



CARBON MONOXIDE ALARM NB931CO

USER'S MANUAL

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IMPORTANT WARNING STATEMENTS

IMPORTANT: Read all instructions before installation and keep this User's Guide near the alarm for future reference.

WARNING: Removal of the alarm batteries will render the alarm inoperative. Wizmart NB931CO Carbon Monoxide Alarm requires a continuous supply of electrical power – it will not work without power.

Test your alarm every week (see the section "TEST/HUSH Button"). If the alarm is working, please replace it, and send for service.

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. This alarm has not been investigated for carbon monoxide detection below 70 ppm. Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

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

CAUTION: Accommodation spaces are to be well ventilated when household cleaning supplies or similar contaminants are used.

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

INTRODUCTION

NB931CO Carbon Monoxide (CO) Alarm is designed to monitor the air for the presence of CO in your home. It will alarm when there are potentially dangerous levels of CO present. It is a battery operated unit, powered by 3 AA batteries (ENERGIZER E91).

The feature of your CO gas alarm includes:

- (1) Easy to install.
- (2) Monitoring for carbon monoxide in a continuous manner.
- (3) Giving a loud alarm (85 dB) when it detects a buildup of carbon monoxide.
- (4) Test button for you to test the alarm anytime.
- (5) Self-diagnostic.
- (6) Complies with the requirements of UL 2034.
- (7) End of Life Indicator.
- (8) A 5-year LIMITED warranty for the carbon monoxide alarm.
(The end-of-life is based on the date manufactured.)

YOU SHOULD KNOW ABOUT CARBON MONOXIDE

Carbon monoxide, also known as "CO" by the chemical form, is considered to be a highly dangerous poisonous gas, because it is colorless, odorless or tasteless and very toxic. In general, biochemistry phenomena have shown that the presence of CO gas inhibits the blood's capacity to transport oxygen throughout the body, which can eventually lead to brain damage.

In any enclosed space (home, office, recreational vehicle or boat) even a small accumulation of CO gas can be quite dangerous.

Although many products of combustion can cause discomfort and adverse health effects, it is CO gas which presents the greatest threat to life.

Carbon monoxide is produced by the incomplete combustion of fuels such as natural gas, propane, heating oil, kerosene, coal, charcoal, gasoline, or wood. The incomplete combustion of fuel can occur in any device which depends on burning for energy or heat such as furnaces, boilers, room heaters, hot water heaters, stoves, grills, and in any gasoline powered vehicle or engine (e.g. generator set, lawnmower). Tobacco smoke also adds CO to the air you breathe.

When properly installed and maintained, your natural gas furnace and hot water heater do not pollute your air space with CO. Natural gas is known as a "clean burning" fuel because under correct operating conditions, the combustion products are water vapor and carbon dioxide (CO₂), which is not toxic. The products of combustion are exhausted from furnaces and water heaters to the outside by means of a fuel duct or chimney.

The following conditions can result in transient CO situations:

- 1) 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).
- 2) Negative pressure differential resulting from the use of exhaust fans.
- 3) Simultaneous operation of several fuel burning appliances competing for limited internal air.
- 4) Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
- 5) Obstructions in or unconventional vent pipe designs which amplify the above situations.

- 6) Extended operation of unvented fuel burning devices (range, oven, fireplace, etc.).
- 7) Temperature inversions which can trap exhaust gasses near the ground.
- 8) Car idling in an open or closed attached garage, or near a home.

Correct operation of any burning equipment requires two key conditions:

- (a) An adequate supply of air for complete combustion.
- (b) Proper venting of the products of combustion from the furnace through the chimney, vent or duct to the outside.

Typical carbon monoxide gas problems are summarized here:

- (a) Equipment problems, due to defects, poor maintenance, damaged and cracked heat exchangers
- (b) Collapsed or blocked chimneys or flues, dislodged, disconnected or damaged vents
- (c) Downdraft in chimneys or flues. This can be caused by very long or circuitous flue runs, improper location of flue exhaust or wind conditions
- (d) Improper installation or operation of equipment, chimney or vents
- (e) Air tightness of house envelop/inadequate combustion of air
- (f) Inadequate exhaust of space heaters or appliances
- (g) Exhaust ventilation/fireplace competing for air supply

Potential sources of carbon monoxide in your home or office include clogged chimney, wood stove, wood or gas fireplace, automobile and garage, gas water heater, gas appliance, gas or kerosene heater, gas or oil furnace, and cigarette smoke.

SYMPTOMS OF CARBON MONOXIDE POISONING

The following symptoms are related to CO poisoning and should be discussed with all members of the household so that you know what to look for:

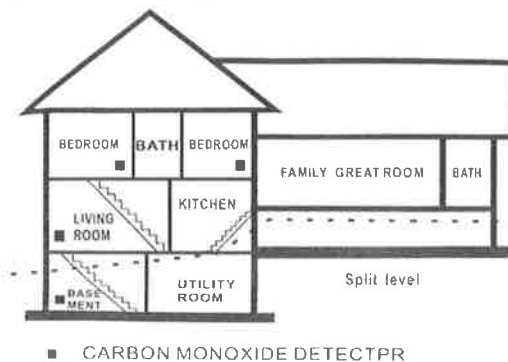
- (1) **Mild Exposure:** Slight headache, nausea, vomiting, fatigue (often described as "Flu-like" symptoms).
- (2) **Medium Exposure:** Severe throbbing headache, drowsiness, confusion, vomiting, fast heart rate.
- (3) **Extreme Exposure:** Unconsciousness, convulsions, cardio respiratory failure, death.
- (4) Many cases of reported CARBON MONOXIDE POISONING indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the building or calling for assistance. Young children and household pets are typically the first affected.

Exposure during sleep is particularly dangerous, because the victim usually does not awaken.

LOCATIONS TO INSTALL YOUR ALARM

Since CO gas moves freely in the air, the suggested location is in or as near as possible to sleeping areas of the home. The human body is most vulnerable to the effects of CO gas during sleeping hours. For maximum protection, a CO alarm should be located in or near bedrooms and living areas. It is recommended that you install a CO alarm on each level of a multi-level home. You may use the number and location of smoke alarms installed in your home

according to current building code requirements as a guide to the location of your CO alarm(s). In the figure below, are suggested locations in the home.



WHEN CHOOSING YOUR INSTALLATION LOCATIONS, MAKE SURE YOU CAN HEAR THE ALARM FROM ALL SLEEPING AREAS. IF YOU INSTALL ONLY ONE CARBON MONOXIDE ALARM IN YOUR HOME, INSTALL THE ALARM NEAR BEDROOMS, NOT IN THE BASEMENT OR FURNACE ROOM.

Two self-adhesive labels are included with the CO alarm. Add the phone number of your emergency service provider in the space provided. Place one label next to the alarm and one label near a fresh air source such as a door or window

IMPORTANT: This device is not suitable for installation in a hazardous location, as defined the National Electrical Code.

LOCATIONS NOT TO INSTALL YOUR ALARM

IMPORTANT: Improper location can affect the sensitive electronic components in this CO alarm. Do not place the alarm in the following areas:

- (a) It is not recommended that you install this CO alarm in garages, kitchens or furnace rooms. Installation in these areas could lead to nuisance alarms, may expose the sensor to substances that could damage or contaminate it, or the alarm may not be heard by persons in other areas of the home, especially if they are sleeping.
- (b) In the garage, vehicle exhaust can contain some carbon monoxide. These levels are higher when the engine is first started. Within hours of starting a vehicle and backing it out of the garage, the levels present over time can activate the alarm and become a nuisance.
- (c) In the kitchen and furnace room, some gas appliances can emit a short burst of carbon monoxide upon start-up. This is normal. If your CO alarm is mounted too close to these appliances, it may alarm often and become a nuisance.
- (d) If you must install a CO alarm near a cooking or heating appliance, **do not install within 5 feet (1.5 meter) of appliance.**
- (e) Do not install in where the temperature may drop below 40°F (4.4°C) or exceed 100°F (37.8°C)
- (f) Do not install in excessively dusty, dirty or greasy areas such as kitchens, garages and furnace rooms. Dust grease or household chemicals can contaminate or coat the alarm's sensor, causing the alarm not to operate properly
- (g) Do not obstruct the openings located on the alarm.

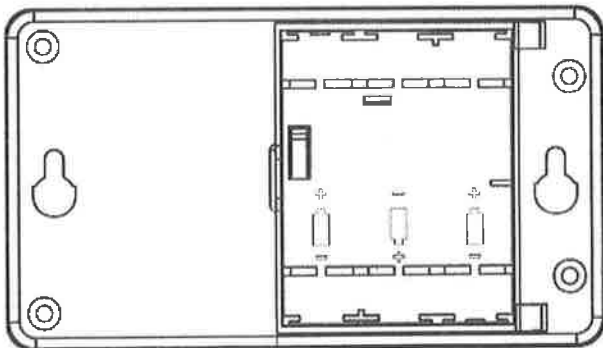
- (h) Do not install in dead air space, such as peaks of vaulted ceilings or gabled roofs, where carbon monoxide may not reach the sensor in time to provide early warning.
- (i) Do not install near doors and windows that open to the outside, near fresh air vents, or anywhere that is drafty.
- (j) Do not install near paint thinner fumes.
- (k) Do not install in exhaust streams from gas engines, vents, flues or chimneys.
- (l) Do not install CO alarm near deep cell large batteries. Large batteries have emissions that can cause the alarm to perform at less than optimum performance.

Avoid the following:

- Excessive spillage or reverse venting of fuel burning appliances caused by outdoor ambient conditions, such as:
 - 1) Wind direction and/or velocity, including high gusts of wind. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - 2) Negative pressure differential resulting from the use of exhaust fans.
 - 3) Simultaneous operation of several fuel burning appliances competing for limited internal air.
 - 4) Vent pipe connections vibrating loose from clothes dryers, furnaces or water heaters.
 - 5) Obstructions in or unconventional vent pipe designs which can 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 attached garage, or near a home.

INSTALLING OR REPLACING YOUR BATTERIES

- Batteries (supplied with unit) were not installed at the factory and must be installed for the unit to operate. Please install three AA batteries (ENERGIZER E91) in the back of the CO alarm.
- Open battery door on the back of the alarm. Dislodging the door latch with your fingernail or similar object.
- The battery polarity markings on the bottom of the battery compartment must be adhered to.
- Batteries must be installed in the sequence shown.



- After the batteries are correctly installed, replace the battery door. The unit will beep once, the green power LED will flash once every second for 45 seconds indicating warm up. After warm up, the green power LED flashes once every 45 seconds to indicate the unit is operating normally.
- If a low battery voltage is detected, the yellow service LED will flash once and sound a short beep every 45 seconds. The

batteries should be replaced. Replace batteries with Energizer E91, available at your local retail and hardware stores.

Note: Battery polarities must be correctly installed.

Note: We recommend you replace your battery every year.

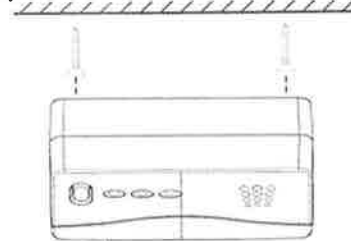
WARNING: Use only the batteries specified. Use of different batteries may have a detrimental effect on the CO alarm.

INSTALLING YOUR ALARM

Your Wizmart Carbon Monoxide Alarm is easy to install to protect you and your family in your home.

To install the alarm:

- The alarm must be wall mounted using the hardware provided.
- Wall mounting installation:
 1. At the place where you are going to install the alarm, draw a horizontal line 3-11/16 inch (94mm) long.
 2. Using a 3/16-inch (5 mm) drill bit, drill two holes at the end of the line and insert wall plugs.
 3. Using the two screws and wall plugs (all supplied), don't screw too firmly into the wall.
 4. Hang the alarm on the protruding screw heads using the 'keyholes' on the back of the alarm.



TEST/HUSH Button

To Test:

To test the alarm (do not test when alarm is warming up.), press the TEST/HUSH button. The red alarm LED flashes, and the unit gives four short beeps, followed 5 seconds of silence, and followed 4 short beeps.

If the Test feature is not working or the unit is in a Fault Status, please replace it, and send for service.

To Hush:

If the alarm is sounding, you can press the Test/Hush button to quickly silence false alarms. The alarm will be silenced and will re-alarm about 5 minutes from the time the button is pressed if the concentration of carbon monoxide surrounding the alarm remains at an abnormal level.

TAKING CARE OF YOUR ALARM

You have to maintain the alarm frequently to ensure it working properly. Few tips are provided for you to take care of your alarm: