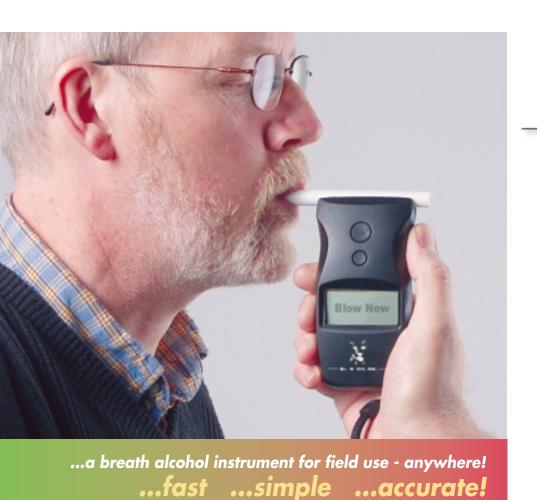
lion alcolmeter® 500



Instrument Features

- SIMPLE TO USE: the lion alcolmeter® 500 is fully automatic. This means it's simple to use, so training requirements are minimal.
- FAST ACCURATE ANALYSIS: using the Lion fuel cell sensor. This ensures a high specificity to alcohol, with a long and stable working life.
- EASY TO READ DISPLAY: breath alcohol readings are clearly shown on a large, illuminated graphics display.
- **LAST TEST RECALL:** the result of the last breath test can be recalled at anytime.
- TRUE EVIDENTIAL CAPABILITY: the lion alcolmeter® 500 may be used for fast subject screening. However, depending on the user's criteria, it may also be suitable for evidential analysis.
- CALIBRATION SECURITY: by means of a hidden push-button sequence.
- ERGONOMIC DESIGN: the 500 is comfortable to hold, and is genuinely pocket size.
- LOW POWER CONSUMPTION: the 500 is energy efficient: just two AAA cells give around 400 breath tests.
- SIMPLE, LOW COST MOUTHPIECE: so low cost per test! In fact, the 500 uses the same pressure mouthpiece as the S-D2/S-L2: these are supplied individually and hygienically wrapped.

Simple Operating Procedure!



SWITCH ON: **AUTOMATIC SELF CHECK**



ATTACH MOUTHPIECE: INSTRUCT THE SUBJECT



THE SUBJECT BLOWS



NOTE ALCOHOL READING

Advanced Specifications and Features

- ANALYTICAL PRINCIPLE: Lion fuel cell sensor for alcohol analysis. Unaffected by acetone, hydrocarbons, nonalcoholic food and drug vapours, and all other likely breath contaminants.
- MEASURING RANGE: 0.02 to 2.00mg/litre; .005 to .400% BAC [g/210 litres]. An over-range indication is given at higher levels.
- BREATH SAMPLING: the 500 automatically samples deeplung air. An optional Manual override feature may also be used, if required.
- ANALYTICAL RESPONSE TIME: normally within 30 seconds, but within 5 seconds at the 'zero' alcohol level.
- **RECOVERY TIME:** approximately 100 seconds at 0.50mg/l.
- **OPERATING TEMPERATURE [Optimum]:** -5 to +40°C.
- **STORAGE TEMPERATURE:** -20 to +65°C.
- POWER SUPPLY: two AAA cells provide sufficient power for around 400 breath tests. Two stage low power warning system.
- **HUMIDITY:** 10 to 95%, non-condensing.
- **BAROMETRIC PRESSURE:** 600 to 1,300hPa.
- CALIBRATION: recommended every 6 months, using either a wet-bath simulator, or an **AlcoĆal®** dry-gas standard. Automatic, security-protected procedure.

- **DISPLAY:** LCD graphics, dimensions 45mm x 21mm, 128 x 64 pixels, with backlighting.
- AUDIBLE BEEPER: gives auxiliary warning messages.
- MICROCONTROLLER: H8/3664.
- **MEMORY:** the last test is stored in memory, for later recall if
- **WARM-UP TIME:** the instrument is not heated, so there is no warm-up time - at **any** ambient temperature.
- **DISPOSABLE MOUTHPIECE:** simple disposable 'pressure' tube, the same as used with the S-D2/S-L2.
- **RFI CERTIFICATION:** exceeds requirements of EN 50081-1: 1992 (emission) and EN 50082-1: 1997 (immunity)
- VIBRATION AND SHOCK: meets IEC 68-2-27 Part 2.1 Test EA: and IEC 68-2-6 Part 2.1 Test FC.
- **CASE CONSTRUCTION:** impact resistant ABS.
- **SOFTWARE CONFIGURATION:** various software settings may be configured by Lion or the local **Distributor** using an external PC and Config-500, such as:
 - *alcohol units * blood:breath ratio
 - * breath discard volume *auto-off time
- **DIMENSIONS:** 125mm x 654mm x 15mm.
- **WEIGHT:** approximately 140g, including batteries.

Disposable and Accessory Items

- **DISPOSABLE MOUTHPIECES:** individually wrapped.
- **USER HANDBOOK:** covers all aspects of operation.
- **SERVICE MANUAL:** for authorised personnel only.
- **PROTECTIVE POUCH:** in either grey or yellow leather. Please Note: this item is supplied as an **optional extra** only.
- **ALCOCAL®:** a convenient calibration standard.
- WET-BATH SIMULATOR: an alternative to the AlcoCal®.

Ordering Information

The lion alcolmeter® 500 is supplied as a complete delivery unit, each unit consisting of the following items:

- *instrument
- * wrist-strap
- *user handbook

- *4 mouthpieces
- * 'Alcohol in the Human Body' book



lion alcolmeter® 500 and accessory items





Lion Laboratories Limited

Complies with directive 93/42/EEC

(E 0086

