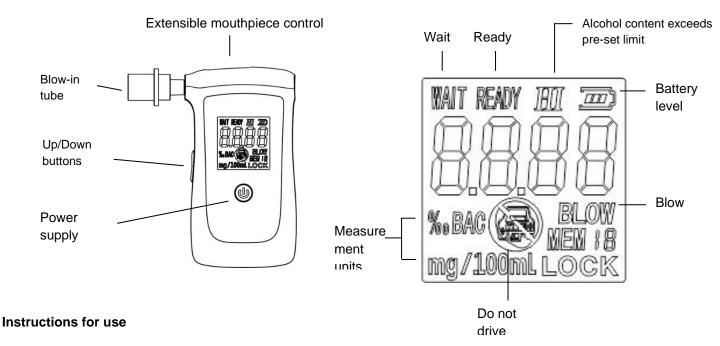
Solight 1T06 Breath Analyser User Manual



Thank you for buying our digital breath analyser, which measures residual alcohol content in your breath and indicates the possible level of intoxication. The 1T06 model ranks among the professional measuring devices in its branch. It is equipped with a measuring sensor relying on the Fuel Cell technology, which is based on an electrochemical reaction of platinum and ethanol and is able to determine the alcohol content in breath with high accuracy of three decimal places of PPT.



- 1. Insert three 1.5V AAA size alkaline batteries into your device.
- 2. Prior to using the breath analyser, wash out your mouth with clean water. Do not smoke or drink alcohol for at least 10 minutes prior to measurement.
 - !!! Measuring immediately or shortly after drinking alcohol is inaccurate and usually also causes damage to the sensitive measuring sensor. Claim due to this cause would be unjustified.
- 3. Extend the mouthpiece using the slider at the top of the device. Only this expandable mouthpiece can be used for testing. When testing several persons, for hygiene, put a blow-in tube onto the mouthpiece. Use a new blow-in tube for each person.
- 4. Push power ON button to turn the device on. ALCO text will appear on the display.
- 5. By pushing the same button once again, you will start device heat-up. This stage includes an automatic testing chamber cleaning, sensor activation and the device will be ready for use after approx. 30 seconds. "PH" text will appear on the display, followed by a countdown sequence to zero SH99 to 00 will appear on the display. At the end of the countdown, an audible signal will sound and "READY" and "BLOW" texts will start to flash. A countdown interval for blowing will appear on the display. If you do not start within approx. 30 seconds, the test will be cancelled.
- 6. Insert the mouthpiece into your mouth and blow-in uninterruptedly for around 5 to 7 seconds.
- 7. Stop blowing after an audible signal. The device will now start analysing, which is indicated by "ANLY" text flashing on the display.
- 8. The measured value will then appear on the display for 10 seconds and then gets stored into device memory.
 - Values are displayed with three decimal spaces; measurement deviation is ±0.08 ‰
 - A pre-set value of 0.2 % will alert excess of the tolerated value limit for driving motor vehicles. "HI" and "Do not drive" icon will start flashing on the display.
- 9. If the air flow is too short or too weak, "FLO" will appear on the display and the test must be repeated.
- 10. For new measurement, press button again. The device stores 20 measured values in its memory.
- 11. The measured values can be displayed by pushing the Up/Down buttons on the side of the device.
- 12. After five subsequent measurements, leave the device at standstill for 5 minutes.
- 13. By pushing the button for 2 seconds you will turn the device off. The device will power off automatically after approx. 30 seconds.

Power supply

Batteries – use exclusively 1.5V alkaline batteries. 1.2 V rechargeable batteries are insufficient for device operation. Especially when using partially discharged rechargeable batteries, the display intensity may be reduced and the device will interpret this condition as result of discharged batteries. When the batteries are low, an icon will flash on the display. In that case immediately replace batteries with new ones.

Notes

- 1. To achieve the most accurate results, we recommend you to clean the testing chamber with utmost care from previous blowing, especially in case of repetitive subsequent measuring cycles. This can be done by shaking the device in your hand, following the direction of the blow-in mouthpiece a few times in both directions. A perfect cleaning can be achieved by fresh air stream e.g. using a fan.
- Powering the device off using push-button or automatically after 30 seconds means that the device will turn into stand-by mode. If you know that you won't use the device for a longer period of time and wish to avoid slow battery discharging, remove them from your device.
- 3. If the tester has not been in use for a prolonged period, the results of the first two tests may differ from actual values. If the difference between two measurements exceeds 0.1 %, you should carry out one more measurement.
- 4. When blowing into the device, do not obstruct air outlet from the device this would cause inaccurate measurement.

Storage and use

- Store the device in dry environment without the presence of chlorine or corrosive gases, within the prescribed temperature range.
- 2. Storage in low temperatures will make device activation last longer.
- 3. Do not let the device fall down on the ground or expose it to impacts and vibrations. In the event of damage by dropping, the device is irreparable.
- 4. For cleaning, use dry cloth and avoid using abrasive agents or solvents.
- 5. !!! Measuring immediately or shortly after drinking alcohol is inaccurate and usually also causes damage to the measuring sensor. Claim due to this cause would be unjustified.
- 6. Fuel Cell technology used by professionals and the police all over the world. The sensor consists of several thin plates coated with microscopic platinum layers. The electrochemical reaction on the sensor surface determines the alcohol content according to precise calculation formulas stored in the device chip. As platinum gets into contact with ethanol contained in alcoholic drinks but also due to humidity and various gases contained in the air, the sensor surface will oxidise. Oxides are removed by calibration. According to the regulations and standards, the device should be re-calibrated every 12 months.
- 7. Also, the device will get locked after 500 measurement; "LOCK" text will appear on the display and it must be re-calibrated by a specialized workshop. Doing this will preserve the measuring sensor, extend its service life and ensure measurement accuracy all due to oxidation on its surface. Calibration is charged according to the current price list of Solight holding s.r.o.
- 8. Under usual conditions, the service life of the Fuel Cell sensor is longer than 3 years. The sensor integrated in this device is made by a specialized lab in the UK.

Warning:

Despite its accuracy, the 1T06 Digital Breath Analyser should be only used as a general guide for detecting alcohol level in your body. Precise values can be only obtained by blood taking.

The level of alcohol in breath can be affected by a number of factors (such as gases in air, smoke, several mouth odours etc.). Therefore, the measured values are merely approximate. The test result should not be interpreted as an indisputable ground for determining the safe capability of driving, running equipment or carrying out other dangerous activities. Neither the seller not the manufacturer accept any liability resulting from the use of this device. DO NOT DRINK ALCOHOL BEFORE DRIVING! Technical parameters are subject to change without prior notice!

Technical data

1	Measurement range:	0.000 % ~ 4.000 %, measuring accuracy ± 0,08 %
2	Power supply:	3 pc. of 1.5V <u>alkaline</u> AAA batteries
3	Display:	digital with backlight
4	Standby mode:	approx. 30 seconds after the latest test
5	Length of measured breathe-out:	approx. 5-7 seconds of uninterrupted air flow
6	Dimensions:	112 x 62 x 20 mm
7	Weight:	85g (without batteries)
8	Pre-set warning value:	0.2‰ BAC, memory for 20 measurement values
9	Standard:	CE
10	Accessories:	2 pc. of blow-in tubes
11	Operating temperature:	0 °C / +55 °C