

New Cosmos - BIE

# Instruction Manual

Gas detector PS-7 with pyrolyzer unit (PS-7-030-PU)



- Be sure to store this instruction manual in a convenient location, and consult it whenever necessary.
- Operate this unit only after reading and fully understanding the content of this manual.
- This instruction manual was written for the pyrolyzer unit (option). Instructions for the basic operations of the gas detector are provided separately in the standard operation manual. Refer to the operation manual when necessary.

## IDENTIFICATION

### This document

Title PS-7-030-PU pyrolyzer instruction manual.  
File name: PS-7-030-PU pyrolyzer unit instruction manual ENG  
rev.1.0.0.docx

### Document history

Revision	Date	Revision description	Originator
1.0.0	12-06-2015	Original release	NC-BIE, FH

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### Equipment

This document applies to:

Name of equipment : Gas detector PS-7-030-PU  
Pyrolyzer unit : PU-7  
Pyrolyzer element : PE-7

### The manufacturer

The equipment is produced by:

New Cosmos - BIE  
Maxwellstraat 7  
NL-1704 SG Heerhugowaard  
The Netherlands  
Tel: +31 (0)72 576 5630  
Fax: +31 (0)72 572 1818

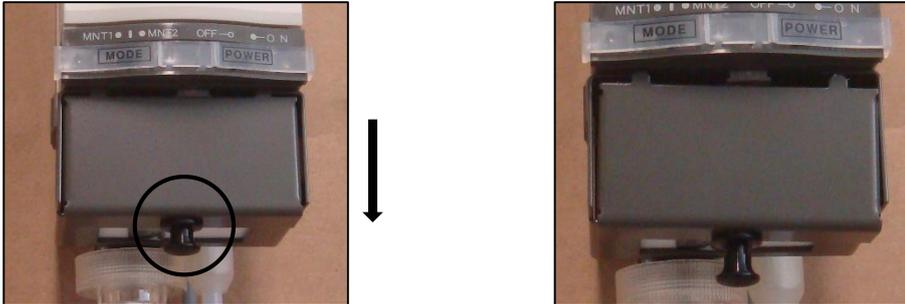


## Caution

- We recommend to replace the sensor unit and pyrolyzer element every six months.  
Always replace sensor unit and pyrolyzer elements that have reached their service life.
- The replacement sensor unit and pyrolyzer elements must be installed before the shelf life has expired.
- Turn off the power source before carrying out any replacements.  
However, when the power switch to the main unit is turned off to replace the sensor unit, the trouble alarm output (open collector) is also turned off. If alarm contacts are used for interlocking with external devices, verify that the interlock be released prior to conducting the alarm test.

# 1 PYROLYZER CHECKS

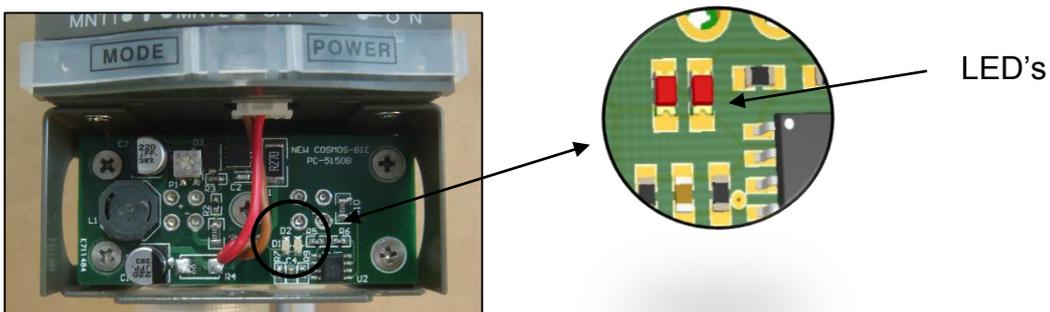
1. Pull the cover lock knob down and release the lock. And after pulling it down further below, pull back the pyrolyzer case cover and remove it.



2. Status LED's.

Status LED's are mounted on the pyrolyzer driver PCB. The pyrolyzer PCB is an integrated part of the pyrolyzer element. The pyrolyzer element contains two pyrolyzers, its function is indicated by two LED's. During normal operation the status LED's D1 & D2 must be OFF.

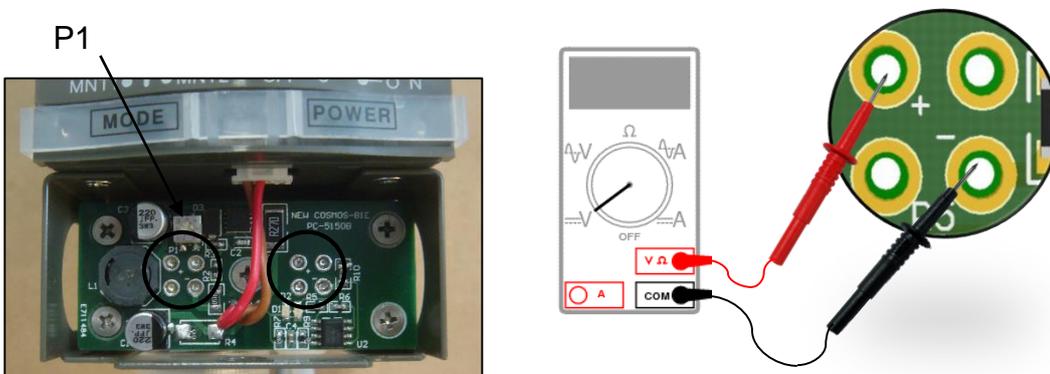
During a pyrolyzer failure the according LED will be ON. In case of a pyrolyzer failure the pyrolyzer element (including driver PCB) must be exchanged.



3. Pyrolyzer voltage.

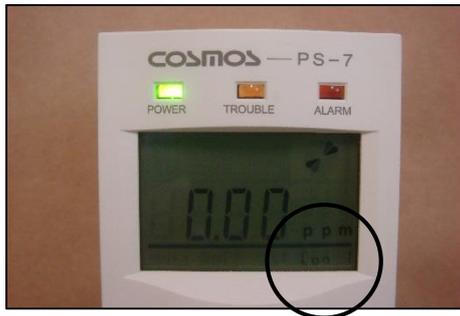
Apply a voltmeter between the two contacts marked "+" and "-" and set the voltage to 1.5 V (+/- 0.05) by adjusting the potentiometer P1.

Note: the voltage increases by turning clockwise.



#### 4. Pyrolyzer configuration

Press the up/ down switch on the main unit, and verify that the pyrolyzer failure alarm is enabled (CON = 1).

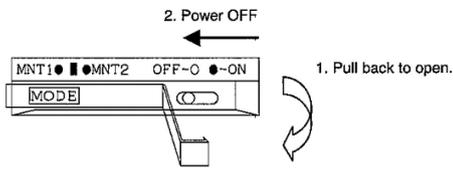


### Warning

- Be sure to check that the pyrolyzer failure alarm is set to ON. When regulator operations are carried out with the failure alarm OFF, the failure alarm will not work.

## 2 PYROLYZER EXCHANGE

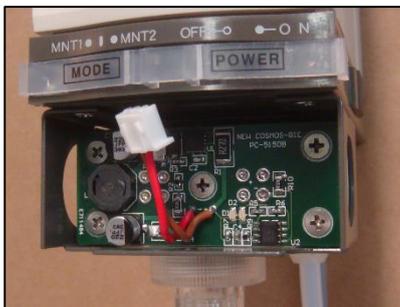
1. Turn off the power source to the main unit



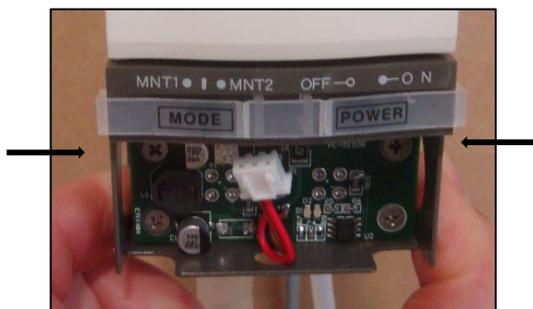
2. Pull the cover lock knob down and release the lock. And after pulling it down further below, pull back the pyrolyzer case cover and remove it.



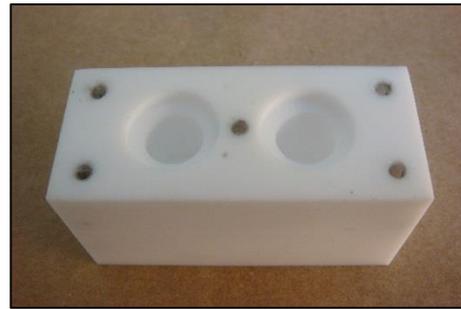
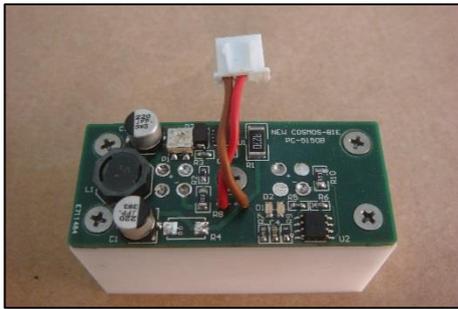
3. Pull out the connector.



4. Hold the both sides of the pyrolyzer assembly, and remove it from the case.



5. Exchange the pyrolyzer with a new one. The driver PCB is mounted with five screws.



6. Insert the pyrolyzer assembly in the case. Push the green part with your finger as shown below, and insert it completely (push it in as far as it will go). Push the connector back into its position.



7. Re-fit the pyrolyzer case cover and push the cover lock knob upward. Switch the main unit power ON.



#### Note

Please return the used pyrolyzer to your authorized dealer.