

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:

8. The certification marking is as follows:
9. 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.
10. The Gaseeker is also certified as Category M2 equipment for use in mines.
11. 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.
12. 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.
13. The equipment has not been assessed as a safety-related device (as referred to by Directive 94/9/EC Annex II, clause 1.5).
14. Repair of this equipment shall be carried out by the manufacturer or in accordance with the applicable code of practice.

Manufactured by:

Telegan Gas Monitoring, a division of
Crowcon Detection Instruments Ltd
2 BLACKLANDS WAY
ABINGDON BUSINESS PARK
ABINGDON, OXON
OX14 1DY Tel: +44 (0)1235 557700
Fax: +44 (0)1235 557749
Email: crowcon@crowcon.com
Web Site: www.crowcon.com

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Issue 2

TELEGAN
gas monitoring

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.

IMPORTANT SAFETY NOTICE: All units fitted with sensors to measure both %LEL AND %Volume Methane, other hydrocarbons or "flammables"

To avoid potential damage to the pellistor sensor used for measuring % LEL methane when calibrating the IR or thermal conductivity sensor used for measuring % volume methane, the following precautions must be observed. Failure to follow this guidance may permanently damage the pellistor sensor, resulting in unsafe, erroneous readings and the need to replace the sensor. If the guidelines are followed the sensor should provide long and reliable service.

Special Calibration Precautions

1. Perform a Zero on the unit in clean mobile air as normal.
2. Apply 2.5 % Volume Methane gas using the flow plate and calibrate the %LEL flammables sensor to either 50.0% LEL (areas covered by ISO10156) or 56.8% LEL (areas covered by ATEX / IEC 60079-29-2007).
3. Apply 6% Volume Methane to the unit - this will ensure the pellistor is set into pellistor save mode and will not be damaged by applying higher volume levels of calibration gas.
4. Ensure that it can be applied within 1-2 seconds after ceasing supply of the gas in step 3 and without introducing air, (for example by use of a three way valve) then apply 50%Volume Methane gas.
5. Calibrate the % volume flammables channel as normal and then turn off the gas supply. **DO NOT** purge the gas line with air.
6. Remove the flow plate and check that both flammables detectors return to zero reading. For units calibrated with hydrocarbons other than methane the levels above should be scaled according to the relevant LEL levels.

LIMITATIONS TO USE

LONG TERM STORAGE				OPERATING LIMITS			
Max.	Min.	20°C	Max.	Min.	Max.		
TEMPERATURE	0°C	20°C	TEMPERATURE	-20°C	50°C		
PRESSURE	90mbar	110mbar	PRESSURE	900mbar	3bar		
HUMIDITY	15% RH	90% RH	HUMIDITY	0% RH	90% RH		
(non condensing)				INGRESS PROTECTION – IP65 (dust proof and weather proof)			

ACCESSORIES FOR GASEEKER

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