# GASEEKER OPERATING GUIDE

## QUICK GUIDE

**TURN ON -** Press ‘On’, press ‘Info’ button to silence alarm, green LED flashes and display will show gas levels. Pump starts.
**ALARM (if requested with order) –** Alarm sounds and red LED flashes. The word ALARM flashes next to the hazardous gas.
**RESET ALARM –** Press ‘Info’ button.
**BATTERY LOW –** Green LED flashes quickly, the sounder frequency increases and a warning is flashed on the display. Use charger to charge instrument.
**BACKLIGHT** – Press centre light button.

## FULL OPERATION

### SWITCH ON

Press On – Gaseeker will display warm up sequence.
If calibration is due, Gaseeker informs user at this stage.

A well charged battery shows 5.8V and over. Below 5.3V needs immediate charging.

The red alarm LED will flash and the alarm will sound. Pressing the Info button will silence this.

The pump starts and after 5 seconds Gaseeker will Auto-zero, if user confirms a clean air condition.
- Press ‘On’ button if in clean air.
- Press ‘Info’ button if unsure or not in clean air.

The instrument is now ready for use.

### BASIC OPERATION

The green ‘Power’ LED flashes intermittently accompanied by a beep from the sounder to give confidence to the user that all is as it should be.

All gas readings are displayed simultaneously.

Any alarms (if requested) may be muted by pressing the ‘On’ button. The message ‘MUTED’ will flash next to the reading.

If an alarm is activated it may be reset by pressing the ‘Info’ button once the reading has dropped below the alarm threshold.

**PUMP**
The internal pump, when used in conjunction with the flow-head and sampling tube, provides a consistent flow-rate and enables the Gaseeker to monitor inaccessible atmospheres.

If the flow is blocked for any reason, the pump is automatically stopped, and the warning message 'PUMP FLOW FAIL' appears on the display. Attend to the blockage and then restart the pump by pressing the 'Info' button.

On increasing the length of the sample tube, the response time will be affected. Add approximately 1.5 seconds per metre of sample tube for gas to reach the instrument (4mm I.D. tube). Be careful not to suck water or dust into the instrument, and avoid kinking the sample tube. Use the filter/water trap provided where necessary.

**BACKLIGHT**
Press the light button to turn the display backlight on or off. It will automatically turn off after 30 minutes.

**STATUS SCREENS**
If the 'Info' button is pressed, the instrument displays a series of status screens, showing the following information in sequence each time the button is pressed.

- Date and Time and Elapsed time from switch-on
- Serial number and cal due date
- Alarm 1 settings

If the button is not pressed for 20 seconds the instrument will return to the main gas reading screen.

**SWITCHING OFF**
Press the 'On' and 'Info' buttons simultaneously.

**BATTERY CHARGING**
The confidence blip will sound a 'double blip' in low battery situations.

The built-in battery pack consists of a rechargeable lead acid battery pack. It has sufficient capacity to power the instrument for around 9 hours. Full recharge from flat is accomplished in 4-6 hours.

Using the Triple Plus Charging Unit, locate the instrument (do not switch it on) in the charger housing and observe that the charging indicator LED glows. A red LED indicates initial fast charge. As the battery approaches full charge, the current drops to a trickle rate and the LED switches to green. An instrument may be left on trickle charge indefinitely, or removed for use.

A vehicle lighter socket for DC input to the charger is also available.

**If the instrument is to remain unused for a length of time, it should be charged prior to the period of storage.**

**TROUBLESHOOTING GUIDE**

| SYMPTOM | DIAGNOSIS | REMEDY / CHECK |
|---|---|---|
| Unit does not switch on | Battery is flat | Recharge/replace the battery |
| Gas reading, no gas | Zero drifted | Turn off and back on |
| Unstable/inaccurate reading | Sensor failed | Send for service |
| 'Loading Defaults' message on display screen | Backup battery is discharged | Recharge unit overnight and leave switched on in charger |

**MAINTENANCE AND CALIBRATION**

For recalibration and service, contact Telegan and/or send the instrument to a service centre.

**LIMITATIONS TO USE**

| | LONG TERM STORAGE | | OPERATING LIMITS | |
|---|---|---|---|---|
| | Min. | Max. | Min. | Max. |
| TEMPERATURE | O°C | 20°C | -20°C | 50°C |
| PRESSURE | 90mbar | 110mbar | 900mbar | 3bar |
| HUMIDITY (non condensing) | 15% RH | 90% RH | 0% RH | 90% RH |

INGRESS PROTECTION – IP65 (dust proof and weather proof)

**ACCESSORIES FOR GASEEKER**

| | |
|---|---|
| Carrying case and belt (included) | C01297 |
| Aspirator probe (1 metre long) | C01097 |
| Extra aspirator hose (to extend normal 1 metre length) | M04032 |
| Water trap | FIL99007 |
| Filter replacements | |
| Charging lead for vehicle cigarette lighter socket | C01296 |
| Charger 12-40V DC , no power pack | C01546 |
| Charger and UK 230 V power pack (included) | C01547 |
| Charger and EU 230 V power pack (included) | C01548 |
| Charger and US 110V power pack (included) | C01549 |

**INSTRUMENT LIMITATIONS**

The instrument is not suitable for use in ambient temperatures above 50°C. Use with care in wet or humid environments where water may condense on the sensors, and check response after use.

Use of high power radio transmitters in close proximity to the instrument may exceed RFI immunity levels and cause erroneous indications. If such problems are experienced, remove antennae to a reasonable distance from the instrument (e.g. 30cm).

**CAUTIONS**
Sensors may be adversely affected by exposure to silicones, lead compounds, high levels of hydrogen sulphide and chlorine, and some industrial solvents.

A condition of certification is that the instrument is not used with ethyl nitrate vapours, or in hazardous areas containing IIC gases (e.g. hydrogen, acetylene) where the risk of mechanical damage to the enclosure is high.

**WARNING –** Do not change the battery in an explosive atmosphere.
**WARNING –** Classified by UL Inc. only for intrinsic safety for use in hazardous locations.
**WARNING –** Substitution of components may impair intrinsic safety.
**WARNING –** Read the instruction manual before use.
**WARNING FOR UL CERTIFIED UNITS –** Not classified for use in atmosphere containing greater than 21% oxygen.

**Instructions specific to hazardous area installations.**
**(reference European ATEX Directive 94/9/EC, Annex II, 1.0.6.)**

The following instructions apply to equipment covered by certificate number Sira 02 ATEX 2176X:

1. The certification marking is as follows:
2. The equipment is Category 2G and may be used in zones 1 and 2 with flammable gases and vapours with apparatus groups IIA, IIB and IIC and with temperature classes T1, T2, T3 and T4.
3. The Gaseeker is also certified as Category M2 equipment for use in mines.
4. The equipment is only certified for use in ambient temperatures in the range -20°C to +40°C and should not be used outside this range.
5. Only the battery types prescribed on the battery compartment label are permitted; other types may invalidate intrinsic safety compliance. Charging is only permitted in the non-hazardous areas.
6. The equipment has not been assessed as a safety-related device (as referred to by Directive 94/9/EC Annex II, clause 1.5.
7. Repair of this equipment shall be carried out by the manufacturer or in accordance with the applicable code of practice.

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