

MACURCO GAS DETECTORS
GD-21
INSTALLATION & OPERATING INSTRUCTIONS
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GENERAL INFORMATION

The GD-21 is a 120VAC plug in type unit, with a self-contained alarm. The standard calibration is to 25% of LEL (Lower Explosive Level) of a mixture of Methane (natural gas) and air. The GD-21 will alarm at about 25% of LEL of Propane, Butane and LP Gas. To detect the complete list of gases on the data sheet will normally require a special calibration, for a nominal charge. However, the following gases can be detected with the standard calibration: Acetylene, Gasoline fumes and Lacquer thinners. See the GD-21 data sheet for a list of other gases that can be detected, and other technical information.

LOCATION

The unit on average can cover about 900 sq. ft. The coverage depends on air movement in the room or facility. Locate the unit high if the gas of concern is lighter than air, such as natural gas (methane). If the gas of concern is heavier than air; such as butane, propane, alcohols or gasoline; mount the detector relatively low. Extra detectors may be needed near any areas where people work or the air is stagnant.

The location selected should not be near a corner, as this can be dead air space. The location selected must also have a 120 VAC power outlet within nine feet. It is not suggested to locate gas detectors in kitchens or bathrooms, because of frequent unwanted alarms due to the normal use in those rooms of products containing combustible gases.

INSTALLATION

At the desired location, start a #6 or #8 wood screw of adequate length. Turn the screw into the wall until only 1/4 inch of the screw protrudes. Note the keyhole shaped mounting pattern on the back of the detector. Slip the larger part of this mounting pattern over the mounting screw head and allow the GD-21 to settle over the screw. Insert the plug into a 120 VAC outlet.

OPERATION

When power is first applied to the detector, it will go through a warm-up period of about two minutes. The unit has an internal delay that prevents alarms during the warm-up period. The green light will blink on and off during the two-minute delay period, and will glow brightly, continuously afterwards. The **PUSH HERE TO RESET** button resets the 2 minute delay. Once the unit is fully operational (the green light on continuously) test the unit by directing gas from an *un-lighted* butane cigarette lighter into the detector near the slot closest to the word ALARM on the decal. The buzzer will alarm loudly and the light should turn red. The GD-21 will shut off the buzzer and turn the light green automatically once the air clears. However, the **PUSH HERE TO RESET** button may be pushed to reset the two minute delay and silence the buzzer while the air clears.

The unit has a trouble signal to indicate problems in the gas-sensing element. This is a chirping sound, along with the light changing to a yellow color, to indicate your detector is inoperable. Return the unit to the factory for service. The detector should be tested regularly, about every 6 months, by using gas from an *un-lighted* cigarette lighter, as detailed above.

ALARM ACTIONS

Various fumes and gases from normal household products such as aerosol spray cans and cleaning agents can cause the GD-21 to alarm. Strong cooking odors may cause the GD-21 to alarm. The data sheet has a list of the gases that can cause alarms. If such an alarm occurs, push the **PUSH HERE TO RESET** button on the detector, which will silence the alarm for two minutes, while allowing the air to clear.

All of the above mentioned unwanted alarms are related to normal day time activities in a home, and should be of no concern if they can be easily traced to by-products of normal activities. **HOWEVER, DURING THE NIGHT WHEN THERE IS NOT NORMAL ACTIVITY TO PRODUCE FUMES, ALL ALARMS BY THE GD-21 MUST BE TREATED AS POTENTIAL EMERGENCIES.**

SENSOR POISONS

The gas sensing tip in the detector is designed with extreme sensitivity to the environment. As a result, the sensing function of the tip may be deteriorated if it is exposed to a direct spray from aerosols such as paints, silicone vapors, etc., or to a high density of corrosive gases (such as hydrogen sulfide, sulfur dioxide) for an extended period of time.

SERVICING OF UNIT

The GD-21 does not require regular maintenance. The unit uses a self-purging semi-conductor sensor that has a 7-10 year life expectancy. All maintenance and repair of products manufactured by Macurco, Inc. are to be performed at the Macurco manufacturing facility. Macurco does not sanction any third-party repair facilities.

LIMITED WARRANTY

The GD-21 gas detectors are warranted to be free from defective material and workmanship for a period of one (1) year from the date of installation. If any component becomes defective during the warranty period, it will be replaced or repaired free of charge, if the unit is returned in accordance with the instructions below. This warranty does not apply to units that have been altered or had repair attempted, or that have been subjected to abuse, accidental or otherwise. The above warranty is in lieu of all other express warranties, obligations or liabilities. **THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED TO A PERIOD OF ONE (1) YEAR FROM THE PURCHASE DATE.** Macurco shall not be liable for any incidental or consequential damages for breach of this or any other warranty express or implied arising out of or related to the use of said gas detector. Manufacturer or its agents liability shall be limited to replacement or repair as set forth above. Buyer's sole and exclusive remedies are return of the goods and repayment of the price, or repair and replacement of non-conforming goods or parts. (The Uniform Commercial Code applicable in the State of Colorado shall govern.)

RETURN INSTRUCTIONS

Call (303) 781-4062 for a Return Authorization number. Then carefully pack the gas detector with a written description of the nature of the return. Send the unit to the following address:

Macurco Inc.
3946 South Mariposa Street
Englewood, Colorado 80110

WWW.MACURCO.COM