# **INSTRUCTION MANUAL**



### **Combustible Gas Leak Detector**





ENS 851 Transport Drive • Valparaiso, IN 46383 Technologies 219.465.2700 • www.gasleaksensors.com

# FOR YOUR SAFETY

NOTICE: A CAUTION: This safety symbol is used to indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

▲ **Warning:** To prevent the risk of ignition of flammable atmospheres, batteries must only be changed in an area known to be non-hazardous.

Do not mix batteries of different age or type.

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

## CONTENTS

### Preparation

For Your Safety	ii
Parts and Accessories	4
General Description	5
Product Specifications	6
Product Features	7

## Operation

Preparation	8
Operation and Use	9-10
Battery Replacement	11-12
Operation Check	13
Sensor Replacement	14

Warranty	Back	Cover
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## PARTS AND ACCESSORIES

### **Standard Accessories (Included)**

Carrying Pouch	360-00002
Instruction Manual	750-00043
Alkaline Batteries	310-00004

### **Optional Accessories / Parts**

Sensor

375-2611-00

## **GENERAL DESCRIPTION**

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

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

A partial list of these gases is:

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

**CAUTION** This instrument is not to be used as a carbon monoxide investigative tool or to quantify any gas concentration.

## SPECIFICATIONS

### **PRODUCT SPECIFICATIONS**

Power Supply:	3 "C" Alkaline Batteries
Sensor:	Solid State
Sensitivity:	20 ppm Methane
Warm up:	Approx. 1 Minute
Response Time:	Instantaneous
Duty Cycle:	Continuous
Battery Life:	Approx. 30 Hours
Size:	3.5" x 10" x 1.6" (89 x 254 x 40 mm)
Weight:	2.4 lbs. (1.1 kg)
Operating Temp.:	0 to 120° F (-20 to 50° C)
Probe Length:	16"
Approvals:	UL913 Intrinsically Safe



**SENSIT**® **TKX** is approved by Underwriters Laboratories to UL913, for Class I, Division 1, Groups C & D hazardous locations when used with alkaline batteries.

## **PRODUCT FEATURES**



## PREPARATION

1. Depress the locking tab on the front of the battery compartment cover with a coin or flat object and pull the battery sleeve handle away from the top of the instrument.

2. Place three (3) approved batteries into the battery compartment. BE SURE TO OBSERVE AND FOLLOW THE POLARITY MARKING on the inside of the battery holder for proper battery installation. The instrument will not function with improperly installed batteries.

3. Replace the battery compartment cover pushing it in place until the locking tab snaps into position. Check to be sure the battery compartment cover is secure to the instrument body by firmly pulling the handle away. The handle will remain in place if cover is properly in place.

# **OPERATION AND USE**

1. Turn the unit on in an uncontaminated / gas free environment by moving the switch from the "OFF" to the "ON" position.

2. The green ready LED will illuminate if there is ample battery power. The red LED may flicker and the tick may sound during the warm up. To silence the tick, rotate the tick wheel fully counterclockwise.

3. Adjust the "TICK ADJUST" by rotating it in a clockwise direction until a uniform tick begins to sound. A uniform tick rate indicates a fully warmed up instrument. The red LED will flash at the same time the tick sounds.

4. Approach suspected leak areas with the sensor until the tick begins to increase. When the tick increases do not move the sensor from the suspected leak area, rotate the tick adjust slightly counterclockwise to slow the ticking sound and continue to approach the leak. Continue to use this method to pinpoint the leak.

REMEMBER: An increase in tick indicates you are approaching a leak, a decrease in tick indicates you are moving away.

# **OPERATION AND USE**

5. If the green LED does not illuminate or blinks, the alkaline batteries must be replaced.

6. If the instrument does not perform or it has been damaged, test the instrument by following the "operation check" procedure in this manual.

### **Battery Replacement**

▲ **Warning:** To prevent the risk of ignition of flammable atmospheres, batteries must only be changed in an area known to be non-hazardous.

If the green LED fails to illuminate, the batteries need replacement.

1. Depress the locking tab on the front of the battery compartment cover with a coin or flat object and pull the battery sleeve handle away from the top of the instrument.

2. Remove the spent batteries and place three (3) approved batteries into the battery compartment. BE SURE TO OBSERVE AND FOLLOW THE POLARITY MARKING on the inside of the battery holder for proper battery installation. The instrument will not function with improperly installed batteries.

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### **Battery Replacement**

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3. Replace the battery compartment cover pushing it in place until the locking tab snaps into position. Check to be sure the battery compartment cover is secure to the instrument body by firmly pulling the handle away. The handle will remain in place if cover is properly in place.

A fresh set of alkaline batteries should operate the instrument for approximately 30 hours.

# **OPERATION CHECK**

First follow steps 1, 2 and 3 (page 10) in the Operation and Use section. Then expose the sensor to a known gas source such as an unlit butane lighter. The tick should increase when the gas is applied. The tick will decrease when the gas is removed.

If the unit fails to respond, the sensor may need replacing or the unit may need to be sent in for repair (see below).

**CAUTION** This instrument shall only be repaired by a SENSIT factory authorized repair technician.

# SENSOR REPLACEMENT

- 1. Turn the unit off
- 2. Pull off the sensor cap
- 3. Unplug the old sensor and discard
- Line up reference tab on side of sensor with reference mark on sensor circuit board and plug in sensor
- 5. Replace sensor cap
- 6. Turn on unit and perform "Operation Check"

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## WARRANTY

Your **SENSIT®TKX** instrument is warranted to be free from defects in materials and workmanship for a period of one year after purchase (excluding sensor and alkaline 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 may be required before warranty performance will be rendered. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Instruments out of warranty will be repaired for a service charge. Return the unit postpaid and insured to:

SENSIT Technologies 851 Transport Drive Valparaiso, IN 46383

Phone: (219) 465-2700 888 4 SENSIT (473-6748) Fax: (219) 465-2701

### MADE IN THE USA

WITH GLOBALLY SOURCED COMPONENTS

SENSIT TKX Instruction Manual Part # 750-00043

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