

## SENSIT®HXG-2

Ask about these other fine instruments from J And N.

**SENSIT®HXG-3** - Combustible Gas Detector

**SENSIT®RLD** - Refrigerant Gas Detector

**SENSIT® GOLD** - Confined Space and Leak Detection Instrument

**SENSIT® GOLD CGI** - Up to 4 Gas Combustible Gas Indicator

**TRAK-IT® III CGI** - Combustible Gas Indicator

**GAS•TRAC®** - Combustible Gas Detector

**SENSIT®M 5** - Personal 5 Gas Monitor

See these instruments and others at our web site at: [www.gasleaksensors.com](http://www.gasleaksensors.com)

### Combustible Gas Detector INSTRUCTION MANUAL

Read and understand instructions before use.



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

**Warning:**  
*To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.*

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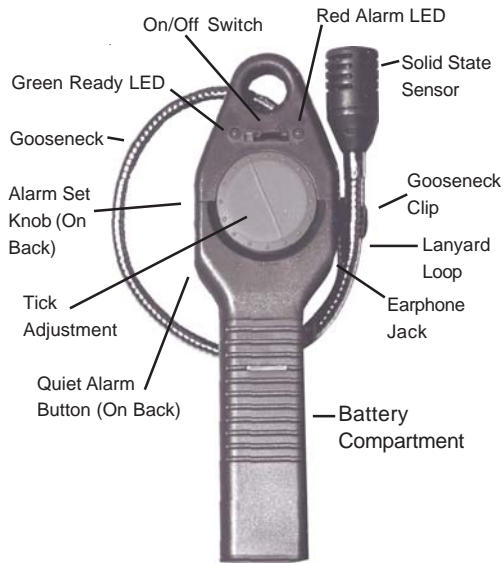
### CAUTION

This safety symbol is used 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. Visual and audible alarms will indicate when the gas concentration at the sensor approaches the alarm set point. The factory setting is 10% lower explosive limit (LEL) methane. The alarm set point is adjustable by the user for any gas concentration within the range of 0% to 40% LEL for methane. The alarm response in the presence of any other gas will be different.



## SAFETY APPROVAL

**SENSIT® HXG-2** is approved by Underwriters Laboratories to UL913, for Class 1, Division 1, Groups C & D hazardous locations when used with *Duracell™* MN1400BK batteries or equivalent alkaline cells.

## 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. It features an adjustable tick rate to pinpoint gas leaks. Additionally the **SENSIT® HXG-2** provides both visual and audible alarms to identify potentially hazardous environments.

The **SENSIT® HXG-2** solid-state sensor is sensitive to most combustible and/or toxic gases.

A partial list of these gases is:

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

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### CAUTION


**This instrument should not be used as a carbon monoxide investigative tool.**

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## OPERATION and USE

1. Turn the instrument on in a gas free environment. The instrument will go through a warm-up process.

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

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2. During warm-up, it is normal but not required, that the ticking sound increases and the alarms indicate for a short time. While the instrument is warming up the tick rate will slowly decrease until it becomes steady. The alarms 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.

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. The alarms activate as they reach 0.5% gas (10% of LEL methane) or above. This is a potentially hazardous environment.

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4. To pinpoint a leak source it may be necessary to readjust the tick rate. The “Nullable Tick Rate” feature of the **SENSIT® 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 **SENSIT® 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 LED 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.

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7. The unit will respond to some leak finding solutions (soap). Use your **SENSIT® HXG-2** instrument first.

8. If the sensor is overexposed to some gases, the unit may take an extended period of time to return to calibrated ready condition.

9. If the green LED flashes or does not illuminate this is an indication that the batteries need replacement.

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## **BATTERY REPLACEMENT**

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To change the batteries depress the latch using a coin and slide the battery compartment cover off. Replace the batteries with 3 fresh “C” alkaline batteries. A fresh set of alkaline batteries should operate the unit for approximately 30 hours.

**NOTE: When replacing batteries observe polarity markings in the battery compartment.**

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## **SENSOR REPLACEMENT**

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Prior to replacing the sensor please contact J And N Enterprises Service Department (219 465-2700).

## CALIBRATION ADJUSTMENT

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

A calibration kit complete with regulator, calibration gas and calibration adapter is available from your distributor or J And N Enterprises, Inc.

To confirm the original factory calibrated alarm set point of 0.5% methane (10% LEL methane) use calibration kit part #C0157-1 for the following procedure.

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.
5. If you are unable to verify operation or calibration, the instrument may require service. Contact J And N for instructions.

## SPECIFICATIONS

<b>Power Supply:</b>	Three "C" size alkaline batteries.
<b>Sensitivity:</b>	10 ppm methane
<b>Sensor:</b>	Solid State
<b>Alarm:</b>	Visual and audio at approximately 10% of L.E.L. methane with a maximum of 40% of L.E.L. methane. Can be calibrated for other concentrations of gases.
<b>Warm-up:</b>	Approximately 1 minute
<b>Response Time:</b>	< 1 second (to 10% L.E.L.)
<b>Alarm Time:</b>	< 6 seconds (to 10% L.E.L.)
<b>Recovery Time:</b>	< 4 seconds (to 10% L.E.L.)
<b>Duty Cycle:</b>	Intermittent
<b>Battery Life:</b>	Approximately 30 hours
<b>Dimensions:</b>	3.5" x 10" x 1.6"
<b>Weight:</b>	1.3 lbs.
<b>Probe Length:</b>	16"
<b>Approvals:</b>	UL913 Intrinsically safe

### OPERATION ENVIRONMENT

<b>Temperature:</b>	0-120° F
<b>Humidity:</b>	10%-90% R.H.

## ACCESSORIES AND PARTS

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### Standard Accessories (Included)

Hard Carrying Case PHXG0260

Instruction Manual I0108

Earphone P014091

Wrist Strap PHXG0350

Set of "C" Alkaline Batteries

### Optional Accessories and Parts


Calibration Kit C0157-1

(21 Liter Cylinder 0.5% Methane/Air,  
Regulator, Cal. Adapter, Screwdriver)

Replacement Cal. Cylinder C0130-0.5  
(21 Liter 0.5% Methane/Air)

Sensor P017005

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 **CAUTION:** This instrument must be repaired only by a factory authorized repair technician.

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## WARRANTY & REPAIR POLICY

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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.  
ATTN: Service Dept.  
851 Transport Drive  
Valparaiso, IN 46383

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