A fresh battery should last for one year under normal operating conditions. This alarm has a low battery monitor which will cause the alarm to “chirp” and at the same time as the red LED flash approx every 32 seconds for a minimum of 7 days when the battery gets low. Replace the battery when this condition occurs. Please refer to “REPLACE BATTERY”.

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

**RECOMMENDED LOCATIONS FOR ALARMS**

- Locate the first alarm in the immediate area of the bedrooms. Try to monitor the exit path as the bedrooms are usually farthest from the exit. If more than one sleeping area exists, locate additional alarms in each sleeping area.
- Locate additional alarms to monitor any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one alarm on every floor level.
- Locate an alarm in every bedroom.
- Locate an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
- Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent an alarm not located in that room from waking the sleeper.
- Smoke, heat, and combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
- For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see MOBILE HOME INSTALLATION below.
- When mounting an alarm on the ceiling, locate it at a minimum of 4” (10cm) from the side wall (Refer to Diagram 3).
- When mounting the alarm on the wall, use an inside wall...
with the top edge of the alarm at a minimum of 4" (10cm) and a maximum of 12" (30.5cm) below the ceiling (Refer to Diagram3).

- Put smoke alarms at both ends of a bedroom hallway or large room if the hallway or room is more than 30 ft (9.1 m) long.
- Install Smoke Alarms on sloped, peaked or cathedral ceilings at or within 3 ft (0.9m) of the highest point (measured horizontally). NFPA 72 states: “Smoke alarms in rooms with ceiling slopes greater than 1 ft in 8 ft (.3m in 2.4m) horizontally shall be located on the high side of the room.” NFPA 72 states: “A row of alarms shall be spaced and located within 3 ft (0.9m) of the peak of the ceiling measured horizontally” (Refer to Diagram 4).

**MOBILE HOME INSTALLATION**

- Modern mobile homes have been designed and built to be energy efficient. Install smoke alarms as recommended above (refer to RECOMMENDED LOCATIONS and diagram 3 and 4).
- In older mobile homes that are not well insulated compared to present standards, extreme heat or cold can be transferred from the outside to the inside through poorly insulated walls and roof. This may create a thermal barrier which can prevent the smoke from reaching an alarm mounted on the ceiling. In such units, install the smoke alarm on an inside wall with the top edge of the alarm at a minimum of 4" (10cm) and a maximum of 12" (30.5cm) below the ceiling (see Diagram 3).
- If you are not sure about the insulation in your mobile home, or if you notice that the outer walls and ceiling are either hot or cold, install the alarm on an inside wall. For minimum protection, install at least one alarm close to the bedrooms. For additional protection, see SINGLE FLOOR PLAN in Diagram 5 and MULTIPLE FLOOR PLAN in Diagram 6.

**WARNING:** TEST YOUR SMOKE ALARM OPERATION AFTER RV OR MOBILE HOME VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE A WEEK DURING USE.
**Installation:**

- Turn the alarm body counterclockwise and take off the bracket.
- Hold the bracket in the installation position as specified in the Recommended Locations, mark installation holes of the bracket with pencil.
- Drill the two marked installation holes with a 3/16 inch (5mm) drill bit. Tap the two plastic grommets into holes with hammer.
- Mount the bracket to the ceiling by inserting and tightening the supplied screws into plastic grommets. (Refer to Diagram 7).
- Connect the battery to power connector.
- Fix the battery into battery box.
- Fit the alarm on the bracket and turn the alarm body clockwise, until fully inserted on the bracket.

Press the button to test the unit. The alarm should then sounds 3 beeps – 1.5 seconds pause, and will repeat until the button is released, if no sound, it indicates a defective alarm, refer to the “Trouble shooting” section for a solution or return to your retailer during warranty.

**WARNING:**

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

**SERVICE AND WARRANTY**

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.

If after reviewing this manual you feel that your smoke alarm is defective in any way, do not tamper with the unit. Return it for servicing to:

**SITERWELL ELECTRONICS CO., LIMITED**

**ADDRESS:** NO.76 HAICHUAN ROAD CHUANGYE ZONE B, JIANGBEI,NINGBO,CHINA

**TEL:**0086-574-87729581

**FAX:**0086-574-87729581

**E-MAIL:**Sales@china-siter.com