



KBL

KBL 6900 / MAX10

Operating Instructions



Copyright and Trademark

© Copyright 2007 KBL AG

This documentation covers only products manufactured by KBL AG.

This documentation must not be duplicated, photocopied, translated or stored on any electronic medium or in a machine-readable form, neither in whole or in part, without prior written consent by KBL AG.

Only original spare parts – especially tubes and burners – have to be used, otherwise operating authorization and terms of guarantee will become invalid.

BA_6900-MAX10_US_F (0809)
Article number: 0100036509


KBL AG
Ringstraße 24-26 · 56307 Dernbach · Germany
fon +49(0)2689.9426-0 · Fax +49(0)2689.9426-66

Content

1. General Safety - Exposure Schedule - Service.....	4
2. Service Plan.....	7
3. Equipment.....	8
4. Operation during the tanning session	9
4.1 Operating panel	9
4.2 Functions.....	10
4.3 Tips for the studio operator.....	17
5. Maintenance of the sun bed	18
5.1 Cleaning and care	18
5.2 Dismantling the acrylic panes.....	19
5.3 Filter panes	21
5.4 Tubes, facial and shoulder tanners	22
5.5 Replacing the burner of the facial tanner.....	24
5.6 Replacing the burner of the shoulder tanner	25
5.7 Unit lighting	27
5.8 Filter mats.....	29
5.9 Canopy drive	30
5.10 Cooling system and exhaust air	31
5.11 Air-conditioning unit.....	33
5.12 Condensate pump	34
5.13 Changing aroma box / aquaCool canister	34
5.14 Music system with MP3-player	35
5.15 Replacing the aquaCool nozzles.....	36
6. Technical data	37
6.1 Data which all apparatuses have in common.....	37
6.2 Views.....	38
6.3 KBL 6900 Ultra Power	38
7. Wiring diagram	39
7.1 Mains voltage	39
7.2 megaVoice without music option	40
7.3 Internal music signal MP3-player	40
7.4 External music signal without channel selection	41
7.5 External music signal (100V) without channel selection	41
7.6 External music signal with channel selection	42
7.7 External Timer	43
7.8 Using T-MAX timer	43
8. Service.....	44
8.1 General information and structures	44
8.2 Service level I	45
8.3 Service level II	53
8.4 Refilling / Changing Aroma and aquaCool.....	56
8.5 Colour codes for the pipes.....	57
8.6 Error message	58
9. Tanning instructions	59
9.1 General tanning instructions.....	59

1. General Safety - Exposure Schedule - Service

Please observe the following safety instructions:

Tanning times	Please keep to the recommended tanning times. See Section 9.1
Timer	This device must be operated with an external timer that is in compliance with UL 917. The maximum tanning time must not be exceeded.
Disconnecting 	Before opening the apparatus, switch off the fuses to disconnect the system from the voltage supply!
Facial tanner	Do not operate the sunbed if a filter pane is defective. Section 5.3
Shoulder tanner	Do not operate the shoulder tanner without lamp unit.
Attention!	Attention! High light intensity, do not look into the radiators!
Technical Parameters	The data indicated in the tanning schemes are based on the assumption that both tubes and burners are replaced at regular intervals. Section 5.4 When replacing tubes, remember to reset the CPI-control system (Section: 8.2) and the counter of the tube service hours (Section: 8.3).
Mechanics	The canopy drive has to be serviced regularly with each tube replacement. This also includes the replacement of the drive rope after 3,000 hours of operation. Section 5.8 Please also keep to the service cycles given in the service plan (Section 2).
Cleaning	Do not use any cleaning agents other than the ones approved by KBL AG. Section 5.1



WARNING - ULTRAVIOLET RADIATION - FOLLOW INSTRUCTIONS - FAILURE TO USE PROTECTIVE EYEWEAR MAY RESULT IN SEVERE BURNS OR OTHER EYE INJURY - IF DISCOMFORT DEVELOPS, DISCONTINUE USE AND CONSULT A PYSICIAN.

ATTENTION - RAYONNEMENTS ULTRAVIOLETS - VEUILLEZ SUIVRE LES INTRUCTIONS - SANS DISPOSITIF DE PROTECTION DES YEUX, CE PRODUIT PEUT CAUSER DES BRÛLURES OU LÉSIONS OCULAIRES GRAVES - SI VOUS SENTEZ UN MALAISE, EN DISCONTINUER L'USAGE ET CONSULTER UN MÉDECIN.

DANGER - Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reaction. Repeated exposure may cause premature aging of the skin and cancer. Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunbed if you are using medications or have a history of skin problems or believe yourself especially sensitive to sun light. If you do not tan in the sun you are unlikely to tan from use of this product. Children, the elderly, or fair skinned people who always burn easily and either never tan or tan minimally should not use this equipment.

DANGER - Eviter surexposition. Comme avec la lumière naturelle du soleil, la surexposition peut causer lésions aux yeux et à la peau et réactions allergiques. Une exposition répétée peut causer un vieillissement prématuré de la peau et cancer. Médicaments et cosmétique peuvent augmenter votre sensibilité aux rayons ultraviolets. Consulter un médecin avant d'utiliser la lampe à ultraviolets si vous utilisez médicaments, si vous avez problèmes de peau ou si vous croyez vous êtes particulièrement sensibles au rayons du soleil. Si vous ne bronzes pas avec le soleil c'est improbable que vous pouvez vous bronzer en utilisant ce produit. Enfants, personnes âgées, ou personnes à peaux très claire, qui deplus sont très sensibles à un coup de soleil et ne brunissent pas ou très peu ne doivent pas utiliser cet appareil de bronzage.

Part No. 3010370800

Exposure schedule

This device may be used only by persons over 18 years (local law may differ) and is intended to be used by only one person at a time. Lie down on the bench in a straight position and with physical contact to the bench.

CAUTION: EXPOSURE POSITIONS OTHER THAN SPECIFIED MAY RESULT IN OVEREXPOSURE AND ARE NOT RECOMMENDED.

Tanning normally begins after one to two exposures and maximizes after one to four (1-4) weeks of exposure following the recommended schedule for your skin type.

Wear protective eyewear.

Eyewear: AHK GmbH, No. 600545

DO NOT REMOVE THIS LABEL
Read the instruction booklet before using tanning system

RECOMMENDED EXPOSURE SCHEDULE

First three sessions should be at 48 hour intervals. Followed by the gradual increasing of exposure times until maximum tanning has occurred (in approximately 4 weeks).

MAXIMUM EXPOSURE is 10 minutes.

Skin type	Week 1 1st - 3rd Session	Week 2 4th - 6th Session	Week 3 7th - 9th Session	Subsequent Weekly Session
II	2 min	4 min	6 min	8 min
III	2 min	4 min	7 min	9 min
IV	2 min	5 min	7 min	10 min
V	2 min	5 min	7 min	10 min

This product is in conformity with performance standards for sunlamp products under No. 21 CFR 1040.20. This appliance is intended to be used with the following lamps:

Canopy: megaLine 1856 R 200W HP

Bench: megaLine 1855 R 160W HP

Facial units: megaLine HP 500

Shoulder tanner (optional): ms 250

For replacement lamps, eyewear or parts please contact:

KBL America Inc.
1324 Washington Avenue
ST. Louis, MO 63103, USA

Part No.3010371505 A

REPAIRS - SERVICE - REPLACEMENT - PARTS AND LAMPS - EYE PROTECTION

If you are in need of any of the above mentioned products or services, you should contact:

KBL America Inc.

1246 Central Park Dr. St. # 1

62269 O'Fallon, IL

USA

phone: 618-624-6000

NOTE: All repairs and replacement components including, but not limited to protective eyewear, lamps, timers and acrylic must be in compliance with CFR 21 1040.20.

Read the instruction booklet before using this device. This device must be operated with an external timer that is in compliance with UL 917. The maximum tanning time must not be exceeded. This device may be used only by persons over 18 years and is intended to be used by only one person at a time. To use, lie down under canopy and pull down as far as adjustment will allow.

CAUTION: THE USE OF ANY OTHER POSITION MAY RESULT IN OVEREXPOSURE. Tanning can begin on a regular basis. An appearance of tanning normally appears after a few exposures and maximizes after four (4) weeks of exposure.

WARNING: As the device is intended to be used by only one person at a time, only one (1) pair of protective eyewear is provided with each KBL 6900.

Use protective eyewear whenever equipment is energized. Read the instruction booklet before using.

Follow the exposure schedule in accordance with your skin type. Failure to do so may result in overexposure. However, regardless of how dark an individual may tan on this system, it will not provide adequate protections against overexposure to natural sunlight or UVB tanning systems.

SKIN TYPE II - This is the individual that usually burns easily and severely, tans minimally or lightly and peels

SKIN TYPE III - Often referred to as „AVERAGE“ complexion. Burns moderately and tans about average

SKIN TYPE IV - This individual burns minimally, tans easily and above average with each exposure

SKIN TYPE V - This individual rarely burns, tans easily and substantially

Exposure schedule - Inductive Device

Skin type	Week 1 1st-3rd Session	Week 2 4th-6th Session	Week 3 7th-9th Session	Subsequent Weekly Session
II	2 min	4 min	6 min	8 min
III	2 min	4 min	7 min	9 min
IV	2 min	5 min	7 min	10 min
V	2 min	6 min	7 min	10 min

2. Service Plan

Service intervals For a safe operation of the sunbeds, regular service works are essential and have to be documented. Cleaning works have to be done when necessary and do not have to be documented.

Service hours	What has to be done?	see
Every day	Check the filling level of the condensate tank and empty it if necessary.	
100	Change or clean filter mats	5.7
500 - 600	Change burners	5.4
	For inductive apparatuses: <ul style="list-style-type: none"> • Change tubes • Change starters • Reset counter of service hours 	
	For CPI-apparatuses (with burners) in Power-mode: <ul style="list-style-type: none"> • Change tubes • Reset counters (8.2.2) • Reset counter of service hours 	
	Check and grease ropes of the canopy drive	5.8
	Check all inner tubes and – if necessary – change them.	
	Climatic apparatus: <ul style="list-style-type: none"> • Clean heat exchanger • Check the functioning of the condensate pump 	5.10
600	Replace burners of the shoulder tanner.	5.6
800	For CPI-apparatuses (with burners) in Eco-mode or for CPI-apparatuses (without burners) in Power-mode: <ul style="list-style-type: none"> • Change tubes • Reset counters (8.2.2) • Reset counter of service hours 	
1000	For CPI-apparatuses (without burners) in Eco-mode with KBL CPI-tubes in Power-mode: <ul style="list-style-type: none"> • Change tubes • Reset counters (8.2.2) • Reset counter of service hours 	5.4
	Replace aquaCool nozzles.	5.15
1200	For CPI-apparatuses with KBL CPI-tubes in Eco-mode <ul style="list-style-type: none"> • Change tubes • Reset counters (8.2.2) • Reset counter of working hours 	
3000	Replace all the ropes	5.8

3. Equipment

Feature		KBL 6900	
pureAir		S	Fresh ionized air
ACS		S	Control of switch on / off behaviour
megaVoice		S	Acoustic user guidance
x-traTan		S	Shoulder tanner
activeColor		O	Colour stimulation in red, green or blue
AquaCool		O	Misty water for refreshment
Aroma and cabinBreeze		O	Fragrances in the sunbed and in the cabin
AirCon		O	Air conditioning
CPI		O	Electronic ballasts
Music, MP3-player		O	With a 256 MB memory for music
Music, external signal		O	
Waste air tube		O	Ø ~11.81", ~118.11"
Central exhaust air element		O	
Warm air recirculation		O	
legTanner		O	





S Default

O Option

4. Operation during the tanning session

General information

When switching on the apparatus, the following information is displayed for 2 seconds before the running text appears:

Firmware version of the display	
Version of the control software	
Sunbed type	
Tube type	

Running text

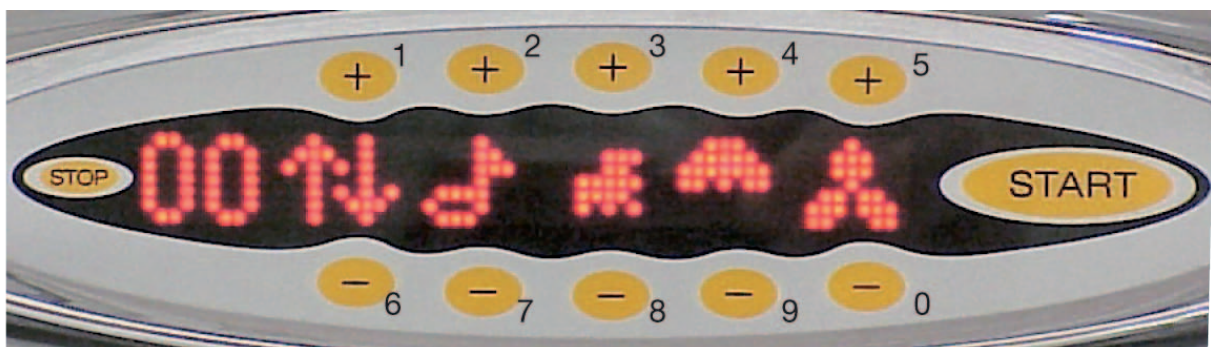
The start of the tanning program depends on the studio control system. If a simple coin-operated system has been installed, the tanning program is started by inserting coins or tokens. When the warm-up time has elapsed the tanning lamps are turned on automatically.

If the touch key "Start" is pressed during this warm-up time, the lamps turn on immediately.

The facial tanners are always turned on only after a certain delay.

Some of the basic features are set in service level I, such as colour-stimulation, aroma therapy, time control etc. Studio staff will set these options according to the customers' wishes.

4.1 Operating panel



Illustr. 4-1 The main display with key numbers (aquaCool is configured)

Main display

The running text is displayed as long as the sunbed is in the „waiting position“. When the coin-controlled signal appears, the functions are displayed and the sunbed can be operated by touching the corresponding keys. Any input will be confirmed by a beep tone.



A function is switched on by pressing the plus sensor, which is also used to increase the output stepwise. To set the maximum value (e.g. fan speed) the sensor field has to be pressed again and again until the maximum value has been reached.



A function is switched off by pressing the minus sensor, which is also used to decrease the output step by step. To set the minimum value (e.g. volume) the sensor field has to be pressed again and again until the desired value has been reached.

4.2 Functions

Start



You can use this touch key to switch on the apparatus during the warm-up time.

If the tanning session has been interrupted by means of the „Stop“ key, it can be continued after touching the „Start“ key once again, provided the coin-operated counter has not run down yet.

The numerical display shows the tanning time.

When the tanning time is over, the running text will appear again.

Stop



By pressing this touch field for at least 2 seconds you can terminate the tanning session prematurely.

Running time



During the tanning program the running time is displayed in this field.

When adjusting the volume, the value set between 0 ... 99 % will be displayed in this field for a short time.

When adjusting the fan speed, the value set between 20 ... 99 % will be displayed in this field for a short time.

End of the tanning session

As soon as the tanning time is over a program to shut down the sunbed will be started:

- a soft voice reminds you of the end of the tanning session and says good-bye,
- burners, tubes and the ventilation system will be reduced step by step,
- the LEDs (in apparatuses with activeColor) will shine in the colour adjusted for another 20 seconds.

Extended menu



These double arrows point to some more menus which can be activated by pressing the „+“ or „-“ keys above the double arrow symbol.

The following menus are available which will be explained in more detail below:

**Music channel /
Air Condition /
Colour stimulation**



Aroma



Acoustic user guidance



By calling up these additional menu functions you can see which functions are activated after switching on the apparatus. Special customer requests can be pre-selected in the service menu (see Section 8.2 ff.)

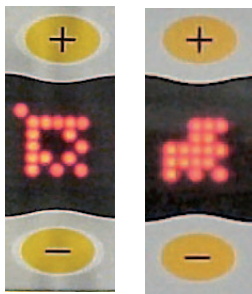
Volume



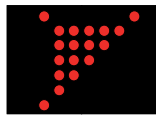
You can adjust the volume of the music by touching the „+“ and „-“ keys. The volume will be displayed in the numerical field as a value between 0 – 99 %.

Press the corresponding sensor key again and again until you have reached the desired volume.

aquaCool

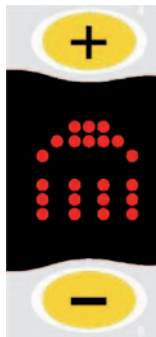


Off ON



Water tank is empty

Facial tanner/ Shoulder tanner



Here you can activate the aquaCool water-atomisation function (plus button, symbol flashes) or deactivate it (minus button, symbol does not flash). Default setting at start: as defined on service level I in the AAC/Aqua menu.

- If the aquaCool supply is running low, the message Aqua low is shown on the display between the tanning sessions. When the message appears for the first time, the aquaCool supply will last approx. another 2.5 hours of operation with aquaCool.
- If the aquaCool supply is empty, the message Aqua 0% appears and the symbol is crossed out. If the system is to be used without aquaCool, you can switch off the messages and the symbol. For this purpose, set the submenu Aqua to "OFF". To reach this menu, proceed to the AAC menu on service level II.

The control of the shoulder tanner is coupled to the facial tanner. The shoulder tanner is switched on whenever the facial tanner is activated but its power cannot be turned down. As soon as the facial tanner is switched off, the shoulder tanner is turned off as well. **Important: Do not operate the shoulder tanner without lamp unit.**

Level II Once the tanning program has been started, the facial tanners are automatically switched on at maximum setting.

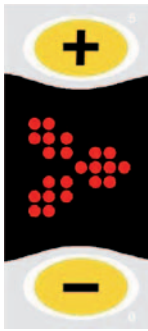
Level I To reduce the output to level I, use the field "-".

Level 0 To switch off the facial tanners completely, touch the "-" field again for at least 3 seconds.

By touching the "+" field you can switch the facial tanners on again or you can increase their output.

When the system has been switched off, there will be a time lag before you can switch it on again due to the necessary cooling of the burners.

Body fan



The power of the body fan can be increased or reduced by steps of 10 % by touching the fields „+“ or „-“.

When switching the system on, the value is 60 %. (see Section 8 „Service“ of this manual)

When changing the value, the current setting is displayed as a two-digit number between “20%” (minimum) and “99%” (maximum) in the numerical field for a short time.

In order to switch off the body fan completely, press the “-” field several times until the value of 20% appears. Then press the “-” field once again and keep the key pressed for 0.5 seconds. After a short time lag the body fan is then switched off.

The body fan can be switched on again at any time simply by touching the “+” field.

Channel selection



With the help of this system you can choose the audio source, e.g. change the CD or go to the next piece of music (MP3).

The MP3-player is equipped with a 256MB-chip, which can take the volume of the 3 music CDs.

The studio operator himself can choose the music and with the computer he can load it to the chip. The MP3-player is designed in such a way that you only have to change the chip for the music. As an optional feature, the music of the MP3-player can be turned on during the tanning breaks.

Tip: The music of the MP3-unit can only be controlled by one audio source, i.e. either by the chip of the MP3-player or by an external music source.

Air-conditioning



This airCon function is only in this level if the aquaCool is activated.

Otherwise you will find airCon one level higher as the picture shows on the right hand side.

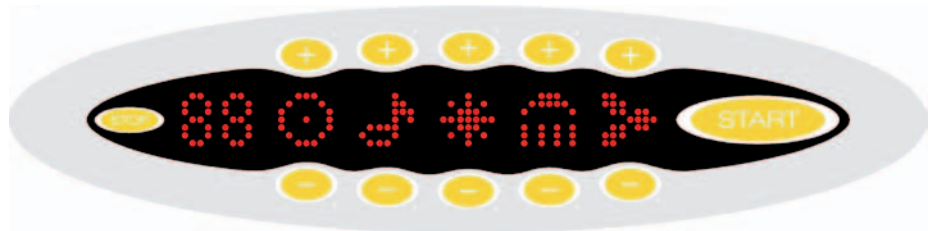


By pressing the „+“ or „-“ keys you can switch the air-conditioning on or off during the tanning session. Once the air-conditioning has been switched off, it can only be switched on again after an interval of 3 minutes. A small star is displayed to confirm this.

If the request to switch on the system is made earlier, it will be registered (big star) and when the interval of 3 minutes is over it will be executed automatically.

Exception

In case that the system has been switched off by means of the coin-controlled system, it can be switched on again immediately.



Main display with air condition (aquaCool is not configured)

Colour stimulation

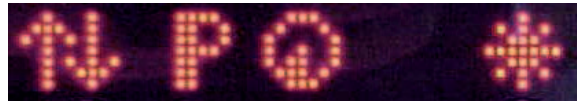


The colour of the colour stimulation can be selected by means of the „+“ key or by the „-“ key: Red- Green - Blue.

You can only switch on one colour, but you can switch them all off (see Service level).

48 high-performance diodes for each colour (Red - Green - Blue) produce the mood desired: relaxing blue, stimulating blue and calming green.

**From Software
Version 6.0 or
sunbeds with
easyCare from
Version 3.0**



**Wellness
Pop
Studio**

In this first submenu is P = Programm, which means during the tanning session, the user can choose out of three music sources, provided that they are available and configured in service menu I:

- Wellness,
- Pop and
- music from the studio system.

To have P displayed, at least two sources must be available and configured.

The new music source is selected and displayed for a short time using the „+“ - or „-“ -keys above / beneath the „P“.

For more information see service menu I.

The symbol „channel selection“ means

- for Wellness or Pop „next title“ and
 - for studio music „next channel of the external music source“ .
- Switch by pressing the „+“ - or „-“ -keys above/beneath the symbol channel selection.

wellnessColor G

24 green LEDs are glowing.

These option produces the color „Green“. This option is not on/off switchable via the menu.

The other colour stimulation „activeColor“ (R - G - B) is without effect and is no longer offered for KBL 6900. It is only present for compatibility.

Aroma



The „aroma“ function can be switched on by means of the „+“ key above „1“ and switched off by the „-“ key below „0“. The display flashes a signal when the function is not activated. KBL can offer 2 aroma fragrances: „Sunrise“ and „Daydream“. The apparatus only has one fragrance which can be changed very easily, however.

The fragrance is combined with a gel. Please note that the gel is not completely used up but a small rest will remain. This status is shown on the display so that the operator knows when to change the gel.

The fragrance comes out at the foot of the bed. The air stream leads the fragrance over the body to the face so that it can be perceived intensively.

aroma and **aquaCool** are activated one after the other (**aroma – aquaCool – aroma**) and start again and again in an interval of 1 minute.

Tip: **pureAir** and **aroma** exclude each other. As long as **aroma** is given off **pureAir** will be switched off.

megaVoice



The „Voice“ function can be switched on by means of the „+“ key above „0“ and switched off by the „-“ key below „1“. The display flashes a signal when the function is not activated. megaVoice informs the customer in a simple and short way about the operating functions of the sunbed. If requested, megaVoice can be switched off by the customer during the tanning session.

The air - blown into the tanning area from the foot - is guided through an ionisator. Here the number of negative charged ions is enriched. The air is now comparable to the air in the forest or at the sea.

The „**pureAir**“ function cannot be switched on or off by keys.

Tip: **pureAir** and **aroma** exclude each other. As long as **aroma** is given off, **pureAir** is switched off.

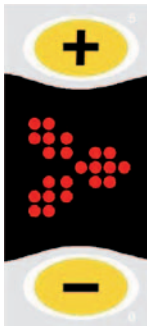
4.3 Tips for the studio operator

Daily checks and basic settings

Please make sure

- that the tank for the condensed water is checked and emptied every day (5.11)
- that materials which have been used up are refilled (8.4) and
- that the settings which can be executed in the service levels (8.2, 8.3) of operation, e.g. colour-stimulation, aroma, time controls etc., are made.

Illumination after use



The illumination (decorative) may be switched on or off if the timer signal is not active by pressing the key sequence „+“, „-“ „+“ of the body fan.

You have to press the individual buttons within a period of 1 sec. Please also bear in mind the possibility of defining two different illumination cycles for each day of the week (see 8.2.2).

Error message „Abluft “ (exhaust air)

This error message is shown in the display and can be acknowledged by pressing the „Stop“ key. But before doing so, service people should repair the defect. Possible reasons of this message can be:

- the temperature in the apparatus is too high or
- the exhaust vent system is defective

For more information see 8.6

5. Maintenance of the sun bed

Preparatory works



Before you open the apparatus, switch off the fuses to disconnect it from the mains supply!

Do not operate the tanning unit without the front panels, without acrylic panes or with the base section opened, because otherwise the tanner areas will become overheated. This will destroy the filter panes!

As far as CPI-equipped units are concerned, the electronic switchboxes located under the bed are also exposed to the danger of overheating.

5.1 Cleaning and care

Plastic parts

The bigger plastic parts are made of solid, high-quality ABS material.

Note:

The surfaces and the acrylic glass must not be cleaned with concentrated disinfectants or solvents or other liquids that contain alcohol! The manufacturer cannot be held liable for any damages caused by chemically active agents such as inappropriate cleaning agents. To clean the varnished and plastic surfaces use a damp soapy cloth. It must be avoided at any rate that cleaning fluid runs into the apparatus.

Acrylic panes

For a harmless cleaning of the acrylic panes use the special cleaning and disinfectant fluid „ megaClean “ (to be obtained from KBL) which has to be diluted in water at a ratio of 1:13.

Chromed parts

Clean only with a damp (not wet) washleather and a plexiglass cleaner (antistatic). The cleaning agent must be applied onto the cleaning cloth and not directly onto the chromed parts.

Fixing the canopy

The canopy can be fixed in the upper position, to perform service and maintenance works.

To do so, turn the lever of the left hand side of the tanning system to the left. Lift the canopy to the upper position and it will remain in this position. To release the canopy again, turn the lever to the right.

After removing the screws on the left and on the right, the bed pane can be fastened to the canopy.



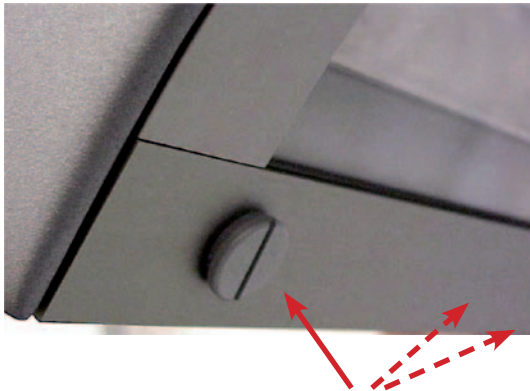
Illustr. 5-1 Fixing the canopy

5.2 Dismantling the acrylic panes

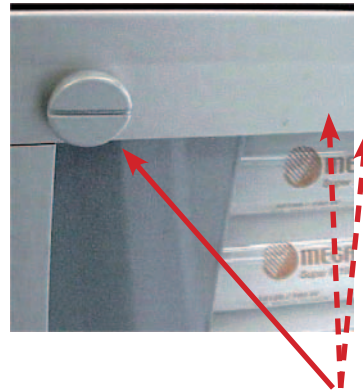
Dismantling the pane in canopy and lateral part

The following tables explain how to dismantle the acrylic panes.

Step	Procedure	Reference
1	Fix the canopy.	10
2	Remove the screws and tilt down the canopy and/or lateral pane(s).	Illustr. 5-2 Illustr. 5-3
3	When the pane is in the lower position, you can lift it out of the swivel hinge support, if necessary.	
4	Mount the pane in reverse order. Make sure that the frame is correctly positioned in the hinge.	
5	When closing the pane, all air nozzles must be matching their counterparts. If not, carefully push the nozzles concerned into their proper position.	
6	Release the canopy.	



Illustr. 5-2 Release the four screws of the canopy pane



Illustr. 5-3 Release the four screws of the lateral pane

Base and duct pane

The following table shows how to clean the base and duct pane. The electronic parts installed underneath the bed must not get in contact with any moisture.

Therefore, in order to clean the underside of the base pane and the inner base section, use a slightly damp micro fibre cloth only. You can also use it to clean the shoulder tanner. You can use megaClean as a detergent (spray the cloth with it).

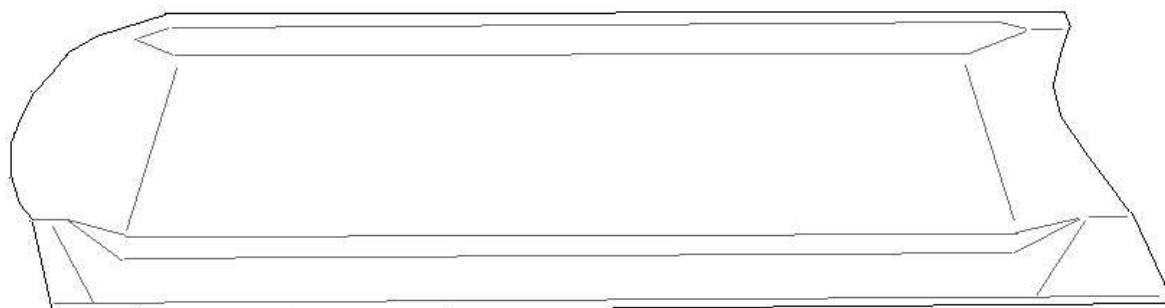
Step	Procedure	Reference
1	Fix the canopy.	
2	Undo the two pan-head screws on the right and on the left-hand side of the base pane.	Illustr. 5-4
3	Lift the base pane and fix it to the canopy by means of the enclosed hooks.	Illustr. 5-5
4	Clean the lower part of the base pane.	
5	If there is a duct pane in the bed, you can take it out for cleaning purposes. Carefully put the duct pane back into its correct position for the proper cooling of the base pane! Proceed in the same way with the shoulder tanner.	Illustr. 5-6
6	Clean the upper surface of the base pane and fasten it with the two screws.	



Illustr. 5-4 Pan-head screw



Illustr. 5-5 Suspension of the base pane



Illustr. 5-6 Duct pane

5.3 Filter panes

Safety function The facial tanners are equipped with an additional safety function. Behind each of the filter panes there is a safety switch that switches off the burner in the case of a missing or broken pane.

Do not operate the tanning system with a defective filter pane.

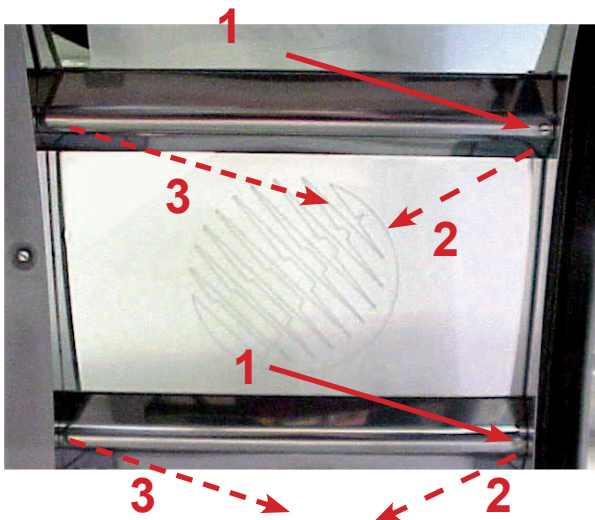
Carry out regular visual inspections!

Filter panes have to be replaced only by those of the same type!

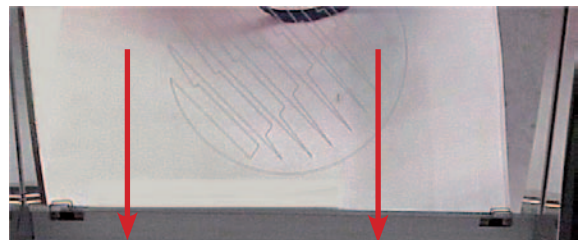
The filter panes may be dismantled and replaced by trained expert staff only.

Filter panes in the canopy or lateral part After dismantling the filter panes (see below), clean them with a standard cleaning agent for glass and a soft cloth or chamois.

Step	Procedure	Reference
1	Dismantle the acrylic pane of the canopy or of the lateral part.	see 5.2
2	Undo the screws of the filter pane cover (1), swing it out (2) and pull it out (3).	Illustr. 5-7
3	Carefully and with both hands, press the filter pane down (4) until the upper springs release the pane (5). Take the pane out from above (6).	Illustr. 5-8
4	After cleaning the pane, mount it again in reverse order.	



Illustr. 5-7 Remove filter pane cover



Illustr. 5-8 Remove pane from the clamping springs

Mark The filters are marked with „KBL 3020 0191“

5.4 Tubes, facial and shoulder tanners

Dismantling Carry out the following procedure to clean or replace tubes or face and shoulder tanners:

Step	Procedure	Reference
1	Dismantle the canopy pane, base pane and lateral pane.	Section 5.2
2	Remove the tube covers in the facial area.	Section 3.3.
3	For XXL-apparatuses: Release the tube covers at the foot of the bed, which will give you free access to the tubes.	
4	For apparatuses equipped with burners: You will have to dismantle the filter panes as well, if you want to replace the burner.	Section 5.3, 5.5
5	Remove the covers of the shoulder tanner.	Section 5.6

Cleaning intervals To make sure that the tanning effect is maintained, we recommend you to clean the tubes and UV radiators with warm water and a chamois after approx. every 200 hours of use. Do not use any aggressive or alcoholic cleaning agents.

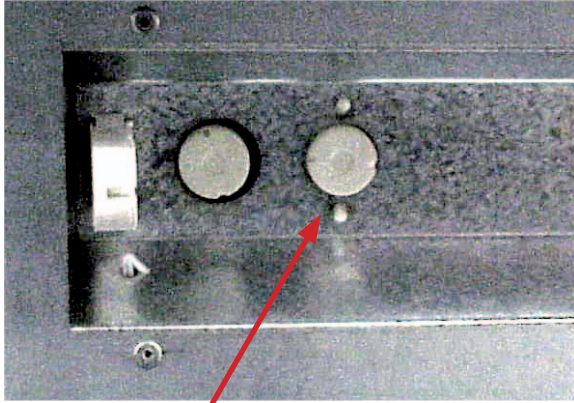
Coloured filter The coloured filter (Sec. 5.7 Unit lighting) has to be replaced at the latest when replacing the tanning tubes.

Replacement intervals **Only replace tubes, face tanners, shoulder tanners and starters with those of the same type!**
When installing the tubes, make sure that the inscription is visible, i.e. the reflector must be at the back.
For units equipped with CPI technology, it is essential to carry out a reset after each tube replacement! (see Section 8.2.2)
For units equipped with inductive technology also install new starters when replacing the tubes!
After each change of tubes, do not forget to reset the counter of the service hours of the tubes. (see Section 8.3.)

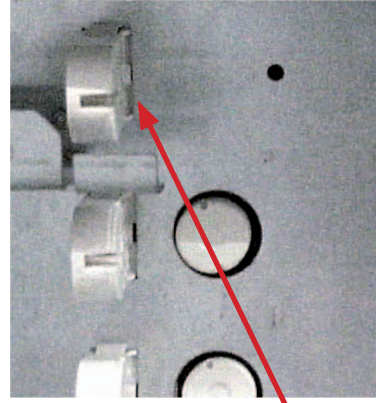
All tanning units	All units with burners	Inductive units	CPI units				
			with facial tanner mode		without facial tanner mode		
Shoulder tanner	Burner	Tubes and Starters	Eco	Power	Eco	Power	Super P.
500 hrs.	500-600 hrs.	500-600 hrs.	1200 hrs.	1000 hrs.	1200 hrs.	1000 hrs.	800 hrs.
Carry out a reset!							

Replacing tubes and starters in inductive units

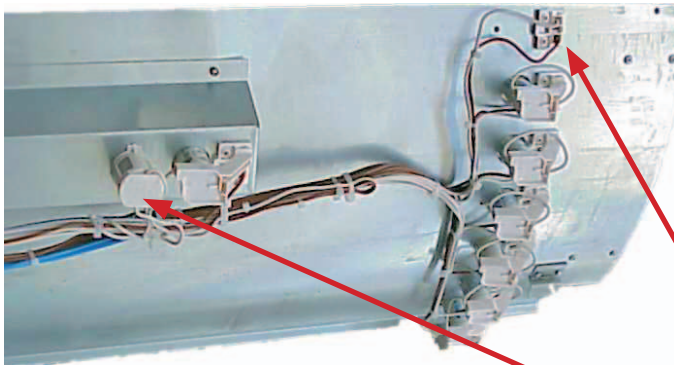
For units with inductive control, please note:
The starter of the upper tube (#21) in the lateral part is located behind the decorative light tube on the left hand side (foot area).



Illustr. 5-9 Starter of tube 21



Illustr. 5-10 Left socket for tube 21

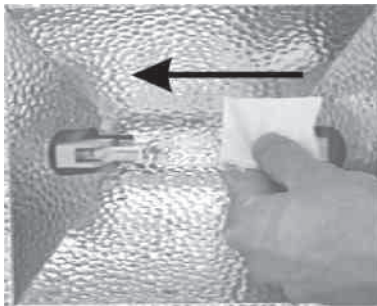


Illustr. 5-11 Back of lateral reflector with starter of tube 21

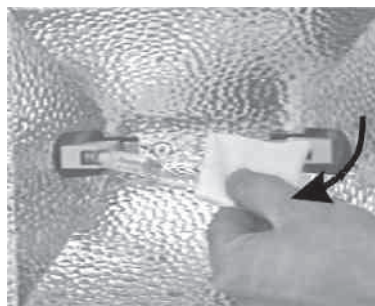
5.5 Replacing the burner of the facial tanner

Burners **Only trained expert staff is allowed to install or remove burners.**

Step	Procedure	Reference
1	Remove the filter pane(s)	Section 5.3
2	Hold the burners with a soft cloth in order to push them to one side and then pull them out towards the front.	Illustr. 5-12 Illustr. 5-13
3	Do not touch the burner glass with your bare hands. If necessary, you can clean the glass bulb with an alcoholic cleaning agent.	



Illustr. 5-12 Pushing the burner sideways



Illustr. 5-13 Pulling the burner out towards the front

Installing the burners

During service, dirt accumulation and an incorrect positioning may lead to damages of lamps and sockets. Therefore, when inserting the burners please make sure that the contact surfaces of both sockets and burners are clean. Insert the burners in a straight position into their sockets.

After being inserted into the socket, the little metal shackle in the centre of the reflector should face the reflector.

5.6 Replacing the burner of the shoulder tanner

Replacement of burner Every 600 hours of operation, the burners of the shoulder tanner have to be replaced. Let the tanning system cool down before you replace the burner. Disassembly and assembly of the burners must only be carried out by trained expert staff. The base pane must remain tilted downwards during dismantling and re-assembly.

Important: Do not operate the shoulder tanner without lamp unit.

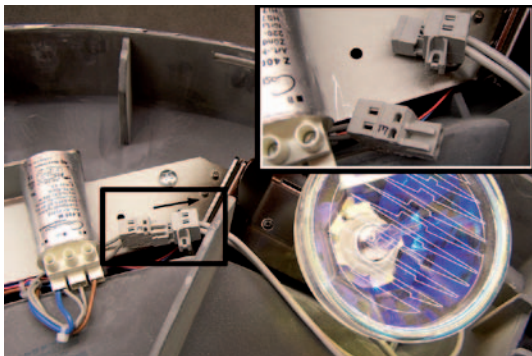
Step	Procedure	Reference
1	Undo the screw that holds the outer covering. Lift the outer covering off in upward direction and towards the front.	Illustr. 5-6-1
2	Undo the screws of the chrome covering and pull it off towards the front.	Illustr. 5-6-2
3	Disconnect the reflector from the electrical system by pulling the plug out of the ignition unit at the position marked in the figure. Remove the reflector by pressing it downwards vertically and then turning it to the left while keeping it pressed down. Pay attention that you do not twist the socket.	Illustr. 5-6-3 Illustr. 5-6-4
4	To spread the clamp, press one side downwards. Then take hold of the socket of the burner on the opposite side and pull it out in an inclined upward movement. Burner and socket represent one single component.	Illustr. 5-6-5
5	When installing the new burner, be careful not to touch the glass with your bare hands. This would cause stains that burn in during operation. If you happen to touch the glass, use alcohol to clean it carefully. Press one side of the clamp downwards, then take the new burner and place it into its exact position by paying attention to the recess in the socket. After that, press the socket downwards on the opposite side until it locks into place. Connect the plug to the ignition unit.	Illustr. 5-6-6
6	When installing the reflector, the wider part of the high-grade steel ring must be directed towards the centreline of the shoulder tanner. Place the reflector in position as shown in figure 5-6-7, then press it downwards and turn to the right while keeping it pressed down. Pay attention that you do not twist the socket.	Illustr. 5-6-7
7	Insert the chrome cover into the slots of the shoulder-tanner casing, press it down to ensure a snug fit and screw it on. Position the reflector correctly under the chrome covering. To do so, press the reflector slightly to align it.	Illustr. 5-6-8
8	Attach the outer covering vertically and tighten the screw.	



Illustr. 5-6-1: Undo the screw holding the outer covering



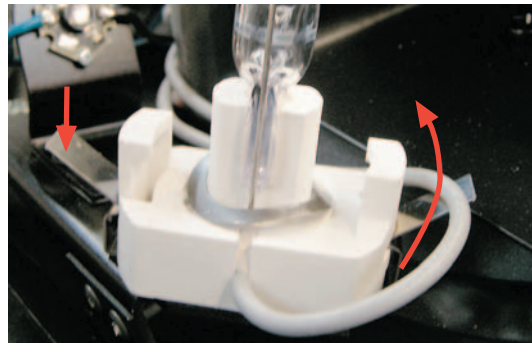
Illustr. 5-6-2: Undo the screws holding the chrome covering



Illustr. 5-6-3: Disconnect the reflectors at the respective ignition unit from the electrical system



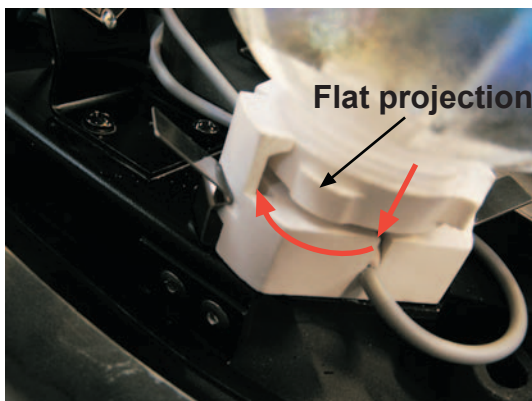
Illustr. 5-6-4: Unscrew the reflector



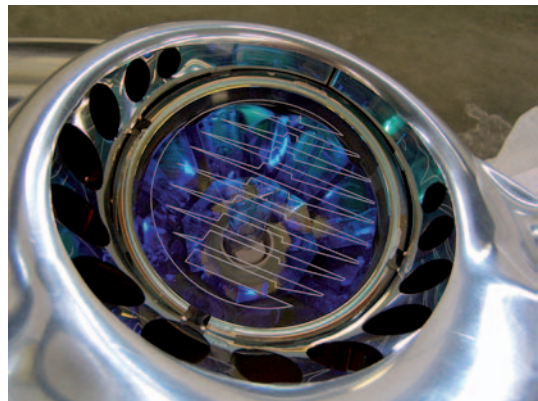
Illustr. 5-6-5: Spread the clamp and take off the burner including socket



Illustr. 5-6-6: Insert the new burner and ensure a snug fit



Illustr. 5-6-7: Insert the reflector



Illustr. 5-6-8: Reflector correctly positioned under the chrome cover

5.7 Unit lighting

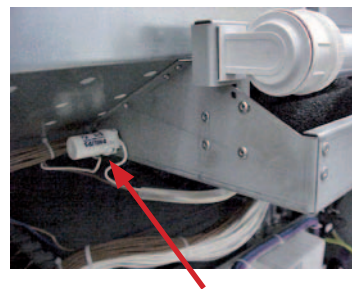
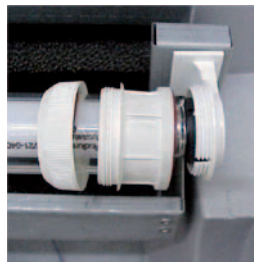
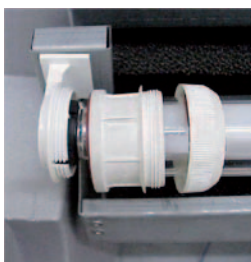
Coloured filter The coloured filter has to be replaced at the latest when replacing the tanning tubes.

Replacing the lighting system in the lateral section Both in the canopy and in the lateral section, there is a coloured lighting tube installed behind the tanning tubes. (see Table).

Step	Procedure	Reference
1	Canopy: Open the canopy pane and tilt it downwards.	Section 5.2
2	Remove the tanning tubes 5 and 6. Now you can replace the tube.	
3	Re-install the tanning tubes and close the canopy.	
4	Lateral pane: Open the lateral pane and remove the two upper tanning tubes. Now you can replace the tube.	Section 5.2
5	Re-install the tanning tubes and close the lateral pane.	

Replacing the unit lighting in the lower front section The tube in the lower front section is located in a protective conduit, which has been screwed onto the tube sockets. Take the opportunity to check the filter mat and to clean or replace it if necessary.

Step	Procedure	Reference
1	Undo the two screws of the base pane and tilt the pane upwards.	
2	Unscrew the protective conduit on both sides and push it to the right (or to the left). Now you can replace the tube.	Illustr. 5-14
3	Close the base pane.	



Illustr. 5-14 Unit lighting in the lower front section and the starter for this tube on the left side.

**Replacing the
lighting system in
the canopy**

Step	Procedure	Reference
1	Dismantle the canopy pane.	Sec. 5.2
2	Remove the tube covers in the facial area.	
3	Remove the first five tanning tubes to uncover the maintenance lid.	
4	Undo the screws of the maintenance lid (upper side, 3 pcs.). The maintenance lid flaps forward together with a part of the reflector plate.	
5	The maintenance lid is hung up in hooks. In order to remove the maintenance lid, first press the lower part slightly backwards so you can lift it easier over the hooks and then take out the maintenance lid in an upward movement. Make sure hat the reflector plate does not damage the tanning tubes.	
6	Release the tube and lift it up and sideways, so you can take it out through the opening, then.	

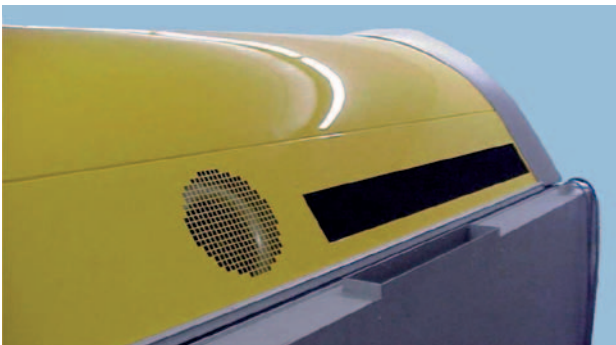
5.8 Filter mats

Cleaning intervals The cooling air is drawn in through two dust filters. Depending on the installation site, clean the filter mats or, if necessary, replace them after approx. every 100 hours of service. To ensure a trouble-free service of the unit, exclusively use original spare filter mats.

Take the opportunity to check the heat exchangers of the air-conditioning unit as well to see if they are dirty. (Section 5.10). Dirty heat exchangers considerably reduce the capacity of the air-conditioning unit. Vacuum-clean the heat exchangers if necessary.

Filter mat in the canopy

This filter mat can be easily replaced at the rear side of the canopy.



Illustr. 5-16 Replacing the filter mat

Filter mat in the base section

The filter mat is located behind the decorative lighting in the base section. Open the bed pane and remove the fluorescent tube. Now you have free access to the filter mat.



Illustr. 5-17 Filter mat in the base section

5.9 Canopy drive

Regular maintenance

In order to guarantee a trouble-free operation of the canopy drive, check and service the spring ropes each time the tubes are replaced. (see table step 1-2)

Tightening the springs

If the canopy does no longer remain firmly in the upper position, the two springs have to be re-tightened. For that purpose you will need a ratchet spanner with a 0.39" socket.

Step	Procedure	Reference
1	Check the ropes for wear. If individual wires of the rope are spliced, always replace both ropes.	
2	Remove the lateral pane.	see 5.2
3	Both at the right-hand and at the left-hand side you will have free access to the tension screws. When you have an XXL-unit remove the cover plates.	Illustr. 5-18 Illustr. 5-19
4	Tighten both springs in a balanced way.	
5	Check the canopy drive: the canopy remains firm in any position.	
6	Close the lateral pane.	



Illustr. 5-18 Left tension screw



Illustr. 5-19 Right tension screw

5.10 Cooling system and exhaust air

ACS

Relaxing gently while tanning. ACS controls the intensity of the exhaust air – depending on the temperature. Sensor systems in the apparatus measure the exhaust air temperature and set the revolutions of the fan accordingly. That means that with low temperatures the fan speed is low as well.

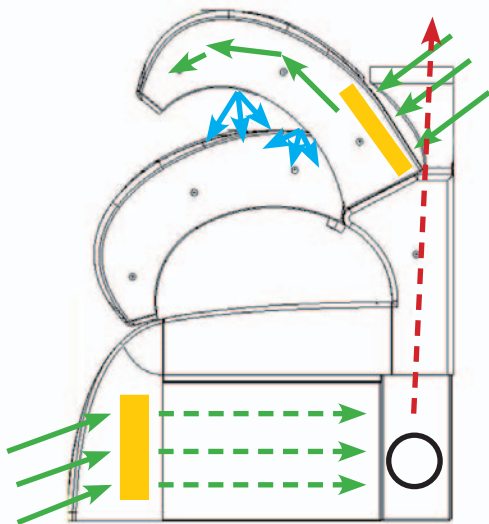
ACS also controls the body ventilator, i.e. the fan speed is slowly increased at the beginning of the tanning session. As soon as the customer increases or decreases the fan speed by hand, this automatism is switched off.

Principle of the cooling system

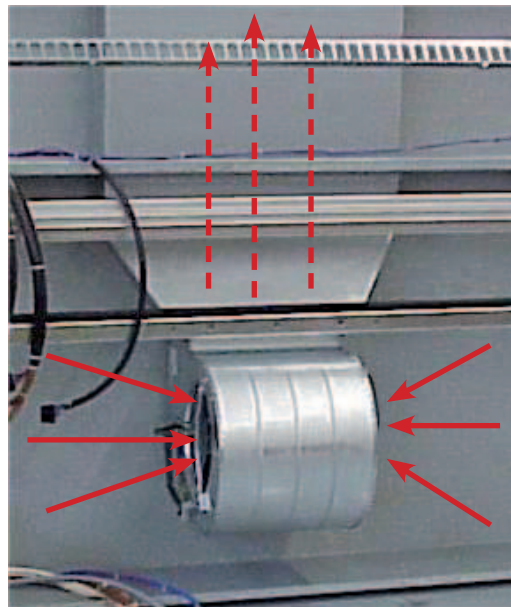
The following pictures illustrate the cooling system of the sunbed.

Ambient air (if there is no air-conditioning) or cooled air mixed with ambient air (if there is air-conditioning) (Illustr. 5-22 and Illustr. 5-23) is blown by the body ventilator through ten nozzles into the tanning room of the sunbed (blue).

Through the upper filter, the fan draws in air to cool the tubes and burners in the upper part; through the front filter cooling air is drawn in for the lower part (tubes). The exhaust air is then blown off through the exhaust flue (green).



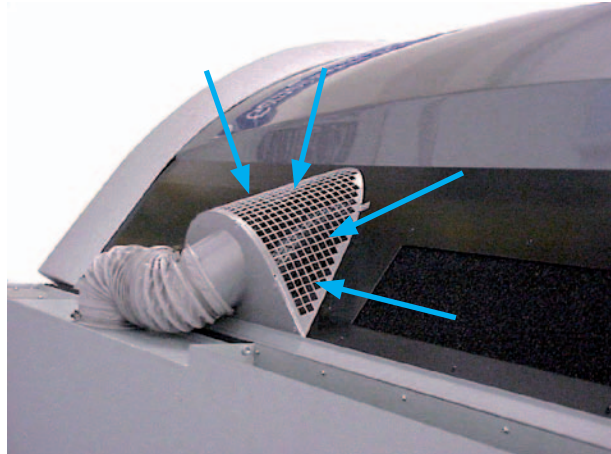
Illustr. 5-20 Body cooling (blue) and unit cooling (green), filter mats (orange) and warmed air (red)



Illustr. 5-21 Exhaust fan (mounting picture)



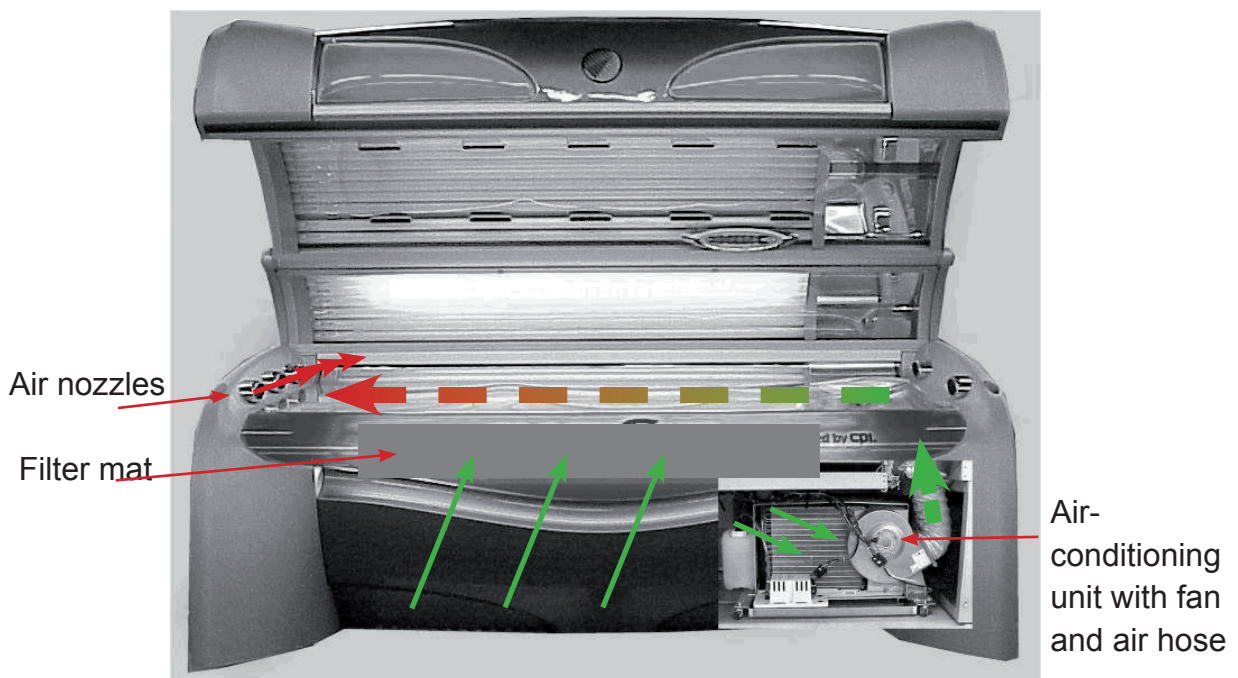
Illustr. 5-22 Cold air for the canopy (mounting picture)



Illustr. 5-23 Cold air for the canopy

Cooling the base pane

In apparatuses with an air-conditioning unit (optional), both base pane and canopy are cooled. Ambient air is drawn in through the filter, cooled in the air-conditioning unit and led through an air hose to the space between duct pane and base pane. At the foot of the bed, this air is mixed with cabin air and blown through a fan into the tanning space of the system (three nozzles).



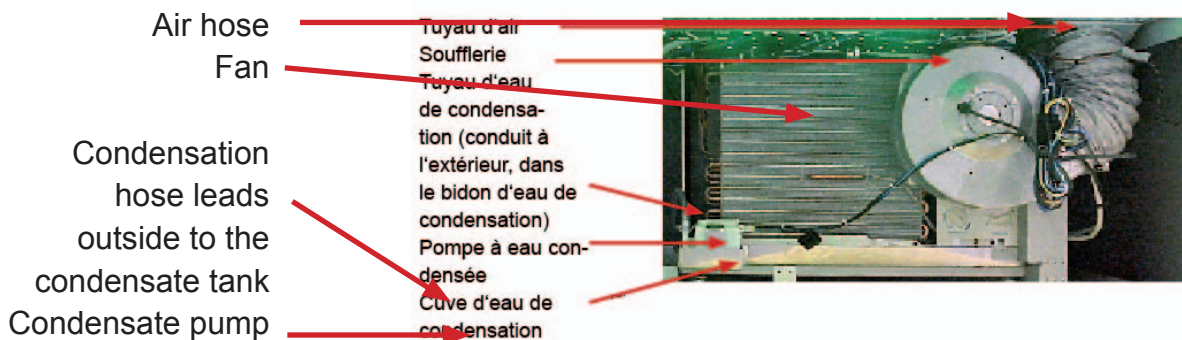
Illustr. 5-24 Cooling principle of base section

Maintenance of the exhaust air system and the air-conditioning

A clean and trouble-free exhaust air system prevents the apparatus from overheating. The maximum hose length of 6 m must not be exceeded unless there is an additional ventilator.

Step	Procedure	Reference
1	Open the lower front cover and check the following items in regular intervals:	
2	The air hose of the air-conditioning unit must not have any kinks.	see also Section 5.10
3	The filter mats in the base section and in the canopy section must be clean.	see also Section 5.7
4	Check the exhaust air hose for kinks or damages, and if there is an additional ventilator due to hose overlength, check its function as well.	
5	An adequate ventilation and air extraction in the studio must be guaranteed at any time.	
6	Check the correct position of the duct pane to make sure that the base pane is adequately cooled.	

5.11 Air-conditioning unit



Checks

Check the heat exchangers of the air-conditioning unit for dirt particles each time a tube is replaced. Dirty heat exchangers reduce the performance of the air-conditioning unit. Open the front cover and vacuum-clean the heat exchangers, if necessary. Check the connection hose each time the tubes are replaced. Defective hoses must be replaced.

5.12 Condensate pump

Maintenance

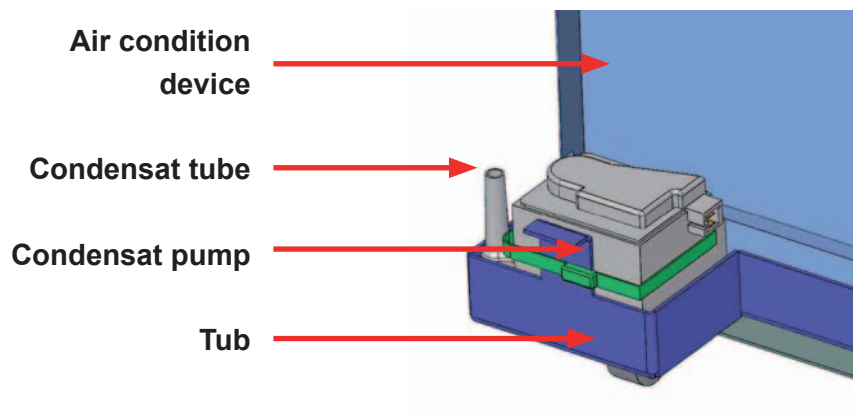
Check the function of the condensation pump each time a tube is replaced.

Open the front cover and slowly fill the tub of the air-conditioning unit with water.

Make sure that the water is pumped off periodically. For this test, the unit must be connected to the mains supply.

By a regular and proper maintenance of the apparatus, you make a substantial contribution to the safety of the system and to a long period of trouble-free operation.

The condensate tank has to be checked every day and to be emptied if necessary.



5.13 Changing aroma box / aquaCool canister

aquaCool

If the canister is empty - it will be displayed after the tanning session or by a icon on display - the aquaCool function must be switched off suddenly and the canister must be replaced by a new one.

More about replacement see Section 8.4 .

5.14 Music system with MP3-player

MP3 player

Below the base pane (head of the bed) you will find the construction elements for

- MegaVoice, the audio user guidance,
- MP3-player for the options: Music and
- I²C-Audioswitch

Audioswitch is for the I²C-BUS-adaption, for the connection of an external music signal with volume regulation and the connections to the MP3-players.

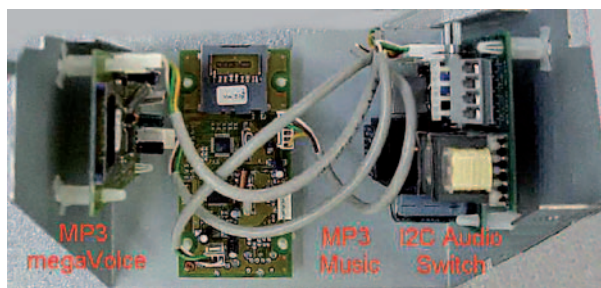
The memory card for the MP3-player can be changed after opening the base pane (see illustration on the following page).



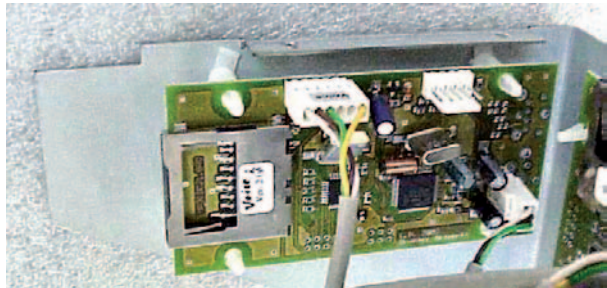
Illustr. 5-26 Installation below the base pane



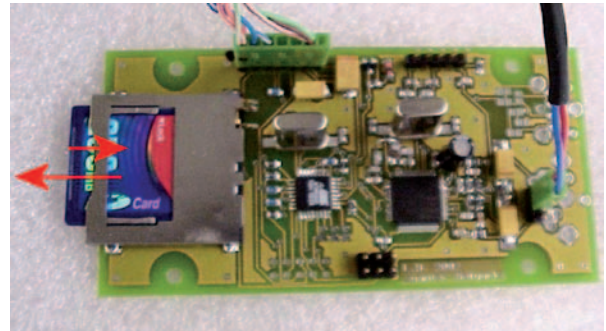
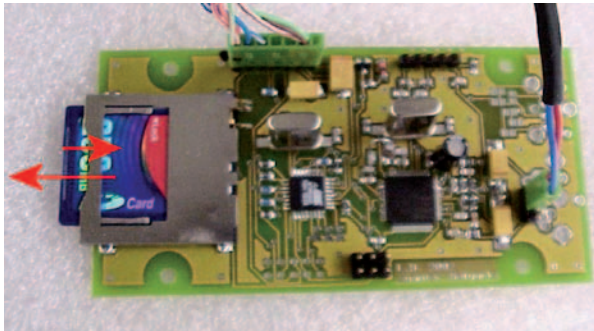
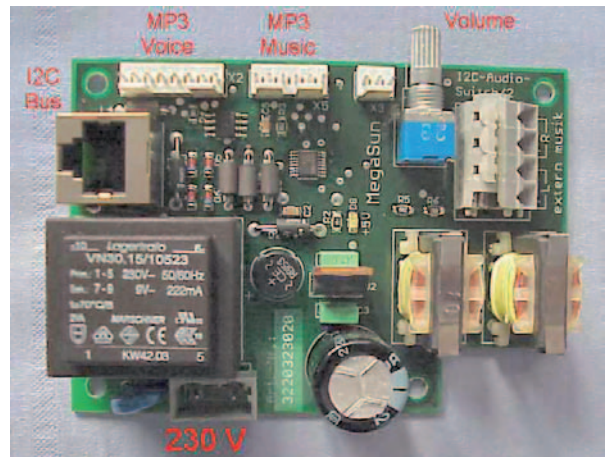
Illustr. 5-27 MP3 player with music card



Illustr. 5-28 Construction elements



Illustr. 5-29 MP3 for megaVoice



5.15 Replacing the aquaCool nozzles

After 1000 hours of operation, the aquaCool nozzles have to be replaced in order to ensure that aquaCool stays fully operative and efficient. The installation instructions will be enclosed in your spare parts consignment.

6. Technical data

6.1 Data which all apparatuses have in common

Ambient conditions

Installation site	In dry rooms with sufficient air supply and ventilation
Relative humidity	≤70%
Ambient temperature	≤86°F (30°C)
ATTENTION!	The unit must not be operated if the coin/timer system or the internal control system of the maximum tanning time is defective or if a filter is broken or missing.
Mains voltage	3-phase: 3x 220 V / ~ / 60 Hz 2-phase: 2x 220 V / ~ / 60 Hz
Wire cross section	3-phase: 4x AWG6 2-phase: 3x AWG8

Condensate

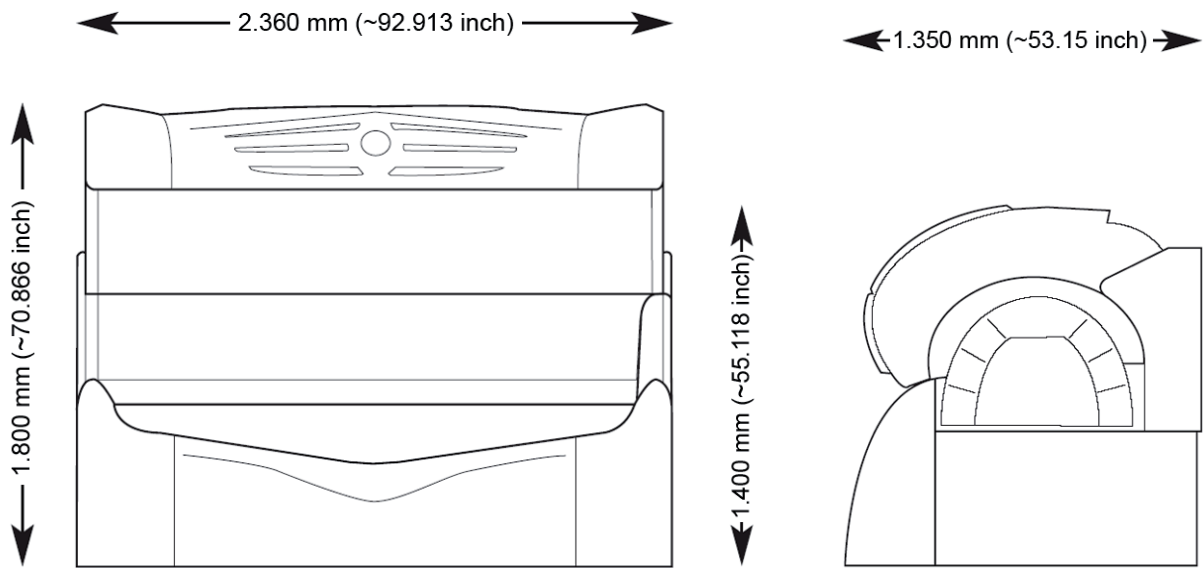
Outlet	At the left-hand rear side of the unit
Disposal	Connection to sewage system or tank (capacity ≥5l)
Quantity	Depending on local conditions and air humidity
Note	For the purpose of pumping the water off, the power supply must not be disconnected after the tanning session

Dimensions

Length x width x height	~92.91" x ~53.15" x ~55.12" when closed ~92.91" x ~53.15" x ~70.87" when opened
Central exhaust air duct Diameter Height (top edge)	~11.81" ~62.99"
Exhaust air hose	Ø ~11.81"
Weight (with air-conditioning unit)	~1477.1 lbs

6.2 Views

6.2.2 KBL 6900



Illustr. 6-3 Front view

Illustr. 6-4 Lateral view

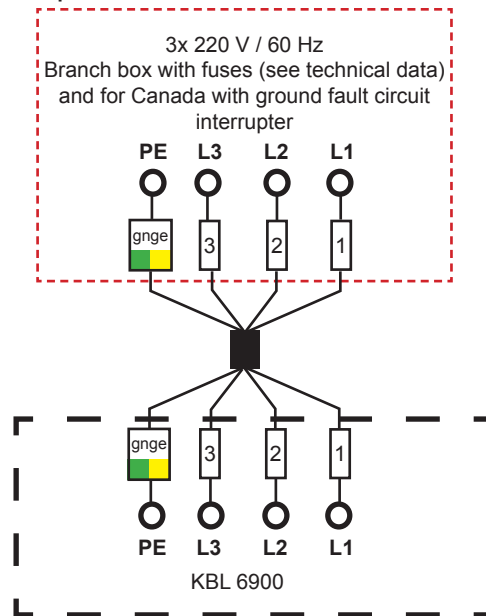
6.3 KBL 6900 Ultra Power

Exhaust air/ Air velocity	appr. 2250m ³ /h (free blow) appr. 10 m/sec
Facial units	megaLine HP 500
Power	4x 500W
Filter panes	evo19525 (3020019525)
Tubes Canopy	27x megaLine 1856 R 200W HP
Tubes Bench	21x megaLine 1855 R 160W HP
Shoulder tanner	2x ms 250
Rated capacity W	
w. air-conditioning unit	12590
w/o air-conditioning unit	11330
Fuses	3-phase: 3x 50 A (for Canada with ground fault circuit interrupter) 2-phase: 2x 70 A (for Canada with ground fault circuit interrupter)

7. Wiring diagram

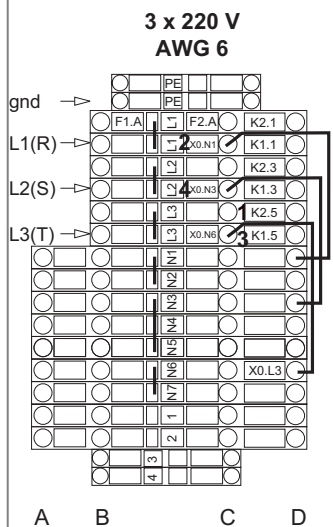
7.1 Mains voltage

The unit has to be connected to the 220 V mains; the connection is to be protected by fuses. For details on the fuses, please refer to the section „Technical data“. An ground fault circuit interrupter is required for Canada.



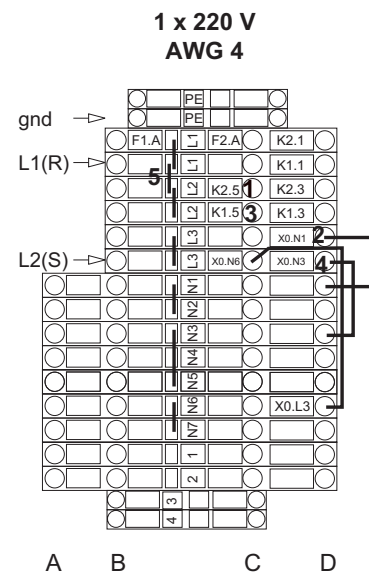
The sunbed is by default set up to operate on 3 phases but it can be changed over to 2-phase operation.

The wiring for 3-phase operation is shown below:



The wiring for 2-phase operation is shown below.

1. Re-wire the 3 cables according to the diagram.
2. Make sure that you use the right cable for the power supply.



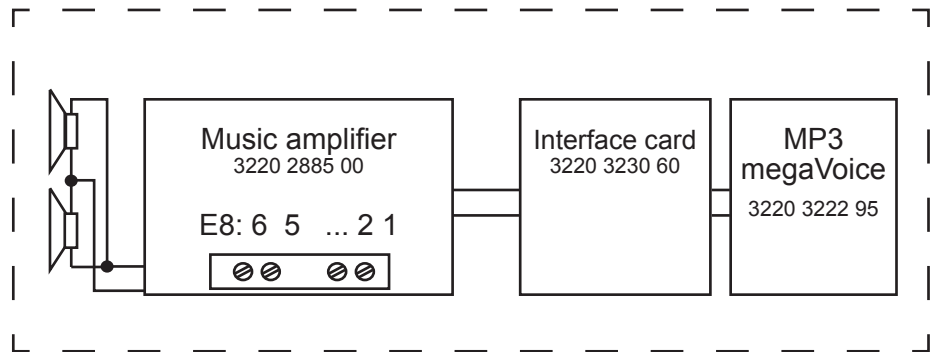
- change connections
- 1 (K2.5) - from[X0.L3D]to[X0.L2C]
 - 2 (X0.N1) - from[X0.L1C]to[X0.L3D]
 - 3 (K1.5) - from[X0.L3D]to[X0.L2C]
 - 4 (X0.N3) - from[X0.L2C]to[X0.L3D]

set jumper
5 from[X0.L1]to[X0.L2]

7.2 megaVoice without music option

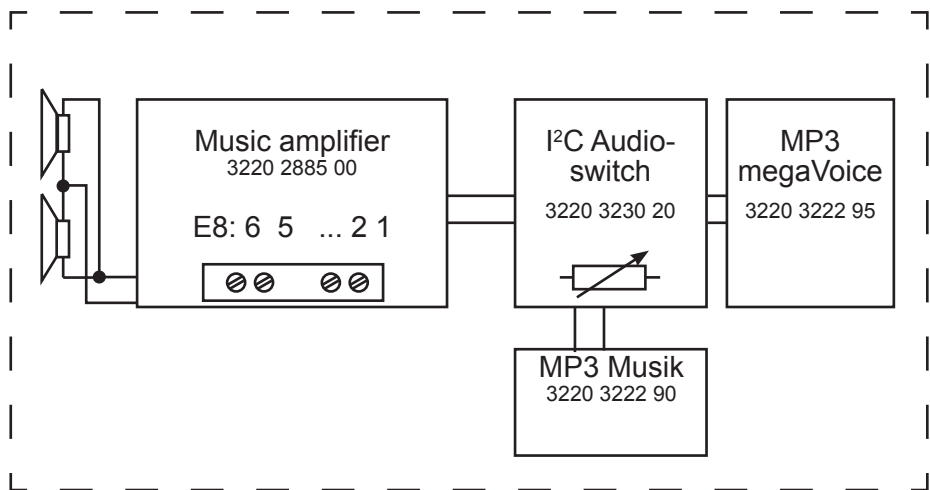
Music amplifier 3220 2885 00

Via an interface card, the MP3-player megaVoice is connected to the music amplifier, which leads to the loudspeakers (connected in parallel, equal-phased).

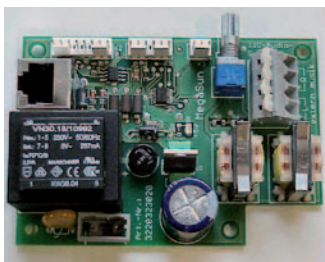


7.3 Internal music signal MP3-player

MP3-player and megaVoice are connected to the Audio switch which leads the music signal to the amplifier and then to the loudspeakers (connected in parallel, equal-phased).



Audio switch



MP3 Music

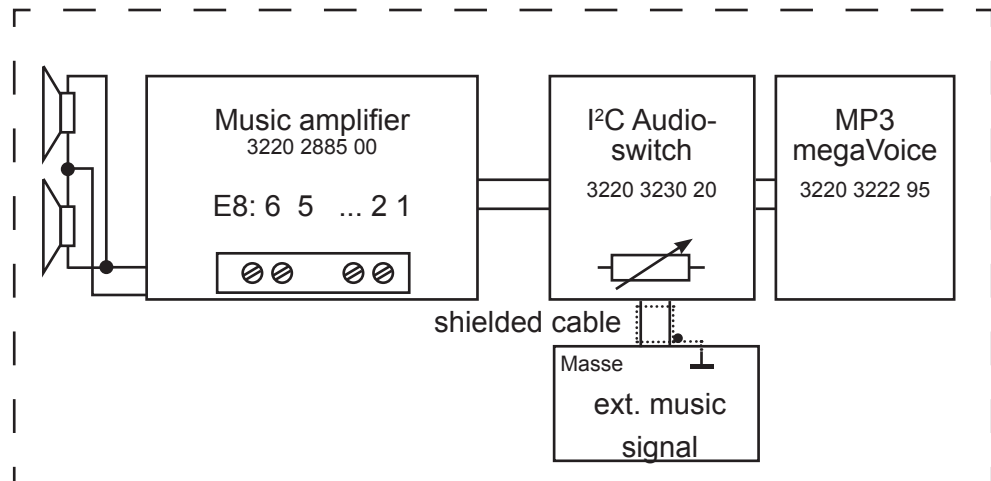


MP3 megaVoice



7.4 External music signal without channel selection

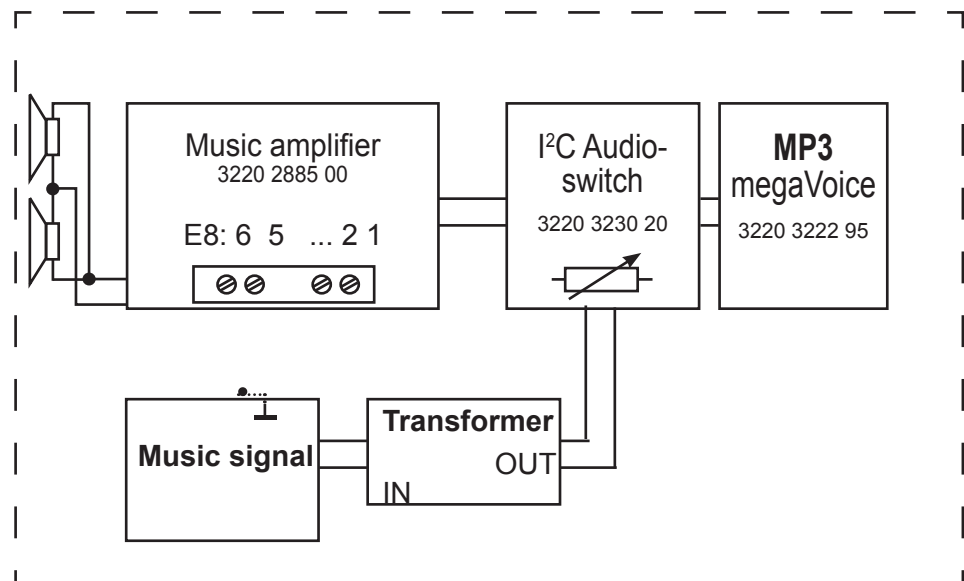
To connect the music signal use a 2-pole shielded cable, the shield has to be earthed at the signal source. The cable is connected to the marked clamps of the Audio switch. The potentiometer is used to set the signal. The loudspeakers are connected in parallel, equal-phased.



7.5 External music signal (100V) without channel selection

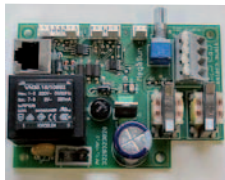
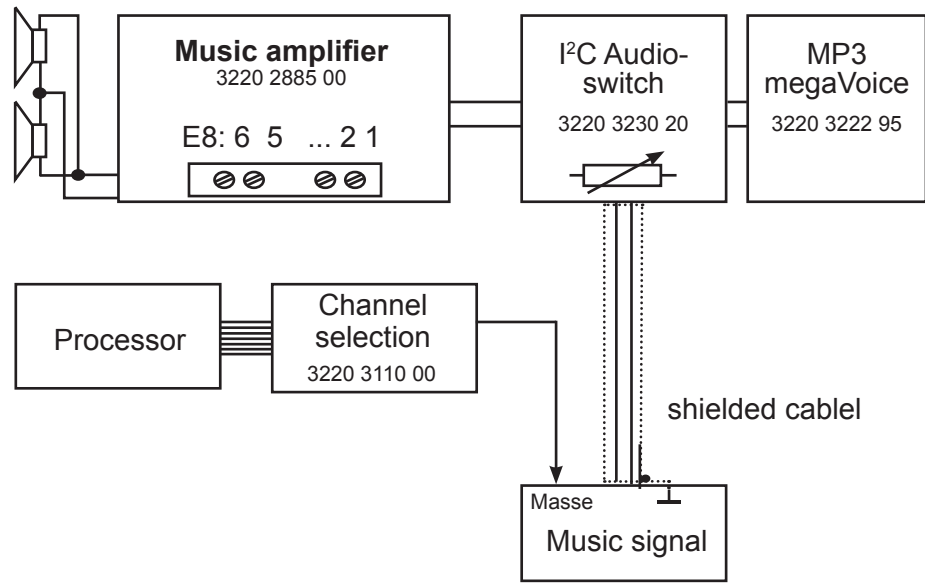
100V-Music signal For this application you will need a transmitter, type 9100017000, and the music signal is connected to the clamps "IN".

Transformer
9100 0170 00



7.6 External music signal with channel selection

To connect the music signal use a 2-pole shielded cable, the shield has to be earthed at the signal source. The cable is connected to the marked clamps of the Audio switch. The potentiometer is used to set the signal. The loudspeakers are connected in parallel, equal-phased.



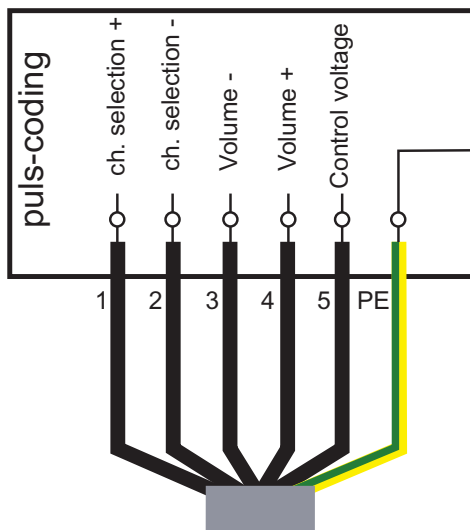
Audio switch

100V-Signal

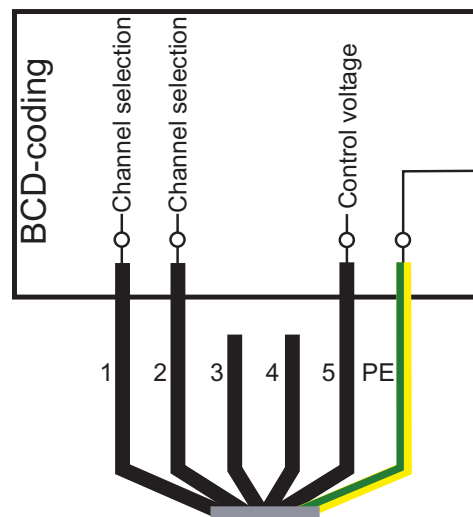
If the external music signal is a 100V-signal, the transmitter is introduced into the signal path in front of the Audio switch. (see 7.4)

The following diagram shows the wiring of the channel selection on the audio equipment's side.

Wiring on the audio system of the studio

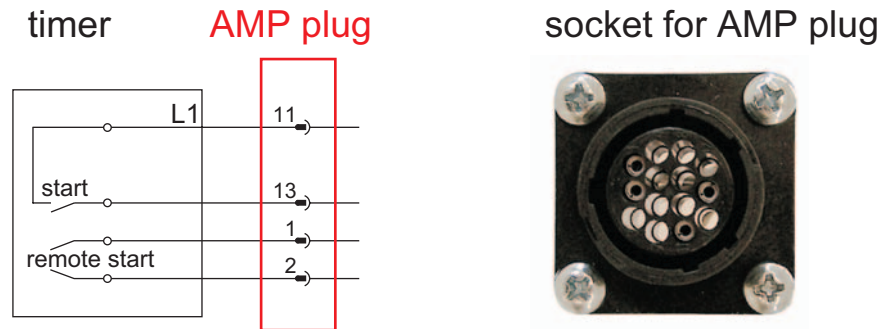


Wiring on the audio system of the studio



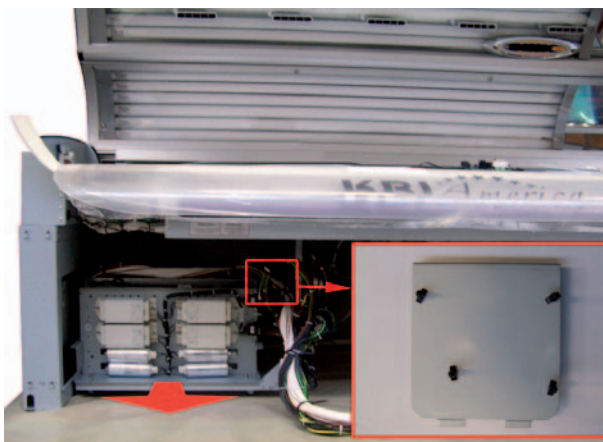
7.7 External Timer

Timer Connect the external timer (e.g. coin box, studio control) according to the instructions supplied with the timer. The connection is made via the socket for an AMP plug on the back side of the device. The following diagram shows the wiring of the timer connection.

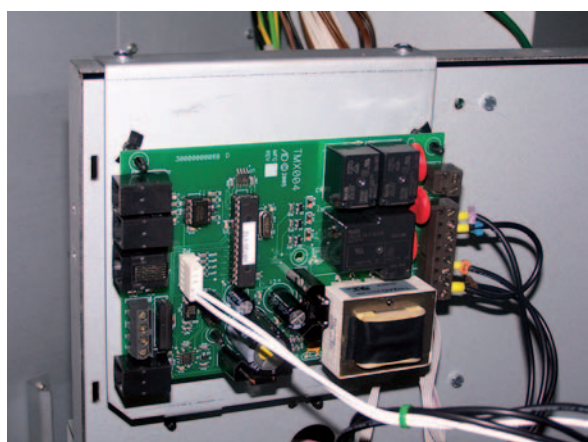


7.8 Using T-MAX timer

Step	Procedure	Reference
1	Remove the front cover and pull out the electronics carriage completely. The console with the spacer supports for the board can be found inside at the right side of the electronics carriage.	Illustr. 7-8-1
2	Attach the board to the spacer supports. Connect the edge connector and the white plug to the board.	Illustr. 7-8-2
3	Remove X.9 and connect X.9A (located at the right side of the electronics carriage).	
4	Connect the RJ22 cable to the board and guide it together with the power or RCA jack cable through the feedthrough in the back.	



Illustr. 7-8-1: Position of spacer supports



Illustr. 7-8-2: Board attached

8. Service

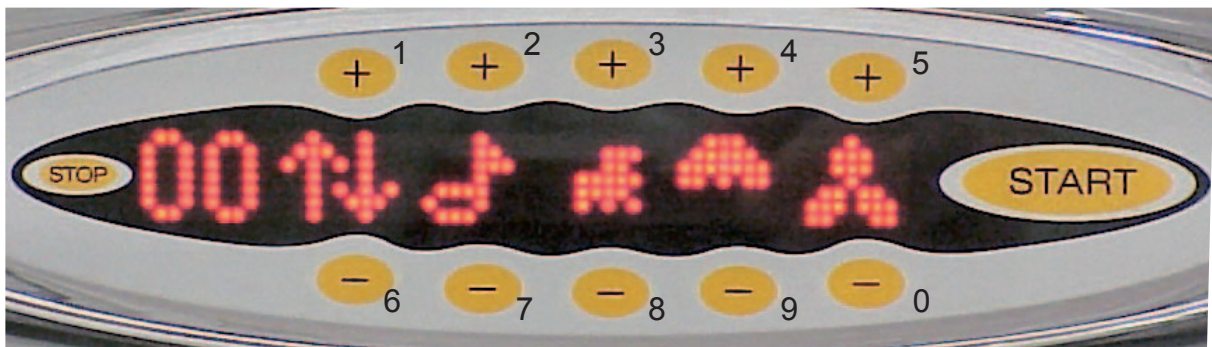
8.1 General information and structures

Service levels There are two service levels which are both accessible by passwords. To get into these levels and to release processes the touch keys 1 ... 0 have to be pressed. For that purpose, the plus and minus keys bear numbers which in the illustration below are slightly bigger than in reality.

In order to get access to the service pages, two prerequisites have to be fulfilled:

- there must not be any error message on the display
- there must not be any incoming signal from the coin/token box system

In case there is an error message you need to reset this message by touching the "Stop" sensor field.



Illustr. 8-1 Touch keys 1 ... 0 for service operations

Service level I In order to get access to level I, first enter the sequence 1 6 1 and then PIN 1 1 1 1.

Service level II This level comprises service pages that may be used by Technical Service staff only. Starting from level I, menu „PIN II“, you will get into level II by entering the correct PIN (not 1 1 1 1!)

General navigation When having called up service level I, the following keys can be used as follows:

Key 5 to move forward in the menu

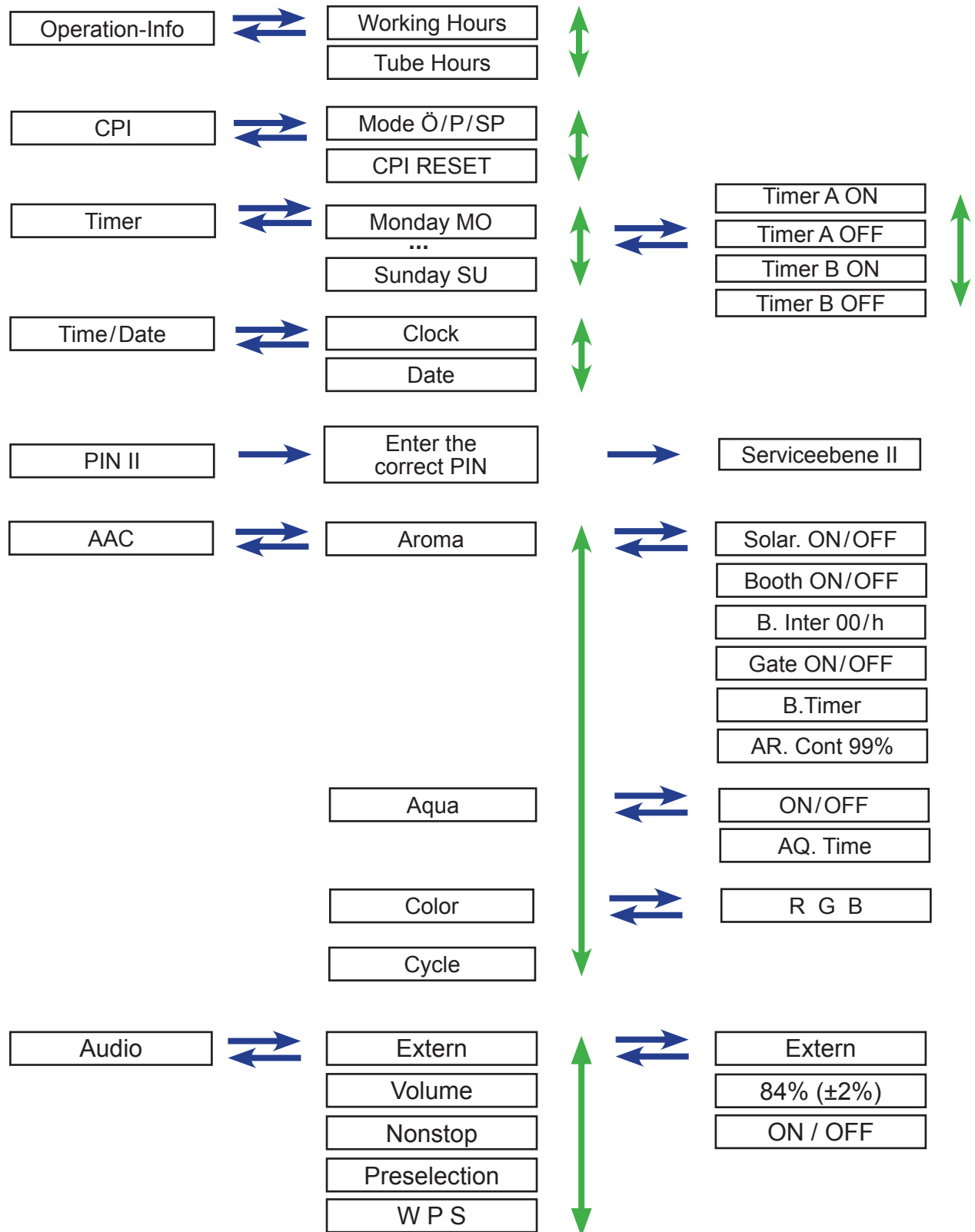
Key 0 to move backwards in the menu

Stop key to leave service level or menu

Start key to select a menu item or to save the value displayed

8.2 Service level I

8.2.1 Structure of the menu on service level I



Overview

On this level you will find the following menus:



Selection of menus by pressing keys 5 and 0

8.2.2 The menus on service level I

Operation-Info

In this menu, the service hours of the sunbed (WORK) and the burning time of the tubes (TUBE) are displayed.

	START	Display	Selection
Operation-Info	→	00146 h WORK	5
	←		
	STOP	00000 h TUBE	0



With the START key you open the sub menus.
 With the STOP key you go back one level higher.
 If you have changed a value and you will save it press START.

CPI

In this menu, the service hours of the sunbed (WORK) and the burning time of the tubes (TUBE) are displayed.

	START	Enter the CPI Mode	Selection	Confirmation
CPI	→	MOD: ÖKO	4	START
	←	MOD: POWER		START
		MOD: SUPER P.	9	START

CPI Reset		Selection	Confirmation
	MOD: POWER	0	
	CPI RESET POW	5	1

Timer

This function allows you to specify two times for switching on and two times for switching off the decorative lighting for any day of the week.

If you do not need the switching time you can delete it by pressing key 1. The hours are set using keys 2 – 4 and the minutes with the help of the keys 3 – 8

	START	Weekday: Monday to Sunday	Selection	Confirm.
TIMER	→	MO	0	START
	←		
	STOP	SU	5	

Time A/BON and A/BOF	Hours / Min	Safe
MO --:-- BON	2 3	START
MO ---:--- BOF	4 8	START

Time / Date

This menu shows time and date. Both values can be changed.

		Display Date	Selection	
TIME/DATE	START	08:37	5	
	← →	30.01.03 TH	0	
	STOP			

Change the time	Selection	Safe
08:37	Std Min 1 3 6 8	START
Change the date	Day	Safe
30.01.03 TH The day of the week appears automatically	1 6	START

PiN II

PiN II opens service level II.

PiN II	START	Enter PIN II and the menu on „service level II“ opens. Ask the KBL-Service for PIN II.
	← →	
	STOP	

AAC

This menu has four sub-menus :

- AROMA
- AQUA
- COLOR
- CYCLE

which can be selected – as in all the other menus – by pressing the keys „0“ and „5“

48

Arroma

This is a sub menu of AAC and it has also 6 sub-menus:

- SOLAR. ON / OFF: A fragrance is or is not sprayed off on the sunbed.
- BOOTH ON / OFF: A fragrance is or is not sprayed off in the booth.

- B. INTER. xx/h: Selection of the cycles per hour, when the fragrance is sprayed off. It can be adjusted to times between 00/h and 24/h
- GATE ON / OFF: A fragrance is sprayed off in the booth when the door is opened or closed.
- B: TIMER: A fragrance can be sprayed off at particular times on the days of the week. There is one interval available for each day (for the setting see „Timer“).
- AR. CONT: Shows the filling level of the aroma gel. When it has reached 00 %, this status is also shown after the tanning session. When having replaced the tin with the aroma gel this message has to be acknowledged (see 8.3 and 8.4) by pressing touch key 1.

These sub-menus can be selected – as in all the other menus – by pressing the keys „0“ and „5“. The function is switched on by the key „+“ or off by „-“, in the same manner increased or decreased.

			Selection	Confirm.
AROMA	START	SOLAR. ON	0	START
		BOOTH OFF		
	STOP	B.INTER. 15%		
		GATE ON		
		B.TIMER		
		AR. CONT 99%	5	

Aqua

This is a sub menu of AAC.

Water is „misted up“ by means of nozzles making the tanning session more refreshing.

- AQUA ON / OFF: This function can be switched on by pressing the „+“ key (4) above „OFF“, and switched off by pressing the „-“ key (8) below „ON“.
- AQ.TIME: The spraying cycle is set in the menu CYCLE and the spraying duration in this menu AQ.TIME between 2 ... 6 seconds. The details are set by pressing the „+“ and „-“ keys above or under the time display.

			Selection	on / off
AQUA	START	AQUA ON	0	4 / 9
	→ ← STOP	AQ.TIME 06 s	5	Adjust 4 / 9

Color

It is a sub-menu of AAC.

The colour of the colour-stimulation can be pre-selected. If you press the „+“ key above one of the letters (e.g. G), this letter (here G) will stop flashing and this colour (Green) has been selected.

When all „-“ keys have been pressed, all the letters will flash, i.e. the colour-stimulation has been inactivated.

It is only possible to choose one colour by pressing the corresponding „+“ key.

			Selection	Confirm.
COLOR	START	R G B	+ / -	START

Cycle

It is a sub-menu of AAC.

The duration of the breaks of aroma and aqua can be set between 1... 5 minutes.

The details are set by pressing the „+“- and „-“ keys above or below the time.



		Adjust	Confirm.
START	CYCLE 04m	+ / -	START

Audio

This menu has five sub-menus:

- **EXTERN:** If the signal is ON, an external source sends the music signal, otherwise the internal MP3-player is used.
- **VOL. HOT:** the volume of the music or of the user guidance system when the fan is running
- **VOL. COOL:** the volume of the music or of the user guidance system when the fan is not running.
- **NONSTOP:** when the signal is ON, the music signal is permanently amplified, otherwise the music transmission ends with the tanning cycle.
- **CH:** The channel selection may be changed from channel and volume selection to BCD selection of a music source. It is possible to select up to 4 music sources. (The volume is adjusted at the music amplifier).
- **PRESELECTION** shows which music source of the three sources from the WPS menu is chosen for preselection.
- **WPS:** Selection of the music source Wellness, Pop or Studio.

The menu can be selected by pressing the „0“ and „5“ keys, the functions can be activated or inactivated by pressing the „+“ key above OFF or the „-“, key below ON, or you can increase or decrease the values by pressing +/- above the numerical value.

			on / off	Conrm.
AUDIO	START	EXTERN OFF	+ / -	START
		VOL.HOT 88%	Adjust + / -	in 2-%- Steps
	STOP	VOL.COOL 58%	Adjust + / -	in 2-%- Steps
		NONSTOP ON	on / off+ / -	
		CH PULS	5 Select	Conrm.
		CH BCD	0 	START
		PRESEL. S		
		W.P.S'	on / off+ / -	START

W Wellness music
P Pop music
S Music from
studio control
system

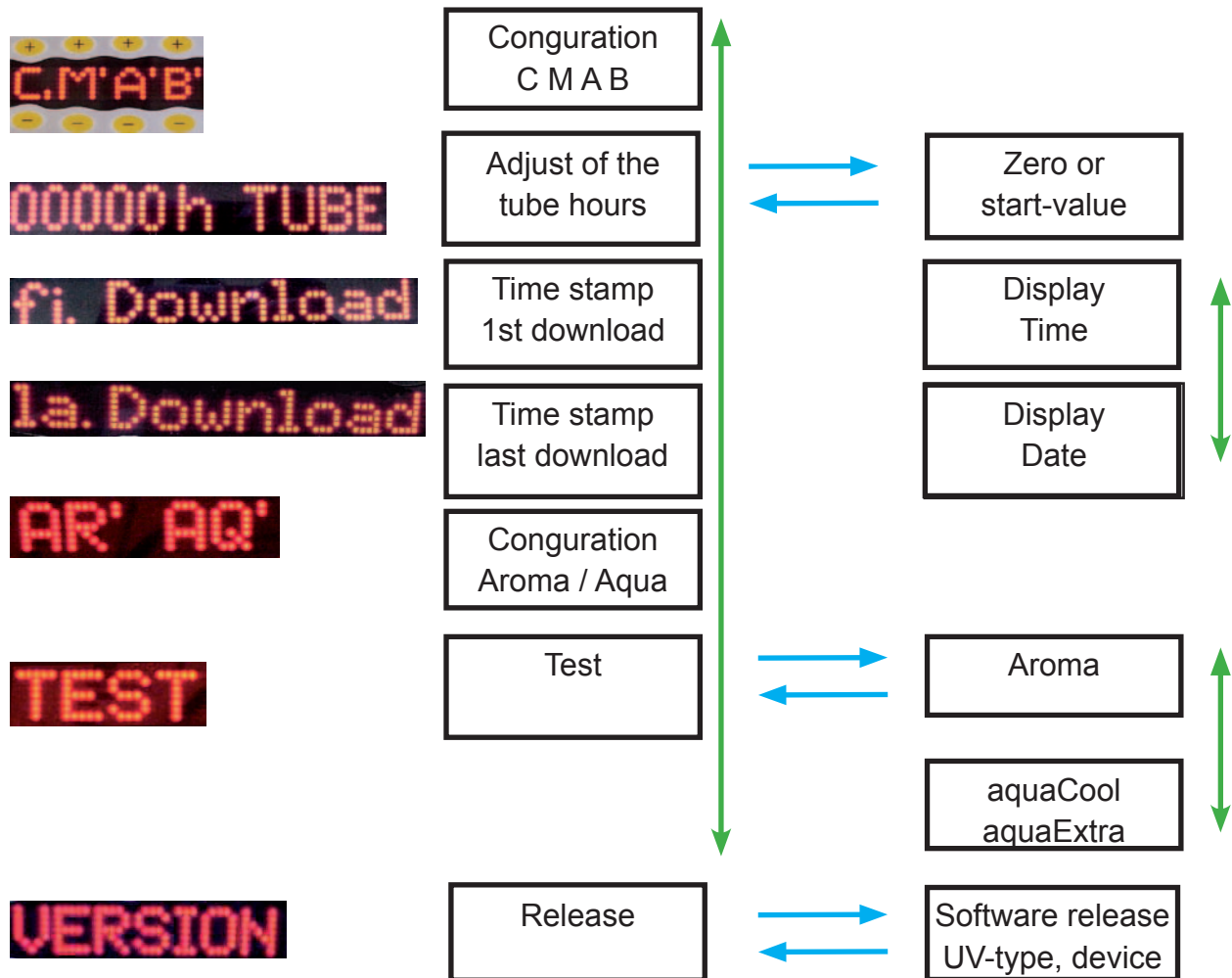
First, you set the active configuration in the menu W P S. The „+“ keys above W, P or S stand for the option „on“. You can activate all three sources at once if they are physically available. To deactivate an option press the „-“ key. Press **START** to save the new setting.

In the table, the studio operator has selected only S which means, the music is provided by the studio's audio system. Selected options in the WPS menu have superior points (S[•]). If you select two or three items, e.g. W[•] P[•] S[•], the studio operator can preselect which source is selected after the start of the tanning program. Press the „+“ key (4) or the „-“ key (9). The appropriate character (W, P or S) is shown in the PRESEL. menu.

During the tanning program, the client can toggle between these sources. He opens the first submenu by pressing the „+“ key above or the „-“ key below the „P“. The newly selected music source (Wellness, Pop or Studio) is displayed for a short time. The channel selection symbol stands for „next title“ with Wellness and Pop and for „next external music channel“ with Studio (see also service level II for the configuration the external channels in menu „C M A B“). Use +“ key for forward and „-“ key for backward.

8.3 Service level II

8.3.1 Structure of the menus in service level II



8.3.2 Menus of service level II

Conguration menus



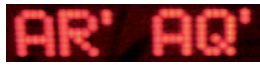
In this menu functions can be activated or inactivated. This makes sense when the corresponding function is missing or temporarily not available (faded out).

- C Channel / Music channel
- M Music / Volume
- A Air-conditioning
- B Facial tanner

The setting can be changed by pressing the “+” or “-” key above or below the symbol. If the two dots behind the letter are at the bottom, the respective function is inactivated.

- C: no channel selection possible,
- B: facial tanner can be operated

AR/AQ



The aroma function can be activated (AR₁) or inactivated (AR₀), the same goes for the aquaCool function (AQ₁ / AQ₀).

The setting can be modied by pressing the „+“ or „-“ key above or below the symbol.

Any modications are accepted by pressing the START key.

Tube hours

In this menu, you can set the service hours of the tubes in steps of 5 hours. This display has to be reset to zero after each tube replacement.

Attention! Always carry out a reset after each tube replacement

	Enter the hours	change	safe
START	00000h TUBE	1 ↑	START
		6 ↓	
STOP			

Time stamps

Here you can store the time stamps of the rst and last download of the software.

			Selection
fi. Download	START	13:10 @	5
First Download			
	STOP	22.01.03	0
la. Download	START	09:34 @	5
Last Download			
	STOP	29.01.03	0

Test

You can also test the three functions Aroma, aquaCool and aquaExtra without a tanning program. After selecting a function, press key 1 to start the test. aquaExtra is switched on by the key 4 and off by the key 9. The cycle time is 5 min. It is use to check the quality of aquaCool.

			Selection	On
TEST	START	AROMATEST	5	1
	STOP	AQUATEST		1
		AQUA EXTR.OF	0 4	
		AQUA EXTR.ON	9	


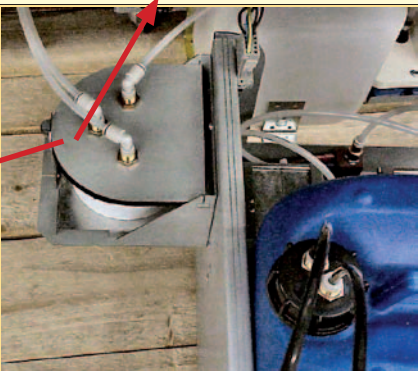
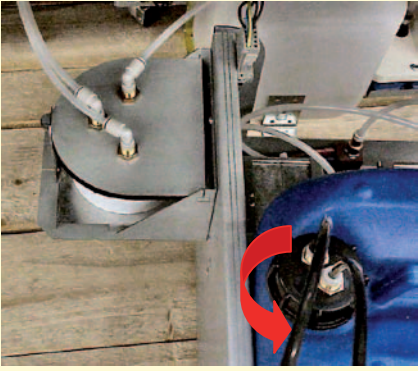

Version

The version of loaded software is displayed since vers. 4.8. This is analogue to the display after the rst start. The version depends on the sunbed: without easyCare (here 5.3) or with easycare (here 1.8).

			Selection
VERSION	START	KBL4 eC 1.8	5
	→	KBL 4 5.3	
	←		
Sub-type of the sun bed	STOP	ULTRA POW.	
UV-type		UV4	
Sun bed		MS6700/6800	0

8.4 Refilling / Changing Aroma and aquaCool

Gel: SUNRISE and DAYDREAMS / aquaCool The gel tin and the water tank are in the base part between the air-conditioning unit (on the left) and the electronics system (on the right).

Step	Procedure	Reference
1	Open the lower front cover and regularly check the filling level of the water tank and of the aroma tin. When the content of one of the container has been used up, replace the corresponding container.	
2	Pull the holding element of water tank and aroma tin forward. .	
3	Move the covering handle on the lid of the aroma tin to the left (1) and then move the lid upward (2). Now you can replace the tin. 	
4	Unscrew the lid with the hoses from the tank and replace the empty tank by a full one. Screw the lid on again. Keep clean the end of the tubes when changing the tank (use a plastic bag). Only use the specific water by KBL „aquacool“. Otherwise the nozzles may clog up which might produce infections.	
5	Put the constructional elements back into their original place in the sunbed.	
6	Acknowledge the error message in service level I by calling up the displays shown on the right and by pressing key 1.	

8.5 Colour codes for the pipes

Colour code	The pipes are marked with colour points:
Blue	compressed air for aquaCool
Red	reflux aquaCool
Green	flow pipe aquaCool
Yellow	aroma

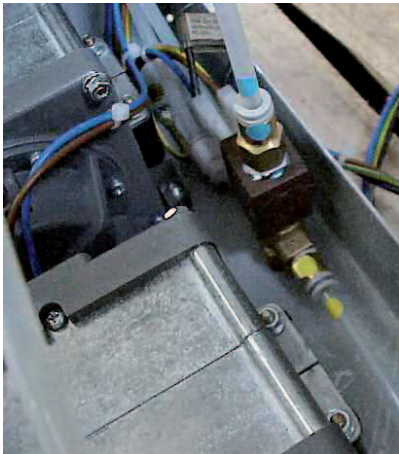


Abb. 8-2 Compressor



Abb. 8-3 aquaCool

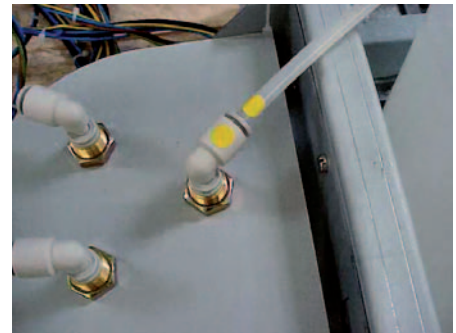


Abb. 8-4 aroma

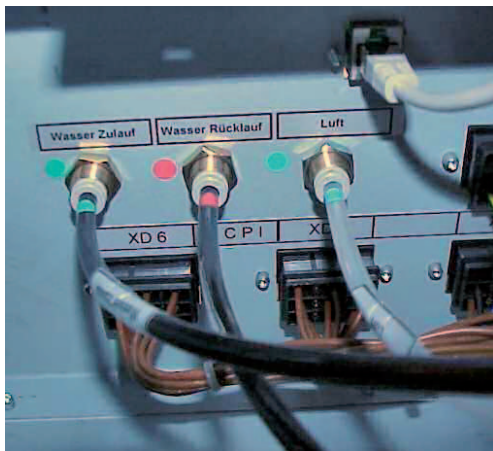


Abb. 8-5 Canopy underside

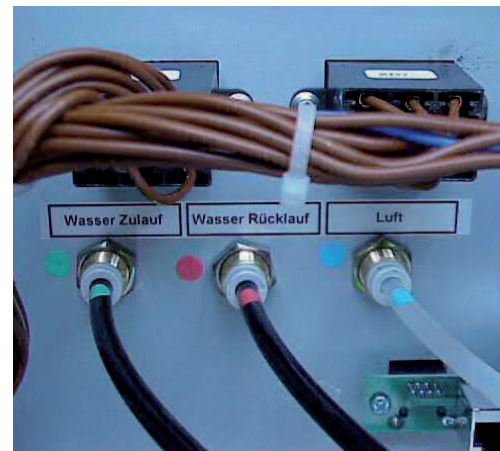


Abb. 8-6 Canopy upper side



Abb. 8-7 Ionizer and aroma pipes

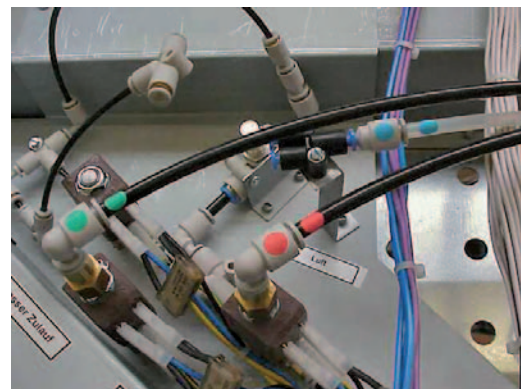


Abb. 8-8 Pipes at the nozzles

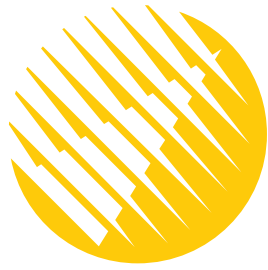
8.6 Error message

Error message “Abluft“ oder “Windschalter“	<p>This error message is displayed on the operating panel and can be acknowledged by pressing the “Stop“ key. Prior to this, service staff has to find the reasons of these error messages. Possible reasons can be:</p> <ul style="list-style-type: none">• temperature in the unit is too high• exhaust vent system is defective
Error message “Ende der Besonnung“ „End of tanning session“	<p>This message will be displayed after 40 minutes of uninterrupted operation of the tanning system. By turning off the coin-operated system this message is acknowledged.</p>
BUS-Error	<p>Daten line of the Bus I²C-Bus is disturbed</p> <ul style="list-style-type: none">— 220 V is missing at MP3-Player or Audio Switch— Bus connector at MP3-Player in wrong position
E01BUS:ABL	<p>There is not any data link between the controller board and the revolution control...</p> <p>Reason: defective or not connected I²C revolution control.</p>
E02:BUS:TMP	<p>Reason: defective or not connected I²C temperature sensor.</p> <p>Solution: press the START key. The blower is running with max. revolution during the temperature controll.</p>
E04:BUS:VOIC	<p>Reason: There is not any data link between the controller board and the MP3 player Voice.</p> <p>Solution: press the START key. The controller is working as one w/o megaVoice.</p> <p>Reason:</p> <ul style="list-style-type: none">— missing soldering bridge on MP3-Player megaVoice,— SD card not readable— formatting or wrong inserted,— Plug at MP3 iInterface or at I²C Audio switch is inserted uncorrect.
E05BUS:REL	<p>Conguration error: I²C-Relay board (8) an I²C Relais board (2) at the same time connected.</p>

9. Tanning instructions

9.1 General tanning instructions

1	<p>Different skin types react differently to sun and tanning times. Follow the skin type table and the individual tanning program (see p. 56 ff.).</p> <p>Once you have reached your nal tanning result, further tanning can only be achieved by considerably exceeding the recommended tanning times. This has to be avoided at all costs!!</p>
2	<p>UV radiation from the sun or from UV apparatuses may cause damages to skin or eyes. These biological effects depend upon the quality and quantity of the radiation as well as on the skin and eye sensitivity of the individual customer.</p>
3	<p>Sunburn can be a reaction of the skin after excessive radiation. Excessively repeated exposures to UV radiation from the sun or from UV apparatuses may lead to premature ageing of the skin and increase the risk of getting skin cancer.</p>
4	<p>Unprotected eyes may become inflamed on their surface or in some cases, e.g. after a cataract operation, the retina can be damaged after an excessive UV exposure. Cataracts may develop after many repeated exposures.</p>
5	<p>Special care is necessary in cases of pronounced individual sensitivity to UV radiation and in cases where certain medicines or cosmetics are applied.</p>
6	<p>It cannot be said in any case that the use of a sunbed reduces the risk of getting sunburn.</p>
7	<p>The apparatus must not be operated when the timer or the lter panes are defective.</p>
8	<p>The following safety precautions have to be taken: Safety precautions</p> <ul style="list-style-type: none"> • Always use the goggles provided. • Remove any cosmetics before the tanning session and do not use any sunscreens. • Refrain from tanning when taking medicine which increases the sensitivity to ultra-violet radiation. If in doubt, ask your doctor for advice. • Allow a period of at least 48 hours between the rst two tanning sessions; do not sunbathe and use the apparatus on the same day. • Follow the recommendations concerning tanning times and tanning intervals (see 56 ff). • See a doctor when your skin produces persistent swellings or sore points, or when pigmented moles change their appearance.
9	<p>The following groups of people are not allowed to use the apparatus:</p> <ul style="list-style-type: none"> • children • people with pace-makers • people who get sunburn without tanning when exposing themselves to the sun • people suffering from sunburn • people who suffer or have suffered from skin cancer or who are predisposed towards it



KBL

KBL AG

Ringstraße 24-26 · 56307 Dernbach · Germany

fon +49 (0) 26 89.94 26-0 · fax +49 (0) 26 89.94 26-66