



OWNER'S MANUAL



SUMMER 2019

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The Starlight™ Collection model range

Corona

✎ x3



Solstice

✎ x5



Orion

✎ x5



The Starlight™ Collection model range

Eclipse

👤 x6



Stellar

👤 x7



Astra

👤 x8



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 Starlight 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.

INSTALLATION & SET-UP

SELECTING A SITE FOR YOUR RIPTIDE SPA

Your Riptide 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 250-500 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 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.

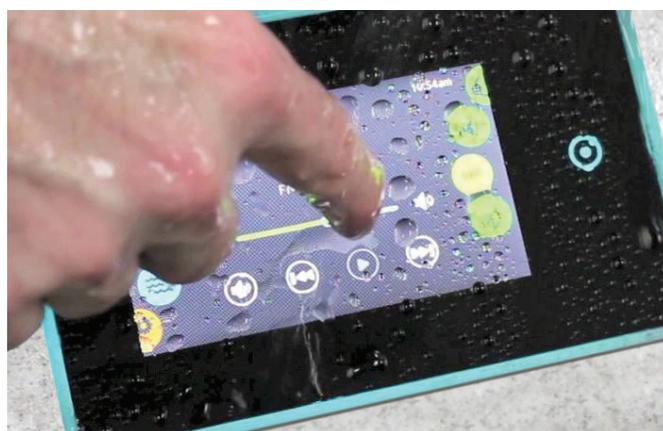
Audio system

The integrated Gecko bluetooth audio system features 2 transducer speakers and a sub woofer speaker.

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.

Keypad

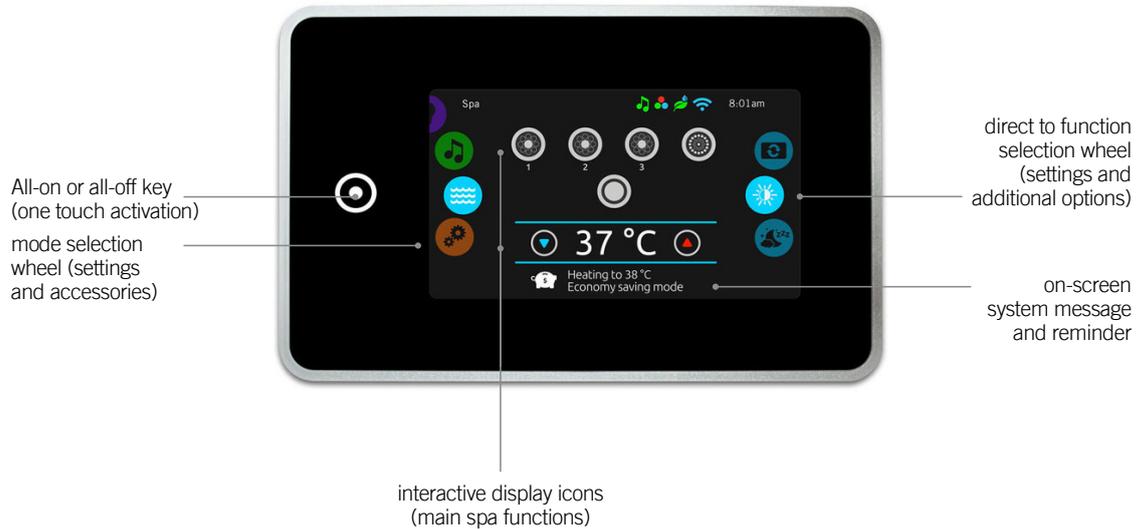


The Gecko in.k1001 capacitive touch screen display keypad will operate under wet and rainy conditions.

CONTROL PANEL OPERATIONS

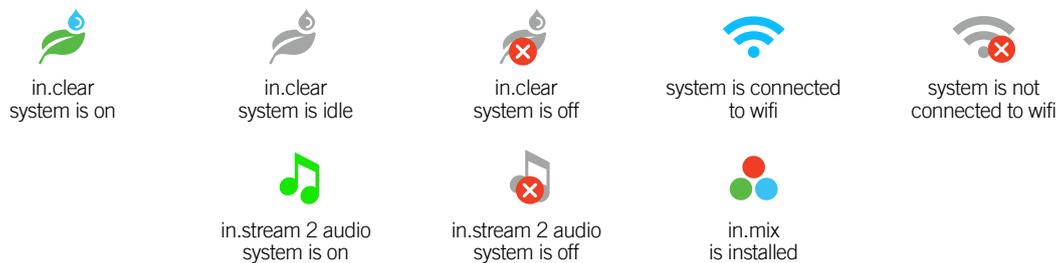
MAIN CONTROL PANEL in.k 1001 Touch Screen Keypad

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.k1001 user interface designed to let spa users interact intuitively with their spa and its value-added accessories.



notification icons

Notification icons at the top right-hand side of the screen show the status of connected value-added accessories.



spas functions

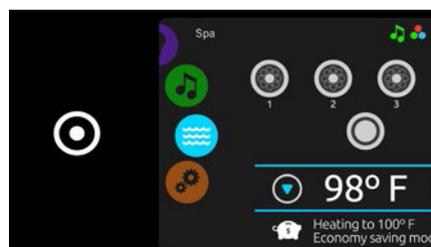
Quick and easy step-by-step instructions to control the main functions and to configure system settings of your spa from its in.k1001 main spa keypad.



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.k1001 features an all-on or all-off one touch activation key. When pressed, it tops or starts all working components and accessories at once.

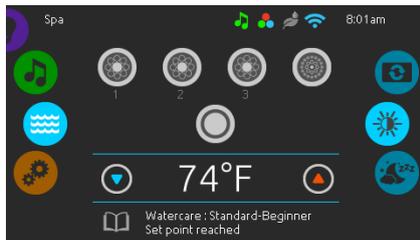
From the home page, you can access the following modes:

- sanitization (with in.clear connected)
- audio (with in.stream 2 connected)
- 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



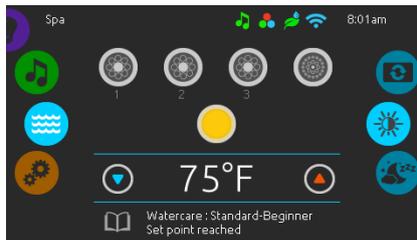
spa mode

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

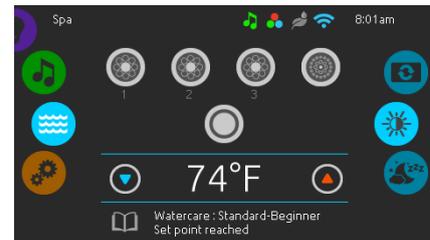
To select an option, slide the right wheel up or down until the desired icon menu is highlighted in the middle.



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.

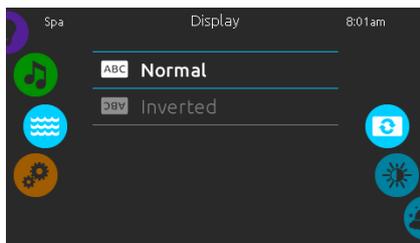
Icons on the screen will reflect the speed or state of the devices running on your spa. When an accessory has more than one speed, press the button until it reaches the desired speed.



water temperature

The temperature at the bottom of the screen shows the current water temperature. Use the Up and Down icons 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.

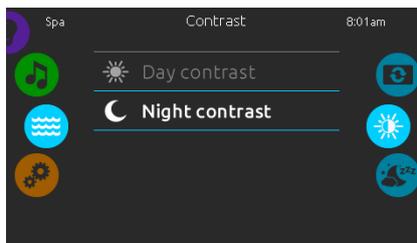
When the set value is lower than the current temperature, Cooling to xx.x will appear below. When the set value is higher than the current temperature, Heating to xx.x will be indicated under the value. Normally there is a short delay before the heating starts, during which Heating Suspended is indicated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

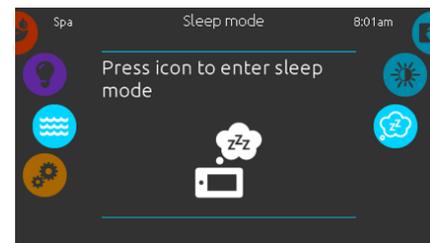
Simply touch the line of the orientation you want to select.



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

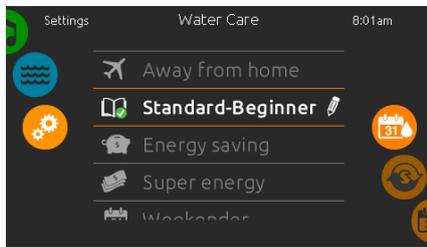
The spa will always be in economy mode during peak hours, every day of the week.



Weekender

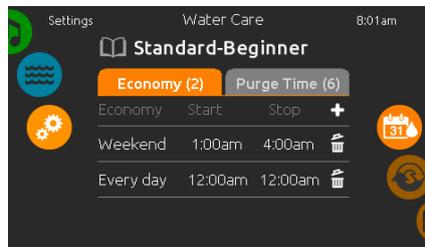
The spa will be in economy mode from Monday to Friday, and will run normally on the weekend.

modifying water care schedules



water care

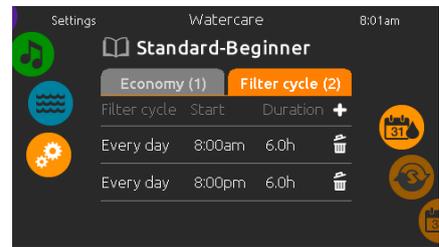
To modify a Water care category, touch the pen icon at the right end of the desired water care to open the selected Water Care menu.



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.

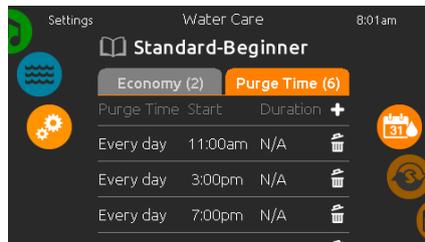


You can modify the programmed schedules by selecting one and adjusting the schedule.

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.

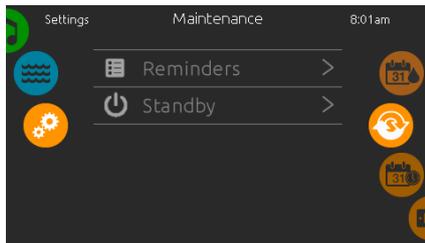


You can modify the programmed purges by selecting one and adjusting the schedule.

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



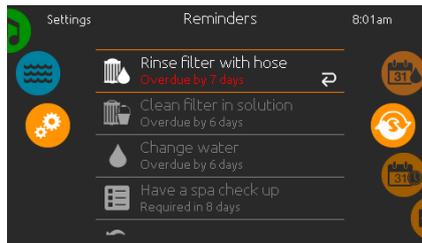
maintenance

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.

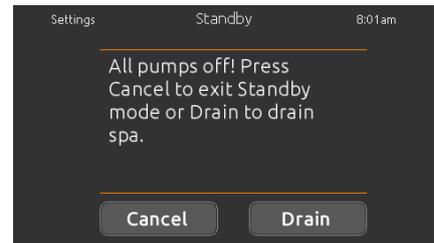


reminders

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.



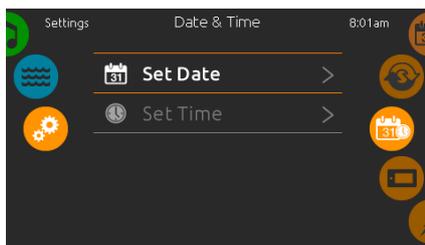
standby

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.

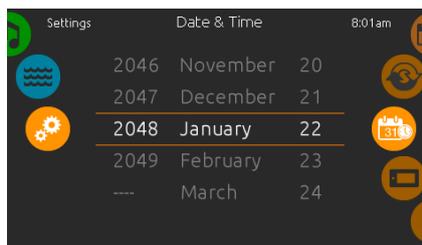
date and time



date and time

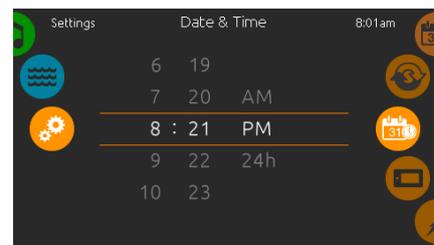
To modify date and time settings, slide the right wheel until the date and time icon is highlighted in the middle.

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



set date

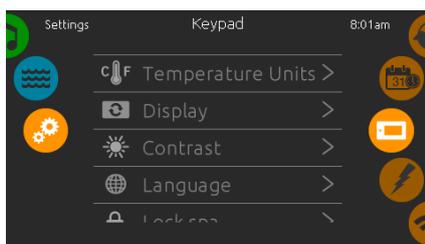
Here you can adjust the year, month and date. Simply swipe up and down the column you want to change, and select the desired value. When done, touch the calendar icon at the right of the screen.



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

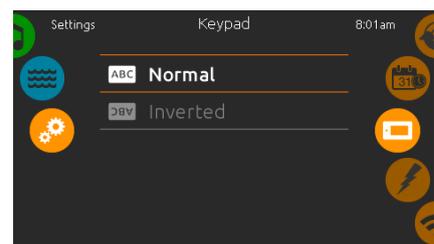
To modify keypad settings, slide the right wheel until the keypad icon is highlighted in the middle.

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



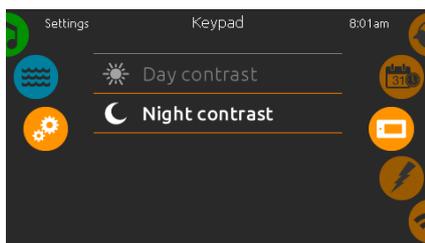
temperature units

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



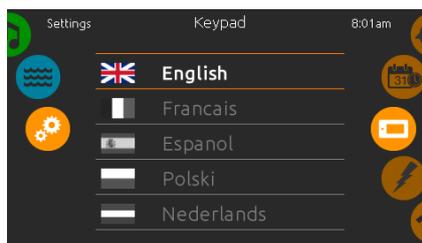
display orientation

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.

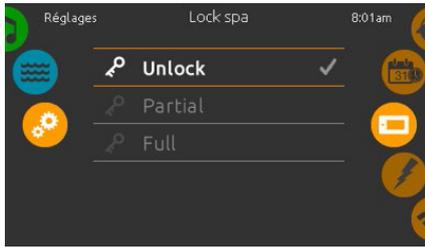


display language

Use this page to set or change the display language.

CONTROL PANEL OPERATIONS

keypad settings



keypad lock/unlock (optional)

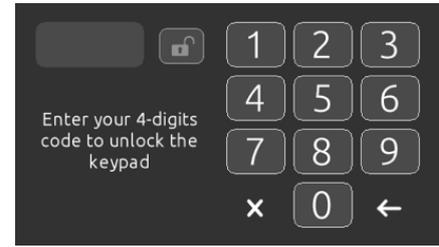
When this option is enabled, the user can partially or completely lock the keypad.

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.

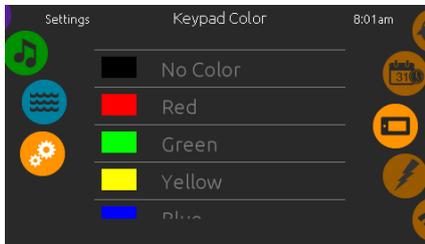


When the user wants to lock the keypad he is asked to select a 4-digit code. The same code will be needed to unlock the keypad.



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.

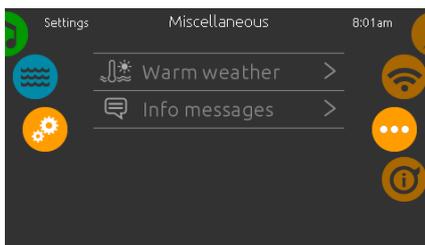


keypad color (optional)

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

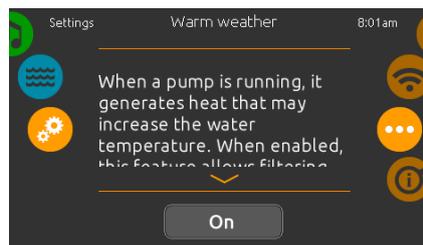
8 pre-defined colors are available. If the in.mix is installed, the keypad rim color can also be associated to an in.mix zone.

miscellaneous



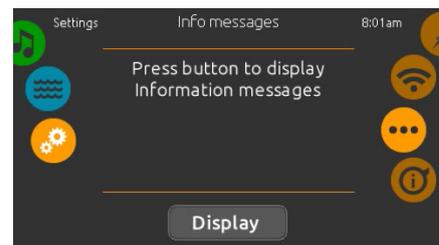
miscellaneous

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

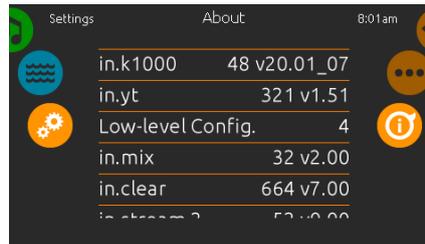
Press display/hide key to modify message display.

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.

CONTROL PANEL OPERATIONS

about your spa system



about

To get info about your spa system, slide the right wheel until the about icon is highlighted in the middle.

Information about the in.k1000 software number and the revision numbers of the different components of your system will be displayed.

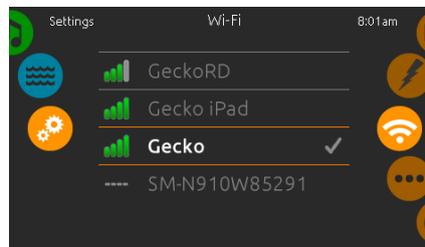
wifi

(This function is available only if an in.touch module is connected to your system.)



wifi settings

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



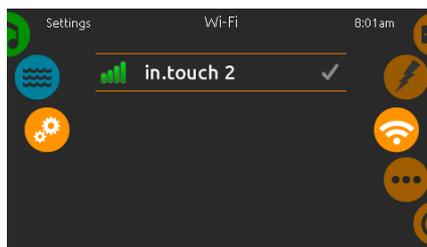
wifi networks

After a few seconds the available networks will appear on-screen, as well as their signal strength. Select network will be identified by a green check mark. Swipe Up or Down the list to select your network.



wifi network password

If the wifi network is password protected, enter it when keyboard prompts. Use Enter key to validate the password. If no password is required the in.touch will connect automatically.



wifi (in.touch 2)

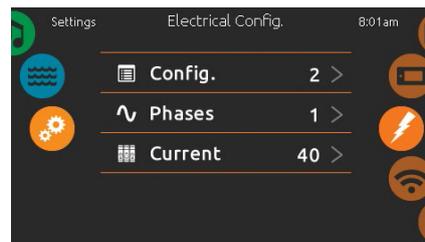
When a in.touch 2 is detected, this network will appear.



in.touch module not connected

If the in.touch module of your spa system is not connected, this message will be displayed.

electrical configuration



Please do not make changes in this section unless you are a qualified electrician.

CONTROL PANEL OPERATIONS

audio mode

(only available if the system detects a connected in.stream 2 audio station)



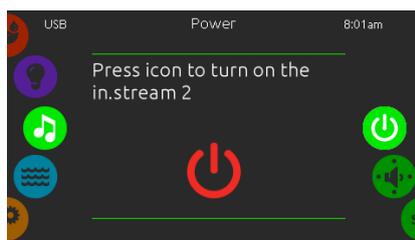
To select the audio mode, slide the left wheel up or down until the audio icon menu is highlighted in the middle.

In the Audio page you can access the following:

- in.stream 2 on/off
- speaker calibration
- audio source selector
- disconnect bluetooth

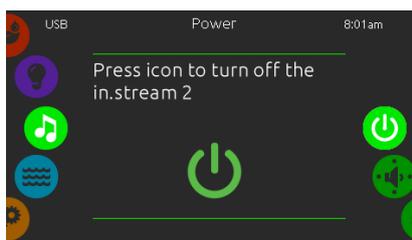
To select an item, slide the right wheel until the desired icon is highlighted in the middle.

on/off



turn in.stream 2 ON (icon red)

Slide the right wheel until the power on/off icon is highlighted in the middle. Press the icon at the center of the screen to turn in.stream 2 on.



turn in.stream 2 OFF (icon green)

Press the icon at the center of the screen to turn in.stream 2 off.



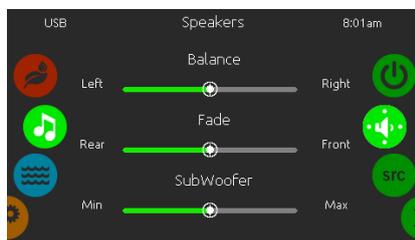
main display

Press Play / Pause to start or pause playback of audio files.

Drag the volume slider to adjust the volume or tap the mute button to mute or unmute sound.

Press the last track or next track buttons to go to the previous song or skip to the next.

speakers setting



to modify your speaker settings

Slide the right wheel until the speaker calibration icon is highlighted in the middle.

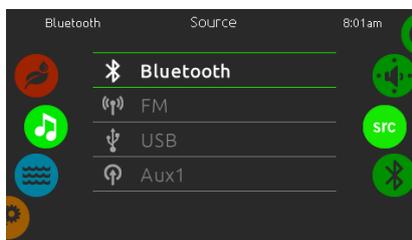
You can adjust:

- balance
- fade
- subwoofer

Use the sliders to change the speaker settings at the desired level.

The fade and subwoofer sliders will only appear on the screen if the corresponding speakers are installed on the in.stream 2.

audio source selector



to select an audio source

Slide the right wheel until the source icon is highlighted in the middle.

In the menu list, the following sources are available:

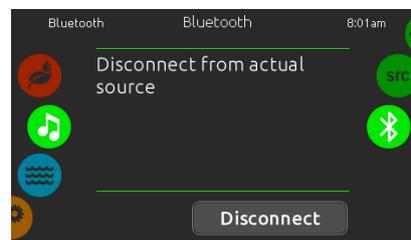
- Bluetooth
- FM
- USB
- Aux. 1

Simply select the desired one to use.

Note that only the sources installed on the in.stream 2 will be displayed in the source menu.

Please note that the Play/Pause and Change Track functions apply to devices using Bluetooth technology and USB, and will not work when AUX is selected as the source.

disconnect bluetooth



If a device with Bluetooth technology is connected to the in.stream 2, you can disconnect it by pressing the Disconnect key at the bottom of the screen.

Doing so will also prevent the in.stream 2 from automatically reconnecting to this specific device until it has been reconnected using the device itself.

TROUBLESHOOTING GUIDE

too much water on display

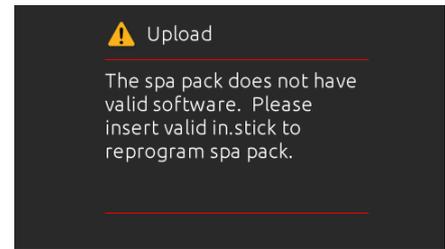
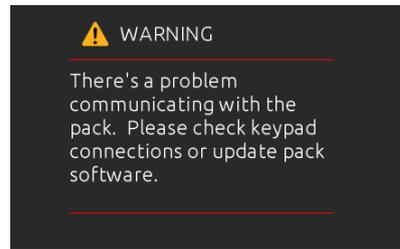


wipe screen

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 1001 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	HR	A hardware error was detected (Relay stuck)
CFLO	No Flow condition	LOBR	Add BromiCharge to spa water
COMM	Verify cable connections	NOBR	Add BromiCharge to spa water
ER1	SwimSpa config. : slave unit is missing	OH	Spa temperature is too high
F1	in.xm2 Fuse # 1 is blown	PR	Temp probes or detection circuit are defective
F2	in.xm2 Fuse # 2 is blown	RH ID	in.xm2 and in.therm incompatible
F3	in.xm2 Fuse # 3 is blown	RH NC	COMM. error between IN.XM2 - IN.THERM
FLC	The pressure switch is closed	SC ER	Error detected during the learning mode
FLO	No Flow condition for more than 2 hours	SP IN	Input voltage issue
FLO	No Flow condition	SUPP	Connect power cord to 240 V source
HIBR	Add fresh water to the spa	UPL	The spa pack does not have valid software. Please insert valid in.stick to reprogram spa pack.
HL	High Limit circuit has tripped!		
Hr	Hardware error was detected (Thermal fuse)		

DIAGNOSTICS - OPERATION

Once commissioned, your Riptide pool 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 pool. Check the error message on page 16 and contact your dealer.
Water jets turns off automatically when using the pool.	<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 air block. 	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 pool. 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 pool. 	Check whether there are foreign bodies inside the filter. Add more water to the pool.

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

FUNCTIONS

Bar Top Controls

By turning Diverter Control you can divert the water current between the different spa jets. You can also adjust the Air Control to allow more air to join the spa water, creating a stronger massage.



Air Control 75mm



Jet Diverter Control
103mm
(Larger control on spa)

Silver Ions Cartridge Replacement

Your Starlight Spa is equipped with a Yellow Ag Silver Ions Cartridge which helps combat bacterial growth in your hot tub.

Every 4 months, when you change your spa water, replace your silver ions cartridge and dispose of the old one. Ensure that your Riptide B Type Filter is clean and positioned on to the suction with the yellow circle. The B Type Filter has an aperture in the top to receive the silver ions cartridge, which is suspended in the middle of the filter for the most effective distribution of ions.

Please Note: For the most effective circulation and filtration of your spa, regularly clean the filters and change your silver ions cartridge every 4 months.



Compartment Door

For easy access, all components in Starlight Spas are positioned on the same side as the compartment door. In the event that an engineer needs to get inside your spa all that is needed is to pull away the steps and open the cabinet.

Clean Cycle

At the beginning of the filtration cycle one pump will automatically operate for one minute to circulate your 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.

Freeze Protection

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

OPTIONAL FOLDAWAY COVER LIFTER

Open and close the Optional Foldaway cover lifter system on your Starlight Spa with the simple to use remote control. Alternatively, you can use the detachable, magnetically coded Smart Key, which also protects the system against unauthorized use - just turn the illuminated button and the spa cover closes automatically.

For total peace of mind, the Foldaway has a child-safe automatic stop feature. If there is any obstruction when in operation, the cover lifter system will fully open within seconds and move the cover into it's hidden parking position.



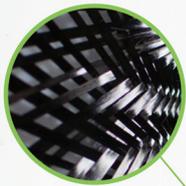
Remote control



Smart Key



FEATURES



Ultralight weight carbon fibre
Manual override mechanism



Cover can be parked behind spa or at 90°



Self retaining drives
One frame alloy body
Resettable safety clutch
Redundant position sensors



Smartphone app with client setup and expert mode setup wizard for easy installation
Cover weight scan
Diagnostic functions
Remote control



Child-safe, illuminated coded Smart Key



System envelope protection
Firmware update via Bluetooth
Automatic position error correction
Load sensitive obstacle recognition
Safety guard for system monitoring

DO NOT LET CHILDREN USE THE REMOTE CONTROL OR OPERATE THE FOLDAWAY POWER SAFETY COVER WITHOUT SUPERVISION.

Proper Use

This spa cover lifter system is designed for domestic use only. Please read the safety instructions carefully and familiarize yourself with the new features and functions that come with this appliance.

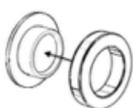
The lifter must not be operated by children and must never be engaged when the spa is in use or persons or animals are within danger or movement areas. Lock the lifter system after opening the spa and before spa utilization by removing the smart key. Keep the

lifter system locked when the spa is closed by removing the smart key to prevent unauthorized operation in your absence. Riptide is not responsible for water logged or overweight covers and assumes no responsibility for system failure due to water logged or obstructed covers.

The foldaway lifter system may not function properly with third party covers exceeding the designed total weight and/or incompatible structures. Ignoring the cover lifetime signal may shut down the lifter system and may require consequent professional maintenance.

OPTIONAL FOLDAWAY COVER LIFTER

DAILY OPERATION



Getting started - unlock the lifter system

Dock the smart key (contains magnets) on the white illuminated docking area. The white illumination will change to green as soon as the smart key is sensed and decoded by the spa controller. The spa cover lifter is now ready to use.

Open the spa

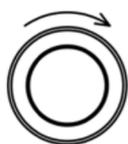
Rotate the smart key one notch clockwise to open the spa cover

Or

Press the open symbol on the optional infrared remote control

Or

Touch the open symbol on the remote control screen of your foldaway smartphone app.

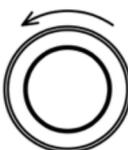


Caution: Make sure by visible contact that the movement area of the lifter and the parking area of the spa cover is free.

Caution: Parts of the vinyl cover can stick to the spa surface. An indicator for such a condition is, when the lifter raises the mid cover section before lifting the front lid. Stop the lifter and pull the front cover on the handle gently upwards in order to detach the cover from the spa surface manually.

Close the spa

Rotate the smart key one detent counter clockwise to close the spa cover.



Caution: Ensure by visible contact and personal presence throughout the closing routine that no bathers are inside the spa and no persons or animals are about to enter the spa.

Manual stop

Any additional command on the smart key while in motion, pressing STOP on the optional remote control or undocking the smart key stops the lifter immediately. Stopping is done with no time delay whereas a drive command starts with a preprogrammed time ramp for a smooth operation.

Automatic stop

Upon reaching the programmed end position in open direction, the lifter stops with a time ramp in order to prevent cover teeter.

The foldaway lifter system moves the cover within approx. 30 sec into the programmed end position. While the motors run the illumination of the dock changes to yellow. The foldaway controller continuously monitors:

- lifter load (total cover weight)
- temperature of the power stage
- cover position
- synchronism of the lifter arms
- motor currents

Each cover position is associated with a reasonable load programmed in the micro controllers memory. Exceeding such a load stops the lifter and/or triggers a visible alarm on the docking panel.

The lifter will not travel beyond programmed limits independent of commanded direction.

Cover Lifetime

The cover lifetime monitor is a program routine that estimates the quality of thermal insulation of the cover by measuring its gain in weight with time.

A water soaked cover has reduced ability to protect from cold environment and gains in weight.

A water soaked cover can vary in weight over time depending on the environmental conditions.

The docking light will illuminate in blue blinking whenever the micro controller senses heavy loads while in motion that do not exceed the shutdown limit.

A blue blinking illumination is considered normal when:

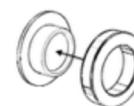
- the vinyl of the insulation cover sticks to the spa shell while opening
- the cover is contaminated e.g. thin layer of snow

Caution: The lifter control logic cannot differentiate between a water soaked cover and cover contamination.

Caution: Ignoring the blue blinking signal for a longer period may end in a lifter shutdown situation.

Lock the spa cover lifter system

Take off the smart key after the system has come to a full stop including the reverse sequence of the drives. The green illumination will change to white. The spa cover lifter is now locked.



Maintenance

Inspect your cover periodically. Do not use a suspect cover system. Perform a visual check periodically, specially of the cover carriage mechanism. The front cover should be slightly tilted towards the spa front as soon as the back cover comes to full rest. The position of the stopping element should be equal on both sides.

Care Simply wipe off dust and moisture from surfaces using a soft cloth e.g. microfiber.

Caution: Keep sharp objects away from the carbon support coating. Damaged or badly scratched coatings allow water to infiltrate the structure.

In freezing outside conditions the transparent coating can chip off upon freezing of water underneath.

Caution: Avoid acid and caustic solutions on the carbon coating.

Flush the metal part of the smart key with fresh water after contact with highly chlorinated spa water. The smart keys construction allows enclosed water to run off when docked or when laying flat with the plastic facing downwards. When the carriage mechanism inside the carbon supports is impaired by sand, wet snow or other debris follow the steps below:

- Close the spa cover.
- Use ordinary water to wash out all loose particles.
- Water and debris will run off.
- Let the system dry before further utilization.

OPTIONAL FOLDAWAY COVER LIFTER

SAFETY DEVICES

Safety devices protect the user and must not be modified or bypassed.

Smart key docking system

Lock

The smart key is magnetically coded and key to any lifter operation. When pulled the foldaway lifter system is locked and the safety controller will ignore any attempt of lifter engagement. A white orientation light will illuminate the docking area during night.

Unlock

Dock the smart key with the black plastic facing the spa on the white illuminated docking station and wait for the LED ring to engage in green color. The system is now unlocked and ready to use.

Cover quick release mechanism

The cover is attached to the lifter's internal slider mechanism on both sides with plastic circlips. Simply remove the circlip and push the carbon support outward to detach the cover from the carriage mechanism.

Caution: The cover will move down freely depending on the current position after releasing both sides.

Self locking drive

The drives are self locking in any position even without power supply.

Overload protection

Each drive is equipped with a mechanical, factory set safety clutch, that opens for overload and protects the cover lifter system and the spa cabinet. The load must exceed approximately 60kg / 132lbs.

Caution:

When the clutch opens the cover is exposed to free fall in open or closed direction depending on the direction of the overloading force and the covers actual position. The clutch will close again automatically when the overload condition is removed.

The safety clutch is a safety device and not designed for regular utilization. Frequent clutch activation reduces the force needed to unlock the drive due to material wear and is not covered by warranty.

The lifter must never be engaged when the cover is obviously twisted. (see Troubleshooting).

Strong wind and gusts can exceed the disengage force of the mechanical safety system and allow the cover to move out of the controlled position.

Safety controller

The foldaway lifter system comes with a dual microprocessor controller with unique safety features:

Safety power up ensures the position data in the processors memory is correct.

Safety guard is a dedicated safety micro processor that supervises the main processor for correct operation.

Safety relay Controlled by the safety guard, it disconnects the power stages from the supply in case of any not commanded movement.

Periodic self test the safety circuit continuously monitors the function of all relevant internal parts to ensure a safe operation.

DANGER AREAS

The foldaway lifter system is able to detect certain objects in areas with a potential risk of injury. Depending on programmed parameters the lifter setup can be less sensitive to small objects e.g. hands and arms of children.

KEEP BODY PARTS AWAY FROM MOVING LIFTER PARTS.

KEEP BODY PARTS OUT OF THE RED TRIANGLE IN ILLUSTRATION.

AVOID DROWNING RISK - ENTRAPMENT POSSIBLE.

FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN INJURY OR DROWNING.

INSPECT COVER AND Lifter PERIODICALLY.



TROUBLESHOOTING GUIDE

The color of the smart key illumination helps in identifying the problem:

A **white blinking** illumination of the docking light indicates an inconsistency in the stored lifter position data. A new alignment must be initiated manually.

A **white/blue** or **green/blue** blinking illumination indicates that the system is not setup correctly. Contact your dealer or start a new system setup with the foldaway app.

A **blue continuous** illumination indicates a current trip condition (overload, obstacle), a system fault (over temperature in the drive power stages, lack or invalid position sensor data, broken drive cable) or an active or incomplete alignment routine. If alignment is in progress - wait for completion. If alignment was stopped - start again manually.

Remove all obstacles and/or allow the system to cool down and command the drives in the opposite direction of the last utilization. If the failure is consistent consult your customer service.

A **red continuous** illumination indicates a failure in the safety relay. Please consult an authorized customer service. Close the spa cover manually. (see also chapter cover quick release)

A **red blinking** illumination indicates a failure in the automatic power stage utilization. Detach the controller from the main supply and wait for 15 seconds. Re-establish power and try lifter utilization. If the failure persists consult your local dealer. Close the spa cover manually. See also Cover quick release section.

OPTIONAL FOLDAWAY COVER LIFTER

TROUBLESHOOTING Q&A

Q: When closing the spa, the lifter stops as soon as the rear cover settles down.

A: The stop nut in the carriage mechanism is not adjusted correctly. The controller misinterprets the wrongly tilted front cover as an obstacle since the cover does not move down freely.

Use an allen key to adjust the stop nut inside the carbon support:

The setup is correct when the forward cover, when laterally viewed is a few degrees tilted towards the front spa panel and when the back cover rests flat on the spa shell.

Start adjustment on one side. Once the correct position of the nut is located, copy that adjustment to the other side. Close the spa and open again. Check for correct tilt and if necessary repeat above steps.

Q: I see a small imbalance between the carbon arms when opening the spa.

A: The drive is loose.

Open the spa half way until the forward cover is tilted approximately vertical.

Take off the circlip from the slider pin and disconnect the slider from the dowel pin.

Move the arm manually forward and back and check the possible travel distance. Max allowed swivel is 15mm (approx. 1/2 inch) at the tip of the arm.

If the distance is greater, unscrew the black drive cap. Check the tightness of center allen screw. If the screw is loose, move the arm manually forward and back while tightening the screw.

The possible way of travel will become more narrow while tightening the screw. Tighten the screw firmly. Put the black drive cap in place and reconnect the slider to the pin, put on the circlip. Initiate a manual alignment.

Q: I cannot control my spa lifter with the Smart key. The App control works fine.

A: The Bluetooth remote control signal overrides the Smart key and the App control has priority.

Always close the App remote control screen when not in use in order to be able to control the lifter on the Smart key panel properly.

Q: There was a metallic noise and suddenly one drive is loose.

A: Lifter loading revealed an installation fault. When the drive was put in position on the drive base, the corresponding cogs of the drive base and the mounting bracket were not aligned properly.

A change in lifter load or an overload condition aligned the cogs and the resulting gap between the surfaces allows the drive to move.

See also Q&A - Imbalance between arms when opening, for corrective action.

Q: The cover is twisted and I don't know how to rectify it.

A: The safety mechanism has unlocked on one side to protect the spa and lifter from permanent damage.

Push the upper carbon arm down to cancel out the unlock force and to level the cover, then simply close the spa with the Smart key.

Q: In the full open position my dog jumped on the cover and the cover moved down. The cover is symmetricly lower than it should be.

A: The safety mechanism unlocked on both sides to protect spa and lifter from permanent damage.

Simply close the spa and the control will automatically realign the lifter system.

Q: The cover lifter is working when closing only. I cannot open the spa.

A: The position counter data is corrupt. Simply initiate a manual alignment with the Smart key to solve this problem - see Manual alignment section below.

Q: My Foldaway lifts the mid section of the cover before the front cover raises.

A: The front cover is stuck to the spa shell e.g. after a longer period of not using the spa or in cold weather, when moisture between the cover and the spa freezes.

Stop the lifter and manually pull the front cover by the handle gently upwards in order to detach the cover from the spa surface.

MANUAL ALIGNMENT

Under normal conditions there is no need to manual align the system. Autohome eliminates minor synchronization errors and deviations in position sensor data during each closing.

However, a manual alignment can be initiated by turning the smart key clockwise approx. 180 degrees (3 short beep) and back within 2 seconds to the original position.

One long beep confirms the action. The LED illumination will change to green blinking for approximately 4 seconds.

While in progress, the LED illuminates blue. The alignment is finished when the illumination changes back to green.

The alignment can be stopped any time by undocking the smart key.

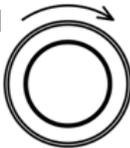
FUSES

The transformer has an integrated thermal fuse that cuts power upon reaching a temperature of approximately 105° C and resets automatically after cool down. The mains terminal block in the control box has a integrated fuse 20 x 5mm rated 6,3A.

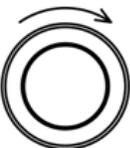
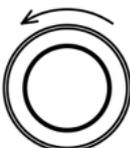
OPTIONAL FOLDAWAY COVER LIFTER

SMART KEY QUICK REFERENCE GUIDE

Normal operation

	White Locked 	Orientation light, lift standby mode	
	Green Ready 	OPEN 	CLOSE 
	Yellow Motors running	STOP with command or remove smart key	
	Yellow/blue blinking Cover heavy or cover lifetime monitor impaired by object	→	Clean cover Replace cover

User action required

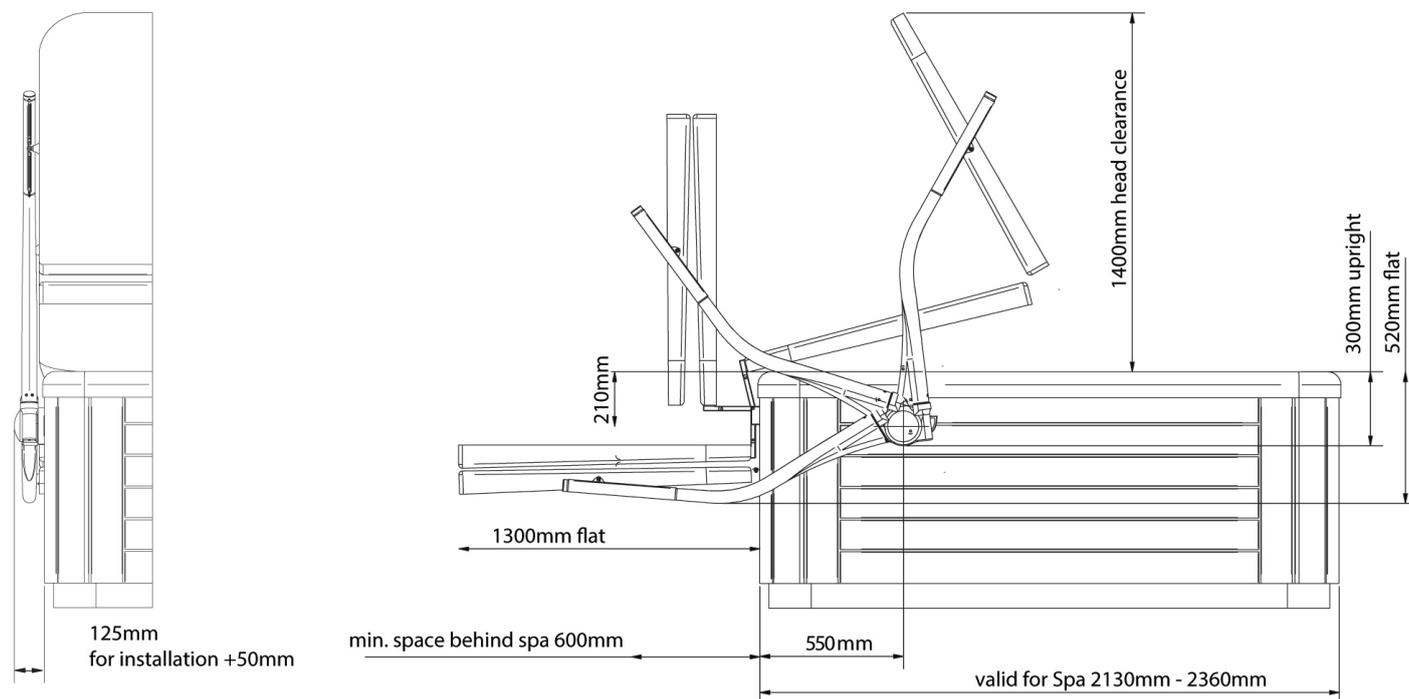
	White blinking Position data fault Alignment required	180° 	AND within 2sec	180° 
	Green blinking System message	Alignment imminent		
	Blue System message	Obstacle detected Alignment in progress Internal fault	→	Clear obstacle, allow cool down time, see troubleshooting

Consult customer care

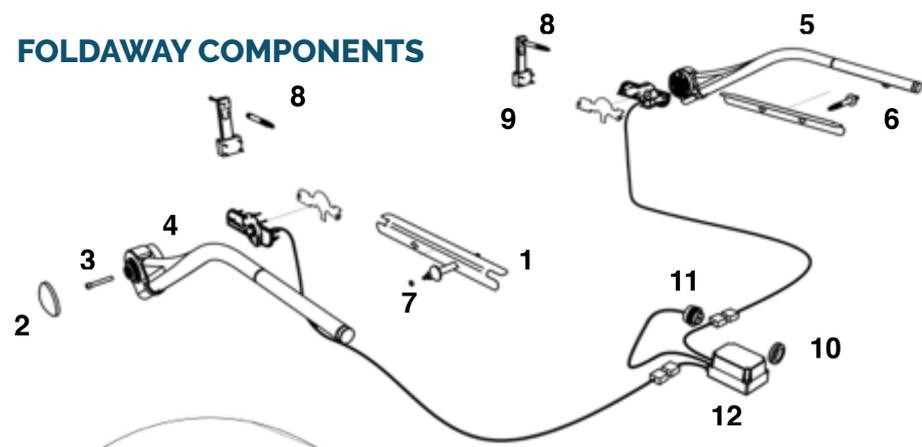
	Red blinking Safety guard	Fault detected in the power stages	→	Contact your dealer
	Red continuous Safety relay	Fault in the safety relay	→	Contact your dealer
	Green/blue blinking White/blue blinking System message	Controller not set up correctly	→	Contact your dealer

OPTIONAL FOLDAWAY COVER LIFTER

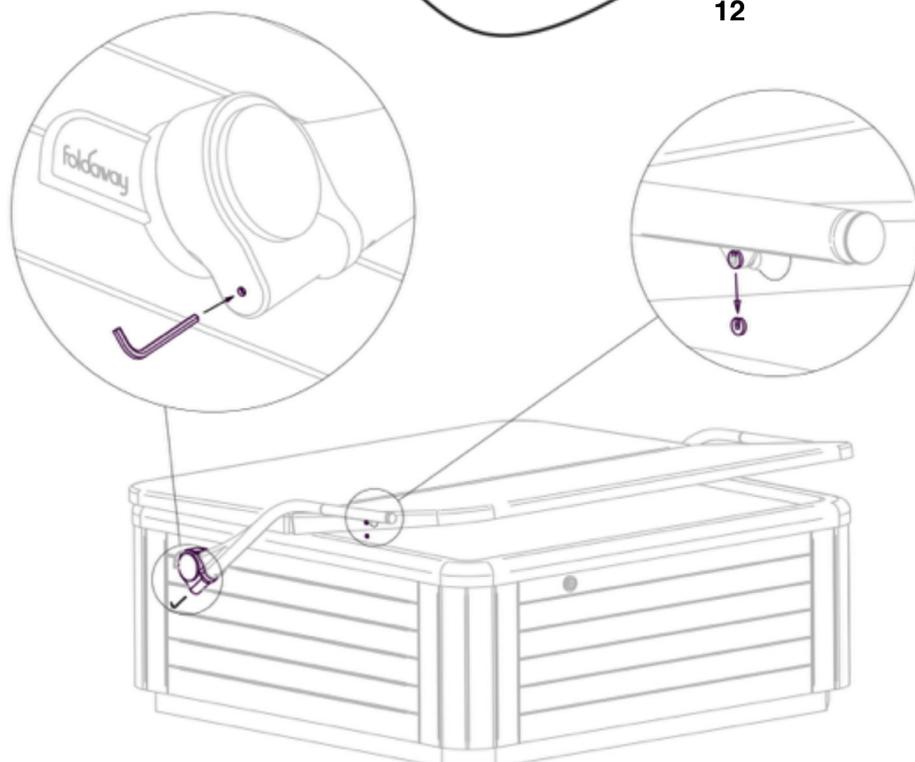
FOLDAWAY DIMENSIONS



FOLDAWAY COMPONENTS



- 1 Support panel
- 2 Drive cap
- 3 Quick lock screw m12 allen key
- 4 Foldaway drive
- 5 Carbon support
- 6 Carriage mechanism
- 7 Circlip (securing clip)
- 8 Cover hinge
- 9 Cover hinge
- 10 Coded smart key
- 11 Smart key docking station
- 12 Foldaway control box



EMERGENCY LIFT OPERATION

1. Remove the plastic securing clip from the cover dowel on both sides.
2. Detach the lifter carriage mechanism from the cover on both sides.
3. Move the cover to a safe position.

OPTIONAL FOLDAWAY COVER LIFTER

SAFETY INSTRUCTIONS

The lifter may only be connected to alternating current and must be installed in accordance with IEC 60364. Installation of the lifter system shall only be carried out by a certified and trained dealer. The voltage must correspond with the type plate on the control box.

Never engage the lifter when persons or animals are in the spa or in the lifter movement area. Body parts could be injured. (see Danger Areas illustration)

The operator must use the lifter correctly. He must consider the local conditions and pay due care and attention to other persons, in particular children or animals, who are nearby.

Never engage the lifter when objects or contamination e.g. heavy snow impairs the spa cover. The lifter does not replace your obligation to clean the cover before opening. Contamination can overload the mechanical system

Always lock the lifter when not in use by removing the Smart key. (operational lock out) Locking the system prevents children from drowning when accessing the spa unattended and protects bathers from injury or death should the lifter engage inadvertently.

Depending on the lifter setup the cover will move beyond the spa's footprint. Keep visible contact to all areas surrounding the spa before lifter utilization. Objects, animals or persons in the cover's parking area could get harmed.

Familiarize yourself with the mechanical release circlip on both lifter arms. Make sure the area below the cover is free before pulling the circlips. Removing the clips exposes the spa cover to free fall.

Be careful when touching dark surfaces in direct sunlight. Some parts of the lifter can become hot in direct sunlight.

Never use your spa and/or engage the lifter in the vicinity of thunderstorms or high voltage cabling.

The lifter is not intended for use by persons with reduced sensory or mental capabilities.

The lifter must not be operated by children without parental supervision or persons who have not been instructed accordingly.

Children must never use the lifter as toy.

Never open the control box - dangerous electrical voltage inside.

Never leave the lifter unattended while in operation.

Do not operate the lifter continuously or outside the temperature range of -20°C to 50°C.

Do not operate the lifter in strong winds. Gusts hitting the cover while in movement could be interpreted as obstacle and shutdown the system. Keep the spa cover closed in windy conditions.

Heavy gusts can overload the lifter system and open the safety clutch mechanism. In this case the cover can free fall in open or closed direction.

Do not expose the opening in the lower carbon support section (containing the carriage mechanism) to environmental hazards e.g. wet snow, freezing rain, sand. The carriage mechanism can fail when impaired by debris.

Do not expose the optional remote control to water. The remote control is NOT waterproof.

Familiarize yourself with the emergency operation of the lifter system.

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.

MAINTENANCE

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.

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 250 and 500 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
CORONA												
0.750	Reduce	Sodium Bisulphate- 'pH Reducer'	18.00g	36.00g	54.00g	72.00g	90.00g	108.00g	126.00g	144.00g	162.00g	180.00g
0.750	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	15.00g	30.00g	45.00g	60.00g	75.00g	90.00g	105.00g	120.00g	135.00g	150.00g
SOLSTICE												
1.410	Reduce	Sodium Bisulphate- 'pH Reducer'	33.84g	67.68g	101.52g	135.36g	169.20g	203.04g	236.88g	270.72g	304.56g	338.40g
1.410	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	28.20g	56.40g	84.60g	112.80g ¹	41.00g	169.20g	197.40g	225.60g	253.80g	282.00g
ORION												
1.350	Reduce	Sodium Bisulphate- 'pH Reducer'	32.04g	64.80g	97.20g	129.60g	162.00g	194.40g	226.80g	259.20g	291.60g	324.00g
1.350	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	27.00g	54.00g	81.00g	108.00g	135.00g	162.00g	189.00g	216.00g	243.00g	270.00g
ECLIPSE												
1.380	Reduce	Sodium Bisulphate- 'pH Reducer'	33.12g	66.24g	99.36g	132.48g	165.60g	198.72g	231.84g	264.96g	298.08g	331.20g
1.380	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	27.60g	55.20g	82.80g	110.40g	138.00g	165.60g	193.20g	220.80g	248.40g	276.00g
STELLAR												
1.510	Reduce	Sodium Bisulphate- 'pH Reducer'	36.24g	72.48g	108.72g	144.96g	181.20g	217.44g	253.68g	289.92g	326.16g	362.40g
1.510	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	30.20g	60.40g	90.60g	120.80g	151.00g	181.20g	211.40g	241.60g	271.80g	302.00g
ASTRA												
2.270	Reduce	Sodium Bisulphate- 'pH Reducer'	54.48g	108.96g	163.44g	217.92g	272.40g	326.88g	381.36g	435.84g	490.32g	544.80g
2.270	Increase	Sodium Bicarbonate - 'Alkalinity Increaser'	45.40g	90.80g	136.20g	181.60g	227.00g	272.40g	317.80g	363.20g	408.60g	454.00g

MAINTENANCE

CHANGING YOUR 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..

DRAIN OPERATION



Drain open

Locate drain valve at floor level. To empty the water from the spa remove the screw-cap from pipe. Twist anti clockwise and pull pipe out. Water will now drain out - allow to drain by gravity only.

Drain closed

To fill the spa up with water, screw cap onto pipe. Push and turn clockwise to lock closed.

Note 1: Drain water to an area that can handle the water volume of your 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 spa shell refer to 'SPA SHELL CARE'.

Steps to refill your spa:

1. Check that the drain is fully closed.
2. Close door to equipment compartment.
3. Refill spa with tap water. Fill the spa to the midway level of the skimmer. The depth should be approximately 150mm-190mm (6-7½") down from the top rim of the 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 spa with a 40/60 mix of hard and soft water. The calcium balance should be between 40 - 250ppm.

4. Restore electrical power supply.
5. See 'Starting Your 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 recommended 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 every year or sooner if necessary. Only use genuine Riptide filter cartridge replacements.

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

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.

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 spa you must expect colour loss and gradual breakdown of headrest material due to the corrosive effect of chlorine and ozone.

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.

MAINTENANCE

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.

LOW USE OR NO-USE PERIODS

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

Low-use: If your spa is being used less than once per month, then you may wish to lower the temperature setting. Lowering the temperature on your spa will cut your cost of operation if you are not using the spa for extended periods. However, you will need to adjust the temperature setting before each use to heat the spa to the desired level.

No-use for 1-2 weeks: If you plan to not use your spa for 1-2 weeks, then we suggest that you not make any changes in operating your spa.

No-use for 2-6 weeks: If you plan to not use your spa for 2-6 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 spa for over 6 weeks, then it is suggested that you winterize your spa by following the steps below.

SPA WINTERISATION

1. Drain the water from the spa (see 'Steps to drain your spa' under 'Changing your spa water' in this Owner's Manual).
2. Drain the 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 spa shell (see '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. Re-attach and secure cover to the spa

SPA DE-WINTERISATION

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

Note: *If your 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 spa and its equipment. If there is no one available to take care of the spa on a weekly basis, then it is recommended that you winterize your spa as described above.*

Before requesting service from your dealer, refer to the TROUBLESHOOTING GUIDE in this Owner's Manual to determine the necessary course of action. If you are not able to solve the problem using the troubleshooting guide, please contact your authorised Riptide dealer.



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