UNIVERSAL®
SECURITY INSTRUMENTS, INC.

Conforms to UL Std.
UL 217 UL 2034

Intertek

Single Station Smoke &
Carbon Monoxide Alarm

MODEL
MPC322S

SMART ALARM TECHNOLOGY®

PLEASE READ AND SAVE!

THANK YOU for purchasing this 3-in-1 Photoelectric Smoke + Fire + Carbon Monoxide Smart Alarm. This tamper-proof alarm does not require battery changes. This alarm contains a 10 year permanent power sealed battery to provide continuous protection--even in the event of a power outage. The sealed battery will last for approximately 10 years. 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.

TABLE OF CONTENTS

ALARM TECHNOLOGY & FEATURES

This is a 3-in-1 combination smoke + fire + carbon monoxide (CO) alarm. The 10 year sealed battery provides continuous protection even in the event of a power outage.

- There are three basic smoke alarm types: Universal Smoke Sensing Technology®, Ionization and Photoelectric.
- Universal Smoke Sensing Technology® is an ionization alarm containing patented Smart Alarm Technology. Alarms containing Universal Smoke Sensing Technology are effective at detecting fast flaming fires faster than the maximum allowable alarm limit, and are effective at detecting slow smoldering fires.
- Ionization smoke alarms are typically more effective at detecting fast flaming fires—fires which consume combustible materials rapidly and spread quickly. Sources of these fires may include paper burning in a wastebasket, or kitchen grease fires.
- Photoelectric smoke alarms, on the other hand, are typically more effective at detecting slow smoldering fires—fires which burn for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.
- Installing alarms containing Universal Smoke Sensing Technology ensures maximum detection of both types of fires from a single alarm, while eliminating the need for a combination of ionization and photoelectric smoke alarms.

The enclosed alarm is a 3-in-1 Photoelectric Smoke + Fire + Carbon Monoxide Smart Alarm.

KEY PRODUCT FEATURES

Smart Alarm Technology virtually eliminates nuisance alarms caused by non-hazardous sources such as every day cooking smoke and steam

Permanent Power battery provides continuous protection and eliminates low battery chirps. Never replace batteries.

Lithium Free 10 Year Sealed Power Supply features Duracell® Duralock Power Preserve™ Technology alkaline batteries providing a safer, greener alternative

ALARM LIMITATIONS AND FUNCTIONS

- **IMPORTANT: ALARMS WILL NOT WORK WITHOUT POWER.** Therefore, installing an alarm with a sealed battery or an alarm powered from two different power sources can give an extra measure of protection. A hardwired alarm with backup battery power will provide protection in the event of an AC power failure. Battery operated alarms cannot work if the batteries are missing, disconnected or dead. If you are concerned about the limitations of the battery or AC power, install both types of alarms.
- **PROPERLY LOCATE THE ALARM TO AVOID NUISANCE ALARMS.** Using an ionization smoke alarm without Universal Smoke Sensing Technology in a smokey area, such as a kitchen, or in a high humidity area near a shower, can cause nuisance/false alarms. Also, humid areas near a shower can cause nuisance/false alarms.
- **DO NOT DEACTIVATE THE BATTERY TO QUIET A NUISANCE/FALSE ALARM.** The alarm will not provide protection if it is not receiving power. Properly locate the alarm to avoid nuisance/false alarms.
- **SMOKE, CO OR GAS ALARMS MAY NOT ALWAYS WARN ABOUT DANGERS CAUSED BY CARELESSNESS.** Safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, natural causes such as lightning and arson. Prevention and appliance maintenance is the best safeguard.
- **INSTALLING ALARMS MAY MAKE YOU ELIGIBLE FOR LOWER INSURANCE RATES, BUT ALARMS ARE NOT A SUBSTITUTE FOR INSURANCE.** Home-owners and renters alike should continue to insure their lives and properties.
- **SMOKE ALARMS CANNOT DETECT FIRES IF THE SMOKE DOES NOT REACH THEM.** Smoke from fires may not reach the sensing chamber and set off the alarm. Do not obstruct airflow around the smoke alarm or place in areas of obstructed airflow.
- **SMOKE ALARMS MAY NOT BE EFFECTIVE IN VARIOUS AREAS.** For example: (1) Fires where the victim is intimate with fire due to a person's clothes catching fire while cooking; (2) Fires where the smoke is prevented from reaching the alarm due to a closed door or other obstruction; (3) Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located alarms.

- **SMOKE ALARMS MAY NOT DETECT FIRE ON ANOTHER FLOOR OR AREA OF THE HOME.** Recommended minimum protection is at least one smoke alarm inside every bedroom, outside every sleeping area and on every level of the residence. Interconnected alarms may provide earlier warning than stand-alone alarms since all alarms will sound when the initiating alarm sounds.
- **SMOKE ALARMS CANNOT PREVENT OR EXTINGUISH FIRES.**
- **ALARMS CAN ONLY SENSE CO WHICH REACHES THE ALARM SENSOR.** Carbon monoxide may be present in other areas of the dwelling without reaching the alarm. CO may be present on one level of the dwelling 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 combination alarm on every level of the dwelling.
- **ALARMS MAY NOT BE HEARD.** The horn in this alarm meets or exceeds current standards, but it may not be heard if: (1) The alarm is located outside a closed or partially closed door; (2) Residents recently consumed alcohol or drugs; (3) The sound of the alarm is drowned out by noise from stereos, TV's, air conditioners or other appliances; (4) Residents are hearing impaired or (5) Residents are sleeping. Current studies have shown alarms may not awaken all sleeping individuals and that it is the responsibility of individuals in the household who are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound or to those who may be incapable of safely evacuating the area unassisted.
- **ALARMS ARE NOT FOOLPROOF.** Test alarms weekly to ensure continued protection.
- **ALARMS HAVE A LIMITED PRODUCT SERVICE LIFE.** This alarm should be replaced immediately if it is not operating properly. If the self-diagnostic test reveals a malfunction, the service signal will warn it is time to replace the alarm. Alarms should always be replaced after 10 years.
- **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 occupants in an emergency. Exposure to the horn at close range may harm your hearing.

INSTALLATION INSTRUCTIONS

⚠WARNING! IMPORTANT CONSIDERATIONS THIS ALARM HAS BEEN DESIGNED WITH A PRODUCT END-OF-SERVICE LIFE SIGNAL 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.

WHERE THIS ALARM SHOULD BE INSTALLED

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: This alarm must be mounted on a ceiling or a wall.
It is not designed for use as a tabletop device.

For maximum protection, install an alarm inside every bedroom, outside every sleep area, and on every level of the home including basements and finished attic spaces.

- Temperature limits for proper operation are 32ºF to 100ºF (0ºC to 38ºC).
- Install an alarm in each room where the occupant closes the door while sleeping.

- Install an alarm in every family living unit containing a fuel-burning appliance, fireplace, or an attached garage.
- Alarms 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 may be needed.
- Protect the escape route, as the bedrooms are usually farthest from an exit. If more than one sleeping area exists, locate additional alarms in each sleeping area. If a hall is more than 40 feet (12 meters) long, install an alarm at each end of the hallway.
- Add additional alarms to protect any stairway, as stairways may act like chimneys for smoke and heat.
- Locate at least one alarm on every floor level.
- Locate an alarm in any area where a smoker sleeps or where electrical appliances are operated in sleeping areas.
- Smoke, heat and other combustion products rise to the ceiling and spread horizontally. Mounting the alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction. However, in mobile homes, wall mounting on an inside partition is preferred to avoid the thermal barrier that may form at the ceiling.
- When mounting the alarm on the ceiling, locate it a minimum of 4" (10cm) from a side wall or corner (see Diagram A).
- When mounting the alarm on a wall, if local codes allow, use an inside wall with the top edge of the smoke alarm a minimum of 4" (10cm) and a maximum of 12" (30.5cm) below the ceiling/wall intersections (See Diagram A).

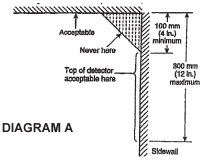
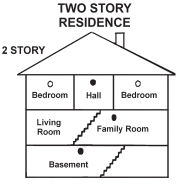


DIAGRAM A

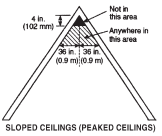


Existing Homes:

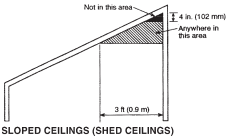
The NFPA requires smoke alarms or combination alarms on every level and outside each sleeping area in existing construction. An existing household with one level and one sleeping area is required to have one smoke alarm.

New Construction Homes and Manufactured Homes:

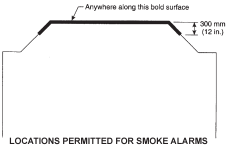
The NFPA requires AC-powered, interconnected smoke alarms to be installed inside each bedroom, outside each bedroom area, and on every level of the home. They also require a minimum of two AC-powered, interconnected smoke alarms or combination alarms in any new construction home.



SLOPED CEILINGS (PEAKED CEILINGS)



SLOPED CEILINGS (SHED CEILINGS)



LOCATIONS PERMITTED FOR SMOKE ALARMS ON TRAY-SHAPED CEILINGS

Sloped Ceilings (Peaked Ceilings):

Smoke alarms or combination alarms mounted on a peaked ceiling shall be located within 36 in. (914 mm) horizontally of the peak, but not closer than 4 in. (102 mm) vertically to the peak.

Sloped Ceilings (Shed Ceilings):

Smoke alarms or combination alarms mounted on a sloped ceiling having a rise greater than 1 ft. in 8 ft. (1 m in 8 m) horizontally shall be located within 36 in. (914 mm) of the high side of the ceiling, but not closer than 4 in. (102 mm) from the adjoining wall surface.

Tray-Shaped Ceilings:

Smoke Alarms or combination alarms shall be installed on the highest portion of the ceiling or on the sloped portion of the ceiling within 12 in. (305 mm) vertically down from the highest point.

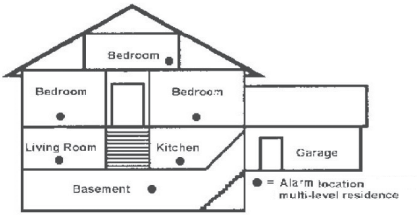
Mobile Home Installation:

For minimum protection, smoke alarms should be installed in compliance with H.U.D. Manufactured Home Construction Safety Standards, Title 24 CFR, Section 3280.208 and Section 3282. For additional protection, see Single Story Residence smoke alarm requirements/recommendations for Existing Homes and New Construction Homes.

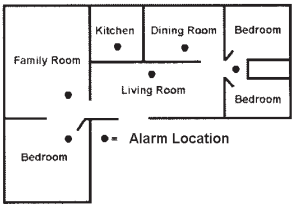
Note: For mobile homes built before 1978, install smoke alarms or combination alarms on inside walls between 4" and 12" from the ceiling (older mobile homes have little or no insulation in the ceiling). This is especially important if the ceiling is unusually hot or cold.

Install smoke alarms or combination alarms inside each bedroom and in the hallway outside each separate sleeping area.

RECOMMENDED PLACEMENT:



Recommended Alarm Placement for a Multi-Level Residence



Recommended Alarm Placement for a Single-Floor Residence

NOTE: For any location, make sure no door or other obstruction could prevent the smoke or carbon monoxide from reaching the alarm.

WHERE THIS ALARM SHOULD NOT BE INSTALLED

Installation in an improper location can affect the sensitive electronic components in this alarm. This alarm is not suitable for installation in hazardous locations as defined in the National Electrical Code.

To avoid causing damage to this alarm, to provide maximum protection, and to prevent unnecessary alarms, DO NOT LOCATE THIS ALARM:

- 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.
- In garages, kitchens crawl spaces and unfinished attics.
- In turbulent air, such as near ceiling fans, heat vents, air conditioners, fresh air returns or open windows. Blowing air may prevent smoke or CO gas from reaching the sensors.
- In 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 the alarm.
- 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.

- Less than 12 inches (306mm) away from fluorescent lights. Electrical noise can interfere with the operation of the alarm.
- In the kitchen, some gas appliances can emit a short burst of CO or gas upon startup. This is normal. If this alarm is installed too close to these appliances, it may sound often and become a nuisance.
- Less than 20 feet (6m) from the sources or combustion particles such as a stove, furnace, water heater, non-electric space heater. In areas where a 20 foot (6m) distance is not possible i.e. modular, mobile or smaller homes, it is recommended the alarm be placed as far from these fuel-burning sources as possible.
- Where heavy furniture drapes or other objects will not block the sensor.
- Peaks of vaulted ceilings, “A” frame ceilings or gabled roofs.
- Alarms are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

NOTES: 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: (1) Wind direction and/or velocity, including high gusts of wind; (2) Heavy air in the vent pipes with cold/humid air with extended periods between cycles; (3) Negative pressure differential resulting from the use of exhaust fans; (4) Simultaneous operation of several fuel-burning appliances competing for limited internal air; (5) Vent pipe connections vibrating loose from clothes dryers, furnaces or water heaters; (6) Obstructions in or unconventional vent pipe designs which can amplify the above situations.

These placement recommendations are intended to keep alarms at a reasonable distance from a fuel-burning source and reduce unwanted/nuisance alarms. Nuisance alarms may occur if an alarm is placed directly next to a fuel-burning source. Ventilate these areas as much as possible.

MOUNTING INSTRUCTIONS

To use the optional Alarm Tamper Resistant Mounting Feature, refer to the next section for further instructions.

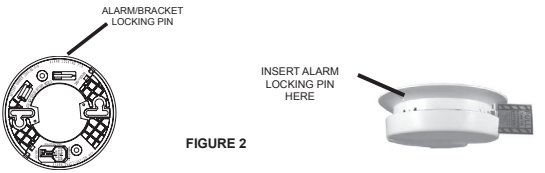


FIGURE 2

1. Be sure to select the proper location for this alarm as described in the placement instructions. This alarm should be mounted either on the ceiling or a wall.
2. To identify the replacement date for this alarm, a label has been placed on the side of the alarm cover. With permanent marker, write the date of installation in the space provided.
3. Remove the mounting bracket from the back of the alarm by holding the mounting bracket and twisting the alarm in the direction indicated by the “TWIST TO REMOVE” arrow on the top of the alarm base.
4. Attach the mounting bracket using the two screws and wall anchors provided.
5. Install the alarm on the mounting bracket.

OPTIONAL ALARM TAMPER RESISTANT LOCKING FEATURE

This feature will help to deter children and others from removing the alarm from the mounting bracket. It is not necessary to activate this feature in places where unauthorized alarm removal is not a concern.

TO INSTALL: The locking pin is molded into the mounting bracket and clearly identified. Refer to Figure 1. **To use the locking feature, followed these 5 steps:**

1. Remove/break off the locking pin located in the mounting bracket.
2. Attach the mounting bracket to the wall or ceiling using the two screws and wall anchors provided.
3. Install the alarm on the mounting bracket.

4. Insert the pin into the opening located in the base of the alarm (Figure 2)

TO REMOVE: To remove the alarm after the tamper resistant locking feature has been engaged; remove the locking pin using long nose pliers. The locking pin is reusable.

IMPORTANT: Two self-adhesive labels are included with this alarm. On each label write in the phone number of your emergency responder, for example 911, and a qualified appliance technician. One label should be placed near where this alarm is installed, and the other label should be placed in the "fresh air" location you plan to go if the alarm sounds.

INDUSTRY & AGENCY INSTALLATION RECOMMENDATIONS

CALIFORNIA STATE FIRE MARSHAL

"Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows. A smoke alarm installed in each separate sleeping area (in the vicinity of, but outside of the bedrooms), and heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages."

NATIONAL FIRE PROTECTION ASSOCIATION

For your information, the National Fire Alarm Code, NFPA 72, reads as follows:

"11.5.1 *Required Detection - Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single and multiple-station smoke alarms shall be installed as follows:

1. *In all sleeping rooms and guest rooms
2. *Outside of each separate dwelling unit sleeping area, within 6.4 m (21 ft) of any door to a sleeping room, the distance measured along a path of travel
3. On every level of a dwelling unit, including basements.
4. On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
5. *In the living area(s) of a guest suite
6. In the living area(s) of a residential board and care occupancy"

The equipment should be installed using wiring methods in accordance with the National Fire Protection Association's Standard 72, National Fire Code. For additional information, contact: National Fire Protection Association, One Batterymarch Park, Quincy, MA 02169-7471 or go to www.nfpa.org

ALARM OPERATION

NORMAL OPERATION: The alarm is operating once the battery power is connected, the battery pull tab has been removed, and the alarm has sounded one long beep. The red smoke LED blinks on once approximately every two minutes. The red CO LED is off. The horn is silent.

CAUTION! This combination smoke & fire & carbon monoxide alarm has separate alarm sounds. This alarm is not designed to detect any other gas. Carbon monoxide and smoke may be present in other areas. The alarm will only indicate the presence of CO or smoke which reaches the sensor

TEST SEQUENCE: The horn beeps 3 times with a 6 second pause and then beeps 4 times. The red smoke LED blinks on in sync with the 3 beeps. The red CO LED blinks on in sync with the 4 beeps.

This alarm incorporates the NFPA recognized horn signal for evacuation.

SMOKE ALARM CONDITION: The horn beeps 3 times with a 2 second pause and continues until the air is cleared. The red smoke LED blinks on in sync with the 3 beeps. The red CO LED is off.

CO ALARM CONDITION: The horn beeps 4 times with a 5 second pause and continues until the air is cleared. The red smoke LED blinks on every two minutes. The red CO LED blinks on in sync with the 4 beeps.

SENSOR TROUBLE: This alarm contains multiple self-diagnostics. If a sensor fault is detected, the horn chirps 3 times approximately every 60 seconds. The red smoke LED blinks on

once approximately every two minutes. The red CO LED is off. The trouble signal cannot be silenced. Reset the alarm. If this does not clear this trouble signal, deactivate the alarm. Refer to the “alarm deactivation section.” Replace alarm immediately.

RESET ALARM: Press the test/silence button for 10-15 seconds, then release. This will clear the alarm origination. Be sure to reset alarms after every alarm event.

QUICK FIND® ALARM ORIGINATION FEATURE: To identify the originating alarm in a non-interconnected system

1. Press and release the test/silence button on each alarm. After releasing the button, the test sequence will sound and last for approximately 5-20 seconds.
2. Once the test sequence ends, if this is the originating alarm will continue to sound for approximately 60 seconds. If it is not the originating alarm, continue to test each alarm until you locate the originating alarm.
3. Remember to reset the originating alarm in order to clear the Quick Find® and return the system to normal operation
4. NOTE: It is necessary to test each alarm by pressing and releasing the test/silence button to determine the originating alarm.

PRODUCT END-OF-SERVICE LIFE ALARM/LOW BATTERY WARNING: When it is time to replace this alarm, which is approximately 10 years of operation from initial power up, the alarm will provide audible and visual warnings. The product end-of-service life warning cannot be silenced. The horn chirps 2 times approximately every 60 seconds. The red smoke LED blinks on approximately every 2 minutes. The red CO LED is off. Deactivate the alarm. Refer to the “alarm deactivation section.” Replace alarm immediately.

USING THE SILENCE FEATURE

⚠WARNING! NEVER ignore any alarm. If the alarm sounds and it is not being tested, it is warning of a potentially dangerous situation which requires immediate attention. NEVER disconnect the power to your alarm to silence the horn—use the Silence feature. Disconnecting the alarm removes your protection!

IMPORTANT! The Silence feature is intended to temporarily silence the alarm warning.

It will not correct a smoke or CO problem.

In the event of a smoke alarm, do not use the Silence feature until the source of the alarm has been identified and safe conditions exist.

The Silence feature is intended to temporarily silence the horn while identifying and correcting the problem. To use the Silence feature, press and release the test/silence button until the horn is silent if it was the initiating alarm. If the test/silence button is pressed while the alarm is in the silence mode, the alarm will start sounding again.

The CO alarm Silence feature can be activated by a press and release of the test/silence button on the initiating alarm while in alarm condition. The alarm will remain silent for approximately 5 minutes, depending on the level of CO detected. The red CO LED will blink on approximately every 10 seconds. If CO levels drop below the alarm levels, the alarm will remain silent and return to normal operation. If CO levels remain constant or increase, the alarm will sound again. This indicates a potentially dangerous situation. Ventilate the area.

The smoke alarm Silence feature can be activated by a press and release of the test/silence button on the initiating alarm while in alarm condition. The alarm will remain silent for approximately 8-12 minutes, depending on the level of smoke detected. The red smoke LED will blink on approximately every 10 seconds. If smoke levels have not cleared during the silence period, the alarm will sound again. This indicates a potentially dangerous situation. Ventilate the area. If the alarm remains silent, the smoke levels have dropped and the alarm will return to normal operation. If smoke levels remain constant or increase, the alarm will sound again.

TESTING INSTRUCTIONS

⚠WARNING! NEVER use an open flame of any kind to test this alarm. You may accidentally damage or set fire to the alarm or to your home.

NEVER use vehicle exhaust to test the alarm! Exhaust may cause permanent damage and voids the warranty.

NEVER use a gas range or an open flame of any kind to test this alarm. You might accidentally damage or set fire to the alarm or to your home.

CAUTION: Continuous exposure to the high sound level of this alarm over an extended period of time may cause hearing loss. Due to the loudness, we suggest that you place your fingers over the sounder opening, or step back from the alarm while testing.

NOTE: The alarm horn loudness meets or exceeds current UL standards of 85 dB at 10 feet (3 meters).

WEEKLY TESTING: This alarm is designed to act as a monitor, not for use as a short-term testing device, or to perform a quick check for the presence of CO or smoke. The built-in test switch accurately tests the alarm operation as required by ANSI/UL 2034/UL 217 Standards for Safety. If at any time the alarm does not perform as described when tested, replace it immediately. Weekly testing is required to ensure proper operation. Irregular or low volume sound may indicate a defective alarm and it should be returned for service. Follow deactivation instructions to prepare alarm for shipment or disposal.

USING THE TEST FEATURE: Press and release the Test button on the alarm cover. During testing, the alarm will sound a loud horn pattern consisting of 3 beeps, followed by a 6 second pause, then 4 beeps. The red smoke LED will blink in sync with the 3 beeps and the red CO LED will blink in sync with the 4 beeps. The alarm will sound if all the electronic circuitry, horn and battery are working properly.

If the alarm does not sound properly:

1. Hold the test button down longer. Try holding the test button down for up to 10 seconds.
2. Make sure the battery activation pull tab has been completely removed.
3. If there is still a problem, call customer service. Do not attempt to fix the alarm.

ALARM AND BATTERY DEACTIVATION

⚠WARNING! This alarm uses a sealed battery for power.
The battery should last for approximately 10 years under normal operating conditions.

⚠WARNING! Deactivation of the alarm is permanent.

Place this alarm into shut-down mode at the end of its useful service life. Once the alarm has entered end-of-service-life mode, it is necessary to turn off the alarm to deactivate the alarm operation. This will stop the product end-of-service-life warning signal and also discharge the remaining capacity of the battery and ready the alarm for disposal.

1. Remove the alarm from the mounting bracket by rotating it in the direction shown the arrows on the rim of the base.
2. The plastic alarm deactivation key is molded in the mounting bracket of the alarm. Refer to Figure 1). Use a small flat blade tool to remove (breakaway) the deactivation key from the mounting bracket.
3. Insert the key into the deactivation keyhole slot outlined on alarm label, and insert fully.
4. Slowly turn key clockwise to the “off” position, approximately 270º, until you feel the switch actuate.
5. This will discharge the alarm battery and stop the alarm chirping after approximately on minute. The alarm is now ready for disposal.
6. The deactivation key cannot be removed and the alarm cannot be re-attached to the mounting bracket.
7. Be sure to install a new alarm immediately.

⚠WARNING! Once this alarm has been deactivated/turned off:

- The alarm cannot be re-activated
- The alarm cannot be re--attached to the bracket
- The alarm will no longer detect smoke or carbon monoxide
- The alarm contains no serviceable parts

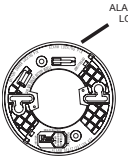


FIGURE 2

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.
- 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 CO.

WHAT TO DO IF CARBON MONOXIDE IS DETECTED

⚠WARNING! Never ignore the alarm sound. If you hear the alarm horn sounding a continuous horn pattern of 4 beeps, 5 second pause, carbon monoxide has been detected. Evacuate everyone from the dwelling.

⚠WARNING! Never disconnect the power from the alarm to stop a nuisance alarm. Doing so will disable the alarm and remove the protection. In the case of a true unwanted alarm, use the silence feature. The silence feature is intended to temporarily silence the alarm while the problem is identified and corrected. Open a window or fan the CO away from the alarm. The alarm will reset automatically when it returns to normal operation. The alarm will stop sounding automatically

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 and 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.

⚠WARNING! IF THE CO ALARM SOUNDS:

1. Operate the 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 or window. Do a head count to check that all persons are accounted for. Do not reenter the premises or move away from the open door or window until the emergency services responder has arrived, the premises have been aired out, and your alarm remains in its normal condition.
4. After following steps 1-3, if the 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 appliances and 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 a qualified appliance technician here: _____.

NOTE: A qualified appliance technician is defined as “a company engaged in and responsible for the installation, testing, servicing, or replacement of heating, ventilation, air conditioning (HVAC) equipment, combustion appliances and equipment, gas fireplaces or other combustion equipment.”

Because carbon monoxide may dissipate by the time a first responder or investigator arrives, it may be difficult to locate the source of CO. USI Electric/Universal Security Instruments shall not be obligated to pay for or reimburse the user of this alarm for any carbon monoxide investigation or service calls. Fire departments, HVAC contractors and most utility companies will perform CO inspections. Some may charge for this service. It is advisable to inquire about any applicable fees prior to having the service performed

POTENTIAL SOURCES OF CARBON MONOXIDE

Carbon monoxide (CO) is a colorless, invisible, odorless, tasteless, poisonous gas produced when fossil fuels do not burn completely, or are exposed to heat, usually fire. This alarm is not designed to detect any other gas. This alarm will only indicate the presence of CO or smoke which reaches the sensor. Carbon monoxide may be present in other areas.

Fossil fuels such as wood, charcoal, coal, natural gas, oil, gasoline, propane and kerosene produce CO.

Household appliances may be sources of CO and include the gas kitchen range, cook top, gas clothes dryer, heater, furnace, water heater, wood-burning stove, certain pool heaters, fireplaces and portable space heathers. When they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly.

Electrical appliances typically do not produce CO.

Energy efficient homes. CO is a real danger now that homes are more “air-tight”, with added insulation, sealed windows, and other weatherproofing can trap CO inside.

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.

Vent pipe connections improperly designed or becoming loose.

Improper use of appliances by operating a barbeque grill, using charcoal, gas or wood pellets, hibachi in an enclosed area such as a garage or screened porch.

Vehicles and portable generators operating in a garage or any area too close to the living space.

Transient CO problems also known as on-again/off-again CO problems, can be caused by outdoor conditions and other special circumstances.

Excessive spillage or reverse venting of fuel-burning appliances.

Outdoor ambient conditions and temperature inversions which can trap exhaust and pollutants close to the ground.

Wind direction or wind velocity pushing heavy air in the vent pipes back in to the dwelling.

Negative air pressure caused by simultaneous operation of multiple fuel burning appliances competing for limited internal air.

This alarm will not operate until it is activated and properly installed. This alarm should be tested immediately after installation and then tested weekly after that. 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 an activated sealed battery power to operate properly. If the battery is dead or deactivated, the alarm will not operate. The sealed battery cannot be replaced. The cover of this 10 year permanent power tamper proof alarm is sealed, and cannot be removed.

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 (CO) levels become threatening to the average, healthy adult.

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. 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. Check the color of the flame on the burner and pilot lights to ensure they are burning properly. They should be blue. If the flame is orange or yellow, it is a sign the fuel is not burning completely and a repair technician should be contacted.

Teach every member of your home about the sounds and operation of this alarm. Proper response is key to survival.

DEVELOP AND PRACTICE A PLAN OF ESCAPE

BASICS OF ESCAPE PLAN

- Make a floor plan indicating all doors and windows and at least two escape routes from each room. Second story windows may need a rope or chain ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where all of you can meet if a fire occurs.
- Familiarize everyone with the sound of the smoke alarm and train them to leave your home when they hear the sound.
- Identify children's bedrooms with red stickers placed in the upper left corner of the windows. They are available from your local fire department.
- Practice a fire drill at least every six months. Practice allows you to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do!

WHAT TO DO WHEN THE ALARM SOUNDS

- Leave immediately by your plan of escape. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If inside door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire department from your neighbor's home – not from yours!
- Don't return to your home until fire officials say that it is all right to do so.

CONDITION	ALARM AUDIBLE & VISUAL SIGNALS			RECOMMENDATION
	HORN	SMK RED LED	CO RED LED	
New-Out of package.	Silent	Off	Off	To activate the alarm remove the pull tab. The alarm will sound one long beep to confirm it is powered up.
DC power is present.	Silent	Blinks On approx. every 2 minutes.	Off	Alarm is operating properly.
The Test button has been pressed. The test sequence lasts for approx 10 seconds.	3 Beeps, 6 second pause, 4 beeps.	Blinks On in sync with 3 beeps.	Blinks On in sync with 4 beeps.	Test the alarm following installation and weekly thereafter. The built-in test switch accurately tests the alarm operation as required by ANSI/ UL217 and UL2034 Standards for Safety. If, at any time, the alarm does not perform as described during the test, replace it immediately.
Originating Smoke Alarm.	3 Beeps, 2 second pause, repeat	Blinks On in sync with the 3 beeps	Off	If hazard is identified, please take all precautions if an alarm sounds by calling Emergency Service and getting out of the home.
Originating CO alarm	4 Beeps, 5 second pause, repeat	Blinks on approx. every 2 minutes	Blinks On in sync with the 4 beeps	If hazard is identified, please take all precautions if an alarm sounds by calling Emergency Service and getting out of the home.
Nuisance alarm	Horn sounds when no hazard present	Blinks On in sync with the 3 beeps	Blinks On in sync with the 4 beeps	If there is no hazard present, verify the alarm is mounted in the correct location (see user's manual). Reset alarm as instructed below.
Smoke alarm when cause of alarm is known and poses no threat	3 Beeps, 2 second pause, repeat	Blinks On in sync with the 3 beeps	Off	The smoke alarm Silence Feature can be activated by pressing and releasing the Silence button while in alarm condition. Silence mode will last for approximately 8 - 12 minutes [With the red smoke LED blinking on approx every 10 seconds].
CO alarm when cause of alarm is known and poses no threat	4 Beeps, 5 second pause, repeat	Blinks on approx. every 2 minutes	Blinks On in sync with the 4 beeps	The CO alarm Silence Feature can be activated by pressing and releasing the Silence button while in alarm condition. The alarm will remain silent for approx 5 minutes [with the red CO LED blinking on approx every 10 seconds], depending on the level of CO detected. If CO levels drop below alarm levels, the alarm will remain silent and return to normal operation. If CO levels remain constant or increase, this indicates a potentially dangerous situation and the horn will sound again. Ventilate area.
Previous alarm condition at unidentified source	Silent (alarmed previously)	Blinks on approx. every 2 minutes	Off	Quick Find® Alarm Origination - It may be difficult to determine which alarm has previously sounded. The Quick Find® feature will allow you to immediately locate the originating alarm (once the alarm has stopped sounding). To initiate Quick Find® press the Test/Silence button on the alarm. After releasing the button and following the test sequence, the originating alarm will continue to sound for approximately 60 seconds.
Alarm needing reset due to abnormal operation/ previous alarms	Silent (alarmed previously)	Blinks on approx. every 2 minutes	Off	To reset the alarm, hold the Test/Silence button for 10-15 seconds. This will clear alarm origination. Reset after each alarm event.
Low Battery or Product End-of-Service Life Warning	2 Chirps approx every 60 seconds	Blinks on approx. every 2 minutes	Off	Deactivate alarm (See User's Manual "ALARM DEACTIVATION" section). Replace alarm immediately.
Sensor Trouble Signal	3 Chirps approx every 60 seconds	Blinks on approx. every 2 minutes	Off	Reset the alarm. If this does not clear the problem, replace alarm.

RESET INSTRUCTIONS: Press the Test/Silence button for 10-15 seconds and then release. This will clear the alarm origination. Be sure to RESET alarms after each alarm event.

QUICK FIND® Alarm Origination/Location Feature: The QUICK FIND® feature will allow you to immediately locate the originating alarm (the alarm that triggered the other alarms), once the alarms have stopped sounding.

1. Press and release the Test/Silence button on alarm. After releasing the button, the test sequence on this alarm will begin, and last approximately 5-20 seconds. If it is not the originating alarm, continue to each alarm until the originating alarm is located.
2. Once this test sequence ends, the originating alarm continues to sound for approximately 60 seconds, which provides ample time to locate the originating alarm.
3. Remember to reset the originating alarm in order to clear the QUICK FIND® and return the system to normal operation.

NOTE: If you have any additional questions about the operation, please contact our Customer Service Department at 800-390-4321, and we will gladly assist you.

THIS PRODUCT IS LISTED TO UL STANDARD FOR SAFETY, UL 217 and UL 2034

MODEL MPC322S 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 batteries used in the product or to any damage which may be caused by such batteries. 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 the product has not been damaged through misuse, abuse, accident, modifications, 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 the 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.

REPAIRS AND SERVICES

If this alarm is defective in any way, do not attempt to open or tamper with it. Return the alarm for servicing. Refer to Warranty for instructions. There will be a service charge for repairing out of warranty alarms.

REGULAR MAINTENANCE

IMPORTANT: DO NOT use spray cleaning chemicals or insect sprays, ammonia-based cleaners, paints, varnishes, most aerosol sprays including compressed gas dusters on or near your alarm. DO NOT paint over the alarm. Doing so may permanently damage the alarm.

IMPORTANT: After cleaning, reinstall alarm and test it by pressing the test button.

Visit Us on the Web
www.UniversalSecurity.com

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