



# ***AlcoHAWK® PT500P***

## **Owner's Manual**



## TABLE OF CONTENTS

INTRODUCTION .....	1
EFFECTS OF ALCOHOL .....	2
PREPARATION .....	3
COMPONENTS DIAGRAM.....	4
OPERATION .....	5
READ THE RESULTS.....	6
ERROR MESSAGES .....	6
MENU OPTIONS.....	7
PRINTING .....	8
PRECAUTIONS .....	9
SPECIFICATIONS.....	10
ACCESSORIES .....	10
CALIBRATION .....	11



# INTRODUCTION

## **Intended Use**

This Breath Alcohol Tester 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 (BAC) of 0.008 and 0.032. Accuracy at a BAC greater than .032 has not been established.

## **Overview**

This Tester provides a digital reading of a person's approximate BAC in seconds. The AlcoHAWK® PT500P is powered by two (2) AA batteries that generally last between 200-300 tests when using alkaline batteries. 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 encountered. You should not drink alcohol and drive or use any machinery after consuming alcohol. There is no safe way to drive under the influence of alcohol. Even one drink can make you unsafe.

## **Calibration**

It is very important to have the instrument calibrated as recommended in this owner's manual (see Calibration, pg. 10). Failure to do so may result in readings that are inaccurate.



# EFFECTS OF ALCOHOL

BAC	Dose-Specific Effects
0.020-0.039%	Generally no loss of coordination, slight euphoria or loss of shyness. Depressant effects are not apparent.
0.040-0.069%	General feeling of well-being, relaxation, lower inhibitions, sensation of warmth. Euphoria. 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. Euphoria. Judgment and self-control are reduced. Caution, reason and memory are impaired. Driving skills are always impaired.
0.100-0.129%	Significant impairment of motor coordination and loss of good judgment. Speech may be slurred. Balance, vision, reaction time and hearing will be impaired. Euphoria.
0.130-0.159%	Gross motor impairment and lack of physical control. Blurred vision and major loss of balance. Euphoria is reduced and dysphoria begins to appear.
0.160-0.249%	Anxiety and restlessness predominates. Nausea may appear. The drinker has the appearance of a "sloppy drunk."
0.250%-0.299%	Needs assistance in walking. Total mental confusion. Dysphoria with nausea and some vomiting.
0.300%-0.399%	Loss of consciousness.
0.400% +	Onset of coma, possible death due to respiratory arrest.

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

**DO NOT DRINK ALCOHOL AND DRIVE**

**ALWAYS USE A DESIGNATED DRIVER  
AFTER DRINKING ALCOHOL**

**BE SAFE AND DRINK RESPONSIBLY**



# PREPARATION

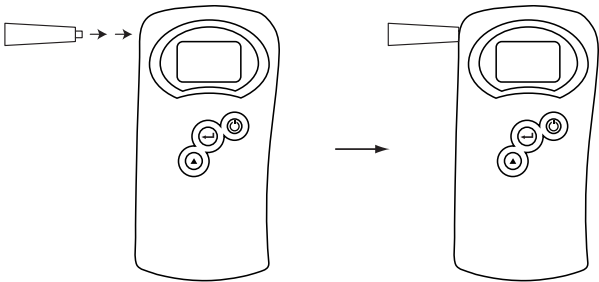
## Install the Batteries

Apply a small amount of pressure on the battery cover located on the back of the product. Push down and away from the product to release the cover. Install 2 AA batteries and slide cover back in place.



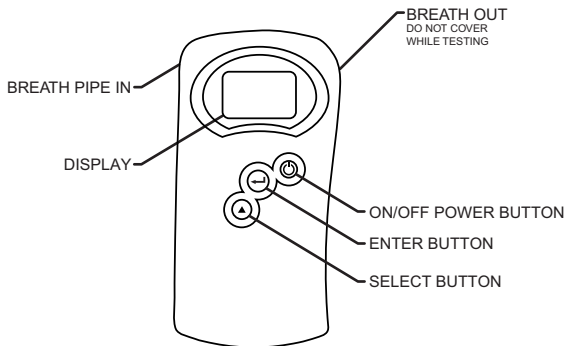
## Insert a New Mouthpiece

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

**Step 1)** Press and hold the ON/OFF power button  for 1 second until you hear a BEEP. The unit reads “Initializing...” as it prepares for use.

**Step 2)** The screen displays “Test” and “Options”. To start a “Test”, press the ENTER button  for 2-3 seconds. The unit displays “Take a Deep Breath” for three (3) seconds, beeps and then displays “Blow Now”. Take a deep breath, wrap your lips around the new mouthpiece and blow steadily for five (5) seconds. The unit takes the breath sample in the amount of time set for a breath sample (factory default is 5 seconds). Do not cover the BREATH OUT hole.


**Note:** Begin blowing immediately when “Blow Now” is displayed to get a deep lung sample.

**Step 3)** The unit displays “Processing” while analyzing the sample. After about three (3) seconds, the unit then displays the estimated BAC.

**Step 4)** The unit displays “Print” at the bottom of the screen. Press the ENTER  button to print the test result. This will send the results wirelessly to the AlcoHAWK® PT Wireless Printer (sold separately).

**Step 5)** The unit shows the test result for 90 seconds before beeping twice and shutting off.




**Step 6)** To turn off the unit, press and hold the ON/OFF power button  for 1 second.

## READ THE RESULTS

The displayed result is an estimate of the test subject's BAC. A breath alcohol tester cannot determine the exact BAC in the blood of the test subject. Correlation between BrAC and BAC depends on many factors, such as temperature and health conditions. Therefore, only use this device as a tool 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
Insufficient Breath Sample	The user failed to provide a sufficient breath sample. Repeat test and have user blow firmly and steadily for the entire test.
	Low Battery - Install two (2) new AA alkaline batteries.



## MENU OPTIONS



When the screen displays “Test” and “Options”, press the SELECT button  to view the menu options. Use the SELECT button  to move down through the menu options. Use the ENTER button  to enter the selected menu option.

### Test Counter

To read the number of tests that have been performed since the last time the unit was calibrated, press the SELECT button  to view the menu options. The first option on the list is TEST COUNTER. It should be highlighted. Press the ENTER button  and the number of tests will be displayed. If the number reads 200 or greater, we recommend sending the unit in for recalibration (see Calibration, pg. 10).

### Alarm Point

The unit will read “High” if the BAC reading exceeds the alarm point setting. The default setting is 0.020% BAC. You can change the alarm point from between 0.020%-0.080% BAC.

To change the setting press the SELECT button  until the unit shows the desired value on the screen. Press the ENTER button  to save the setting.

### Temperature Scale

You can switch between Celsius (C) and Fahrenheit (F) for the temperature sensor. The default setting is Fahrenheit (F).

To change the setting press the SELECT button  until the unit shows the desired scale. Press the ENTER button  to save the setting.

### Convert Units


You can change the unit of alcohol concentration shown for tests. You can choose between %BAC (U.S.A), g/L, or ‰BAC. The default setting is %BAC (U.S.A) (the U.S.A standard).

To change the setting press the SELECT button  until the unit shows the desired conversion. Press the ENTER button  to save the setting.



# PRINTING

The AlcoHAWK® PT500P has the ability to print test results wirelessly. This feature requires the use of an AlcoHAWK® PT Series Wireless Thermal Printer (sold separately). Follow these steps to print a test result.

- Step 1)** Turn on the printer by pressing and holding the power button for two (2) seconds.
- Step 2)** Make sure the printer is within 15 ft. of the AlcoHAWK® PT500P and that no barriers are between the printer and the PT500P.
- Step 3)** Open the printer's paper cover and insert a roll of paper, leaving about one (1) inch of the loose end sticking out of the printer's paper slot. Close the paper cover.
- Step 4)** Complete a test using the PT500P. When the estimated BAC is displayed you will see the "Print" option at the bottom of the screen. Press the ENTER  button to print the test result. This will send the results wirelessly to the printer.
- Step 5)** Press and hold the printer's power button for two (2) seconds to shut it off.

## Printing Format

The following is an example of the printing format for reference:

Record NO.: 025  
Date: 09-16-2008  
Time: 10:56  
Result: 0.136 %BAC  
Testee:

---

Address:

---

Testee signature:


---

Police NO.:



# PRECAUTIONS



1. After drinking, smoking and eating, users should wait at least 20 minutes before testing.
2. Avoid testing in strong winds, in a closed room with a heavy amount of smoke, or where alcohol is present.
3. When the battery low symbol  appears replace the AA batteries.
4. Do not blow cigarette 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. BAC changes over time depending on many factors. BAC at one time can differ from BAC a few minutes later.
7. Do not use this product with an ignition interlock device or while inside a vehicle.
8. You cannot use the results of this product in court.
9. Do not use this device to determine if you or anyone else can operate any vehicle or machinery.
10. Do not let yourself or anyone else drink and drive. Always use a designated driver when you or anyone else drinks alcohol.
11. It is very important to have the instrument calibrated as recommended in this owner's manual (see Calibration, pg. 10). Failure to do so may result in readings that are inaccurate.
12. Please carefully review one-year limited warranty sheet included in product package.



# SPECIFICATIONS

Dimensions	5" x 2.63" x 1.25" (12.7 cm x 6.68 cm x 3.18 cm)
Weight	3.6 oz (102 g) without batteries; 5.2 oz (147 g) with batteries
Power Supply	Two (2) AA alkaline batteries
Battery Life	200 tests <sup>1</sup>
Sensor Technology	<i>PT Core™</i> Electro-chemical Fuel-cell Sensor
Warm-UP Time	10-20 seconds <sup>1</sup>
Blowing Time	5 seconds
Response Time	3 seconds <sup>1</sup>
Operating Temperature	10 - 40°C (50 - 104°F)
Detection Range	0.000 - 0.400% BAC
Warranty	1 Year Limited Warranty

<sup>1</sup> Estimates, results may vary.

## ACCESSORIES

Visit our online store at [www.q3ats.com](http://www.q3ats.com) to purchase the following accessories:

- Mouthpieces
- Soft Carrying Pouch
- Hard Carrying Case



## CALIBRATION

Calibration of the AlcoHAWK® PT500P occurs during manufacturing using advanced alcohol simulation equipment. The manufacturer passes known BAC levels 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 after six to twelve months, depending on frequency of use and operating conditions. **We recommend sending the unit in for calibration after 200 tests have been performed, or every six to twelve months if less than 200 tests have been performed.**

If the unit is providing inconsistent results, unusually high or low readings, or no readings at all, a professional needs to recalibrate the unit.

For recalibration or support, please visit [www.q3i.com](http://www.q3i.com) or call 888-399-1687. During recalibration, a technician will perform a diagnostic check on the unit and reset the baseline sensor values.





# **Q3 INNOVATIONS**

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