



FNT series Wall-Touch / Design-Touch

Operating Instructions

Made in Germany

About this manual

Validity

This operating manual applies to the following controls:

- FNT2000 / FNT2000-DESIGN
- FNT2200 / FNT2200-DESIGN
- FNT3000 / FNT3000-DESIGN
- FNT3200 / FNT3200-DESIGN
- FNT3400 / FNT3400-DESIGN
- FNT2000-STEAM / FNT2000-STEAM-DESIGN
- FNT3000-STEAM / FNT3000-STEAM-DESIGN

Original operating manual DE

The original language of this operating manual is German. No liability can be accepted for translations.

Characters, symbols and illustrations used

- Additional information about an operating step
- Cross-reference to a page
- Read instructions
- ✓ Result of a step

Legal notice

Operating manual for FNT series control Doc ID B_FNTxxxx Version 2.0 Date 02/2024

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Safety



This operating manual is intended for persons who are authorised and qualified to set up and operate the control for a sauna cabin.

The following safety instructions should be observed during setup and operation.

Failure to observe the safety instructions could result in death or serious injury.

- Familiarise yourself with the information in this chapter to ensure you can use the control safely.
- Only use the control if you have understood the information in this chapter and can follow the instructions.

1.1 Intended use

This control is intended solely for the operation and control of saunas, saunas with humidity, infrared cabins or steam bath cabins with the appropriate ovens, evaporators, infrared emitters and steam generators. "Intended use" comprises the functions and operating steps described in this manual.

The control is approved for operation in household and commercial settings. Any use other than that described, or use of the control in any other way, could lead to a hazardous situation and is therefore prohibited. The operator is liable for any loss or damage arising from improper use.

Foreseeable misuse

The following are considered instances of foreseeable misuse:

- The control is operated without knowledge of or compliance with the safety instructions.
- The control and sensor cable plugs or cables are plugged in incorrectly.
- Operating, service and maintenance requirements are not observed.
- Modifications are made to the control.
- The control is operated by persons with reduced mental capacity or children, or persons who have not received the necessary instruction.

Any person carrying out unauthorised modifications to the control is solely liable for any damage or loss resulting from such action.

1.2 Commissioning

This manual assumes that the installation of the control has been completed in accordance with the appropriate installation instructions and the installation has been inspected and accepted by an authorised technician.

Risk to life and limb from electric shock	 Improper installation may leave live parts exposed. There is a risk to life and limb from electric shock due to contact with electrically live parts. The electrical installation may be performed only by a trained electrician from an authorised electrical company. The system must be completely disconnected from the mains supply before installation and repair work are commenced. The housing cover must only be removed by a trained specialist. The mains cable must be fitted with an isolator switch with a contact opening width that meets the conditions of overvoltage category III for complete isolation. If you detect any damage to the isolation switch you must switch the control off and arrange to have it repaired immediately. Fuses must never be bypassed. The fuses should never be put out of action. When replacing fuses, ensure they display the correct amperage. Keep liquids away from electrically live parts.
Overheating after short circuit	 If a short circuit occurs on a load connected to the control, the contact on a relay within the control may fuse due to the high current in the short circuit. Switching the control back on without rectifying the short circuit may cause the safety relay to fuse as well. If this happens the control will be unable to switch the connected load on or off and it will operate in continuous mode. After a short circuit occurs you should switch off the circuit breaker in the junction box. Send the control back to the manufacturer for inspection or repair.
Fire hazard from overheating	 Insufficient ventilation can lead to the control unit overheating and catching fire. Observe the safety and installation instructions for the control unit provided by the cabin manufacturer and the oven manufacturer.

Safety

Hazard due to modifications to the device	 Changes and alterations to the control or the installation may lead to unforeseen hazards. Contact the manufacturer if you require a technical modification. You should only carry out modifications that have been approved in writing.
Hazard due to ambient conditions	 Unfavourable ambient conditions may lead to hazards. Only operate the control within the permitted ambient conditions. 2.5 Technical data, C EN +13 Switch off the main switch or fuses when you decommission the control or will not be using it for a prolonged period. Check that there are no flammable items on the oven before switching it on. Ensure that the local accident prevention regulations applicable to the intended use of the control and general safety regulations are followed.
Hazard due to incorrectly connected devices	 Devices and accessories from other manufacturers may be connected to this control if the technical data are compatible. These devices have their own operating manuals. Observe the safety instructions, technical data and instructions in the operating manuals of any connected devices.

ΕN

1.3 Qualifications of personnel

Risk of injury due to Improper handling can cause severe personal injury and damage to insufficient training property. Assembly, installation, commissioning as well as troubleshooting, maintenance and repairs should only be carried out by suitably qualified persons. Ensure that the operating manual has been read carefully and understood before switching on the device. Keep the operating manual to hand to ensure it is available to personnel at all times as required. **Operation by persons** This device may be used by persons with reduced physical, sensory with reduced capacity or mental abilities or persons with no experience or knowledge of the device provided that they are under supervision or have been instructed in how to safely use the device and they understand the associated risks. Children under 8 years of age may not use the device. Children of 8 years of age or more may only use the device under supervision. Cleaning and maintenance by the user must not be performed by

children unless they are under supervision.

Operating Instructions - FNT Serie

Safety



1.4 Classification of warnings

The texts in bold below are used in the following chapters to indicate the risks of hazardous situations.

Warning

indicates a hazardous situation which, if not avoided, could result in death or serious injury.

ACAUTION

Caution

indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Note

indicates a hazardous situation which, if not avoided, could result in damage to the device.

1.5 Standards and regulations

For an overview of the standards that were observed during the design and construction of the control, please refer to the relevant Declaration of Conformity on our website:

www.sauna.fasel-gmbh.de/service/downloads/

Local regulations also apply to the installation and operation of heating, sauna, and steam bath systems.

Identification

The controls in the FNT series are available as Wall-Touch and Design-Touch models.

2.1 Overview

Wall-Touch

In the Wall-Touch model the touch display is integrated into the control unit. The control unit is surface-mounted.



Design-Touch

In the Design-Touch model the control unit and the touch display can be installed separately. The control unit is surface-mounted. The touch display is flush-mounted.



2.2 Scope of delivery

See delivery note for scope of delivery.



2.3 Nameplate

The nameplate is located on the left side of the control unit.

Wall-Touch



- Do not dispose of with domestic waste н
 - Manufacturer L
- E Electrical connection

Design-Touch

D Customer ID



- A Model
- **B** Device designation
- С Item number
- D Customer ID
- **Electrical connection** Ε
- F Device number

- G Device number barcode
- Item number barcode н
- ID codes and certification marks L
- Manufacturer J
- K Do not dispose of with domestic waste

2.4 Functions

The controls are equipped with various functions depending on the model.

Sauna $\underline{\mathfrak{M}}$ Humidity $\underline{\mathfrak{M}}$ Infrared \mathbb{R}

Function	Symbol	FNT2000 FNT2000-DESIGN	FNT2200 FNT2200-DESIGN	FNT3000 FNT3000-DESIGN	FNT3200 FNT3200-DESIGN	FNT3400 FNT3400-DESIGN
Sauna (Finnish)	<u></u>	\checkmark	✓	√	√	\checkmark
Sauna with humidity		x	✓	x	✓	\checkmark
Infrared		x	×	×	×	\checkmark
eco mode		\checkmark	1	1	1	\checkmark
Temperature sensor		1	1	2	2	2
Light dimming		X	X	1	1	✓
Fan dimming		X	X	1	1	1
Optional humidistat		X	x	x	1	1

Steam bath 🤤

Function Symbol		FNT2000-STEAM FNT2000-STEAM-DESIGN	FNT3000-STEAM FNT3000-STEAM-DESIGN	
Steam bath		\checkmark	\checkmark	
eco mode		x x		
Temperature se	nsor	1	1 (optionally 2)	
Light dimming		X	1	
Fan dimming		X	\checkmark	
Optional humid)ptional humidistat X		X	



2.5 Technical data

The control units are available in various models and configurations. Devices made by a number of different manufacturers can also be connected to the control units.

Sauna \fbox Humidity \red{M} Infrared \mathbb{R}

- FNT2000 / FNT2000-DESIGN
- FNT2200 / FNT2200-DESIGN
- FNT3000 / FNT3000-DESIGN
- FNT3200 / FNT3200-DESIGN
- FNT3400 / FNT3400-DESIGN

Ambient temperature	0°C to +40°C
Ambient temperature	With protective coating: -20°C to +40°C
Rel. humidity	max. 80% rel. hum. (non-condensing)
	min. 00:15 h
Heating period	max. 06:00 h
	(max. 20:00 h*)
Power supply	3N~ 400 V 50 Hz
Switching output	max. 9 kW resistive load
Connected load, oven	3 x 3 kW resistive load
Connected load,	1 x 3 kW resistive load
steam generator	
Connected load.	1 x 1.5 kW with full spectrum emitters
IR heater	1 x 3 kW resistive load
Sauna setting range	
Temperature	40°C to 110°C
Sauna with humidity setting range	e
Temperature	30°C to 65°C
Humidity	30% to 80%
Drying temperature	80°C to 110°C
Drying time	0 min to 59 min
Infrared setting range	
Temperature	40°C to 70°C (45°C**)
Base temperature	20°C to 65°C (40°C**)

* The control units are supplied with a maximum adjustable heating period of 6 hours. If you require a heating period longer than 6 hours please contact the installer or the distributor of your sauna system.

** The temperature can be limited to 45°C for Austria.

Steam bath 🕀

- FNT2000-STEAM / FNT2000-STEAM-DESIGN
- FNT3000-STEAM / FNT3000-STEAM-DESIGN

Ambient temperature	0°C to +40°C With protective coating: -20°C to +40°C			
Rel. humidity	max. 80% rel. hum. (non-condensing)			
Heating period	min. 00:15 h max. 06:00 h (max. 20:00 h*)			
Power supply	1N~ 230 V 50 Hz			
Evaporator	230 V~ approved for external steam generator			
Bench heating (optional)	230 V~ max. 2 kW			
Aroma	230 V~ max. 120 W			
Steam bath setting range				
Temperature	30°C to 50°C			

* The control units are supplied with a maximum adjustable heating period of 6 hours. If you require a heating period longer than 6 hours please contact the installer or the distributor of your sauna system.



Operation

The control unit has various connection options and functions that differ depending on the model. The images on the touch display are specific to each model and may vary from those shown in the figures below. For an overview of the functions, see $\square 2.4$ Functions, \square EN-12.

3.1 User interface

FNT2000 and FNT3000

The FNT2000 / FNT2000-DESIGN and FNT3000 / FNT3000-DESIGN control units can be used for the sauna (Finnish) bath mode.



* FNT3000 / FNT3000-DESIGN only

FNT2200 and FNT3200

The FNT2200 / FNT2200-DESIGN and FNT3200 / FNT3200-DESIGN control units can be used for the sauna (Finnish) and sauna with humidity bath modes.





* Only with optional humidistat.



FNT3400

The FNT3400 / FNT3400-DESIGN control unit can be used for the sauna (Finnish), sauna with humidity and infrared bath modes.



FNT2000-STEAM and FNT3000-STEAM

The FNT2000-STEAM / FNT2000-STEAM-DESIGN and FNT3000-STEAM / FNT3000-STEAM-DESIGN control units can be used for the steam bath bath mode.



3.2 Explanation of symbols

Symbol	Explanation
\checkmark	Confirm entry.
X	Cancel procedure.
Þ	Scroll forward.
<	Scroll back.
Sm	Displays a button for selection.
<u> </u>	Bath mode off.
<u>}}}</u>	Bath mode on.

A bright symbol on a dark background indicates that the function is active.



3.3 Switching the control unit on/off

The control unit can be switched on/off using the trip switch. The trip switch is located on the bottom of the control unit in the Wall-Touch model and on the left side in the Design-Touch.

Using the trip switch

- 1 Switch the control unit on by setting the trip switch to |.
- 2 Switch the control unit off by setting the trip switch to ${f 0}$.
- **3** To switch on the cleaning light only, set the trip switch to $\dot{\heartsuit}$.

3.4 Standby

If the trip switch on the control unit is set to **I** and the bath mode does not start, the touch display may be in standby mode. If the bath mode does not start, the touch display automatically switches to standby after 2 minutes.

Switching standby on/off

- Press and hold down the U button on the touch display for approx.
 1 second.
 - ① The control unit should only be switched to standby if the bath mode has not started. The control unit emits an acoustic signal when you switch the control unit to standby.

3.5 Bath mode

Different bath modes are available depending on the model. You can choose between the following bath modes:

- Sauna (Finnish) <u></u>
- Sauna with humidity <u></u>
- Infrared R
- Steam bath

Selecting the bath mode

- 1 Press the desired bath mode.
 - The bath modes vary depending on the model:
 2.4 Functions, C EN-12



3.6 Starting the unit



Fire hazard from overheating

Objects placed on the oven could catch fire.

- Ensure that there is nothing covering the oven.
- Ensure that the air is able to circulate freely.

WARNING

Injuries or damage to health due to excessively high temperature and humidity

Items covering the temperature sensor or humidistat may cause an increase in temperature or humidity in the cabin.

- Ensure that there is nothing covering the temperature sensor and humidistat in the cabin.
- Ensure that the air is able to circulate freely.

Carry out the steps below before starting the unit:

- Select the bath mode.
- Set the temperature and humidity.
- Set the heating period.

Start bath mode

1 Press and hold down the selected bath mode for approx. 2 seconds.



- $\ensuremath{\boxtimes}$ The selected bath mode is shown as dark.
- \square The remaining heating duration is displayed.

 \square The following symbol appears at the top of the touch display when the oven is heating: $\parallel \parallel$

 \square The background colour of the touch display switches from blue to green when the sauna cabin reaches the desired temperature.



3.7 Switching off

NOTICE

Device damage due to repeatedly switching off the unit improperly

If the control unit is repeatedly switched off contrary to the instructions in this operating manual the control unit may be damaged.

Observe the following instructions on how to switch off the control unit.

A bath mode can be switched off before the end of the heating period.

Switching off

- 1 Press the bath mode you have started.
 - \boxdot The selected bath mode is shown as bright.
- 2 Wait until the automatic drying function is switched off.
 - ① The drying function is only switched on after the "sauna with humidity" bath mode.*
 - (1) The following symbol appears at the top of the touch display while the drying function is running: $\mathbb{R}^{\mathbb{R}}$
- 3 Switch the touch display to standby or switch the control unit off.

* For Austria the drying function is also switched on after the "infrared" bath mode.

3.8 Drying function

NOTICE

Damage to cabin due to drying function being switched off prematurely

Switching the drying function off prematurely can damage the cabin, for example due to mould growth

In the "sauna with humidity" bath mode the cabin is automatically dried after the end of the heating period to prevent mould growth. When the drying function is switched on, the oven heats the cabin to the drying temperature to allow the cabin to dry. The following symbol appears at the top of the touch display while the drying function is running: $\mathbb{R}^{\mathbb{R}}$

3.9 **Temperature and humidity**

The desired temperature and humidity in the sauna cabin can be set, depending on the model.

With the FNT3400 control unit you can set the desired temperature and a limiter temperature for the infrared bath mode. The oven switches off when the sauna cabin reaches the desired temperature. The control also switches off the infrared emitter if the sauna cabin reaches the limiter temperature.

- Desired temperature
- Desired humidity 00
- Limiter temperature \mathbf{R}
- Setting the temperature
 - O 22 6:00h 40 % นข

1 Press the desired temperature display.

- 2 Use the slider to adjust the temperature to the desired level.
- **3** Confirm your entry by pressing \mathbf{V} .



Setting the humidity

Press the desired humidity display.
① You can adjust the humidity in stages or % depending on the model.



- 2 Use the slider to adjust the humidity to the desired level in %* or in stages.
- **3** Confirm your entry by pressing $\boxed{\checkmark}$.
- * Only with optional humidistat.

3.10 Heating period

Setting the heating period determines how long a bath mode remains on. The heating period can only be changed when the bath mode is off. The following maximum heating periods are permitted in accordance with EN 60335-2-53:

Max. heating period	Description
More than 12 hours	Public sauna cabins supervised by appropriately inst- ructed staff.
12 hours	Hotels, blocks of flats or similar
6 hours	All other sauna cabins, private households

The control units are supplied with a maximum adjustable heating period of 6 hours. If you require a heating period longer than 6 hours please contact the installer or the distributor of your sauna or infrared system.

Setting the heating period

1 Press the heating period display.



- 2 Enter the desired heating period in hours and minutes using the number bar.
 - ① The heating period is saved permanently if the bath mode is off.
- **3** Confirm your entry by pressing **V** .
 - ① This setting can be applied separately for each bath mode.
 - ① The set heating period is displayed at the top of the touch display.
 - If a bath mode is on, the remaining heating duration is displayed in the touch display instead of the heating period.
 - ① The set heating period does not change if the remaining heating duration is changed.



Menu settings

4.1 Fan

The exhaust air fan in the sauna cabin can be switched on and off on the touch display. The fan speed in the sauna cabin can be adjusted.

Switching the fan on/off

- 1 Press the \equiv button on the touch display.
- 2 Press 🛞.
- Setting the fan speed*
- 1 Press the \equiv button on the touch display.
- **2** Press and hold down \bigotimes for approx. 2 seconds.
- 3 Use the slider to set the desired fan speed.
 ① The lowest fan speed is on the left. The highest fan speed is on the right.
- 4 Confirm your entry by pressing √.
 ① These settings can be applied separately for each bath mode.

*Not applicable to FNT2000 / FNT2000-DESIGN and FNT2200 / FNT2200-DESIGN and FNT2000-STEAM / FNT2000-STEAM-DESIGN.

4.2 Cabin light

The cabin light in the sauna cabin can be switched on and off on the touch display. The brightness of the cabin light can be dimmed.

Switching the cabin light on/off with button

1 Press the $\overline{\overline{Q_{2}}}$ button on the touch display.

 \square The following symbol appears at the top of the touch display when the cabin light is switched on: $\frac{1}{2\sqrt{3}}$

Switching the cabin light on/off via the menu

- 1 Press the \equiv button on the touch display.
- 2 Press 뒀 .

Dimming the cabin light*

- 1 Press the \equiv button on the touch display.
- 2 Press and hold down $\overline{\sqrt{2}}$ for approx. 2 seconds.
- 3 Use the slider to adjust the brightness to the desired level.
 ① The lowest brightness level is on the left. The highest brightness level is on the right.
- 4 Confirm your entry by pressing .
 ① These settings can be applied separately for each bath mode.

*Not applicable to FNT2000 / FNT2000-DESIGN and FNT2200 / FNT2200-DESIGN and FNT2000-STEAM / FNT2000-STEAM-DESIGN.

4.3 Coloured light

The coloured light function is available as an option for the FNT3000 / FNT3000-DESIGN, FNT3200 / FNT3200-DESIGN and FNT3400 / FNT3400-DESIGN controls. You can set colours and transitions. The coloured light function is automatically displayed if the control has been equipped with this option.

Switching the coloured light on/off

- 1 Press the \equiv button on the touch display.
- 2 Press 🛞 .

Adjusting coloured light

- 1 Press the \equiv button on the touch display.
- 2 Press and hold down \bigotimes_{RGB}^{OO} for approx. 2 seconds.
- 3 Adjust the coloured light to the desired setting.



4 Confirm your entry by pressing √.
① These settings can be applied separately for each bath mode.

4.4 Bench heating

Bench heating is available as an option for the FNT3000-STEAM and FNT3000-STEAM-DESIGN controls. You can switch the bench heating on when the control unit is in standby mode to preheat the bench. The bench heating switches back off automatically if the steam bath does not start up within 2 hours.

Switching the bench heating on/off

- 1 Press the \equiv button on the touch display.
- **2** Press <u>관</u>.

4.5 Essence function

The essence function is available as an option for the FNT3200-DESIGN and FNT3400-DESIGN controls. Injection and intermission times can be set for the essence pump. The essence function is automatically displayed if the control has been equipped with this option.

Adjusting the essence function

- 1 Press the \equiv button on the touch display.
- 2 Press 🛗.
- **3** Set the intermission time in minutes on the left and the injection time of the essence pump in seconds on the right.



4 Confirm your entry by pressing .
① These settings can be applied separately for each bath mode.

4.6 External dimmer

This function is available as an option for the FNT3000-Design, FNT3200-DESIGN and FNT3400-DESIGN controls.

- Adjusting the external dimmer
- 1 Press the \equiv button on the touch display.
- 2 Press the $\frac{1}{2}$ button on the touch display.
- 3 Use the slider to adjust the brightness to the desired level.
 ① The lowest brightness level is on the left. The highest brightness level is on the right.
- 4 Confirm your entry by pressing √.
 ① These settings can be applied separately for each bath mode.



4.7 Option output

The option outputs can be assigned to specific functions by the customer and switched on/off from the control. This function is available as an option for the FNT3000-DESIGN, FNT3200-DESIGN and FNT3400-DESIGN controls.

Switching the option output on/off

- 1 Press the \equiv button on the touch display.
- 2 Press the F1 or F2 button on the touch display. The relevant option output switches on/off.
 - ① The option outputs switch off when the control unit is switched off. The option outputs can be switched back on manually after the control unit is restarted.

Basic settings menu

5.1 eco mode

eco mode is only available in the sauna (Finnish) bath mode. In eco mode the heating period is automatically set to 15 minutes once the desired temperature is reached. The oven also switches off automatically 3 minutes before the end of the heating period in eco mode.

Switching eco mode on/off

- 1 Press the \equiv button on the touch display.
- 2 Press 💭.
- 3 Press \mathcal{Q}_{\cdot} .

5.2 Start time

You can set the start time so that the bath mode starts at a specific time.

Setting the start time

- 1 Press the \equiv button on the touch display.
- 2 Press 🙀.
- 3 Press 🕑.
- 4 Enter the start time in hours and minutes using the number bar.
- **5** Confirm your entry by pressing **V** .
- 6 Start the desired bath mode ► Start bath mode, □ EN-20.
 ① The bath mode must be on for the start time to be activated. The bath mode starts at the start time you have set.



5.3 Time

- Setting the time
- 1 Press the \equiv button on the touch display.
- 2 Press 🙀.
- 3 Press 🕑.
- 4 Enter the time in hours and minutes using the number bar.
- **5** Confirm your entry by pressing **V** .

5.4 Temperature differential fan ON

This setting is only available for the FNT2000-STEAM / FNT2000-STEAM-DESIGN and FNT3000-STEAM / FNT3000-STEAM-DESIGN controls. If you wish, you can specify the temperature at which the fan is activated. You can set the fan to start before the desired temperature is reached by adjusting the difference in temperature from the desired temperature.

Setting the switching point

- 1 Press the \equiv button on the touch display.
- 2 Press 🖸.
- 3 Press ₿፝%.
- 4 Set the difference in temperature.

5.5 Fan phase AUTO

This setting is only available for the FNT3000-STEAM / FNT3000-STEAM-DESIGN controls. You can specify whether the fan speed is automatically controlled in response to the temperature.

Switching fan phase AUTO on/off

- 1 Press the \equiv button on the touch display.
- 2 Press 🔯.
- 3 Press 🛞.

5.6 Display settings

The backlight on the touch display can be switched on and off. The brightness and contrast of the touch display can be adjusted.

Switching the display lighting on/off

- 1 Press the \equiv button on the touch display.
- 2 Press 🚺.
- 3 Press 🚺.
- Adjusting brightness and contrast
- 1 Press the \equiv button on the touch display.
- 2 Press 🚺.
- **3** Press and hold down **()** for approx. 2 seconds.
- 4 Use the slider at the top to adjust the contrast to the desired level.
 ① The lowest contrast level is on the left. The highest contrast level is on the right.
- 5 Use the slider at the bottom to adjust the brightness to the desired level.
 ① The lowest brightness level is on the left. The highest brightness level is on the right.
- 6 Confirm your entry by pressing \mathbf{V} .



5.7 Keypad lock

Certain control functions can be locked on the touch display.

- Locking functions
- 1 Press the \equiv button on the touch display.
- 2 Press 🚺.
- 3 Press 🔂.
- 4 Enter the PIN using the number bar.① PIN: 1111
- **5** Confirm your entry by pressing **V** .
- 6 Select all functions you want to lock.
 ① Locked functions are shown as dark.
 ① Locked functions can be unlocked in the same way.
- 7 Confirm your entry by pressing .
 ① Locked functions are now marked by a padlock.

5.8 Cabin light dimming range

You can adjust the optimal dimming range for the cabin light here, depending on the type of lighting used (light bulb or LED).

- Adjusting the cabin light dimming range
- **1** Press the \equiv button on the touch display.
- 2 Press 🔯.
- 3 Press 2.
 ① Dimming range for light bulb: 2.
 Dimming range for LED: 2.

5.9 Info menu

The info menu shows all information about the control currently in use. This information is useful for the service engineer if a fault occurs.

Displaying the info menu

- 1 Press the \equiv button on the touch display.
- 2 Press 🔯.
- 3 Press (i).
- 4 You can use the ≤ and > buttons to scroll back and forward in the info menu.



Troubleshooting

This chapter describes potential faults on the control and how they can be eliminated.

Personal injury due to improper troubleshooting

Improper troubleshooting can lead to hazards due to electric shock or fire hazard from overheating.

- If a fault occurs, disconnect the control from the mains power and secure the control against switching back on.
- ► Inform customer service.
- Work on the system should only be carried out by qualified technicians.

Overheating after short circuit

If a short circuit occurs on a load connected to the control, the contact on a relay within the control may fuse due to the high current in the short circuit. Switching the control back on without rectifying the short circuit may cause the safety relay to fuse as well. If this happens the control will be unable to switch the connected load on or off and it will operate in continuous mode.

- After a short circuit occurs you should switch off the circuit breaker in the junction box.
- Send the control back to the manufacturer for inspection or repair.

6.1 Error messages

Contact the installer or the distributor of your sauna system if faults occur that cannot be eliminated according to the description below. See address on invoice, delivery note or the back of this operating manual. If an error occurs while the system is in operation the error number appears in the display. If the cause cannot be eliminated by the end user please note down all displays shown or take a photograph of the display and contact your service technician.

Troubleshooting

No.	Fault	Possible causes	Troubleshooting	To be carried out by
000	Internal timing error	Internal timing error.	-	Service engineer
100	Safety temperature limiter circuit open, safety tempe- rature limiter	The connection to the safety temperature limiter is bro- ken, or the thermo-fuse has been damaged by excessi- vely high temperature.	 Check safety temperature limiter Check cable Check clamps 29 and 30. 	Trained electrician/ service engineer
11C	I ² C error	Error on l ² C bus.	Switch off the mains power. Wait a while. Switch on. If the fault recurs, contact service engineer.	Service engineer
200	Oven sensor short circuit	Short circuit on oven sensor.	- Check cable. - Check clamps 27 and 28.	Trained electrician/ service engineer
201	Oven sensor fault	Oven sensor cable broken. Contacts or clamps.	- Check cable. - Check clamps 27 and 28.	Trained electrician/ service engineer
210	Bench sensor short circuit	Short circuit on bench sen- sor.	 Check cable. Check clamps 31 and 32. 	Trained electrician/ service engineer
211	Bench sensor fault	Bench sensor cable broken. Contacts or clamps.	 Check cable. Check clamps 31 and 32. 	Trained electrician/ service engineer
220	Wall sensor short circuit	Short circuit on wall sensor.	 Check cable. Check clamps 33 and 34. 	Trained electrician/ service engineer
221	Wall sensor fault	Wall sensor cable broken. Contacts or clamps.	 Check cable. Check clamps 33 and 34. 	Trained electrician/ service engineer
300	Humidistat	The humidistat is broken or short-circuited.	- Check clamps 21–23. Note: The control unit can continue to operate as a cont- rol unit with time-controlled humidity. Confirm error dis- play. Disconnect humidistat.	Trained electrician/ service engineer
400	External error message	Option input for control unit, e.g. gas burner.	- Confirm error. - Eliminate fault on external device.	Operator/ Service engineer
485	RS485 error	Error on RS485 bus.	Switch off the mains power. Wait a while. Switch on. If the fault recurs, contact service engineer.	Service engineer
999	Internal timing error	Internal timing error	-	Service engineer



6.1.1	Messages	and	notes	on	the	displa	ay
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No.	Fault	Possible causes	Troubleshooting	To be carried out by
800	Drying function cancelled	The drying function has been cancelled prematurely.	Follow instructions on the display.	Operator
	Water deficiency	No water in evaporator.	Top up water in accordance with evaporator operating manual.	Operator
			Check water supply line/sole- noid valve on evaporator.	Trained electrician/ service engineer
		Thermal cut-out switch on evaporator has tripped.	Press reset button on evapora- tor (see evaporator manufac- turer's manual).	Operator

6.1.2 Confirm error messages

Confirm error message

- 1 Eliminate the cause of the fault.
- 2 Confirm the error message on the display.

Maintenance

The controls are maintenance-free.

7.1 Cleaning

NOTICE

Device damage due to aggressive cleaning agents

Aggressive cleaning agents and aids may damage or destroy housings, components and cables.

- Use only mild soap-based cleaning agents.
- Ensure cloths used are damp, not wet.
- Ensure that no liquid enters the control.

Cleaning the control

- 1 Switch on the control using the trip switch ${f 0}$.
- **2** Secure the control against switching back on (switch off and lock circuit breaker).
- 3 Clean the housing from the outside only using a damp soft cloth.
- 4 Do not open the housing.

7.2 Spare parts

Order spare parts from the installer or the distributor of the sauna system. See address on invoice, delivery note or the back of this operating manual.

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Danger of injury due to incorrect spare parts

Incorrect spare parts and improperly executed works can cause personal injury, damage, malfunctions or complete system failure.

- ► Use only original spare parts from the manufacturer.
- Repairs to the control should only be carried out by qualified technicians.

7.3 Customer service

Your distributor, or the installer of the sauna system can provide technical information. See address on invoice, delivery note or the back of this operating manual.



Disposal



Dispose of the control in accordance with the regulations applicable in your country.

Do not dispose of the control with domestic waste.

Note on disposal of batteries

The control contains batteries. Batteries must not be disposed of as domestic waste. You are obliged by law to return used batteries to be disposed of properly. You can take used batteries to an in-store collection point or recycling centre.

Legal information

9.1 Disclaimer

The utmost care has been taken whilst compiling the information and notes in this manual, which are based on current guidelines and standards, the state of the art and many years of knowledge and experience.

The manufacturer is not liable for loss or damage resulting from:

- Failure to follow the operating and installation instructions
- Improper use
- Unauthorised retrofitting
- Technical modifications
- Use of unauthorised assembly tools (only the assembly tools supplied are permitted)
- Use of unapproved spare parts and wear parts.

The actual scope of delivery may differ from that described and illustrated here if customised models are supplied, additional order options are selected, or recent technical modifications have been applied.

The obligations, the manufacturer's terms and conditions and terms and conditions of delivery agreed in the contract of supply also apply, as do the statutory regulations valid at the time the contract was concluded.

Warranty

The manufacturer's warranty period runs for 24 months from the date of shipping by the manufacturer. The shipping date can be identified from the device number on the nameplate.

The manufacturer is not liable for any warranty agreements that deviate from this provision. Claims under the warranty must be made to the manufacturer of the sauna system or the distributor.

Installation must be carried out by an authorised electrical company. The warranty shall be invalidated if suitable evidence of this (copy of invoice) cannot be produced.



9.2 Copyright

Copying in any form whatsoever including extracts, as well as use and/or communication of the contents requires the written permission of the manufacturer.

The contents, whether in the form of text, drawings, images or other representations are protected by copyright and industrial property rights.

Improper use of any kind is punishable by law.

9.3 Declaration of Conformity

The current Declaration of Conformity can be found on our website: www.sauna.fasel-gmbh.de/service/downloads/

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