

Part # MC304S | MC304SB



UNIVERSAL[®]
SECURITY INSTRUMENTS, INC.
ALWAYS WORKING TO
PROTECT YOUR FAMILY[®]



SHORT PRODUCT DESCRIPTION

10 Year Tamper Proof Permanent Power Sealed Battery Carbon Monoxide Smart Alarm

LONG PRODUCT DESCRIPTION

Provides protection against the silent killer—carbon monoxide. 10 year sealed power. No batteries to change—ever!

PRODUCT FEATURES & BENEFITS

- Tamper proof design provides a higher level of security to prevent battery removal
- Maintenance Free Battery Power—No batteries to replace for life of the alarm. Gives a decade of peace of mind
- Saves money—Never replace batteries for 10 years, saving up to \$38.00 over the life of the alarm
- Eliminates annoying low battery chirps
- 10 year sealed batteries provide continuous protection—even in the event of a power outage
- Microprocessor intelligence combined with electrochemical sensor virtually eliminates nuisance alarms
- Ideal for installation in EVERY room. Perfect for new or replacement installations
- Red LED indicates the status of power and CO
- Table top (free standing) or wall mounted. Mounting hardware included
- Quick activation battery pull tab makes this fast and easy to install
- Deactivation key switches alarm off and makes batteries safe for disposal (once alarm reaches the 10 year product end of service life)
- Tamper resistant feature prevents deactivated alarm from being reinstalled
- Choose this alarm if you are looking for an alarm with superior nuisance alarm resistance
- 10 year product end-of-service life warning sounds when it is time to replace alarm
- This alarm is suitable for installation in houses, apartments, dormitories, hotels/motels & manufactured hsg
- For early warning of carbon monoxide, install this smart alarm on every level of dwelling, including basements
- For maximum protection, install an alarm inside every bedroom, outside every sleeping area and on every level of the dwelling
- Exceeds industry standards, ETL listed to UL Standard UL 2034 and California State Fire Marshal approved
- ECO Friendly—Reduces environmental waste & eliminates disposal of up to **twenty** 9 volt batteries
- Loud 85dB Alarm
- Temperature Range 40°F to 100°F (0°C to 38°C). Humidity Range 10% to 95% relative humidity (RH)
- 10 year limited warranty on both battery and alarm



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UNIVERSAL[®]

SECURITY INSTRUMENTS, INC.

Models MC304S, MCD305S

Carbon Monoxide Alarm with 10 Year Permanent Power Sealed Battery



Certified to Standard
UL 2034



Intertek
Single Station
Carbon Monoxide Alarm

PLEASE READ AND SAVE!

THANK YOU for purchasing this Carbon Monoxide alarm. This alarm does not require battery changes. It has a permanent power sealed battery which will last for 10 years. It is designed to detect carbon monoxide which reaches the sensor. It is not designed to detect fire, heat, flames or any other gas. This manual includes important information regarding where to install the alarm, how to operate, maintenance, testing and product features. It also includes tips and information which could help protect you and your family.

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WHAT YOU SHOULD KNOW ABOUT CO

Carbon Monoxide (CO) is an insidious poison. It is a colorless, odorless, tasteless gas. It is a cumulative poison. Even low levels of CO have been shown to cause brain and other vital organ damage in unborn infants with no effect on the mother.

The following symptoms are related to CARBON MONOXIDE 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, cardiorespiratory failure, death.

Many cases of reported CARBON MONOXIDE POISONING indicate that victims are aware they are not well, but they become so disoriented that they are unable to save themselves by either exiting the building or calling for assistance. Young children and household pets may be the first affected.

Your combination alarm is designed to detect the toxic CO fumes that result from incomplete combustion, such as those emitted from appliances, furnaces, fireplaces and auto exhaust.

What Levels of CO Cause an Alarm?

Underwriters Laboratories Inc. UL2034 defines three specific alarm points by which all residential CO alarms must alarm. They are measured in parts per million (ppm) of CO over time (in minutes).

UL2034 Required Alarm Points:

- If the alarm is exposed to **400 ppm** of CO, IT MUST ALARM BETWEEN 4 and 15 MINUTES.
- If the alarm is exposed to **150 ppm** of CO, IT MUST ALARM BETWEEN 10 and 50 MINUTES.
- If the alarm is exposed to **70 ppm** of CO, IT MUST ALARM BETWEEN 60 and 240 MINUTES.

WARNING!

The screen will indicate the current CO readings if higher than approx. 50 ppm on digital display models.

Although this alarm will not automatically display levels below approx. 50 ppm, it will detect and store these readings in memory. In typical ambient surroundings, CO concentrations may range up to 50 ppm, which may be an indication of a temporary or intermittent condition. Sometimes such a condition may start out as low-level leaks, but can develop into harmful CO concentrations. If this happens, the CO alarm will detect the dangerous level and alarm, which should be treated as an EMERGENCY. DO NOT ignore high concentration readings above 50 ppm or a CO alarm.

Accuracy of display readings may vary slightly depending on changes in the ambient condition (temperature, humidity) and the condition of the sensor.

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. Individuals with medical problems may consider using warning devices which provide audible and visual warnings for carbon monoxide concentrations under 30 ppm.

IMPORTANT CONSIDERATIONS

YOUR CARBON MONOXIDE ALARM HAS BEEN DESIGNED WITH AN END-OF-SERVICE LIFE ALARM WHICH WILL SOUND AFTER APPROXIMATELY 10 YEARS OF OPERATION FROM INITIAL POWER UP.

NOTE: MANUFACTURER RECOMMENDS REPLACEMENT OF THIS ALARM 10 YEARS AFTER DATE OF INSTALLATION.

NOTE: NUMEROUS ALARMS OR PROLONGED ALARMING IS NOT TYPICAL AND WILL CONSUME THE BATTERY CAPACITY, SHORTENING THE LIFE OF THIS PRODUCT. CONSTANT EXPOSURE TO HIGH OR LOWER TEMPERATURES, OR HIGH HUMIDITY, MAY REDUCE BATTERY LIFE.

INSTALLATION RECOMMENDATIONS

Early warning is best achieved by the installation of alarms on all floors and areas of the household.

WHERE THIS ALARM SHOULD BE INSTALLED

- Install an alarm inside each bedroom where the occupant closes the door while sleeping.
- An alarm should be installed in any family living unit containing a fuel-burning appliance or fireplace or having an attached garage.
- An alarm should be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where bedrooms are separated and audibility of the alarm to occupants within the bedroom area could be seriously impaired, more than one alarm could be needed.

In general, install Carbon Monoxide (CO) Alarms:

- **WHERE YOU CAN HEAR THE ALARM FROM ALL SLEEPING AREAS.**
- In or near bedrooms and living areas or wherever you suspect a CO exposure is likely.
- On each level of a multilevel home.

IMPORTANT!

Installation in an improper location can affect the sensitive electronic components in this alarm. Please review WHERE THIS ALARM SHOULD NOT BE INSTALLED (see Page 4).

Not suitable for installation in hazardous locations as defined in the NFPA 70, National Electrical Code. This alarm will only detect carbon monoxide.

This alarm is designed to act as a continuous monitor. It is not designed for use as a short-term testing device to perform a quick check for the presence of Carbon Monoxide (CO).

⚠ CAUTION!

BASIC SAFETY INFORMATION

- This alarm is not designed to detect fire or any other gas. Carbon Monoxide (CO) may be present in other areas. The CO Alarm will only indicate the presence of CO which reaches the sensor. The CO Alarm is not designed to sense smoke, heat or flames.
- Do not paint the alarm. Paint may clog the openings to the sensing chambers and prevent the alarm from operating properly.
- Do not stand too close to the alarm when it is sounding. It is loud to wake you in an emergency. Exposure to the horn at close range may harm your hearing.

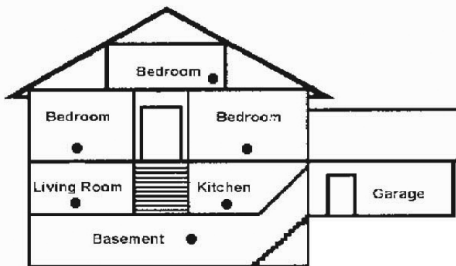
⚠ WARNING!

Keep small children away from the unit. Teach them not to play with it. Explain what the different alarm sounds mean.

The test sequence lasts for approximately 6 seconds after the test button is pressed and released. The alarm will then test itself for proper operation. When testing the alarm, have someone else check that the alarm can be heard easily from the sleeping areas. The alarm should be located where it can wake you if it alarms at night.

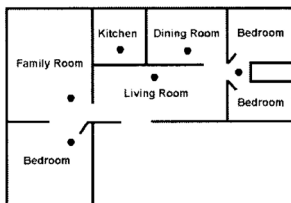
RECOMMENDED PLACEMENT:

FIGURE 1



- Recommended Alarm Placement for a Multi-Level Residence

FIGURE 2



● Recommended Alarm Placement for Single-Floor Residence

NOTE: For any location, make sure no door or other obstruction could prevent the Carbon Monoxide (CO) from reaching the alarm.

WHERE THIS ALARM SHOULD NOT BE INSTALLED

To avoid causing damage to the unit, to provide optimum protection, and to prevent unnecessary alarms. Do **NOT** locate this alarm:

- In garages, kitchens, crawl spaces and unfinished attics. Avoid extremely dusty, dirty or greasy areas. Installation in these areas could lead to nuisance alarms, may expose the sensor to substances which could damage or contaminate it, or the alarm may not be heard by people in other areas of the home, especially if they are sleeping.
- 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.
- In the kitchen, some gas appliances can emit a short burst of CO upon startup. This is normal. If your CO Alarm is installed too close to these appliances, it may alarm often and become a nuisance.
- Keep alarms at least 20 feet (6m) from the sources or combustion particles (stove, furnace, water heater, space heater), if possible. In areas where a 20 foot (6m) distance is not possible (in modular, mobile or smaller homes for example), it is recommended the 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 reduce "unwanted" alarms. Unwanted alarms can occur if an alarm is placed directly next to a fuel-burning source. Ventilate these areas as much as possible. **If you must install the alarm near a cooking or heating appliance, install at least 5 feet (1.5m) from appliance.**
- Curtains or heavy furniture may prevent CO from reaching the sensor.
- In extremely humid areas. This alarm should be at least 10 feet (3m) from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
- In very cold or very hot environments or in unheated buildings or outdoor rooms where the temperature can go below or above the operating range of the alarm. Maximum temperature limits for proper operation are 40°F to 100°F (4.4°C to 37.8°C).
- In turbulent air, such as near ceiling fans, heat vents, air conditioners, fresh air returns or open windows. Blowing air may prevent CO from reaching the sensors.
- Good ventilation is recommended when household cleaning supplies or similar contaminants are used.
- 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 connections vibrating loose from clothes dryers, furnaces or water heaters.
 - Obstructions in or unconventional vent pipe designs which can amplify the above situations.

HOW TO INSTALL THIS CO ALARM

IMPORTANT: Read all instructions before using this product.

1. Activate the Permanent Power battery feature by removing and discarding the battery pull tab.
NOTE: Once activated, the alarm cannot be turned off without permanent deactivation. The alarm will remain on for the next ten years.
2. The alarm will sound one long beep to let you know it is powered up. The red power LED should be off and will blink on approx. every 2 minutes. It may take up to 3 minutes for the alarm to begin monitoring for CO.



3. Determine the best location for your CO alarm. This CO alarm can be either wall mounted or placed on a stable table top. Placing the alarm at eye level allows for optimum monitoring of the digital display screen. Be sure to install out of the reach of children.
 - For wall mounting, using supplied washer head screw, insert the screw into the wall at the desired location until the screw head is protruding approx. 1/8 inch from the wall. (If mounting in a plasterboard or drywall, drill a 3/16 inch hole in the wall and insert the plastic wall anchor provided. Secure the screw into the wall anchor the same as above.) Hook the CO alarm over the screw and onto the key hole in the back of the CO alarm.
 - If placing on a stable table top, be sure the alarm is no more than three feet from the floor in order to minimize the risk of causing permanent damage to the alarm in the event that it is knocked to the ground by accident.
4. Press the Test/Silence button. Test the alarm following installation and weekly thereafter. The built-in test switch accurately tests the alarm operation as required by ANSI/UL2034 Standards for Safety. If, at any time, you test the alarm and it does not perform as described, replace it immediately.

Due to the loudness of the alarm, we suggest that you place your fingers over the sounder opening while testing your alarm.

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

WHAT YOU SHOULD DO IF THE ALARM SOUNDS

The alarm will automatically sense when the level of CO in the air falls below the danger level. You should stay outside the residence in fresh air until the alarm is silenced. When the alarm sounds, do not stand too close to the alarm. The sound produced by the alarm is loud because it is designed to awaken a person in an emergency. Prolonged exposure to the alarm at a close distance may be harmful to your hearing.

Two self-adhesive labels have been provided. Labels contain important safety information and instruction for what to do in case of a CO alarm. In the space provided on each label, add the phone number of emergency services provider and a qualified technician. Place one of the labels near the alarm, and place the other label near a source of fresh air which will be used as a gathering place if the alarm sounds.

⚠ CAUTION!
READ CAREFULLY.

THIS UNIT IS SEALED. THE ALARM COVER IS NOT REMOVABLE!

CO problems can occur any time during the year and this alarm can only alert you if it is receiving power.

When fully powered, it samples the air continuously. A microchip inside the unit stores each reading and remembers the levels it has been exposed to over time. The unit goes into alarm mode when it has been exposed to a "critical" level.

⚠️WARNING!

- Test the alarm once a week. If the alarm ever fails to test correctly, have it replaced immediately. If the alarm is not working properly, it cannot alert you to a problem.
- This alarm must have battery power to operate. If the battery is dead, the alarm cannot operate. The sealed battery cannot be replaced.
- This product is intended for use in ordinary indoor locations or family living units. It is not designed to measure CO levels in compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards. Individuals with medical conditions which 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.

UNDERSTANDING YOUR ALARM

NORMAL OPERATION: In normal operation, the alarm will blink the red LED on once approximately every 2 minutes. On digital display models, the screen will be blank.

CO ALARM: The alarm signal is 4 beeps, 5 second pause, repeat. The red LED blinks on in sync with the cycle of 4 beeps. The screen will indicate the current CO readings if higher than approx. 50 ppm on digital display models.

Although this alarm will not automatically display levels below approx. 50 ppm, it will detect and store these readings in memory. In typical ambient surroundings, CO concentrations may range up to 50 ppm, which may be an indication of a temporary or intermittent condition. Sometimes such a condition may start out as low-level leaks, but can develop into harmful CO concentrations. If this happens, the CO alarm will detect the dangerous level and alarm which should be treated as an EMERGENCY. DO NOT ignore high concentration readings above 50 ppm or a CO alarm

NUISANCE ALARM / CO SILENCE: If there is no hazard present and the alarm is still sounding, activate the silence feature by pressing and releasing the Test/Silence button on the alarm. Silence mode will last for approx. 5 minutes with the red LED blinking once approx. every 10 seconds. Verify the alarm is mounted in the correct location (see User's Manual, "AVOID THESE LOCATIONS" section). Reset alarm as instructed below. And the red LED will blink ON approximately every 2 seconds.

TROUBLE / SERVICE ALARM: Periodically, the alarm measurement circuit is tested. If an error is detected, the alarm will sound 3 chirps approx. every 60 seconds and the red LED will blink ON approximately every 2 seconds. Reset the alarm as instructed below. If this does not clear the problem, deactivate the alarm (see ALARM DEACTIVATION section in the User's Manual). Replace alarm immediately. Alarm will not detect CO.

END-OF-SERVICE LIFE ALARM: When it is time to replace your alarm, which is in approximately 10 years of operation from initial power up, the alarm will sound 2 chirps approx. every 60 seconds. Deactivate alarm (see ALARM DEACTIVATION section in User's Manual). Replace alarm immediately. Alarm will not detect CO.

RESET THE PEAK CO MEMORY (digital display models only): If there was a previous peak CO level recorded, press and hold the Reset/Peak button for 10 seconds and release. The screen will display "000" when the button is released indicating the peak CO level is reset and then the screen will be blank.

RESET THE CO SILENCE AND TROUBLE / SERVICE SIGNALS: Press and hold the RESET/PEAK OR RESET button for 10 seconds and release. This will reset the silence and trouble/service signals.

IF YOUR CO ALARM SOUNDS

WHAT TO DO IF CARBON MONOXIDE IS DETECTED:

If you hear the alarm horn sound 4 beeps, a 5 second pause (and then repeat), carbon monoxide has been detected. Evacuate everyone from the building.

⚠️WARNING!

Actuation of your CO Alarm indicates the presence of carbon monoxide (CO), which can kill you. In other words, when your CO Alarm sounds, you must not ignore it!

Some individuals are more sensitive to CO than others, including people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers or elderly people can be more quickly and severely affected by CO. Members of sensitive populations should consult their doctors for advice on taking additional precautions.

IF THE CO ALARM SOUNDS:

1. Operate TEST/SILENCE button;
2. Call your emergency services, fire department or 911. Write down the number of your local emergency service here: _____
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 manufacturer(s) 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. Write down the number of your local appliance service technician here: _____

⚠ WARNING!

If the unit alarms and you are not testing the unit, it is warning you of a potentially dangerous situation which requires your immediate attention. NEVER ignore any alarm. Ignoring the alarm may result in injury or death.

⚠ WARNING!

USING THE CO ALARM SILENCE FEATURE

- The CO Silence feature is intended to temporarily silence the horn while you identify and correct the problem.
- To use the CO Silence feature, press and hold the TEST/SILENCE button until the horn is silent.
- If the TEST/SILENCE button is pressed while the alarm is in the silence mode, the alarm will go into test mode and then resume silence mode.

WHEN THE CO ALARM SIGNAL IS SILENCED: The CO alarm will remain silent for approx. 5 minutes (with the red LED blinking on approx. every 10 seconds) and then return to normal operation. It will continue to monitor the air for CO. Ventilate area. After up to 5 minutes, depending on the level of CO detected, if CO levels remain potentially dangerous, the horn will start sounding again.

IMPORTANT!

The CO Silence feature is intended to temporarily silence the alarm horn. It will not correct a CO problem.

⚠ WARNING!

WEEKLY TESTING

This alarm is designed to act as a monitor, not for use as a short-term testing device to perform a quick check for the presence of CO. NEVER use vehicle exhaust to test the alarm! Exhaust may cause permanent damage and voids your warranty. The built-in test switch accurately tests the alarm operation as required by ANSI/UL2034 Standard for Safety. If, at any time, you test the alarm and it does not perform as described, replace it immediately.

⚠ CAUTION!

It is important to test this alarm every week to make sure it is working properly.

Due to the loudness of the alarm, we suggest that you place your fingers over the sounder opening while testing your alarm.

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

USING THE TEST FEATURE:

Press and release the TEST/SILENCE button on the alarm cover.

During testing, you will hear a loud horn pattern: 4 beeps, while the red LED flashes on in sync with the 4 beeps.

If the alarm does not sound properly:

1. Test the alarm again. If the alarm is still not working properly, replace it immediately.

USING THE PEAK CO MEMORY (Digital Display Models Only):

The CO Memory feature lets you check the highest level of CO recorded, since the last reset, and is displayed in parts per million (ppm) of carbon monoxide.

To check CO memory:

1. Press and release the RESET/PEAK button on the alarm cover. The peak CO level is displayed on the screen.

NOTE: The highest CO level will be saved into memory until you clear it. DO NOT clear the CO memory reading if you plan to call someone to investigate a CO problem. Clear the CO memory reading only after the investigator has checked your home.

To reset and clear peak CO memory:

1. If there was a previous peak CO level recorded, press and hold the Reset/Peak for 10 seconds and release. The screen will display "000" when the button is released indicating the peak CO level is reset and then the screen will be blank.

REGULAR MAINTENANCE

CLEANING YOUR ALARM:**⚠WARNING!**

DO NOT use spray cleaning chemicals or insect sprays directly on or near the alarm. DO NOT paint over the alarm. Doing so may permanently damage the alarm.

The outside can be wiped with a damp cloth. Do not use any household cleaning agents, ammonia-based cleaners, paints, varnishes, most aerosol sprays including compressed gas dusters, or any other chemical on or near your alarm.

NOTE: WEEKLY TESTING IS RECOMMENDED

MAINTENANCE / OPERATIONAL PRECAUTIONS

Move the CO alarm to a remote location to prevent possible damage or sensor contamination prior to performing any of the following:

- Staining or stripping floors or furniture, painting or wallpapering.
- Power washing with ammonia-based cleaners.
- Using disinfectant aerosols or petroleum-based adhesives.

⚠WARNING!

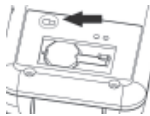
Reinstall the CO alarm as soon as possible to assure continuous protection.

The following is a list of substances which, at high levels, can damage the CO alarm sensor or cause temporary readings which are not CO readings:

- Ethylene, methylethyl ketone (M.E.K.), alcohol, isopropanol, benzene, toluene, ethyl acetate, hydrogen sulfide and sulfur dioxide.
- Also most aerosol sprays, alcohol-based products, paint, thinner, solvent, adhesive, hair spray, aftershave, perfume and most household cleaning agents.

ALARM DEACTIVATION: Place the CO alarm into shut-down mode at the end of its useful service life.

Once the CO alarm has entered end-of-service-life mode, it is necessary to deactivate the alarm. This will silence the product end-of-service-life warning signal and also discharge the remaining capacity of the battery to render it safe for disposal.



1. Locate the deactivation key on the back of the alarm under the paper label.
2. To remove key, press on the upper area of the key and break away. Remove any paper label material from key.
3. Insert key into the deactivation keyhole slot outline on label--slowly turning key clockwise until it stops--approximately 270°. This will permanently deactivate alarm. Once the key is turned, it cannot be removed. Alarm will resist remounting to wall.
4. Dispose of alarm. Do not dispose of alarm in a fire.
5. Alarm should be recycled or disposed of as per state and local guidelines.

**BE SURE TO INSTALL A NEW ALARM IMMEDIATELY.
ALARM WILL NOT DETECT CO ONCE DEACTIVATED**

CARBON MONOXIDE (CO) ALARM LIMITATIONS

CO Alarms have limitations. Like any other electronic device, CO Alarms are not foolproof.

CO Alarms have a limited operational life. Your CO Alarm must be tested 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 (see last page for warranty information).

CO Alarms can only sense CO which reaches the alarm's sensor. Carbon monoxide may be present in other areas without reaching the alarm.

CO could be present on one level of the home and not reach the 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 this reason, we recommend you provide complete coverage by placing a CO Alarm on every level of the home.

This alarm is not a smoke alarm. It will not sense smoke or fire. For early warning of fire, you must install smoke alarms, even though carbon monoxide can be generated by a fire.

CO Alarms are not a substitute for property, disability, life or other insurance of any kind. Appropriate coverage is your responsibility.

POTENTIAL SOURCES OF CO IN THE HOME

Fuel-burning appliances, such as; heaters, gas or wood burning fireplaces, gas kitchen ranges or cooktops, gas clothes dryers.

Damaged or insufficient venting; such as; corroded or disconnected water heaters, vent pipes, leaking chimneys, pipes or flues or cracked heat exchangers, blocked or clogged chimney openings.

Improper use of appliances/devices; operating a barbeque grill or vehicle in an enclosed area (such as a garage or screened porch).

Transient CO Problems: "transient" or on-again/off-again CO problems can be caused by outdoor conditions and other special circumstances.

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).
 - Negative pressure differential resulting from the use of exhaust fans.
 - Simultaneous operation of several fuel-burning appliances competing for limited internal air.
 - Vent pipe connections vibrating loose from clothes dryers, furnaces or water heaters.
 - Obstructions in or unconventional vent pipe designs which can amplify the above situations.
2. Extended operation of unvented fuel-burning devices (ranges, ovens, fireplaces).
3. Temperature inversions which can trap exhaust close to the ground.

HOW CAN I PROTECT MY FAMILY FROM CO POISONING?

This alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before carbon monoxide levels become threatening to the average, healthy adult.

⚠WARNING!

An alarm is not a substitute for proper maintenance of home appliances.

To help prevent CO problems and reduce the risk of CO poisoning:

- Clean chimneys and flues yearly. Keep them free of debris, leaves and nests for proper air flow. Also, have a professional check for rust and corrosion, cracks or separations. These conditions can prevent proper air movement and cause backdrafting. Never "cap" or cover a chimney in any way that would block air flow.
- Test and maintain all fuel-burning equipment annually. Many local gas or oil companies and HVAC companies offer appliance inspections for a nominal fee.
- Make regular visual inspections of all fuel-burning appliances. Check appliances for excessive rust and scaling. Also check the flame on the burner and pilot lights. The flame should be blue. A yellow flame means fuel is not being burned completely and CO may be present. Keep the blower door on the furnace closed. Use vents or fans when they are available on all fuel-burning appliances. Make sure appliances are vented to the outside. Do not grill or barbecue indoors or in garages or screen porches.

- Check for exhaust backflow from CO sources. Check the draft hood on an operating furnace for a backdraft. Look for cracks on furnace heat exchangers.
- Check the house or garage on the other side of a shared wall.
- Keep windows and doors open slightly. If you suspect that CO is escaping into your home, open a window or a door. Opening windows and doors can significantly decrease CO levels.

QUICK REFERENCE GUIDE / OPERATIONAL SUMMARY

CONDITION	ALARM AUDIBLE & VISUAL SIGNALS		RECOMMENDATION
	HORN	RED LED	
New - Out of Package	Silent - then One long beep	Off	To activate the alarm, remove the pull tab. The alarm will sound one long beep to let you know it is powered. Press the Test/Silence/Reset/Peak button. Test the alarm following installation and weekly thereafter. The built-in test switch accurately tests the alarm operation as required by ANSI/UL 2034 Standard for Safety. If, at any time, you test the alarm and it does not perform as described, replace it immediately.
Alarm Test	4 beeps, 5 second pause, 4 beeps	Blinks On in sync with the cycle of 4 beeps and turns Off	The Test/Silence/Reset/Peak button has been pressed and released. The test sequence lasts for approx 3 seconds after the button is released. None. The alarm is operating properly.
DC Power is Present	Silent	Off and Blinks On approx every 2 minutes	DC power is present. If a hazard is identified, please take all precautions when an alarm sounds by calling an Emergency Service and getting out of the home.
Originating CO Alarm	4 beeps, 5 second pause, repeats	Blinks On in sync with the cycle of 4 beeps	CO alarm If a hazard is identified, please take all precautions when an alarm sounds by calling an Emergency Service and getting out of the home.
Nuisance Alarm	Horn sounds when no hazard is present	Blinks On in sync with the cycle of 4 beeps	Nuisance Alarm. If there is no hazard present, verify the alarm is mounted in the correct location (see User's Manual, "AVOID THESE LOCATIONS" section). Reset alarm as instructed below.
Silence Feature	Silent	Off and blinks On approx every 10 seconds for approx 5 minutes	The alarm has previously detected CO and had alarmed. Follow the reset instructions below to remove the peak CO level memory reading.
Sensor Trouble/Service Alarm	3 chirps approx every 60 seconds	Blinks on approx every 2 seconds	Sensor Trouble/Service Alarm. Reset the alarm as instructed below. If this does not clear the problem, deactivate the alarm. See ALARM DEACTIVATION section in the user's manual. Replace alarm immediately. Alarm will no longer detect CO.
Product End-of-Service Life Notification	2 chirps approx every 60 seconds	Off	Product End-of-Service Life Alarm. Deactivate and replace the alarm immediately. See ALARM DEACTIVATION section in user's manual. Alarm will no longer detect CO.

Reset Alarm - Press and Hold the Test/Silence/Peak/Reset button for approximately 10 seconds and release. This will clear the CO Silence and Sensor Trouble/Service Alarm and Peak CO memory (on alarm models with the display screen).

MODEL MC304S and MCD305S TEN-YEAR LIMITED WARRANTY

USI Electric, Inc. /Universal Security Instruments, Inc. ("USI") warrants this product to be free from defects in material and workmanship for a period of 10 (ten) years from the date of purchase. This warranty shall not apply to any damage which may be caused by the sealed batteries used in this product. This warranty applies only to the original consumer purchaser and only to products used in normal residential use and service. If this product is found to be defective, USI's only obligation, and your exclusive remedy, is the repair or replacement of the product, at USI's discretion, provided that the product has not been damaged through misuse, abuse, accident, modification, alteration, neglect or mishandling. This Warranty shall not apply to any product which is found to have been improperly installed, set-up, or used in any way not in accordance with the instructions supplied with this product.

ALARM RETURNS

For replacement of this alarm under the terms of this Warranty, contact the Customer Service Department at 800-390-4321 extension 238 to obtain the current postage and handling fees. USI does not warrant, and specifically disclaims any warranty, whether express or implied, of fitness for a particular purpose, other than the warranty contained herein. No implied warranty on this product, created by state law, shall extend beyond the term of this warranty unless such law otherwise provides. USI specifically disclaims any liability and shall not be liable for any consequential or incidental loss or damage, including, but not limited to, damages to any equipment with which this product is used. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. No agent, representative, dealer, or employee of the company has the authority to increase or alter the obligations or terms of this Warranty. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state. This Warranty is only valid for merchandise purchased from outlets in the United States and Canada. This warranty expires upon product end-of-service life signal.

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