

## AlcoScan AL-5000

### User's Manual



The AlcoScan AL-5000 analyzes a breath sample to detect alcohol in the lungs. This reading is then converted to blood alcohol concentration (BAC). The AlcoScan AL-5000 uses an advanced oxide semiconductor sensor to detect alcohol. It also features replaceable mouthpieces.



### Initial Use:

1. **Battery.** Install two 1.5V AA batteries (included), as shown below.



2. **Mouthpiece.** One mouthpiece should be placed in the mouthpiece slot near the top of the device. For sanitary purposes, you may replace the mouthpiece between uses.

### Operation:

1. **Power On/Off.** Press the POWER button on the face of the unit. **IMPORTANT:** When you power on the unit, you will see a countdown in the display. The device must “warm up” the sensor for testing. Please wait until the display shows “0” before using the device. **The warm up process takes less than one (1) minute. The unit will play two (2) short BEEPS and show a “READY” light when it is ready for use.**
2. **Breath Sample.** The user should take a deep breath and exhale sharply and steadily into the mouthpiece for at least 3 to 4 seconds.
  - a. While blowing into the mouthpiece, **the unit will play a BEEP for about 3 to 4 seconds. You must continue blowing until the long BEEP is finished. The unit will then play two (2) short BEEPS when the sample is complete.**
  - b. Make sure the lips are sealed around the mouthpiece and the “breath out” opening is not blocked. (Please observe other **Warnings** in Section 5 below.)

- c. If a sample is not taken within 20 seconds, you will see “Out” in the display and the unit will shut itself off.
  - d. If you see a warning message in the display, please refer to the list of **Warnings** at the end of Section 5 below.
3. **Analysis and Display.** Once the sample is analyzed, **the unit will display the result as a percent measure of Blood Alcohol Concentration (BAC) from 0.00% to 0.39%.** The BAC will be displayed for 15 seconds. The unit will shut itself off after testing.

If you would like to perform another test, please power on the unit again. When performing multiple tests, the warm up cycle shortens to less than 20 seconds.

4. **Results.** The legal limit for intoxication (DUI/DWI) has recently been lowered from 0.10% to **0.08%** BAC across most of the USA. According to the American Medical Association (AMA), a BAC of **0.05%** is enough to impair the ability to drive. *You should never operate a motor vehicle when you are impaired by the consumption of alcohol, drugs or lack of proper rest.*

**Measured BAC**

0.00% to 0.01%	Safe range.	Little/no alcohol intake.	
0.02% to 0.04%	Moderate* range.	Increased alcohol intake.	
0.05% to 0.07%	Warning* range.	Ability to drive may be impaired.	WARN light displayed on unit.
0.08% and over	High Risk* range.	Legal driving limit for BAC exceeded.	WARN light displayed on unit.

*\*Drinking alcohol in ANY amount may impair the ability to drive. There is no “safe” level of alcohol intake before driving. Don’t drink and drive.*

Note: The maximum reading the device can show is 0.40%. A true BAC of 0.40% or above may result in the onset of coma or even death by respiratory arrest. A reading of 0.40% may indicate an acutely dangerous condition, but may also indicate a sampling error (such as liquid alcohol blown into the device). Please carefully read the **Warnings** section of this manual before operating the device.

5. **Warnings.**

- a. Wait at least 20 minutes after eating or drinking before testing. Alcohol remaining in the mouth, or even excess saliva, may interfere with testing. This includes alcohol-based mouthwash or similar products. ***This is the most common cause of false positives and results that seem higher than normal.***
- b. Avoid testing in high wind or enclosed spaces. Poor ventilation may also lengthen the time required for warm up between tests.
- c. Do not blow smoke, saliva or other contaminants into the mouthpiece, as the sensor may become damaged.
- d. Do NOT use the AlcoScan AL-5000 as a tool to drink and drive.
- e. Keep out of extreme temperatures and out of the reach of children.
- f. To maintain accuracy, professional recalibration of the AlcoScan AL-5000 must be performed every 200 tests or at least once yearly, whichever comes first.
- g. **WARNING DISPLAY “Flo”:** If you see “Flo” in the display, the breath sample was not strong enough for measurement. Please try again and make sure the breath is strong and steady during sampling. ***This is the most common case of user error.***
- h. **WARNING DISPLAY “Cal”:** If you see “Cal” in the display, the unit requires recalibration or maintenance. Please use the contact information at the end of this document.
- i. **WARNING DISPLAY “Bat”:** If you see “Bat” in the display, the battery power is low. Please replace the batteries.

6. **Specifications for AlcoScan AL-5000.**

Method of Measure	Breath sample to BAC
Range	0.00% to 0.40%
Accuracy	+/-0.01%
Sensor	Oxide semiconductor
Power	Two 1.5V AA alkaline batteries (included)
Testing Capacity	Approx. 200-300 with fresh batteries
DOT Approved	YES
Operating Temp.	10 – 40 degrees Celsius
Warm Up	Less than 1 minute
Display	3-digit LED
Size	4½" x 2½" x 1"
Weight	105 g
Recalibration	Required every 200 tests or at least once yearly.
Remark	CE approved

7. **Warranty.** The manufacturer warrants the product to be free from defects in workmanship or material (excluding calibration) under normal use for six (6) months from the date of purchase. The manufacturer's obligation under this warranty is limited to replacing, adjusting or repairing the unit if returned along with proof of purchase. This warranty is void if the unit has been tampered with or maliciously damaged. Recalibration is a required periodic maintenance procedure required of any and all breathalyzers in order to maintain accuracy, and as such, is not a warranty service.

8. **Recalibration.** For recalibration or technical support, please contact us using the information below.

AK Solutions USA, LLC  
21 Grand Ave. Suite 102  
Palisades Park, NJ 07650

Tel: 201.943.9411

Fax:201.943.8828

Email: [info@PersonalAlcoholTester.com](mailto:info@PersonalAlcoholTester.com)

Web: <http://www.PersonalAlcoholTester.com/>