

Alcohol Breath Tester Operational Manual

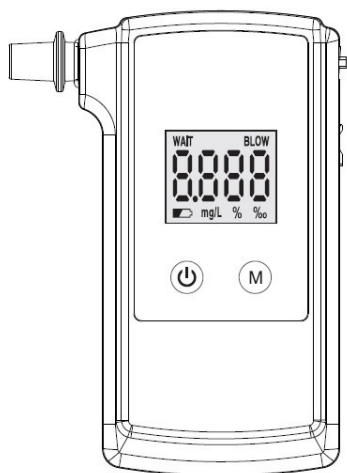


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Introduction

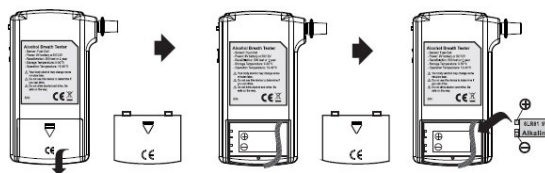
• The device is intended to measure alcohol in the human breath. Measurements obtained by this device are used in the diagnosis of alcohol intoxication.

Correct Measurement

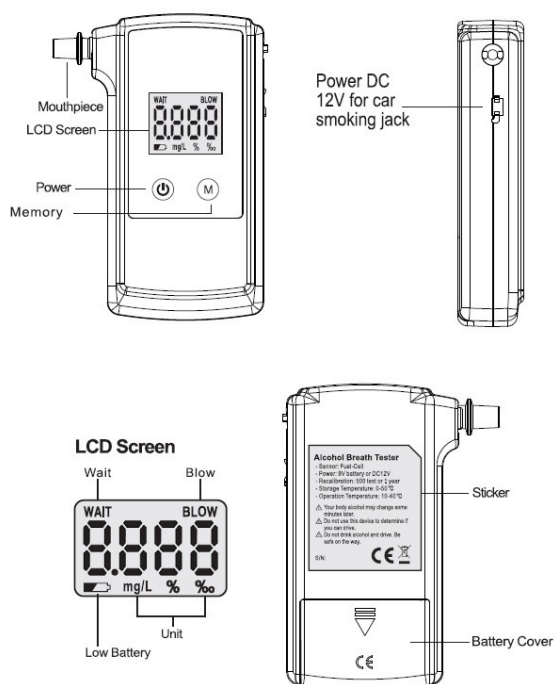
- Before testing, wait at least 15 minutes after your last drinking.
- Only use the device in a temperature 10-40 °C or 30-104 °F.

Power Supply

- Slide back the battery cover on the back of the device.
- Insert 1 piece 9V alkaline battery, making sure that the +/- symbols are correctly aligned.
- If the battery voltage is too low, the unit may display a battery symbol “” and the device may not operate correctly. You need to change a new battery.
- The device can also be operated from DC12V by car smoking plug, no recharge function. The power of battery will be terminated when plugging the DC jack.



Description of parts

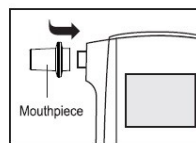


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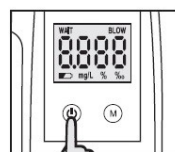
Operation

Test Mode

- Insert one of the mouthpieces into the 'blow in' hole.



- Press and hold the **TEST** button until power on. Release it after power on.



- LCD will display test counter before starting countdown.



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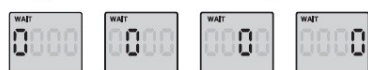
- The **WAIT** displays on the screen and countdown 15, 14, and 13... to zero.



- The **BLOW** displays on the screen, and displays "C" with flashing. Take a deep breath, blowing steady into the mouthpiece until hearing a CLICK sound.(about blowing 6 seconds.)



- The **WAIT** displays on the screen and displays "0" with flashing, the device is calculating the alcohol content.



- Your test result will be displayed on the screen for 20 seconds.



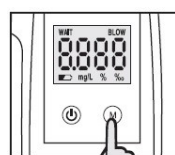
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- It may show **Err** (error) if blowing incorrectly, refer to the chapter of Errors and Troubles in detail. The device will auto off after displaying error.



Memory mode

- After tested, the device displays the test result for 20 seconds, press the "M" button to check your previous tested records.



- The device will auto off after displaying 20 seconds.
- The memory button is only available on this mode.

Accessories

- Mouthpieces
- Manual





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Important notes

- Before testing, wait at least 15 minutes after your last drinking for correct measurement.
- The blowing time must be enough until beeping stops. Take a deep breath before blowing.
- It may show Err(error) if no blowing, lower air flow, interrupt or shorter blowing. The device will auto power off after displaying error.
- The device change the place with different temperature, wait some minutes to use it. It may show error at this status.
- The memory recalls function only available after tested and during 20 seconds display.
- Only use the device in a temperature 10 - 40°C or 30 - 104°F for correct measurement.
- The data port of device uses by factory only.
- Suggest using alkaline battery with better accuracy.
- The car smoking plug will terminate the power of battery. The device only can use one of power sources, no recharge battery function.
- Recalibration: suggest each 12 month or 500 tested times.
- Never store the device in a corrosive gas room.
- Never store the device under sun exposure area.
- Avoid dropping or subjecting the device to a strong shock.
- For your safety and responsibly, don't drink and drive.

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Errors or Troubles

Error Message or Troubles	Description	Remarks
No Display	- Press and hold the TEST button until power on. - Check the battery - Check the power of DC jack, which will terminate the power of battery if plug in.	
Auto Off	- Low battery - Over the period of test stage	
Hi	-The blood alcohol content above the display range. -Display range: 1.00mg/L BrAC (2.000%BAC, 0.200%BAC)	
Err	- Blowing unsteady or interrupt. - Blowing less 7 seconds - Blowing flow too weak - No blow during BLOW mode. - If move the device and temperature changes suddenly, suggests waiting for some minutes to use.	
	- Low battery indication - Need to change new battery - Use alkaline battery	
Alarm Sound	- Error message - Above alcohol set point - Set point: 0.05 %BAC	

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Calibration

- Test counter indicates the times of tested, and display the digits after power on.
- The sensor may change the performance some month later.
- For better accuracy, suggest recalibration once for each 12 months or 500 tested times.
- The risks related to the use of device with an expired calibration period and exceeded the test times.
- Contact your service agent in detail.

Calibration Record:			
Date First Used:		Serial Number:	
#	Calibration Date	Remarks	Recalibration by

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Specifications

- European Fuel Cell Sensor (Electro-chemical sensor)
- Blowing time: 7 seconds; Blowing flow: 10L/min
- Display range: 0 -1.00mg/L BrAC; (Show "HI" if above)
- Accuracy: +/-0.03mg/L (0.05%, 0.005%) at set point.
- Set point:0.25mg/L BrAC (0.50%BAC, 0.05%BAC)
- Memory recall for last 5 tested data.
- 5 mouthpieces included.
- Warm up time: 15 seconds.
- Testing Time: 10 seconds.
- Circling testing: less than 60 seconds.
- Audible sound alarm if above set point.
- Indication: 4 digits LCD with status and backlight.
- Power supply: 9V alkaline battery (not included)
- Battery available for standard testing is about 500 times.
- Low battery indication and auto function.
- Operation: 10°C - 40°C; Store: -10°C - 50°C
- Test counter with alarm of recalibration
- Recalibration: each 12 months or test 500 times
- Blowing pressure and interrupt detection
- Size: 126x68x26mm

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Fuel Cell Sensor FAQ

1. What is the fuel sensor?

The sensor detects the alcohol and converts it to electronic signal to process and display on the device. The sensor is the heart of device. They are the choice of police officers around the world.

2. How does it work?

A fuel cell is a chemical battery to which the fuel and oxidant are continuously supplied, so in principle it is everlasting. We said an electrochemical cell. Many chemical reactions consist of a transfer of electrons from one reactant to another.

3. What is it made of?

The electrodes are made of platinum, high quality, high surface area, high performance, stability and long life; the electrolyte is an acid.

4. What is the lifetime of the sensors?

For unheated sensors, service lifetimes of ten years are known, but the answer really is "until, in your opinion, they get too slow to be of practical use". 5 years is typical. And you cannot really over-use them, in fact they seem to last longer when well used than hardly used at all.

5. How often to calibrate?

Calibration checks are carried out at 6 monthly intervals in the case of the UK police evidential equipment, but that is a statutory requirement, and few would need a recalibration at this interval. We suggest recalibration by each 12 month.

6. How to calibrate?

There are two commonly used methods, a "wet" gas and a "dry" gas. Contact your service agent in detail and do the calibration by the service agent only.

Precautions

- Your blood alcohol content (BAC) may change some minutes later.
- Do not use this device to determine if you can drive.
- The risks related to the use of device with an expired calibration and exceeded the test time.
- You cannot use the test results of device in court of law.
- You cannot use the test result of device against police's unit.
- For your safety and responsibly, don't drink and drive.

- ⚠ Your blood alcohol may change some minutes later.
- ⚠ Do not use this device to determine if you can drive.
- ⚠ Do not drink alcohol and drive. Be safe on the way.