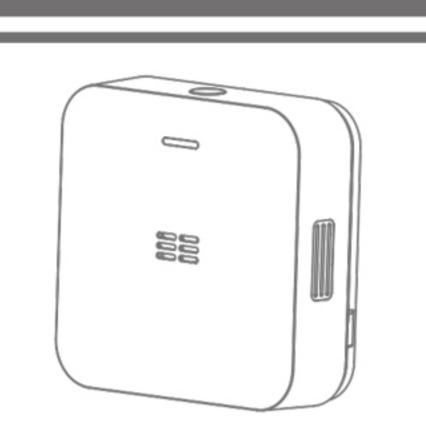
Heiman CARBON MONOXIDE ALARM



M313-3EVer1.3

HM-720ES Individual Carbon monoxide alarm

HS-720ES Carbon monoxide alarm with Zigbee function

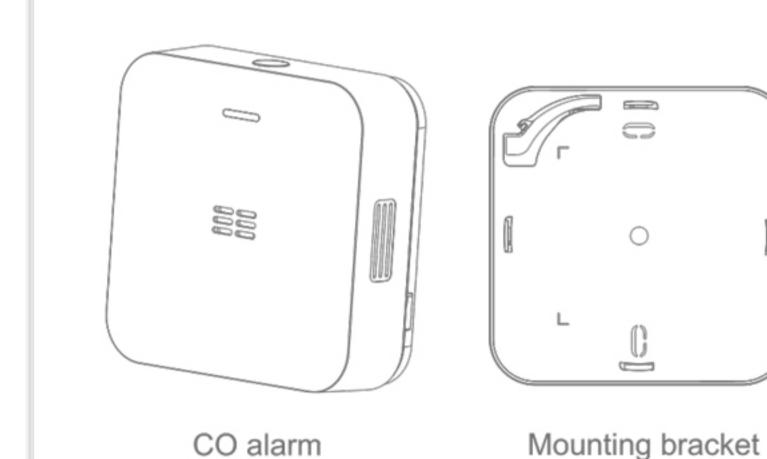
WS-720ES Carbon monoxide alarm with WiFi function

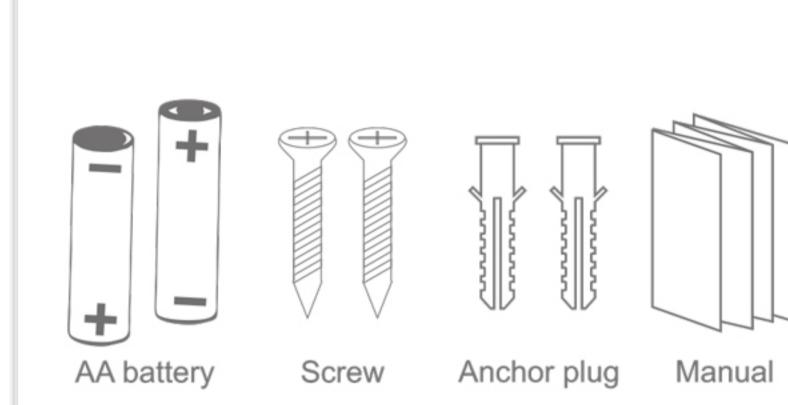
IMPORTANT! PLEASE READ CAREFULLY AND SAVE. This user's manual contains important information about your CO Alarm's operation. If you are installing this CO Alarm for use by others, you must leave this manual—or a copy of it—with the end user.



PACKING LIST

PART NAME	QUANTITY
CO alarm	1 Piece
Mounting bracket	1 Piece
AA battery	2 Pieces
Screw	2 Pieces
Anchor plug	2 Pieces
Manual	1 Piece





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1.TECHNICAL SPECIFICATIONS AND FEATURES

1 TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS		CONC
Power	DC 2×1.5V Alkaline AA LR6 (NECTIUM)	CO concentra
Sensor lifespan	max.10 years	30 ppm
Temperature	-10°C~+40°C	50 ppm
Humidity	0%~95%RH non-condensing	100 ppm
Sound level	≥85dB at 3m	300 ppm
Alarm output	Visual and audible indication	ООО РРПП
Warm-up period	Approx.100 seconds	
Mounting method	Wall mounting or ceiling mounting	3. IMPORT
Conform to	EN 50291-1:2018	A
Battery life	5 years	WAR

1.2 FEATURES

- Advanced electrochemical CO sensor technology Digital temperature compensation technology
- Low battery warning Anti-RF Interference
- Hush mode:silence an unwanted alarm

IMPORTANT:

The apparatus should be installed by a competent person.

What you should know about carbon monoxide(CO) Carbon monoxide(CO) is a dangerous poison. It is a colourless, odourless and tasteless gas. CO gas is generated by combustion of carbonaceous materials, namely, when not enough oxygen is available.

This hazard can occur, for example, in open fireplaces, boilers, stoves and automobile exhaust. This toxin is bound in the blood where it prevents the transport of oxygen, which can cause death by suffocation. Everyone is susceptible but experts agree that unborn babies, pregnant women, senior citiizens and people with heart or respiratory problems are especially vulnerable.

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever and can include dizziness, severe headaches, nausea, vomiting and disorientation. symptoms of carbon monoxide poisoning are experienced, seek medical attention immediately, CO poisoning can be determined by a caarboxyhemoglobin 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 heat rate. 3. Extreme Exposure: Unconsciousness, convulsions,

/!\ Important information

cardiorespiratory failure, death.

Note that there are other hazards where the CO detector will not trigger an alarm, such as gas leaks, fires or explosions. A CO detector is no substitute for smoke, fire, heat or other gas detectors! This device is intended for use within private housing. It is suitable neither for commercial or industrial applications nor for use on recreational craft or commercial vessels. This detector is intended to protect persons from the acute effects of carbon monoxide. It can not provide people with special medical properties complete security. If in doubt you should consult a physician. Gas appliances/equipment should be installed by trained personnel only. Get the devices/equipment in good mechanical condition and have them checked regularly. The installation of the CO detector should not be used as a substitute for proper installation, use and maintenance of fuel-fired facilities including appropriate ventilation and exhaust systems.

Danger CO Levels			
Concentration of CO in Air (ppm=parts per million)	APPROXIMATE INHALATION TIME AND SYMPTOMS DEVELOPED		
50ppm	The maximum allowable concentration for continuous exposure for healthy adults in any 8-hour period.		
200ppm	Slight headache,fatigue,dizziness,nausea after 2-3 hours.		
400ppm	Frontal headaches within 1-2 hours,life threatening after 3 hours.		
800ppm	Dizziness,nausea and convulsions within 45 minutes.Unconsciousness within 2 hours. Death within 2-3 hours.		
1600ppm	Headache,dizziness and nausea within 20 minutes.Death within 1 hour.		
3200ppm	Headache, dizziness and nausea within 5-10 minutes. Death within 25-30 minutes.		
6400ppm	Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.		
12800ppm	Death within 1-3 minutes.		

-02-

2. ALARM CONDITIONS

CARBON MONOXIDE CONCENTRATION AND DECRONCE TIME

CONCENTRATION AND RESPONSE TIME					
O concentration	No alarm within	Alarm at the latest after			
30 ppm	120 minutes	_			
50 ppm	60 minutes	90 minutes			
100 ppm	10 minutes	40 minutes			
300 ppm	_	3 minutes			

TANT SAFETY INFORMATION

RNING!

PLEASE READ AND SAVE THESE INSTRUCTIONS. IMPORTANT!

- This Carbon Monoxide (CO) Alarm is a sophisticated instrument that has been carefully designed and tested to detect CO build-up in residential environments.
- CO cannot be seen, smelled or tasted and can be fatal. The build-up of CO in the blood is called the carboxyhaemoglobin level and interferes with the body's ability to supply itself with oxygen. Depending on the concentration, carbon monoxide can kill in minutes.
- The most common sources of CO are malfunctioning, or misuse of gas appliances used for heating and cooking, vehicles engines, electric generators, blocked chimneys or flues, portable fuel burning heaters, fireplaces, fuel powered tools and operating a grill in an enclosed space.
- Indications of CO poisoning include symptoms similar to the flu, but with no fever. Other symptoms include dizziness, fatigue, weakness, headache, nausea, vomiting, sleepiness and confusion. Everyone is susceptible to the danger of CO, but unborn babies, small children, pregnant women, senior citizens and people with heart or respiratory problems may experience symptoms sooner. Each year a qualified technician should inspect and clean your heating system, vents, chimney, and flues.
- Dangers, Warnings, and Cautions alert you to important operating instructions or to potentially hazardous situations. Pay special attention to these items.
- THIS IS NOT A SMOKE ALARM! This CO Alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.

This CO Alarm is approved for use in single-family residences. It is NOT designed for marine or RV use.

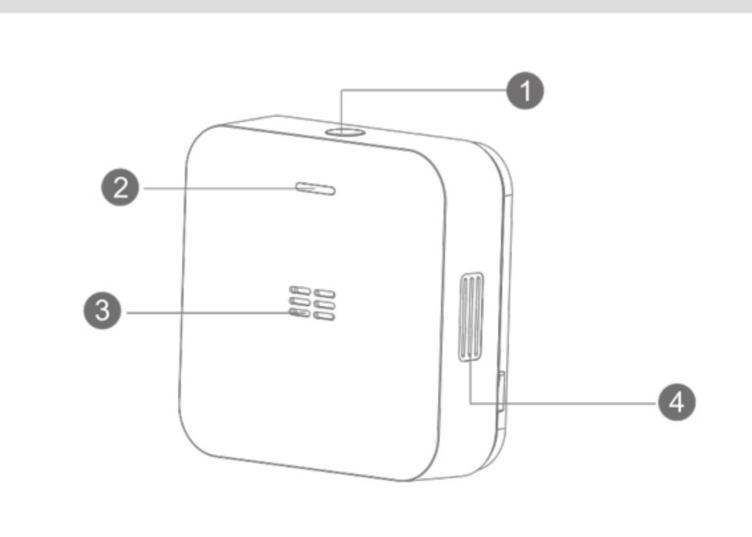
CAUTION!

■ This CO Alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

/I\ WARNING!

- Always check your home for a potential problem after any alarm. Failure to do so can result in injury or death.
- NEVER ignore any alarm. If there is any question as to the cause of an alarm it should be assumed that the alarm is due to dangerous levels of carbon monoxide and the dwelling should be evacuated. See section 9 WHAT TO DO IF THE ALARM SOUNDS for more information on how to respond to an alarm. Failure to respond can result in injury or death.
- Test this Carbon Monoxide Alarm once a week. If it ever fails to test correctly, have it replaced immediately! If the CO Alarm is not working properly, it cannot alert you to a
- This product is intended for use in ordinary indoor locations of family living units. Individuals with medical conditions that may make them more sensitive to carbon monoxide may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm. For additional information on carbon monoxide and your medical condition contact your physician.

4. HOW YOUR CO ALARM WORKS



1 Test/Hush/Networking button 2 LED Indicator 3 Buzzer Air inlet

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CONDITION	OPERATION	LED	Buzzer
Power up and Warm-up	Install 2*AA battery correctly to power on the alarm. Warm-up lasts approx 100 seconds. When completed, LEDs all turn off.	The red/yellow/green LED flashes alternately for approx. 100 seconds.	One short beep
Stand-by condition	After warm-up period, the alarm turns to standby condition.	The green LED flashes every 30 seconds.	None
Test condition	Press and release Test/Hush/Networking Button to check whether CO alarm works normally.	Red LED flashes four times.	The alarm sound four beeps.
Alarm condition	The presence of carbon monoxide.	Red LED flashes quickly (four flashes every 5 seconds)	beeps quickly (four beeps every 5 seconds)
Low battery	None	Yellow LED flashes every 30 seconds.	One beep every 30 seconds
Sensor failure	None	Yellow LED flashes twice every 30 seconds.	Two beeps every 30 seconds
End of life	None	Yellow LED flashes twice every 30 seconds.	One long beep and one short beep every 30 seconds
Hush condition	Silence an unwanted alarm, push and release the Test/Hush/ Networking button, it will enter hush mode.	RED LED flashes quickly (four flashes every 5 seconds)	None(Hush condition duration: about 10 minutes)
	When the CO alarm is alarming as low battery, push the Test/Hush/Networking button, it will enter hush mode.	Yellow LED flashes every 30 seconds.	None(Hush condition duration: about 12 hours)

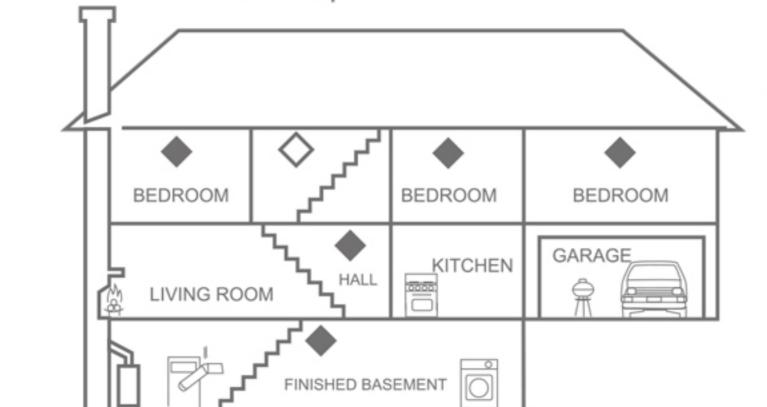
* Attention: If remote silencing function is available, any remote silencing feature shall only be used in line of sight of the CO alarm. Hushing: When the CO Alarm is sounding an alarm after a suspected false alarm, you can press the Test/Hush button and the CO alarm will remain silent for 10 minutes. While the Alarm is silenced, it will continue to monitor the air for CO. The alarm will sound again, if CO level still at dangerous level. The Hush Feature is intended to temporarily silence the Alarm horn, if will not correct a CO problem.

5. WHERE TO LOCATE

- 5.1 A CO Alarm should be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms. For added protection, install additional CO Alarms in each separate bedroom, and on every level
- of your home. 5.2 If your bedroom hallway is longer than 40 feet (12 metres), install a CO Alarm at BOTH ends of the hallway.
- 5.3 In a single-level home:
- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install an additional CO Alarm at least 20 feet (6 metres), away from the furnace or fuel burning heat source.

— 05 —

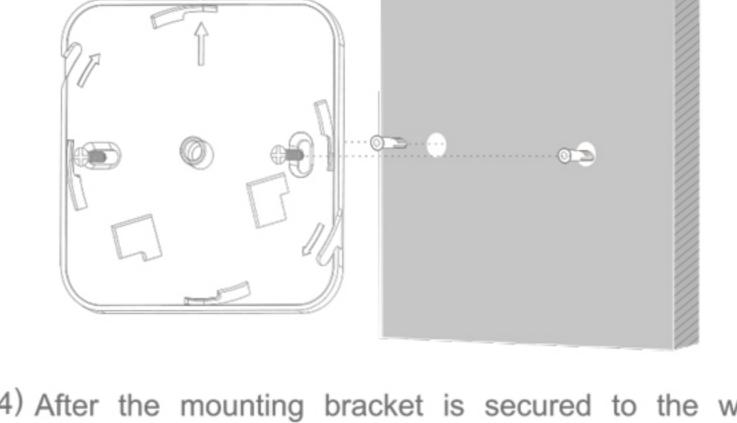
- 5.4 In a multi-level home—(same as above plus):
- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install at least one CO Alarm on each level of the home. If you have a basement, install that CO Alarm at the top of the basement stairs.



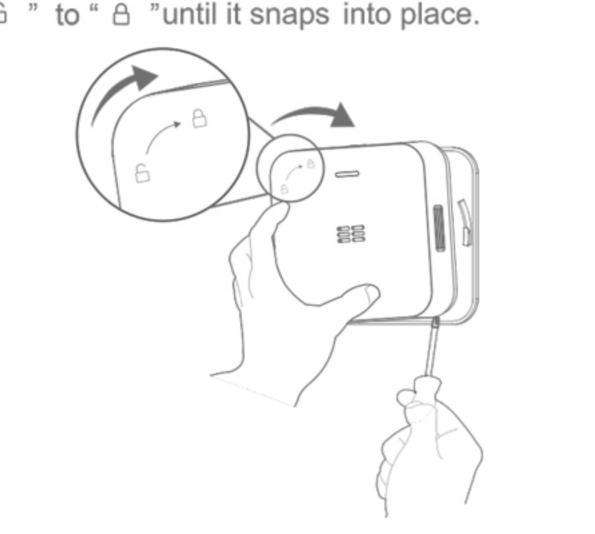
— 06 —

(3) Insert the anchor plugs and screw the mounting bracket SCREWS, this will distort the mounting bracket.

— 08 **—**



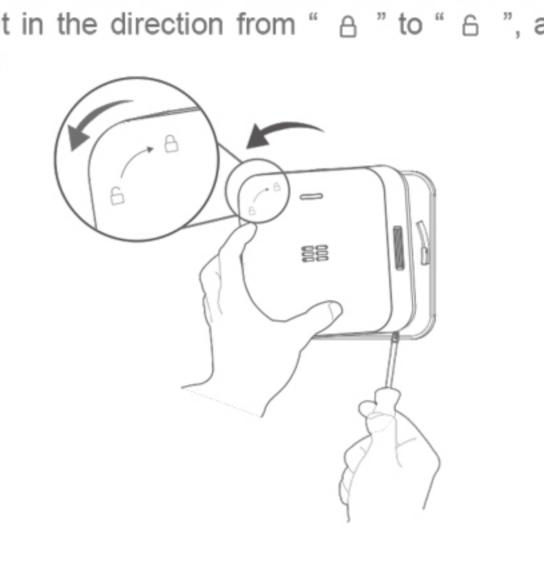
(4) After the mounting bracket is secured to the wall, insert two new AA batteries into the alarm's battery compartment correctly, and then place the screwdriver into the disassemble hole and meanwhile rotate the alarm into the mounting bracket in the direction from " 6 " to " 6 "until it snaps into place.



7.2 BATTERY REPLACEMENT

To replace the batteries in this CO alarm, please perform the following steps: (1) Place the screwdriver into the disassemble hole.

meanwhile rotate the device out of the mounting bracket in the direction from " △ " to " △ ", as show



Yellow LED flashes and

the alarm sounds one

beep every 30 seconds.

emergency.

10. TROUBLESHOOTING PROBLEM

IMPORTANT: The battery should be installed in correct

7.1 MOUNTING

7.HOW TO INSTALL

sensors.

6.7 In direct sunlight.

Caution:

For wall mounting or ceiling mounting, follow these steps: (1) Place the mounting bracket againt the mounting surface(wall or ceiling), and mark the mounting surface with a pencil through two slots of the bracket.

CO alarms for limited protection

burning heat source.

locate CO alarms:

6. LOCATIONS TO AVOID

Additional CO alarms for better coverage

For added protection, install an additional CO Alarm at

least 20 feet (6 metres) away from the furnace or fuel

IMPORTANT: Improper location can affect the sensitive

electronic components in this alarm. To avoid causing

damage to the unit, to provide optimum performance,

and to prevent unnecessary nuisance alarms, DO NOT

6.1 In garages, kitchens, furnace rooms, or in any

6.2 Where combustion particles are produced. Combustion

particles form when something burns. Areas to avoid

include poorly ventilated kitchens, garages, and

furnace rooms. Keep units at least 20 feet (6 metres)

from the sources of combustion particles (stove,

furnace, water heater, space heater) if possible. In

areas where a 20-foot (6 metres) distance is not

possible — in modular, mobile, or smaller homes, for

example — it is recommended the CO Alarm be placed

as far from these fuel-burning sources as possible. The

placement recommendations are intended to keep

these Alarms at a reasonable distance from a fuel-

burning source, and thus reduce "unwanted" alarms.

Unwanted alarms can occur if a CO Alarm is placed

directly next to a fuel-burning source. Ventilate these

6.3 Within 5 feet (1.5 metres) of any cooking appliance.

room or other source of high humidity.

6.4 In extremely humid areas. This Alarm should be at

6.5 In areas where temperature is colder than -10°C or

hotter than 40°C. These areas include non-

airconditioned crawl spaces, unfinished attics,

uninsulated or poorly insulated ceilings, porches, and

6.6 In turbulent air , like near ceiling fans, heat vents, air

— 07 —

6.8 When scouring or stripping a wooden floor, painting,

6.9 High concentrations of the following substances can

safe place to prevent damaging the sensor.

wallpapering or using adhesive or aerosol, you should

remove the carbon monoxide alarm and keep it in a

damage the sensor, which often results in a false

alarm: methane, propane, isopropyl butane, ethylene,

ethanol, isopropyl alcohol, benzene, toluene, ethylace-

tate, hydrogen, hydrogen sulfate and sulfur dioxide.

Also aerosol sprays, alcoholic products, paint,

solvents, adhesive, hair spray, aftershave, perfume

and certain cleaning agents can cause damage.

conditioners, fresh air returns, or open windows.

Blowing air may prevent CO from reaching the

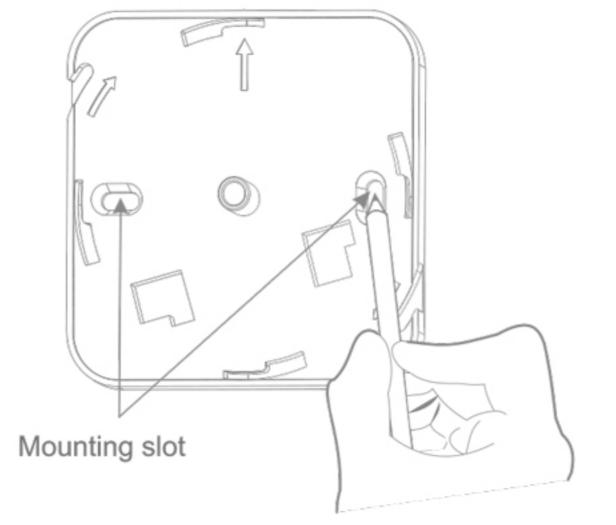
least 10 feet (3 metres) from a bath or shower, sauna,

humidifier, vaporizer, dishwasher, laundry room, utility

areas as much as possible.

extremely dusty, dirty or greasy areas.

- (2) Drill two holes with a 3/16 inches (5mm)drill on the two
- Note: The arrow marked in the bracket shall be placed upwards for wall mounting.

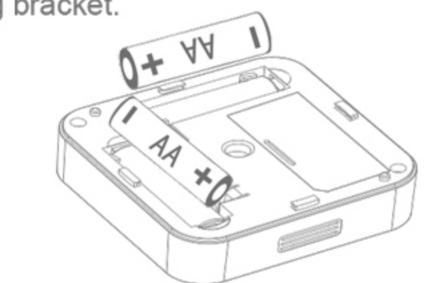


Note: Keep CO alarms away from getting plaster dust when you drill the holes.

to the chosen position. DO NOT OVERTIGHTEN THE

(2)Replace the used batteries with 2 new AA batteries about 5 seconds later, the device will be powered on, and beep one sound, which indicates the batteries are replaced correctly, then rotate the device back into mounting bracket.

— 09 —



positive and negative electrode as indicated inside the battery compartment.

Constant exposures to high or lowhumidity may reduce battery life. After installing or changing the batteries, test the alarm to make sure it works normally.

. MAINTENANCE

To keep your alarm in good working order, you must follow these steps:

- 8.1 Test the alarm once a week by pressing the Test button.
- 8.2 Vacuum the alarm cover once a month to remove accumulated dust.



- 8.3 Never use detergents or solvents to clean the alarm. Chemicals can permanently damage or temporarily contaminate the sensor.
- 8.4 Avoid spraying air fresheners, hair spray, paint or other aerosols near the alarm.
- 8.5 Do not paint the unit. Paint will seal the vents and interfere with proper sensor operation.

. WHAT TO DO IF THE ALARM SOUNDS 9.1 Call your emergency services (fire dept.).

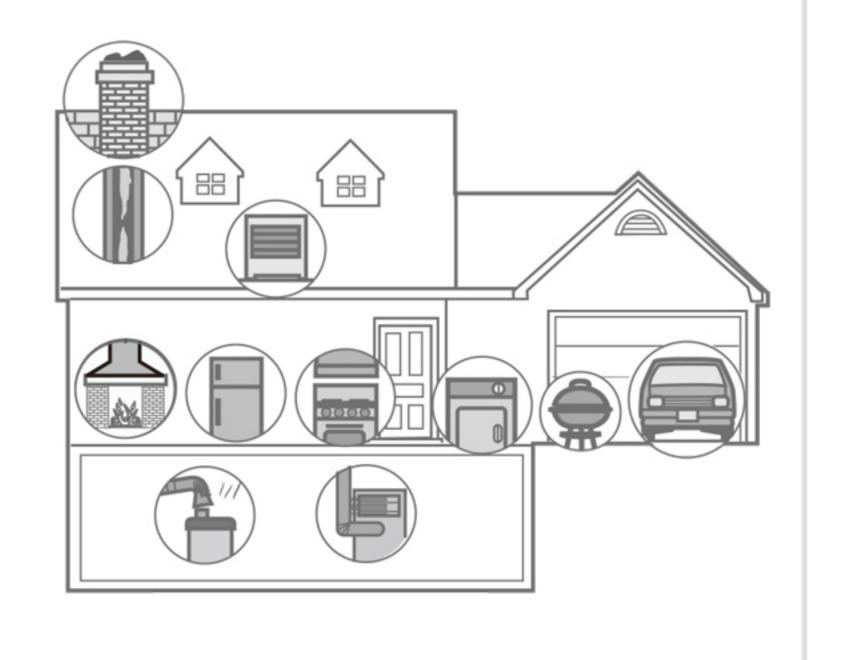
in its normal condition.

- 9.2 Immediately move to fresh air outdoors or by an open door/window. Do a head count to check that all persons
- closed or only partly open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or closed doors. Noise from traffic, stereo, are accounted for. Do not re-enter the premises nor radio, television, air conditioner, or other appliances move away from the open door/window until the may also prevent alert persons from hearing the alarm emergency services responders have arrived, the horn. This CO Alarm is not intended for people who are premises have been aired out, and your alarm remains hearing impaired.
- 11.5 CO Alarms are not a substitute for a smoke alarm. 9.3 After following steps 9.1-9.2, if your alarm reactivates Although fire is a source of carbon monoxide, this CO within a 24 hour period, repeat steps 9.1-9.2 and call a Alarm does not sense smoke or fire. This CO Alarm qualified appliance technician to investigate for sources senses CO that may be escaping unnoticed from of CO from fuel burning equipment and appliances, malfunctioning furnaces, appliances, or other sources. and inspect for proper operation of this equipment. Early warning of fire requires the installation of smoke
- 9.4 If problems are identified during this inspection have 11.6 CO Alarms are not a substitute for life insurance. the equipment serviced immediately. Note any combustion equipment not inspected by the technician Though these CO Alarms warn against increasing CO levels, we do not warrant or imply in any way that and consult the manufacturer's instructions, or contact they will protect lives from CO poisoning. Homeowners the manufacturer's directly, for more information about and renters must still insure their lives. CO safety and this equipment. Make sure that motor 11.7 CO Alarms have a limited life. vehicles are not, and have not been, operating in an Although the CO Alarm and all of its parts have passed attached garage or adjacent to the residence.

11.8 CO Alarms are not foolproof.

home, away from the CO Alarm.

as possible, any of these parts could fail at any time. cancel the alarm. Therefore, you must test your CO Alarm weekly.



-11-

Press Test button, CO If no problem with batteries

alarm shows no response. | and CO alarm still shows no

Yellow LED flashes twice | Sensor or unit malfunction.

and the alarm sounds two Please contact your local

If children or others do not readily waken to the sound

of the CO alarm, or if there are infants or family

members with mobility limitations, make sure that

someone is assigned to assist them in the event of an

11.2 This CO Alarm will not sense carbon monoxide that

does not reach the sensor. CO may be present in

other areas. Doors or other obstructions may affect the

rate at which CO reaches the CO Alarm. For this

reason, if bedroom doors are usually closed at night,

we recommend you install a CO Alarm in each

11.3 CO Alarms may not sense CO on another level of the

home. For example, a CO Alarm on the second level,

near the bedrooms, may not sense CO in the

basement. For this reason, one CO Alarm may not give

adequate warning.Complete coverage is recommended.

The Alarm horn loudness is above 85 dB at 3.28 feet(1)

metre). However, if the CO Alarm is installed outside

the bedroom, it may not wake up a sound sleeper or

bedroom and in the hallway between them.

Place CO Alarms on each level of the home.

11.4 CO Alarms may not be heard.

beeps every 30 seconds. distributor.

11. LIMITATIONS OF CO ALARMS

11.1 CO alarms may not waken all individuals.

SOLUTION

Please check whether

local distributor.

Battery is low –

batteries are properly installed

response, please contact your

REPLACE IT IMMEDIATELY!

9.5 Do not press the Test Button, the Test Button can not

12. DISPOSAL

Correct Disposal of This Product(Waste Electrical&Electronic Equipment) (Applicable in the European Union and other European countries with separate collection systems). This marking shown on the product or its

many stringent tests and are designed to be as reliable

Like all other electronic devices, CO Alarms have

limitations. They can only detect CO that reaches their

sensors. They may not give early warning to rising CO

levels if the CO is coming from a remote part of the

one who has recently used drugs or has been drinking

alcoholic beverages. This is especially true if the door is

literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

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Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

*Always throw used batteries to the battery recycling bin. *If the battery is built-in inside the product,open the product and remove the battery.

/!\ Warning:

Except the battery replacement, it's forbidden for the user to disassemble the CO alarmprivately which may cause damage to the CO alarm.

/! \ Caution :

The CO alarm is for indoor use only, and it is not designed for use in a recreational vehicle or mobile home. The CO alarm should be installed by a competent person.

This apparatus is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt, please consult a medical practitioner.

— 14 —

— 10 — — 12 —