

# lion alcolmeter® SD-400P



...a breath alcohol evidential instrument for field use - anywhere! ...fast ...simple ...accurate!



```

15 E PAG
XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX

lion alcolmeter SD-400PA

Serial No.: 824621 D
User Re: No.: 2888

Last Calibration:
18:58 28/09/99

Last Calibration Check:
08:03 21/09/99

SUBJECT BREATH TEST

Date: 07/12/99
Time: 23:55
Test No.: 0005

Blank Check: .000 BAC
Subject: .000 XBAC

Subject's Name:

.....
Operator's Name:

.....
Location:

.....
Subject's Signature:

.....
Operator's Signature:

.....
XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX
    
```

## Instrument Features

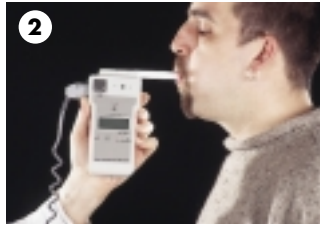
- **SIMPLE TO USE:** the lion alcolmeter® SD-400P is fully automatic. This means it's very simple to use, so training requirements are minimal.
- **FAST, ACCURATE ANALYSIS:** using the Lion *fuel cell* sensor. This ensures high specificity to alcohol, and a long stable working life.
- **EASY TO READ DISPLAY:** alcohol readings are shown on a large illuminated display. Four indicator lights inform and instruct the operator.
- **INTEGRAL PRINTER:** delivers a comprehensive test record - with alcohol readings, date and times. Names, signatures and the location are then entered by hand. The printout is available in various languages: customisation on request.
- **CONFIGURATION:** operating parameters may be set to meet the user's needs.
- **LAST TEST RECALL:** the result of the last breath test can be recalled and reprinted, even if the instrument has since been switched off.
- **SHOULDER-BAG OR CARRY-CASE:** the 400P comes housed in a soft water-resistant shoulder bag as standard. However, a hard, water-proof carry-case (fitted to carry an **AlcoCal**® alcohol standard) is also available as an alternative option.
- **AUTOMATIC DATA COLLECTION:** alcohol readings are stored in memory, with date and time. This data can then be downloaded to a printer or PC.
- **CALIBRATION SECURITY:** by means of a 'dongle' electronic key.
- **APPROVALS:** Approved by law enforcement authorities worldwide, for **evidential** testing.



# Simple Operating Procedure!



**1**  
SWITCH ON: SELF CHECK:  
ATTACH MOUTHPIECE



**2**  
INSTRUCT THE SUBJECT:  
BREATH SAMPLE PROVIDED



**3**  
NOTE ALCOHOL READING



**4**  
OBTAIN PRINTOUT

## Specifications and Features

- **Fuel Cell Sensor:** high specificity to alcohol, unaffected by other possible breath contaminants.
- **Warm-up Time:** the instrument is ready for use within 15 seconds of switch on, at **any** temperature.
- **Measuring Range:** normally 0.02 to 2.00mg/litre BrAC. An overrange indication is given at higher levels.
- **Analytical Response Time:** normally within 30 seconds; but within 5 seconds at zero alcohol levels.
- **Date and Time:** each test result is stored with date and time [internal battery backed].
- **Temperature Range:** from -5°C to +40°C, for optimum operation.
- **Recalibration:** at least every six months, using either a wet-bath simulator or **AlcoCal**<sup>®</sup> gas standard.
- **Recovery Times:** typically 10 seconds at zero alcohol; 60 seconds at 0.35mg/litre BrAC; 4 minutes at 2.00mg/litre.
- **Memory Capacity:** 500 tests as standard, expandable up to 5,000.
- **Print Copies per Charge:** approximately 120.
- **Printer Recharging Time:** approximately 14 hours.
- **Print Copies per Paper Roll:** approximately 120.
- **400 Power Supply:** 5 new AA cells give at least 3,000 breath tests. Two stage low power warning system.
- **Radio Frequency Immunity:** exceeds requirement of EN 50082-1.
- **Shock/Vibration:** impact resistant ABS: meets IEC 68-2-27 Part 2.1 Test EA and IEC 68-2-6 Part 2.1 Test FC.
- **Dimensions and Weight:** **Shoulder Bag:** 250 x 330 x 130mm; 2.5Kg [complete with contents].  
**Hard Carry Case:** 460 x 380 x 170mm; 5.5Kg [complete with contents].

## Accessory Items

- **Disposable Mouthpieces:** low resistance to breath flow; individually and hygienically wrapped.
- **Reusable Sampling Cup:** an alternative to the mouthpiece, for rapid subject sampling and turnover, such as at a Police roadblock or factory gate.
- **Rechargeable Power Unit [for 400 instrument]:** with 220 volts AC/12volts DC intelligent charger.
- **Vehicle Power Unit:** powers the **400** from a vehicle's 12 volt DC supply [via the cigarette lighter socket].
- **Handbooks:** a range of handbooks covering all aspects of use of the instrument and accessories.
- **Protective Leather Pouch:** protects the **400** instrument and fits inside the carry case or bag.

## Accessory PC Software

- **Data-400<sup>™</sup>** : retrieve test data from the instrument's memory and store it on your PC's hard disk; then export to any standard database or spreadsheet program. Operates under MS Windows.  
  
Supplied with connector cable and full instructions.
- **DataMac-400<sup>™</sup>** : the same application as for **Data-400<sup>™</sup>**, but used in Apple Macintosh PC's  
  
Supplied with connector cable and full instructions.



INVESTOR IN PEOPLE



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Lion Laboratories Limited

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Complies with directive  
93/42/EEC



FM 25502  
CERTIFIED TO  
INTERNATIONAL QUALITY  
STANDARD ISO 9000:  
EN 29000 : BS 5750