

Carbon Monoxide Detector Manual (SSCO1)

Introduction

The SSCO1 wireless carbon monoxide (CO) detector monitors the level of CO gas in your home and gives early warning when a potentially dangerous level exists. It does not detect fire, smoke, or any other gas. If a dangerous concentration of CO is detected, the red light on the front of the detector turns on and an internal siren sounds (4 loud beeps followed by a pause). The built-in wireless transmitter can also cause your SimpliSafe Base Station siren to sound. The alarm automatically resets when CO is no longer detected.

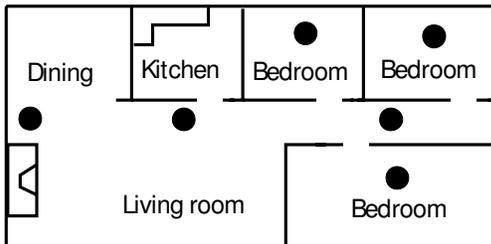
The CO detector also monitors low battery, wall tamper, and sensor end-of-life conditions. These trouble conditions will cause an audible chirp from the CO detector as described in the "Operating Modes" section below.

The SSCO1 is intended for residential indoor applications and other areas approved by the authority having jurisdiction (AHJ). It is not intended for use in industrial applications.

CO Detector location

CO Detectors should be mounted in or near bedrooms and living areas. Make sure you can hear the alarm from all sleeping areas. If you install only one CO alarm in your home, install it near bedrooms, not in the basement or furnace room. For maximum protection, install one outside primary sleeping areas and on each level of your home.

Recommended locations



Locations to avoid

To avoid causing damage to the unit, to provide optimum performance, and to prevent unnecessary nuisance alarms:

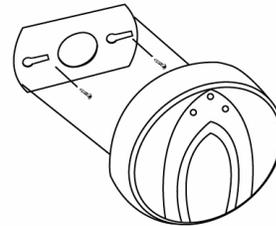
- Do not install in kitchens, garages, or furnace rooms.
- Do not install in areas where the temperature is colder than 40°F (4.4°C) or hotter than 100°F (37.8°C).
- Do not install within 5 ft. of heating or cooking appliances. (We recommend 15 ft. to prevent nuisance alarms.)

- Do not install near vents, flues, chimneys, or any forced/unforced air ventilation openings.
- Do not install on metal surfaces. Avoid mounting in areas with a large quantity of metal or electrical wires.
- Do not install near ceiling fans, doors, windows, or areas directly exposed to the weather.
- Do not install in dead air spaces, such as peaks of vaulted ceilings or gabled roofs, where CO may not reach the sensor in time to provide early warning.
- Do not place the alarm where drapes, furniture, or other objects block the flow of air to the vents.
- Do not install near paint thinner fumes

Installing the CO Detector

Install the CO Detector on a ceiling or wall:

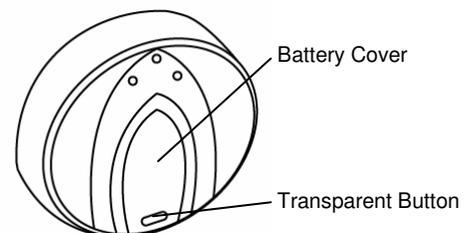
1. Remove the mounting bracket from your unit by rotating it counterclockwise.
2. Mount the bracket to the ceiling or wall, using the included screws and wall anchors.
3. Push the CO Detector onto the mounting bracket and turn it clockwise until it clicks into place. Pull outward on the alarm to make sure it is securely attached.



Battery installation and replacement

To install or replace the batteries in this alarm:

1. Press the transparent button and flip open the battery cover to expose the battery compartment.



2. Remove the old batteries and properly dispose of them as recommended by the battery manufacturer.
3. Install the new batteries. Note the polarity illustration in the battery compartment. Make sure to carefully seat the red battery warning flags in the recess of the battery well
4. Close the battery cover .The battery cover of your CO alarm will only close if all three AA batteries are properly installed.

When replacing the batteries, use the following approved brand and model #:

- AA 1.5V Energizer #L91 lithium battery

Replacement batteries can be purchased online from SimpliSafe at simplisafe.com or in retail stores.

Warning: Use of a different battery may have a detrimental effect on the alarm operation.

Caution: Constant exposures to high or low humidity may reduce battery life.

After changing the batteries, the unit will chirp for approximately 0.5 second and all the lights will flash for 0.5 second. Test your alarm by using the Test/Hush button and check that the green Power light is on.

Testing

Caution: Continuous exposure to the high sound level of this alarm over an extended period of time may cause hearing loss.

Press the test button. You should hear 4 short beeps with a corresponding three LED flashes in 5 seconds. This cycle will repeat one more time. We recommend you test your CO detector weekly.

Silence Feature

If the CO alarm is sounding, pressing the Test/Mute button will mute the siren; the red light will continue flashing. After 4 minutes, if the CO concentration that caused the alarm remains at a dangerous level, the siren will reactivate, sounding 4 beeps, then pausing 1 minute, then sounding 4 beeps again, until the CO condition is resolved.

Operating Modes

Power on mode: Three LEDs blink and buzzer beeps for 0.5 second as soon as the batteries are installed.

Stand-by mode: green LED flashes once in every 60 seconds, which means the unit is receiving power and also indicates it is functioning properly.

CO Alarm mode: When the unit senses CO, the red LED light flashes rapidly and buzzer sounds loudly with repeating 4 quick beeps and pause 5 seconds and then 4 quick beeps. After 4 minutes of an alarm, the pause will increase to 60 seconds.

Low battery warning mode: The yellow LED flashes once in a minute and the buzzer chirps also once in a minute. This warning should last for up to 30 days, but please replace the battery immediately.

Malfunction (Error) mode: The yellow LED flashes three times in a minute and buzzer chirps once in a minute. This indicates the unit is malfunctioned and needs to be replaced.

Low sensitivity (Aging) mode: The yellow LED flashes twice in a minute and buzzer chirps once in a minute. This means unit needs to be replaced.

End of life signal mode: The yellow LED flashes four times in a minute and buzzer chirps once in a minute. This indicates the CO alarm unit is reaching the end of this useful life (around 5 years after the unit was manufactured). Please replace with a new CO Detector.

Tamper mode: The buzzer chirps once in a minute and the yellow LED is steadily on .until the CO alarm unit is mounted back to the bracket properly.

Maintenance tips

To keep your alarm in good working order:

- Perform a CO alarm test once a week
- Vacuum the alarm cover once a month to remove accumulated dust.
- Never use water or cleaners - they may damage the unit.
- Avoid spraying air fresheners, hair spray, paint, or other aerosols near the alarm.
- Do not paint the unit. Paint will seal the vents and interfere with proper sensor operation.

Information about carbon monoxide

Carbon monoxide is a colorless, odorless, and tasteless poison gas that can be fatal when inhaled. CO inhibits the blood's capacity to carry oxygen.

Periodically review this alarm manual and discuss your CO alarm emergency procedure with all members of your family. Never ignore a CO alarm. A true alarm is an indication of potentially dangerous levels of CO. CO alarms are designed to alert you to the presence of CO before an emergency - before most people would experience symptoms of CO poisoning, giving you time to resolve the problem calmly.

Determine if anyone in the household is experiencing symptoms of CO poisoning. Many cases of reported CO poisoning indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves either by exiting the building or calling for assistance. Also, young children and household pets may be the first affected. You should take extra precautions to protect high-risk persons from CO exposure because they may experience ill effects from CO at levels that would not ordinarily affect a healthy adult.

Symptoms of CO poisoning

The following common symptoms are related to CO poisoning and should be discussed with ALL members of the household:

- **Mild exposure** = Slight headache, nausea, vomiting, fatigue (often described as “flu-like” symptoms).
- **Medium exposure** = Severe throbbing headache, drowsiness, confusion, fast heart rate.
- **Extreme exposure** = Unconsciousness, convulsions, cardio-respiratory failure, death.

If you experience even mild symptoms of CO poisoning, consult your doctor immediately.

Conditions that can produce carbon monoxide

- Excessive spillage or reverse venting of fuel burning appliances caused by:
 - Outdoor ambient conditions such as wind direction and/or velocity, including high gusts of wind; heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - Negative pressure differential resulting from the use of exhaust fans.
 - Simultaneous operation of several fuel burning appliances competing for limited internal air.
 - Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
 - Obstructions in or unconventional vent pipe designs which amplify the above situations.
- Extended operation of unvented fuel burning devices (range, oven, fireplace, etc.).
- Temperature inversions which can trap exhaust gasses near the ground.
- Car idling in an open or closed garage, or near a home.

What CO alarms can and cannot do

CO alarms provide early warning of the presence of CO, usually before a healthy adult would experience symptoms. This early warning is possible only if your CO alarm is located, installed, and maintained as described in this manual.

Because carbon monoxide is a cumulative poison, long-term exposures to low levels may cause symptoms, as well as short-term exposures to high levels. This unit has a time-weighted alarm: the higher the level of CO present, the sooner the alarm will be triggered.

This CO alarm can only warn you of the presence of CO. It does not prevent CO from occurring, nor can it solve an existing CO problem. If your unit has alarmed and you've provided ventilation by leaving your windows and doors open, the CO buildup may have dissipated by the time help responds. Although your problem may appear to be temporarily solved, it is crucial that the source of the CO is determined and that the appropriate repairs are made.

CO alarms have limitation. Like any other electronic device, CO alarms are not fool-proof. CO alarms have a limited operational life. You must test your CO alarm weekly, because it could fail to operate at any time.

If your CO alarm fails to test properly, or if its self-diagnostic test reveals a malfunction, immediately have the unit replaced.

This alarm will not monitor CO levels while in a trouble condition.

The CO alarm can only sense CO that reaches the unit's sensor. It is possible that CO may be present in other areas without reaching the alarm. The rate and ability with which CO reaches the alarm may be affected by:

- Doors or other obstructions.
- Fresh air from a vent, an open window, or other source.
- CO being present on one level of the home and not reaching a CO alarm installed on a different level. (For example, CO in the basement may not reach an alarm on the second level, near the bedrooms).

For these reasons, we recommend you provide complete coverage by placing a CO alarm on every level of the home.

Important warning statements

This carbon monoxide alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.

WARNING: Carbon monoxide alarms are not smoke alarms. This carbon monoxide alarm is not a substitute for installing and maintaining an appropriate number of smoke alarms in your home.

This CO alarm will not sense smoke, fire, or any poisonous gas other than carbon monoxide even though carbon monoxide can be generated by fire. For this reason you must install smoke alarms to provide early warning of fire and to protect you and your family from fire and its related hazards.

Caution: This alarm will only indicate the presence of carbon monoxide at the sensor. Carbon monoxide may be present in other areas.

WARNING: This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA), commercial, or industrial standards. It is not suitable for installation in hazardous locations as defined in the National Electric Code.

The installation of this device should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances, including appropriate ventilation and exhaust systems. It does not prevent CO from occurring, nor can it solve an existing CO problem.

WARNING: This device is designed to protect individuals from acute effects of carbon monoxide exposure. It may not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner. Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 PPM.

This carbon monoxide alarm requires a continuous supply of electrical power - it will not work without power.

This alarm has not been investigated for carbon monoxide detection below 70 PPM.

WARNING: This device contains a wireless transmitter that can actuate a remote audible siren. When used in a typical single level or multilevel dwelling, or in apartment buildings where adjacent apartments may have similar systems, it is possible that interference for another system could prohibit the remote siren from sounding in the event of an alarm. Never rely solely on the remote siren for notification of an alarm. Always make sure that the internal siren in the CO Detector can be heard from all bedrooms and living areas.

Specifications

Required batteries	Three AA batteries (Energizer #L91 lithium)
Sensor	Electrochemical carbon monoxide sensor
Audible alarm	Over 85dB at 3m
Alarm response times	70 PPM = 60-240 min. 150 PPM = 10-50 min. 400 PPM = 4-15 min.
Dimensions	12.5cm diameter x 3.5cm depth
Operating environment	
Temperature	40 to 100°F (4.4 to 37.8°C)
Relative humidity	10 to 95% noncondensing

Regulatory information

ETL Rating

The CO Detector conforms to UL 2034.

FCC Part 15 Notice

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

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 or more 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.

Customer support

For any questions regarding your CO Detector, please contact:

SimpliSafe, Inc
1035 Cambridge St, 18A
Cambridge, MA 02141

Email: customer-support@simplisafe.com

Website: www.simplisafe.com

Phone: 1-888-957-4675

What to do in the event of a CO alarm

 **WARNING!!** Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU. If alarm signal sounds:

- 1) Press the mute button
- 2) Call your emergency services (fire department or 911)
- 3) Immediately move to fresh air – outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
- 4) After following steps 1 – 3, if your alarm reactivates within a 24 hour period, repeat steps 1 – 3 and call a qualified appliance technician to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.