MODEL MDS107, MDS107L

SIGNALING UL LISTED

SMART ALARM TECHNOLOGY®

UNIVERSAL SMOKE SENSING TECHNOLOGY®

2-IN-1 SMOKE & FIRE ALARM WITH SILENCE FEATURE AND ALARM ORIGINATION FEATURE

READ ALL INSTRUCTIONS

This smoke alarm uses an extremely small amount of a radioactive element in the ionization chamber. Do not tamper with radioactive sealed source or try to repair the smoke alarm yourself.

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SMOKE ALARM LIMITATIONS AND FUNCTIONS

- 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 and 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.
- **The enclosed alarm is a 2-in-1 Universal Smoke Sensing Technology® Smoke & Fire Smart Alarm**

- SMOKE ALARMS WILL NOT WORK DURING A LOSS OF POWER. SINCE A SMOKE ALARM WILL NOT WORK WITHOUT POWER, having an alarm(s) that works from two completely different power sources, such as an AC direct wire with battery backup smoke alarm, can give you an extra measure of protection in case of an AC power failure or a dead battery. Battery operated alarms cannot work if the batteries are missing, disconnected or dead, if the wrong type of batteries are used or if the batteries are not installed correctly. AC (only) powered alarms cannot work if the AC power is cut off for any reason. If you are concerned about the limitations of the battery or AC power, install both types of alarms.
- USING AN IONIZATION SMOKE ALARM IN A SMOKY AREA, SUCH AS A KITCHEN, OR IN A HIGH HUMIDITY AREA NEAR A SHOWER, CAN CAUSE NUISANCE FALSE ALARMS. IT IS PREFERABLE TO USE PHOTOELECTRIC ALARMS IN THESE AREAS. DO NOT TURN OFF THE AC POWER TO QUIET THE ALARM. A SMOKE ALARM WILL NOT HELP PROTECT YOU IF IT IS NOT POWERED. Properly locate your alarm to avoid nuisance alarms.
- A SMOKE ALARM MAY NOT ALWAYS WARN YOU ABOUT FIRES CAUSED BY CARELESSNESS AND SAFETY HAZARDS LIKE SMOKING IN BED, VIOLENT EXPLOSIONS, ESCAPING GAS, IMPROPER STORAGE OF FLAMMABLE MATERIALS, OVERLOADED ELECTRICAL CIRCUITS, CHILDREN PLAYING WITH MATCHES, NATURAL CAUSES SUCH AS LIGHTNING, OR ARSON. FIRE PREVENTION IS YOUR BEST SAFEGUARD.
- INSTALLING SMOKE ALARMS MAY MAKE YOU ELIGIBLE FOR LOWER INSURANCE RATES, BUT SMOKE ALARMS ARE NOT A SUBSTITUTE FOR INSURANCE. Homeowners 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. One alarm should be installed inside each bedroom or sleeping area. Do not obstruct airflow around the smoke alarm or place in areas of obstructed airflow.
- BE AWARE OF VARIOUS SITUATIONS AGAINST WHICH THE SMOKE ALARM MAY NOT BE EFFECTIVE. For example: (1) Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking; (2) Fires where the smoke is prevented from reaching the alarm due to a closed door or other obstruction or (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 in every sleeping area and every bedroom on every level of your home. Interconnected smoke alarms may provide earlier warning than stand-alone smoke alarms since all smoke alarms alarm when one detects smoke.
- SMOKE ALARMS MAY NOT BE HEARD. The alarm horn in this alarm meets or exceeds current standards, but it may not be heard if: (1) the smoke alarm is located outside a closed or partially closed door; (2) residents recently consumed alcohol or drugs; (3) the alarm is drowned out by noise from stereos, TV's, air conditioners or other appliances; (4) residents are hearing impaired or (5) if residents are sleeping.
  CURRENT STUDIES HAVE SHOWN SMOKE 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.
- SMOKE ALARMS ARE NOT FOOLPROOF**.** You must test the smoke alarm weekly to ensure your continued protection. Smoke alarms cannot prevent or extinguish fires.
- SMOKE ALARMS HAVE A LIMITED LIFE. The smoke alarm should be replaced immediately if it is not operating properly. You should always replace a smoke alarm after 10 years.
- SMOKE ALARMS ARE NOT TO BE USED WITH DETECTOR GUARDS UNLESS THE COMBINATION HAS BEEN EVALUATED AND FOUND SUITABLE FOR THAT PURPOSE.

RECOMMENDED LOCATION OF ALARMS

- Locate the first smoke alarm in the immediate area of the bedrooms. Try to protect the escape route as the bedrooms are usually farthest from an exit. If more than one sleeping area exists, locate additional smoke alarms in each sleeping area. If a hall is more than 40 feet (12 meters) long, install a smoke alarm at each end.
- Locate additional smoke alarms to protect any stairway as stairways act like chimneys for smoke and heat.

- Locate at least one smoke alarm on every floor level.
- Locate a smoke 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 smoke 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 smoke alarm on the ceiling, locate it a minimum of 4" (10cm) from a side wall or corner (see Diagram A).
- When mounting smoke 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 a smoke alarm 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 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 smoke detectors 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 smoke detectors 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 smoke detectors 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 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 a smoke alarm inside each bedroom and in the hallway outside each separate sleeping area.

AVOID THESE LOCATIONS

- the garage – products of combustion are produced when you start your vehicle.
- near appliances or areas where normal combustion regularly occurs (kitchens, near furnaces, gas hot water heaters). Use smoke alarms with photoelectric sensors or smoke alarms with Silence Feature for these areas.
- in areas with high humidity, like bathrooms or areas near dishwashers or washing machines. Install at least 3 feet (0.9 meters) away from these areas.
- in areas of turbulent air such as air returns or heating and cooling supply vents, smoke alarms shall not be located where airflow prevents smoke from reaching the alarms.

- in extremely dusty, dirty or insect-infested areas. Loose particles interfere with smoke alarm operation.
- in areas where temperature may fall below 40^{0}F (4.4^{0}C) or rise above 100^{0}F (37.8^{0}C).
- closer than 1 foot (0.3m) from fluorescent lights, electrical "noise" and flickering may affect the alarm's operation.
- closer than 3 feet (0.9m) horizontal path from the tip of the blade of a ceiling suspended (paddle) fan.
- on a poorly insulated ceiling or exterior wall (mount smoke alarm on an inside wall).

THIS SMOKE ALARM WILL NOT WORK WITHOUT 120 VAC POWER AND A GOOD BATTERY PROPERLY INSTALLED. THE SMOKE ALARM SHOULD BE TESTED WHEN INSTALLED AND THEN TESTED WEEKLY AFTER THAT.

⚠CAUTION!

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, as appropriate, heat or smoke alarms in living rooms, dining rooms, kitchens, hallways, attics, furnace rooms, closets, utility storage rooms, basements and attached garages. Test the alarms weekly to assure proper operation.

⚠WARNING!

INSTALLATION INSTRUCTIONS: CAUTION!! READ CAREFULLY.

Installation of this alarm must conform to the electrical codes in your area; Article 760 of the National Electrical Code, NFPA 72, 101; SBC (SBCCI); UBC (ICBO); NBC (BOCA): OTFDC (CABO), and any other local or building codes that may apply. Wiring and installation must be performed by a licensed electrician. Failure to follow these guidelines may result in injury or property damage.

This alarm must be powered by a 24-hour, 120V AC 60Hz circuit. Be sure the circuit cannot be turned off by a switch, dimmer or ground fault circuit interrupter. Failure to connect this alarm to a 24-hour circuit may prevent it from providing constant protection.

IMPORTANT: Do not subject this smoke alarm to megger, high voltage or high-pot tests. Remove the smoke alarm(s) before high-potting tests occur on the circuit or system. (Ref. Section 550-17, National Electrical Code, 2002 Edition).

⚠DANGER!

ELECTRICAL SHOCK HAZARD

Turn off power to the area where you will install this alarm at the circuit breaker or fuse box before beginning installation. Failure to turn off the power before installation may result in serious electrical shock, injury or death.

CAUTION: THIS SMOKE ALARM IS SEALED. THE COVER IS NOT REMOVABLE!

- A mounting bracket is provided on the back of the alarm.
- 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 side of the alarm base.

OPTIONAL TAMPER RESISTANT FEATURES: There are two separate tamper resistant locking features provided for this model. Activating one or both of these features deters someone from removing the smoke alarm from the mounting bracket or removing the battery from the alarm. The breakaway locking pins are clearly marked and molded into the mounting bracket. Refer to the diagram on the next page.

TO ACTIVATE THE LOCKING FEATURES: Do not activate the locking features until you have activated the battery, mounted the smoke alarm to the bracket and tested the smoke alarm. Refer to OPERATION, TESTING & MAINTENANCE instructions on Page 6.

1. Detach the breakaway alarm locking pin from the mounting bracket.

2. Insert the pin into the hole for the feature you are activating. Refer to the diagram below for correct placement.

TO DEACTIVATE THE LOCKING FEATURES: To remove the smoke alarm for cleaning or servicing or to replace the battery, you must first remove the appropriate locking pin, if it has been installed.

1. Turn off AC power to the circuit.
2. Use long nose pliers to pull the locking pin out of the hole.
3. It is now possible to remove the smoke alarm or replace the battery.

WIRING INSTRUCTIONS:

1. a. The appropriate power supply is 120 Volt single phase power supplied from a non-switchable circuit NOT protected by a ground fault circuit interrupter.
   b. Turn off AC power to the circuit before wiring the smoke alarm.
   c. There are three pigtail wires (black, white and yellow) coming from the AC QUICK CONNECTOR. The proper wire connection is as follows:

WIRES FROM QUICK CONNECTOR	CONNECT TO
BLACK	"HOT" side of AC line
WHITE	"NEUTRAL" side of AC line
YELLOW	Interconnect wires of other smoke alarms

⚠CAUTION!

DO NOT TAMPER WITH WIRES WHEN POWER IS ON!

For alarms that are used as single smoke alarms, do not connect the yellow wire to anything. Insulate this wire (tape it) in place to make certain the yellow wire cannot contact any metal parts.

INTERCONNECTION & COMPATIBILITY: Interconnected alarms can provide earlier warning of fire than stand-alone alarms, especially if a fire starts in a remote area of the dwelling. When alarms are interconnected, all alarms will sound when the initiating alarm sounds, providing more time to escape safely. This alarm may be interconnected with a total of not more than 24 interconnected devices, i.e., as many as 11 other USI ELECTRIC or UNIVERSAL brand model smoke alarms or combination smoke and carbon monoxide (CO) or smoke and carbon monoxide/natural gas alarms; 6 other initiating alarms which may be a combination of USI ELECTRIC or UNIVERSAL brand CO alarms and heat alarms; and six other non-initiating devices such as USI ELECTRIC brand relay modules.

This alarm can be interconnected with the following compatible models: MDSCN111, MICN109, MCN108, USI-1103, USI-1204, USI-1208, USI-1209, USI-5204, USI-3204, USI-7795, 5304, MI106, MDS107, MP117, USI-2430, USI-960, MI106S, MIC1509S, MPC122S, MP116S.

When any one of these interconnected models alarms it will trigger the corresponding alarm within the interconnected system with respect to their sensing capabilities. Natural gas detection is only present in models MDSCN111, MICN109, and MCN108, therefore a natural gas alarm will NOT trigger the alarm of non- natural gas sensing models within an interconnected system.

The following alarms cannot reset units on an interconnected system: USI-7795, CD-9795.

The following alarms can trigger Quick Find® Alarm Origination, but will not indicate Alarm Origination on an interconnected system: USI-1103, USI-1203, USI-1204, USI-1208 Part USI-1209, USI-1213, USI-5204, USI-3204, CD-9795, USI-7795, USI-2430.

The following alarms cannot be reset through an interconnected system: USI-1103, USI-1203, USI-1204, USI-1208, USI-1209, USI-1213, USI-3204, USI-2430, USI-7795.

Interconnected CO alarms or CO alarm circuit of combination smoke and CO alarms will only respond if a CO alarm / event initiates the alarm. All other alarms remain silent.

Interconnected smoke alarms, heat alarms and relay modules will only respond if a smoke alarm / event or heat alarm / event initiates the alarm. All CO alarms remain silent.

Note that alarms without battery backup will not respond during an AC power failure.

NOTE: Relay Modules/USI-960 will not respond if a CO alarm / event initiates the alarm.

The yellow wire is used only for multiple station operations with USI ELECTRIC or UNIVERSAL Model alarms only. Connecting this yellow wire to any other circuits may result in damage and alarm malfunction. When alarms are interconnected, all alarms must be powered from a single AC branch circuit. If local codes do not permit, be sure the neutral wire is common to both phases. The maximum wire run distance between the first and last alarm/device in an interconnected system is 1,000 feet. NOTE: Use standard household wire (18 gauge or larger, rated at least 300V, as required by local codes) available at all electrical supply/ hardware stores.

The wiring to be used shall be in accordance with the provisions of Articles 210 and 300.3(B) of the National Electrical Code, ANSI/NFPA 70. In addition, the resistance of the interconnecting wiring shall be a maximum of 10 Ohms.

2. Attach the mounting bracket to the electrical junction box.
3. To activate 9 volt battery and alarm, hold the QUICK DRAW(R) battery drawer closed, pull and remove the PULL-TAB. Confirm that the entire PULL-TAB has been completely removed. Discard PULL-TAB.
4. Plug the AC QUICK CONNECTOR into the alarm base. Push and twist the alarm clockwise onto the mounting bracket.
5. See "OPTIONAL TAMPER RESISTANT FEATURES" and "TO ACTIVATE THE LOCKING FEATURES" instructions on Page 4.
6. Turn on AC power and check the LED's for proper operation. The green LED should be on to indicate AC power. The red LED blinks on once approx. every 40 seconds to indicate proper operation.

OPERATION, TESTING & MAINTENANCE

OPERATION: The smoke alarm is operating once the AC power is connected and turned on (the battery must also be installed). When products of combustion are sensed, the alarm sounds a loud alarm which continues until the air is cleared.

This alarm incorporates the NFPA recognized horn signal for evacuation. During alarm mode, the horn produces three long beeps followed by a two second pause and then continuallyl repeats.

READY/ACTIVE CONDITION: The red LED blinks on once approx. every 40 seconds to indicate the alarm is properly functioning.

LOCAL ORIGINATING ALARM CONDITION: The red LED blinks on approx. every 2 seconds and the alarm emits a loud, pulsating alarm sound.

NON-ORIGINATING ALARM CONDITION: The red LED is off and the alarm emits a loud, pulsating alarm.

GREEN LED: The green LED is on whenever AC power is turned on.

NUISANCE ALARMS: The smoke alarm is designed to minimize nuisance alarms. Smoking will not normally set off the alarm unless smoke is blown directly into the smoke alarm. Combustion particles from cooking may set off the alarm if the smoke alarm is located close to the kitchen cooking surface. Large quantities of combustion particles are generated from spills or broiling.

If the smoke alarm does sound, check for fires first. If a fire is discovered, get out and call the fire department. If no fire is present, check to see if one of the reasons listed above may have caused the alarm. Use the Silence Feature if it is a nuisance alarm, or reset the alarm by pressing and holding the test button for ten seconds. Refer to RESET on Page 7.

TESTING: Test by pressing the Test button on the smoke alarm cover until the alarm sounds, then release. The alarm sounds if all electronic circuitry, horn and battery are working. If no alarm sounds, the alarm may have a power supply failure. **Test the smoke alarm weekly to assure proper operation. IMPORTANT:** Under normal conditions, the test button should sound the alarm immediately after it is pressed. There are special conditions that, when you press the Test button, you will experience a delay of approx. 10-15 seconds before the alarm sounds. This delay occurs if the test button is pressed during a self-diagnostic period. This occurs: (1) Upon initial power up; (2) After battery replacement (and no AC power is present); (3) If 120 volt AC power has been interrupted and no backup battery is present.

ALARM ORIGINATION: QUICK FIND® Alarm Origination-In an interconnected system consisting of any of these models: MI106S, MIC1509S, MPC122S, MP116S, 5304, MI106, MDS107, MCN108, MICN109, MDSCN111, MP117, it may be difficult to determine which alarm initiated the alarms to sound during an alarm event. The QUICK FIND® feature will immediately allow you to locate the originating alarm once the alarms have stopped sounding. To initiate QUICK FIND®, press and hold the Test/Silence button on any alarm. After releasing the button, the test sequence on this alarm will begin and last 5-20 seconds, and then stop. The specific test sequence horn pattern is designated by the alarm type. Once this test sequence ends, the originating alarm continues to sound for approx. 50 seconds, which provides ample time to locate the originating alarm. Remember to reset (see Page 10) the originating alarm in order to clear the QUICK FIND® alarm origination and to return your system to normal operation. Refer to the wiring instructions model interconnect compatibility section of this manual (Page 5) for additional information. In a non-interconnected installation, it is necessary to test each alarm by pressing and Test/Silence button to determine the originating alarm.

RESET: To reset the QUICK FIND® Alarm Origination condition, press and hold the Test button on any alarm for at least 10 seconds and then release. Reset after each alarm. The reset feature will reset all interconnected units.

END-OF-SERVICE LIFE NOTIFICATION: A majority of home fire deaths are a result of no smoke alarms or no *working* smoke alarms. In addition to the "replace by date" stamped on the back of your alarm, your alarm contains a unique audible end-of-service life notification feature. When it is time to replace your alarm, which is after approximately 10 years of operation from initial power up, the alarm will sound 1 beep approx. every 60 seconds and the red LED will blink on once approx. every 40-45 seconds. The green LED stays on. The alarm should be replaced immediately.

The product end-of-service life signal can be silenced for approximately 9 hours. To perform this function, press and release the test button. The alarm will sound for approximately 60 seconds while it resets. After the reset function is completed, the alarm will be silent for approximately 9 hours. The end-of-service life signal will reactivate after the silence period.

⚠WARNING!

NEVER use an open flame of any kind to test this smoke alarm. You might accidentally damage or set fire to the smoke alarm or to your home. The built-in test switch accurately tests the smoke alarm's operation as required by Underwriters Laboratories Inc. (UL).

(UTHA) Sensitivity Indicating Means

The sensitivity indicating means for this Smoke and Fire Alarm is the use of the analyzer for Smoke Detectors Model 501-A or 501-A/Bat Aerosol Generator Manufactured by Gemini Scientific Corp., 1122-B Aster Ave., Sunnyvale, CA 94086.

The Equivalent UL 268 Light obscuration %/Ft as measured by this instrument must be within the obscuration listed on the back of this alarm.

(UTHA) Go/No-Go Field Test

The Go/No-Go test for this smoke and fire alarm is to use one of the following UL listed can-type aerosol smoke alarm testers. The instructions for use are printed on the canister. Home Safeguard, Model 25S.

⚠CAUTION!

If you choose to use an aerosol smoke product to test the smoke alarm, be certain to use one that has been Listed to Underwriters Laboratories, Inc. Safety Standards and use it only as directed. Use of non-UL Listed products or improper use of UL Listed products may affect the smoke alarm's sensitivity.

NUISANCE ALARM SILENCE FEATURE: This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the smoke alarm. The smoke alarm Silence Feature is activated by pushing and releasing the Silence button on the smoke alarm cover while in alarm condition. The smoke alarm will automatically reduce sensitivity and the red LED will blink on approx. every 10 seconds to indicate the alarm is in the Silence mode. The smoke alarm will gradually regain normal sensitivity and sound the alarm if particles of combustion are still present. The 8-12 minute Silence feature may be used repeatedly until the air has cleared, by pushing and releasing the Silence button again. Resetting the smoke alarm after a nuisance alarm is recommended.

NOTE: If the Test button is pressed and held during the Silence mode, the smoke alarm will be tested normally. Upon the release of the Test button, the Silence mode will be restarted.

(UTHA) MAINTENANCE: The smoke alarm is virtually maintenance free. However, under dusty conditions, a vacuum hose may be used to clear the sensing chamber of dust.

Clean the smoke alarm at least once a month to remove dust, dirt, insects or debris. Always turn off power to smoke alarm before cleaning. Using a soft brush or wand attachment to a vacuum cleaner, vacuum all sides and cover of smoke alarm. Be sure all the vents are free of debris.

⚠WARNING!

BACKUP BATTERY REPLACEMENT

Disconnect AC power before changing battery. Shock hazard exists if AC power is miswired.

The smoke alarm uses a 9 Volt battery. The battery should last for at least one year under normal operating conditions. The smoke alarm has a low battery indicator, an audible beep or chirp. It will operate at approx. 40 second intervals for a minimum of 7 days. When this indication occurs, replace the battery with an Alkaline type (Energizer #522, Duracell #MN1604) or Lithium type (Ultralife U9VL-J or Ultralife U9VL-J-P) from your local retailer.

LITHIUM Battery Models only - The LITHIUM battery is warranted to last for 10 years under normal operating conditions. Replace the battery with only LITHIUM type: (ULTRALIFE: U9VL-J or ULTRALIFE U9VL-J-P).

OPTIONAL BATTERY DRAWER TAMPER LOCKING PIN: To make your battery drawer tamper resistant, a locking pin has been provided (breakaway part on mounting bracket).

Pull the QUICK DRAW(R) battery drawer open and remove the battery. While observing polarity, push the replacement battery into the battery drawer until it is held securely in place. Carefully close the battery drawer and reinstall the tamper pin.

IMPORTANT: Under normal conditions, the test button should sound the alarm immediately after it is pressed. There are special conditions that, when you press the Test button, you will experience a delay of approx. 10-15 seconds before the alarm sounds. This delay occurs if the test button is pressed during a self-diagnostic period. This occurs: (1) Upon initial power up; (2) After battery replacement (and no AC power is present); (3) If 120 volt AC power has been interrupted and no backup battery is present.

REPAIRS AND SERVICES

This smoke alarm contains less than 1 microcurie (37 kilobecquerel) of Americium 241, a radioactive material. **The distribution of these ionization-type smoke alarms is licensed by the U.S. Nuclear Regulatory Commission; the consumer is exempt from any licensing or requirements.** If the smoke alarm is defective in any way, do not tamper with the smoke alarm. Return the smoke alarm for servicing. (See warranty for instructions or in-warranty returns.) There will be a service charge for repairing out of warranty smoke alarms.

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.

NATIONAL FIRE PROTECTION ASSOCIATION REQUIRED INFORMATION

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 Protection Association, Batterymarch Park, Quincy, MA 02269)

CAUTION (AS REQUIRED BY THE 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.

OPERATIONAL SUMMARY

HORN	RED LED	GREEN LED	CONDITION / RECOMMENDATION
Silent	Blinks On once approx every 40-45 seconds	Stays On	**Condition:** AC Power is present. DC Power is present. **Recommendation:** None, alarm is operating properly.
Silent	Blinks On once approx every 40-45 seconds	Off	**Condition:** AC Power is not present and alarm is receiving DC Power. **Recommendation:** Check the breaker or fuse box for power. If the breaker or fuse box looks normal, call a licensed electrician for assistance.
Horn does not sound when other alarms are active or horn does not sound when interconnected alarms test	Blinks On once approx every 40-45 seconds	Stays On or Off	**Condition:** One or more alarms not responding to interconnected alarm. **Recommendation:** Press and hold the smoke alarm Test/Silence button for at least 5 seconds. If still no alarm, turn off AC Power at the circuit breaker or fuse box and disconnect the alarm from the mounting bracket and make sure the connector plug is securely attached on units that did not alarm. If still no alarm, have a licensed electrician make sure the yellow wire is not mistakenly or accidentally connected to the white (neutral) wire.
3 Beeps, 2 second pause, Repeat	Blinks On approx every 2 seconds	Stays On	**Condition:** Originating Smoke Alarm. **Recommendation:** If hazard is identified, please take all precautions if an alarm sounds by calling an Emergency Service and getting out of the home.
3 Beeps, 2 second pause, Repeat	Off	Stays On	**Condition:** Non-originating Smoke Alarm. Another interconnected smoke alarm has sensed smoke, causing all interconnected units to alarm. **Recommendation:** If hazard is identified, please take all precautions if an alarm sounds by calling an Emergency Service and getting out of the home.
3 Beeps, 2 second pause, Repeat	Blinks On approx every 2 seconds	Stays On	**Condition:** Nuisance Alarm. **Recommendation:** 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.
3 Beeps, 2 second pause, Repeat	Blinks On approx every 2 seconds	Stays On	**Condition:** Alarm has sensed smoke. **Recommendation:** Silence Feature is activated by pressing and releasing the Test/Silence button on the initiating alarm while in alarm condition. Silence mode will last for approx 8-12 minutes with the red LED blinking once approx. every 10 seconds.
Silent (alarmed previously)	Blinks On once approx every 40-45 seconds (normal operation mode) or Blinks On once approx every 10 seconds (silence mode)	Stays On	**Condition:** One alarm has sensed smoke. **Recommendation:** QUICK FIND® Alarm Origination - In an interconnected system, it is difficult to determine which alarm initiated the alarms to sound. The QUICK FIND® feature will immediately allow you to locate the originating alarm (once the alarms have stopped sounding). To initiate QUICK FIND®, press the Test/Silence button on any alarm. After releasing the button, the test sequence will sound and then stop. Then, the originating alarm will continue to sound for approx 50 seconds. In a non-interconnected installation, it is necessary to test each alarm to determine the originating alarm. Reset the originating alarm.
Silent	Blinks On once approx every 40-45 seconds (normal operation mode) or Blinks On once approx every 10 seconds (silence mode)	Stays On	**Condition:** Alarm needs to be reset due to varying conditions/ previous alarms. **Recommendation:** To Reset the Alarm, hold the Test/Silence button for approx 10 seconds. This will clear alarm origination. Reset after each smoke alarm event.
1 Chirp approx every 40 seconds	Blinks On once approx every 40-45 seconds	Stays On	**Condition:** Low Battery **Recommendation:** Check to make sure the battery activation pull tab has been completely removed, battery polarity is correct and the battery terminals are making contact with the smoke alarm contacts in the battery drawer. If chirp continues, replace the 9V battery (see User's Manual for recommended battery types).
1 Beep approx every 60 seconds	Blinks On once approx every 40-45 seconds	Stays On	**Condition:** Product End-of-Service Life signal. **Recommendation:** Replace alarm immediately. To silence signal for approx. 9 hours, press and release the test button. The alarm will sound for approx. 60 seconds while it resets. After the reset function is completed, the product end-of-service signal will be silent for approx. 9 hours and will reactivate after the silence period.

THIS PRODUCT IS LISTED TO UL STANDARD FOR SAFETY, UL217 BY UNDERWRITERS LABORATORIES, INC.

MODELS MDS107, MDS107L

PRODUCT 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 ten (10) 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.

LITHIUM BATTERY LIMITED WARRANTY

The Ultralife battery models U9VL-J and U9VL-J-P are warranted by Ultralife Corporation in this alarm ONLY and are not warranted in any other device. Submit your warranty claim through the Ultralife website www.ultralifecorp.com or call 800-332-5000.

Visit Us on the Web! **www.UsiElectric.com**

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