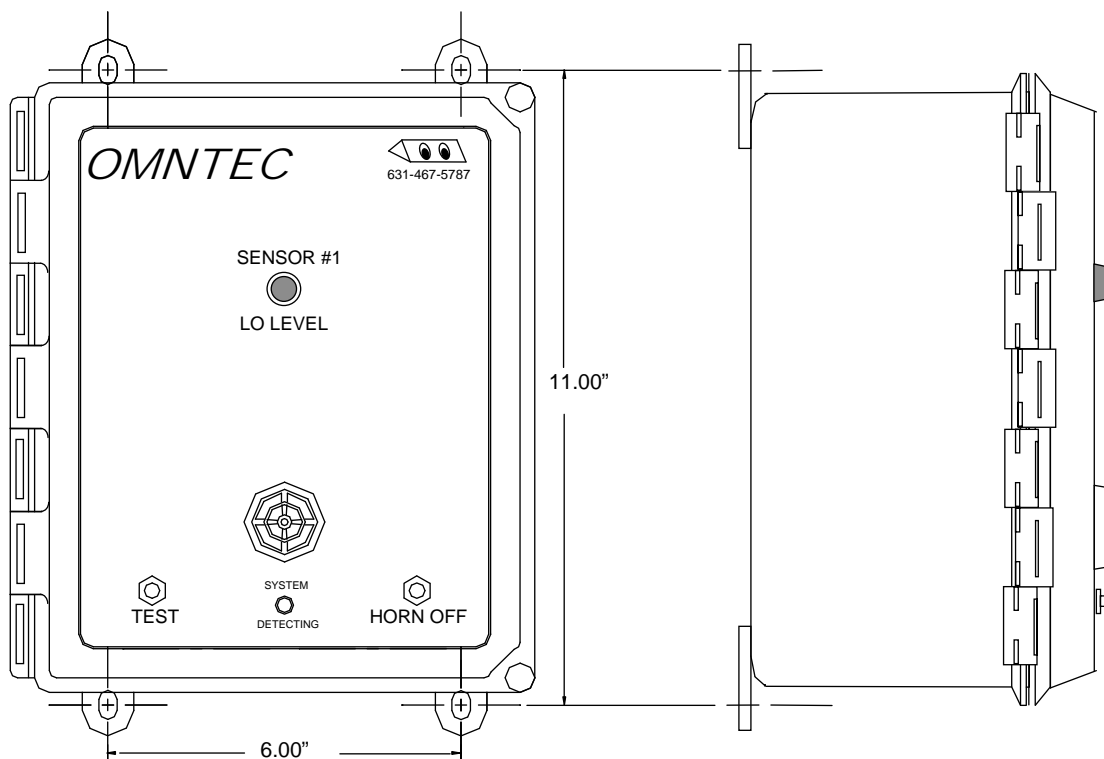


ONE CHANNEL



LU1-SP1 Specifications

POWER INPUT

85-125 VAC, 47-440 Hz
16 Watts maximum

POWER TO SENSORS

2 VDC @ 13 ma

RELAY OUTPUT

SPST normally open dry contacts 1.25 AMPS, 120
AC/DC switches when an alarm condition occurs

WEIGHT

6 LBS.

DIMENSIONS

(W) 9" x (H) 10.5"

SENSOR CABLE

Shielded 22 AWG UL-E118830 CM
Maximum length 2000 feet

ENCLOSURE

NEMA 4X

OPERATING TEMPERATURE

-40° to 140° F

AUDIO/VISUAL CONSOLE

AUDIBLE ALARM - 95 dB pulsing horn with 30 second
timeout

AMBER LIGHT -Indicates liquid alarm for L-series
sensors

TEST BUTTON- When pressed will actually test entire
system electronics from control panel to sensors

GREEN LIGHT- indicates the power is on

HORN OFF BUTTON - Silences the audible alarm when
pressed

SENSORS

L-1 Single point liquid level optic sensor for low level

ACCESSORIES

RA-1 audio/visual remote annunciator

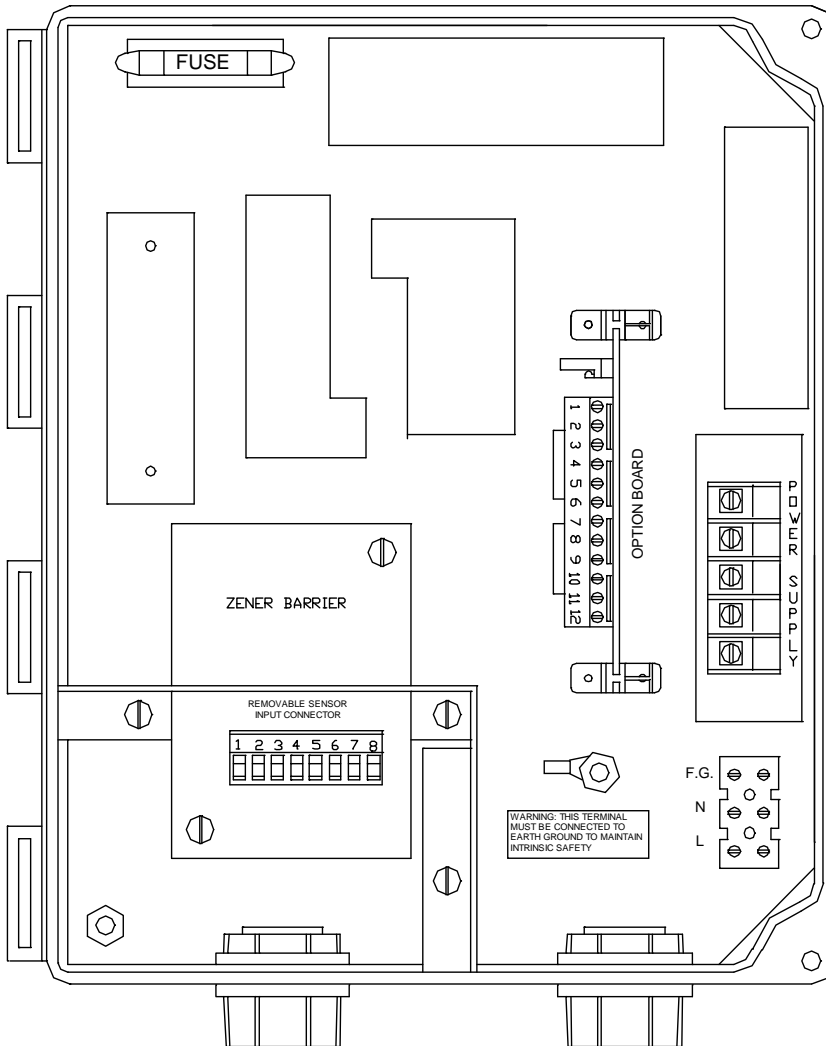
RLY-RA Relay (consult factory)

RA-1-NYS Remote annunciator with strobe (consult factory)

LABELS

Provided with controller

LU1-SP1 CONTROLLER CONNECTION DIAGRAM



COLOR CODE

CABLES FROM SENSORS TO REMOVABLE SENSOR INPUT CONNECTORS

1	RED	SENSOR #1 LO LEVEL
2	WHITE	
3	UNUSED	
4	UNUSED	
5	UNUSED	GROUND FROM SENSOR #1
6	UNUSED	
7	BLACK	
8	SHIELD DRAIN	

WIRES TO OPTION BOARD

WIRES FROM RA-SERIES REMOTE

1	GREEN	-HORN
2	RED	+HORN
3	BLACK	GROUND
4	WHITE	SENSOR #1 LO LEVEL
5	UNUSED	
6	UNUSED	

WIRES FROM RELAY OUTPUTS

7	UNUSED	
8	UNUSED	
9	UNUSED	
10	UNUSED	
11	COMMON	SENSOR #1
12	NORMALLY OPEN	LO LEVEL

120VAC

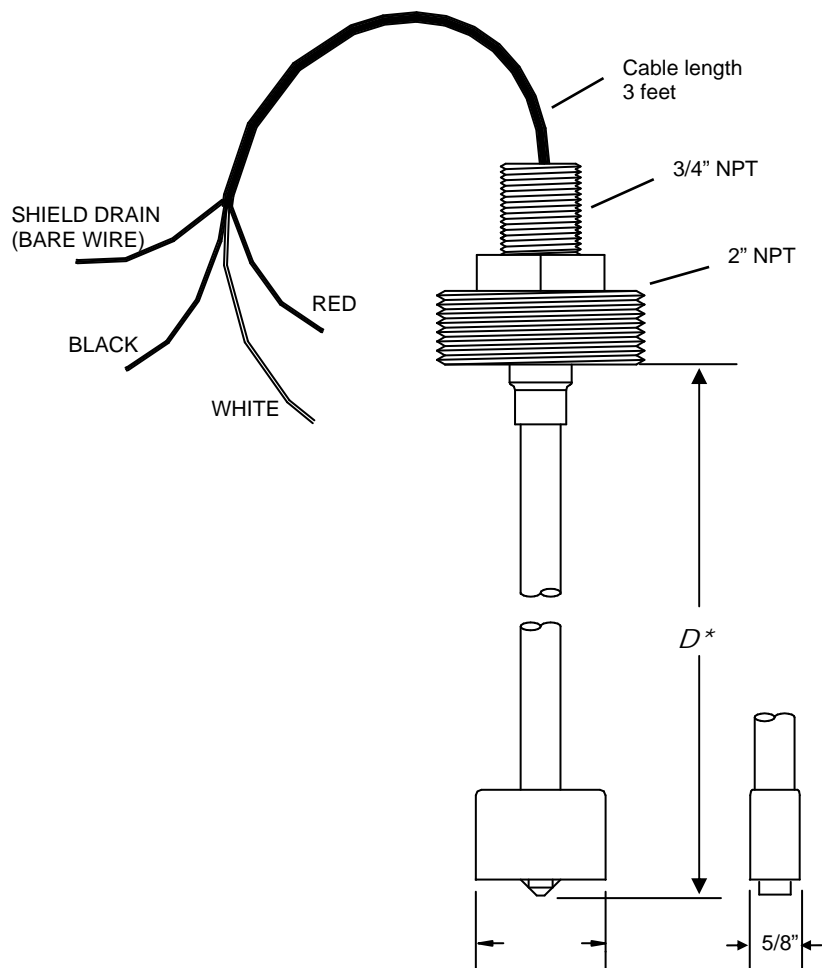
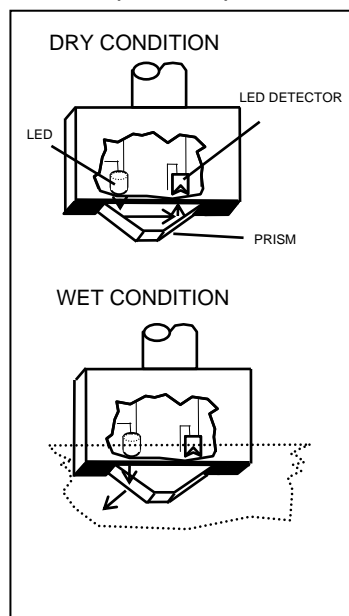
WIRES TO POWER SUPPLY

F.G.	FIELD GROUND
L	LINE
N	NEUTRAL

NOTE: To maintain proper shielding, BLACK sensor wires and SHIELD DRAINS should not be connected together at sensors.

Liquid Level Optic Sensor

Principles of Operation



L-1 SPECIFICATIONS

U.L. LISTED 5L04

Intrinsically safe Class I, Group D Hazardous Locations when connected in accordance with Control Drawing nos. L1, L2, L3, L4, L6, L9

OPERATING TEMPERATURE

-40 TO +140 F

POWER

2 VDC @ 13 mA

WEIGHT

2 pounds

PRINCIPLES OF OPERATION

LIQUIDS (ex: fuel, water) – Photo Optic

DRY CONDITION – Normally closed light beam

ALARM CONDITION – Opens (refracts) normally closed light beam

SENSOR CABLE

Shielded 22 AWG UL-E118830 CM

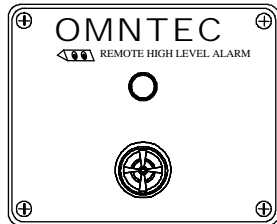
Maximum length 2000 feet

RESPONSE TIME

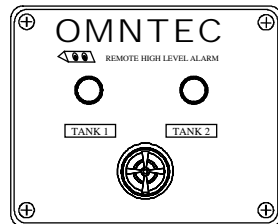
Immediate

RA-Series Remote High Level Alarm

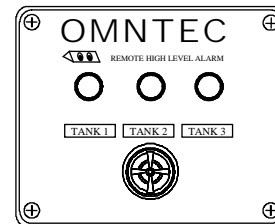
RA-1



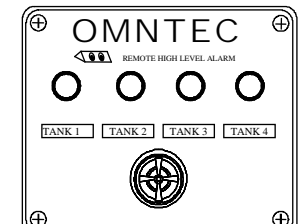
RA-2



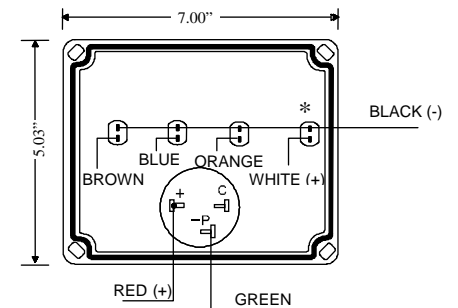
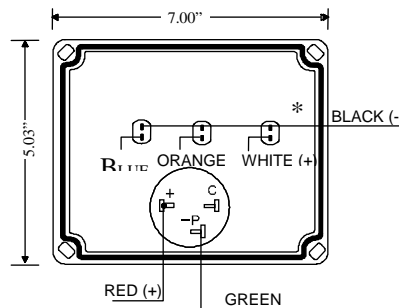
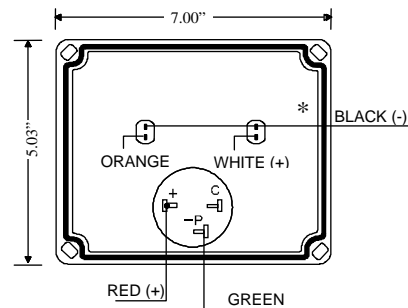
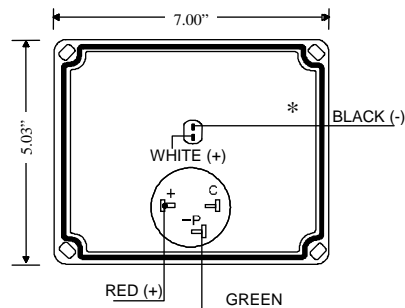
RA-3



RA-4



Internal Wiring Color Code

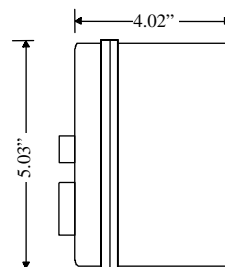


* **WARNING LABEL PLACED HERE:** Warning: Low voltage inputs only

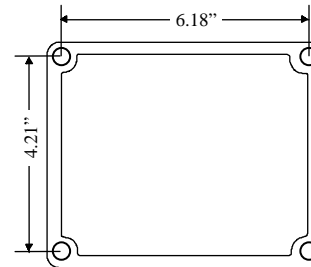
SPECIFICATIONS

Audible Alarm	95 dB pulsing horn
Red Light	Liquid-high-level alarm
Response Time	Immediate
Power Input	12VDC @200mA maximum from controller
Wire	22 AWG minimum
Weight	1 lb.

SIDE VIEW



MOUNTING DIMENSIONS



Note: It is recommended that knockouts be placed in the bottom of the enclosure

LOG SHEET

[illegible]

WARRANTY

The seller OMNTEC Mfg., Inc. warrants to buyer defects when properly installed, and maintained by user. The sellers sole obligation is to repair or replace parts found to be defective, or non-conforming for one year and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warranties whether implied or expressed. Seller assumes no obligation for special or, indirect damages incurred by user.

All standard tank gauging systems are free of defects when properly installed and maintained by user. Warranty on tank gauging systems will only be effective after proper documentation has been submitted by the buyer to OMNTEC Mfg., Inc. The sellers sole obligation is to repair or replace parts found to be defective, or non-conforming for one year and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warranties whether implied or expressed. Seller assumes no obligation for special or indirect damages incurred by user.

All standard replacement parts, "add-ons", or spare parts are free of defects when properly installed and maintained by user. The sellers sole obligation is to repair or replace parts found to be defective or non-conforming for 90 days and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warranties whether implied or expressed. Seller assumes no obligation for special or indirect damages incurred by user.

Equipment not covered by this warranty includes, but is not limited to: custom equipment, pressure transducers, and control systems.