

# **eL-320**

# **CLI020202**

**Combustible Gas  
Leak Detector**

**User's Guide**



Congratulations on the purchase of the **AccuTools™ eL-320 Combustible Gas Leak Detector**, the most technologically advanced of its kind. The **eL-320's** low power requirements, small size and high sensitivity combine to create a tool which is easy to handle and ultra effective at locating even the most difficult-to-find leaks.

The **eL-320's** long life sensor will detect concentrations of combustible gases as low as 5 ppm. It is sensitive to all combustible gases.

The **eL-320** also features a low sensitivity mode, enabling quick and easy location of large combustible gas leaks.

### TECHNICAL DATA

Dimensions	7.25" x 2.25" x 1.5" (19 cm x 5.7 cm x 3.8 cm)
Weight	7 oz. (190 grams)
Batteries	2 x 1.5V 'AA' Alkaline Batteries (3 VDC)
Battery Life	11 hours
Sensitivity	Less than 50 ppm (Propane, Iso-Butane, Methane)
Sensor lifetime	> 1 year normal use
Operating temperature	32 – 122°F (0 – 50°C)
Warm up time	25 seconds to 1.5 minutes
Calibration	Auto
Response time	5 seconds
Reset time	5 seconds or more depending on gas concentration
Probe length	12" (30 cm)

#### Gases Detected

Propane, Methane, Natural Gas, Iso-Butane, Acetone, Hexane, Acetylene, Benzene, Butane, Ethanol, Ethylene Oxide, Gasoline, Hydrogen, Industrial Solvents, Methanol, Paint Thinners, Naptha etc.

### INSTRUCTIONS

1. Move the **eL-320** to a fresh-air environment. Press the button to turn the unit on.
2. The LED will flash rapidly for a period of time (see **WARM-UP TIME**, below) to indicate warm-up and auto-calibration, afterwards the unit will begin beeping and flashing green.
3. Unit turns on in the high sensitivity level, which is preferred for most small leaks. To operate the unit in the low sensitivity level, press the button twice (double-click like a computer mouse). The LED will fade from green to red and a sweeping sound effect of high to low pitch will be heard. This low sensitivity mode is useful for pinpointing very large gas leaks.
4. Double click again to change back to high sensitivity.
5. Move the probe towards a suspected gas leak at a rate of less than 1 inches (25 mm) per second, no more than ¼ inch (5 mm) away from the suspected source.
6. If a leak exists, the sound will increase in rate and pitch and the LED will start flashing rapidly.
7. Alarms caused by very large leaks may take a long time to clear. If this is the case, switch to the low sensitivity mode as detailed in (3) above.
8. To turn the **eL-320** off, press and hold the button for 3 seconds.

### WARM-UP TIME

The warm-up time for the **eL-320** will range between 25 seconds and 1.5 minutes. Each sensor has different warm-up characteristics that change with use over the life of the sensor. The **eL-320** has built-in intelligence that recognizes sensor differences and adjusts the warm-up time automatically for maximum sensitivity and stability.

### MISSING/DAMAGED SENSOR ALARM

If the sensor is damaged, a sweeping alarm and a red-green flash will indicate the problem.

### BATTERY INDICATOR/LOW BATTERY SHUTDOWN

A flashing LED during normal operation also reflects the battery level:

- Green: Batteries are fresh.
- Orange: Batteries are low and should be changed.
- If the batteries are nearly empty, the LED will turn solid red and a two-tone alarm will be noted for 5 seconds, before **eL-320** will power itself off.
- If the unit is left on unattended, it will automatically turn off after about 5 minutes to conserve batteries.

### RECALIBRATION

When the **eL-320** is turned on, the unit automatically calibrates the sensor for maximum sensitivity. Occasionally, the signal from the sensor may drift (especially if moving from one location to another where the ambient humidity changes), causing a continuous alarm that will not clear. In this case, simply power the unit off and on again, or use the following recalibration procedure:

To recalibrate the unit:

1. Move the unit away from any suspected leaks and into fresh air.
2. Quickly press the button four (4) times. This must be done within one second.
3. The LED will flash rapidly for about 10 seconds, indicating recalibration.
4. The unit will return to normal operation in the high sensitivity mode.

### BATTERY INSTALLATION AND REPLACEMENT

1. Turn the power off.
2. Remove the battery cover from the back of the instrument by loosening the battery cover screw and lifting the battery cover off.
3. Insert 2 size 'AA' alkaline batteries, observing proper battery polarity.
4. Replace battery cover and tighten battery cover screw.

### SENSOR

A **eL-320** sensor should last many hundreds of hours of continuous operation. A failed or failing sensor will be indicated by a continuous “siren” sound. In addition, it is recommended that the sensor be replaced yearly for optimum performance.

### SENSOR REPLACEMENT

In either case, occasional replacement of the sensor is necessary:

1. Turn the power off.
2. Remove the sensor cap by pulling it from the end of the probe.
3. Pull the old sensor from the socket.
4. Install the new sensor. Note that the sensor package has a tab that needs to be aligned with a slot on the sensor socket.
5. Install the sensor cap by pushing it fully over the sensor.

#### Replacement sensor

Part Number **ELS-3**

### MAINTENANCE

The EL-320 should provide years of service with little maintenance aside from changing batteries and sensors. The case may be cleaned with a shop towel moistened with water and a mild detergent. Do not use solvent of any kind.