

CO ALARM'S USER'S MANUAL

TYPE: RCC412

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Introduction

Thank you for purchasing the Electronics model CO-2088 BA carbon monoxide alarm. This is one single Station alarm. Please take a few minutes to thoroughly read this user's guide. And save for future reference.

Features/Specification

- Loud 85 decibel alarm.
- Permanent carbon monoxide sensor.
- Powered by one 9V battery (9V lithium battery).
- The alarm sound pattern is continuous alarm beeps. This continues until the CO eliminated. The red LED will flash once every one second while in alarm mode.
- One "chirp" every 40 seconds is an indication that the battery is low (need replacement).
- Test button to test the units electronics and verifies proper unit operation.
- Red LED light flashing once every 40 seconds to indicate normal operation mode.
- Sensor faulty indicator with yellow LED light
- Hush function
- Battery life: 5 years (min.)



The alarm will sound and be accompanied by the flashing red LED light when there are relevant levels of CO present. Please see below table.

| CO concentration | No alarm before | Alarm before |
|------------------|-----------------|--------------|
| 30 PPM | 120 Minutes | - |
| 50 PPM | 60 Minutes | 90 Minutes |
| 100 PPM | 10 Minutes | 40 Minutes |
| 300 PPM | | 3 Minutes |

The CARBON MONOXIDE (CO) alarm monitors the air for the presence of CO.

The alarm will sound and be accompanied by the flashing red LED light when there are high levels of CO present.

CAUTION: This alarm will only indicate the presence monoxide gas may be present in other areas.

Specification:

Power Supply: 9V battery (lithium battery)
 Sensitivity Setting: comply with EN50291
 Standby Current: <35μA
 Alarm Current: <35mA
 Operation Ambient Condition: 4~38°C, 25~85%R.H.

Installation Instructions

Step1

Installation Guide:

IMPORTANT: THIS ALARM MUST BE MOUNTED ON A WALL. INSTALL ONLY AS DETAILED!

A. Recommended Installation Locations:

We recommend the installation of a CO Alarm in the following locations.

For maximum protection we suggest an alarm be installed on each level of a multilevel home including every bedroom, pass ways, finished attics and basements.

Put alarm at both ends of bedroom hallway or large room if hallway or room is more than 30ft.(9.1m) long. If you have only one alarm, ensure it is placed in the pass way outside of the main sleeping area, or in the main bedroom. Verify the alarm can be heard in all sleeping areas.

Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent the alarm from waking the sleeper. If installing the alarm on the wall, at a minimum of 4"(10cm) and a maximum of 12"(30.5cm) below the ceiling

B. Where Not to install:

Do not install in garages, kitchens, furnace rooms or bathrooms! INSTALLED WHERE THERE IS A FUEL BURNING APPLIANCE IN A HORIZONTAL DISTANCE OF BETWEEN 1M AND 3M AWAY FROM THE POTENTIAL CO SOURCE.

Do not install within 3ft(0.9m) of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas. Avoid excessively dusty, dirty or greasy areas. Dust, grease or household chemicals can contaminate the alarm's sensors, causing it to not operate properly.

Place the alarm where drapes or other objects will not block the sensor. CO must be able to reach the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceiling, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.

Install at least one foot away from fluorescent lights, electronic noise may cause nuisance alarms. Extreme temperatures will affect the sensitivity of the CO Alarm.

Do not install in areas where the temperature is colder than 40 degrees Fahrenheit (4.4 Celsius) or hotter than 100 degrees Fahrenheit (37.8 Celsius). Place away from doors and windows that open to the outside.

Step2

Mounting Instructions:

1. Remove the mounting bracket from the back of the alarm by twisting the alarm.
2. After selecting the proper location for your CO Alarm, drilling two $\phi 5.0\text{mm}$ holes in the ceiling or wall according to the diagram below and inserting two plastic roles in to the hole, then attaching the bracket to the plastic role and screwing tightly two screws in the two roles.
3. Matching the lines on base wall and bracket wall to snap the alarm on the bracket by twisting the alarm.

Step3

Testing the Alarm

CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms length away from the unit when testing.

The test/reset button has two purposes. It tests the unit's electronics, resets the CO alarm.

After installation, TEST THE UNITS ELECTRONICS by pressing the test/reset button for five seconds. A series of beeps will sound.

The unit needs to be tested weekly! If at anytime it does not perform as described, verify power is connected correctly and that the battery doesn't need replacing. Clean

dust and other buildup off the unit. If it still doesn't operate properly call the Consumer Hotline.

Operation Instructions

Test Feature

Press the test button for several seconds to test unit's electronics. The alarm will sound.

LED indicator Operation

Red LED

Red Led will flash in conjunction with the alarm beep. Therefore, the red LED will flash during a CO alarm, a low battery mode chirp.

As you install the battery on the unit, maybe it will sound for several minutes, then stop and enter in normal operation mode. If it always sounds, please call our agent.

YELLOW LED

Yellow Led indicator sensor faulty

HUSH FUNCTION:

It enters into Silence model for 3—7 minutes after pressing "HUSH BUTTON" during alarm model.

What to Do IF the Alarm Sounds

If alarm sounds:

- 1) Call your emergency services.
- 2) 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.

Never restart the source of a CO problem until it has been fixed. NEVER IGNORE THE ALARM!

The CO sensor sensitivity setting is 150+/-50ppm CO concentration.

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

Fire departments, most utility companies will perform CO inspections, some may charge for this service.

Alarm Removal/Battery Replacement

Alarm Removal

Remove the alarm from the mounting bracket by twisting the alarm.

Battery Replacement

If battery failure is detected the unit will "chirp" one time. This

cycle will occur once every 40 seconds.

CAUTION: YOUR ALARM IS SEALED AND THE COVER IS NOT REMOVABLE!

To replace the battery you must first remove the alarm from mounting bracket by following the ALARM REMOVAL instructions at the beginning of this section. After the alarm has been removed, you can directly replace the battery.

After installing or changing the battery, reinstall your alarm. Test your alarm by using the test button and check that the red LED flashing once every 40 seconds.

Replace battery with one of the following approved brands: Duracell, Energizer, Duracell, Pair deer.

WARNING! Use only the batteries specified. Use of different batteries may have a detrimental effect on the CO alarm. A good safety measure is to replace the battery at least once a year, or at the same time you change your clocks for daylight saving time.

General Maintenance

To keep your CO Alarm in good working order, please follow these simple steps:

- Verify the unit's alarm and LED light operation by pushing the test/reset button once a week.
- Remove the unit from mounting bracket and vacuum the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.

REINSTALL IMMEDIATELY AFTER CLEANING AND THEN TEST USING THE TEST/RESET BUTTON!

- Never use detergents or other solvents to clean the unit.
- Avoid spraying air fresheners, hair spray, or other aerosols near the CO Alarm.

Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect CO. Never attempt to disassemble the unit or clean inside. This action will void your warranty.

WARNING: Reinstall the CO Alarm as soon as possible to assure continuous protection.

When household cleaning supplies or similar contaminants are used, the area must be well ventilated. The following substances can affect the CO sensor and may cause false reading and damage to the sensor: Methane, propane, iso-butane, iso-propanol, ethyl acetate, hydrogen sulfide dioxides, and alcohol based products, paints, thinner, solvents, adhesives, hair spray, after shave, perfume, and some cleaning agents.

Carbon Monoxide Safety Information

General CO Information

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

Possible Source

CO can be produced when burning any fossil fuel: gasoline, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly. Possible sources include furnaces, gas/stoves, gas clothes dryers, warmer heaters, portable fuel burning space heaters, fireplace, wood-burning, stoves and certain swimming pool heaters, blocked chimney or disconnected vent pipes, and a loose or cracked furnace exchanger can also cause CO. Vehicles and other combustion engines running in an attached garage and using a charcoal/gas grill or hibachi in an enclosed area are all possible sources of CO.

The following conditions can result in transient CO situations: 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 limited internal air, even pipe connections vibrating loose from clothes dryers, furnaces, or water heaters, obstructions in, or unconventional, vent pipe designs which can amplify the above situations, extended operation of invented fuel-burning devices (range, oven, fire-place, etc), temperature inversions which can trap exhaust gasses near the ground, car idling in an open or closed attached garage, or near a home.

CO Safety Tips

Every year have the heating system, vents, chimney and flue inspected/cleaned by a qualified technician. Always install appliances according to manufacturer's instructions and adhere to local building codes. Most appliances should be installed by professionals and inspected after installation. Regularly examine vents and chimneys for improper connections, visible rust, or stains, and check for cracks in furnace heat exchangers. Verify the color of flame is a sign that the fuel is not burning completely. Teach all household members what the alarm sounds like and how to respond.

Symptoms of CO poisoning

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever and can include dizziness, severe headaches, nausea, vomiting and disorientation. Everyone is susceptible but experts agree that unborn babies, pregnant women, senior citizens and people with heart or respiratory problems are especially vulnerable. If symptoms of carbon monoxide

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poisoning are experienced seek medical attention immediately. CO poisoning can be determined by a carboxyhemoglobin test.

The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household:

1. Mild Exposure:

Slight headache, nausea, vomiting, fatigue (often described as "Flu-like" symptoms).

2. Medium Exposure:

Severe throbbing headache, drowsiness, confusion, fast heart rate.

3. Extreme Exposure:

Unconsciousness, convulsions, cardio respiratory failure, death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. 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. Also, young children and household pets may be the first effected. Familiarization with the effects of each level is important.

WARRANTY INFORMATION

3-year limited smoke alarm warranty

Company warrants to the original consumer

Purchaser 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.

Manufacturer & Service information

Manufacturer

RICTRON INDUSTRIAL CO.,LIMITED

TEL:86-755-61353289

Service information

If you have any questions about the alarm, please call our agent or return the alarm to our agent.