

## Operate Your Spa

# Topside Control Panels

## System Settings

When your spa is first actuated, it will go into Priming mode, indicated by “Pr.” The Priming mode will last for less than 5 minutes (press a Temperature button to skip Priming Mode) and then the spa will begin to take temperature readings, followed by the heater test cycle. After completed, the heater will turn on, heat the spa and maintain the water temperature in the Standard mode.

The start-up temperature is set at 100°F/37°C. The last measured temperature is constantly displayed on the LCD. Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes.

**Maximum Temperature is set at 104°F/40°C as required by UL/CSA.**

**Minimum temperature is 80°F/26°C.**

*Note: If the spa is currently in a heating or filtration cycle the primary pump will only switch between high and low. It cannot be turned off until the heating or filtration cycle is completed.*

## Preset Filter Cycles

**F 2** The first filter cycle begins 6 minutes after the spa is energized. The second filter cycle begins 12 hours later. The default filter time is 2 hours. Recommended setting is F2.

*Example: In a 12 hour period (1 cycle), a setting of F2 means 2 hours of filtration on, 10 hours of filtration off.*

*You may choose F2, F4, F6, F8 or c (continuous).*

To program, press a temperature button, then “Jets”. Press a temperature button to adjust. Press “Jets” to exit.

## Mode

Mode is changed by pressing a temperature button, then pressing the “Light” button.

**Standard Mode** is programmed to maintain the desired temperature. Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes. “ST” will be displayed momentarily when you switch into Stan-

ard Mode. The temperature is constantly displayed when in Standard Mode. This is the best mode to use during COLD weather.

**Economy Mode** heats the spa to the set temperature only during filter cycles or if the temperature falls to 20 degrees below set temperature. “EC” will display solid when temperature is not current, and will alternate with temperature when temperature is current. This is the best mode to use during WARM weather.

**Sleep Mode** heats the spa to the set temperature only during filtration cycles. “SL” will display solid when temperature is not current, and will alternate with temperature when temperature is current, but only within 20 degrees of your set temperature.

## Freeze Protection

If the temperature sensors detect a drop to below 44°F/6.7°C within the heater, the pumps will automatically activate to provide freeze protection. The equipment stays on until 4 minutes after the sensors detect that the spa temperature has risen to 45°F/7.2°C or higher.

## One-Pump Spas



## Jets

Touch the “Jets” button once to turn the main 2-speed pump on or off, and to shift between low and high speeds. If left running, the low speed of the pump will automatically turn off after 2 hours, and the high speed will automatically turn off after 15 minutes.

## Lights

Press the **Light** button on the topside control panel to turn the spa light on. If your spa has perimeter LED lights, they will also light up at the same time as the spa light. LEDs operate in four modes. The mode is changed by turning the light off and then immedi-

ately back on

1. **Fading:** The lights will cycle through all the colors in this order: White, Cyan, Magenta, Blue, Chartreuse, Green, Red
2. **Color Locked:** This cycle offers a hard color change without fading.
3. **Quick Color Change:** Each time you press the button, you advance to the next color.
4. **Flashing white:** The LED lights will flash white.

### “WARM / COOL” Buttons

To display the Set Temperature, press either the “WARM” or “COOL” button once. The LCD will begin to flash the set temperature. If you want to increase or decrease the desired temperature, press the “WARM” or “COOL” button accordingly. Once at the desired temperature, allow a few seconds for the flashing to cease. Your Set Temperature has now been successfully set.

**Control Pack Codes** See pages 29-30.

---

## Operational and Energy Tips

### 1. Control Valves – air and water controls on the top of spa

- a. **Average to Cold Climate** - When not in the spa, make sure the valves are turned off. All these valves will inject a certain amount of air into the water which causes a cooling effect. Therefore your spa will have to heat more often and cost more money to operate.
- b. **Hot Climate** – Hot tubs are only designed to heat up and maintain temperature, therefore hot climate can actually make a spa over heat. In these areas, the control valves can be left open all the time to help cool the spa down.

### 2. Filter Settings – Time and Duration

#### a. Filter settings

- i. **Filter times** - To set your filter time, simply power your spa on at desired filter start time. If you power the spa up at 8:00am, it will filter at 8:00am and 8:00pm daily until the power is

turned off and on again.

1. **Savings** – if your electric provider offers different rate per KWH (peak / off-peak) then you will want your filter time to take place during off-peak time.
  2. **Cooling a Spa** – if you are experiencing over heating with your spa, have the spa filter during cooler times of the day, and leave the control valves opened like mentioned prior.
- ii. **Filter setting F2,F4,F6,F8,and FC = filter constantly**
    1. The factory setting is F2, which means the spa will filter 2 hours for every 12 hour period. 4 hours total per day. Since we use a large primary pump for your filtration, it moves a lot of water quickly. Therefore we recommend you keep your filtration at no more than F4, anything longer will just waste electricity and in warm climates the spa may overheat.

### 3. Heating Modes – Standard, Economy, and Sleep

**a. 4 Button Controllers Only** - These options are not always unlocked from the factory, and may require a settings change. Attempt to change the mode several times prior and if no results a dip switch will need changed.

#### b. Standard – St

- i. **Standard is the default setting**, and you are in standard mode if none of the other setting codes show up
  1. Temperature will be at or near desired temperature constantly
  2. Pumps turn on at regular intervals to check and maintain temperature
  3. Best to use at startup of spa, it will heat until desired temperature is reached
  4. Best to use in cold climates
  5. Most costly to operate

#### c. Economy – Ec

- i. **Economy** is the power saving alternative for regular heating, you will know that you are in economy by the code displayed. If the pump is running the current temperature and code will alternate on the display.
  1. Spa will only heat during filter period
  2. Temperature will remain close to desired, but it will drop between filter periods
  3. If users can get in a routine, filter period

## Operate Your Spa

should overlap the usage time by a half hour. This will have spa temperature closest to the desired temperature.

a. Example, if using the spa at 8:00 have spa filter from 6:30 – 8:30.

4. Best used in mild to warm climates
5. Tests show a 20% reduction in energy consumption when compared to standard mode

### d. Sleep – SI

i. **Sleep** is considered a vacation heater setting, and will maintain your spa water at the most affordable price

1. Spa will only heat during your filter period
2. The water temperature may drop up to 20 degrees below your desired temperature
3. Will work in all climates, and will not allow the spa to freeze
4. Tests show a 50%+ reduction in energy consumption when compared to standard mode

## 4. Steam Loss / Venting Around Spa Cover

a. **It is normal** to see an occasional burst of steam from around the cover due to pressure releasing from a high to low area. However heat loss can be greatly impacted by use of the spa

i. **Control valves** should be turned off when getting out of the spa in a cool climate.

1. Air injects from the cabinet and enters into the water area. That air not only will cool the cabinet area, but will also greatly increase the pressure under the cover and cause more steam to release.

ii. **Surfaces are different for all spas**, and covers may provide a better seal is spun differently.

1. If the folding seam goes over the controller area, often more steam will be able to escape. Try to position the cover so that the fold seam goes over the wider top surface areas on the adjacent sides.

## Proper Spa Cover Use

*Important! Keep the spa covered when not in use!*

- Covered spas will use less electricity in maintaining your set temperature.
- Covering your spa will protect your spa's finish from the sun's ultraviolet rays.
- You are required to keep the spa covered to maintain warranty coverage.

- Covering your spa helps prevent children from drowning in the spa. See the photo for instructions on mounting the locks and how to lock and unlock the cover.

- In addition, while a soft spa cover is rigid, it is not designed to support any weight. Therefore, as a safety precaution and to preserve the life of your cover, you must not sit, stand, or lie on it, nor should you place objects of any kind on top of it.

## Personal Settings



### Jets

Jets in your spa may be adjustable. Rotating the face of an **adjustable jet** to the left (counter-clockwise) will increase the amount of water flow

through the jet. Rotating the face of an adjustable jet to the right (clockwise) will decrease the amount of water flow through the jet.

## Air Controls



Air controls are the **2" knobs** located around the top of your spa. Each one will let you add

a mixture of air with the jet pressure. This is accomplished by rotating the air control knob to the left (counterclockwise) to increase the amount of air-flow through the jets. To decrease the amount of air-flow through the jets, rotate the handle to the right (clockwise).

## Water Feature Controls *(if equipped)*



Some spas include waterfalls and/or water columns. Increase or decrease the flow of the waterfall using the **2" water on/off knob** nearest the water feature.