



**ANALOX**

looking after the air **YOU** breathe®

## ***ANALOX CO Portable Analyser***

### **User Manual**

**Analox Sensor Technology Ltd.**

**UK Address**

15 Ellerbeck Court, Stokesley Business Park  
North Yorkshire, TS9 5PT, UK

**T UK:** +44 (0)1642 711400 **F UK:** +44 (0)1642 713900

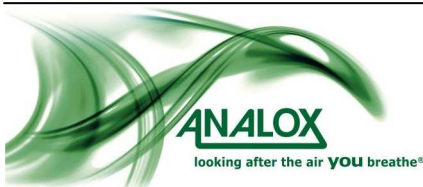
**USA Address**

5981 Engineer Drive, Huntington Beach,  
California, 92649

**T US:** +1 (877) SAFE AIR or +1 (714) 891 4478 **F US:** +1 (714) 891 4479

**W:** [www.analox.net](http://www.analox.net) **E:** [info@analox.net](mailto:info@analox.net)

# **Analox CO Portable Analyser – User Manual**



**CONTENTS**

Introduction ..... 3

Controls ..... 4

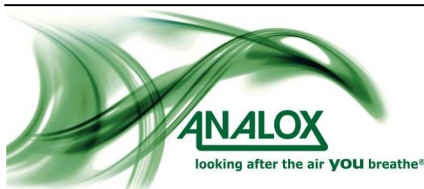
Gas Calibration ..... 5

Warning ..... 5

Carbon Monoxide Calibration ..... 5

Specifications ..... 6

Disposal ..... 7



## **Introduction**

The Analox CO Portable Analyser is designed to measure CO levels in the 1ppm to 100ppm range. It can be used to measure the CO content to assure safety in gas mixes that may be contaminated due to the introduction of CO from internal combustion engines or other pumping devices where CO is a bi-product. The Analyser is designed to be able to verify CO concentration in cylinders as well as analyse closed spaces.

The Analox CO Portable Analyser has a digital display, an internally or externally mounted temperature compensated sensor with a 1 year life expectancy. The power is supplied by three AAA 1.5 volt batteries providing an expected operation life of one year before replacement is required.

The case has an environmentally sealed, potentiometer, on/off switch, long life sensor and digital panel meter.

The Analox CO Portable comes supplied with an internal audible alarm, which provides a warning to the user when the CO concentration goes over 10ppm CO.

The alarm will disengage once the CO concentration drops back below 10ppm CO.

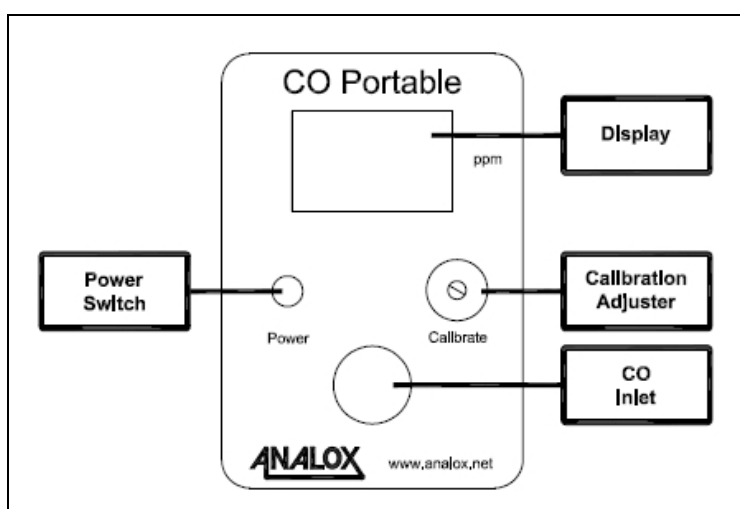
## Controls

The Analox CO Portable Analyser has a splash proof on/off switch. When the switch is centered it is in the off position. When not in use, the switch should be in the off position to conserve battery life. When the switch is in the up position it is on. When the switch is flipped down the unit will remain in the off position.

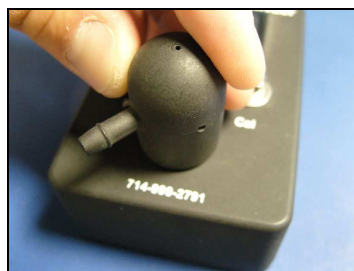
When switched on, the analyser's display will indicate a CO reading. Please note that the analyser has been calibrated prior to shipping but it should be checked routinely (see calibration section).

The low battery warning is a battery symbol in the left corner of the display. When present change the batteries prior to using the analyser.

The display has a 1 ppm resolution and is sealed.



Ensure that the red sensor saver cap is not in place and screw the CO Portable domed flow adaptor onto the sensor threads.



With the domed flow adaptor in place, turn on the analyser and hold the domed adaptor up against the tank outlet, crack the tank and wait for the display reading to settle.



## **Gas Calibration**

While calibration is desirable prior to every use, The CO Portable comes factory calibrated for use at sea-level. This calibration carries a 12 month warranty from the date of manufacture. The warranty is void if the calibration screw has been tampered with.

## **Warning**

The analyser is sensitive to partial pressure. Calibration must always be carried out at the same pressure as the CO measurement.

For gas mixtures or room monitoring you should use a CO calibration gas of 20ppm in air or 50ppm in air concentration before use. This assures minimum deviation and greatest accuracy.

As the sensor ages it would be correct to either send the unit back for recalibration or reset the calibration using the above concentrations of certified gas.

For regular use expose the analyser to the calibration gas and adjust the calibration screw until the display reads the listed concentration of the Calibration gas.

The analyser is now ready for CO measurement.

## **Carbon Monoxide Calibration**

A suitable calibration gas should be in the range of 20ppm CO balance air or 50ppm CO balance air.

Calibration gases can be sourced from Analox.

Flow the gas over the sensor using the provided flow adaptor at a rate of 0.2 - 0.3 liters per minute.

Allow for the reading on the display to settle.

To allow for adjustment of the calibration screw, the nut must firstly be loosened, do this using an 8mm spanner and slowly turning anticlockwise.

With the reading stable, adjust the screw by turning clockwise or anticlockwise until the desired reading has been met.

Once complete, turn off the supply of calibration gas and re-tighten the nut to secure the calibration screw in place.

The analyser is now ready for CO measurement.

**Specifications**

<b>Range</b>	-	<b>0 to 100ppm CO</b>
<b>Accuracy</b>	-	<b>+/- 1ppm</b>
<b>Response Time</b>	-	<b>90% in &lt;15 seconds</b>
<b>Sensor Type</b>	-	<b>Galvanic (Electro-chemical)</b>
<b>Sensor Life</b>	-	<b>Expect 18 months in room air</b>
<b>Warranty</b>	-	<b>18 Months under standard conditions of use</b>
<b>Stabilisation Time</b>	-	<b>15 minutes when first installed</b>
<b>Battery</b>	-	<b>3 x AAA 1.5V batteries</b>
<b>Battery Life</b>	-	<b>Depends on duration of continuous use</b>
<b>Operating Temperature</b>	-	<b>0 to 50°C</b>
<b>Operating Humidity</b>	-	<b>10 to 95% RH</b>
<b>Storage Temperature</b>	-	<b>-20 to 60°C</b>
<b>Alarm Level</b>	-	<b>70db @ 30cm</b>

**Disposal**



**According to WEEE regulation this electronic product can not be placed in household waste bins. Please check local regulations for information on the disposal of electronic products in your area.**

