

Spa Owner's Manual

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INTRODUCTION

- Welcome to your new spa. With the correct preparation and care, your new spa will provide you with many years of fun and relaxation. Please find the "User Manual" and "Quick Start Guide" in the product attachment.
- This manual has been developed to provide you with the information that you need regarding the preparation, installation, care and operation of your new spa. Please take the time to carefully read the entire manual to ensure that your spa preparations are carried out correctly. Also make sure that you familiarize yourself with the important safety instructions before using your spa.
- If you have any questions on the operation or maintenance of this product, please contact customer service at 1-800-787-6649.

MAIN FUNCTIONS AND PRODUCT CHARACTERISTICS:

Hydrotherapy function:

The product comes with special hydrotherapy seats which are designed according to ergonomic engineering, offering different kinds of jets in the seat to help to achieve body therapy. Adjust the massage pressure by adjusting the jet face, water diverter (if equipped), and air regulator.

Air blower therapy function (if equipped):

Turn on the air blower. Specially designed air jets will blow lots of air bubbles to provide you bubble therapy and fun.

Heating function:

The spa comes with a heater. Once the user sets the temperature, the heater will start to maintain the temperature to the set temperature and ensure the spa is available for all seasons.

Filter and circulation function:

The spa comes with a filter (or filters) which can clean the impurities inside efficiently. Meanwhile, the system will run the Filter Cycle programming automatically to kill the bacteria via the ozone released by the ozone generator (if equipped).

Aromatherapy function (if equipped):

If equipped, the spa's aromatherapy canister contains scented oil. The soothing scent is dispersed into the water to help you relax.

Lighting:

The spa is fitted with an underwater light. The color and mode of the light can be changed via the control system topside panel, helping you create an ambiance to suit your mood.

Multimedia (if applicable):

The optional bluetooth allows you to enjoy video or music while exercising or relaxing in the spa.

Important declaration: All functions mentioned above are a general introduction to our spas. The spa you purchase may differ. Please check it thoroughly. The manufacturer reserves the right to modify and improve the product when necessary without prior notice and without entering into any obligation.

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IMPORTANT INFORMATION

It is essential to familiarize yourself with general spa safety and water treatment procedures. Please make sure to familiarize yourself with the below contents:

■ Drainage Requirement:

Ensure that the spa is not in a low or floodable position; as this could cause electrical equipment shortage or be dangerous to spa users.

■ Risk of Electric Shock:

As with all electrical appliances there is a risk of electrocution. The equipment compartment within the cabinet houses the control unit that operates the spa. The door enclosing the unit should always remain shut. If water happens to enter the equipment compartment, turn the spa off at the breaker and make sure all the components are dry before attempting to power the spa back up.

■ Temperature:

Keep your spa water temperature no higher than 40°C / 104°F. Higher water temperatures can cause strain on the cardiovascular system. If the water temperature is higher than 40°C / 104°F, get out of the spa and contact customer service as soon as possible. It is recommended that the water temperature be no higher than body temperature i.e. 37°C / 98°F.

Medical Conditions:

- People with diabetes, high blood pressure, heart disease or other cardiovascular conditions should consult their physician before using a spa.
- To reduce the risk of contaminating spa water and minimize health risks, shower with soap and water prior to using the spa.
- People with open sores or any type of infection should not use the spa.
- Hot water is an ideal environment for spreading infection, especially if sanitizer levels are not properly maintained.
- Women who are pregnant should consult their physician before using a spa.

Soak and Cool Time:

Limit spa use to no more than 15-20 minutes at a time. Some spas are equipped with a cooling seat. When you feel you are getting too hot, sit on the cooling seat and allow your body to cool. When you feel comfortable you may submerse yourself back into the spa. Sitting in the spa with your heart above the water level will dramatically decrease the time it takes to cool down. Hyperthermia may be fatal.

Do not expose your body to prolonged exposure in water above normal body temperature.

Alcohol Use and Medication:

The consumption of alcohol in and around the spa is a hazardous practice. Never use glass drinking vessels near the spa. Alcohol can cause drowsiness and lead to drowning. Any person taking medication should consult their physician before entering the spa.

Child Safety:

Children should not be permitted to use the spa without adult supervision.

■ Preventing Slips:

Always take care when entering and exiting a spa due to slippery, uneven surfaces. Handrails and non-slip surfaces will help to minimize the risk of slipping and falling. In some cases steps may be needed to make entering the spa easier.

Location Requirement:

- Before installing, it is better to ask a professional to check the spa position.
- If you are installing your spa on an elevated wood deck or other structure, consult a structural engineer or a contractor to ensure the structure will support the weight of 150 pounds per square foot.
- Avoid placing the spa where water could flood into the electrical equipment compartment, and also protect the unit from direct contact with very damp areas.

• Electrical Appliances:

Never have any electrical devices within 2 meters of the spa.

Weather Conditions:

Do not operate or soak in a spa during severe weather conditions i.e. thunderstorms, tornadoes, cyclones, or electrical storms.

Ventilation:

If the spa is not sufficiently ventilated some people may experience throat irritations. Make sure that the spa is properly ventilated if you are installing it in an enclosed area.

Chemicals:

Spa chemicals are necessary to control bacteria, prevent infection and maximize the life of your spa and its equipment. However, in concentrated form these chemicals, like other household chemicals, can be hazardous. Always handle and use them with care. Refer to the product's label for safety and handling information. A more in-depth explanation on how to use chemicals in your spa can be found in the Spa Water Management & Maintenance section starting on page 7.

SPA INSTALLATION

Please always find a professional to install your spa. The manufacturer shall not be responsible for any damage caused by an improper installation or an installation performed by non-qualified personnel.

Positioning and Location of the Spa

- Your spa needs to be positioned so that the spa's equipment is easily accessible. The equipment is located (in most cases) at the front of the spa and will need to be accessible for service and power connection. It is recommended that you have access to all sides allowing at least 0.5 meter / 18 inches access around all 4 sides of your spa for future access if required. It will be the owners responsibility to make sure this is completed prior to the service being carried out. All portable spa equipment must be ventilated. Do not obstruct any vents in the cabinet.
- It is recommended to place the spa away from trees, as falling leaves may block the filter.

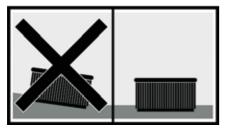


Important note: Do not leave your spa uncovered in direct sunlight. The spa has closed cell insulation foam under the shell. If left exposed to direct sunlight the surface temperature can build up to 200 °F causing damage to your spa. It is suggested that you have the cover over your spa while not in use. Leaving the spa uncovered and exposed may void your warranty on your spa and its accessories.

- Position the spa horizontally, placing the whole base on a smooth, flat and level surface capable of supporting the total weight when in use. The weight of the spa, the water and the weight of the bathers need to be taken into account.
- The spa cannot be placed on a curved, soft, sandy surface or blocks.
- If you are installing your spa on an elevated wood deck or other structure, consult a structural engineer or a contractor to ensure the structure will support the weight of 150 pounds per square foot.

Location Requirements

- Before installing, it is better to ask a professional to check the spa position.
- Avoid placing the spa where water could flood into the electrical equipment compartment, and also protect the unit from direct contact with very damp areas.



ATTENTION: IMPORTANT

Electrical Requirements

- The electrical supply to your new spa will require a dedicated circuit with no other appliances or sockets sharing the power. Electrical burnout due to incorrect amperage WILL NOT be covered by warranty. All electrical connections must be carried out by a qualified electrician.
- Ensure your new spa is safely grounded. Ensure the main power supply has installed high sensitive leakage protectors of 5mA. All spas must be permanently hardwired to a Class A GFCI circuit breaker on an isolated circuit. The electrical wiring must meet the requirements of National Electric Code, ANSI/NFPA 70-2008 and any applicable local, state, and federal codes.
- Please refer the control system instruction manual before electrical installation.

SPA MAINTENANCE

While owning a spa is fun, relaxing and therapeutic, you must protect your investment to avoid unnecessary and premature repair costs. Detailed on the following pages is a simple step-by-step procedure to follow.

Owner's Manual

Filling Your Spa

- Before filling your spa, please check and tighten all unions on pumps and heater as they may become loose during transit. Please check and make sure all the gate valves are all in the open position.
- Check the drainage valve is shut off.
- Check that all jets are in the open position. Turn counter-clockwise to turn your jets on.
- Fill your spa with water. Fill the water through the filter in order to prevent air blockages in the pumps.
- Fill water to the line on the water level indicator.

The required water level



Note: To avoid any damage to the components. Do not fill the spa with hot water over 40°C / 104°F into your spa.

Draining Your Spa

• If you use your spa once or twice a week, the need to drain

your spa will be less frequent than a spa owner who uses their spa three or more times a week. Therefore, it would be recommended that a spa be drained at least every 3 months with frequent usage.

 Your drainage valve is positioned at the front corner of the base. Details for drainage are as follows:



1. Remove the cap of the drain valve by turning counter-clockwise.



2.Connect a 3/4 inch hose or screw a standard female hose fitting onto the valve and connect your hose.



3. Turn value counter-clockwise



4. Pull outwards and the spa will begin draining.

Note: Ensure the power is shut off before draining. Equipment damage caused by dry running will not be covered under warranty.

Spa Control Panel Instructions

For spa control panel operation, please refer to the User Manual of the Control System, included separately.

Jet Instructions

Jets are the main parts in which massage comes into effect.

- Turn the jet face clockwise about 1/4 of a turn to turn the jets on.
- Turn the jet face counter-clockwise about 1/4 of a turn to turn the jets off.







Note: Some jets and the air jets are unadjustable. Don't rotate these jets with force. It may cause damage to the jets.

Air Controls Instructions

Air controls affect the pressure of your jets by adding air. You may have more than one air control on your spa, each of which will be associated to a certain group of jets. By opening an air control when the pump is on, air will be drawn into the water flow.

- When the air control is turned clockwise, it will decrease the power of the massage jets.
- When it is turned counter-clockwise, it will increase the power of the massage jets.







Note: For better heating efficiency, please turn the air controls off. The air flow may cool the spa water temperature.

Aromatherapy Canister Instructions (if equipped)

- The aromatherapy canister allows you to add soothing scented essential oils to the spa water. The aromatherapy canister is composed of the canister cover, canister and canister holder. Turn the canister counter-clockwise to open and increase the aromatherapy. Turn the canister clockwise to decrease the aromatherapy.
- To replace the aromatherapy oils, turn the aromatherapy cover counterclockwise, then turn the canister counter-clockwise. Check the level of oils in the reservoir. Replace when empty. Contact customer service for replacement.



Aromatherapy canister knob

Turn the canister knob to adjust the level of aromatherapy.



Turn the canister cover counterclockwise to open.

Aromatherapy

canister cover



- Aromatherapy canister - Aromatherapy canister holder - Sealing cover

Turn the sealing cover counter-clockwise to open before use.

Note: To help aromatherapy oils last longer, remember to turn the aromatherapy canister off when the spa is not in use.

Water Diverter Instructions (if equipped)

The Water Diverter allows you to adjust the massage power. Rotating the water diverter will divert the massage power of different seats.



Rotating the water diverter

Water Flow Control Instructions (if equipped)

Note: For better heating efficiency, turn the water flow controls off when the spa is not in use.

The water flow control adjusts the flow of water to the water features, such as waterfalls and fountains. Rotating the water flow control will turn on, turn off and adjust the water flow.







SPA WATER MANAGEMENT & MAINTENANCE

- Please note that these instructions are just a guide to maintain the spa's water quality. Before taking any action, please consult your local spa specialist for proper amount of sanitizer use, and take proper action depending on the capacity of the spa.
- You should never use pool grade chemicals in your spa. Any damage to equipment caused by using pool grade chemicals or other improper chemicals will not be covered under warranty.
- Spa water should be professionally tested at least once a month. It's
 recomended that the water is tested at least weekly by the end user. When
 adding chemicals to the spa, make sure the pumps are running and allow
 20-30 minutes for the chemicals to mix. Test the water after the chemicals
 are sufficiently mixed into the water.

Note: Do not cover the spa for at least 30 minutes after adding chemicals.

The Effect and Adjustment of pH

 Low pH (below 7.2) causes sanitizers to dissipate more rapidly, increases corrosion of surfaces and equipment, and may make water irritating to spa users. If pH is high (above 7.6) chlorinating sanitizers are less effective, surfaces and equipment can scale, and water may cloud.

ATTENTION!

The pH level measures the acidity and alkalinity: Values above 7 are alkaline and below 7 are acid. A pH index of between 7.2 and 7.6 is recommended.

WARNING:

Please make sure that the correct pH level is maintained. Any damage caused by an inadequate pH level is not covered by your spa warranty.

pH Adjustment

- Check the pH of the spa water using a pH tester (not supplied).
- If the pH level is outside the recommended range between 7.2 and 7.6, please add appropriate amount of acidity-alkalinity balance reagent into the water, uncover the spa cover, leave it mix in for 20 minutes, then re-do the pH test.

Disinfection of the Water

Disinfection of the water is of utmost importance in order to destroy algae, bacteria and organisms that could develop in the water. However, excessive disinfection could cause skin, eye, and throat irritation.

- Bromide tablets are a suitable disinfectant for the spa water. This product is placed in the pre-filter and gradually dissolves. Check the residual bromide level daily using the Br analyser set. The recommended level of residual bromide is between 2.2 and 3.3 ppm.
- Sodium dichlor is the only type of chlorine we recommend for spa use.
 Sodium dichlor is granular, fast-dissolving, and pH-neutral. Make sure no bathers are in the spa when you add chlorine. After adding chlorine, open all jets and run the spa at high speed with the cover open for at least 30 minutes.
- Disinfection with OZONE: Ozone or O3, is an oxidizing chemical compound, which is very effective for disinfecting water. The main advantage of ozone is that it leaves no chemical trace and is odorless. If your spa is equipped with an ozone generator, it produces ions from oxygen in the atmosphere. This is an automatic process controlled by the filter cycle and resulting product is injected into the water through the ozone jets. It is recommended that the ozone disinfection is operated twice a day and the duration is maintained within 1~2 hours, thus the ideal disinfection effect can be obtained and the life span of the ozone generator can be extended. An ozone generator cannot be used as the sole means of maintaining safe spa water. You must select and use a spa chemical sanitizer in addition to your ozone generator.
- Do NOT use Trichlor tablets or liquid chlorine. These harsh chemicals are very corrosive and can degrade the spa shell's appearance and damage spa components.

Application of Other Special Chemical Products

Besides the pH adjustment and the previously-mentioned methods, there are some cleaning products which can be used in spa water:

- CALCIUM REDUCER: it can be used to prevent/reduce precipitation of calcium salts (scale), especially in hard water areas. The recommended calcium hardness (CH) is 150 - 200 ppm. Use it if the CH level is high and whenever the water is renewed.
- If the CH is too low, add liquid hardness increaser.
- SPA ALGAECIDE: Prevent algae from growing in the water, use it as needed.

Balancing the Total Alkalinity

- Total alkalinity (TA) measures the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA can be considered a pH buffer. It is the measure of the ability of the water to resist changes in pH level.
- The recommended total alkalinity is 80 120 ppm.
- If the TA is too low, the pH level will fluctuate widely from high to low. Low TA can be corrected by adding an alkalinity increaser.
- If the TA is too high, the pH level will tend to be too high and may be difficult to bring down. High TA can be corrected by adding a pH decreaser.
- When the TA is balanced, it normally remains stable, although adding water with high or low alkalinity will raise or lower the TA level.

WARNING!

Add the exact amounts to the water, as specified. Do not mix products to avoid possible reactions.

Do not smoke while handling these products - they may be flammable.

Do not add chemical products to the water if there is someone in the spa.

Keep containers tightly closed in dry, well-ventilated places, and keep these products away from children.

Do not inhale chemical products, and take care not to let them come into contact with the eyes, nose or mouth. Wash hands after use.

Follow the emergency instructions on the product label in the event of an accident or ingestion.

SPA CLEANING AND MAINTENANCE

The spa surface is made of high gloss acrylic. It is recommended that the spa surface (above the water line) be cleaned once a week to remove dirt build up and scum lines. The whole spa surface should be cleaned when the spa is drained. Cleaning details are below.

Spa Surface Cleaning and Maintenance

The spa surface is made of high-gloss acrylic. We suggest cleaning the spa outside surface once a week and cleaning the whole spa after draining. Details steps as below:

- Clean the surface with wet towel. A neutral detergent and soft towel may be used. Do not use detergent with ketone or chlorine water.
- If the surface has some light scratches, it can be polished with a fine cutting compound and finished off with a fine polish.
- Please do not clean the spa surface with any corrosive chemical solution or crude tools; do not scratch the spa surface with hard materials or knives.
- Please do not clean the spa surface with nail polish, nail polish remover, dry detergent, acetone, paint remover etc. It will damage the surface.
- Do not touch the spa surface with any heat source over 40°C / 104°F.

Control Panel Maintenance

- Please do not touch the control panel with hard objects to avoid scratching.
- Please avoid prolonged direct sunshine on the control panel.
- Please keep the control panel covered when not in use.

Headrest Maintenance

- Clean the headrests with a neutral detergent.
- Excessive chemical levels and ozone may cause fading of headrests. Headrests can be removed after use. Fading is not covered by warranty.

Spa Cover Maintenance

- Clean the spa cover with soapy water.
- Do not pull or carry the cover by the link in the middle of the cover.
- Do not sit, lie or jump on the cover, damage this may cause is not covered by warranty.

Note: Please cover the spa after each use or after cleaning. Leaving the spa uncovered and exposed may void your warranty on your spa and its accessories.

■ Filter Maintenance

You should clean your filters regularly. Once a week you should remove your filters and hose any debris out of them with a low pressure hose. Once a month you should soak your filters in a cartridge filter cleaning solution and then hose off with a low pressure hose.

Filter Cleaning

- Turn off the power;
- Remove the cartridge (please read the filter removal instruction before doing so).
- Clean the cartridge with water to remove debris by spraying from top to bottom at a 45° angle.
- Install the filter and cartridge after cleaning.
- Turn on the power.

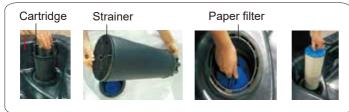


Warning: Before removing your filters, ALWAYS ensure that the power to your spa is turned off.

If you leave your power on and anything is drawn into the pump(s) or heater, causing either to fail, the fault will not be covered under warranty.

Filter Removal and Installation

- Removal of RD cartridge and filter (applicable models)
- Lift up the RD cartridge filter, turn the strainer counter clockwise to remove. Turn the filter counter clockwise to remove.
- Go the opposite way to install the cartridge filter.



Removal of twin front access filters (applicable models)

- Lift the front panel upwards to remove and pull strainer out.
- Turn the filters counter clockwise to remove.
- Go the opposite way to replace filters.



Removal of CMP cartridge and filter (applicable models)

- Open the cartridge cover.
- Turn the cartridge counter clockwise to remove. Remove the filter basket over the filter.
- Remove the filter.
- Go the opposite way to replace the filter and cartridge.



Removal of big size front access stopper filter (applicable models)

- Take off the top cover.
- Go counter-clockwise to remove the paper filter.
- Go the opposite way to install the front access stopper filter.



When Your Spa is Not in Use

If you do not plan on using the spa for a period of 15 days or longer, it is recommended that you turn your spa off and empty it. It is important to remember to leave the cover on even while empty to protect the shell. If you are going away for only a few days, do not turn your spa off completely.

Turn the temperature down to its lowest setting, so that the filtration cycles are still functioning but the spa doesn't heat.

• 3-5 days

Test the spa water to check pH and sanitizer levels and adjust if necessary. Cover the spa. Test water balance and adjust if necessary before using the spa again.

• 5-14 days

Set the spa to the lowest temperature setting. Check the water balance and adjust if necessary. Cover the spa. Check water balance and adjust if necessary before using the spa again.

• 15 days or more

Turn the power off, open the drain valve and drain the spa clean, remove the filter, dry the spa and cover with the spa cover.

Winterization

If you don't plan to use your hot tub for an extended period of time during freezing conditions, you must winterize your hot tub. Water expands when it freezes and can cause damage to plumbing.

Turn off power to the spa at the breaker, remove the exterior panels, drain the spa, and remove any remaining water in the shell with a wet-vac or sponge. Loosen all unions to the heater and pump(s). Use a wet-vac to remove all water from the plumbing lines. Place the wet-vac end over the drain line(s), each union, each jet face, each suction, and the filter cavity after removing the filter to remove as much water as possible. Once all components are vacuumed, close the drain line(s), and reinstall all unions with gaskets. Spa antifreeze may be added to the filter cavity and into the top of each pump union for additional protection. Replace the exterior panels, and cover the spa.

TROUBLESHOOTING

Issue	Probable Causes	Possible Solution
An error message appears on the LCD display and the spa stops working	Error detected by digital diagnostics function	Please check the error message trouble shooting in the control system manual, and then contact customer service if you are unable to resolve the issue
Spa can't start in any mode	 Power off Control panel is locked Control panel failure (display showed error message) 	 Check the power switch is on or GFCI switch is turned on Check the control panel is unlocked Check the failure code in control system manual for solution, then contact customer service to do the repair.
Spa starts automatically	Filtration program is operating, heating function is operating, or antifreezing function is operating	The control system will automatically stop when the program finishes.
The water pump turns off	 The pump has been running longer than the default maximum run time The pump motor is overheat protected 	 Repress pump button to restart pump Turn pump off for 1 Hour to cool and then start pump
Pump is running after filling spa but no water is coming through jets	The jets are closedAir blockage in the water pump	 The jets are closed. Open jet faces to allow water flow (see pg 5). Turn pumps on and off several times to drain the blocked air. Unscrew the discharge union on the water pump to release the air and then screw on tightly. Note: Fill the spa with water through the filter to prevent air blockages in the pump(s)
Heater heating slowly or failing to heat	 Temperature setting is low Filter cartridge dirty and blocked No spa cover on the spa causing heat loss Jets connected to the circulation pump is closed Heater broken Water/Air controls left on 	 Set the temperature up Clean or replace paper filter core Put the cover on the spa Turn on the jets Contact customer service Turn off Water/Air Controls
Reduced water flow through the jets	 Jets are not fully opened Jets are blocked Air valve is turned off Water diverter (if equipped) closed to the seat 	 Turn on the jets fully (see page 5). Turn counter-clockwise to take off the jet fitting and clean the jet chamber if blocked. Turn on the air valve switch Divert the water diverter (if equipped) to the seat jets wanted Check the water pump side-check valves are fully opened
Uneven water flow from jets	Suctions or filter are blockedWater pump side-check valves are not fully opened	Clean the suction or filter Check the water pump side-check valves are fully opened