

## **Warranty and Repair Exchange Policy**

Your GAS•TRAC® model NGX-6 instrument is warranted to be free from defects in materials and workmanship for a period of 1 year after purchase (excluding calibration, batteries and sensor). If, within the warranty period, your instrument should become inoperative from such defects, a no-charge repair or replacement will be made to the original purchaser. This applies to all repairable instruments which have not been opened, tampered with or damaged. Repairable instruments out

of warranty will be repaired for a service charge by returning unit postpaid and insured to:

### **SENSIT TECHNOLOGIES**

851 Transport Drive

Valparaiso, IN 46383

(800) 820-6199

Phone: (219) 465-2700

Fax: (219) 465-2701

[www.gasleaksensors.com](http://www.gasleaksensors.com)

J And N Enterprises, Inc. 6/97 Revised 7/10.

# **GAS•TRAC® INSTRUCTION MANUAL**

MODEL NGX-6



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### CAUTION

The GAS•TRAC® model NGX-6 is factory calibrated for methane in air.

The alarm will be set off when the methane concentration in the air approaches 40% of the lower explosive limit. The level indication and alarm response in the presence of any other gas will be different.

## Accessories

### Included with each Instrument

- 360-00010 Carrying Pouch
- 360-00018 Wrist Strap
- 199-00023 Earphone
- 365-00005 Extension Adapter
- 360-00015 Lanyard Loop
- 750-00001 Instruction Manual

### Replacement Cylinders

- 315-080001 21 liter 0.1% Methane/Air
- 315-080013 21 liter 2.0% Methane/Air
- 315-080012 21 liter 2.5% Methane/Air
- 315-080014 21 liter 3.0% Methane/Air
- 315-180001 221 liter 0.1% Methane/Air
- 315-180017 221 liter 2.0% Methane/Air

### Optional Accessories

- 881-00010 Calibration Kit
- 881-00065 Quick Check Kit (2%  $\text{CH}_4$ /Air)
- 883-00002 30" Non-Conductive Probe
- 883-00001 Arson/Leak Survey Probe
- 873-00001 Hydrocarbon Filter Kit (with 6 refills)
- 873-00002 Hydrocarbon Filter Refill Tubes (6 each)
- 880-00008 Adapter for using Regulator with 221 liter Cylinders
- 880-00009 Calibration Kit Regulator with Cupule Assembly
- 880-00032 Calibration Regulator only
- 880-00028 Calibration Cupule only

## Specifications

Power Supply: Two "D" and two "AA" alkaline batteries

Sensitivity: 100 ppm methane

Warm-Up Time: Approximately 1 minute

Sensor: Solid-State Taguchi

Alarm: Visual and audio at approximately 40% of L.E.L. for methane. Can be calibrated for other gases.

Dimensions:  $1\frac{5}{8}$ " x  $2\frac{1}{2}$ " x  $14\frac{5}{8}$ "

Duty Cycle: Intermittent: Unit automatically shuts off after 15 minutes but may be turned back on immediately.

Battery Life: Approx. 8 hours

Weight: 2 pounds

Probe Length: 16 in.

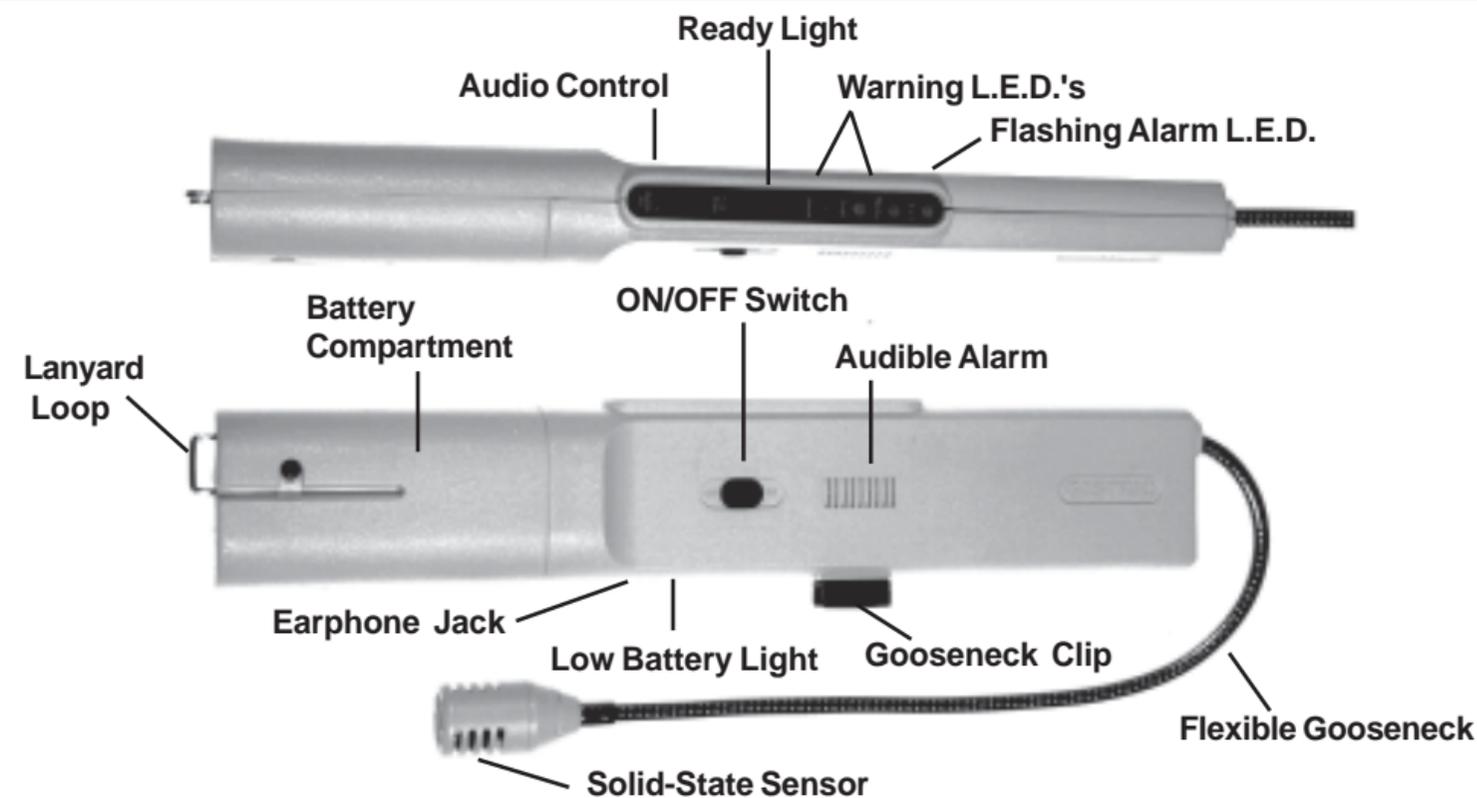
Response Time: Less than 2.5 seconds (to 40% L.E.L.)

Recovery Time: Less than 4 seconds (from 40% L.E.L.)

Operating Temp.: 32° - 122° F

Humidity: 10% - 90% R.H.

## Product Features of the GAS •TRAC®



## General Description

The GAS•TRAC® instrument is an advanced state-of-the-art leak detector capable of detecting combustible gases.

Approved:  
Performance and intrinsically safe for CL1, Division 1, Group C and D, Haz. LOC. T4 when used with *Duracell* MN1300 and MN1500 or *Procell* PC 1300 and PC 1500 cells.

Approval is limited to methane and other combustible gases when calibrated in that specific gas at 40% or less of its L.E.L prior to use with that gas only.

The solid-state sensor is sensitive to most combustible and/or toxic gases.

These gases include:

Acetone	Industrial Solvents
Alcohol	Jet Fuel
Ammonia	Lacquer Thinner
Benzene	Methane
Ethane	Naphtha
Ethylene	Propane
Gasoline	Refrigerants
Smoke	Hydrogen Sulfide
Steam	



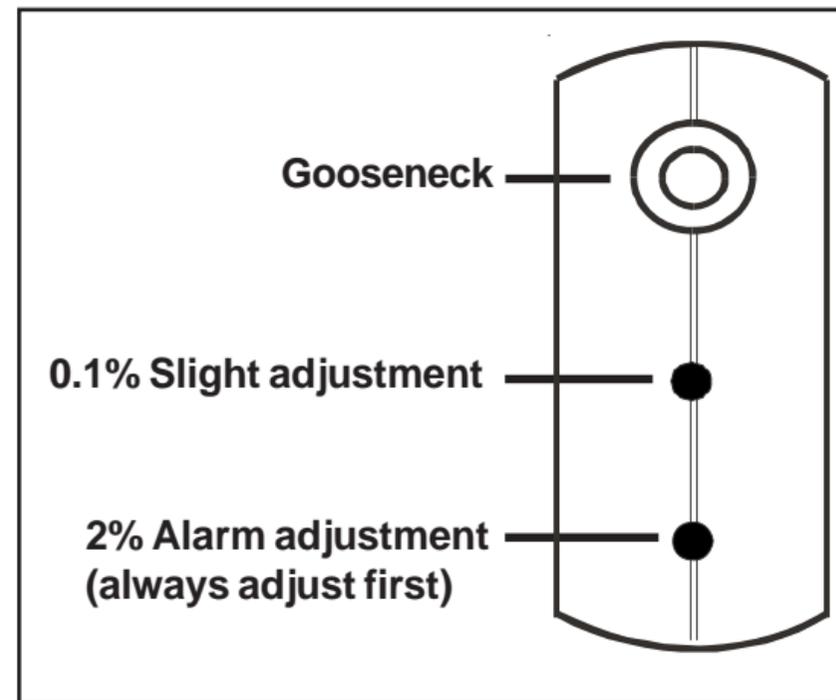
## Calibration - continued

### Warning:

The methane/air mixture must be stationary because air movement across the sensor will cause inaccurate calibration.

Always adjust the 2% "ALARM" light BEFORE adjusting the 0.1% "SLIGHT" light.

If the unit cannot be calibrated using this procedure, it should be returned to the factory for repair.



## Calibration

### Calibration Check:

The calibration should be checked daily. Turn on the unit and after the "READY" light comes on, place the sensor in a closed container having a stationary 2.5% methane/air mixture. The "ALARM" light should flash on and off within 10 seconds.

### Calibration Adjustment:

Warm-Up:

1. Turn on unit for 10 minutes of warm-up.

### Alarm adjustment:

2. Insert the sensor into a clean, closed container filled with a 2% dry methane/air mixture.
3. Rotate the 2% alarm adjustment until

the "ALARM" light just comes on.

4. Remove the sensor from the gas for 1 minute.

### Slight adjustment:

5. Repeat step 2 using 0.1% dry methane/air mixture.
6. Rotate the 0.1% slight adjustment until the "SLIGHT" light just comes on.
7. An alternate method of adjusting the "SLIGHT" light is to rotate the 0.1% slight adjustment until the "SLIGHT" light just comes on in room air then back off  $\frac{1}{8}$  turn so that the green "READY" light is on. This will approximate 0.1%.

## Operating Tips

1. Turn the instrument on in a non-contaminated atmosphere by moving the "ON/OFF" slide switch to "ON".
2. During warm-up it is normal but not required that the L.E.D.s individually light in sequence from the green "READY" light to the red "ALARM" light, then more slowly sequence back until the green light remains on. The time required for this could take several minutes depending on the duration of time since the instrument was last used.  
NOTE: If the instrument is in an area where any detectable gases are present, the "READY" L.E.D. may not come on. The unit will still detect any higher gas levels in a normal manner.
3. Only after the "READY" light remains

on is the unit ready for calibrated use. The L.E.D. labeled "SLIGHT" will light when approximately 0.1% gas is detected. As the level of gas increases, the "MEDIUM" L.E.D. will come on at approximately 1% gas, followed by the flashing "ALARM" light indicating a potentially hazardous atmosphere at approximately 2% gas. When the alarm light is flashing, an audible warbling sound is also heard.

4. To pinpoint a leak source, adjust the "TICK RATE" control for the slowest uniform ticking sound. The tick rate will then vary, corresponding to the change in gas concentration detected. The tick rate is independent of the lights and alarm which are calibrated to appropriate gas concentrations.

## Operating Tips - continued

5. The earphone can be plugged into the unit if there is high background noise or the operator does not want to disturb other people.
6. The speaker can be disabled by turning the "TICK RATE" knob toward the "AUDIO OFF" position or inserting the earphone.
7. The unit will automatically turn off after approximately 15 minutes to conserve battery life. To turn the unit on, just slide the switch to "OFF" and then back to "ON".
8. If the L.E.D.s do not light or go out, this is an indication that the batteries need replacement. There is a low battery light located near the earphone jack. If this light is on the batteries should be replaced.

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9. The unit will respond to some leak-finding solutions (soap). Use your GAS•TRAC® instrument first!
10. If the sensor is overexposed to some gases, the unit may take an extended period of time to return to "READY".

### BATTERY REPLACEMENT:

If the L.E.D.s fail to light, the batteries need replacement. Loosen the battery compartment screw and replace the batteries with 2 fresh "D" size and "AA" size alkaline batteries.

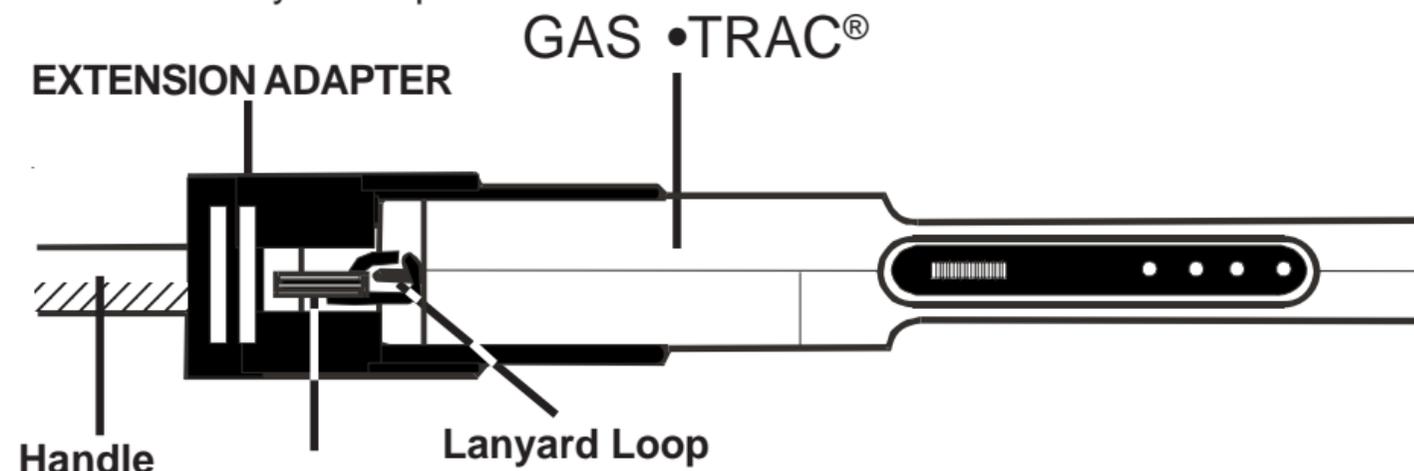
NOTE: When replacing batteries observe polarity markings in the battery compartment. A fresh set of alkaline batteries should operate the unit for approximately 8 hours.

## Operating Tips - continued

### EXTENSION ADAPTER:

1. Slide the extension adapter firmly into the grooves in the handle of the instrument. The slot on the extension adaptor must fit over the lanyard loop.
2. Rotate the lever to lock the extension adapter onto the lanyard loop.

3. A paint roller type of extension handle or a broom handle can now be screwed into the extension adapter. Be sure the handle fits firmly into the extension adapter before using the instrument.



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