# Apollo 11 Control system instruction set

## START UP

When power is first applied to the spa, the system will go through a check to verify that the sensors, pump,

and heater are working. If the water does not move when the pump comes on, or if you notice any other problems, abort the start up by pressing and holding the "JETS 1" button until the display reads "TEST." Once in the test mode, press the temperature up button to abort the start-up and enter into FTR Only mode. Press the temperature down button to restart the system. Press the Aux button to cycle the blower. Press the light button to see the temperatures from each sensor.

Press the Jets 1 button to cycle pump 1. Press the Jets 2 button to cycle pump 2.



On normal start-up, the system will determine how the spa was configured during installation. After the system completes this test, the system will enter its normal operating mode and display the day, time, and temperature (as show above). You can now set the temperature, time, day, and filter start time and heating mode. If there was a problem during the system check, the display will show one of the following messages: "SENSOR FAILURE" if the system finds a problem with one of the sensors, "HEATER" if it determines the heater is not working or "NO FLOW" if the system could not detect a working pump connected to the heater.

One reason for the system not detecting the heat pump is the pump may be air locked. This happens when the pump is on and there is little or no water flow visible in the tub. Try releasing the air from the pump and restarting the system.

# **HEATING**

The default temperature setting is 80 degrees. The system will revert back to this temperature anytime power has been interrupted and reapplied. The maximum temperature setting is 104 degrees and the minimum set temperature is 60 degrees. You can change the temperature setting by pressing either the "UP" button or the "DOWN" button. Prior to pressing any buttons, the display will cycle between showing the day and time to showing the actual temperature of the water (assuming there is no special message to be displayed). When you press either the "UP" or "DOWN" button, the normal display will be interrupted to display the current temperature setting. Subsequent presses of the "UP" or "DOWN" button will increment or decrement the temperature setting. When the display shows the desired temperature setting, the new temperature will be set and the display will revert back to the normal display mode showing the day, time and temperature after 10 seconds. When the system is ready to heat, it will first turn on the heater pump. After one minute, the heater will come on and the display will cycle between displaying "HEATING" and the current water temperature. When the set temperature is reached the system will turn off the heater and the display will revert back to showing the day, time and temperature. The pump will continue to run for one minute and then turn off.



## **HEAT MODES**

There are three different heating modes for the control system: standard, economy, and weekend. If your tub is connected to 120 Volts, the system will not heat with pump 1 on high, pump 2 on, or if the blower is on.

#### **STANDARD**

The default heating mode for the system is standard mode. The system will revert to this mode anytime power is interrupted and reapplied. In standard mode, the system will turn on the pump and heater as needed to maintain the set temperature of the water. After one hour of inactivity, the system will enter into low cycle mode. In low cycle mode the spa will only turn on once every fifteen minutes unless, a button is pressed, the spa is in a filter cycle or any of the connected equipment is on.

#### **ECONOMY**

In economy mode, the system will only heat the water to maintain the set temperature during the filter cycle or if the temperature falls below 60 degrees.

#### WEEKEND

In weekend mode, the system will only heat the water to maintain the set temperature between Friday at 12:00 am and Sunday at 11:59 pm or if the temperature falls below 60 degrees.

#### **FILTERING**

The system will come on to filter for two hours a day at the same time both am and pm. The default filter start time is 12:00. The system will revert back to this time anytime power has been interrupted and reapplied.

## CHANGING HEAT MODES, DAY, TIME, & FILTER START TIME

## To change the **HEAT MODE**:

Press and hold "JETS1" button until the display reads "PROGRAM" (about 7 sec) then release the "JETS1" button and press and hold the "JETS2" button until the display shows the current **HEAT MODE** "STANDARD," "ECONOMY," or "WEEKEND." To change, press and release the "JETS2" button until the display shows the desired heat mode. When you are done, leave the topside control alone, and the mode will be set The display will revert back to normal after 30 seconds.

#### To change the **DAY & TIME**:

Press and hold "JETS1" button until the display reads "PROGRAM" (about 7 sec) then release the "JETS1" button and press and hold the "JETS2" button until the display shows the current HEAT MODE "STANDARD," "ECONOMY," or "WEEKEND." Now, to change the:

- DAY –press and release the "JETS 1" button.
- HOUR -press and release the "AUX" button.
- MINUTES -press and release the "UP."
- AM/PM -press and release the "DOWN" button.

When you are done, leave the topside control alone, and the time will be set. The display will revert back to normal after 30 seconds.

#### To change the **FILTER START TIME** (the time the filter cycle starts):

Press and hold "JETS1" button until the display reads "PROGRAM" (about 7 sec) then release the "JETS1" button and press and hold the "JETS2" button until the display shows the current HEAT MODE "STANDARD," "ECONOMY" or "WEEKEND." To change, press and release the "LIGHT" button until the desired start time is displayed. When you are done leave the topside control alone and the filter start time will be set. The display will revert back to normal after 30 seconds.

