

INSTALLATION AND
OPERATING INSTRUCTIONS

DROP SPA

drop.

These instructions contain important information on the installation, operation, and servicing of the spa. Please read through the instructions carefully before installing and starting up a new spa. Keep the instructions for future reference. If you are uncertain, please contact Drop's customer service department.

THIS MANUAL APPLIES TO

- Drop X
- Drop Vuolle
- Drop Vuolle Compact
- Drop S
- Drop Lähde
- Drop Lähde Compact
- Drop Lampi
- Drop Lampi Compact

CONTENTS OF THE DELIVERY

- Drop spa
- Insulation cover
- Chemical starter kit

The manufacturer retains the right to change the product's assembly or structure without separate notice and without any obligation arising from this.

SAFETY

Use of the spa pool requires compliance with the safety instructions set out in these user instructions. Be vigilant, use your common sense and make sensible decisions in all actions related to water.

- In order to prevent drowning and serious injury, the access of children under the age of 5 to the spa must be restricted.
- Children may not use the spa without adult supervision.
- When using the spa with small children, check the suitability of the water temperature.
- Diving is not allowed in the spa. Never jump into the spa. Never jump on the benches or on the edges. It may lead to a serious injury or even death.
- Remove the spa cover fully before entering the spa.
- Do not heat up the water too much. The recommended water temperature is 37 °C.
- It is recommended that people with heart problems keep the water temperature below 37 °C.
- Do not use the spa under the influence of alcohol or medications that may jeopardize the safe use of the spa. Use of the spa under the influence of the substances mentioned above is at the user's own risk.
- Do not bring electrical devices closer than 2.5 meters from the spa. Neglecting to keep a safe distance increases the risk of electric shock and may cause a serious injury or even death.
- We recommend that a continuous bathing session be no longer than 30 minutes in length, after which you should cool down for 5–10 minutes.
- The surface of the spa may be very slippery. Be careful when entering and exiting the spa.
- Do not remove or plug the suction drains or use the spa without the drains or if the drains are broken.
- Keep the chemicals (e.g., water treatment or cleaning chemicals, or disinfectants) out of the reach of children.
- Keep the spa cover closed and locked when the spa is not in use. Do not stand, sit, lean, or place weight on the cover. The filter located on the step absorbs small debris from the water.

Do not block or sit on top of the filter.

CONSIDERATIONS BEFORE RECEIVING YOUR SPA

Carefully familiarize yourself with the spa's dimensions and, if necessary, ask our customer service department for assistance with planning your spa site. The spa's placement must be planned well with regard to the comfort and safety of use. The spa should be placed in an open spot if possible. Otherwise, leaves falling from trees and other dirt may easily end up in the spa water during bathing sessions. In densely populated areas, you should take your neighbors into account.

The spa must be installed and stored in such a way that it rests on its frame. Do not lower the spa to rest on its top edge or have the spa resting against a terrace, for example, in such a way that the top edge carries the spa's weight. The plans are indicative examples of the installation.

Please take into consideration the effect of frost when designing the base.

The manufacturer is not liable for damage caused by an incorrectly installed spa.

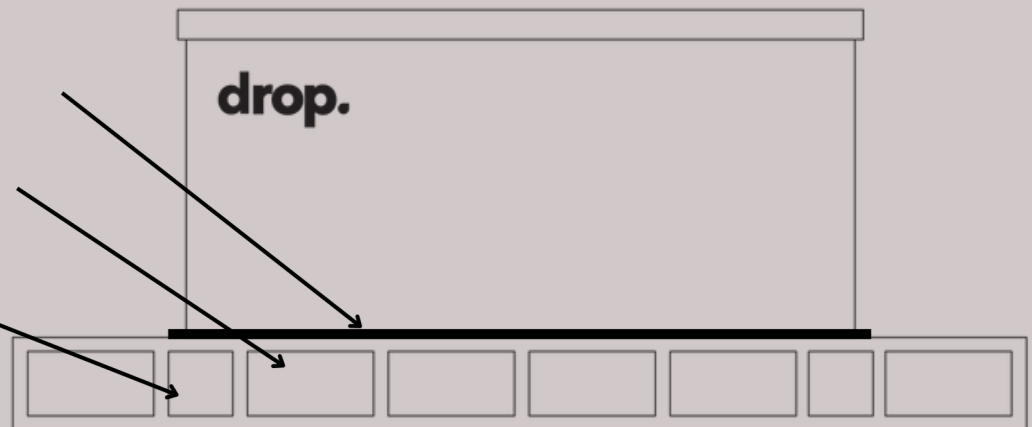
ALTERNATIVES FOR THE FOUNDATION

Insulation ABS base with tracks for slings on the base of the spa

20mm watertight plywood can be added on to top of the wood beans

Sturdy wooden beam above ground

Adequate cross support



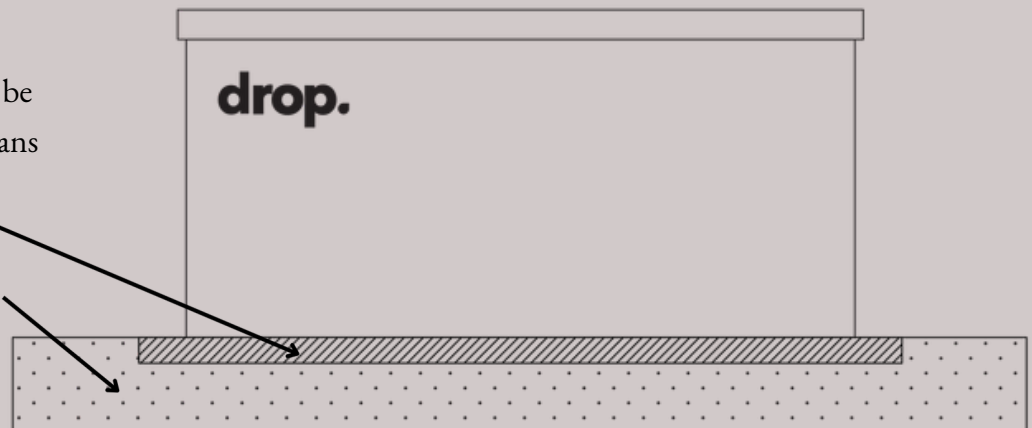
Insulation ABS base with tracks for slings on the base of the spa

20mm watertight plywood can be added on to top of the wood beans

Concrete casting / horizontal tiling

Compressed crushed stone

Filter fabric

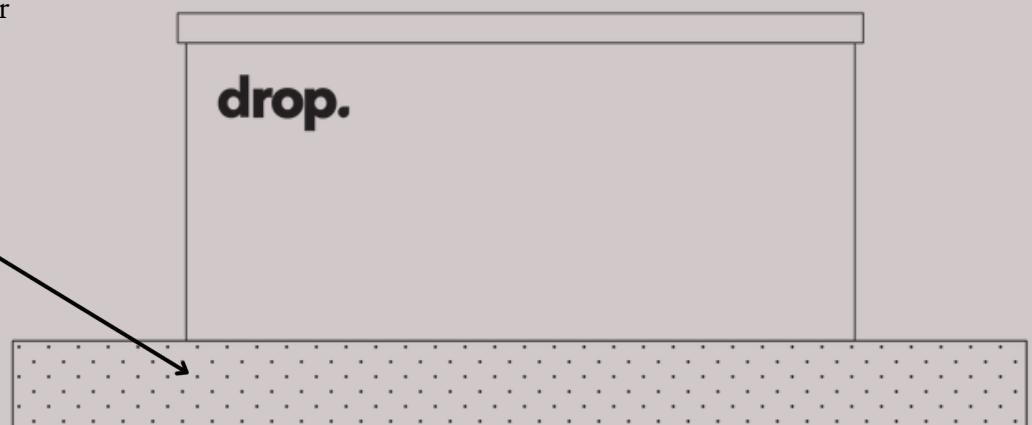


Insulation ABS base with tracks for slings on the base of the spa

20mm watertight plywood can be added on to top of the wood beans

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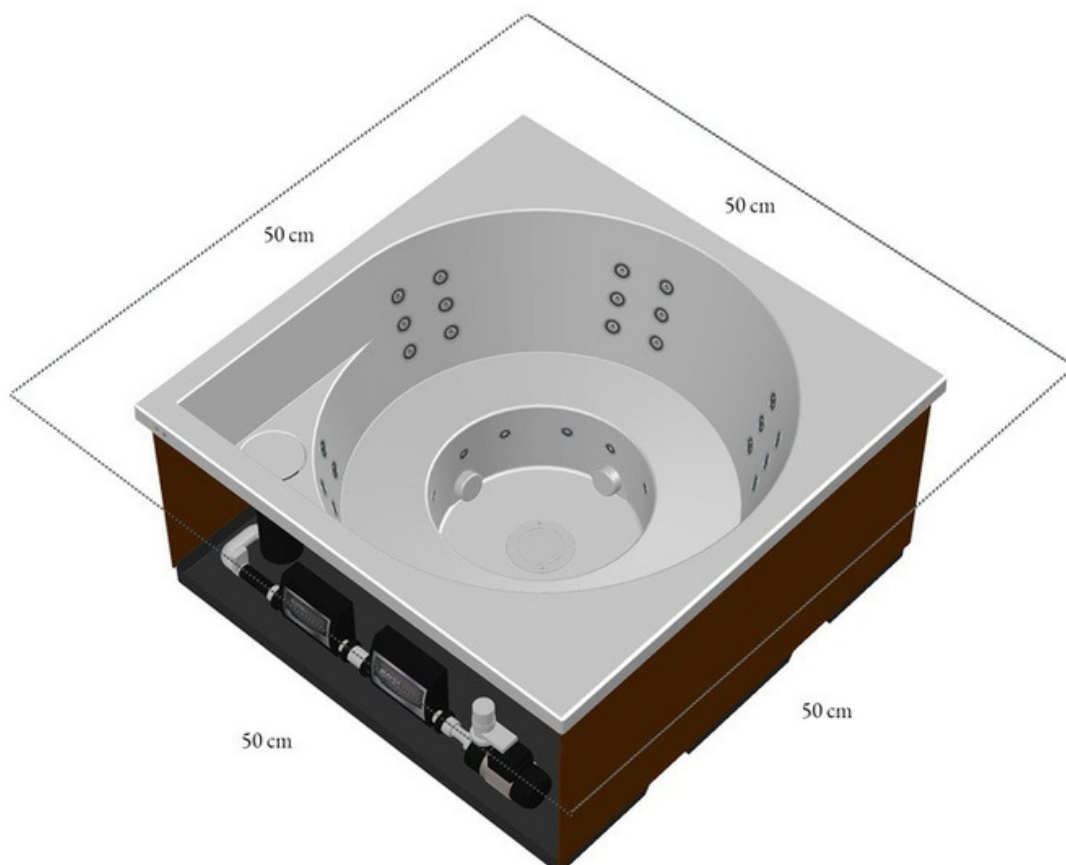
SERVICE HATCH

Each site must be designed according to the situation and place. Special attention must be paid to the realization of the spa base. The base must be level, load-bearing, and horizontal. The most suitable bases are made of **concrete, gravel, wood, or some other hard base material**. The base must be able to withstand a weight of 2,500 kg without sinking or deforming.

There must be no less than 50 cm of space around the outdoor spa for any required servicing measures. It must be possible to open the service hatches located on the side of the spa without impediment. If you want to sink the spa into a terrace, you will need to make a separate service hatch in the terrace. The service hatch must allow the side panels to be opened and provide enough room to work next to the spa.

In case you surround the spa with skirting, all side doors must be accessible to enable service maintenance.

The filter can be replaced without opening the service door.



RECEIPT OF DELIVERY

Please check the package externally before acknowledging receipt. Any observed external damage caused during transportation must be immediately reported to the courier or our customer service department. All damage caused during transportation must be reported within a maximum of seven (7) days in writing to drop@drop.fi / Drop reseller.

If there are faults or deficiencies in the product delivered, the seller will either make the required changes to the product or deliver a new replacement product to the customer. The seller must be notified of the product's deficiency within 14 days of receipt of the product.

The spa is delivered in an upright position by a truck with a utility trailer unless otherwise agreed. Remove the plastic packaging, cardboard, and any other equipment or parts delivered inside the spa before turning the spa to its correct position. Four to six (4-6) people are needed to turn the spa to its correct position.



INSTALLATION AND STARTUP

Roughly four to six (4-6) people are needed to move the spa. Special care must be taken when moving the spa to prevent accidents. When the spa is lowered into a hole in a terrace, for example, it is recommended that moving straps be used to ensure safe installation. Grooves for moving straps can be found on the bottom of the spa.

Don't leave the spa exposed to sun light without spa cover or without water.

PLEASE NOTE! Do not connect power to the spa until it is filled with water!

1. Turn the jets until they are open.
2. Before using the spa, check that all the threaded connections of the pumps are firmly secured. The threaded connections may come loose during transportation.
3. Fill the spa with water using a garden hose. Fill the spa through the filter tank to avoid airlock, in such a way that the water level is approx. 10 cm below the edge of the spa.
See page 17 for filter instructions.
4. The electrical installation may only be carried out by a licensed electrician. Do not connect power until the spa is filled with water. See Electrical installation.
5. After power is turned on, the spa display (located in the equipment compartment) will show setup data. This initialization will last 4–5 minutes.
6. If the error message HTR | MAY | BE | DRY | - - - - - | WAIT | - - - - - OR ER-3 or ER-4 shows on the display within the first few minutes, it indicates that there is air in the pump. In this case, see the instructions for clearing an airlock.
7. Turn on the pumps and check that water is coming out of all jets.

Technology

Before filling the hot tub, make sure that all threaded connections on the pumps are tight. Threaded connections may come loose during transport.



1. Filter system
2. Balboa *extra heater 3 kW
3. Balboa *central unit 3 kW
4. Balboa control panel
5. Koller 200 W filter pump
6. Jet system
7. UV-system

*Compact models these are located in different order

Service hatch with isolation



Electrical installation

The electrical installation may only be carried out by a licensed electrician.

PLEASE NOTE! Do not turn on the power to the spa until it is filled with water!

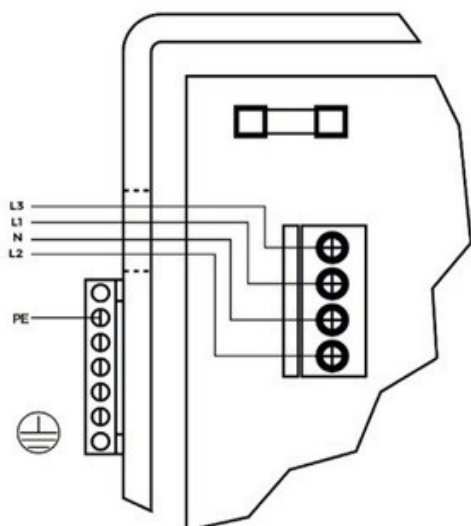
The outdoor spa must be connected to a 3 x 16 A, 400 V (current) or a 1 x 16 A, 230 V (3 kW Lähde & Lampi) electrical connection. The electrical connection must be protected with a ground fault circuit interrupter. The electric supply can be drilled through any corner of the spa's siding or a moving strap groove in the spa base. The side behind which the control panel is located is marked on the spa.

The spa must be connected to a 3 x 16 A, 400 V (current electrical connection) The electrical connection must be RCD protected. The power supply can be drilled through the outer cladding of any corner of the spa or through the lifting sling groove of the bottom spa.

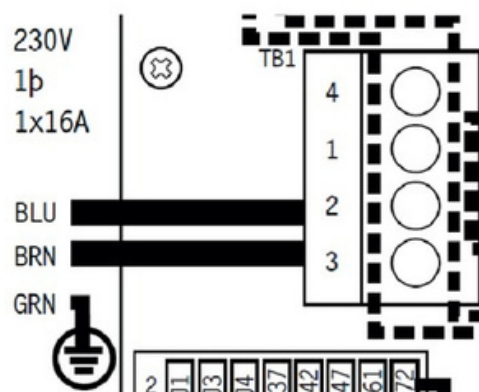
PLEASE NOTE! The wires must be stripped to a length of approx. 20 mm, and the earth connection must be completed appropriately. Place the disconnecter in an easily accessible location.

1. Check that the spa is filled with water and that all nozzles are covered with water.
2. Open the service hatch.
3. Open Balboa Central Unit (BP21)
4. Connect the power cable to the control panel.
5. Close the service hatch.

Electrical installation diagram 6 kW 3 x 16 A, 400 V



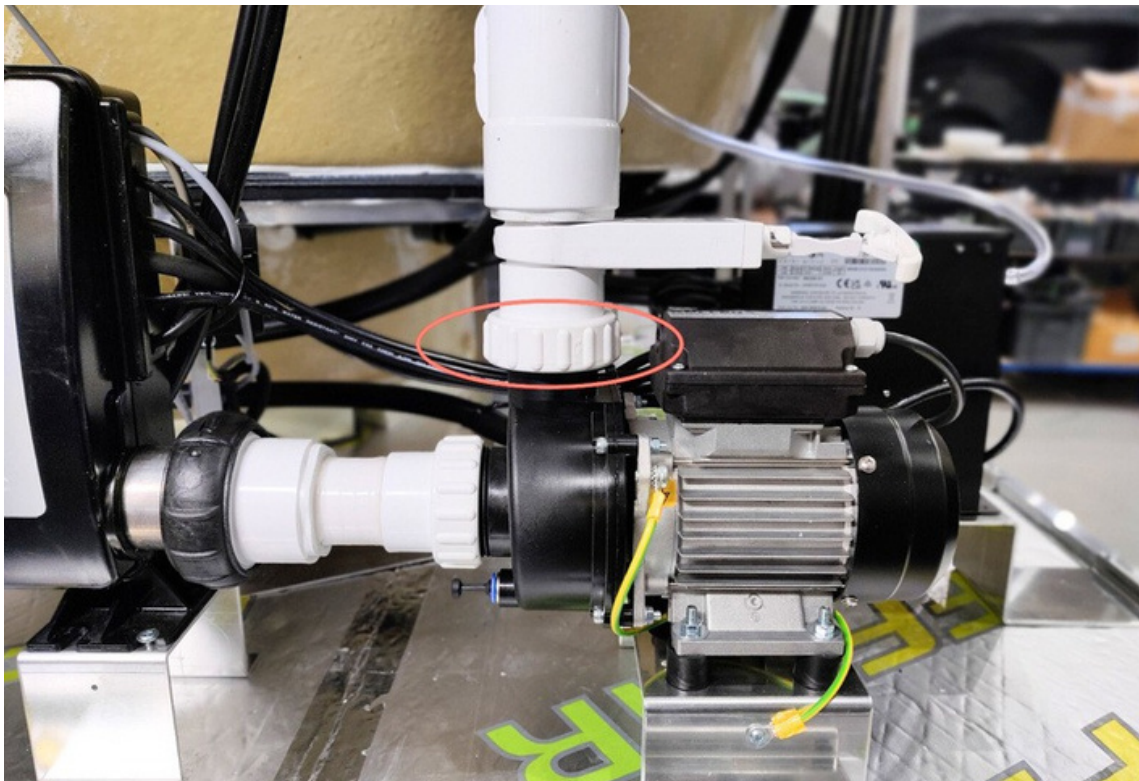
Electrical installation diagram 3 kW 1 x 16 A, 230 V



Instructions for clearing an airlock

An airlock causes the jets to malfunction. An airlock is often caused by filling the spa too quickly, which results in air being trapped in the piping. To avoid airlock, we recommend to fill the spa through the filter tank.

1. Open the service hatch and turn the threaded connection on top of the pump slightly open.
2. When water starts coming out, tighten the connection and turn on the pump. The pump will pump for a moment, after which the water will start to flow properly.
3. Dry any spilled water and close the service hatch. Your outdoor spa is ready for use.



ControlMySpa™ (additional product)

You can use the remote control to adjust the spa's settings from anywhere and check the status and functions of the spa. The new generation of CMS™ remote control also sends notifications to your mobile phone about any issues with the spa. The remote control uses radio signal between spa module and home module. Home module requires internet connection.

The spa can also be controlled by using the control panel located in the spa's equipment compartment.

1. Connect the CMS Gateway Ultra unit to a modem with a network cable and connect the power cable to the unit.
2. Download the CONTROLMYSPA application via your phone's app store. Create a new account with your email.
3. Stand next to the spa and make sure that the power to the spa is turned on.
PLEASE NOTE! CMS can be found 15 minutes after the spa is turned on. If necessary, turn off the power to the spa, wait for 20 seconds and then turn the power back on.
4. Open the CONTROL MY SPA application on your phone, press "SETUP" and follow the instructions on the screen.
5. The CMS code is PDS-26134

TROUBLESHOOTING

PROBLEM	CAUSE
Red light in the CMS Gateway Ultra unit	The unit and the spa are not connected
Blinking red light in the CMS Gateway Ultra	The unit and the spa are connected, but there is no connection to the control panel.
Blinking blue light in the CMS Gateway Ultra unit	Software update in progress. Do not turn off the power.
Blinking green light in the CMS Gateway Ultra	The unit and the spa are connected, but there is no Internet connection.
Green light in the CMS Gateway Ultra unit	The unit and the spa are connected and an Internet connection has been established. No errors.

USE, CARE AND SERVICE

A Drop spa can be filled with approx. 1,500 liters of water. Please note that the water level rises as the number of bathers increases. The spa is filled with clean water by using a garden hose, for example. We recommend to fill the spa through the filter tank.

Never turn on the equipment or keep it running when the spa is empty of water.

Only turn on the equipment when:

- 1.the required amount of water has been reached (water level approx. 10 cm below the spa's edge)
- 2.the spa is in READY mode (control panel in the equipment compartment).

Keep the spa's insulation cover closed during heating and always when the spa is not in use. Make sure that the spa always has enough water and that all jets are below the water surface.

Using the spa

You can set the desired temperature using the control panel. There are two switches on top of the spa that can be used while bathing.

- 1.Aeration/massage system (Drop X, Vuolle, S, and Lähde) —press the button to turn the massaging bubbles on/off. The bubbles run for 15 minutes.
- 2.Light switch—by pressing the button, you can change the color of the spa's LED lights to the color of your choice. The same button turns the lights on/off.



INSULATION COVER

The cover is made of polyvinyl chloride (PVC). Avoid vinyl conditioners that contain silicone or oils or that are waxy, as they are very harmful to the vinyl.

To avoid damaging the leather insulation cover, do not use sharp objects to remove extra weight.

Regular cleaning with mild household all-purpose cleaners lengthens the spa's service life and maintains the cover's general appearance. When you add vinyl conditioner, the cover must be clean. In the winter, it is important to remove any snow that has piled up on the cover. Remember to keep the cover locked when the spa is not in use.

PLEASE NOTE! The outdoor spa's insulation cover is not made to withstand human weight.

Cleaning the spa and water treatment

The spa requires care and services in order to stay fresh, attractive, and hygienic. The filtration and UV system alone is not sufficient to keep out all bacteria, which is why chemicals must also be used in the spa.

General

- Wash yourself carefully before entering the spa.
- If sand enters the spa, it may clog the equipment.
- Keep the water's pH value between 7.0 and 7.4.
- Follow the chemical dosing instructions.
- The spa's water level should be cleaned with a microfiber cloth regularly or after each use, for example.
- Empty and clean the spa regularly.
- Always fill the spa with clean water
- Replace the filter approximately once a year.

The Drop spa can be filled with approx. 1,500 liters of water. The amount of water filled also depends on how many people bathe at the same time. Spa care and cleaning are easy and effortless.

The condition of the water largely depends on how frequently the spa is used, what season it is (in the summer, the water must be disinfected more often), what temperature the water is kept at and what the general water quality is (whether the spa is located in a city or a rural area or whether it is filled with lake water).

It is difficult to provide instructions that would be applicable to all cases, as water quality varies a great deal, depending on the examples provided above. Once you have used the spa for some time, you become familiar with “your own” water.

See the chemical packaging for the correct dosage.

Please note that chemicals do not need to be used weekly if the spa is not in active weekly use. Unnecessary use of chemicals can cause stains in the surface of the spa that require mechanical polishing. If you take a break from using the spa or use it very rarely, there is no need to add chemicals every week.

First mix the fast-dissolving chlorine tablet with water in a separate container and then pour it into the spa.

Important facts about chemicals and water treatment

Adhere to the dosages of chemicals closely. Excessive use of chemicals may damage the equipment, whereas using too little causes algae and other bacterial growth that may clog the piping, breaking the spa equipment as a result. The warranty does not cover damage or breakdowns caused by erroneous use of chemicals or neglect of other care instructions.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Cloudy water	• Dirty filter • The pH value is not within the recommended range • Insufficient use of cleaning chemicals • Excessive use of the same water or the water is too old	• Clean the filter • Adjust the water pH level to the recommended range • Add a cleaning chemical to the water • Replace the water in the spa
Smell of water	• The water contains too much organic matter • Insufficient use of cleaning chemicals • Water pH level too low	• Adjust the water pH level to the recommended range • Add a cleaning chemical to the water
Chlorine odor	• Chlorine level too high • Water pH level too low	• Wait for the chlorine level to decrease • Adjust the water pH level to the recommended range
Musty smell	• Bacterial or algae growth	• Add a cleaning chemical to the water • Empty, clean and refill the spa
Organic layer	• Accumulated oil and dirt	• Wipe the dirt away with a clean sponge
Algae growth	• Water pH level too high	• Adjust the water pH level to the recommended range • Add a cleaning chemical to the water
Patches on the surface	• Total alkalinity of water too low • Water pH level too low	• Adjust the water pH level to the recommended range • Adjust the total alkalinity to the correct value
Calcification	• Too much calcium in the water • Total alkalinity of water too low • Water pH level too low	• Adjust the water pH level to the recommended range • Empty, clean and refill the spa

Emptying the spa

Replace the water in the spa 2–3 times per year, depending on use. If you wish to empty the spa for the winter. Turn off the power to the spa before emptying it. The spa is emptied into the wastewater drain with a submersible pump.

PLEASE NOTE! Do not use a metal submersible pump.

After the spa has been emptied, clean the inner surface thoroughly with a mild disinfectant. Use a soft and lint-free cloth or sponge.

Replacing the filter

1. Lift the filter lid. The lid is removed by turning the lid counterclockwise to release the lock.
2. Open the filter compartment float by turning it counterclockwise.
3. Lift the float brackets and the coarse filter from their exhaust gases.
4. Lift up the fiber filter and replace it with a clean one.

REMOVE PLASTIC AROUND FILTER

5. Replace the parts.



You can clean and reuse the filter. To achieve the best result, replace the filter whenever you replace the water. You can use two filters in turns. When one is being cleaned, the other is ready for use.

The fabric filter recovers small debris from the water. The fabric filter of an outdoor hot tub might get blocked by lime particles from hard water, which makes the flow of water weaker. In order to prolong the useful life of the fabric filter and improve its performance, rinse the filter under running water 2–4 times a month. The filtering system is fully automated.

Cleaning a filter

- Remove the filter from the spa.
- Put water in a bucket and soak the filter for at least three hours.
- Then rinse the filter with clean water.
- Let the filter dry.
- In this way, the filter is always clean and ready to be put in the spa.



Massage jet

Turn the white/grey outer edge of the nozzle clockwise or counterclockwise to open/close the nozzle.

For Drop X, Vuolle, Vuolle Compact and Drop S models.

Using the spa in winter

The Drop spa is intended for year-round use, which is why we recommend that spas equipped with maintenance heating be used in summer and winter alike. If the spa is emptied for the winter, the warranty does not cover any damage caused by the freezing of the spa.

The spa cover should be cleared of snow at regular intervals. At worst, a thick layer of snow may even cause the cover to break. Additionally, the spa's surroundings and the access route to the spa should be kept clear of snow to allow you to make it ready for use quickly and to ensure safe access to the spa. In the winter, the area around the spa may be particularly slippery when water that has spilled from the spa freezes over.

The Drop spa can be kept always ready for use in the winter, in which case the equipment is kept warm inside the frame and there is no risk of the spa freezing.

Please secure the supply of power to the spa, as long-term power outages may cause the spa to freeze and damage the equipment.

In the event of a power outage, DO NOT OPEN THE INSULATION COVER!

The spa will turn back on automatically when power is restored. After a power outage, check the functions and water temperature of the spa. Short power outages ranging from a few minutes to a few hours do not affect the functionality of the spa.

The spa is well-insulated, which prevents it from freezing in this amount of time, even in freezing temperatures. It takes a power outage of longer than a few days for the spa to freeze. In the event of a longer power outage, please contact the seller or your service agent.

Before the weather drops well below freezing point, you should service the spa:

- replace the water
- clean the spa
- replace the filter

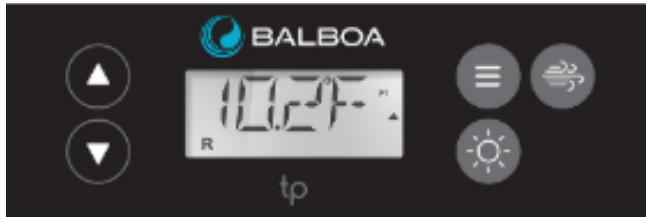
If you want to empty the spa for the winter, we recommend that you contact our customer service department. When emptying the spa, you must make sure that there is no water left in the piping. The piping cannot be fully emptied with the drainage pump alone – the piping must be vacuumed. Additionally, the filter must be removed from the filter tank to allow the filter to dry and prevent them from mildewing or freezing.

The warranty does not cover damage caused by freezing.

CONTROL PANEL

Depending on timing of purchase, your Drop spa may be equipped with one of the following control panels. Read the QR-codes with your phone to get more information.

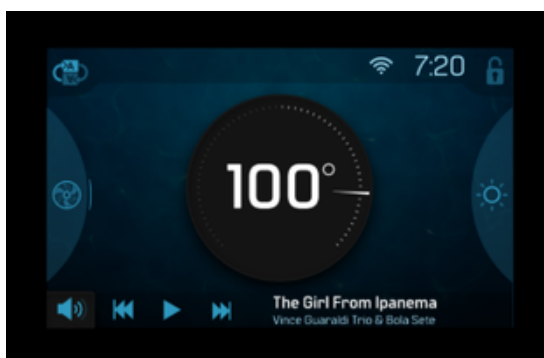
Balboa TP500



Balboa Spa Touch 3



Balboa Spa Touch 4



D R O P

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