# Spa Information

## My Spa:

**Model Name:** _____     **Serial Number:** _____

**Date Purchased:** _____     **Date Installed:** _____

**Gallons/Liters:** _____

**Notes:** _____

_____

_____

_____

_____

## Dealer Information:

**Dealer's Name:** _____

**Address:** _____

**City:** _____     **State:** _____     **Zip:** _____

**Telephone:** _____     **Fax:** _____

Dimension One Spas, D1, Dynamic Massage Sequencer, Envirotect, *Liquid-FX*, Neckflex Jet Pillow, SoftTouch, UltraPure Water Management, and UltraLounge are trademarks or pending trademarks of Dimension One Spas.

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# IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

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

- **Risk of Accidental Drowning.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use or approach the spa unless they are supervised at all times.
- **Risk of Serious Injury or Death.** The suction fittings in this 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 spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
- **Risk of Electric Shock.** Install at least 5 FEET (1.5 m), from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4 mm2) solid copper conductor attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment can.
- **Risk of Electric Shock.** Do not permit any electrical appliance, such as a light, telephone, radio, television, etc. within 5 feet (1.5 m) of a spa. Never operate any electrical appliances from inside the spa or when you are wet.
- The electrical supply for this spa must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with section 680-42 of the National Electrical Code, ANSI/NFPA 70-1993. The disconnect must be readily accessible and visible to the spa occupant but installed at least 5 feet (1.5 m), from the spa water.
- A grounding wire connector is provided on this spa to connect a minimum No. 8 AWG (8.4 mm2) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the spa.
- Do not attempt to remove the light housing cover without lowering the water level below the light housing cover.
- **To Reduce the Risk of Injury:** The water in a spa should never exceed 104° F (40° C). Water temperatures between 100° F (38° C) and 104° F (40° C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.
- **To Reduce the Risk of Injury:** Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100° F (38° C).
- **To Reduce the Risk of Injury:** 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 +/- 5° F (2° C).
- **To Reduce the Risk of Injury:** The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
- **To Reduce the Risk of Injury:** Pregnant women, the elderly, infants, or 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. People with infections diseases should not use a hot tub.
- **To Reduce the Risk of Injury:** Persons using medication should consult a physician before using a spa since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure, and circulation.
- Observe a reasonable time limit when using the spa. Long exposures at high temperatures can cause high body temperature. Symptoms may include dizziness, nausea, fainting, drowsiness, and reduced awareness. These effects could result in possible drowning.
- Enter and exit the spa slowly. Wet surfaces can be very slippery.
- Proper chemical maintenance of spa water is necessary to maintain safe water and prevent possible damage to spa components.
- Use the spa straps and clip tie downs to secure the cover when not in use. This will help to discourage unsupervised children from entering the spa and keep the spa cover secure in high wind conditions. There is no guarantee that the cover, clip tie downs, actual locks will prevent access to the spa.

## SAVE THESE INSTRUCTIONS

# IMPORTANT SAFETY INSTRUCTIONS (CANADA) (CSA SAFETY INFORMATION)

**In addition** to the preceding safety instructions, Canadian owners should read and understand the following information from the Canadian Safety Association:

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

- A green colored terminal or a terminal marked G, GR, Ground, Grounding, or the symbol * is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.
  o IEC Publication 417, Symbol 5019.
- At least two lugs marked "BONDING LUGS" are provided on the external surface or on the inside of the supply terminal box/compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub or spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.
- All field-installed metal components such as rails, ladders, drains or other similar hardware within 3 meters of the spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG.
- Children should not use spas or hot tubs without adult supervision.
- **AVERTISSEMENT:** NE PAS LAISSER LES ENFANTS UTILISER UNE CUVE DE RELAXATION SANS SURVEILLANCE.
- Do not use spas or hot tubs unless all suction guards are installed to prevent body and hair entrapment.
- **AVERTISSEMENT:** POUR ÉVITER QUE LES CHEVEUX OU UNE PARTIE DU CORPS PUISSENT TRES ASPIRÉS, NE PAS UTILISER UNE CUVE DE RELAXATION SI LES GRILLES DE PRISE D'ASPIRATION NE SONT PAS TOUTES EN PLACE.
- People using medications and/or having adverse medical history should consult a physician before using a spa or hot tub.
- **AVERTISSEMENT:** LES PERSONNES QUI PRENNENT DES MÉDICAMENTS OU ONT DES PROBLÈMES DE SANTÉ DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER USE CUVE DE RELAXATION.
- People with infectious diseases should not use a spa or hot tub.
- **AVERTISSEMENT:** LES PERSONNES ATTEINTES DE MALADIES INFECTIEUSES NE DEVRAIENT PAS UTILISER UNE CUVE DE RELAXATION.
- To avoid injury, exercise care when entering or exiting the spa or hot tub.
- **AVERTISSEMENT:** POUR ÉVITER DES BLESSURES, USER DE PRUDENCE EN ENTRANT DANS UNE CUVE DE RELAXATION ET E SORTANT.
- Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.
- **AVERTISSEMENT:** POUR ÉVITER L'ÉVANOUISSEMENT ET LA NOYADE EVENTUELLE, NE PRENDRE NI DROGUE NI ALCOOL AVANT D'UTILISER UNE CUVE DE RELAXATION NI QUAND ON S'Y TROUVE.
- Pregnant or possibly pregnant women should consult a physician before using a spa or hot tub.
- **AVERTISSEMENT:** LES FEMMES ENCEINTES, QUE LEUR GROSSESSE SOIT CONFIRMÉE OU NON, DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION.
- Water temperature in excess of 38° C may be injurious to your health.
- **AVERTISSEMENT:** IL PEUT TRE DANGEREUX POUR LA SANTÉ DE SE PLONGER DANS DE L'EAU À PLUS DE 38°C.
- Before entering the spa or hot tub, measure the water temperature with an accurate thermometer.
- **AVERTISSEMENT:** AVANT D'UTILISER UNE CUVE DE RELAXATION MESURER LA TEMPÉRATURE DE L'EAU À L'AIDE D'UN THERMOMÈTRE PRÉCIS.
- Do not use a spa or hot tub immediately following strenuous exercise.
- **AVERTISSEMENT:** NE PAS UTILISER UNE CUVE DE RELAXATION IMMEDIATEMENT APRÈS UN EXERCICE FATIGANT.
- Prolonged immersion in a spa or hot tub may be harmful to your health.
- **AVERTISSEMENT:** L'UTILISATION PROLONGÉE D'UNE CUVE DE RELAXATION PEUT TRES DANGEREUSE POUR LA SANTÉ.

- Do not permit electric appliances (such as a light, telephone, radio, television, etc.) within 1.5m of this spa or hot tub.
- **AVERTISSEMENT:** NE PAS PLACER D'APPAREIL ÉLECTRIQUE (LUMINAIRE, TÉLÉPHONE, RADIO, TÉLÉVISEUR, ETC.) À MOINS DE 1.5 M DE CETTE CUVE DE RELAXATION.
- Maintain water chemistry in accordance with manufacturer's instructions.
- **ATTENTION:** LA TENEUR DE L'EAU EN MATIERÈS DISSOUTES DOIT TRE CONFORME AUX DIRECTIVES DU FABRICANT.
- The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia in hot tubs and spas.
- **AVERTISSEMENT:** LA CONSOMMATION D'ALCOOL OU DE DROGUE AUGMENTE CONSIDÈRABLEMENT LES RISQUES D'HYPERTHERMIE MORTELLE DANS UNE CUVE DE RELAXATION.

## SAVE THESE INSTRUCTIONS

# Hyperthermia

Prolonged immersion in hot water may cause hyperthermia. A description of the causes, symptoms, and effects of hyperthermia are as follows: Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F, or 37° C. The symptoms of hyperthermia include dizziness, drowsiness, lethargy, and fainting. The effects of hyperthermia include:

- Failure to perceive heat,
- Failure to recognize the need to exit spa,
- Unawareness of impending hazard,
- Fetal damage in pregnant women,
- Physical inability to exit spa,
- Unconsciousness resulting in the danger of drowning.

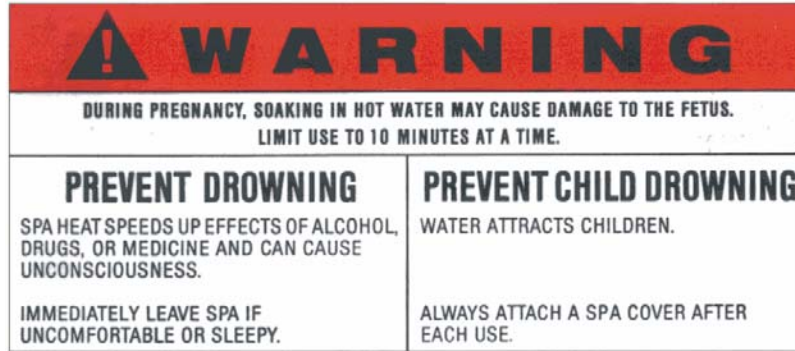# Safety Do's and Don'ts

**Do**

- **DO** read all operating instructions.
- **DO** read, understand and follow all Safety, Danger and Warning instructions before use.
- **DO** test water temperature with your hand before entering to be sure that it is comfortable.
- **DO** keep the spa cover closed when the spa is not in use. This is important for safety and for economical spa operation.

**Don't**

- **DON'T** block the equipment compartment vents. Blockage may cause damage to the spa equipment and will void the warranty.
- **DON'T** block or sit on the filter recess area.
- **DON'T** allow horseplay or unsupervised use of your spa.
- **DON'T** allow anyone to tamper or play with any of the safety or suction fittings of your spa.
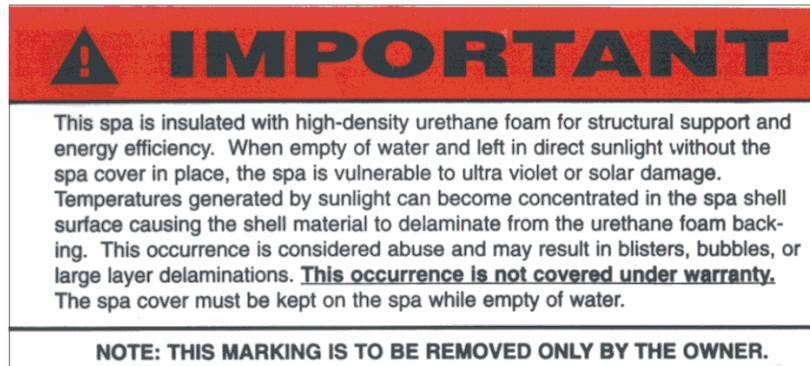
# Warning Signs

Each spa has been provided with a Warning Sign and an Important Notice label.

**⚠ WARNING**

DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS.
LIMIT USE TO 10 MINUTES AT A TIME.

| PREVENT DROWNING | PREVENT CHILD DROWNING |
|---|---|
| SPA HEAT SPEEDS UP EFFECTS OF ALCOHOL, DRUGS, OR MEDICINE AND CAN CAUSE UNCONSCIOUSNESS. | WATER ATTRACTS CHILDREN. |
| IMMEDIATELY LEAVE SPA IF UNCOMFORTABLE OR SLEEPY. | ALWAYS ATTACH A SPA COVER AFTER EACH USE. |

This label outlines safety precautions. This sign should be permanently placed in a location that is visible to the spa user. Replacement signs can be obtained from:

Dimension One Spas
2611 Business Park Drive
Vista, CA 92081
(760) 727-7727

**⚠ IMPORTANT**

This spa is insulated with high-density urethane foam for structural support and energy efficiency. When empty of water and left in direct sunlight without the spa cover in place, the spa is vulnerable to ultra violet or solar damage. Temperatures generated by sunlight can become concentrated in the spa shell surface causing the shell material to delaminate from the urethane foam backing. This occurrence is considered abuse and may result in blisters, bubbles, or large layer delaminations. **This occurrence is not covered under warranty.** The spa cover must be kept on the spa while empty of water.

NOTE: THIS MARKING IS TO BE REMOVED ONLY BY THE OWNER.

# Initial Startup

**IMPORTANT: About your GFCI Circuit Breaker** — The GFCI (Ground Fault Circuit Interrupter — also called a "circuit breaker") is an electrical safety switch that automatically shuts off power to the spa in case of an electrical malfunction.  You must have a GFCI installed according to your local building codes in an electrical power box near your spa. The GFCI should be OFF before you fill your spa. You can manually turn off power to the spa any time by using the GFCI.  Just push the switch to the OFF position.  After turning off the GFCI, make sure the control panel display window is blank, so you know the power is off. When you are ready to turn the power back on, you can reset the GFCI by returning the switch to the ON position.

If you have questions about the location or operation of your GFCI, ask your dealer to explain it to you.  Do not use your spa unless you understand the operation of the GFCI.

1.  Locate the spa's Upper Control Panel; use the pictures on page 9 to help you identify your Upper Control Panel. Beneath this panel is the equipment compartment.

2.  Use a Phillips screwdriver to unscrew the panel.  To remove the panel, pull it up, then pull it towards you to expose the equipment compartment.

3.  Locate the **hose bib** (see picture to the left) that is included in the owner's manual packet. The packet is shipped inside the equipment compartment. This bib allows you to connect a hose to your spa to drain it.

4.  Screw the hose bib onto the male drain fitting at the bottom of the hot tub to the lower left of the equipment compartment, on the pedestal. (see arrow in the photo to the right).

5.  **Close the valve** on the side of the hose bib by turning the valve handle so it is perpendicular to the pipe. (In the illustration below the valve is open).

6.  Check that the pump unions (circled in illustration) are hand tight to prevent the possibility of leakage.







7.  Remove the two shipping bolts on the front of the pump mount (circled in illustration).

    Then check to ensure that the gate valves (arrows on the illustration) on the pump(s) are in the open position (handles fully extended).



8.  Look at the circulation pump (2 pumps if your spa is equipped with *Liquid-FX*) located at the bottom of the main equipment compartment. Check the hose clamp fitting where the plumbing attaches to the pumps and make sure they are tight.

9.  Inside the spa, remove the bleeder valve(s) located in the skimmer area (see picture at right) to allow air to escape from the pump(s) while you are filling the spa.
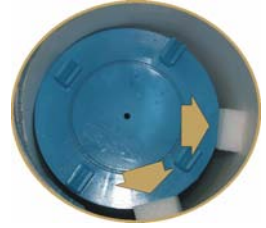


Do not forget to replace the bleeder valve(s) once the pumps are operating.

10. Remove the filter lid(s), then remove the foam blocks securing the filter(s). The spa may have one or two filters.





UltraPure™ Filter

Skimmer Filter

11. If the spa has two filters, remove the UltraPure™ filter (see photo to the left) and fill the spa with a hose in that canister. Otherwise, remove the single filter and fill the spa through that canister. (See the Filter Cleaning section in this manual to learn more about removing filters).
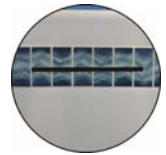
12. Fill the spa until the water level is about six inches below the top of the spa or two inches above the bottom of the tile line (if your spa has tile).



13. Once the spa is filled, replace the filters and turn on the GFCI circuit breaker. Your spa's Upper Control Panel will turn on. On spas equipped with either the Digital Control Panel or the Scrolling Message Center, flashing dashed lines will appear for 30 seconds, followed by the current water temperature (flashing). On spas equipped with the ☀·d r i v e Control Panel, the display screen on the control panel will show the software version, followed by the software number. The screen will then show the Spa menu, dashed lines will appear instead of the current temperature for the first 30 seconds.

14. On spas equipped with either the Digital Control Panel or the Scrolling Message Center, push the **JETS Button** twice (use the **JETS 1** Button on multi-pump spas) on North American 60Hz models to turn the pump on to high speed. (Push it once on European 50Hz models). Let the system run for 30 to 45 seconds to prime the pump. Push the button again to shut the pump off.



On spas equipped with the ☀·d r i v e Control Panel, push the **Jet Pump 1 Button** once to turn on Pump 1. Let the system run for 10 to 15 seconds to prime the pump, then press the button again to turn it off. Repeat this process with pump 2 (if equipped).
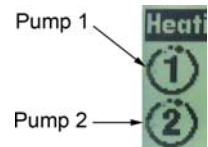


15. If the jets do not start, there is air trapped in the plumbing lines. To eliminate the trapped air, turn the pumps on and off several times to force the trapped air through the pumps. If the jets still do not start, and the bleeder valves have been open for some time, turn off the pumps and loosen the top pump unions (see illustration in step 6) slightly to let any trapped air escape. Re-tighten the pump unions and turn the pumps on again. Turn the pumps on and off several times until jets function properly.



**Note**

Ozone bubbles will continue to rise from the skimmer compartment UltraPure™ bleeder valve as long as the valve remains open. Once the jets are working, be sure that the bleeders are closed tightly.

16.  After the jets functioning properly, replace and close the bleeder valves.  Now you will need to set the desired water temperature.

On spas equipped with either the Digital Control Panel or the Scrolling Message Center, push the UP/DOWN Buttons until your desired water temperature (called the "Set Temperature") appears in the Display Window. The Display Window will show your Set Temperature for thirty seconds before reverting to show the current water temperature.

On spas equipped with the @·d r i v e Control Panel, push up or down to enter the set point menu and select the temperature for the spa.  Press Accept to save your changes.

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⚠ **Warning**

The Display Window will not allow you to set the temperature above 104° F ($\cong$40°C).  However, if the water temperature exceeds 104° F ($\cong$40° C), the display will show the actual temperature.  **Never get in water if the temperature exceeds 104° F ($\cong$40° C).**

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17.  While the spa is heating, inspect the pump unions and plumbing fittings for leaks. When the inspection is finished, replace all the equipment panels.

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**Note**

To confirm that the heater is on check that the Heat Indicator light at the right side of the control panel is glowing.

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**Note**

Depending upon the size of the hot tub and the size of the circuit breaker used, the spa will heat at approximately 3° F ($\cong$1.65° C) to10° F ($\cong$5.5° C) per hour.

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18.  After completing the above steps, see the **Water Care Guide** (provided separately) to ensure proper water chemistry.

19.  Place the thermal cover on the hot tub to conserve energy and to keep it ready for use.

# Operation

To control the functions of the spa use the topside Control Panel. The spa is equipped with either the **Scrolling Message Center** (in which the words or numbers "scroll" in the display window), the **Digital Control Panel** where words and numbers appear without scrolling, or the **mDrive Control Panel**, which uses a menu-driven interface.

Before continuing, identify which control panel you have by comparing with the pictures below.
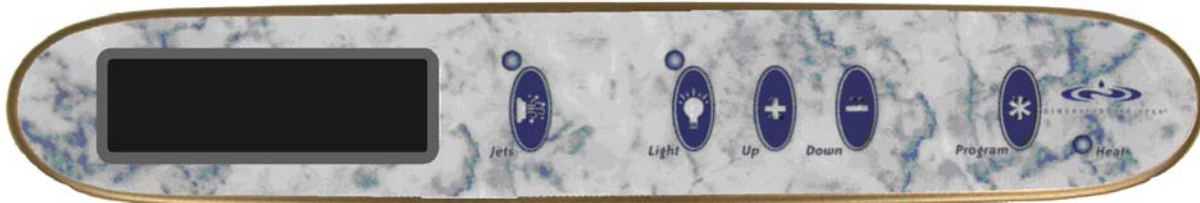
**Scrolling Message Center - Non-** *Liquid-FX* **spas**
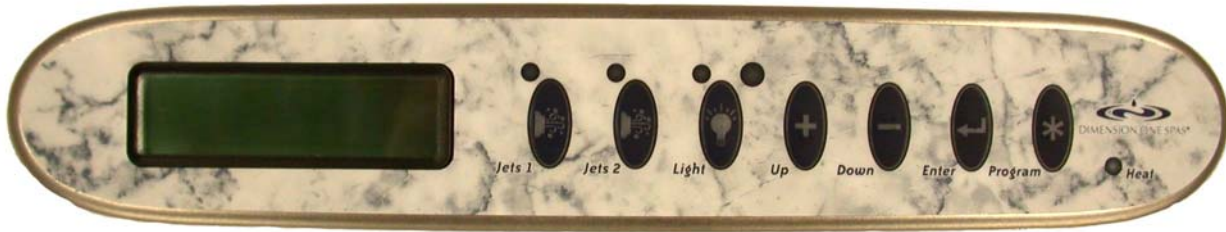
**Scrolling Message Center –** *Liquid-FX* **spas**
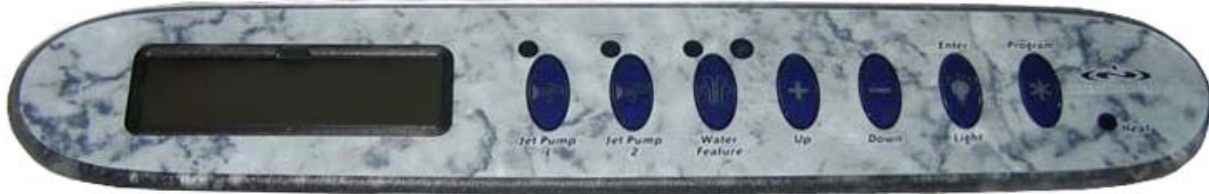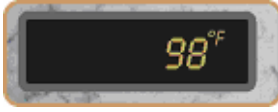
**Digital Control Panel**

**mdrive Control Panel**

# Using the Digital Control Panel and Scrolling Message Center

The following information applies to all of the control panels shown above. Other instructions specific to each panel follow this section. Understand the following features before starting up the spa.

*Display Window*

The **Display Window** shows the current status of the hot tub: its monitoring functions, self-diagnostics, or programming messages. By default it shows the water temperature.

*JETS Buttons*

When the **JETS 1** or **JETS 2** Button (or the **JETS** Button on one-pump models) are pushed:
- The corresponding jet pump activates.
- The Jet Indicator Light glows.
- A swirl icon appears in the upper left corner of the Display Window. Its swirl speed indicates the pump's speed.

Pushing a **JETS Button** once starts the pump on LOW speed. Pushing it a second time turns on HIGH speed. Pushing it a third time turns the pump off.

A built-in timer will automatically shut the pump off after 30 minutes (60 minutes on some models), unless it is turned off manually. (To reprogram the shut-off time see the Programming section).

When the pump is turned on, after the pump speed appears in the Display Window, a status bar appears indicating the time remaining until shut-off. If your spa has multiple jet pumps, they are all controlled by the same shut-off cycle.

The automatic shut-off also allows the hot tub to be filtered immediately after use. Just push the Jet button one more time as you get out, for an additional cycle of filtering.

Pushing a **JETS Button** will disable any concurrent filter cycle.

***LIGHT Button***
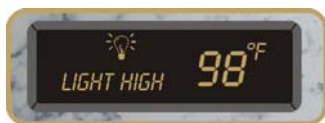
If the spa is equipped with the standard light, push the light button once to turn on the brightest setting. Push a second time for medium, a third for dim, and a fourth to turn the light off. The light automatically turns off after one hour.

If the spa is equipped with the optional Dynamic L.E.D. Light, there are 2 modes: Color Change, which cycles through all colors, and Color Select, which allows selection of any solid color from the Color Change mode. Push the light button once for Color Change mode. To change between Color Change and Color Select modes, turn the light off for 3 seconds, and then turn it back on. Another way to change modes is to hold down the Light button until the light flashes off and on. To synchronize all spa lights, turn off the light for 3-9 seconds and turn it back on.

If the spa is equipped with the optional *Liquid-FX* package, press the light button once to enter Mode 1: Brilliant Mode. All lights are turned ON in the spa. To switch to Mode 2: Candle Mode press the light button once, then push it again before "LIGHT OFF" disappears from the Display Screen. The lights on the bartop, tile line, and fountain are ON, and the spa light is OFF. To switch to Mode 3: Fountain Mode, press the light button once, then push it again before "LIGHT OFF" disappears from the Display Screen. The fountain light is ON, and all other spa lights are OFF. Changing mode again returns you to Mode 1. To lock in your favorite light color, push and hold the light button until all lights in the spa blink off, then on. To unlock and return to the color wheel, hold down the light button until the lights blink off and on again.

**NOTE:** On *Liquid-FX* spas, the Light and Enter functions are the same button. In the programming menu, the Light/Enter button is the Enter button; at all other times, it is the Light button.

***WATER FEATURE Button (Liquid-FX spas only)***

Push the **WATER FEATURE Button** to turn on the water feature. Push a second time to turn off. To adjust the water feature, use the Water Feature Control Knob (pg. 31).

***TEMPERATURE Buttons***

To control the water temperature use the **Up (+) and Down (-) Buttons**. Push a button once to change the temperature by one degree, or hold it down to change more rapidly. For your safety, the temperature can be set no higher than 104 ° F. For a detailed description of setting the temperature, see the section that applies specifically to your type of control panel (either the "Scrolling Message Center" or the "Digital Control Panel").

*Heat Status Light*

The **Heat Status Light** glows when the heater is on. This is a normal function.

*ENTER Button*

If the spa is equipped with the **Scrolling Message Center**, the **Enter Button** is used to control some programming operations, or to exit the programming sequence at any time. (This button is not present on the Digital Control Panel).

**NOTE:** On *Liquid-FX* spas, the Light and Enter are the same button. In the programming menu, the Light/Enter button is the Enter button; at all other times, it is the Light button.

*PROGRAM Button*

Push the **PROGRAM Button** to begin the process of programming, or reprogramming, the spa.

For more information, see "Programming the Scrolling Message Center" or "Programming the Digital Control Panel**."**

*Dimension One Spas ICON (Logo) Button*

**Time of Day:** Push the Dimension One **ICON Button** to see the time of day. If no other button is pushed within 5 seconds, the display will revert to water temperature.

**Standby Mode:** If your spa has the **Scrolling Message Center**, hold the ICON Button for 5 seconds to put the spa in "Standby" mode, for cleaning the spa without turning off the power.
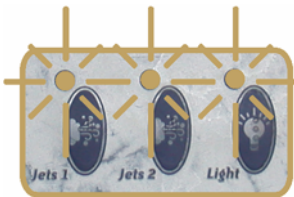
*Infrared Sensor*

If the spa is equipped with the **Scrolling Message Center**, the D1 Remote Control controls the jets, interior lights, and optional perimeter lighting.

Be sure to point the remote control at the infrared sensor, located to the left of the **Up** (+) button.

*Three Flashing Lights*

**DO NOT ENTER THE WATER** if you see **Three flashing Lights** on the control panel. This indicates a problem with the spa.

If there are flashing lights, but the Digital Display Window shows the current water temperature, there is a water flow problem. Check the water level and/or clean the filters.

The flashing lights should stop once the problem is fixed. If the problem persists, reset the power to the spa by resetting the GFCI breaker.

*or*

If the problem persists after resetting the power, contact your local Authorized Dimension One Spas Dealer, or authorized service center.

## Control Panel Functions Unique to the Scrolling Message Center

Messages that Appear in the Scrolling Message Center

If the spa is equipped with the Scrolling Message Center (to confirm this, see that your control panel has an Enter Button on it), then the spa will automatically provide warnings, prompts, or reminders to you in the Display Window as described below.

NOTE: To reset (turn off) any warning message, hold the Dimension One Spas ICON (logo) Button located at the right hand side of the control panel for 3 seconds.

### *Setting the Temperature*

Press the **Up (+) and Down (-) Buttons** to set the spa temperature and the words **SET TEMP TO _ _ _° F** appear in the lower left of the Scrolling Display Window. After the target temperature is set, the current temperature again appears in the Display Window while the bottom left corner scrolls the message **HEATING TO _ _ _° F** until the hot tub reaches the target temperature. A thermometer icon appears in the top center of the Display Window while the spa is heating.

If the water reaches 2° F ($\cong$1° C) above the target temperature, the message **COOLING TO _ _ _ - CIRC PUMP & O3 OFF** will be displayed in the bottom left hand side of the Digital Display Window, and a cooling cycle will start.

### *Rinse Filters*

Every other month, the Scrolling Message center will Display **RINSE FILTERS.** The bottom of the Display Window will scroll the following instructions: **REMOVE FILTERS & RINSE WITH HOSE... PUSH AND HOLD ICON BUTTON MORE THAN 3 SECONDS TO RESET THIS MESSAGE.**

### *Clean Filters*

On alternate months when **RINSE FILTERS** does not appear, the Scrolling Message Center will display **DIRTY FILTER**. The bottom of the Display Window will scroll the following instructions: **REMOVE FILTERS & CLEAN IN SOLUTION... PUSH AND HOLD ICON BUTTON MORE THAN 3 SECONDS TO RESET THIS MESSAGE.**

### *Change Water*

Every four months, your Scrolling Message center will display **CHANGE WATER**. The bottom of the Display Window will scroll the following instructions: **TURN POWER OFF, DRAIN & REFILL SPA...PUSH AND HOLD ICON BUTTON MORE THAN 3 SECONDS TO RESET THIS MESSAGE**.

*Change Vision Cartridge*

OPTIONAL FEATURE: If the spa is equipped with the optional Vision Cartridge filtration system **CHANGE VISION CARTRIDGE** appears in the Display Window when it is time to replace it.  For details see the separate instructions that came with the Vision Cartridge.

To reset (turn off) this message, push and hold the Dimension One Spas ICON (logo) Button located at the right hand side of the control panel for 3 seconds.

*Spa Check Up*
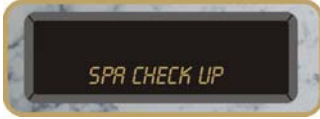
When **SPA CHECK UP** appears in the Digital Display Window, it is recommended that the hot tub be inspected by your dealer for routine preventative maintenance.

To reset (turn off) this message, push and hold the Dimension One Spas ICON (logo) Button located at the right hand side of the control panel for 3 seconds.

*Overheat*

**DO NOT ENTER THE WATER WHEN "OVERHEAT" APPEARS IN THE DISPLAY WINDOW!**  Check the water temperature with a certified thermometer, and if it is above 104° F (≅40° C), remove the hot tub cover and allow the water to cool. If the problem recurs, contact your local Authorized Dimension One Spas Dealer, or authorized service center.

Note

The overheat condition could be caused by excessive filtration. See the Troubleshooting Guide section for more information.

*Check Water Level*

**DO NOT ENTER THE WATER IF YOU SEE THE MESSAGE "CHECK WATER LEVEL -CLEAN FILTER-IF PROBLEM CONTINUES, TURN OFF POWER AND RESTART THE SYSTEM-IF PROBLEM CONTINUES, CALL FOR SERVICE" IN THE DISPLAY WINDOW!**

If the water level is high enough, clean the filters as directed. The warning should stop once the problem is fixed. If the problem persists, reset the power to the spa by turning off the GFCI breaker and then back on.

If the problem persists after resetting the spa, contact your local Authorized Dimension One Spas Dealer, or authorized service center.

***Erroneous Temperature on the Display***
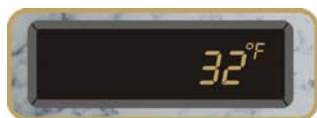
**DO NOT ENTER THE WATER** if the temperature display reads **32° F** (≅0° C) or **136° F**(≅57.8° C) without first checking the actual water temperature with a certified thermometer. The system has detected a Temperature Probe Failure and the water may be too hot, or too cold, to safely use.

Contact your local Authorized Dimension One Spas Dealer, or authorized service center.

***Ice***

When **ICE CONDITION** appears in the Display Window, the air temperature has dropped below a factory-preset level, and the system has activated "Smart Winter Mode." The pump runs automatically to circulate the water and prevent it from freezing.

This is a normal hot tub function. No corrective action is necessary.

***Cooling***

When **COOLING** appears beside the water temperature in the Display Window, the water temperature has reached 2° F (≅1° C) above the set temperature. The circulation pump and ozone generator turn off to allow the water to cool back to the set temperature.

This is a normal hot tub function. No corrective action is necessary.

> **Note** — The circulation pump and ozone generator run while either jet pump is on. They remain on for 30 minutes after the pump(s) turn off regardless of the water temperature.

## Summer Mode
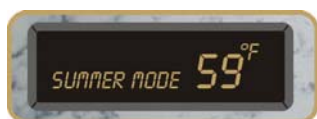
The Summer Mode feature (available only in the *Scrolling Message Center* models) allows the circulation pump to continue running even when the spa exceeds the Set Temperature. During hot weather, normal filtering can cause the spa to exceed the Set Temperature, which halts circulation pump so the spa can "cool off."  If your spa is not filtering enough during hot weather, you can put it in Summer Mode to allow the pump to keep running.

To initiate Summer Mode, use the Down Button to set the temperature below 59° F (15°C). **SUMMER MODE** will appear in the Display Window. In this mode the pump will run the filter cycle until the water reaches 107°F (41° C) before turning off. It will remain off until the water temperature falls to 102° F (38° C) at which point the pump turns on again.

## Standby Mode

Standby Mode (available only in the *Scrolling Message Center* models) allows the filter to be cleaned without turning off the power to the spa. This feature disables all automatic and manual functions so that pumps do not accidentally start while the filters are being cleaned.

To enter **STANDBY** mode press and hold the Dimension One ICON (logo) Button for 5 seconds. To exit Standby mode, press and hold the Logo Button for 5 seconds.  If Standby mode is not exited manually, the spa will automatically exit it and return to normal functioning after 24 hours.

**Battery Backup** - The Dimension One Spas Scrolling Message Center Control Panel has a battery back-up that will retain the time of day for 30 days, even without an active power source. The control panel will also store custom programming commands for up to 40 years without power. This battery backup will **not** provide power to heat or operate the hot tub. (This feature is not present in the" Digital Control Panel" models).

## Programming the "Scrolling Message Center" Control Panel

To program the automatic filter cycles and other functions (the Scrolling Message Center has an Enter button).

### The Program Button

To start programming the Scrolling Message Center control panel, hold PROGRAM for 3 seconds. If no button is pushed within 10 seconds, the hot tub will automatically exit the programming mode and go back to the main screen.

To exit the programming sequence at any time, push ENTER, or do not press any button for 10 seconds. Any programming changes made up to that point are saved.

*Clock*

After you press the PROGRAM Button for three seconds, **SET TIME OF DAY** appears in the Display Window above the scrolling instructions: **PUSH UP OR DOWN TO CHANGE - PUSH PROGRAM TO SELECT NEXT FUNCTION - PUSH ENTER TO EXIT**. (To skip setting the Clock, press Program to move on to the Filter Start Time.) When the UP or DOWN buttons are pushed, the Time screen appears with hours (_ _.**00**) flashing. Set the hour using the UP or DOWN buttons, then push the LIGHT** button to move on to the Ten Minute setting (**12:_0**). Set it using the UP or DOWN buttons, then push the LIGHT button to move on to the Minute setting (**12: 0_**). Set it with the UP or DOWN buttons, then push the LIGHT button to move on to the AM or PM setting. Select AM or PM with the UP or DOWN buttons. When finished, push PROGRAM to exit the clock-setting mode. There will be a prompt for setting the Filter Start Time. To stop here, press Enter to exit the programming sequence and save the changes.

**If the spa has a WATER FEATURE button, substitute the WATER FEATURE button for the LIGHT button in the above instructions.

*Filter Cycle Start Time*

After the clock is set, the Display Window will prompt **SET FILTER CYCLE TIME**. Push UP or DOWN to set the time for your filter cycle to start. When finished, push PROGRAM (the pre-set factory default is 12:00 p.m. to 1:00 p.m. repeating every 12 hours).

During a filter cycle, **SPA FILTERING** appears in the corner of the Display Window. JETS 1 will run for 5 minutes at high speed and for the remainder of the cycle at low speed. JETS 2 will run for 1 minute at high speed and then turn off.

*Filter Cycle Duration*

After the Filter Cycle Start Time is set, the Display Window reads **SET CYCLE DURATION**. Push UP or DOWN to choose 60, 90, 120, 150 or 180 minutes. Push PROGRAM to save the settings (the pre-set factory default is 60 minutes).

*Number of Filter Cycles*

After the Filter Cycle Duration is set, the Display Window reads **SET # OF CYCLES**. Push UP or DOWN to choose 1, 2, 3 or 4 cycles per day. Push PROGRAM to save the settings (the pre-set factory default is 2 cycles per day).

> Long and/or numerous filter cycles could cause overheating of the hot tub, especially in hot climates.

*Pump Run Time*

After the number of filter cycles is set, the display window reads **SET PUMP RUN TIME**. Push UP or DOWN to choose 30, 45 or 60 minutes. Push PROGRAM to save the settings. This sets how long the pump will run when a JETS button is pushed, before shutting off automatically (the pre-set factory default is 30 minutes).

*Temperature Units (°F or °C)*

After the pump run time is set, the display window reads **SET TEMPERATURE UNITS**. Push UP or DOWN to toggle between **°F** (Fahrenheit) and **°C** (Celsius). Push PROGRAM to save the settings (the pre-set factory default is Fahrenheit).

*Vision Cartridge*

After the temperature units are set, the display reads: **SET VISION CARTRIDGE**. Push UP and DOWN to toggle between "Yes" and "No." If the spa has a Vision Cartridge select "Yes," if not, select "No." Selecting "Yes" tells the message to indicate when the cartridge needs replacing. Push PROGRAM to save the settings.

This ends the programming sequence for spas without the *Liquid-FX* option.

*Water feature Run Time (Liquid-FX spas only)*

After the Vision Cartridge is set, the display window reads: **SET WATER FEATURE RUN TIME**. Push UP and DOWN to choose 1, 2, 3 or 4 hours. Push PROGRAM to save the settings. This sets how long the water feature will run when the Water Feature Button is pushed, before shutting off automatically (the pre-set factory default is 1 hour).

This ends the programming sequence for spas with the *Liquid-FX* option.

Remember, during programming, press Enter at any time to exit the programming sequence and return to the main screen.

## Invert the Display Window

To flip the text in the Display Window to make it readable from either inside or outside the hot tub.

On non-*Liquid-FX* spas, push ENTER three times to invert the screen. Do the same to return it to its original position.

On *Liquid-FX* spas, push PROGRAM three times to invert the screen. Do the same to return it to its original position.

**Control Panel Lock**

To lock the control panel and prevent other people from using the hot tub or change the settings. When the panel is locked, all programmed or default hot tub functions will operate normally, but the control buttons will not operate. When locked, the display window reads: **ALL SPA FUNCTIONS LOCKED**.

To lock the panel, push the following sequence of buttons within 3 seconds:
1. The Dimension One Spas ICON (logo) Button.
2. The Dimension One Spas ICON (logo) Button (again).
3. Push ENTER.

**Control Panel Unlock**

To unlock the panel, push the following sequence of buttons within 3 seconds:
1. Push ENTER.
2. Push ENTER (again).
3. Push the Dimension One Spas ICON (logo) Button.

**Programming Lock**

To lock the spa programming and prevent other people from changing the settings. When programming is locked, all programmed or default functions will operate normally, and a user may still operate the hot tub jets and light. When locked **PROGRAMMING LOCKED** will scroll twice in the Display Window and a lock icon will appear at the right. To lock programming, push the following sequence of buttons within 3 seconds:
1. Push the Dimension One Spas ICON (logo) Button.
2. Push the Dimension One Spas ICON (logo) Button (again).
3. Push PROGRAM.

**Programming Unlock**

To unlock the Programming functions, push the following sequence of buttons within 3 seconds:
1. Push ENTER.
2. Push ENTER (again).
3. Push the Dimension One Spas ICON (logo) Button.

**Reset the Control Panel**

If needed, reset all hot tub settings to the factory defaults with one step. Please keep in mind that this resets not only your programming, but also all maintenance messages (clean filters, change water, etc.), as if the hot tub had just been installed. To reset the control panel, push the following sequence of buttons within 3 seconds:
1. Push the ICON (logo) Button.
2. Push ENTER.
3. Push PROGRAM.
   The top line of the display window reads **RESET PROGRAMMING?**
   The bottom line will reads **IF SO, PUSH ICON**.

Push the Dimension One ICON Button to reset the entire control system to factory defaults, or do not push any button for 10 seconds to exit without resetting.

## Control Panel Functions Unique to "Digital Control Panel" Models

Setting the Temperature

Control the water temperature with the UP (+) and DOWN (-).  The "Set Temperature" icon appears in the lower right side of the Window to indicate that the temperature shown is a target setting and not the actual temperature. The "Temperature Icon" will appear at the top of the window if the new setting requires more heat.

Once the new temperature is set, the display window once again shows the actual spa water temperature. The spa will heat to the new temperature automatically.

Programming the Digital Control Panel

*Program Button*

To enter the programming mode, hold the PROGRAM button for 5 seconds. Each time the button is pressed it will move to the next step of the programming sequence.

| Programmable Item | Program Button Action |
|---|---|
| Clock | Press and hold for 5 seconds |
| Filter Cycle Time | 2nd press |
| Filter Cycle Duration | 3rd press |
| Number of Filter Cycles | 4th press |
| Pump Run Time | 5th press |
| Temperature Unit | 6th press |
| Quit Program Sequence | 7th press, or wait 60 seconds |

To exit the programming sequence before the end do not  press any buttons for 60 seconds.

*Clock*
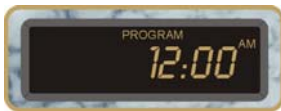
In programming mode, the clock appears with the hour flashing.  Use UP and DOWN to set the hour.

When the hour is correct, press LIGHT to move to the minutes setting.

Use UP or DOWN to set the minutes, the press LIGHT to move to the AM/PM setting.  Use UP or DOWN to select AM or PM.  Then press PROGRAM to move on to the next step.

*Filter Cycle Start Time:*

When PROGRAM is pressed twice, the "Filter Icon" appears in the Display Window to indicate that you are setting the Filter Cycle Start Time.

Use UP, DOWN and LIGHT to set the Filter Cycle Starts the same as the clock setting (see above).
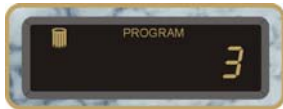
*Filter Cycle Duration*

Pressing PROGRAM three times goes to Filter Cycle Duration. This tells the spa how long to run during each filter cycle.

Use UP and DOWN to choose from 60, 90, 120, 150, or 180 minutes (the factory default is 60 minutes).

*Number of Filter Cycles:*

Press PROGRAM fours times for the number of filter cycles that the spa will run each day.
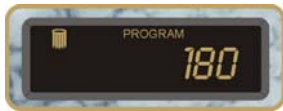
Your choices are 1, 2, 3, or 4 cycles per day (the factory default is 2 times per day).

NOTE: Long and/or numerous filter cycles could cause overheating of the hot tub - especially in hot climates.

*Pump Run Time*

Pressing PROGRAM five times starts the Filter Pump Run Time. Push UP or DOWN to choose 60, 90, 120, 150, or 180 minutes. This sets how long the pump will run when a Jets Button is pushed, before shutting off automatically (the pre-set factory default is 60 minutes).
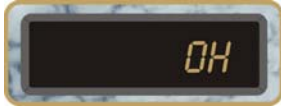
*Temperature Units (ºF or ºC)*
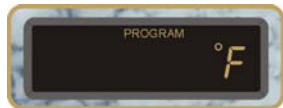
Pressing PROGRAM six times to start the Temperature Unit selection.

Use UP and DOWN to choose Fahrenheit (ºF) or Celsius (ºC) (the factory default setting is Fahrenheit).

Press PROGRAM seven times to finish and exit the programming sequence.

## Warning Messages in the Digital Control Panel

*Overheat Warning*



If the control panel has flashing lights and an **OH** in the display, your system has overheated. The water temperature has reached 118° F (≅47.8° C). The entire system is disabled.

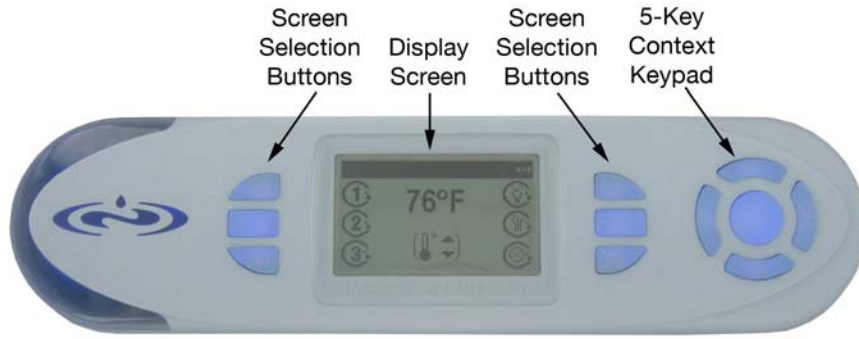Contact your local Authorized Dimension One Spas Dealer, or authorized service center.

*Ice Warning*



When **ICE** appears in the display window, the air temperature has dropped below a factory-preset level, and the system has activated "Smart Winter Mode." The pump will automatically run to circulate the water and prevent it from freezing.

This is a normal function and no action is necessary.

# Using the ❖·d r i v e Control Panel



Screen Selection Buttons    Display Screen    Screen Selection Buttons    5-Key Context Keypad

Push the screen selection button next to any item to turn on that item. When active, the ring around that item will spin. Push the button again to turn off the item. In a menu, push the button next to an item to bring up that item.

## Navigation
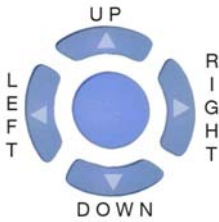


### The 5-Key Context Keypad

The 5-Key Context Keypad buttons access and change spa settings quickly and easily. On each menu, the current navigation options are indicated in the upper right corner of the screen. The left and right arrows allow navigation through the menu structure.
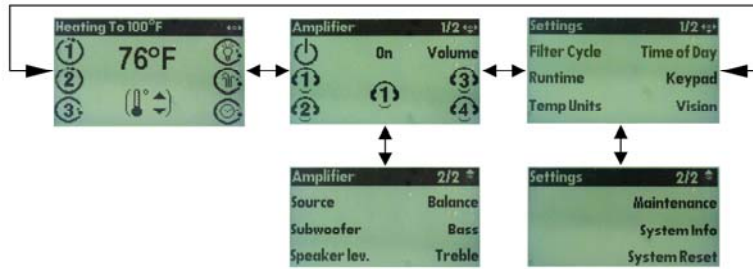


There are three main menus on the ❖·d r i v e Control Panel: the Temperature menu, the Amplifier menu, and the Settings menu. The Temperature menu sets the spa temperature, turn jet pumps on and off, and operate the spa's light and waterfall. The Amplifier menu controls the settings for the spa's optional Sonic Immersion System; if there is no Sonic Immersion System installed, this menu will not display. The Settings menu adjusts other various aspects of the spa, including the time of day and display screen brightness.
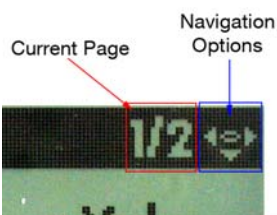


The amplifier and settings menus both contain two pages of options; the current one is indicated in the top right of the display. On the 5-Key Context Keypad, the up and down buttons scroll between pages 1 and 2 in that particular menu. The center button goes back to page 1 of the current menu; if it is at page 1, it goes back to the Temperature menu. To adjust a setting (i.e. bass), the center key goes back to the menu to access that setting.

## Spa Menu



### The Hotkey

The Hotkey allows the spa to display different sets of information on the screen while still giving access to the main controls. Pushing the Hotkey changes the information displayed in the center of the Spa Menu in the following sequence:

### Temperature Screen

The Temperature screen displays the current spa temperature and sets the desired spa temperature.



### Clock Screen

The Clock screen displays the current time of day.



### Runtime Screen

The Runtime screen shows how much time remains in the current jet cycle for each pump.



### Invert Screen

The Invert screen inverts the display to face the inside or outside of the spa with the up and down arrows on the 5-Key Context Keypad.



### Volume Screen

The Volume screen shows and adjusts the current volume level for the amplifier, using the up and down arrows on the 5-Key Context Keypad.

NOTE: This option will only display if the optional Wireless Sonic Immersion System is installed.



Push the Hotkey again to return to the default Temperature screen and restart the sequence.

**Adjusting Temperature**

From the Temperature screen, push the up or down arrow on the 5-Key Context Keypad to enter the Setpoint screen. In this screen, use up and down to select the desired temperature. Press Accept to save the changes.

*Summer Mode*

During hot weather, normal filtering can cause the spa to exceed the set temperature, which stops the circulation pump so the spa can cool. If the spa is not filtering enough during hot weather, it is possible to put it into Summer Mode to allow the pump to keep running.

To enter Summer Mode, adjust the set point to the lowest possible temperature, 59°F (15°C), and continue to hold the down arrow on the 5-Key Context Keypad. The temperature value will be replaced by "Summer."

**Light Operation**

If the spa is equipped with the standard light, push the light button once to turn on the spa light at the brightest setting. Push a second time for medium, a third for dim, and a fourth to turn the light off. The light automatically turns off after one hour.

If the spa is equipped with the optional Dynamic L.E.D. Light, the light has 2 modes: Color Change, which cycles through all colors, and Color Select, which allows selection of any solid color from the Color Change mode. Push the light button once to enter Color Change mode. To change between Color Change and Color Select modes, turn the light off for 3 seconds, and then turn it back on. Another way to change modes is to hold down the Light button until the light flashes off and on. To synchronize all spa lights, turn off the light for 3-9 seconds and turn it back on.

Press the light button once to enter Brilliant Mode. All lights are turned ON in the spa. To switch to Candle Mode press the light button once, then push it again just after "LIGHT OFF" begins to scroll off of the display. The lights in the air valves, tile line, and fountain are on; the spa light is off. To switch to Fountain Mode, press the light button once, and then push it again just after "LIGHT OFF" begins to scroll off of the display. The fountain light is on; all other spa lights are off. Push the light button once, then press it again just after "LIGHT OFF" begins to scroll off the screen to switch back into Brilliant Mode. To lock in your favorite light color, push and hold the light button until all lights in the spa blink off, then on. To unlock and return to the color wheel, hold down the light button until the lights blink off and on again.

**Standby Mode**

To enter Standby mode, hold down the center key on the 5-Key Context Keypad while on the home screen for 5 seconds. This mode disables all automatic and manual functions so the pumps do not accidentally start while you are cleaning the filters. The spa stays in standby mode for 30 minutes. To reactivate the spa, press exit.

## Amplifier Menu

Page 1
MAIN > ▶



Page 2
MAIN > ▶ > ▼
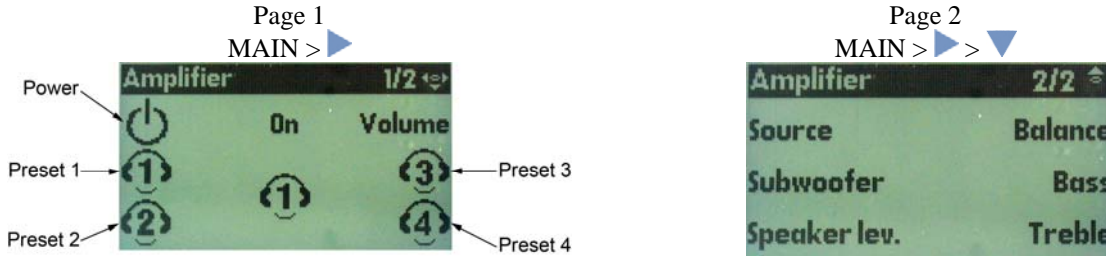


### Presets

The icons 1, 2, 3 and 4 correspond to presets for the Sonic Immersion System Amplifier. Presets allow the spa to save or recall settings of the Sonic Immersion Systems Amplifier, such as subwoofer level, speaker level, bass, treble, and source input.

A short press of a preset button will load that preset.

A long press on a preset button will save the amplifier's current settings to that preset number.



### Volume

Use the up and down arrows on the 5-Key Context Keypad to select your desired volume. Press Accept to save the changes.

Press Mute to temporarily turn off the amplifier's speakers. Push Mute again to turn the speakers back on.
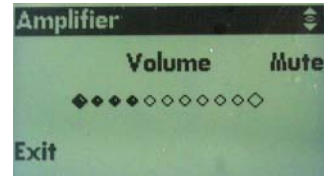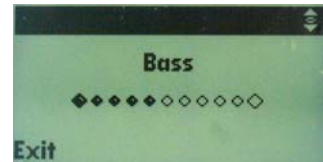


### Source

Push the Source button on page 2 of the Amplifier menu to bring up the Source selection screen. On this screen, select which audio input to play though the spa's Sonic Immersion System. To play audio through the stereo mini jack located on the spa, select SPA. To play audio from a home stereo system via a Wireless Sonic Immersion System, select House. If Auto is selected, the spa will play audio from a home stereo unless there is something plugged into the stereo mini jack.

Select the audio source by pressing the button next to your selection. The selection will become highlighted. Press Back to exit the menu.
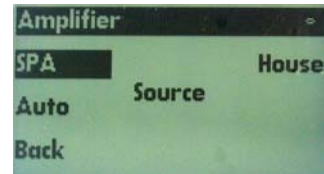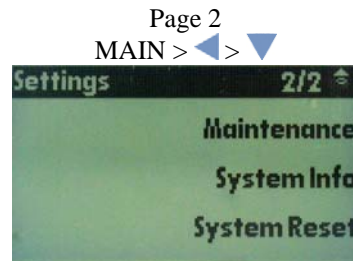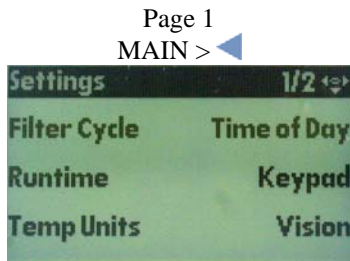


### Adjusting Stereo Settings

On the Amplifier menu, press Subwoofer, Speaker Level, Balance, Bass or Treble to bring up that parameter's adjustment menu. In these menus, use the up and down arrows on the 5-Key Context Keypad to adjust that setting. Press Exit to leave the menu.
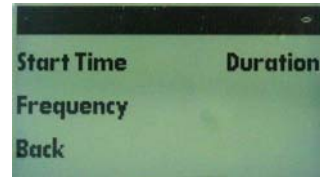
## Settings Menu

| Page 1 | Page 2 |
|---|---|
| MAIN > ◀ | MAIN > ◀ > ▼ |

| Settings | 1/2 | Settings | 2/2 |
|---|---|---|---|
| Filter Cycle | Time of Day | | Maintenance |
| Runtime | Keypad | | System Info |
| Temp Units | Vision | | System Reset |

### Filter Cycle Menu

Pressing the filter cycle button brings up the filter cycle menu, which adjusts how long and how often the spa's filter cycle runs.

| Start Time | Duration |
|---|---|
| Frequency | |
| Back | |

*Start Time*

To adjust the filter cycle's start time, use the left and right arrows on the 5-Key Context Keypad to select whether to modify hours or minutes. Use the up and down arrows on the 5-Key Context Keypad to select the start time. Press Accept to save the changes.

**Start Time**
**12:00PM**
Back          Accept

*Frequency*

Use the up and down arrows on the 5-Key Context Keypad to adjust the number of filter cycles per day. Press Accept to save the changes.

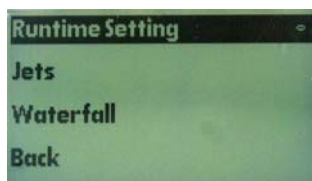**Frequency**
**1**
Back          Accept

*Duration*

Use the up and down arrows on the 5-Key Context Keypad to adjust how many minutes each filter cycle will last. Press Accept to save the changes.

**Duration**
**20**
Back          Accept
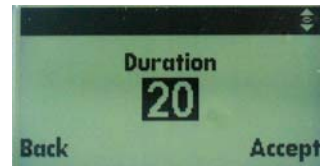
### Runtime

Pressing the Runtime button brings up the Runtime Setting menu. This menu adjusts how long the jets and waterfall run.

**Runtime Setting**
Jets
Waterfall
Back

*Adjusting Runtime*

Push the Jets or Waterfall button to bring up that item's Runtime screen. On this screen, use the up and down arrows on the 5-Key Context Keypad to select how many minutes each cycle will last. Press Accept to save the changes.

**Jets Runtime**
**30**
Back          Accept

**Temperature Units**

Push the Temp. Units button to bring up the Temperature Units screen. Use the up and down arrows on the 5-Key Context Keypad to select whether to display the temperature in Fahrenheit or Celsius. Press Accept to save the changes.

**Time of Day**

Push the Time of Day button to bring up the Time of day screen. To adjust the time of day, use the left and right arrows on the 5-Key Context Keypad to select whether to modify hours or minutes. Use the up and down arrows on the 5-Key Context Keypad to select the start time. Press Accept to save the changes.
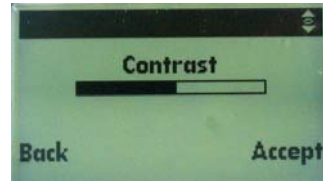
**Keypad**

Push the Keypad button to bring up the Keypad menu. The Keypad menu adjusts various aspects of the display screen, including which language the menus are displayed in. Push the button next to any item to bring up that item's adjustment screen.
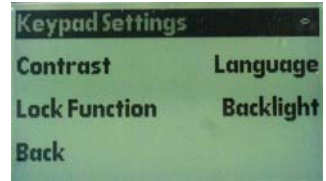
*Contrast*

Use the up and down arrows on the 5-Key Context Keypad to adjust the contrast of the display screen. Press Accept to save the changes.

*Language*

Use the up and down arrows on the 5-Key Context Keypad to select the display language. The options are English, Spanish, French and German. Press Accept to save the changes.

*Lock Function*

Use the up and down arrows on the 5-Key Context Keypad to control others' access to the spa's controls. Choose Unlock to allow access to all spa functions. Choose Partial Lock to lock programmable features but allow control of the jets, waterfall, light and stereo. Choose Full Panel Lock to lock all spa functions. Press Accept to save the changes. To unlock the spa from a Partial Lock, navigate back to the Lock Function menu and change the setting to Unlock. To unlock from a Full Panel Lock, hold down the center key on the 5-Key Context Keypad for 5 seconds.
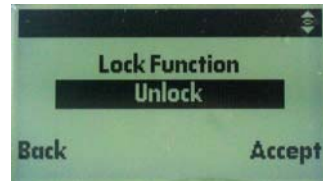
*Backlight*

Pushing the Backlight button from the Keypad screen brings up the Backlight menu. The Backlight menu adjusts the brightness of the backlight and how long the light will stay lit.
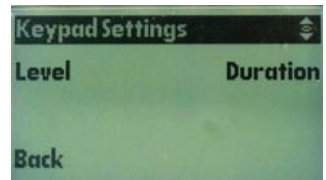
**Adjusting Backlight Settings**

Push the Level or Duration button to bring up that item's adjustment screen. Use the up and down arrows on the 5-Key Context Keypad to adjust backlight brightness and how long the light stays on. Press Accept to save the changes.
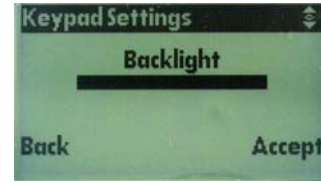
**Vision**

From the Settings menu, push the Vision button to bring up the Vision adjustment screen. Use the up and down arrows on the 5-Key Context Keypad to indicate if a Vision cartridge is installed. Press Accept to save the changes.
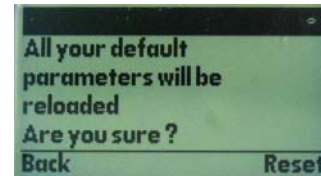
**Maintenance**

From page 2 of the Settings menu, push the Maintenance button to bring up the Maintenance Reminder adjustment screen. Use the up and down arrows on the 5-Key Context Keypad to choose if the spa will display maintenance reminders. Press Accept to save the changes. Press Back to go back to the previous menu and cancel the changes.

**System Reset**

The system reset menu resets all parameters to the factory defaults. To proceed and reset all settings, press Reset. To go back and keep your settings, press Back.

**Reminders**

Occasionally, a maintenance reminder will appear on the screen. Some messages have an arrow below the last line; push Down on the 5-Key Context Keypad to read the remainder of the message. After the requested action is performed, push Done. To have the system remind you again later, push the Snooze button.
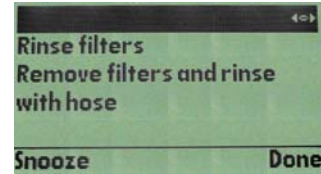
**Warnings**

If there is a warning light on the display screen, the spa has detected a problem in the spa. **DO NOT ENTER THE WATER IF A WARNING MESSAGE IS DISPLAYED.** Perform the suggested actions and if the problem persists, contact your local dealer for service.
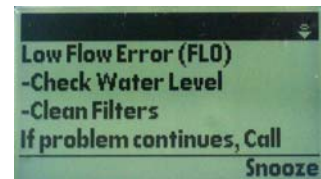
## Cleaning Your @·drive Control Panel

If the @·drive Control Panel needs to be cleaned, using baking soda and water is recommended.

**Do NOT use caustic cleaners such as "409," ammonia based cleaners such as "Windex," citrus based or alcohol based cleaners.**

# Features Unique to Certain Models

## Dynamic Massage Sequencer™

The Dynamic Massage Sequencers control the jets in the lounge areas to sequentially massage different muscle groups. When selecting a massage sequence, the human figure on the control panel displays corresponding lights, allowing a preview of that sequence before starting it.

### The Dynamic Massage Sequencer Control Panel

***Light Button***

The Light Button on the Dynamic Massage Sequencer works just like the one on the control panel to turn the spa light on and off. If the spa is equipped with the Digital Control Panel or the Scrolling Message Center, see page 11 for light operation information. If the spa is equipped with the @d r i v e Control Panel, see page 24 for light operation information.

***Jets Button***

The Jets button on the Dynamic Massage Sequencer turns the jet pump associated with the Sequencer on or off. The same spa jet pump jet may be turned on or off using the button on the control panel.

***Speed Button***

The Speed button changes the amount of time between each step of the massage sequence (the default time is 5 seconds). Push the Speed button once to change it to 15 seconds, again to change it to 30 seconds. A third push will return it to 5 seconds. The status light below the Speed button will blink at the current speed.

***Start/Stop Button***

Press the Start/Stop button to start a massage sequence or pause one already underway. Pause does not stop the massage, it holds it in one place.

*For example:* If you want to massage any particular zone for a long time, press the Start/Stop button when the massage is working on that zone, and the system will remain there until the button is pushed again.

While paused, the lights on the human figure show the current massage pattern. To preview other patterns while in pause mode, press the Sequence button.
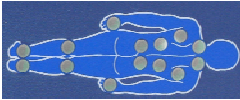
*Sequence Button*



The Sequence button chooses between the six different massage sequences. The light glows to indicate the current sequence.

When all jets are operating at once (the default mode) none of the sequence lights will glow.

*Massage Zones*



The lights in the Massage Zone Indicator (Human Figure) show which zone is currently selected. When the desired sequence is found with the Sequence button, press the Start/Stop button to start your massage.

## Operating the Dynamic Massage Sequencer



Push the Jets button to turn on the jet pump.



Select a sequence by pushing the Sequence button until the desired one is found (the lights in the Human Figure show the zones that will be active). Press the Start/Stop button to begin the massage. Use the Speed button to control how quickly the spa moves through the massage sequence.



Sequence #1 steps through each individual zone one at a time, from zone A through F, then reverses the sequence.
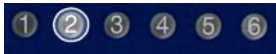


Sequence #2 activates all zones at once, then deactivates individual zones one at a time, from A through F. Then it reverses that sequence.



Sequence #3 activates alternate groups of zones. It activates Zones A, C, and E all at once, then switches to Zones B, D, and F.
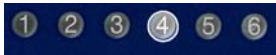


Sequence #4 steps through each individual zone one at a time, from zone A through F, then it starts over in groups of two zones – activating zones A and B, then zones B and C, etc.



Sequence #5 starts with Zone A and adds new zones one at a time until all zones are active. Then it reverses the sequence by removing zones one at a time until all zones are inactive.



Sequence #6 activates random pairs of zones at one time, starting with adjacent zones, (A and B, then B and C, etc.), then opposite zones (A and F, then B and F, etc.), and finally the middle zones (B and E, then C and D, etc.).

# *Liquid-FX* **Package (On Certain Models)**

| | |
|---|---|
| SoftTouch Lighting | If the spa is equipped with the optional SoftTouch Lighting Package, use your Upper Control Panel to choose from three different ambient settings.   If the spa is equipped with the Digital Control Panel or the Scrolling Message Center, see page 11 for light operation information.  If the spa is equipped with the ⚫·d r i v e Control Panel, see page 24 for light operation information. |

*Liquid-FX* Fountain

The *Liquid-FX* fountain works with the SoftTouch Lighting.

You can customize the fountain with additional, interchangeable fountainheads available from your spa dealer. To remove a fountainhead, twist the retainer cap, remove the inner acrylic fountainhead and replace with another.

Note: Make sure that the rubber "O" ring is properly in place.



Skirt Lighting

The skirt lights will turn on and off automatically depending on the time of day.  To stop the lights from turning on, there is a manual override switch located under the bottom left corner of the spa when facing the Upper Control Panel.  When turned off, the skirt lighting will not turn on for any reason.  Simply flip the switch back and forth to turn the lighting on and off.



Pagodas

The light pagodas on the spa are interchangeable.  Pull up on the pagoda to remove it from its slot and then insert another pagoda in its place.

# Selector Valves, Flow Controls, and Jet Pillows (On Certain Models)

If the spa is equipped with any of the following features, use the manual controls to adjust their performance.

| | |
|---|---|
| Jet Zone Selector | If the spa is equipped with the Jet Zone Selector, rotate this knob on the topside controls to change the flow of water from one group of jets to another. |

| | |
|---|---|
| Water Feature Flow Control | If the spa is equipped with certain types of water features (such as fountains), turn this topside control knob to adjust the water flow from a trickle to a full stream.

Note: The valve will not shut the water feature off completely. |

| | |
|---|---|
| NeckFlex Jet Pillow | The NeckFlex Jet Pillow has five adjustable height positions.  Gently pull the bottom of the pillow forward and slide it up or down the guide rails.  Adjust the water flow from the jets by rotating their nozzles clockwise or counterclockwise. |

# Routine Equipment Maintenance

## Draining Your Hot Tub

The spa is gravity-drained, without the need for a pump.  To drain the spa, locate the hose bib, which was attached to the spa in the Initial Setup operation (described earlier), on the base near the lower left side of the equipment panel. Remove the cap (if any) from the hose bib. Screw a garden hose onto the hose bib, put the other end of the hose in a safe place for water run-off (do not drain onto lawn or plants), and then turn the valve on the side of the hose bib ninety degrees to release the flow of water.  Do not forget to close the valve again before re-filling the spa.

For information about how often to drain and refill the spa, refer to the **Water Care Guide** that came with the spa.

## Filter Cleaning

**IMPORTANT:** To prevent debris from getting into the system during filter cleaning, shut off the power to the spa at the **GFCI circuit breaker** (see Initial Startup section of this manual for details).  If the spa has the Scrolling Message Center or ꙮ·d r i v e Control Panel, put it in Standby Mode, which ensures that no pumps start up while cleaning the filters.  With the Scrolling Message Center, press the Dimension One ICON (logo) Button, found on the right side of the Control Panel, for 5 seconds. With the ꙮ·d r i v e Control Panel, press and hold the center key on the 5-Key Context Keypad for 5 seconds.  With either controller, exit Standby mode by holding down either the logo button or the center key for 5 seconds. The spa will leave Standby Mode automatically after 30 minutes.

The spa is equipped with one or two filters. It is recommended that you the filters are cleaned every month as preventative maintenance.

### Cleaning the Skimmer Filter



To clean the skimmer filter, remove the access lid that covers the entire filter area. Lift the center float of the skimmer assembly until it is fully extended. Hold the centerpiece of the assembly and turn it counterclockwise until the flats of the basket are aligned with the securing tabs. Then pull the basket assembly straight up to remove it.

Below the basket is the filter. Remove the filter by twisting it 1/4 turn counterclockwise to its stop and lift the filter out of its canister. Clean the filter with a high-pressure garden hose. Every other cleaning, soak the filter in filter-cleaning solution and rinse it thoroughly. Reinstall the filter by reversing the removal process, then replace the skimmer basket assembly and the access cover. Then turn the power back on at the GFCI breaker or exit Standby Mode, if you used it, as described above.  After cleaning the filter, run the pump for a few minutes at high speed before leaving the spa in its normal mode.

### Cleaning the UltraPure™ Filter Cartridge (optional)

To clean the UltraPure™ filter, first remove the access lid (see photo) by turning it counterclockwise.  Remove and clean the filter in the same way as the skimmer filter.

## Cleaning the Filter Screens



The Filter Screen is a black plastic perforated cylinder located at the bottom of the canister that holds the filter. It normally requires no maintenance. However, if the spa frequently says to clean the filter, or if the spa is reporting "low water flow," clean the screen in addition to the filter.

First, remove the filter(s) as described in the Filter Cleaning section above.

Then locate the black plastic Filter Screen at the base of the filter canister (see photo at left).

⚠ **Caution** To prevent debris from getting into the pump, be sure to remove any floating debris BEFORE removing the Filter Screen.

Remove the filter screen by inserting the tip of a flat-blade screwdriver into the slot as shown, and gently apply outward pressure until the catch releases. Then lift the black screen to remove it from the filter canister. Outside the spa, rinse the screen with water using pressure from **inside** the screen.



## Cleaning the UltraPure Inner Filter Screen

The UltraPure filter (if the spa is equipped with it) contains a metal Inner Filter Screen inside the black plastic Filter Screen. (This inner screen is not present in the skimmer filter).

To clean the Inner Filter Screen, first remove the entire plastic Filter Screen as described above.



E-Z Lock Filter Screen

Inner Filter Screen
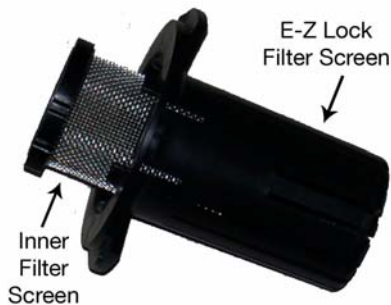
Then remove the Inner Filter Screen and clean both screens with water, using pressure from the **inside** of each screen.

Replace the Inner Filter Screen into the plastic Filter Screen by lining up the grooves (shown by the arrow in the photo) and pressing it snugly into position.

Then press the Filter Screen (with the Inner Filter Screen inside) back onto the base of the spa filter canister.



Finally, replace the filter into its canister and replace the lid.

Then turn the power back on, (or exit the "Standby" Mode, if you used it, as described above).

# Light Bulb Replacement

Some models are equipped with a standard light bulb, others with an optional "Dynamic L.E.D. Light," and others with a Soft Touch Lighting System, but all are replaced in the same way. To change the bulb:

1. **Turn the power off** at the GFCI breaker and drain the water to below the level of the light.
2. Using the special tool provided in the owner's manual packet, unscrew the lens that covers the light housing.
3. Remove the old bulb and install the new bulb.
4. Use the special tool to replace the lens on the light housing.
5. Turn the light on and off to make sure it works before refilling the spa.

| | |
|---|---|
| **Warning** | Do not attempt to remove the lens without draining the water to below the level of the light. |

| | |
|---|---|
| **Note** | Do not attempt to remove the lens without the special tool. If it is lost, contact Dimension One Spas Service Department to have one sent. |

| | |
|---|---|
| **Note** | Be sure the rubber O-ring behind the lens is undamaged and is properly positioned when replacing the lens. Contact Dimension One Spas if you need a replacement O-ring. |

# Spa Surface Care

It is recommended that a "cheesecloth" rag, or other soft rag, is used to clean the entire shell surface with Water Line Cleaner or a similar product from your spa dealer.  Or use ph/Alkalinity Increaser or a 50/50 solution of denatured alcohol and water. Be sure to thoroughly rinse the shell after cleaning. To restore the luster of the shell after cleaning, use Poli-Gloss or a similar product from your spa dealer.

| | |
|---|---|
| **Caution** | Do not use "409" type cleaners or other caustic solutions as they may damage the shell surface and void the warranty. If you are using baking soda to clean your hot tub shell, be careful not to get it on the wood skirt. It may bleach the wood. |

| | |
|---|---|
| **Caution** | Do not use citrus-based cleaners on the shell surface. |

| | |
|---|---|
| **Warning** | **Colored Shells:** If your spa has a colored shell you must keep the spa covered even when it contains no water. Sunlight can damage the spa surface and cause it to peel or blister. |

## Dimension One "Envirotect"™ Skirts and Vinyl Covers

The Dimension One Envirotect skirts are unaffected by most corrosive substances, and will not absorb moisture. To maintain the original skirt finish, clean with soap and water. No sealing or painting is required. To maintain a "nearly original" appearance on your vinyl cover, it is recommended that a protectant with a high SPF (sun protection factor) is applied, obtained from your spa dealer, at least once a month if exposed to direct sunlight.

## Care for the Wood Spa Cabinet

When properly cared for, the wood cabinet of the hot tub will maintain its beauty for many years. Wood reacts to the elements by expanding and contracting. To protect the wood finish, re-stain it every 3-6 months with Redwood or Coastal Gray Stain, which seals the wood. Please note that the cabinet is not warranted against reaction to natural weather conditions. Check with your spa dealer for wood maintenance products.

## Care for TimberLite Cabinets

To maintain the original appearance of the TimberLite cabinet, clean periodically with any non-abrasive household cleaner. Should the TimberLite cabinet become stained, use the 3M Graffiti Remover System to remove the stain.

## Care for StoneLite Cabinets

Clean your StoneLite skirts with soap and lukewarm water, using a soft cloth to wipe the surface. Do not use liquid detergents or boiling water, as they will damage the skirt material. Do not use cloths containing grit or abrasive particles, such as household scouring compounds; these will scratch the skirt material. Blot the surface dry using a damp cloth or chamois. Wax the surfaces sparingly to protect your StoneLite skirts; D1 recommends using Simonize, Aero Wax or Glo-Coat. Apply the wax in a thin, even film with a soft, clean cloth. Polish lightly with a clean cotton cloth. After polishing, wipe gently with a damp cloth to ground any electrostatic charges which may attract dust. Light scratches may be rubbed out with Simonize wax and a soft cloth.

# Special Cold Weather Instructions

All Dimension One Spas are designed for year-round use. They are insulated for energy efficiency and to protect the plumbing and equipment when the system is operational. The system has a "Smart Winter" freeze protection mode to circulate water during freezing weather, assuming the system has electrical power and the proper water level. Therefore, keeping your system operational is your best defense against freeze damage.

However, if there freezing conditions present and shutting down the spa for the winter is unavoidable, or where conditions may get too cold for the spa's "Smart Winter" mode to prevent freezing, the spa should be Winterized by a professional Dimension One dealer or authorized service representative. **Draining the spa will not prevent freeze damage, because small amounts of water in the plumbing can expand and damage the system.**



Draining or Winterizing the spa is specifically not covered by the warranty. This is why only a professional should be allowed to Winterize your spa if it becomes necessary.



The system is equipped with automatic freeze protection. However, a power outage can cause the equipment to freeze quickly. During freezing conditions, check the system frequently to ensure proper operation. Always check the system after any power failure to ensure that it is operational.

## Springtime Startup of a Winterized System

If the spa has been Winterized, Dimension One highly recommends that you contact an authorized dealer to restart it. The following is an outline of the procedures involved.

- Make sure o-rings for pumps are in place and undamaged.
- Make sure all the fittings that loosened are re-tightened.
- Replace all jet fittings, pump drain plugs, hose bib drains, and bleeder valves
- Fill the system with water in the normal way
- Turn the power back on.
- Run the jets on high speed for about 15 minutes.
- Drain the water.
- Put the filter(s) back in.
- Refill the system and treat chemically as one would after a normal water change

For more information about winterizing the system, or restarting a Winterized system, please contact your local Authorized Dimension One Spas dealer.

# Troubleshooting Guide

## Heating System

| Symptom | Problem | Corrective Action |
|---|---|---|
| **Does not heat** | 1. Temperature setting is too low | 1. Turn up the "set temperature" on the control panel |
| | 2. Dirty filter | 2. Clean filter |
| | 3. Flow switch malfunction | 3. Call your dealer for service |
| **Too hot** | 1. Temperature setting too high | 1. Turn down the "set temperature" on the control panel |
| | 2. High limit tripped | 2. Call your dealer for service |
| **Flashing temperature of 34°F (≅1° C)or 134°F (≅56° C) appears on the display** | Possible temperature sensor failure | Call your dealer for service |
| **Hot Tub Temperature erratic** | Water level | Fill hot tub to about six inches below the top of the spa or 1" (2.54 cm) to 2" (5.08 cm) above the bottom of the tile line if your spa has tile. |
| **Display reads OVERHEAT** | 1. Too much filtration | 1. Reduce the number of filter cycles and/or the filter cycle duration |
| | 2. Temperature setting too high | 2. Turn down the "set temperature" on the control panel |
| | 3. High limit or sensor problem | 3. Call your dealer for service |

## Electrical System

| Symptom | Problem | Corrective Action |
|---|---|---|
| **Will not turn on – in any mode** | No power | Check circuit breaker and/or GFCI |
| **Turns on by itself** | Normal automatic daily filtration, or anti-freeze cycle | No action required |
| **Light is out** | Burned out bulb | Replace bulb |
| **Pump shuts down unexpectedly while in use** | 1. Automatic timer has shut pump off | 1. Push JETS Button again to start another cycle. If desired, reprogram automatic pump timer for longer duration. |
| | 2. Motor over-heated and automatic protective device has shut down pump(s) | 2. If pump(s) will not restart when JETS Button is pushed, call for service  Make sure that the equipment panel vent area is not blocked. Vent blockage can cause serious damage to your equipment. |
| **3 flashing lights on the Topside Control** | Possible sensor errors | 1. Check water level, adjust if needed |
| | | 2. Clean filter |
| | | If problem persists: |
| | | 1. Turn power off at GFCI breaker, then back on |
| | | If problem still persists: Call your dealer for Service |

## Water System

| Symptom | Problem | Corrective Action |
|---|---|---|
| **Pulsing jets** | Water level too low | Fill spa to proper water level |
| **No Jet Action, or action is poor** | 1. Jets turned off | 1. Turn jets on by turning jet face clockwise |
| | 2. Selector Valve turned | 2. Turn the Selector Valve to the appropriate position |
| | 3. Dirty Filter | 3. Clean Filter |
| | 4. Air lock | 4. Loosen pump union to allow air to bleed |
| | 5. Gate valve closed | 5. Open gate valve |
| **"Check Water Level" message or 3 flashing lights on control panel** | Possible sensor errors | 1. Check water level |
| | | 2. Clean filter |
| | | 3. If problem continues: Turn power off at GFCI breaker, then back on |
| | | If problem still persists, call your dealer for service |