



NOW AVAILABLE.....



# The Lion Alcolmeter 500

AN AMAZING NEW ALCOHOL TESTER FROM LION KNOWN FOR 25 YEARS OF SD-2 FAME



The A500 has advanced features currently only available in alcohol screeners selling at around twice the price



- Simple, fully automatic operation
- No buttons to press
- Very easy to blow Even for an 80 year old. Manual override button for difficult subjects
- Automatic zero check Provides error free readings everytime
- Automatic calibration No screwdriver adjustment. The A500 automatically adjusts itself to the preset value of an external alcohol standard

#### Other winning features:

##### Last test recall

The test result from the previous test can be recalled even after switch-off.

##### Fail-safe operation

The A500 features an automatic check for system errors upon switch-on. No test can be done if the pre-check fails.

##### Graphic display

The easy to read graphic display provides instructions for the operator.

##### Pocket sized dimensions

The A500 is similar in size to up-market cell phones. An optional carry pouch is available with a belt clip.

##### Compatible mouthpiece

The A500 employs the same mouthpiece as used with the LION SD-2.



**BEWARE OF CHEAP BREATH TESTERS AND OF SUPPLIERS CLAIMING TO HAVE INSTRUMENTS WITH EQUIVALENT CHARACTERISTICS**

You cannot easily or accurately calibrate cheap testers-if at all. They frequently give false high or low readings and may give positive readings from substances other than alcohol, such as acetone, often found in the breath of diabetics, smoke and menthol sweets.

**CHEAP TESTERS HAVE BEEN USED AS A SUCCESSFUL DEFENCE IN DISCIPLINARY HEARINGS**

**The LION A500  
The NEW alcohol screener for  
all South Africa**

**Setting the standard for years to come!**

If you have old manually operated and calibrated LION SD-2 instruments perhaps consider purchasing A500's as replacements



# SIMPLE FULLY AUTOMATIC OPERATING PROCEDURE... No buttons to press



**1 SWITCH ON  
AUTOMATIC SELF CHECK**



**2 ATTACH MOUTHPIECE:  
INSTRUCT THE SUBJECT**



**3 THE SUBJECT BLOWS**



**4 NOTE ALCOHOL READING**

**VERY EASY TO BLOW**  
even for an 80 year old

**AUTOMATIC ZERO CHECK**  
no operator errors

**LAST TEST RESULT RECALL**  
even after switch-off

## PLEASE NOTE THAT THE HIGHLY POPULAR QUICK SAMPLING FEATURE OF THE LION SD-2 IS AVAILABLE ON THE A500

A manual breath sample button can be pressed at any time to take a breath sample when a subject provides a short or weak sample.

### AUTOMATIC CALIBRATION PROCEDURE



Checking for accuracy and adjustment where necessary is achieved by a hidden (secure) push button sequence.

No screwdriver adjustment is needed. The A500 will automatically adjust itself to the preset value of the AlcoCal calibration standard. AlcoCal calibration standards can be purchased from ALCO-Safe; alternatively the instruments can be sent to ALCO-Safe for calibration and return via courier.

*The Lion Alcolimeter 500 being calibrated with a Lion AlcoCal S alcohol calibration standard*

### DISPOSABLE AND ACCESSORY ITEMS

Supplied with the A500: Wrist strap, user handbook, alcohol in the body book.

#### Optional:

\* **DISPOSABLE MOUTHPIECES.** Individually wrapped.

These mouthpieces are the same as used with the well-known LION SD-2 Alcolimeter.

\* **PROTECTIVE POUCH.** Supplied in either a plain grey or a black pouch with iridescent yellow stripes for nighttime visibility. Each pouch is fitted with a belt clip.

\* **SERVICE MANUAL.** For authorized personnel only.

\* **ALCOCAL-S OR ALCOCAL-M CALIBRATION STANDARDS** (300 calibrations) (60 calibrations)



## 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 deep lung 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/litre

**OPERATING TEMPERATURE (Optimum):** -5 to +40°C.

**STORAGE TEMPERATURE:** -20 to +60°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 1300hPa.

**CALIBRATION:** recommended every 6 months, using either a wet-bath simulator, or an AlcoCal dry-gas standard. Automatic, security-protected procedure.

**DISPLAY:** LCD graphics, dimensions 45mm x 21mm, 128 x 64 pixels, with backlighting

**AUDIBLE BEEPER:** gives auxiliary auditory messages.

**MICROCONTROLLER:** H8/3664.

**MEMORY:** the last test is stored in memory, for later recall if required.

**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.

**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 software, such as: \*alcohol units, \*blood:breath ratio, \*auto-off time, \* breath discard volume

**DIMENSIONS:** 125mm x 654mm x 15mm.

**WEIGHT:** approximately 140g, including batteries.

Call us or visit our website to obtain assistance in setting up and operating a substance abuse policy/programme

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