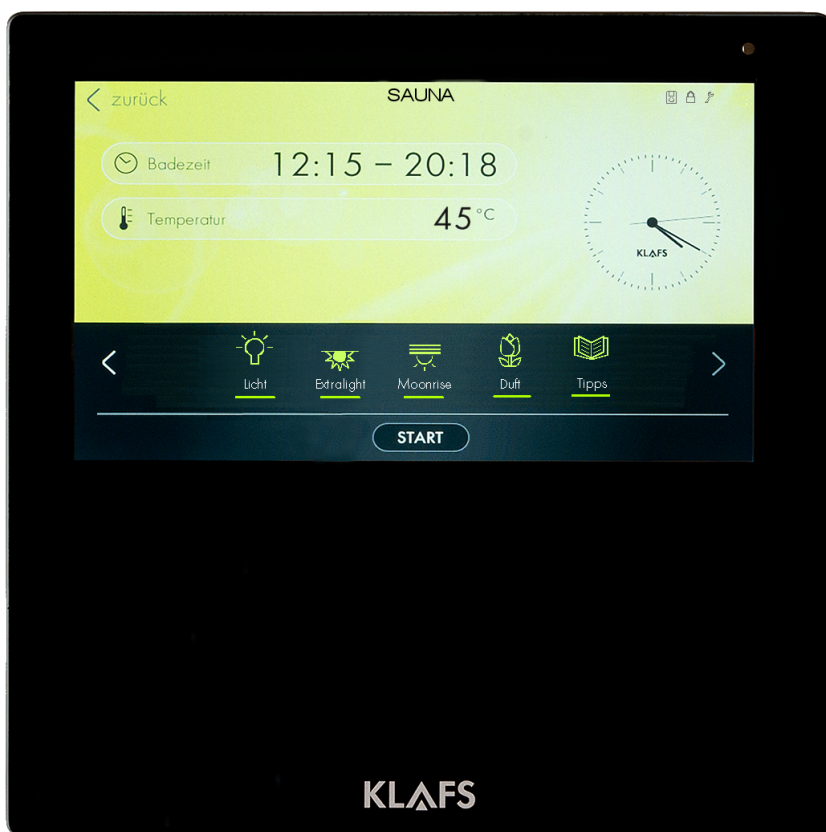


Operating instructions

KLAFS controller model 21 S1 T



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— 90 °C

— 60 °C

— 40 °C

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— 90 °C

— 60 °C

— 40 °C

1. QUICK REFERENCE GUIDE - SANARIUM CONTROLLER

The KLAFS controller enables you to operate your Sauna S1 quickly and easily. There are numerous pre-programmed standard programs available for each bathing mode. Any changes made to the standard program settings are saved in a custom program (last setting). There is a custom program for each bathing mode.



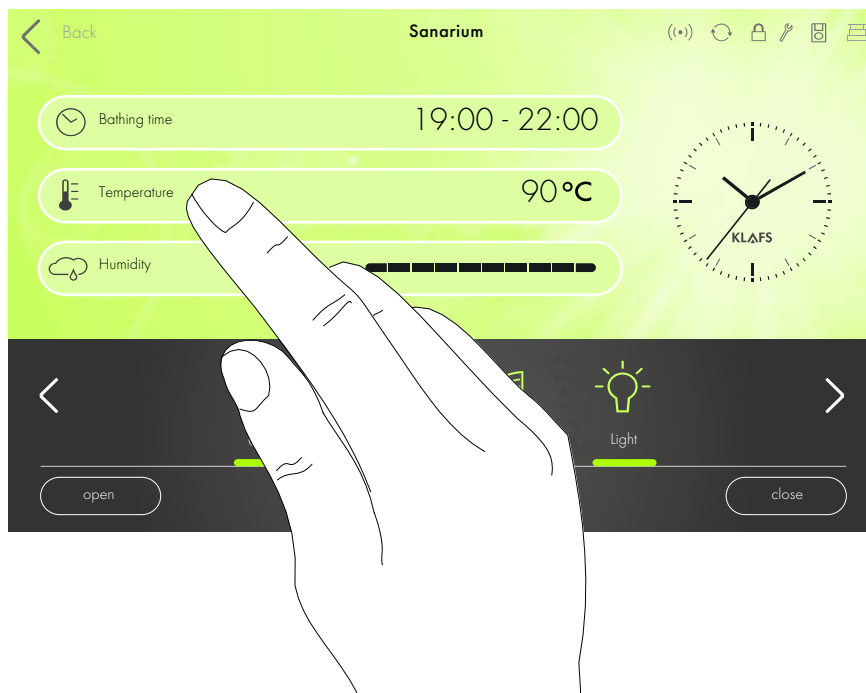
Only operate the touchscreen with your fingers. Operating the touchscreen with hard objects will leave scratches on the screen's surface or damage the screen.



Entering and changing settings will be quicker if a short pause of around 0.5 seconds is left between presses.



After five minutes of non-use, the backlighting will gradually start to dim and eventually switch off fully. If you touch the display while it is dimmed or switched off, the backlighting will switch on first. You will then be able to operate the controller via the display.



2. BATHING MODE

All bathing modes in your KLAFS Sauna S1 have been designed to improve your general health and well-being. However, you should still take into account any pre-existing health conditions when choosing your bathing program.

This includes:



- Temperature
- Relative humidity (optional)
- Bathing time.

Choose your bathing program according to its length and your condition. You should end the session and leave the cabin if you start to feel unwell.

2.1. SAUNA

SAUNA

with temperatures of 80 - 90 °C and a low relative humidity.

Warm air bath

with a particularly mild climate, temperatures of 45-60 °C and a relative humidity of up to approx. 20%.

2.2. SANARIUM (optional)

Soft steam bath

as a mild and humid bath, with temperatures of 48-60 °C and humidity adjustable in 10 increments.

Tropical bath

with temperatures of up to 75 °C and humidity adjustable in ten increments.

The temperature and the absolute humidity are controlled by a microprocessor controller in both bathing modes.

Aroma bath

with the same climate settings as the soft steam bath, plus evaporation of premium-quality herbal extracts and scents. This enhances the effect of the soft steam bath.

— 90 °C

— 60 °C

— 40 °C

3. TECHNICAL DATA

Controller model 21 S1 T: 3/N/PE 400 V - 50/60 Hz, max. 7.5 kW.

Controller model 21 S1 T: 1/N/PE 230 V - 50/60 Hz, max. 3.3 kW.

Room conditions: Temperature 0 °C to 25 °C, max. 80% relative humidity.

4. INTENDED USE

The controller is intended for use with the heaters tested and approved by the German VDE (Association for Electrical, Electronic and Information Technologies) or TÜV (Technical Inspection Authority):

- Sauna heater with or without evaporator

The controller is only to be used as intended. Intended use also assumes adherence to the manufacturer's operating, installation and servicing instructions. The manufacturer is not responsible for any damage resulting from unintended use or unapproved changes to the controller. The user does these things at their own risk.

The controller may only be operated, maintained and repaired by persons who are familiar with it and aware of the risks involved. Always observe the relevant German VDE regulations and other generally recognised safety precautions.

5. GENERAL SAFETY PRECAUTIONS

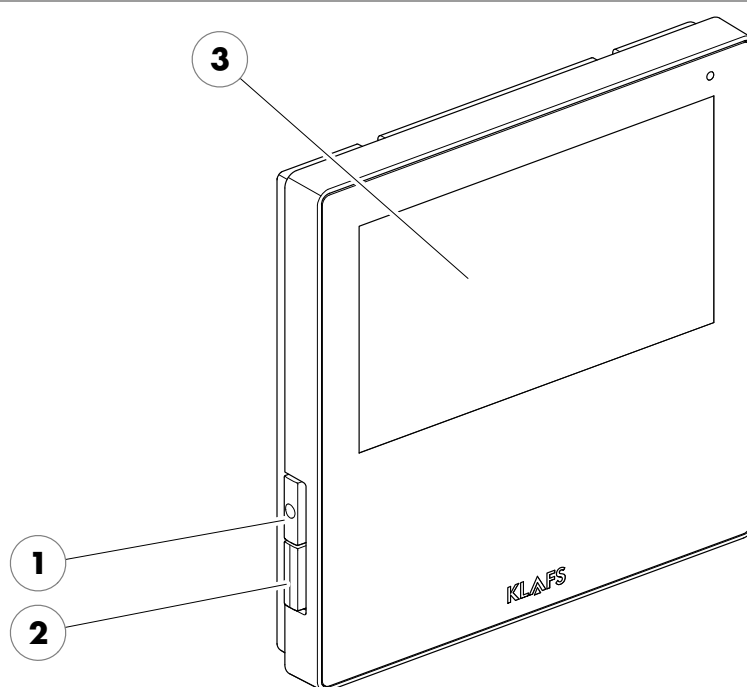
Read and observe the operating instructions and safety precautions before commissioning.

- Disconnect the controller from the mains before opening the controller housing.
- The controller may only be connected to the mains by a locally authorised electrician.
- Connect sauna units to the mains supply by inserting a safety plug into a safety socket. In the connecting feed line, use a residual-current circuit breaker $I_{\Delta N} \leq 0.03 \text{ A}$ with a contact gap of at least 3 mm.
- Only connect sauna units with a fixed connection directly to the mains via a fixed connection in accordance with VDE (German Association for Electrical, Electronic and Information Technologies) regulations. In the connecting feed line, use a residual-current circuit breaker $I_{\Delta N} \leq 0.03 \text{ A}$ with a contact gap of at least 3 mm. To minimise electrical hazards, if the unit's mains power cable becomes damaged it must be replaced by the manufacturer, by the manufacturer's customer service department, or by another suitably qualified individual.
- Please contact KLAFS customer service in case of a fault.

- Remote operation (remote power-on unit): Setting, controlling and/or adjusting the controller using a command or a remote control unit that is outside the range of vision of the sauna heater.
- Only use original KLAFS spare parts.
- Unapproved changes to the controller are not permitted.
- Install the controller in accordance with the installation instructions.
- Electrical wiring installed at a height of more than one metre inside the cabin and in cabin walls must have silicone insulation.
- Before commissioning the controller, always make sure that there are no flammable objects near the sauna heater or infrared heater in the cabin. RISK OF FIRE
- Do not use the sauna to dry your washing.
- Never use undiluted essential oils. Only use the indicated concentration (approx. 20 - 30 drops of oil in one litre of water).
- Only use KLAFS essential oil extracts.
- Never store the bottle containing the essential oil inside the sauna cabin.
- Regularly check the sauna heater for damage.
- Never pour herbal extracts, used in SANARIUM mode, directly into the evaporator. Outside of the cabin, fill the aroma cup a quarter full with water and add the herbal extracts drop by drop in accordance with the instructions on the bottle. Then re-attach the aroma cup to the steam outlet.
- Check the heater for flammable objects before restarting the timer or switching on the heater via a separate remote activation system.
- The unit can be used by people with reduced physical, sensory or mental capabilities and by people who lack experience/knowledge in using it provided that they are supervised while doing so and/or have been shown how to use the unit safely and understand the potential risks involved. Children must only use the unit under supervision. Children should not clean the unit or carry out basic maintenance on it without supervision.

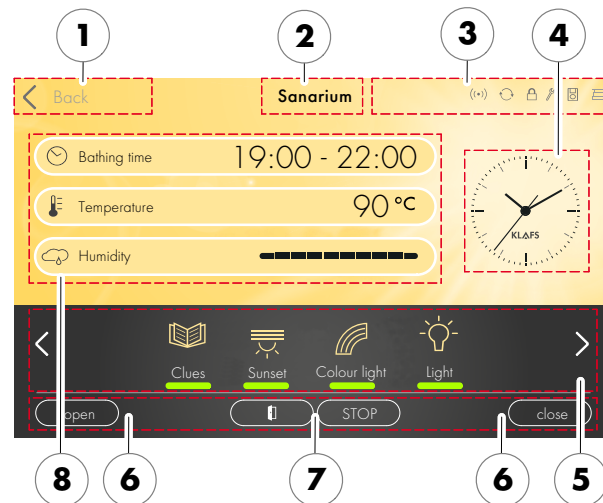
6. CONTROLLER

6.1. Operating and display elements



Item	Description
1.	Controller main switch. <ul style="list-style-type: none"> • The main switch switches off the mains power to the controller. • The clock in the controller has a power reserve for a few months in the event of a power failure.
2.	Cabin light switch. <ul style="list-style-type: none"> • When the controller is connected to the mains, the cabin light may be switched on independently of the main switch.
3.	Touchscreen. <ul style="list-style-type: none"> • See page 10.




6.2. Touchscreen



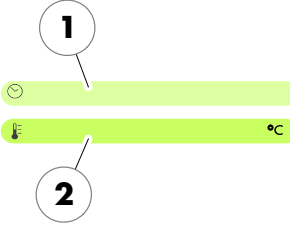
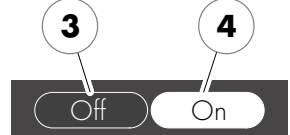
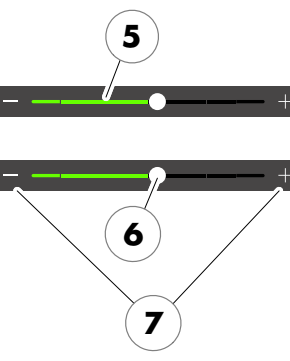


Section

- | | |
|--|--|
| <p>1. Session.</p> <ul style="list-style-type: none"> • See page 13. <p>2. Bathing mode.</p> <ul style="list-style-type: none"> • See page 13. <p>3. Status bar.</p> <ul style="list-style-type: none"> • Display only, no touchscreen function. • The symbol display depends on the configuration. • See page 14. <p>4. Clock.</p> <ul style="list-style-type: none"> • See page 15. <p>5. Extras.</p> <ul style="list-style-type: none"> • The symbol display depends on the configuration. • See page 16. | <p>6. Extend/retract the cabin.</p> <ul style="list-style-type: none"> • Open: Press and hold the symbol until the cabin has been fully extended. • Close: Press and hold the symbol until the cabin has been fully retracted. <p>7. Start/Stop, cabin control.</p> <ul style="list-style-type: none"> • Start/Stop: Starts the bathing program with the displayed bathing parameters or stops the program in progress. • See page 17. <p>8. Bathing parameters.</p> <ul style="list-style-type: none"> • Bathing time, temperature, humidity (optional). • See page 20. |
|--|--|

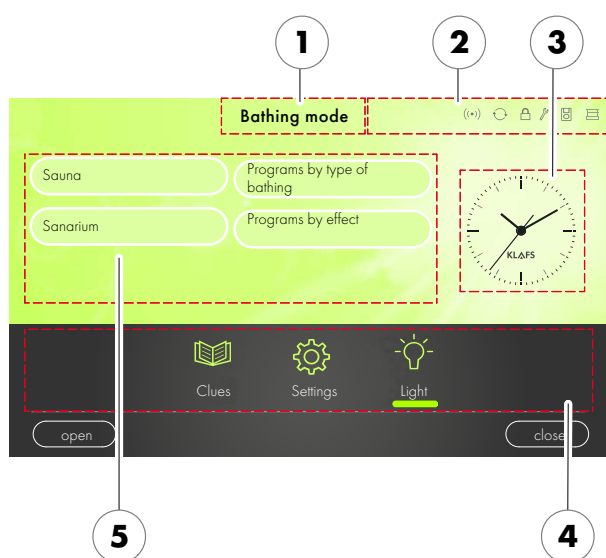
6.3. Touchscreen - Basic operation and display symbols

Example	
Symbol:	Display/function:
	The control panel must be switched on at the main switch. • See page 21.
	Operate the control panel by pressing on the touchscreen with your finger. The touchscreen is divided into display sections and function symbols. Functions are activated by pressing the symbols displayed. Entering and changing settings will be quicker if a short pause of around 0.5 seconds is left between presses.
	If you do not press any symbol or confirm the new value by touching an area outside the setting within three seconds, the controller will automatically exit input mode and apply the new setting.
	After five minutes of non-use, the backlighting will gradually start to dim and then the screen will switch off fully within a minute. If you touch the display while it is dimmed or switched off, the backlighting will switch on first. You will then be able to operate the controller via the display.
	Screen background. Green: Standby, settings. Blue: Heating up. Orange: Ready to use.
	Symbol. E.g. light. Pressing a symbol opens a dialog with the available settings and for switching the selected function on/off. Light bar (1). Indicates that a function has been activated or started. The function can be deactivated or stopped by pressing the symbol for that function again.
	Left/right arrows. Pressing the respective direction takes you to the previous/next step or enables you to scroll through the available options.

6.3. Touchscreen - Basic operation and display symbols

Example	
Symbol:	Display/function:
	<p>Symbols highlighted in colour. E.g. duration, temperature or numerical value.</p> <p>Pressing the field selects or activates the function.</p> <p>Active/selected (1). Not active (2).</p>
	<p>Switches a function on/off.</p> <ul style="list-style-type: none"> Pressing the function selects it and highlights it in colour. <p>Not active (3). Active (4).</p>
	<p>Indicators. E.g. bar scale (5).</p> <p>The bar scale displays the settings in ten bars. The bar scale is used to set parameters such as humidity, volume and screen brightness.</p> <ul style="list-style-type: none"> Press and hold the slider (6) to move the bar scale to the left or right. <p>or</p> <ul style="list-style-type: none"> Increase or decrease the value by pressing the "+" (7) or "-" (7) symbol respectively. If you do not confirm the new value by touching an area outside the setting within three seconds, the controller will automatically exit input mode and apply the new setting.
	<p>Cancel, confirm.</p> <p>Press the cross button (8) to cancel changing a setting and discard the input value. Press the tick button (9) to confirm the new setting or input value and apply it.</p>
	<p>Favourite.</p> <p>Available (10). Active (11).</p>

6.4. Touchscreen - Section 1: Sessions







1. Title line of the current window.
2. Status bar.
 - Display only, no touchscreen function.
 - The symbol display depends on the configuration.
 - See page 14.
3. Clock.
 - See page 15.
4. Tips, settings, light.
 - Tips and recommendations for bathing modes or extras.
 - Controller system settings.
 - For the system settings, see page 16.
 - Switches the cabin light on/off.
5. Bathing sessions, program selection according to criteria.



6.5. Touchscreen - Section 2: Bathing modes

Symbol:	Display/function:
Sauna	Sauna bathing mode. <ul style="list-style-type: none"> • See page 29.
Sanarium	Sanarium bathing mode (optional). <ul style="list-style-type: none"> • See page 31.
Programs by type of bathing	Bathing mode: Programs by type of bathing. <ul style="list-style-type: none"> • See page 45.
Programs by effect	Bathing mode: Programs by effect. <ul style="list-style-type: none"> • See page 47.


6.6. Touchscreen - Section 3: Status bar

Symbol:	Display/function:
	The status bar is for display only and has no touchscreen functions. The symbol display depends on the configuration.
	WLAN is installed and activated. The dot inside the symbol indicates that a WLAN module is installed. The waves appear if there is a connection between the controller and a router.
	The KNX module is connected. KNX operation and the controller are equivalent.
	"Blockade control unit" (touchscreen lock). When enabled, this function prevents the controller from being operated inadvertently. The controller can only be used after entering your password via the touchscreen. <ul style="list-style-type: none"> • Symbol appears = Touchscreen is locked. • Setting up the touchscreen lock - see servicing instructions 50701466/50701467. • To switch the touchscreen lock on/off, see page 54.




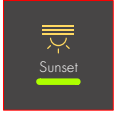

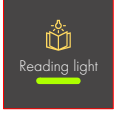

6.6. Touchscreen - Section 3: Status bar

Symbol:	Display/function:
	The controller is in Service mode.
	Cabin status - extended/retracted.



6.7. Touchscreen - Section 4: Clock

Symbol:	Display/function:
	<p>Clock.</p> <ul style="list-style-type: none"> To set the time, see page 24.

6.8. Touchscreen - Section 5: Extras

Symbol:	Display/function:
	The symbol display depends on the configuration.
	Tips. <ul style="list-style-type: none"> View interesting information about and tips on using the sauna.
	Switches the cabin light on/off. <ul style="list-style-type: none"> See page 22.
	Switches Sunset on/off. <ul style="list-style-type: none"> To change the setting, see page 56.
	Switches the coloured light on/off. <ul style="list-style-type: none"> To change the setting, see page 56.
	Switches the reading light on/off. <ul style="list-style-type: none"> Reading light switches off after a delay of up to 30 seconds after the bathing program has finished.
	Switches the SCC exhaust air module on/off. <ul style="list-style-type: none"> To change the setting, see page 56.




6.9. Touchscreen - Section 6: START/STOP, open/close, cabin control

Symbol:	Display/function:
	<p>Start/Stop.</p> <ul style="list-style-type: none"> • Press the button. <p>The selected bathing program is started with the bathing parameters shown.</p> <p>The display switches to "Stop" once the program has started. Pressing the button stops the bathing program.</p>
	<p>There must not be any objects on the sauna heater when the bathing program is switched on.</p>



6.9. Touchscreen - Section 6: START/STOP, open/close, cabin control

Symbol:	Display/function:
<div> <div>90 °C</div> <div>open</div> </div>	Extending the cabin Requirement: <ul style="list-style-type: none"> Option: Lay floor protectors. Floor protectors are required for the cabin if it is installed on flooring such as carpet. Before extending the cabin, ensure that no persons or objects are in the path of the cabin. The cabin door must be closed in order to extend the cabin. Switch on the main switch on the cabin, see page 21. Drive key for extending the cabin. <ul style="list-style-type: none"> Once the cabin has been fully extended, the bench can be pulled out from beneath the lounger. Fold down the foldaway lounger (optional), see page 37.
	Retracting the cabin Conditions for retracting the cabin: <ul style="list-style-type: none"> No bathing session may be started. The cabin must be cooled after a bathing session. Requirement: <ul style="list-style-type: none"> In the cabin, remove objects from the sauna heater or the multifunctional duct. Place the bench beneath the lounger in the cabin. Fold up the foldaway lounger (optional), see page 38. Before retracting the cabin, ensure that no persons or objects are inside the cabin or in the path of the cabin. The cabin door must be closed in order to retract the cabin. Drive key for retracting the cabin. <ul style="list-style-type: none"> Option: Put away the floor protectors. Floor protectors are required for the cabin if it is installed on flooring such as carpet.




6.9. Touchscreen - Section 6: START/STOP, open/close, cabin control

Symbol:	Display/function:
	<p>The cabin control function for operating the controller via the KLAFS Sauna app is only available for cabins that have WLAN installed and activated.</p> <ul style="list-style-type: none"> For the WLAN function, see page 14.
	<p>Cabin control.</p> <ul style="list-style-type: none"> Function for operating the controller via the KLAFS Sauna app, e.g. with a smartphone. KLAFS safety concept ASC. <p>Performs a visual precheck of the inside of the cabin to ensure that there are no flammable objects near the sauna heater or the infrared heater. The cabin may only be started via the KLAFS Sauna app if this visual check has been carried out after the last sauna session.</p> <ul style="list-style-type: none"> Standby mode. Function for remotely controlling the controller via the KLAFS Sauna app, see page 27. <p>Symbol flashing: The symbol will start flashing after you have pressed the cabin control symbol. Open the sauna door within the next 30 minutes and check the heaters for flammable objects, removing any if necessary. The symbol will be permanently lit after closing the sauna door. The cabin can now be started via the KLAFS Sauna app.</p> <p>Symbol permanently lit: The sauna cabin has been checked. A bathing mode can be started via the KLAFS Sauna app.</p> <p>Symbol off: If the sauna door is opened after the visual precheck and before the session has started, the symbol will go out. The cabin can no longer be operated via the KLAFS Sauna app. If the sauna door is opened during the remote-control standby period and the cabin temperature is less than 40 °C, the symbol will go out and the controller must be reset.</p>
	<p>If a setting has been changed on the controller or the sauna door has been opened during the remote-control standby period, the cabin can neither be started via the KLAFS Sauna app, nor can bathing parameters be changed.</p>

6.9. Touchscreen - Section 6: START/STOP, open/close, cabin control

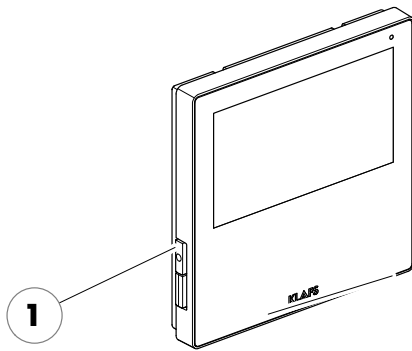
Symbol:	Display/function:
	<p>Operating the controller via the KLAFS Sauna app is only available for cabins that have WLAN installed and activated.</p> <ul style="list-style-type: none"> For the WLAN function, see page 14.
	<p>Cabin control.</p> <ul style="list-style-type: none"> Function for operating the controller via the KLAFS Sauna app, e.g. with a smartphone. <p>Carry out a visual precheck of the inside of the cabin to ensure that there are no flammable objects near the sauna heater or the infrared heater. The cabin must only be started via the KLAFS Sauna app if this visual check has been carried out after the last sauna session.</p> <ul style="list-style-type: none"> Make sure that unauthorised persons cannot access your sauna cabin during your absence.

6.10. Touchscreen - Section 7: Bathing parameters

Symbol:	Display/function:
	<p>Setting the bathing time.</p> <ul style="list-style-type: none"> See page 49.
	<p>Setting the temperature.</p> <ul style="list-style-type: none"> See page 50.
	<p>Setting the SANARIUM humidity.</p> <ul style="list-style-type: none"> See page 51.

7. BASIC FUNCTIONS AND SETTINGS

7.1. Switching the power supply on/off at the main switch



Switching the power supply on

1. Press the touch key (1).

The controller goes into standby mode. In standby mode, the display shows the bathing mode that was last selected.

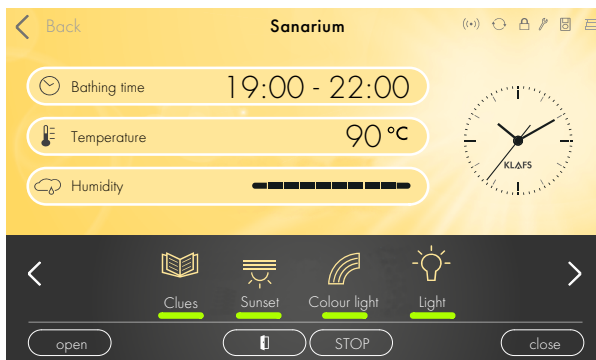
When the controller is switched on, the following symbols are displayed: Settings for the relevant bathing mode, clock, Start/Stop extras and cabin control (optional).

- For standby, see page 27.



After five minutes of non-use, the backlighting will gradually start to dim and the screen will switch off fully within a minute.

If you touch the display while it is dimmed or switched off, the backlighting will switch on first. You will then be able to operate the controller via the display.



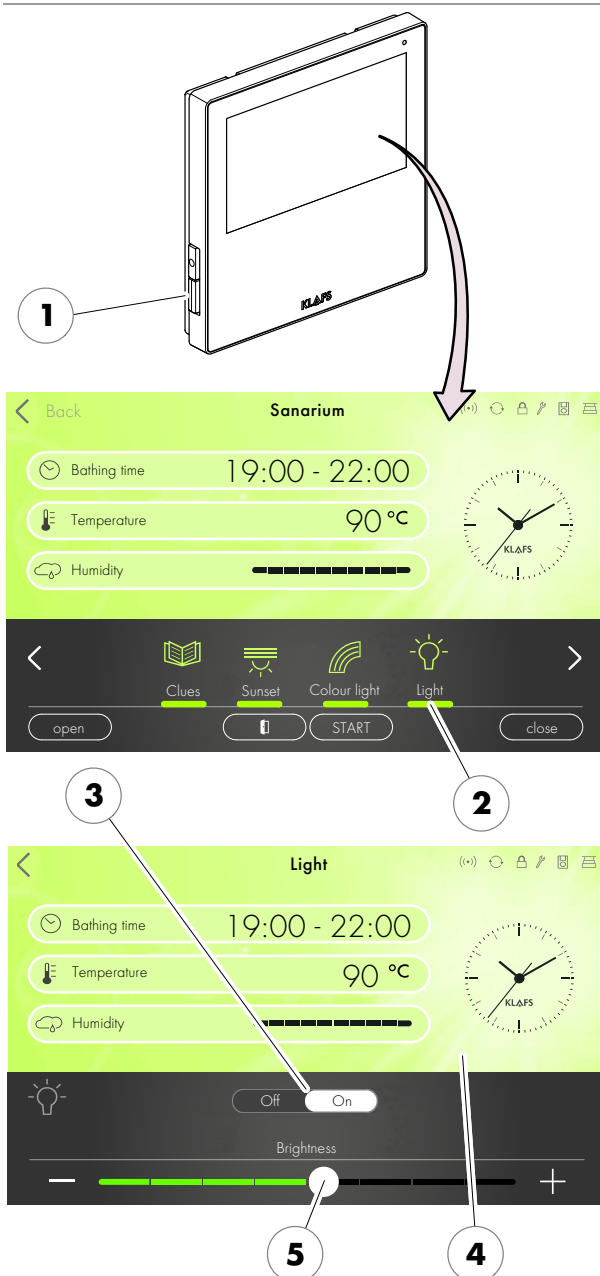
Switching the power supply off

1. Press the touch key (1).

The touchscreen is blank when the controller is switched off.

- The cabin light can be switched on even when the controller is switched off.
- The clock in the controller has a power reserve for a few months in the event of a power failure.

7.2. Switching the cabin light on/off



1. With the unit switched off at the main switch, press the button (1).
2. Or press the symbol (2) if the controller is switched on.
3. Press the Off/On symbol (3) and apply the change by touching the screen (4).

- The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen.

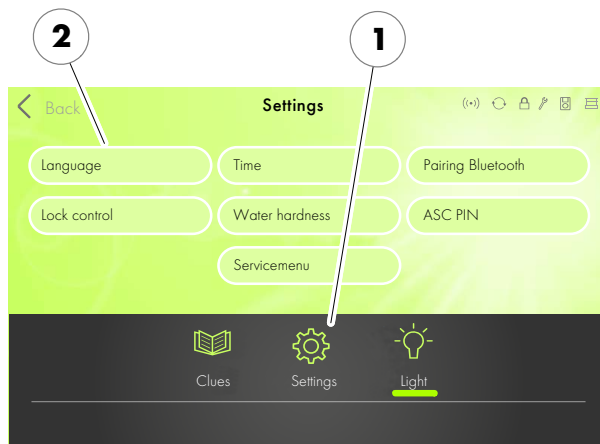
The cabin light switches on or off.

- Set the brightness of the cabin light using the slider (5).



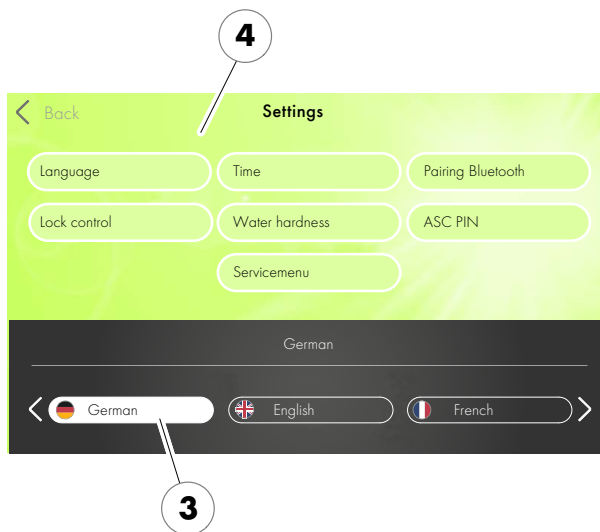
The light is not dimmed if the controller is switched off. The light can only be dimmed using the symbol (5) on the display.

7.3. Setting the language



1. Press the "Settings" symbol (1).
2. Touch the "Language" line (2).

The sub-menu for setting the language appears.

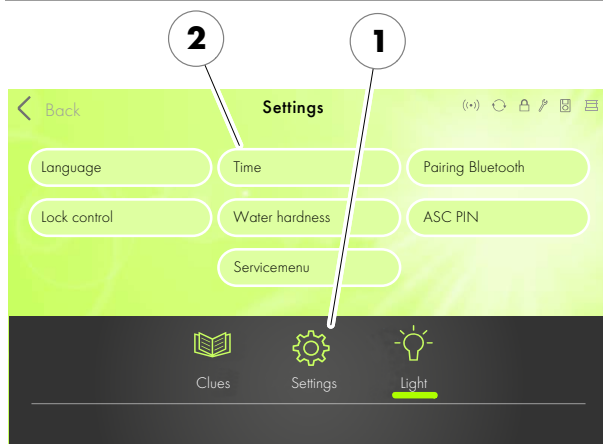


3. Select your preferred language (3).
4. Confirm the language you have selected by touching the screen (4).

The language has been set.

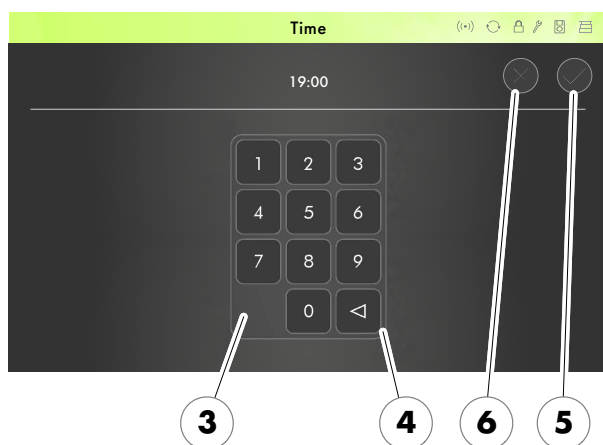
- The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen.

7.4. Setting the time



1. Press the "Settings" symbol (1).
- You can set the time by pressing the analogue clock.
2. Touch the "Time" line (2).

The sub-menu for setting the time appears.



3. Enter the time using the keypad (3). Press button (4) to delete a number if you enter the wrong one.
4. Confirm the time you have set by pressing the tick symbol (5) or cancel the process by pressing the cross symbol (6).

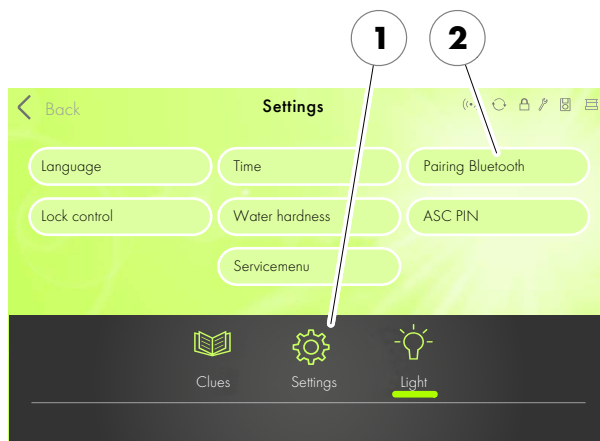
The time has been set.

- The clock in the controller has a power reserve for a few months in the event of a power failure.

7.5. Pairing a Bluetooth device (e.g. smartphone, tablet)

The AudioRelax system (optional) is Bluetooth-enabled. Pairing a Bluetooth device with the AudioRelax system allows you to listen to music through the speakers inside the cabin.

- Once a Bluetooth device has been detected for the first time, the AudioRelax system saves it in a list of up to four devices. Bluetooth devices on this list will then be automatically paired with the AudioRelax system whenever they come within its wireless range.
- If more than one Bluetooth device is in range, the system will pair with the Bluetooth device that it detected in its wireless range first. Only one Bluetooth device can be paired with the AudioRelax system at any one time.

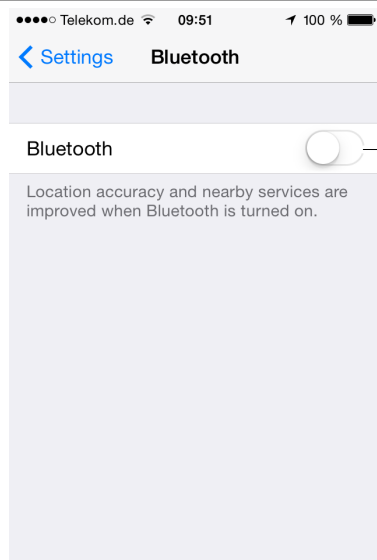


Pairing your Bluetooth device with the AudioRelax system

- Read the operating instructions for your Bluetooth device to find out how to activate the Bluetooth function.
1. Press the "Settings" symbol (1).
 2. Touch the Pairing Bluetooth (2) line.

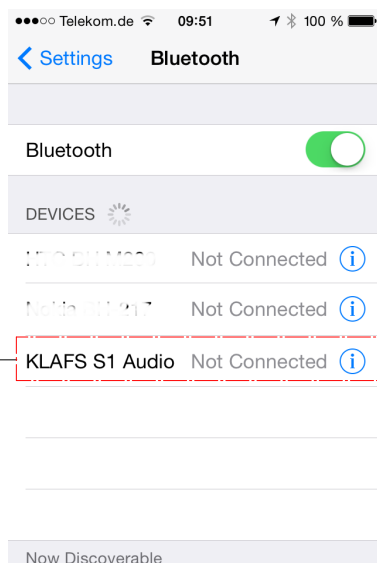
You now have three minutes to pair your Bluetooth device with the AudioRelax system.

7.5. Pairing a Bluetooth device (e.g. smartphone, tablet)



3. The following example shows how to pair a device with the controller:

Activate the Bluetooth function (3) on your Bluetooth device.



Your Bluetooth device will display a list of all available Bluetooth devices nearby.

4. Select the AudioRelax system (4) from the list shown.

The AudioRelax system will then pair with your Bluetooth device.

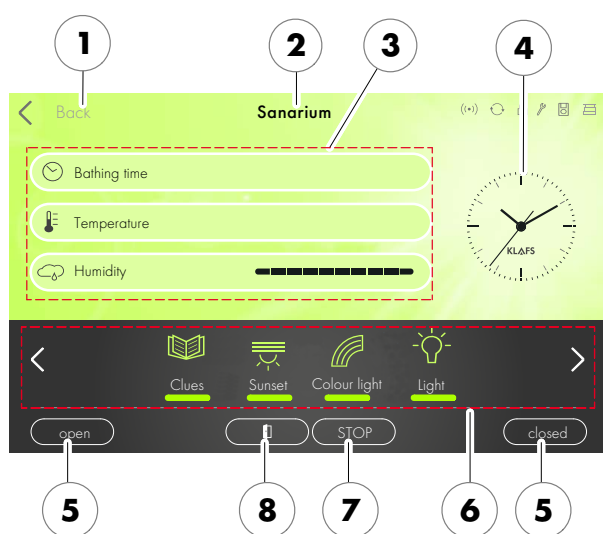
7.6. Standby mode

The touchscreen displays the following symbols in standby mode:

- Go back to the menu screen (1)
- Currently selected or last selected bathing mode (2)
- Bathing parameters (3)
- Time (4)
- open/closed (5)
- Extras (6) (depending on cabin equipment)
- Start/Stop (7)
- Door contact switch (8) (optional)

The backlighting switches off automatically after five minutes of non-use.

- The controller can be operated via the touchscreen at any time whilst in standby mode.

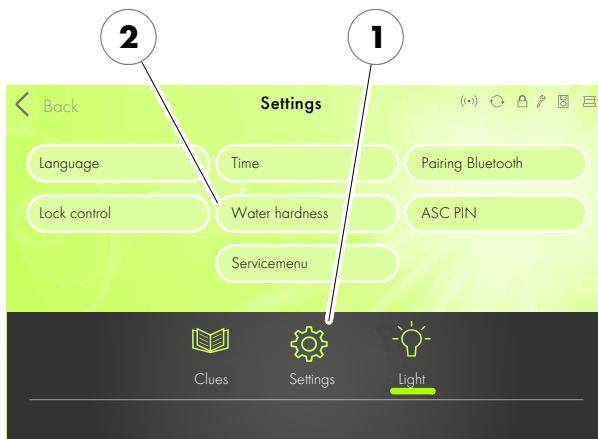


7.7. Setting the water hardness



Requirement:

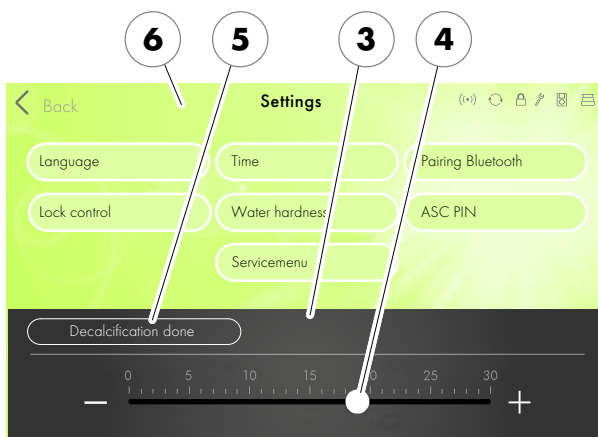
- Ask your water supplier about your area's water hardness in order to set the correct settings on the control panel.



- Press the "Settings" symbol (1).
- Touch the "Water hardness" line (2).

The sub-menu for setting the water hardness appears.

- The currently selected hardness range (3) is displayed.
- Change the water hardness setting by moving the slider (4) or pressing the +/– symbols.
 - If decalcification has been carried out, press the "Decalcification complete" symbol (5).
 - The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen (6).



Water hardness conversion table

		°dH	°e	°fH	ppm	mval/l	mmol/l
German level	1 °dH =	1	1.253	1.78	17.8	0.357	0.1783
English level	1 °e =	0.798	1	1.42	14.3	0.285	0.142
French level	1 °fH =	0.560	0.702	1	10	0.2	0.1

7.8. SAUNA bathing mode



Risk of fire

Before commissioning the controller, always ensure that there are no flammable objects near the sauna heater or infrared heater in the cabin.



To enjoy a sauna, empty the evaporator water tank.

- See page 41 - Decommissioning the evaporator.



Prerequisite: The cabin must be fully extended. The cabin status symbol (1) appears. Extending the cabin, see page 17.



Starting SAUNA mode

1. Press the SAUNA symbol (2).

7.8. SAUNA bathing mode



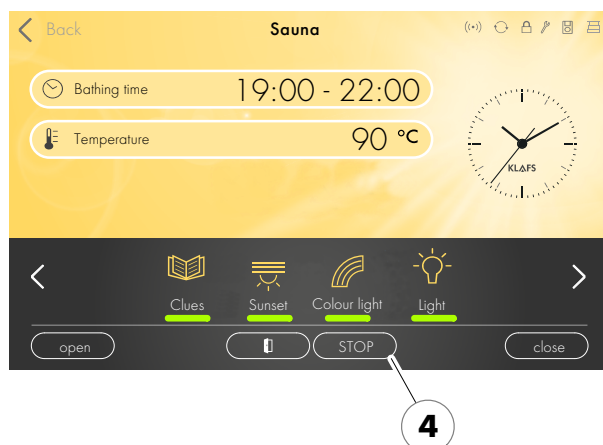
Starting SAUNA mode

The background colour (3) changes to blue during the heat-up phase. The sauna starts with the bathing parameters that were set for the last program used.

The sauna heater switches on and the cabin heats up.

The background colour (3) changes to "ready to use" (orange). The cabin is ready to use.

- To select a special program/custom program, see page 45.
- To change the temperature, see page 50.
- To change the bathing time, see page 49.



Stopping SAUNA mode

1. Press the STOP symbol (4).

The sauna heater switches off.

The controller then goes into standby mode.

- After a bathing session, open the cabin door to ventilate the cabin.

7.9. SANARIUM bathing mode (optional)

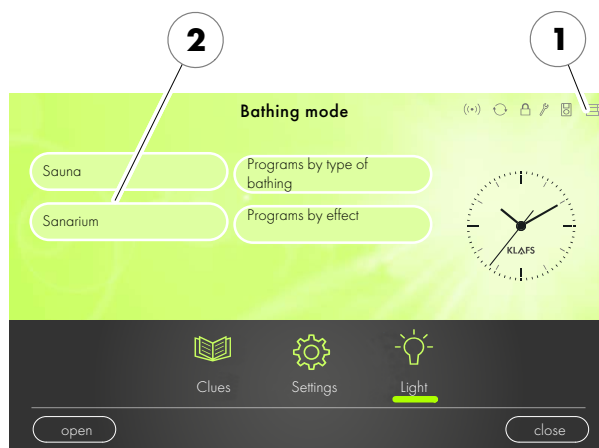


Risk of fire

Before commissioning the controller, always ensure that there are no flammable objects near the sauna heater or infrared heater in the cabin.



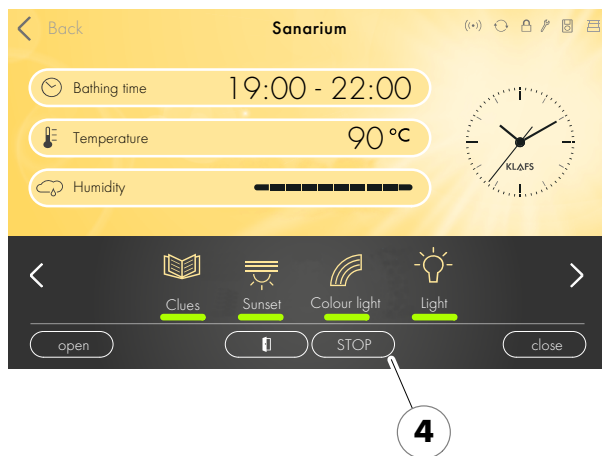
Prerequisite: The cabin must be fully extended. The cabin status symbol (1) appears. Extending the cabin, see page 17.



Starting SANARIUM mode

- For SANARIUM mode, commission the evaporator beforehand.
 - Preparing the evaporator - see page 39.
1. Press the SANARIUM symbol (2).

7.9. SANARIUM bathing mode (optional)



Starting SANARIUM mode

The background colour (3) changes to blue during the heat-up phase. The sauna starts with the bathing parameters that were set for the last program used.

The sauna heater switches on and the cabin heats up.

The background colour (3) changes to "ready to use" (orange). The cabin is ready to use.

- To select a special program/custom program, see page 45.
- To change the temperature, see page 50.
- To change the humidity, see page 51.
- To change the bathing time, see page 49.

Ending SANARIUM mode

1. Press the STOP symbol (4).

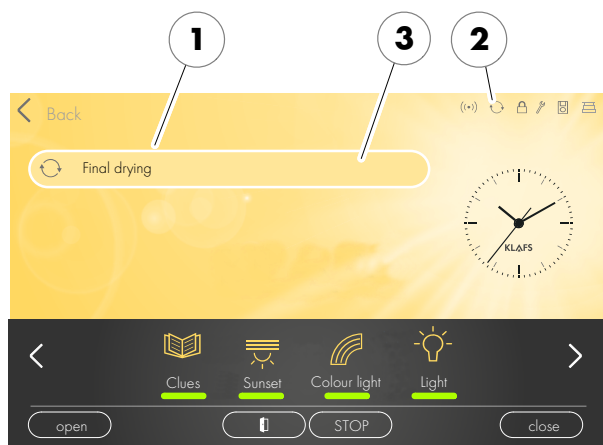
The sauna heater switches off.

Subsequent drying starts.

The controller then goes into standby mode.

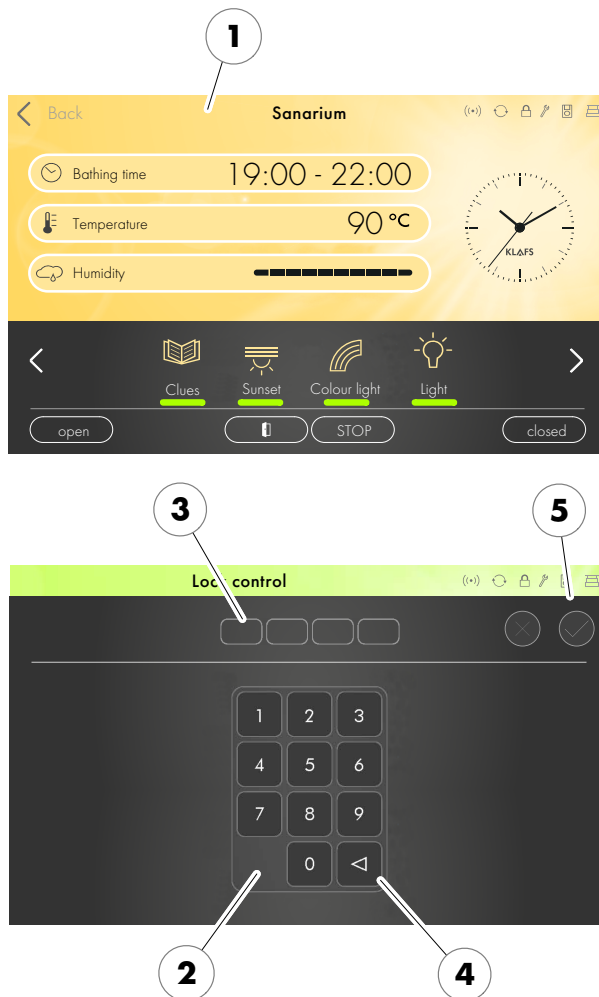
7.9. SANARIUM bathing mode (optional)

Automatic Final drying (1) after ending SANARIUM mode



- If SANARIUM was used for more than ten minutes, Final drying will start automatically after ending the program. Symbol (2) is displayed. The remaining program time before Final drying starts is shown on the display (3).
- The sauna heater heats up again, causing an increased exchange of air. This ventilates the cabin.
- The controller will automatically switch to standby mode once Final drying has finished.

7.10. Blockade control unit (keypad lock)



Removing "blockade control unit" (keypad lock)

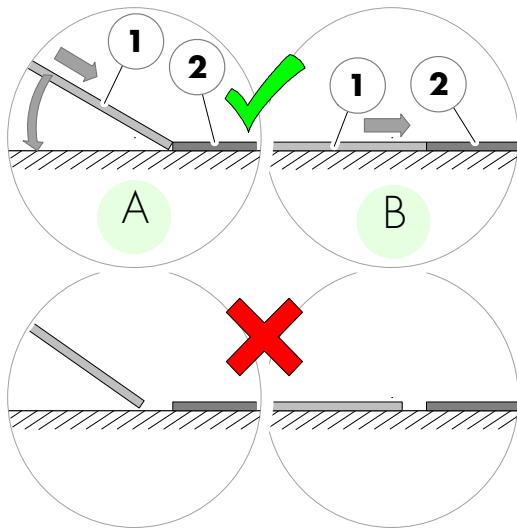
1. Touch the screen (1).

The screen for entering your security code will appear.

2. Enter the four digits using the keypad (2). The digits will appear in the line above (3). Press button (4) to delete a number if you enter the wrong one.
3. Confirm the four digits you entered by pressing the tick symbol (5).

- Once you have entered your security code correctly, you will be able to operate the controller again.
- If you do not touch the screen for a few seconds, the controller will go into standby and "blockade control unit" will be reactivated.
- To enable/disable "blockade control unit", see page 54.
- If you have forgotten your security code, you can disable "blockade control unit" by entering the universal code.
Universal code = "1357".

7.11. Extending the cabin



Lay floor protectors (optional)

- Floor protectors are required if the cabin is installed on flooring such as carpet. If floor protectors are not required, proceed to "Extending the cabin".
- 1. Lay the floor protector (1) flush with the floor protector underneath the cabin (2).

Extending the cabin

Requirement: The main switch on the cabin must be switched on, see page 21.

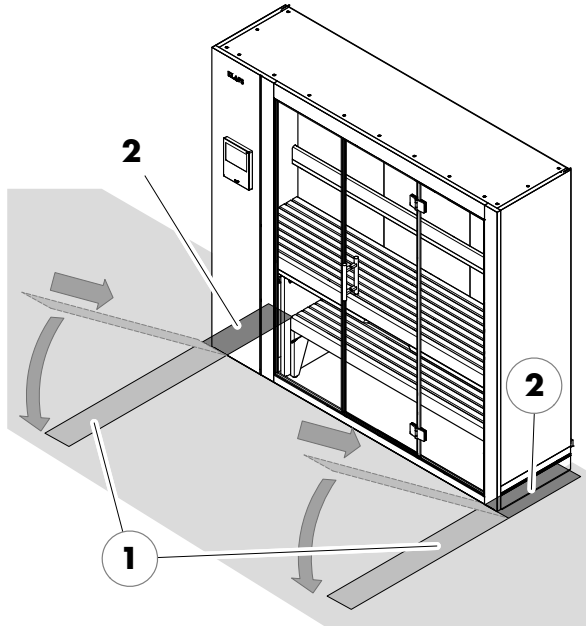


Risk of injury and material damage

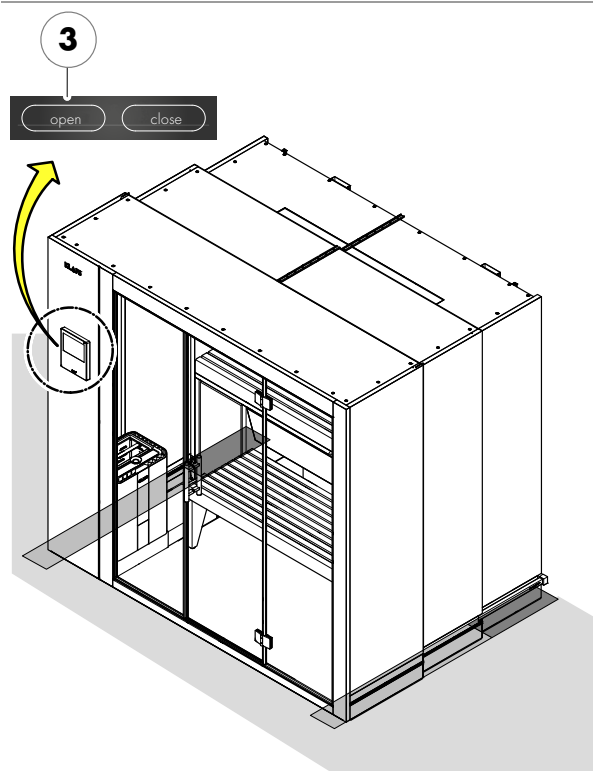
Before extending the cabin, ensure that no persons or objects are in the path of the cabin.



The cabin door must be closed in order to extend or retract the cabin.

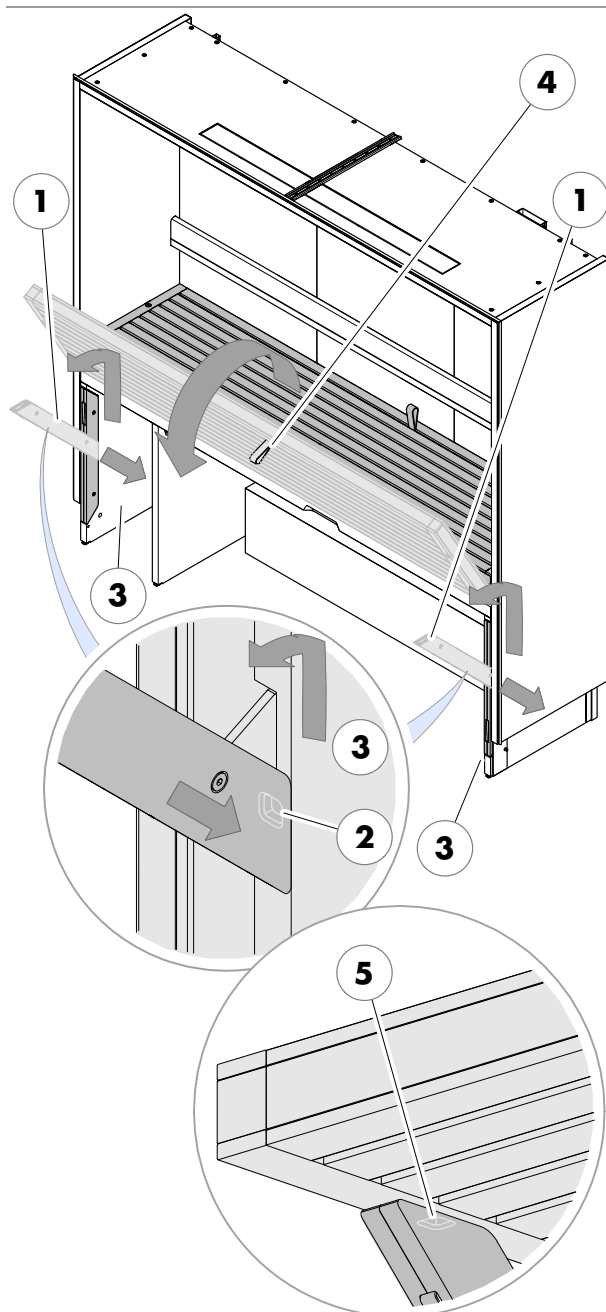


7.11. Extending the cabin



2. Extend the cabin. Press and hold the touch key (3) until the cabin is fully extended.
 - Once the cabin has been fully extended, the bench can be pulled out from beneath the lounger.
 - The controller can now be used to start a bathing program.

7.12. Folding down the foldaway lounger (optional)



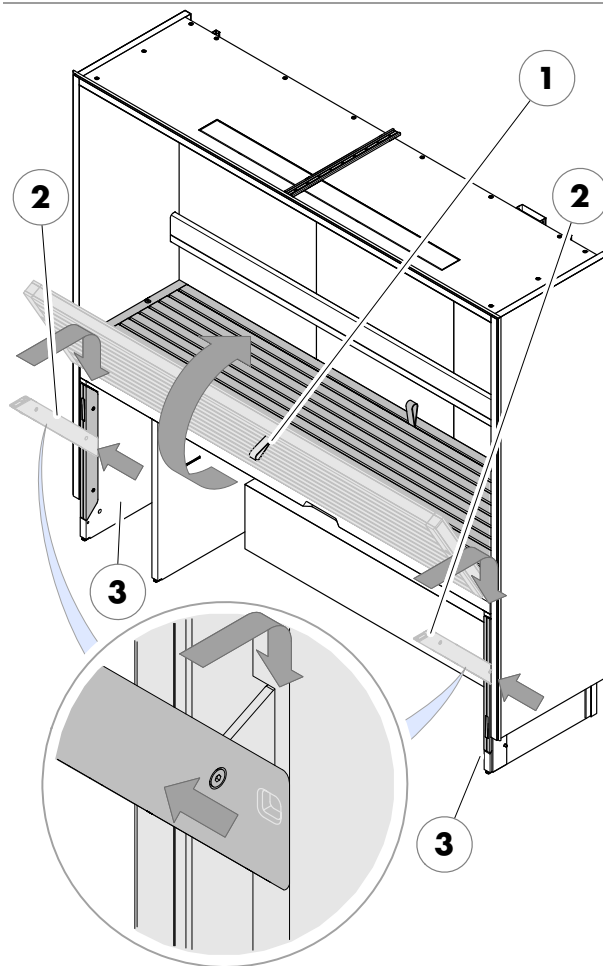
Risk of injury



Do not use the foldaway lounger until the supports (1) have been swung out and the foldaway lounger is firmly secured.

- Extend the cabin before folding down the foldaway lounger.
 - Extending the cabin, see page 17, 35.
1. Pull out the supports (1) on both sides. Insert the plug (2) into the sitting position on the side member (3).
 2. Grasp the foldaway lounger (4) by the hand strap and pull it down.
 3. Insert the plug (5) into the supports on both sides of the foldaway lounger.

7.13. Folding up the foldaway lounger (optional)



Risk of crushing

Only handle and fold up the foldaway lounger using the hand strap (1).

1. Grasp the foldaway lounger (1) by the hand strap, pull it up and fold it over onto the lounger.
 2. Pull out the supports (2) on the left and right and push them fully into the side member (3).
- Only retract the cabin once the foldaway lounger has been folded up properly and the supports have been swung in.

7.14. Varius S - Commissioning the evaporator

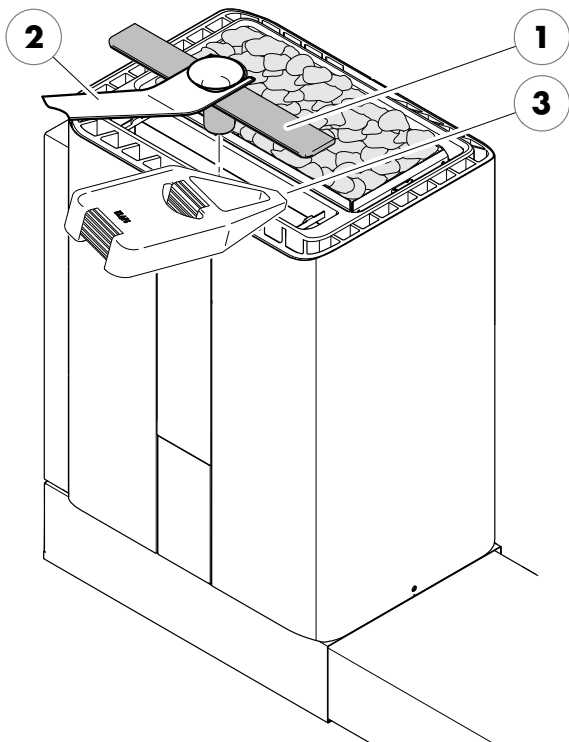


Filling the evaporator with water

Fill the evaporator when it is cold.
The maximum fill capacity is 3 litres.



Do not put any additives into the water.



Risk of fire

Before commissioning, always check that there are no inflammable objects on or near the sauna heater.



Hot surfaces - Risk of scalding!

The cover (1) will be hot straight after a bathing session has finished.
Protect your hands and fingers from burns.

Filling the evaporator with water

1. Use the aroma fork (2) to remove the cover (1).
2. Fill the water container (3) with water via the opening.
 - The maximum fill capacity is three litres of water.
3. Put the cover (1) back on.



Topping up the evaporator

Topping up the evaporator when it is hot:
The temperature difference causes mechanical stress in the tank, which may become apparent due to a noise when topping up.

7.14. Varius S - Commissioning the evaporator



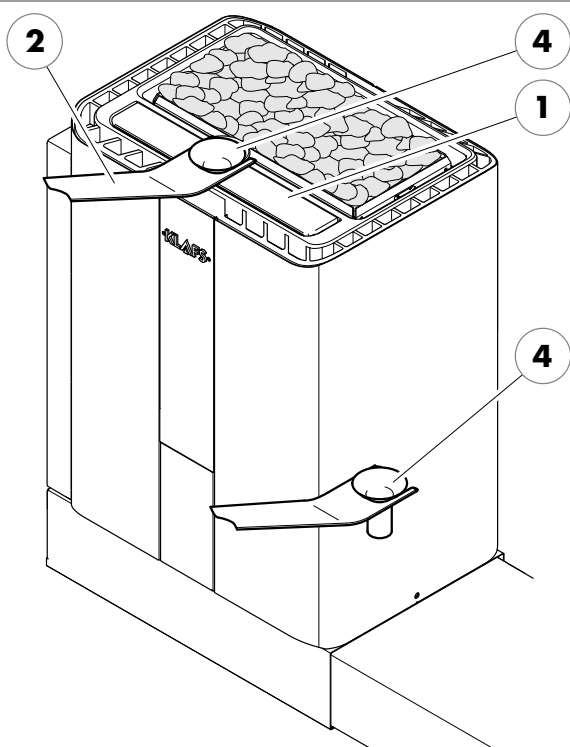
Risk of fire

Do not fill the aroma cup on the heater.



Hot surfaces - Risk of scalding!

The cover (1) will be hot straight after a bathing session has finished.
Protect your hands and fingers from burns.



1. Use the aroma fork (2) to remove the aroma cup (4).
2. Pour diluted scent into the aroma cup (4) at a distance from the sauna heater.
3. Put the aroma cup (4) back in.

7.15. Varius S - Decommissioning the evaporator



Drain the water after every bathing session.

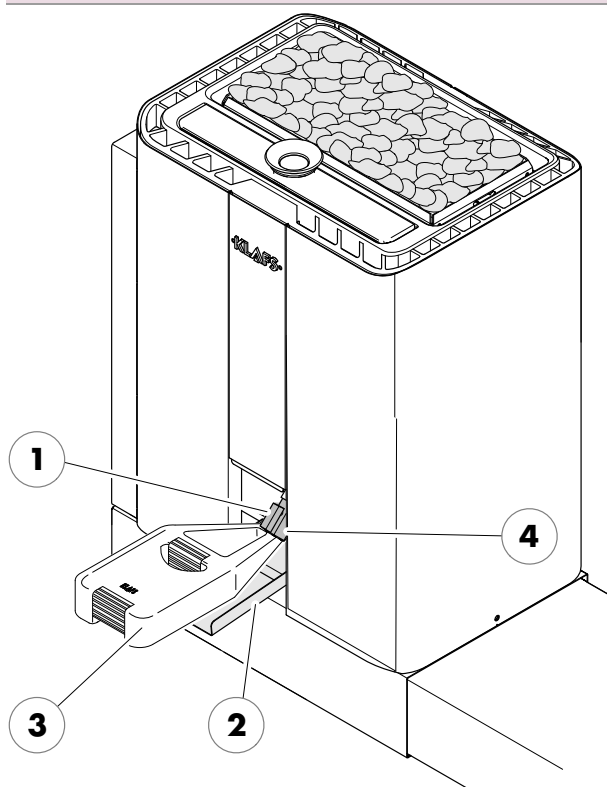


Danger of scalding

The residual water will be hot straight after a session has finished.
Protect your hands and fingers from scalding.

Varius S - Draining the residual water

1. Press down on the cover flap (1) at the bottom (2) and then pull it out.
2. Hold the filler can (3) below the drain valve (4).
3. Open the drain valve (4).
4. Close the drain valve (4) again after draining the evaporator.
5. Close the protective cover (1) again.
6. Drain the filler can (3).



7.15. Varius S - Decommissioning the evaporator



Risk of fire

Do not empty the aroma cup in the vicinity of the sauna heater.

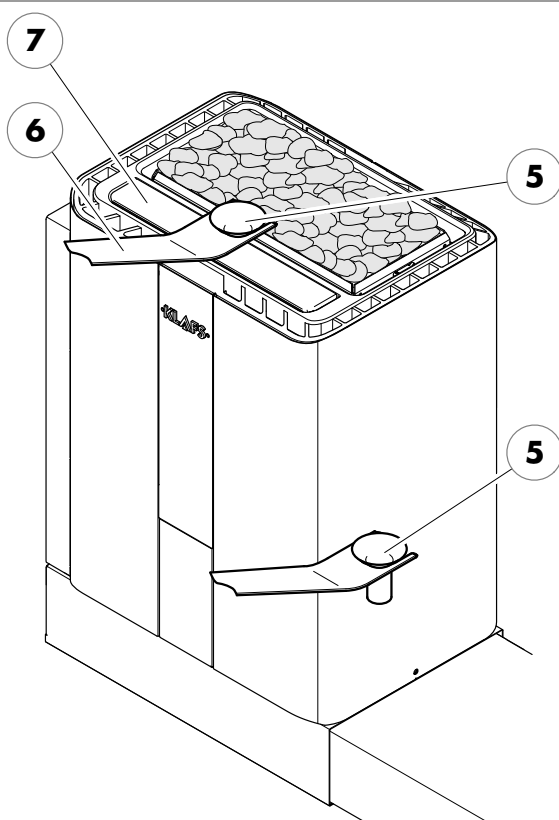


Danger of scalding

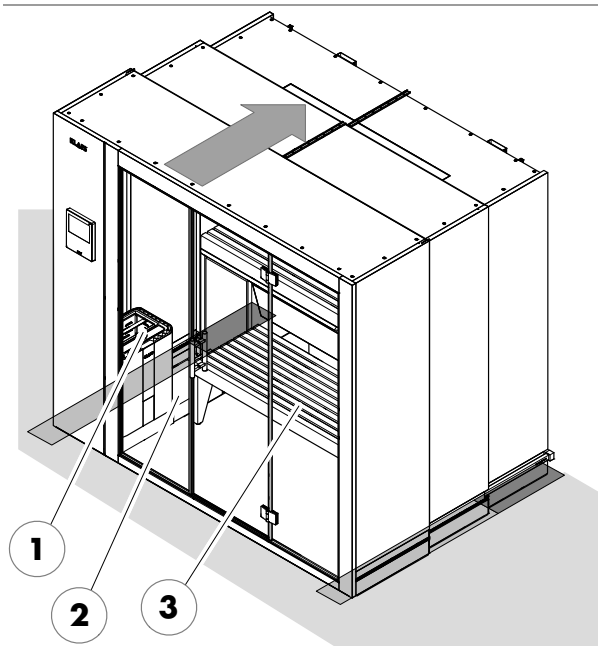
Immediately after the bathing session, the aroma cup is still hot.
Protect your hands and fingers from scalding.

Emptying the aroma cup

1. Use the aroma fork (6) to remove the aroma cup (5) from the cover plate (7) and empty at a distance from the sauna heater.
2. Rinse the aroma cup with water.
3. Place the aroma cup (5) back on the cover (7).



7.16. Retracting the cabin

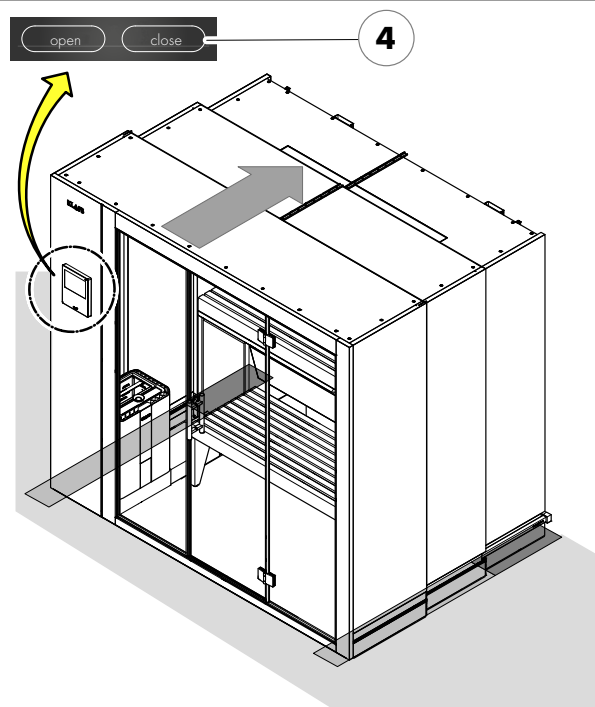


Retracting the cabin

Conditions for retracting the cabin:

- No bathing session may be started.
 - The cabin must be cooled after a bathing session.
1. Remove any objects on the sauna heater (1) or the multifunctional duct (2) inside the cabin.
 2. Place the bench (3) beneath the lounge in the cabin.
 3. Fold the foldaway lounge (optional) back up.
- Fold the foldaway lounge back up, see page 38.

7.16. Retracting the cabin



Risk of injury and material damage



Before retracting the cabin, ensure that no persons or objects are inside the cabin or in the path of the cabin.



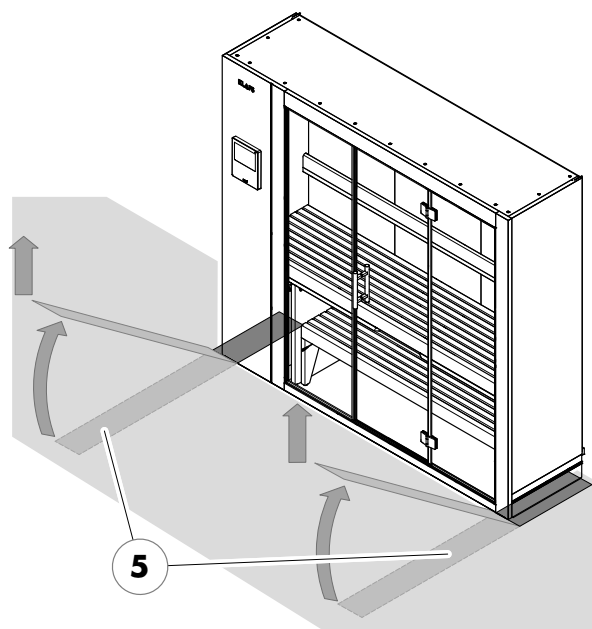
The cabin door must be closed in order to extend or retract the cabin.

Requirement: The main switch on the cabin must be switched on, see page 21.

4. Retract the cabin. Press and hold the touch key (4) until the cabin is fully retracted.

Put away the floor protectors (optional)

- Floor protectors are required for the cabin if it is installed on flooring such as carpet.
5. Take the floor protectors (5) off the floor and store them elsewhere, e.g. inside the cabin.



8. CUSTOM SETTINGS

8.1. Programs by type of bathing



Each bathing mode offers the last bathing program you used (with your custom settings) and special programs with preset bathing parameter settings that cannot be changed.

Any changes made to bathing parameters are saved automatically.

If the personalised bathing parameter settings are the same as the settings in one of the standard programs, the standard program is automatically selected.

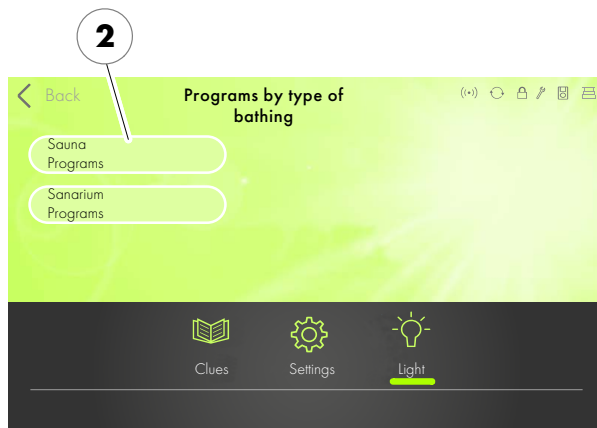
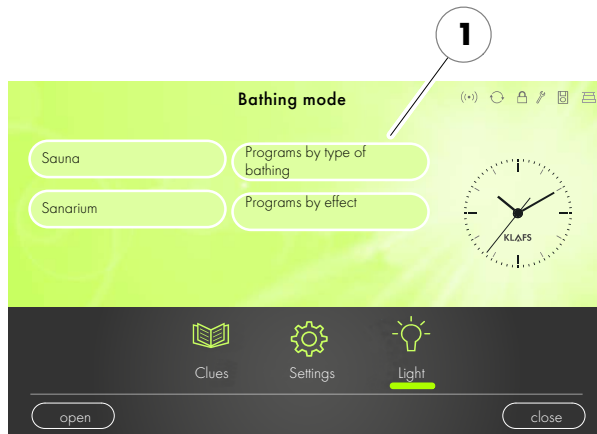
Programs by type of bathing

1. Press the Programs by type of bathing symbol (1).

The program selection screen appears.

2. Touch the program you would like to use. E.g. Sauna Programs (2).

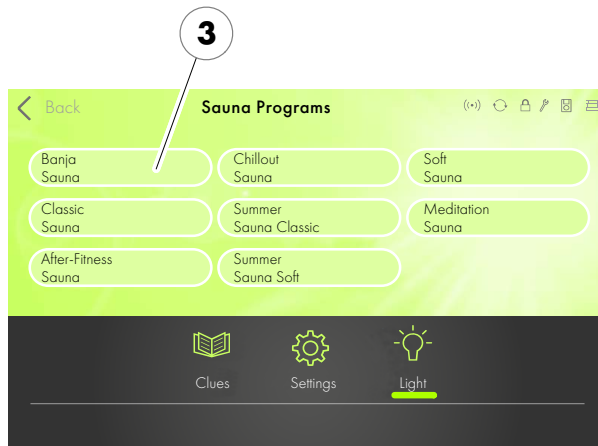
Additional sub-programs to the selected program are displayed.



8.1. Programs by type of bathing

Programs by type of bathing

3. Touch the program you would like to use. E.g. Banja Sauna (3).



The program descriptions (4) are displayed alongside the saved bathing parameters (5) such as the temperature, humidity, intensity or bathing time.

4. Start the selected program by pressing the symbol (6).



8.2. Programs by effect



Each bathing mode offers the last bathing program you used (with your custom settings) and special programs with preset bathing parameter settings that cannot be changed.

Any changes made to bathing parameters are saved automatically.

If the personalised bathing parameter settings are the same as the settings in one of the standard programs, the standard program is automatically selected.

Programs by effect

1. Press the Programs by effect symbol (1).

The program selection screen appears.

2. Touch the program you would like to use. E.g. Cardio (2).

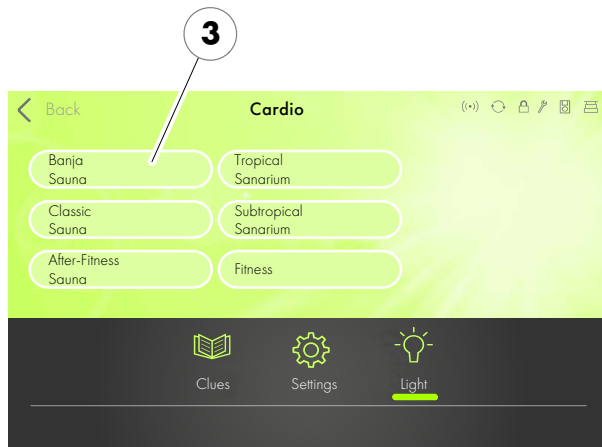
Additional sub-programs to the selected program are displayed.



8.2. Programs by effect

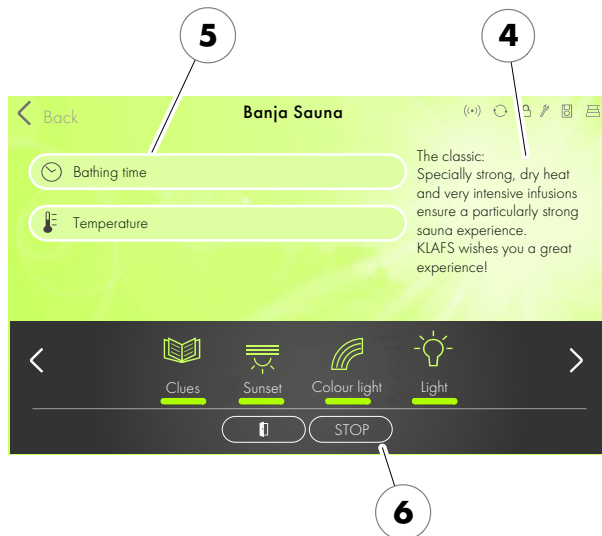
Programs by effect

3. Touch the program you would like to use. E.g. Banja Sauna (3).



The program descriptions (4) are displayed alongside the saved bathing parameters (5) such as the temperature, humidity, intensity or bathing time.

4. Start the selected program by pressing the symbol (6).



8.3. Setting the bathing time



Risk of fire

Before commissioning the controller, always check that there are no inflammable objects on or near the sauna heater.



If the slider is at the far left, the selected bathing mode will start immediately.



In preset time mode (start time in the future), the length of the last heat-up phase is subtracted.

Bathing time

1. Press the Bathing time line (1) to activate it.

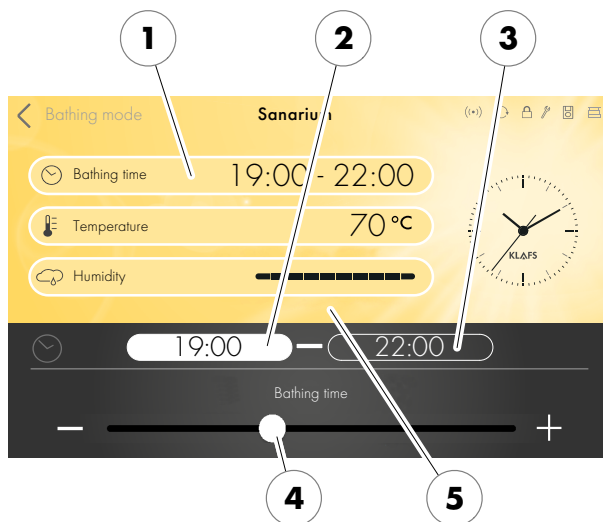
The Bathing time line (1) changes the background colour.

2. Select "Start time" (2) and use the +/- buttons or the slider (4) to set the start time.
3. Select "End time" (3) and use the +/- buttons or the slider (4) to set the end time.

- Slider at the far right = maximum Bathing time; slider at the far left = Bathing time of one minute.

4. Confirm the setting by touching the screen (5).

- The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen.



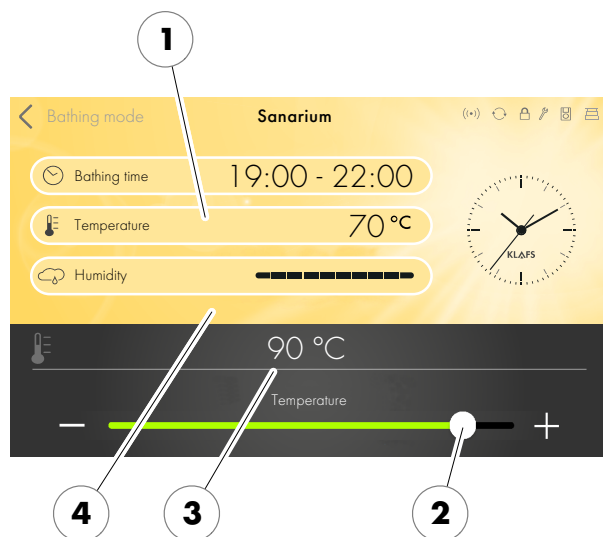
8.4. Setting the temperature

Changing the temperature

1. Press the Temperature line (1) to activate it.

The Temperature line (1) changes the background colour.

2. Use the +/- buttons or the slider (2) to set the temperature (3) you require.
 3. Then confirm the setting by touching the screen (4).
- The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen.



— 90 °C

— 60 °C

— 40 °C

8.5. Setting the SANARIUM humidity (optional)



The humidity can only be set in SANARIUM mode.

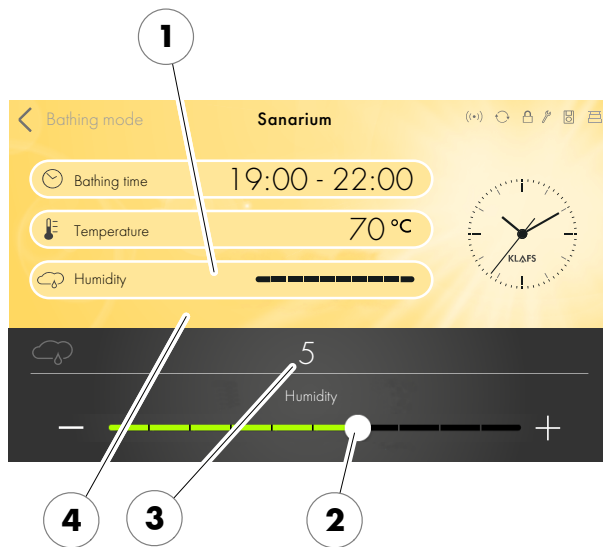
Changing the humidity

1. Press the Humidity line (1) to activate it.

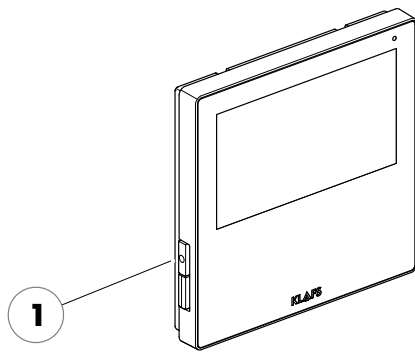
The Humidity line (1) changes the background colour.

2. Use the +/- buttons or the slider (2) to set the humidity (3) you require.
3. Then confirm the setting by touching the screen (4).

- The value is automatically accepted after three seconds. Alternatively, this can be done by tapping on an empty area of the screen.



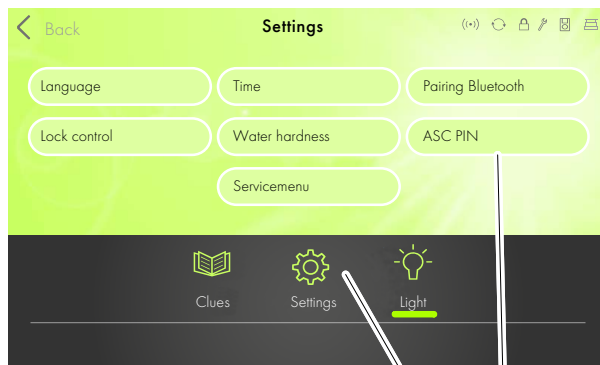
8.6. Assigning a PIN to the controller (optional)



Entering a PIN for remote control of the controller

A PIN is required to switch on the controller via the KLAFS app.

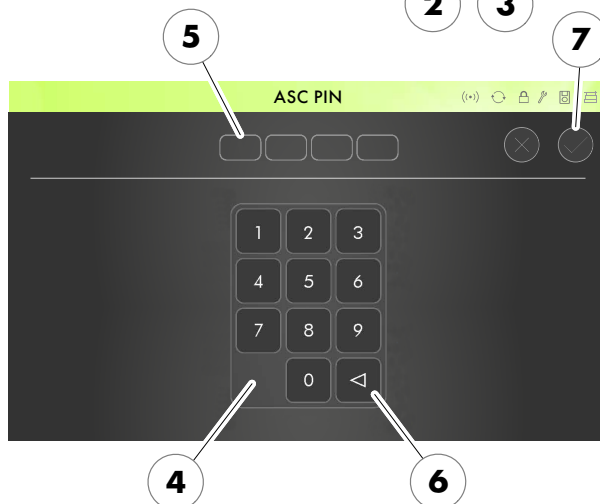
1. Switch the controller on at the main switch (1).
2. Press the "Settings" symbol (2).
3. Press the ASC PIN (3) line.



The screen for entering the ASC PIN will appear.

Create and note down your PIN (four-digit number).

4. Enter the four digits using the keypad (4). The digits will appear in the line above (5). Press key (6) to delete a number if you enter the wrong one.
5. Confirm the four digits you have entered by pressing the tick symbol (7).

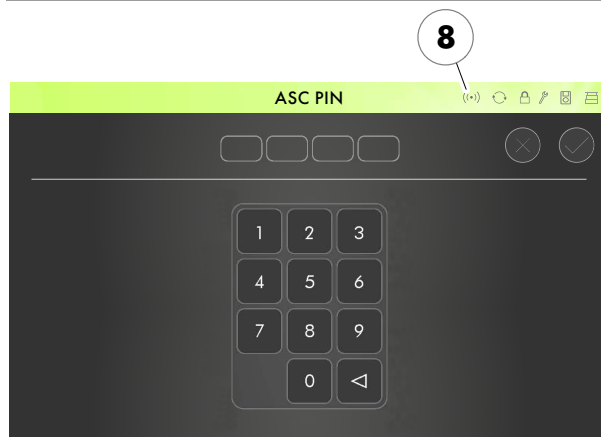


Any four-digit number can be used as your PIN except for "1111" and "2222", which have already been allocated to KLAFS.



The lock will be activated when you switch on the controller and once the bathing session has ended.

8.6. Assigning a PIN to the controller (optional)



6. Switch the controller off and then on again at the main switch (1).

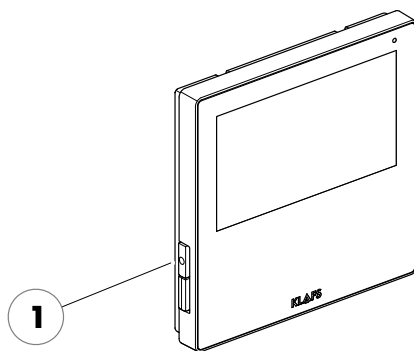
The KLAFS WLAN module in the controller will be activated after you have switched the controller on.

The activation process takes approximately 30 seconds and is indicated by the symbol (8) flashing.

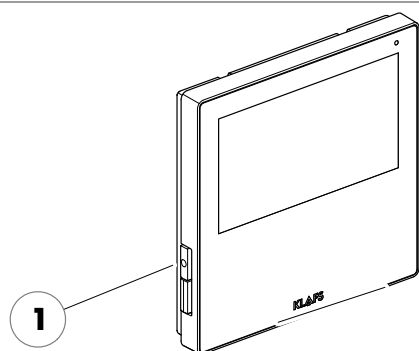
Once the activation process is complete, the WLAN symbol (8) stops flashing and remains lit.

The KLAFS WLAN module is now ready to be configured.

To configure the KLAFS WLAN module, see the installation instructions with the item number 5060108/5060109.



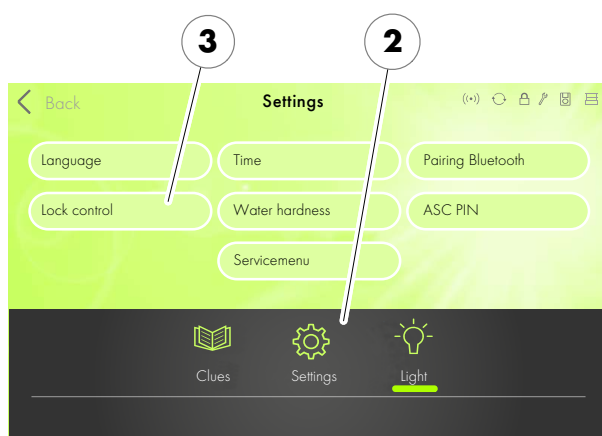
8.7. Enabling/disabling "blockade control unit" (locking/unlocking the keypad)



Calling up the "blockade control unit" menu

When enabled, the "blockade control unit" function prevents the controller from being operated unintentionally.

1. Switch the controller on at the main switch (1).
2. Press the "Settings" symbol (2).
3. Press the "Blockade control unit" line (3).



Any four-digit number can be used as your PIN except for "1111" and "2222", which have already been allocated to KLAFS.

8.7. Enabling/disabling "blockade control unit" (locking/unlocking the keypad)

Enabling "blockade control unit" (keypad lock)

Create and note down a custom security code (four-digit number).

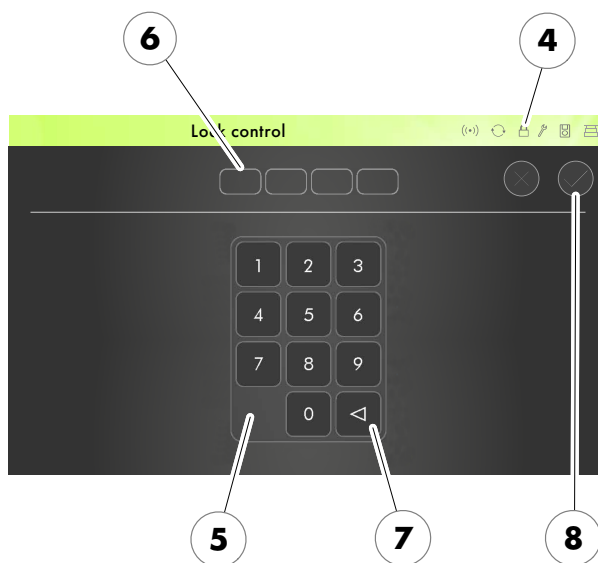
4. Enter the four digits using the keypad (5). The digits will appear in the line above (6). Press button (7) to delete a number if you enter the wrong one.
5. Confirm the four digits you entered by pressing the tick symbol (8).

When "blockade control unit" is enabled, the lock symbol will appear (4).

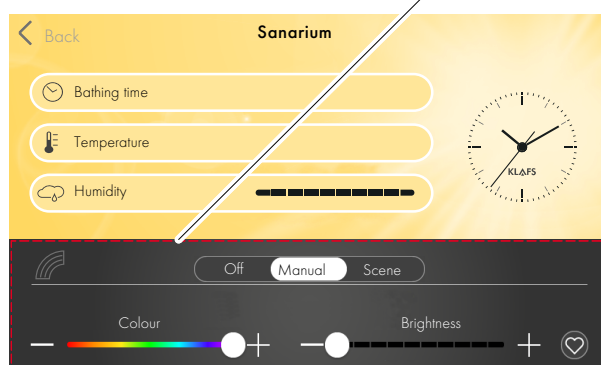
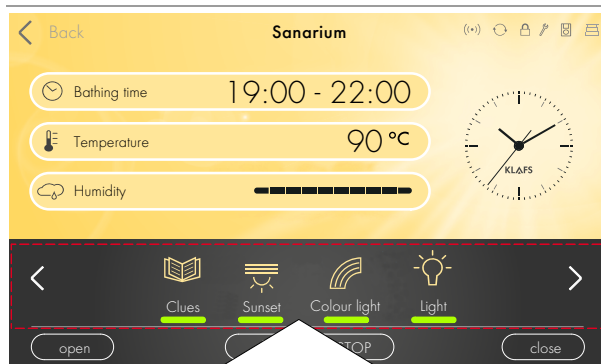
Once the controller has switched to standby, you will not be able to operate it without entering your custom security code first.

Disabling "blockade control unit" (keypad lock)

1. Call up the "blockade control unit" menu.
2. Enter "1111" using the keypad (5). The digits will appear in the line above (6).
3. Confirm the four digits you entered by pressing the tick symbol (8).



8.8. Extras



Switching extras on

- The number of symbols displayed depends on the functions and features of the cabin.
- 1. Press the relevant symbol, e.g. (1).

The extra is switched on.

- The green light bar (3) indicates that the extra is switched on.
- If the extra is adjustable, a sub-menu (2) will appear underneath it.

Switching extras off

1. Press the relevant symbol (1).
- The special feature is switched off.
 - The green light bar (3) disappears.
 - Or switch off the extra (2) in the sub-menu.

8.8. Extras

Switching on and configuring adjustable extras

1. You can change the settings of adjustable extras (1) using the +/- buttons or the slider (2).
- Setting the adjustable extras (1) to 0 switches them off.
2. Apply the change by touching the screen (3).
- The green light bar (4) appears.

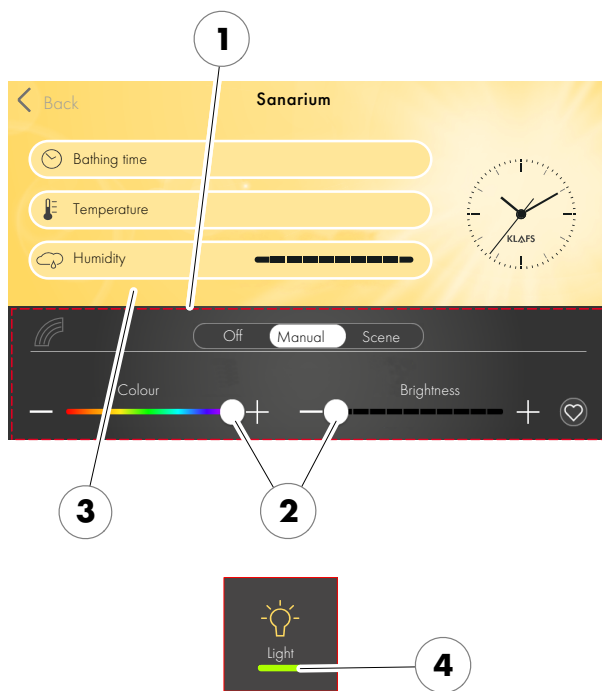
The adjustable extra (1) then starts with the setting entered.

Switching adjustable extras off

1. Change the settings of adjustable extras (1) to 0 using the +/- buttons or the slider (2).
2. Apply the change by touching the screen (3).

The adjustable extra (1) is switched off.

- The green light bar (4) disappears.



8.9. Extras: Coloured light

Setting the coloured light

1. Press the Colour light symbol.

The display for setting the coloured light appears.

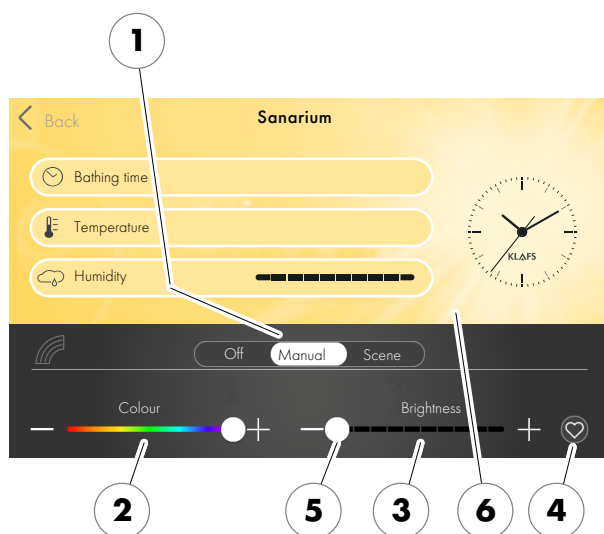
2. Press the switch (1) to change the coloured light settings manually.

3. The menu below allows you to adjust the following settings:

- Colour spectrum (2)
- Brightness (3)
- Favourite settings (4).

4. Use the +/- buttons or the slider (5) to configure the settings you want.

5. Then apply the setting by touching the screen (6).



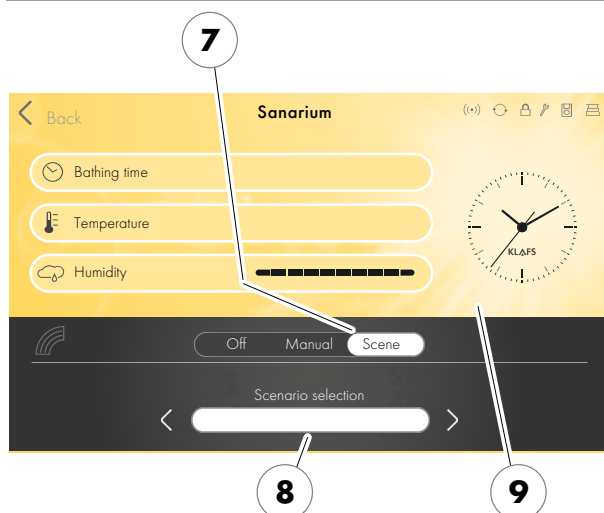
Set a theme

1. Touch the switch (7) to select a theme for the coloured light.

2. The menu below shows a list of available options.

3. Select the theme you want (8) by pressing the </> keys.

4. Apply the change by touching the screen (9).



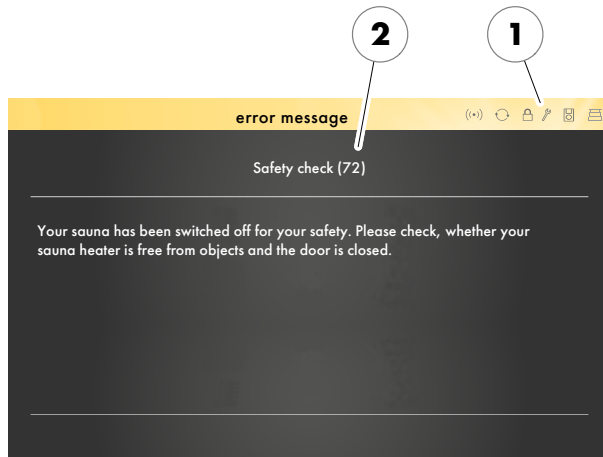
9. IF SOMETHING DOES NOT WORK

9.1. Error messages on the display



Risk of injury and damage to property

Repairs and maintenance must only be carried out by KLAFS service engineers or by technicians expressly authorised by KLAFS. customerservice@klafs.de. KLAFS can only provide repairs and servicing work under warranty if this work is carried out by KLAFS service engineers.




Error messages

The Service symbol (1) appears together with the error message number (2) (e.g. 72).

The controller may still be operational while the Service symbol is flashing, depending on the nature of the fault.

No.	Fault	Remedial measures
39	The cabin was extended and retracted too quickly. The cabin can only be extended and retracted for up to two minutes within a five-minute period.	If this error message is shown, wait five minutes.
41	At greater than 40 °C, there is still too much residual heat in the cabin.	The sauna heater and the sauna stones are still too hot for the cabin to be retracted. Open the cabin door and allow the cabin to cool. Wait at least one hour until the idle period has elapsed.



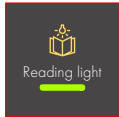

No.	Fault	Remedial measures
50	The cabin drive was switched off due to motor overload.	Remove obstacles in the cabin's range of motion. If the error message is repeated, this indicates a technical problem. <ul style="list-style-type: none"> ● Contact Klafs service engineers.
	The cabin extension/retraction mechanism has jammed.	<ul style="list-style-type: none"> ● Contact Klafs service engineers. ● customerservice@klafs.de
	The torque limiter on the motor controller has been activated.	
	The motor is defective.	
51	The opened or closed cabin did not reach its final position within one minute.	Remove obstacles in the cabin's range of motion. If the error message is repeated, this indicates a technical problem. <ul style="list-style-type: none"> ● Contact KLAFS service engineers. ● customerservice@klafs.de
69	The basic heat sensor in the InfraPLUS heater is missing or defective.	Stop using infrared bathing mode. <ul style="list-style-type: none"> ● Contact KLAFS service engineers. ● customerservice@klafs.de
70	The skin temperature sensors in the InfraPLUS heater are missing or defective.	
72	A sauna heater cover was detected.	Check the sauna heater and remove any objects. Check the service menu point 34 setting.
	The cabin door was opened during the heat-up phase.	Close the cabin door.
89	Cooling unit power pack too hot.	Check the venting of the cooling unit at the power pack solid-state relay/power pack 21040 T.
91	No SCS bridge present.	Check whether the SCS bridge is fitted correctly. If necessary, fit the SCS bridge.
92	Varius S: Maintenance required, decalcify the evaporator. <ul style="list-style-type: none"> ● If the water hardness is set to 0 °dH, the error message 92 will not appear. ● See page 28. 	Service the evaporator. <ul style="list-style-type: none"> ● Varius S: See page 66. When the controller is in standby, reset error 92 by pressing and holding the symbol for one second.

No.	Fault	Remedial measures
95	Line break in the actual temperature sensor.	 <p>Switch the controller off at the mains.</p> <p>Do not use the sauna cabin.</p> <ul style="list-style-type: none"> • Contact KLAFS service engineers. • customerservice@klafs.de
96	Line break in the heater temperature sensor.	
97	The safety temperature limiter (STL) is interrupted.	
98	Short circuit in the actual temperature sensor.	
99	Short circuit in the heater temperature sensor.	

9.2. Other possible errors

Fault	Cause	Remedy
The controller cannot be switched on.	No mains power available.	Check the residual-current circuit breaker and the fuse in the power supply.
	Fuse SI4 or SI5 has blown.	Replace fuse SI4 (1.6 AT) or SI5 (2.5 AT) or contact KLAFS service engineers. ● customerservice@klafs.de
There is no steam escaping (SANARIUM M, B, S, Fero S).	Line break.	● See servicing instructions 50701466/50701467.
	The heating rod is faulty.	
	The fuse SI700 in the 21 S1 T controller cut out.	Replace the fuse SI700 (16 AT) in the 21 S1 T controller.
The cabin light does not light up after having been switched on.	The bulb is defective.	Change the bulb. 1. Disconnect the controller from the mains. 2. Replace with a bulb of the same wattage.
	No mains power.	Check the residual-current circuit breaker and the fuse in the power supply.
	Light fuse SI3 has blown.	Replace light fuse SI3 (1.25 AT) or contact KLAFS service engineers. ● customerservice@klafs.de
The SCC exhaust air module is not working.	No mains power.	Check the residual-current circuit breaker and the fuse in the power supply.
	Fuse SI4 has blown.	Replace fuse SI4 (1.6 AT) or contact KLAFS service engineers. ● customerservice@klafs.de
	The exhaust air module is defective.	Replace the fan. 1. Disconnect the controller from the mains. 2. Replace with a fan of the same wattage.
	The main switch is not switched on.	Switch on the main switch.

9.2. Other possible errors

Fault	Cause	Remedy
No power at output AG1.	Fuse AG1 SI1 has blown.	Replace fuse AG1 SI1 (1.6 AT) or contact KLAFS service engineers. <ul style="list-style-type: none"> customerservice@klafs.de
No power at output AG2.	Fuse AG2 SI2 has blown.	Replace fuse AG2 SI2 (1.6 AT) or contact KLAFS service engineers. <ul style="list-style-type: none"> customerservice@klafs.de
	The controller is in standby mode.	Start a bathing mode.
The controller cannot be operated. 	The touchscreen lock symbol appears on the touchscreen. The touchscreen lock is switched on.	Switch the touchscreen lock off. <ul style="list-style-type: none"> See page 54.
The coloured light cannot be switched on. 	The fuse in the feed line to the coloured light controller has blown.	Replace or reset the fuse.
	There is a break in the data line.	Check the data line.
The reading light cannot be switched on. 	The bulb in the reading light is defective.	Replace the bulb in the reading light. Replace with a new bulb of the same wattage.
	The fuse at AG1 or AG2 has blown.	<ul style="list-style-type: none"> Contact KLAFS service engineers. customerservice@klafs.de Check the fuse at AG1 or AG2 and then replace if necessary.
Remote power-on symbol. 	The controller will not switch on.	In the 20 KEYGUARD service menu or 29 door contact, change the setting to [1 or 2]. <ul style="list-style-type: none"> See servicing instructions 50701466/50701467.

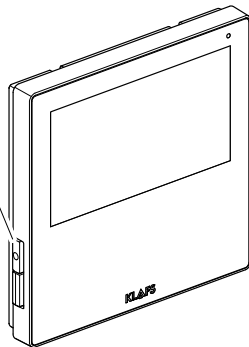
9.3. Rectifying faults, resetting error messages



Notice:

Only allow work on electrical components/assemblies to be carried out by qualified electricians who work in accordance with electrical rules and regulations. Switch the controller off, disconnect it from the mains and make sure that it cannot be switched on again.

1



1. Switch the controller off at the main switch (1).
2. Disconnect the controller from the mains and make sure that it cannot be switched on again.
3. Rectify the fault.
4. Reconnect the controller to the mains.
5. Switch the controller on at the main switch (1).

10. CLEANING AND MAINTENANCE

10.1. Cleaning the sauna cabin

The high humidity in SANARIUM mode does not damage the wood of your cabin.
A prerequisite is that the cabin is well ventilated after use and the drying phase is completed.



Never use a hose or pressure washer on the inner cabin walls, benches or seats.

Dirty loungers

Wipe the wooden surfaces with a damp cloth.

Sand any rough surfaces on the loungers with fine sandpaper if necessary.

The benches can also be rinsed with a 3% hydrogen peroxide solution (available from specialist dealers).



Disinfectants are highly corrosive.

It is therefore important to observe the relevant safety precautions.

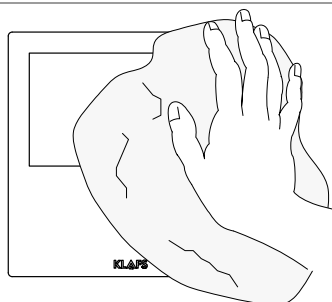
Always wear rubber gloves.



The outer cabin walls have been varnished or waterproofed.

Do not varnish, paint or waterproof the inner panelling or the inner cabin walls and units (loungers, etc.).

10.2. Cleaning the touchscreen



Switch the controller off at the main switch before cleaning.

The touchscreen's surface should only be cleaned using a soft cloth.

Moisten the soft cloth with water.

For more stubborn marks, soak the soft cloth in an organic solvent such as light petroleum.



Do not use corrosive solvents such as isopropyl alcohol (IPA).

10.3. Varius S - Decalcifying the evaporator

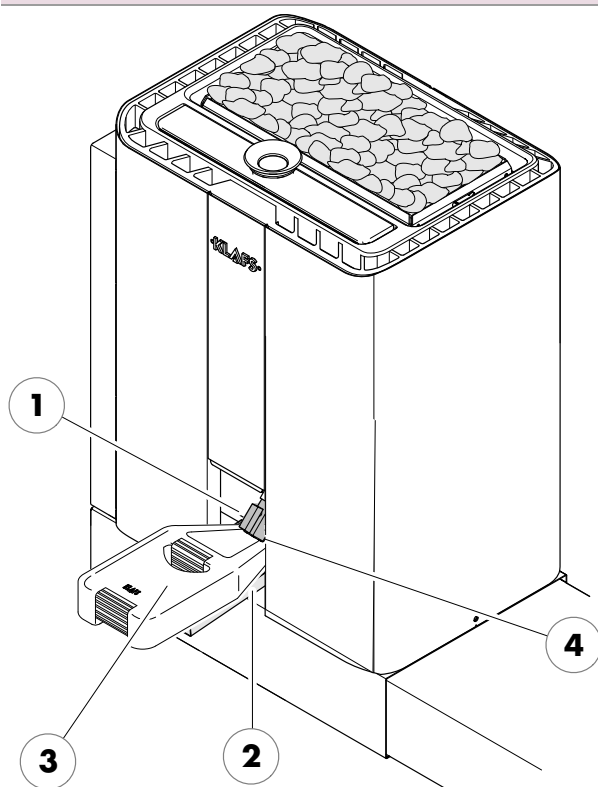


Risk of chemical burns!

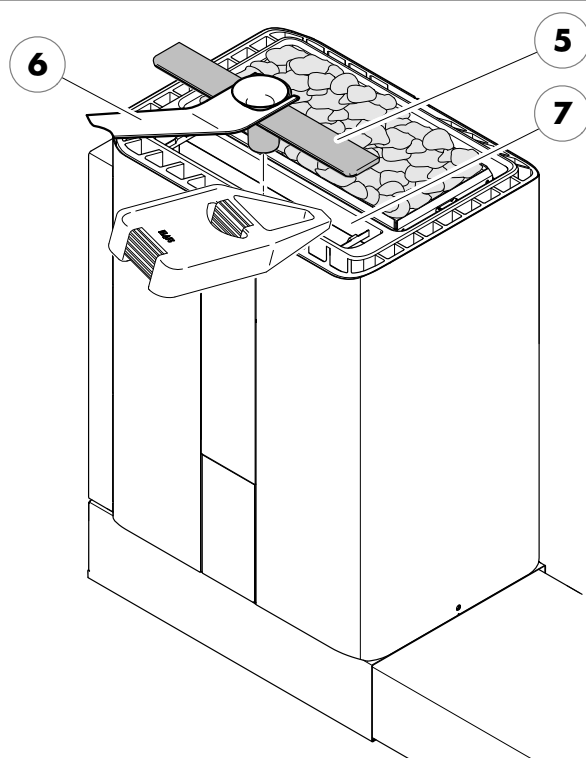
There is a risk of chemical burns to eyes and skin when handling decalcifiers. Always follow the instructions on the package insert.

Draining the evaporator

1. Press down on the cover flap (1) at the bottom (2) and then pull it out.
2. Hold the filler can (3) below the drain valve (4).
3. Open the drain valve (4).
4. Close the drain valve (4) again after draining the evaporator.
5. Close the protective cover (1) again.
6. Drain the filler can (3).



10.3. Varius S - Decalcifying the evaporator



Decalcifying the evaporator

7. Use the aroma fork (6) to remove the cover (5) from the evaporator.
8. Fill the evaporator unit (7) with three litres of water.
9. Add approx. two tablespoons of (chlorine-free) household decalcifier to the evaporator unit (7).
10. Place the cover (5) on the evaporator.
11. Allow the decalcifying solution to work on the calcium layer over night, for at least 12 hours. The solution can be allowed to act over a period that is two or three times as long to ensure that all of the calcium deposit is dissolved.



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