

# CA2010 Owner's Manual



**Digital Alcohol Detector**

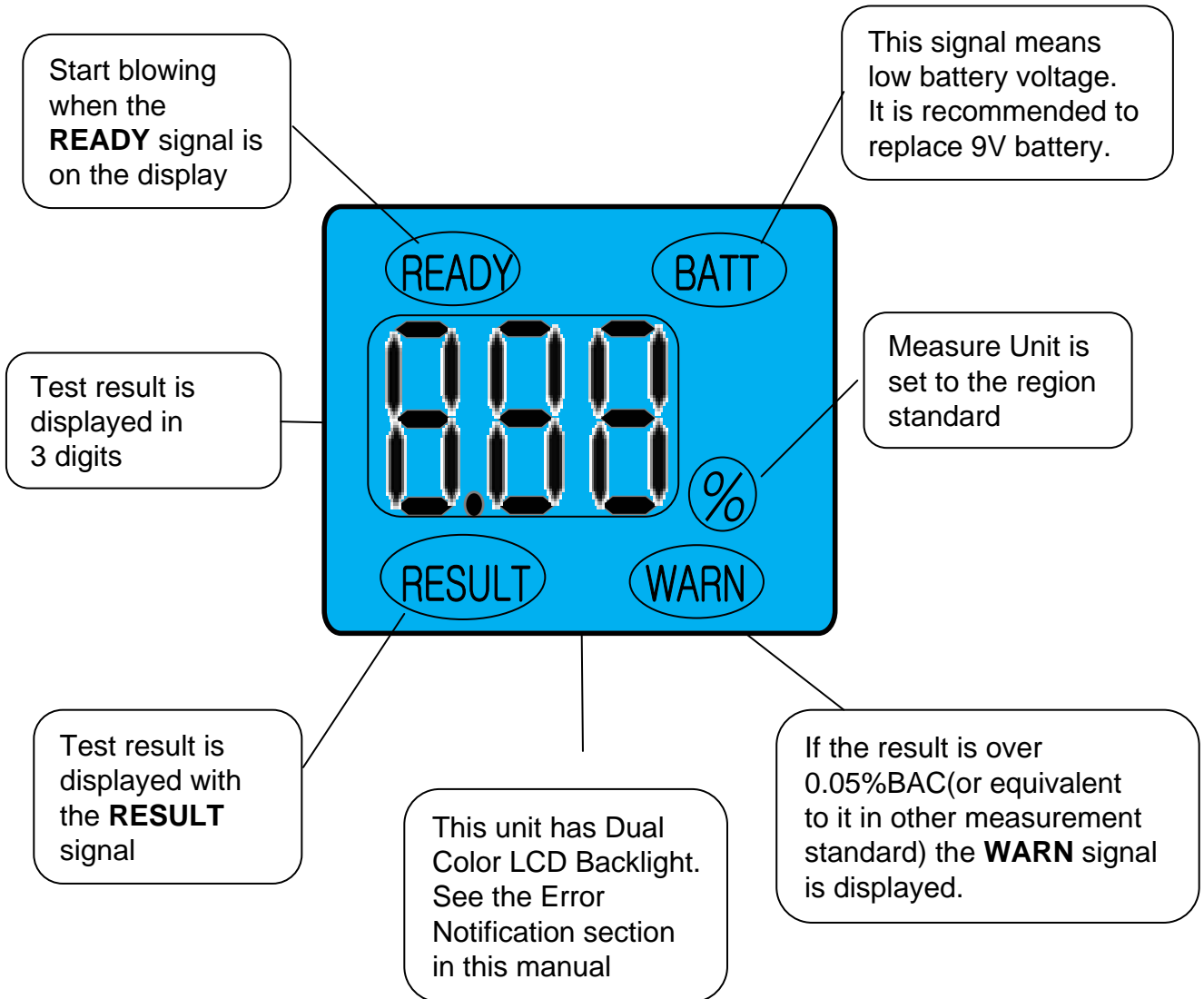
# Part Names



This device is a breath alcohol tester designed to measure the presence of alcohol in the body. Please make sure to read this manual thoroughly before use.

**DO NOT DRINK AND DRIVE**

# LCD Display



# Operation

1. Insert a mouthpiece into the mouthpiece inlet.
2. Slide up the ON/OFF power switch that is located in the right side of the unit.
  - The detector will show "on" together with a sound and then start to count up from 000 to 100% on the display. This warm-up process prepares the sensor and circuit for testing.
3. When you hear beep sound & "Ready" display is on, please blow steadily into the mouthpiece until you would hear the "Beep" sound again. Stop blowing.
  - In this stage, if you don't blow within 30 seconds, it automatically turns off.
  - In case you drink very little (if actual concentration would be below 0.01% BAC/0.05mg/l BRAC), it may not be activated. However, it shows still 0.00% and you're said to be in safe range.
4. After the circling line is on the display for 5 seconds, the test result (BAC or BRAC) will be displayed by 3 digits for 20 seconds along with beep sound.
  - If the BAC/BRAC data would be over 0.05%/0.25mg/l (default setting) respectively, the LCD color will be changed from blue to red and "WARN" signal will be displayed along with "Alarm" sound.
5. Finally, the unit will turn off automatically along with a sound.
6. For the successive testing, try again from No.2 to No.4.
7. Space tests at least 2 minutes apart.

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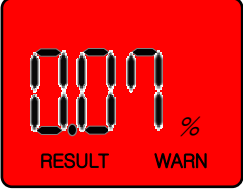
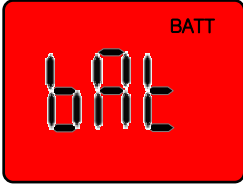
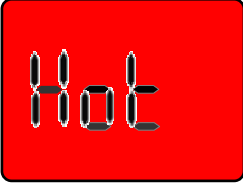
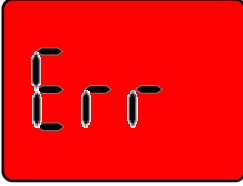
## **Additional feature: Checking need for re-calibration.**

This feature is to check periodically to ensure whether it is in good condition or needs for re-calibration.

1. Insert a mouthpiece into the mouthpiece inlet.
2. Slide up & hold the ON/OFF power switch for 5 seconds until you see "CAL" signal together with a sound and then release it.
  - The detector will start to count up from 000 to 100% on the display.
3. When you hear beep sound and "Ready" & "CAL" display is on, please blow steadily into the mouthpiece until you would hear the "Beep" sound again. Stop blowing.
4. After the circling line is on the display for 5 seconds, the test result will be displayed for 20 seconds with one of below signals.
  - PAS : Your device is ok to use.
  - CAL : Your device needs re-calibration. (LCD Backlight turns red)

\*\*\* N.B. : This test should be performed without any alcohol intake.

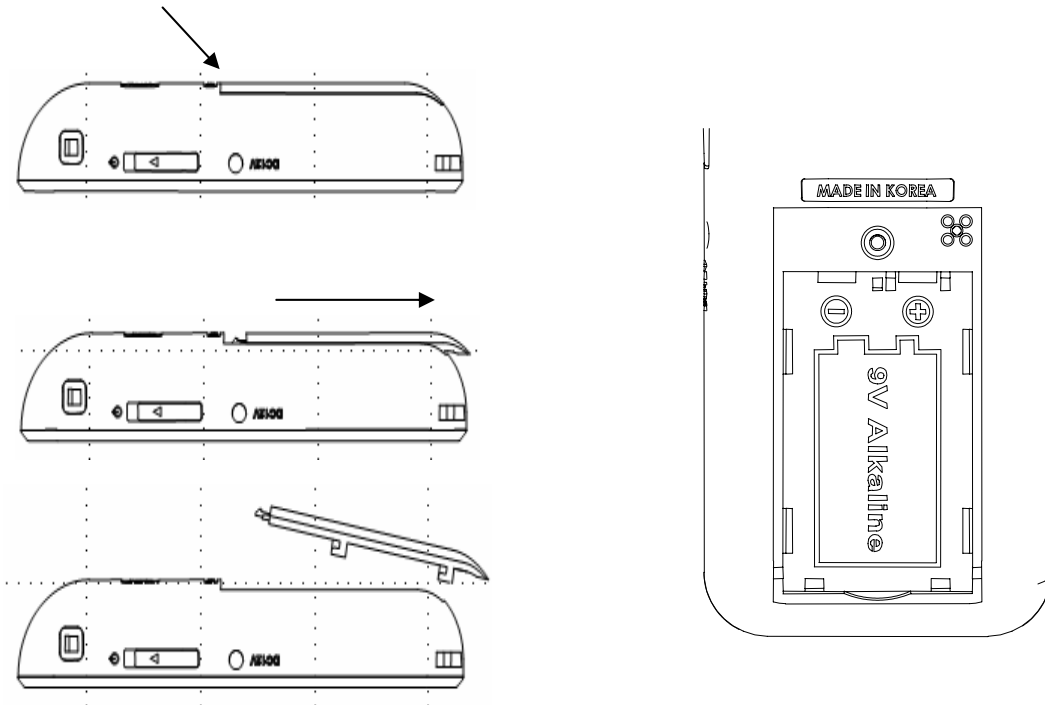
# Error Notification

Error Message	Cause & Action	Error Message	Cause & Action
	<p>If the result is higher than 0.05BAC/ 0.25BRAC, “WARN” signal is displayed along with “ALARM” sound.</p>		<p>The battery voltage is too low to perform a test. The device will turn off automatically after showing this signal. Replace 9V Alkaline Battery.</p>
	<p>If the result is above 0.40BAC/ 2.00BRAC, the LCD color will be changed from blue to red and “Hot” signal is displayed along with “ALARM” sound.</p>		<p>The user had a short exhale time during the test, which likely means the user did not exhale steadily and continuously for at least 3 – 5 seconds. Repeat operation steps from No.2 to No.4 to perform another test</p>

\*\*\* N.B. : Any of these error occurs, the LCD Backlight turns red to give notice.

# Battery Replacement

Apply a small amount of pressure on the battery cover located on the back of the unit and push down and away from the unit to release the cover.  
See the following diagram.



\*\*\* N.B. : Make sure to insert the battery with the proper position of positive(+) and negative(-) as indicated.

# Precautions

1. After drinking, smoking and eating, it is recommended to test after 20 min.
  - It is because it takes 20 min. approximately for alcohol to be absorbed into blood from the digestive organs, and residual alcohol remaining in the mouth takes this long to dissipate.
2. Avoid testing under strong wind or in the closed room with contaminated air.
3. When the “**BATT**” signal is on the display, it is advisable to replace 9V alkaline battery.
4. Do not blow cigarette smoke, food or liquid into the instrument because this may damage the sensor.
5. Do not use this unit as a tool to determine whether you or anyone else should operate any motor vehicle or machinery.
6. Keep it under 0 – 50 °C (32 – 122 °F). And this device is designed to be used in a temperature range of 10 – 40 °C or 50 – 104 °F. Operation of the unit in temperature ranges above or below this range may affect the accuracy of results
7. In normal use, CA2000 requires re-calibration every 6 – 12 months to obtain accurate results. Discuss with local distributors for re-calibration.
8. Do not leave the unit connected to the AC/DC outlet when the unit is not being used.
9. You cannot use the results of this unit in court of law. The driver holds full responsibility for driving under the influence of alcohol.
10. Avoid testing in the presence of any liquids that contain any kind of alcohol or acetone. These substances may interfere with the results of the test.
11. Conditions that increase the amount of ketones on the breath, such as diabetes and low caloric intake, may cause a false positive test.  
(i.e., showing a non-zero reading despite not drinking alcohol)
12. Do not use this device in conjunction with an ignition interlock device or while sitting in a motor vehicle
13. An individual's testing result can continue to increase or decrease over time, depending on many factors. Obtaining a testing result reading at one time does not mean the testing result reading will be the same even a few minutes later.
14. Do not let yourself or anyone else drink and drive. Always use a designated driver when you or anyone else drinks alcohol.

# Specifications

Dimension	5.6 x 12.3 x 2.3 cm / 2.2 x 4.8 x 0.9 inch
Weight	111g / 3.9oz (with a battery and a mouthpiece)
Battery	9V Alkaline
Sensor	Highly Selective Semi-conductor Oxide Sensor
Display	Dual Color LCD Backlight
Warm-up Time	20 sec
Respond Time	3 ~ 5 sec
Accuracy	±0.01% at 0.10% BAC
Calibration	BAC Simulator
Working Temp.	+10°C ~ +40°C
Storage Temp	0°C ~ +50°C
Warranty	1 Year Limited Warranty

## Warranty

Manufacturer warrants for 1 year the product to be free from defects in workmanship or material (excluding calibration) in normal service from the date of purchase.

Manufacturer's obligation under the 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.