



CA2010

Owner's Manual

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INTRODUCTION

Intended Use

This breath alcohol tester is intended to measure alcohol in human breath. Readings from this device are used to determine alcohol intoxication. The accuracy of this device has been proven at a Blood Alcohol Concentration (BAC) of 0.008 and 0.032. Accuracy at a BAC greater than .032 has not been established.

Overview

The CA2010 is a breath alcohol tester designed to test for the presence of alcohol in the breath. This product estimates blood alcohol concentration (BAC) in seconds. Please read this entire manual before use.

Effects of Alcohol

Variations among people and other factors, such as altitude and air temperature, affect the degree of intoxication. Some people may become intoxicated at low BAC levels. A low BAC on a breath alcohol tester does not mean that a person's reaction times can respond to any emergency. You should not drink alcohol and drive or use any machines after consuming alcohol. There is no safe way to drive under the influence of alcohol. Even one drink can make you unsafe.

BAC	Dose-Specific Effects ¹
0.020-0.039% ²	Generally no loss of coordination. Slight joy or loss of shyness. Depressant effects are not clear.
0.040-0.069%	General feelings of well-being, relaxation, shyness is reduced and sensation of warmth. Joy. Some minor impairment of reasoning and memory. Lowering of caution. Driving skills may be impaired.
0.070-0.099%	Slight impairment of balance, speech, vision, reaction time, and hearing. Joy. Judgment and self-control are reduced. Caution, reason and memory are impaired. Driving skills are always impaired.
0.100-0.129%	Major impairment of motor coordination and loss of good judgment. Speech may be slurred. Balance, vision, reaction time and hearing will be impaired. Joy.
0.130-0.159%	Gross motor impairment and lack of physical control. Blurred vision and major loss of balance. Joy reduced and state of feeling unwell begins to appear.
0.160-0.249%	Anxiety, restlessness predominates. Nausea may appear. Appearance of a "sloppy drunk."
0.250%-0.299%	Needs assistance in walking. Total mental confusion. State of feeling unwell with nausea and some vomiting.
0.300%-0.399%	Loss of consciousness.
0.400% +	Onset of coma. Possible death due to respiratory arrest. ³

¹ Bailey, William J., Drug Use in American Society, 3rd ed., Minneapolis: Burgess, 1993.

² Some individual's may experience impairment at BAC levels at .03% or even lower.

³ Death can occur at a lower BAC level in some individuals.

DO NOT DRINK ALCOHOL AND DRIVE

ALWAYS USE A DESIGNATED DRIVER

AFTER DRINKING ALCOHOL

BE SAFE AND RESPONSIBLE

PREPARATION

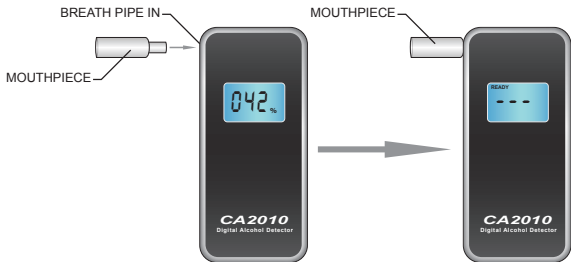
Installing the Battery

Apply a small amount of pressure on the battery cover located on the back of the unit. Push down and slide away from the unit to release the cover. Install one (1) 9V alkaline battery and slide cover back in place.

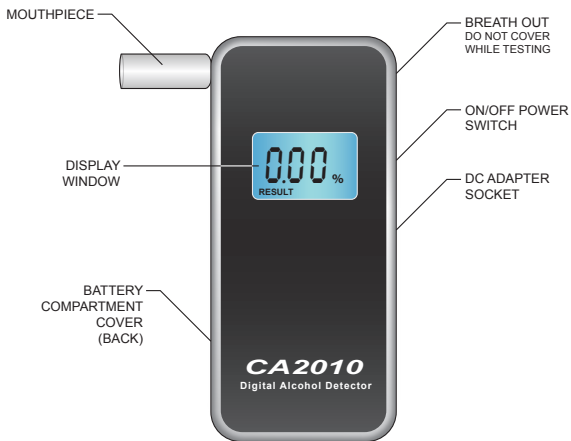


Inserting a New Mouthpiece

Insert a new mouthpiece firmly into the BREATH PIPE IN hole on the left side of the product. Insert a new mouthpiece before each test.



COMPONENTS DIAGRAM



OPERATION



Wait 20 minutes after the test subject smokes, eats, or drinks alcohol before testing. Failure to wait 20 minutes can give inaccurate BAC readings and harm the sensor.

Step 1) Insert a new mouthpiece each time you test another individual.

Step 2) **SLIDE UP AND HOLD** the ON/OFF power switch for 1 second until you hear the startup tones. The device will display “On” and count from 000 to 100% as it prepares the sensor for testing.

Note: The device will restart a count if the sensor is not ready within the first count.

Step 3) When you hear a **SINGLE BEEP** and the **unit displays “READY - -”** take a **DEEP BREATH**, wrap your lips around the new mouthpiece and **BLOW STEADILY** (for at least 5 seconds) until a **DOUBLE BEEP** sounds to signal completion of the testing. Do not cover the BREATHE OUT hole.

Note: If you do not blow within 30 seconds the device will display “Off” and power down. Continue from step 2.

Step 4) A circling line will display for approximately 5 seconds followed by “**RESULT**”, your estimated BAC, and a long beep.

Note: The unit’s backlight will turn from blue to red, display “**WARN**”, and play alarm tones when the result is higher than 0.05% BAC.

Note: If you consumed very little alcohol, your actual concentration may be below 0.01% BAC and the unit will display 0.00% BAC and emit a long beep.

Note: After the result has been displayed for 20 seconds the device will display “**Off**” and power down.





Step 5) For more testing, wait two (2) minutes and repeat steps 1-4.

READ THE RESULTS

The result is an estimate of the subject's BAC. A breath alcohol tester cannot determine the exact BAC in the blood of the subject. Correlation between BrAC and BAC depends on many factors, such as temperature and health conditions. Only use this device to screen for the presence of alcohol.

Many people consider a 0.02% or greater a positive test for alcohol in "zero tolerance" screening. Most states have 0.08% as the legal BAC limit for tasks such as operating a motor vehicle. Some states prohibit driving commercial vehicles or any vessel with a 0.04% BAC or higher. Many states prosecute individuals for driving under the influence at any level.

ERROR MESSAGES

Error Message	Cause and Course of Action
	The unit displays "WARN" and plays alarm tones when the result is higher than 0.05% BAC.
	The unit did not detect an even alcohol concentration in the breath sample. This can occur if the user varies the blowing force when performing a test or if the exhaust port is obstructed. Repeat operation steps 1 – 6 to perform another test.
	The unit displays "Hot" and plays alarm tones when it has detected a very high alcohol concentration (above 0.40% BAC).
	Battery power is low. Install a new 9V alkaline battery.

Note: Any of these errors will turn the unit's backlight red.

PRECAUTIONS



1. **Wait at least 20 minutes** after drinking, smoking and eating before testing.
2. Do not test in strong winds or in a closed room with smoke or alcohol present.
3. When the unit displays “bAt”, install one (1) new 9V alkaline battery.
4. Do not blow smoke, food or liquid into the unit.
5. Only use the unit in a temperature range of 10 - 40°C or 50 - 104°F. Operation above or below this range may affect the results.
6. Do not leave the unit connected to the AC/DC outlet when the unit is not being used.
7. 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.
8. Conditions that increase the amount of ketones on the breath, such as diabetes and low caloric intake, may cause a false positive test (showing a non-zero reading when subject hasn't had any alcohol).
9. BAC changes over time depending on many factors. BAC at one time can differ from BAC a few minutes later.
10. Do not use this unit with an ignition interlock device or while inside a vehicle.
11. You cannot use the results of this unit in court of law.
12. Do not use this unit to determine if you or anyone else can operate any vehicle or machinery.
13. Do not let yourself or anyone else drink and drive. Always use a designated driver when you or anyone else drinks alcohol.

SPECIFICATIONS

Dimensions	4.88" x 2.19" x .75" (12.4 cm x 5.6 cm x 1.9 cm)
Weight	2.2 oz (63 g) without battery; 3.7 oz (105 g) with battery
Housing	Shock resistant, molded plastic
Power Supply	One (1) 9V alkaline battery
Battery Life	200 - 300 tests ¹
Sensor Technology	Sensitive Semiconductor Sensor
Blowing Time	5 seconds
Response Time	3 seconds ¹
Digital Display	3 digits (0.00% BAC)
Operating Temperature	10 - 40°C (50 - 104°F)
Detection Range	0.00% - 0.40% BAC
Air Sample	5 seconds
Operation	1 button
Warranty	1 Year Limited Warranty
Calibration	Required periodically. Visit www.q3i.com .

¹ Estimates, results may vary.

MAINTENANCE CHECK

This feature is to check periodically to ensure the sensor is in good working condition. **This test should be performed without any alcohol intake.**

Step 1) SLIDE UP AND HOLD the ON/OFF power switch for 5 seconds until the device displays **“CAL”** and begins counting from 000 to 100% as it prepares the sensor for testing.

Step 2) WAIT until the unit displays “**READY CAL**” and you hear a **SINGLE BEEP**.

Step 3) Take a **DEEP BREATH AND BLOW STEADILY** (for at least 5 seconds) until a **DOUBLE BEEP** sounds to signal completion of the testing. Do not cover the **BREATH OUT** hole.

Step 4) WAIT approximately 5 seconds until the unit displays “**RESULT**” and your pollution check result will be displayed using one of the responses below:

PAS - No pollutants were detected in your device.

CAL - Pollutants were detected. Please contact the Q3 Service Center for instruction. (backlight will turn red)

ACCESSORIES

Visit our online store at www.q3ats.com to purchase the following accessories.

- Mouthpieces
- 12 Volt DC Adapter
- Wall Adapter
- Soft Carry Pouch
- Hard Case

VERIFICATION AND CALIBRATION

Calibration of the CA2010 occurs during manufacturing using advanced alcohol simulation equipment. The manufacturer passes known alcohol concentrations through the sensor to set baseline values for testing. During testing, the unit compares users’ breath samples to these baseline values. If the verification determines that the BAC is not consistent with actual BAC levels, a technician calibrates the unit. The accuracy of breath alcohol testers can fluctuate over time, depending on frequency of use and operating conditions.

If the unit is providing inconsistent results or unusually high or low readings, the unit may need calibration. **A technician should recalibrate this unit at least every six to twelve months. More frequent calibrations may be required depending on frequency of use; such as once per month if the unit is used daily.**

Please visit www.alcoholhawk.com or call 888-399-1687 for calibration or support.

ONE-YEAR LIMITED WARRANTY

Q3 Innovations (Q3I) warrants this unit to be free from defects in workmanship or material (excluding calibration) under normal use for ONE (1) YEAR from the date of retail purchase by the original buyer ("Warranty Period").

The warranty covers parts and labor on covered repairs and ground freight back to the customer (USA only). Except as provided above, Q3I provides this product "as is."

If a defect arises and Q3I receives a valid claim within the Warranty Period, at its option, Q3I will either (1) repair the product, (2) exchange the product with a product that is new or which has been built from new or serviceable used parts and functionally equivalent to the original product, or (3) refund the purchase price of the product. If a refund is given, the returned product becomes Q3I's property. The warranty does not cover shipping to Q3I. The warranty is void if anyone tampers or abuses the unit.

This warranty is limited to the original consumer purchaser and can not be transferred to any other owner.

For warranty service please follow these instructions:

1. Call 888-399-1687 or email service@q3i.com to obtain an RMA number. Return the unit postage paid, insured and in proper box.
2. You should obtain a proof of delivery receipt. You must pay the cost

for shipping the unit to us.

3. You must enclose the following with the unit:
 - a. The completed RMA form (available at www.alcoholhawk.com/support)
 - b. Your name, return address and description of the problem. (No PO Box)
 - c. Your phone number to reach you during the day.
 - d. A copy of your sales receipt or invoice.

DISCLAIMER

Q3I makes no warranties, expressed or implied, as to the ability of this unit to determine whether, or to the extent to which, a test subject's mental or physical functionality, or judgment, is impaired by blood alcohol including whether the test subject is intoxicated, under any definition of that word. Q3I expressly disclaims any liability for incidental, special, or consequential damages of any nature under any legal theory. Any act or failure to act based upon a reading from this product is at the test subject's or user's own risk. Q3I assumes no responsibility for consequences to users or test subjects who use this product and are later under the influence of alcohol or to have had their judgment or any mental or bodily function impaired by alcohol. Correlation between BrAC and BAC depends on many variables, such as temperature and health conditions of the test subject. A safe or low BAC reading does not mean that the test subject's physical or mental performance or judgment (including reaction times) can respond to any emergency encountered. A breath alcohol tester cannot determine the exact concentration of alcohol in the blood of a test subject.

Q3I does not warrant that the operation of the product will be error-free. Q3I 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 Q3I; (c) to consequences caused by service performed by anyone who is not a representative of Q3I or a Q3I Authorized Service Provider; or (d) to a product or part that has been modified to alter functionality or capability without the written permission of Q3I.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, Q3I SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF Q3I CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES, THEN TO THE EXTENT PERMITTED BY LAW ALL SUCH WARRANTIES ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY AND TO THE REPAIR OR REPLACEMENT SERVICE AS DETERMINED BY Q3I IN ITS SOLE DISCRETION.

Q3I does not authorize any Q3I reseller, agent, or employee to make any modification, extension, or addition to this warranty. If anyone determines any terms to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

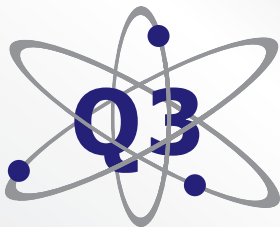
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Some countries, states and provinces do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty or condition may last, so the above limitations or exclusions may not apply to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

DO NOT DRINK ALCOHOL AND DRIVE

ALWAYS USE A DESIGNATED DRIVER
AFTER DRINKING ALCOHOL

BE SAFE AND RESPONSIBLE



Q3 INNOVATIONS

Personal Safety & Monitoring Devices

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