

RIVERFLOW

OWNER'S MANUAL



CONTENTS

IMPORTANT SAFETY INFORMATION 3

SPECIFICATIONS

Jet pump assignment 4

Components 4

Plan & side view 5

Riverflow spa set up 5

Exploded diagram 6

Plumbing access panel 6

Sinking the spa in decking 7

Electrical diagram 8

INSTALLATION AND SET-UP

Selecting a site for your spa 9

Electrical requirements and connections 9

Checklist before filling your spa 10

CONTROL PANEL OPERATIONS

Control System Features:

Heater control 10

Jet control 10

Safety features 10

Main Control Panel 11

Notification Icons 11

Spa functions 11

Spa mode 12

Settings 12

Water care 13

Modifying water care schedules 13

Maintenance 14

Date and time 14

Keypad settings 14

Miscellaneous 15

TROUBLESHOOTING GUIDE

Too much water on display 16

Installation error messages 16

Diagnostics - In.k 1000 Error Codes 16

Diagnostics - operation 17

MAINTENANCE

Water chemistry 18

Overview of water chemistry 18

Starting your spa with new water 19

Maintaining spa water 19

Water chemistry troubleshooting 19

Riptide Spa total alkalinity (TA)

adjustment chart 20

Sand Filter 21

Spa shell care 21

Cover care 21

Miscellaneous care 21

LIMITED WARRANTY 22

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. Electrical Supply. Please provide a dedicated RCD protected power supply terminated at a consumer unit fitted with a type C breaker. Alternatively, you could fit a rotary isolator and have your own electrician hardwire directly into the hot tub control box.

ALWAYS USE A QUALIFIED ELECTRICIAN TO CONNECT THIS 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 Riptide Riverflow spa unless they are supervised at all times.

5. DANGER - risk of injury. The suction fittings in the Riptide 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 Riptide spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated lower than the flow rate marked on the original suction fitting.

6. DANGER - risk of electric shock. Do not permit any electrical 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 spas' own electrics.

7. WARNING - to reduce the risk of injury:

- a) Before entering the 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 a spa and should maintain safe water temperatures.
- d) The use of alcohol, drugs, or medication, before or during 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 a spa.
- f) Persons using medication should consult a physician before using the 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 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 below the normal body temperature of 37°C (98.6°F). The symptoms of hypothermia include

an decrease in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hypothermia include:

- Unawareness of impending hazard
- Failure to perceive cold
- Failure to recognise the need to exit the spa
- Physical inability to exit the spa
- Foetal damage in pregnant women
- 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 spa.

3. WARNING - risk of children drowning. Although your Riptide spa cover is not rated as a safety cover, it is wise to always keep the spa cover securely fastened when not in use. This will help discourage children from attempting to enter the 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 spa. Surfaces can be very slippery when wet. Do not step or sit on head rests. Keep all breakable objects out of the spa area.

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

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

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

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

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

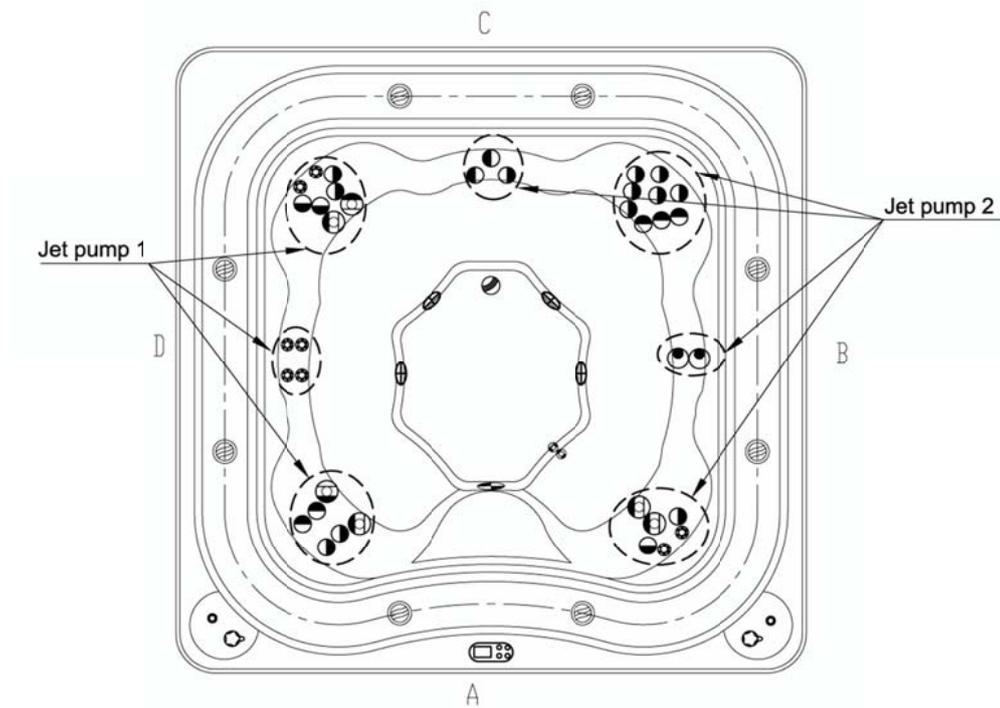
11. CAUTION - risk of damage to spa or equipment. By performing maintenance as described later in this Owner's Manual, the chance of damage to your spa and its equipment will be greatly reduced.

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 Riptide dealer.

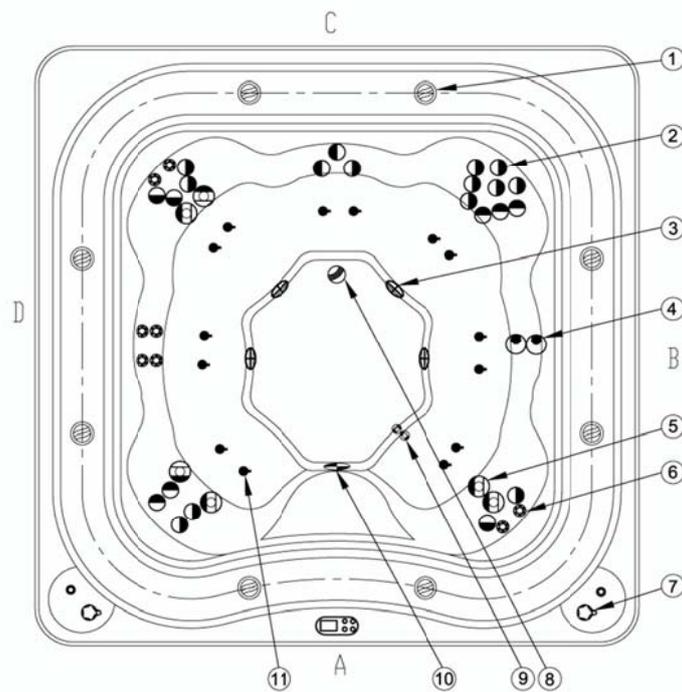
13. CAUTION - location of your Riptide spa. Locate your Riptide spa on a surface that can withstand the weight bearing requirements of the spa (see Selecting a Site for your Riptide spa in this Manual). Also, locate your spa in an environment that can withstand repeated exposure to water and the possibility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

SPECIFICATIONS

Jet pump assignment



Components

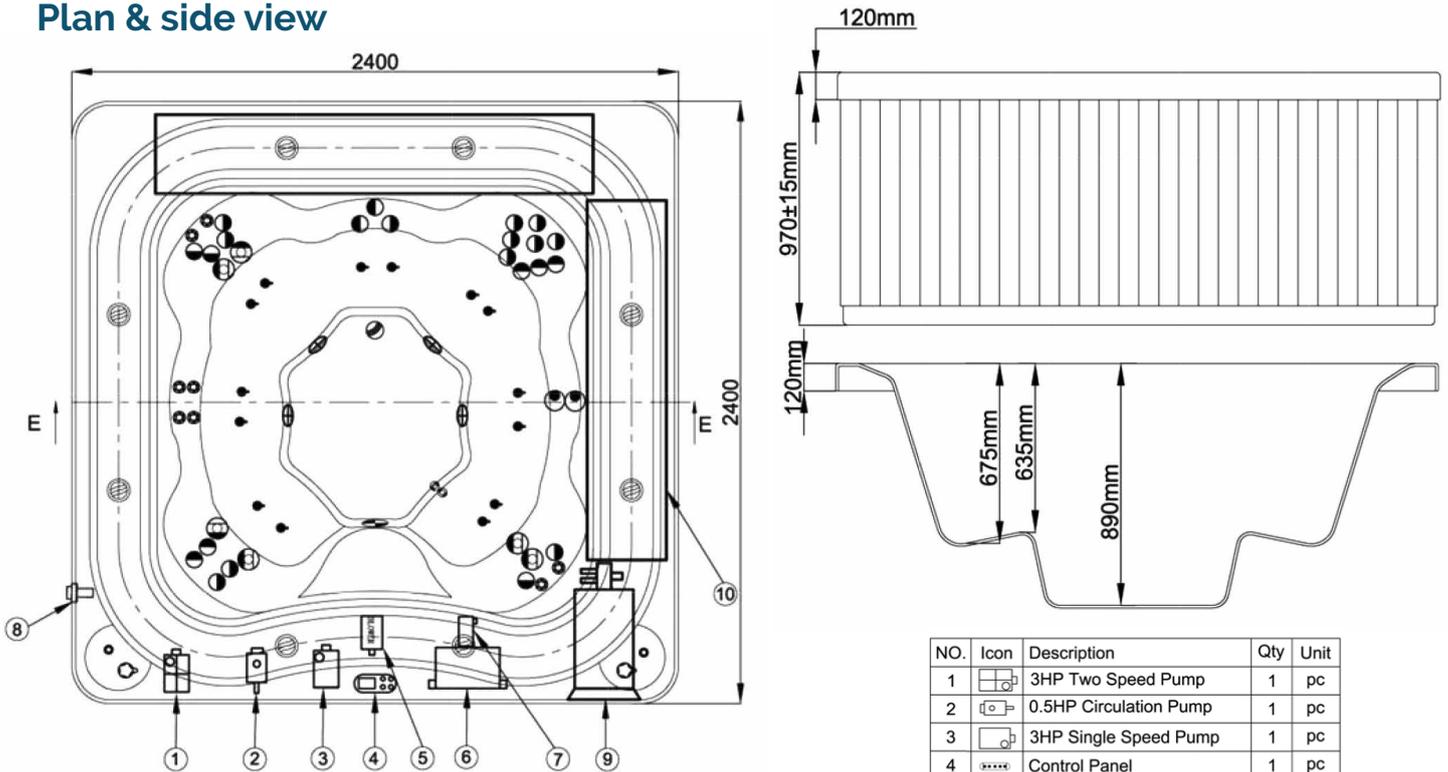


NO.	Icon	Description	Qty	Unit
1		1.5" overflow net	8	pcs
2		Large 3" Jet Internal-Single Pulse	22	pcs
3		2" Suction (full set) - SS Face	4	pc
4		4" Jet Internal-Single Pulse	2	pc
5		5" Jet Internal-Single Pulse	6	pcs
6		Jet Face - 2" - Directional	8	pcs
7		1" Air Check Valve Assembly	2	pcs
8		Stainless Steel Low Drain - 3/4" Slip	1	pcs
9		Ozone Injector - Carbon Grey	2	pc
10		5" Light Housing Without Holder	1	pc
11		Air Injector Assembly - 1"	16	pc

Please note: Due to manufacturing tolerances, there may be some minor differences between the actual spa and scale drawings. For site planning, take measurements from the actual spa. All specifications are subject to change without notice. Some components may be optional on your spa.

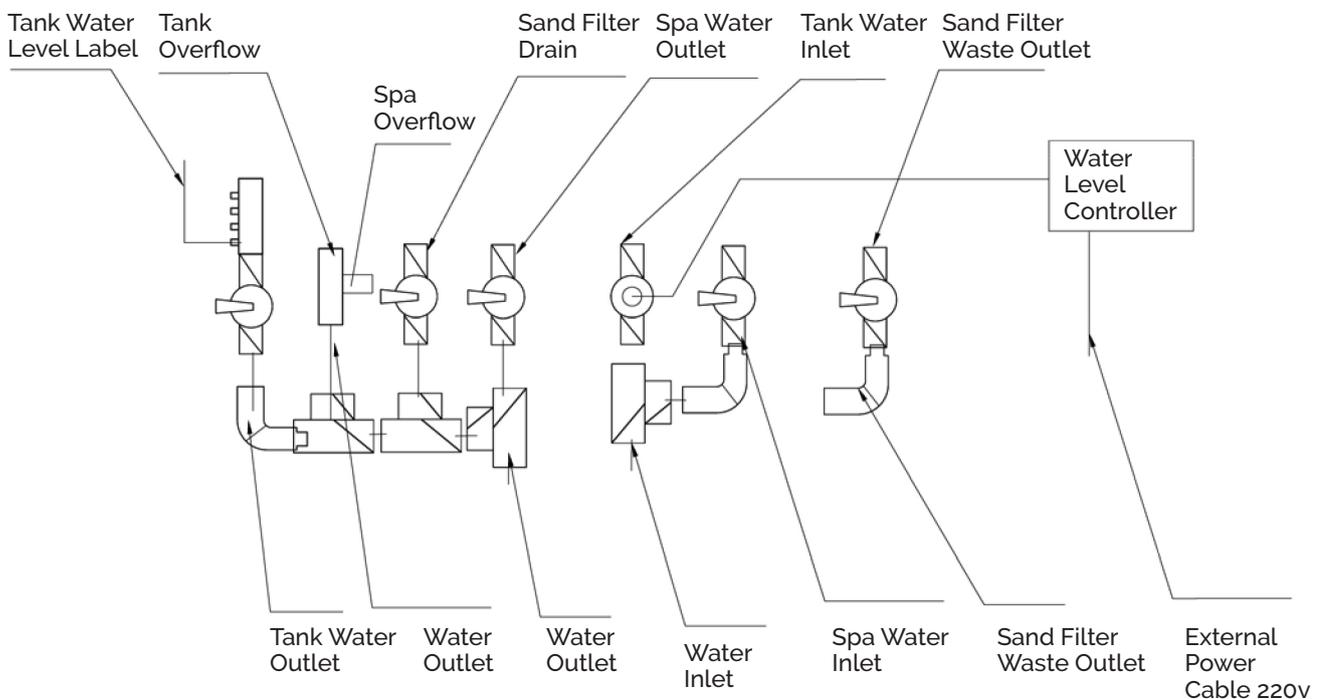
SPECIFICATIONS

Plan & side view



NO.	Icon	Description	Qty	Unit
1		3HP Two Speed Pump	1	pc
2		0.5HP Circulation Pump	1	pc
3		3HP Single Speed Pump	1	pc
4		Control Panel	1	pc
5		400W Blower	1	pc
6		Control Box	1	pc
7		CP Ozone Generator	1	pc
8		External Drain	1	pc
9		Sand Filter	1	pc
10		Water Tank	1	pc

Riverflow spa set up

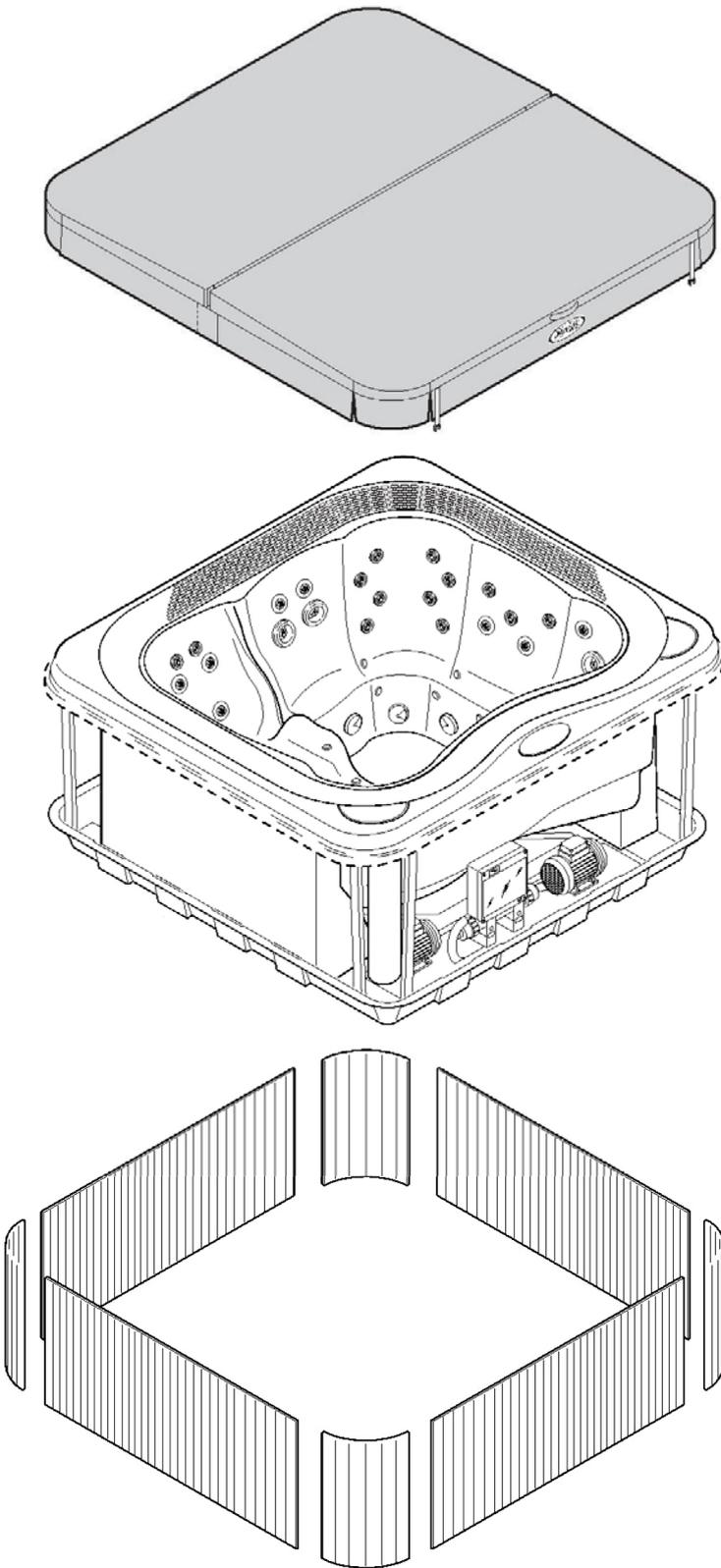


1. In normal conditions, all the ball valves (including the magnetic valve) stay closed, while water outlet and sand filter waste outlet must stay open.
2. Switch on the power to the water level controller. Next, turn on the water inlet ball valve then fill the balance tank through the water inlet. The spa and the balance tank will be filled with water at the same time. Note: Do not wire the spa control system till the spa is filled with water.
3. When the balance tank is filled to the water level the balance tank magnetic valve will stop automatically. The balance tank will stop

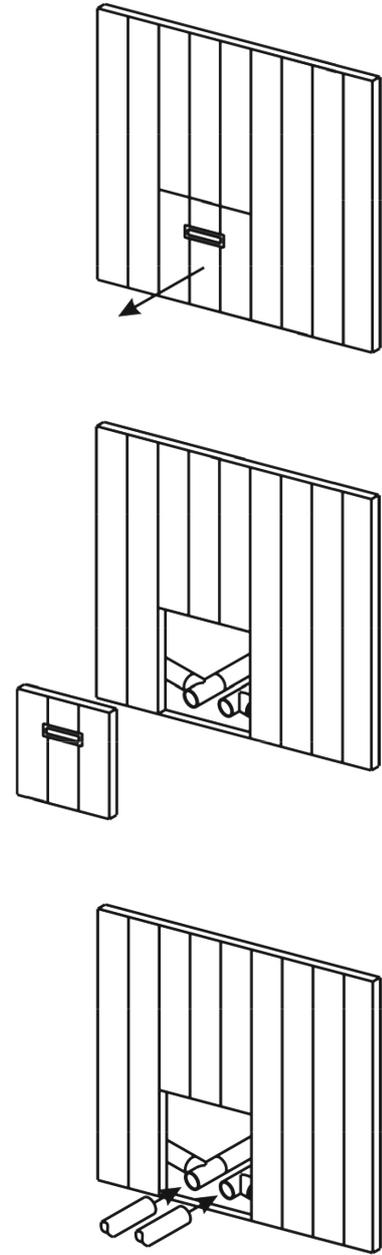
- filling water automatically at the same time. Shut off the spa water inlet valve once the spa water reaches the water level.
 4. Now you can wire the spa control system and the spa is ready for commissioning.
 5. When the spa needs to be cleaned or repaired, open the related drain ball valve, balance tank, sand filter and spa drain to empty the spa water.
- When maintenance is complete, repeat steps 1 to 4 to make sure balance tank, spa and sand filter are at the correct water level.

SPECIFICATIONS

Exploded diagram

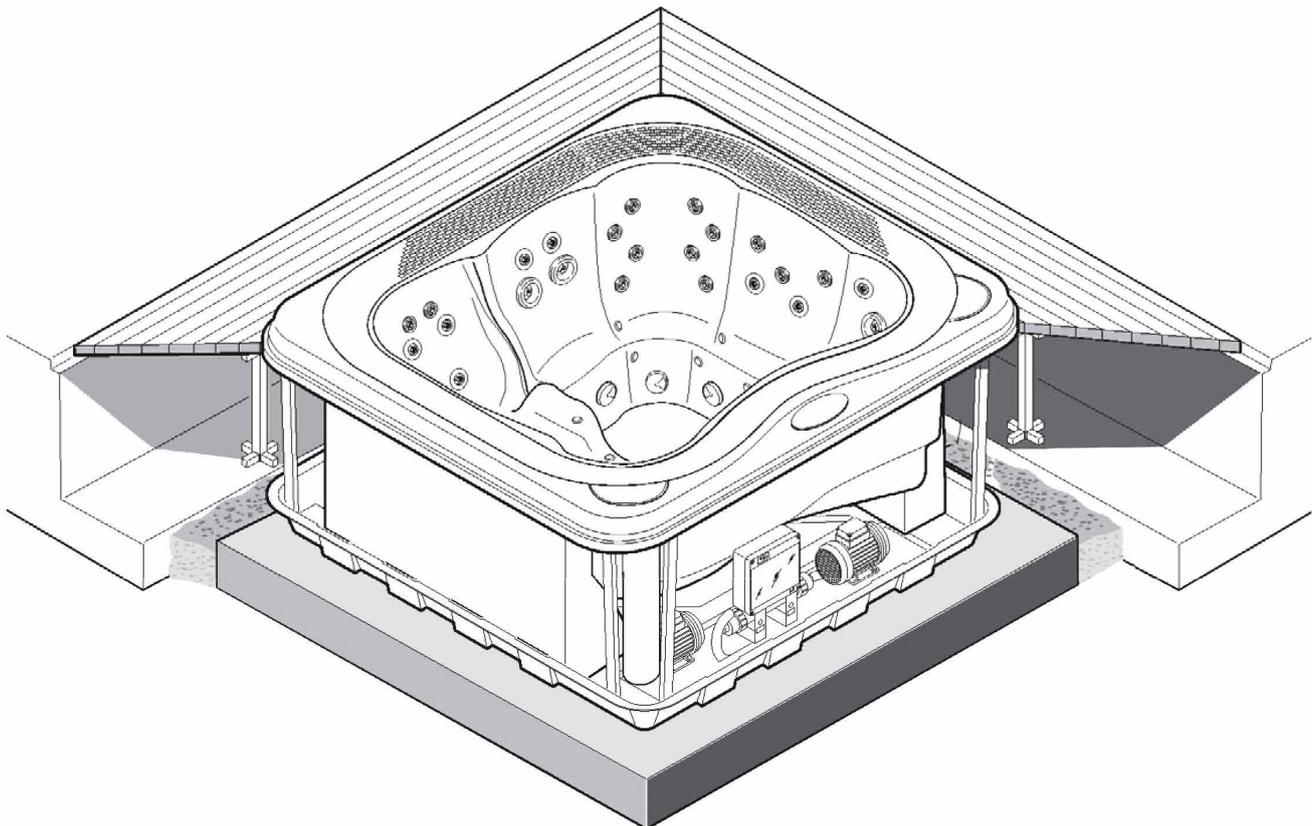
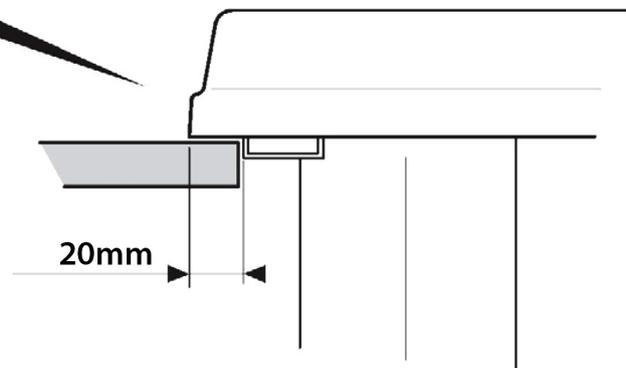
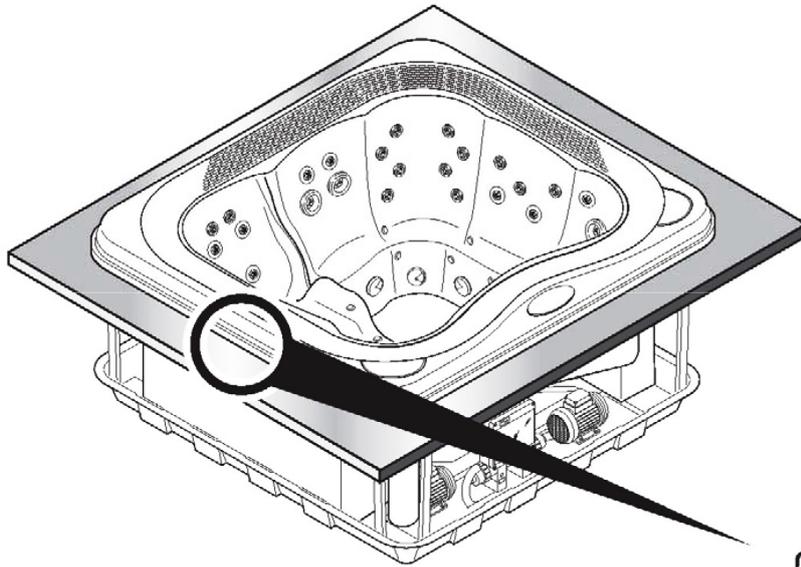


Plumbing access panel

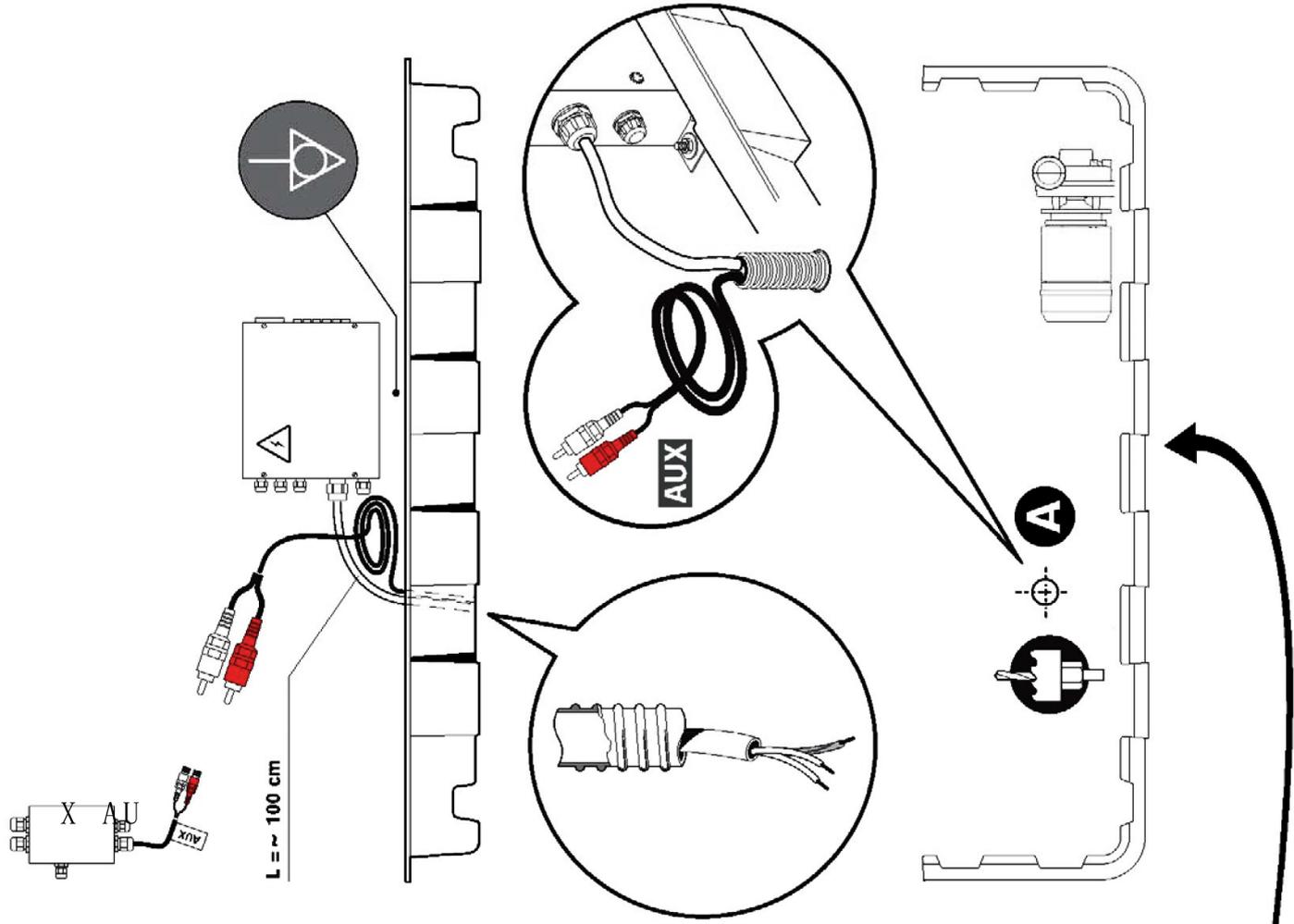
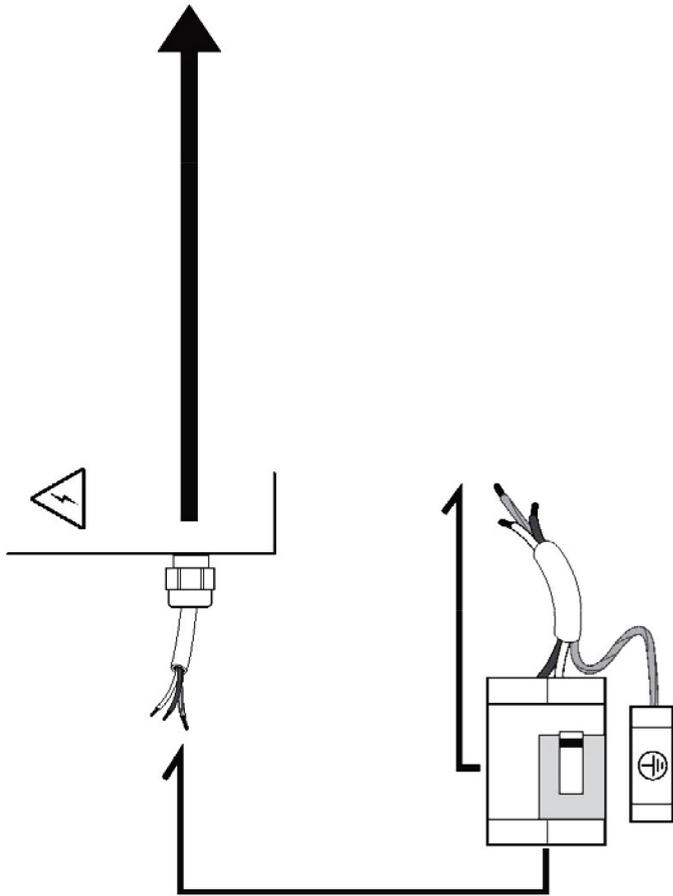


SPECIFICATIONS

Sinking the spa in decking



SPECIFICATIONS Electrical diagram



INSTALLATION & SET-UP

SELECTING A SITE FOR YOUR RIVERFLOW SPA

Your Riverflow spa is designed for either indoor or outdoor use. In either case, please adhere to the following guidelines:

1. Select a site that is stable and capable of supporting the weight of your spa, its water, and the people using it (refer to the model brochure or contact an authorised Riptide dealer for the filled weight of your spa). If installed on a suspended floor/deck, it should be capable of supporting your spa. If you have concerns on this matter, please contact a qualified, licensed contractor.
2. The surface needs to be flat and level as it must provide continuous support for the entire bottom of the spa structure. Do not shim or block up the 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 spa in a pit or low area where water may accumulate and damage the spa or its equipment. Choose a site where water will drain away from the spa and not towards it.
4. **Important:** with all installations, the Riptide spa must be located at least 150cm [5ft] from all electrical outlets, switches, and other permanently installed electrical devices.

Indoor considerations: There are several considerations when installing your Riptide spa indoors: the environment both around and below the spa should be water resistant. It must be capable of handling water splashed out from the spa as well as the possibility of a leak from the vessel (a catch basin equivalent to the volume of your spa is recommended); it is recommended that the room you install the spa in has proper ventilation. This can usually be achieved by an exhaust fan or a dehumidifier if 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 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 Riptide spa cover and cabinet. Lastly, avoid locating your spa in an area where debris could be blown into the spa. If sinking your Riptide 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 Riptide spas must be wired in accordance with all national electric codes. Always use a qualified electrician to perform the electrical installation.

Wiring installation

Please provide a dedicated rcd protected power supply terminated at a consumer unit fitted with a type C breaker. Alternatively, you could fit a rotary isolator and have your own electrician hardwire directly into the hot tub control box.

220/240v Installation

Use only a qualified, licensed electrician to make 240 Volt electrical installations.

Your 220/240v standard Riptide spa model requires a dedicated supply, wire size of 1.5mm-2.5mm. It is important that these circuits are dedicated (not being used by any other electrical appliance) or your spa may not function properly.

Position your Riptide spa at least 150cm [5ft] 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 Riptide Spa on an electrically heated floor.

INSTALLATION & SET-UP

CHECKLIST BEFORE FILLING YOUR SPA

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

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

2. Check drain valves: Check that the 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 spa: Fill the spa to approximately the halfway point on the skimmer.

6. If you live in a hard water area and have access to a water softener we recommend you fill the spa with softened water. The calcium balance of the spa water should be approximately 40-250 ppm.

6. Check for leaks: After the Riptide 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 Riptide dealer.

CONTROL PANEL OPERATIONS



CONTROL SYSTEM FEATURES

The fully programmable Gecko IN.YE5 control system on Riptide spas allows total management of the water temperature and jet power at the touch of a button. Also included is an automatic timer switch and operational safety features to ensure a safe and relaxing spa experience.

Heater control

You can set the water temperature to your personal preference. You can also set the water temperature in advance ensuring your spa is ready for use anytime you wish.

Jet control

The speed of the jets is 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 spa operates safely. The control box is fully waterproof with International Protection Rating (IP) 55.

CONTROL PANEL OPERATIONS

MAIN CONTROL PANEL in.k 1000 Touch Screen Keypad

No buttons, keys and overlays! Mode and function selection wheels, all-on or all-off one touch activation key of last used settings, interactive display icons and on-screen messages are all elements of the in.k1000 user interface designed to let spa users interact intuitively with their spa and its value-added accessories.



spas functions

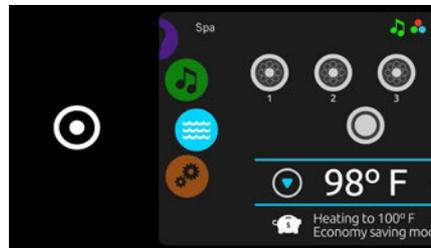
Quick and easy step-by-step instructions to control the main functions and to configure system settings of your spa from its in.k1000 main spa keypad.



turn keypad on

3 minutes after the last pump is turned off, the screen will shut off if there is no touch activity.

Touch the screen to turn on the keypad. Then follow the instructions on the screen to access the main screen.



all-on, all-off target key

in.k1000 features an all-on or all-off one touch activation key. When pressed, it tops or starts all working components and accessories at once.

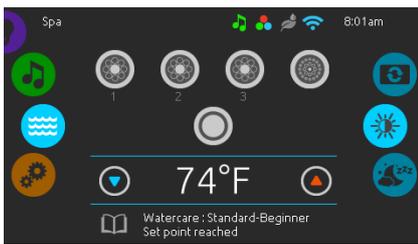
From the home page, you can access the following modes:

- color (with in.mix installed)
- spa
- settings

To select a mode, slide the left wheel up or down until the desired icon menu is highlighted in the middle.

CONTROL PANEL OPERATIONS

spa mode



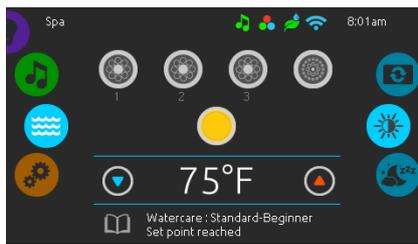
spa mode

To select the spa mode, slide the left wheel up or down until the spa icon is highlighted in the middle.

The home page will display its equipment start or stop keys, up and down buttons, water temperature, messages and quick access to display options:

- display orientation
- display contrast

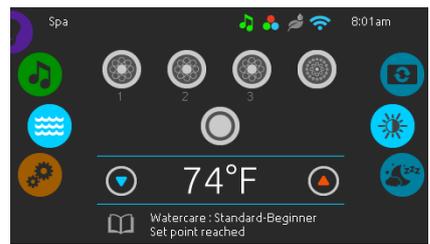
To select an option, slide the right wheel up or down until the desired icon menu is highlighted in the middle.



start or stop accessories

To start or stop an accessory (pump, blower, light), touch the associated icon. Icons will become animated when their accessory is turned on, and animation will stop when turned off.

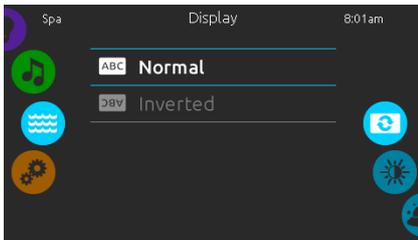
Icons on the screen will reflect the speed or state of the devices running on your spa. When an accessory has more than one speed, press the button until it reaches the desired speed.



water temperature

The temperature at the bottom of the screen shows the current water temperature. Use the Up and Down icon to set the desired temperature. The set point will appear in blue. After 3 seconds without any changes to the set temperature value, the current water temperature will reappear.

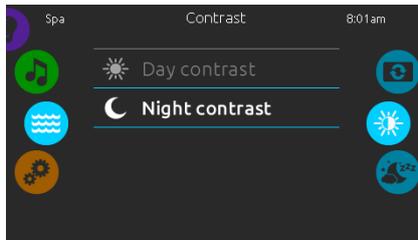
When the set value is lower than the current temperature, Cooling to xx.x will appear below. When the set value is higher than the current temperature, Heating to xx.x will be indicated under the value. Normally there is a short delay before the heating starts, during which Heating Suspended is indicated under the value.



display orientation

To modify the display orientation settings, slide the right wheel until the display orientation icon is highlighted in the middle.

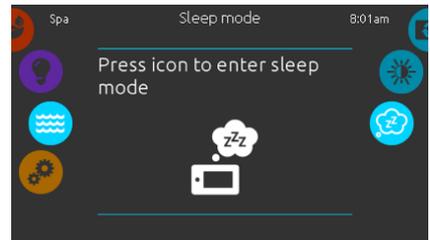
Simply touch the line of the orientation you want to select.



display contrast

To modify the display contrast settings, slide the right wheel until the display contrast icon is highlighted in the middle.

Simply touch the line of the contrast you want to select.



sleep

Press key to go directly into the sleep mode. In sleep mode, water splashing on the keypad can't inadvertently start/stop a pump.

settings

You can use the Settings mode to manage settings of your spa system.



To select the settings mode, slide the left wheel up or down until the settings icon menu is highlighted in the middle.

In the Settings page you can access the following:

- water care
- maintenance
- date & time
- keypad
- electrical configuration
- wifi
- miscellaneous
- about

To select an item, slide the right wheel until the desired icon is highlighted in the middle or press on the menu name.

CONTROL PANEL OPERATIONS

water care

The Water care page will help you set up your ideal filtration and heating settings. The Water care page will help you set up your ideal filtration and heating settings. Choose, set or modify one of the 5 suggested modes depending on your needs at any given time.



Away from home

In this mode the spa will always be in economy; the set point will be reduced by 20° F.



Beginner

The spa will never be in economy mode and will be filtering according to the pack's low level configuration.



Energy Savings

The spa will be in economy mode during the peak hours of the day and resume normal mode on the weekend.



Super Energy

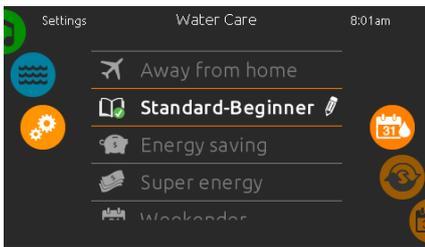
The spa will always be in economy mode during peak hours, every day of the week.



Weekender

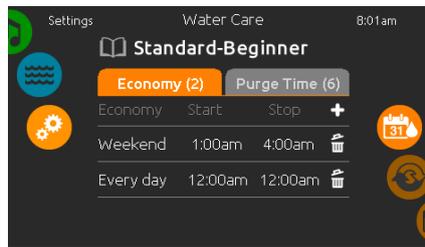
The spa will be in economy mode from Monday to Friday, and will run normally on the weekend.

modifying water care schedules



water care

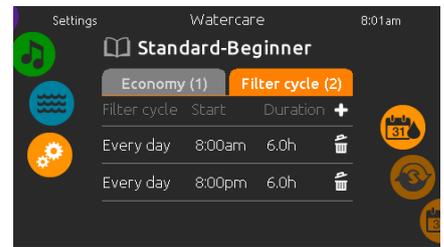
To modify a Water care category, touch the pen icon at the right end of the desired water care to open the selected Water Care menu.



economy

Touch the Economy tab to change the economy schedule. You can add economy schedules by touching the « + » symbol.

To delete a schedule, touch the garbage can icon at the right end of the desired line.



filter cycles

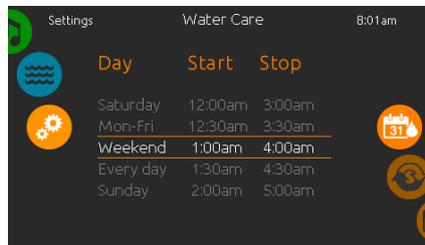
Touch the Filter cycle tab to change the filter cycle schedules. You can add filtration schedules by touching the « + » symbol.

To delete a schedule, touch the garbage can icon at the right end of the desired line.

In Economy mode, the set point will be reduced by 20°F, which means that the heating system will not be engaged unless the temperature falls to 20°F below the spa's set temperature.

The filtration schedule show on the screen will be applied to the main filtration pump, most likely pump 1. If your spa uses a circulation pump configured to run 24 hours, the screen will show you the purge setting instead of filtration.

The purges are pre-programmed for a fix number of minutes, therefore the duration will be set to N/A on the screen, and only the start time can be modified.

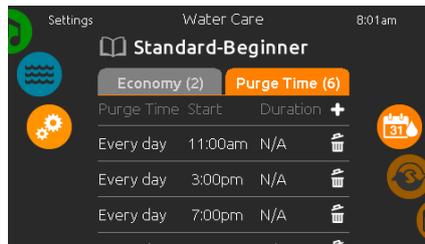


You can modify the programmed schedules by selecting one and adjusting the schedule.

You have several possibilities for the schedule (Mon-Fri, weekend, every day, or single days). The schedules will be repeated every week. The time and duration are set in 30 minute increments.



Once you have set the schedule, use the calendar icon to go back.



purges

Touch the Purge tab to change the purge settings. You can add purges by touching the « + » symbol.

To delete a schedule, touch the garbage can icon at the right end of the desired line.



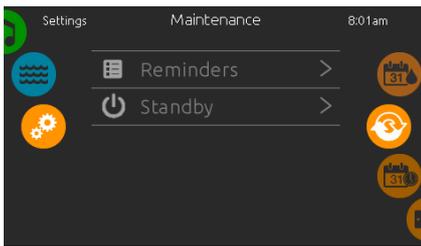
You can modify the programmed purges by selecting one and adjusting the schedule.

You have several possibilities for the schedule (Mon-Fri, weekend, every day, or single days). The schedules will be repeated every week. The time and duration are set in 30 minute increments. Once you have set the purge,

use the calendar icon to go back.

CONTROL PANEL OPERATIONS

maintenance



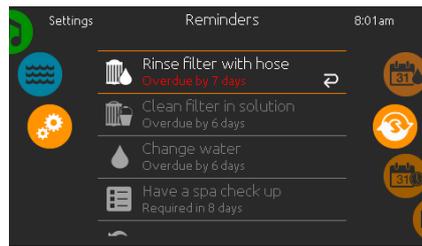
maintenance

To modify maintenance settings, slide the right wheel until the maintenance icon is highlighted in the middle.

From the Maintenance page you can access the following:

- Reminders
- Standby

Simply touch the line of the item you want to change.

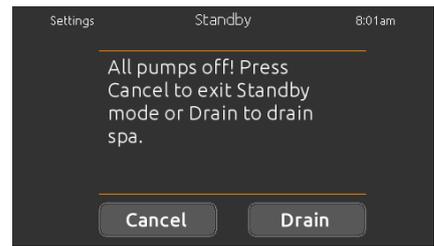


reminders

The in.k1000 keypad will provide reminders about maintenance required on your spa, like rinsing or cleaning the filter. Every task has its own duration, based on normal use.

The reminders menu allows you to check the time left before maintenance is required, as well as to reset the time once a task has been completed.

To reset a task, select it by pressing the curved arrow, then confirm when prompted. Once you have confirmed, the task will be reset.



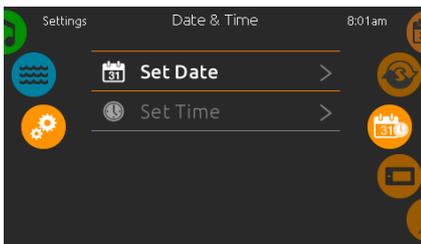
standby

The Standby mode allows you to service your spa. Pumps will stop for 30 minutes and will automatically restart after this time.

Once Standby mode is activated a screen will appear to show that pumps have stopped. The normal spa page will return at the end of maintenance.

When the Drain key is pressed, pump 1 low or circulation pump (depending on spa configuration) is activated to drain the spa.

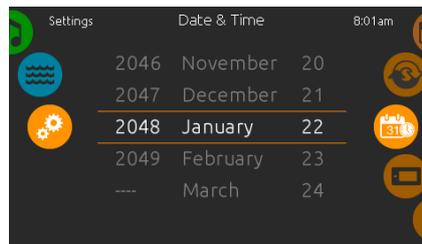
date and time



date and time

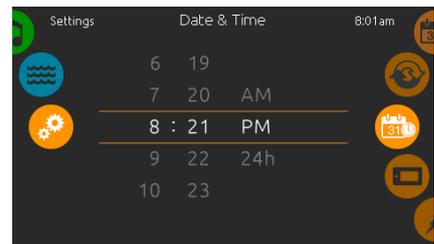
To modify date and time settings, slide the right wheel until the date and time icon is highlighted in the middle.

Simply touch the line of the item you want to change.



set date

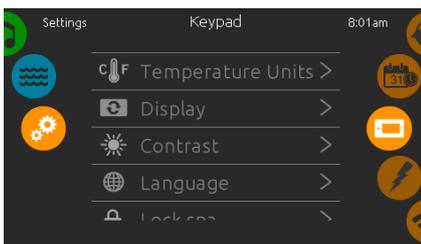
Here you can adjust the year, month and date. Simply swipe up and down the column you want to change, and select the desired value. When done, touch the calendar icon at the right of the screen.



set time

Here you can change the hour, minute and time format. Simply swipe up and down the column you want to change, and select the desired value. When done, touch the calendar icon at the right of the screen.

keypad settings



keypad settings

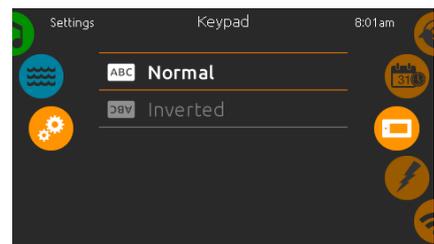
To modify keypad settings, slide the right wheel until the keypad icon is highlighted in the middle.

Simply touch the line of the item you want to change.



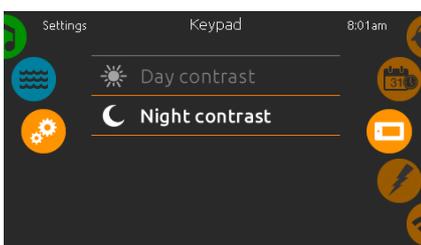
temperature units

Use this page to set or change the temperature in F° or C° units.



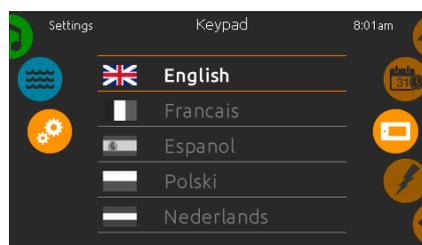
display orientation

Use this page to set or change the normal or inverted display orientation.



display contrast

Use this page to set or change the display day or night contrast.

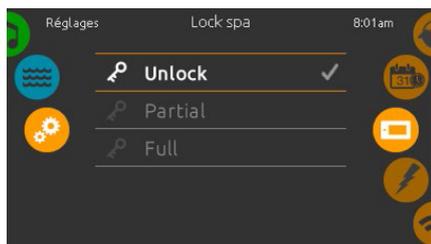


display language

Use this page to set or change the display language.

CONTROL PANEL OPERATIONS

keypad settings

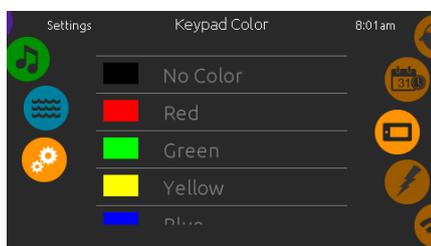


keypad lock/unlock (optional)

When this option is enabled, the user can partially or completely lock the keypad.

When Full Lock is selected, all functions are locked.

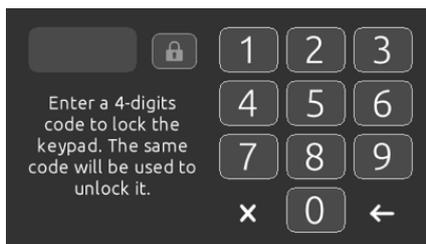
In Partial Lock, you may only activate accessories. Settings may not be changed in this mode.



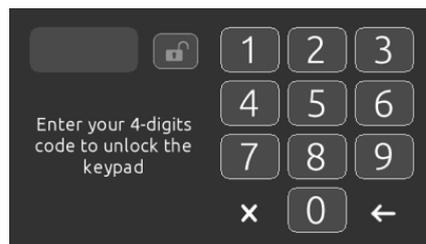
keypad color (optional)

If this option is available (depending on the spa configuration), the keypad rim color can be changed.

8 pre-defined colors are available. If the in.mix is installed, the keypad rim color can also be associated to an in.mix zone.



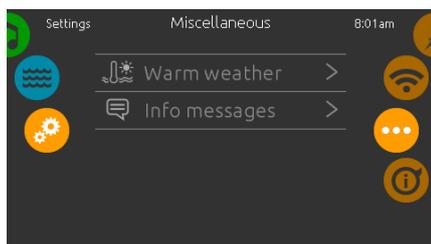
When the user wants to lock the keypad he is asked to select a 4-digit code. The same code will be needed to unlock the keypad.



Next time he wants to lock the keypad, he will be prompted again to select a 4-digit code (same functionality as a Safe in a hotel room).

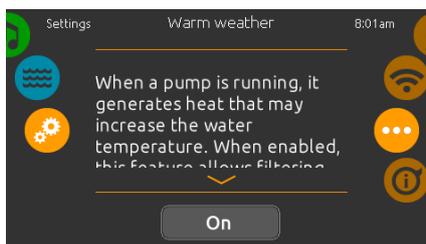
The keypad can be unlocked with a universal unlock code (3732) or by a reset of the keypad.

miscellaneous



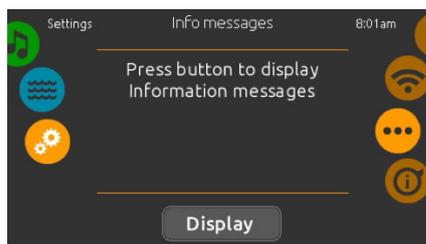
miscellaneous

This menu gives access to modify the Warm Weather option and info messages in the media center.



warm weather

The Warm weather option allows you to bypass the pack filtration over-temperature feature. When Warm weather is On, the filtration over-temperature is disabled. This feature allows the spa to continue filtering even though the water temperature is high.



info messages

Press display/hide key to modify message display:

If hide option is selected, smart winter mode message will only appear when a SWM purge is in action. Otherwise the message will always appear when the spa is in a SWM condition.

If hide option is selected, heating suspended and filtering suspended messages will not appear.

TROUBLESHOOTING GUIDE

too much water on display

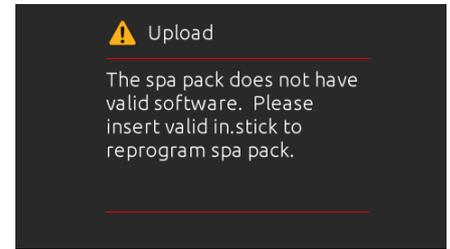
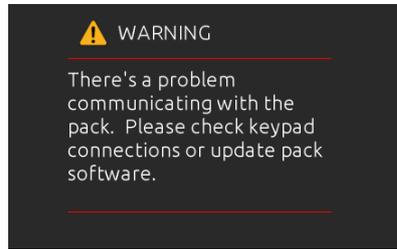


wipe screen

This message appears when too much water is detected on the touch screen. Simply wipe away excess water.

installation error messages

Upon connecting the in.k1000 to your spa system you may see one of two error messages. Please follow the instructions in the message or contact your dealer for more information.



DIAGNOSTICS - IN.K 1000 ERROR CODES

The error codes indicate a failure or problem that must be rectified to guarantee the good function of the n.YJ2 control system. The error messages listed below display on the keypad. For more information on error messages. Please refer to the IN.YE5 control system techbook at www.geckodocs.com

If this guide does not help you solve the problem please contact your dealer.

ERROR CODE	MESSAGE
AOH	ELEVATED INTERNAL TEMPERATURE
CFLO	NO FLOW CONDITION
COMM	VERIFY CABLE CONNECTIONS
ER1	SWIMSPA CONFIG. : SLAVE UNIT IS MISSING
F1	IN.XM2 FUSE # 1 IS BLOWN
F2	IN.XM2 FUSE # 2 IS BLOWN
F3	IN.XM2 FUSE # 3 IS BLOWN
FLC	THE PRESSURE SWITCH IS CLOSED
FLO	NO FLOW CONDITION FOR MORE THAN 2 HOURS
FLO	NO FLOW CONDITION
HIBR	ADD FRESH WATER TO THE SPA
HL	HIGH LIMIT CIRCUIT HAS TRIPPED!
HR	HARDWARE ERROR WAS DETECTED (THERMAL FUSE)
HR	A HARDWARE ERROR WAS DETECTED (RELAY STUCK)
LOBR	ADD BROMICHARGE TO SPA WATER
NOBR	ADD BROMICHARGE TO SPA WATER
OH	SPA TEMPERATURE IS TOO HIGH
PR	TEMP PROBES OR DETECTION CIRCUIT ARE DEFECTIVE
RH ID	IN.XM2 AND IN.THERM INCOMPATIBLE
RH NC	COMM. ERROR BETWEEN IN.XM2 - IN.THERM
SC ER	ERROR DETECTED DURING THE LEARNING MODE
SP IN	INPUT VOLTAGE ISSUE
SUPP	CONNECT POWER CORD TO 240 V SOURCE
UPL	THE SPA PACK DOES NOT HAVE VALID SOFTWARE. PLEASE INSERT VALID IN.STICK TO REPROGRAM SPA PACK.

TROUBLESHOOTING GUIDE

DIAGNOSTICS - OPERATION

Once commissioned, your Riptide 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.

OPERATING PROBLEM	ANALYSIS	ACTION REQUIRED
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 10-12 and contact your dealer.
Water jets turns off automatically when using the spa.	<ul style="list-style-type: none">• The default time setting has switched off the jets.• The pump motor is overheating.	Press the pump button to restart the pump. 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">• The water pump has an airlock.	Try to restart the jet. 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">• The jets are blocked.• The water pump's air 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.• There is not enough water in the spa.	Check whether there are foreign bodies inside the filter. Add more water to the spa.

FAULT-FINDING

For fault-finding and other technical help with your in.YJ2 control system please visit the Gecko online resource at:

www.geckodocs.com

MAINTENANCE

WATER CHEMISTRY

Tap water that is safe to drink is not always right for your spa. Normal tap water usually contains 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 spa as well as the people who 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 spa shell, equipment, and piping.
3. Clogged filters.

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

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

2. Weekly shock dose As your 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 or double dose of CHLORINE GRANULES.

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 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 spa and its equipment; cloudy water; a prematurely dirty filter; and less effective chlorine sanitation. To correct high pH levels, add a pH REDUCER.

Low pH levels (under 7.2) can cause the following: Discomfort to the user and corrosion to the 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 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 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 Riptide 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 spa's surface as well as corrosion to the 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 Riptide 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 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 spa water add a small amount of FOAM REDUCER.

8. Clearing cloudy water There are two basic reasons that 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. Sanitizing with Non-Chlorine Shock (potassium peroxymonosulfate) When sanitizing your spa with Non-Chlorine Shock you should add the correct dose directly to the spa water with the jets running.

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

On a weekly basis it is important to shock your spa with NON-CHLORINE SHOCK or double dose of CHLORINE GRANULES.

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

MAINTENANCE

STARTING YOUR SPA WITH NEW WATER

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

Note: *If you live in a hard water area, fill the spa with soft water if available. The calcium balance should be between 40-250 ppm.*

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

3. If possible, have your authorised Riptide 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 7.2-7.6.

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 SPA WATER

Sanitizer and pH Levels

It is important to test and adjust the sanitizer and pH levels of your 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 Riptide dealer for assistance.

Shock dose

Once a week, and when the spa is not in use, shock

dose the spa water by adding the following:

Add four tablespoons of NON-CHLORINE SHOCK to the spa water.

Stain and scale control

Use a 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 spa water is cloudy call your Riptide dealer for advice.

WATER CHEMISTRY TROUBLESHOOTING

Prior to each 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 spa section in these conditions could result in a skin rash or other irritation.

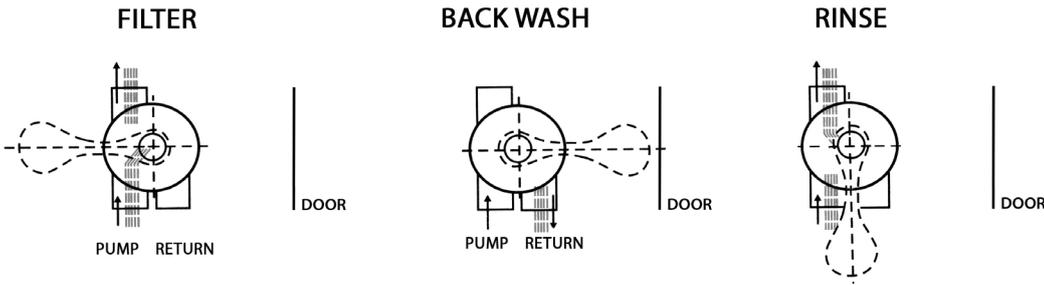
For assistance in handling water chemistry problems, consult your authorised Riptide dealer or another service centre capable of performing a detailed Water Analysis.

RIPTIDE 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	10	20	30	40	50	60	70	80	90	100
RIVERFLOW												
1.965	Reduce	Sodium Bisulphate- 'pH Reducer'	47.16g	94.32g	141.48g	188.64g	235.80g	282.96g	330.12g	377.28g	424.44g	471.60g
1.965	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	39.30g	78.60g	117.90g	157.20g	196.50g	235.80g	275.10g	314.40g	353.70g	393.00g

MAINTENANCE



SAND FILTER

On a regular basis, check your sand filter pressure gauge and when the reading gets to approx 20 psi you will need to clean the sand filter.

1. Open the cabinet to gain access to the sand filter.
2. Depress the handle and move to backwash position.
3. Run for about 2 minutes.
4. Move handle to rinse and run until the pipe is clear.
5. Move lever back to original position and restart the pumps.
6. Shut cabinet

SPA SHELL CARE

The spa surface is durable and easy to clean:

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 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 spa shell and void your warranty.

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

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 it 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 spa: Debris from wind, trees and spa users will occasionally accumulate on the bottom of your spa. Your 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 Grit Gitter. If you do not have a spa vacuum, please contact your authorised Riptide dealer.

RIVERFLOW SPAS LIMITED WARRANTY

2 Year Structural and 2 Year Surface Warranty

Riptide warrants the sub frame and structure not to crack or fracture for a period of two years from delivery date. Additionally, the Lucite™ surface material of the Riptide Spa is warranted not to peel, crack, wrinkle, blister, yellow, efface or delaminate for a period of two years from the spa's delivery date. The Lucite™ surfaces are non-permeable and will not absorb odours, bacteria or pollutants.

1 Year Trim (Tile) and Cover Warranty

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

2 Year Gecko Hi Flow Heater Warranty

Riptide warrants the Gecko Hi Flow heater against fault in manufacture or faulty workmanship for a period of two years from its delivery date.

2 Year LED Light Warranty

Riptide warrants the LED lighting chains and bulbs to be free from defects of materials and workmanship for two years.

No-Nonsense Warranty Riptide will make no call-out or labour charges or ask for part payment of parts for the entire warranty period, provided that your Riverflow Spa has had an annual service within the last 12 months to validate the warranty.

Warranty subject to terms and conditions .

2 Year No Leak Warranty

Riptide warrants your Riverflow Spa not to leak for a period of two 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 and light fittings.

2 Year UV Resistant Low maintenance cabinet Warranty

Riptide 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 two years from the spa's delivery date. This warranty specifically covers the cabinet's structural integrity, including all glue and integral bonded joints.

2 Year Component Warranty

Riptide warrants the electrical components, pumps, control box, and other Riptide Spa components against malfunction or defects in workmanship for a period of two years from its delivery date. Filter cartridges, 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 purchaser.



Extent of warranty

This warranty extends only to the original consumer purchaser of the Riptide spa when purchased and originally installed or relocated in the boundaries of the country of purchase. The Riptide spa warranty terminates upon any transfer of ownership or if the spa is installed or relocated outside the country of purchase. The customer must register their purchase with Riptide, 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 Riptide will repair the Riptide spa. To obtain service, contact the authorised service agent who sold you the spa. There is no charge for parts or labour to repair the spa or its components. Service agents reserve the right to assess reasonable call out fees or travel based upon their individual policies. If the spa is installed outside of the normal servicing area of the selling dealer, or if normal access to the spa is not possible, extra travelling expenses and costs of access will be charged. These costs are not covered by this warranty.

Riptide 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 Riptide. 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 spa, which shows the date of purchase. Notice must be given Riptide Pools Limited, 41 Robjohns Road, Chelmsford, Essex, CM1 3AG, UK
Tel 01245 265036 ext 2, Monday to Friday.

Annual Service Requirement

To maintain your warranty it is required that you have your spa serviced and your Service Book signed once every 12 months by a Riptide approved dealer.

Acts invalidating warranty

This warranty is void if your spa has been improperly installed, subjected to alteration, misuse or abuse, or if any repairs on the spa are attempted by anyone other than an authorised representative of Riptide. 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 spa other than in accordance with Riptide's printed instructions, or use of the spa in an application for which it is not designed. Specifically: use of the spa in a non-residential application; damage caused by the operation of the spa outside the specified voltage requirements (230 +/- 10%), operation of the 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 Riptide; damage caused by allowing undissolved sanitizing chemicals to lie on the spa surface (no 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 spa surface caused by leaving the 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 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.

Disclaimers

Riptide shall not be liable for loss of use of the Riptide 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 Riptide or any of its representatives be held liable for injury to any person or damage to any property however arising.

Riptide Pools Limited
United Kingdom



www.riptidepools.co.uk