

COSMOS ALCOHOLTESTER

CA 8010



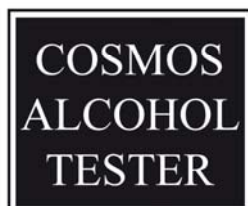
Instruction manual

2 WORD A4 E / 10-10 / C A 8010 GA + Kal / GA Alle Sprachen



The breath alcohol tester...

- for road safety
- for safety at work
- in medicine



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These instructions have been prepared with the greatest of care – should you however, when working, find details which do not agree with the system, we would ask that you please inform us briefly so that we can correct the inconsistencies as quickly as possible.

The device

Congratulations on the purchase of this new hand-held alcohol breathalyser. The CA 8010 fulfills almost every demand that can be put to a small and still very economic device.

1. Large colour screen in a blue tint with time, battery state and accurately measuring data display
2. Memory for 199 measurements
3. Measuring result in ‰
4. Simple and fast calibration – can also be performed by the client himself. To do that Cosmos provides 1 mobile devices (Gas simulator)
For further information please ask for an offer with calibration manual !
5. Calibration and final testing of every device before shipping.

1. Mouthpiece nozzle
2. Time, date, measuring result
3. Seconds (Time)
4. LCD display
5. Battery indicator
6. Menu „up“ or „+“
7. Menu „down“ or „-“
8. USB interface
9. „Mode“ button
10. „OK“ button
11. „Power“ button and „menu return“



Scope of delivery

This is the condition you will find your CA 8010 in at the time of purchase. The device is calibrated and after loading the rechargeable battery ready for use.

- Shipment in a stable plastic case with detailed instruction for use
- COSMOS breathalyzer CA 8010
- Belt pouch with zipper
- 3 mouthpieces with back flow
- 1x rechargeable battery (before first use, please load the battery)
- USB charging cable
- Car adaptor
- Hand strap
- Guarantee for the sensor 6 month (consumable)
- Guarantee for the device 24 month (subject to proper use)
- Unlimited right to return within 2 weeks of delivery

Important information

Threshold limits for impaired driving incapacity vary from country to country. Independent of this, because of different tolerances to alcohol, a blood alcohol concentration of lower than 0.2 – 0.4 ‰ for example can also impair driving and lead to criminal culpability. In Germany, criminal prosecution and a fine can be expected if neurological impairment is 0.30 ‰ or above.

A test with the CA 8010 will not be accepted by the police as evidence, it is nevertheless an important indicator for you to act responsibly. The COSMOS-ALCOHOL-TESTER was calibrated before shipment. To ensure continued correct measurement results, it should be recalibrated every 6 months. To do this, please send the device to your supplier.

The measuring method

Blood and breath alcohol are closely connected. Deep in the lungs, in the alveoli, blood and breathed air are separated by a thin gas permeable membrane. The gas exchange takes place here.

Oxygen passes to the blood and carbon dioxide, and any alcohol, passes to the breathed air.

In order to get this air out of the depth of the lungs (alveolar air) for analysis, a sufficient minimum volume of breathed air must be breathed out.

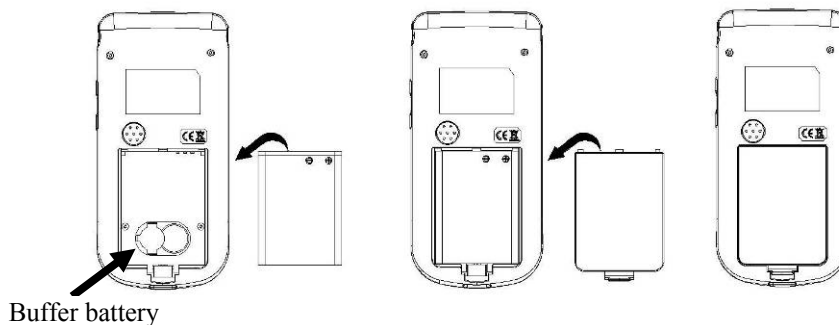
Only if a sufficient volume of breathed air is breathed out and this is blown with enough strength for at least 4 seconds will a correct measurement be achieved.

CA 8010 Operation

Inserting the rechargeable battery (Akku)

Open the battery cover at the backside of the CA 8010. Insert the rechargeable battery. This is also the place of the buffer-battery for the CA 8010. The guarantee expires if the label removed.

The backup (buffer) battery ensures that the functionality of the memory and time is maintained in the case of the rechargeable battery runs low.

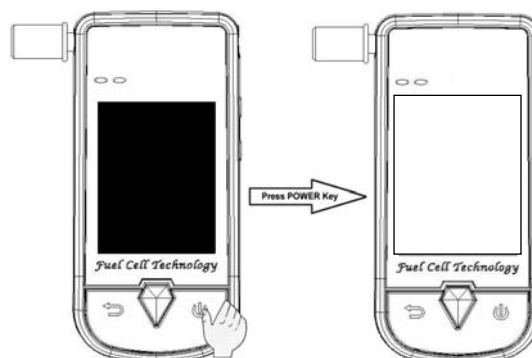


Loading the rechargeable battery

Please connect the CA 8010 to the supplied USB cable and a free USB port on your PC, Notebook or car adapter for loading. The battery-status- indication on the display shows the loading procedure by the three moving bars. If the bars comes to a standstill the rechargeable battery is fully charged.

Switch on the device

Briefly press the power button to switch on the CA 8010. This is confirmed by an audible signal and the display shows the current time.



Performing a measurement

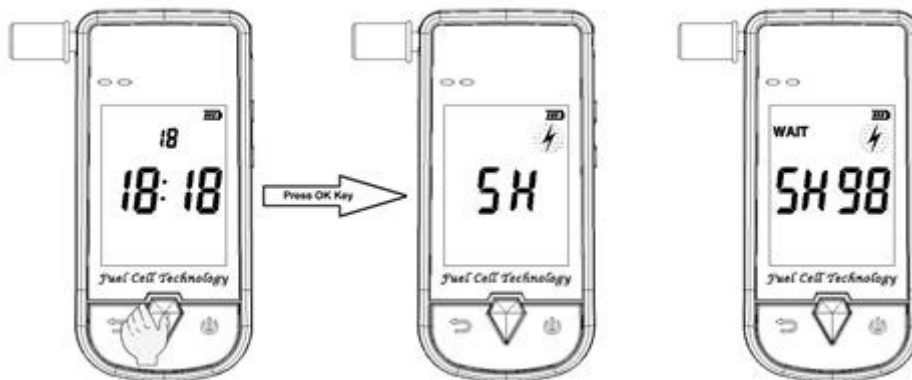
Attention:

The test person may not have drunk alcohol within 20 minutes before giving a breath sample. – Otherwise, a false, elevated value will show.

For hygienic reasons and to prevent excessive moistening of the sensor, please use a new mouth piece for every measurement (otherwise a complete malfunction of the sensor could result).

Smoke also damages the sensor. Do not smoke 5 minutes before a test!

1. Switch on the CA 8010 by press briefly the power button
2. By pressing the OK button for more than one second the display shows “PH”. Now the sensor is pre-heated.
3. Please place the mouth piece in the mouth piece nozzle.
4. If „READY“ and „BLOW“ will flash alternately you have 30 seconds to start a measurement.

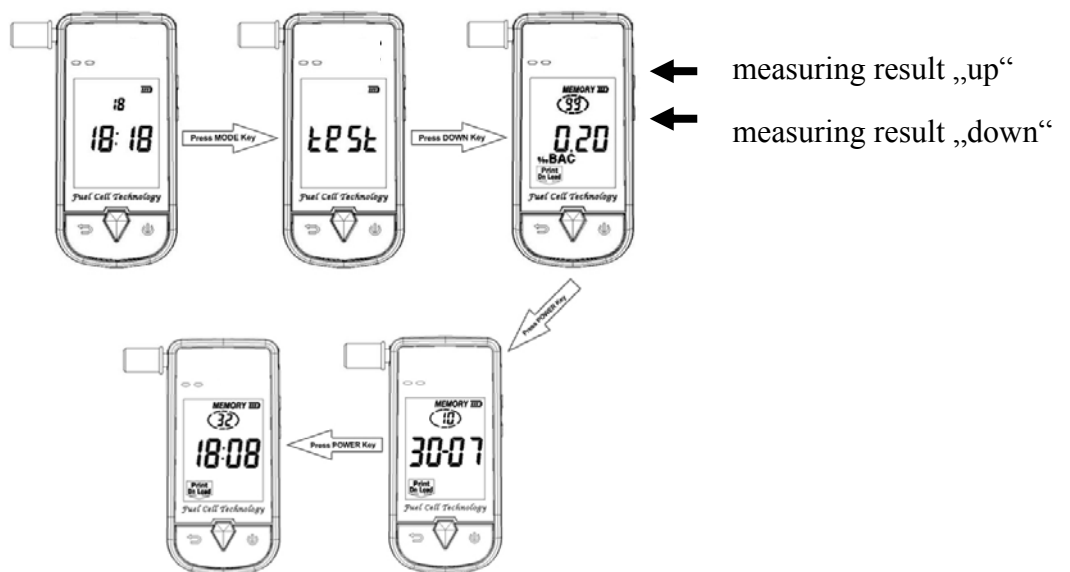


5. Now please breathe into the mouthpiece with a sufficiently large respiratory flow, evenly and without interruptions. A proper blow-in procedure is indicated by an audible signal.
6. These breath sample are evaluated and outputted as a measurement result. The display shows „AnLY“ und and then the measuring result.

Indicate measuring results

1. Switch on the CA 8010 by pressing the power button.
2. Press briefly the „Mode“ button.
3. Press the lateral up- and down key for display the measuring results.
4. By pressing the „Power“ button you will return to the time.

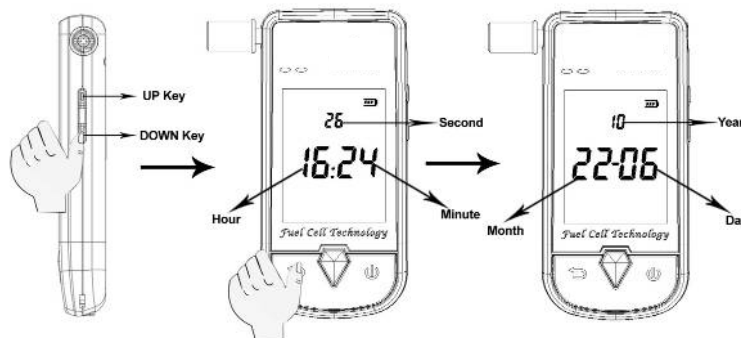
199 measuring results will be stored, if the memory is full the oldest result is automatically deleted.



Time and date adjustment

Please press the lateral “down key” for 3 seconds. The second-indication of the actual time begins to flash.

By pressing the „up“ (6) key again single values can be changed. By pressing the “mode” button you switch to seconds → minutes → hours → year → month → day. Finally press the power button (11).



Calibration the AlcoConnect 8010

Switch on the device

Press briefly the power button to switch on the CA 8010. This is confirmed by an audible signal and the display shows the current time.

Calibration mode

Aktivate the calibration mode by pressing the central lateral keys between 6 and 7 + OK-button (10) at the same time. The display shows „0 0 0 0“, and the first two digits start flashing. Replace the two flashing 00 with the number 20 by pressing the „+“ key and confirm with **OK**. Now the third and fourth 00 flashes. Replace these two 00 with the number 10 by pressing the „+“ key. ! Please **do not** press the OK button or any other key. After a few seconds the device switches automatically into the calibration mode.

Settings

Factory pre-set for germany (21) in ‰ and alert 0,50 ‰

Country code:

You can change the country code by pressing the „+“ button.

Number 20	➔	Switzerland
Number 21	➔	Germany
Number 23	➔	England

Measuring unit:

You can change the measuring unit by pressing the „OK“ button..

%
‰
mg/l

Alert level:

You can change the alert level by pressing the „-,“ button.

0,20‰
0,30‰
0,50‰
0,80‰

Calibration

Once you have made the settings you require, and when no key is pressed for a short time the display shows „SH 99“. After the heating-up phase of the sensor the display shows „BLOW“. You are now ready to begin with gassing the sensor.

1. Run:
In the first step you gassing the sensor with a calibration solution of 0,20%. Please confirm the measuring result which is indicated by pressing the OK button.

2. Run:
Start the second run by pressing the OK button. The display shows again „SH 99“, the sensor heats up and the display shows again “BLOW”. Now you start with the second gassing by using a calibration solution of 1,00%. Please also confirm the second measuring result and finalise the calibration procedure by pressing the OK button.

After the completion of this works the CA 8010 is ready for operation for the next 6 month.

Order information – for the CA 8010

Product	Number	Item no.	Price*
Breathalyzer CA 8010 black Shipment in a aluminium case, with accessories comprising: 25 mouthpieces, batteries, belt pouch, instruction manual	1. piece	8010	
Mouth pieces with rebreathing inhibitor 1 VE = 25 St. einzeln verpackt	1. piece	0023	
Belt pouch For the convenient storage of the device and mouth pieces	1. piece	7202	
Transport- and storage case	1. piece		
USB jack For the connection of the Alco Conect 8010 to a PC or Laptop	1. piece		
Gas simulator exclusiv Complete with thermostat for constant temp. 34°C, air pump for calibration, flow meter with control and automatic air-flow stop.	1 piece	0403	
Calibration-alcohol-solution for Cosmos Gas simulators 500 ml with 0,20 ‰ + 1,00 ‰	1 bottle	0404	

* VAT to be added to all prices plus shipping costs, if necessary. Subject to change.

Troubleshooting

Fault description	Fault / remedy
The device does not turn on	- <i>Please reload the rechargeable battery by using the USB loading cable</i>
Device turns off	Please check the state of charge of the battery. (Image 1 Pos. 5)
Measuring data gets lost	Batterie + -Buffer battery is weak Send the device to the supplier for repair.
Err	Blown too weak or too short

Please contact Cosmos Service if the faults cannot be corrected!

- Caution: Used alkali batteries
- do not throw into fire
 - do not charge batteries. Risk of explosion!
 - do not use force to open. Risk of explosion!



Only dispose of as toxic waste. Comply with local regulations governing disposal.

For your safety

Please observe the instruction manual exactly and use the device only for the purpose described. As accessories, please only use original parts listed in the spare parts list on page 15.

Repairs may only be carried out by specialists. (Cosmos – Service). Maintenance intervals must be complied with. Liability for the function of the devices transfers to the owner or operator if the maintenance is not performed by Cosmos – Service. The manufacturer’s warranty conditions apply.

Safety information

- The device is only designed as an alcohol breathalyzer and may only be used for this purpose.
- Batteries may not be charged or reactivated and must be kept away from children.
- Medical attention must be sought immediately if a battery is swallowed.
- Only dispose of batteries at official or retail collection points
- If you no longer want the device, please send it to your supplier. The supplier will ensure for proper recycling/disposal.

Cleaning

Only with a soft, dry cloth. Do not use cleaning agents.

Technical information

Display:	Digital LCD display with backlight
Dimensions:	W x L x D – 54 x 114 x 18,5 mm
Weight:	approx. 75 g without battery
Batteries:	3,7 volt lithium
Measurement method:	electrochemical sensor (fuel cell)
Precision:	0,05‰ at 0.50 ‰
Measurement range:	0.10 to 4.00‰ (0.05 to 2,00 mg/L)
Temperature range:	5°C bis +50°C
Shutdown:	automatic after 30 seconds

The CA 8010 should be recalibrated every 6 months.

We reserve the right to make necessary technical and optical modifications and improvements without serving notice.

Electrical and Electronic Equipment Act – ElektroG dated 16/03/05

Manufacturers and importers of these kinds of devices are required to dispose of them properly in accordance with statutory provisions. This alcohol breathalyzer is a device subject above all to the provisions under § 2/8 and 9 of this law for which there is no requirement to make disposal at a public disposal site. – Your supplier would like however to comply with any future ordinances.

Should you no longer use the device – we hope after many years of faithful serve – please return it to us so that we can dispose it properly for you. – Thank you.

Attachment / RoHS



EG - KONFORMITÄTSERKLÄRUNG EC - DECLARATION OF CONFORMITY

For the following device:

Name: COSMOS-ALCOHOL-TESTER
Model: C A 8010
Serial no.: 00100 - 02000

We confirm herewith that the design of the above named device conforms with applicable EC guidelines.
The declaration loses its validity if changes are made without authorisation from us.

Applicable EC guidelines::

Emissions	
Radiated emission	EN55022
Interference immunity	
Electrostatic discharge	EN61326-1
Electromagnetic field	EN61326-1
Magnetic field (power-frequency)	EN61326-1

Design model test:

We confirm that our design model conforms with the requirements of the EC guidelines above.

Bad Segeberg 01.06.2010

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