# ALCJFIND

# **Breath Alcohol Tester**

Professional Fuel cell sensor Personal & professional use alcohol tester

## DA-8500 Instruction Manual

- 50 sets of test result memory
- Professional Fuel Cell Sensor
- Law enforcement grade accuracy
- 4-digit LCD display with a backlit
- · Fast analyzing and result
- Automatic power off
- User adjustable settings (Blow time, Unit, Beep alarm, Blow detecting)

ALCIFIND

## Important safety information

- Before using the alcohol tester, read all instruction manual carefully and practice the test.
- · Maintenance and calibration should be performed by experts.
- Test should be performed after 20 minutes after eating, drinking or smoking, if failure to wait 20 minutes may result in invalid results or incorrect results.
- · Residual alcohol in the mouth can distort the measurement.
- Aromatic drinks or mouth sprays containing alcohol can interfere with measurements. In this case, wait for 20 minutes or rinse the mouth with pure water.
- Do not permit to blow cigarette smoke into the tester which may damage the sensor.
- Do not drink and drive, even small amount of alcohol can result in driving impairment.
- Recommended to use calibration service every 12 months or after 500 times tests.
- Do not use this device as a tool to determine "drink and drive". The manufacturer and the sellers will not take any legal responsibility for the test results.
- When not used for a long time, keep the device after taking out the batteries. In case of testing after long-term storage, there might be high tolerance of test results for the first 3 tests.
- Replace the batteries when the battery indicator icon reaches empty for the accuracy reason.
- In case the test result is higher than 0.1% BAC (1.0 g/l) and you try again without interval, then warm up time might be delayed.
- Perform a test within the operating temperature, which is specified in the instruction manual.

## Introduction

Thank you for purchasing our breathalyzer, ALCOFIND DA-8500 which is a personal & professional use alcohol tester with extremely high-reliability. It can be used in the hospital, school and many other industrial fields. It measures estimated B.A.C(Blood Alcohol Content) in human breath by means of a fuel cell sensor which is high durable sensors and providing accurate breath alcohol results.



## Preparation

Install two AAA batteries in the battery compartment by paying attention to the battery polarity.







Gently pull the cover down

Insert a mouthpiece into the port on the side of the alcohol tester. Ensure whether it is securely fit or not.

A new mouthpieces is to be used for every person tested.

## Performing the measurement



Press the power button (b) The total number of test performed will be displayed briefly and start countdown.

When the countdown reaches zero with a double beep sound, three dashes ( $\neq$ ) will be displayed and "START" will flash. Take a deep breath and blow the mouthpiece for five seconds until there is a double beep sound.



When the sampling was successful, LCD outer lines will be turning along the edge of LCD as you can see the picture.



After a few seconds(depending on the alcohol level), the estimated BAC(Blood Alcohol Concentration) will be displayed. The value will flash for several seconds.

If you want to test again, press the start button to restart the countdown cycle.

The tester automatically will be turned off after 15~20 seconds.

Wait at least 20 minutes after eating, drinking or smoking before measurement.

## **User Settings & Memory**

User may adjust UNIT, BEEP ALARM, BLOW TIME, FLOW DETECTION through Menu mode. Turn on the tester which may begin a countdown. During the countdown, press and hold the mode button for more than 5 seconds, the tester may enter Menu mode & Memory mode

#### Adjust measurement units

When "Unit" appears on the display, press the start button to adjust the measurement unit.

#### Adjust beep alarm setting

When "bEEp" appears on the display, press the start button to set the beep alarm. If user set the beep alarm at 0.05% BAC, the tester will sound an audible warning alarm when the test result is over 0.05% BAC. If user set "none" the tester will not sound at all. Recommended to set the value at your country's BAC Limit.

#### Adjust blow time

When "bL-t" appears on the display, press the start button to adjust the blow time. A longer blow time may provide a deep lung air which may provide more accurate reading.

#### Adjust flow detection setting

When "FL-d" appears on the display, press the start button to adjust the flow detection. Use this option to adjust how hard a user is required to blow.

LO Low level detection, this is default setting.

HI High level flow detection. This level requires a stronger breath. Recommend if previous test attempts have been unsuccessful.

USER User activated test mode. When testing in this mode, the user must press the start button during blowing to obtain breath sample and perform a test successfully.

#### Enter the Memory Mode

When "DAT" appears on the display, press the start button, the most recent test result will appear. By pressing start button, next test result will appear.

The tester will recall up to 50 test results. If the memory is full, the oldest test result is deleted automatically.

## Display message & Problem-solving guide

MESSAGE	WHAT ITMEANS	ACTION
	Full battery	Full battery
	Empty battery : Warns when battery is low. The unit can be operated but recommended to change new batteries for correct result!	Replace new batteries.
88E	If the LCD displays "BAt", the unit cannot operate.	Replace new batteries immediately.
FLo	If the sampling volume is too low or not sufficiently blow.	Press () button again to repeat the measurement.
Out	If there is no breath sample blown within 30 seconds, the LCD will display "OUT".	Press () button to restart the countdown cycle and retest.
But	If the unit is powered on beyond the acceptable temperature range(5~40°C or 41~104°F) the unit will display it.	Repeat the test after the unit has reached a temperature within the operation range.

## Technical specifications

Indication of B.A.C.	0.000 ~ 0.500%BAC 0.00 ~ 5.00‰ 0.00 ~ 2.50mg/l
Accuracy	+/- 0.005%BAC at 0.1%BAC at 25°C +/- 0.05‰ at 1.0‰ at 25°C +/- 0.025mg/l at 0.50mg/l at 25°C
Warm up time	Within 15 seconds at 0.50g/l(‰) warm up time may vary depending on the BAC measured.
Sensor	Professional Fuel cell sensor
Power supply	Two AAA size alkaline batteries
Battery Life	Approx. 1000 tests
Dimensions(WxHxD)	48mm x 120mm x 20mm
Weight	96g including batteries
Calibration	every 12 months or after 500 tests
Operating temperature	5 ~ 40 °C

The specifications are subject to change without prior notice for functional improvement.

## Warranty

The manufacturer warrants the product to be free from defects in workmanship or material (excluding calibration) under normal use either for 1(one) year from the date of purchase or 500 breath tests whichever comes earlier.

The manufacturer's obligation under this warranty is limited to replacing, adjusting or repairing the unit at manufacturer's option, if returned along with proof of purchase.

For any defects due to natural disaster or customer's negligence, misuse, reconstruction and repair by unauthorized person, reasonable cost shall be charged for repair or part replacement.

## Customer service

For any questions, after-sales service, product calibration or to purchase additional mouthpieces, please contact nearest distributor.

Distributor :