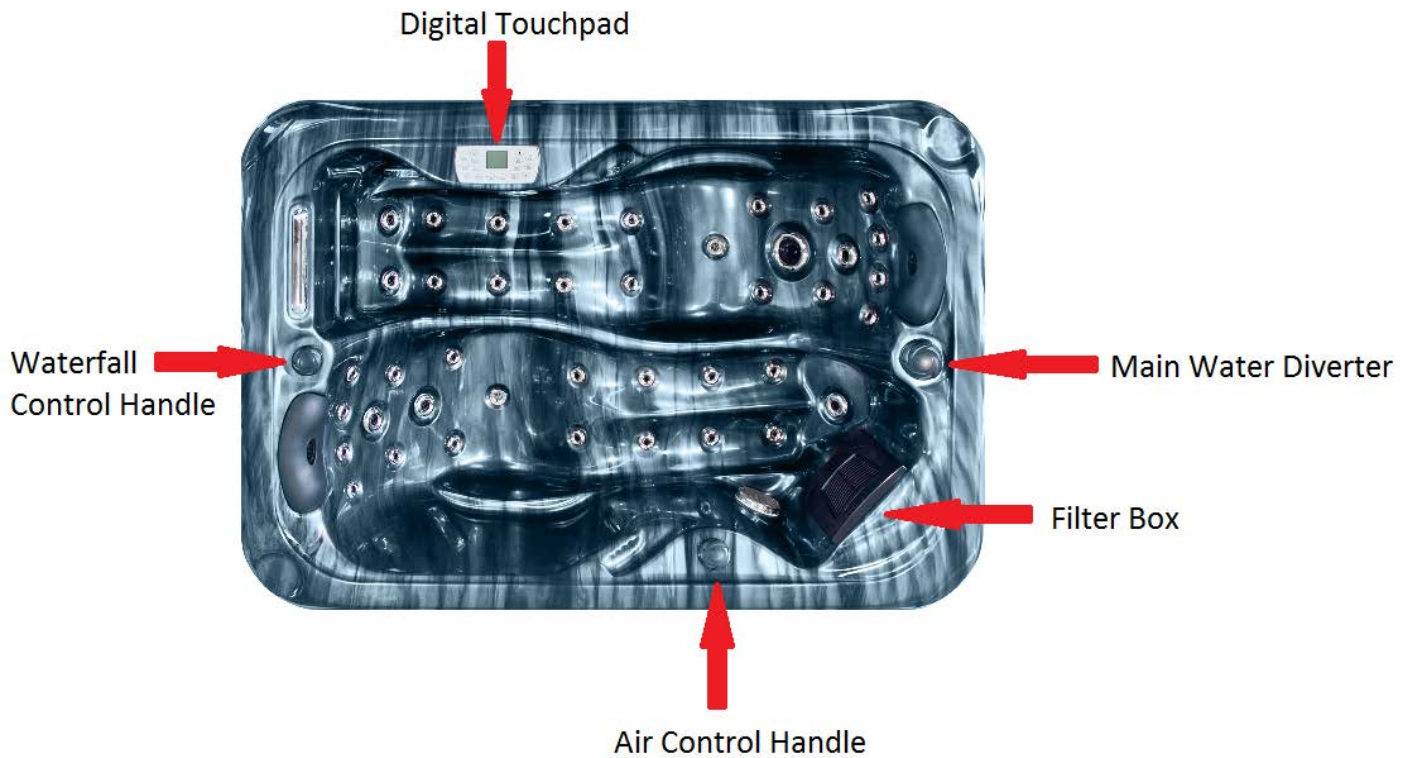




Airlie Luxury Spa

USER MANUAL



Contents:

3 Important safety instructions

3 Warnings

4 Hyperthermia

4 Information to assist you locating the spa

4 Outdoor locations

4 Location considerations

5 Spa base

5 Water supply

5 Electrical safety

5 Electrical installation

6 Wiring diagram

6 Electrical connection point location

7 Important usage warnings – non warranty faults

7 Water treatment

7 Filling your spa with water – avoiding air locks

7 Filter

8 How to remove your spas filter

8 Hardcover use

8 Caring for cedar & synthetic cabinets

8 Empty spa warning

9 Using the drain – Draining the spa

9 Turning jets on & off

9 Air control handle – Main Diverter

10-11 Operating your Airlie Luxury spa

12 Setting the time

12 Setting the cycle cleaning

13 Setting the cycle heating

14 Turning on the heater manually

14 Turning on the hot water massage pump

14 Turning on waterfall

14 Turning on the LED lights

14 Frost prevention system

14 Ozonator

15 Troubleshooting

16-18 Aqua Pulse Spas Warranty

IMPORTANT SAFETY INSTRUCTIONS

Your physiological response to hot water is very subjective and depends on your age, health and medical history. If you don't know your tolerance to hot water or experience dizziness, headaches or nausea you should exit the spa immediately and cool down.

WARNINGS

Children in and around the spa should be supervised at all times by a responsible adult.

- Use caution when entering or exiting the spa, where practical install a safety grab bar or handrail and set of stairs with non-slip tape on the stair treads (cease use of the stairs immediately if the grip tape is not in tact). Turn off all the jets before entering or exiting the spa to improve visibility while entering or exiting the spa. Remember that wet surfaces can be slippery.
- Do not allow anyone to submerge their head under the water.
- Do not use the spa unless all suction guards are installed to prevent body and hair entrapment. Do not sit in front of or on top of the suction fittings or skimmer. This will obstruct proper circulation of the water and may result in personal injury.
- Never operate the spa pumps without having all suction and return lines open.
- Always keep the hardcover installed and locked when the spa is not in use.
- Never allow anyone to sit or stand on the hardcover.
- People using medications and or having any adverse medical history should consult a physician before using the spa.
- People with infectious diseases should not use the spa.
- Do not use the spa if you are under the influence of alcohol or drugs.
- Do not consume alcohol or drugs while using the spa.
- Pregnant women should consult a physician before using the spa.
- As prolonged immersion in water temperatures in excess of 38°C (100°F) may damage your health, we recommend measuring the water temperature with an accurate thermometer before entering the spa. We also recommend establishing lower temperatures and shorter periods of use for users who may be affected by hot water temperature.
- In order to avoid the possibility of hyperthermia (heat stress) occurring it is recommended that the average temperature of spa-pool water should not exceed 38°.
- Do not use the spa immediately following strenuous exercise.
- You must use a Licenced Electrical Contractor to connect the spa to power.
- The power should be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 20mA.
- If your power supply cable is damaged switch the spa off at the residual current device inside your houses meter box, contact a Licenced Electrical Contractor to replace the cable.
- Live parts and connections must be inaccessible to any person in the spa.
- Earthed appliances must be permanently connected to fixed wiring.
- Do not permit or use electric appliances (such as lighting, telephone, radios, televisions etc.) within 2 meters of the spa, unless the appliance is rated at 12VDC or less.
- Parts incorporating electrical components except remote control devices must be located or fixed so that they cannot fall into the spa.
- Test the GFCI (Ground Fault Circuit Interrupter) or residual current device (RCD) monthly.
- If water is leaking from the spa stop using the spa and turn it off at the RCD in the meter box until a qualified technician has resolved the problem.
- Do not leave the spa empty for any period of time, this can cause terminal damage to the spa.
- Post emergency phone numbers for Police, Fire Department and Ambulance at the nearest phone.
- Install a CPR Resuscitation chart within easy view of the spa.
- Check with your local council to see if you require a building & fencing permit for your spa.

HYPERTHERMIA

Since your spa can be set to reach temperatures of 40°C (104°F) users should be aware that extended submersion in water that exceeds normal body temperature can lead to hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches several degrees above the normal body temperature of 37°C (98.6°F). The symptoms of hyperthermia include drowsiness, lethargy and an increase in the internal temperature of the body. The effects of hyperthermia include:

- Unawareness of impending hazard
- Failure to perceive heat
- Failure to recognize the need to exit the spa
- Physical inability to exit the spa
- Foetal damage in pregnant woman
- Unconsciousness resulting in the danger of drowning

If you feel any of the symptoms of hyperthermia safely exit the spa immediately. Please note that the use of Alcohol, Drugs or Medication can significantly increase the risk of Hyperthermia.

INFORMATION TO ASSIST YOU LOCATING THE SPA

The following information will assist you in choosing the right location for your spa. When making your decision always remember that spas can be enjoyed all year round, indoors or out regardless of the climate. Many spa owners report that their favourite seasons are the cooler winter months while others enjoy using their spa in the warmer summer months.

OUTDOOR LOCATIONS

For a variety of reasons outdoor locations are a far more popular choice, some of the reasons include:

- Limited indoor space
- Delivery complications due to door openings, stairwells etc
- Desire for an outdoor entertainment area
- The spa is being installed adjacent to an existing or planned swimming pool
- Concerns over splashing water inside the home.

For those who choose an outdoor location, spa operating temperatures can be adjusted to match the season. In colder months many owners will operate their spa in the range of 36-38°C. During warmer months an operating temperature of 26-28°C will provide a refreshing retreat.

LOCATION CONSIDERATIONS

Contact your local council to determine if a building permit is necessary and for information on applicable bylaws (distance from property lines, buildings, fencing requirements etc.). If you are doing any excavating contact Dial before You Dig on 1100 to ensure that there are no underground lines. Locate the spa where possible within close distance of a door to the house, this will maximize potential winter use. Ensure that your pumps, controls, drain-valve and thermal probe are easily accessible and protected. If possible, locate the spa where you will enjoy some privacy. If this is not possible a partial privacy or wind partition or proper placement of the optional cover lifter should provide adequate privacy. Make sure your spa is positioned so that access to the equipment compartment and side panels will not be blocked. Blocking access to any side panel on the spa will render the spa unserviceable. Service technicians will not move your spa to gain access to a side panel which has been blocked in, decking in your spa will render your spa unserviceable and our technicians will not attend your site for any repairs whatsoever whether under warranty or post warranty.

SPA BASE

Your spa needs a good solid foundation supporting the whole base of the spa. The foundation on which your spa sits must be able to support the weight of the spa the water in it and the weight of its users. If the foundation is inadequate the spa may shift, this will cause stress to the shell which may lead to the shell cracking. Damage caused by an inadequate or improper foundation is not covered under warranty. It is the responsibility of the spa owner to provide a proper foundation for the spa. A spa containing both water and people is extremely heavy, if you are installing the spa onto decking or any other elevated structure you must consult a structural engineer to ensure that the structure will support the weight of the spa. Ideally the spa should be installed onto a concrete base at least 4" thick with reinforcing steel inside the slab. If you are installing your spa indoors ensure that your choice of flooring is impermeable to water. Ensure that water drains away from the spa protecting the cabinet and electrical components from water damage. Do not place any item underneath the spas base to level the spa this will cause stress to the shell which may lead to the shell cracking. Damage caused by packing under the spas fibreglass base is not covered under warranty.

WATER SUPPLY

Spas do not require a permanent water supply however there must be a water supply and hose within reach in order to fill the spa. A hose is also used for emptying the spa via the bottom drain or by using a submersible pump if the bottom drain is not accessible.

ELECTRICAL SAFETY

Do not place your spa within 3 metres of overhead power lines.

ELECTRICAL INSTALLATION

You will need a suitable electrical supply to run the spa.

The Airlie Luxury Spa requires a 10Amp Residual Current Device Protected Dedicated Power Connection. Your Licenced Electrical Contractor can hardwire the spa straight to the meter box in your house or they can install a 10Amp residual current device protected dedicated single power plug.

Double power plugs or the use of an extension lead will void your warranty.

ALL ELECTRICAL CONNECTIONS REQUIRE YOUR LICENCED ELECTRICAL CONTRACTOR TO INSTALL THE APPROPRIATE SIZED RCD IN THE HOUSES METER BOX.

It is the responsibility of your Licenced Electrical Contractor to ensure the Residual Current Device is installed at the correct mA required by the law.

When appointing an electrician to prepare your spas electrics check that they are suitably qualified and licenced to do so. Do not attempt to install the spas electrics yourself if you are not a fully Licenced Electrical Contractor. The spa must be wired on its own fused circuit back to your household meter box. The spa should not be sharing power supply with any other appliances.

If your spa is being hardwired, we recommend you install a Rotary Isolation Switch so that the spa can be isolated from the power supply in an emergency or for service work. This is simply a rotary on/off switch but should be sited more than 2 metres away from the spa so that users cannot be in the spa whilst operating the switch.

3 Pin Plug



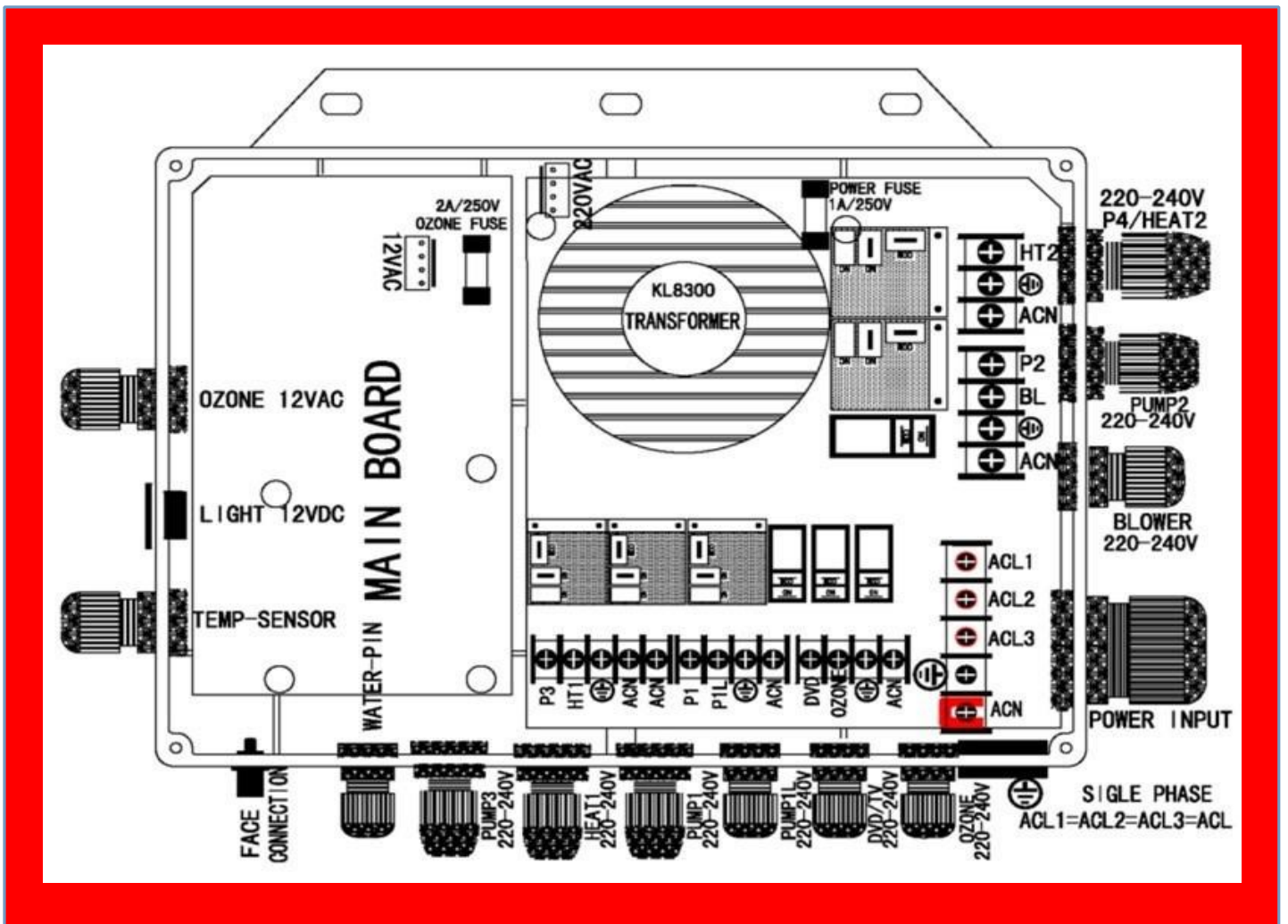
Rotary Isolation Switch



ELECTRICAL CONNECTION POINT LOCATION



If you have chosen to hardwire the spa your Licenced Electrical Contractor will locate the electrical connection point here, unscrew and remove the cabinet panels directly underneath the spas touch pad.



IMPORTANT USAGE WARNINGS – NON WARRANTY FAULTS

Spas are extremely delicate products and require regular maintenance. Below we will list a number of common causes of problems which are not covered under warranty. Should we ever need to visit you to repair your spa you will be charged the full cost of a repair if we found that the cause was the result of poor maintenance or customer negligence. Paying full attention to the issues below will help to reduce the risk of damage to your spa.

WATER TREATMENT

One of the most crucial aspects of spa maintenance is water treatment. Improper water balance of Chlorine, Lithium, Peroxide, pH, Alkalinity or Calcium will cause damage to the spa surface, pumps, jets, heaters, headrests and fittings. If we find improper water balance in your spa, these parts will not be covered under warranty.

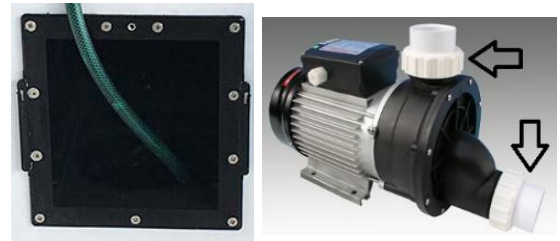
Please note that your spas headrest and filter box face are sensitive to chemical exposure and will discolour immediately if you over sanitize the water or allow them to float in the water, this will not be covered under warranty. Do not clean the spas headrests or filter box face with the spas water only use fresh tap water to clean the headrests and filter box faces. If you are sanitizing the spa on a once a week program it is recommended to remove the spas headrest on the day you sanitize the spa and replace them a day later to avoid over exposure to your sanitiser. Different chemical packs have different methods of caring for the water. You will need to refer to the user guide that came with your chosen chemical pack for exact details on how to treat your water. We recommend that you have the spa water tested weekly at a Pool or Spa Store to gain accurate results of the water chemistry. Use the results to go home and balance your spas water from the user guide supplied with your chemical pack. **DO NOT FOLLOW THE POOL OR SPA STORES RECOMENDATIONS ON BALANCING THE WATER AS THEY WILL NOT BE SUPPLING YOU WITH THE REQUIRED CHEMICAL LEVELS FOR YOUR SPA.** Test history should be kept as a reference as the test history will be required in the event of a warranty claim. It is a requirement of the Warranty Terms to keep a printed monthly test result of the water chemistry from a professional pool or spa store. Your warranty will be made void if you cannot show the results of monthly water chemistry history printed from a recognisable professional Pool or Spa Store.

USE OF BROMINE TABLETS or BIGUANIDE WILL VOID YOUR SPAS WARRANTY.

FILLING YOUR SPA WITH WATER – AVOIDING AIR LOCKS

The correct way to fill your spa with water is to remove the spas filter and place your hose inside the filter box. Be sure to remove the fitting off the hose to prevent it from falling into the spas plumbing. Placing the hose inside the spas main seating area may cause a build-up of air inside the plumbing creating an air lock. Air locks can cause damage to the spas pumps and heater. Damaged caused by an air lock will not be covered under warranty. To avoid this problem ensure you fill up the spa through the filter box. You can tell if you have an air lock by turning on the pumps, if no water appears to circulate through the system it is very likely that you have an air lock. To resolve this problem, loosen the unions at the side of the suction end of the pump until water begins to flow through. Alternatively contact the store of purchase for advice on other ways to remove an air lock.

Note: Please ensure the drain fitting is closed before filling the spa, see instructions on page 9 for how to work the drain fitting, and page 8 for how to remove the spas filter.



FILTER

Before you use the spa, please make sure the plastic wrap has been removed from the filter.

Poor filter conditions are one of the biggest causes of faults that are not covered under warranty. Poor filter conditions allow particles to roam in the spas water. These tiny particles can cause damage to the spas components. One of the first things our technician will check when visiting your spa is the condition of your filter. If we find your filter is in poor condition your repair will not be covered under warranty.

We recommend that you soak your spas filter in filter cleaner every week. You should also replace your spas filter every 12 months. It is advised to purchase spare filter at the time of ordering your spa and alternate between the filter each week to make the cleaning process easier. Only soak the filters in the recommended Filter Cleaner.

HOW TO REMOVE YOUR SPAS FILTER

Remove the flat head screw in the filter box face and dispose of it. **Do not reinstall the screw.**

1. Lift the face plate on the filter box vertically until it separates away from the filter box.
2. Remove the leaf catcher by sliding it horizontally towards the centre of the spa.
3. You will see the filter inside the filter box, to remove it turn the handle on the top of the filter anti-clockwise until you can lift the filter out of the filter box.
4. To reinstall the filter, reverse these steps.



Do not overtighten the filter, it only needs to be lightly screwed in. Overtightening the filter will break the filter and is not covered under warranty.

HARDCOVER USE & CARE

Your spas hardcover must be locked to the spas cabinet when the spa is not in use. Leaving the cover off exposes your spa to the elements which can cause damage to the spas acrylic and fittings, it also allows leaves, dust etc. to enter your spa. Debris in the spa can cause blockages or damage to the equipment, if our technician finds items such as leaves or dirt inside your spa your repair will not be covered under warranty. Never stand, sit or apply any weight to the hardcover this will bend or break the hardcover. The handles on the hardcover are not for lifting or pulling the hardcover, lifting or pulling on these handles will tear the vinyl. To lift the hardcover place your hand underneath the valance and lift the hardcover itself not the handles. Do not open the zippers on your hardcover they can be extremely difficult to close and may not close at all. The hardcover has small holes in the underside of the cover, these holes allow the water which will get inside the cover through the stitching to drain out. To clean your hardcover wipe both the top vinyl and underside over with a damp cloth. To extend the life expectancy of your hardcover we recommend you apply 303 aerospace protectant to the vinyl side of your hardcover every 30 days and balance your spas water weekly as per the chemical instructions we have supplied you with. Poorly balanced water can blister your hardcover and breakdown the stitching voiding your hardcovers warranty.

CARING FOR CEDAR CABINETS

Wood skirting has a tendency to hairline crack, fade and lose its like-new appearance with time. You should re-oil your spa's skirting once every three months. Lightly sand the surfaces to remove any chemical stains and smoothen rough surfaces, re-oil the wood surfaces using a suitable decking or outdoor furniture oil. Do not use varnishes, shellacs or surface sealants. Warranty on cedar spa skirting is only valid if regularly oiled.

CARING FOR SYNTHETIC CABINETS

Do not use any chemicals to clean your synthetic cabinet. The best way to clean your cabinet is to regularly wipe it down with a micro fibre cloth and fresh water. Where possible try to keep the cabinet from being exposed to the sun as this can cause colour fade in the cabinet and can also cause the cabinet to shrink if exposed to extreme heat. Fading and shrinking of the cabinet are not covered under warranty.

EMPTY SPA WARNING

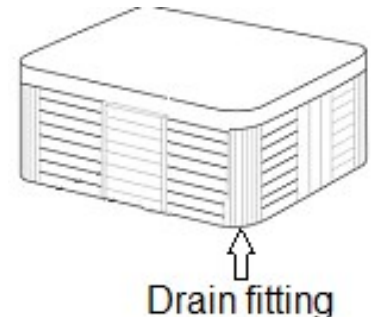
Your hardcover must always be on the spa when not in use, and the spa must always be filled with water. An empty spa on a hot day will cause melting, crazing, discolouration and blistering in the spas acrylic and fittings. This can happen within 10 minutes of the spa being emptied. Your warranty will be made void if you leave the spa empty for any period of time.

USING THE DRAIN

The drain fitting has a locking keyway to stop the drain automatically opening. When you want to operate the drain fitting turn the handle clockwise and at the same time pull the handle away from the spa to release it from the locking keyway. When the drain fitting is pulled fully away from the fibreglass base you can now unscrew and remove the handle by screwing it anticlockwise. With the handle off you can now connect the supplied hose connection and attach your garden hose, now push the drain half way back in and it will begin draining the spa. When the drain fitting is pushed completely in or pulled fully away from the fibreglass base the drain is closed and when the drain fitting is in the middle of both closed positions the drain is open.

DRAINING THE SPA

NOTE: When planning on draining the spa, make sure you refill and reinstall the hardcover straight away. The spa must always be filled with water. An empty spa on a hot day will cause melting, crazing, discolouration and blistering in the spas acrylic and fittings. This can happen within 10 minutes of the spa being emptied. Never drain your spa on a hot day we recommend you drain the spa on cooler days or in the evening or morning to avoid heat exposure. Your warranty will be made void if you leave the spa empty for any period of time.



1. Attach the supplied hose fitting.
2. Connect your garden hose.
3. Put the drain fitting half way between the two closed positions.
4. When finished draining the spa push the drain fitting back in.

TURNING JETS ON & OFF

The larger jets in your spa can be turned on or off. Turning the jet face clockwise will turn the jet on which will allow the water to flow through the jet. Turning the jet face anticlockwise will turn the jet off stopping the water from flowing through the jet. The smaller jets in your spa can not be turned on and off, they will always remain on.

WATERFALL CONTROL HANDLE

Your waterfall control handle can be located on the spa image on page one. To run your waterfall turn on the manual heating button and set the temperature button above the current water temperature, then turn the control handle anticlockwise. To turn off the waterfalls turn the control handle clockwise until they stop running. This handle only needs to be lightly turned when controlling the waterfalls, turning this handle too far either way will cause it to break and will not be covered under warranty.

AIR CONTROL HANDLE

The air control handle can be located on the spa image on page one. This handle controls the amount of air pressure coming from the jets, which will increase the water pressure if it is turned anticlockwise and will decrease the water pressure if it is turned clockwise. This handle only needs to be lightly turned, turning this handle too far either way will cause it to break and will not be covered under warranty.

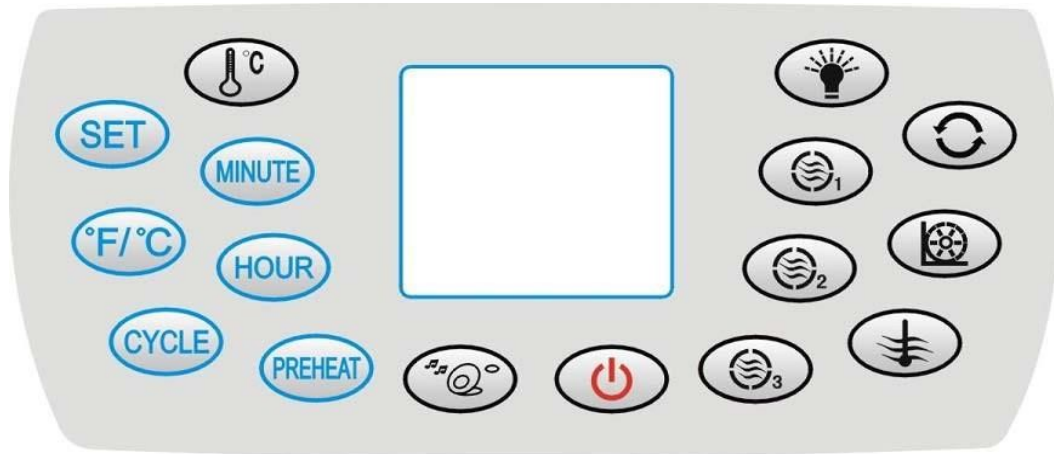
MAIN DIVERTER


The main diverter handle can be located on the spa image on page one. This handle is used to divert the water flow from one side of the spa to the other. This handle should not be turned while the pump is running, turning this handle with the pump running can break the handle which is not covered under warranty. This handle only needs to be lightly turned with the pump off, turning this handle too far either way or with the pump on will cause it to break and will not be covered under warranty.

MY SPA IS TOO HOT IN SUMMER, THE TEMPERATURE OF THE WATER IS HIGHER THAN I HAVE SET








During summer there may be times when the spas water exceeds the set temperature. This is not a fault in the spa it is simply the ambient air temperature causing this. To combat this problem, you can use ice to cool down the water.

OPERATING YOUR AIRLIE LUXURY SPA

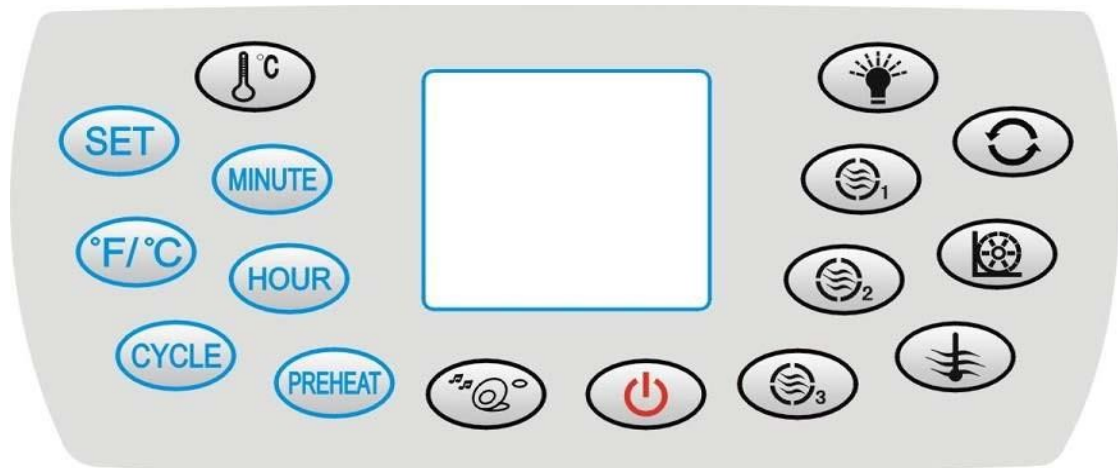








- Your spa has two modes of operation, Standby and Active modes.
- To switch between Standby and Active modes press 
- The spa will display '---' to indicate that the spa is in Standby mode.

Please Note: The Blue buttons will only operate when the spa is in Standby mode and the Black buttons will only operate when the spa is in Active mode.

BUTTON	FUNCTION	MODE
	Changes Between Active & Standby Modes	N/A
	Sets Cycle Cleaning and Filtration	Standby Mode Only
	Sets Heating Cycle	Standby Mode Only
	Sets Fahrenheit or Celsius	Standby Mode Only
	Sets Temperature	Active Mode Only
	No Function	Active Mode Only
	Turns on LED Lights	Active Mode Only

OPERATING YOUR AIRLIE LUXURY SPA




BUTTON	FUNCTION	MODE
	Turns on Water Jets 1	Active Mode Only
	No Function	Active Mode Only
	No Function	Active Mode Only
	No Function	Active Mode Only
	Turns on Heater for Manual Heating (Jets 1 must be off)	Active Mode Only
	Starts Cycle Cleaning	Standby Mode Only

SETTING THE TIME



When turning on the spa for the first time you will need to set the clock time.

To set the clock time the spa must be in Standby mode.

Please ensure the spa is in Standby Mode (---). The three horizontal dashes must be displayed.

Press the  button to enter the time setting mode.

The hour and minutes will begin to flash on the display.

Press the  and  buttons to adjust the time, the time is set in a 24 hour clock.

Once the desired time is selected wait for 5 seconds.

The hour and minutes will remain static once this has completed.

SETTING THE CYCLE CLEANING

In order to keep your spa clean you need to set the cycle cleaning. This feature will automatically turn on all of the spas jets temporarily to purge the spas water and then will run the spas filter for the set period of time. You must run this feature for a minimum of 6 hours every day. Once the spa has finished the cycle cleaning it will return to standby mode.

To set the 6-hour cleaning cycle ensure the spa is in Standby Mode (---)

Now press 

Now enter the time of day you want the spa to begin the cycle cleaning, using a 24-hour clock.

To adjust the time, press the  and  buttons.


Once you have selected an appropriate time press 

Now enter the duration for which you want the spa to cycle clean.

To adjust the duration, press the  and  buttons, you must set at least a 6-hour period. Which will read 6:00.

Once you have selected an appropriate duration press 

Now press the  button.

This symbol  will now appear on the display panel to indicate that cycle cleaning has been set.

SETTING THE CYCLE HEATING


If you intend to keep the spa at a set temperature use the preheating function at the same time you run your cleaning cycle, the spa will return to standby mode once finished preheating

Ensure the spa is in Standby Mode (---)

Press 


Now enter the time of day you want the spa to begin preheating using a 24-hour clock. (Use the same time set for the cleaning cycle).

To adjust the time, press the  and  buttons.


Once you have selected an appropriate time press 


Now enter the duration for which you want the spa to preheat (Use the same time you have set for the cleaning cycle)

To adjust the duration, press the  and  buttons and set at least a 6-hour period, which will look like 6:00.

Once you have selected an appropriate duration press 

Now set the temperature you want the spa to preheat too.


Press the  button to adjust the temperature to the desired temperature.

Now press this  button an 'on' sign (see below) will now be displayed next to the time which indicate that the preheating has been set.



TURNING ON THE HEATER MANUALLY


Ensure the spa is in Active Mode.

Press this  button to turn on the heater manually.

We recommend to use this feature when you first fill the spa. Allow up to 12 hours for the spa to reach the set temperature. Do not turn on jets 1 as this will turn the heater off.

TURNING ON THE HOT WATER MASSAGE PUMP

Ensure the spa is in Active Mode.

Press this  button to turn on the hot water pump.

To turn off the hot water pump press the same button again.

This pump will automatically turn itself off after a set amount of time running, if it turns off while you are in the spa you can press the same button to make it run again.


TURNING ON WATERFALL


The waterfall will only run whilst the spa is heating, once the desired heat is reached the waterfall will not run. The waterfall is adjustable with the waterfall control handle, please make sure you turn the waterfall control handle to the closed position when you finish using this feature. You don't want the waterfall running while your spas hardcover is on.

Do not overtighten this fitting, it only needs to be lightly turned to turn the waterfall off.

TURNING ON THE LED LIGHTS

Ensure the spa is in Active Mode.

Press this  button once to turn on the lights, the lights will now alternate between a number of colours.

To hold a particular colour press this  button a second time.

To turn the lights off press the button a third time.

FROST PREVENTION SYSTEM

If the temperature of the spas water drops below 5°C the spa will switch on the heater until the spa reaches the temperature of 8°C.

OZONATOR

The spas ozonator will automatically turns itself on and off when required, there are no adjustments you are able to make.

TROUBLESHOOTING

Symptoms	Possible Cause(s)	Possible Resolutions
No Power	MCB Switch off Inadequate wiring of power to spa Fuse blown in control box RCD Tripped RCD Connected Improperly	Check MCB Consult electrician Replace fuse Reset Consult electrician
No Circulation	Impeller clogged Water level too low	Access and clean Top up water
RCD Repeatedly Tripping	Power Supply Short in Grounding	Check power supply is adequate Consult your electrician.
Jet Surge	Water level too low Pump suctions are blocked	Top up water Clear the suctions
No Heat	Heater is not switched on Water level is too low Heating element is damaged	Turn on heating (See Manual) Top up the water Contact seller
Noisy Motor	Damaged or worn bearings Low voltage Low water level Frozen pump	Contact seller Check electrical supply Top up the water Thaw out
Display Panel Not Working	Poor connection	Unplug and reconnect the cable
Pump doesn't turn on	No power to the pump Low water level Air Lock	See "No Power" above Top up the water See "Air Lock" in user's manual
Thermometer button flashes when the Heat Button is pressed	Not enough pressure to the circulation pump	Operate the circulation pump for a few minutes before turning on the heater.

UNLESS YOU HAVE THE APPROPRIATE ELECTRICAL LICENCE DO NOT OPEN THE SPAS COMPUTER BOX, PLEASE CONTACT THE STORE OF PURCHASE FOR DETAILS OF A LICENCED CONTRACTOR.