

Rapid River Swim Spa

OWNER'S MANUAL

AQUAMASTER SERIES



Rapid River[®]
RELOCATABLE SWIM SPAS

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IMPORTANT SAFETY INFORMATION

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.

2. WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

3. In standard form the Rapid River swim spa requires only one supply of 240 volts 32 amp or 42 amp, except the Poseidon model which is 23 amps and 42 amps. Please consult with a qualified electrician to verify current legislation

ALWAYS USE A QUALIFIED ELECTRICIAN TO CONNECT THIS Swim spa TO YOUR ELECTRICITY SUPPLY

4. DANGER - risk of accidental drowning. Extreme caution must be exercised to prevent unauthorised access by children. To avoid accidents, ensure that children cannot use the Rapid River swim spa unless they are supervised at all times.

5. DANGER - risk of injury. The suction fittings in the Rapid River swim spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the Rapid River swim spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

6. DANGER - risk of electric shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5m) of the unit. These units have an integral ground fault circuit interrupter, but this only covers the pools own electrics.

7. WARNING - to reduce the risk of injury:

- a) Before entering the swim spa check the temperature.
- b) Since excessive water temperatures have a high potential for causing foetal damage during the early months of pregnancy, pregnant or possibly pregnant women should seek advice before using pool and should maintain safe water temperatures.
- c) The counter-current of the Rapid River swim spa is extremely powerful and could cause injury if used incorrectly. Do not stand next to the counter-current nozzles when the motor is running. Ideally you should be placed at least 1 meter from the nozzles. Never attempt to adjust the swim jet nozzles whilst the motor is running
- d) The use of alcohol, drugs, or medication before or during swim spa use may lead to unconsciousness with the possibility of drowning.
- e) Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using swim spa.
- f) Persons using medication should consult a physician before using the swim spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure and circulation.

ADDITIONAL SAFETY INSTRUCTIONS:

1. WARNING - risk of fatal hypothermia.

a) The use of alcohol, drugs, or medication can greatly increase the risk of fatal Hypothermia in a swim spa.

b) The causes, symptoms, and effects of Hypothermia may be described as follows: Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 37°C (98.6°F). The symptoms of Hypothermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of Hypothermia include:

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit the Pool;
- Physical inability to exit the Pool;
- Foetal damage in pregnant women; and
- Unconsciousness and danger of drowning.

2. WARNING - risk to infants, the elderly, and women planning pregnancy or during pregnancy. Please consult your physician if the above applies to you or anyone using your swim spa.

3. WARNING - risk of children drowning. Although your Rapid River swim spa cover is not rated as a safety cover, it is wise to always keep the swim spa cover securely fastened when not in use. This will help discourage children from attempting to enter the swim spa when not supervised by an adult.

4. WARNING - risk of drowning. Use caution when bathing alone. Overexposure to hot water may cause nausea, dizziness, and fainting.

5. WARNING - risk of injury. Always use extreme caution while entering or exiting the swim spa. Surfaces can be very slippery when wet. Do not step on or sit on head rests. Keep all breakable objects out of the swim spa area.

6. WARNING - risk of injury. Never use the swim spa immediately after strenuous exercise.

7. WARNING - risk of injury. Individuals with infectious diseases should not use the swim spa

8. WARNING - risk of injury. Maintain water chemistry in accordance with chemical manufacturer's instructions.

9. WARNING - risk of shock. The swim spa shall not be operated in severe weather conditions, i.e. electrical storms.

10. CAUTION - unauthorised access. Secure the swim spa area against unauthorised access. Make sure all barriers meet local codes. Keep the swim spa cover on swim spa when not being used.

11. CAUTION - risk of damage to pool or equipment. By performing maintenance as described later in this Owner's Manual, the chance of damage to your swim spa and it's equipment will be greatly reduced. Never block the air vents that lead to the equipment compartment. Doing so may cause the swim spa equipment to overheat.

12. CAUTION - non-approved accessories. Using accessories not approved by the manufacturer could void your guarantee or cause other problems. Please consult with your authorised Rapid River dealer.

13. CAUTION - location of your Rapid River swim spa.

Locate your Rapid River swim spa on a surface that can withstand the weight bearing requirements of the swim spa (see Selecting a Site for your Rapid River swim spa in this Manual). Also, locate your swim spa in an environment that can withstand repeated exposure to water and the possibility of a major spill.

INSTALLATION & SET-UP

SELECTING A SITE FOR YOUR RAPID RIVER SWIM SPA

Your Rapid River swim spa was designed for either indoor or outdoor use. Whether indoors or outdoors, please adhere to the following guidelines:

1. Select a site that is stable and capable of supporting the weight of your swim spa, its water, and the people using it (refer to the model brochure or contact an authorised Rapid River dealer for the filled weight of your swim spa). If installed on a suspended floor/deck, the floor/deck should be capable of supporting your swim spa. If you have concerns on this matter, please contact a qualified licensed contractor.
2. Select a surface that is flat and level. This surface must provide continuous support for the entire bottom of the swim spa structure. Do not shim or block up the swim spa creating voids below the base framework. If you do not intend to use a pit please ensure you have adequate drainage or a soak away.
3. Avoid installing the swim spa in a pit or low area where water may accumulate and damage the swim spa or its equipment. Choose a site where water will drain away from the swim spa and not towards it.
4. Important: With all installations, the Rapid River swim spa must be located at least 150cm [5 feet] from all electrical outlets, switches, and other permanently installed electrical devices.

Indoor considerations: There are several considerations when installing your Rapid River swim spa indoors: the environment both around and below the swim spa should be water resistant. It must be capable of handling water splashed out from the swim spa as well as the possibility of a leak from the vessel (a catch basin equivalent to the volume of your swim spa is recommended); it is recommended that the room you install the swim spa in has proper ventilation. Proper ventilation can usually be achieved by an exhaust fan or a dehumidifier if swim spa is used for less than one hour per day.

Note: Typical indoor surfaces include, but are not limited to: concrete, wood, non-slip tile or linoleum.

Outdoor Considerations: When selecting an outdoor site, several things should be considered. Firstly, avoid selecting a site where excessive water may contact the swim spa such as from sprinklers or a roof edge without rain gutters. If possible, avoid areas of direct, prolonged sunlight. The ultraviolet rays of sunlight will tend to fade and damage your Rapid River swim spa cover and cabinet. Lastly, avoid locating your swim spa in an area where debris could be blown into the swim spa. If sinking your Rapid River swim spa into the ground a suitable drainage system must be installed to avoid the risk of hydrostatic pressure from rising ground water.

Note: Typical outdoor surfaces include, but are not limited to: concrete, brick, non-slip tile, wood-decking, pea shingle or sand.

ELECTRICAL REQUIREMENTS and CONNECTIONS

All Rapid River swim spas must be wired in accordance with all national electric codes. Always use a qualified electrician to perform the electrical installation.

WIRING DIAGRAMS

Please reference the wiring diagram that is specific to your Rapid River swim spa's control system:

- Standard Rapid River swim spa 32 amp / 42 amp model control system
— one input 240V 32 amp / 42 amp single phase.
- Aquadual Rapid River swim spa 23 amp spa end, 42 amp pool end.

220/240 VOLT INSTALLATION

Use only a qualified Licensed Electrician to make 240 Volt electrical installations.

Your 220/240 Volt Standard Rapid River swim spa 32 amp / 42 amp model requires one fused and dedicated electrical circuit of 32 amp / 42 amp and a minimum supply wire size of 6mm. It is important that these circuits are dedicated (not being used by any other electrical appliance) or your swim spa may not function properly.

The 220/240V Rapid River swim spa 42amp model requires one fused and dedicated electrical circuit of 45amp and a minimum supply wire size of 6mm. It is important that these circuits are dedicated (not being used by any other electrical appliance) or your swim spa may not function properly.

Position your Rapid River swim spa at least (1.5m) from all electrical outlets or devices.

ELECTRICIAN'S INSTRUCTIONS

We strongly recommend that a suitable seal cable guide is installed to retain the water tight seal of the control boxes. The incoming power line must be suitably fused and protected to a C.E. minimum standard and any national specific regulations required.

IMPORTANT INFORMATION

Never, under any circumstances, install your Rapid River pool on an electrically heated floor.

INSTALLATION & SET-UP

CHECKLIST BEFORE FILLING YOUR SWIM SPA

Important: The equipment should **never** be operated without water in the swim spa. Serious damage to the equipment will occur.

1. Installing your cover: Your Rapid River swim spa cover comes with tie-down straps and locking hardware to attach the cover to the swim spa cabinet or decking.

2. Check drain valves: Check that the swim spa drain valve is fully closed.

3. Tighten equipment fittings: In the equipment compartment, hand-tighten all PVC pipe unions, pump bleed valve and pump drain plugs to prevent the possibility of leakage (sometimes these fittings loosen during shipment). Check also that all fittings on the filter are closed (HAND TIGHT ONLY!).

4. Check Valve: Verify that all valves aside from the drainage valves described previously are in the fully open position. A valve that is half closed will result in a noisy pump due to lack of water flow.

5. Fill the pool: Fill the swim spa to approximately the halfway point on the skimmers.

Note 1: The higher the water level, the less pool users it will take to cause the water to overflow the pool edge. Also, water will splash out more easily whilst swimming in the pool if it is over filled.

Note 2: If you live in a hard water area you can fill the pool with a 50/50 mix of hard and soft water. The calcium balance should be between 250 and 500 parts per million.

6. Check for leaks: After the Rapid River swim spa is full, but before turning the power on, check all the fittings and equipment in the equipment compartment for signs of leakage. If a leak is detected, except from fittings that can be hand-tightened, call your authorised Rapid River dealer.

CONTROL PANEL OPERATIONS

CONTROL SYSTEM FEATURES

The fully programmable computer based control system on Rapid River swim spas allows total control of the water temperature and jet power at the touch of a button. Also included are operational safety features to ensure a safe and relaxing swim spa experience.

Heater control

You can set the water temperature to suit the activity: hot for just relaxing, cooler for exercise. You can also set the water temperature in advance ensuring your swim spa is ready for use anytime you wish.

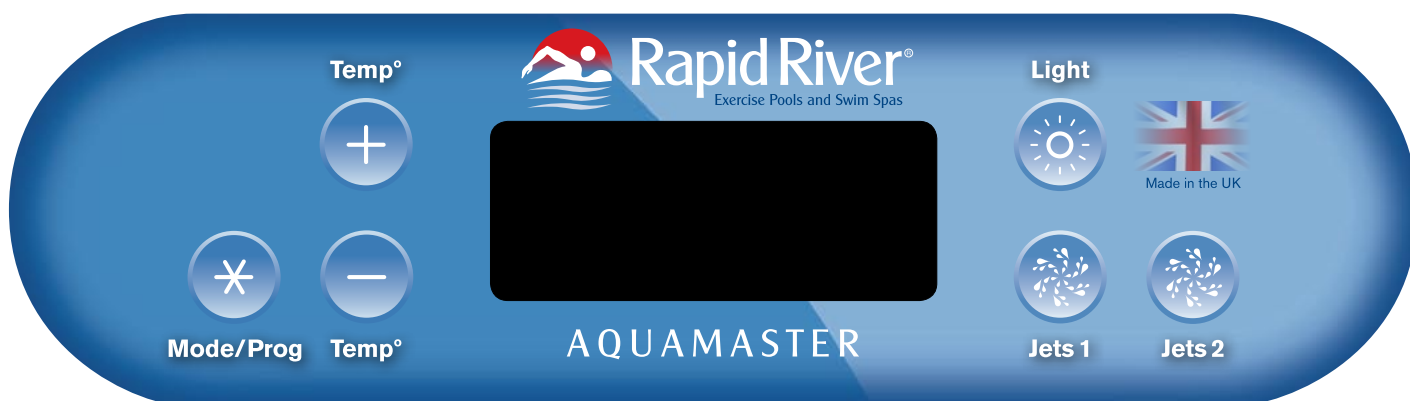
Jet control

The speed of the jets are fully adjustable via the simple to operate buttons on the control panel.

Safety features

The control system has multiple safety features including water flow protection, high and low voltage protection, high and low temperature protection and anti dry heating protection to guarantee the swim spa operates safely. The control box is fully waterproof with International Protection Rating (IP) 55.

MAIN CONTROL PANEL OPERATING INSTRUCTIONS - AQUAMASTER SERIES



Quick Guide to Control Panel	SYMBOLS	FUNCTION
Jets 1		ON/OFF Jet Pump 1
Jets 2		ON/OFF Jet Pump 2
Light		ON/OFF LED Lighting / change LED Lighting mode
Mode/Prog		Function 1. Sleep / Economy / Standard mode Function 2. YES/NO
Temp°+		Adjust Temperature (+) / select modes
Temp°-		Adjust Temperature (-) / Select modes

CONTROL PANEL OPERATIONS

ICON LEGEND

Heat Icon - indicates different temperature level.



Jets Icon - when either of the jets in the spa is switched on the jet icon will show on the screen.



Light Icon - when the lights in the spa are on the light icon will show.



INITIAL START-UP

Priming mode

When your Rapid River pool is first connected it will go into Priming mode (after displaying some configuration information). The screen will display *Pr*.

The Priming mode will last for up to 4 minutes and then the spa will begin to heat and maintain the water temperature in the Standard mode. You can exit Priming mode early by pressing **Temp°+** or **Temp°-**.

TEMPERATURE SETTING



The actual temperature of the pool water is constantly displayed on the screen. The temperature will show once the pump has been operating for 1 minute.

Press the **Temp°+** or **Temp°-** button once to display the set temperature. Each time either + or - button is pressed again, the set temperature will increase or decrease. After 3 seconds the screen will automatically return to display the actual water temperature. If the water is cooler than the set temperature the thermostatically controlled heater will automatically turn on to heat the spa water. The temperature setting can be adjusted from between 26°C - 40°C.

MODE SETTING



The **Mode** button is used to switch between Standard, Economy and Sleep modes.

Press **Mode** to enter mode programming. Press **Temp°-** to cycle through to the desired mode (the mode will flash on the screen until confirmed), then press **Mode** to confirm selection.

Standard mode maintains the desired temperature. Note that the current water temperature is displayed only when the pump has been operating for at least 1 minute. The *Std* icon will display until the mode is changed.

Economy mode heats the spa to the set temperature only during filtration cycles. The *Ecn* icon will display until mode is changed.

Pressing **Jets 1** while in Economy mode puts the spa in Standard-In-Economy mode, which operates the same as Standard mode for 1 hour, then automatically reverts back to Economy mode. Both the *Std* and *Ecn* icons display in this mode. During this time you can press the **Mode** button to revert back to Economy mode immediately.

Sleep mode heats the water to 11° C only during filter cycles. The *SLP* icon will display until mode is changed.

STANDBY MODE

Pressing **Temp°+** or **Temp°-** then **Jets 2** will turn off all spa functions temporarily. This is helpful when changing or cleaning a filter. Press any button (except the **Jets 1** button which on your system may control the pump in Standby mode (drain mode)) to revert the spa back to its current settings. The system will revert to current settings after 1 hour.

CONTROL PANEL OPERATIONS

JETS 1 and JETS 2



The first preset filtration cycle begins 6 minutes after the swim spa is energised. The second preset filtration cycle begins 12 hours later. Filtration duration is programmable for 2, 4, 6 or for continuous filtration (indicated by *FILL*). The default filtration time is 2 hours for non-circ systems and 4 hours for circ systems.

To program, press **Temp° +** or **Temp° -** then **Jets 1**. Press **Temp° +** or **Temp° -** to adjust. Press **Jets 1** to exit programming.

At the beginning of each filtration cycle all other equipment will run briefly to purge the plumbing.

FREEZE PROTECTION

If the temperature sensors within the heater detect a very low temperature then the pumps automatically activate to provide freeze protection. The pumps will run continuously or periodically depending on the conditions.

CLEAN-UP CYCLE

At the beginning of the filtration cycle Jet 1 and Jet 2 will automatically operate for 1 minute to clean the spa water.

CIRCULATION PUMP

The circulation pump operates during filtration and when the heater is in operation.

OZONE GENERATOR

The ozone generator will operate during filtration cycles.

USER PREFERENCES

There are several aspects of spa operation that you can customise using the User Preferences sub menu.

Press **Temp°+** or **Temp°-** then **Jets 1** then **Light** (each press within 3 seconds). At this point if *USr* is not showing on the display press **Temp°+** or **Temp°-** until *USr* appears. Then press **Jets 1** to enter the User Preferences sub menu.

Once in the User Preferences sub menu press **Temp°+** or **Temp°-** or to cycle between these settings:

Sr - Suppress reminders

When set to *Sr.Y* reminders are never displayed on the panel. When set to *Sr.n* reminders are displayed on the control panel periodically.

LC - Temperature in °C (Celsius)

When set to *LC.Y* temperatures are displayed in °C (Celsius). When set to *LC.n* temperatures are displayed in °F (Fahrenheit).

CC - Clean up Cycle Duration

When set to *CC.Y* clean up cycles are disabled. When set to *CC.1* through *CC.4* the number indicates how many hours each clean up cycle will run.

EDITING USER PREFERENCES

View the setting you wish to adjust (see User Preferences).

The left 2 characters (before the decimal point) tell you what setting you are viewing or editing. The character after the decimal point tells you the value of that setting (for example: *.Y* for yes, *.n* for no).

Press **Jets 1** to switch editing on and the value will flash. Press **Jets 1** once again to turn editing off and it will stop flashing.

When editing the value (when it is flashing) use the **Temp°+** or **Temp°-** to change the value to the setting you want. After you have changed the value press **Jets 1** again to save the change - the value will then stop flashing.

If you don't make any changes during editing it will time-out after 30 seconds. If you press **Light** to back out of the menu or pause long enough for it to time-out while a value is flashing, the changes you were making to that setting won't be saved. However, changes you made to previous settings will be saved.

TROUBLESHOOTING GUIDE

DIAGNOSTIC MESSAGES

Control Panel Message	Definition	Action required
No message on display	Power has been disconnected from the spa	The control panel will be disabled until power returns. All spa settings will be preserved.
<i>OHH</i>	Overheat - the spa will have shut down. One of the sensors has detected that the heater has reached a temperature of 47.8°C.	DO NOT ENTER THE WATER. Remove the spa cover and allow the water to cool. Once the heater has cooled, reset by pushing any button on the control panel. If the spa does not reset, disconnect from the power and call your dealer for assistance.
<i>OHS</i>	Overheat - the spa will have shut down. One of the sensors has detected that the spa water is 43.3°C.	DO NOT ENTER THE WATER. Remove the spa cover and allow the water to cool. At 41.7°C the spa should automatically reset. If the spa does not reset, disconnect from the power and call your dealer for assistance.
<i>ICE</i>	Potential freeze condition detected.	No action required. The pumps will automatically activate regardless of spa status.
<i>SrA / SrB</i>	Spa is shut down. The sensor that is plugged into A or B as indicated is not working.	If the problem persists contact your dealer. This message may appear temporarily in an overheat situation and will disappear when the heater cools.
<i>SrS</i>	Sensors are out of balance. If this message is alternation with the temperature it may just be a temporary condition. If the display shows only this message (periodically blinking the spa will have shut down.	If the problem persists contact your dealer.
<i>HFL</i>	A substantial difference between the temperature sensors has been detected. This could indicate a water flow problem.	Check water level in spa. Add water if necessary. If the water is at the correct level make sure the pumps have been primed. Press any button to reset.
<i>LF</i>	Persistent low water flow problems (will display this message on the fifth occurrence of the <i>HFL</i> message within 24 hours). The heater will have shut down but other spa functions will continue to operate normally.	Check water level in spa. Add water if necessary. If the water is at the correct level make sure the pumps have been primed. Press any button to reset.

TROUBLESHOOTING GUIDE

DIAGNOSTIC MESSAGES

Control Panel Message	Definition	Action required
<i>dr</i>	Insufficient water detected flowing through the heater.	Check water level in spa. Add water if necessary. If the water is at the correct level make sure the pumps have been primed. Press any button to reset.
<i>dry</i>	Insufficient water detected flowing through the heater (message displayed on the third occurrence of dry message). Spa will have shut down.	Check water level in spa. Add water if necessary. If the water is at the correct level make sure the pumps have been primed. Press any button to reset.
<i>Pr</i>	When your spa is first connected to power it will go into priming mode.	The priming mode will last up to 4 minutes and the spa will begin to heat and maintain the water temperature in the Standard mode.
<i>---F or ---C</i>	Water temperature unknown.	After the pump has been running for 1 minute the temperature will be displayed.
<i>---</i>	Temperature does not appear when spa is in Economy or Sleep mode for an extended period.	If you wish to see the current spa water temperature either switch to Standard mode or turn on 'Jets 1' for a minimum of 1 min.
<i>Sby</i>	Stand mode has been activated by pressing a button combination on the user panel.	Press any button except 'Jets 1' to leave standby mode and return to normal operation.
<i>PHL</i>	pH level in water is low.	Add pH increaser according to manufacturer's instructions.
<i>PHH</i>	pH level in water is high.	Add pH reducer according to manufacturer's instructions.
<i>SAL</i>	Sanitiser level is low.	Add sanitiser according to manufacturer's instructions.
<i>SAH</i>	Sanitiser level is too high.	Remove spa cover and allow sanitiser to dissipate.
<i>drn</i>	The pump is on during Standby mode to assist in draining the spa.	Press 'Jets 1' to turn off the pump when the water has drained (or power-off the spa).
<i>rLE</i>	Hardware failure.	Contact your dealer.
<i>PSL</i>	Hardware failure.	Contact your dealer if message appears on more than one power-up.
<i>ErE</i>	Firmware install problem.	Contact your dealer if message appears on more than one

TROUBLESHOOTING GUIDE

DIAGNOSTIC MESSAGES

Control Panel Message	Definition	Action required
<i>cFE</i>	Configuration error. Spa cannot start up.	power-up. Contact your dealer.
<i>sLU</i>	A pump appears to be stuck on causing the water temperature to rise, possibly to a hazardous level.	DISCONNECT THE SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer.
<i>HOL</i>	A pump appears to be stuck on from the last time the spa was powered up.	DISCONNECT THE SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer.

PERIODIC REMINDER MESSAGES

Control Panel Message*	Frequency	Action required
<i>rPH</i>	Every 7 days	Test and adjust pH chemical levels as per manufacturer's instructions.
<i>rSA</i>	Every 7 days	Test and adjust sanitiser chemical levels as per manufacturer's instructions.
<i>rCL</i>	Every 30 days	Remove, clean and re-install filter as per manufacturer's instructions.
<i>rdr</i>	Every 90 days	Drain and refill spa as per manufacturer's instructions.
<i>rCO</i>	Every 180 days	Clean and condition cover as per manufacturer's instructions.
<i>rtr</i>	Every 180 days	Clean and condition spa skirt as per manufacturer's instructions.
<i>rCH</i>	Every 365 days	Install new filter.
<i>rCR</i>	As required	Install new Mineral cartridge.

* Spa owner can hide all periodic reminders in User Preferences. Press the 'Mode' button to reset a displayed reminder. Some of these periodic reminders may be changed or disabled before installation.

TROUBLESHOOTING GUIDE

DIAGNOSTICS - OPERATION

Once commissioned, your Rapid River swim spa should operate normally when properly set up. If, however, you encounter operating problems please use this general guide. If this guide does not help you solve the problem please contact your dealer. Please also refer to **DIAGNOSTIC MESSAGES** on pages 9-11.

Operating problem	Analysis	Action required
The error message appears on the display panel and the spa is not operating.	<ul style="list-style-type: none"> The control system will have digital diagnostics functions which turn it off if there is something wrong with spa operations and will only restart when the problem is solved. 	Please check the error message in DIAGNOSTIC MESSAGES section on pages 9-11 and contact your dealer.
Spa can't start in any mode.	<ul style="list-style-type: none"> Power is off. Electric control failure (display shows error message). 	Check the power supply to the spa. Check the error message on pages 9-11 and contact your dealer.
Water jets turns off automatically when using the spa.	<ul style="list-style-type: none"> The pump motor is overheating. 	Stop running pump for 1 hour until cool and then restart the pump.
The water pumps are operating but no water is coming out of the jets.	<ul style="list-style-type: none"> Water pump is sucking in air. 	Try to restart the jet. If still not operating, open the cap on the water pump to release any possible air trapped in the system and then screw tightly. Introduce water into the filter opening to clear any possible air block.
Spa water is heating slowly and / or not reaching required temperature.	<ul style="list-style-type: none"> Filter cartridge needs cleaning There is no cover on the spa creating heat loss. Heater is faulty. 	Re-set the temperature. Clean or replace the filter. Put the cover on the spa. Contact your dealer.
The power of the jets is low.	<ul style="list-style-type: none"> Jets are blocked. Water pump's valve is not fully open. 	Check whether there are foreign bodies inside the jets. Check if water pump's valve is fully open.
The jet water power fluctuates.	<ul style="list-style-type: none"> Filter is blocked. Water pump's valve is not fully open. 	Check whether there are foreign bodies inside the filter. Check if water pump's valve is fully open.

MAINTENANCE

WATER CHEMISTRY

Tap water that is safe to drink is not always right for your swim spa. Normal tap water is usually filled with minerals and micro-contaminants that are not visible to the naked eye. Properly testing and treating your spa water is essential for the health of your swim spa as well as the people that use it.

Proper chemical maintenance can control and help prevent the following:

1. Bacteria, algae and fungi, which can spread disease and infection to humans.
2. Staining and scale build-up on your swim spa shell, equipment, and piping.
3. Clogged filters. With the swim spa please be aware that the chemical maintenance of your hot water spa section and the cooler pool section will be different and not always proportional to the volume of water.

Note 1: When using chemicals, always follow the instructions provided on the manufacturer's labels.

Note 2: Use an accurate test kit to perform all chemistry tests.

Note 3: Never mix chemicals.

Note 4: Always add chemicals directly to the swim spa water, evenly spreading the chemicals over the surface. Run the Filter Pump for 15 or more minutes after applying any chemical. To help with the mixing of chemicals you can turn on your massage system as well.

OVERVIEW OF WATER CHEMISTRY

1. Sanitation

Sanitisers kill bacteria and keep the water clean. Effective and safe sanitisers include any of the following: STABILISED CHLORINE GRANULES (sodium dichloro isocyanurate dihydrate).

Note: Trichlor chlorine tablets and/or non-dichlor granular chlorines must not be used in your swim spa, they may damage the swim spa, voiding your warranty.

2. Weekly shock dose

As your swim spa is used, non-filterable wastes, including perspiration, oils, hair sprays, etc, will build up in the water. These substances make the water unattractive in appearance and odour, and can also interfere with sanitizer effectiveness. Normal sanitation does not eliminate these waste substances but shock dosing does. Shock dosing is achieved by 'shocking' the spa water with a weekly dose of NON CHLORINE SHOCK.

3. pH Control

Proper pH balance is extremely important in controlling bacteria, providing water that's comfortable for the user, and in preventing damage to the swim spa and its equipment. Using the scale of 0-14, pH is the measure of acidity and alkaline in the water. pH levels under 7.0 are acidic while pH levels over 7.0 are alkaline. The proper pH range for a spa is 7.2 to 7.6.

High pH levels (over 7.6) can cause the following:

Scale build-up on the swim spa and its equipment, cloudy water, a prematurely dirty filter, and less effective chlorine sanitation. To correct high pH levels, add a pH DECREASER.

Low pH levels (under 7.4) can cause the following:

Discomfort to the user and corrosion to the swim spa and its equipment. To correct low pH levels, add a pH INCREASER.

Note: Never use muriatic or hydrochloric acid to adjust pH as it can damage your swim spa shell and surroundings.

4. Total alkalinity (TA)

Total Alkalinity (TA) is the measure of carbonates and bicarbonates in the spa water. Low TA can cause pH to be unstable, bouncing from one level to another, causing the water to be corrosive or scale forming to the swim spa and its equipment. To correct low TA, add a TOTAL ALKALINITY INCREASER. High TA can cause scale build-up, cloudy water, as well as other pH problems. To correct high TA, contact your authorised Rapid River dealer.

5. Calcium hardness (CH) 250-500 PPM

Calcium hardness (CH) is the measure of dissolved calcium in the water. Low CH (soft water) can result in staining to the swim spa's surface as well as corrosion to the swim spa and its equipment. To correct low CH, add a CALCIUM HARDNESS INCREASER. High CH (hard water) can cause cloudy water as well as rough scale build-up on the spa's surface and equipment. To correct or manage high CH, contact your authorised Rapid River dealer.

6. Stain & scale control

Stain and scale problems are common in hot water environments. To help prevent and control staining and scaling, add a STAIN & SCALE INHIBITOR.

7. Foam control

Water emulsifies shampoo, soap and detergents, and combined with high water temperatures, can cause surface foaming. To prevent and control foam on the surface of the swim spa water add a small amount of FOAM REDUCER.

MAINTENANCE

8. Clearing cloudy water

There are two basic reasons that swim spa water becomes cloudy. First, non-filterable liquid wastes (perspiration, etc.) have contaminated the water. To remove these waste substances, shock the water (as described previously). Second, non-filterable micro-particulate wastes (dust, etc.) have contaminated the water. To remove these waste substances, use a WATER CLARIFIER.

9. Sanitising with non-chlorine shock (potassium peroxymonosulfate)

When sanitising your swim spa with Non-Chlorine Shock you should add the correct dose directly to the swim spa/pool water with the jets running.

Non-Chlorine Shock will give up to, two hours of safe bathing. If you use the spa/pool for more than two hours it will be necessary to re-dose.

On a weekly basis it is important to shock your spa/pool with NON CHLORINE SHOCK.

Note: Use only branded Hot Tub Barn chemicals to ensure premium performance.

STARTING YOUR SWIM SPA WITH NEW WATER

1. As your swim spa fills with tap water, add 10 teaspoons of STABILISED CHLORINE GRANULES to the pool end and in a swim spa add 2 and a half teaspoons to the spa end. This will provide the initial protection against bacteria in your pipes.

Note: If you live in a hard water area you can fill the pool with a 50/50 mix of hard and soft water. The calcium balance should be between 250 and 500 parts per million.

2. When the swim spa is completely filled with water complete the following.

3. If possible, have your authorised Rapid River dealer test the Calcium Hardness (CH) of your water and adjust as per your dealer's recommendation (the correct level of CH depends on your overall water conditions).

4. Test and adjust the Total alkalinity (TA) to the range of 125-150 PPM (parts per million).

5. Test and adjust the pH to the range of 7.4-7.6.

6. After the water has circulated for approximately a quarter of an hour, retest the chlorine level in your water and add the correct amount to raise the level to between 3—5 PPM.

Start-up water chemistry is now complete. However, it may take several days for the filter to completely clear the water.

MAINTAINING SWIM SPA WATER

Sanitizer and pH Levels

It is important to test and adjust the sanitizer and pH levels of your swim spa on a daily basis.

With each sanitizer test, use STABILISED CHLORINE GRANULES to maintain the following levels:

With ozone

Chlorine Level: 3—5 PPM

To maintain the above sanitizer level with CHLORINE, please refer to your authorised Rapid River dealer for assistance.

Shock dose

Once a week, and when the swim spa is not in use, shock dose the spa water by adding the following:

Add four tablespoons of NON CHLORINE SHOCK to the spa end and eight tablespoons of NON CHLORINE SHOCK to the pool end, or if only one volume of water, eight tablespoons of NON CHLORINE SHOCK into the pool.

Stain and scale control

Use a STAIN & SCALE INHIBITOR as per the instructions on the manufacturer's label.

Foam control

As required, use FOAM REDUCER as per the instructions on the manufacturer's label.

Cloudy water prevention and control

Use a WATER CLARIFIER as per the instructions on the manufacturer's label. If the swim spa water is cloudy call your Rapid River dealer for advice.

WATER CHEMISTRY TROUBLESHOOTING

Prior to each swim spa use, check the water. If the water appears cloudy or off-colour, has significant surface foam or smells of chlorine, then there is a problem with the water and it needs to be treated or drained. Using the spa of the swim spa section in these conditions could result in a skin rash or other irritation.

For assistance in handling water chemistry problems, consult your authorised Rapid River dealer or another service centre capable of performing a detailed Water Analysis.

RAPID RIVER TOTAL ALKALINITY (TA) ADJUSTMENT

Additions based upon: 2.4kg Sodium Bisulphate reducing the TA by 20.00mg/L per 50.00 cubic metres
 2.0kg Sodium Bicarbonate Increasing the TA by 20.00mg/L per 50.00 cubic metres

Volume (Metre ³)	Alkalinity Effect	Chemical Addition	Total alkalinity adjustment required in mg/L									
			10	20	30	40	50	60	70	80	90	100
AQUAMASTER 4.5												
6.500	Reduce	Sodium Bisulphate 'pH Reducer'	156.00g	312.00g	468.00g	624.00g	780.00g	936.00g	1092.00g	1248.00g	1404.00g	1560.00g
6.500	Increase	Sodium Bicarbonate 'Alkalinity Increaser'	130.00g	260.00g	390.00g	520.00g	650.00g	780.00g	910.00g	1040.00g	1170.00g	1300.00g
AQUAMASTER 6												
9.500	Reduce	Sodium Bisulphate 'pH Reducer'	228.00g	456.00g	684.00g	912.00g	1140.00g	1368.00g	1596.00g	1824.00g	2052.00g	2280.00g
9.500	Increase	Sodium Bicarbonate 'Alkalinity Increaser'	190.00g	380.00g	570.00g	760.00g	950.00g	1140.00g	1330.00g	1520.00g	1710.00g	1900.00g
AQUADUAL Pool End												
4.981	Reduce	Sodium Bisulphate 'pH Reducer'	119.54g	239.09g	358.63g	478.18g	597.72g	717.26g	836.81g	956.35g	1075.90g	1195.44g
4.981	Increase	Sodium Bicarbonate 'Alkalinity Increaser'	99.62g	199.24g	298.86g	398.48g	498.10g	597.72g	697.34g	796.96g	896.58g	996.20g
AQUADUAL Spa End												
1.491	Reduce	Sodium Bisulphate- 'pH Reducer'	35.78g	71.57g	107.35g	143.14g	178.92g	214.70g	250.49g	286.27g	322.06g	357.84g
1.491	Increase	Sodium Bicarbonate 'Alkalinity Increaser'	29.82g	59.64g	89.46g	119.28g	149.10g	178.92g	208.74g	238.56g	268.38g	298.20g

MAINTENANCE

CHANGING YOUR SWIM SPA WATER

Depending on usage, your spa section water will need to be changed approximately every 4 months or whenever your spa water becomes difficult to manage. For the pool section we recommend that you replace 1/3 rd of your pool water every 4 months.

Steps to drain your swim spa:

1. Disconnect electrical power supply.
2. Open door to Equipment Compartment.
3. Drain water from spa by completing the following:
 - a). Locate drain valve at floor level.
 - b). Open drain valve by twisting ball valve.
 - c). Allow to drain by gravity only.
 - d). At the end of the procedure re-close the ball valve by reversing the instructions.
 - e). For swim spas with two volumes of water, to drain the spa end of the swim spa follow the same procedures as above but using the ball valve dedicated to the spa end.

Note 1: Drain water to an area that can handle the water volume of your swim spa.

Note 2: If draining water onto vegetation, make sure that the sanitizer level (chlorine level) of your spa water is less than 5 PPM.

4. To clean the swim spa shell refer to 'SWIM SPA SHELL CARE'.

Steps to refill your swim spa:

1. Check that the drain valves are fully closed.
2. Close door to Equipment Compartment.
3. Refill swim spa with tap water. Fill the swim spa to the midway level of the skimmer in each section. The depth should be approximately 150mm -190mm (6-7½") down from top rim of the swim spa.

Note 1: The higher the water level, the fewer spa users it will take to cause the water to overflow the top of the spa.

Note 2: If you live in a hard water area you can fill the pool with a 50/50 mix of hard and soft water. The calcium balance should be between 250 and 500 parts per million.

4. Restore electrical power supply.
5. See 'Starting Your Swim spa with New Water' under 'Water Chemistry'.

CLEANING YOUR FILTERS

The filters are located inside the skimmer. Put your hand into the skimmer and remove each filter one at a time. On a regular basis it is important to

remove excessive pollution and organic matter from the filters. It is recommend that on a regular basis the filters are either cleaned with INSTANT FILTER CLEANER or allowed to soak overnight in CARTRIDGE CLEANER. In either case after degreasing use a high pressure hose or pressure cleaner to remove cleaner residue and calcium.

Filter replacement:

Replace the filters ever two years or when necessary. Only use genuine Rapid River filter cartridge replacements.

CAUTION: Using a brush to clean a cartridge could damage it. Commercially available cartridge cleaners may be used and can be obtained from your authorised Rapid River dealer.

SWIM SPA SHELL CARE

Your Rapid River swim spa surface is durable and easy to clean:

Swim spa shell surface:

For normal cleaning use WATERLINE CLEANER solution. For surface marks, use SURFACE CLEANER. To apply these cleaners, use a soft, damp cloth or sponge. Rinse well and dry with a clean cloth.

General cleaning:

With normal use of your spa, oils, lotions and hairsprays will build up on the surface of the water, sometimes leaving a scum line around the perimeter of your shell. This scum line can easily be removed with SURFACE CLEANER.

To remove grease, oil, paint and ink stains, use 25% isopropyl (rubbing) alcohol in water.

Note 1: Never allow your swim spa surface to come in contact with acetone (nail polish remover), nail polish, dry cleaning solution, lacquer thinners, gasoline, pine oil, abrasive cleaners or any other harsh chemical. These chemicals can damage your swim spa shell and void your warranty.

Note 2: Avoid using cleaning agents that will leave suds in your swim spa water.

CLEANING AND PROTECTING THE HEADRESTS

Clean on a regular basis with soap, water and a clean cloth. Use 303® Protectant or it's equivalent once per month. This will maintain water resistance and lustre of the product. Between uses it is recommended to remove the headrests and store in a dry place.

Note: if headrests are left in the swim spa you must expect colour loss and gradual breakdown of headrest material due to the corrosive effect of chlorine and ozone.

MAINTENANCE

COVER CARE

Your cover has a one year warranty.

Basic instructions are provided below. It is important that you refer to the information that came with your cover, which provides detailed information on caring for your cover and what to do to protect its warranty.

Cleaning and conditioning your cover:

On a monthly basis, complete the following:

1. Remove the cover and lay it down on a flat, clean surface near a garden hose.
2. Rinse the cover to remove any loose debris.
3. Using a soft bristle brush, clean the top (vinyl portion) of the cover with a mild solution of washing up liquid — about one teaspoon of soap to two gallons of water. Scrub the cover, using a gentle circular motion, being careful not to let any areas of the cover dry before rinsing with water.
4. Rinse the cover thoroughly and then dry with a clean cloth.
5. We recommend the use of 303 Protectant to give your cover a shiny appearance and UV protection.
6. Wipe and/or rinse any dirt from the bottom side of the cover.
7. Replace the cover and secure with cover locks.

MISCELLANEOUS CARE

Vacuuming the swim spa:

Debris from wind, trees and spa users will occasionally accumulate on the bottom of your swim spa. Your swim spa's filtration system will remove the smaller debris. Debris that is too large or too heavy for the filtration system will have to be removed by the use of a spa vacuum, such as a Pool Buster. If you do not have a spa vacuum, please contact your authorised Rapid River dealer.

Cleaning the scum line:

With normal use of your swim spa, oils, lotions and hairsprays will build up on the surface of the water, sometimes leaving a scum line around the perimeter of your swim spa shell. This scum line can easily be removed with waterline cleaner or its equivalent.

See your authorised Rapid River dealer for this product.

LOW-USE OR NO-USE PERIODS

At certain times of the year you may not use your swim spa as often as expected. For these low-use or no-use periods, we recommend the following:

Low-use:

If your swim spa is being used less than once per

month, then you may wish to lower the temperature setting of the spa section by approximately 5°C. Lowering the temperature on your spa will cut your cost of operation if you are not using the swim spa for extended periods, however, you will need to adjust the temperature setting approximately 120 minutes before each use to heat the spa section to the desired level.

No use for 1-2 weeks:

If you plan to not use your swim spa for one-two weeks, then we suggest that you not make any changes in operating your swim spa.

No use for 2-6 weeks:

If you plan to not use your swim spa for two-six weeks, then you may wish to lower the temperature setting to approximately 26°C during the No-Use period.

No use for over 6 weeks:

If you plan to not use your swim spa for over six weeks, then it is suggested that you winterise your swim spa by taking the following steps:

SWIM SPA WINTERIZATION

1. Drain the water from the swim spa (see 'Steps to drain your swim spa' under 'Changing your swim spa water' in this owner's manual).
2. Drain the swim spa equipment. This is done by removing the drain plug from the pumps, loosening all PVC pipe unions and pump air bleed valves in the equipment compartment. On the base of the filter columns there is a drain plug which you need to unscrew.
3. Clean the swim spa shell (see 'Swim spa shell care' in this owner's manual).
4. Remove filter cartridge(s), clean filter (see 'Cleaning your filter' in this owner's manual), allow to dry, and then store inside your garage or home.
5. Reattach and secure cover to the swim spa

SWIM SPA DE-WINTERIZATION

De-Winterisation is completed by reversing the above procedure and then refilling the swim spa (see 'Steps to refill your swim spa' under 'Changing your spa water' in this owner's manual).

Note: *If your swim spa water is not emptied during periods of No-Use, you should test and chemically treat the water approximately once per week. Not doing so may lead to corrosion, staining and/or scaling to your swim spa and its equipment. If there is no one available to take care of the swim spa on a weekly basis, then it is recommended that you winterise your swim spa as described above.*

SERVICE

Before requesting service from your dealer, refer to the TROUBLE SHOOTING GUIDE in this owner's manual to determine the necessary course of action. If you are not able to solve the problem using the trouble shooting guide, please contact your authorised Rapid River dealer.

GUARANTEE SERVICE

If your Rapid River swim spa fails within the guarantee period and within the scope of its guarantee, contact your authorised dealer and schedule a service call.

Note: *Damage caused by repairs made by someone other than an authorised Rapid River technician will not be covered by your warranty.*

NON-GUARANTEE SERVICE

We recommend having an authorised Rapid River technician perform all repairs on swim spa that fail outside of warranty coverage or beyond the warranty period. If you are not able to use an authorised Rapid River technician, we encourage you to request and use genuine Rapid River replacement parts.

If you are not able to obtain service in your area, call us on 01245 265036.

PURCHASE INFORMATION

YOUR SWIM SPA SERIAL NUMBER

PURCHASE DATE

DELIVERY DATE

Rapid River Pools
41 Robjohns Road
Chelmsford
Essex CM1 3AG
United Kingdom



5 Year Structural / 5 Year Surface Warranty

Rapid River warrants the galvanised steel sub frame not to crack or fracture for a period of five years from delivery date. Additionally, the Aristech surface material of the Rapid River Swim Spa is warranted not to peel, crack, wrinkle, blister, yellow, efface or delaminate for a period of five years from the Exercise Pool/Swim Spa's delivery date. The Aristech surfaces are non-permeable and will not absorb odours, bacteria or pollutants.

3 Year No Leak Warranty

Rapid River warrants the Rapid River Swim Spa not to leak for a period of three years from its delivery date. This warranty specifically covers leaks from the wall fittings, jet fittings, internal plumbing, internal glue joints, freeze drains and all bonded parts including the filter chamber, light lens and counter currents.

3 Year Heater Warranty

Rapid River warrants the heater against fault in manufacture or faulty workmanship.

3 Year UV Resistant Synthetic Wood Cabinet Warranty

Rapid River warrants the UV Resistant Synthetic Wood cabinet material not to peel, crack, wrinkle, blister or delaminate and to be free from defects in workmanship for a period of three years from the Swim Spa's delivery date. This warranty specifically covers the cabinet's structural integrity, including all glue and integral bonded joints.

2 Year Component Warranty

Rapid River warrants the electrical components, pumps, ozone generators, and other Rapid River Swim Spa components against malfunction or defects in workmanship for a period of two years from its delivery date. Filter cartridges, light bulbs, spa pillows and cover locks are not included in this warranty, but are warranted to be free from defects in materials or workmanship at the time of delivery to the original consumer purchaser.

1 Year Trim (Tile) And Cover Warranty

Rapid River warrants the cosmetic trim and Swim Spa cover to be free from defects in materials and workmanship for a period of one year from the Swim Spa's delivery date.

Rapid River Pools
United Kingdom

Extent of warranty

This warranty extends only to the original consumer purchaser of the Rapid River swim spa when purchased and originally installed or relocated in the boundaries of the country of purchase. The Rapid River swim spa warranty terminates upon any transfer of ownership or if the swim spa is installed or relocated outside the country of purchase. The customer must register their purchase with Rapid River. at the below address to benefit from this warranty.

Warranty performance

In the event of a malfunction or defect covered under the terms of this warranty, an authorised service agent of Rapid River will repair the Rapid River swim spa. To obtain service, contact the authorised service agent who sold you the swim spa. There is no charge for parts or labour to repair the swim spa or its components. Service agents reserve the right to assess reasonable call out fees or travel based upon their individual policies. If the swim spa is installed outside of the normal servicing area of the selling dealer, or if normal access to the swim spa is not possible, extra travelling expenses and costs of access will be charged. These costs are not covered by this warranty.

Rapid River maintains an extensive service network. In the event the consumer purchaser should not be able to either obtain service or satisfactory service from an authorised service agent, notify the service department of Rapid River. Written notice of any malfunction or defect must be given within ten (10) days of the time the malfunction is discovered, and must be accompanied by the original consumer purchaser receipt of the swim spa, which shows the date of purchase. Notice must be given Rapid River Pools Limited, 41 Robjohns Road, Chelmsford, Essex, CM1 3AG, UK
Tel 01245 265036

Acts invalidating warranty

This warranty is void if this Rapid River swim spa has been improperly installed, subjected to alteration, misuse or abuse, or if any repairs on the swim spa are attempted by anyone other than an authorised representative of Rapid River. Alteration shall include component or plumbing change, electrical conversion or the addition of any non-approved sanitation or water purification device or heating system which contributes to a component or unit failure or unsafe operating system. Misuse and

abuse shall include: any operation of the swim spa other than in accordance with Rapid River's printed instructions, or use of the swim spa in an application for which it is not designed. Specifically: use of the swim spa in a non-residential application; damage caused by the operation of the swim spa outside the specified voltage requirements (230+ -10%) or operation of the swim spa at water temperatures outside the ranges of 1°C and 42°C; damage caused by voltage spikes or "brown-out" conditions; damage caused by dirty, clogged or calcified filter cartridges; damage caused by the use of trichloro chlorine, chemical tablets in a floater, acid or by any other spa / pool chemicals or cleaners which are not recommended by Rapid River; damage caused by allowing undissolved sanitising chemicals to lie on the swim spa surface (no swim spa can withstand this kind of abuse); damage to components or surface caused by improper pH balance or other improper water chemistry maintenance; and damage to the swim spa surface caused by leaving the swim spa uncovered while empty of water and in direct exposure to sunlight (causing solar heating distress) are considered abuses and will invalidate warranty.

The standard swim spa covers are not designed to support heavy weight loads and should not be used as a seat. In extreme cases the lid could crack and break. This occurrence is considered abuse and is not covered under this warranty.

Hercules™ covers (optional) are designed to take the weight of an average adult walking across it only. Excess weight may still cause damage to the cover and will not be covered under warranty.

Disclaimers

Rapid River shall not be liable for loss of use of the Rapid River swim spa or other incidental, consequential, special, indirect or punitive costs, expenses or damages, which may include but are not limited to the removal of a permanent deck or other custom fixture or the necessity for crane removal. Any implied warranty shall have a duration equal to the duration of the applicable warranty stated above. Under no circumstances shall Rapid River or any of its representatives be held liable for injury to any person or damage to any property however arising.

Rapid River Pools
United Kingdom



Warranty Registration Form

To validate your manufacturer's warranty please complete the form below and send to Rapid River Pools Limited, 41 Robjohns Road, Chelmsford, Essex, CM1 3AG UK

If possible please enclose a photocopy of the original purchase contract/receipt to negate the need for inspection on service calls.

Name: _____

Address: _____

Post Code: _____

Model: _____

Serial Number: _____

Purchase Date: _____

Place of Purchase: _____