SPAXO®

A WORLD OF WELLNESS

Norefjell

SPX-01

Hvaler

SPX-02

Tjøme

SPX-03

USER MANUAL

PLUG & PLAY

spaxo.no

Modern manufacturing

NOW IT IS TIME FOR YOU TO SIT BACK AND ENJOY!

Congratulations for investing in your own health & lifestyle!
Thank you for your trust in the Norwegian premium wellness-brand SPAXO. We hope you get to spend as much time as possible relaxing in your premium quality home spa! But first we recommend you to read this user manual.

WE ALWAYS CHOOSE THE GREEN WAY

Instead of using shell lamination which creates harmful styrenes as a by-product, we use high quality GreenShield materials. They are completely harmless to both health and nature. On top of that we recycle all of the leftover material and introduce it back to the manufacturing process. That makes us a close to zero-waste company (97 %).

PRECISE EXECUTION OF EVERY DETAIL

We work with the latest technology and machinery, currently also used in automotive, aircraft and arms industry. That enables us to be precise to a hundredth of a millimeter. Precision and quality are areas which we never compromise in.

STRICT QUALITY TESTING BEFORE SHIPMENT

Not one hot tub leaves our manufacture hall without a series of strict and thorough testing procedures. We test all our products in real life circumstances which allows us to eliminate 99 % of possible defects and malfunctions. We are also inspired by the hardline quality control of TPS (Toyota Production System).

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For your own safety and the safety of your device, please comply with the following instructions. Read the following instructions carefully and comply with them during the use of the hot tub to prevent damage and risk of an injury.

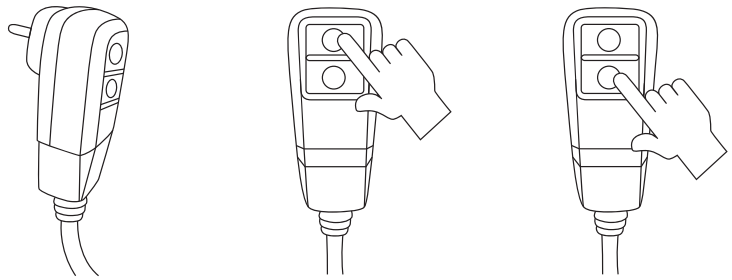
1 Hot tub performance specifications

Performance specifications

nominal voltage:	**one phase 220-250 V 50/60 Hz**
maximum work current:	**1 × 16 A**
voltage resistance:	**1 250 V/min. without puncturing**
insulation resistance:	**>= 200 M Ω**
water resistance:	**IPX5**
electrical shock protection:	**first level**

Stress load

heating:	**230 V/2 kW/13,6 A**
ozone:	**230 V/50–60 Hz/80 mA**
circulation pump 1/2:	**2,2 kW**
overall wattage (depends on the hot tub type):	**4,5 kW/h**
protection class:	**I.**
lighting:	**LED 12 V/10 W**
humidity resistant speakers:	**yes**



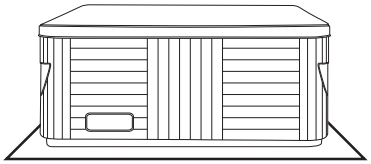
2 Preparation for the installation of the hot tub

Check the hot tub first before the installation. Immediately contact the seller in case any of the parts are broken or missing.Make sure that all the components correspond to your order. Check the hot tub before every use. In case of any damage, do not use the hot tub.

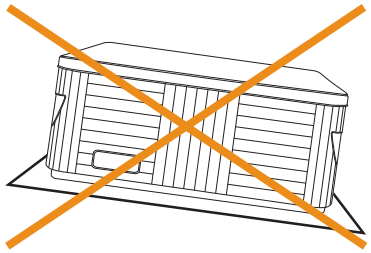
2.1 Preparation of the place for installation and connection to electricity

The hot tub must be installed on a flat and firm enough base plate with regard to the maximum load of the construction. For exterior installations we recommend a construction of a monolithic concrete base plate of minimum thickness of 10 cm. It is always necessary to pick the maximum load of the base plate with regard to the size and weight of the hot tub. Consult with your construction supervisor. The weight is adduced in the technical description of the hot tub.

YES



NO



2.2 Preparation for the interior hot tub installation

If the hot tub is installed in an interior space, it is necessary to comply with safety instructions. The basic safety requirements are mainly non-skid floors and drainage in the place of the installation in case of a water overflow. It is also crucial to keep in mind that the humidity around the hot tub will rise and can damage surrounding electric appliances. Therefore we recommend customizing the place of the installation according to these conditions. The hot tub should be accessible from all sides for future repair services. If it is not sufficiently accessible during the guarantee period, the owner has a duty to ensure the access.

2.3 Preparation for the exterior hot tub installation

If the hot tub is installed in an exterior space, it is necessary to comply with safety instructions. The basic safety requirements are mainly non-skid floors and water drainage in case of a rainfall or water overflow from the hot tub. Therefore we recommend customizing the place of the installation according to these conditions.

3 Installation of the hot tub

3.1 General information

a) Carefully remove all the packaging material from the hot tub and position the hot tub on a beforehand selected place of installation.
b) Every hot tub is tested in real life conditions during the production process, therefore there is a possibility some technical parts of the hot tub have remained slightly dirty. We recommend you to clean the surface of the hot tub using a suitable method; lukewarm water works best for this purpose. Clean the surface using a soft cloth only. Don't use any rough abrasive means and cloths which could permanently damage the surface of the hot tub. If you decide to use a generic cleaning detergent, it cannot be aggressive towards the hot tub surface.

3.2 Filling the hot tub with water

Fill the hot tub with a sufficient amount of water. The level of water in the hot tub cannot ever fall under the skimmer level. If you notice a water leak, stop the water until the defect is fixed. Hot tubs do not possess the technology for water-softening and hard water can be damaging to them. The damages caused by poor handling and upkeep are not covered by the guarantee.

a) Fill the hot tub through a skimmer to prevent an over aeration of the circulation pumps.
b) Do not fill the hot tub with water of temperature over 40 °C.
c) Once the water reaches the desired level, put the cartridge filter inside the skimmer. Tilt the filter during the installation to prevent air bubbles. Only after removing the air from the filter, install the filter into place.

3.3 Running the power supply of the hot tub

If the hot tub is connected by a moving supply cable, this cable cannot come in contact with sharp objects or be exposed to external forces. Therefore we recommend putting the supply cable inside a protective case. Turn on a residual current device intended for a hot tub.

3.4 Programming of the hot tub control unit using the control panel

Now you can start the programming of the hot tub. The process is described in the chapter “Control panel”. After you are finish the programming, cover the hot tub with a thermo cover and let the water temperature to stabilize. Check the water level inside the hot tub regularly.

4 Aquatic AV audio system

Aquatic AV audio system AQUATIC/MY MUSIC (relevant only for hot tubs equipped with the system)

If you want to play music from an external device, it is necessary to pair the device with the hot tub first (phone, tablet, computer). Turn on the bluetooth system on your external device and search for the AQUATIC device. The connection is not restricted by a code and only one connection can be active at a time. You can play music immediately after the devices are successfully paired. You can control all the functions of the audio system on your connected external device.

5 Control panel (BALBOA VL401)

5.1 Main displayed data

5.2 Temperature setting

Set the temperature with the up or down arrows. Use the arrow to set the desired temperature, the value flashes, and then save itself.

5.3 Filter time setting

You can access the filtration settings by pressing the *down arrow* and the *JETS* button. *F* is displayed and the numeric value represents the clock. Set the time by arrfows, the filter will run (1–8 hours) – the value will flash and then save itself. The filter cycle is repeated every 12 hours. If the electricity supply is interrupted, filtration needs to be re-set.

5.4 Mode setting

To set the water heating mode in the hottub, press the *down arrow* and the *LIGHT* button. Each time you repeat, the mode switches.

Mode settings options:

Standart (St)	heating the water to the set temperature
Ekonom (Ec)	heating the water only during filtration
Sleep (SL)	heating the water by 10°C below the set temperature

5.5 Jets control

Press the *JETS* button to turn on the jets

5.6 Lights control

Press the *LIGHT* button to turn on the lights. Every time the light is switched off and on again, the color changes. The range of colors is varied.

6 Trouble shooting

DIAGNOSTIC MESSAGES

message	meaning	action required
no message on display	Power has been cut off to the spa.	The control panel will be disabled until power returns. Time of day will be preserved for 30 days with a battery back-up on **EL8000** and **EL5000** systems. **EL1000** and some **EL2000** systems reset the time of day on each power-up. Spa settings are preserved on all systems.
OHH	"Overheat" – The spa has shut down.* On some systems, an alarm may sound. One of the sensors has detected 118°F (approximately 47.8°C) at the heater.	**DO NOT ENTER THE WATER.** Remove the spa coverand allow water to cool. Once the heater has cooled, reset by pushing any button. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
OH5	"Overheat" – The spa has shut down.* One of the sensors has detected that the spa water is 110°F (approximately 43.3°C).	**DO NOT ENTER THE WATER.** Remove the spa cover and allow water to cool. At 107°F (approximately 41.7°C), the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization.

* On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

message	meaning	action required
ICE	"**Ice**"– Potential freeze condition detected.	No action required. The pumps and the blower will automatically activate regardless of spa status.
SnA	Spa is shut down.* The sensor that is plugged into the Sensor "**A**" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
Snb	Spa is shut down.* The sensor that is plugged into the Sensor "**B**" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
SnS	Sensors are out of balance. If this is alternating with the temperature, it may just be a temporary condition. If the display shows only this message (periodically blinking), the spa is shut down.	If the problem persists, contact your dealer or service organization.
HFL	A substantial difference between the temperature sensors was detected. This could indicate a flow problem.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.
LF	Persistent low flow problems. (Displays on the fifth occurrence of the "**HFL**" message within 24 hours.) Heater is shut down, but other spa functions continue to run normally.	Follow action required for "**HFL**" message. Heating capacity of the spa will not reset automatically; you may press any button to reset.
dr	Inadequate water detected in heater.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.

* On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

message	meaning	action required
dry	Inadequate water detected in heater. (Displays on third occurrence of "**dr**" message.) Spa is shut down.	Follow action required for "**dr** " message. Spa will not automatically reset; you may press any button to reset.
Pr	When your spa is first actuated, it will go into Priming mode.	See the **M-7** Installation Instruction Manual for complete instructions on Power-up and Pump Priming. The Priming mode will last for up to 4 minutes and then the spa will begin to heat and maintain the water temperature in the Standard mode.
	Temperature unknown.	After the pump has been running for 1 minute, the temperature will be displayed.
Sby	Standby Mode has been activated by pressing a button combination on the user panel.	Press any button, except "**Jets**", to leave Standby Mode and return to normal operation.
Std	The spa is operating in Standard Mode.	Temperature display is current after pump has been running for at least 2 minutes.
Ecn	The spa is operating in Economy Mode.	"**Ecn**" will appear solid on the display when the temperature is not current. "**Ecn**" will alternate with the temperature when the temperature is current.
SE	The spa is operating in Standard-in-Economy Mode.	Operates the same as Standard mode, then reverts to Economy mode after 1 hour. Press "**Temp**" followed by "**Light**" to switch directly to Economy mode.
SLP	Sleep Mode has been activated by pressing a button combination on the user panel.	"**SLP**" will appear solid on the display when the temperature is not current. "**SLP**" will alternate with the temperature when the temperature is current.
PHL	pH is low	Add pH increaser according to manufacturer's instructions.

message	meaning	action required
PHH	pH is high	Add pH reducer according to manufacturer's instructions.
SAL	Sanitizer is low.	Add sanitizer according to manufacturer's instructions.
SAH	Sanitizer is high.	Remove spa cover and allow sanitizer to dissiwpate.
drn	The pump is on during Standby Mode to assist in draining the spa.	Press "**Jets**" to turn off the pump when water has drained (or power off the spa.)
rtC	Hardware failure.	Contact your dealer or service organization.
PSt	Hardware failure.	Contact your dealer or service organization if message appears on more than one power up.
CrC	Firmware install problem.	Contact your dealer or service organization if message appears on more than one power up.
CFE	Configuration error. Spa cannot start up.	Contact your dealer or service organization.
9F 1	Spa could not trip GFCI.	Contact your dealer or service organization. Continued operation may be unsafe.
StU	A pump appears to be stuck on, causing the water temperature to creep up, possibly to hazardous levels.	**POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER.** Contact your dealer or service organization.
HOt	A pump appears to have been stuck on the last time spa was powered.	**POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER.** Contact your dealer or service organization.

PERIODIC REMINDER MESSAGES

(Press the "**Temp/Warm**" button to reset a displayed reminder.)*

message**	frequency***	action required
rPH	every 7 days	Test and adjust pH chemical levels per manufacturer's instructions.
rSA	every 7 days	Test and adjust sanitizer chemical levels per manufacturer's instructions.
rCL	every 30 days	Remove, clean, and reinstall filter per manufacturer's instructions.
rt9	every 30 days	Test & reset GFCI per manufacturer's instructions.
rdr	every 90 days	Drain and refill spa per manufacturer's instructions.
rCO	every 180 days	Clean and condition cover per manufacturer's instructions.
rtr	every 180 days	Clean and condition wood per manufacturer's instructions.
rCH	every 365 days	Install new filter.
rCA	as needed	Install new Mineral cartridge.

* User can suppress all reminders in User Preferences.

** All of these Periodic Messages can be disabled individually by the spa manufacturer.

*** The producer can change the frequencies as required.

7 Upkeep of the hot tub

7.1 General information

Do not expose the hot tub to sun without water inside or a cover on top. The direct sunlight can cause fading and deformation of the surface material. When you are not using the hot tub, cover it with the thermo cover, regardless of whether it is empty or full. Protect the hot tub from rain and snow. Place the hot tub under a gazebo or a roof if possible.

a) Do not open the control unit. There are no user-fixable parts inside.
b) Drain, clean and fill the hot tub with clean water on regular schedule.
c) Clean the filter cartridge at least once a week.
d) The hot tub user should have a proper shower before and after the use of the hot tub.

7.2 Removal and cleaning of the filter cartridge

The hot tub filter cartridge can get clogged by calcareous and mineral particles from a hard water, which can lead to a restricted water flow inside the filtration system. **We recommend to clean the filter cartridge at least once a week.**

Remove the cartridge and the skimmer insertion. Using a garden hose, clean the cartridge so that no settled dirt remains in the corners of the filter. Once clean, put the insertion back to the skimmer. Put the cartridge inside the skimmer tank next and close it. Remember that the filter cartridge has to be replaced every 3–6 months. Replace it even sooner if it is damaged or clogged, it is not usable in such state.

Make-up, sunscreens and other types of body lotion decrease the quality of the water and lower the filter cartridge longevity.

7.3 Maintaining the quality of the water in the hot tub

WARNING: Always add the chemicals to the water, never the other way around. Add the chemicals to the water only when there are no people inside. Use the circulation pumps to mix the chemicals with the water. Store the chemicals according to the instruction on their label.

a) Use a suitable water hardness regulator regularly (the **HANSCRAFT SPA Water hardness regulator** is recommended) and follow the instructions on the chemicals' label.
b) Depending on the frequency of use of the hot tub, test the water quality regularly by a suitable water quality tester.
c) Adjust the water pH level accordingly by suitable water chemicals (the **HANSCRAFT SPA – pH PLUS** and **pH MINUS** is recommended).
d) Adjust the Cl (chlorine) level with suitable water chemicals (**HANSCRAFT SPA – MULTI MINI 3 in 1 tablets** are recommended). Follow the instructions on the chemicals' label.
For the chlorine to have the desired effect, the pH level needs to be adjusted first.
e) We recommend you to clean/replace the filter cartridge before adding the chemicals.

Chlorine shock – in case of extreme pollution, it is necessary to treat the water with a dose of fast dissolving chlorine and thus perform a chlorine shock. The pH level of the hot tub water has to be adjusted to 7.0–7.6 first and the chlorine level has to be checked. Once a week or after adding a large amount of fresh water to the hot tub, add a shock dose of chlorine 10–20 g/m^3 (2 table spoons) into the water. Add the chlorine only when there are no people in the hot tub. After you add the chlorine, turn on the circulation pumps so that the chemicals mix well with the water. If you are using a granulated form of the chemical, dissolve it in a small amount of water first. Let the chlorine level drop to 3 mg/l before you start using the hot tub.

Oxygen shock – in case of extreme pollution, it is necessary to treat the water with a large dose of fast dissolving oxygen and thus perform an oxygen shock. The pH level of the hot tub water has to be adjusted to 7.0–7.6 first and the oxygen concentration in the water has to be checked. Once a week or after adding a large amount of fresh water to the hot tub, add a shock dose of oxygen (2 tablets) into the water. Add the oxygen only when there are no people in the hot tub. After you add the oxygen, turn on the circulation pumps so that the chemicals mix well with the water. Let the oxygen level drop to 15 mg/l before you start using the hot tub.

Store the chemicals according to the instructions on the label.

Ideal chemical levels

Free chlorine concentration (active oxygen concentration)	0.7–1.0 mg/l (10–15 mg/l)
pH level	7.0–7.6
Calcium	100–180 mg/l
Overall alkalinity	80–120 mg/l

7.4 Replacing the water

It is important to keep the hot tub water fresh and clean. We recommend you to replace the water at least every 3 months unless the water quality drops sooner. The hot tub water can be used for watering the garden for example, given that it has not been chemically treated at least one week prior.

a) Disconnect the hot tub from the power supply (turn off the residual current device).
b) Check the power supply cable and make sure it is not wet.
c) Drain the water through a water drainage system, close it carefully and fill the hot tub with fresh water.
d) Connect the hot tub back to the electrical circuit (turn on the residual current device).

7.5 Cleaning the outer shell of the hot tub

Use a mild, not abrasive cleaning detergent and a soft cloth.

7.6 Hot tub hygiene and disinfection

Taking care of hygiene is extremely important for elimination of any germs, algae and other harmful organisms polluting the water in the hot tub. Test the water using the testing kit first (to find out the pH and Cl level) and follow by using suitable water chemicals accordingly. Follow the instructions on the chemicals' label carefully.

7.7 Thermo cover

Using the thermo cover helps saving up energy expenditures by minimizing temperature loss and evaporation. The cover is an effective way of protecting your hot tub from impurities and fallen leaves.

WARNING: For safety and damage prevention reasons, do not sit, stand or lie on top of the cover. Do not place any objects on top of it. The thermo cover does not serve as a fence around the bathing area either. Do not let animals walk on top of the thermo cover. Prevent a large snow layer build up on top of the thermo cover.

7.8 Upkeep of the thermo cover and upkeep instructions

It is important to take a proper care of the thermo cover: clean it when necessary and treat it with a product intended especially for an eco-leather or fake leather. The guarantee does not cover damages caused by an inappropriate cleaning product.

a) The right balance of water chemicals represents an important factor in prolonging the longevity of your hot tub thermo cover.
b) Remove the hot tub's cover and place it on the ground surface down.
c) Wash the cover with a large amount of water from a garden hose or a water bucket.
d) Clean the thermo cover surface using a soft brush and a mild dish soap solution (1 tea spoon of dish soap per 8 litres of water).
Attention: Do not let the dish soap solution dry on the thermo cover before washing it off!
e) Wash off the cleaning solution thoroughly.
f) Return the cover back on the hot tub.
g) Open the thermo cover regularly so that the chemical vapours can disperse. Flip the thermo cover inner side u at least twice a year for 3–4 hours.
h) If the thermo cover does not get regularly cleaned twice a month, the surface material can become frail or age prematurely. The seams can separate. If you do not clean the thermo cover appropriately, the guarantee becomes invalid.

WARNING: Do not lift the thermo cover by the handles. A vacuum forms between the thermo cover and the hot tub therefore lifting by the handles could result in a damage. It is necessary to support the thermo cover from below by hand.

8 Winter and summer time

Winterizing the hot tub, a process recommended by the producer.

It is required that all water gets drained from the hot tub during the process of winterizing it, as well as water from all the technical parts of the hot tub (circulation pumps, pipes, etc.) We recommend you to use our specialized service for this purpose because flawed winterizing of the hot tub can result in a loss of the guarantee. If you decide to use our professional services, it is necessary to order them sufficient amount of time in advance. In case of winterizing the hot tub by yourself, it is crucial to do it when the air temperature is still above zero. If the winterizing is done in temperatures below zero, it can be very difficult because water in the motors could have frozen already and damaged some parts of the hot tub.

8.1 Winter time – using the hot tub, all year operation (SLP)

If you decide to keep using the hot tub during the winter time, it is necessary to keep checking the hot tub for cases of for example: circuit break failure, motor not working, heating not working, filter cartridge getting clogged.

If the instructions above are not complied with and it results in a damage of the hot tub, the warranty cannot be claimed.

8.2 Summer time

Do not expose the hot tub to direct sunlight; do not use inappropriate cleaning detergents for upkeep. Prevent the hot tub surface coming in direct contact with chemicals as well as surface scratches cause by sharp objects. Ensure the safety of children in the hot tub by a continuous adult supervision. Only eligible persons over 18 years of age, educated about the whole process, can be operating the hot tub. The same goes for handling the water chemicals, which have to be stored out of children's reach.

9 Final establishments

9.1 Guarantee conditions

Guarantee conditions abide by terms and conditions of your distributor.

9.2 Safe disposal of the product after the service life

Hire a professional service to dispose of the hot tub after it reaches the end of its longevity. According to the WEEE directive (Electronics and electrical appliances waste) this device cannot be disposed of like a regular waste.

9.3 Warranty claims and repair services

Potential warranty claims abide by the consumer protection laws and the warranty claims policy of your distributor.

10 Repair services chart

A TABLE FOR YOUR NOTES, PLEASE FILL OUT THE FOLLOWING INFORMATION. You will need the filled out information in case of a repair requested through the customer service line.	
Purchase date	
Delivery date	
Model name	
Serial number	
Seller information (name, phone number)	

11 Notes

A WORLD OF WELLNESS
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