## OPERATING INSTRUCTIONS



Whenever the heater is operating to maintain preset temperature, the spa water

temperature and heat Icon (HET) will alternately appear on the temperature Display.

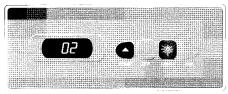
Note: Press and hold the **TEMP** touch button to cause the temperature setting to change slowly, then rapidly.



#### **SETTING FILTRATION CYCLES:**

There are two equal filtration cycles a day. They may be programmed in 2 hour increments, to operate from 2 - 12 or 2 - 24

hours a day (depending on factory setting).



To set the filtration cycles, press and hold (6 seconds) the *LIGHT* touch button. A number

between 02 and 12 (or 02 and 24) will be displayed, this is the total hours of programmed daily filtration. To change the current setting, press TEMP to increase the hours. To decrease the the hours, press and hold the TEMP touch button until 12 (or 24) appears, release TEMP and press again, the display will start at again at 00, press TEMP until the desired setting appears.

To set filtration start times, press and hold **LIGHT** (6 seconds) the filtration cycle setting will appear, press **LIGHT** again, a number between **00** and **12** (or **02** and **24**) will be displayed, this is the number of hours until the start of the first filtration cycle. To increase the current setting, press **TEMP** until the desired setting is displayed. To decrease the setting, press and hold **TEMP** until **12** (or **24**) appears, release **TEMP** and press again, the display will start again at **00**, press **TEMP** until the desired setting is displayed. Press and release **LIGHT** to resume normal operation.

**Example - Two filtration cycles per day:**If the Spa-Side Control has been set for 2 hrs.

filtration time (02) followed by 1 hr. start time (01), the first filter cycle of 1 hr. will start 1 hr. after programmed. 12 Hrs. later the second 1 hr. filter cycle will start. If the filter cycle Fc is



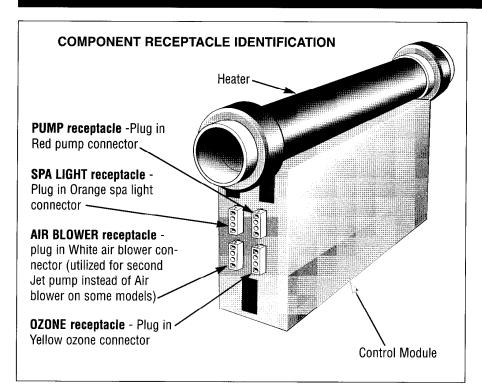
ON, the second push of the LIGHT touch button advises the time left on the filter

cycle. If the filter cycle is OFF, the second push of the **LIGHT** touch button advises the time until the next filter cycle starts.

**Note:** Some models utilize "one" filtration cycle per day, instead of two filtration cycles per day. On these models the setting procedures are the same as two cycles per day.

Example - One filtration cycle per day: If the Spa-Side Control has been set for 2 hrs. filtration time (02) followed by 1 hr. start time (01), the filter cycle will start 1 hr. after programmed and continue to operate for 2 hrs.

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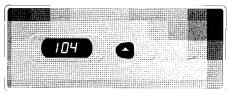
# SETTING THE TEMPERATURE: The temperature may be set to



The temperature may be set to maintain the spa water between 40°F (4°C) and 104°F (40°C).

To set the temperature press the **TEMP** touch button and the current temperature setting will be displayed for approximately 4 seconds.

To increase temperature setting, press the **TEMP** touch button until the desired temperature is displayed.



To decrease temperature setting, press and hold the **TEMP** touch button, the display will continue to increase and stop at **104**, release **TEMP** and press again, the display will start again at **40**, press **TEMP** until desired temperature is displayed.

## OPERATING INSTRUCTIONS



## **OPERATING THE JETS:**

To activate the jets, press the **JET** touch button once for low speed , press again for high

speed (**JET** will appear momentarily on the Temperature Display), press again for OFF (**oFF** will appear momentarily on the temperature display).



A safety shut-off timer circuit automatically turns off the jets after 30 minutes of operation. Press the **JET** touch button to continue using the jets.

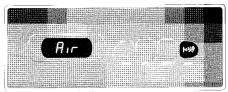
NOTE: When operating in a filtration cycle, pressing the **JET** touch button will change between low speed and high speed operation only. The pump will **not** turn OFF until the end of the filtration cycle.



#### **OPERATING THE AIR SYSTEM:**

The **AIR** touch button controls the air system. Press the **AIR** touch button to activate the air

system (**Air** will momentarily appear on the Temperature Display), press again for OFF (**oFF** will appear momentarily on the temperature display).



A safety shut-off timer circuit automatically turns off the air system after 30 minutes operation. Press **AIR** again to continue using the air system.

Air channel purge feature . . . The air system will automatically operate for 1 minute every day, assuring that all water is exposed to the sanitizer.

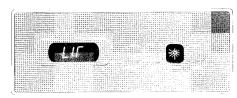
**Note:** Some models utilize the **AIR** touch pad to operate a second Jet system (no air system). The operating procedures are the same except, **JET** will momentarily appear on the Temperature display instead of **Air** and there is no air channel purge feature.



## **OPERATING THE SPA LIGHT:**

The *LIGHT* touch button controls the spa light. Press the *LIGHT* touch button to turn the

light ON (*LIT* will momentarily appear on the Temperature Display), press again for OFF (*oFF* will appear momentarily on the temperature display).



A safety shut-off timer circuit automatically turns the spa light OFF after four hours of operation.

## **IMPORTANT SAFETY INSTRUCTIONS**

When installing and using this Control Module, basic safety precautions should always be followed including the following:

# READ AND FOLLOW ALL INSTRUCTIONS

### **INSTALLATION CONSIDERATIONS**

- 1. A bonding lug has been provided on the outside of the Control Module electrical control box. This lug permits the connection of a No. 8 AWG (8.4mm²) solid copper bonding conductor between the Control Module and all other electrical equipment and exposed metal in the vicinity, as may be needed to comply with local regulations.
- 2. The Control Module must be installed to provide for adequate drainage, and to prevent water from entering the electrical equipment area. When installing the spa indoors, the floors and structures beneath the spa must be protected against water run-off.

## FOR CORD AND PLUG CONNECTED UNITS 120 VOLT OPERATION

3. DANGER - Risk of injury.

Do NOT use an extension cord. The Control Module must be located close enough to the electrical outlet

that an extension cord shall not be required. Use of an extension cord will seriously degrade Control Module performance, and can create a serious electrical hazard.

Never bury the power cord.

To reduce the risk of electric shock, replace a frayed or damaged power cord immediately.



For units with a 20 ampere type plug, connect **ONLY** to a grounded, grounding type receptacle rated at 120 volts, 20 amperes. Never, for any reason,

modify the attachment plug to fit other than a grounded, 120 volt, 20 ampere receptacle.

### FOR PERMANENTLY CONNECTED UNITS "HARDWIRED" FOR 120 VOLT OR 240 VOLT OPERATION

**4.** The electrical supply for permanently connected Control Modules ("Hardwired" for 120 or 240 volt operation) must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Article 422-20 of the National Electrical Code, ANSI/NFPA 70. The disconnecting means must be within sight and readily accessible to the user of the spa, but installed at least 5 feet (1.5m) from the spa. The electrical supply for permanently connected Control Modules must also include a suitably rated Ground Fault Circuit Interrupter (GFCI) to comply with

Article 680-42 of the National Electrical Code, ANSI/NFPA 70.

## **OPERATING PRECAUTIONS**

- **5. DANGER-RISK OF ELECTRICAL SHOCK.** Do not permit any electrical appliance, such as a light, telephone, radio, or television, within 5 feet (1.5m) of the spa.
- **6.** Be sure that water always flows freely from the hydrotherapy jets within the spa. Any blockage or restriction of this water flow by persons or objects may damage system components, create an electrical shock hazard, and/or cause water damage to the surrounding area. To avoid damage to the pump and heater, the Control Module must never be operated unless the spa is filled with water.
- 7. DANGER To reduce the risk of injury to persons within the spa, never remove, or alter in any way, the grates or covers on the suction fittings in the spa. Never operate the Control Module if the grates or covers on the suction fittings are broken or missing.
- **8. WARNING RISK OF CHILD DROWNING.** Extreme caution must be exercised to prevent unauthorized access to the spa by children. **WARNING** To reduce reduce the risk of injury, do not permit children to use the spa unless they are closely supervised at all times

**9. WARNING** - 120 volt Control Modules may be equipped with a Ground Fault Circuit Interrupter (GFCI), located in the plug or power supply cord. This GFCI protects against electrical shock hazard by sensing electric fault conditions and interrupting the electric power applied to the Control Module.

Before each use of the spa the GFCI, should be tested in the following manner: Push the **TEST** button. the **RESET** button should pop outward, indicating that the GFCI is functioning properly. Push the **RESET** button all the way in, restoring power to the Control Module.

If the **RESET** button does not pop outward when the **TEST** button is pushed, a loss of GFCI protection is indicated. Should this occur, immediately disconnect electrical power from the Control Module, and discontinue use of the spa until a qualified technician has identified and corrected the problem.

**10.** Prolonged immersion in water hotter than 104°F (40°C) may cause hypothermia. The causes, symptoms, and effects of hypothermia may be described as follows: Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hypothermia include dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hypothermia

include (1) unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit the spa, (4) physical inability to exit the spa, (5) fetal damage in pregnant women, and (6) unconsciousness resulting in a danger of drowning. **WARNING** The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.

Leave the spa immediately if nausea, dizziness, or headache occur. Immediately cool the body by taking a cool shower or by applying cold towels or ice packs. If the symptoms persist, seek medical attention.

**11. WARNING** - To reduce the risk of injury: Before entering the spa the user should measure the

Before entering the 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 (3°C).

The use of alcohol, drugs, or medication before or during use if the spa may lead to unconsciousness with the possibility of drowning.

The water in the 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 extended use (exceeding 10 minutes) and for young children.

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 temperature to 100°F (38°C).

Obese persons or persons with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using the spa.

Persons using medication should consult a physician before using the spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

Because occasional users of the spa may not be aware of all of the potential risk associated with spa usage, they should be made aware of these Important Safety Instructions.

## **SAVE THESE INSTRUCTIONS**

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