

USER MANUAL

SPATOUCH 3

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Hot tub performance specifications

For your own safety and the safety of your product, please observe the following instructions. Read the following information carefully and follow the user manual exactly when using the hot tub to avoid damaging the product or the risk of injury. This appliance is intended for use by children 8 years of age or older with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, provided they are under supervision or have been instructed on the use of the product and understand the risks. Children must not play with the product. Cleaning and maintenance must not be performed by children without supervision.

1 Hot tub performance specifications

Performance specifications

| | |
|--------------------------------|---------------------------------------|
| rated voltage: | three-phase connect. 230/400 V 50 Hz* |
| maximum working current: | 3 × 16 A |
| current surge: | up to 3 × 25 A |
| voltage resistance: | 1 250 V/min. without breakdown |
| insulation resistance: | ≥ 1 M Ω |
| water resistance (protection): | IPX5 |
| electrical shock protection: | first degree |

*The product does not use 400 V phase to phase voltage. It is possible to adjust it to 1 × 230 V; however, this is not recommended due to limitation of the functions. (For more information on this connection, please refer to the Supplements, p. 33)

Load capacity

| | |
|---|--------------------------|
| heating: | 1 × 230 V/3 kW/13.6 A |
| ozone: | 1 × 230 V/50 Hz/80 mA |
| blower: | 1 × 230 V/0.66 kW/2.9 A |
| pump 1/1 + 1/1 + 0,4: | 2.2 kW + 2.2 kW + 0.4 kW |
| total input power (depending on type of hot tub): | 8.5 kW/h |
| protection class: | I. |
| lighting: | LED 12 V AC/10 W |
| maximum output power: | 20 W |

Preparation and electrical connection options – AC three-phase current 3 × 230/400 V/16 A/20 A

Ensure that the hot tub is always connected to a circuit protected by a Residual Current protective Device with a rated tripping current of 0.03 A. It is necessary to use a Type C or Type D circuit breaker with a rated current of 16 A (motor circuit breaker) downstream of the Residual Current protective Device.

Preparation for the installation of the hot tub

Recommended Type C circuit breaker

Hot tubs with two massage motors:

3× 16 A/C or D

Hot tubs with three massage motors:

3× 20 A/C or D

!!!THE HOT TUB MUST ONLY BE CONNECTED BY A PERSON WITH PROFESSIONAL ELECTRICAL QUALIFICATION IN ACCORDANCE WITH DECREE NO. 50/1978 COLL.!!!

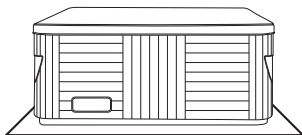
2 Preparation for the installation of the hot tub

Check the hot tub before use! If any part of it is damaged or missing, immediately contact the retailer without delay! Ensure that all components are in line with your order. Check the hot tub every time before use. In case of any damage, do not use the hot tub! In case your spa is equipped with screwless cabinet, it is prohibited to install additional accessories or load the cabinet in a way not specified by the manufacturer. Damage caused by failure to follow this precaution is not covered by the warranty!

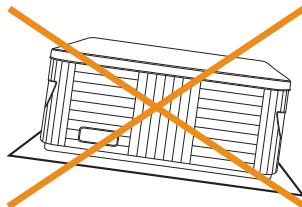
2.1 Preparation of the place for installation and connection to electricity

The hot tub must be installed on a flat, sufficiently solid base plate, taking into account the load-bearing capacity of the building. If the hot tub is installed outdoors, we recommend constructing a concrete monolithic base slab with a minimum strength (thickness) of 10 cm. It is important to also always select the load-bearing capacity of the base slab with regard to the dimensions and the weight of the hot tub. Consult your building supervisor. The weight is specified in the technical description of the given hot tub. The tubs are prepared by us for an electrical connection of 3× 230 V/400 V~ alternating current. Therefore, use a circuit breaker 3× 16 A/C or D, alternatively 3× 20 A/C or D and a Residual Current protective Device corresponding to this connection. Furthermore, it is necessary to have a cable with parameters corresponding to the rightful regulations for this type of connection. **The cable must also have 4 usable meters at the location of the hot tub**, so that it can be pulled through and connected to the control unit without complications. Do not route the cable under 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

Warning: connection to electricity must be done according to norms valid in Czech Republic ČSN 33 2000-7-701

3.1 General information

We strongly recommend you to hire professionally trained and qualified technicians for the process of installation. If you decide to install the hot tub by yourself, please abide by the following instructions.

- a) Carefully remove all the packaging material from the hot tub and position the hot tub on a beforehand selected place of installation.
- b) Demount the front panel on the side of the hot tub control panel. Demount the upper cover of an electrical wiring under which you can find a residual current device, a ground fault circuit interruptor (if it is part of the hot tub equipment) and a ground staple. The connection itself must be done by a person with an expert qualification.
- c) 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.
- d) Before filling the hot tub, make sure that all the screws on the equipment are tightened to prevent water leakage.

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 104 °F.
- 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.

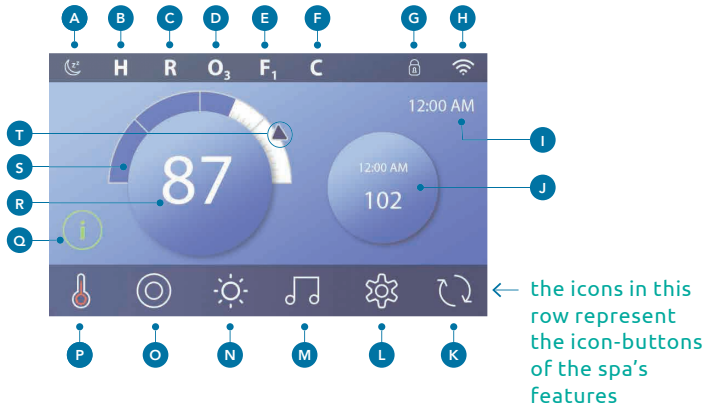
4 Aquatic AV audio system

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 SpaTouch 3)

5.1 Home screen



- | | |
|--|--|
| A Sleep mode | I Time-of-day |
| B Temperature range | J Secondary panel within the panel |
| – High H | K Rotate display |
| – Low L | L Settings |
| C Heat mode | M Not installed |
| – Ready R | N Not installed |
| – Rest ⌘ | O Hot tub |
| – Ready-in-rest RR | P Heat status |
| D Ozone running O₃ | Q Messages |
| (whenever the filter pump is running) | – Information i |
| E Filter cycles | – Reminder Ⓡ |
| – Filter cycle 1 F1 | – Error and Warning ⚠ |
| – Filter cycle 2 F2 | – Error – spa will not function until fixed ⚠ |
| – Filter cycle 1 and 2 F+ | R Water temperature bar |
| F Clean-up cycle | S Pascal inquiry |
| G Panel locked and/or settings locked | T Quick temperature setting |
| H Wi-fi connection | |

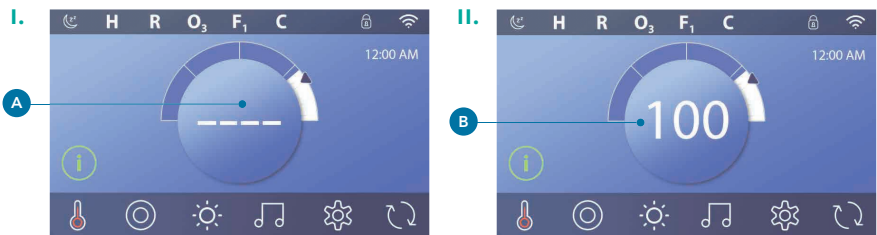
The system's configuration determines the number of icons that will show up on the home screen. Your home screen may have less icons or different ones.

5.2 Hot tub status



Important information regarding the operation of the hot tub may be visible on the home screen. Most functions, including *Changing the set temperature*, are accessible from the home screen. The current water temperature and the set water temperature may be changed (see chapter 5.9.4).

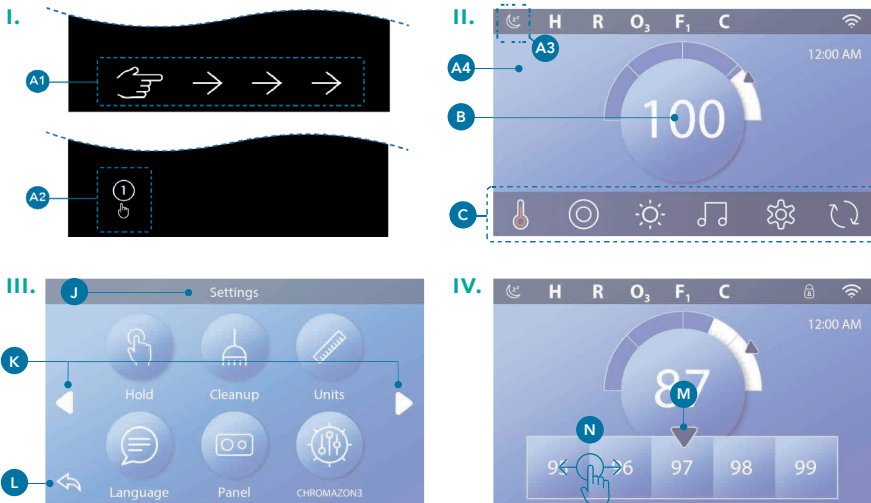
Time-of-day status, ozone status and the status of the filter cycles as well as other messages and warnings are accessible here. The selected temperature range is visible in the top left corner of the screen. The lock icon becomes visible if the panel and/or *Settings* are locked. In some instances, error messages or reminders may appear in the bottom part of the screen. By tapping on these indicators, you will be redirected to the message viewing screen. You may decline some messages. For further information about messages (see chapter 6).



Once the hot tub is switched on, four dashes will appear for the duration of one minute in place of the bar indicating water temperature **A**. The dashes indicate that the hot tub is checking the water temperature. After the pump is started up and the 1-minute time period has passed the dashes will disappear and the water temperature will show up **B**. The dashes may appear again if the pump is switched off for longer than one hour.

5.3 Waking up the panel, navigation and common buttons

Control of the hot tub is easy thanks to its intuitive graphic controls, interface (GUI).



Waking up the panel

When in rest mode, the screen is blank. After you've touched the blank screen, one of three options will show up:

- 1 The home screen will show up (A4) and the panel is awake.
- 2 An icon of a circled number 1 will show up (A2). You can wake up the panel by pressing this icon followed by pressing the icon of a circled number 2.
- 3 An icon of a hand will show up (A1). You can wake up the panel by pressing the icon of the hand and swiping your finger in the direction of the arrows.

The panel will automatically switch to sleep mode if it is not being used for a certain amount of time. You may configure this amount of time (*see chapter 5.6 section Panel*).

Putting the panel into sleep mode

You may put the panel into sleep mode by pressing the *Sleep* (A3) icon. The panel may or may not include this icon.

Icon-buttons

The different icon-buttons allow quick access to functions and settings. In the middle of the display, you can find a large icon-button which indicates the temperature (B) and controls the set temperature. The entire bottom row of the home screen contains different icon-buttons (C).






Control panel

Screen titles

Screen titles show up in the top row of the screen. For example, this is the screen of *Settings* **J**. Screen titles are mentioned throughout the entire user manual.

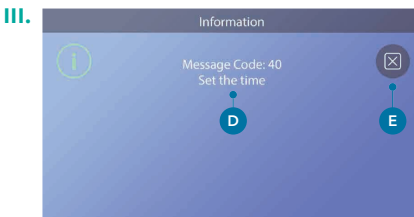
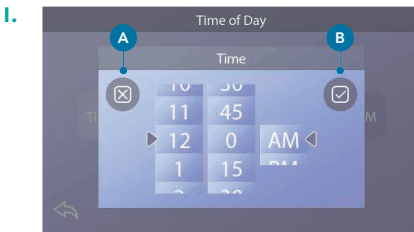
Navigation

You may navigate the different screens and/or lists using the icon-buttons:

-  Up
-  Left
-  Down
-  Right
-  Back

Swiping and selecting items in the lists

You may search the list for your desired setting by swiping your finger along the list **N**. An arrow indicating the current setting will appear **M**. If a desired setting shows up but is not aligned with the arrow, tap the desired setting for it to align with the arrow. The list of temperatures will disappear by tapping anywhere outside it.




Saving and cancelling


After you've selected a new setting, tap the *Save* **B** icon-button. Once you've tapped the *Save* icon-button the change is complete. If you do not wish to use the new setting, tap the *Cancel* **A** icon-button.


Message icons

Message icons provide reminders that help maintain the smooth operation of the hot tub. Message icons also provide warning information helping technicians solve problems. When a message icon appears **C**, tap on it for its message to appear **D** or **G**. Tap the *Exit* **E** icon-button to return to the home screen or tap the *Clear* **F** icon-button to cancel the message. The icon-buttons may differ based on the type of message. Please see the list of the different types of messages below.

 Informational messages

 Reminders

 Errors and warnings

 Errors – the hot tub will not function until the error is resolved!

 Delete

 Back

5.4 Hot tub behaviour

Pumps

The pumps drive water and air through the jets. The pump typically has one or two speeds. The pump may switch off by itself if it is left running beyond a certain time limit.

Circular (filter) pump

The circular (Filter) pump is usually smaller and quieter, and it requires less energy than the pump used for jets. The circular pump typically has one speed and it circulates water through the filtration system of the hot tub to keep it clean. The circular pump enables water flow through the heating system and is thus active whenever the heating system is active.

Operation without a filter pump

If the hot tub is equipped with a two-speed pump and lacks a filter pump, one of the speeds of the two-speed pump will replace the filter pump's job.

Filtration and ozone

If the hot tubs lack a circular pump, during filtration the two-speed pump will run on its first speed together with the ozone generator and the UV lamp, if installed.

Control panel

In circulation systems the ozone will typically run together with the circulation pump, but it may be limited by filtration cycles.

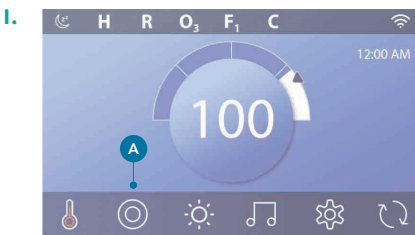
Freeze protection

If the temperature sensors within the heating system register a low temperature, the pumps and blower will gradually activate to provide freeze protection for the water in the hot tub.

Clean-up cycle (optional)

When a pump or blower is turned on by tapping the icon-button on the control panel, the clean-up cycle will begin 30 minutes after the pump or blower is turned Off or timed out. The pump will run for 30 minutes or longer (depending on the system). On some control systems, you can change this setting.

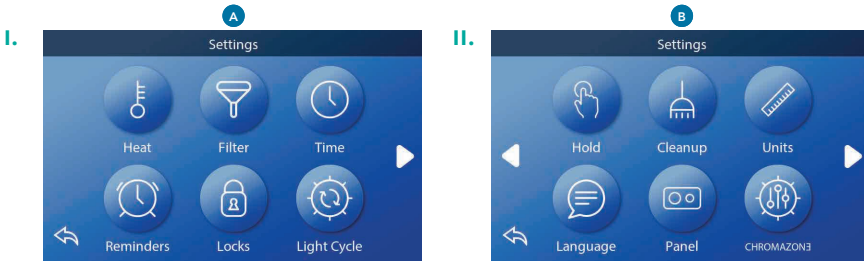
5.5 Features of the Hot tub






By tapping on the *Spa* **A** icon you will open the *Spa* screen. By tapping on these icon-buttons **B** you will activate the hot tub's devices. Some devices may only be switched On or Off while other systems may have different speeds/statuses available. The configuration of your hot tub determines the number of icons buttons and icon features on the *Spa* screen. A maximum of six icon-buttons is showed at once. If more than 6 icon-buttons are available, a navigation arrow shows up on the right-hand side **D**. By tapping this arrow or by swiping your finger you will arrive at the next screen with the remaining feature icon-buttons of the hot tub **D**. By pressing the *Back* **C** icon-button you arrive back at the home screen.

If the jets are left running, they will switch Off after a certain period of time. If the hot tub is equipped with a circular pump, the icon of the circular pump will show up on the *Spa* screen. This icon only indicates its activity and is thus not a functioning icon-button. If the hot tub doesn't have a circular pump, *Jets 1* may occasionally switch on automatically. In that case, it is possible to change the speed by repeatedly tapping this icon-button, however, it is not possible to switch off *Jets 1*.

5.6 Settings



Tap the *Settings*  icon-button on the home screen. A menu with a selection of *Settings* **A** icon-buttons will show up. To view the entire selection, tap the navigation arrows   or swipe your finger across the display.

Heat

Keep the hot tub heated and ready to enjoy via correct heating settings.
(See chapter 5.9)

Filter

Keep the water in your hot tub clean and ready to enjoy via filter cycle settings.
(See chapter 5.7)

Time

By setting the time-of-day, you ensure correct timing of the planned features.
(See chapter 5.8)

Reminders

Reminders that are visible on the screen **A** are useful messages regarding the maintenance of the hot tub, and they show up regularly.

Locks

Settings lock/panel lock. (See chapter 5.10)

Hold

The *Hold* function which is visible on the screen **B** is used to switch off the pumps during servicing such as cleaning or replacement of the filter. The *Hold* mode lasts 1 hour unless switched off manually. If servicing requires more than 1 hour, it is recommended to switch off the hot tub's power supply instead. You may terminate *Hold Mode* by tapping the *Back* icon-button.

Control panel



Cleaning

When the pump or blower is switched on using the icon-button, the cleaning cycle starts 30 minutes after switching on. The pumps and blower will run for 30 minutes or longer, depending on the system. You can change this setting with some systems.

Units

Units are visible on the screen **B**. You may change the unit settings for temperature (Degrees Celsius or Degrees Fahrenheit) or units of time (12 hours or 24 hours).

Language

Select a language from the chosen options.

Panel

You may change two parameters on the *Panel* screen:

- 1 Setting up how long after the last activity the panel goes to sleep. We recommend selecting a short time period since it lowers the chances of the icon-buttons becoming activated by the water.
- 2 Setting up whether extra steps are necessary in order to wake up the panel. (See chapter 5.3) The purpose behind extra steps to wake up the panel is to prevent unwanted waking up, for example by condensed water.

Diagnostics

This icon-button visible on the screen **C** is for service technicians who may find useful information here. (For further information about diagnostics see Chapter 5.11)

5.7 Set Filter Cycle Times



Keep your water clean and ready to enjoy!

Follow these steps to set up the timing for **Filter cycle 1**:

- Tap the **Settings** **A** icon-button on the home screen.
- Tap the **Filter** **B** icon-button on the **Settings** screen.
- Tap the **Start** **E** icon-button on the **Filter cycles** screen.
- Select the start time using the icon-buttons **J** on the **F1 End** screen.
- Save the settings by tapping the icon-button **Save** **K** alternatively, cancel the settings using the **Cancel** **I** icon-button.
- Tap the **End** **F** icon-button on the **Filter cycles** screen and follow the same process to set the end time.
- After setting the start and end time tap the **Save** **G** button on the **Filter Cycles** screen.
- After setting the start and end time, an option **H** will show up on the **Duration** screen and you have now set the time for **Filter cycle 1**; the white circle **C** indicates that Filter cycle 1 is enabled (it is always enabled).

Follow the same steps as above to set the time for **Filter cycle 2**.

Control panel

Enabling Filter cycle 2

You will find out whether *Filter Cycle 2* is enabled by seeing if a white circle appears around the icon-button with a number 2 **D**. For example, on image III. on the previous page *Filter Cycle 1* **C** is enabled (the number 1 is encircled with a white circle), and *Filter Cycle 2* is disabled **D** (the number is not encircled in white). By tapping on the number 2 icon-button **D** you enable/disable *Filter Cycle 2*. *Filter Cycle 2* will only run if it is enabled.

NOTE: Filter Cycle 1 and Filter Cycle 2 may overlap, by which the total filtration time will shorten by the amount of overlap time.

Clean-up cycles

Short-term launch of water filtration through secondary devices at the beginning of every filter cycle ensures maintenance of hygienic conditions as well as freeze protection. Some systems automatically launch a certain number of rinse cycles per day regardless of the number of filter cycles per day that have you set up. In such cases, the clean-up cycles do not have to coincide with the start times of filter cycles set by you. If *Filter Cycle 1* runs on a 24-hour setup, by switching on *Filter Cycle 2* you launch the clean-up at the time when the launch of *Filter Cycle 2* is programmed.

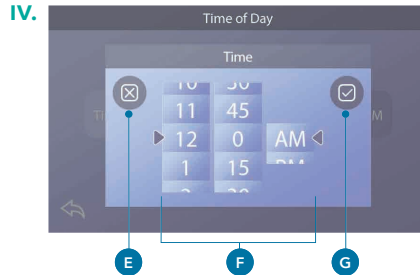
Description of filter cycles

- 1 The filter pump is always running during a filter cycle.
- 2 In REST mode, heating up only happens during the filter cycle.
- 3 Rinsing (launching of the massage pumps) occurs at the beginning of every filter cycle (in most systems).

5.8 Time-of-day settings



Continued on the next page



Follow these steps to set the time:



- On the home screen, tap the *Settings* **B** icon-button.
- On the *Settings* screen tap the *Time-of-Day* **C** icon-button.
- On the *Time-of-Days* screen tap the *Time* **D** icon-button.
- Settings icons will show up:
 - You can set the time by scrolling the windows of the selection **F**. If the required time value shows up but is not aligned with the arrow, tap the required time for it to align with the arrow.
- You save the settings by tapping the *Save* **G** icon-button or tap the *Cancel* **E** icon button to cancel the settings.

Setting the time-of-day is important in order to determine the filtration times and other background features. If it is necessary to set the time-of-day an informational message icon **A**. (See chapter 5.3 section message icons)

NOTE: If the system's power supply is interrupted, the Time-of-day settings will be retained for a few days (this is only the case for some systems).

5.9 Heat settings



Ensure that your hot tub is heated and ready to enjoy using the *Heat Settings*. Access the *Heat Settings* from the home screen by tapping on the *Settings*  icon-button. Tap the *Heat*  icon-button and a screen will appear on the *Heat Settings* screen **A**. The *Heat Settings* screen does not contain icon-buttons such as *Save* or *Cancel*, so the changes that you make will apply immediately.

5.9.1 Heat modes **B**

READY mode **R**

READY mode (see image on the previous page) **B** maintains the water's temperature within the range of 0,5 °C (1° F) from the set temperature. For example, if the set temperature is 39 °C (102 °F) the water temperature in this mode will remain within the range of +/- 0,5 °C (1° F) from 39 °C (102 °F). By tapping on the *Heat Mode* icon-button **B** you can switch between *READY* mode and *REST* mode. If the hot tub is in *READY* mode, an **R** icon will show up on the display of the home screen.

REST mode **R**

REST mode functions the same way as ready mode, except that *REST* mode only heats up the water during filter cycles. (See chapter 5.7) By tapping on the *Heat Mode* **B** icon-button you can switch between *READY* and *REST* modes. **R** An icon will show up on the display of the home screen if the hot tub is in *REST* mode.

READY-IN-REST mode **RR**

READY-IN-REST mode is the same as *REST* mode. The only exception is that in *READY-IN-REST* mode, after switching on *JETS 1*, if necessary, the water is heated up for up to one hour. An **RR** icon shows up on the home screen if the hot tub is in *READY-IN-REST* mode.

If the hot tub is in *READY-IN-REST* mode and you go to the *Heat Settings* screen **A** the *READY-IN-REST* mode is cancelled. You will be returned to *REST* mode even if you didn't tap on any icon-buttons on the *Heat Settings* screen.

5.9.2 Heat Range

There are two available heat range settings. High and low heat range.

High **H**

The water temperature may be set in the range between 26,6 °C–40 °C (80 °F–104 °F) when *Temp Range* is set to *High*. Tap on the *Temp Range* icon-button **C** to switch between *High* and *Low* values. An **H** icon will appear in the top row of the home screen if the hot tub is in *High temperature Range* mode.

Low **L**

The water temperature may be set in the range between 10,0 °C–37,2 °C (50 °F–99 °F) when *Temp Range* is set to *Low*. Tap on the *Temp Range* icon-button **C** to switch between *High* and *Low* values. An **L** icon will appear in the top row of the home screen if the hot tub is in *Low* mode.

Varying *High* and *Low* temperature ranges may be set by the manufacturer. Freeze protection is active in both *High* and *Low* temperature ranges.

5.9.3 M8

By tapping on the M8 **D** icon-button you switch the feature On and Off. The M8 feature searches for opportunities to attenuate the pump, which may prolong the pump's durability and save money and energy, especially if you're using a thermocover to cover the hot tub whenever it's not in use. The M8 Feature is enabled by default. This function is optional and may thus not show up in all systems.

5.9.4 Changing the set temperature

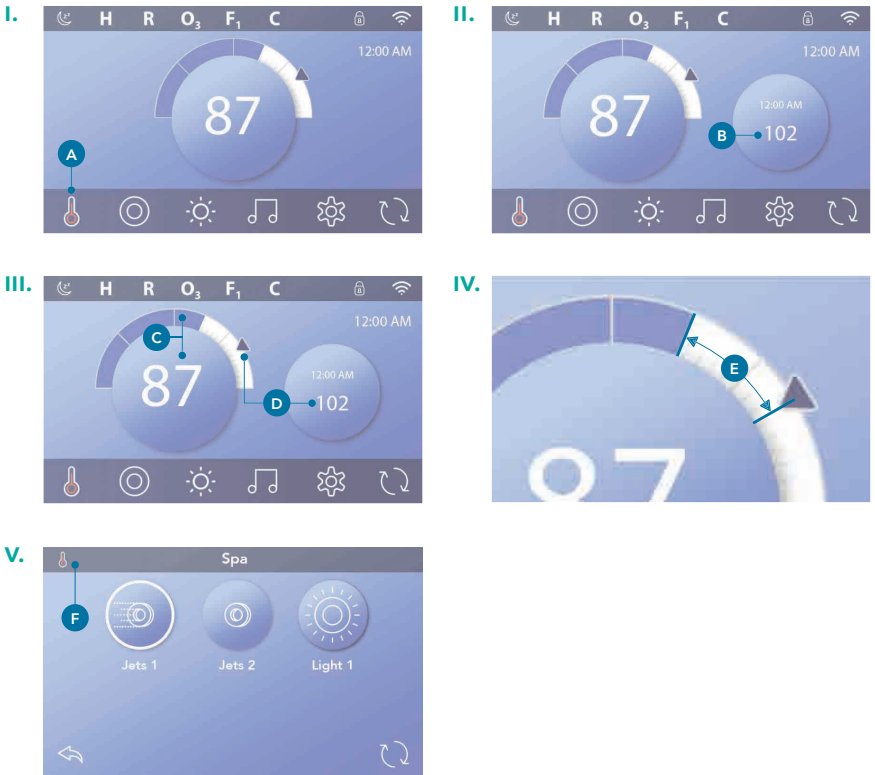


In the example above, the temperature is set to 102 °F/38 °C.


- Tap on the icon-button showing the water temperature **A** and a range of temperatures will show up **B**. An arrow will show up in the middle **C**, this arrow indicates the current set temperature.
- If the value 102 (38 °C) is already visible but is not centred **D**, tap on the field with the value to centre it **E**.
- If the value 102 (38 °C) is not visible **B**, swipe your finger across the temperature menu until the desired temperature becomes visible on the display **D**.

Control panel

- If 102 (38°C) shows up after swiping your finger but it does not stop in the centre of the display under the arrow **D**, tap on the field with the desired temperature. By tapping on it, the relevant field will move to the centre frame **E**.
- By tapping on the water temperature value on the display **A** you confirm the water temperature setting. The temperature menu in the bottom part will disappear. So, now the water temperature is set to 102 (38°C).



Viewing the set temperature

Tap on the icon of the heater **A**  and the temperature setting will show up in a mini panel **B**. By tapping on the heating icon once again the mini panel disappears. The temperature setting is indicated with a numerical value and an arrow in the graphic diagram **D**. The current water temperature is then shown with a numerical value and a blue field in the graphic diagram **C**.

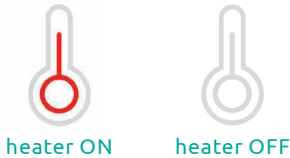
The difference between the current water temperature and requested set temperature is shown in the graphic diagram as a white gap between the blue field and arrow **E**. If there is no gap here the numerical value of the water temperature and set water temperature are identical.

Changing the temperature setting using the mini panel

The icon-button of the mini panel and the temperature settings screen work the same way in this sense. By tapping on the icon-button of the mini panel you can view the temperature menu. Select the desired temperature and then tap on the icon-button of the mini panel. The temperature menu will disappear and now the new temperature is set.

Method of displaying an active heater

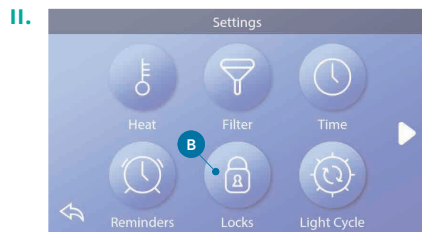
When the heater is switched on the centre of the water temperature icon goes red **A**. If the heater is switched on, then the icon showing the heater's status will be displayed in the top left corner of the panel



Note: the icon showing the heater's status flashes when the heater is switched on; this is normal.

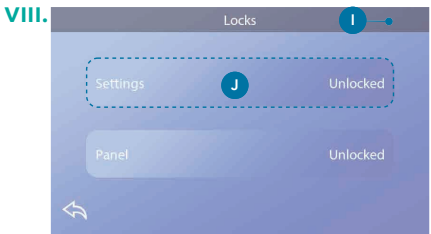
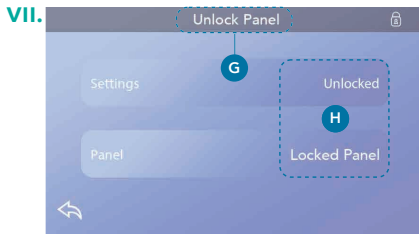
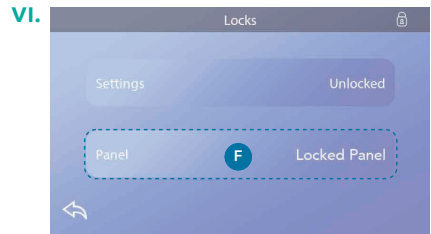
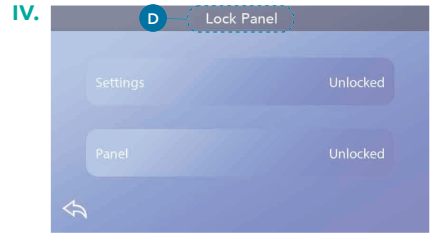
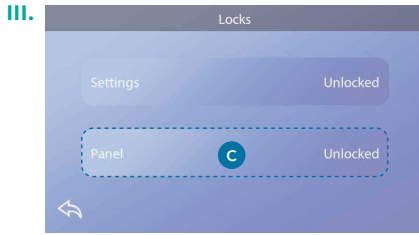
5.10 Limiting operations

The following examples show how to lock and unlock the panel.





Continued on the next page

Control panel



Lock panel

- Tap the *Settings*  icon-button **A** on the display of the home screen.
- Tap the *Locks*  icon-button **B** on the *Settings* screen.
- On the screen of the *Locks* feature, tap on the *Panel* icon-button **C** and the title *Lock Panel* **D** will show up in the top section of the screen.

- Press and hold the *Lock Panel* icon-button **D** for 5 seconds after which an icon of a lock will appear in the top right corner of the screen **E**; the icon of a lock will also show up in the top row of the home screen; the panel is now locked.

Unlocking the panel

- On the *Locks* screen tap on the *Panel* **F** icon-button and the title *Unlock Panel* **G** will show up in the top section of the screen.
- Press and hold the *Unlock Panel* icon-button **G** for 5 seconds after which the icon of the lock will disappear from the top row of the *Locks* **I** screen; the panel is now unlocked.

Locking and unlocking settings

By following the same steps as you did to lock and unlock the panel you may lock or unlock the settings features.

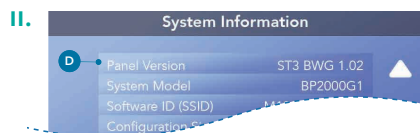
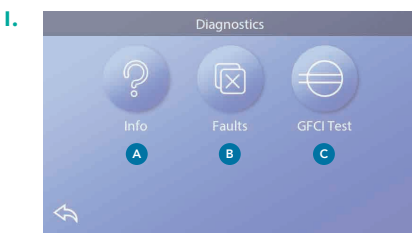
By locking the settings features you can limit the controlling to prevent unwanted use or unwanted temperature settings. Locking the panel inhibits the use of the controller and all features are switched off except for automatic features which remain active.



Simultaneous locking of panel and settings

The lock icon **K** shows up if the settings or panel, or both are locked.

The current lock status is visible on the right-hand side of the icon-buttons **H**.

5.11 Diagnostics



The diagnostics screen is useful for technicians. You access the diagnostics menu by tapping the *Settings*  icon-button on the home screen followed by tapping on the *Diagnostics* icon-button. 

Information

Info **A** displays different settings and identifications of the system.

Control panel/System messages

Under information you may find the following:

System model – displays the number of the system model

Panel version – displays the software number in the top part **D**

Software ID (SSID) – displays the ID number of the software system

Configuration tag – displays the checksum for the system configuration file

Current settings – displays the current chosen configuration of the setup number

Dip Switch settings – displays the number which represents the DIP switch in the S1 position on the main board

Heater type – displays the identification number of the heater type or the “Standard”

Voltage of the heating system (north American system/UL) – north American control systems/UL display the operating voltage configured for the heater

Heating system power input (international system/CE) – international/CE control systems display the power range of the heater which is configured for a given control system

Faults

Faults B is the record of the last 24 faults which may be removed. Using the arrows, you can display individual records in the faults list.

GFCI Test **C**

CE Product. Systems registered as CE don't have an RCD test due to the character of the electrical connection. There must be a trained person at the end user's address who knows how to correctly test and reset the ground fault circuit interrupter (GFCI).

6 System messages

6.1 General messages

Freeze protection

The system has registered a water temperature that may cause the water in the hot tub to freeze. The pumps and blower then start running in sequences. The heating is also switched on. This is an operating message not an error.

The water is too hot (Message code: M029*)

The system has detected a water temperature of 43 °C (110 °F) or higher in the hot tub. The features of the hot tub are switched off. The system automatically rests if

the water temperature in the hot tub falls below 42 °C (108 °F). Check whether the pump isn't running for too long or if the surrounding temperature is too high.

6.2 Messages of the heating system

Low water flow (Message code: M016)**

It may happen that water flow isn't sufficient enough to carry heat from the heating device. The heating will switch on again after approximately 1 minute.

(See below Controls related to water flow)

Water flow has failed* (Message code: M017)**

There's insufficient water flow through the heating device for heat to be diverted from the heating device. The heating has been switched off. *(See below Controls related to water flow)* Reset the message after having solved the problem*.

Heating device may be dry* (Message code: M028)**

There is insufficient water in the heating system. The hot tub will switch off for 15 minutes. Reset this message* to restart the heating.

(See below Controls related to water flow)

Heating system is dry* (Message code: M027)**

There is an insufficient amount of water in the heating to start it up. The hot tub is switched off. After having solved the problem, it is necessary to reset the message* for the heating system to switch on again. *(See below Controls related to water flow)*

The heating is too hot (Message code: M030**)**

One of the water temperature sensors has detected approx. 48 °C (118 °F). The hot tub will switch off. It is necessary to reset the message* if the temperature is lower than approx. 42 °C (108 °F).

Controls related to water flow

Check whether the water level isn't too low, if suction flow isn't restricted, closed valves, trapped air, too many closed jets or a pump running at full power.

6.3 Messages related to sensors

Sensors are not synchronized (Message code: M015)**

Temperature sensors may be unsynchronized by 3 °F. If this message does not disappear within a few minutes, call for service.

System messages

Sensors are not synchronized – call for service* (Message code: M026)**

Temperature sensors are not synchronized. The above-mentioned fault lasts a minimum of 1 hour.

Fault of sensor A, fault of sensor B

(Sensor A: Message code: M031) (Sensor B: Message code: M032**)**

The temperature sensor has failed. Request a service.

6.4 Messages related to the system

Programme memory failure* (Message code: M022)**

When switching on the system, the checksum test programme failed. This indicates a problem with the firmware (operating programme) and requires service action.

The settings were restarted (error of the non-volatile memory)*

(Message code: M021)**

If this message shows up numerous times when switching on the hot tub, contact your seller or service organization.

The clock has failed* (Message code: M020)**

Contact your seller or service organization.

Configuration error

The hot tub will not start. Contact your seller or service organisation.

The pump may be stuck (Message code: M034)**

The water may be overheated. SWITCH OFF THE HOT TUB AND DO NOT ENTER THE WATER! Please contact your service organisation.

Hot water (Message code: M035)**

SWITCH OFF THE HOT TUB AND DO NOT ENTER THE WATER! Contact the service organization.

6.5 Reminders

Reminder messages may be reset directly from the panel. Tap on the Clear icon to reset the reminder message.

Check the pH

It may appear in regular intervals, i.e., every 7 days.

Check the pH using the testing kit and adjust the pH with suitable chemicals.

Check the water quality

May appear in regular intervals, i.e., every 7 days.

Check the levels of the disinfectant agent and the chemical composition of the water using the testing kit and adjust it using suitable chemicals.

Check ozone

Check the features of the ozone generator. *(Service technician)*

Service inspection

May appear in regular intervals.

Carry out the service inspection according to the guidelines of the manufacturer. Other messages may appear with specific systems.

Clean the filter

May appear in regular intervals, i.e., every 30 days.

Clean the filter media according to the guidelines of the manufacturer.

GFCI (or RCD) test

Check the ground-fault circuit interrupter and its proper functioning. The device has to be tested regularly, ideally 1× every 4 weeks.

Replace the water

May appear in regular intervals, i.e., every 90 days.

Replace the water in the hot tub regularly to maintain the right chemical balance and hygienic conditions.

Clean the cover

May appear in regular intervals, i.e., every 180 days.

The thermal covers should be cleaned and treated regularly to reach maximum durability.

Check UV

Check whether the UV lamp is functioning. Please contact the service centre.

6.6 Other messages

Set Time of day

When the control system that displays this message is switched on, its time of day is initialized at 12:00. The correct time of day setting is important in order to determine filter times and other background features.

Communication error

The control panel does not receive communication from the system. It can shortly pop up during the start-up of the system. This is normal. If it does not disappear quickly, call for service.

6.7 Notes regarding messages

Some messages contain the text “*Call for service*”, because to solve the problem it is necessary to call a service technician. If the panel is locked and a message notification pops up, you will be redirected to the lock screen before the message is deleted (it is necessary to first unlock the panel after you’re redirected).

By tapping on the *Error/Warning/Reminder/Info* icon on the screen containing the message you will access the *System information* screen. This will enable solving the problems on the phone or enable the service technician in the field to better understand what is happening. Leaving the screen containing the system information in this instance will bring you back to the messages screen.

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/m³ (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.

Upkeep of 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 Thermocover

Using the thermocover 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 thermocover does not serve as a fence around the bathing area either. Do not let animals walk on top of the thermocover. Prevent a large snow layer build up on top of the thermocover.

7.8 Upkeep of the thermocover and upkeep instructions

It is important to take a proper care of the thermocover: 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 thermocover.
- 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 thermocover 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 thermocover before washing it off!

- e) Wash off the cleaning solution thoroughly.
- f) Return the cover back on the hot tub.
- g) Open the thermocover regularly so that the chemical vapours can disperse. Flip the thermocover inner side up at least twice a year for 3–4 hours.
- h) If the thermocover 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 thermocover appropriately, the guarantee becomes invalid.

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

Setting to 1× 230 V

When setting to 1× 230 V, it is necessary to observe the cross-section of the supply wire; namely: CYKY – 3× 10. A circuit breaker and Residual Current protective Device 32 A, according to the applicable standards of the country where the product is installed. This setting is necessary to maintain all functions of the tub.

HANSCRAFT[®]
european spa producer

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