

COSMOS ALCOHOL TESTER

ENGLISH

GEB.ANL.E Seite1 / 02.04.2005 / TYP 2000

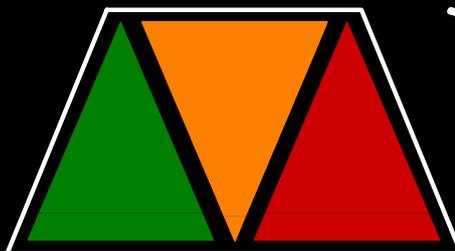
COSMOS
ALCOHOL
TESTER

ALCOHOL-TESTER

BLOW STRONGLY

- Champion
- Pro
- Sportsman
- Minimum

POWER DISPLAY
and FITNESS TEST



Insert
STRAW
here

PLEASE WAIT

The measurement cell in this machine is used by police forces and clinics world-wide and delivers very precise results. It is regularly checked and serviced.

Drink no alcohol for 20 minutes before the test. Rinse your mouth thoroughly with water. Do not smoke. Repeat the test after 20 minutes to check whether your alcohol level has fallen or risen.

WARNING

The manufacturer, installer or operator of this equipment and the owner of this establishment accept no liability. If in any doubt, do not take the risk.

IMPORTANT ADVICE

A level over 0,3 ‰ will result in criminal proceedings if you are stopped by the police due to erratic or reckless driving.

This test cannot be used as evidence or as a defence. The measurements determined by the police are binding in every case.

PLEASE
REMOVE
STRAW AFTER
INSERTING
COIN

COSMOS

COSMOS ALCOHOL TESTER TYPE 2000

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ALCOHOL
TESTER**

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OPERATING CONDITIONS

The COSMOS ALCOHOL TESTER calculates blood alcohol levels rapidly and reliably by measuring the level of alcohol in the breath. The machine is designed for use in warm/heated rooms with an ambient temperature of 18-25° C. For correct results, the user should

- drink no alcohol for 20 minutes and
- not smoke for at least 5 minutes before the test.

If these instructions are not observed, the results can be severely affected by traces of alcohol remaining in the mouth. **If any alcohol in liquid form is blown in, this can lead to temporary breakdown of the equipment. The machine should be left switched on and you should blow into the machine strongly about 10 times TO SPEED UP REMOVAL OF THE LIQUID FROM THE TESTING CYLINDER. The heating bulb will then evaporate the rest of the alcohol (liqueur gums up the pump!!)**

FOR YOUR SAFETY

Familiarise yourself with these operating instructions before using this equipment.

The equipment should only be used as described.

Only use "ORIGINAL COSMOS PARTS" for any repairs.

LIABILITY FOR OPERATION AND DAMAGE

If the equipment has been incorrectly maintained or repaired, liability for its operation falls on the owner or operator in every case.

Maintenance and repairs should be conducted only by **COSMOS SERVICE** or in the strictest accordance with instructions for use.

Cosmos Automaten GmbH accepts no liability for any damage caused through non-observance of these instructions or through inappropriate use.

These instructions do not modify the conditions of guarantee and liability detailed in Cosmos Automaten GmbH's General Conditions of Sale 92.

RESALE

The COSMOS ALCOHOL TESTER must not be exported to the USA without the express written permission of Cosmos Automaten GmbH.

SPECIFICATIONS

POWER SUPPLY

Input: 200/ 240V AC & 100 / 120V AC
Output: 24 Volts; 0.5 – 5 A ; 108 Watts
Fuses: 5 x 20mm – F 3.15 A

CONSUMPTION:

approx. 60 Watts per hour – depending on the light programmes

EXT DIMENSIONS:

W x L x H; 50 x 75 x 19cm

WEIGHT:

approx. 20 kg

GUARANTEE:

6 months



COSMOS AUTOMATEN GMBH AM IHLSEE 18 23795 BAD SEGEBERG

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COSMOS ALCOHOL TESTER TYPE 2000 **Congratulations**

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**COSMOS
ALCOHOL
TESTER**

We congratulate you on the acquisition of your

COSMOS ALCOHOL TESTER,

the latest, state of the art, breath alcohol analyser

A machine that provides not just security but also some fun for your customers and **turns their fun into money for you.**

This remarkable machine is the result of many years of experience in the marketing and servicing of alcohol testers..

It is safe to operate, easy to maintain, vandal-proof and produces high returns.

From our own extensive experience, an ideal location for the machine is beside or on the way to the toilets. Almost every customer will pass the machine at some point during the evening and the first couple of hours in the pub provide a customer with ample opportunity to try it out. At this time, most of them will not keep to the delay required between their "last drink" and the test so there is usually a lot of fun when the results show levels of , say 5.5%.

The important point for responsible drivers, however, is that they can rely on the results when they use the equipment properly.

So, as a rule, when they go to the toilet again before leaving the pub, they will remember to "BLOW" again, just to be on the safe side.

If, based on the reading, they then decide to get a lift home or take a taxi, they will just remember the good time they have had, so our machine helps to encourage all your customers to come back again (with their car!).

Once a COSMOS ALCOHOL TESTER has been installed, customers are more careful about when they should drive but are not discouraged from drinking – whether they are drinking beer, wine or shorts.

On the contrary, they can have fun trying out this new machine again and again just to see how inebriated they actually are.

In Germany, because it is not games or entertainment equipment:

OUR ALCOHOL TESTER IS ONLY SUBJECT TO VAT (currently 16 %). THERE ARE NO OTHER DUTIES OR CHARGES AND NO TIME RESTRICTIONS.

The police also use the same electro-chemical measurement cell, among other things.

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COSMOS ALCOHOL TESTER TYPE 2000

Installation & Maintenance

INSTRUCTIONS PAGE 04 / 2005-04-02 / TYPE 2000

**COSMOS
ALCOHOL
TESTER**

COMMISSIONING

Your newly delivered machine is already calibrated and ready for use

Check that all the connectors are correctly plugged in (see the cable connections sheet).

Connect the equipment to the mains – the hardware is tested automatically; the numerical display shows " - - - " and the "Please Wait" panel lights.

According to the room temperature, the rest of the lights will illuminate after approximately 30 seconds and the "Please Wait" light will go out. The equipment is now ready for use.

However, the normal operating temperature of about 34° must be reached before precise readings can be obtained: this takes about one hour. A 25 Watt electric light bulb provides the heat.

Incidentally

We recommend that, when your COSMOS ALCOHOL TESTER is delivered, your staff place the machine on a table and run through the functions following the operating instructions. If they are still unclear about anything, they can always phone us; we are there to help.

Location

The machine's location is crucial to its "success".

Always install it on the way to or near the toilets (but not actually in the facilities)

This ensures that every customer will pass it several times during the evening.

Fixing

The machine is installed using an installation frame. - No special tools are required.

To hang up the machine, unscrew the screws on the back approximately 1 cm, then tighten the flat nut onto the wooden rear panel. Uncouple the cable connections to the boards (in the door) and then remove the door so that the casing is easier to install. Then reconnect the cable connections.

(For connections to the power supply, loudspeaker and coin mechanism see the instructions on page 5.)

Lastly, don't forget to screw in the central screw (to prevent theft!!)

Socket

Install a socket above the machine about 2.2 m above the floor or just above the skirting board (to ensure that the plug cannot be pulled out easily as a joke). We recommend that you use a switched socket.

Maintenance

This is simple and involves, at most, regularly refilling the machine with straws and recalibrating it after a certain number of tests (every 6-8 weeks).

Calibration only takes 2-3 minutes and can easily be carried out by any employee – without any technical knowledge required (see the operating instructions "Calibrating with the gas calibrator").

Disposal

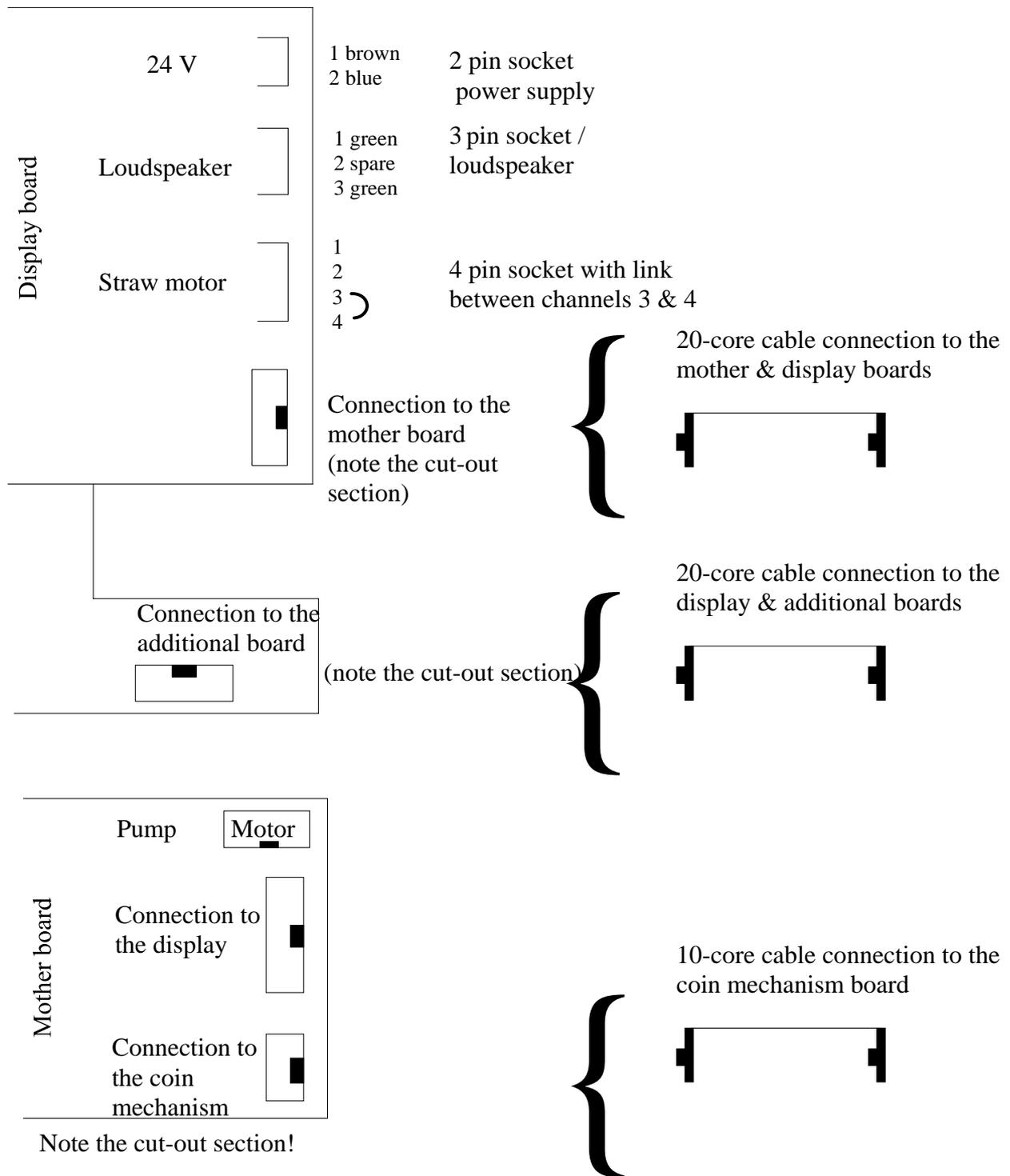
Because of the COSMOS ALCOHOL TESTER's durability, this will not be required for several years, but when it does become necessary, do not throw the battery and the sensor away with the general rubbish: instead return them to Cosmos and we will dispose of them for you.

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Cable connections – display & computer

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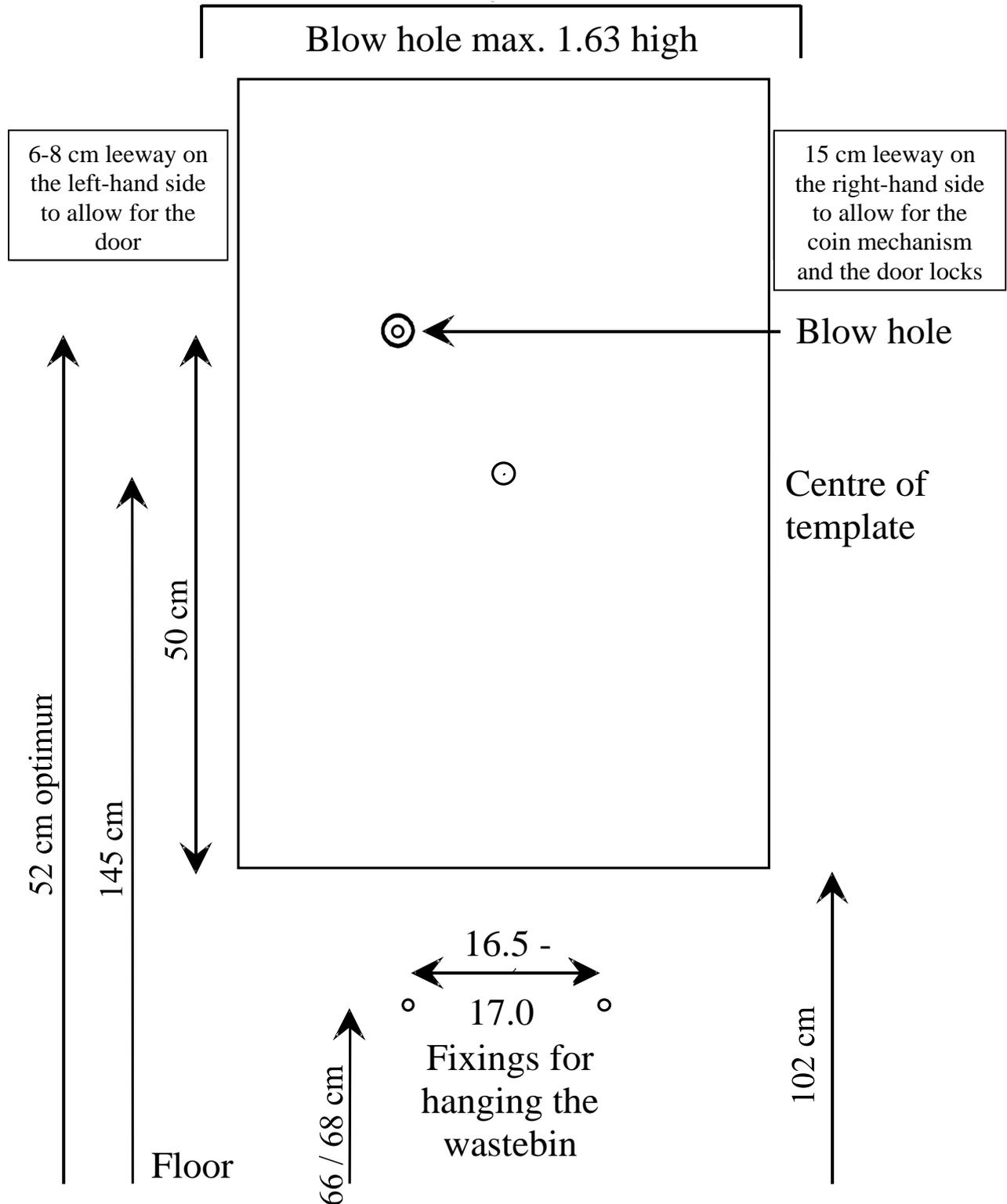
Fixings

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Machine dimensions WxHxD 50x75x18

All dimensions in cm



COSMOS ALCOHOL TESTER TYPE 2000

Functions

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**COSMOS
ALCOHOL
TESTER**

OPERATION

When a coin (or coins – depending on the setting) is inserted, the left-hand triangle flashes.

You can now take a straw, insert it into the opening and blow into it strongly.

The red lamps on the power display start to light up from the bottom upwards.

Blow until at least 5 red lamps light ("Minimum" level). Your breath is then analysed.

The other ratings – "Sportsman", "Pro" and "Champion" – serve as a fitness test and provide an even more precise blood alcohol value – the highest level being when both green lamps are lit.

During analysis, the "PLEASE WAIT" panel lights up until the precise results are displayed.

The green, yellow or red triangles also light up according to the test results.

The "Please Wait" panel lights while the measurement cell regenerates (this takes from 20-60 seconds, depending on the level of alcohol in the breath).

Another coin cannot be inserted while the machine is "recovering". As soon as the testing cell is ready, the "Please Wait" sign goes out and the three stripes on the display light up. The alcohol tester is then ready for use again.

MEASUREMENT

The measurements are taken by an electro-chemical cell with long-time-stability.

A micro-processor carries out the actual analysis and converts the breath alcohol level into a blood alcohol reading..

MEASUREMENT PRECISION

Range 0 - 1.0 ‰ ± 5 % of the measured value. Our newly developed measurement system provides a level of precision close to that previously only achievable with very expensive technology (e.g. infrared systems).

VERY SHORT MEASUREMENT INTERVALS

Completely new developments in the rapid regeneration of electro-chemical cells enable the intervals between tests to be reduced, as a rule, to only 10-20 seconds.

THE RESULTS CANNOT BE MANIPULATED

Measuring the alveolar breath.(breath from deep in the lungs) provides the closest correlation between the breath alcohol and blood alcohol levels. The microprocessor must therefore measure the breath's **pressure, volume and duration**. The actual analysis only takes place when all these three elements have been measured and the alveolar breath is available. If the test person's exhalation is too weak, interrupted or too short, the test is abandoned.

The test can be repeated without more money being inserted.

Drink no alcohol for 20 minutes before the test and do not smoke!

Traces of alcohol remaining in the mouth cause erroneous readings!

Repeat the test again after 20 minutes to check that your blood alcohol level has not increased!

VERY EASY TO MAINTAIN

All the functions are automatically checked by a self-diagnostic program, thanks to microprocessor technology. The lamps can be tested simply by pressing a button. Calibration is fully automatic.

Safe to operate – easy to maintain – vandal-proof

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COSMOS ALCOHOL TESTER TYPE 2000

Software details

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The COSMOS ALCOHOL TESTER has 6 programs you can operate and adjust.

BLI	Blink program 1 or 2	TON	Music on or off
CAL	See page 9 for Calibration	LA	Lamps light in 4 sectors
COU	No. of tests	SEN	Sensitivity + seconds before display

Calling up and modifying programs

The mother board has 4 keys. + - O K and Test

You can switch from program to program using the O K, + and - keys.
The "TEST" key is only for checking measurements after calibration.

SWITCHING SEQUENCE	Key used	Code displayed	Program setting
Ready status		- - -	
1 st setting	O K	END	
2 nd setting	+	BLI	Press OK to switch to L 1 or L 2
3 rd setting	+	CAL	See "Calibration" on page 9 Press O K and key in, for instance, 0.58. Then use + or - to modify the value and press O K. The triangle will flash and the machine is ready to be calibrated. Now blow gas from the gas calibrator into the machine. CAL is displayed automatically when everything is ready.
4 th setting	+	COU	Press OK to call up the number of tests – first the thousands, then the hundreds
5 th setting	+	Ton	Press OK for music off or on
6 th setting	+	LA	Press OK to check the lamps.
7 th setting	+	SEN	1 st No. = sensor sensitivity 2 nd No. = seconds before display.
8 th setting	+	END	
9th setting	O K	- - -	The machine is ready for use

COSMOS ALCOHOL TESTER TYPE 2000

Calibrating with the gas simulator

INSTRUCTIONS Page 09 - mg / l - / 2005-04-02 / TYPE 2000 J

**COSMOS
ALCOHOL
TESTER**

Your newly delivered alcohol tester is already calibrated and ready for use.

It should be recalibrated every 6-8 weeks after initial commissioning (to obtain precise values, the equipment must have been switched on for at least 60 minutes). - The gas simulator has to be filled with an alcohol testing solution (140 ml) from COSMOS AUTOMATEN.

(Solution 1.00 ‰ // 0.10 % // 0.50 mg/l)

The fluid's temperature should be 18-30 °. – **Now prepare the machine:**

Press: **“OK” then “+” twice; “CAL” is displayed**
Press “OK” again; a number is displayed
Use “+” or “-” to set the correct value (see below)
Press “OK” again; the arrow flashes and the equipment is ready for calibration.

Insert the end of the test mouthpiece into the blow hole and blow into it strongly; the first red lamp lights. Now blow gas from the test bottle into this opening for about 5 seconds without interruption until the green lamp on the power display lights.

- **The new value is set automatically by the fully automatic calibration procedure.**
 - **Foam should never be allowed to reach the outlet hole while blowing.**
 - **Blowing in fluid interrupts the operation of the chemical cell for about one hour (E 01 is displayed)**
- Should this occur, leave the COSMOS ALCOHOL TESTER switched on and blow into it strongly ten times using a straw. Any remaining liquid will be evaporated by the electric light bulb. The equipment resets itself automatically every 10 minutes. When the three strips light up the tester is again ready for use. The machine sustains no significant damage.**

CALIBRATION SETTINGS mg/l (according to the temperature of the fluid in the bottle)

Temperature	Setting	Temperature	Setting	Temperature	Setting	Temperature	Setting
16,0	0.15	23,0	0.24	27,0	0.31	31,0	0.42
18,0	0.18	24,0	0.26	28,0	0.33	32,0	0.43
20,0	0.20	25,0	0.28	29,0	0.36	33,0	0.46
22,0	0.23	26,0	0.29	30,0	0.38	34,0	0.50

We recommend that you increase all the values to exclude technical tolerance to the disadvantage of the users. You should therefore increase the values for the fluid temperatures in the above table by 0.02 (e.g. 20° would then = 0.22)

To avoid inaccurate measurements, do not use at temperatures below 16° C

CHECKING THE CALIBRATION (MEASUREMENT CHECKS)

When the machine is in Ready status, i.e. display shows:

" - - - " ,

Now press the “TEST” button and introduce gas from the test bottle:

As with calibration .

Deviation from the calibration values by max ± 10%. – Otherwise repeat calibration.

To ensure that it operates correctly, the machine should be calibrated every 6 months. If the ALCOHOL TESTER is usually left unsupervised, we recommend calibration every 2 months. Once you have completed a calibration, always seal the gas simulator carefully on both sides (to avoid the danger of evaporation).

WARNING Please do not use the same fluid for longer than one month or more than 30 times for calibration. Store the filled simulator in a refrigerator- to avoid evaporation.

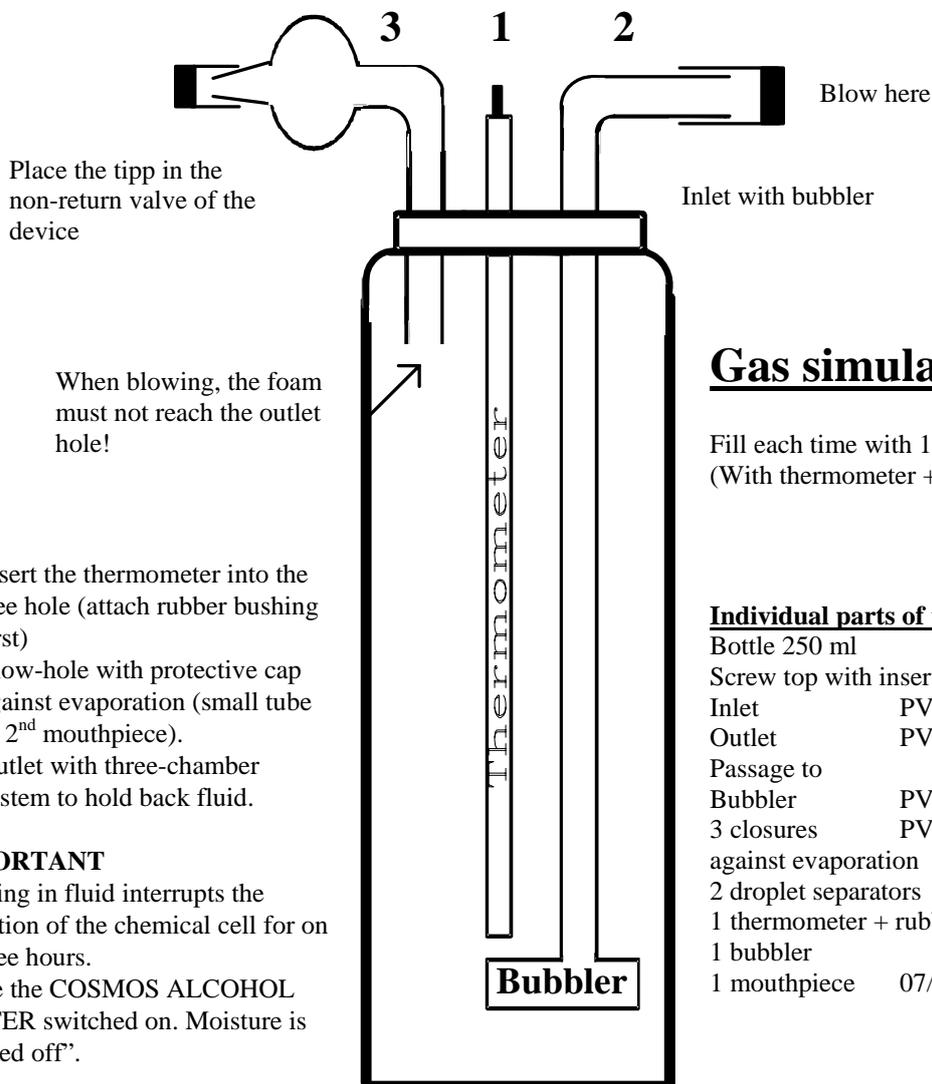
The police also use the same electro-chemical measurement cell, among other things

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COSMOS - ALCOHOL - TESTER GAS SIMULATOR

GEB-ANL. E Seite 09 b / 2005-04-02 / TYP 2000 E

**COSMOS
ALCOHOL
TESTER**



Gas simulator

Fill each time with 130 ml (maximum!!)
(With thermometer + bubbler = 140 ml)

Individual parts of the gas simulator

Bottle	250 ml			
Screw top with insert and seal	217			
Inlet	PVC tube	05/07	14 cm	
Outlet	PVC tube	05/07	11 cm	
Passage to				
Bubbler	PVC tube	07/10	3 cm	
3 closures against evaporation	PVC tube	07/10	4 cm	
2 droplet separators				
1 thermometer + rubber bushing				
1 bubbler				
1 mouthpiece	07/10	4 cm		

1. Insert the thermometer into the free hole (attach rubber bushing first)
2. Blow-hole with protective cap against evaporation (small tube as 2nd mouthpiece).
3. Outlet with three-chamber system to hold back fluid.

IMPORTANT

Blowing in fluid interrupts the operation of the chemical cell for on to three hours.

Leave the COSMOS ALCOHOL TESTER switched on. Moisture is "burned off".

The Cosmos Gas Simulator serves to simulate a human breath sample and therefore provides a low-cost calibration procedure.

The gas simulator provides a controlled alcohol reference gas for the calibration of breath alcohol measuring devices. Air is passed through an ethanol-in-water solution of a precisely known concentration and temperature. The air absorbs ethanol and water vapour in a defined concentration for the calibration of breath alcohol measuring devices.

The police also use the same electro-chemical measurement cell, among other things.

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Calibration in small steps

TYP 2000

**COSMOS
ALCOHOL
TESTER**

GEB-ANL E 09 c Kal. in kl. Schritten / Typ 2000 E

Calibration must take place every 6 month in order to ensure accurate measurement. However, Cosmos recommends calibration every 6 – 8 weeks, i.e. at the same intervals as service staff arrive to refill straws, to remove money and to calibrate.

The individual steps:

1. Prepare the gas simulator

- Fill the gas simulator bottle (Instructions, page 9b) with test fluid up to 140 ml.
- Read off the temperature on the thermometer, then determine the corresponding calibration settings in the table (Instructions, page 9a – Calibration settings).

2. Prepare COSMOS Alcohol Tester

(Wiring instructions, page 8)

Switch using the buttons on the motherboard (page 11 with + and – and OK and Test)

- On the motherboard, switch to CAL
(1x “OK” // and 2x “+” = CAL)
- Now “OK” = old value
- Set to new value with “+” or “-”
(see table page 9a)
- 1x “OK” – now the small triangle flashes

3. Calibration

Place the tip of the gas simulator (Instructions page 9b / No. 3) at the device blow hole on the Cosmos Alcohol Tester.

Blow once strongly to start the LED column, then continue to blow evenly until the green LEDs at the top are reached.

Foam should never be allowed to reach the outlet hole while blowing.

CAL appears again to indicate that automatic calibration is completed.

Now press “+” 5x until “END” appears.

Now press “OK” 1x so that

3 dashes then appear and the device is ready to use again.

4. Test whether calibration was successful

Press the test button – a small triangle starts to flash.

Attach the gas simulator and blow.

The value displayed must correspond to the previously set value (2c).

(Maximum deviation $\pm 10\%$ - otherwise repeat calibration)

**If a guest should complain that
”the machine is nuts – the readings are completely wrong”
you can quickly determine with the gas simulator
and the test described above
whether the machine or the guest is “nuts”.**

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COSMOS ALCOHOL TESTER TYPE 2000

Calibrating with the gas simulator

INSTRUCTIONS Page 09 a / 2005-04-02 / TYPE 2000

**COSMOS
ALCOHOL
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Your newly delivered alcohol tester is already calibrated and ready for use.

It should be recalibrated every 6-8 weeks after initial commissioning (to obtain precise values, the equipment must have been switched on for at least 60 minutes). - The gas simulator has to be filled with an alcohol testing solution (140 ml) from COSMOS AUTOMATEN

The fluid's temperature should be 18-30 °. – **Now prepare the machine:**

Press: **“OK” then “+” twice; “CAL” is displayed**
Press “OK” again; a number is displayed
Use “+” or “-” to set the correct value (see below)
Press “OK” again; the arrow flashes and the equipment is ready for calibration.

Insert the end of the test mouthpiece into the blow hole and blow into it strongly; the first red lamp lights. Now blow gas from the test bottle into this opening for about 5 seconds without interruption until the green lamp on the power display lights.

- **The new value is set automatically by the fully automatic calibration procedure.**
 - **Foam should never be allowed to reach the outlet hole while blowing.**
 - **Blowing in fluid interrupts the operation of the chemical cell for about one hour (E 01 is displayed)**
- Should this occur, leave the COSMOS ALCOHOL TESTER switched on and blow into it strongly ten times using a straw. Any remaining liquid will be evaporated by the electric light bulb. The equipment resets itself automatically every 10 minutes. When the three stripes light up the tester is again ready for use. The machine sustains no significant damage.**

CALIBRATION SETTINGS (according to the temperature of the fluid in the bottle)

Temperature	Setting	Temperature	Setting	Temperature	Setting	Temperature	Setting
4.0	0.13	15.0	0.28	24.0	0.51	29.5	0.74
5.0	0.14	16.0	0.30	24.5	0.53	30.0	0.76
6.0	0.15	17.0	0.33	25.0	0.55	30.5	0.79
7.0	0.16	18.0	0.35	25.5	0.57	31.0	0.81
8.0	0.17	19.0	0.37	26.0	0.58	31.5	0.84
9.0	0.18	20.0	0.40	26.5	0.60	32.0	0.86
10.0	0.19	21.0	0.43	27.0	0.62	32.5	0.89
11.0	0.21	22.0	0.46	27.5	0.64	33.0	0.92
12.0	0.22	22.5	0.47	28.0	0.66	33.5	0.95
13.0	0.24	23.0	0.48	28.5	0.69	34.0	0.98
14.0	0.26	23.5	0.50	29.0	0.72	34.5	1.00

We recommend that you increase all the values to exclude technical tolerance to the disadvantage of the users. You should therefore increase the values for the fluid temperatures in the above table by 0.10 (e.g. 18° would then = 0.45) To avoid imprecise measurements, do not use at temperatures below 15°.

CHECKING THE CALIBRATION (MEASUREMENT CHECKS)

When the machine is in Ready status, i.e. display shows: " - - - " ,
Now press the “TEST” button and introduce gas from the test bottle: As with calibration .
Deviation from the calibration values by max ± 10%. – Otherwise repeat calibration.

To ensure that it operates correctly, the machine should be calibrated every 6 months. If the ALCOHOL TESTER is usually left unsupervised, we recommend calibration every 2 months. Once you have completed a calibration, always seal the gas simulator carefully on both sides (to avoid the danger of evaporation).

WARNING Please do not use the same fluid for longer than one month or more than 30 times for calibration.

The police also use the same electro-chemical measurement cell, among other things

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COSMOS ALCOHOL TESTER TYPE 2000

Self-diagnosis system INSTRUCTIONS Page 10 / 2005-04-02 / TYPE 2000

**COSMOS
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All error messages are automatically reset after approximately 10 minutes.

The equipment then carries out a self-check, particularly with regard to E O 1 (which is generally caused by alcoholic fluid being blown into the machine), to determine whether its operating status has been restored by “warming up” (evaporating the fluid, etc.).

Warning!! Error messages can be caused not only by faults within the COSMOS machine itself, but also by electromagnetic interference from other unshielded equipment in the vicinity.

Whenever a fault appears, switch the equipment off and then back on again.

If this does not eliminate the fault, follow the procedures described below.

Before attempting any of the troubleshooting measures described, always remove a fuse (from the power supply circuit).

Display	Cause	Troubleshooting measures
None	No current	Check the cable, plug and socket, the fuses on the cover and possibly the F 3.15A 5x20mm power supply fuses
E 01	Alcohol in the sensor	Leave the equipment switched on so that the heating system (light bulb) can evaporate the alcohol more rapidly. Clear the system by blowing strongly into the blow hole using a straw (10 times or more), even if initially there is no display at all. This removes residual alcohol from the testing cylinder.
E 04	Pump breakdown	Switch the equipment off and then on again - pump OK now?. If not, carefully use a small screwdriver to turn one of the gear wheels in the motor, provided the slack point has not been passed. If there is still no change, replace the board. The pump is then probably gummed up with residue from some fluid blown in (e.g cola or liqueur).
E 05	Defective pressure sensor	Replace the mother board.
E 12	Defective or empty	This only applies if there is a built-in straw dispenser. Refill the straw dispenser. Alternatively, the bridging plug (between pins 3&4 may be faulty. If the fault remains, call Cosmos Service.

Other faults may have been caused by strong electrical interference from another piece of equipment damaging an IC and replacement is required (call Cosmos Service).

On the mother board

Coin mechanism IC 4
Sensor motor U 2
RS 232 interface IC 10
Clock IC 6

On the display board

Buzzer and sound card IC 6
Lamps IC 1 + 2 + 17
Power display IC 4+5
Alcohol level display IC 9+11+13

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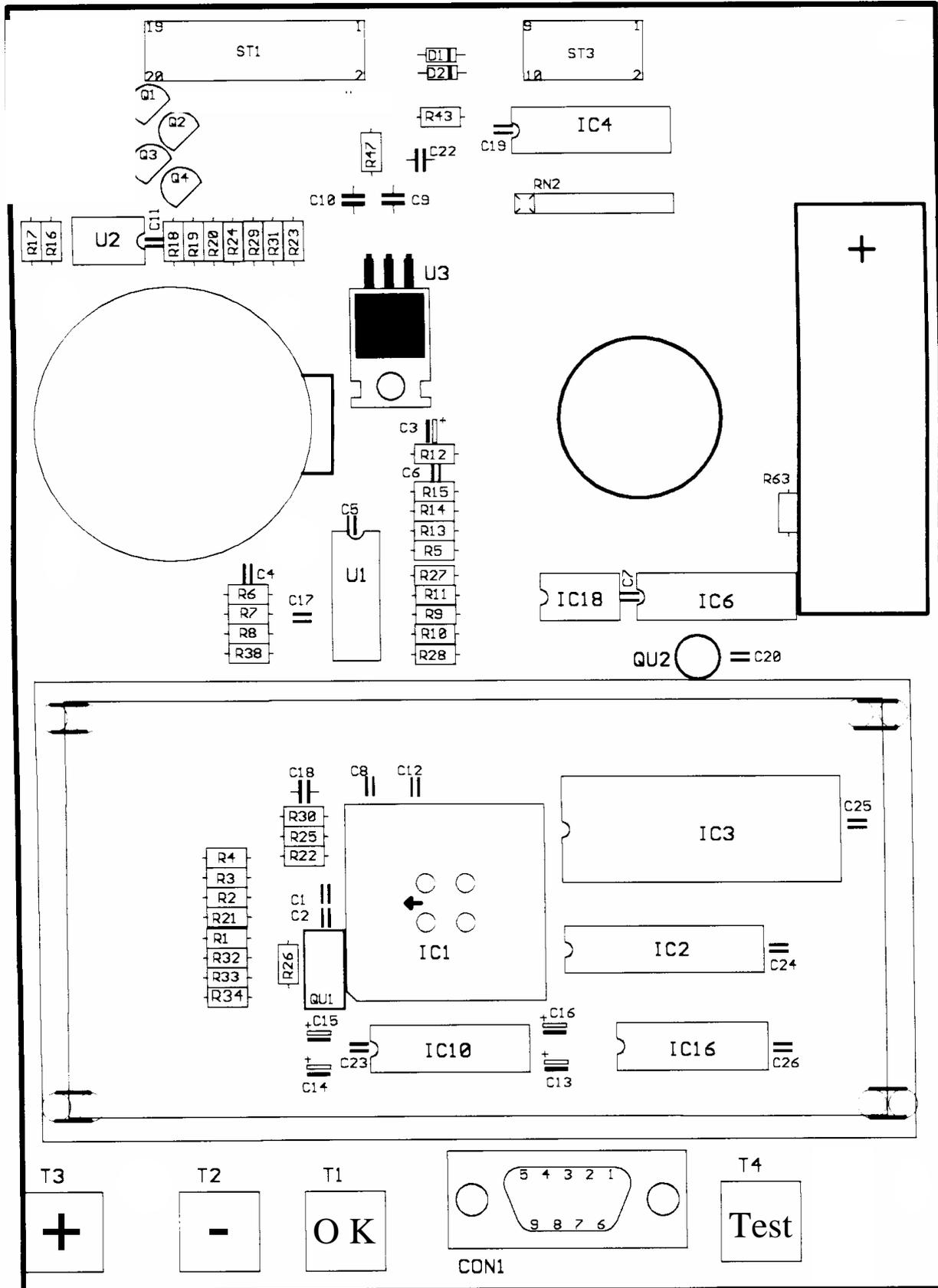
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Type 2000 mother board

Plugs and sockets

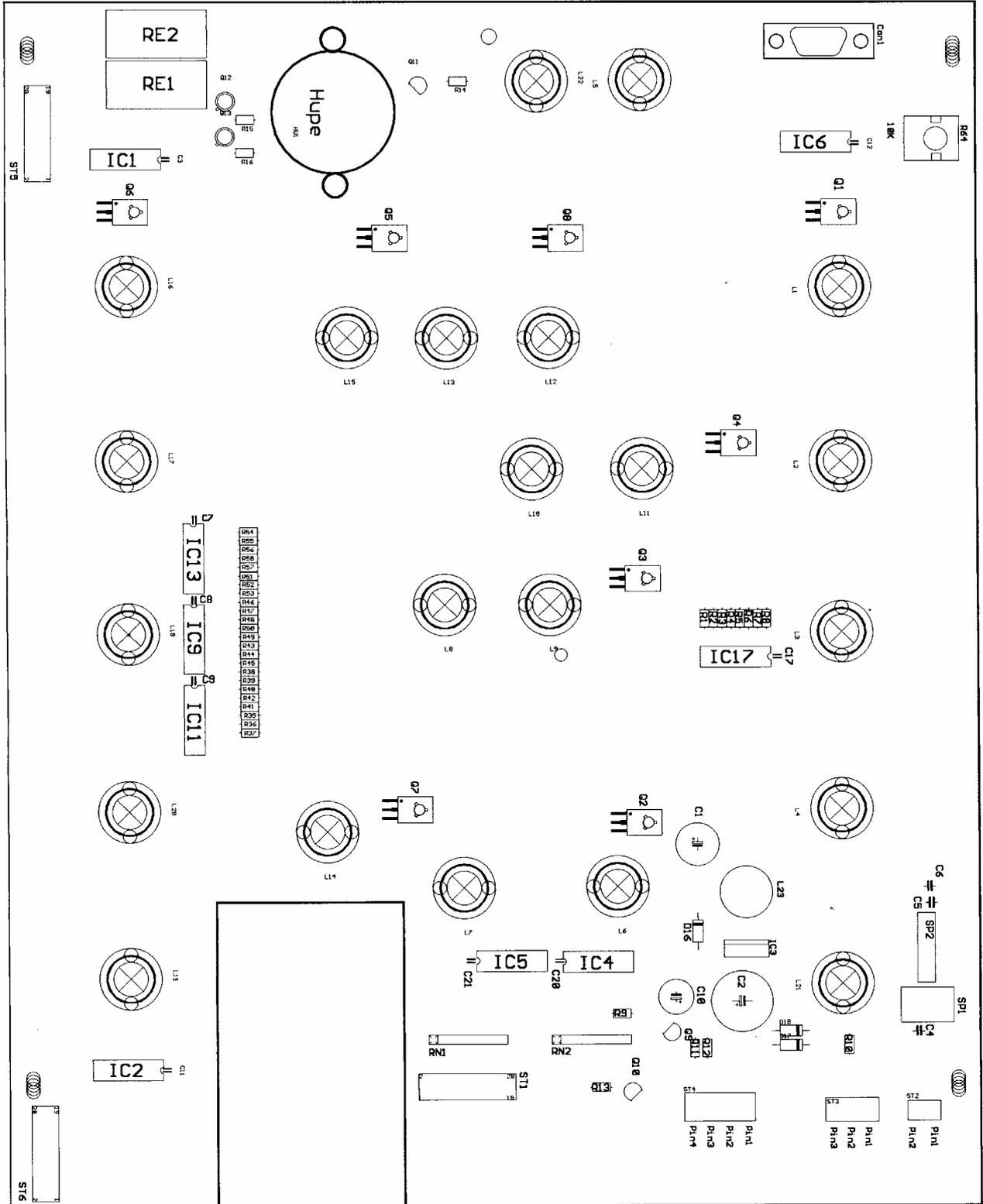
INSTRUCTIONS Page 11 / 2005-04-02 / TYPE 2000



TYPE 2000 display board

Plugs and sockets

INSTRUCTIONS Page 12 / 2005-04-02 / TYPE 2000



("Hupe" = buzzer)

COSMOS-ALCOHOL-TESTER TYP 2000

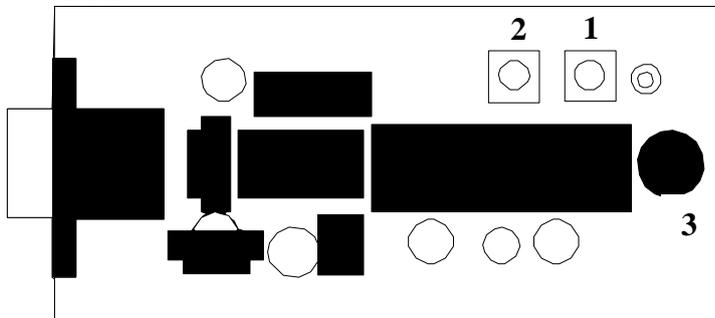
SOUND & ADDITIONAL BOARD

This expansions module is not standard equipment
 INSTRUCTIONS Page 13 / 02.04.05 / TYP 2000



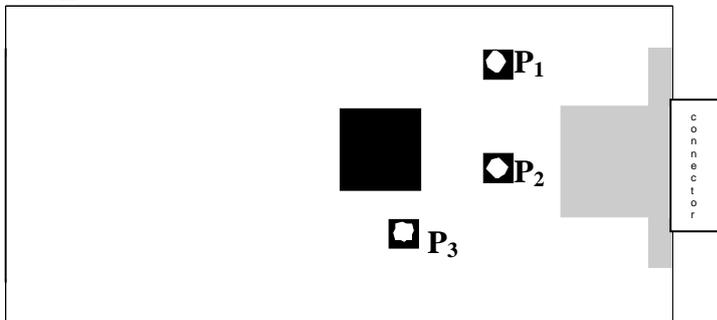
Sound board

front



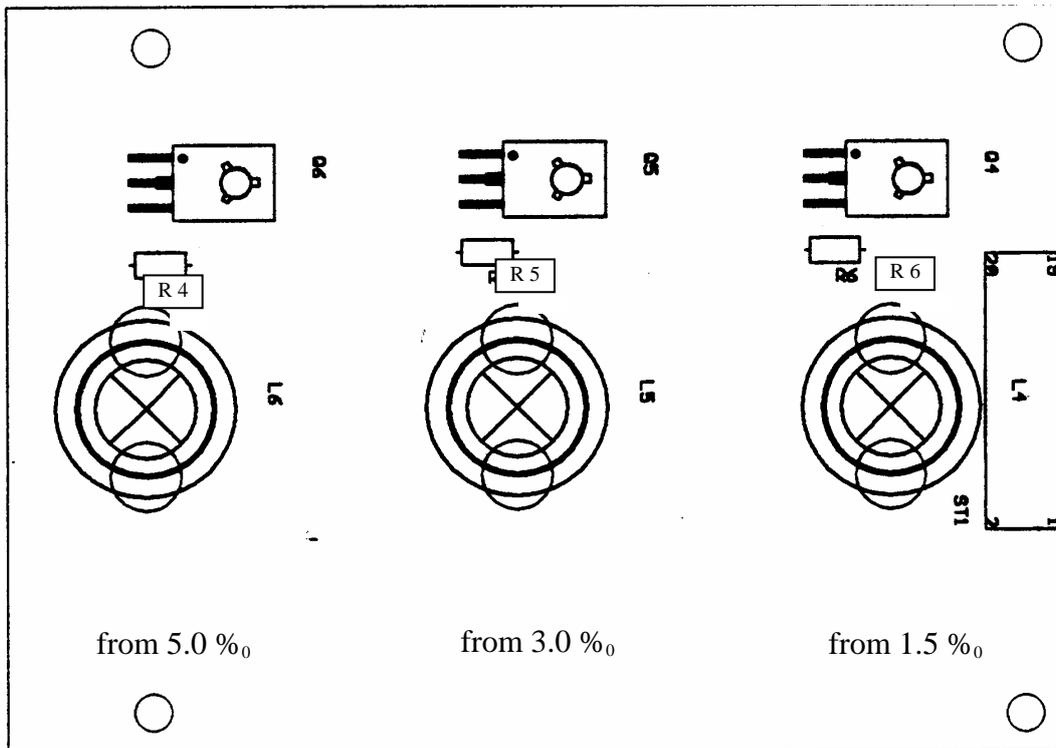
- 1 Recording button
- 2 Internal check
- 3 Microphone

back



- P₁ Sound fast - slow
(sliding right increases the speed)
- P₂ Loudspeaker volume control
(sliding left increases the volume)
- P₃ Loudspeaker speech control
(sliding right increases the volume)

Additional board



The apparatus is

NOT NUTS !

A little bit of mouth alcohol

The display says 5,5 mg/100 ml.
And what you say is :
"THE APPARATUS MUST BE NUTS "
because I'm stone-cold sober.

**At 3 o'clock in the morning
after a boozy party**

The display says 0,75 mg/ml.
And what you say is again:
" THE APPARATUS MUST BE NUTS "
because i'm dead drunk.

BUT THE APPARATUS IS NOT NUTS !

At a real blood alcohol level of 0,7 mg/ml
your personal impression may be quite different depending on your physical condition and the time of day.
At 9 o'clock at night : I'm stone-cold sober
At 5 o'clock in the morning : I'm dead drunk

Therefore :

NEVER RUN ANY RISK IF IN DOUBT

THE EFFECT OF ALCOHOL ON THE HUMAN BODY

Absorption of alcohol
by the body fluids

about 40 - 50 per cent within 15 min
about 65 per cent within 30 min
the rest within 60 - 70 min
Absorption will be delayed by substantial meals

Time of alcohol reduction
per hour

for a man : about 0.10 - 0.15 mg/ml
for a woman : about 0.08 - 0.10 mg/ml

Accurate display

If properly used (without mouth alcohol) the value displayed will be reliable (+/- 6 per cent)
To be on the safe side, repeat each test after 20 minutes to ensure that blood alcohol is being reduced. At the second test the display must indicate a lower value.

The police also use the same electro-chemical measurement cell, among other things

COSMOS-ALCOHOL-TESTER
TYP 2000
KONFORMITÄTSERKLÄRUNG



Geb.-ANL. Seite 15 KONFORMITÄTSERKLÄRUNG / 02.04.2005 / Typ 2000 D Geb. Anl

EG - KONFORMITÄTSERKLÄRUNG
EC - DECLARATION OF CONFORMITY

Für das folgende Gerät:

Bezeichnung : COSMOS-ALCOHOL-TESTER

Typ: 2000

Serien Nr. 1000 - 1999

Wir bestätigen hiermit, dass die Bauart des obigen Gerätes den einschlägigen EG Richtlinien entspricht.

Durch mit uns nicht abgestimmte Änderungen, verliert diese Erklärung ihre Gültigkeit.

Einschlägige EG Richtlinien:

Niederspannungsrichtlinie:	EN 60335-1
Fachgrundnorm Störfestigkeit	EN 50 082-1
Fachgrundnorm Störaussendung	EN 50 081-1

Baumusterprüfung:

Die Übereinstimmung unseres Baumusters mit den Bestimmungen der obigen EG Richtlinien wurde bestätigt von der:

Fachhochschule Kiel – Fachbereich Elektrotechnik – EMV Labor
Prof. Dr.K.Scheibe und Dipl. Ing E. Lehmann.

Prüfbericht EMV: B 9913 COS.005 und
Prüfbericht Niederspannung: B 9921 COS.006 / 007

Das Gerät wurde in einer Reihe von typischen Situationen getestet.

Bad Segeberg 01.09.1999

COSMOS-AUTOMATEN

GmbH

Onno Lüttmer

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