



RELAXATION YOU CAN AFFORD TO ENJOYSM
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OWNERS MANUAL

RLX



TLX



CLX



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OWNERS RECORD

DATE PURCHASED:

DATE INSTALLED:

DEALER:

ADDRESS:

TELEPHONE:

SPA MODEL / SERIAL NUMBER:

Please read this "Owners Manual" carefully, as it is designed to provide you with the information you will need to ensure the safe, secure use of your new spa. .

IMPORTANT: Freeflow Products & Freeflow Spas Corporation reserves the right to change specifications or design without notification and without any obligation.

Spa Dimensions:

Model	Width	Length	Height
TLX	75 INCHES	75 INCHES	33 INCHES
RLX	69 INCHES	81 INCHES	31 INCHES
CLX	66 INCHES	66 INCHES	29 INCHES

IMPORTANT SAFETY INSTRUCTIONS

It is the Hot Tub owner's responsibility to read and follow all the instructions and precautions described in this manual. Failure to do so may result in personal injury. Liability rests with the Hot Tub owner. Please, make instructions available for reference by hot tub users.

1. **BEFORE OPERATION THE SPA: READ AND FOLLOW ALL INSTRUCTIONS. SAVE ALL INSTRUCTION**
2. A wire connector is provided on this unit to connect a minimum No. 8 AWG solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet of the Hot Tub.
3. **DANGER** – Risk of Accidental Drowning. **Extreme caution must be exercised to prevent unauthorized access by children.** To avoid accidents, ensure that children cannot use this Hot Tub unless they are supervised at all times.
4. **DANGER** – Risk of injury. The suction fittings in this Hot Tub 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 Hot Tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

5. **DANGER** – Risk of Electric Shock. Install at least 5 feet from all metal surfaces. As an alternative, a Hot Tub may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum of No. 8 AWG solid copper conductor to the wire connector on the power pack that is provided for this purpose.
6. **DANGER** – Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television within 15 feet of the Hot Tub.
7. **WARNING** – To reduce the risk of Injury:
 - a. Before using your Hot Tub, you should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.
 - b. The water in the hot Tub should never exceed 104° F (40° C). Water temperatures between 100° F and 104° F are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when Hot Tub use exceeds 10 minutes.
 - c. The use of alcohol, drugs, or medication before or during Hot Tub use may lead to unconsciousness with the possibility of drowning.
 - d. Individuals using medications should consult their physician before using the Hot Tub since some medications may induce drowsiness, while other medications may affect heart rate, blood pressure, and circulation.
 - e. Individuals suffering from obesity or with a medical history of heart disease, high or low blood pressure, circulatory system problems, multiple sclerosis, thyroid disease, or diabetes should consult their physician before using the Hot Tub.
 - f. Since excessive water temperatures have a high potential for causing fetal damage during early months of pregnancy, pregnant or possibly pregnant women should limit Hot Tub water temperatures to 100° F, you should also consult your physician before using the Hot Tub.
 - g. Heat stroke is a dangerous condition brought about by excessive heat. It especially affects the very young, elderly, individuals under the influence of alcohol or drugs, and those using certain medications. The symptoms include: sweating, dizziness, nausea, light-headedness, convulsions, increased pulse rate, shallow breathing, and in the extreme, unconsciousness. If you suspect heat stroke, get medical help immediately. Lay the victim on their back, with the head slightly elevated for easier breathing, and apply ice packs to the head.
 - h. Emergency telephone numbers, such as: hospital, physician, ambulance, paramedics, and the police should be readily available and posted next to a close-by telephone.

SAFETY PRECAUTIONS

DANGER – RISK OF INJURY – READ AND FOLLOW ALL INSTRUCTIONS

1. *Please use the Hot Tub when others are present.*
2. *Children should be CLOSELY supervised at all times.*
(WARNING – RISK OF CHILD DROWNING. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a spa unless they are supervised at all times.)
3. **DANGER:** *To avoid the risk of drowning, keep the filter clean and unclogged. Do not remove the suction drain cover. Do not modify the suction or filtration systems.*
4. *Exercise caution when entering or leaving the Hot Tub. When changing positions, be sure of your footing before applying your full weight, as water refraction can be misleading.*
5. *Do not stay in the water for extended periods of time. Set reasonable time limits. Leave the Hot Tub, cool down, take a shower, relax, then return for another stay.*
6. *The water in a spa should never exceed 40 degrees C (104 degrees F). Water temperatures between 38 degrees C (100 degrees F) and 40 degrees C (104 degrees F) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10 to 15 minutes) and for young children.*
7. *Since excessive water temperature has a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 38 degrees C (100 degrees F).*
8. *Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature regulating devices may vary as much as 3 degrees C (5 degrees F).*
9. *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 or hot tub.*
10. **Danger- Risk of Injury-** **a. Replace damage cord immediately. b. Do not bury Cord. c. Connect to a grounded, grounding type receptacle only.**

Extreme Caution

Hyperthermia: Occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 degrees Fahrenheit. The symptoms of Hyperthermia include dizziness, fainting, drowsiness or lethargy.

The effects of Hyperthermia include:

1. ***Unawareness of impending hazard***
2. ***Failure to perceive heat***
3. ***Failure to recognize the need to exit spa***
4. ***Physical inability to exit spa***
5. ***Fatal damage in pregnant women***
6. ***Unconsciousness resulting in a danger of drowning***

ELECTRIC REQUIREMENTS

DANGER – RISK OF ELECTRIC SHOCK

Installations that do not conform to the following procedures and requirements may expose users to electric shock. Non-conforming installations will not be covered under warranty.

1. Installations that are within 5 feet from any metal surfaces must ground the metal surfaces to the Hot Tub. Use an 8 AWG solid wire and attach it to the grounding lug on the power pack, located in the equipment compartment.
2. Only a licensed electrician may install power to the Hot Tub.
3. Power Supply installation must include a properly rated GFCI breaker, The circuit breaker must be dedicated and should not be shared with any other appliances. It must be labeled and easily accessible to users.
4. Power supply lines must be hard wired into the power pack. DO NOT use extension or plug-type cords of any kind. The use of a shut-off box near the Hot Tub is also recommended. This box provides a quick and convenient method to shut off power to the Hot Tub for emergencies and maintenance.
5. Supply lines must be properly sized as per the NEC (National Electric Code). A ground line must be provided that is as large as the largest current carrying conductor, but no less than 8 AWG. Use copper wiring only.
6. Please open the front cover of the power pack, and follow the instructions and wiring diagram printed on the backside.

CIRCUIT BREAKER REQUIREMENTS

A new GFCI circuit breaker must be used for your Hot Tub installation. Do not use an existing breaker, as its condition is unknown.

<u>BREAKER</u>	<u>240 V</u>	<u>120V</u>
Capacity	40 amps	20 amps
# of wires	4	3

On 240 volt systems always use a 4 wire system. ON all systems, the Hot Tub must be connected to a dedicated circuit breaker that is not shared with any other equipment. Do not use extension or plug type cords of any kind.

For 120V to 240V or 240V to 120V conversion instructions see backside of spa pack cover plate for your spa's specific instructions.

CONVERSION MUST BE PERFORMED BY A QUALIFIED LICENSED ELECTRICIAN.

CONTROLS

Initial Start-up

Your Lite Leader control has been specifically designed so that by simply connecting the spa to its properly grounded source, the control will automatically heat the water to the set temperature.



Temperature Adjustment (80°F - 104°F)



Temperature adjustment is controlled by pushing the pad. The display will show the actual water temperature unless the pad is pressed. When the pad is pressed, the display will show the set temperature. Pressing the pad a second time will cause the set temperature to increase or decrease depending on what direction was last chosen. Each press to follow will change the set temperature in the same direction. If the opposite direction is desired, release the pad and let the display revert to the actual water temperature. Press the pad to display the set temperature, and again to make the temperature change in the desired direction.

Light and Pump Control



Press the pad once to turn on the light. Press the pad again and the pump's low speed, the ozone generator (if installed), and the light will operate. Press the pad a third time and the pump's high speed and the light will run. Press the pad again and only the pump's high speed will be on. Press the pad a final time to turn off all functions. The light will automatically turn off after 4 hours of operation. The pump's low speed and the ozone generator (if installed) turn off after 2 hours. The pump's high speed turns off after 15 minutes. When the heater is turned on, the pump and the ozone generator (if installed) are automatically activated. If activated in this way, neither can be turned off with the function pad; however, the pump's high speed may.

Preset Filter Cycles

Your Lite Leader will automatically filter itself twice each day. The first filter cycle will begin 1 minute after the Lite Leader is energized. The second filter cycle will begin 12 hours after the start of the first filter cycle. The filter cycle is set by the factory for 2 hours. During filtration, the pump's low speed and the ozone generator (if installed) run continuously.

Diagnostic Messages

Overheat (Spa is deactivated) **Oh**

DO NOT ENTER THE WATER. If the spa water has reached 112° F, remove the spa cover to cool the water. Overheating may occur if the filter cycle is set too long. At 110°F, the spa should reset itself. If the high-limit sensor detects 118°F at the heater, the spa will shut down. When the heater cools to 110°F, press any button to reset the spa. If the spa will not reset, then shut off power to the spa and call your dealer or service organization.

Flow **Fl**

A pressure switch is not working. Call your dealer or service organization.

Flow (Spa is deactivated) **Sn**

The high-limit sensor or water temperature sensor is not working. Call your dealer or service organization.

Warning! Shock Hazard! No User Serviceable Parts.

Do not attempt service of this control. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.

Whirlpool Jet (when equipped)

Located below the water line at control panel, in the wall, is the whirlpool (special order option on the TLX model only). This jet is a combination valve and high capacity jet, and has a larger diameter than the hydrotherapy jets. Because there is a substantial amount of water pressure when the jet is in operation, you must turn the pump off or to low speed before attempting to rotate the jet face. When the whirlpool jet is in the open it will turn off all of the hydrotherapy jets. Whirlpool must be in the off position normally to provide accurate heating.

Hydrotherapy Jets

The Hydrotherapy jets are recessed and located in the wall of the Hot Tub. Rotate the jet face counterclockwise to turn the jets on, clockwise to turn the jets off. Not all jets have a rotational face to turn off and on the jets. Turning off or on a jet will increase or decrease the effects of any jets "not" in the closed position.

Air Control Valve

Located next to the topside digital control will be an Air Control Valve (Units equipped with a whirlpool will have two air control valves. The additional air control is for the whirlpool on TLX models only). This air control valve serves to regulate the amount of air mixed with the water when the jets are operational. Rotate the air control to "Max" to achieve the maximum jet pressure and therapeutic action. Rotating the air control to "Min" turns the air off and allows the jets to work with water only. Turn the air controls to "Min" when the Hot tub is not in use. This will prevent cold air from entering the Hot Tub and will keep heating cost to a minimum.

FILL AND START UP INSTRUCTIONS

The following procedures should be followed on initial startup and whenever the Hot Tub is drained for routine maintenance.

FILLING THE HOT TUB WITH WATER

1. Clear all the debris from your Hot Tub.
2. Use a garden hose to fill your Hot Tub with water. **NOTE: do not use home water heater or softened water.**
3. As the water level rises, check inside the equipment compartment for water leaks. It may be necessary to tighten unions and/or fittings that may have loosened during delivery. There is no need to call for service, this can easily be done by yourself. If assistance is required, your dealer or service organization may charge a small fee.
4. Keep the water level at the texture level mark, where the rough texture meets the smooth texture on the inside of the spa, at all times. All jets must be under water.

APPLYING POWER

Apply power by turning on your dedicated GFCI circuit breaker (120 volt or 220volt). Your Hot Tub has been specifically designed so that by simply applying power, it will automatically heat to the factory default temperature of 100° F.

1. Press the Lights/Jets pad on the topside control panel to activate the spa. Rotate the air control valves to “Max” and observe the increased jet action. **NOTE: let the high-speed pump run for 10 minutes. This helps purge the air from the water lines.**
2. While the pump is running, check again for water leaks at the drain spigot, unions, or fittings in the equipment compartment. If water is leaking from one of these areas, there is no need to call for service. Simply tighten the fitting. If assistance is required, your dealer or service organization may charge a small fee.
3. After checking your spa for leaks it is now time to adjust your preferred temperatures and turn off the high-speed pump.

FILTRATION CYCLES

Your Hot Tub has been factory preset to automatically filter for 2 hours, twice a day. During filtration, the low-speed pump will activate. The first cycle will begin 1minute after the Hot Tub is energized. The second filter cycle will begin twelve hours after the start of the first filtration cycle.

NOTE: Your Hot Tub should filter for a minimum of 2 hours, twice a day for proper filtration. If power is lost, your controls will reset back to the factory defaults.

ADDING START-UP CHEMICALS

You should have an adequate supply of chemicals on hand for your Hot Tub. You should familiarize yourself with the necessary types and amounts of chemicals to maintain your water at clean and healthy levels. Your dealer stocks the necessary chemicals and is a good source of information on chemicals and procedures.

NOTE: the importance of the chemical balance in the Hot Tub can not be over-emphasized.

PH Balance

PH is a measure of water acidity. On a scale of 0 to 14, 7.6 is the ideal point of balance. A measurement below 7.2 indicates that your water is more acidic. This water condition results in corrosion of the equipment's metal components. A measurement above 7.8 indicates that your water is more alkaline. This water condition causes calcium deposits and scaling in the equipment and Hot Tub. Both conditions are detrimental and cause damage.

NOTE: Calcium deposits can also cause a restriction of air through your jets. Using a stain & scale remover regularly, will greatly reduce the chance of this occurring.

CHLORINE

Granulated Chlorine must be used to remove bacteria and other organic matter from the water. Little or no chlorine causes water to turn green and unhealthy. Too much chlorine causes water to smell pungent, irritates the eyes and skin, and can cause damage to the heater tube on the power pack.

NOTE: Improper pH will destroy the pump seals and heater elements. Damage to components caused by improper pH balance or other improper chemistry will not be covered under warranty.

Freeflow Spas strongly discourages the use of chemicals that contain Hydrogen Peroxide. Hydrogen Peroxide will eventually cause the light body and lenses (used on all spas) to become brittle and crack.

***Read all labels on Chemicals—Do not use any products that omit usage in Hot Tubs or with ozonators.**

OZONATORS

If your Hot Tub is installed with an ozonator at the factory, your Hot Tub will automatically filter water at preset times. Please note that ozonator and chemicals work together to kill bacteria. Ozonators cannot totally eliminate the need for chlorine. Ozone is a bactericide. The active component in an ozonators is the ozone generating Microchip. When power is applied to the Microchip, ozone is generated. A tube links the ozone compartment with the ozone jet. During the filter cycle, when the water pump is on low speed, the water movement through the ozone jet draws the ozone out of the compartment, mixes with and purifies the water in the process.

The ozone generating Microchip has a limited service life. Production of ozone is degraded with use. For optimum performance, we recommend the Microchip be replaced about once every year (see ozone generator booklet shipped with spa).

CLEANING OR WINTERIZING

Every three or four months, depending upon the water condition, you may need to renew your water. Before draining, power must be turned off at the GFCI circuit breaker. Within the equipment compartment, locate the drain faucet. Attach a garden hose to the faucet and open it. Water will start to drain. You can also siphon the water from the Hot Tub. The drain faucet will not remove all the water. You may have to remove a small amount of the water by hand, using a towel or plastic container.

If you plan to store your tub for the winter, you must also use a wet-vac to clean out the water lines to ensure they are free of any water. Water left in the lines might freeze and damage the lines and jets. To adequately clean out the lines, place the wet-vac over each jet face for 10-15 seconds. On the whirlpool jet, rotate it to the open position and vacuum for 10-15 seconds. Remove the filter cartridge and do the same. Also, let the water drain from the heater tube by loosening the black spit-nuts on each side of the heater tube. Remember to re-tighten the split-nuts when completed. Use the wet-vac to vacuum up any water that may have drained on to the Hot Tub floor.

Note: damage caused by improper winterizing will not be covered under warranty. You will want to contact a professional for proper winterizing.

SURFACE CARE

Do not use solvents or abrasive cleaners to clean the Hot Tub. Consult your Freeflow dealer for the proper cleaners.

COVER CARE

Please keep your cover free from dirt at all times. Use a cover cleaner or warm soapy water to clean the surface. Do not use any silicone-based products, as it will dry and may eventually crack the vinyl.

NOTE: Do not stand on the cover at any time. The cover must be removed when adding chemicals to your Hot Tub. This will extend the life of your cover. The gases from burned off chemicals will be trapped under the cover, if not removed. These gases will eat away at the protective lining for the foam inserts. Eventually, the foam inserts will absorb the moisture from the Hot Tub and become very heavy. This will not be covered under warranty.

FILTER CARTRIDGE MAINTENANCE

Freeflow Hot Tubs use a screw in cartridge that is easily removed. When the filter cartridge is removed, make sure that no objects fall into the filter cavity. They can cause obstructions to the water movement.

Every two weeks, the filter cartridge must be cleaned to remove the objects and particles that have lodged in the cartridge pleats. Using a garden hose with a pressurized nozzle, push water from inside to outside of the pleats, forcing all the trapped particles out. If the cartridge is far too dirty to be cleaned as described above, contact your Freeflow dealer for a replacement.

NOTE: Filter cartridges should be replaced at least once a year.

SPA MAINTENANCE

FILTER CARTRIDGE REMOVAL AND CLEANING INSTRUCTIONS

Turn the power to the spa off, then follow directions below:

- **Push** down slightly and turn filter basket counter clockwise to unlock, then pull the basket and weir out.
- **Carefully** unscrew the filter cartridge and bring it out of the spa.
- **Rinse** cartridge using a garden hose. Rotate and separate filter pleats while spraying water to remove all dirt and debris possible. Let filter dry and look for calcium deposits (scaling) or an oil film. If you find these, you will need to deep clean your filter cartridge with a “spa filter cleaner” solution to break down and remove unwanted deposits and oils. (For longer filter life you should soak filter regularly.)
- **Replace** filter cartridge, then return basket and weir, insert and rotate clockwise to lock into position. Then, turn spa’s power back on.

SPA COLORED LIGHT LENS INSTALLATION

- **Colored** lenses, red and blue, are included with the spa light. Colored lenses pop on and pull off permanent clear light lens.

SPA LIGHT BULB REPLACEMENT

- **Turn OFF** the power to the spa.
- **Remove** the equipment compartment access door.
- **Locate** the rear of the spa light.
- **To** remove the bulb, turn it counter clockwise ¼ turn, and remove bulb from socket.
- **Replace** the bulb by reversing the above steps.

CAUTION: The replacement bulb must be the same rating as the factory installed bulb. Check with your dealer for the correct part number.

DRAINING YOUR SPA

- **Trip all GFCI breakers in sub-panel, main electrical panel or unplug your spa**
- **Remove** the equipment compartment access door.
- **Locate** end of the drain hose and lift it above the water level.
- **Unscrew** and remove the drain cap.
- **Attach** drain hose to a garden hose and direct to an appropriate draining area, keeping the hose below the water line.
- **After** your spa is empty, clean the shell and filter cartridge. See “**Important Maintenance Procedures**”
- **After** cleaning, remove garden hose, replace drain cap and put drain hose back in equipment compartment.
- **Follow** the “Start-up Instructions” to refill your spa.

LIMITED WARRANTY

Thirty-Year Shell/Surface Warranty

Freeflow Spas warrants the interior surface/shell against cracking, blistering, delaminating or water loss for a period of thirty years from the date of purchase.

Two- Year Equipment and One- Year Labor Warranty

Freeflow Spas warrants the electrical components including the pump, heater, and control system against malfunctions in materials or workmanship for a period of two years from the original purchase date. Filter cartridges, light bulbs, cover locks, fuses, ozone generators, and headrest are not included in this warranty. Those items are, however, warranted to be free from defects in materials and workmanship at the time of delivery to the original consumer purchaser. Shipping charges for parts in the second year of warranty are the sole responsibility of the consumer purchaser.

One-Year No Leak Plumbing Warranty

Freeflow Spas warrants the factory installed plumbing components not to leak for a period of one year from the original purchase date. This warranty specifically covers leaks from jet fittings, internal plumbing, internal glue joints and hoses.

Extent of Warranty

This warranty applies to Freeflow Spas manufactured after April 1, 2003 and sold by Freeflow Spas authorized dealers within North America. This warranty is given only to the original consumer purchaser and terminates upon any transfer of ownership. Commercial applications are excluded from all warranty coverage. This warranty does not provide coverage for the insulated cover or any item attached to or installed on the spa after the date of manufacture (including ozone systems) although they may be covered under other warranties. Check with your Freeflow dealer for details.

Warranty performance

In the event of a defect not covered under the terms of the warranty, notify your authorized Freeflow dealer as soon as possible and use all reasonable means to protect the spa from further damage. Upon proof of purchase, Freeflow Spas or its designated service representative will correct the defect subject to the terms and conditions contained in this warranty. There will be no charge for parts and labor to replace the defect, although you may incur reasonable repairman travel mileage charges. If Freeflow determines that the repair of the covered defect is not feasible, we reserve the right to instead provide a replacement spa equal in value to the original purchase price of the defective spa. In such instances, reasonable cost for the removal of the defective spa, shipping cost for the replacement spa and delivery and installation of the replacement spa will be the responsibility of the spa owner.

Acts Invalidating Warranty

This warranty is void if the Freeflow Spa has been subjected to alterations, neglect, misuse or abuse; if any repairs have been attempted by anyone other than a Freeflow Spas authorized service representative; or if failure is caused by accident, acts of nature or other causes beyond the control of Freeflow Spas. Alterations shall include: any component or plumbing change, electrical conversion or addition of alternate sanitation or heating systems which contribute to component failure. Neglect, misuse and abuse include any installation, operation or maintenance of the spa other than in accordance with the **owner's manual** or use for which the spas were not designed. Specifically damage caused by the operation of the spa with water temperatures outside the range of 32 degrees Fahrenheit and 120 degrees Fahrenheit; damage caused by dirty, clogged or calcified filter cartridges; damage to the spa surface caused by improper use of chemicals to lie on the surface; damage caused by improper Ph balance, improper calcium hardness level or other improper water chemistry; damage to the spa surface caused by leaving the spa uncovered and in direct sunlight; damage caused by allowing solar blankets to be stored in the folded position on the top lip of the spa; damage caused by failure to provide even and sufficient support for the spa are considered abuses and may invalidate this warranty.

Disclaimers

Freeflow Spas or any of its authorized agents shall not be held liable for injury or loss of use of your spa or other incidental and consequential cost, expense or damages which may include, but are not limited to, the removal of a permanent deck or other custom fixture. In no event shall Freeflow Spas be liable for any reason or cause in excess of the amount paid for the product. No other warranties, written or implied, are valid. NO agent, dealer, distributor, service company or other party is authorized to change modify or extend the terms of this warranty.

Legal Rights

This warranty gives you specific legal rights and you may have other rights, which vary from state to state.