

## LS-134H User Manual



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### INTRODUCTION

GlobalSat's single station photoelectric smoke detector LS-134H is designed to sense smoke that comes into the alarm chamber. It does not sense gas, or flame. This smoke detector is designed to give early warning of developing fires by giving off the alarm sounds from its built-in alarm horn. It can provide precious time for you and your family to escape before a fire spreads. However, the smoke detector makes such pre-warning of fire accident possible, only if the smoke detector is located, installed, and maintained properly as described in this User Manual.

**WARNING:** This smoke detector is designed for use in a single residential unit only, which means that it should be used inside a single family home or apartment. It is not meant to be used in lobbies, hallways, basements, or another apartment in multi-family buildings, unless there are already working alarms in each family unit. Smoke detectors, placed in common areas outside of the individual living unit, such as on porches or in hallways, may not provide early warning to residents. In multi-family buildings, each family living unit should set up its own smoke detectors.

**WARNING:** This detector is not meant to be used in non-residential buildings. Warehouses, industrial or commercial buildings, and special purpose non-residential buildings require special fire detection and alarm systems. This smoke detector alone is not a suitable substitute for complete fire detection systems for places where many people live or work, such as hotels or motels. The same is true of dormitories, hospitals, nursing homes or group homes of any kind, even if they were once single family homes. Please refer NFPA 101, the Life Safety Code, NFPA 72A for smoke alarm requirements for fire protection in buildings not defined as "households".

**WARNING:** This smoke detector will not alert people who are hard of hearing. It is strongly recommended that the special-purpose smoke detectors, using lights or vibrating devices, should be installed to alert occupants who are hard of hearing.

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### LOCATIONS TO INSTALL YOUR SMOKE DETECTOR

Smoke detectors should be installed in accordance with the NFPA Standard 72 (National Fire Protection Association, Battery march Park, Quincy, MA 02169). For complete coverage in residential units, smoke detectors should be installed in all rooms, halls, storage areas, basements, and attics in each family living unit. Minimum coverage is one detector on each floor and one in each sleeping area.

#### Here, we have useful tips for you:

- Install a smoke detector in the hallway outside every separate bedroom area, as shown in Figure 1. Two alarms are required in homes with two bedroom areas, as shown in Figure 2.
- Install a smoke detector on every floor of a multi-floor home or apartment, as shown in Figure 3.
- Install a minimum of two detectors in any household.
- Install a smoke detector inside every bedroom.
- Install smoke detectors at both ends of a bedroom hallway if the hallway is more than 40 feet (12 meters) long.
- Install a smoke detector inside every room where one sleeps with the door partly or completely closed, since smoke could be blocked by the closed door and a hallway detector may not wake up the sleeper if the door is closed.

Figure 1:  
LOCATIONS FOR PLACING SMOKE DETECTORS  
FOR SINGLE RESIDENCE WITH ONLY ONE SLEEPING AREA



Figure 2:  
LOCATIONS FOR PLACING SMOKE DETECTORS  
FOR SINGLE-FLOOR RESIDENCE WITH MORE  
THAN ONE SLEEPING AREA

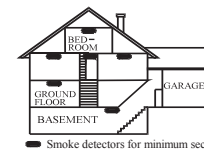
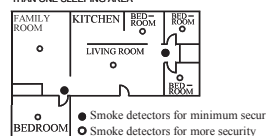


Figure 3:  
LOCATION FOR PLACING SMOKE DETECTORS  
FOR A MULTI-FLOOR RESIDENCE

- Smoke detectors for minimum security
- Install basement detectors at the bottom of the basement stairwell.
- Install second-floor detectors at the top of the first-to-second floor stairwell.

#### Be sure no door or other obstruction blocks the path of smoke to the detector.

- Install additional detectors in your living room, dining room, family room, attic, utility and storage rooms.
- Install smoke detectors as close to the center of the ceiling as possible. If this is not practical, put the detector on the ceiling, no closer than 4 inches (10 cm) from any wall or corner, as shown in Figure 4.
- If ceiling mounting is not possible and wall mounting is permitted by your local and state codes, put wall-mounted detectors between 4 and 6 inches (10 ~ 15 cm) from the ceiling, also see Figure 4.
- If some of your rooms have sloped, peaked, or gabled ceilings, try to mount detectors 3 feet (0.9 meter) measured horizontally from the highest point of the ceiling as shown in Figure 5.

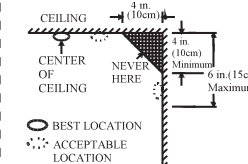


Figure 4:  
RECOMMENDED BEST AND  
ACCEPTABLE LOCATIONS TO  
MOUNT SMOKE DETECTORS

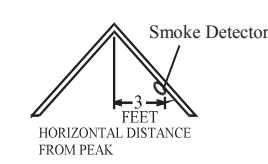


Figure 5:  
RECOMMENDED LOCATION TO MOUNT SMOKE  
DETECTORS IN ROOMS WITH SLOPED, GABLED,  
OR PEAKED CEILING

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**CAUTION** (As required by the California State Fire Marshall) "Early warning fire" detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: (1) A smoke detector installed in each separate sleeping area (in the vicinity, but outside of the bedrooms), and (2) Heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and, storage rooms, basements and attached garages."

For your information, NFPA Standard 72, Section 29 reads as follows: "29.5.1 Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics.

The provisions of 29.5.1 represent the minimum number of alarms required by this standard. It is recommended that the householder consider the use of additional smoke detectors for increased protection for those areas separated by a door from the areas protected by the required smoke alarms under 29.5.1 above. The recommended additional areas are living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace rooms, utility room, basement, integral or attached garage, and hallways not included in 29.5.1 above. However, the use of additional alarms remains the option of the householder." We recommend complete coverage and use of additional smoke detectors.

### LOCATIONS NOT TO INSTALL YOUR SMOKE DETECTORS

Nuisance alarms take place when smoke detectors are installed where they will not work properly. To avoid nuisance alarms, do not install smoke detectors in the following situations:

- Combustion particles are the by-products of something that is burning. Thus, in or near areas where combustion particles are present you do not install the smoke detectors to avoid nuisance alarms, such as kitchens with few windows or poor ventilation, garages where there may be vehicle exhaust, near furnaces, hot water heaters, and space

heaters.

- Do not install smoke detectors less than 20 feet (6 meters) away from places where combustion particles are normally present, like kitchens. If a 20-foot distance is not possible, e.g. in a mobile home, try to install the detector as far away from the combustion particles as possible, preferably on the wall. To prevent nuisance alarm alarms, provide good ventilation in such places.

**IMPORTANT:** For any reason, do not disable the unit to avoid nuisance alarms.

- When air streams passing by kitchens, the way how a smoke detector can sense combustion particles in normal air-flow paths is graphically shown in Figure 6, which indicates the correct and incorrect smoke detector locations concerning this problem.

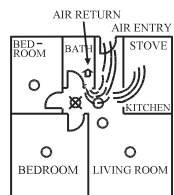


Figure 6:  
RECOMMENDED SMOKE DETECTORS  
LOCATIONS TO AVOID AIR STREAMS  
WITH COMBUSTION PARTICLES

- CORRECT LOCATION
- INCORRECT LOCATION

- In damp or very humid areas, or near bathrooms with showers. Moisture in humid air can enter the sensing chamber, then turns into droplets upon cooling, which can cause nuisance alarms. Install smoke detectors at least 10 feet (3 meters) away from bathrooms.
- In very cold or very hot areas, including unheated buildings or outdoor rooms. If the temperature goes above or below the operating range of smoke detectors, it will not work properly. The temperature range for your smoke detector is 0°C~49°C.
- In very dusty or dirty areas, dirt and dust can build up on the detector's sensing chamber, to make it overly sensitive. Additionally,

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dust or dirt can block openings to the sensing chamber and keep the detector from sensing smoke.

- Near fresh air vents or very drafty areas like air conditioners, heaters or fans, fresh air vents and drafts can drive smoke away from smoke detectors.
- Dead air spaces are often at the top of a peaked roof, or in the corners between ceilings and walls. Dead air may prevent smoke from reaching a detector. See Figures 4 and 5 for recommended mounting locations.
- In insect-infested areas. If insects enter a detector's sensing chamber, they may cause a nuisance alarm. Where bugs are a problem, get rid of them before putting up a detector.
- Near fluorescent lights, electrical "noise" from fluorescent lights may cause nuisance alarms. Install smoke detectors at least 5 feet (1.5 meters) from such lights.

**WARNING:** Never remove battery from smoke detector to stop a nuisance alarm. Open a window or fan the air around the smoke detector to get rid of the smoke. The detector will turn itself off when the smoke is gone. If nuisance alarms persist, attempt to clean the smoke detector as described in this User Manual.

**WARNING:** Do not stand close to the smoke detector when the alarm is sounding. The alarm is loud in order to wake you in an emergency. Too much exposure to the horn at close range may be harmful to your hearing.

### INSTALLING YOUR SMOKE DETECTOR

LS-134H smoke detector is made to be mounted on the ceiling or on the wall if necessary.

**WARNING:** Do not connect LS-134H smoke detector to any other detector or auxiliary device. Connecting anything else to this detector will keep it from working properly.

Read "LOCATIONS TO INSTALL YOUR SMOKE

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**DETECTORS"** and "LOCATIONS NOT TO INSTALL YOUR SMOKE DETECTORS" section in this Manual first, then decide where to install a detector.

#### Please follow these steps to install your smoke detector:

1. At the place where you are going to install your smoke detector, draw a horizontal line six inches long.
2. Remove the mounting bracket from your unit by rotating it counterclockwise.
3. Place the bracket so that the two longest hold slots are aligned on the line. In each of keyhole slots, drawing a mark to locate a mounting plug and screw.
4. Remove the bracket.
5. Using a 3/16-inch(5mm) drill bit, drills two holes at the marks and insert plastic wall plugs. Put the smoke detector away from plastic dust on it when you drill holds for mounting.
6. Using the two screws and plastic wall plugs ( all supplied) , attach the bracket to the wall.
7. Line up the slot of the bracket and the smoke detector. Push the detector onto the mounting bracket on turn it clockwise to fix it into the place. Pull onward on the smoke detector to make sure it is securely attached to the mounting bracket.

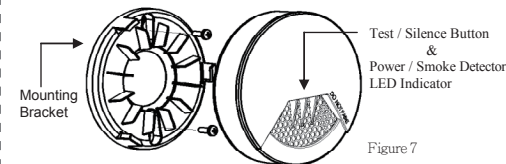


Figure 7

**CAUTION:** This smoke detector comes with cover latches that will prevent the smoke detector cover from closing if battery is not

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installed. This tells you that the smoke detector will not work until a new battery is properly installed.

**NOTE:** The detector horn will beep once after the detector is installed with battery and mounted with bracket 2–4 seconds. This means the smoke detector is working normally and also indicates that the battery is positioned properly. Close cover, and then press the test button, holding it down for about 3 seconds until the horn sounds. The horn should sound a loud, pulsating alarm. This means the unit is working properly.

**PRODUCT SPECIFICATION**

**Model :** LS-134H  
**Sensitivity:** Meet with both UL217 & UL268 and EN14604 standard  
**Battery Power:** 3V lithium battery, Panasonic CR123A  
**Warning Sound Pattern:** Meet with temporal three  
**Alarm Audibility:** 85dB/3m  
**Alarm Temperature:** 57°C~65°C (134°F~149°F)  
**Operation Temperature:** 0°C~49°C (32°F~120°F)  
**Relative Humidity:** 10~85%  
**Size:** 120mm diameter x 5.3mm depth

**STANDBY MODE**

The red LED, as the ALARM indicator, are featured with the smoke detector. It can be seen through the clear test button on the cover of the unit. When red LED flashes once 334 seconds, it indicates the smoke detector is under normal operation. When smoke detector senses smoke and simultaneously sounds an audible alarm with 3 beeps , pause and 3 beeps. The red LED will flash continuously and rapidly.

**SILENCE FEATURE**

The silence feature can temporarily quite an alarm for up to 10 minutes. To use this feature, press test/silence button on the cover when it alarms. However, if the smoke concentration around the smoke detector unit is still at alarming level after 10 minutes of

silence, the unit will re-alarm immediately.

**LOW BATTERY WARNING SIGNAL**

If the detector horn begins to chirp once in 43 seconds with red and yellow LED flashing, this signal means that the smoke detector's battery is weak. This low battery warning signal should last for up to 30 days , but you should replace the battery immediately to secure your protection.

**TAMPER SWITCH FEATURE**

If the smoke detector is not mounted into the bracket properly within 5 minutes after battery is installed, the tamper function is triggered and the Yellow LED is steadily on. If the smoke detector is still not mounted into the bracket properly 5 minutes after battery is installed, you will hear temporal three sound with yellow LED steadily on until smoke alarm is mounted back into bracket properly.

**MALFUNCTION (ERROR) SIGNAL**

If you hear 3 “beep” with yellow LED flashing 3 times in 43 seconds, it indicates that the smoke detector does not work properly, please have it repaired or serviced.

**TESTING YOUR SMOKE DETECTOR**

Test the detector weekly by pushing firmly on the test button with your finger for around 4 seconds until the horn sounds, the sound pattern is 3 beeps , pause, and then 3 beeps with red LED flashing continuously and rapidly.If the smoke detector beeps three with yellow LED flashing three times in 43 seconds, it indicates the smoke detector is not working properly, it requires to be repaired or serviced. This is the only way to make sure that the smoke detector unit is working properly. If the unit fails to test properly, have it repaired or replaced immediately. If you suspect that your smoke detector does not go into alarm, test it by pressing the test button with your finger to ensure if it works properly.

**WARNING:** Never use an open flame of any kind to test your detector. You may set fire to damage the detector, as well as your

home. The built-in test switch accurately tests all functions as required by Underwriters’ Laboratories. They are the only correct ways to test the unit.

**WARNING:** When you are not testing the unit and the alarm horn sounds this means the smoke detector has sensed smoke or combustion particles in the air. Be sure that the alarm horn is a warning of a possible serious situation, which requires your immediate attention.

- The alarm could be caused by a nuisance situation. Cooking smoke or a dusty furnace, sometimes called “friendly fires” can cause the alarm to sound. If this happens, open a window or fan the air to remove the smoke or dust. The alarm will turn off as soon as the air is completely clear.

**NOTE:** Do not disconnect the power or remove the battery from the smoke detector. This will remove your protection from fires.

- If the alarm horn begins to beep once in 43 seconds with red LED flashing, this signal means that the smoke alarm’s battery is weak. Replace new battery immediately. Keep fresh batteries on hand for this purpose.

**NOTE:** Use only the replacement batteries listed below: (Duracell) DL123A, (Panasonic) CR123A 3V with minimum life time as long as 1 years under normal operation.

**WARNING:** Do not use any other kind of battery. This smoke alarm may not operate properly with other kind of battery.

**BATTERY INSTALLATION**

1. Open battery compartment (see figure as below)
2. Install battery into compartment and make sure the “+” and “-” ends of each battery are aligned properly.
3. After battery is installed in compartment, you will hear a chirp which indicates the unit is receiving battery power.

**TAKING CARE OF YOUR SMOKE DETECTOR**

installed, located and maintained.

- Smoke detector may not be heard if residents are hearing impaired. Special designed units such as those with visual and audible alarms should be installed for hearing impaired residents.
  - Smoke detector may not waken all individuals if they are sound sleepers.
- If children or other family members do not waken readily to the sound of the smoke detector , or if there are infants or members with mobility limitations, make sure someone is assigned to assist them in fire drill and in the event of emergency.

**Federal Communication Commission Interference Statement**  
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

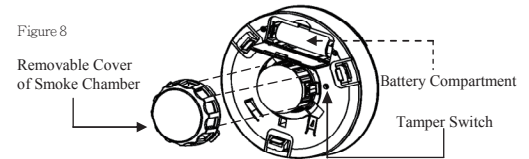
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device

Your smoke detector is designed to be maintenance-free as possible. To keep your smoke detector in good working condition, you must test the unit weekly, as referring to section “**TESTING YOUR SMOKE DETECTOR**”.

**Regular Maintenance:**

- Open the cover and vacuum the dust off the detector’s sensing chamber at least once a month.
- Remove battery before cleaning. To clean smoke detector , use soft brush attachment to your vacuum. Carefully remove any dust on smoke detector components, especially on the openings of the sensing chamber. Replace battery after cleaning. Test the smoke detector to make sure battery is working correctly. Never use water, cleaners as they may damage the unit.



**NOTE:** If nuisance alarms keep coming from the unit , you should check whether the smoke detector unit’s location is adequate. Refer to section “**LOCATIONS TO INSTALL YOUR SMOKE DETECTOR**” Move your smoke detector if it is not located properly. Clean the unit as described above.

**TIPS TO ENHANCE YOUR PROTECTION FROM FIRES**  
Putting up smoke detectors is only one step in protecting your family from fires. You must also reduce the chances that fires will start in your home. And you must increase your chances of escaping safely if one does start. To have a good fire safety program you must apply the following tips to enhance your family’s protection from fires:

1. Install smoke detectors properly. Carefully follow all the instructions in this manual. Keep your smoke detectors clean, and test them every week.
2. Remember that smoke detector that do not work will not alert you. Replace your smoke detectors immediately if they are not working properly.
3. Follow fire safety rules, and prevents hazardous situations:
  - Use smoking materials properly. Never smoke in bed.
  - Keep matches and cigarette lighters away from children.
  - Store flammable materials in proper containers. Never use them near open flame or sparks.
  - Keep electrical appliances in good condition. Do not overload electrical circuits.
  - Keep stoves, fireplaces, chimneys, and barbecue grills grease free. Make sure they are properly installed and away from any combustible materials.
  - Keep portable heaters and open flames such as candles away from combustible materials.
  - Do not allow rubbish to accumulate.
  - Keep a supply of extra batteries on hand for your battery powered smoke detectors.
4. Develop a family escape plan and practice it with your entire family. Be sure to include small children in your practice.
  - Draw a floor plan of your home, and find two ways to exit from each room. There should be one way to get out of each bedroom without opening the door.
  - Explain to children what the smoke detector alarm signal means. Teach them that they must be prepared to leave the home by themselves if necessary. Show them how to check to see if doors are hot before opening them. Show them how to stay close to the floor and crawl if necessary. Show them how to use the alternate exit if the door is hot and should not be opened.
  - Decide on a meeting place which has a safe distance from your house. Make sure that all your children understand that they should go

- and wait for you there if there is a fire.
- Hold fire drills at least every 6 months to make sure that everyone, even small children, knows what to do to escape safely.
  - Know where to go to call the Fire Department from outside your home.
  - Provide emergency equipment, such as fire extinguishers, and teach your family to use this equipment properly.

**MORE TIPS TO FACE A FIRE IN YOUR HOME**

If you have made a family escape plan and practiced it with your family, you have increased their chances of escaping safely. Go over the following rules with your children each time you have fire drills. This will help everyone remember them in case of a real fire emergency.

1. Don’t panic and stay calm. Your safe escape may depend on thinking clearly and remembering what you have practiced.
2. Get out of the house as quickly as possible. Follow a planned escape route. Do not stop to collect anything or to get dressed.
3. Feel the doors to see if they are hot. If they are not, open them carefully. Do not open a door if it is hot. Use an alternate escape route.
4. Stay close to the floor. Smoke and hot gases rise.
5. Cover your nose and mouth with a wet or damp cloth. Take short, shallow breaths.
6. Keep doors and windows closed. Open them only if you have to in order to escape.
7. Meet at your planned meeting place after leaving the house.
8. Call the Fire Department as soon as possible from outside your house. Give the address and your name.
9. Never go back inside a burning building. Contact your local Fire Department. They will give you more ideas about how to make your home safer from fires and how to plan your family’s escape.

**LIMITATIONS OF SMOKE DETECTORS**

Although smoke detectors play a key role in reducing damage resulting from home fires, they can only work if they are properly

must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT NOTE:**  
Radiation Exposure Statement:  
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.  
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.