

megaSun[®]

by KBL



megaSun[®] basic care

Operating Instructions

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About this manual

This operating manual is intended for use by
operating staff,
users,
service staff.

Any person dealing with this device must have read
and understood these instructions.

Keep this manual ready to hand at all times.

Safety notes

This chapter provides a summary of general information on safety and proper handling of the device. More specific safety advice is given in other chapters of the operating manual.

Intended use

The device has primarily been designed for assisting the staff of the tanning studio in drawing up individual tanning schedules that suit the clients' respective skin types. In addition, the device recommends certain cosmetic products and determines the self-protection time of the skin when tanning in natural sun, taking into account the respective latitude.

Please note that the results must only be considered recommendations.

In order to be provided with optimum advice, the client must answer the questions truthfully. Nevertheless, responsibility towards the client resides with the personnel of the tanning salon. The device should only be considered an aid.

The device has been designed for use by individuals who are in full command of their physical, sensorial and mental faculties. Moreover, sufficient knowledge and experience are required.

Children should be supervised to make sure that they do not use the device as a toy.

Duties of the operator

KBL-Solarien AG cannot be held liable for any damage resulting from improper use of the equipment or non-observance of these operating instructions.

Only original spare parts must be used. Otherwise, both operating authorisation as well as warranty will become void.

General safety advice

- Follow all instructions given in this manual. In addition, observe all relevant statutory provisions and regulations, also those applicable in the country of operation.
- The device may only be installed and assembled by specifically trained staff.
- Arbitrary modifications or conversions of the equipment are not permissible.
- Observe all danger signs and safety notices attached to the equipment.
- Safety notices must not be removed, and safety equipment must not be disabled or removed.
- The device may only be operated when in perfect working condition.
- Never operate the device with the outer covers removed.
- Before opening the device, unplug the power plug in order to disconnect the device from the power supply.
- Only use the cleaning agents specified in the section "Cleaning".
- If you lose the stylus that comes with your device, use a plastic pen instead. Remove its metal tip and the ink cartridge before you use the pen to touch the screen.
- In the case of an emergency, unplug the power plug! Therefore, select the location for installation carefully, allowing easy access for disconnection of the device. The mains connection must be freely accessible during normal operation.

Description of the unit

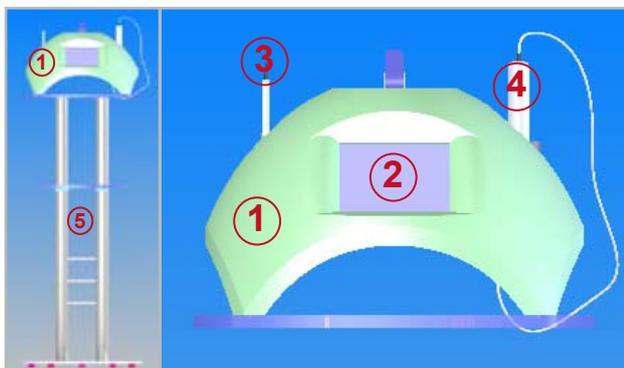
Function

The device determines the individual skin type by carrying out measurements and by evaluating answers to a questionnaire. On the basis of these data, the system draws up a tanning schedule that is adapted to the client's individual situation. This tanning plan can then be printed out on an external printer or displayed on the screen.

Components

The device consists of a central measuring unit ①, sensors ③,④ and a user interface (touch screen) ②. Facing the device and looking towards the touch screen, the moisture sensor is located on the left-hand side while the melanin sensor is on the right-hand side.

Figure 6.1



1	Measuring unit
2	User interface
3	Moisture sensor
4	Melanin sensor
5	Stand (optional equipment)

Skin moisture

A healthy skin contains natural moisture (moisture in the horny layer of the epidermis). Tanning sessions

reduce the moisture content of the skin. Therefore, the skin moisture represents an essential factor to determine the individual tanning time. The moisture sensor is used to measure the skin moisture at four places on the face. The system then calculates an average value.

Melanin content

Melanin is the skin pigment that protects the nuclei of the skin cells. Consequently, the melanin content is the respective concentration of this pigment in a person's skin. The melanin sensor attached to the device is also used to carry out measurements at four places on the body; in this case, the values are measured at two places on the face and at two places on the arms. Each individual measurement must be carried out four times. This means that the final value given in the evaluation later on has been calculated on the basis of 16 individual measurement values.

Operation

The system is operated via the touch screen monitor ② integrated in the front part of the device.

The direct dialogue is based on a menu that either branches into submenus, returns to parent menu items or, with some questions concerning major health issues, aborts the questionnaire while displaying a corresponding message.

- For forward and backward navigation within the menu structure, the "continue" and "go back" buttons are available.

Figure 6.2



- If there are other or additional navigation or control options, these are displayed and explained in detail.

Example: Further control options

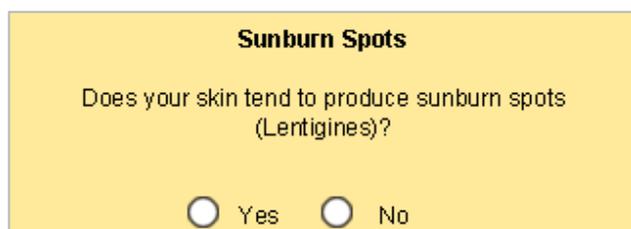
Figure 7.1



- So-called radio buttons provide various options for entering individual answers to the respective items of the questionnaire. To select an answer, mark the desired button. A selected button changes in colour.

Example: Radio button

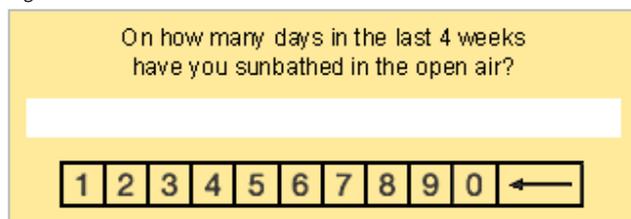
Figure 7.2



- Some questions are answered by using input fields. Touch the numeric values in the lower bar to select the answer. Use the arrow on the right-hand side to delete values.

Example: Input field

Figure 7.3



Menu items

In addition to the two measurements, melanin and skin moisture, further questions are asked to obtain data for drawing up a tanning plan.

The whole procedure can be summarised as follows:

Questions:

- Age (18 or younger)
- Photodermatoses
- Illnesses
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements:

- Melanin
- Skin moisture

Evaluation/output of results:

- Output (printer/screen)

Connections & Sensors

Connections on the device

All connections as well as the power switch are located on the underside of the device.

Figure 8.1



a	LAN (RJ45)
b	Mains connection and power switch
c	Sensor connections

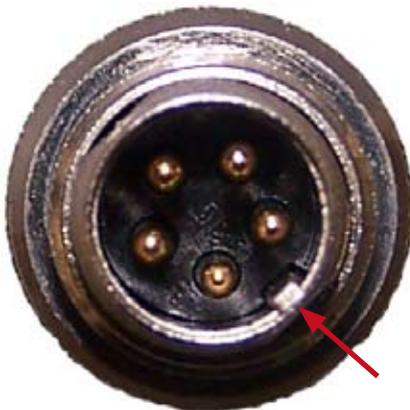
Printers can only be connected to the device via a print server and by using a (CAT5e) cross-link FTP cable with RJ45 plugs (called “cross-link cable” in the following). The two connections (c) can be chosen from freely to connect the skin-moisture and the melanin sensor. The device recognises the sensors automatically.



⚠ DANGER

Danger of destruction when connecting the sensors!

Figure 8.2



Ensure that the angular-orientation lug of the sensor cable connector (arrow) engages exactly in the guide

recess of the connector socket on the device. There must not be any noticeable resistance when inserting the connector.

In the case of non-observance, the device might get severely damaged.

Connection to the mains voltage

Connection to the mains voltage is effected by means of a power cord with grounded plug.

⚠ DANGER



Live components
Risk of fatal injury due to electric shock when touching live parts.

- Switch off mains voltage.
- Protect against re-connection.

Mains switch

There is a rocker switch on the underside of the device (b) for switching the unit on and off.

If a printer has been connected, switch it on first. Switching off the system is carried out in reverse order.

Sensors

The device is equipped with holders for the two sensors for moisture and melanin measurements. These holders differ in diameter. The moisture sensor only fits in the left-hand holder, the melanin sensor only in the right-hand one.

Figure 9.1



- Both sensors must be cleaned with a commercially available disinfectant wipe in the presence of the client before starting a measurement.
- The foam ring of the melanin sensor must be pushed down before each measurement to avoid faulty measurements.
- These sensors are sensitive precision devices that are susceptible to maltreatment. Handle them with care and avoid vibrations.

Input/output devices

Screen

The screen integrated in the main unit is a liquid crystal display (LCD) in the form of a touch screen.

!

The tubes providing the LCD backlight contain small amounts of mercury. Observe the applicable rules and regulations when disposing of the tubes.

If you have to store the device, please observe the following:

- Store in a dark place (no sunlight and no UV radiation).
- Storage temperature between +10°C/50°F and +35°C/95°F with normal air humidity.
- Clean before storing.

Do not touch the screen with bare fingers! Only use the supplied stylus to make entries.

Figure 10.1



If you lose this stylus, use a plastic pen, e.g. a ballpoint pen casing, as a substitute.

!

Do not use any metal objects or ballpoint pens with ink cartridges or metal tips.

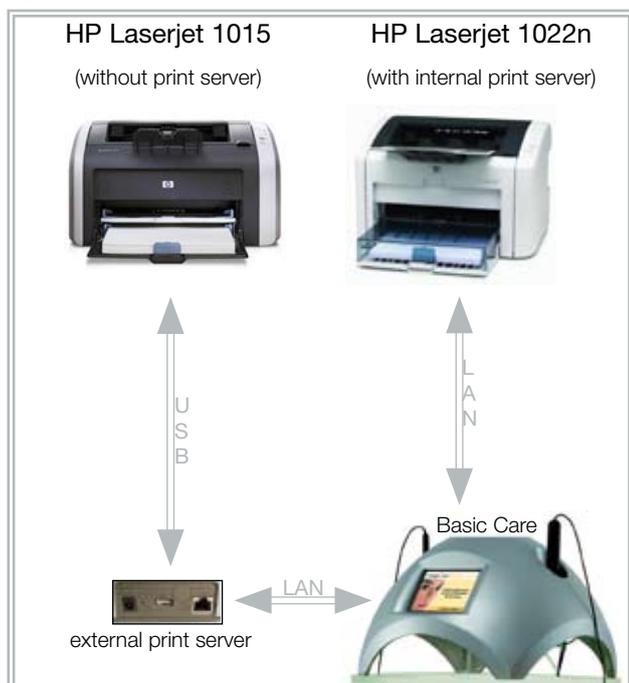
The temperature must not exceed +40°C/104°F in the operating environment of the monitor. The relative air humidity must not exceed 85%.

Prevent the monitor from misting up (bedewing). If necessary, do not switch on the device before the screen temperature and the ambient temperature have reached the same level. Make sure that there is no more moisture on or in the device.

Printer

The tanning schedule can optionally be printed out. Depending on the date of delivery, the system comprises one of the following printer models.

Figure 11.1



Both devices are laser printers by Hewlett-Packard. A correct print output can only be guaranteed if these printers are used.

HP Laserjet 1022n is equipped with an integrated print server. It can be connected to the basic care unit directly via a LAN connection (a) (figure 8.1) using a cross-link cable (14) (figure 14.5).

To connect the HP Laserjet 1015, use a commercially available USB cable, connect the printer to an external print server and then to the basic care unit via a cross-link cable (14) (figure 14.5).

Only one of the two printers mentioned can be connected at a time.

Replacing peripheral devices

Communication between the basic care unit and the printer is controlled by the “Transmission Control Protocol/Internet Protocol” (TCP/IP).

When replacing

- a defective **HP LJ1022n printer (with integrated print server)**, or
- a **defective external print server** (if a HP LJ1015 printer is used),

the correct addressing by a fixed IP address must be set on the respective print server.



Otherwise, any communication with the basic care unit will be impossible.

For a correct set-up, use the following network configuration:

IP: 192.168.000.001
Subnet Mask: 255.255.255.000

For details on how to make the setting, please refer to the respective user manual.

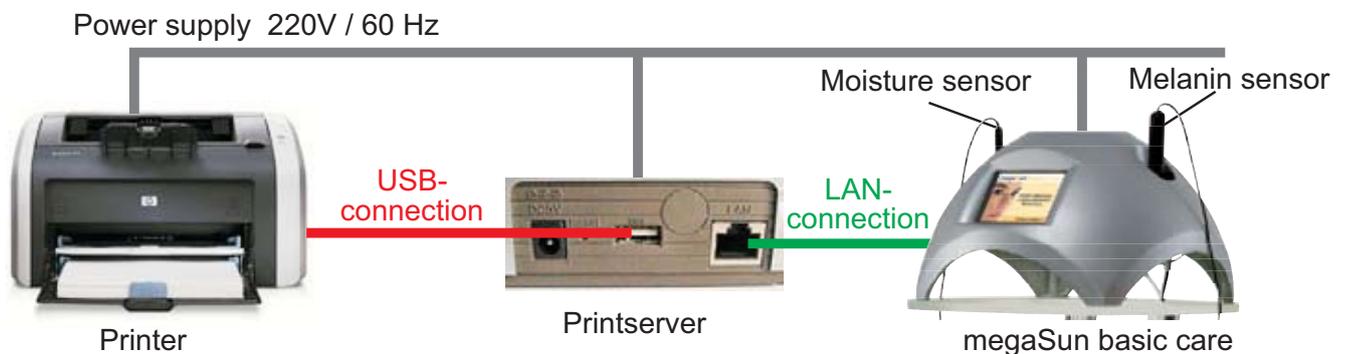
When replacing the HP LJ1015 printer (while keeping the old external print server), this setting is not necessary.

Connection & Power up

Connection using HP LJ1015 printer

Check all connections, or establish them, if necessary.

Figure 12.1



1. Connect the sensor cables to the basic care device  (figure 8.1) and check the correct connection. It does not matter which connector a sensor cable is connected to. Ensure that the angular-orientation lug of the sensor cable connector engages exactly in the guide recess of the connector socket on the device. There must not be any noticeable resistance when inserting the connector. In the case of non-observance, the device might get severely damaged.
2. Connect printer and print server using the USB cable (marked in red in the diagram).
3. Use the cross-link cable  (figure 14.5) to connect the print server to the basic care device (figure 12.1), marked in green in the diagram.
4. Connect the power plugs of printer, print server and basic care unit to the mains. The power plugs must be visible from the outside and accessible at any time.

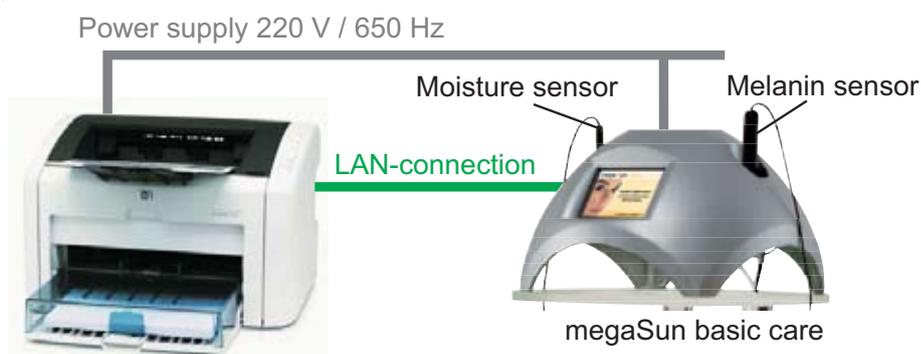
Switching on/off

1. Switch on the printer.
2. Switch on the basic care unit.
3. The print server has been turned on by connecting it to the power supply. The LEDs “PW” and “LAN” are lit. While data are being transferred, the LEDs “USB” and “LAN” are flashing.
4. To switch off the system, proceed in reverse order.

Connection using HP LJ1022n printer

Check all connections, or establish them, if necessary.

Figure 13.1



Printer with integrated print server

1. Connect the sensor cables to the basic care unit  (figure 8.1) and check the correct connection. It does not matter which connector a sensor cable is connected to. Ensure that the angular-orientation lug of the sensor cable connector engages exactly in the guide recess of the connector socket on the device. There must not be any noticeable resistance when inserting the connector. In the case of non-observance, the device might get severely damaged.
2. Use the cross-link cable  (figure 14.5) to connect the print server to the basic care device (figure 13.1), marked in green in the diagram.
3. Connect the power plugs of the printer and the basic care unit to the mains. The power plugs must be visible from the outside and accessible at any time.

Switching on/off

1. Switch on the printer
2. Switch on the basic care unit.
3. Switch off the system in reverse order.

Assembly of the stand

Variants

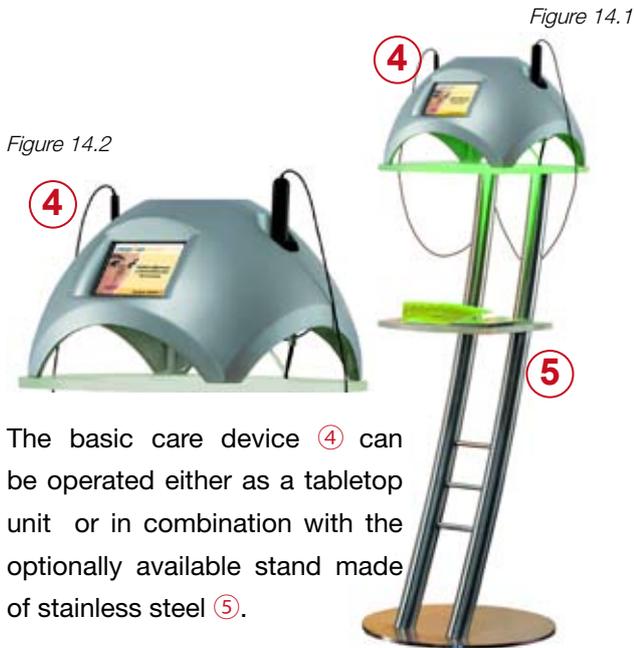


Figure 14.2

Figure 14.1

The basic care device ④ can be operated either as a tabletop unit or in combination with the optionally available stand made of stainless steel ⑤.

If you have opted for the attractive premium steel stand, assemble it as follows:

Components of the stand

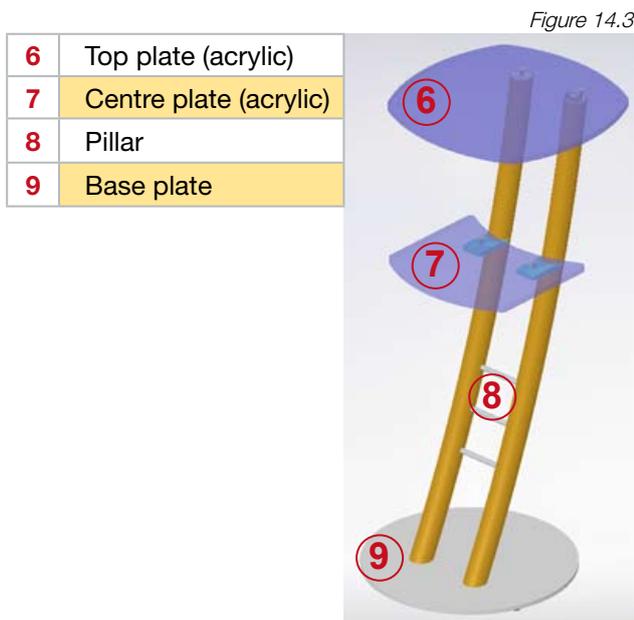


Figure 14.3

Small parts

Figure 14.4



10	Rubber feet 5x
11	Screws 5x M4 x 15, incl. washers
12	Countersunk-head screws 4x M5 x 20 (acrylic plates)
13	Countersunk-head screws 2x M8 x 15 (base plate)

Cables & Plugs

Figure 14.5

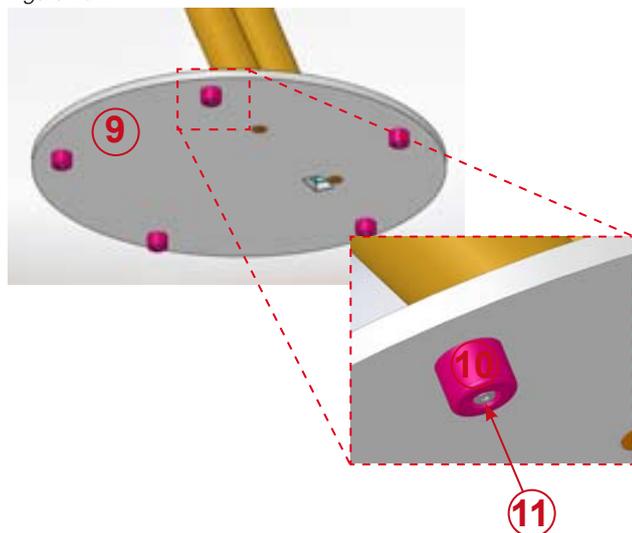


14	FTP cable (cross-link) CAT5e / 5m
15	Power cord (230V)
16	IEC connector

Pre-assembly

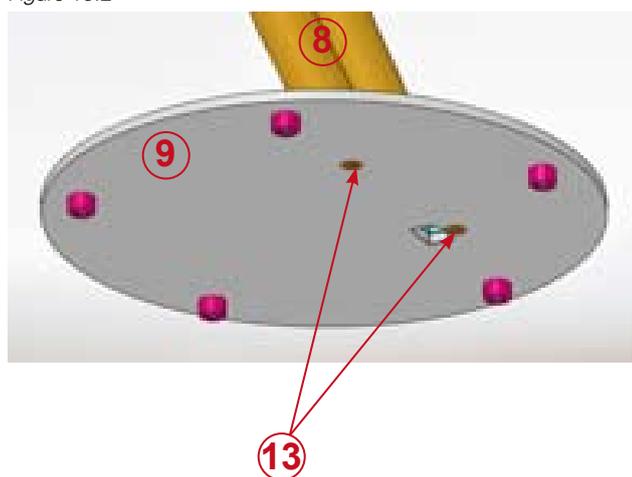
1. Fasten the five rubber feet (5) to the base plate (9), using five screws (M4 x 15) incl. washers (11) (figure 14.4).

Figure 15.1



2. Fix the base plate (9) to the underside of the pillar (8). Use the two countersunk-head screws (M8 x 15) (13) (figure 14.4) to do so.

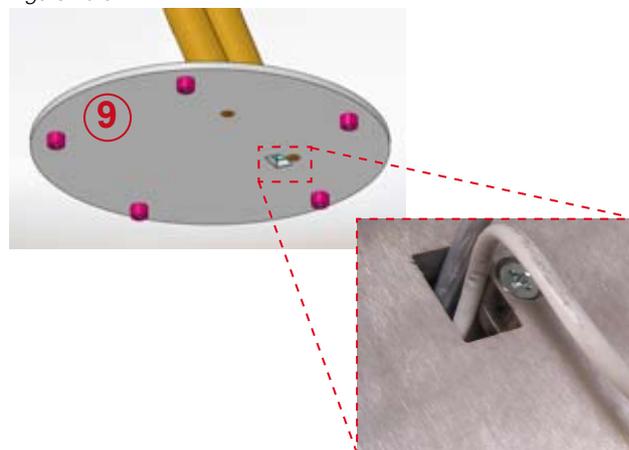
Figure 15.2



3. Look from the front at the underside of the pillar. Guide the two cables (power cord (15) and FTP cable (14) (figure 14.5)) through the right-hand cable conduit of the pillar. Insert the two cables one after the other into the opening of

the base plate. Push them through the whole conduit and pull them approx. 30 cm out of the opposite opening.

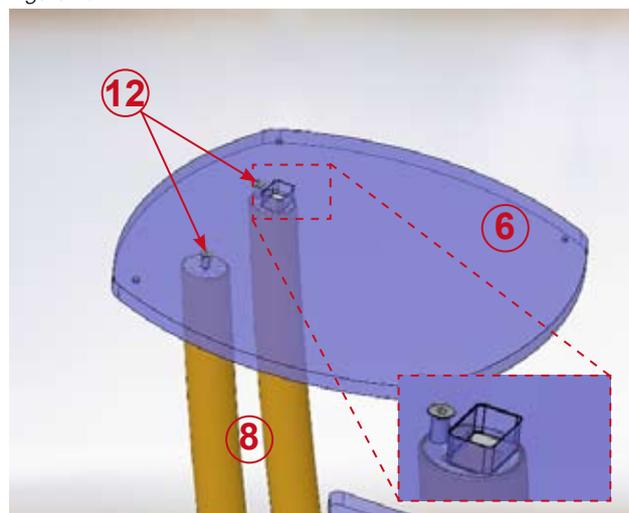
Figure 15.3



! At this stage, the IEC connector (16) (figure 14.5) must not have been fixed yet.

4. Attach the top plate (6) to the pillar (8). Use two countersunk-head screws (M5 x 20) (12) (figure 14.4) to do so.

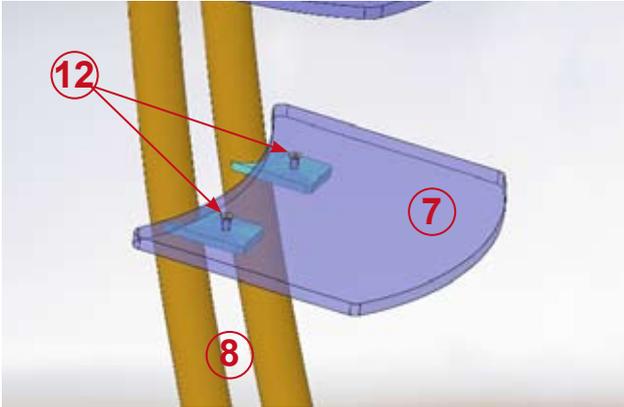
Figure 15.4



! Before fixing the plate, guide the two cables (14, 15) (figure 14.5) through the rectangular opening in the top plate.

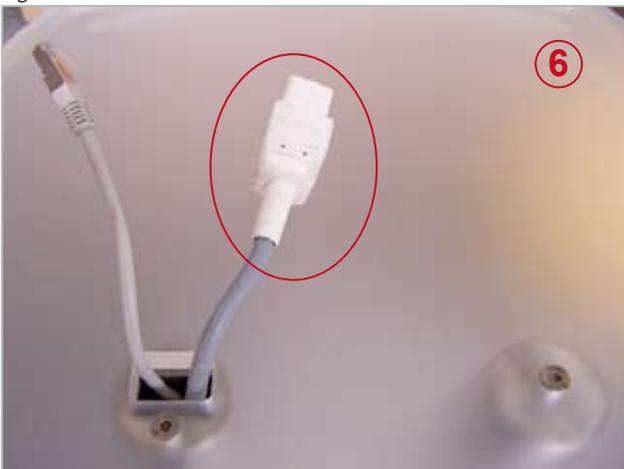
- 5.** Fasten the centre plate **7** to the pillar **8**. Use two countersunk-head screws (M5 x 20) (figure 14.4) to do so.

Figure 16.1



- 6.** Then mount the IEC connector **16** (figure 14.5) on the bare end of the power cord **15** (see ellipse).

Figure 16.2



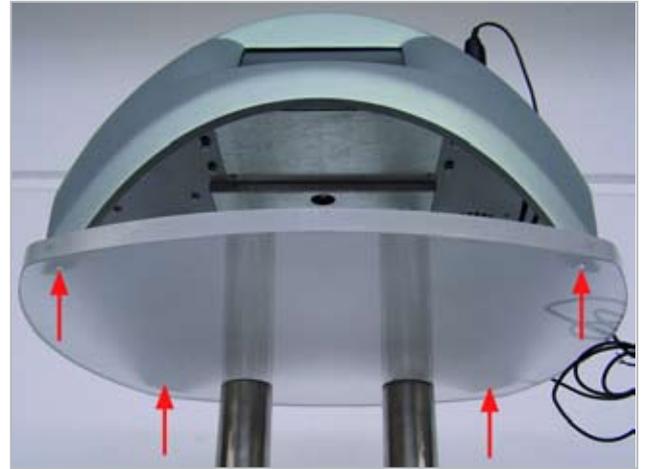
! Electrical installation work may only be performed by qualified specialist personnel.

	⚠ DANGER
	<p>Live components Risk of fatal injury due to electric shock when touching live parts.</p> <ul style="list-style-type: none"> • Switch off mains voltage. • Protect against re-connection.

Assembly

Four countersunk-head screws (M4 x 20) are required to attach the pre-assembled stand to the basic care case.

Figure 16.3



Insert the screws into the four drilled holes (see arrows) provided in the top acrylic plate and fasten them in the screw-in sleeves (M4) (figure 16.4) embedded in the four foot areas of the case (figure 16.5).

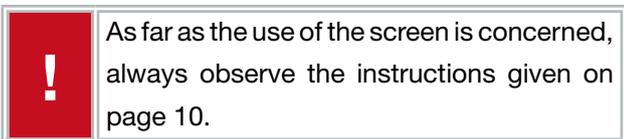
Figure 16.4



Figure 16.5



Operation



As far as the use of the screen is concerned, always observe the instructions given on page 10.

Loading

After having switched on the basic care unit, the company logo is displayed during the loading time.



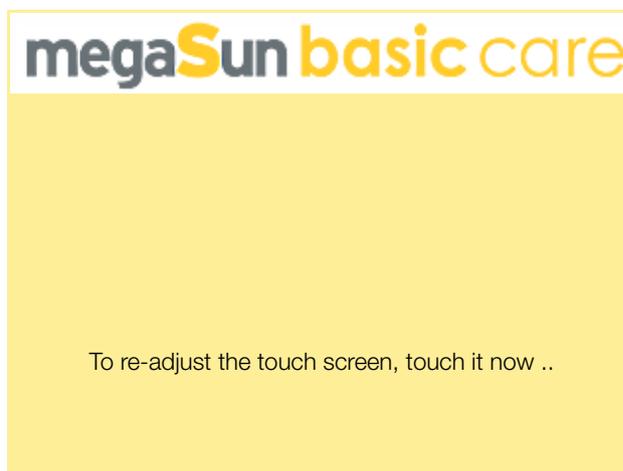
Loading can take up to 30 seconds!

Calibrating the touch-screen monitor

After loading, the screen for calibration of the touch screen monitor is displayed for a short while.

The monitor has been calibrated in the factory.

A re-adjustment is required only if problems occur during input and/or with regard to menu control.

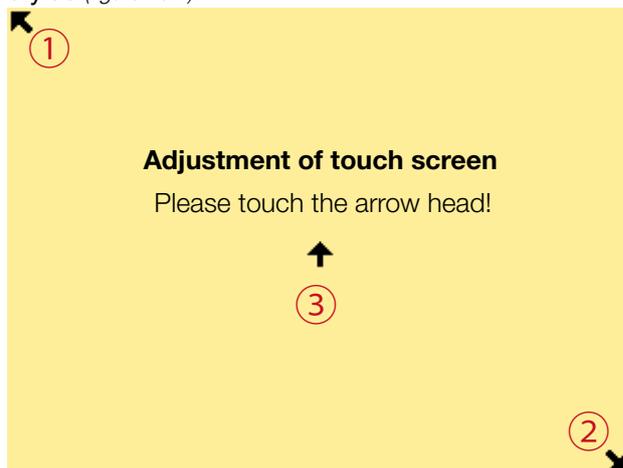


Calibration

If you want to carry out a re-calibration, touch the screen at any place while the corresponding request is displayed.

Thus you will enter the calibration mode.

Afterwards just touch the tips of the arrows with the stylus (figure 10.1).

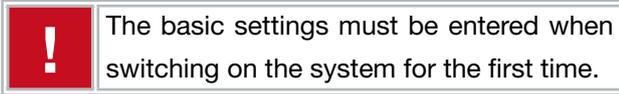


You will be asked to touch, one after the other, three arrows on the screen. The whole procedure is repeated three times!

After the calibration has been successfully terminated, you will automatically be forwarded to the start menu.

Operating modes

In the basic care start menu, you can choose between the normal mode (“normal service”) and a mode that allows for entering or changing basic settings such as location and cabin data.



Start Menu:



Mark your choice and touch “start” afterwards.

Basic information regarding navigation within the menu is available in the section “Operation” from page 6 on.

Menu structure

The following pages will provide detailed information about the menu order of basic settings and normal service. In order to provide a better overview, the explanation of the individual program steps is supplemented by the display of the menu structure on the left-hand side. Menu items that are currently being explained are always **highlighted**. Subordinate menu items that represent further branches are displayed **in a brighter hue**.

On the right-hand side, you will find the corresponding windows including some brief explanation.

The menu structure

Change basic settings

- Switch functions on / off
- Change cabin settings
 - Cabin 1
 -
 -
- Set location
- Save settings

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

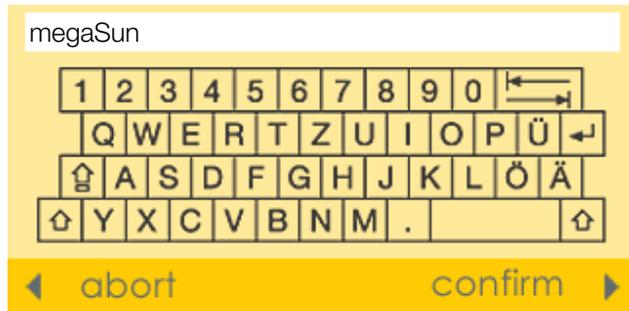
- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

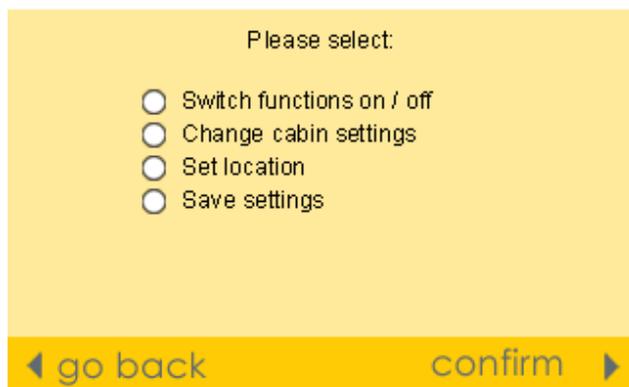
- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Change basic settings

When selecting this item, you will be asked to enter a password. Enter *megaSun* as your password and confirm it.



Pay attention to uppercase and lowercase. Then the basic settings menu will open and offer the following options:



Select the desired menu option by marking it. Then touch the “confirm” button to go to the corresponding submenu.

Touch the “go back” button to return to the start menu.

Change basic settings

Switch functions on / off

Change cabin settings

Cabin 1

.....

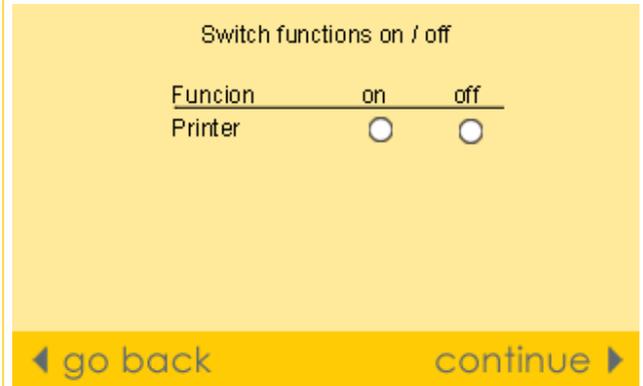
.....

Set location

Save settings

Switch functions on / off

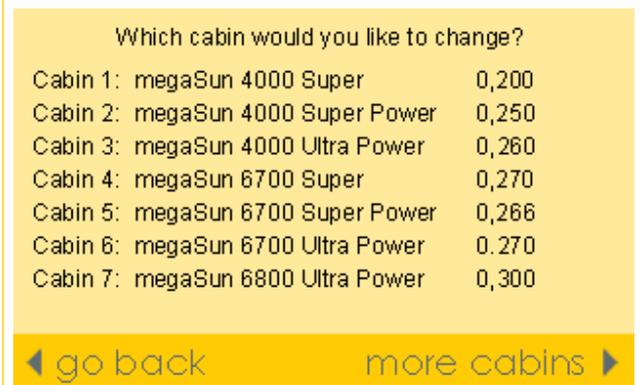
Via this function, you can switch the printer on and off. If the printer is disabled, the tanning plan will be displayed on the screen.



Change cabin settings

This menu item allows you to enter and manage the cabins of the studio (studio configuration). Apart from the cabin names, the erythema values of the tanning systems are also entered. For these values, please refer to the test report of your tanning unit.

Enter your studio configuration when you start the system for the first time. Afterwards, you can add, change or remove data of individual tanning units at any time.



“Touching” the desired cabin will take you to the corresponding submenu. If you have entered more than 7 cabins, these can be listed by touching the “more cabins” button.

Change basic settings

Switch functions on / off
Change cabin settings

Cabin 1

.....
.....

Set location
Save settings

Cabin 1

In the cabin menu, both cabin name and erythema value of the tanning unit are entered.

The following input window is available to you.

Please enter the name of the sun bed
by means of the keys:

megaSun 4000 Super

1	2	3	4	5	6	7	8	9	0	↔	
Q	W	E	R	T	Z	U	I	O	P	Ü	
⌂	A	S	D	F	G	H	J	K	L	Ö	Ä
⌂	Y	X	C	V	B	N	M	.		⌂	



The name of the tanning system must not exceed 27 characters!

Please enter the erythema of the sun bed
by means of the keys:

0,200

1	2	3	4	5	6	7	8	9	0	↔	
Q	W	E	R	T	Z	U	I	O	P	Ü	
⌂	A	S	D	F	G	H	J	K	L	Ö	Ä
⌂	Y	X	C	V	B	N	M	.		⌂	



The erythema value must not exceed 0.8 W/m²!

Use the displayed keyboard to enter your data and confirm your entries by touching

confirm ▶

The last confirmation will take you back to the studio configuration (Change cabin settings).

Information:

For the erythema value, please refer to the test report that comes with the sunbed.

Change basic settings

Switch functions on / off

Change cabin settings

Cabin 1

.....

.....

Set location

Save settings

Set location

If you select the menu option “Set location”, four windows will open one after the other so that you can enter the address of your tanning salon.

Please enter the name of the tanning studio
by means of the keys:

Please enter the address of the tanning studio
by means of the keys:

Please enter the postal code and the city
by means of the keys:

Please enter the contry
by means of the keys:

Use the displayed keyboard in order to enter your data



and  your entries.

Touch the “go back” button to return to the basic settings menu.

Save settings

This option is used to save all settings and modifications made. Mark the radio button “Save settings” and confirm by touching “continue”.

Save settings





“Acknowledging” the subsequent repeat question will take you back to the basic settings menu.

Normal service

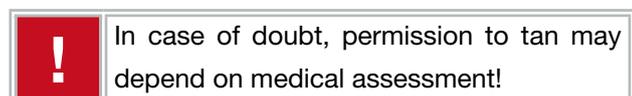
By selecting “Normal service” in the start menu, you will be taken to the analysis program.

Analysis start window



Touch the “start analysis” button to start the program.

The program flow is not a linear one. There are branches that may lead to an abortion of the program or that require a doctor’s opinion at a later stage.



Control commands:

- abort** The program is aborted. Tanning must be refrained from!
- continue** The program continues with the next question.
- go back** Takes the user back to the previously answered question in order to correct the answer, if necessary.
- confirm** The confirmation is required for safety purposes, e.g. whenever medical advice is needed.

Questions

Questions contained in the analysis:

- Age (18 or younger)
- Photodermatoses
- Illnesses
- Carcinoma
- Sunburn spots
- Moles
- Colour of the eyes
- Colour of hair
- Colour of skin
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

All questions must be answered truthfully.

This is the only way to ensure that the system can draw up a tanning schedule tailored to the client’s individual requirements.

Normal service

Questions

Age

Photodermatoses

Illnesses

- Cutaneous diseases
- Essential chronic general diseases
- Taking of medicines
- Current cold or influenza
- Immunotherapy

Carcinoma

Sunburn spots

Moles

Eye colour

Hair colour

Skin colour

Skin reactions after exposure to UV radiation

Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Questions

Questions contained in the analysis:

Age

Are you younger than 18 years?

Yes No

Negating the question will take you to the next step in the menu while affirming will provoke the following message:

People younger than 18 are not allowed to tan in sunbeds.

Nonetheless, for your own information you can go ahead with the skin analysis to determine your skin type and set up your individual tanning plan.

But we urgently request you to refrain from tanning!

Photodermatoses (Light Dermatoses)

Light Dermatoses

With solar radiation, do you currently suffer from reactions which cannot be attributed to an over-dose (sunburns)?
In the form of the so-called sun-allergy?

Yes No

Here again, negating the question will take you further in the menu. If you affirm the question, the following message will be displayed.

Information

Abnormal photo-reactions of the skin represent a counter-indication for the use of a solarium. They can lead to severe cutaneous or general diseases, when the skin is exposed to UV-radiation. A medical treatment should be recommended..

Due to your data the tanning program will be aborted.



In this case, tanning must be refrained from!

Normal service

Questions

Age
Photodermatoses

Illnesses

Cutaneous diseases

Essential chronic general diseases
Taking of medicines
Current cold or influenza
Immunotherapy

Carcinoma
Sunburn spots
Moles
Eye colour
Hair colour
Skin colour
Skin reactions after exposure to UV radiation
Number of previous tanning sessions

Measurements

Melanin measurement
Skin moisture measurement

Evaluation/output of results

Selecting a cabin
Displaying the result
 Additional information
Printing the result
Current tanning session
End of program

Illnesses

This menu provides questions regarding the client's individual state of health.

Please select the items which apply to you:

- Cutaneous disease
- Essential chronic general diseases
- Taking of medicines
- Current cold or influenza
- Immunotherapy

Marking one or more radio buttons, followed by touching the "continue" button, will lead to a corresponding submenu. If nothing is applicable to the client, do not mark anything. Touch "continue" to get to the next program item.

Cutaneous diseases

Information About Cutaneous Diseases

Some cutaneous diseases improve as a consequence of UV-radiation (e.g. psoriasis, neurodermitis). But there are also some dermatoses which get worse as a consequence of UV-radiation (e.g. erythematodes).

Before you use a solarium, please ask your general practitioner if he has any objections to your tanning treatment. .



Confirm only if a doctor has made a corresponding diagnosis.

Does your general practitioner regard a tanning treatment as harmless?

- Yes
- No

After negating the question, the program will request a further confirmation and is then aborted. You are taken back to the start window of the analysis program. If you answer in the affirmative, you will get to the next menu item.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases**
 - Taking of medicines**
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Essential chronic general diseases

Information About General Diseases

UV-radiation can be favourable for some general diseases (e.g. osteoporosis). Others (e.g. thyroid gland diseases) may get worse as a consequence of UV-radiation.

Before you use a solarium, please ask your general practitioner if he has any objections to your tanning treatment.



Confirm only if a doctor has made a corresponding diagnosis!

Does your general practitioner regard a tanning treatment as harmless?

Yes No

If this question is negated, the program requests a further confirmation and is then aborted. You will then get back to the start window of the analysis program. If the question is affirmed, you can proceed further within the menu.

Taking of medicines

Information About Medicaments (2)

Some medicaments may cause photo-allergic reactions when exposing your body to UV-radiation. Please check the patient package insert of your medicaments for information or ask your general practitioner if this is the case with your medicaments.

If yes, please check your body for any possible skin reactions after each solarium session.

Would you like to continue with the tanning program?

Yes No

If the question is answered in the negative, the program is aborted. If it is affirmed, a further question will be asked for the personal safety of the client.

Does your general practitioner regard a tanning treatment as harmless?

Yes No

After a negation of the question, the program is aborted when a further confirmation is given. You will then get back to the start window of the analysis program. If you answer the question in the affirmative, you may proceed in the menu.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza**
 - Immunotherapy**
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Current cold or influenza

Information About Infection

Please do not start the solarium sessions as long as the infection has not gone.

The immunomodulating nature of UV-radiation might have a negative effect on the infection.

After a further confirmation, the program is aborted, and you get back to the start window of the analysis.

Immunotherapy

Information About Medicaments (1)

UV-radiation might increase the effect of the medicaments that you take.

Therefore you should rather refrain from a tanning treatment, unless your general practitioner has no objections to it.



Confirm only if a doctor has made a corresponding diagnosis.

Does your general practitioner regard a tanning treatment as harmless?

Yes No

If you negate the question, the program requests a further confirmation before it is aborted. You return to the start window of the analysis program. If the question is answered in the affirmative, you can go on in the menu.



In this case of a program abort, tanning must be refrained from!

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy

Carcinoma

Sunburn spots

- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Carcinoma

Carcinoma

Do you have or have you ever had a carcinoma, especially skin cancer or early stage of it? Or has any of your blood relatives had skin cancer?

Yes No

If you negate this question, you can go on in the menu whereas a positive answer will display the following message:

Information

When you suffer or have suffered from cancer or have a genetic predisposition to cutaneous cancer you should only use a solarium if your doctor approves of it.



Confirm only if a doctor has made a corresponding diagnosis.

Does your general practitioner regard a tanning treatment as harmless?

Yes No

A negative answer results in the program being aborted. If you answer the question in the affirmative, you will reach the next question in the menu.

Sunburn spots

Sunburn Spots

Does your skin tend to produce sunburn spots (Lentigines)?

Yes No

If you negate this question, you will get to the next one in the menu. If the question is affirmed, the program will be aborted after the display of a message that must be confirmed.



In this case, tanning must be refrained from!

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy

- Carcinoma
- Sunburn spots

Moles

Eye colour

Hair colour

Skin colour

- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Moles

Moles

Have you got more than 50 dark moles or large atypical pigmentation marks?

- Yes No

Negating the question leads you further within the menu while an affirmative answer displays a message that has to be confirmed. Afterwards, the program is aborted.



In this case, tanning must be refrained from!

Eye colour

What is the colour of your eyes?

- Light blue, light grey or light green
 Blue, grey or green
 Light brown or dark grey
 Dark brown

Hair colour

Which of these descriptions comes closest to the natural colour of your hair?

- Red to reddish-brown
 Very fair to blonde
 Dark-blonde to brown
 Dark-brown to black

Skin colour

What is the colour shade of your untanned skin?

- Reddish
 Whitish
 Slightly beige
 Brownish

Mark the applicable answers to these questions. Use the “continue” button to reach the respective following question.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy

- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour

Skin reactions after exposure to UV radiation

Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Skin reactions after exposure to UV radiation

How does your skin react to sunbathing for quite a while?

- Always sunburnt
- Mostly sunburnt
- Often sunburnt
- Seldom or never sunburnt

How does your skin develop a suntan when having sunbathed repeatedly?

- Hardly any or no tan
- Gentle tan after several sunbaths
- Progressing tan, becoming clearer
- Starting off quickly, deep tan

Mark the applicable answer and touch "continue" to be taken to the next question.

This is where the skin type is going to be determined.

If the result is skin type 1, a message will appear and must be confirmed. Then the program will be aborted.



Number of previous tanning sessions

On how many days in the last 4 weeks have you sunbathed in the open air?

1	2	3	4	5	6	7	8	9	0	←
---	---	---	---	---	---	---	---	---	---	---

On how many days in the last four weeks have you used a sunbed ?

1	2	3	4	5	6	7	8	9	0	←
---	---	---	---	---	---	---	---	---	---	---

Enter the corresponding data by means of the keys displayed. Touch "continue" to proceed to the next question and to the melanin measurement.

Measurements

Measurements contained in the analysis:

Melanin measurement

Melanin Measurement



- Measurement Face 1
- Measurement Face 2
- Measurement Arm 1
- Measurement Arm 2

Skin moisture measurement

Measurement of Skin Moisture



- Measurem. forehead
- Measurem. cheek 1
- Measurem. cheek 2
- Measurem. chin

The following text describes the melanin and skin moisture measurements. If you prefer to skip the measurements, touch “continue”. A message will then be displayed and must be confirmed.

It has not been possible to determine your values. The analysis will be continued without measurement.

The results of the questionnaire are sufficient to draw up the tanning schedule.

If faulty measurements have occurred, the following message is displayed:

It was not possible to properly take down the measured value. Please repeat the measurement!

To avoid faulty measurements, please refer to the chapter “Faulty measurements and how to avoid them”.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

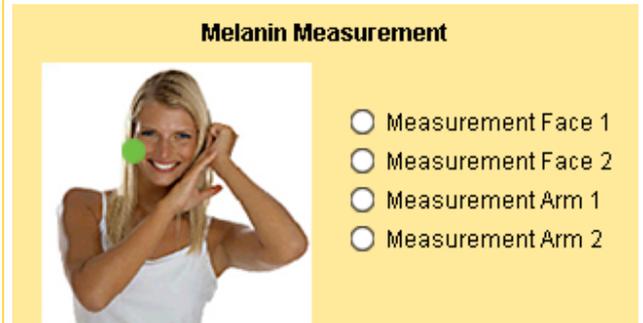
Melanin measurement

- Skin moisture measurement

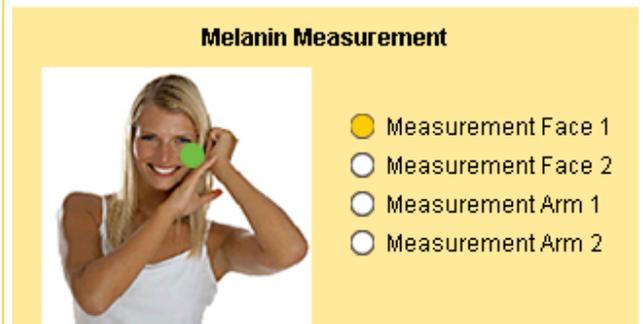
Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Melanin measurement



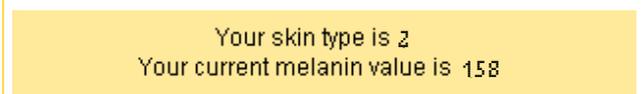
- To carry out the melanin measurement, place the previously cleaned melanin sensor on the places of the body indicated by the analysis program. It starts with “Measurement Face 1” (dot in the picture).
- Carry out the individual measurements by gently pressing the sensor onto the skin until you hear a short feedback sound.
- Repeat the individual measurements until the termination of the current measurement is indicated by the colour of the current measurement dot changing as well as by a long feedback sound.



- Repeat this procedure for all further measurement places.

The result will be displayed automatically after the last measurement.

Example:



Touch “continue” to proceed to the moisture measurement.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

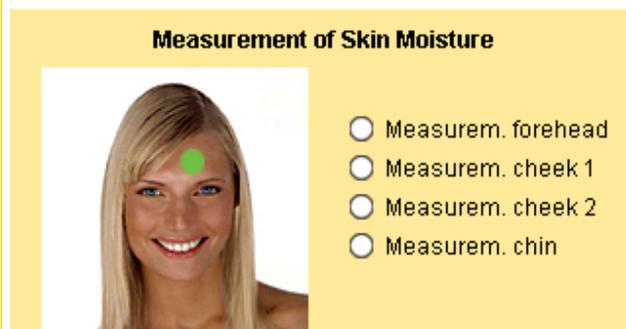
Melanin measurement

Skin moisture measurement

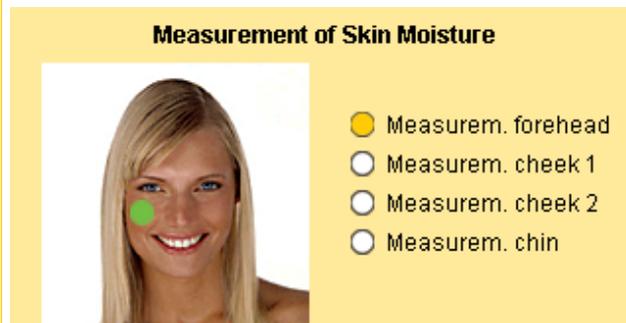
Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Skin moisture measurement



- To carry out the skin moisture measurement, place the previously cleaned moisture sensor onto the place of the body that the analysis program indicates to you. It starts with “Measurement forehead” (dot in the picture).
- Carry out the measurement by gently pressing the sensor onto the skin until you hear a short feedback sound. The termination of the current measurement is indicated by a change in colour of the current measurement dot as well as by a long feedback sound.



- Repeat this procedure for the remaining measurement places.

After the last measurement, you will automatically be taken to the cabin selection menu.

Evaluation/output of results

Once the questions have been answered and the measurements completed, the entered data will be evaluated and the results summarised in a tanning programme.

If a printer is connected, the tanning plan can be printed out. If not, the result will be displayed on the screen.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

Selecting a cabin

- Displaying the result
 - Additional information
- Printing the result
- Current tanning session
- End of program

Selecting a cabin

After the measurements, the analysis program will take you to the cabin selection menu.

This menu lists all sunbeds and tanning systems available in the studio, including the individual admissible tanning time that has been determined on the basis of the previous measurements, the answers to the questionnaire and the entered values, and that is independent of the manufacturer of the tanning system.

Which sunbed would you like to tan on?

<input type="radio"/>	Cab. 1: Test bed 1	07 min
<input type="radio"/>	Cab. 2: Test bed 2	06 min
<input type="radio"/>	Cab. 3: Test bed 3	00 min
<input type="radio"/>	Cab. 4: Test bed 4	00 min
<input type="radio"/>	Cab. 5: Test bed 5	00 min

6 - 10

If there are further tanning systems available, they can be accessed by touching the arrow. Marking the desired tanning system and touching the “continue” button will take you/your client to the individual tanning plan.

Depending on the configuration, the tanning schedule can be made available as a printout or directly as a screen display.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin

Displaying the result

- Additional information
- Printing the result
- Current tanning session
- End of program

Displaying the result

If there is no printer connected and configured, the software will take you directly to the tanning plan after you have selected a cabin. Several windows will be displayed; you can navigate in between them by using the “go back” and “continue” buttons.

Example:

Tanning plan and self-protection times:

Your Tanning Plan (Part 1)

Your skin type is "Htyp" and your moisture type is "Ftyp".

Session	Tanning time in minutes
1	"t1"
2	"t2"
3	"t3"
4	"t4"
5	"t5"

Your Tanning Plan (Part 2)

Session	Tanning time in minutes
6	"t6"
7	"t7"
8	"t8"
9	"t9"
10	"t10"

Your Self-protection Time (Part 1)

Area	Self-prot. time	Sun prot. factor	Tanning
Northern	"Ez1" min.	"Is1"	"sb1" h.
Europe	"Ez2" min.	"Is2"	"sb2" h.
	"Ez3" min.	"Is3"	"sb3" h.
Central	"Ez4" min.	"Is4"	"sb4" h.
Europe	"Ez5" min.	"Is5"	"sb5" h.
	"Ez6" min.	"Is6"	"sb6" h.

Your Self-protection Time (Part 2)

Area	Self-prot. time	Sun prot. factor	Tanning
Southern	"Ez7" min.	"Is7"	"sb7" h.
Europe	"Ez8" min.	"Is8"	"sb8" h.
	"Ez9" min.	"Is9"	"sb9" h.

To get some information on the terms, please tap on „info“, otherwise go to „continue“ in the program.

Then touch “continue” to reach the current tanning data (Current tanning session).

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information**
- Printing the result
- Current tanning session
- End of program

Additional information

The windows displaying the results have an "info" button centrally located at their bottom edge.



It is used to provide you with general information regarding tanning, skin protection and care.

Some information

Self-protection time is the time period during which you can tan your unprotected skin in the natural sun without getting sunburnt.

The sun protection factor of the applied sunscreen tells you how many times your self-protection time you can stay in the natural sun

Tanning is the recommended time for staying in the natural sun with protected skin. In order to avoid consequential damages, the time indicated for staying in the sun is only 60% of the time calculated.

After Tanning

It is particularly important to protect your skin after the tanning session.

On the basis of the moisture type of your skin we recommend

"After Sun Lotion".

After tanning, this extraordinary composition will be good for your skin and will lead to a perfect tanning result.

Your tan will be preserved and the cooling, refreshing effect offers an ideal care for your skin.

Use the control buttons to switch between the two information windows and to get back to the result windows.

Normal service

Questions

- Age
- Photodermatoses
- Illnesses
 - Cutaneous diseases
 - Essential chronic general diseases
 - Taking of medicines
 - Current cold or influenza
 - Immunotherapy
- Carcinoma
- Sunburn spots
- Moles
- Eye colour
- Hair colour
- Skin colour
- Skin reactions after exposure to UV radiation
- Number of previous tanning sessions

Measurements

- Melanin measurement
- Skin moisture measurement

Evaluation/output of results

- Selecting a cabin
- Displaying the result
 - Additional information

Printing the result

Current tanning session

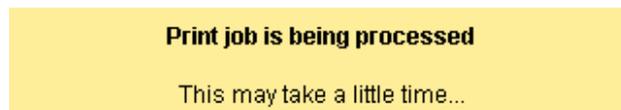
End of program

Printing the result

If a printer has been connected and the “printer” function enabled in the basic settings, a print window is displayed after the cabin selection.



Touch the “print” button to start printing your client’s tanning schedule.



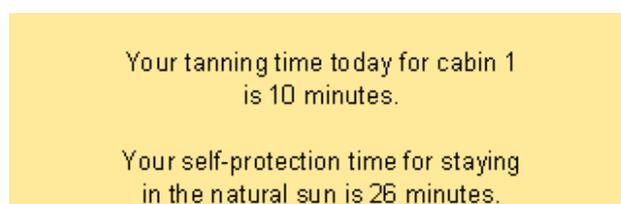
The tanning programme is then being printed.

If the printout is not possible, please refer to the chapter “Printer failure”.

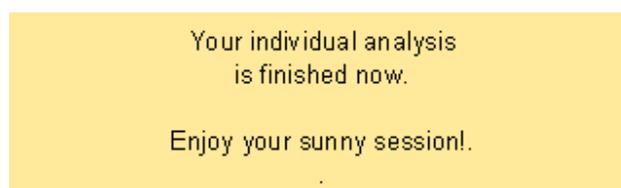
An example of such a printout is shown on the following page.

Current tanning session

In a final step, the tanning time, depending on the cabin selection, as well as the current self-protection time, are displayed.



End of program



Tanning programme (example)

megaSun[®] basic care
by KBL

TANNINGSCHEDULE

Name: John Doe Date: 26.07.2007
of: KBL-Solarien AG, Ringstr. 24-26, 56307 Dernbach, Germany

Tanning session no.	Tanning time, in cabin:
1	8
2	8
3	8
4	8
5	8
6	8
7	8
8	10
9	10
10	10

Tanning schedule

Your tan will be built up in 10 tanning sessions, at intervals of at least 2 days and at most 4 days, with a permanently rising UV-dosis.

Self-protection time and sun protection factor for the natural sun

Self-protection time is the time period during which you can tan your unprotected skin in the natural sun without getting sunburnt. The sun protection factor indicates how many times your self protection time you can stay in the sun. In order to avoid consequential damages, however, the time indicated for staying in the sun is only 60% of the time calculated.

to 45 minutes before sunbathing, so that it can perfectly work itself into the skin. The application should be repeated at regular intervals, because even waterproof cream does not offer sufficient protection after swimming. Nonetheless, it is not possible to extend the calculated tanning time by repeatedly applying sun cream.

Moisture type :

It is particularly important to take care of your skin with the appropriate care product. On the basis of your skin type, we recommend: AfterSun Lotion. After tanning, the extraordinary formula will be good for your skin and will help to build up a perfect tanning result. It will keep the tan and its cooling and vitalizing effect will be the perfect care for your skin.

Skin type:

The sunscreen should be applied 30

Please ask your tanning consultant.

Region	Self-protection time (in minutes)	Sun protection factor	Stay in the sun (in hours)
46-50 Vancouver	33	6	2
	33	12	4
	33	20	6
41-45 New York	22	10	2
	22	20	4
	22	30	6
21-25 Miami	19	12	2
	19	25	4
	19	35	6

I have been informed about the possible sensibilisation due to the medicaments that I take, and I here with take full responsibility of any undesired side effects of today's tanning session.

Signature

Parental consent Signature

Troubleshooting

System failure

In rare cases, the system can crash. If this happens, switch off the unit and wait 10 seconds before switching it on again.

If this procedure is not successful, get in touch with your KBL support team.

Printer failure

If a print command given from a menu is not executed, the following message is displayed:

Possible causes of error:

- Printer turned off
- Printer not properly connected
- IP address and/or printer queue of print server is/are not set correctly

Acknowledge the message and check the printer.

Check

- all cable connections to the printer,
- whether the printer has been switched on,
- whether the printer is sufficiently supplied with the necessary media (paper, ink).

In rare cases, other reasons may lead to a printer failure. In this case, the green LED flashes permanently, even if there is no print job pending.

If this happens, switch off the printer and wait 10 seconds before switching it on again.

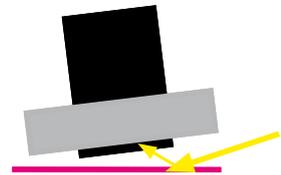
If this procedure is not successful, get in touch with your KBL support team.

Faulty measurements and how to avoid them

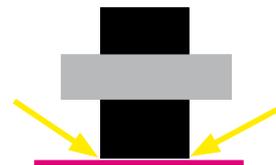
With the melanin sensor, there is a certain risk of improper handling.

Faulty measurements may result from the following:

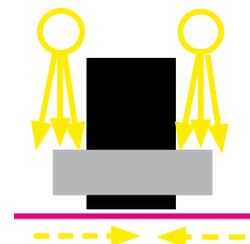
1. The sensor has not been placed vertically onto the skin (scattered light).



2. The foam ring has not been pushed down onto the skin (scattered light).



3. The measurement has been carried out in a very bright environment. Due to the light emitted by halogen spotlights, for example, the measurement area may be brightened.



Avoid these sources of error when performing your measurements by placing the face of the sensor onto the skin in an exactly planar way, by using the foam ring and by avoiding very bright lighting in the measurement environment.

Maintenance & Cleaning

Maintenance

Regular and thorough maintenance of the device makes a substantial contribution to increasing its reliability and to preserving its value over a long period of time.

	Maintenance work must only be carried out by qualified specialised personnel.
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	 DANGER
	<p>Live components Risk of fatal injury due to electric shock when touching live parts.</p> <ul style="list-style-type: none"> • Switch off mains voltage. • Protect against re-connection.

Cleaning

Always unplug the power cord from the mains supply before any cleaning work!

Plastic parts

The plastic parts of the basic care unit are made of solid high-quality ABS material.

Do not use any concentrated disinfectants or solvents or other liquids that contain alcohol to clean the surfaces. The manufacturer cannot be held liable for any damages caused by chemically active agents such as inappropriate cleaning agents.

Use a damp soapy cloth to clean the varnished and plastic surfaces.

Cleaning fluid must never get inside the device.

Sensors

Clean the sensors for melanin and skin moisture measurements with a commercially available disinfecting wipe before starting the measurement and while the customer is present. Never spray disinfectant directly onto a sensor - the cleaning fluid must not get into the sensors.



Screen

If the monitor is slightly soiled, only use a dry and soft antistatic cloth.

If the monitor is heavily soiled, clean it with a damp cloth. Only use warm water and wipe the screen dry afterwards.

Wipe slightly horizontally or in vertical direction, never in circles, and do not exert much pressure. Do not rub!

Solvents or aggressive cleaning agents can damage the surface.

Use a soft cloth only so as not to damage the LCD coating.

Please also observe the instructions for the LCD screen on page 10.

Service

For all service-related questions, please contact your responsible specialist supplier.

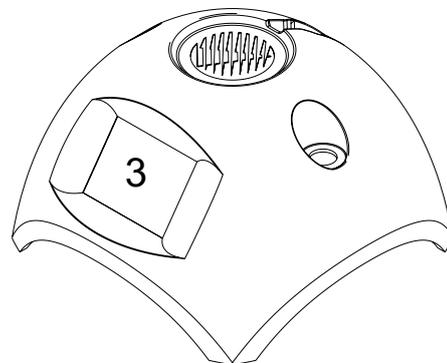
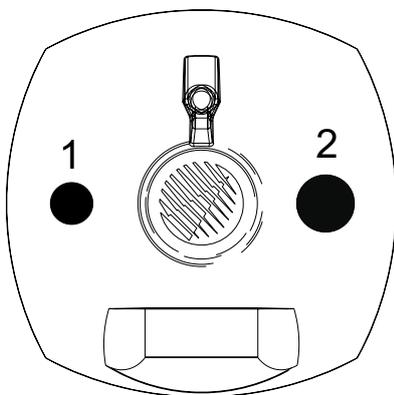
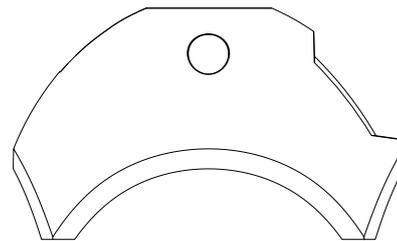
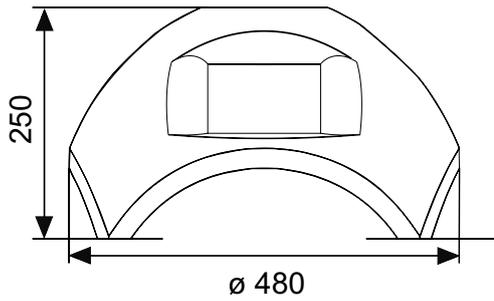
Technical data

Technical data

megaSun basic care	
Installation site	In dry rooms with sufficient air supply and ventilation
Relative air humidity	≤70 %
Ambient temperature	≤30°C / 86°F
Mains voltage	230 V / 50 Hz
Fuse	6 A
Connecting line	Power cord (3 x 1.5 mm ²) with grounded plug
Power consumption	19 W
Diameter x height mm	ø 418 x 250
Stand W x D x H mm	445 x 550 x 1100
Mass kg, basic care unit	3.9
Mass kg, stand	23
Configuration	<p>Computer system with:</p> <ul style="list-style-type: none"> • LCD touch screen monitor: active surface 86.4 x 115 mm • Sensors for measuring melanin and skin moisture • Printer HP Laserjet 1015 / USB including USB print server or printer HP Laserjet 1022n with integrated print server.
Screen (LCD touch screen)	
Lighting	<p>Lighting is effected from behind by means of cold cathode fluorescent tubes (CCFL).</p> <ul style="list-style-type: none"> • Service life of the tubes approx. 50,000 hours at 25°C / 77°F.

Views

1. Moisture sensor
2. Melanin sensor
3. Display



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