

Important New Operation Information

This information supercedes the one listed
in the owner's manual.

Equipment System Operation for Hybrid Heat Spas





Initial Start-Up


When your Spa is first activated, it will perform a self diagnostics test showing a series of numbers followed by Pr, then by - - along with the low speed pump for aprox 7 minutes. Also the internal clock that keeps track of the filtration cycles every 12 hours will start at that point. The system is preset to heat up to 37.7° C (100° F) and it is also preset to run on low speed for two hours. (F2)

Temperature Adjustment


21° - 40°C (70°F-104°F)

When either of the temperature pads   are pressed once, the LCD will display the temperature witch has been set. Each time either one of this pads are pressed again, the temp. will change by .556°C (1°F), After 5 seconds, the LCD will automatically display the current spa temperature.

Jets

Press the  pad to run the pump on and off. If left running, the high speed pump will automatically turn off after 15 minutes or low speed in 4hours.

Light

Press the  pad to turn the spa light on. To switch color modes, press the pad again immediately after turning it off. If left on, the light will automatically turns off after 4 hour.

Spa Water Maintenance

This function enables you to program the amount of water filtration time.

Press  or  and  to enter the programing mode.

Once in the programing mode press  or  to select the filtration time.

F2 In this mode the water will be filtered for 2 hours every 12 hours.

F4 In this mode the water will be filtered for 4 hours every 12 hours.

F6 In this mode the water will be filtered for 6 hours every 12 hours.

F8 In this mode the water will be filtered for 8 hours every 12 hours.


FC In this mode the water will be filtered continuously.

To exit press 

Indicator Lights  = Heater On  = Jets, Light On

Standby Mode (59)

This function allows you to disable the equipment when the filter need's to be serviced without disturbing the already programed filtration time.

Press  repeatedly (or hold it down) until it gets to 21° C (70° F) then press it one more time (within a couple of seconds) to enter the stand by mode. All spa functions are disabled except for freeze control. To exit from standby press any button and re-enter desire set temperature.

For additional features (See page 11)

Dysplay Messages (See page 12)




WARNING
OPERATING THE SYSTEM
WITHOUT WATER
WILL CAUSE SEVERE DAMAGE.

OPERATING THE SYSTEM WITH
ANY TYPE OF EXTENSION CORD
WILL CAUSE SEVERE DAMAGE.

WARNING: Shock Hazard! No User Serviceable Parts. Do not attempt service of this control. Contact your dealer or service Center for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.

Additional Features

Spa Heating Modes

The **Heating Mode** offers the ability to control your heater in special circumstances. Your spa is preset at the factory to **Standard Mode**. However, the **Standard** Heating Mode can be changed to **Economy** or **Sleep** by pressing the  or  then  button. With each press of the buttons, the display will cycle through the three different modes described below:

- 1. Standard Mode (ST):** Your spa is preset to this mode. This mode operates the heater whenever needed to maintain the programmed spa water temperature. (See Temperature Adjustment).
- 2. Economy Mode (EC):** This mode operates the heater only during programmed **Filtering Cycles** (See "Spa Water Maintenance"). This mode is ideal for areas that charge a premium for electricity during peak hours. This mode will maintain the thermostat setting. If it does not reach the thermostat setting, you may have to allow for more heating time by increasing the **Filtration Cycles**.
- 3. Sleep Mode (SL):** This mode works in the same manner as the **Economy Mode** except the thermostat setting is automatically lowered by 20 degrees. This mode is best suited for extended leaves from home when it is not important to maintain constant water temperature, such as vacations or business trips.

Summer Set Temperature

In hot weather, it is possible for water temperature to exceed the temperature setting. This is especially common when your temperature setting is lower than air temperature. If the water temperature exceeds the temperature setting more than 3°, an automatic safety circuit will turn off all of the electrical systems. The systems will remain off until either the water temperature cools to below the setting, or the setting is increased above the water temperature.

Display Messages

MESSAGE	MEANING	ACTION REQUIRED
	No message on display. Power has been cut off to the spa.	The control panel will be disabled until power returns. Spa settings will be preserved until next power up.
- -	Temperature unknown.	After the pump has been running for 2 minutes, the temperature will be displayed.
HH	"Overheat" - The spa has shut down. One of the sensors has detected 47°C (118°F) at the heater.	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. Once the heater has cooled, reset by pushing any button. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
OH	"Overheat" - The spa has shut down. One of the sensors has detected that the spa water is 43°C (110°F).	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. At 41°C (107°F), the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
IC	"Ice" - Potential freeze condition detected.	No action required. The pump and blower automatically will activate regardless of spa status.
SA	Spa is shut down. The sensor that is plugged into the Sensor "A" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
SB	Spa is shut down. The sensor that is plugged into the Sensor "B" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
SN	Sensors are out of balance. If alternating with spa temperature, it may just be a temporary condition. If flashing by itself, spa is shut down.	If the problem persists, contact your dealer or service organization.
HL	A significant difference between temperature sensors has been detected. This could indicate a flow problem.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. If problem persists, contact your dealer or service organization.
LF	Persistent low flow problems. (Displays on the fifth occurrence of "HL" message within 24 hours.) Heater is shut down, but other spa functions continue to run normally.	Follow action required for "HL" message. Heating capability of the spa will not reset automatically; you may press any button to reset.
DR	Possible inadequate water, poor flow, or air bubbles in detected in the heater. Spa is shut down for 15 minutes.	Check water level in spa. Refill if necessary. If water level is okay, make sure the pumps have been primed. Press any button to reset, or this message automatically will reset within 15 minutes. If problem persists, contact your dealer or service organization.
DY	Inadequate water detected in heater. (Displays on third occurrence of "dr" message.) Spa is shut down.	Follow action required for "dr" message. Spa will not automatically reset. Press any button to reset.