

BACtrack[®] ELEMENT



PRODUCT MANUAL

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This device is intended to measure alcohol in human breath. Measurements obtained by this device are used in the diagnosis of alcohol intoxication.

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INTRODUCTION

The BACtrack® is an alcohol screening device, used for the detection of alcohol in the breath. The BACtrack provides a digital result indicating the approximate BAC (Blood Alcohol Content) of the test subject. The BACtrack is easy to use; simply turn on the unit and begin testing in a matter of seconds.

Before you begin testing, please read this manual in its entirety and familiarize yourself with the BACtrack.

ALCOHOL AND ITS EFFECTS ON THE HUMAN BODY

Alcohol is absorbed from the mouth, throat, stomach, and intestines into the bloodstream.

Alcohol ingested by the human body can be detected in the breath because of its presence in the bloodstream. Alcohol cannot be digested and it cannot be chemically changed in the bloodstream. As the blood flows through the lungs, alcohol in the bloodstream moves across the membranes of the lung's air sacs (alveoli) into the air. The concentration of the alcohol in the alveolar air is directly related to the concentration of the alcohol in the blood. As the alveolar air is exhaled, the alcohol in it can be detected by the breath alcohol testing device.

The alcohol concentration in the breath is related to that in the blood, and because of this, an individual's BAC can be determined by measuring alcohol in the breath. The ratio of breath alcohol to blood alcohol is generally estimated to be 2,100:1. Therefore, 2,100 milliliters (ml) of alveolar air will contain approximately the same amount of alcohol as 1 ml of blood.

ALCOHOL IS A DRUG

Alcohol is the chemical (ethanol or ethyl alcohol) resulting from the fermentation of grapes or grain. Alcohol is absorbed directly into your bloodstream. From your bloodstream, the fluids in your body tissues absorb the alcohol. Your brain is made up of a large concentration of fluids and will absorb a large amount of any alcohol you drink. Your liver eliminates the absorbed alcohol at its own rate of time and nothing you eat or drink can speed up the process. Your liver does this by oxidizing the alcohol (converting it into water and carbon dioxide). Coffee, food or any other "cure" will not sober you up; only time will do that.

HOW DOES ALCOHOL AFFECT MY BODY?

Alcohol is a depressant. It has a relaxing effect on the muscles in your body. The muscles of your eyes relax and lose focus. Your eyesight will become fuzzy and you may experience double vision. Brain activity is slowed. Your judgment, reflexes, and coordination are all negatively affected.

Some vision impairments that occur when you have been drinking include:

- Narrowing of your field of vision
- Reduction in your depth perception
- Decreased ability to see in darkness
- Increased sensitivity to glare and a longer time for your eyes to readjust from the glare

Some mental impairment can occur when you have been drinking, including:

- Reduced awareness of danger
- Becoming overly confident and reckless
- Difficulty in making decisions
- Reduction in balance
- Slowed reflexes
- Impaired judgment

HOW DOES ALCOHOL AFFECT MY DRIVING?

We can't emphasize enough how dangerous it is for you to drink and drive. Your vision and your brain are the most important factors in driving safely. If you jeopardize either by drinking, and then you drive, you are likely to be involved in a serious or fatal collision.

Do not use your BACtrack as a tool to determine whether you should operate a motor vehicle or equipment, or perform any other dangerous act. Do not drink and drive. Always have a designated driver when alcohol is being consumed.

EFFECTS OF ALCOHOL*

0.02-0.03% BAC

Slight euphoria. Loss of shyness. Depressant effects are not apparent. Impairment possible in some individuals.

0.04-0.06% BAC

Feeling of well-being, relaxation, lower inhibitions and sensation of warmth. Euphoria. Some minor impairment of reasoning and memory. Lowering of caution. Driving skills may be impaired at this level of intoxication.

0.07-0.09% BAC

Slight impairment of balance, speech, vision, reaction time, and hearing. Euphoria. Judgment and self-control are reduced. Caution, reason and memory are impaired. Driving skills are always impaired at this level of intoxication and higher.

0.10-0.12% BAC

Significant impairment of motor coordination and loss of good judgment. Speech may be slurred. Balance, vision, reaction time and hearing will be impaired. Euphoria.

0.13-0.15% BAC

Gross motor impairment and lack of physical control. Blurred vision and major loss of balance Euphoria is reduced and dysphoria (anxiety, restlessness) begins to appear.

0.16-0.20% BAC

Dysphoria predominates. Nausea may appear.

0.25% BAC

Need for assistance in walking. Total mental confusion. Dysphoria with nausea and some vomiting.

0.30% BAC

Loss of consciousness. Onset of coma. Possible death due to respiratory arrest**.

* The effects of alcohol intoxication are greatly influenced by individual variations among users. Some users will be intoxicated at a much lower BAC than shown on the previous page.

** Death can occur at a lower BAC in some individuals.

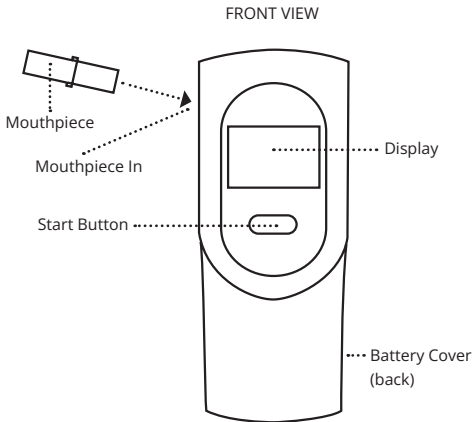
The generally accepted legal standard for alcohol intoxication in Canada/the United States is 0.08%. However, your driving skills can be impaired at any level above 0.00% BAC. It is never safe to drink any amount of alcohol and drive.

PREPARATION

INSTALLING THE BATTERY

Install two AAA alkaline batteries in the battery compartment.

COMPONENTS DIAGRAM



OPERATION




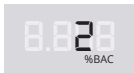
Test subjects should wait 20 minutes after eating, drinking, or smoking before blowing into the BACtrack Breathalyzer. Failure to wait 20 minutes can provide inaccurate test results and damage the sensor.



STEP 1: Insert a mouthpiece into the Mouthpiece In slot. Do not force it—mouthpiece will only insert a few millimeters.



STEP 2: Press  The BACtrack will quickly display the total number of tests performed, and then begin a countdown.



STEP 3: When the countdown approaches 2, begin to inhale a deep breath.



STEP 4: When the countdown reaches zero, “Blow” will flash and the screen will display three lines. Blow through the mouthpiece for five seconds until there is a double beep sound.

The LCD display shows the number "0.080" in a large, black, digital font. Below the number, the text "%BAC" is displayed in a smaller font. The entire display is set against a light gray background.

STEP 5: Once the sensor has analyzed the breath sample, the estimated BAC value will flash for about 10 seconds.

The BACtrack Breathalyzer will turn off automatically in 3 minutes. You can also turn off the breathalyzer during the countdown by pressing and holding down (start button symbol) for 3 seconds.

ERROR NOTIFICATION

The LCD display shows the text "FLo" in a large, black, digital font. Below the text, the text "%BAC" is displayed in a smaller font. The entire display is set against a light gray background.

If a user does not blow a sufficient breath sample, the LCD will display "FLo". Press start to restart the countdown cycle and retest.

The LCD display shows the text "Out" in a large, black, digital font. Below the text, the text "%BAC" is displayed in a smaller font. The entire display is set against a light gray background.

If there is no breath sample blown within 3 minutes, the LCD will display "Out". Press start to restart the countdown cycle and retest.

The LCD display shows the text "Out°F" in a large, black, digital font. Below the text, the text "%BAC" is displayed in a smaller font. The entire display is set against a light gray background.

If the unit is powered on outside of the acceptable temperature range (0-40 °C or 32-104 °F) the unit will display Out°F and testing cannot be performed.

The LCD display shows the text "BA" in a large, black, digital font. To the right of the text is a battery icon consisting of a horizontal bar with a small notch on the right side. Below the text and icon, the text "%BAC" is displayed in a smaller font. The entire display is set against a light gray background.

If the battery indicator display is empty, install two new alkaline AAA batteries.

SPECIFICATIONS

Dimensions	4.75 x 1.90 x 0.75 inches (12.1 x 4.8 x 1.9 cm)
Weight	3.3 oz (94 g) With mouthpiece and batteries
Sensor Technology	Xtend™ fuel cell sensor technology
Detection Range	0.000 – 0.400 %BAC
Test Count	Displays total number of tests performed
Power Supply	Two AAA alkaline batteries, included
Battery Life	Approximately 1000 tests
Warm Up Time	10-20 seconds
Response Time	10 seconds
Sensor Accuracy	+/- 0.005 %BAC @ 0.1 %BAC
Operating Temperature	32-104 °F (0-40 °C)

PRECAUTIONS

1. Wait at least 20 minutes after drinking, eating or smoking before testing. Not observing this waiting period can cause inaccurate readings and damage the sensor.
2. Do not blow smoke, food, or liquids into the BACtrack because this will damage the sensor.
3. Do not test in areas with strong winds, smoke, or in an area where a large amount of alcohol is being consumed.
4. Avoid testing in the presence of any substances that contain methyl alcohol, isopropyl alcohol or acetone. These substances may interfere with the results of the test.
5. Replace the two AAA batteries when the battery indicator icon reaches one bar.
6. Send your tester in for periodic calibration service as required. (See Calibration).
7. The BACtrack Breathalyzer is designed to be used in a temperature range of 32-104 °F (0-40 °C).
8. You cannot use the results of this product in court
9. Do not use the BACtrack as a tool to determine whether you should operate a motor vehicle or equipment, or perform any other dangerous act.
10. Do not drink and drive. Always have a designated driver when alcohol is being consumed.

VERIFICATION AND CALIBRATION

The BACtrack is calibrated during manufacture using advanced alcohol simulation equipment. Known alcohol concentrations are passed through the sensor to set baseline values for testing. During testing, the unit compares breath samples to these baseline values.

The accuracy of breath alcohol testers can fluctuate after six to twelve months of normal use depending on the number of tests performed and operating conditions.

If this product is providing inconsistent test results, is not providing any test results, or provides unusually high or low test results, the product should be recalibrated immediately by a trained professional.

The product should be recalibrated at least every six to twelve months. If the product is used every day, it may need to be recalibrated as frequently as every month.

CALIBRATION INSTRUCTIONS

Please visit www.bactrack.com/calibration or call 877.334.6876 for information on how to get your BACtrack calibrated.

During recalibration, a professional technician will reset the sensor baseline values and also perform a full diagnostic check to ensure the accuracy and reliability of the product.

OBTAINING WARRANTY SERVICE

Please be sure to read this instruction manual carefully if you believe your product is not operating properly. If you still feel that your product requires warranty service, please follow these instructions:

Obtain a Return Authorization (RA) number by emailing support@backtrack.com

When shipping the product back to KHN Solutions Inc., please package the product carefully and ship using a major carrier (UPS, FedEx, USPS, etc). To ensure proper credit for a returned item, be sure to obtain a delivery confirmation on the return shipment. The customer is responsible for all return shipping charges.

Include the following information with your returned product:

- Your Return Authorization number
- Name, address, and phone number as stated at the time of order
- A copy of your original sales receipt

DO NOT DRINK AND DRIVE

BACtrack®

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Questions?

We're here to help.



support@bactrack.com



877-334-6876
M-F, 9am-5pm PST



www.BACtrack.com