

DIGITAL PERSONAL BREATHALYZER

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# **AlcoMate<sup>®</sup>**

## **AlcoScan AL2500**



**AlcoScan AL2500 Operator's Manual**



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The AlcoScan AL2500 analyzes a breath sample to detect alcohol in the lungs. This reading is then converted to blood alcohol concentration (BAC). The AlcoScan AL2500 is very convenient and portable. No mouthpiece is required.

The AlcoScan AL2500 is intended to measure alcohol in human breath. Readings obtained by this device are used in the diagnosis of alcohol intoxication. The accuracy of this device has been established at a Blood Alcohol Concentration of 0.008 and 0.032. Accuracy at a Blood Alcohol Concentration greater than 0.032 has not been evaluated. Accuracy testing was completed according to DOT regulations.

# - Device Setup and Operation -

If you are using the AlcoScan AL2500 for the first time, please install two 1.5V AA batteries (included) by opening the rear cover of the unit.

## 1. Power On/Off

- a) Press and hold the Power Switch to turn the unit on. **The cumulative test count will be displayed as you hold the Power Switch down.**
- b) Release the Power Switch. There will be a countdown from **234** to **0** as the unit warms up. The warm up process takes less than 30 seconds. The unit will play two (2) short BEEPS when it is ready for use.

2. **Breath Sample:** The user should take a deep breath and exhale sharply and steadily into the sensor opening (above the display) for at least 3 to 4 seconds.

- a) After you blow into the unit, it will BEEP once to show that it has taken a reading.
- b) The unit will BEEP again when it starts analyzing the sample. You will also see a "WAIT" indicator flashing in the display.
- c) When the analysis is complete, the "WAIT" indicator will turn off and the unit will BEEP again. You will then see a Blood Alcohol Concentration (BAC) reading in the display.
- d) If a sample is not taken within 20 seconds, you will hear four (4) beeps and the unit will shut itself off. (You can also press the **POWER** button again to manually shut off the unit.)

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 0.40%. 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) is 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

Your Reading	Your Range	Description
0.00% to 0.01%	Safe* range	Little/no alcohol intake.
0.02% to 0.04%	Moderate* range	Increased alcohol intake.
0.05% and over	Warning* range	Ability to drive may be impaired.

*\* 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 **Warning section** of this manual before operating the device.

## - General Information about DUI/DWI -

The legal limit for intoxication (DUI/DWI) is **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.

## - Warnings and Error Codes -

### **Warnings and Precautions**

- **WAIT AT LEAST 20 MINUTES AFTER EATING OR DRINKING BEFORE TESTING.** A breathalyzer examines “lung air” samples, not “mouth air” to calculate alcohol content. Any “contaminants” in the mouth, including alcohol, food, smoke, or even excess saliva, may interfere with testing. This includes alcohol-based mouthwash or similar products. **This is the most common cause of improper use and incorrect results.**
- Avoid testing in high wind or enclosed spaces. Poor ventilation may also lengthen the time required for warm up between tests.
- Do not blow smoke, saliva or other contaminants into the mouthpiece, as the sensor may become damaged.
- **Do NOT use the AlcoScan AL2500 as a tool to drink and drive.**
- Keep out of extreme temperatures and out of the reach of children.
- **To maintain accuracy, the sensor inside the AlcoScan AL2500 must be recalibrated every 200 tests or at least once a year (whichever comes first).** Large numbers of "high positive" (high alcohol) readings may require recalibration of the sensor much sooner than normally expected. To recalibrate, you must mail your device to the address at the end of this manual. Please contact us at [support@alcomate.net](mailto:support@alcomate.net) for details and related fees.

## **Troubleshooting**

- **WARNING DISPLAY "bAt"**: If you see "bAt" in the display, the battery power is low. Please replace the batteries with a new pair. Make sure to properly align the batteries by looking at the +/- marks.
- **WARNING DISPLAY "Er"**: If this code appear in the display, the device is reporting a general problem with the alcohol sensor, or that the device has been physically damaged. Please purchase a new device.
- For the other troubles, please contact AK GlobalTech at [support@alcomate.net](mailto:support@alcomate.net), along with your error codes and photos if available.

## **- Specifications -**

Method of Measure	Breath sample to BAC
Detection Range	0.00% - 0.40% (Accuracy: +/- 0.01% up to 0.10% BAC)
Sensor	Oxide semiconductor
Power	Two 1.5V AA alkaline batteries (included)
Warm-up Time	Less than 1 minute
Testing Capacity	Approx. 200 with new batteries
DOT Approved	YES
Operating Temperature	50 - 104 degrees Fahrenheit or 10 - 40 degrees Celsius
Warm Up	Less than 1 minute
Display	3-Digit LCD (0.00)
Dimensions	4.1 H x 1.6 W x 0.8 D
Weight	3 oz
Sensor Module	Sensor modules should be replaced every 200 tests or at least once yearly (whichever comes first).
Warranty	One (1) Year (Refer to "Warranty" section)

## **- Limited Warranty -**

### **Manufacturer's Warranty Coverage**

AK GlobalTech Corporation warrants the AlcoScan AL2500 to be free from defects in workmanship or material, excluding spent or used sensor modules, under normal use for one (1) year from the date of purchase. AK GlobalTech's obligation under this warranty is limited to replacing, adjusting or repairing the unit only if returned along with proof of purchase, complete shipping address, daytime contact

phone number and written explanation. The warranty is void if the unit has been tampered with (excluding the opening of the rear cover as specifically described in this manual) or maliciously damaged. The calibration of the device is a required periodic maintenance procedure required of any and all breathalyzers in order to maintain accuracy (every 1,000 tests or at least once per year, whichever comes first), and as such, is not a warranty service. Warranty does not include shipping costs to AK GlobalTech. Warranty is non-transferable.

## **Disclaimer**

AK GlobalTech makes no warranties, express or implied, as to the ability of this product to determine whether, or the extent to which, a test subject's mental or physical functioning, or judgment, may be impaired by blood alcohol including whether the test subject is intoxicated under any definition of that word. AK GlobalTech expressly disclaims any liability for direct, indirect, incidental, special, or consequential damages of any nature under any legal theory. Any act or failure to act based on a reading from this product shall be at the test subject's or user's own risk.

AK GlobalTech assumes no responsibility for consequences to or of test subjects who use this product and later are shown to have been under the influence of alcohol or to have had their judgment or any mental or bodily function impaired by alcohol.

Correlation between breath alcohol content and blood alcohol concentration depends on many variables, including environmental factors (such as air quality, wind, humidity, temperature, etc.) and health conditions of the test subject. A low g/dL or %BAC reading does not mean that the test subject's physical or mental performance or judgment (including reaction times) can respond to an emergency. The concentration of alcohol in the blood of a test subject cannot be exactly determined by using a breath alcohol screening product.

AK GlobalTech does not warrant that the operation of the product will be error-free. AK GlobalTech is not responsible for any consequences arising from failure to follow instructions or relating to the product's use. This warranty does not apply: (a) to consequences caused by accident, abuse, tampering, misuse, flood, fire, earthquake or other external causes; (b) to consequences caused by operating the product outside the permitted or intended uses described by AK GlobalTech; (c) to consequences caused by service performed by anyone who is not an official representative, reseller or distributor of AK GlobalTech; or (d) to a product or part that has been modified to alter functionality or capability without the written permission of AK GlobalTech.

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Some countries, states and provinces do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty or condition may last, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary by country, state or province. This Limited Warranty is governed by and construed under the laws of the country in which the product purchase took place.

## **Technical Support**

### **AK GlobalTech Corporation**

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**800-943-1016 Toll-Free (9A-6P EST)**

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