

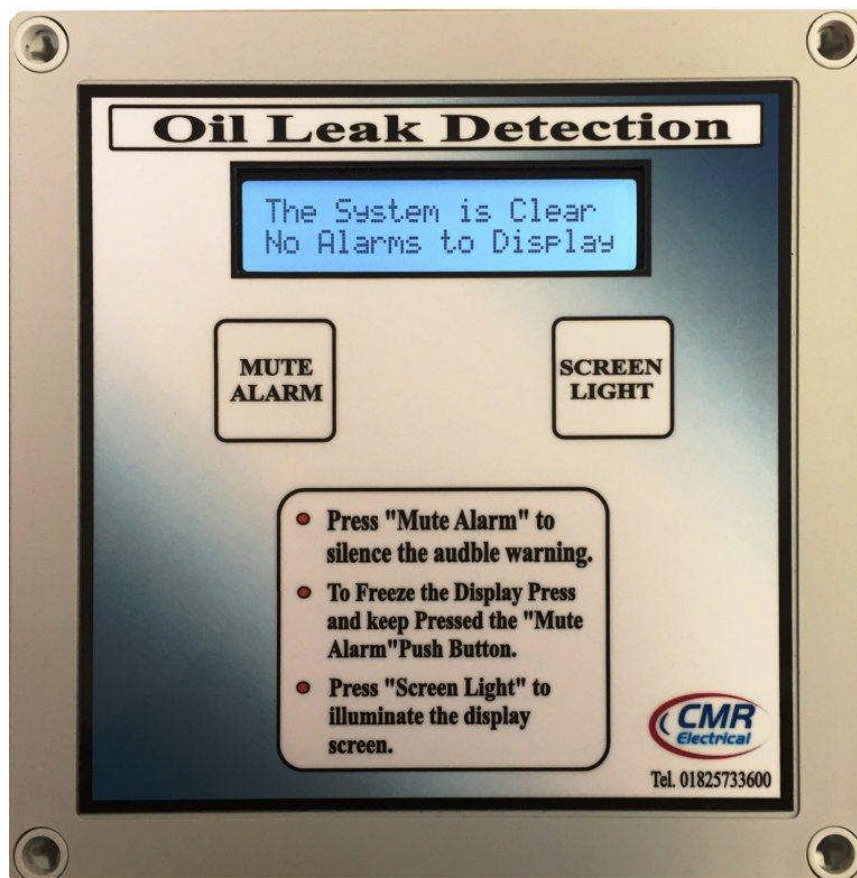


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ODS4-2

Three & Four Zone Fuel Oil Leak Alarm

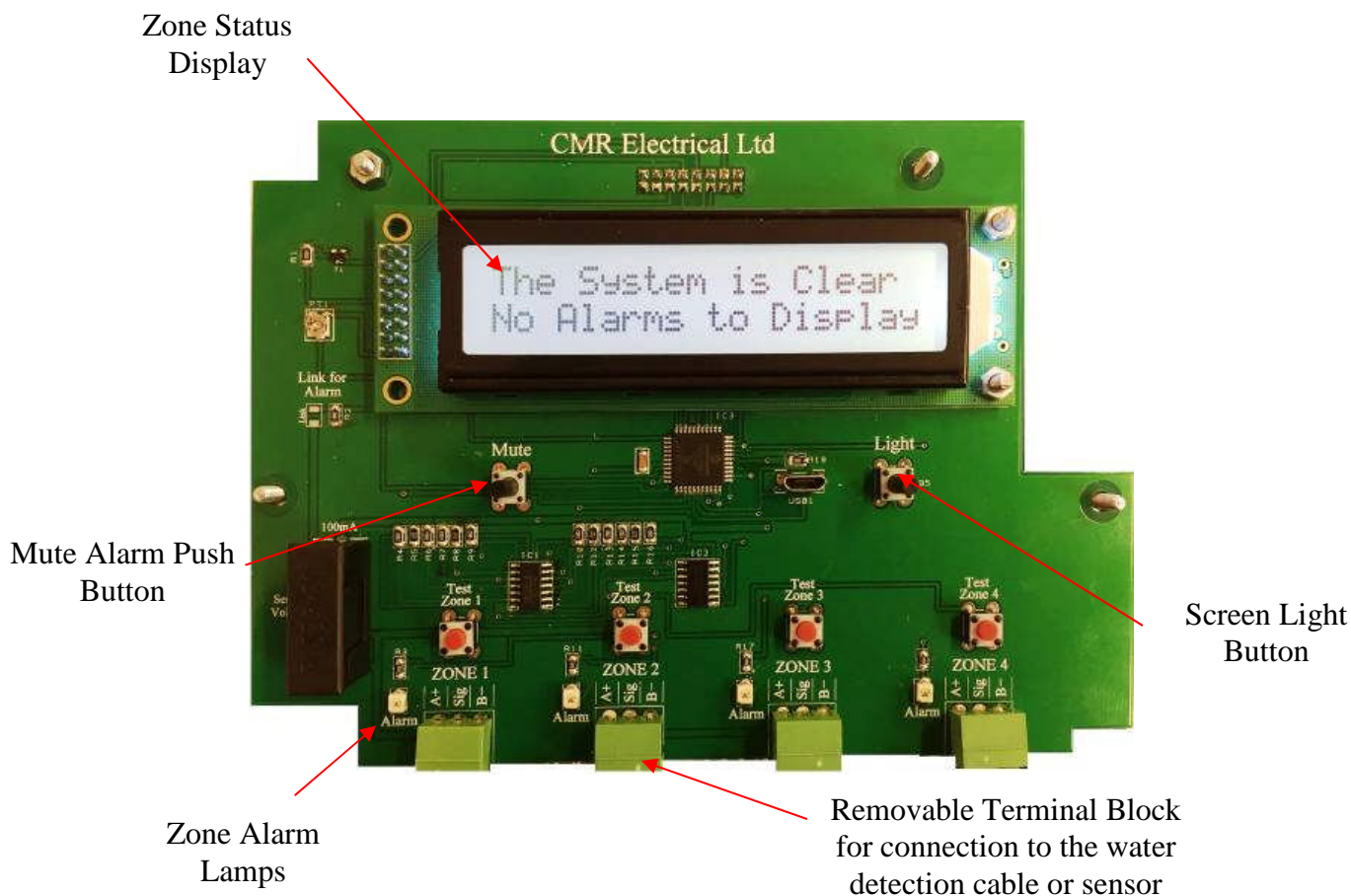
Installation and Operation Manual



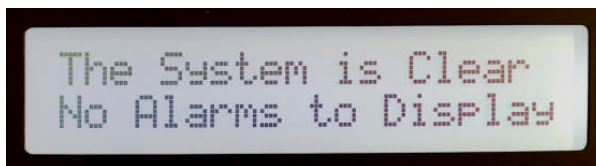
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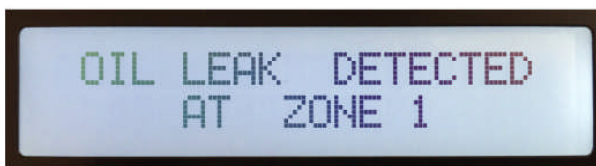
1) Display and Control



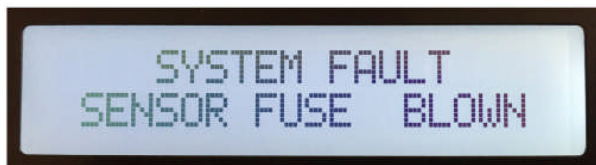
Display Screens



Normal screen



An Oil Leak has been detected on Zone 1



Blown sensor supply fuse

2) Operation

With no oil leaks being detected, the screen will display “The System is Clear No Alarms to Display” and audible warning device will be OFF.

3) Alarm

When one of the detection sensor comes into contact with oil, the audible warning device will sound, the common alarm relay will close and the display will change to advise the sensor zone i.e. “OIL LEAK DETECTED AT ZONE 1”. To stop the audible warning press the “Mute Alarm” button. The system will remain in this state until the Oil has been removed from the sensor. If more than one zones detects an oil leak at the same time, the display will latch on to the lowest numbered zone. Once muted, the display will latch onto the next zone in alarm and start the audible warning device again requiring the “Mute Alarm” button to be pressed again.

4) Screen Back Light

When the system is clear from alarms, the screen back light will off. Once the unit detects an oil leak the backlight will automatically turn on and remain on until the leak has been cleared. The “Screen Light” push button has been provided to allow the back light to be turned on when the system has no alarms to report and will automatically turn off again after five minutes.

5) Blown Sensor Supply fuse

The unit continually monitors the supply fuse that feeds power to the external sensors. If this fuse is removed or blows due to power overload, the audible warning will sound, the common Fault relay will de-energise and the display will change to “SYSTEM FAULT SENSOR FUSE BLOWN”

6) Common fault relay

The system is provided with a common fault relay the is permanently energised. This relay will de-energise when either power is lost to the unit or the fuse on the power supply feeding the sensors has blown.

7) Alarm Test

“Test Zone” push buttons have been provided internally on the top PCB. To simulate an oil leak alarm press the selected test zone button until the audible warning starts.

8) Display Freeze

When the system detects more than one leak, the screen will display each of the zones that are in alarm for approximately 2 seconds. To freeze the display on a particular screen, press and keep pressed the “Mute Alarm” button.

9) Alarm lamps

Internal “Alarm” lamps position next to each zones output terminal block on the top PCB have been provided to give a quick indication of all alarms. This can be used when commissioning or if the main display fails.

10) Installation

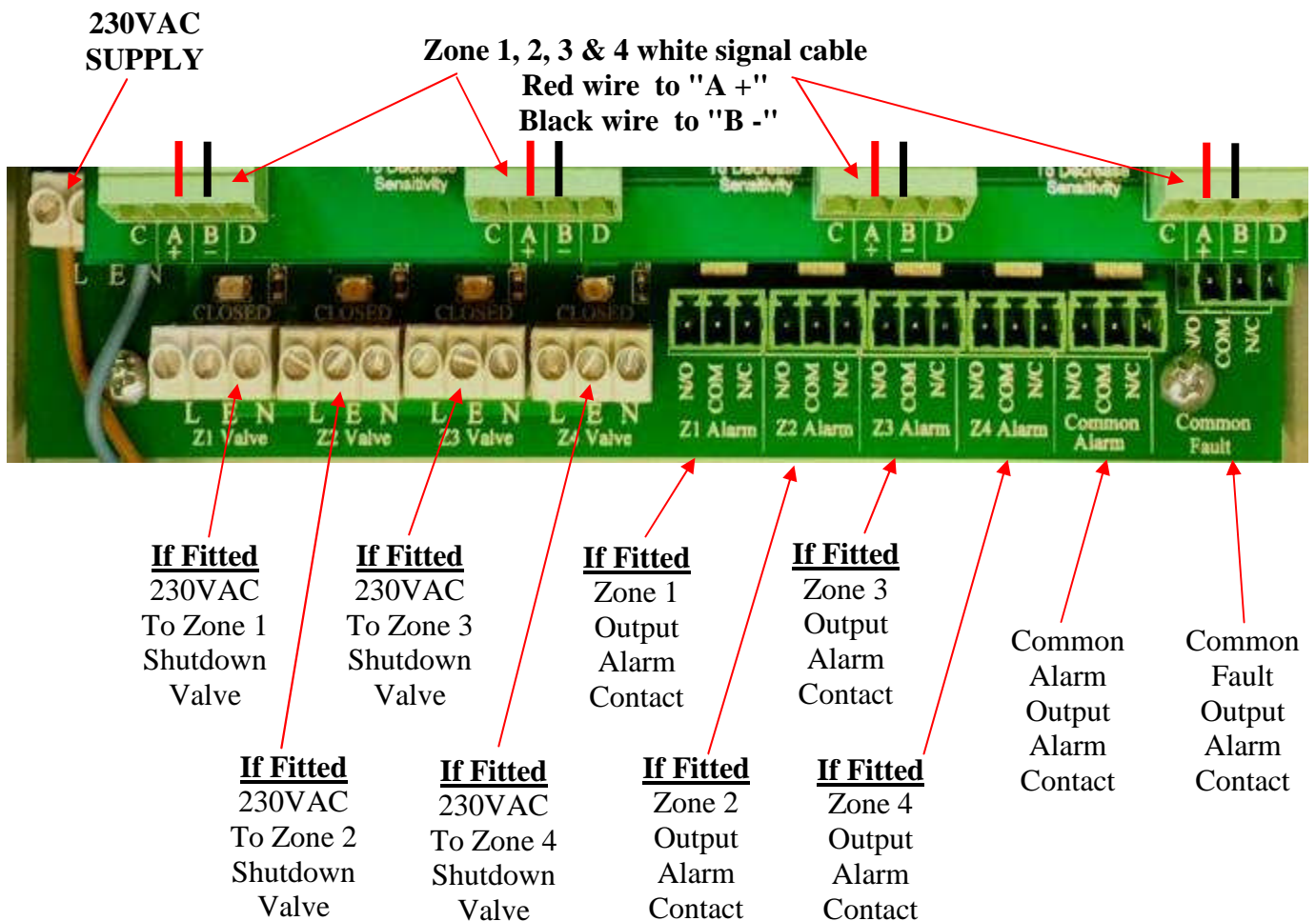
THIS EQUIPMENT SHOULD ONLY BE CONNECTED AND WORKED ON BY A QUALIFIED ELECTRICIAN.

To mount the unit to a wall, first remove the front cover to expose the internal equipment. In each corner of the housing positioned below/above the front cover fixings will be found the mounting holes.

Plastic glands have been provided for incoming power and outgoing signal cables. The large gland requiring a 20mm hole within the housing is for the power cable and the smaller gland requiring a 13mm hole within the housing is for the signal cable. Care should be taken when drilling the holes to ensure no damage occurs to the electronic equipment.

A suitably rated 230VAC power cable supply should be run from a fused spur to the unit and terminated to the internal terminal block marked "L", "E" & "N". The fuse within the fused spur should be rated at 5 Amps.

Connections within the Alarm Housing



Output Volt Free contacts for use by a Building Management System.

<i>Function Required</i>	<i>Fitted as Standard</i>	<i>Relay Output Terminals</i>
Zone 1 alarm	No	Z1 Alarm
Zone 2 alarm	No	Z2 Alarm
Zone 3 alarm	No	Z3 Alarm
Zone 4 alarm	No	Z4 Alarm
Common Alarm	Yes	Common Alarm
Common Fault	Yes	Common Fault

All Zone wiring and volt free alarm / fault relays wiring is to removable screw type terminal blocks.

11) Beacon and beacon sounder

If a beacon or beacon sounder is supplied connect to the three terminals identified as “Sounder Beacon” as follows.



Sounder Beacon terminal block

11a) Non Mutable Beacon or beacon sounder

If the beacon or the beacon sounder is to be active (On all the time) until the water leak alarm has cleared, connect as follows

Terminal reference	Connect Beacon / beacon sounder terminals to the following terminals
+V	Beacon +V or Strobe /Tone + terminal
BOV	Beacon -V or Strobe /Tone - terminal
SOV	NO connection to this terminal

11b) Mutable Beacon or beacon sounder

If the beacon or the beacon sounder is to turn off when the “Mute” push button is pressed connect as follows.

Terminal reference	Connect Beacon / beacon sounder terminals to the following terminals
+V	Beacon +V or Strobe /Tone + terminal
BOV	NO connection to this terminal
SOV	Beacon -V or Strobe /Tone - terminal

11c) Mutable sounder Beacon on all the time

If the beacon is to remain alight all the time an alarm is current but the sounder is to be turned off when the “Mute” push button is pressed connect as follows.

Terminal reference	Connect Beacon / beacon sounder terminals to the following terminals
+V	Strobe and Tone + terminal
BOV	Strobe - terminal
SOV	Tone - terminal

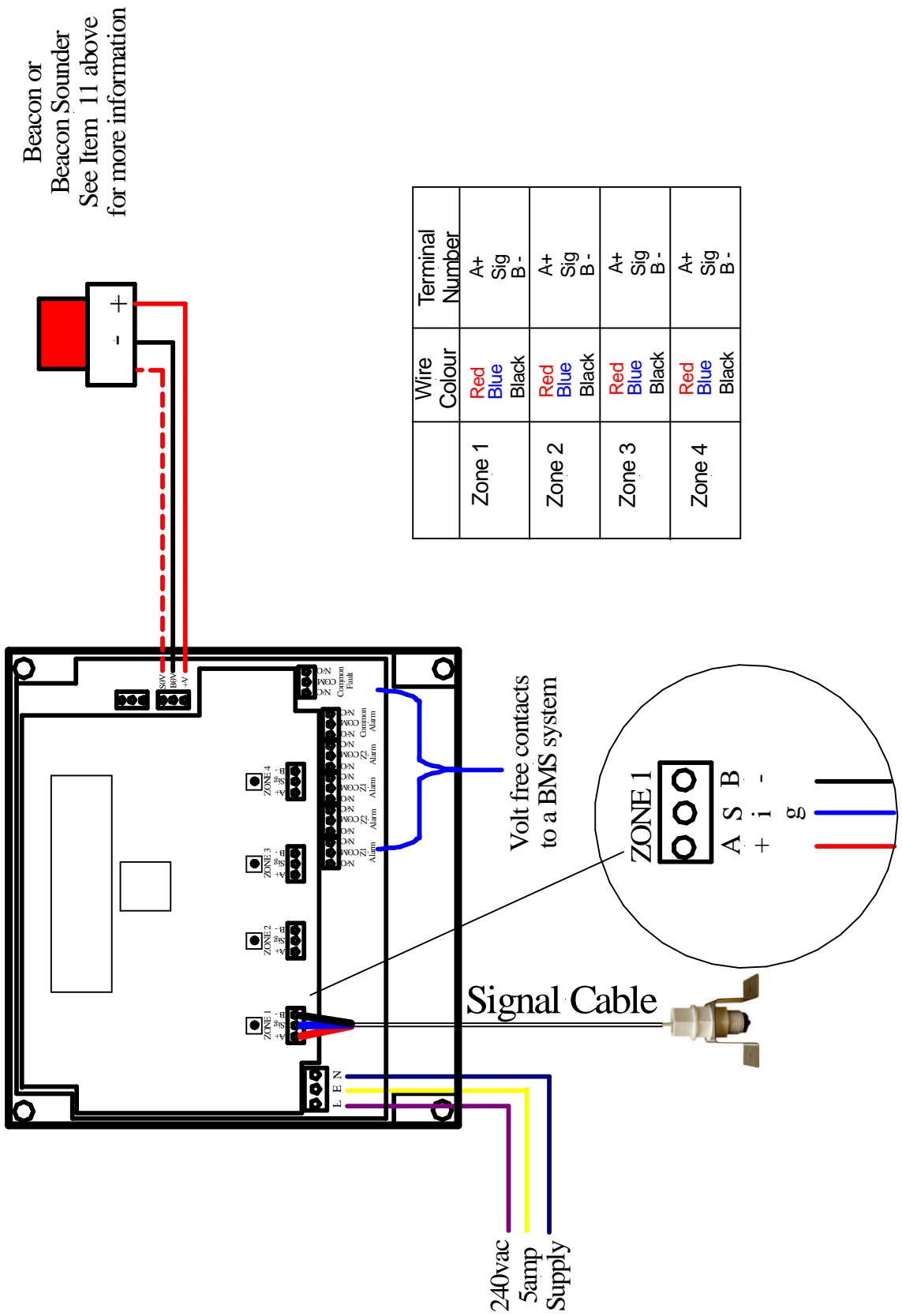
Warning; if the above option “10c” is required, remove the electrical link connected between the second (Strobe -) & third terminals (Tone -) terminals within the sounder.

12) Commissioning

Having connected the unit as described above, turn of the mains power to the unit and ensure that the display states “The System is Clear No Alarms to Display”(tip; use the “Screen Light” for better visibility). If any of the zones indicate an alarm and the audibled warning sounds, check that the sensor on that zone is clean and not contaminated with a liquid. Using a small sample of oil submerge the black bulb of each sensor into the oil, the audible warning should sound and the appropriate zone alarm should be displayed. Mute the alarm, the sounder should stop, clean off the oil from all sensor and ensure that the display revert back to “The System is Clear No Alarms to Display” , repeat for all other zones.

13) Wiring

Oil Leak Alarm Unit



NOTE

IF TWO SENSORS ARE CONNECTED TO THE SAME ZONE, CONNECT IN PARRALEL i.e. both red cables to “A+”, blue cables to “Sig” and black cables to “B-“.

