



## Instructions For Use Handy Atmosphere

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### Description & Use

The **OxyGuard Handy Atmosphere** is a portable gaseous oxygen meter. It measures % oxygen by volume, and is powered by a 9V battery. The instrument is waterproof, and its easy-to-clean design makes it ideal for use in the food industry and similar.

The Handy Atmosphere has two pushbutton controls. The “ON-OFF” button is used to turn it on and off, the other button back-lights the display when held depressed.

To measure oxygen just press the “ON-OFF” button and note the reading when it has stabilized.

### Maintenance

Maintenance as such is not necessary. After use the instrument should be placed in its pouch indoors where it will be ready for calibration check next morning. There is **NO** need to keep the membrane moist.

Keep the probe clean and check the calibration every morning. There is **NO** need for regular service, neither the membrane nor the electrolyte need to be changed at regular intervals.

### Calibration

Calibration is carried out in air. **It is essential that the probe has the same temperature as the air.** DONT calibrate in strong sunlight or near any source of heat, or just after you have subjected the probe to a change in temperature. We recommend that you calibrate every morning, with the probe in its pouch where it has been all night.

To calibrate, press “ON-OFF”. When the reading is stable adjust the small screw in the side of the handy until the display shows 20.9.

### Specifications

Range: 0.0 - 100.0 by volume.  
Accuracy: Depends on calibration: typically better than 1% of reading +/-1 digit.  
Repeatability: Typically better than +/-0.5% of value.  
Operating temp. Probe -5 to +50°C,  
Meter -15 to +50° C  
Response time: 90% after less than 25 sec.  
Battery: 9V E-BLOCK - 6LR61 - 6F22 - MN1604



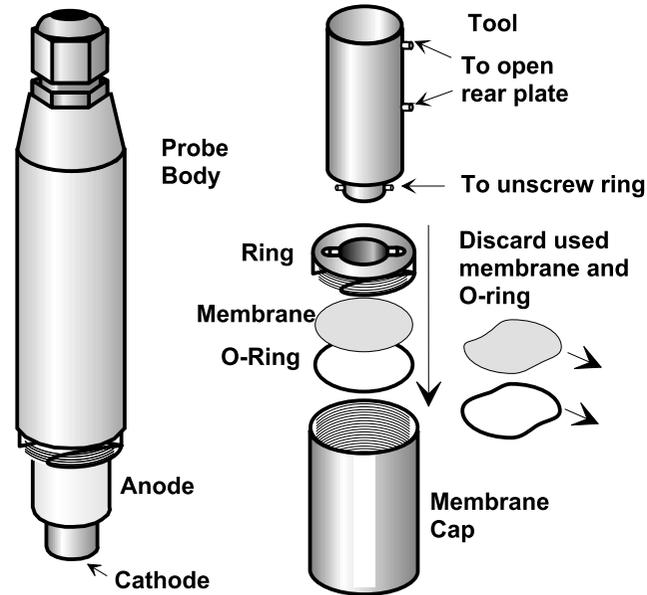
### Probe Renovation

If the membrane should be damaged, or if it is impossible to calibrate to 20.9, the probe should be renovated as follows:

Clean the outer of the probe. Remove the protector and unscrew the cap. Rinse the probe. The anode, which is made of lead, will not normally need cleaning. Check the cathode and clean off any deposits using the brown plastic scouring pad delivered with the Handy. **THE CATHODE MUST NOT BE POLISHED.**

Fill the extra membrane cap with electrolyte and screw it slowly onto the probe. Excess electrolyte will dribble from the thread. Calibrate the probe. Re-calibrate after a few hours, since the probe will take a little time to settle down after renovation.

A new membrane can easily be fitted to the cap - see the drawing. Make sure that all parts are completely clean and dry. Use a new membrane and O-ring and assemble exactly as shown. Tighten fairly tightly, but the membrane must not wrinkle. If this happens try again with a new membrane and O-ring. An O-ring can



### Battery Exchange

Fit a new battery as soon as "Lo Bat" appears in the display. Remove the battery if the meter is to be stored for an extended period of time.

Use the assembly tool to open the rear plate. The battery can then easily be exchanged. Don't touch the ribbon cable or any of the components. Make sure you tighten the rear plate properly

