Owners Manual

Please read before operating

HALO

SPAS

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1. WELCOME

Thank you for choosing a Halo Spa! We are proud to be an Australian owned and operated company delivering premium spas crafted for luxury, performance and endurance.

At Halo, we take pride in building high-quality spas designed to deliver an unparalleled aquatic experience for years to come. Our commitment to innovation, quality manufacturing and customer satisfaction ensures your Halo Spa will provide enjoyment for your whole family.

Please take the time to thoroughly read this owner's manual. It contains important information for the safe, effective set up and operation of your new spa. Following the instructions and guidelines will ensure you get the most from your investment.

This manual covers topics such as:

- Pre-Delivery Planning: Get your site ready for arrival and installation
- Spa Set Up: Proper installation, filling and start up procedures
- Operation: Understand the components, controls and features
- Maintenance: Keep your spa clean, balanced and well cared for
- Troubleshooting: Identify and address common issues

Refer to the table of contents to easily find the section you need. If you need any assistance, your authorized Halo dealer is ready to help.

Enjoy creating lasting memories and wellness in your new Halo Spa!

Record your spa serial number here for easy reference:

My Serial Number	

2. OWNER RESPONSIBILITY

2.1. LOCAL, SAFETY, AND LEGAL OBLIGATIONS

Local Authorities

Before proceeding with your spa installation, it's important to consult your local authorities regarding any mandatory regulations that must be followed when installing a spa or swim spa. They will provide information about pool fencing requirements and applicable regulations.

Fencing Compliance & AS1926.1 Standard

Your spa installation and fencing must comply with the guidelines set within the AS1926.1 standard and by your local council. All installations in Australia and New Zealand, must adhere to the AS1926.1 standard. This is a benchmark that guarantees your spa meets specific safety and quality criteria.

Permits and Inspections

As the owner, it is your duty to obtain any necessary permits or inspections required by your local council. This typically relates to the delivery, fencing, and installation of your spa. Taking this step ensures that your installation is recognised and approved by the relevant authority.

2.2. ELECTRICAL OBLIGATIONS

Adhering to Electrical Standards

When it comes to electrical connections, always ensure they are aligned with the necessary codes and regulations. In accordance with the AS/NZ 3000 regulations, all spas must be connected to a dedicated circuit safeguarded by a safety switch and circuit breaker.

Employing a Qualified Electrician

Engage a certified electrician to undertake the electrical connection of your spa and provide an Electrical Safety Certificate. The certificate should be retained as a record of the correct and safe installation.

Spa Position

The spa must be positioned a minimum of three (3) meters away from overhead power lines or any existing electrical outlets.

2.3. WARRANTY & CERTIFICATIONS

Understanding Warranty Terms

Compliance with regulations ensures that your warranty remains valid. It's important to note that any deviation from these regulations could potentially void your warranty and lead to complications. Halo Spas cannot be held accountable for any breaches resulting from non-compliance. Additionally, any damage resulting from incorrect electrical configurations will not be covered under the Halo Spa warranty.

Retaining Your Electrical Safety Certificate

Please retain you Electrical Safety Certificate as a copy may be requested by your Halo Spa dealer or manufacturer if requesting a warranty claim.

2.4. USAGE & SAFETY RESPONSIBILITY

Below, we've detailed essential usage and safety recommendations for your Halo Spa, following these guidelines will assist you in enjoying your spa safely and responsibly.

- Always disconnect the spa from the power supply before any servicing to prevent electrical safety incidents.
- Prior to entering the spa, check the water temperature. For a healthy adult, a maximum of 38°C is advised. Extra caution is recommended for young children.
- Ensure that the spa water is consistently maintained and balanced. This is essential for a safe and optimal user experience.
- Refrain from submerging your head entirely in the water.
- It's suggested to limit your spa usage to 15-20 minutes when operating at higher temperatures.
- For your safety, avoid using the spa if under the influence of drugs or alcohol, as these can increase the risk of accidental drowning.
- Consult with a medical professional before using the spa if you are taking any medication, or if you are pregnant.
- Always ensure children or persons with limited mobility have a responsible adult present to monitor their safety when using the spa.
- Children should be supervised at all times when they are in the vicinity of the spa.

IMPORTANT NOTICE: Before powering up your Halo Spa for the first time, please thoroughly read the entire Owner's Manual. Being well-acquainted with its features and functionalities ensures safe operation and helps maintain the validity of your Halo Spas Warranty.

3. PRE-DELIVERY PLANNING

Before the arrival of your spa, proper preparation is essential. Outlined below are the key points, and subsequent chapters will delve into the details of each topic to ensure comprehensive understanding and preparation.

3.1. UNDERSTANDING SPACE AND LAYOUT

Clearance

A minimum clearance of 500mm on all sides of the spa is recommended. Ensure that QuickLock™ door panels can be accessed and removed without any hindrance. Failing to provide this adequate clearance might result in additional charges during routine servicing, general repairs, or during warranty claims.

If you are installing a heat pump in addition to the spa, choose a location where noise and airflow disruptions are minimal. The pump should be at least 500mm away from the spa, but no more than 3 meters. *Refer Figure 3.1a.*

TIP: Outline the intended position of the spa using chalk or rope. This visualisation aids in ensuring proper preparation.

Foundation Choices

Once filled, your spa can weigh several tonnes. When preparing the foundation, it's essential to account for both the spa's weight and its occupants.

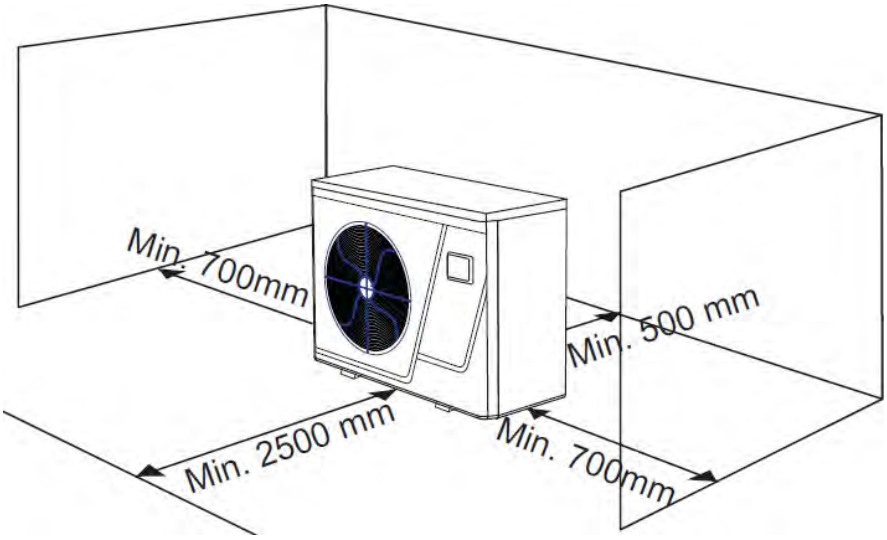
For optimal support, a reinforced concrete slab is recommended. If you're planning on using an existing concrete base, it should be solid, flat, and capable of evenly supporting the spa's weight when occupied. More details and specifications for installing on a concrete slab will be covered in upcoming sections.

If you're incorporating a timber deck around your spa, it's necessary to plan ahead. Ensure your design grants access to the QuickLock™ door panels and maintains the recommended clearance on all sides for panel removal during servicing. Overlooking this detail can lead to complications and potential added costs in the future. The foundation beneath is equally important; a reinforced concrete slab under the spa is advised to ensure stability and support.

If a timber deck will serve as the main foundation for the spa, it is advisable to consult a structural engineer. They will ensure your decking can safely support the occupied weight of the spa and offer guidance tailored to your property and the selected model.

Services

Plan where services such as electrical and plumbing will be routed. This might necessitate trenches or specific accommodations in the slab design.



[Figure 3.1a]

3.2. DELIVERY PREPARATION

Before the arrival of your new Halo Spa, you'll need to provide a clear and accessible path from the delivery vehicle (be it crane, truck, ute, etc.) to its final location. The delivery driver will make every effort to approach as close to the spa's placement location as possible.

Width and Height Assessment

- Gates and Pathways: Measure the width to ensure the spa, and any equipment can pass without hindrance.
- Overhead Obstacles: Ensure there's ample clearance height anywhere obstacles are located along the delivery path, such as low-hanging tree branches, roof eaves, and utility lines.

Considering Corners & Fixed Obstacles

- Assess any tight turns or corners, especially 90-degree turns.
- Take note of fixed obstructions, such as meter boxes, air conditioning units, or water heaters. Some might be easy to miss, so a walk-through can help identify them.

Landscape Preparations

- Trees, bushes, or shrubs that might be in the way should be trimmed or, if necessary, relocated.
- Similarly, temporarily relocate items like BBQs, planters, or play equipment to ensure an obstruction-free path.

Evaluating Ground Conditions

- Aim for a flat and stable delivery path. Slopes or uneven terrain could complicate the delivery process. If your route has steep areas, consult with your Halo Spa dealer to ensure adequate delivery or crane provisions are allowed for.

Delivery Day

- A crane is typically used to unload the spa from the delivery vehicle. You will need to be present for the placement and ensure enough manpower is on-hand to aid in manoeuvring the spa into its position.
- Consult with your Halo Spa dealer regarding space requirements for manoeuvring, delivery vehicle & crane parking, and possible needs like trolleys.
- Coordinate with a qualified electrician to be on-site during delivery. Their presence ensures that any immediate electrical connections or checks can be performed efficiently and safely upon the spa's placement.

NOTE: Halo's Standard Delivery does not include crane services. It's essential to liaise with your Halo Spa dealer regarding crane provisions and any associated requirements.

4. INSTALLATION

4.1. PREPARING THE FOUNDATION

The foundation plays a pivotal role in ensuring the longevity of your spa. Surfaces such as grass, sand, pebble, or dirt are unsuitable. Utilising these as a foundation can lead to damages, including distortions or cracks in the shell, which subsequently voids your spa's warranty.

Your chosen foundation should provide even support for the spa and have the strength to sustain a load of at least 1000kg/m². Such precautions prevent issues like the spa shifting or settling post-installation, which could otherwise place undue stress on the shell.

When deciding between a concrete slab and timber decking, Halo Spas strongly advises seeking the advice and services of a professional contractor. Proper foundation preparation is critical, and it is the owner's responsibility to ensure the spa is correctly installed.

Please refer to the table below for the dimensions and approximate filled weights of various Halo Swim Spa models:

Model	Dimensions	Dry Weight	Filled Weight
Halo 4.5	4470 x 2300 x 1400mm	900kg	6900kg
Halo 4.5 Max	4470 x 2300 x 1400mm	950kg	6950kg
Halo 5.8	5830 x 2300 x 1400mm	1100kg	8300kg
Halo 5.8 Max	5830 x 2300 x 1400mm	1150kg	8350kg
Halo 3.0S	3000 x 2300 x 900mm	380kg	2378kg
Halo 2.3D	2300 x 2300 x 900mm	280kg	1750kg
Halo 2.3S	2300 x 2300 x 900mm	280kg	1810kg
Halo 2.1D	2050 x 2050 x 900mm	240kg	1450kg
Halo 2.1S	2050 x 2050 x 900mm	240kg	1500kg
Halo 1.6	1600 x 2050 x 900mm	190kg	1105kg

When planning foundation requirements, always factor in the weight of occupants in addition to the spa's filled weight.

NOTE: Damage due to insufficient or incorrect foundation support is not covered by the Halo Spas Warranty. It is incumbent upon the spa owner to provide an adequate foundation for the spa.

4.1.1 Concrete Slab

A reinforced concrete slab is the recommended foundation for your spa. This must be a flat and sturdy surface that is able to support your spa evenly. Below are the guidelines for constructing the concrete slab.

- **Base:** Use crushed rock beneath the slab, compacted well, to a minimum of 65 kPa of pressure.
- **Thickness**: The slab should be at least 100mm thick.
- **Reinforcement**: Use two layers of steel mesh reinforcement (SL82) within the slab for added strength.
- **Concrete Quality**: Use concrete with a strength rating of F'c=25 MPa, and make sure there's a 30mm cover of concrete over the mesh.
- **Size**: Refer to slab engineering drawing in section *4.1.6 Slab Specifications*. (for swim spas only)

NOTE: These are general guidelines, and it's essential to hire a licensed contractor or qualified engineer to ensure the slab meets these specifications and any local building codes.

4.1.2 Timber Decking

Timber decking can either surround your spa or serve as its primary foundation. Regardless of the choice, it’s vital to

emphasise the importance of planning, structural stability, and accessibility for maintenance.

Decking that Surrounds the Spa

For those considering a timber deck aesthetic around their spa:

- **Accessibility for Maintenance**: Always design with maintenance in mind. Ensure that you grant unhindered access to the QuickLock™ door panels and maintain the recommended clearance on all sides. This accessibility is essential for routine upkeep and servicing, helping to avoid complications and potential future costs.
- **Underlying Foundation**: Beneath the spa, a reinforced concrete slab (as detailed above) is strongly recommended. It offers the necessary stability for the spa's occupied weight, while the timber decking contributes to the overall style.

Decking as the Primary Foundation for the Spa

Given the significant weight a filled spa carries, especially when in use, it's advised to consult with a structural engineer if you're opting for timber decking as the main foundation. Their expertise will ensure your decking can safely bear the load. The deck's design must support a load of at least 1000kg/m², with centre supports installed to uphold the centre of the spa.

4.1.3 Indoor Installations

Flooring Considerations

- **Water-Resistant Flooring**: The floor beneath the spa should be specifically chosen with water-resistance in mind. It's vital to select a type of flooring that won't be compromised or damaged by water, as regular use and maintenance of the spa will result in occasional splashes or overflows.
- **Drainage System**: Beyond the flooring type, an adequate drainage system should be considered to ensure any water overflow, splashes, or spills are promptly and efficiently managed, preventing water damage and ensuring safety. Consider installing floor drains or integrating a slope for water to flow towards a drain.

Additional Considerations

- **Load Bearing Capacity**: Even when indoors, the structural integrity of the flooring beneath the spa cannot be overlooked. The foundation must support a load of at least 1000kg/m². Before installing, consult with a building engineer to verify that the intended location meets this requirement.
- **Ventilation Considerations**: Spas naturally increase the humidity of the surrounding environment. To combat this, ensure the installation room has adequate ventilation. Consider the integration of exhaust fans, dehumidifiers, or a HVAC system tailored to handle increased moisture levels.

NOTE: Halo Spas will not be held responsible for water damage or any adverse effects resulting from placing the spa in surroundings that haven't been appropriately prepared. Always ensure that every aspect of the indoor installation adheres to recommended guidelines and seek professional advice where necessary.

4.1.4 Eco Heating System or Other External Heat Pumps

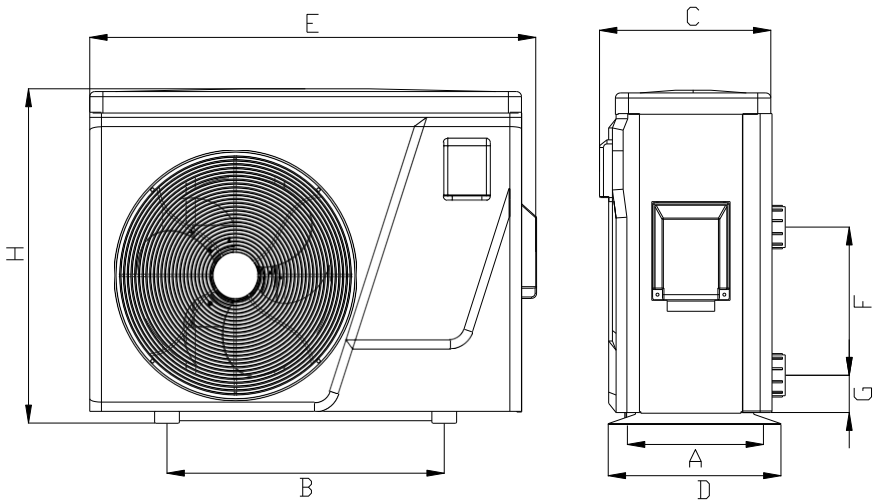
For maximum stability and performance, install the heat pump on a flat, level concrete slab. As you prepare the foundation for your spa, consider making provisions for the heat pump the same time.

- **Location**: Place the heat pump outdoors, separate from the spa cabinet. Ensure it isn't located in a confined space to prevent air recycling. Avoid having the fan face windows, walls, or areas frequented by people or animals. Shield the pump from prevailing winds and keep it away from pollutants, dust, or debris. While proximity to the spa is important, it should be no closer than 500mm. The optimal maximum distance is 3 meters.
- **Elevation**: The slab should be raised to prevent water accumulation around the heat pump's base and ensure adequate fall for the condensate drain pipework to divert condensation away from the heat pump.
- **Anti-vibration Mounts**: Use these mounts when installing the heat pump on its base. They effectively minimise noise and reduce wear on the unit.
- **Size & Stability**: The concrete base should be substantial both in dimensions and weight to anchor the heat pump securely.

Chilli 9kW Inverter Heat Pump Dimensions (Supplied with the Eco Heating System).

A	B	C	D	E	F	G	H
324mm	560mm	347mm	349mm	903mm	250mm	74mm	654mm

Above data is subject to modification without notice.



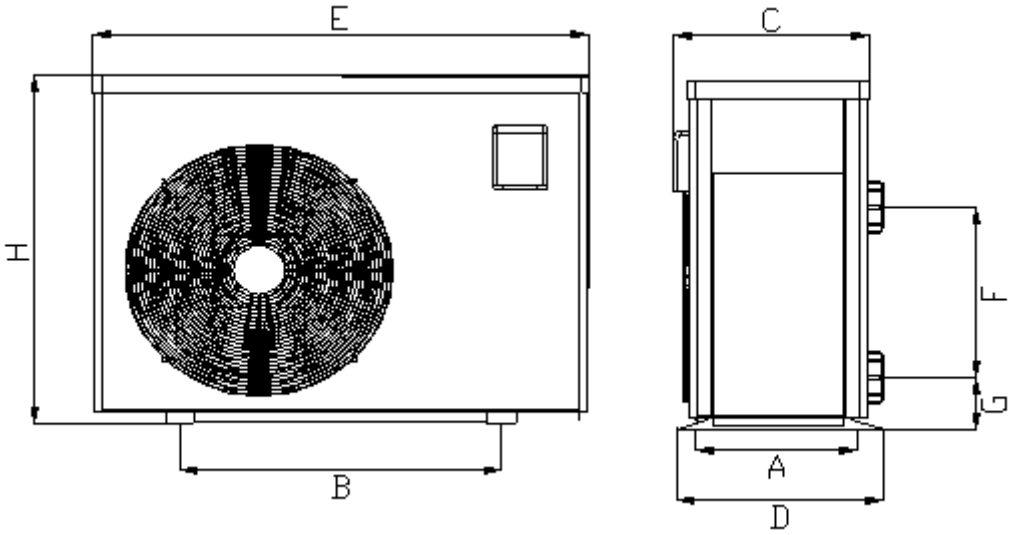
[Figure 4.1.4a]

Note: The figures above are the specification diagram of the heat pump, for technician's installation and layout reference only. The product is subject to adjustment periodically for improvement without further notice.

Chilli 5kW Inverter Heat Pump Dimensions (Supplied with the Eco Heating System).

A	B	C	D	E	F	G	H
334mm	428mm	318mm	359mm	682mm	280mm	74mm	598mm

Above data is subject to modification without notice.



[Figure 4.1.4b]

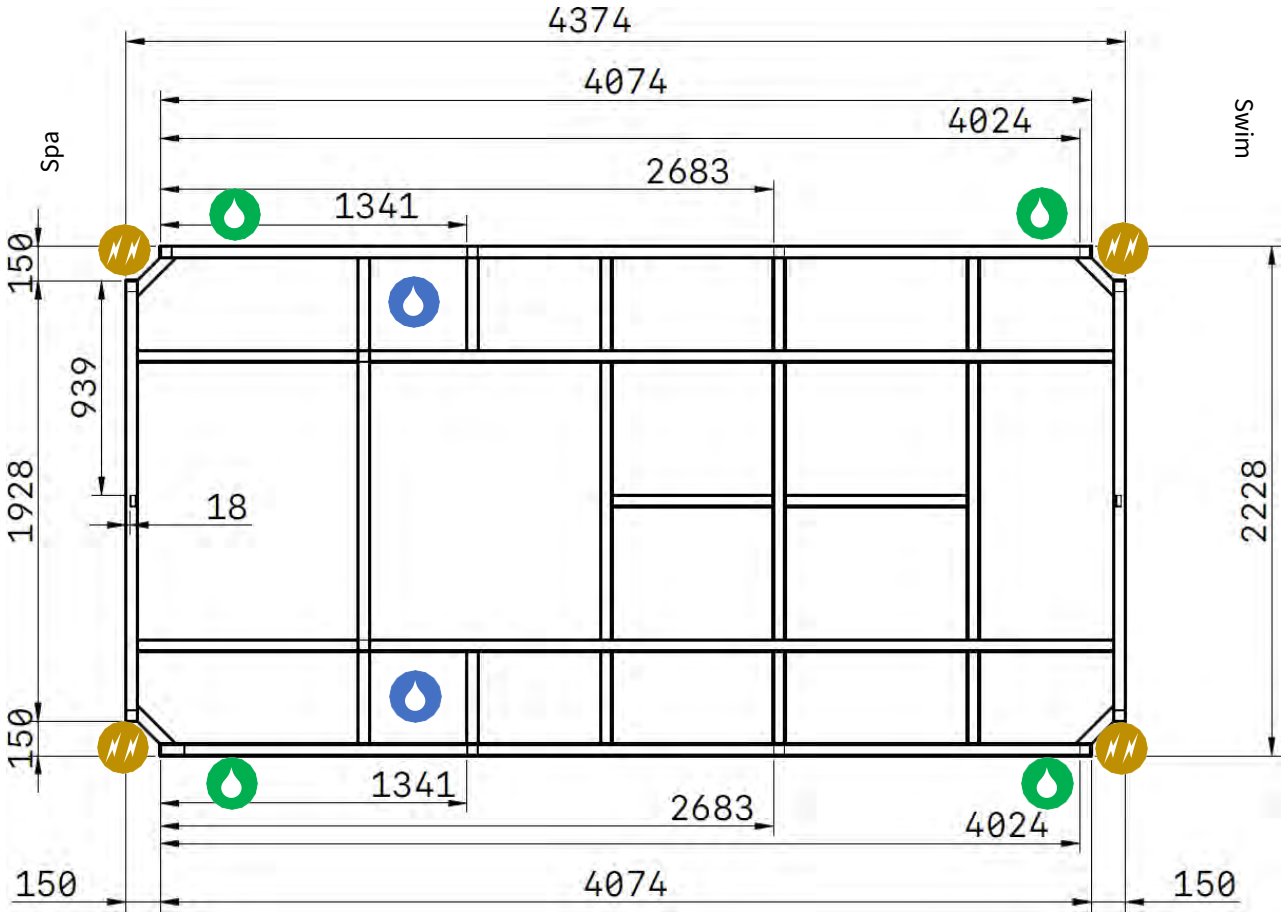
Note: The figures above are the specification diagram of the heat pump, for technician's installation and layout reference only. The product is subject to adjustment periodically for improvement without further notice.

4.1.5. Incorporating Services into the Foundation

When constructing the foundation such as a concrete slab, factor in the routing of both the power supply and the heat pump plumbing. Refer to the drawings below which highlight the access points within the swim spa frame. It's essential to integrate these points into the foundation design. Before beginning foundation construction, consult with your electrician to ensure all conduit specifications and other prerequisites are addressed.

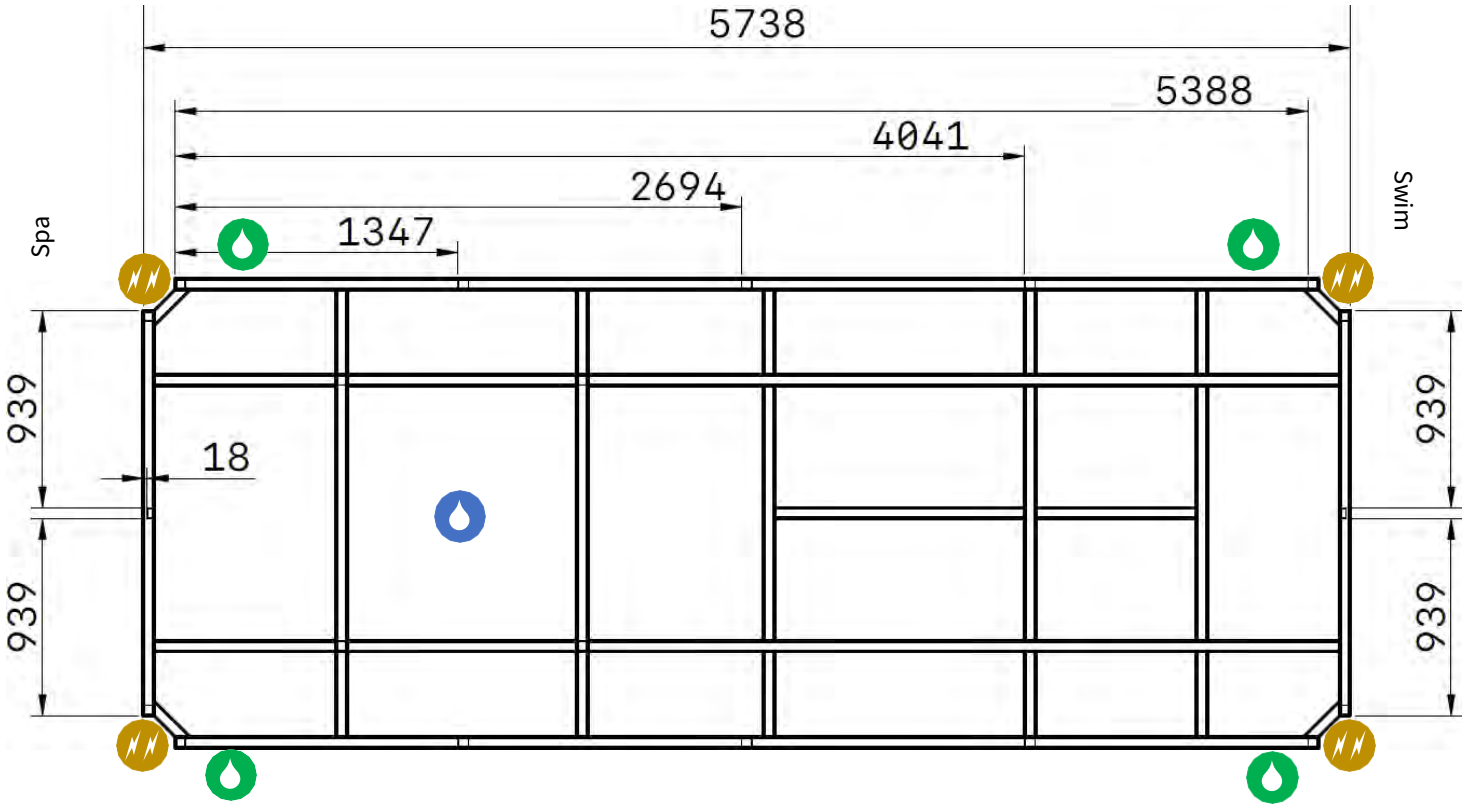
Power Supply Access | Heat Pump Plumbing Access (through base) | Heat Pump Plumbing Access (through QuickLock™ panel)

Halo 4.5 Service Access Points



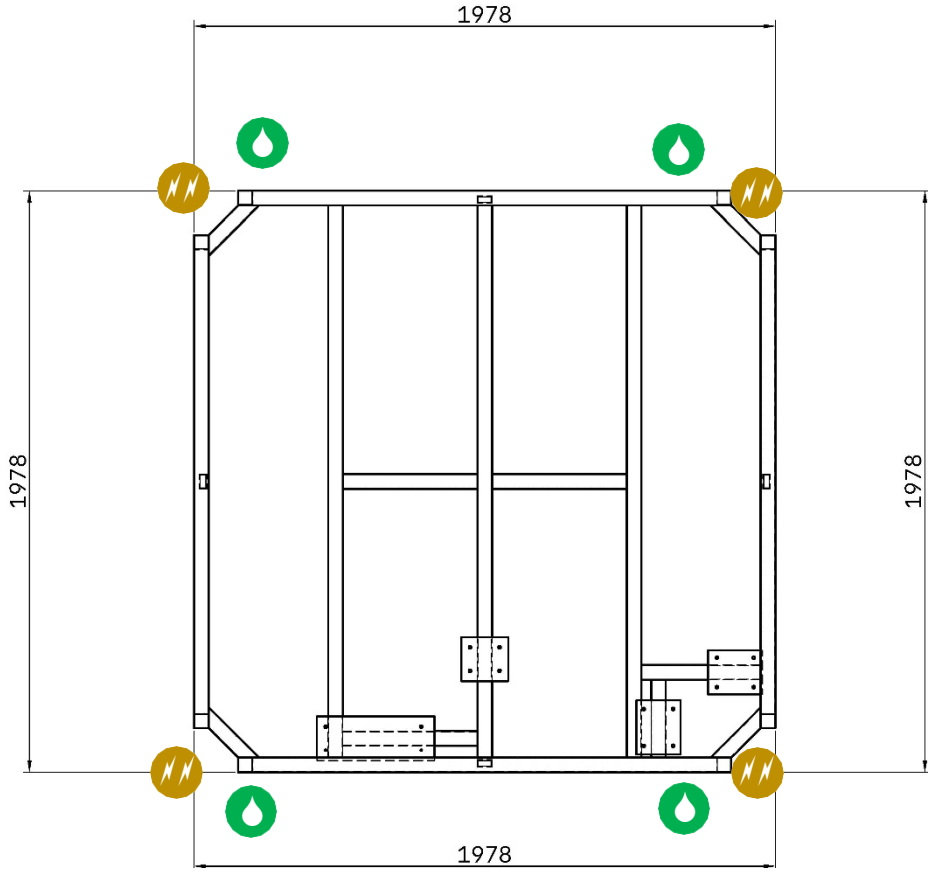
[Figure 4.1.5a]

Halo 5.8 Service Access Points

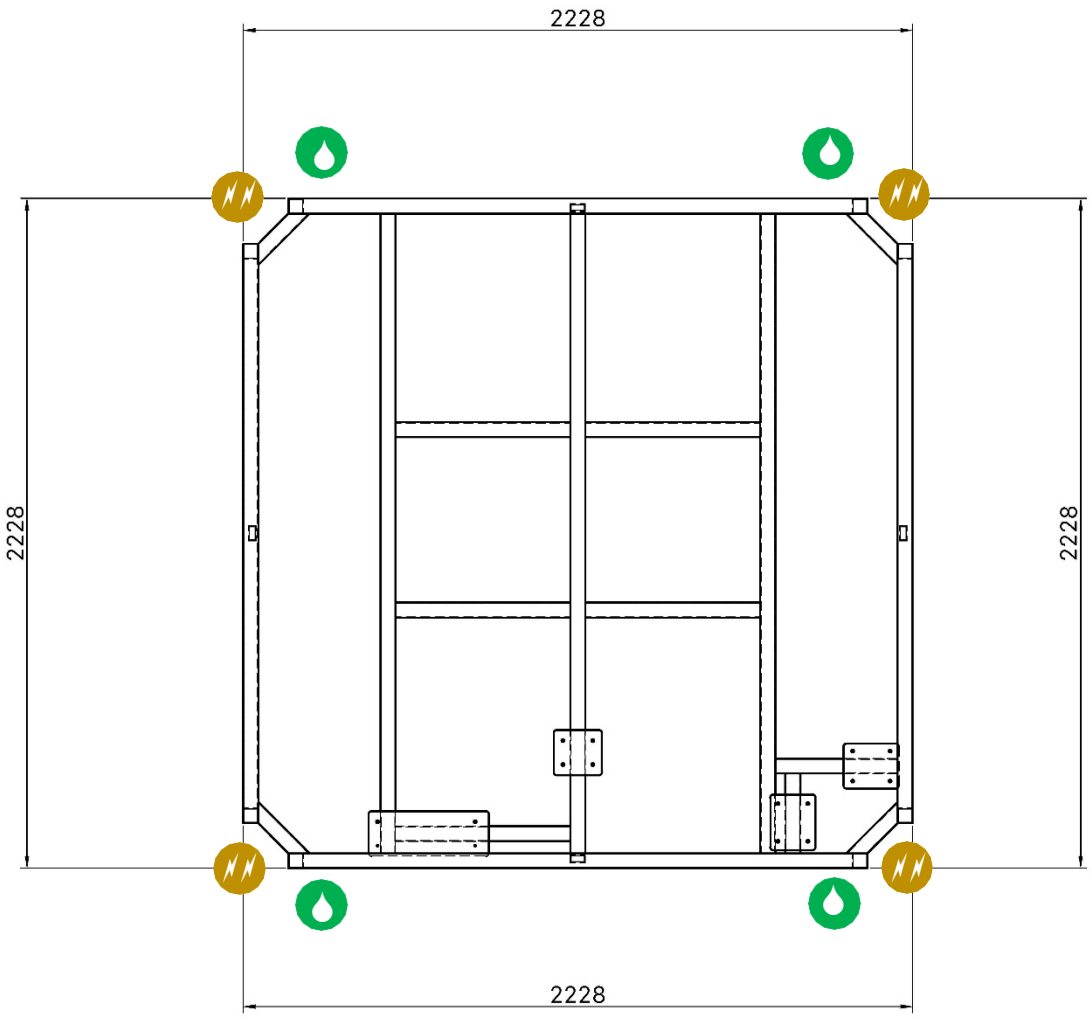


[Figure 4.1.5b]

Halo 2.1Service Access Points

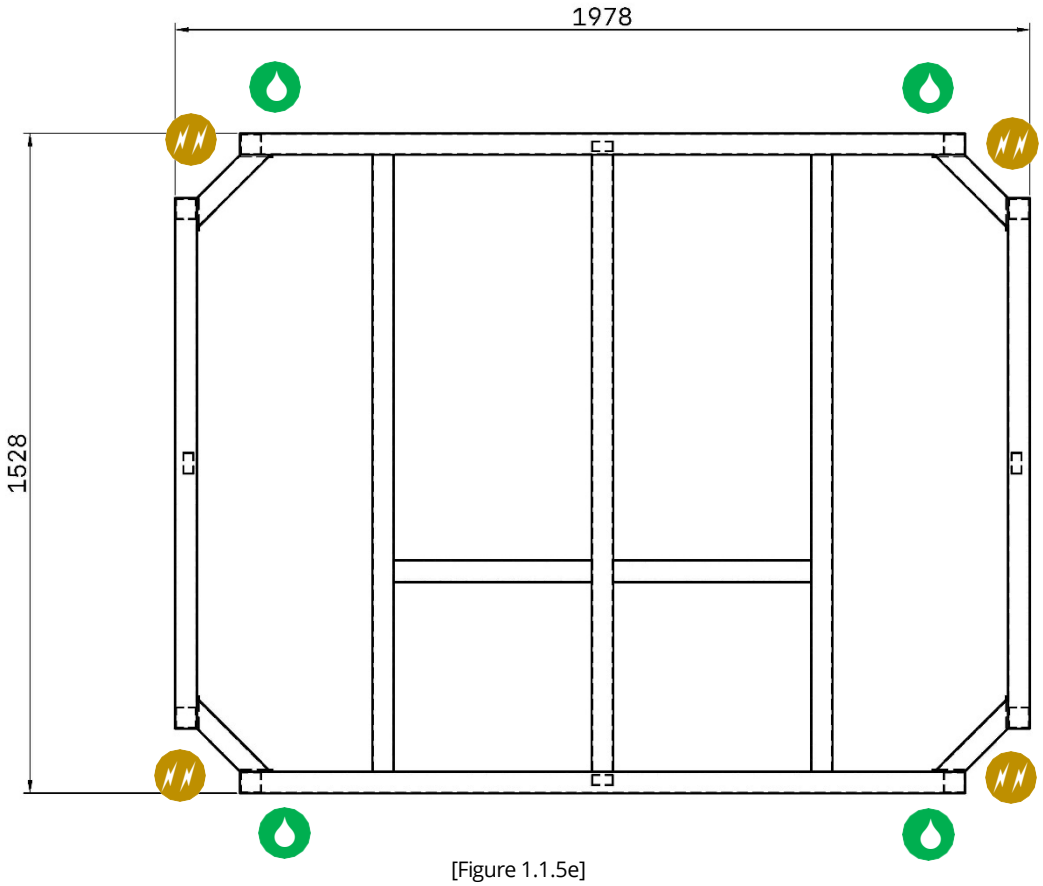


[Figure 1.1.5c]



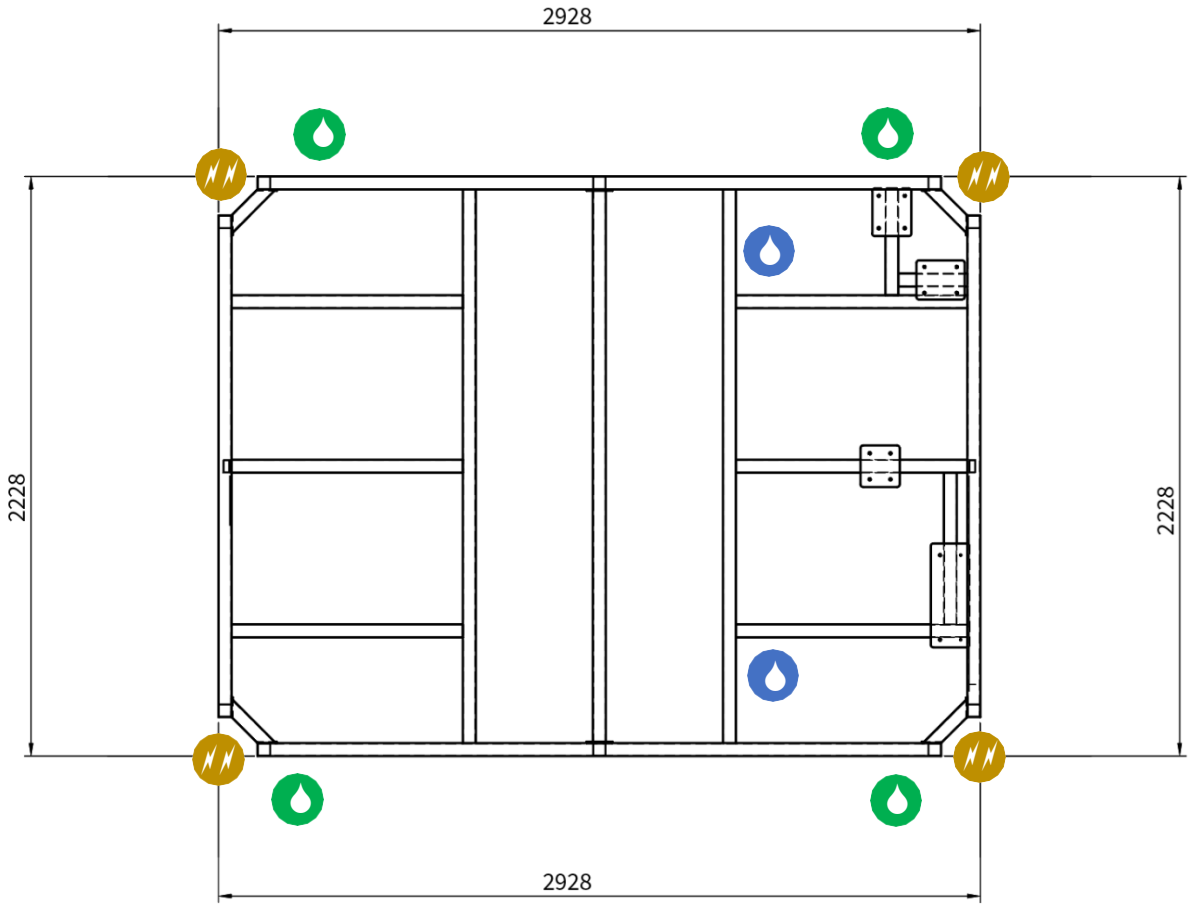
[Figure 1.1.5d]

Halo 1.6 Service Access Points



[Figure 1.1.5e]

Halo 3.0S Service Access Points

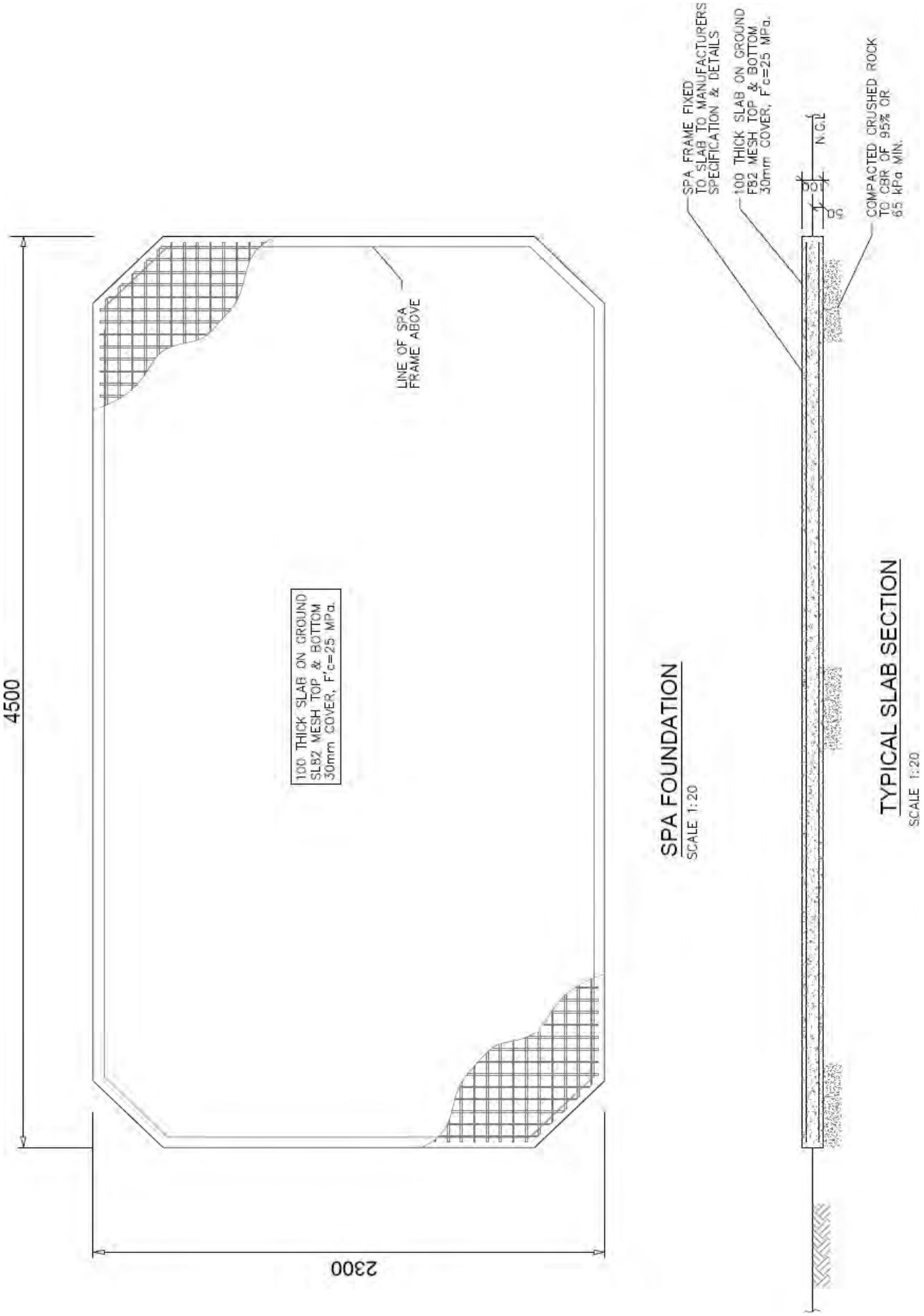


[Figure 1.1.5d]

4.1.6. Slab Specifications

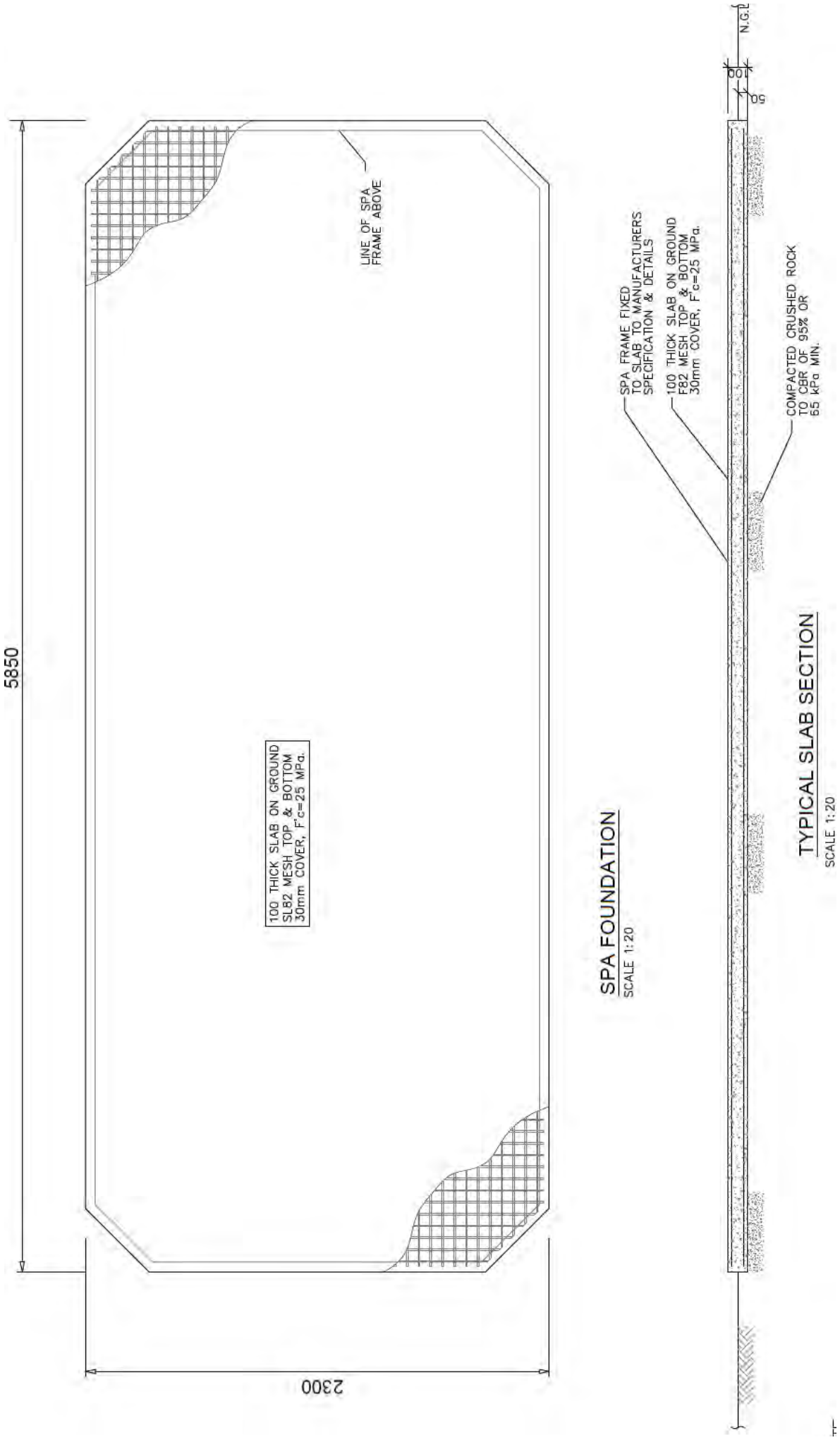
Halo 4.5

[Figure 4.1.1a]



Halo 5.8

[Figure 4.1.1b]



4.2. ELECTRICAL INSTALLATION & SAFETY

All electrical connections must be performed by a qualified registered electrical contractor. Upon completion of the installation, the electrical contractor must issue a Certificate of Electrical Safety.

4.2.1. Power Requirements

Please refer to the table below for specific power requirements of each Halo spa model. Additionally, the power consumption of your spa will be indicated on the Compliance Plate.

Halo 4.5	Halo 4.5 Max	Halo 5.8	Halo 5.8 Max
16 AMPS	32 AMPS	16 + 16 AMPS	16 AMPS + 32 AMPS

Halo 3.0S	Halo 2.3D	Halo 2.3S	Halo 2.1D	Halo 2.1S	Halo 1.6
16 AMPS	16 AMPS	16 AMPS	16 AMPS	16 AMPS	13 AMPS

Halo Spas Model Name Reference

Max = Max Swim System Option, D = Double Lounger Model and S = Single Lounger Model

4.2.2. Connection Guidelines

- **Extension cords are strictly prohibited.**
- Hardwired connection to power must be performed by a registered electrical contractor, ensuring that the power supply is correctly rated, and all electrical connections comply with necessary codes and regulations.
- In accordance with AS/NZ 3000 regulations, all spas must be connected to a dedicated circuit. This circuit is to be protected a safety switch (ensuring all-poll disconnection) and a circuit breaker. Use a residual current device (RCD) with a rated tripping current not exceeding 30mA for the spa's power supply.
- To prevent hazards from unintended resetting of the thermal cutout, the spa must not be connected through an external switching device, such as a timer, or a circuit that's regularly switched on and off by the utility.
- Connect all metal objects within 1.25 meters to the main electrical earthing system.
- Parts containing live components (exceeding 12V) must be unreachable to an occupant of the spa.
- Keep electrical connections dry at all times.

4.2.3. Connecting Power to the Spa

- A registered electrical contractor must ensure electrical cables are routed through the base via the conduit access before filling the spa with water. For conduit entry points refer *Section 4.1.5. Incorporating Services into the Foundation.*
- Find the Balboa control box within the engine bay. Connect the power supply (line, neutral, ground) directly to the Balboa control box. Refer to Wiring Diagram inside the cover of the control box enclosure.
- For the Halo 5.8 models, two separate electrical connections are required. Connect the power supply to both Balboa control boxes, located in the engine bay of the spa end. The control box for the swim spa section will be positioned on the right-hand side of the engine bay.
- Use the correct size power supply cable and exercise extreme caution during connection to the Balboa control box. An incorrect connection risks damaging the control system.
- The Eco Heating System, powered by the Chilli Inverter Heat Pump, operates on the spa's existing circuit; no additional power circuits are needed.

4.3. HEAT PUMP INSTALLATION

The Chilli Inverter Heat Pump comes with signal and power cables already connected to the Halo spa Balboa control box. These cables will extend to and coil at the owner-nominated heat pump connection point inside the cabinetry. Additionally, the heat pump's PVC inlet and outlet pipe connections will be plumbed to this nominated connection point within the spa cabinetry. *Refer to Figure 4.3a*.

[Figure 4.3a]

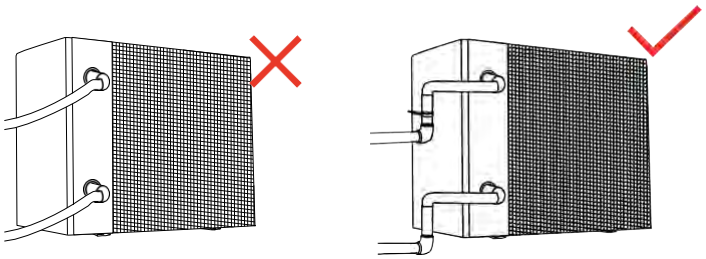
4.3.1. Installation Guidelines

- **Professional Installation**: Installation should be performed by professionals. Unqualified installation may lead to heat pump damage and safety hazards.
- **Air Flow**: Avoid placing objects near the inlet or outlet areas that might block air flow. Maintain a minimum clearance of 500mm behind the heat pump. Obstructions can hinder efficiency or even stop the heat pump. Refer to Section *3.1. Understanding Space & Layout.*
- **Securing the Frame**: Anchor the frame using M10 bolts to a concrete foundation or brackets. The foundation should be solid, and any brackets used should be sturdy, rust-resistant, and properly treated.
- **Condensation Management**: Condensation water will discharge from the bottom of the heat pump. Securely attach the provided drainage nozzle accessory to the condensate hole and connect a pipe to channel the water away.

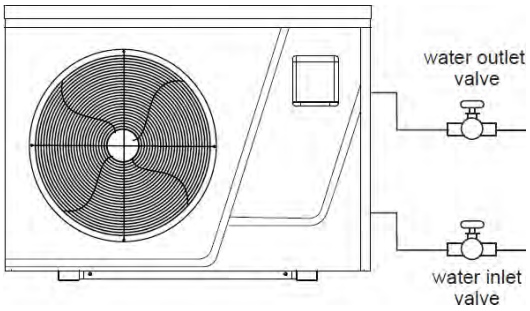
NOTE: The Wi-Fi module included with the Chilli Inverter Heat Pump is not required for installation. The Halo Spa comes equipped with its own Wi-Fi connectivity.

4.3.2. Connecting the Heat Pump to the Spa

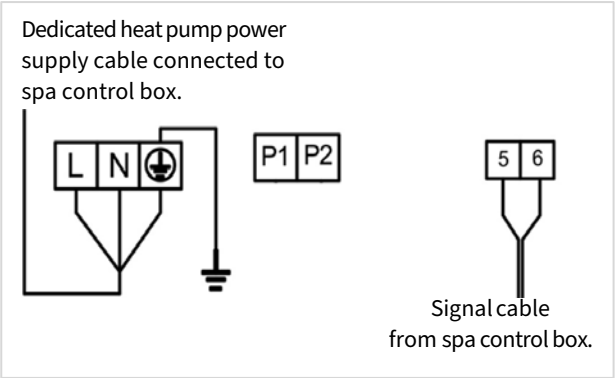
- Run two 40mm PVC pressure pipes (Class 12) from the spa's inlet and outlet to the corresponding inlet and outlet on the heat pump. *Refer Figure 4.3.2a*.
- Halo Spas strongly recommends the installation of gate valves on each of the heat pump inlet and outlets. These gate valves are essential for future servicing and maintenance. *Refer Figure 4.3.2b*.
- Make sure that the gate valve located above the Balboa circulation pump is in the closed position. This will redirect water flow to the Chilli Inverter heat pump, which is necessary to heat the spa.
- Run both the power supply and signal cable through a 25mm orange electrical conduit.
- The PVC pressure pipes and electrical conduit should be installed at a depth of 600mm to prevent potential damage.
- Connect the signal cable and power supply cable to the heat pump as shown in *Figure 4.3.2c*.
- After completing the cable connections, the spa control box will automatically detect the heat pump, facilitating its integration into the spa system.
- During the initial set up, adjust the temperature directly on the heat pump. Set it to "Heat" mode and a target temperature of 40°C.
- For subsequent temperature adjustments, please use the spa touchpad. The controller will take care of managing the heating process, and it will automatically turn off the heat pump once the target water temperature (e.g. 28°C) is achieved.



[Figure 4.3.2a]



[Figure 4.3.2b]



[Figure 4.3.2c]

For detailed instructions and additional product information, please refer to the Chilli Inverter Heat Pump Manual:

5. FILLING AND INITIAL START-UP

For a successful start-up of the Halo spa, perform the pre-fill checklist before moving onto the initial set up instructions.

5.1. PRE-FILL CHECKLIST

- ☐ Before filling, remove the QuickLock™ equipment door panel(s) and inspect for any items that might have shifted or loosened during transit. Keep the engine bay panel off until the spa is filled with water, and a leak inspection has been carried out.
- ☐ Examine the barrel unions on all pumps and heaters, ensuring they are secure. These parts may loosen during transport and are not covered under warranty. They must be tightened before initial start-up.
- ☐ Ensure the external drain/fill valve is securely closed, and the drain cap is tight.
- ☐ Verify the shut-off valve is in the open position. This valve is typically located on either side of the pump(s). When in the up position, water can flow through the pipes to your pump. Note: These valves should only be closed (down position) during servicing.

NOTE: If an external heat pump has been installed and connected to the spa, keep the gate valve above the circulation pump closed to redirect water flow to the heat pump.

5.2. FILLING YOUR SPA

- Ensure all jets are open (Refer to the 'Jet Section' of this Operating Manual for more information).
- Fill your spa with clean water. To prevent air locks in the pumps or heaters, remove one filter and place the hose directly into the skimmer box. Fill until all jets are submerged, or the water is level with the third fin of the skimmer faceplate.
- After reaching the appropriate water level, re-fit the filter.
- Be cautious not to overfill the spa. If the bather load increases, drain any excess water. After usage, refill the spa as needed.

5.3. INITIAL START-UP PROCEDURE (SWIM SPA ONLY)

- Switch the power on at the main isolator. Please note that it is normal for the pumps to run for up to 4 minutes during the initial start-up.
- The Naked NKD-R freshwater filtration system settings are pre-configured to the Halo swim spa. Locate the NKD-R control panel in the engine bay and press the Power button to turn on the filtration system. *Refer Figure 5.3a. (swim spas only)*

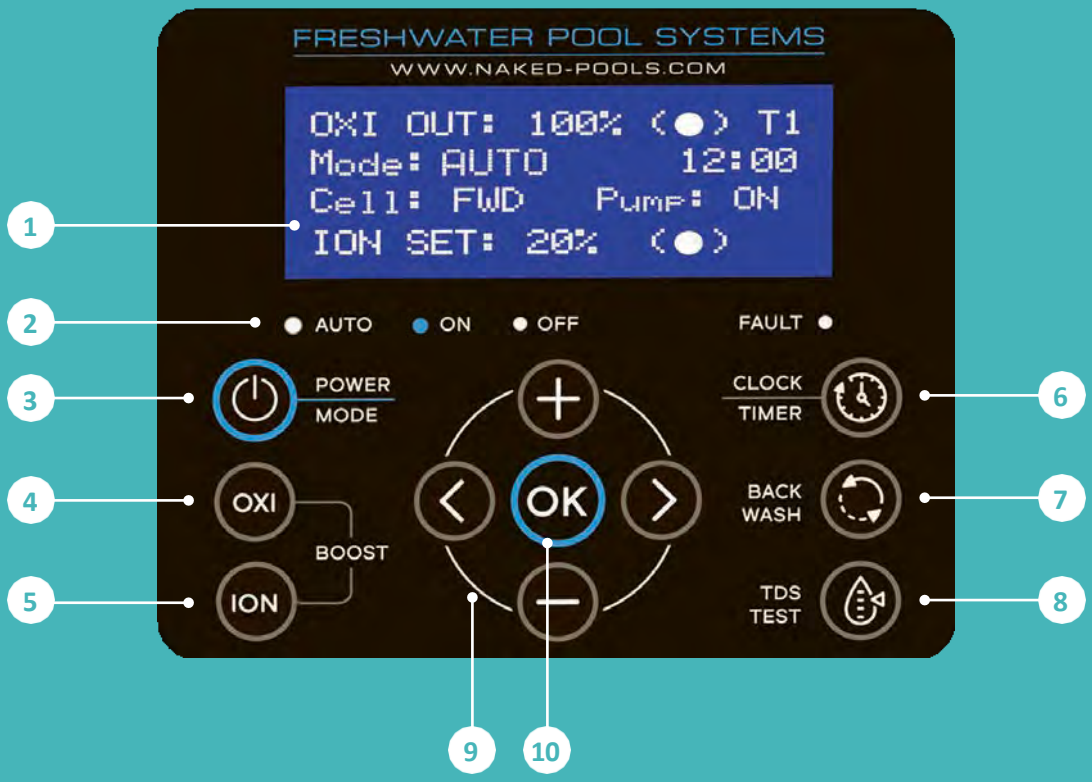
  NOTE: The NKD-R control panel will be located behind the middle panel of the Halo 5.8 models.
- Turn on the boost pumps and add 4.5kg of pool salt to the water. Run the pumps for 10 minutes.
- Using the spa touchpad, set your desired water temperature.
- Carefully inspect for leaks around and inside the spa. If no leaks are detected, reattach the QuickLock™ door panel(s).
- Attach the plastic locks to the side of the cabinet to secure the hard cover, following the instructions provided by the hard cover manufacturer.

  IMPORTANT: Operating the equipment without the appropriate water level can result in damage to the pumps and/or heater.

Overview – Major Functions

This is a general overview of each button on the main screen. More detailed information about these functions are contained in the System Menu Overview of this guide.

1. DDS Screen – Default Display Screen.
2. Indicators – Displays what mode the system is currently in.
3. Power Mode – This should always be in ON mode
4. OXI Boost – Boost the Oxidiser during/after heavy use or extreme weather.
5. ION Boost – Boost copper levels in the water if low.
6. Timers – Clock Timer. Cycle = EX CNTRL
7. Backwash – Not applicable for a Swim Spa
8. TDS Test – Check the TDS levels in your water. (Ideal levels are 800-1200ppm)
9. Navigation - [+] Increase. [–] Decrease. [<] Back/Exit
10. Enter/Save/Next



[Figure 5.3a]

6. SPA COMPONENTS & OPERATION

NOTE: Halo Spas continually strives for innovation. As a result, we may introduce enhancements or modifications to our spa features or designs. We reserve the right to make such changes without prior notification or incurring any obligation.

6.1. SPA IDENTIFICATION

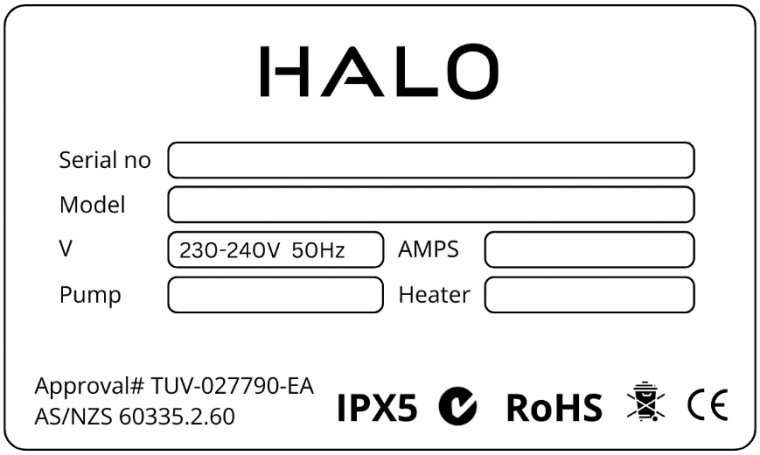
Each Halo spa has a unique serial number, which serves as an identifier for warranty services or any other assistance you may require.

Where you can find it

Compliance Plate - Located on the QuickLock™ equipment access panel.

Compliance Plate

The aluminum Compliance Plate contains important information about your spa.
This information will assist you when arranging periodic servicing, purchasing consumables such as filters, or seeking technical assistance, etc. *Refer Figure 6.1a*.

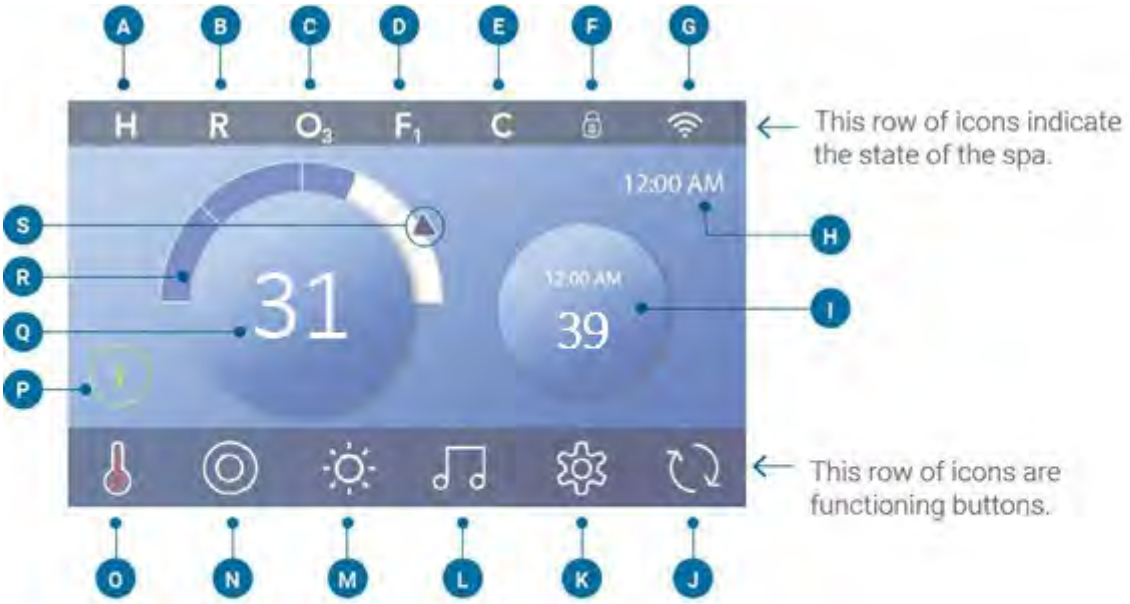


[Figure 6.1a]

6.2. SPATOUCH 3+ TOUCHPAD

Located on the topside of your spa. The touchpad controls pumps, temperature, LED lighting, filtration cycles, diagnostics, and more.

6.2.1. Main Screen



Main Screen Icons

A - Temperature Range
- High: **H**
- Low: **L**

B - Heat Mode
- Ready: **R**
- Rest: **R̲E̲**
- Ready-in-Rest: **RR**

C - Ozone Running: **O_3**

D - Filter Cycles
- Filter Cycle 1: **F_1**
- Filter Cycle 2: **F_2** *(Optional Feature)*
- Filter Cycles 1 & 2: **F_+**

E - Cleanup Cycle *(Optional Feature)*

F - Panel Locked and/or Settings Locked

G - WiFi (Local or Cloud Connection)

H - Time-of-Day

I - Secondary Button/Display

J - Invert Display

K - Settings

L - bba™ versions 2 and 3 (Balboa Bluetooth Audio)

M - Light (or CHROMAZONE™ if installed).
Both icons change from white to color when these devices are powered On.

N - Spa

O - Heater Status

P - Message Button (May Appear)
- Information:
- Reminder:
- Error - Normal Error or Warning:
- Error - Spa will not function until fixed:

Q - Water Temperature

R - Water Temperature Bar

S - Set Temperature Arrow

The system configuration determines the number of icons that appear on the Main Screen. Your Main Screen may have fewer or different icons.

6.2.2. Spa Status

Important information about spa operations can be seen on the Main Screen. Most features, including Set Temperature adjustment, can be accessed from this screen. The actual water temperature can be seen, and the Set Temperature can be adjusted. Time-of-Day, Ozone and Filter status are available, along with other messages and alerts. The selected Temperature Range is indicated in the upper left corner.

A Lock icon is visible if the Panel and/or Settings are locked. Near the bottom of the screen, at certain times an indicator may appear showing that a message is waiting. Touch this indicator to go to the Message Display Screen. On that Screen some of the messages can be dismissed.

When the spa is powered On, four dashes appear (A) in the Water Temperature display for one minute. The dashes indicate that the spa is checking the water temperature. After the pump runs for 1 minute, the dashes disappear, and the water temperature is displayed (B). The dashes may reappear after the pump has not run for one hour.

6.2.3. Wake Up the Panel, Navigation & Common Buttons

Controlling your spa is easy with the intuitive graphical user interface (GUI). This section describes how to navigate and use the GUI.

Wake Up the Panel

The screen is blank when it is in sleep mode. When you touch the blank screen, one of three screens will appear:

- The Main screen will appear (A3). The panel is awake.
- The ① icon will appear (A2). Wake up the panel by pressing the ① icon and then the ② icon.
- The hand icon will appear. Wake up the panel by pressing the hand icon (A1) and then swiping in the direction of the arrows.

The panel automatically goes into sleep mode when it is not used for a specified duration. The duration can be adjusted in the Panel Settings.

Buttons

A variety of button styles provide quick access to functions and settings. The large temperature display is a button (B) that controls the Set Temperature. The whole bottom row of the Main screen contains buttons (C).

Mini Player Button (Set Temperature/Time)

The Mini Player button gives fast access to the Set Temperature and time (D). Show or hide the Mini Player button by pressing the Heater Status button once (E).

Screen Names

Screen names appear in the top row of the screen. For example, this is the Settings screen (J). Screen names are

referenced throughout this user guide.

Navigation

Navigate screens and/or lists with the following buttons:

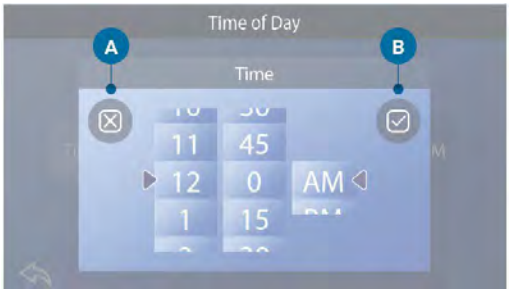
Up Down Left (K) Right (K) Back (L)

Swiping & Selecting Items in Lists

Swipe a list (N) to find the setting you want. The list will have an arrow (M) that indicates the current setting. If your desired setting appears but is not aligned with the arrow, tap the desired setting to make it align with the arrow. The temperature list will disappear when you tap anywhere outside of it.

Saving & Cancelling

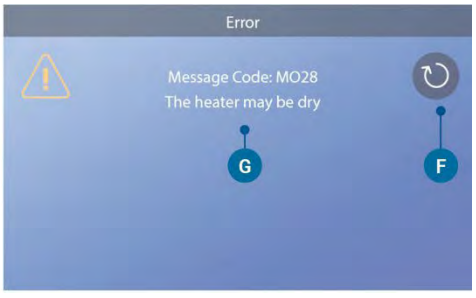
After you input a new setting, press the Save button (B). After you press Save, the change is complete. If you don't want to apply a new setting, press the Cancel button (A).



Message Buttons

Message buttons provide reminders to help you keep your spa running smoothly. Message buttons also provide warning information that helps spa technicians with troubleshooting.

When a message button appears (C), press it to view the corresponding message (D) or (G). Press the Exit button (E) to go back to the Main screen, or press the Clear button (F) to dismiss the message.



Buttons vary depending on the type of message:

- Error - Normal Error or Warning
- Error - Spa will not function until fixed
- Information
- Reminder
- Clear Button
- Exit Button

6.2.4. Set the Time of Day

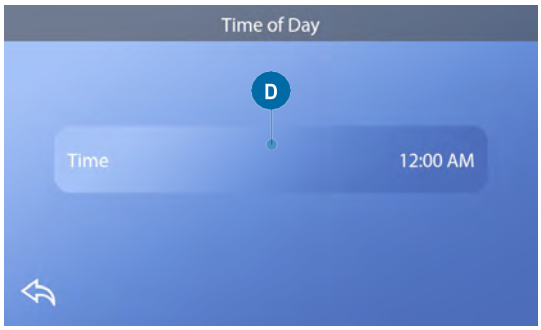
Be sure to set the Time-of-Day

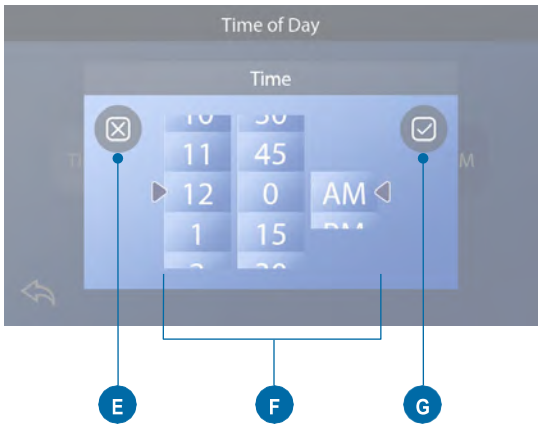
Follow this sequence to set the time-of-day.

- In the Main screen, press the Settings button (B).
- In the Settings screen, press the Time button (C).
- In the Time of Day screen, press the Time button (D).
- Setting dials appear. Swipe these dials (F) to set the time. If your desired time value appears but is not aligned with the arrow, tap the desired time value to make it align with the arrow.
- Press the Save button (G) to save your settings. Or, press the Cancel button (E) to cancel your settings.

Setting the time-of-day is important for determining filtration times and other background features. If Time-of-Day needs to be set, the Information Message button (A) appears on the Main screen; view the previous page for more information on the different types of Message buttons.

NOTE: If power is interrupted to the system, Time-of-Day will be maintained for several days (this only applies to some systems).

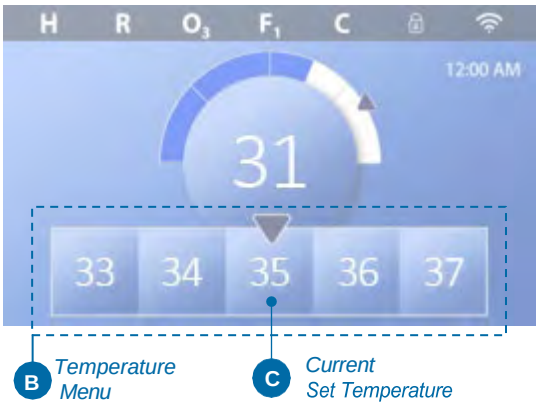


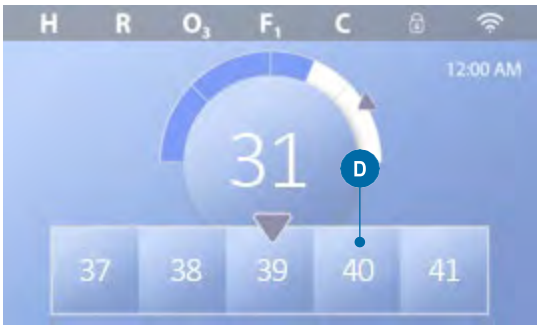


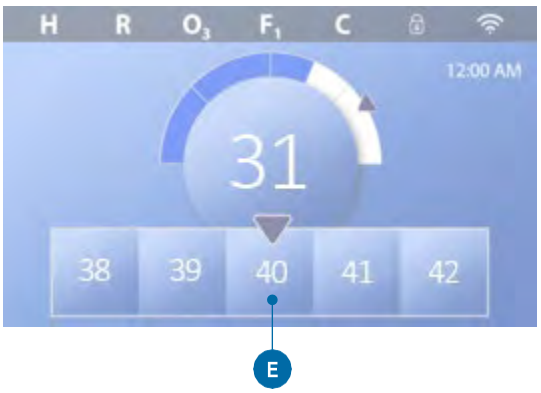
6.2.5. Set the temperature

In this example we will set the Set Temperature to 102.

- Press the water temperature display button (A) to make the temperature menu appear (B). The center box with the arrow (C) indicates the current Set Temperature.
- If 102 is already showing, but just not centered (D), touch it to center it (E).
- If 102 is not showing (B), swipe the temperature menu until 102 appears (D).
- If 102 appears after swiping but does not stop in the center box (D), press 102. Pressing 102 makes it shift to the center box (E).
- Press the water temperature display (A) to make the temperature menu disappear. The Set Temperature is now 102.



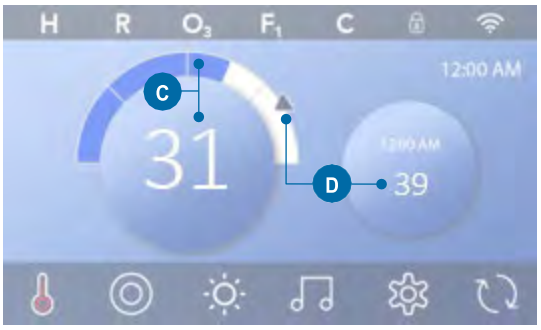




How do I view the Set Temperature?

Press the Heater Status button (A), and the Set Temperature appears in the Mini Player button (B). Press the Heater Status button again to make the Mini Player button disappear.

Set Temperature is represented numerically and by a blue arrow (D). Water temperature is represented numerically and by a blue status bar (C). The difference between water temperature and Set Temperature is represented by the gap between the blue status bar and the blue arrow (E). If there is no gap, the water temperature and Set Temperature are equal.

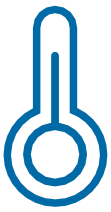


Can I change the Set Temperature with the mini player button?

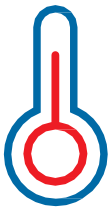
Yes you can. The mini player button and temperature display button function the same way in this regard. Press the mini player button to view the temperature menu. Select the desired temperature, and press the mini player button again to make the temperature menu disappear. You have now programmed a new Set Temperature.

How do I know when the heater is On?

The center of the Heater Status icon turns red (A) when the heater is On. The Heater Status icon appears in the top left corner of the Spa screen (F) when the heater is On.



Heater Off



Heater On

Note: the Heater Status button icon flashes during heater start-up; this is normal.

6.2.6. Run spa devices

Press the Spa button (A) to view the Spa screen. Press these buttons (B) to run spa devices. Some devises may only turn On and Off, while other devices may have multiple speeds/states. Your spa configuration determines the number of buttons and

the function of the buttons in the Spa screen. One Spa screen displays six buttons, maximum. If more than six buttons exists, a navigation button appears (D). Press the navigation button (D), or swipe, to view the next Spa screen. Press the Back button (C) to navigate to the Main screen.

If the Jets are left running, they will turn off after a time-out period.

If the Spa has a circulation pump, a circulation pump icon will appear in the Spa screen to indicate its activity only (the icon is not a functioning button). The circulation pump can be controlled with a button during Priming mode (view page 26).

If the spa does not have a circulation pump, then Jets 1 may turn On automatically at times. In these cases, pressing the Jets 1 button will just change speeds, but will not turn Off Jets 1.

Main Screen

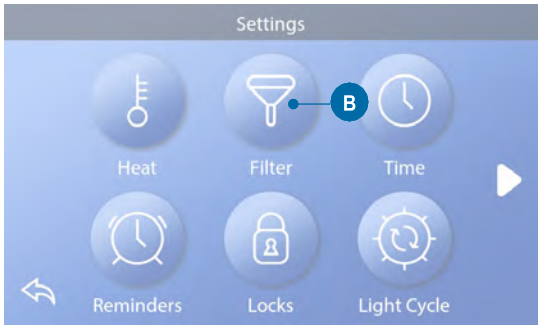
Spa Button

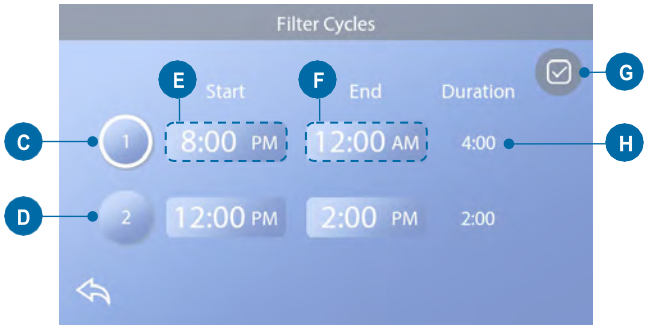
6.2.7. Set filter cycle time

Keep your water clean and ready to enjoy

Follow these steps to set the time for Filter Cycle 1.

- Press the Settings button (A) on the Main screen.
- Press the Filter button (B) on the Settings screen.
- Press the Start button (E) on the Filter Cycles screen.
- Set the Start Time with these dials (J) on the F1 End screen.
- Press the Save button (K) to save your settings, or press the Cancel button (I) to cancel your settings.
- Press the End button (F) on the Filter Cycles screen, and follow the same steps to set the End Time.
- Once the Start and End Times are set, press the Save button (G) on the Filter Cycles screen.
- Once Start and End Times are set, the Duration appears here (H). You have now set the time for Filter Cycle 1. The white ring (C) indicates that Filter Cycle 1 is enabled (it is always enabled).



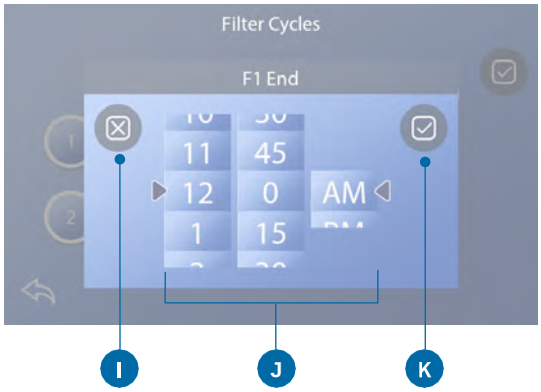


Follow the same steps noted above to set the time for Filter Cycle 2.

How can you tell if Filter Cycle 2 is enabled?

Filter Cycle 2 is enabled when a white ring appears around the ② button. For example, Filter Cycle 1 is enabled (C) in this screen, and Filter Cycle 2 is disabled (D). Press the ② button to enable/disable Filter Cycle 2. A Filter Cycle 2 will only run if it is enabled.

Note: It is possible to overlap Filter Cycle 1 and Filter Cycle 2, which will shorten overall filtration by the overlap amount.



ADJUSTING FILTRATION

Circulation Pump Modes

Some spas may be manufactured with Circ Pump settings that allow programming filtration cycle duration. Some Circ Modes are pre-programmed to operate 24 hours a day and are not programmable. Refer to the spa manufacturer's documentation for any Circulation Pump Mode details.

Purge Cycles

In order to maintain sanitary conditions, as well as protect against freezing, secondary water devices will purge water from their respective plumbing by running briefly at the beginning of each filter cycle. (Some systems will run a certain number of purge cycles per day, independent of the number of filter cycles per day. In this case, the purge cycles may not coincide with the start of the filter cycle). If the Filter Cycle 1 duration is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

The Meaning of Filter Cycles

1. The heating pump always runs during the filter cycle*
2. In Rest Mode, heating only occurs during the filter cycle
3. Purges happen at the start of each filter cycle (on most systems).

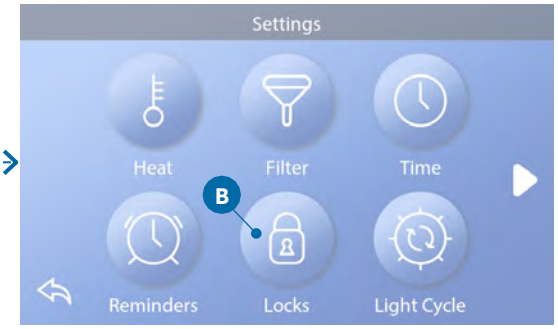
** For example, if your spa is set up for 24/hour circulation except for shutting off when the water temperature is 3˚F/1.3˚C above the set temperature, that shutoff does not occur during filter cycles.*

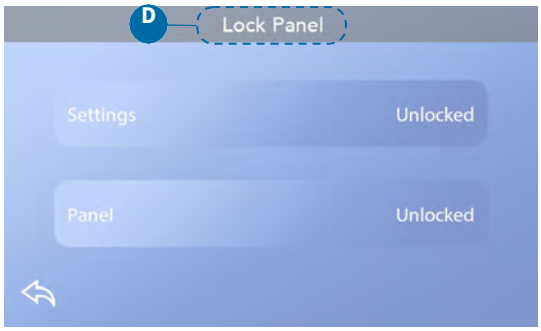
6.2.8. Restrict operations

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

LOCK PANEL

- Press the Settings button (A) on the Main screen.
- Press the Locks button (B) on the Settings screen.
- Press the Panel button (C) on the Locks screen. "Lock Panel" will appear at the top of the screen (D).
- Press-&-hold "Lock Panel" (D) for five seconds. After five seconds a Lock icon (E) will appear in the top row. The lock icon also appears in the top row of the Main screen. The panel is now locked.



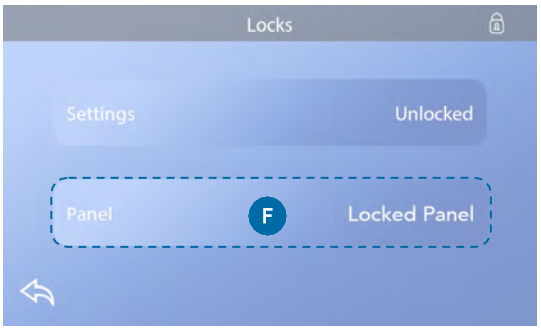


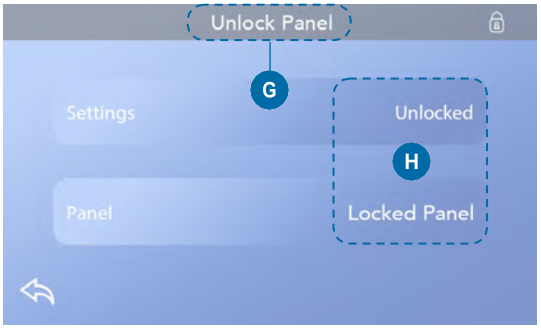
(Continued on next page)

UNLOCK PANEL

- Press the Panel button (F) in the Locks screen, and "Unlock Panel" will appear at the top of the screen (G).
- Press-&-hold "Unlock Panel" (G) for five seconds. After five seconds the Lock icon will disappear from the top row (I) of the Locks screen. The panel is now Unlocked.

The control can be restricted to prevent unwanted use or temperature adjustments. Locking the Panel prevents the controller from being used, but all automatic functions are still active.

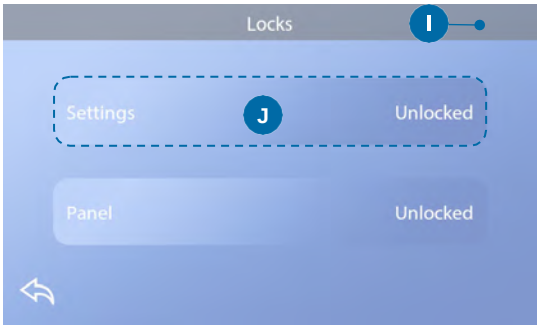




LOCK & UNLOCK SETTINGS

Follow the same steps noted above to lock and unlock Settings.

Locking the Settings allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted. Settings Lock allows access to a reduced selection of menu items. These include Filter Cycles (view only), Invert, Information and Fault Log. They can be seen, but not changed or edited.



Can Settings and Panel be locked simultaneously?

Yes. The lock icon (K) appears if Settings or Panel or both are locked. The current lock states are noted on the right side of the buttons (H).

6.2.9. Diagnostics screen

The Diagnostics screen is helpful for spa technicians.

Here is how to navigate to the Diagnostics screen starting from the Main screen. Pressing the Settings button and then the Diagnostics button .

Info

Info (A) displays various settings and identifications of this system.

System Model

Displays the Model Number of the System.

Panel Version

Displays a number of the software in the topside control panel (D).

Software ID (SSID)

Displays the software ID number for the System.

Configuration Signature

Displays the checksum for the system configuration file.

Current Setup

Displays the currently selected Configuration Setup Number.

Dip Switch Settings

Displays a number that represents the DIP switch positions of S1 on the main circuit board.

Heater Type

Displays a heater type ID number, or "Standard".

Heater Voltage (North American system / UL)

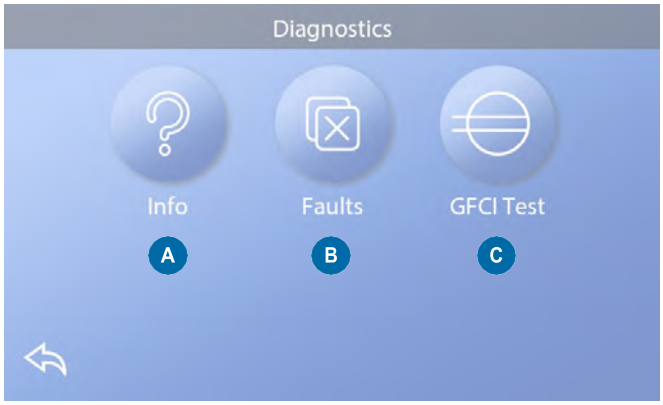
North American/UL control systems display operating voltage configured for the heater.

Heater Wattage (International System / CE)

International/CE control systems display the heater wattage range that is configured for the control system.

Faults

Faults (B) is a record of the last 24 faults that can be reviewed by a service tech. Use the arrow buttons to view each entry in the Fault Log. When Priming Mode shows in the Fault Log, it is not a fault. Rather, it is used to keep track of spa restarts.



6.2.10. Heating settings

Ready to enjoy!

Make sure your spa is heated and ready to enjoy with Heat Settings. Navigate to the Heat Settings screen from the Main screen by pressing the Settings button . Press the Heat button , and the Heat Settings screen appears (A). The Heat Setting screen does not have Save or Cancel buttons, so changes you make take effect immediately.

Heat Mode (B) R

Ready

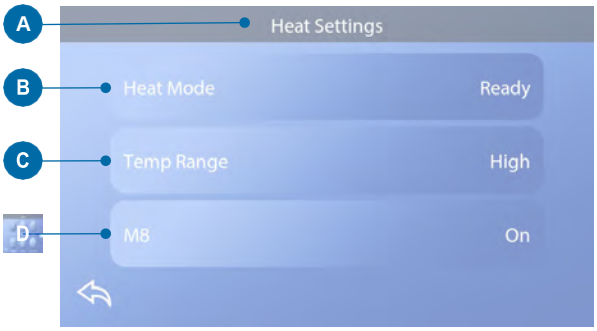
Ready Mode (B) keeps the water temperature within 1° F (0.5° C) of the Set temperature. For example, if the set temperature is 102° F (39.0° C), the water temperature will be within +/- 1° F (0.5° C) of 102° (39.0° C). Press the Heat Mode button (B) to switch between Read and Rest Mode. The R icon appears on the Main screen when the spa is in Ready Mode.

Rest R

Rest Mode functions the same as Ready Mode, except Rest Mode only heats the water during filter cycles (view page 13). Press the Heat Mode button (B) to switch between Read and Rest Mode. The R icon appears on the Main screen when the spa is in Rest Mode.

Ready-in-Rest RR

Ready-in-Rest Mode is the same as Rest Mode, except Ready-in-Rest Mode heats the water, if necessary, for one hour when you turn On Jets 1. The RR icon appears on the Main screen when the spa is in Ready-in-Rest mode. If the spa is in Ready-in-Rest mode and you go to the Heat Settings screen (A), that cancels Ready-in-Rest Mode and puts you back into Rest Mode, even if you press no buttons while on the Heat Settings screen.



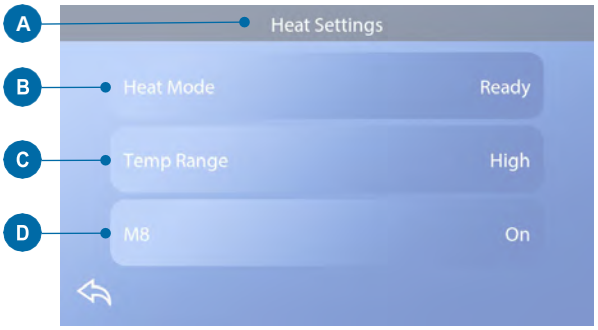
Heater Pump

In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the "heater pump".

The heater pump can be either a 2-speed pump (Pump 1) or a circulation pump. If the heater pump is a 2-Speed Pump 1, Ready Mode will circulate water at various intervals, using Pump 1 Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as "polling."

Rest Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two. When the heater pump has come on automatically (for example for heating) you can switch between low speed and high speed but you cannot turn the heater pump off.

Temp Range (C)



There are two Temp Range settings: High and Low.

High H

The water temperature can be set between 80° - 104° F (26.6° - 40.0 C) when Temp Range is set to High. Press the Temp Range button (C) to switch between High and Low Range. The **H** icon appears in the top row of the Main screen when the spa is in High Range.

Low L

The water temperature can be set between 50° - 99° F (10.0° - 37.2° C) when Temp Range is set to Low. Press the Temp Range button (C) to switch between High and Low Range. The **L** icon appears in the top row of the Main screen when the spa is in Low Range.

Different High and Low Temp Ranges may be determined by the Manufacturer.

Freeze Protection is active in High and Low range.

M8

Press the M8 button (D) to turn it On/Off. The M8 feature looks for opportunities to decrease pump usage, which may increase pump life and save energy. M8 is On by default. M8 is an optional feature and may not appear on all systems.

6.2.11. Settings screen

Fine tune your spa with a wide variety of Settings.

Starting from the Main screen, press the Settings button to view the Settings screen (A). Press the navigation arrows or swipe to view all of the Settings screens.

Heat

Make sure your spa is heated and ready to enjoy with Heat Settings. (view page 22).

Filter

Keep your spa water clean and ready to enjoy by setting Filter Cycles (view page 13).

Time

Set the Time to insure scheduled features have proper timing (view page 9).

Reminders

Reminders (A) are helpful spa maintenance messages that display periodically.

Locks

Lock the Panel and/or Setting (view page 15).

Light Cycle (Optional)

If you want the spa lights to turn On and Off at a specific times, use Light Cycle (A).

Hold

Hold (B) is used to disable the pumps during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually. If spa service will require more than an hour, it may be best to simply shut down power to the spa. The Hold Icon on the Settings Screen places the spa in Hold Mode and displays the System Hold screen. Touch Back to exit Hold Mode.

A

B

Hold (continued)

Drain Mode (Optional)

Some spas have a special feature that allows Pump 1 to be employed when draining the water. When available, this feature is a component of Hold.

Cleanup

When a pump or blower is turned on by a button press, a clean-up cycle begins 30 minutes after the pump or blower is turned off or times out. The pump and the ozone generator will run for 30 minutes or more, depending on the system. On some systems, you can change this setting.

Units

Specify Time and Temperature Units (B). The temperature choices are Fahrenheit or Celsius. The time display choices are 12 hour or 24 hour.

Language

Select from a variety of languages.

Panel

Set how long it takes the panel to go to sleep after the last activity. Short times are recommended because it decreases the chance of water activating buttons.

Also you can set whether or not you need to do an extra action to wake the panel (see page 6). The purpose of the extra action to wake the panel is to make it very unlikely that water can wake the panel.

CHROMAZONE™ (Optional)

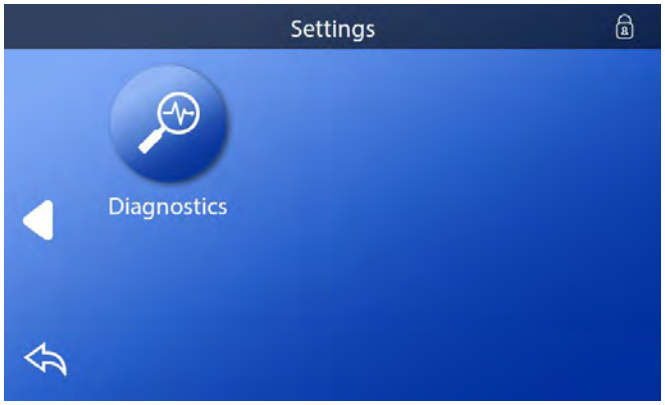
If your spa is equipped with CHROMAZONE™, refer to the CHROMAZONE™ user guide that came with the spa. If a user guide was not included, please contact the spa dealer or manufacturer.

Diagnostics

Spa technicians can find useful information and features in Diagnostics (C) (view page 19).

B

C



General Messages

Several alerts and messages may be displayed in a sequence.

Possible freezing condition

A potential freeze condition has been detected, or the Aux Freeze Switch has closed. All water devices are activated. In some cases, pumps may turn on and off and the heater may operate during Freeze Protection. This is an operational message, not an error indication.

The water is too hot – M029*

The system has detected a spa water temp of 110°F (about 43°C) or more, and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (about 42°C). Check for extended pump operation or high ambient temp.

The water level is too low

This message can only appear on a system that uses a water level sensor. It appears whenever the water level get too low (or the water level sensor is disconnected), and automatically disappears when the water level is adequate. Pumps and the heater turn OFF when this message appears.

Heater-Related Messages

The water flow is low – M016**

There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 minute. See “Flow Related Checks” below.

The water flow has failed* – M017**

There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See “Flow Related Checks” below. After the problem has been resolved, reset the message*.

The heater may be dry* – M028**

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 minute. Reset this message* to reset the heater start-up. See “Flow Related Checks” below.

The heater is dry* – M027**

There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must reset the message* to restart heater start up. See “Flow Related Checks” below.

The heater is too hot* – M030**

One of the water temp sensors has detected 118°F (about 48°C) in the heater and the spa is shut down. You must reset the message* when water is below 108°F (about 42°C). See “Flow Related Checks” below.

Flow-related checks

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems, even when spa is shut down by an error condition, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

6.3. WI-FI CONNECTION & CONTROL

6.3.1. Control Your Spa from Your Smartphone

The Balboa Worldwide App (bwa™), is an app for your smart device (Android™ or iPhone®) that allows you to access your spa via a direct connection anywhere in the local proximity of your spa, anywhere in your house that you can connect to your local Wi-Fi network, or anywhere in the world you have an Internet connection to your smart device via 3G/4G/5G, or Wi-Fi hot spots*.

With the bwa app, you can ensure that your spa will be ready whenever you want to take a dip. Instead of going outside and pressing buttons on the topside panel, the app lets you start the spa and change settings from your smartphone or tablet.

The app provides full interface control so you can set the temperature, turn pumps on and off and even set filtration cycles.

You can access your spa from the comfort of inside your home, your office before you leave work, or on your way back from your getaway holiday. You can set your own mood and personal settings, so your spa is set to how you like when you arrive.

> **NOTE**: Before you continue you need to know your wireless name, password, and encryption. If you don't, please contact your administrator, the person(s) who helped setup your home wireless router, or check your equipment manuals. You will also need to make sure you have wireless internet connection at the location of your spa.

6.3.2. Setting Up Wi-Fi Control on Your Smart Device

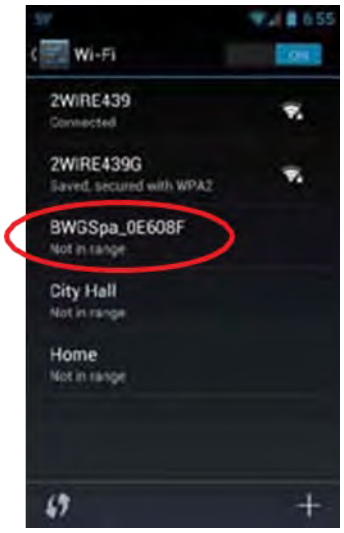
Step 1

Download the app to your smart device from either the Google® Play or the iTunes® store. Once you have it loaded on your phone you are ready to connect to your spa.

Google® Play Store iTunes® App Store

Step 2

Make sure your device's Wi-Fi is turned on, and you are near your spa. Go to your Wi-Fi settings screen, look for the BWG SPA network and connect. No password is needed. The name of the network will be similar to "BWGSpa_0E608F" in the example.



Step 3

Once you are connected to the BWG Spa network, open the bwa™ app and follow the prompts on the screen.

- Connect to the spa.
- Once connected, you will be taken to the main app screen.
- You are now directly connected to your spa and can control all the spa functions via the bwa™ app.
- Check the functions of the app to determine they are operational. We suggest testing the control functions via the direct connection mode before moving onto the next step. If you can control all the functions, you should now be able to connect the spa to your local home network.

The detailed operation of the bwa app is explained in the app user guide which can be found here: http://www.balboawater.com/bwa.

NOTE: Your bwa™ start screen may differ slightly to the examples throughout this guide.

Step 4

If you have a home internet network, you can control your spa from up to 20 meters away. If you do not have a home internet network, you can conclude the setup here.

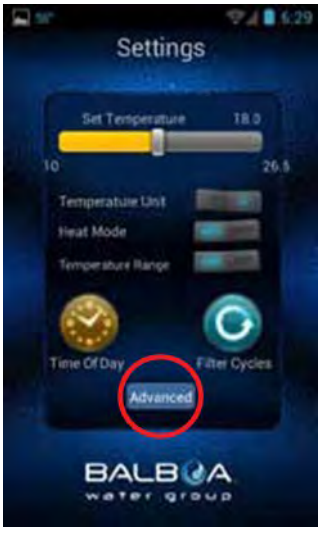
While standing beside your spa, confirm you can see your home Wi-Fi network on your smart device. If you can connect your smart device to the internet through your home network, then the spa bwa™ Wi-Fi module should be able to connect to your home network also. If you cannot connect to the internet through your home network, you may need to move your Wi-Fi router or add a Wi-Fi extender/repeater to boost the signal to your spa location.

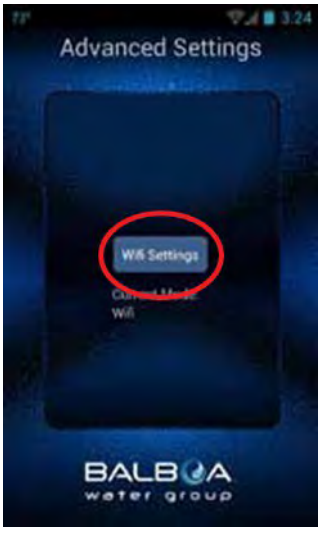
NOTE: It is not possible to connect to the spa via "the cloud" without network hardware such as a Wi-Fi router, or an additional device that is used as a hot spot. Without this, the bwa™ module can only be operated in local direct connect mode only.

Step 5

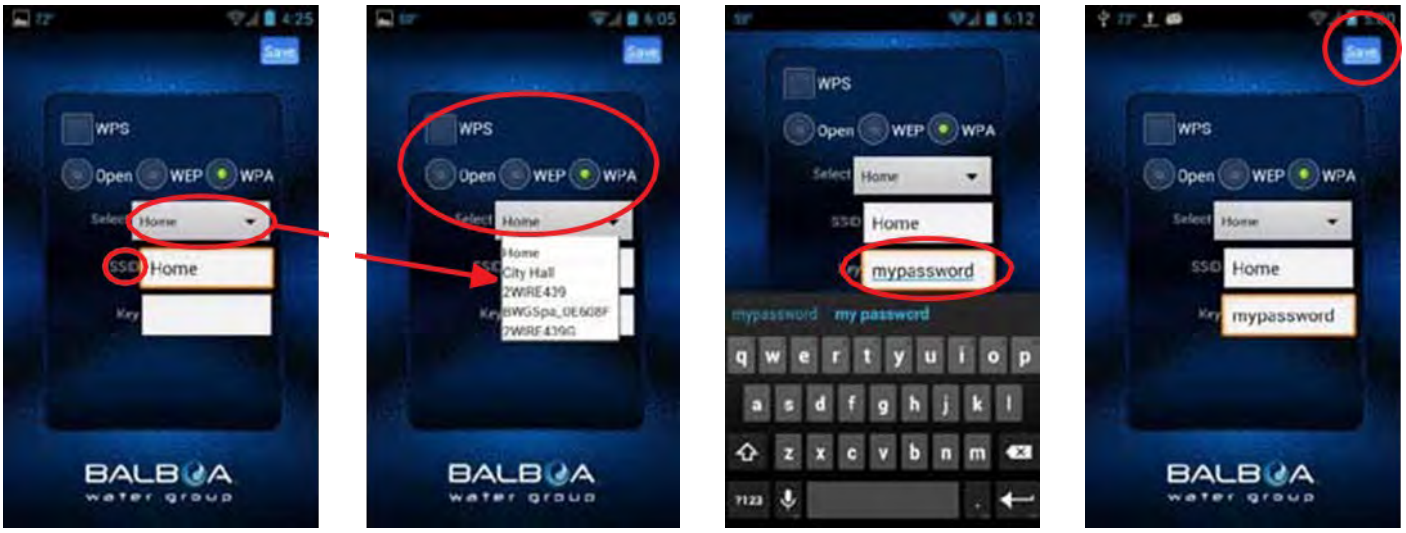
Setting up your local/home Wi-Fi is a one-time process. Once connected, you will not need to change your settings again unless your home network name (SSID) or home network password changes.

- To connect your spa to your local/home network press the "Settings" button.
- On the "Settings" screen, select the "Advanced" button to configure your Wi-Fi network settings.
- Press the "Wi-Fi Settings" button and select your home Wi-Fi network.

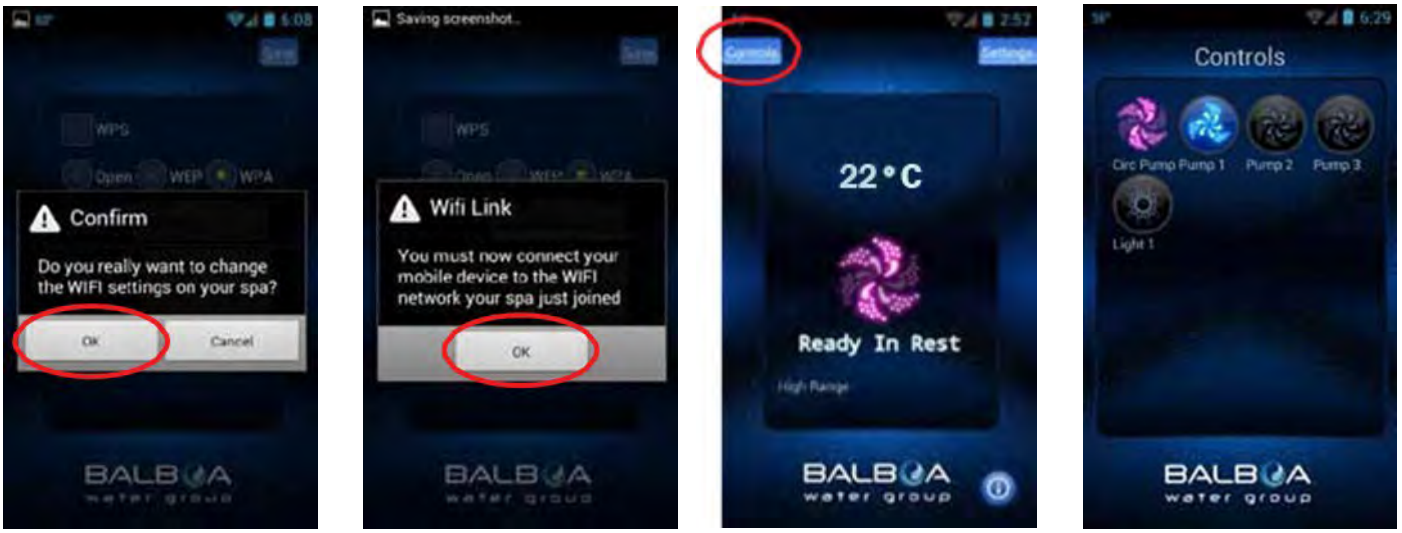




- On the Wi-Fi Settings screen you can use the drop-down menu to select your network SSID, or you can enter it in the "SSID" field.
- You will also need to choose the type of password encryption you are using: Open, WEP, or WPA.
- If you have a router that supports WPS provisioning, select the option and press the WPS button on your network Wi-Fi router.
- Select the "Key" field to enter you home network Wi-Fi password if you have one.
- Press the "Save" button.



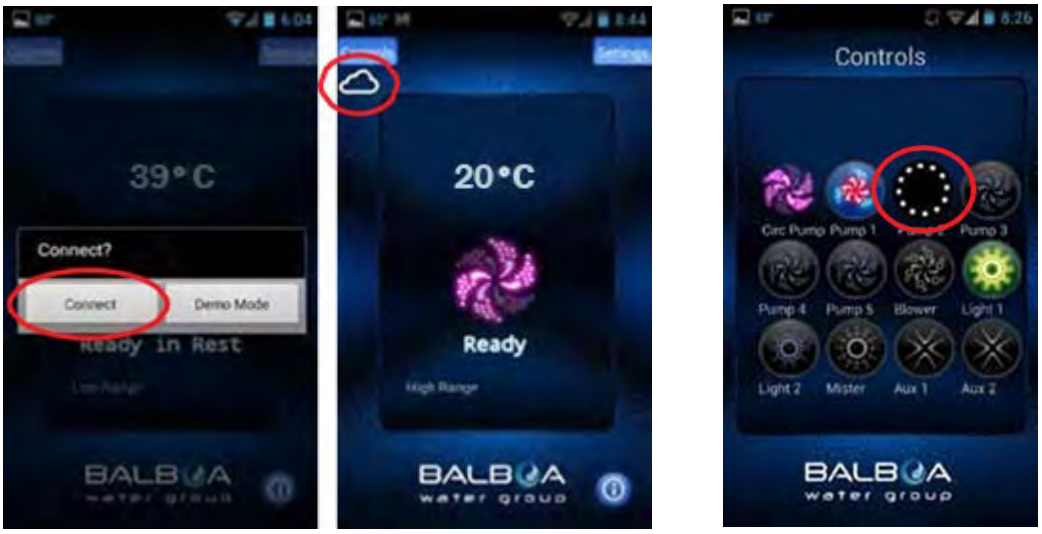
- You will be asked to confirm that you want to update your Wi-Fi settings. If you are ready to proceed, select “OK”.
- The BWG Spa network (set up in Step 2) will disconnect, and you will be connected and controlling your spa via your home network.
- Once you connect the bwa™ app to the local Wi-Fi network, you should reconnect your phone to the same network using your smart device/phone settings.
- After reconnecting to your home Wi-Fi network, restart the bwa™ app. You can now control your spa anywhere you can connect to your local/home network.
- You can turn on your pumps & lights by pressing the Controls button. The equipment for your spa will automatically show up on this screen. You can turn the equipment on/off by pressing the buttons.



Step 6

If you want to control your spa away from your local direct connection, or home Wi-FI network, make sure you have an active internet connection on your smart device (via 3G/4G/5G cellular data or hotspot connection).

- Start the bwa™ app and press the “Connect” button when prompted. Now you can control your spa remotely via the internet.
- When connected via the internet, a small cloud icon will appear under the “Controls” button letting you know that you are remotely connected to the spa.
- Operate your spa by going to the Controls screen.
- Depending on your coverage and data speed, the response time for acknowledging the equipment has turned on/off when pressed may vary. You should see the spinning dots while the bwa™ app communicates to the swim spa via the Internet, and the spa sends back a message that it has completed the request (e.g. that the light has been turned on).



6.3.3. Frequently Asked Questions (FAQ)

Q. When I connect via the local home router with one (1) device, then I try to connect with another smart device at the same time, the next device connects via the cloud. Why?
A. There is only one (1) local router port available for connection. So, if you have more than one (1) device trying to connect via the local router, the others connect via the cloud.

Q. Sometimes when trying to connect to the spa via local home router, I get connected via the cloud instead. Why?
A. This can happen when another device was already connected via the local router and did not disconnect. This seems to happen more often with Android devices, but it can occur with iOS devices also. You should kill the app on the Android or iOS to make sure it drops the local connection properly; Otherwise, the local router connection is taken by the previous running version of the app. This is just how apps sit in the background in Android devices. For iOS devices, make sure you have closed out of the app.

Q. I can connect to my new Wi-Fi module directly (same as the previous version) no problem. I then change the Wi-Fi settings to connect to my home network, no problem. It then instructs me on my iPhone to connect to my home network to connect to my spa. This is where I am running into trouble. Once I change back to my home network on my iPhone and try to connect to my spa it keeps telling me “Connection failed.” Why?
A. This may be due to two different things:

- You may have mistyped your password, SSID or set your encryption wrong. The bwa™ module tries to connect to the router using the information you entered. It will keep trying for 3-5 minutes. If after that time it cannot connect, the bwa™ module will show up again as networks on your smart device’s Wi-Fi settings screen. If it does, repeat the steps to connect to the router making sure you type the SSID & password correctly and select the correct encryption (Open, WEP, WPA).
- You do not have local Wi-Fi coverage or very weak signal from your wireless router at your spa. If you are in the same location as your spa and you cannot connect to the internet using your smart device that is connected to your local wireless router, the bwa™ module cannot connect to your home router either. You will need to add a repeater or network extender to make sure you have local Wi-Fi coverage at your spa.

If you like to read more FAQ please visit. www.balboawater.com/bwa-faq

6.3.4. Troubleshoot Wireless Issues

Check the wires and wireless network adapter

Checking that all your wires are plugged in at the router and from the plug is one of the first things you should do. Verify the power cord is connected and that all the lights of the router and cable/DSl modem are on.

Low Signal Strength

There are several factors that can cause the signal of your access point to deteriorate and the performance of your network to fall under par. Many appliances that operate on the same frequency level (2.4 GHz) as 802.11b or 802.11g can cause interference with your wireless network. Be sure to keep cordless phones, microwaves, and other electrical equipment at least 1m away from the access point. This will ensure you get the best signal from your router.

Installing a repeater for a performance boost

If you're looking for a boost you can always choose to install a repeater. The job of a repeater is to receive the signal, regenerate it and rebroadcast it therefore extending the range of your wireless network. This would sit somewhere between your router and your spa.

Positioning the wireless router

The wireless router should be located somewhere where it will receive the strongest signal with the least amount of interference. For the best results, follow these tips:

- Position your wireless router in a central location. Place the router as close to the centre of your home as possible to increase the strength of the wireless signal throughout your home.
- Position the wireless router off the floor and away from walls and metal objects, such as metal file cabinets. The fewer physical obstructions between your spa and the router's signal, the more likely that you'll be using the router's full signal strength.
- Reduce interference. 802.11g networking equipment uses a 2.4 gigahertz (GHz) radio frequency. This is the same frequency as most microwaves and many cordless phones. If you turn on the microwave or get a call on a cordless phone, your wireless signal might be temporarily interrupted.

No Signal From Your Router – Possible Cause

Cause: Distance Between the Router and Connection Points
Solution: The easiest solution is to move the router to an area where it is unobstructed. However, it is also possible to increase the range of Wi-Fi signal with Wi-Fi extenders/repeaters, or by upgrading the router to one with an increased range.

Cause: ISP Speed
Solution: First, determine the speed of the Internet Service Provider (ISP). If it is not very fast, you may need to upgrade to a faster plan or a faster router. You can also contact your ISP to troubleshoot your connection speed and/or to see if any configurations have changed.

Cause: Walls and Other Interference
Solution. Moving the wireless router to a different area can help prevent the signal from being blocked or interfered with by walls or other devices. Additional signal boosters or repeaters can help extend the Wi-Fi range. If your router has directional antennas, try to aim them at the spa location, or towards windows, thinner walls, or doors to allow the signal to move through the home unencumbered.

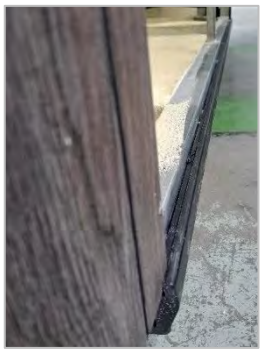
Cause: Number of Devices Online
Solution: If there are too many people using the Internet or cloud services at the same time it can affect the reliability of the connection to your spa. Disconnect any unused devices from the network and limit the number of devices connected to the Internet at the same time. A dual band router can also assist with managing different connections throughout the home.

Cause: Outdated Wireless Router
Solution: Outdated routers may need to be replaced with newer wireless routers that are built to current Wi-Fi standards.

Download the full manual:

6.4. QUICKLOCK™ DOORS

The QuickLock™ door panels offer a convenient cleat system that effortlessly secures the panels onto the frame, ensuring a perfect alignment every time with minimal effort. Unlike traditional fasteners like screws, there's no need to worry about aligning holes for panel refitting. Plus, the process can be completed by hand, requiring virtually no tools. To remove the QuickLock™ panels, follow these detailed steps:



A base rail runs along each side of the spa base. This rail securely locks the cleat on the QuickLock™ door into place, providing a solid foundation.

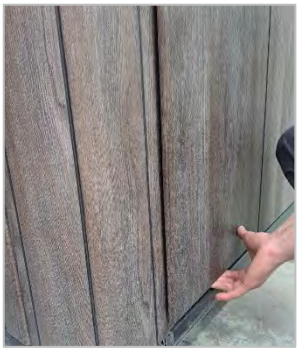
Additional upper anchor points are located on the uprights of the frame. These points offer support to the top section of the QuickLock™ panel.

To remove a panel, start by raising it from the base rail. Carefully insert a flathead screwdriver into the gap at the outer edge of the base rail as this will allow you to get a handhold and manoeuvre the panel more easily.

Simultaneously, unhook the panel from the cleat at the anchor points toward the top of the frame. Use a lift-and-shift motion.

For the wider QuickLock™ panels situated at each end, consider having an extra set of hands to assist. These panels can be bulkier, and the process will be easier with two people working together.

When refitting the QuickLock™ panel, start by tilting the panel and positioning it underneath the flange of the spa to align it with the frame.



Next, slowly lower the panel to locate and hook the cleat onto the upper anchor points.

To complete the reattachment, secure the bottom of the QuickLock™ panel by engaging the cleat with the base rail.

6.5. HYDROTHERAPY SPA JETS

6.5.1. Adjusting Jet Controls for Your Comfort

Your new Halo Spa features a variety of Rush Jets, each designed with unique massage actions. Adjusting these jets is as easy as turning them clockwise or counterclockwise to control the water flow.

To remove the jet face for cleaning or maintenance, rotate the face counterclockwise until it clicks and detaches.

NOTE: Closing too many jets could result in water siphoning out of the air venturis.

Rush Directional Jets:

Focused and powerful, these jets target specific areas to alleviate tension and deliver a revitalising massage experience.

Rush Pulse Jets:

These jets, crafted with precision, emit a rhythmic, pulsating massage that promotes deep relaxation and renewal.

Rush Knead Jets:

Mimicking the technique of a deep tissue kneading massage, these jets help to ease muscle tension and stimulate circulation.

Rush Base Jets:

High-pressure, high-volume jets specially designed to deliver a soothing foot massage, perfect for unwinding after a busy day.

6.6. SWIM SPA SYSTEM

Providing a balanced current between each of Rush swim jets, the swim system is adjustable to allow you to personalise your aquatic workout.

6.6.1. Swim System Operation

To increase the power of the swim system, select one or more boost pumps on the SpaTouch controller. Use the air controls located at the swim spa end to add air, which gives more turbulence to the water, giving the effect of swimming in the open surf.

Experiment with different combinations of boost pumps and air controls to enact different swimming conditions for different experience levels. From 1-2 boost pumps and air control off suitable for walking/resistance exercises, to all available boost pumps on the Max swim Halo models suitable for the experienced swimmer to swim freestyle lap pool conditions.

Halo 4.5 models: Direct water flow to the swim end by turning the diverter valve. Refer to Section 6.8. Massage / Swim Jet Diverter Valve.

Halo 5.8 models: Select the boost pumps on the SpaTouch controller located at the swim spa section.

6.6.2. Adjusting Swim Jets

Tilt the outlet of the Rush swim jet to raise or lower the direction of the water flow to suit your preferred swimming or exercise preferences.

6.7. AIR CONTROLS

Your Halo Spa comes equipped with controls that allow you to add air to the water flowing through the jets. This feature enhances the performance of the jets and the overall massage effect. To increase heat retention when the spa is not in use, it is recommended to close the air controls. Toggle the switch to turn the air on and off.

6.8. MASSAGE / SWIM JET DIVERTER VALVE

The diverter valve in your Halo Spa is designed to alternate the flow of water between the spa seating zones to you swim system.

Rotate the valve to the far left or right to alternate between zones. Avoid forcing the selector handle. If it becomes stiff to turn, please consult your authorised Halo swim spa dealer.

When your spa is not in use, leave the valve in the centre position to ensure there is flow through all the plumbing to ensure all water is filtered evenly.

When using the spa seating zones you can rotate the valve towards the swim system to reduce the intensity of the jets.

6.9. OZONE SANITISATION

Your Halo Spa is equipped with an ozone sanitisation system, which serves to eliminate bacteria, yeast, molds, and viruses, adding an additional layer of water sanitisation. The ozone system operates during filter cycles, and its generator is typically located in the toward the floor of your spa or swim spa zones.

You can access the ozone generator by removing the QuickLock™ door panel on the side of your spa. When in operation, you'll notice the end of the generator illuminating and small ozone bubbles being injected into your spa. Depending on the concentration, ozone may have a slightly sweet to moderately antiseptic smell.

For more information about maintenance products that can be used alongside the ozone system, please contact your local authorised Halo Spa Dealer.

6.10. FILTRATION PUMP

The Circulation Pump is in the engine bay of your spa. This highly efficient, energy efficient pump is used in the filtration and circulation of water through the heater.

The filtration pump will operate through set filtration cycles and when your spa is calling for heating.

During routine maintenance, check that the barrel unions to the pump are tight, as continual use may cause them to loosen due to vibration.

6.11. BOOST PUMPS

Located in the engine bay of your spa, this is the largest of the pumps, used for creating water pressure through the jets.

The Balboa boost pumps in your Halo Spa are programmed to turn on automatically at various intervals throughout the day. The pump will switch off automatically after approximately 30 seconds, a standard operation designed to protect the pumps and prevent water stagnation and bacterial build-up.

6.12. CONTROL BOX

The Balboa control box is in the spa engine bay. This is where the power supply, ozone sanitisation and pumps are connected.

6.13. 3KW TITANIUM HEATER

The in-built titanium heater is housed in the control box. If the Halo spa has been upgraded to include the Eco System, comprising of the external Chilli Inverter Heat Pump, the in-built 3kW heater will be disabled and not in service.

7. MAINTENANCE AND CLEANING

7.1. KEEPING YOUR SPA CLEAN

Your spa should be kept clean and free from dirt and grit. This prevents particles from being lodged in the jets or your spa's operating equipment. Consider placing a mat or foot wash near your spa, allowing users to clean their feet before entering. Remember, damage caused by dirt and grit in your plumbing system is not covered by your warranty.

Your authorised Halo spa dealer can provide guidance on accessories such as hand, and robot vacuums to assist with maintaining your swim spa.

7.2. WATER MAINTENANCE

Maintaining the balance of your water is critical for both health reasons and the protection of spa components. The pH level should read between 7.2 and 7.6 to ensure clean water. The total alkalinity should be between 80 and 120 parts per million. Adhering to these guidelines will ensure your spa is clean and free from contaminated water. Failure to maintain your water within these parameters can compromise the safety of the water, and risk voiding your warranty. Your authorised Halo spa dealer can provide guidance on water balancing and recommend suitable products.

(Swim Spas only)
Filling your swim spa for the first time, add 4.5kg of pool salt to the water. After refilling they should press ION BOOST and set copper level to 0. This will then boost to correct levels. Test and balance water according to recommended levels.

Water Balance for your Spa

In a pool or spa, we need to help nature (water) achieve balance. Balanced and sanitised water provides a healthy environment for your family and friends, but untreated or improperly treated water is not quite so appealing.

When water is out of balance, it becomes aggressive and seeks to balance itself by either attacking the surface, corroding equipment or forming scale on various surfaces. This can be expensive and it can also inhibit the sanitising process. In simple terms, the owner should balance the pH, its Total Alkalinity and the Calcium Hardness.

The Naked System featured in the Halo Swim Spas also relies on copper and silver as it's main form of residual sanitizer, eliminating the need to swim in high levels of chlorine and other chemicals associated with chlorine, salt or minerals. Correct copper levels should range between 0.2-0.5ppm.

Water Chemistry for your Freshwater Swim Spa Important Notes

- Do not add cyanuric acid (Stabiliser)
- Do not use copper algaecides
- Do not use any bromine compounds
- Do not use aluminium based or other flocculants
- Do not use sodium carbonate (Soda Ash)
  - Sodium bicarbonate is fine
- Do not use granular chlorine
  - Liquid chlorine can be used if necessary

TDS levels should not exceed 3000ppm. Excessive TDS levels may cause the unit to overheat and void warranty.

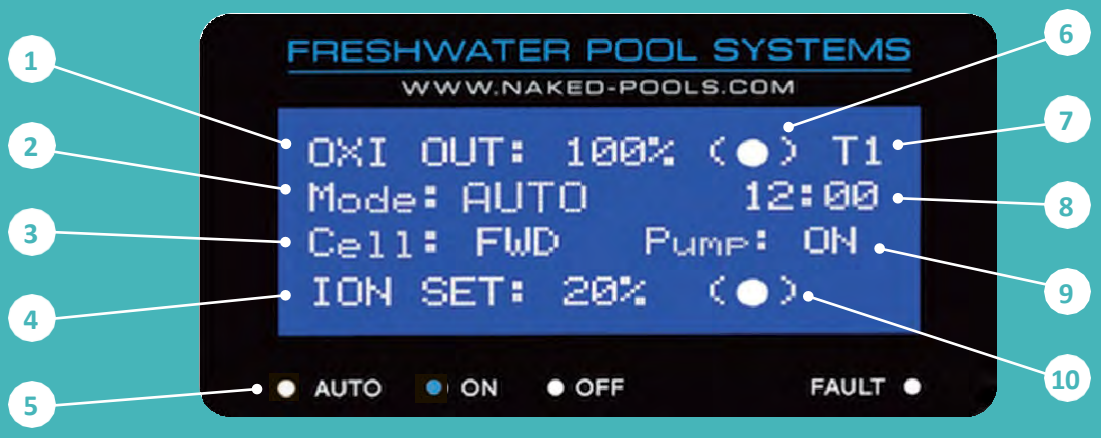
Please follow the recommended water chemistry advice below to ensure the correct operation of your Naked Freshwater System.

(Swim Spas only)

TESTING	IDEAL
Total Chlorine	0 - 0.5ppm
Free Chlorine	0 - 0.5ppm
pH	7.2 - 7.4
Total Alkalinity	80 - 120ppm
Calcium Hardness	150 - 250ppm
Copper *	0.2 - 0.5ppm
Total Dissolved Solids (TDS)	800 - 1200ppm
Salt / Mineral Salt	500 - 700ppm
Phosphates	0 - 0.2ppm

Overview – DDS (Default display screen)

1. What % the Oxidiser is running at. Typically this will be at 10-20% but can be adjusted depending upon the use and environment of the spa, particularly when heated.
2. The mode the system is currently in. Should always be in ON mode.
3. Shows direction cell is operating relating to reverse polarity. Will change between FWD, REV or OFF.
4. Shows the Set Point for the Ioniser (copper output). This screen will also fluctuate between ION Set and Water Temperature and any possible alerts from the unit.
5. LEDs for current mode or if a fault is detected.The dot (•) inside the brackets shows when the Oxidiser is running.
6. The dot (•) inside the brackets shows when the Oxidiser is running.
7. The mode the unit is in. Typically [EXT]
8. Time of day
9. When the unit is using the pump (ON/OFF)
10. Similar to OXI OUT, the dot will be only visible when the Ioniser is running. ie: at 20% you will see the dot on for two minutes of every ten.



IMPORTANT! – Blankets/Covers trap chlorine in the spa. It is important to remove the cover often to allow the water to breathe and be exposed to direct sunlight where possible.

OXI Boost Button

The OXI button is designed to give the water a boost to ensure it remains crystal clear and will help breakdown organic matter, sunscreens, body oils and other factors that get in the water during heavy use.

- When the OXI Boost button is pressed you will see the timer on the screen start counting down from 24 hours. To adjust the run time, press the [-] button or leave it and after the default 24 hours countdown period ends the system will automatically go back to the previous settings.

- **If your spa water is looking cloudy or not remaining crystal clear, you should check the water balance, utilize the OXI Boost, or you may need to increase the OXI OUTput setting higher than the 10-20% range and monitor.**

TIP! Check and adjust pH before and after OXI Boost.

ION Boost

Firstly, did you check your copper level using the copper test kit provided? If not, then please do so remembering to read the sample in the shade and not direct sunlight and make certain your pH is within range (7.2 - 7.4).

If it's determined that your copper is low, you can use the ION Boost feature which will step you through the process. The ION Boost will automatically determine the run time of the Ioniser based on the size of your spa.The ION SET will change to 100% while in boost mode.

We advise testing copper levels at least once whilst ION Boost mode is running. Should the levels be within range (0.2-0.5ppm) while the Boost function is still running, simply press the ION Boost icon again, wait a few seconds and it will give you the option to EXIT.

ALERTS: High pH will mask an accurate copper reading. Ensure pH is in range when testing copper levels.

REFILLING THE WATER IN YOUR SWIM SPA

If you empty your spa water and refill from the tap water, please ensure to rebalance the water as per the guidelines. After balancing the water, use the ION Boost feature to introduce copper back into the water.

Faults and Alerts

Should there be situations where operation or standard performance of the system may be affected you will see the Fault light come on and the fault message or an alert will be displayed at the

TIP: For detailed information about these alerts and possible causes please refer to our online Help Centre at naked-pools.com

LOW TDS

TDS levels below 600ppm means sanitisation will not be as effective. Check water balance and add salt/ minerals. LOW TDS for long periods of time can damage the plate material inside of the cell.

HIGH TDS

TDS levels above 2500ppm. Try diluting some of the water. TDS levels should never exceed 3000ppm.

CHECK IONISER RODS

The Copper/Silver anodes have warn and will need replacing. Replacement Ioniser Rods can be ordered through naked-pools.com or your HALO Dealer

WATER FLOW FAULT

Occurs when there is no water flow or the water level in the cell housing is too low and has exposed the flow sensor on the OXI Cell.

The system will automatically stop the pump for

3 minutes and make three attempts to draw water over a 5-10 minute period. The system will continue repeating the process when another Timer is due to start. The Fault Light will remain until the water flow issue is resolved.

WATER TEMP LOW

Should your water get below 10ºC the unit will come up with an alert to notify you. During the process of electrolysis, very cold water can cause damage to the titanium plate material within the cell.

To combat this the Naked system will automatically drop the OXI (oxidiser) output to 10% (from 100%) to protect itself. As soon as the water increases above 10ºC again the alert will go off and the system will set the OXI back to it's previous setting

WATER TEMP HIGH

This alert will show when the water temperature is between 40º - 45ºC and the unit will operate as normal. This alert is in the event that there may be a closed valve, pump fault or water flow issue.

Should the water rise above 45ºC the unit will pause and wait for the water temperature to drop again, once more to

protect your equipment and the safety of others.

WATER TEMP HIGH FAST

This alert will indicate that the water temperature passing through the cell has increased by more than 20ºC within a two-minute period. The system will stop the pump and go into a cycle mode for approximately 20 minutes to test and retest the water temperature.

Once completed the system will start the pump and check the temperature again if the temperature is then consistent the unit will go back to normal operation.

Troubleshooting

CALCIUM BUILD UP (WHITE SPOTS)

This is caused by an imbalance of chemicals in the spa. It is important to maintain the chemical balance at all times to avoid the build-up of calcium. If calcium build-up does occur, have your water tested and seek advice from a professional. (See “Inspecting and cleaning the OXI cell further in this guide”).

SUNSCREENS / BLOCKOUT

Sunscreens do come off the body when swimming and can affect water balance and cause the water to go cloudy. Excessive use can also form a residue on the waterline which will then need wiping to ensure no staining develops. Try to avoid

excessive use of sunscreens and make sure it is applied at least 30-45 minutes prior to jumping in the water.

Although rare, certain people when using sunscreen in the spa may find discolouration of bathers after swimming. (This can be removed when washing).

PHOSPHATES

Phosphates typically come into the water from lawn care products; fertilizers, sprays, and other

phosphorous based chemicals. Phosphates can also come from dead skin cells, body fats and oils. In water, phosphates are a food source for algae and will assist in its reproduction. It’s important to keep your water well maintained and always remove debris as soon as possible. We recommended testing every 6-8 weeks depending upon the environment and location of your spa.

ENVIRONMENT

Harsh weather conditions also affect water quality. Strong winds blow dust and debris into the water. High rainfall can dilute water and is typically acidic which may alter water balance. Lightning is full of nitrogen, similar to fertilizers, this can feed phosphates and therefore algae. Be aware of changing conditions that may affect your water and manage accordingly when you are leaving the spa uncovered and exposed to the elements for long periods of time.

Inspecting and Cleaning the OXI Cell

Reverse Polarity electrodes should not normally require cleaning, however, in areas with very hard water all the calcium may not be removed. Calcium deposits may form on the lower areas of the electrode, the sensor or the sides of the electrode plates. All electrodes must be cleaned before scale/calcium builds up to the point where the electrode gaps in the OXI Cell become bridged.

If the OXI Cell has excessive calcium deposit, this may damage the electrode coating, as the bridging on the plates affects the operation.

The OXI OUT % can also decrease due to excessive build up of calcium and once cleaned will return to normal levels. Monitoring pH levels weekly/fortnightly and maintaining them within range will assist in less calcium build up.

FOR CLEANING, PLEASE FOLLOW THESE STEPS

- Switch off unit at the wall outlet to ensure the pump and system will not turn on.
- Unscrew the OXI Cell Locking Ring and remove the electrode for inspection. If calcium build-up is present, immerse the electrode in cell cleaning solution.

A solution can be made by mixing 1 part hydrochloric acid to 10 parts of water. If excessive build-up is present, a stronger solution may be used to remove the calcium.

Using 5 parts of water will make a more aggressive solution and will not damage the electrode.

You can choose to use a cell cleaning solution and if so, follow the instructions supplied. Allow the cleaning solution to dissolve the calcium deposits for about

10 minutes. Dispose of the cleaning solution at an approved council depot and never into storm water or sewage drains.

IMPORTANT: When mixing acid with water, ALWAYS ADD ACID TO WATER. NEVER ADD WATER TO ACID.
Eye Protection, mask and gloves should be worn when cleaning the cell.

Inspecting the ION Rods

The Copper/Silver Anodes are sacrificial and will have to be replaced periodically (typically every 4-6 years) depending on the size of your spa.

When the ION Rods are worn and ready to change the fault light will appear to say “CHECK IONISER RODS”.

Replacement ION Rods can be purchased either direct from Naked Pools or your HALO Dealer or service technician.

Naked Pools ION replacement Copper/Silver Rods come complete with cable and plug attached for ease of installation and replacement.

FOR INSPECTION OR TO CHANGE ION RODS PLEASE FOLLOW THESE STEPS:

- Turn the unit off at the power outlet switch as this ensures the pump and system will not turn on.
- Unscrew the ION Locking Ring and remove the Rods from the Housing and simply unplug the cable from the base of the control unit.
- Replace with new ION Rods and repeat the process, ensuring that the O-ring is clean, greased and properly seated and the Locking Ring is hand tight and secure.
- Turn on the wall outlet starting the pump and the system will return to normal operation

7.3. FILTER CARTRIDGE CARE AND REPLACEMENT

Dependent on the model, your spa comes equipped with 2, 4 or 6 50sq/ft filter cartridges. These filters are made from a fine polyester material designed to filter out body oil and grime. With proper care and correct water maintenance, a filter cartridge can last approximately 12 months.

Regular cleaning of filters is vital to remove body oils and grime. A basic clean should be done weekly, while a deep clean involving soaking the filter cartridges in a filter cleaner should be done monthly. Remember, washing filters in water alone will not remove all grease and grime. Using a filter cleaner is essential. When cleaning, consider rotating with an extra set of cartridges for added convenience.

Take note that dirty or worn filters are the single biggest cause of malfunction. Ensuring filter cartridges are clean and replaced when worn is essential to the operation of your spa.

7.3.1. Cartridge Removal & Cleaning Procedure

- **Power Off**: Select the pause feature on the touchpad before removing the filters to prevent foreign matter from entering the pumps, heater, and plumbing system while filters are removed.
- **Cartridge Cleaning**: Lift the filter box lid, remove by unscrewing the filter cartridges, and clean with a standard garden hose nozzle to remove all debris. Follow product instructions and soak the filter in a recommended filter cartridge cleaner to eliminate all body oils and grime.
- **Cartridge Rinsing**: Thoroughly rinse the cartridge with clean water using a standard garden hose nozzle, ensure all soap residue is thoroughly rinsed off to prevent foaming in your spa. Then, carefully re-fit the filter cartridges, being cautious not to overtighten.
- **Refitting Filters**: Before refitting the filters, submerge the filter cartridge in the spa top-first to allow all trapped air to escape before inserting the filter into the Skimmer Box, be careful not to overtighten. Failing to do this can cause an airlock in the plumbing system, impairing the operation of the pump and heater. Rare to happen but if it does, turning on pump 1 will assist with removing airlocks in the system. Failing this, to prevent airlocks, slightly loosen the barrel unions to the pump and heater to release any trapped air, then retighten (ensure spa power is turned off during this procedure).
- **Finishing Touches**: Finally, replace the filter lids, ensuring they are securely fitted before using the spa again.

7.4. DRAINING YOUR SPA

Your Halo Spa or Swim Spa comes equipped with an external drain valve, at the foot of the cabinet toward the right-hand corner where equipment is located. A second drainage point is installed on the Halo 5.8 to allow each section to be drained independently.

Spas

It is important to replace the water on your spa. The frequency in which this is required is dependent on bather load / frequency of use. When the water gets “heavy” (Total Dissolved Solids are high), it is time to drain your spa and replace the water. This is required typically every 3-6 months for an average spa user (spa use 2-3 times per week) or more frequently for a heavy user (spa use 4-5 times per week). For advice on how to test TDS levels, please contact your an authorised Halo Spas Agent or your local pool shop for guidance.

Swim Spas Only (with Fresh Water Sanitisation Systems)

As a Halo Swim Spa owner utilising the NKD-R Fresh Water Sanitisation System, the need for water change will be drastically reduced in comparison to a traditional spa. Under regular usage and maintenance, you should only need to completely drain and refill your swim spa every few years when you feel the water quality is becoming compromised.

Steps to drain your spa or swim spa:

• Disconnect power at the circuit breaker.

• Remove the centre cap on the drain and connect a garden hose adaptor.

• Rotate the lock nut counterclockwise and pull it out approximately 10mm. Allow the water to drain. This process

typically takes 5-6 hours, so it's often convenient to let it drain overnight.

• Remove any residual water from the spa's seats and foot well using a bucket and sponge.

• Remember to turn the drain valve back to the off position after draining the spa or swim spa.

NOTE: In cases where you are draining your spa or swim spa when it's not in use for extended periods, loosen the barrel unions to the pump to eliminate all water from the plumbing system. Be sure to tighten them once all the water is removed.

7.5. ACRYLIC SHELL MAINTENANCE

Avoid leaving your spa continually exposed to the elements. The acrylic shell can reach extremely high temperatures without shade or cover, and damage due to sunlight or extreme temperatures is not covered by the warranty. Regular use of your spa may lead to a build-up of oils and lotions on the water's surface, potentially leaving a scum line around the perimeter of your spa shell.

To clean:

- Use a recommended cleaner or simply wipe down with a soft cloth and Spa Shock, provided in the starter water maintenance kit.
- For hard water stains, consult your Halo Spa Dealer for an appropriate cleaner/polish.
- Never let your spa surface come into contact with harsh chemicals such as acetone (nail polish remover), nail polish, dry cleaning solution, lacquer thinners, gasoline, pine oil, abrasive cleaners, citrus cleaners, etc. These can damage your spa acrylic shell and void your warranty.

7.6. SPA HARDCOVER

Using a hardcover when the spa is not in use will significantly reduce your operating costs, heat-up time, and maintenance requirements.

7.6.1. Care for Your Hardcover

- Clean your cover with mild soap and water.
- Avoid walking, jumping, or lying on the cover.
- Always lift your cover when moving it; do not drag, drop, or slide it.
- Do not place the cover on rough surfaces.
- Each month, use a vinyl conditioner on top of the cover. Your Halo Spa Dealer can advise you on appropriate products for your cover.
- Every 12 months, remove the foam liner from the hardcover and rotate to prevent sagging.
- Always ensure the hardcover is fitted on the spa when not in use.
- Hardcover locking clips must be fixed to the spa cabinet. Fasten hardcover correctly to the locking clips to ensure the safety of others.
- Remember to replace the hardcover over the spa to protect the acrylic shell from direct sunlight. Damages caused by UV or sunlight are not covered by the warranty.

7.7. HEADREST MAINTENANCE

Your Halo Spa features comfortable headrests for the utmost relaxation. It is advisable to remove these headrests periodically for cleaning and particularly if your spa is not in use for extended periods. Prolonged exposure to ozone and moisture can lead to damage over time. Your authorised Halo spa dealer can provide guidance on purchasing accessories such as replacement headrests.

Every 3-6 months, follow these steps for headrest maintenance:

- Gently remove the headrests off the two clips
- Wipe with soapy water.
- Rinse and re-fit onto clips.

8. TROUBLESHOOTING

Problem	*Cause*	*Procedure*
Spa does not operate	Power not connected	Check that power is connected
	Power supply fault	Check fuse or circuit breaker at your electrical panel
Power available, but pump does not run	Air lock in plumbing	Loosen the barrel union located above the pump to release air. You may also need to release a small amount of water
Reduced water flow from Rush Jets	Shut-off valves in closed/off position	Open the shut-off gate valves to allow water flow
	Insufficient water levels	Add more water to the spa until it reaches the recommended level
	No flow through jets	Turn Rush Jets clockwise to the 'on' position. If this doesn't work, remove the QuickLock door panel(s) and check for kinks in the delivery hoses
	Pulsating jets	Check water level and add more water if necessary
Underwater light not operating	Underwater light not connected	Ensure the light is plugged into the control box
	Defective light	Spa technician to replace the light during routine maintenance.
Spa will not heat	Temperature set too low	Increase the thermostat setting
	Excessive heat loss	Secure the hard cover on the spa to retain heat
	Dirty filter cartridge	Clean or replace the filter cartridge
	Spa set to economy or sleep READY REST modes	Increase timer cycles or set to standard mode (refer to controller instructions)
Spa activates by itself	Normal automatic daily filtration or anti-freeze cycle	No action required – this is a standard operation
Pump shuts off unexpectedly while in use	Automatic timer has shut off pump	Press the 'JETS' button again to start a new cycle
	Motor overheated, and automatic protective device has shut down the pump(s)	Wait for 10 minutes, then press the 'JETS' button to restart

If the above procedures fail to address your issue, please contact the Halo Customer Support team for further assistance.

Phone: 1300 287 772 | Email sales@halospas.com.au

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