

**PRODUCT PROFILE**



Signal wire is for relay output, black wire COM, pink wire for NC and blue wire for NO.

**PRODUCT INTRODUCTION**

The product is a 'stand-alone' combustible gas detector with built in high stability catalytic sensor and is used for detecting the leakage of combustible gases including LPG, Natural Gas, Natural Refrigerants etc.. The gas concentration level will be shown in the digital LED display in PPM. Mains power 220 – 240 vac, 50/60 hZ. A 9v rechargeable backup (Ni-MH) battery option is recommended.

**TECHNICAL SPECIFICATIONS**

Operating Voltage	220-240v AC, 50-60 Hz. Optional 9v rechargeable Ni-MH battery backup
Temperature Range	-21 Degree C + 50 Degree C
Humidity Range	10% - 95% RH
Alarm Level	Gas: 0.5% (5000ppm +/- 1500ppm)
Alarm Reset	Auto reset when ppm < 1000ppm
Sensor	Catalytic combustion sensor
LED Display	Battery Level Gas Concentration when level is higher than 2000 ppm
Display Range	2000ppm - 9900 ppm
Indicator Lights	AC Power - Constant Green Alarm - Red - flashing rapidly Sensor fault - constant yellow
Audio Alarm	85dB at 10 feet Gas Alarm constant beeps
Approval Standards	En50194, UL1484
Dimensions	118.5x82x43mm

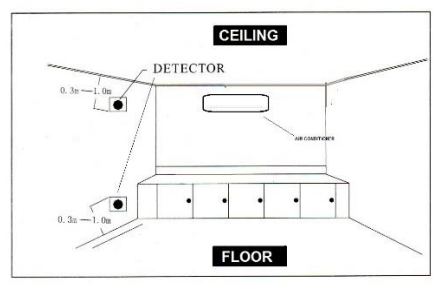
**PRODUCT FEATURES**

- LED DISPLAY SHOWS GAS LEVEL IN PPM
- LOW BATTERY ALARM (IF BATTERY FITTED)
- 220 – 240v AC – 50/60 Hz OPERATING VOLTAGE
- HIGH STABILITY CATALYTIC GAS SENSOR
- 9v RECHARGEABLE NI-MH BATTERY BACKUP OPTION
- AUTOMATIC FAULT DETECTION
- CONVENIENT TEST BUTTON FEATURE
- SMT MANUFACTURE TECHNOLOGY
- EASY INSTALLATION AND MAINTENANCE
- COMPLIES TO UL – 1484 AND EN50194

**INSTALLATION**

Prior to installation confirm the use if for heavier than air gases (LPG etc.,) or lighter than air gases (Natural Gas, CNG etc.,).

Choose a suitable location to install the detector according to the type of gas (i.e. heavier or lighter than air). To detect heavier than air, the installation must be installed between 0,3 – 1,0 m from the floor and approximately 1.5m from the potential gas source. To detect lighter than air gases, the installation must be installed between 0,3 – 1,0 m – however not lower than the potential source of the gas. The unit should be placed within 1.5m from the potential source. Please refer to the figure below.



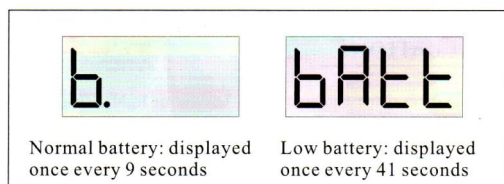
Using the correct size screws, fix the back plate firmly to the wall, and hang the detector.

It should be noted when installed in a domestic residence, mount the detector away from normal every day heat or smoke sources, like cookers, heaters etc., Do not install the detector in a location where it would be exposed to regular heavy smoke or oil, these can cause the sensor to malfunction, causing possibilities of false alarms. Additionally do not install sensors close to exhaust fans, windows or doors or locations where there are heavy vapours/high humidity – such as bathrooms.

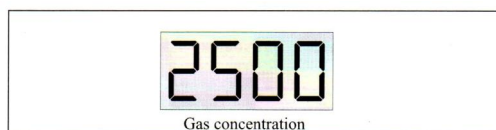
All electrical installations MUST confirm to Local and National standards and regulations. Wires MUST be of the correct size and colour. The connections MUST be sound to eliminate error alarms during operation.

## OPERATING INSTRUCTIONS

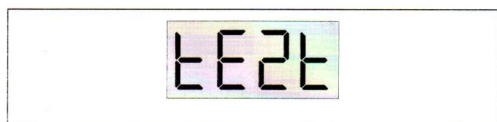
On connection of the mains AC power indicator, LED display will illuminate. The detector will then go through a self-test phase for approximately 3-5 minutes. After the self-test, the LED display will switch off and the product enters a 'stand by' state. If the detector is connected to mains AC power only the power light will be illuminated. If the unit is powered by the back-up battery only the power light is extinguished and the LED display shows "b" every 9 seconds. If the battery voltage level drops to a certain level the LED will display "batt" once every 41 seconds and the buzzer will sound. When powered by battery the LED display is as follows.



When the gas concentration exceeds 2000 ppm, the LED display will be as follows.



On pressing the test button, the alarm indicator flashes in RED, the buzzer sounds, and the display shows as follows.



During the test function the unit will run self-test on the sensor. Should any faults be found the fault indicator will illuminate and the buzzer will produce a long buzz.

To connect exhaust fans, relays, solenoid valves etc., the detector has two output signals ( 1x NO 1 x NC). Wire to suitable panel to local and national standards using whichever signal (NO or NC) to suit your system.

## EMERGENCY ALARM PROCEDURE

Should the sensor alarm it indicates that the concentration of gas exceeds the alarm level (2000ppm). The following procedures are to be followed.

Extinguish any ignition sources, open doors and windows, and exit the area. Call qualified technician to trace and repair the source of the leak. Should a leak not be found, re-test or replace the sensor.

## PRODUCT TESTING

Thorough product testing **MUST** be carried out – quarterly.

Ensure there is mains AC voltage to the unit, the main power light will be illuminated green. If it is not illuminated – check incoming supply, wiring and connections. If power supply is confirmed "OK" the detector **MUST** be replaced. The AC mains voltage must be checked to ensure it's in tolerance (200 – 240 v).

If the green power indication is illuminated, press and hold the test button until the buzzer sounds.

Expose the sensor to a **SMALL** amount of gas to raise the level to /above 5000 ppm. Ensure the unit alarms @ 5000 ppm and that all devices (fans, lights, alarms, solenoids etc..) all operate correctly. Never use an open flame to test the unit.

Do not stand too close to sensor when the alarm is sounding as it could be harmful to hearing.

If the sensor fails to activate it **MUST** be replaced, if any component connected to the no volt contacts, this **MUST** be rectified and made fully serviceable immediately.

## WARNING

The detector **MUST** be powered by a constant 220/240v supply, ensure that the circuit cannot be isolated by a switch, dimmer or an earth leakage protection device.

The unit **MUST** have AC power to operate. The battery back-up is only there to operate in the case of short term mains power interruptions/power cuts.

Do not press the test button frequently when powered by the back-up battery.

Test the detector via the test button, **at least** once a week. If the detector fails the test – replace **IMMEDIATELY**.