



Topside Control Instructions for Single Pump Spas



For technical support and assistance, call 844-894-6659

15vs300v24002

POWERING ON YOUR SPA

After filling the spa through the filter assembly to the correct level and removing the water hose, replace the filter, the filter basket assembly and filter cover. Turn the GFCI on. Every time the GFCI is powered on, your spa controls run diagnostic self checks. During diagnostic testing, it is normal for a series of messages to display on your topside controls. When diagnostic self checks are completed, the spa will start in priming mode.

Priming Mode



Each time you fill your spa, some air may be trapped in the plumbing lines. Priming mode safely removes the air. To prevent overheating and serious damage, the heater is disabled during priming mode. Your spa starts up in priming mode every time the GFCI is powered “ON” and ends automatically after approximately 6 minutes. When Priming Mode is complete, the primary pump will run on low speed until the pre-set water temperature is reached.

Run Pumps to Purge the Air



When this message is displayed on your topside controls, push the “Pump ” button once to start the pump on low speed. Press the “Pump” button a second time to switch to high speed. After confirming water is coming from all jets and the pump is not surging, press the “Pump ” button to turn the pump off.

Within 2 minutes of pressing each pump button, water should be flowing from the jets in every seat without surging. If none of the jets in a seat work or if water surges, turn the pump off. When the water in the spa is completely still, repeat the process to initiate a second pump priming session. If the pumps do not prime within 2 minutes on your second attempt, turn the GFCI off. Make sure the slice valves are locked in the up position, that the diverter valves are centered for even distribution of the water, that any jet without flow is rotated to the open position and remove any debris in the filter basket and on suction drain covers in the foot well. Power the GFCI on and when the Priming Mode message is displayed on the topside controls, repeat the process to run each pump on HIGH SPEED. If the pumps don’t prime on the third attempt, call 844-894-6659 for assistance.

***Do not turn on any pump that will not prime.** A pump that fails to prime should not be left on for more than 2 minutes under any circumstance. The heater will engage when priming mode is complete. If a pump is not properly primed when the heater engages, the spa may overheat causing serious damage.*



Pre-Programmed Factory Settings



The spa will start in Standard Operating Mode.

The temperature is pre-programmed to 100° F.

The minimum programmable temperature is 80° F, the maximum is 104° F

The Filtration cycle is pre-programmed to run for twice each day for two hours.

While the water is heating, the temperature is measured approximately every two minutes. After the spa has been running for 2 minutes, the current water temperature will be displayed on the topside controls. When the water temperature reaches the pre-programmed temperature setting, the pump will automatically turn off. To display the current pre-programmed temperature setting, press the “cool” button once. The current water temperature will flash on the display.

When the display is flashing, the spa controls are in programming mode. To prevent accidentally changing pre-programmed settings, after you press a button, you should wait 5 seconds before pressing a different button.

Turning the Jets On and Off



Press the “Pump” button once to turn the pump on low speed. Press the “Pump” button a second time to turn the pump on high speed. Pressing the “Pump” button a third time will turn it off. If the “Pump” button is not pressed to turn it off manually, the pump will shut down automatically after 20 minutes. To turn the pump back on, simply press the “Pump” button.

To ensure your safety and for optimal performance, your spa controls will automatically perform maintenance functions and run diagnostic testing. The pump will start automatically on low speed to circulate the water every thirty minutes to run a system check. During heating, filtration and diagnostic testing the pump runs on low speed. When the pump starts automatically to perform these actions, pressing the pump button will not turn the pump off.



Turning the Lights On and Off



Press the “Light” button once to turn the lights on. The colored light will rotate. Press the “Light” button to turn the light off. To display only one color, press the “Light” button repeatedly turning the lights on and off. When the color you desire turns on do not turn the light off. Press the button when you are ready to turn the light off. If the “Light” button is not pressed to turn the lights off manually, the lights will turn off automatically after 2 hours. Press the “Light” button to turn the lights back on. If your spa is equipped with optional perimeter lighting, the perimeter lighting feature works in tandem with the main light.

Operating the Audio Components



Music from your Mp3 player will play through the built-in audio components when the audio system is powered on and the device is plugged into the audio jack. Both the on/off switch and audio jack are located inside the Mp3 Cargo Bay. The Mp3 Cargo Bay is built into the spa cabinet on the same side as the topside controls. To power on the audio system, open the sliding door on the Mp3 Cargo Bay and press the rocker switch on. Use your Mp3 player to select music and to control the volume. If the model you purchased is equipped with Bluetooth capability, open the Bluetooth settings on your Mp3 player and connect it to the spa to stream your music wirelessly. Enter “0000” if a pairing code is required.



For your safety and to protect your device, your Mp3 player should always be stored in the Mp3 Cargo Bay. When you remove your Mp3 player from the Cargo Bay, always push the rocker switch down to turn the speakers off. Leaving the audio components on causes overheating that will permanently damage the audio components. Damage to the audio components that occurs because the components were not turned off is not covered under the warranty.



Changing the Programmed Temperature Setting

To change the pre-programmed temperature setting, press the “cool” button once. The programmed water temperature will flash on the display. While the programmed water temperature is still flashing press the “cool” button again to reduce the programmed temperature setting or the “warm” button to increase it. After 3 seconds, the display will stop flashing and the current water temperature will again be displayed.

The controls are in programming mode when the display is flashing. If the display is not flashing when the temperature is adjusted, the changes will not be saved.

Freeze Protection



If the water temperature falls to 44° F, the spa will automatically turn on and will run for 4 minutes after the water temperature reaches 46° F to prevent freezing. If your spa is in Sleep Mode when the ambient temperature is 40° F or lower, the water temperature will likely operate in Freeze Protection Mode for extended periods if not continuously.

Setting the Filtration Cycles

Filtration cycles run every 12 hours

Continuous Filtration IS NOT RECOMMENDED

To change the length of the filter cycle, press the “Cool” button. The current water temperature will flash on the topside display. While the temperature is still flashing, press the “Pump” button, then press the “Cool” button, stopping when the setting you want is displayed on the topside controls. Press the “Jets” button to confirm your selection. Filter cycles can be set for 2, 4, 6, or 8 hours. Filter continuously appears as “FL” on your topside display and should not be selected. **CONTINUOUS FILTRATION CAUSES OVERHEATING THAT WILL PERMANENTLY DAMAGE COMPONENTS.** *Damage from over heating is not covered under the warranty.*

The first filtration cycle will begin automatically when priming mode is complete, approximately 6 minutes after the spa is powered on. When the filtration cycle begins, the pump will operate on high speed for approximately 1 minute to flush the lines, after which the pump will operate on low speed until the filtration cycle is complete. Filtration cycles run every 12 hours. For example, If the GFCl is powered on at 4:54 and you have selected 2 hour filtration cycles, your filtration cycles will run from 5 to 7 in the morning and in the evening. If you want the filtration cycles to run from 3 to 5, you should power on the spa at 2:54.



UNDERSTANDING OPERATING MODES

Your spa controls are equipped with three operating modes to help you regulate energy consumption and reduce operating costs. How often the spa is used and the ambient temperature will help you determine which mode is best for you. To change operating modes, press the “Cool” button and while the display is still flashing, press the “light” button. The current mode will flash on the topside control. Press the “Cool” button followed immediately by the “Light” button until the operating mode you want to select is displayed on the topside controls.

Standard Operating Mode

*The water is heated to maintain your pre-programmed temperature setting
The current water temperature is displayed on the topside controls*

When your spa is in Standard Operating Mode, it's always ready to use whenever you're ready to use it. Your desired pre-programmed temperature setting is automatically maintained. The current water temperature will be displayed on the topside controls when the spa is in Standard Operating Model unless you are switching between modes, when “5L” will be displayed momentarily on the topside controls.

Economy Mode

*The water heats only during filtration cycles
In Economy Mode the water may be too cool for immediate use.
“EC” is displayed on the topside controls*



DO NOT PUT YOUR SPA IN SLEEP MODE WHEN THE AMBIENT TEMPERATURE IS 40° F OR LOWER!

Economy Mode reduces energy consumption by heating the water only during filtration cycles. In Standard Operating Mode, the spa automatically begins heating when the water temperature falls a couple of degrees. In Economy Mode the water heats to the programmed temperature only during filter cycles. In moderate weather, setting the filtration cycle to end right before use can be an effective way to reduce energy consumption. In Economy Mode, the water temperature will flash alternately with “EC” on the display when the pump is running on low speed, after diagnostic testing, during or after a filtration cycle, or when you press the “Cool” button once. Otherwise “Ec” is displayed on the topside controls.





Sleep Mode

The water heats to 20°F below the pre-programmed temperature setting

The water heats during filtration cycles only

“SL” is displayed on the topside controls

DO NOT PUT YOUR SPA IN SLEEP MODE WHEN THE AMBIENT TEMPERATURE IS 40° F OR LOWER!

Sleep Mode can significantly reduce energy consumption because the water only heats during filter cycles and stops heating when the water temperature is 20° F below the pre-programmed temperature setting. For example, if your pre-programmed temperature setting is 100° F, during the filtration cycle your water will heat to 80° F. If the filtration cycle times out before the water temperature reaches 80° F, the filtration cycle will end regardless of the water temperature. Sleep Mode is ideal when the weather is warm or when the spa will not be in use for a prolonged period of time. When your spa is in Sleep mode, the water temperature flashes alternately with “SL” on the display when the pump is running on low speed, after diagnostic testing, during or a filtration cycle, or when you press the “Cool” button once. Otherwise, “SL” will be displayed on the topside controls.

Freeze Protection

If the water temperature falls to 44° F, the spa will automatically turn on and will run for 4 minutes after the water temperature reaches 46° F to prevent freezing. If your spa is in Sleep Mode when the ambient temperature is 40° F or lower, the water temperature will likely operate in Freeze Protection Mode for extended periods if not continuously.

When the display on the topside control flashes the spa is in programming mode. After you press one button, you should wait five seconds before you press a different button. For example, if you only press the “Light” button, only the light function changes. If you only press the “Cool” button, only the temperature changes. But you press the “Light” button and immediately press the “Cool” button the operating mode will change. Waiting 5 seconds between pressing the “Light” and “Cool” buttons will prevent you from accidentally changing the operating mode.

It may be difficult to read the topside display in bright sunlight. Standing under an umbrella can block direct sunlight and increase visibility.



Troubleshooting Error Messages on Topside Control

Message	Meaning	Action Required
	No message to display No Power to Spa	Control panel disabled until power is restored. Settings have been preserved.
--	Temperature Unknown	Temperature will be displayed after pump has been running for 2 minutes
HH	OVERHEAT - Spa shut down to protect against excessively high water temperature in heater chamber at sensor	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
OH	OVERHEAT - Spa has shut down to protect against high water temperatures in heater chamber at sensor	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
IC	Ice - Potential for freezing	No action required. Pump will automatically activate to prevent freezing
SA	Spa shut down - Sensor "A" not working	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
SB	Spa shut down - Sensor "B" not working	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
Sn	Sensors out of balance - Temporary if alternating with water temperature. If flashing by itself, spa is shut down	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.



Troubleshooting Error Messages on Topside Control

Message	Meaning	Action Required
<i>HL</i>	Significant difference between sensors - likely flow problem	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
<i>LF</i>	Persistent Flow Problems - Heater shut down, other functions will run normally	DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Change filter if dirty. Power on if not resolved call 844-894-6659 for assistance.
<i>dr</i>	Possible low water levels, low flow or air bubbles in heater, spa shut down for 15 minutes	Check water level and refill if necessary. Make sure slice valves are up and locked, remove obstruction from filter basket and suction covers. Press any button to reset. If problem persists, call 844-894-6659 for assistance
<i>dy</i>	Inadequate water in heater. Spa is shut down.	Check water level and refill if necessary. Make sure slice valves are up and locked, remove obstruction from filter basket and suction covers. Press any button to reset. If problem persists, call 844-894-6659 for assistance

