



BREATHO PRO USER MANUAL



DO NOT DRINK AND DRIVE!

Disclaimer

The g/210L BrAC reading from this instrument is considered accurate at the time of testing, and we have taken great care to ensure this accuracy. However, the manufacturer, distributor, and owner are not liable for any actions or claims arising from the reading, whether the instrument is used correctly or not.

IMPORTANT: Many factors (e.g. environment gas residue, smoke & various smell in human mouth, etc...) may affect the Breath Alcohol Concentration (BrAC) level, so the Readings are for reference only.

Neither the reseller nor manufacturer accepts any liability arising from the use of this unit. **DO NOT drink alcohol before you drive. Alcohol should not be consumed for at least 15 mins prior to using the device.**

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1. Introduction

Thanks for purchasing our Breatho Pro fuel cell alcohol analyser. The Breatho Pro gives you a precision digital indication of your/workers breath alcohol content, and thus possible concentration of intoxication. To achieve high accuracy, users should study this manual carefully. Any use of this breathalyser requires full understanding and strict observation of these instructions.

2. Basic Scientific Principles

The fuel cell sensor works by using electrochemical reaction with platinum against ethanol molecules. This gives the most stable and reliable measuring technology.

3. Declaration

Please read this operating manual before use!

The performance of the device will depend on the correct operation and good maintenance.

Calibration and maintenance must be carried out by authorized personnel according to the requirements of local government.

Maintenance can only be done by authorized service personnel from Breatho.

Only spare parts from Breatho can be used for repairs.

4. Brief description

This model (Breatho Pro) is a quick alcohol screening instrument. Using the quick screening test mode, you can judge if someone has alcohol on their breath before using throwaway mouthpieces.

The Breatho Pro is a cutting-edge alcohol analyser that leverages the latest technology for unparalleled accuracy. It features advanced fuel cell sensors that ensure precise measurements by eliminating interference from other substances.

With professional-grade gas flow measurement techniques, the Breatho Pro accurately captures deep lung air, providing a reliable reflection of breath alcohol content.

Designed for simplicity, it operates with just three buttons, making it user-friendly for all. The device also offers extensive data capabilities, including a 50,000-record memory and a USB port for seamless data transfer. Users can print results via a Bluetooth printer or manage them through our dedicated PC software, which also allows for maintenance, calibration, and other device settings.



Caution: Although the Breatho Pro is a durable device, it contains delicate components and should be handled with care. Avoid exposing it to rough handling or submerging it in water. Do not store the instrument in direct sunlight or in environments with extreme temperatures.

5. Power ON/OFF

1.1 Press "POWER" button for about 3 seconds and the device will switch on.

1.2 The Breatho Pro will perform a self-check after turning on (next calibration date is shown here). The device will check it's sampling pump which you may hear.

1.3 The Pro will then enter the "active mode" automatically. After "Ready" appears, the device is ready to take a sample.



The Breatho Pro will stand in this state until a flow of breath is detected in active, and passive modes.

To power off, hold the power button for 2 seconds.

6. Operation Information

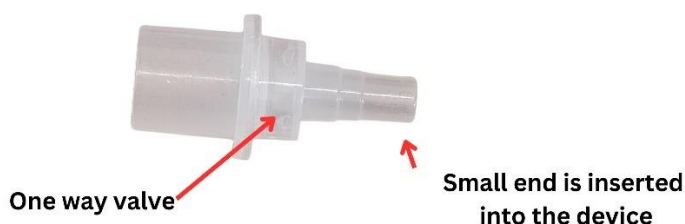
The Breatho Pro has active (with a mouthpiece for an accurate BrAC in g/210L), and a passive mode (without mouthpieces for fast screening).

When turning the device on, the unit should automatically enter the active mode.

6.1 Mouthpieces

There are 2 types of mouthpieces.

- Mouthpiece for accurate BrAC readings



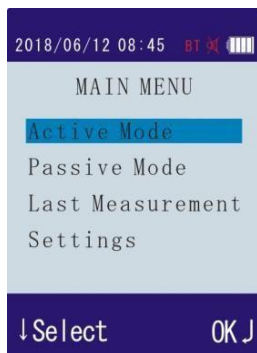
- Open funnel for direct breath for passive testing



6.2 Display

The Breatho Pro has a colour display that shows,

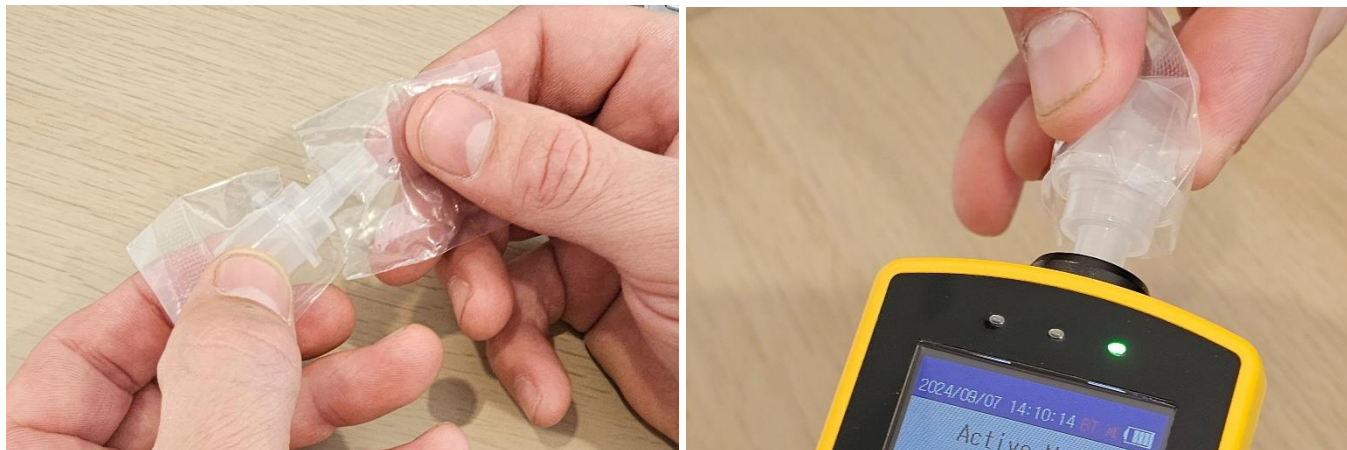
- Date (upper left)
- Time (upper centre)
- AAA Battery charge indicator (upper right)
- Menu button where you can change from active mode, to passive mode, check last measurements, settings, or connect to PC software.



6.3 Active mode

For an active accurate alcohol breath test, we need to install the mouthpiece. The best way to keep the mouthpiece clean and sterile is to pull apart the protective bag like below.

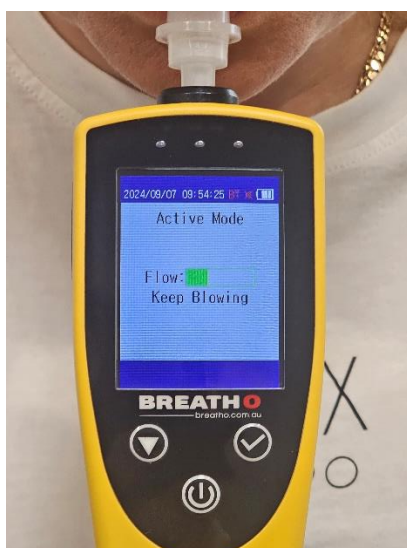
- Hold the large mouthpiece end and pull the plastic wrapping off to expose the smaller end.
- Hold the larger end of the mouthpiece and insert the smaller end into the mouthpiece port.
- The device is now ready to take a sample.



Caution

Residual alcohol in the mouth will cause an incorrect reading during measurement. Alcohol should not be consumed for at least 15 mins prior to using the device. Smoking will destroy the device and lead to incorrect readings too. Smoking should not be consumed 10 mins before using the device.

- The subject takes a deep breath and places their mouth over the large end of the mouthpiece and blows a medium breath. This will activate the unit to take air into the sensor. The display will show the “flow” meter and keep blowing during the test. The subject keeps breathing through until beeping stops.



- If the flow of breath ends too soon, “blow failure” will appear. The testing process will need to start again.
- If the flow of breath is sufficient, there will be 2 quick beeps to signify enough breath has passed through the sensor. The display will show “analysis” when calculating BrAC

6.4 Active mode analysis

After a valid analysis has completed, the device calculates how much alcohol is present in breath. This may take 2-4 seconds before depending on how much alcohol is present.

The display changes colour depending on how much alcohol is present.

Green	Yellow	Red
0.000 g/210L BrAC	0.001-0.049 g/210L BrAC	Over 0.050 g/210L BrAC



For the next test, press the back (or arrow down) button to return active mode. Time between tests will depend on the amount of alcohol that passes through the sensor. The higher the readings, the longer the recovery period.

6.5 Passive Testing (Fast Screening)

Passive testing is for rapid and non-invasive screening in ambient air, with no need for a mouthpiece.

This mode is not used for an accurate measurement in BrAC. Passive mode indicates that there is alcohol in the air. After there is a positive test in passive mode, active mode should be used to measure BrAC accurately.

- To set the device to passive mode, enter the main menu and scroll down to passive mode and press OK
- When “Ready” appears, the device is ready to take a sample.

Passive testing can be activated either by blowing through the device, or by using the test button while the subject blows no more than 5cm away from the mouthpiece port.

1. Have the subject blow through the device with a direct breath. A valid breath will start a long beep and will end in 2 quick beeps.



2. The subject breathes no more than 5cm away from the device while tick button. This will manually draw air into the sensor.



6.6 Passive mode analysis

After a valid analysis has completed, the display shows either green (No Alcohol) or Red (Alcohol detected). This may take 2-4 seconds.



If alcohol is not detected, the test has completed. If alcohol is detected, the device should be changed to active mode (with a mouthpiece) for an accurate BrAC result.

Scan below for video on passive vs active modes



Caution: The accuracy of passive mode is affected by the distance from the mouth, or blow volume. Make sure to always keep the distance between the mouthpiece and the subject's mouth no more than 5cm away.

6.7 Results

The history data is stored, including history of testing results, date, time and counter no. The user can find every measurement in this menu.

The last measurements can be found in the main menu. Scroll down and press the tick button.

Press “select” to flick through the recorded results. The Breatho Pro can store up to 20,000 results in memory.

6.8 Settings

Settings can be found in the main menu.

You can change some functions of the breathalyser including,

- Date/Time
- Contrast/Brightness
- Key Tone ON/OFF
- Unit (password protected) as g/210L unit is used in Australia
- language
- Print Info.
- Calibration (password protected) Contact Breatho
- Set BLE Printer (Bluetooth printer)

7.0 Error troubleshooting

Passive Mode

Error message	Causes	Remedy
Alcohol measured with no alcohol	Last value too high or alcohol residue	<ul style="list-style-type: none"> • Wait 15 seconds and re-test
Alcohol consumed but no result	<ul style="list-style-type: none"> • Alcohol sensor broken • Sensitivity decreases from the ambient temperature being too low • Too far from mouth • Sampling port blocked 	<ul style="list-style-type: none"> • Exchange alcohol sensor or • Recalibration • Adjust the distance from mouth
No power	<ul style="list-style-type: none"> • Battery depleted 	<ul style="list-style-type: none"> • Change battery

Active Mode

Error Message	Causes	Solution
Blow failure	Blow was interrupted.	Blow again and reach 1.0L
Big difference between two measurements	Test too soon after alcohol, mouth have alcohol residue	Test again after 5 minutes, if two readings have more than 10% difference, there is alcohol residual in mouth. Wait 15minutes and test again.
Time error	Date and time error	If this error happens again after time adjustment, please contact Breatho
Alcohol can be identified in passive mode, but active reading is zero.	The tester alcohol value below 3mg/100 ml may show 0 or device broken	Send device to Breatho service centre

Sampling system error	Error in pump	Contact Breatho service centre
Memory error	Memory cannot be read	Contact Breatho service centre
Calibration expired	Calibration overdue	Contact Breatho service centre
Calibration error	Calibration failure for high Alcohol	Contact Breatho service centre
Alcohol module error	Alcohol module no connect with main board	Contact Breatho service centre
Printer error	There is no communication between unit and bluetooth printer, or have error between the printer and unit.	Contact Breatho service centre
Paper error	No Paper	Exchange paper

8. Liability for proper function or damage

- Never unscrew your Breatho Pro. Warranty not valid if any screws have been loosened or warranty label has been broken. Serviced or repaired by personnel not employed by Breatho Service centre or authorized by Breatho, or if the instrument is used in a manner not conforming to its intended use.

9. Maintenance

- Repair/maintenance of the Breatho Pro should only be carried out by trained technician from authorized Breatho professional breath alcohol tester Service Centre.
- Only authentic AP spare parts can be used for maintenance.
- Specification subjects to change without notice.

10. Important notes

- You should store the Breatho Pro in a shaded place in between 1- 50 degrees Celsius.

Calibration is recommended every 12 months to keep day 1 accuracy. If you require a calibration, please get in contact with us at [Breatho.com.au](https://breatho.com.au), or at info@breatho.com.au

- The measurement result display range is 0.00 to 0.400BrAC

11. Contact us

- [Breatho.com.au](https://breatho.com.au)
- info@breatho.com.au
- 0423 067 818