

BASIC MULTIGAS DETECTOR

FORENSICS DETECTORS™

**FORENSICS
DETECTORS**



READ THIS MANUAL BEFORE STARTING

**** WARNING ****

- FOLLOW MANUAL. **DETECTOR IS VERY SENSITIVE**
- KEEP DETECTOR **AWAY** FROM ELECTROMAGNETIC & MAGNETIC INTERFERENCES (i.e. PHONES & MAGNETS)
- STORE DETECTOR **WITHIN SPECIFICATIONS**
- IF UNWELL, SEEK CLEAN AIR & MEDICAL HELP.
- **DO NOT** OPEN THE ALARM UNIT
- **KEEP AWAY** FROM DUST & PARTICULATE AND NEVER EXPOSE TO HARSH CHEMICALS OR EXTREMELY HIGH CONCENTRATION LEVELS AS IT MAY POISON THE SENSOR
- **TO ENSURE** ACCURACY, CALIBRATE **EVERY 6 MONTHS**
- **SENSOR LIFE IS 2 YEARS FROM RECEIPT**. IF TAKEN CARE OF THE SENSOR CAN LAST LONGER, BUT MAY REQUIRED CALIBRATION MORE OFTEN TO OPERATE WITHIN SPECS.

CONFIRM ACCESSORIES IN PACKAGE

- 1 x Multigas Detector
- 1 x calibration cap (black) & 1 x screw for calibration cap
- 1 x sling
- 1 x manual & 1 x calibration certificate
- 1 x recharge cable (no charger include as any USB charger or USB computer port will be OK, fast charge > 1.0Amp rating)

INTRODUCTION

You have purchased the **BASIC MULTIGAS DETECTOR** by **FORENSICS**. The detector is factory calibrated. Turn On and go. This detector is made with a robust design using high quality electrochemical sensors made in the UK. The detector has time, alarm functionality, adjustable alarm levels and is calibration friendly. Ideal for field use, laboratory, R&D and industrial requirements.

OPERATION

ON/OFF: Press POWER button for 3 seconds. After self check, normal gas detection begins and gas concentration level is show. Backlight in ON for 15 secs then turns off.

MENU MODE: Quickly press POWER button to enter the main MENU SELECTION. Use UP and DOWN buttons to make your selection, then press POWER button to select. Menu option selections are explained in the next section.

MENU OPTIONS

ZERO SET: Select Gas to ZERO. Expose to ZERO air for 2 minutes using certified gas or fresh air (only for O2 Detectors, expose to pure N2). Maintain a flow of about 0.5L/min when using gas bottles and use the sensor cap provided to deliver the gas to the detector. Then press Save to register the Zero reading.

GAS CHECK (SPAN Calibration): Enter passcode 1111. Enter CAL gas concentration – usually mid point of detection range or highest alarm level range. Expose to CAL air for 2 minutes using certified gas. For O2, simply expose the detector to fresh air, having 20.9% of O2. Maintain a flow of about 0.5L/min when using gas bottles and use the sensor cap provided to deliver the gas to the detector. Save to register reading.

TIME SET: Follow screen instructions. Move cursor and adjust time digits as desired.

ALARM RECORD: Shows the time-stamped history of alarm activation.



LOW ALARM: Low Alarm point setting. Follow screen instructions. Move cursor and adjust alarm levels.

HIGH ALARM: High Alarm point setting. Follow screen instructions. Move cursor and adjust alarm levels.

ESC: Exits menu options and back to normal operation.

BATTERY

BATTERY life percentage can be displayed by pressing UP arrow, then see BATT row for life % remaining. The detector has a built-in lithium battery and can be charged via micro-USB. Before charging, TURN OFF the detector to avoid any potential damage. During charging, the detector cannot detect gas. **DO NOT try to charge it at testing location to avoid fire or explosion.**

SPECIFICATIONS

Sensor: Electrochemical Sensor (H2S, CO, O2), Catalytic Bead Sensor (CH4)

Sensor Life: 2 years (comes with calibration certificate)

Detection Range: CH4 (0-100%LEL), H2S (0-100ppm), CO (0-1000ppm), O2 (0-30%vol), Error: <±5% F.S.

Recovery/ Response Time: < 30 seconds

Storage / Operating Temperature: 0-50°C

Storage / Operating Humidity: <95%RH

Battery: DC3.7V Li-Ion battery 2000mAh

Operation Time: >12 hours (without alarming)

Dimension/Weight: 130*67*30m, 230grams

Rating: ATEX certified EXIaICT4. IP65 certified.

CONNECT: SUPPORT & SALES:

WEB: www.forensicsdetectors.com

Email: forensicsdetectors@gmail.com



BASIC MULTIGAS DETECTOR

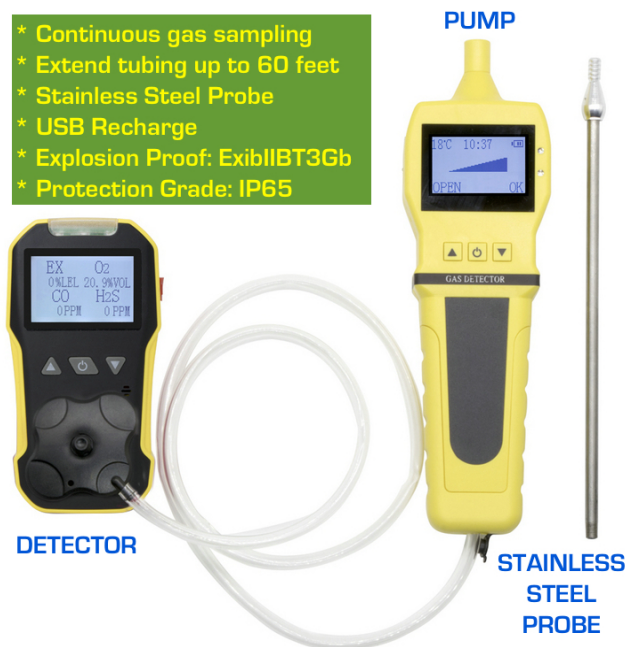
FORENSICS DETECTORS™

BACK & FRONT VIEW



GAS SAMPLING PUMP

- * Continuous gas sampling
- * Extend tubing up to 60 feet
- * Stainless Steel Probe
- * USB Recharge
- * Explosion Proof: ExIIBT3Gb
- * Protection Grade: IP65



Sometimes one needs to sample gas in hard to reach locations OR the location is isolated and may contain high level of toxic gas that would not be safe to enter OR area is rampant with air turbulence/drafts where a reliable reading via diffusion will not suffice. In such cases, a gas sampling pump probe is required. Perfect for continuous monitoring in sewers, tanks, shafts, fermentation etc....

Sold Separately.

Amazon.com product ASIN: B07GKJDCQ

What is CALIBRATION?

This product is already calibrated, ready to use just Turn ON and GO. However, calibration is an important function to be performed to ensure your gas detector operates accurately (EVERY 6 MONTHS). Accuracy and Calibration drift can happen over time because of chemical degradation of sensors and the natural drift in electronic components. There are two parts to the calibration, ZERO Calibration and SPAN Calibration.

ZERO CALIBRATION: Ensures a good baseline to ZERO target gas exposure. This ensures the detector reads a true ZERO for CO, H₂S and %LEL. Always do this first!

SPAN CALIBRATION: Ensures accurate gas concentration reading via exposing the sensor to gas concentrations by using a certified gas bottle. This process ensures the detector works within specs and the displays gas level readings that are accurate & true.

Bump Testing?

Bump testing is to expose the gas detector to a small amount "blast" of target gas to ensure the detector operates and alarms as programmed. The function of this test is to verify detection operation and build user confidence, particularly in hazardous and critical user applications. Not mandatory but is recommended.

Calibration Process & Recommended Gas Bottle?

The detector comes with a calibration cap that screws to the detector. The cap has a nipple that connects via a tube to the calibration gas regulator. For calibration, a standard mixed gas NIST gas bottle with a regulator will be satisfactory. Our recommended gas bottle product is Amazon.com ASIN: B015016X32 (or similar). Multi Calibration Gas: 25 PPM Hydrogen Sulfide, 100 PPM Carbon Monoxide, 2.5% (50% LEL) Methane, 19% Oxygen, Balance Nitrogen

GAS SAMPLING PUMP

Product Designed in California, USA, Product Tested, QA/QC in California, USA, Product Made in China



SUPPORT & SALES:

WEB: www.forensicsdetectors.com
Email: forensicsdetectors@gmail.com

