



RLU MOS Remote Sensor

User Manual

Technical Support
Continental North America Toll Free 1-(800) 387-9487
Ph: +1 (905) 829-2418 Fx: +1 (905) 829-4701

A Product of Arjay Engineering Ltd.
Oakville, Ontario, Canada

www.ArjayEng.com
www.EnmetGasDetection.com

The Remote Sensor requires individual calibration. This has integral alarms and sensor fault indication. The Remote Sensor outputs a discrete voltage signal on the common Vsig wire (one of the 4 in the connection cable) to indicate its alarm level. This sensor is to be used in conjunction with an ISA 66RLU or Gas-Alert Series panels.

Calibrating the remote sensor requires:

- Enmet Calibration Kit which should have calibration gas concentrations for the required High and Low alarm values.
 - Small slot screwdriver to adjust the alarm levels.
 - The sensor should be powered up for 48 hours prior to calibration to allow the sensor to stabilize.
 - A Voltmeter.
1. Locate Test Point 1 (named TP1: Black) (See drawing 20030130). It is located at the bottom right of the remote sensor board. Locate Test Point 4 (named TP4: Red). It is located at bottom left of the remote sensor board. Plug the negative lead of the voltmeter into TP1 and the positive lead to TP4. The measured voltage will be in the 1.5 – 5.0 Volt range.
 2. Locate the Range potentiometer (labeled “N” for normal air) on the Remote Sensor board. It is the bottom-most of the group of 3 pots (See drawing 20030130 for pot. labeled “N”). Adjust the pot to 2.8 Volts (+/- .2) on the voltmeter in normal clean air.
 3. SETTING THE LOW ALARM: Setup the Enmet calibration see Fig. 1.0: You will need a gas canister containing the gas concentration of the low alarm level i.e. if the low alarm is to be set at 35 PPM then the canister should contain 35 PPM. Attach the calibration cup over the sensor and adjust the gas flowrate to about 0.75 – 1 SCFH (some calibration adapters may not have a rotometer, but instead have a preset .5 LPM regulator). Note: the use of the voltmeter is optional, but is useful to determine the length of the calibration time. The sensor requires roughly 1 to 2 minutes to stabilize or until the voltage drop has stabilized.
 4. Locate the Low Alarm adjustment pot. labeled “L” (see drawing 20030130).
 5. Also locate the Low Alarm indicator LED (Yellow) which is to the left of adjustment pots. If the Low Alarm LED is already lit then adjust the Low Alarm pot. clockwise until the alarm LED just goes off and then adjust counterclockwise until the LED comes back on plus about 10 degrees. If the LED is already off, adjust the pot counterclockwise until the LED just goes on plus about 10 degrees.
 6. Repeat steps 3 – 5 for the High Alarm, using the high level calibration gas, but in this case, use the pot. marked “H” to adjust the alarm, and the RED LED closest to the yellow LED for the High Alarm indication.

THE COMPONENTS IN YOUR KIT

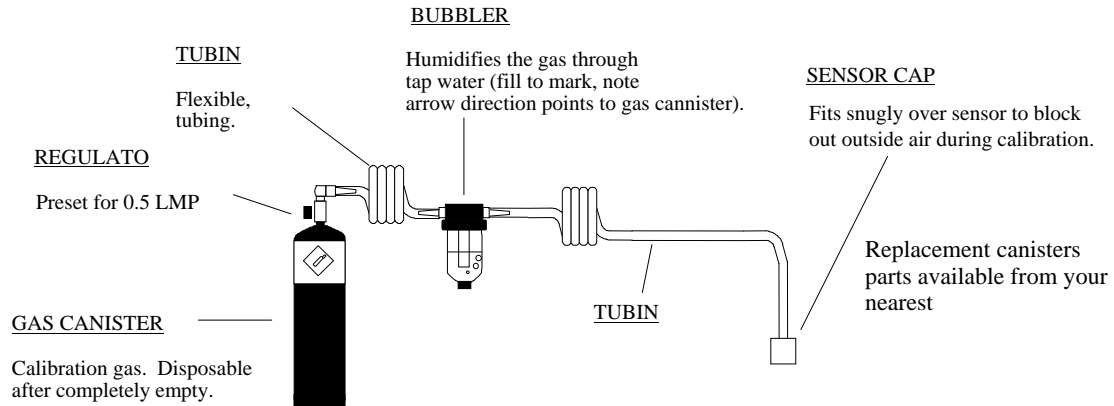
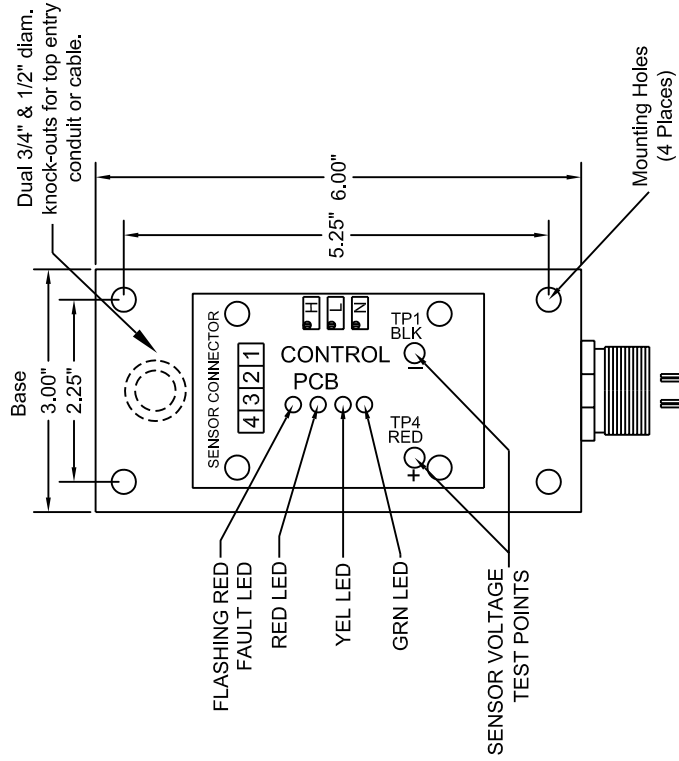
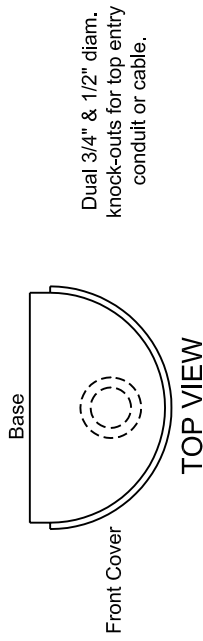


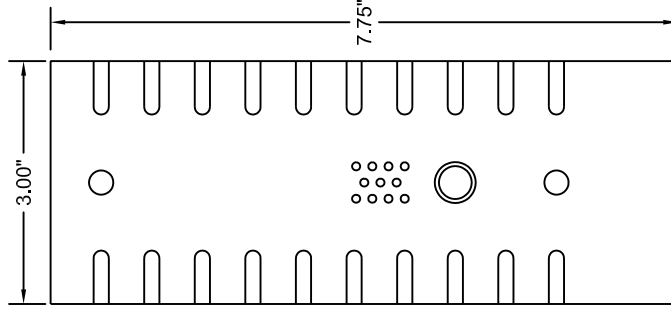
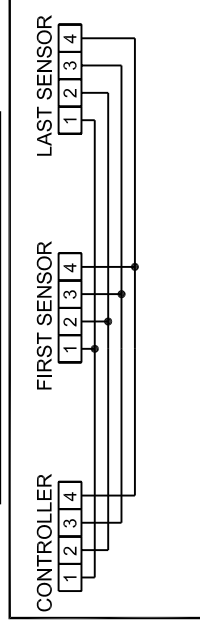
Figure 1.0



SENSOR CONNECTOR

1. +24 VDC
2. PGND
3. VSIG
4. SGND

TYPICAL SENSOR HOOKUP



1	12/04/04	ADDED "TOXIC" IN TITLE	CHK'D	APP'D
REV	DATE	DESCRIPTION		
REVISIONS				
ENMET CANADA LTD.			PROJECT: _____	
DWG. STATUS	BY	DATE	TITLE	
DRAWN	V.H.	18 6 03	RLU MOS TOXIC	
CHECKED			REMOTE SENSOR ASSEMBLY	
APPROVED			P/N E90052A	
SCALE	REF. NOS.	DWG. NO.	SHT.	REV.
N.T.S.		20030130	1	1