Aqua Spa - Platinum TV Spa

Manual (Revised 2010)

Contents Page

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.

WARNING

Children should NOT use a spa without adult supervision.
Do not allow children to submerge their head under water.
Do not use a 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, as this will obstruct proper circulation and may result in personal injury.
Never operate the spa pump at high speed without having all suction and return lines open.
Always keep the hardcover installed and locked when the spa is not in use.
People using medications and/or having any adverse medical history should consult a physician before using a spa.
People with infectious diseases should not use a spa.
Use caution when entering or exiting a spa. Where practical, install a safety grab bar or handrail. Turn off the jets before entering the spa to improve visibility of the steps or flat entry area.
Do not use drugs or alcohol before or during the use of a spa.
Pregnant women should consult a physician before using a spa.
As prolonged immersion in water temperatures in excess of 38°C (100°F) may be 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 young children and/ or those users potentially affected by hot temperatures.
Do not use a spa immediately following strenuous exercise.
Do not permit or use electric appliances (such as light, telephone, radio or television) within 1.5 m (5 ft) of a spa, unless such appliances are rated at 12VDC or less.
Test the RCD Breaker monthly.
Post emergency phone numbers for Police, Fire Dept., and Ambulance at the nearest phone.

HYPOTHERMIA

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 hypothermia.

The causes, symptoms and effects of hypothermia may be described as follows:
Hypothermia 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 hypothermia include drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hypothermia include:

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

If you sense any of the symptoms of hypothermia, safely exit the spa immediately.

WARNING

THE USE OF ALCOHOL, DRUGS OR MEDICATION CAN SIGNIFICANTLY INCREASE THE RISK OF HYPOTHERMIA.

Choosing the Right Location

In this part, we describe outdoor spa installations. The following information will assist you in choosing the right location for your individual needs. When making your decision, always remember that spas can be enjoyed year-round, indoors or out, regardless of the climate. Many spa owners report that their favorite seasons are the cooler autumn and winter months, whilst others praise the enjoyment of using their spa in the warmer spring and 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.
Limited budget (indoor installations usually also involve interior home renovations)
Desire for an outdoor entertainment centre
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 38-40°C (101 -104°F). During warmer months, an operating temperature of 36-37°C (97-99°F) will provide a refreshing retreat. If you should choose an outdoor location, you will find further information as outlined in the section below.

SPECIAL CONSIDERATIONS

Contact your local building department 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 your local gas, hydro, and cable-company to ensure that there are no underground lines
Locate the spa, where practical, within close distance of a door to the house. This will maximize potential winter use.
Ensure that your pump(s), 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. Spa equipment is generally designed for indoor (out of the direct elements) use. When your Spa is equipped with a factory-installed cabinet, and installed as per the guidelines of this manual, the equipment is adequately protected. If the spa is shipped without a cabinet, your custom cabinet or other structure must be designed to supply protection for the spa equipment from rain, snow, splash water, etc., but still designed in a manner to ensure adequate ventilation.

Installation & Preparation

Hot Tub Base

Your hot tub needs a good solid foundation. The foundation on which your hot tub sits must be able to support the weight of the tub, the water in it and the weight of its users. If the foundation is inadequate, the tub may shift every now and again. This will cause stress to the shell which may eventually lead to small cracks. Damage caused by an inadequate or improper foundation is not usually covered by hot tub warranties. It is the responsibility of the hot tub owner to provide a proper foundation for the hot tub.

A hot tub containing both water and people is extremely heavy. If you are installing the tub onto wooden decking or an other elevated structure, it is advisable to consult a structural engineer to ensure that the structure will support the weight of the tub.

Ideally, hot tubs should be installed onto a concrete base at least 4" thick.

If you are installing your hot tub 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.

Water Supply

Hot Tubs do not require a permanent water supply however there must be a non-softened water supply and hosepipe within reach in order to fill the tub. A hosepipe is also used for emptying the hot tub via the bottom drain or by using a submersible pump. An accessible drain in which to direct the emptying water is useful.

Safety

Do not place your hot tub within 3 metres of overhead power lines. Make sure your hot tub is positioned so that access to the equipment compartment and side panels will not be blocked. On the Atlantic and sunset spas, the access panel is on the longest side.

Taking Delivery - Check the dimensions of your hot tub and compare them to the width of any gates and paths along the delivery route between the road and the installation site. It may be necessary for you to remove a gate or partially remove a fence in order to provide an unobstructed passageway.

If the delivery route will require a 90° turn, don't forget to check the measurements to ensure the hot tub will fit through. Also, look for any protruding utility meters, low roof eaves, overhanging trees or gutters that might cause an obstruction.

In some circumstances it might be necessary to hire a crane for the installation. This could be to avoid damage to the tub or to your property, or simply because there is no other way to get the tub into position.

Electrics

You don't need a permanent water supply for a hot tub or garden spa but you will need a suitable electrical supply to run the tub. Hot tubs have a specific section in the 16th Edition IEE (Institute of Electrical Engineers) Regulations and fall into the same category as swimming pools.

When appointing an electrician to prepare your hot tub electrics check that they are suitably qualified electrician. Do not attempt to install hot tub electrics yourself if you are not a fully qualified electrician.

The Government introduced a new law in January 2005, which demands that most electrical work in UK households is only carried out by a competent person. This law means that Electrical safety requirements have been included in a new Part P of the Building Regulations.

The law states that anyone carrying out fixed electrical installations in households in England and Wales must ensure that electrical installations are:

Designed and installed to afford appropriate protection against mechanical and thermal damage, and so that they do not present electric shock and fire hazards to people
Suitably inspected and tested to verify that they meet the relevant equipment and installation standards.

It is now against the law to have a new circuit installed in your home without having it inspected and tested to ensure it is Part P compliant. This can be achieved in 2 ways:

1. Appoint an electrical contractor who is registered with a competent person scheme.
2. Appoint someone who is not Part P registered but contact you local authority's Building Control Department first. The work will have to be inspected and tested by your local authority before it can be signed off. There will be a charge for this service.

Either way you will receive a Part P certificate after the hot tub electrical supply work is completed. From 2007, these will need to be kept on file and presented if you ever sell your house as part of the new home information packs (HIPS).

Your Spa Dealer can liaise with your electrical contractor regarding the exact specification for your spa but it must meet the following specification:

The hot tub must be hard wired on its own fused spur back to your household consumer unit. (i.e. the tub should not be sharing a supply with any other appliances)

The hot tub should be protected by a sufficiently rated MCB (mains circuit breaker) and should cover the maximum amperage pull of the spa PLUS 25% to allow for brake torque (i.e. the extra rush of current when pumps are first started.) So a hot tub that has a maximum current draw of 20 amps should be fitted with a 25amp MCB.

The hot tub should also be protected against earth faults by an RCD (Residual Current Device) This is a trip switch which prevents danger of electric shock from damaged or waterlogged cables and connections. A suitably rated 30mA RCD is recommended.

Outdoor cabling should be protected from damage by either laying protective ducting (pvc pipe) below ground or by using Steel Wired Armoured (SWA) cable. Your electrician will calculate the size of cable required depending on the loading and the distance from the mains supply. 6mm2 3-core SWA cable is perfectly suitable in most cases but always consult an electrician first.

An IP65 45amp Rotary Isolation Switch is also recommended so that the hot tub can be isolated outdoors in an emergency or for service work. This is simply a rotary on/off switch but should be sited more than 2 metres away for the hot tub so that users cannot be in the spa whilst operating the switch.

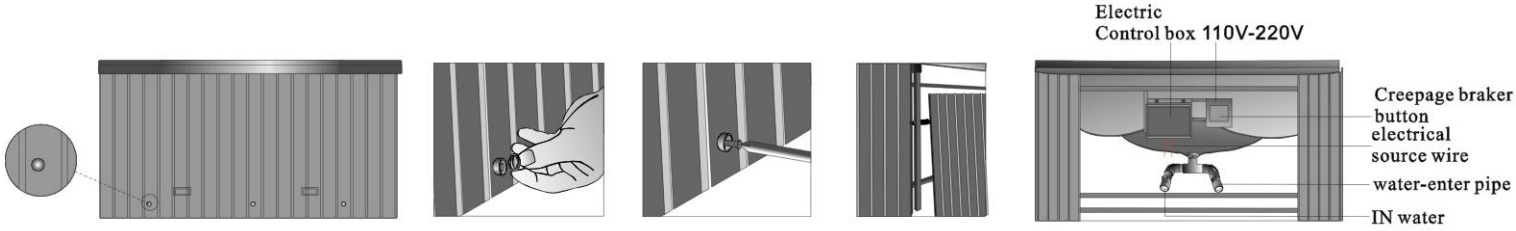
The hot tub supply can then be directly hard wired into the load box inside the spa. Waterproof gland packs should be used to prevent ingress of water on all outdoor electrical connections (2 at the isolation switch and 1 inside the hot tub) Ensure that all earth cables are clearly colour coded with green/yellow insulating tape or earth sleeve.

Once the hot tub is filled with water and the electrical supply is installed, your hot tub installation team should commission the hot tub and check that everything is fully operational before "handing over" to you with a thorough training of how all of the hot tub features work.

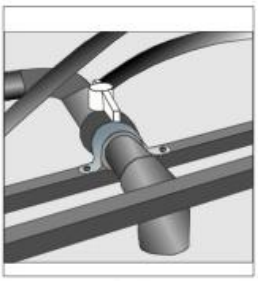
INSTALLING THE HOT TUB

Accessing The Panel

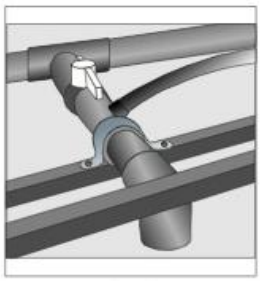
The diagrams below will explain how to remove the panels for the Spas.



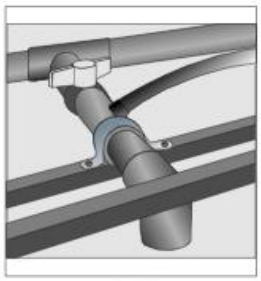
Connecting The Drainage



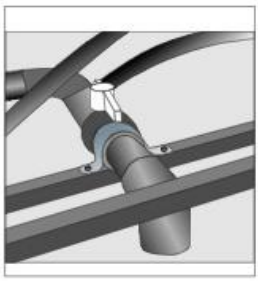
1. Connect inlet pipe



2. Connect drainage pipe

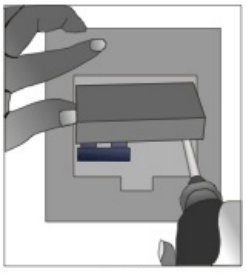


3. Shut of drainage

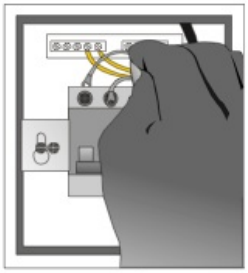


4. Once the spa has been filled with water, turn of the water inlet valve as above.

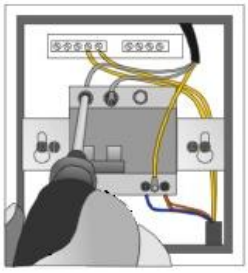
Electrical Connections



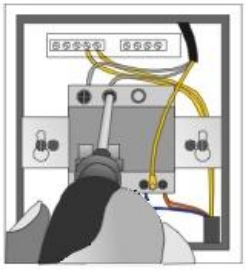
1. Open electrical box



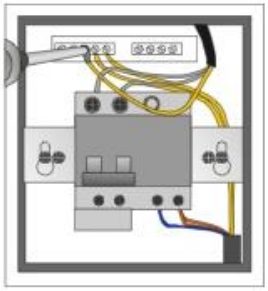
2. Put cables of three cores, 6mm2 in the input of RCD



3. Use Cable with 3 cores, 6mm2 to connect

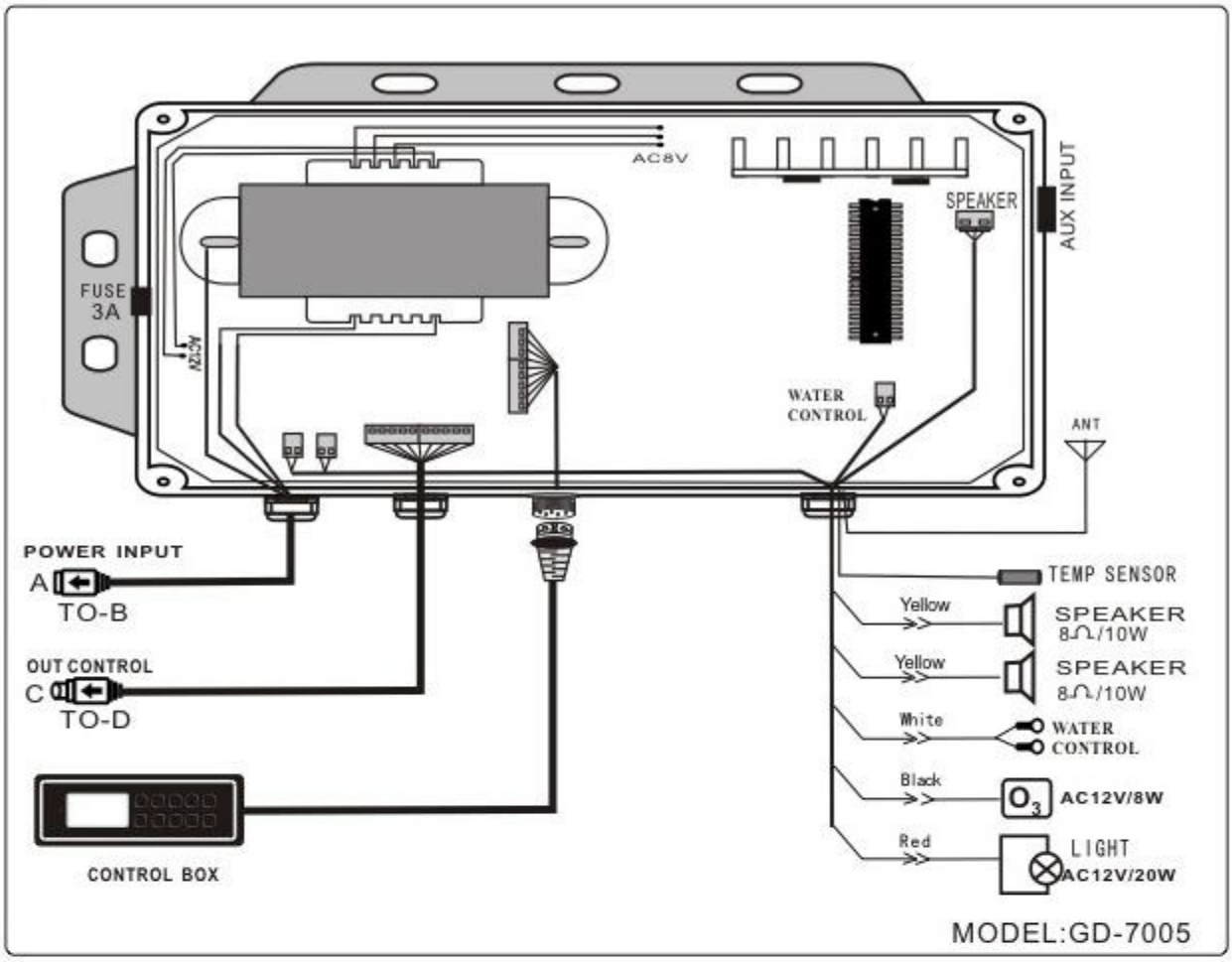


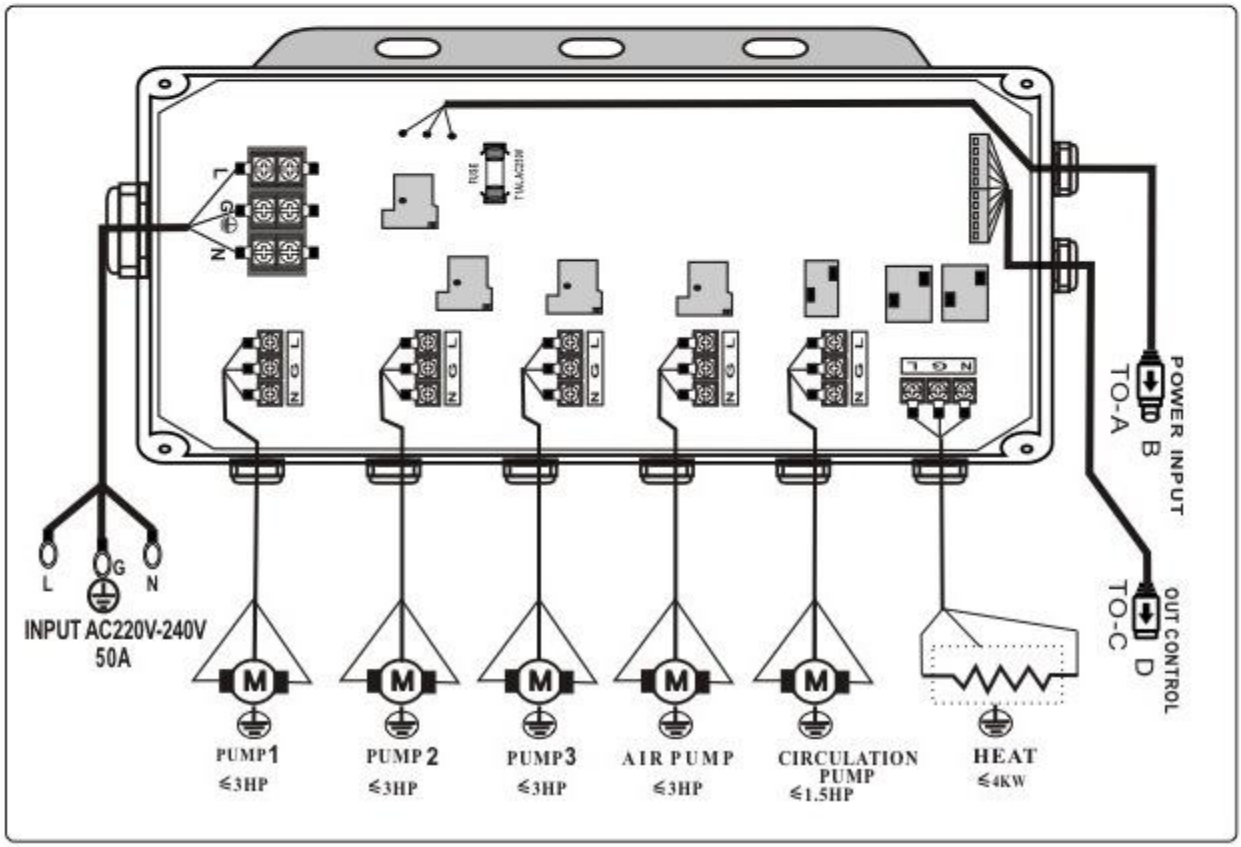
4. Connection method as as above



5. Grounding (Note: Grounding must be connected to avoid static electricity)

CIRCUIT BOARD DIAGRAM





TECHNICAL SPECS

Model	Device	Power	Rated Amp	Total RCD Reg'd
Platinum TV Spa	Water pump 1	2200W	9.17A	
	Water pump 2	2200W	9.17A	43.59A
	Circ pump 3	750W	3.13A	
	Air blower	700W	2.92A	
	Heater	3000K	12.5A	
	TV	45W	3.75A	
	DVD	30W	2.5A	
	Other system	.099W	0.45A	

FILLING UP, CHECKING, AND STARTING YOUR SPA

Although your spa has been water tested for at least 1 hour in the factory, some loosening of fittings can occur during shipping.

Before any decking, tiling or carpeting is completed around the installation, fill and operate your spa to test for leaks (this ensures easy access and inexpensive correction). Check all union connections and plumbing for minor leaks. In the event of a leak, ensure all union connections are tight and o-rings/gaskets are in place.

Ideally, the spa should be filled using a standard garden hose, turning the tap on slowly to prevent damage to the surface by a jerking hose connection

Fill to the recommended level, approximately 10cm - 12cm below the edge of the spa

PRESET THE TEMPERATURE

It is recommended that you could preset the temperature through the computer controlled-panel. Once the temperature of hot water is lower than the temperature preset, the ceramic heater will automatically heat the water inside, until the preset temperature is obtained.

When you operate the water pump, the ceramic heater will start to operate automatically.

WARNINGS

THE THERMOSTAT CANNOT BE OPERATED WHEN THE WATER PUMP HAS STOPPED

For more detailed operation guide, please refer to the heater instructions enclosed.

Turn the main power “on” at your electrical panel

Turn the breaker for computer controlled-panel “on” at your electrical panel

If the spa pump is located below water level, the water should start circulating immediately. If the motor works but you do not notice water circulation within the first 15 seconds, the pump may require priming due to trapped air (referred to as an ‘air lock’).

PLEASE DO NOT OPERATE THE WATER PUMP WHEN THE WATER LEVEL IS LOWER THAN THE POSITION OF THE LARGE JETS.

THE HEATER WILL NOT OPERATE IF THE WATER LEVELS DO NOT COVER AT LEAST 3/4 OF THE FILTER WINDOW.

FILTERS

Filters

Water should be cleansed with your chosen sanitizer before using the filter.

Trail Operation of the Filter

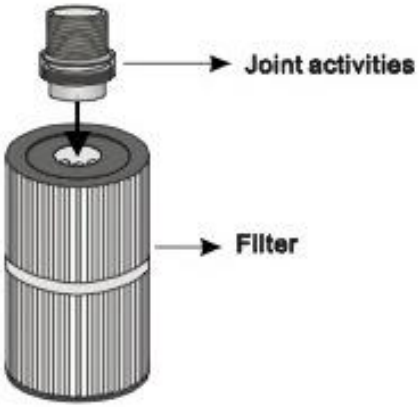
Check whether the valve and connector in the pipe are completely sealed. The handle on top of the filter must be tightened.

Filtering

Once the filter system has been turned on, water will flow continuously through the filter. Over time, particles and dust will gather in the filter. For this reason, the filter should be cleaned every two weeks and replaced at least once every year.

Cleaning the Filter Core

The filter can be washed with a hose pipe, alternatively, the dirt on the filter can be brushed off after being left to dry in a cool place.



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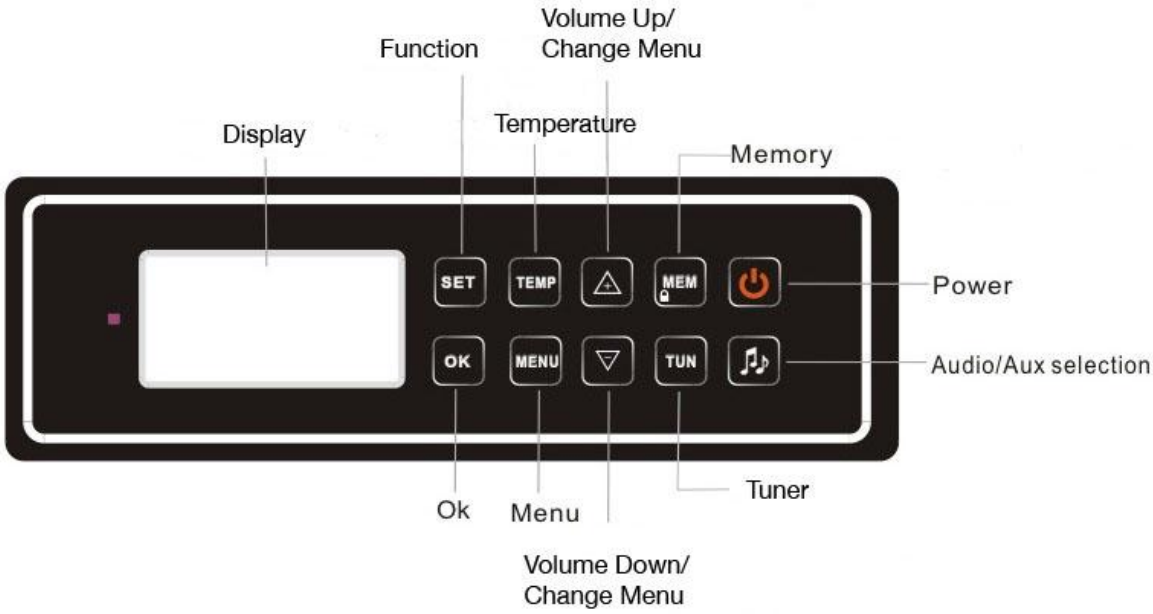
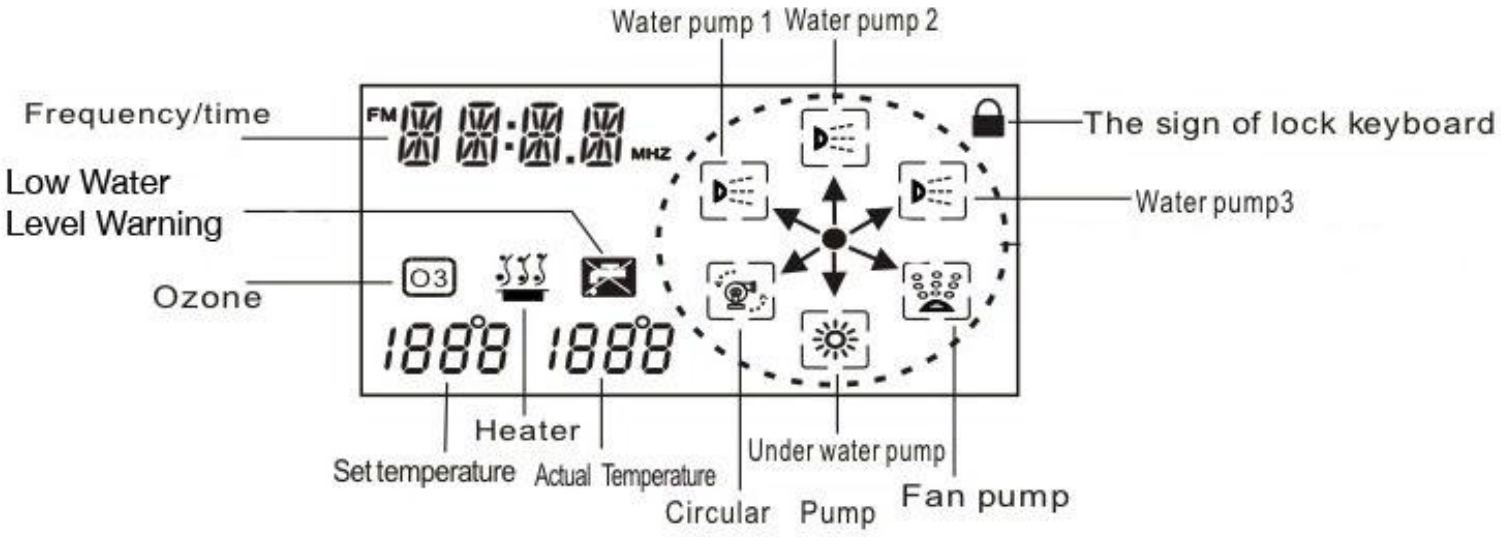
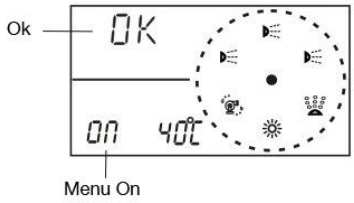


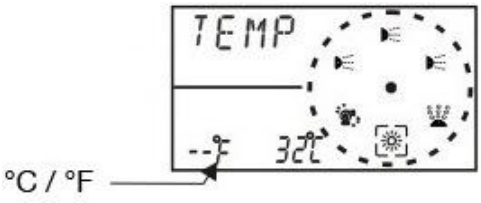


1. Menu Mode



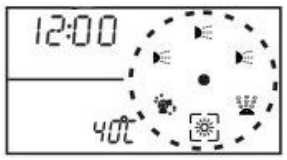
Entering into the Menu allows you to adjust many of the spa's settings. These settings include the Time, Circulation Period, Sleep Times etc. To enter into Menu Mode press MENU. Press either ▽ or △ until the Menu displays the word 'ON'. Then press the OK button to enter Menu Mode. Then scoll through the menu items by pressing the menu button MENU

1. SET UNIT OF TEMPERATURE



You spa can display the temperature in either °Celsius or °Fahrenheit. Press ▽ or △ to select you preferred unit and then press OK to confirm.

2. SETTING THE TIME

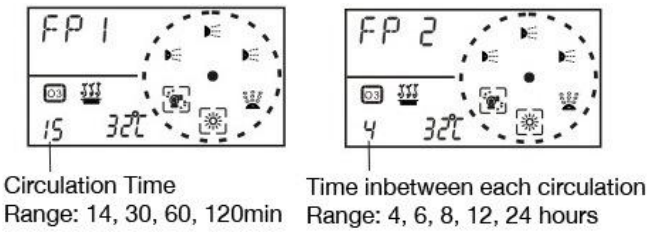


Press SET to set the minute/hour. Press ▽ or △ to adjust to the time.

Once the time has been correctly set, press the OK to confirm.

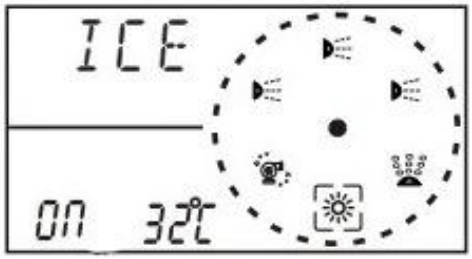
3. SETTING THE FILTRATION SETTINGS

When the spa is maintaining a constant temperature, the circulation system will automatically turn on in order to filter the water in the tub and keep the water clean. The spa will circulate for a set period of time (FP1), and will circulate based on a frequency set by the user (FP2).



To set FP1 (Filtration Time), use the +/- buttons and then press OK. The spa will now ask you to confirm the time in between each filtration

5. WINTER MODE

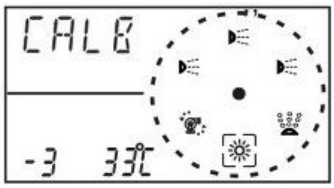


Freezing water temperatures can cause damage to equipment in the spa. The spa includes a winter mode to prevent this. When water temperature drop below 5°C the heater will turn itself on to raise the temperature of the water to 8°C.

To turn on the winter mode, use the +/- buttons until the control panel displays ‘ON’. Press OK to continue.

6. CORRECTING TEMPERATURE ERRORS

From time to time the actual temperature in the spa may differ from the displayed temperature. For example, If the temperature displays 33°C when it is actually only 30°C, then it is possible to calibrate the thermometers that monitor temperatures in the spa.



Use the +/- buttons to select the difference between the actual and displayed temperatures. Press OK to confirm and continue.

7. RESTORING FACTORY SETTINGS

To restore the spa to factory settings, use the +/- buttons until the panel displays ‘ON’. Press OK to confirm.

8. EXITING THE MENU

To exit the menu, simply press the OK button.

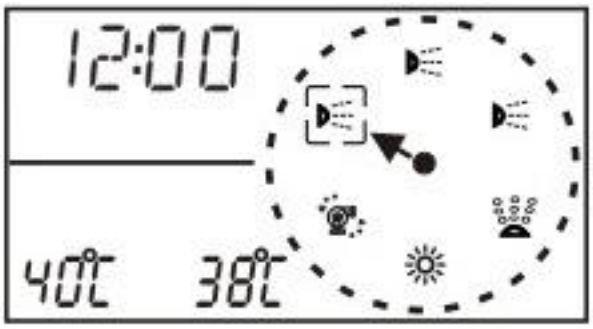
2. Heating Your Spa

To set the temperature of the spa, press the TEMP button. Use ▲ and ▼ to adjust the 'Set Temperature'.

When the 'Set Temperature' is higher than the 'Actual Temperature', the spa will turn on the Circulation Pump. The heater will then turn itself on after 30 seconds.

When the 'Set Temperature' is lower than the 'Actual Temperature', the spa will turn off the heater, the circulation pump and ozonator will automatically turn on. The spa will automatically enter 'Filter Mode'.

Turning on Jets, Pumps, and Lighting



To turn on a feature in the Hot Tub, simply press the SET to move the arrow, then press OK to turn your selected feature on or off.

Page 11 of this manual shows what all the icons above represent.

Hold SET for 2/3 seconds and all of the spas features will turn on gradually.

Please Note:

- The Fan Pump will automatically turn itself off after 30 minutes.
- The water pump will not initiate if the water level is too low.
- Pump 3 is the circulation pump and will automatically operate when the heater is in operation or when the tub in in Filtration mode. You can not manually turn on Pump 3.

Ozonator

The Ozonator inside your spa produces a natural chemical found in water. Ozone reduces the need for chemicals and sanitisers. The ozonator turns itself on whenever the circulation pump is in action.

Low Temperature Protection

When the temperature of the spa drops below 5°C, the spa will turn on both the circulation pump and the heater until the temperature in the water rises above 8°C.

Locking the Keypad

To lock the control panel, simply hold the MEM button for 3 seconds until the panel displays the symbol. To unlock the keypad, simply hold the MEM button for an additional 3 seconds until 'UNLOCK' is displayed on the panel.

Radio Operation

Turning the Radio On

To turn on the radio simply press the  button. When  is pressed, the volume will automatically rise and the last used radio station will begin to play.

Selecting Stations / Tuning

To scan for a radio station, hold the  button for 2 seconds. The screen will now display 'TUN'. Press  or  and the radio will scan through all channels until it finds a radio station. If you're in an area of poor signal quality, it is recommended that you tune the radio manually.

To tune manually, simply press  and then use the  and  keys to select a frequency.

Memory

To save a radio station to memory, Immediately after selecting the radio station, press  . Each time you press  the spa will increase the Memory Channel.

There are a total of 10 memory channels.

To recall a channel of memory, simply press the  button. Each time you press the  button the Memory channel will increase.

Adjusting the Volume

Whilst the spa is in radio mode, press the  and  buttons to adjust the volume.

LIstening to External Audio Devices (Inc DVD Player)

To listen to an Auxiliary Audio Device, press the  button until AUX is displayed on the panel.

Ensure than an auxiliary device is connected up to the spas control panel.

GENERAL TROUBLESHOOTING

Symptoms	Possible Cause(s)	Possible Resolutions
No Power	- Breaker off at main panel or fuse out - Improper wiring - Fuse blown in control panel - RCD Tripped - RCD Connected Improperly	- Check panel - Consult electrician - Replace the fuse - Reset - Consult electrician
No Circulation	- Impeller clogged - Water level is too low	- Access and clean - Top up water (must cover 3 quarters of the filter window)
RCD. Tripped	- Short of ground in system - Faulty RCD	Consult electrician
Jet Surge	- Water level too low - Blockage in lines - Suctions are blocked	- Top up water - Check valves and/or strainer - Clear the suctions
No Heat	- Thermostat no on - Low water - Heating element damaged	Turn up the heating (as directed earlier in the manual). Top up water Replace heating element (contact your dealer)
Noisy Motor	- Damaged or worn bearings - Low voltage - Low water level - Frozen pump - Clogged impeller	- Call your Spa Dealer - Check electrical supply - Top up water - Thaw out - Access and clean
Digital Top Side	- Improper connection	- Unplug and reconnect cable
Control panel displays nothing	- Electrical Burn Out	- Reboot control system
Pump doesn't turn on	- No power to pump - A jet switch disconnected	- See “No Power” above - In the jet switch connected to the contactor on the

Warning / Protection Codes

A number of warning codes could be displayed on the spa.

Warning Code	Possible Cause(s)	Corrective Action(s)
	Lack of Water in the Spa. The spa will not heat, nor will water pumps operate when the water level is too low.	Top up the level of water.
HEAT	Temperature of water is higher than 45 °C and potentially harmful.	The spa will automatically turn off the heater.
ICE	Water temperature is below 5°C and potentially harmful to equipment.	It is recommended that you turn on the Low Temperature Protection. If this is already turned on the then the spa will begin to heat up the water automatically.
CLDF	Problem with the Circulation Pump	Consult Your Spa Dealer

Hot Tub Warranty
Aqua Spas

Aqua Spa Hot Tubs are designed to last a lifetime. Our tubs are individually built and are not simply rolled of a conveyor belt. We take great pride in the quality of our hot tubs. They go through a number of quality checks before they are packed and shipped.

We offer the following warranties on our models:

Shell Warranty (1 Year for Standard Warranty)

The acrylic surfaces of Aqua Spas are covered against leaks and defects in materials for a period of 5 Years.

Component Warranty (1 Year for Standard Warranty)

Electrical components, pumps, jets, air valves, levers, bezels. Some parts, such as spa covers, filter cartridges, filter lid, spa pillows and cover locks are not included in this warranty, but are covered against defects in materials and workmanship at the time of delivery.

Cabinet Warranty (1 Year for Standard Warranty)
The wooden cabinet is covered against defects in material and workmanship for five years, specifically the cabinet's structural integrity including the wooden, framing material, and all bonded joints. The cosmetic finish is covered to be free from defects in materials and workmanship at the time of initial delivery. Fading and weathering of the surface will occur naturally over time, and are not defects.

Dealing With Faults

Aqua Spas will Endeavour to resolve all faults with our Hot Tubs within 2 weeks from being notified of the problem. An engineer will contact you within 36 hours of reporting the fault.

If the issue is a small problem then we will try and guide you through the process of resolving the issue of the phone. Larger problems will see an engineer sent out to the customer on site.

Engineer Call Outs
In the unlikely event that we need to send an engineer out to the customer, Aqua Spas will contact one of our approved engineers to visit you within 10 days of reporting the fault. If we require any spare parts to repair the tub, we may take longer to visit.

Aqua Spas will not cover the cost of engineers called out by the customer without Aqua Spa's approval. If an unapproved engineer carries out a repair on the hot tub it may invalidate the customers warranty

Aqua Spas may bill the customer if one of our engineers is called out and the reported fault is not found.

Aqua Spas may ask for photographic evidence of a fault before and engineer is sent out.

Faults Not Covered
Some parts, such as spa covers, filter cartridges, filter lid, spa pillows and cover locks are not included in this warranty, but are covered against defects in materials and workmanship at the time of delivery.

If your Hot Tub does not carry a Part P Certificate (given by a Part P registered electrician at the time of installation), your warranty may be invalidated.

Aqua Spas will not cover accidental damage to the Hot Tub.