

ALARM MUTE

Press the TEST-MUTE button when the detector is in alarm. **1.** The Red LED will continue flash and the alarm will beep every 30 second, until the gas level has dropped to a safe level, then **2.** The LED will flash Green until the end of the Mute cycle. **3.** If dangerous gas levels return before the end of the mute cycle, the alarm will beep 4 times and return to phase 1. **4.** After 2 minutes the detector will return to normal operation (solid Green) or resound the alarm if dangerous levels of gas remain in the area.

MALFUNCTION ALARM

The microprocessor will activate the malfunction alarm when it detects a fault in the detector's operation. The LED will alternately flash Red and Green, and the sounder will beep twice every 15 seconds. The Mute switch will not function. REMOVE THE DETECTOR IMMEDIATELY AND RETURN IT FOR REPAIR OR REPLACEMENT.

LOW POWER OPERATION

This detector will operate normally down to 7 vDC. Do not operate this detector below 7 vDC.

TROUBLE SHOOTING GUIDE

| PROBLEM | CAUSE AND SOLUTION |
|---|---|
| LED OFF | 1. FAULTY POWER CONNECTIONS, REVERSE POLARITY, BAD OR MISSING FUSE OR DEAD BATTERY. |
| NO SOUND IN TEST | 1. DEFECTIVE RETURN IMMEDIATELY |
| NO RED LED IN TEST | 1. DEFECTIVE RETURN IMMEDIATELY |
| ALARMS AFTER WARM UP WITH NO GAS PRESENT | 1. CONTAMINATED SENSOR FROM AN EXTENDED STORAGE PERIOD. PRESS TEST -MUTE SWITCH. |
| RED AND GREEN LED CONSTANT ALARM NO RESET | 1. DEFECTIVE RETURN IMMEDIATELY |

LED AND SOUNDER SIGNALS

| Color | Detector Operation | Sounder |
|----------------------------|--------------------|-----------------------|
| Yellow Flashing | Warm Up Cycle | Off |
| Solid Green | Normal | Off |
| Flashing Red | Alarm | Continuous |
| Flashing Green | Mute Cycle | Off |
| Flashing Red In Mute Cycle | Alarm | Beep Every 30 Seconds |

Red and Green Alternating **Malfunction** **2 Beeps every 15 seconds**

SPECIFICATIONS

| | |
|-----------------------------|---|
| POWER SUPPLY | 12 vDC |
| OPERATIONAL VOLTAGE | 7-16 vDC |
| NOMINAL CURRENT DRAW | 46 mA @ 13.5 vDC |
| OPERATIONAL TEMPERATURE | -31° F to 150° F -35° C to 66° C |
| RELATIVE HUMIDITY | 15% to 93% |
| AUDIBLE OUTPUT | 85 dB @ 10 feet |
| VISUAL ALARM SIGNAL | Blinking Red |
| VISUAL MUTE SIGNAL | Blinking Green |
| VISUAL MALFUNCTION SIGNAL | Alternating Red - Green |
| ALARM TRIGGER | < 25% of the LEL of Propane and Methane |
| CONFIRMATION CIRCUIT | 8 Seconds |
| Alternate Case | 40-441 3" x 3.5" x 1.38" 40-442 4.8" x 3.5" x 1.5" 40-442 6.5" x 3.5" x 1.38" |
| CASE MATERIAL | Geon 3700 |
| FLAME RATING | 94 5V |
| WARRANTY | 1 Year Limited |
| TESTING LABORATORY STANDARD | Underwriters Laboratories UL 1484, Rev.2 Gas Detectors For Residential and RV Use |

LIMITED WARRANTY

LIMITED PRODUCTS WARRANTY

MTI INDUSTRIES, INC. Warrants to the original purchaser that this detector will be free from defects of material or workmanship for a period of one (1) year. If defective in original materials or workmanship and returned, delivery costs prepaid, MTI INDUSTRIES, INC., will repair or replace this product free of charge.

LIMITS OF WARRANTY

Repair or replacement is your exclusive remedy under this limited warranty or any other warranty (including any implied warranty of merchantability for a particular purpose). Any and all implied warranties or merchantability or fitness for a particular purpose is limited to the warranty period from the original date of purchase. MTI INDUSTRIES, INC., its dealers and distributors shall in no case be responsible or in any way liable for any incidental or consequential damages for any reason. Some states do not allow the limitation or exclusion of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific rights, and you may also have other rights that may vary from state to state.

WARRANTY RETURN POLICY

Warning- opening this product for any reason voids the warranty. There are no user serviceable parts inside the case. This detector requires an authorization number (RA) for repair or replacement. Call MTI for a RA number. Pack the detector carefully in a padded container. Include the RA number, an explanation of the problem, the original dated sales receipt, and your return address. Send, shipping prepaid, to: MTI Industries, Inc. 31632 N. Ellis Dr. #301 Volo, IL. 60073 Customer Service Number: 800-383-0269
www.safe-t-alert.com
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SAFE-T-ALERT™ BY MTI INDUSTRIES

PROPANE AND METHANE GAS DETECTOR

FOR RECREATIONAL VEHICLE USE

MODEL 40-441A MODEL 40-442A

USER'S MANUAL

IMPORTANT PLEASE READ CAREFULLY

This manual contains important information. Purchasers who install this detector for use by others must leave this manual with the owner.
Do not throw out.

Manual #40A96-7



SINGLE STATION PROPANE AND METHANE DETECTOR
SUITABLE FOR USE IN RECREATIONAL VEHICLES

FILE NO. 151449

IMPORTANT: Always follow the operation and safety instructions of the gas appliance manufacturer.



CONNECT ONLY TO WIRING THAT CANNOT BE TURNED OFF BY A WALL SWITCH OR GROUND FAULT PROTECTOR.

IMPORTANT: Failure to follow the installation instructions may void the warranty.

**SPECIAL FEATURES OF THE
SAFE-T-ALERT™ GAS DETECTORS**

Your Safe-I-Alert™ gas detector uses the latest microprocessor technology. This detector is UL listed as a Propane and Methane (Natural Gas) detector. Other explosive gases detected by this alarm include Acetone, Alcohol, Butane, and Gasoline all of which you may have in your Trailer, Truck Camper, Van Camper or Motorhome.

To prevent false alarms from brief “puffs” of explosive gases the detector has a recheck cycle before alarming. If high levels of explosive gases remain during the recheck cycle the detector will alarm.

WARNING **LIMITATIONS OF** **PROPANE AND METHANE GAS** **DETECTORS**

THIS DETECTOR will not work without power. Examples causing no power are: Cut lead wires, faulty circuit connection, a blown or missing fuse, improper supply (+) or ground (-) connections.

This detector will only indicate the presence of propane or methane (natural) gas at the sensor. Explosive gas may be present in other areas.

This detector may not be heard. The alarm loudness meets or exceeds regulatory standards. However, if this detector is in remote locations or behind closed doors the alarm may not be heard. Persons who are hard of hearing may not hear the alarm.

This detector is not smoke or fire detector. It is not suitable as a smoke or fire detector.

This detector is not suitable for installation in hazardous areas as defined in the National Electrical Code.

HOW TO TAKE CARE OF YOUR **DETECTOR**

To keep your detector in good working order, you must;

- **Test the detector weekly.** (See “TEST PROCEDURE”)
- **Observe the color of the indicator light** on the front of the detector regularly. (See “Operating Instructions”)
- **Vacuum the dust off the detector cover weekly,** (more frequently in dusty locations), using the soft brush attachment of your vacuum.
- **Clean the detector cover weekly.** Hand wash using a damp cloth, or paper towel. Dry with a soft cloth.
- **DO NOT SPRAY CLEANING AGENTS OR WAXES** directly onto the front panel. This action may damage the sensor cause, cause an alarm or cause a detector malfunction.

WHERE TO INSTALL GAS DETECTORS

This detector is UL® listed for installation in recreational vehicles. Install this detector near sources of a potential gas leak. Some potential sources are a furnace, water heater, stove or oven. If potential sources of a gas leak are in separated areas, MTI recommends installing a detector in each area.

CAUTION: Propane is heavier than air. For propane gas detection, install this detector no more than 20 inches off the floor.

CAUTION: Methane is lighter than air. For methane (natural gas) detection, install within 6 inches of the ceiling or on the ceiling at least 12 inches from a wall.

WHERE NOT TO INSTALL THIS GAS DETECTOR

- **BEHIND FURNITURE, DRAPES, IN CLOSETS OR AREAS THAT WILL BLOCK AIR FLOW TO THE DETECTOR.**
- **WITHIN 12 INCHES OF EXTERIOR DOORS, OPENING WINDOWS, RETURN VENTS.**
- **IN THE DIRECT AIR FLOW OF AIR VENTS.**
- **IN AN OUTSIDE WALL.**
- **TO A WALL SWITCH CONTROLLED POWER LINE, GROUND FAULT CIRCUIT OR CIRCUIT BREAKER.**

NOTE: Older homes and RVs may have little or no insulation and therefore are more drafty. Carefully consider mounting locations.

INSTALLATION INSTRUCTIONS

Power Supply 12 vDC. Recommended Wire Size 14 GA. TO 18GA. Connect the alarm to a properly fused circuit, maximum over protection device rating 15 amps. All connections must be in accordance with the National Electrical Code.

CAUTION: ONLY USE UL APPROVED CONNECTORS
DISCONNECT POWER UNTIL THE INSTALLATION IS COMPLETE


40-441A: SEE (THE WHERE TO AND NOT TO INSTALL GAS DETECTOR SECTION). Drill a 1/4-inch hole. Connect the RED (+) power lead to the fused circuit. Connect the BLACK lead to Ground (-). Fasten the detector to the wall using the two screw holes located on the front of the case. Reconnect the power supply.

40-442A: REFER TO (“WHERE TO AND NOT TO INSTALL GAS DETECTOR”). This model requires 1 1/2 inch clearance to recess the case. Cut a 4”W x 3”H hole, connect the RED (+) power lead to the fused circuit. Connect the BLACK lead to Ground (-). Fasten the detector to the wall using the two screw holes located on the front of the case. Reconnect the power supply.

OPERATION

POWER ON: When power is first applied the Yellow LED will flash for 3 minutes, while the detector is stabilizing. At the end of that time the LED will turn Green indicating full operation. If the detector has detected unsafe levels of gas it will immediately go into alarm. **Caution-** This detector cannot alarm during the 3 minute warm up cycle.

TESTING  **WARNING: DO NOT USE A CIGARETTE LIGHTER TO TEST THE ALARM.**

 **WARNING: TEST THE OPERATION OF THIS DETECTOR AFTER THE VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE PER WEEK DURING USE.**

Simply press the Test switch any time during the warm up cycle or while in normal operation. The LED should flash RED and the alarm should sound. Release the switch. **THIS IS THE ONLY WAY YOU SHOULD TEST YOUR DETECTOR. THE TEST FEATURE CHECKS THE FULL OPERATION OF THE DETECTOR. If this detector does not test properly return it immediately for repair or replacement.**

ALARM

The Red LED will Flash and the alarm will sound whenever a dangerous level of propane or methane gas is detected. The detector will continue to alarm until the gas clears or the Mute switch is pressed. See (“Procedures Take During An Alarm”)

PROCEDURES TO TAKE DURING AN ALARM

- 1. TURN OFF ALL GAS APPLIANCES, (STOVE, HEATERS, FURNACE), EXTINGUISH ALL FLAMES AND SMOKING MATERIAL. EVACUATE, LEAVE DOORS AND WINDOWS OPEN.**
 - 2. TURN OFF THE PROPANE \CNG TANK VALVE.**
 - 3. DETERMINE AND REPAIR THE SOURCE OF THE LEAK. SEEK PROFESSIONAL HELP IF NECESSARY.**
- CAUTION- DO NOT RE-ENTER UNTIL THE PROBLEM IS CORRECTED.**