

GLD/450plus

Combustible Gas Leak Detector



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INTRODUCTION

Please read these instructions fully before using the GLD/450PLUSplus.

The GLD/450plus is powered by two AA batteries. Take care to ensure the batteries are inserted correctly. When replacing batteries please dispose of used batteries in accordance with local regulations.

The GLD/450plus will enable the operator to **pin-point small combustible gas leaks**. It does not MEASURE gas levels

Do not use the GLD/450plus as a personal safety monitor.

Take extreme care when using the GLD/450plus, especially when gas is detected. If in any doubt, open doors and windows to ventilate rooms under test, ensure people are not at risk and call the Emergency Service Provider.

The leak detector operation:

Warm up:

Switch the GLD/450plus ON in **fresh air**, (push the slide switch away from you). All 3 LEDs will briefly illuminate and the unit will bleep for approximately 1 second.

The LEDs will then cycle for approximately 20 seconds to indicate the warm-up / reset period as the sensor stabilises.

When the warm up / reset period is complete all 3 LEDs will briefly illuminate and the unit will bleep for approximately 1 second.

Normal operation:

The Green LED will remain illuminated if the batteries have sufficient power to run the GLD/450plus. If the Green LED is not illuminated the batteries in the KANE425/450 must be replaced.

In fresh air the unit will bleep about twice a second and the Yellow LED will also flash.

If gas is detected the rate of bleeping and Yellow LED flashing will increase.

The Red LED will illuminate at higher levels of gas and the bleep rate will increase to become almost continuous.

To pin-point a gas leak:

After completing the warm up period in **fresh air**, move the tip of the GLD/450plus's "wand" towards the suspected gas leak. The rate of bleeping and LED flashing will increase as the concentration of the gas increases, thereby leading you to the gas leak.

If the Red LED is illuminated and the bleeping is continuous before you have pin-pointed the gas leak, you must reset the GLD/450plus in this concentration of gas. To do this switch the GLD/450plus OFF, then back ON and wait for 20 seconds to allow the sensor to reset itself in this concentration of gas. You can then continue to pin-point the gas leak.

Tips:

If the initial bleep rate does not settle to about twice a second, switch off and back on to allow additional re-setting time.

The unit may be reset at any time by switching off and back on.

The unit will detect methane and most other "HC" gases down to low ppm levels.

The unit will respond to some leak detection fluids. Use the GLD/450plus first!

The unit is intended for use in sheltered areas or indoors as severe draughts may cause (temporary) false indication.

Avoid contamination by water or dirt and do not allow any reactive chemicals etc. to come in to contact with the sensor.

Specifications

Power Supply :	2 x AA alkaline batteries
Sensor :	Solid state semi conductor
Sensitivity :	<50ppm methane
Indicators :	Audible : Variable tic rate Visual : Flashing multicoloured LEDs
Warm-up :	20 seconds
Response Time :	<1 second
Duty Cycle :	Continuous
Battery Life :	5 hours typical use
Dimensions :	Handle = 190mm long Probe = 180 mm long
Weight :	Approx. 100gm
Operational Range :	0-40°C , 10% to 90% RH non-condensing

Gases detected include:

Acetone	Butane	Industrial Solvents	Naphtha
Alcohol	Ethylene	Jet Fuel	Natural Gas
Ammonia	Gasoline – Petrol	Lacquer Thinners	Propane
Benzene	Hydrogen	Methane	Toluene

ELECTROMAGNETIC COMPATIBILITY

The European Council Directive 89/336/EEC requires that electronic equipment does not generate electromagnetic disturbances that exceed defined levels and has an adequate level of immunity to enable it to be operated as intended. The specific standards applicable to this product are detailed in the appendices.

Since there are many electrical products in use that pre-date this Directive and may emit electromagnetic radiation in excess of the standards defined in the Directive there may be occasions where it would be appropriate to check the analyser prior to use. The following procedure should be adopted:

- Go through the normal start up sequence in the location where the equipment is to be used.
- Switch on all localised electrical equipment that might be capable of causing interference.
- Check that performance is as expected. (A level of disturbance in the performance is acceptable). If not adjust the position of the instrument to minimise interference or switch off, if possible, the offending equipment for the duration of the test.

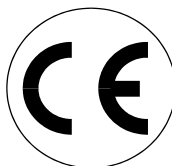
At the time of writing this manual (December 2006) there is no awareness of any field based situation where such interference has ever occurred and this advice is only given to satisfy the requirements of the Directive.

Protection Against Electric Shock

(in accordance with EN 61010-1 : 1993)

This instrument is designated as Class 3, SELV.

ELECTROMAGNETIC COMPATIBILITY



This product has been tested for compliance with the following generic standards:

EN61000-6-3
EN61000-6-1

and is certified to be compliant

Specification
EC/EMC/KI/GLD/450PLUS/001 details the specific test configuration, performance and conditions of use.