



DOD Technologies, Inc.

Innovative Life Safety Systems & Services

ChemLogic[®] CL4 & CL8

Continuous Gas Monitor

Pyrolyzer User Manual Supplement

© DOD Technologies, Inc.
675 Industrial Drive Bldg. A
Cary, IL 60013
Phone 815.788.5200 • Fax 815.788.5300

Chapter 1 – Overview

The DOD Technologies ChemLogic 8 (CL8) Pyrolyzer option uses two four-point Pyrolyzers enclosed in a separate housing the same size & shape as the CL8. The Pyrolyzer has its own power cord, on/off switch, and exhaust fan as shown in figure 1.

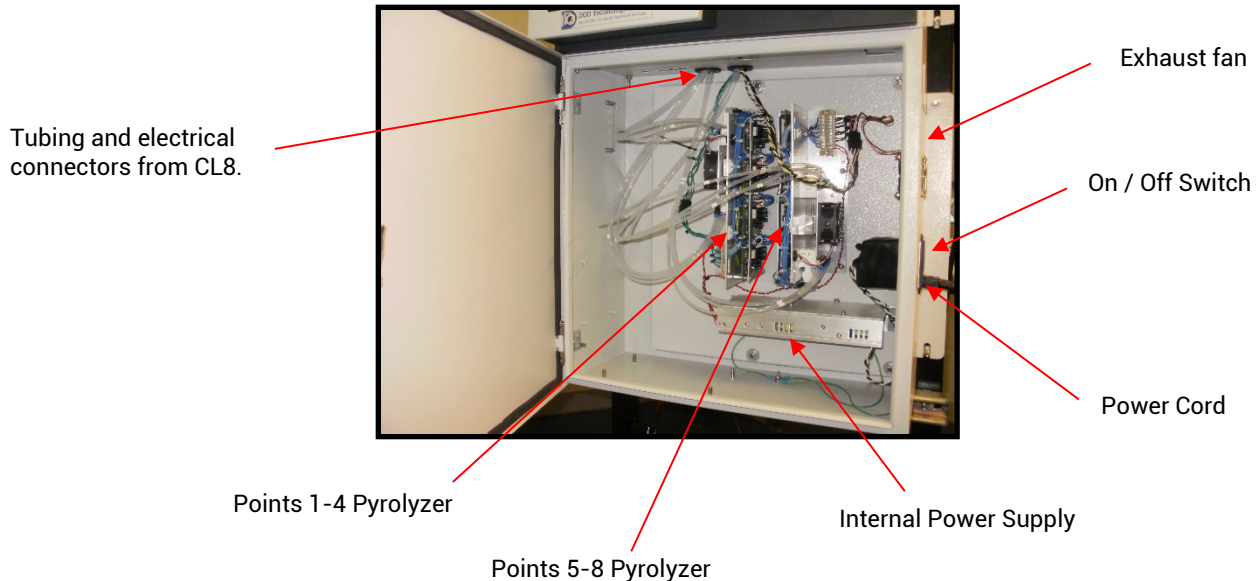


Figure 1

WARNING: To provide adequate cooling of the unit provide a minimum of 6" of clearance on both sides of the Pyrolyzer unit for proper air circulation. Do not block the exhaust fan.

1.1 Pyrolyzer Installation Diagram

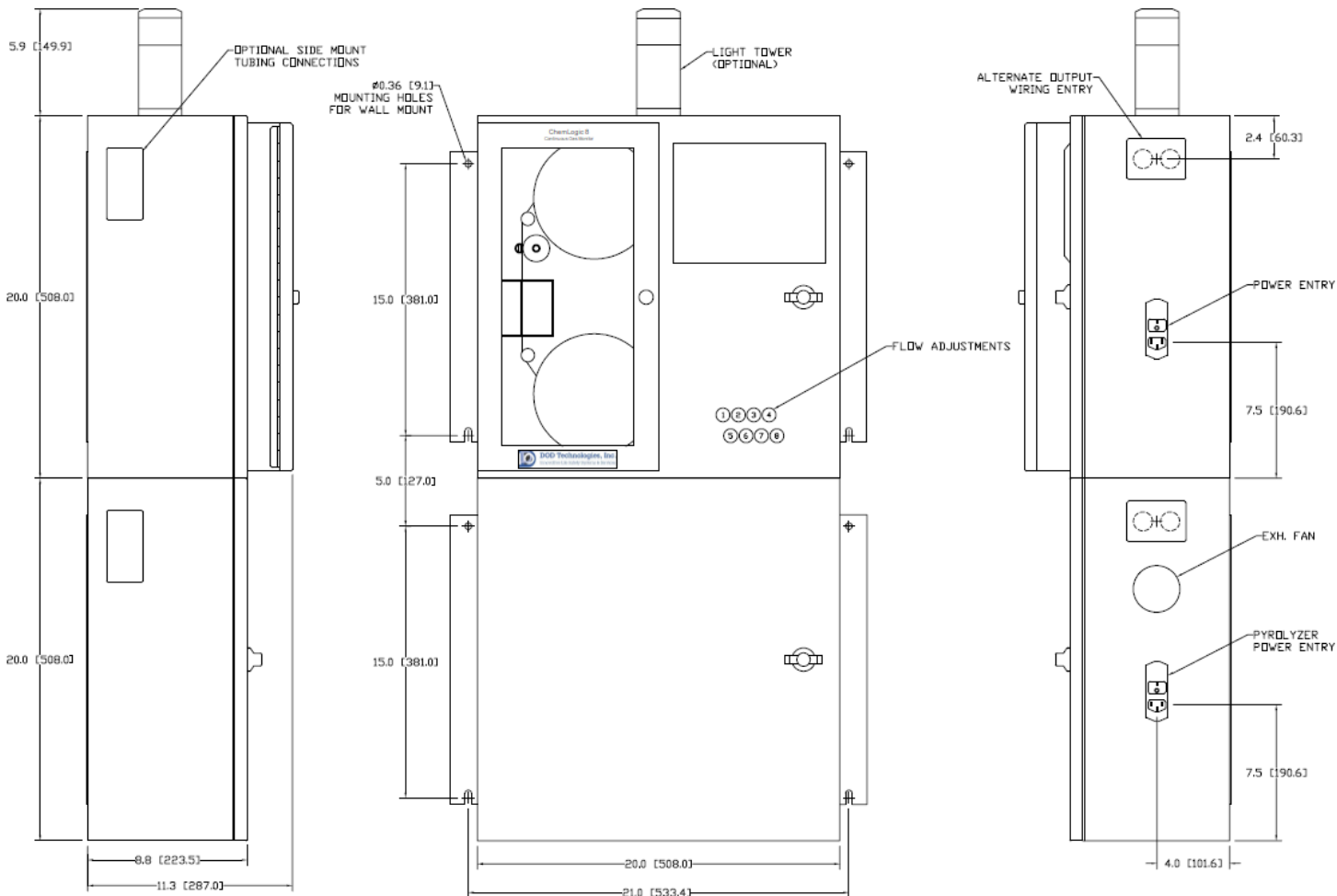
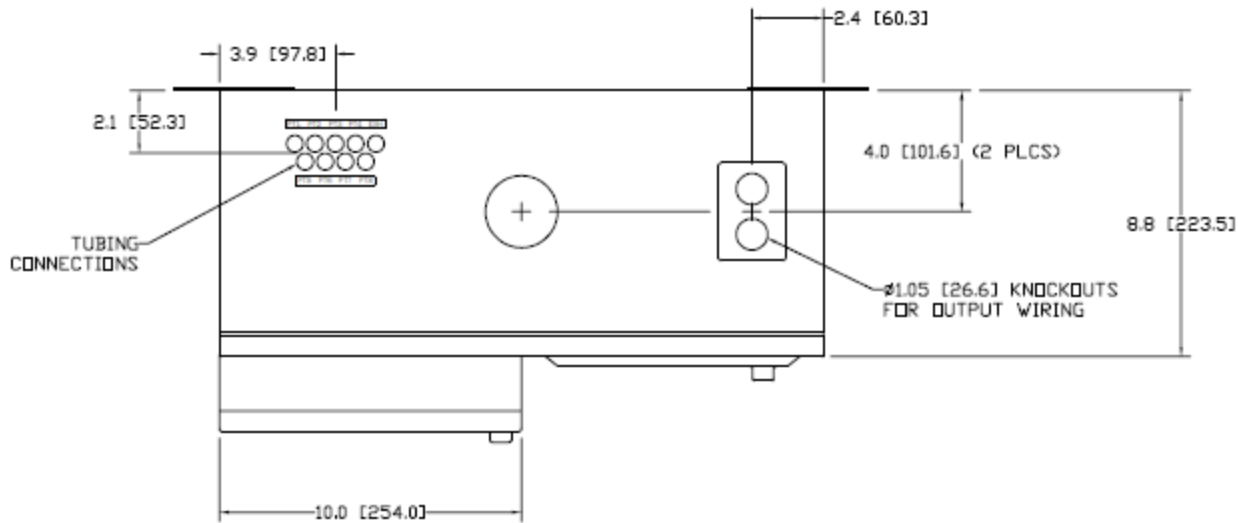
CL8 Operating Voltage: 110/115VAC (+/-10) 50/60 Hz <1.0 Amps;
230VAC (+/-10) 50/60 Hz <0.5 Amps

Pyrolyzer Operating Voltage: 110/115VAC (+/-10) 50/60 Hz <2.0 Amps;
230VAC (+/-10) 50/60 Hz <1.3 Amps

Sample Tubing Points 1-8 FEP Teflon: ¼" OD x 3/16" ID x 300' (91 mtrs)

Exhaust Tubing Polyethylene: 3/8" OD x 1/4" ID x 25' (7.5 mtrs)

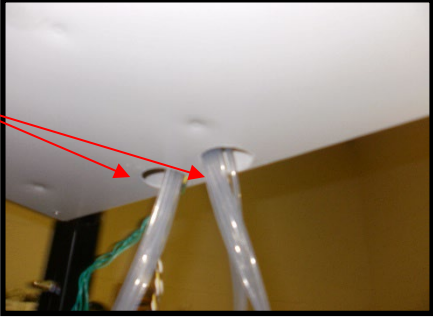
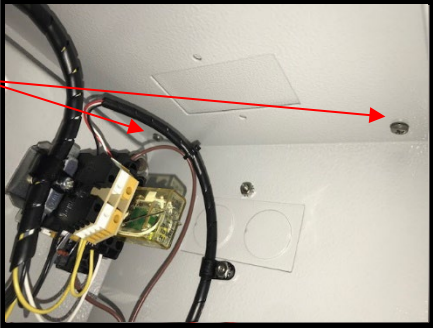
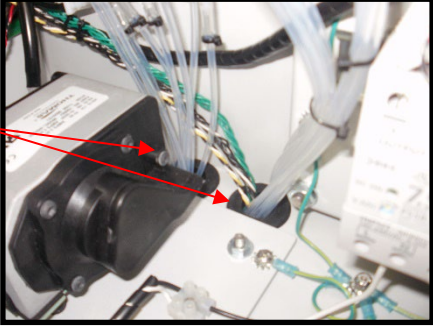
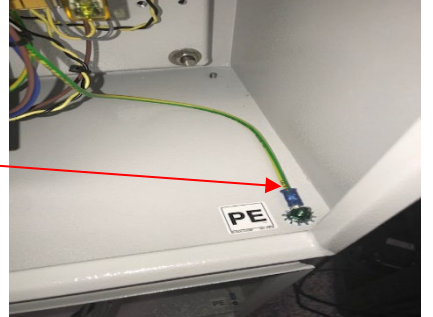
Please allow 4' minimum spacing (left and right side) to allow door swing and power plug clearance



Chapter 2 – Installation

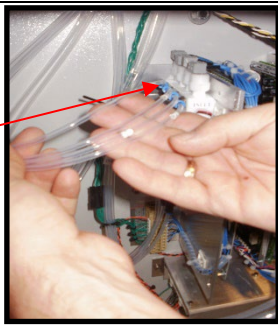
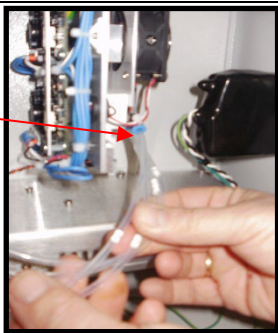
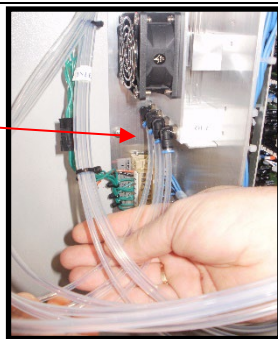
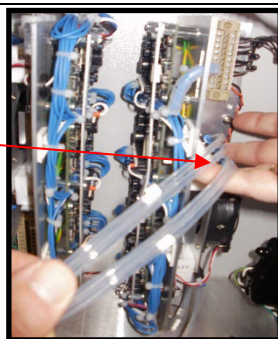
2.1 Mounting

WARNING: The doors on the CL8 unit and the pyrolyzer are heavy and can tip the units when opening if they are not permanently mounted. Care must be taken when assembling the two units together before mounting.

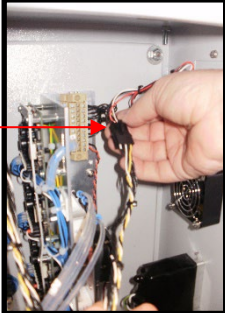
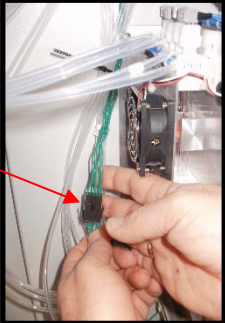
<p>Carefully feed wiring and tubing bundles from the bottom of CL8 into corresponding holes on top of the pyrolyzer. Make sure the grommets are attached over the bundles inside the CL8.</p>	<p>Wiring & Tubing bundles exit holes on bottom of CL8 unit.</p>	
<p>Place CL8 unit on top of pyrolyzer. Align units properly and make sure wires & tubing are not pinched. Securely tighten screws from inside pyrolyzer.</p>	<p>From inside the Pyrolyzer unit insert and tighten four (4) 8/32" screws at the top and tighten to secure unit to CL8 using pre-tapped holes.</p>	
<p>Press the Grommets into the hole to cover the metal edges of both the CL8 and the pyrolyzer. Check the Grommet from above and below to assure they are properly seated</p>	<p>Grommets seated properly.</p>	
	<p>Reattach the Protective Earth (PE) ground wire inside the CL8 cabinet</p>	

2.2 Tubing

NOTE : The two bundles of tubing labeled 'inlet' and 'out' each contain 8 tubes which must be attached to the pyrolyzers. The left pyrolyzer is points 1-4 and the right side is points 5-8. The pyrolyzers are mounted opposite so the inlet and out tubes are opposite each other on each unit.

<p>First carefully attach inlet tubes 1-4 to the top connectors of the left pyrolyzer.</p>	<p>Using the labels on the tubing connect the inlet tubes to points 1 thru 4. Point 1 is in the top-left-back sequentially thru point 4 in the top-left-front.. Fully insert the tubes securely in to the Pyrolyzer fitting.</p>	
<p>Now repeat the procedure for the inlet of points 5-8 on the bottom of the right pyrolyzer.</p>	<p>Point 5 is in the bottom-right-back sequentially thru point 8 in the bottom-right-front. Fully insert the tubes securely in to the pyrolyzer fitting.</p>	
<p>Connect the outlet tubes for points 1-4 to the bottom of the left pyrolyzer.</p>	<p>Point 1 is in the bottom-left-back sequentially thru point 4 in the bottom-left-front.</p>	
<p>Connect the outlet tubes for points 5-8 to the top of the right pyrolyzer.</p>	<p>Point 5 is in the top-right-back sequentially thru point 8 in the top-right-front.</p>	

2.3 Wiring

<p>The pyrolyzer and fan power connector contains the yellow, black, & white wires.</p>	<p>Connect the pyrolyzer and fan power connector as shown.</p>	
<p>The pyrolyzer output connector contains all green wires.</p>	<p>Connect the pyrolyzer output/status connector as shown.</p>	

Chapter 3 - Operation

Be sure both the pyrolyzer and the CL8 are powered on before operation. See the CL8 user's manual for operation of the CL8 unit. No special configuration is necessary for the pyrolyzer option after the gas tables are loaded at the factory.

3.1 Filters

End of line filters are recommended for all sample tubing on the CL8. See the CL8 user's manual for more information.

3.2 Error Messages

The pyrolyzer option includes several event log messages in addition to the standard CL8 event messages – see Figure 3 below.

Message	Corrective Action
Pyro Encl Fan Fault	Repair/replace pyrolyzer enclosure exhaust fan.
Pyrolyzer fault Point X	Repair/replace the element for the specified point***

Figure 3

***In addition to the enclosure exhaust fan, each pyrolyzer assembly has its own exhaust fan. When a pyrolyzer fan fails all four points of the assembly will issue a fault message simultaneously. When the four messages appear together check the pyrolyzer fan for proper operation.