



Operating Instructions for the ICON Analyser from Vetronic Services LTD



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General

The ICON oxygen Analyser is a battery-powered device suitable for monitoring the percentage of oxygen in an anaesthetic or in free-air. The ICON Analyser uses a long-life galvanic cell and associated micro-power electronics to measure and display the oxygen level. The unit is powered by a single 1.5 volt alkaline battery and is designed to run for approximately one year, based on a usage rate of 8 hours per day.



Features

- Simple to use
- Main body can be rotated through 360 degrees on Adaptor for preferred viewing position.
- Simple calibration and span procedures
- Use in-circuit or in free-air
- Adaptor allows easy connection in 22mm /15mm circuits
- Long sensor life
- Long battery life

User Controls

There are only 2 buttons on the ICON unit, The left hand button is labelled 'CALIBRATE' and the right hand button is labelled 'ON/OFF'. For routine use only the ON/OFF button need be used to turn the unit on and off.



Button Use

ON/OFF

Press this button once to turn on the unit. When the unit is turned on, 6 horizontal lines will appear on the screen for 3 seconds and then be replaced by the measured oxygen percentage value.

CALIBRATE

Press and hold this button for 5 seconds to start the calibration procedure
See - Calibration procedure, below.

Calibration Procedure

The calibration procedure can be run in two parts - a simple 21% recalibration or a 21-100% span calibration. To run a span calibration you must have a guaranteed source of 100% oxygen, such as from an oxygen bottle or hospital oxygen line.

Performing a 21% recalibration

- Press and hold the CALIBRATE button until the screen flashes **CS**
- Release the button
- Press the CALIBRATE button for 1 second - the screen changes to a flashing **21**
- Ensure that the unit is in clean room air for at least 60 seconds and then press the CALIBRATE button again for 1 second
- The screen changes to a flashing **100**
- Turn the unit off using the ON/OFF button

Performing a 21-100% span calibration

- Press and hold the CALIBRATE button until the screen flashes **CS**
- Release the button
- Press the CALIBRATE button for 1 second - the screen changes to a flashing **21**
- Ensure that the unit is in clean room air for at least 60 seconds and then press the CALIBRATE button again for 1 second
- The screen changes to a flashing **100**
- Flow 100% oxygen through the ICON connector for 60 seconds
- After 60 seconds press the CALIBRATE button for 1 second
- The screen changes to a flashing **CC**, indicating Calibration Complete
- Press the CALIBRATE button one more time to leave the calibration routine



Maintenance



Changing the battery

When the battery level is low, the screen will flash slowly about once every 2 seconds. If the flashing is continuous then the battery is below the minimum level and should be replaced.

Undo the back cover of the device by undoing the securing screws in the corner of the back-plate. Remove the battery from the battery holder and replace with a long life, low drain 1.5v Alkaline battery. Replace the back-plate and tighten all the corner securing screws.

Replacing the 22mm Adaptor seal

There is an O-ring seal in the 22mm Adaptor that prevents the leakage of gas from the anaesthetic circuit. If this seal becomes damaged or is lost it must be replaced. Use a small screwdriver to ease out the old seal and then press the new seal into place.

New seals can be obtained from your supplier or distributor.

Replacement Part number: **VSL ICON R-15**

Troubleshooting

Problem: There are 6 horizontal lines on the screen all the time
The oxygen cell is depleted. Contact your supplier or distributor to arrange a unit service

Problem: The display is constantly flashing although the numbers seem correct
The internal AA battery is low. Replace the battery

Problem: There is nothing on the display and no response to the ON/OFF button.
Fit a new Long-life AA battery. If this does not resolve the problem, contact your supplier or distributor to arrange a unit service

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