INSTRUCTION MANUAL

SENSIT® TKX

Combustible Gas Leak Detector

Read and understand instructions before use.

Model with
alkaline battery shown.

CLASSIFIED UL® 7WA6

Approved UL913, For Class I, Division 1, Groups C & D hazardous locations when used with alkaline batteries and approved Lithium Ion (LiON) rechargeable battery.

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

SENSIT Technologies
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219.465.2700 • www.gasleaksensors.com

FOR YOUR SAFETY

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

⚠ **Warning:** For models powered by alkaline batteries - To prevent the risk of ignition of flammable atmospheres, batteries must only be changed in an area known to be non-hazardous.

For models powered by alkaline batteries - Do not mix batteries of different age or type.

⚠ **Warning:** For models with built-in LiON rechargeable batteries - To prevent the risk of ignition of flammable atmospheres, batteries must only be charged in an area known to be non-hazardous.

⚠ **Warning:** For models with built-in LiON rechargeable battery - Do not attempt to remove the rechargeable battery. This battery is not intended to be removed by the end user.

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

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PARTS AND ACCESSORIES

Standard Accessories (Included)

Carrying Pouch	360-00002
Instruction Manual	750-00043
Alkaline Batteries*	310-00004
Wall Charger (US)**	871-00050

Optional Accessories / Parts

Sensor	375-2611-00
Wall Charger (International)**	871-00049

* for models powered by alkaline batteries
** for models powered by the LiON rechargeable battery

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

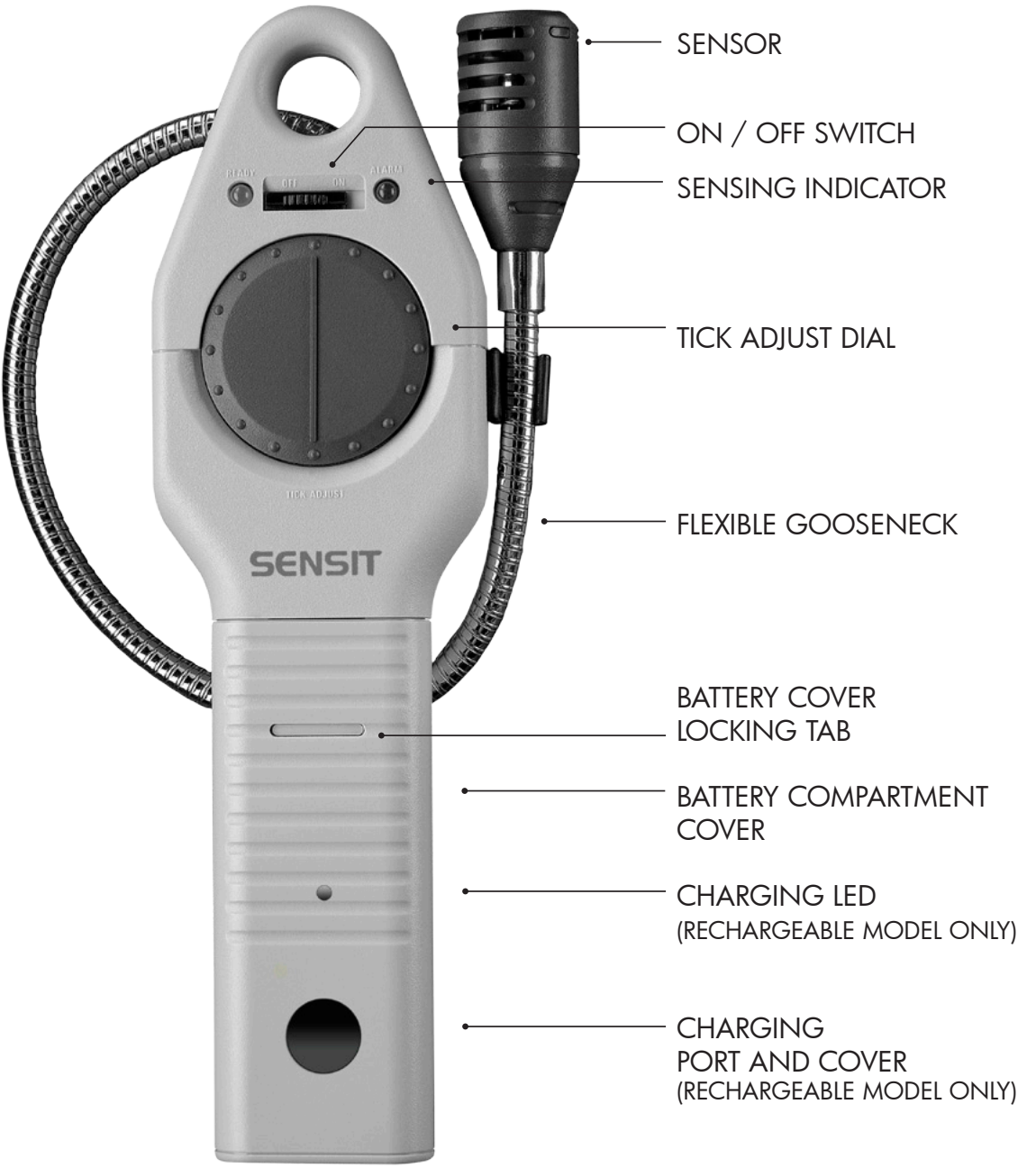
PRODUCT SPECIFICATIONS

Power Supply:	3 “C” Alkaline Batteries / Built-in rechargeable battery
Sensor:	Solid State
Sensitivity:	20 ppm Methane
Warm up:	Approx. 1 Minute
Response Time:	Instantaneous
Duty Cycle:	Continuous
Battery Life:	Approx. 30 Hours Alkaline
	Approx. 20 Hours LiON
Size:	3.5” x 10” x 1.6” (89 x 254 x 40 mm)
Weight:	2.4 lbs. (1.1 kg) Alkaline
	2.0 lbs. (0.9 kg) LiON
Operating Temp.:	0 to 120º F (-20 to 50º C)
Charging Temp.:	32 - 104º F (0 - 40º C)
Probe Length:	16”
Approvals:	UL913 Intrinsically Safe

CLASSIFIED UL 7WA6

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

PRODUCT FEATURES



Model with
Rechargeable Battery Shown

PREPARATION

ALKALINE BATTERY POWERED MODEL

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.

PREPARATION

LiON RECHARGEABLE BATTERY MODEL

For safety during shipping, the TKX with LiON rechargeable battery has been packaged with a special label covering the ON/OFF Switch to insure the device does not turn on during shipment. This label must be removed before the TKX can be powered on.

Follow the procedure in the section titled “Battery Charging” (page 14) to perform an initial charge to the battery.

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 or the rechargeable battery must be recharged.

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

BATTERIES

Battery Replacement
Alkaline Battery Powered Devices

⚠ **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. Removed 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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BATTERIES

Battery Replacement
Alkaline Battery Powered Devices

(CONTINUED)

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.

BATTERIES

Battery Charging LiON Rechargeable Battery Powered Devices

If the green LED next to the ON/OFF switch blinks or fails to illuminate on the instrument, the battery needs recharging.

> ⚠ **Warning:** To prevent the risk of ignition of flammable atmosphere, recharging the battery must only be completed in an area known to be non-hazardous.

Recharge the battery only at a temperature between 32 and 104 ºF (0 – 40 ºC)

1. Remove the Charging Port Cover. (Note: this cover is tethered to the TKX housing. Care should be taken not to pull the end of the tether completely out of the Charging Port Hole.)

2. The charging connection should be visible through the charging port hole. Insert the plug from the approved battery charger that was provided with your TKX instrument.

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BATTERIES

Battery Charging LiON Rechargeable Battery Powered Devices

(CONTINUED)

3. The charging LED will illuminate red to indicate that the battery is charging and green to indicate a fully charged battery. Charging may take up to 6 hours.

4. When charging is complete, remove the charger plug and replace the charging port cover. The instrument will operate for approximately 20 hours continuously on a full charge.

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

4. 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”

NOTES

NOTES

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

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

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