

SENSIT[®]HXG-2

Instruction Manual

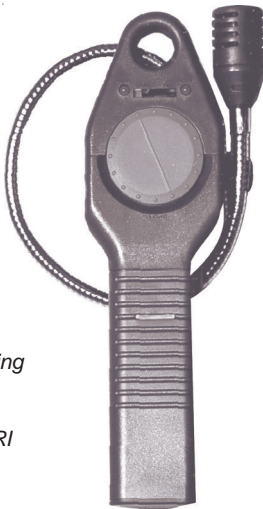
For use with combustibile gases

Gas Leak Detector



Approved
UL913,
For Class 1,
Division 1,
Groups C & D
hazardous locations
when used with
alkaline batteries.

*Meets Gas Research
Institute (GRI)
requirements for testing
residential gas
furnace heat
exchangers using GRI
procedure number
84/0162.*



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 **CAUTION**

This safety symbol is use to indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

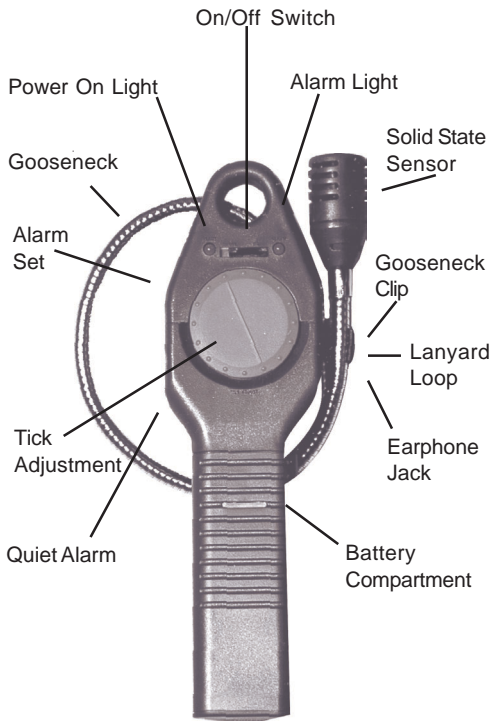
CAUTION

The **SENSIT[®] HXG-2** instrument is factory calibrated for methane in air. The alarm will indicate when the gas concentration at the sensor approaches the Alarm Set Point. The Alarm Set Point is adjustable by the user for any gas concentration within the range of 0% to 40% of the lower explosive limit. The alarm response in the presence of any other gas will be different.

SENSIT[®] is a registered trademark of J And N Associates, Inc.

PRODUCT FEATURES

SENSIT[®] HXG-2



GENERAL DESCRIPTION

The **SENSIT® HXG-2** instrument is an advanced state-of-the-art leak detector capable of detecting many combustible, noncombustible and toxic gases.

The **SENSIT® HXG-2** solid-state sensor is sensitive to most combustible and/or toxic gases. A partial list of these gases is:

Acetone, Alcohol, Ammonia, Steam, Carbon Monoxide*, Butane, Gasoline, Jet Fuel, Hydrogen Sulfide, Smoke, Industrial Solvents, Methane, Lacquer Thinners, Naphtha, Propane, Natural Gas.

* Not to be used to quantify the amount of CO present.




WARNING

This instrument cannot be used for finding low level carbon monoxide leaks in furnaces or in the home. Order a Heat Exchanger Test Kit accessory for testing furnace heat exchangers.

OPERATING TIPS

1. Turn the instrument on in a noncontaminated atmosphere. The instrument will go through a warm-up process.

2. During warm-up it is normal but not required that the ticking sound increases and the alarm indicates for a short time. While the instrument is warming up the tick rate will slowly decrease until it becomes steady. The alarm will also stop indicating as the instrument completes warm-up. The time required for this will vary depending on the duration of time since the instrument was last used.

 **CAUTION: If the instrument is in an area where detectable gases are present, the alarm may not stop.**

3. Once warm-up is complete adjust the "Tick Adjust" control to establish a slow uniform tick rate. Only after the tick rate remains steady is the instrument ready for calibrated use. To identify the presence of gas vapors or leaks listen for any change in the tick rate. If the tick rate increases, the instrument has detected the presence or location of a leak. As the level of gas increases the tick rate will increase accordingly. If the alarm is indicating, the level of gas is near or above 0.5% gas or approximately at a minimum of 10% of LEL methane. This indicates a potentially hazardous atmosphere. When the instrument alarms a flashing red light will appear and an audible warbling tone will sound.

OPERATING TIPS continued

4. To pinpoint a leak source it may be necessary to readjust the tick rate. The "Nullable Tick Rate" feature of the HXG-2 allows the rate to be slowed and reestablished even in high gas concentrations. By turning the tick adjust counterclockwise and reestablishing a slow tick rate as needed the HXG-2 will continually identify higher levels of gas thereby locating the leak source. Remember, an increase in the tick rate means you are getting closer while a decrease means you are moving further away from the leak source.

5. To continue searching for a leak while the alarm is sounding, you may choose to depress the "Quiet Alarm" button on the back of the instrument. This will silence the audible portion of the alarm and allow the user to listen to the tick rate pattern. The visual red flashing light will still be seen when the instrument is alarming even if the "Quiet Alarm" button is used. You will note that the tick rate is independent of the alarm which is calibrated to the appropriate gas concentration.

6. The earphone can be plugged into the unit if there is high background noise or the operator does not want to disturb other people. The speaker is disabled by inserting the earphone.

OPERATING TIPS continued

7. If the green light flashes or does not illuminate this is an indication that the batteries need replacement.
8. The unit will respond to some leak finding solutions (soap). Use your **SENSIT® HXG-2** instrument first.
9. If the sensor is overexposed to some gases, the unit may take an extended period of time to return to calibrated ready condition.
10. To increase battery life turn the unit to "OFF" when not in use.

BATTERY REPLACEMENT

If the **SENSIT® HXG-2** green ready light fails to operate or if it blinks and the audio does not work, the batteries need replacement.


Depress the latch using a coin and slide the battery compartment cover off. Replace the batteries with 3 fresh "C" alkaline batteries.

NOTE: When replacing batteries observe polarity markings in the battery compartment. A fresh set of alkaline batteries should operate the unit for approximately 30 hours.

CALIBRATION ADJUSTMENT

To confirm the original factory calibrated alarm set point of 0.5% methane (10% LEL methane) use calibration kit part #S0157-1 for the following procedures.

1. Turn on the unit in a gas free environment for a 10 minute warm up.
2. Attach the regulator to the calibration gas cylinder (0.5% methane). Attach the calibration adapter to the regulator, gas flow starts automatically. Immediately insert the sensor into the calibration adapter.
3. If necessary, adjust the alarm set knob slowly until the red alarm light and alarm tone activate.
4. Disconnect the calibration adapter from the regulator to conserve gas.

 **CAUTION: To verify the operation of this instrument it is necessary to apply combustible gas to the sensor head. The tick should increase and alarms may sound. To verify accuracy calibration must be performed.**

A calibration kit complete with regulator, calibration gas, calibration cup and easy to use instructions is available from your distributor or J And N Enterprises, Inc.

SPECIFICATIONS

- Power Supply:** Three "C" size alkaline batteries.
- Sensitivity:** 10 ppm methane
- Sensor:** Solid State
- Alarm:** Visual and audio at approximately 10% of L.E.L. with an absolute maximum of 40% of L.E.L. for methane. Can be calibrated for other concentrations or gases.
- Warm-up:** Approximately 1 minute
- Response Time:** < 2 seconds (to 40% L.E.L.)
- Recovery Time:** < 4 seconds (to 40% L.E.L.)
- Duty Cycle:** Intermittent
- Battery Life:** Approximately 30 hours.
- Dimensions:** 3.5" x 10" x 1.6"
- Weight:** 1.3 lbs.
- Probe Length:** 16"
- Approvals:** UL913 Intrinsically safe

OPERATION ENVIRONMENT

- Temperature:** 0-120° F
- Humidity:** 10%-90% R.H.

ACCESSORIES

- S0157-1 Calibration Kit (small)
- C0130-0.5 Replacement Cal. Cylinder
21 liter 0.5% Methane/Air

WARRANTY & REPAIR POLICY

Your **SENSIT® HXG-2** instrument is warranted to be free from defects in materials and workmanship for a period of two years after purchase (excluding sensor, calibration and batteries). If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at our option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect, or improper maintenance. A purchase receipt or other proof of date of original purchase will be required before warranty performance will be rendered. Instruments out of warranty will be repaired for a service charge. Return the unit postpaid and insured to:

J And N Enterprises, Inc.

648 W 300 N

Valparaiso, IN 46385

Phone: (219) 759-1142

Fax: (219) 759-1835

Order Number: (800) 820-6199

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

OTHER PRODUCTS

Ask about these other fine instruments from J And N.

SENSIT[®]HXG-3 - Combustible Gas Indicator

SENSIT[®] - Refrigerant Gas Detectors

SENSIT[®] GOLD - Confined Space and Leak Detection Products

SENSIT[®] GOLD CGI - Up to 4 Gas Combustible Gas Indicator

TRAK-IT[®] III CGI - Combustible Gas Indicator

GAS•TRAC[®] - Combustible Gas Detector

TRAK-IT[®] DM/DMS-CO - CO Attachments for Digital Multimeters

SAFETY

SENSIT[®] HXG-2 is approved by Underwriters Laboratories to UL913, for Class 1, Division 1, Groups C & D hazardous locations when used with alkaline batteries.

