# POOL ENVIRONMENTS, INC.

## INSTRUCTION MANUAL / TROUBLE SHOOTING GUIDE

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For After Hour Emergency Call Office 972-985-1576 and receive Emergency Numbers.

7 days a week 7:00 am to 10:00 pm

If you do not receive a call back in 20 minutes, please call again. Thank You.

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## **POOL HEATING INSTRUCTIONS (Manual / Computer)**

Turn pump on. (manual) (see fig. 8)/ On indoor panel filter pump must be on. (computer) (see fig. 1)

- 2. Flip heater toggle switch to on. (manual) (see  $\underline{\text{fig. 6}}$ )/ On indoor panel pool heater must be on. (computer) (see  $\underline{\text{fig. 1}}$ )
- 3. Adjust thermostat to desired level. (manual) (see <u>fig. 6</u>)/ On indoor panel set tempature. (computer) (see <u>fig. 1</u>) (If you are trying to heat the pool daily in any automated manor contact Pool Environments for programming instructions.)

During normal operation, water is drawn from the pool main drain and skimmers into the pump suction, forced through the filter. Through the heater and back into the pool through the adjustable eyeball inlets located on the pool sidewalls.

#### **POOL HEATING:**

If you want to heat the pool to a specific temperature and maintain that temperature for days and months at a time, these special instructions must be followed:

#### **MANUAL OPERATED HEATING:**

For a manual timed mode (be sure a firemans switch has been installed, if you don't have a computer controlled pool).

The most efficient method of heating the pool is as follows:

The pumps should be capable of running for up to 20 - 22 hours per day. Start time approximately from 4PM to 6PM through Noon to 1PM, this will allow the heater to keep the water at the chosen temperature. With the filter at a rest time of 3 to 4 hours during the warmest time of the day.

#### **COMPUTER OPERATED POOLS:**

If you have a Jandy One Touch Computer, you may use the maintain temperature setting option. The maintain feature will run the pump and heater as required to keep the water at the desired temperature when this feature is on. The system will periodically activate the pump, sample the water temperature and fire the heater to maintain the preset temperature as required. The heater must be enabled at all times for this feature to maintain temperature. (Example – On at 12:00am and off at 11:59pm. Maintain hours are to be operational for the opposite hours your routine times are programmed for. (Example: Pump runs 7:00am to 7:00pm maintain operation time on 7:00pm to 7am) At your computer panel you may highlight hours and press select, use the up/down arrow key to change the hours than the system will maintain the preset temperature.

If you have any questions always feel free to contact our office for further detailed instructions. 972-985-1576

### Non Computer Pools Only:

Your heater is a boiler-rated unit. Its internal parts remain hot long after the heater is turned off, either by the thermostat or manually. **TURN THE HEATER OFF 20 MINUTES PRIOR TO TURNING THE PUMP OFF.** This will allow cool water to circulate through the heater, thus allowing the unit tocool down. If this "Cool Down" process is not followed, you may experience serious damages and a sizeable service repair bill. (Cool Down Is Automatic with Computer.)

#### **BACKWASHING**

If your pool has been equipped with a D.E.S. filter, It should be backwashed approximately every two months or when the pressure registered on the gauge reads 10 P.S.I. OVER the normal running pressure. This pressure may vary from pool to pool (typically 19 to 24 p.s.i.). Backwashing cleans out the filter by reversing the flow of water in the chamber. The resulting dirty water is run into the sanitary sewer system. Your pool's normal operating pressure is (\_\_\_\_\_\_) p.s.i. and the backwash is 10 p.s.i. over normal operating pressure.

- 1. Backwashing Operation
  - a. Turn the pump off (manual) (see <u>fig. 8</u>) / (with computer go to time out) <u>(see Fig. 2)</u>
  - b. Turn the cleaning system off. (manual) (see <u>fig. 8</u>) / (automatic with computer)
  - c. Raise or rotate the backwash handle/valve. (Remember to rotate to unlock)
  - d. Turn the pump on for 1 minute, or until the water starts to clear in the sight glass.
  - e. Turn the pump off again. (manual) (see <u>fig. 8</u>) / (with computer go to time out) <u>(see Fig. 2)</u> (Use Filter Pump Button to turn on & off.)
  - f. Lower or rotate the backwash valve and turn the pump on for 10 seconds. (Use Filter Pump Button to turn on & off.)
  - g. Repeat steps "a" through "e" at least four times.
  - h. Add the required amount of D.E. into the nearest skimmer.

SMALLER pools, add (6 to 8) one-pound coffee cans or a container of the approximate size, of D.E. after backwashing.

LARGER pools, add (10 to 12) full coffee cans or a container of the approximate size, of D.E. after backwashing.

MULTIPLE FILTER installations, add (8 to 16) full coffee cans of a container or the approximate size, of D.E. after backwashing.

**CAUTION: NEVER** raise, lower or rotate the backwash handle valve while the pump is running. \*Twist to lock position to secure the backwash handle valve in the lock position.

## SPA OPERATION: (Manual / Computer)

Note: If you have a PDA see Special Instructions.

- 1. Turn the pump on. (manual) (see  $\underline{\text{fig. 8}}$ ) / on indoor panel push spa button, with a Jandy One Touch go to one touch screen and push spa mode. (computer) (see  $\underline{\text{Fig. 1}}$  &  $\underline{\text{Fig. 7}}$ )
- 2. Close the pool suction line & open the spa suction line by turning the Jandy 3-way valve (see <u>Fig.5</u>) as instructed. (manual) / automated with computer.

3. Close the pool return line & open the spa return jet line by turning the Jandy 3-way valve (see <u>Fig.5</u>) as instructed. (manual) / automated with computer.

Turn the cleaning system off if it's on. (manual) (see fig. 8) / automated with computer.

- 5. Turn on the heater toggle switch. (manual) (see  $\underline{\text{fig. 6}}$ ) / on indoor panel enable spa heat. Jandy One Touch is automated. (see Fig. 1)
- 6. Adjust the thermostat to the desired temperature. (manual) (see <u>fig. 7</u>) / Push spa heat button to check for correct temperature setting. (computer) (see <u>Fig. 1</u> & <u>Fig. 7</u>) To change Computer Temperature Settings, Press or Highlight menu, press Select or Enter, Scroll or Highlight Temperature Setting, press Select or Enter, select Pool or Spa Temperature, use arrows to Adjust Temperature, press Select or Enter. You are DONE.

**NOTE:** Lubricate the air ventures regularly. Leave air ventures closed when the spa is not in use.

## **TO TURN SPA OFF: (Manual / Computer)**

Note: If you have a PDA see Special Instructions.

- 1. TURN OFF THE HEATER. (manual) (see <u>fig. 8)</u> / PUSH SPA HEAT & SPA BUTTON TO OFF. One Touch screen, push mode key off. (computer) (see <u>Fig. 1</u> & <u>Fig. 7</u>)
- 2. Close the spa suction line & open the pool suction lines by turning the Jandy 3-way valve (see <u>Fig.5</u>) as instructed. (manual) / automated with computer.
- 3. Close the spa return jets & open the pool return lines by turning the Jandy 3-way (see <u>Fig.5</u>) valve as instructed. (manual) / automated with computer.
- 4. Make sure the pump runs for at least 20 minutes after the heater is off to cool the heater down. (manual) (see fig. 8) / automated with computer.
- 5. Turn cleaning system on if neccessary. (manual) (see fig. 8) / automated with computer.

#### **TO CLEAN THE SPA: (Manual / Computer)**

- 1. Close the pool suction line & open the spa suction line by turning the Jandy 3-way (see <u>Fig. 5</u>) to its spa use position. (manual) / Outdoor Panel (see <u>Fig. 2</u>) go to time out, select spa drain and push filter pump button. (computer)
- 2. Leave the return Jandy valve in its normal position. (manual) / automated with computer.
- 3. Begin brushing the dirt in the spa towards the drain.

#### NOTE: DO NOT ALLOW THE WATER TO DROP BELOW THE SPA LIGHT.

#### **TO FILL THE SPA: (Manual / Computer)**

- 1. Close the spa suction line & open the pool suction line by turning the Jandy 3-way (see <u>Fig.5</u>) to the normal operation position. (manual) / Outdoor Panel (see <u>Fig. 2</u>) you will already be in time out, select spa fill / or Pool Mode & spa will fill. (computer)
- 2. Close the pool returns & open the spa jet return line by turning the Jandy 3-way (see <u>Fig.5</u>) to the spa operation postion. (manual) / automated with computer.
- 3. When spa is full of water, close the spa jet return line & open the pool return line by turning the Jandy 3-way (see <u>Fig.5</u>) to the normal pool operation position. (manual) / Outdoor Panel, go to automatic. (computer)

#### LOWER WATER LEVEL IN THE POOL / ONLY IF APPLICABLE

- 1. Water level may be lowered by using the backwash method. Please refer to the backwash instructions on page 2.
- 2. If you do not wish to use the backwash method, you may attach a garden hose to the hose bib located on the pressure side of the pump. Open the valve to then allow the water to flow through into the yard. Pump Must Be Running.

#### **VACUUMING THE POOL**

(Computer Pools go to Time Out operate Filter Pump button for On & Off.)

- 1. Close the main drain valve half way.
- 2. Close the skimmer valve on the skimmer not in use.
- 3. Attach the vacuum head to the telescoping pole.
- 4. Attach the vacuum hose to the vacuum head.
- 5. Starting at the vacuum head, feed the hose into the water to fill the hose with water.
- 6. Insert the free end of the hose through the skimmer mouth.
- 7. Once inside the skimmer mouth, insert the hose into the 1-1/2" diameter hole at the bottom of the skimmer. This hole is located under the skimmer basket and float.
- 8. Vacuum pool.
- 9. If the vacuum seems to lose its suction, check for air in the line or a possible clogged hair and lint strainer basket located at the pump.
- 10. When vacuuming is complete, remove the hose from the skimmer, replace the skimmer parts, and check the hair and lint strainer basket for trash.
- 11. Check the filter pressure gauge for increased pressure. Backwash if necessary.

## HAIR AND LINT STRAINER BASKET: (Manual / Computer)

- 1. Open the time clock door and turn the pump off. (manual) (see <u>Fig. 8</u>) / Outdoor panel go to time out. (computer) (see <u>Fig. 2</u>)
- 2. Close both Jandy 3-way valve (see Fig.5) as instructed. / Close the pool main drain valve & each skimmer.
- 3. Loosen lid holding the hair and lint strainer basket lid in place.
- 4. Remove the basket and remove trapped material.
- 5. Replace the basket and lid. DO NOT OVERTIGHTEN.
- 6. OPEN both Jandy 3-way (see Fig.5) valves to their normal running position. / reverse step 2.
- 7. Turn the pump back on by way of the time clock. (manual) (see <u>Fig. 8</u>) / Computer Outdoor panel, push Filter Pump after Prime is Successfull, Return to Auto
- 8. Bleed any air out of the filter from the air relief valve on top of the filter. This is automatic with the newer filters.

**NOTE:** The hair and lint strainer basket collects and holds material which either sifts through the skimmer baskets or is swept into the main drain. As it fills, the pump must work harder to circulate the pool water. In yards with a severe leaf problem, check the strainer basket daily in the spring and fall as well as after emptying the skimmer baskets as leaves will find their way around the basket as it is lifted. Lubricate the O-Ring on the strainer lid regularly.

#### **GENERAL MAINTENANCE TIPS:**

# VERY IMPORTANT: Be sure the proper gas pressure and flow to your heater are to the manufactuers specifications.

- a. Save the literature for these units. It is full of good tips for your particular unit.
- b. Check the finger strainer located at the wall fitting weekly.
- c. "Rotate" the whip hoses 1/4 turn every month to distribute wear and extend the life.
- d. Clean the collection bag regularly. Dirt and leaves are heavy and can cause the unit to work harder and inefficiently. Clean daily in yards with heavy tree population in spring and fall.

**NOTE:** During the winter months, your cleaning system will not operate as efficient due to the cold weather.

- 1. Automatic Cleaning System
- 2 Tile

Clean with Bonami/Comet or Baking Soda using a sponge, brush or Rag.

3. Lights

The lights are designed to cool by surrounding water and will burn out quickly if operated above water. **NEVER** turn the lights on if they are above or out of the water.

4. Pool Filter

Disassemble at least twice a year for inspection and cleaning. See preventative maintance for cleaning information.

5. Lubrication of Components

The rubber seals and gaskets throughout the equipment should be lubricated regularly with "Aqua-Lube" or other lubricants designed for application to rubber under water. Seals or "O-Ring" gaskets are found in the following location: (See preventative maintance for cleaning details)

- a. Hair and lint strainer lid.
- b. Backwash "T-bar" valve. Most pool owners will only be able to lubricate the vertical shaft which slides into the valve. Other gaskets inside should be lubricated by your serviceman if any leaks develop.

  6. General Cleaning Sequence

If you wish to brush down the pool, clean the skimmer baskets, the hair and lint strainer baskets or to backwash, please follow the sequence below:

- a. With the pump running, open the pool main drain and the skimmer valves. Remove and clean the skimmer baskets.
  - b. If you wish to brush the pool, do it now.
  - c. Turn off the pump by way of the time clock. Clean the hair and lint strainer basket.
  - d. If you wish to backwash, do it now.

**NOTE:** This list gives you the sequence. They may be omitted to suit the situation.

## PREVENTATIVE MAINTENANCE PROGRAM:

(This is vital for proper operation & equipment life expectancy.)

Pool Environments Inc. recommends a semi-annual maintenance program to your pool equipment. Services included in this program are:

- 1. Inspect pad equipment for leaks or wear.
- 2. Lubricate pump, filter and backwash o-rings.
- 3. Disassemble filter and clean filter grids.
- 4. Check pool chemistry.
- 5. Check heater operation.

A full inspection report is done and a follow up call is made by our office to you concerning any questions. This service is recommended to ALL pool owners, as a regular maintenance program keeps your equipment in prime condition during the summer months and the freezing days of winter. Please call our office at 972-985-1576 for further details.

#### POOL PROTECTION DURING FREEZING WEATHER:

Your pool is equipped with a freeze-prevention switch. This switch operates during freezing weather by overriding the time clock, thus turning the pool pump on. The resulting water circulation greatly reduces the possibility of the plumbing freezing. This switch does not heat the water.

#### POWER OR PUMP FAILURE DURING FREEZING WEATHER:

- 1. Turn off pool switches at main breaker panel.
- 2. Filter: Open air relief valve on top and remove the white cap at the bottom to drain unit.
- 3. Sight Glass: Open hose bib next to sight glass.
- 4. Heater: Open drain cocks on either side of heater.
- 5. Pump: Remove hair and lint strainer basket lid and strainer basket pot and at bottom of pump.
- 6. Polaris: Remove black rubber hose at Polaris motor.
- 7. Valves: Open ALL valves.
- 8. Reverse the above steps when power is restored.

**NOTE:** Freeze damage is **NOT** covered under any warranty so please read and follow directions carefully. Most freeze damage occurs when baskets are full of debris or you have low water flow. The other common freeze damage is the water level gets low and the pumps lose prime. You will evaporate a lot of water in a freeze. YOUR POOL MUST STAY FULL OF WATER.

#### PROCEDURES TO BE USED DURING A FREEZE:

- 1. Make sure skimmers and pump pot is clean and clear of any debris.
- 2. Fill lines (manual): Disconnect the fill line during freezing weather to avoid damaging household plumbing. (If applicable)
- 3. Spa: Open the spa jet valve during freezing weather to maintain freeze damage. Open spa drain valve 1/4 to 1/2 way open. (Only when the temperatures are in the teens for more than 24 hours at a time)
- 4. Time Clock: As mentioned above, the freeze prevention switch will override any time clock setting. It is still recommended to remove the clock dial(s) and manually turn the system on.
- 5. Automatic Cleaning System: During freezing weather, disconnect cleaning unit from pool, drain unit and hoses and store in a protected area.
- 6. Separation Tank (if installed): Always make certain the separation tank drain valves are open as directed during freezing weather.
- 7. Always make sure water level is in middle of tile line.
- 8. Backwash sight glass (if so equipped): If water remains in the sight glass after backwashing, it should be drained to avoid freeze damage. Loosen the bolts slightly to allow the water to drain.
- 9. Slide: Drain slide tubing during the winter months to avoid freeze damage.

#### **EXTREME FREEZING CONDITIONS:**

If you should experience extreme freezing conditions, such as ice formation on the pool and/or spa water surface, or temperatures drop down to the mid teens or below, the following should be performed:

1. Turn heater on highest setting for at least 10 hours.

Note: Although pool motor may be running, it is activated by the Prevent-A-Freeze Switch. For the heater to fire, be sure the time clock for the pool motor is in the "on" position.

- 2. Open Valves
  - a. Spa drain valve should be 1/4 to 1/2 way open
  - b. All other valves should be fully open.
- 3. Check water level
- a. If ice develops on surface of pool, water level should be maintained higher than normal to compensate for the thickness of the ice to insure proper flow into the skimmers.
- b. When the heater is on, water will evaporate quicker than normal. Check the water level at least once daily.

**NOTE:** If your fill line or house hose bib freezes, it may be necessary to fill pool with the washing machine hose bib inside your house.

#### 4. Observe

- a. When it is extremely cold, the pressure gauge on your filter may become frozen and non-functional. If this occurs, you must notice circulation from your return lines in your pool.
- b. Check skimmers for water flow. When ice is on the surface, it could freeze the skimmer weir (flap at the front of skimmer). If this occurs, it could prevent water flow into skimmers.

#### KEEP ICE BROKEN AWAY FROM SKIMMERS.

## **COMPUTER EXTREME FREEZING CONDITIONS:**

In Menu Scroll to System Setup, Select or Enter, Scroll to Freeze Protect, Select or Enter, Choose to Protect Spa, Select or Enter

**CHEMICALS: Standard** (contact Pool Environments for variations with Salt Pools)

If water temperature is 50 degrees or below, testing should be performed once every 2 weeks.

If water temperature is between 50 to 85 degrees, testing should be performed once a week.

If water temperature is 85 degrees or above, it is suggested to perform the testing 2 times per week if possible but it is not absolutely necessary.

- 1. Chlorine: If chlorine level is above 3.0 discontinue testing for a day or so until level lowers or further testing will be inaccurate.
- 2. Alkalinity: (Level of Hydroxy Buffers) Total alkalinity range acceptable for most plaster pool is between 100 to 120 ppm (parts per million), optimum 110 ppm. In the winter, alkalinity should be kept at 120 ppm. Due to our local

water conditions and the fact that you have a plaster pool, it is very unlikely that the alkalinity level will ever go over 150 ppm. However, if it should ever go above 150 ppm, call your service technician for instructions. When alkalinity tests out of the acceptable range (below 100 ppm or over 150 ppm), you must adjust the level before proceeding any further.

**NOTE:** When adding chemicals to pool, pool pump and cleaner must be running. **NEVER** add chemicals at the same time or within 30 minutes of each other.

- a. To raise alkalinity: 2 pounds of baking soda per 10,000 gallons will raise the level by 10 ppm. Example: If the alkalinity level is 70 ppm it should be raised to 110 ppm. To do this, you would add 8 pounds of baking soda. To add baking soda, broadcast it as evenly across pool surface. Wait for 30 minutes then proceed to the next test. Alkalinty must be in Acceptable Range before PH test is performed.
- 3. PH: The PH test is the single most important chemical level in the pool a PH Level of 7.4 to 7.6 is recommended for sparkling water, effective bacteria control, minimum corrosion of fittings and maximum bather comfort
- a. If the PH is above 7.6, perform an acid demand test and add the required amount of muratic acid to drop the PH level down to 7.4.

**NOTE:** If alkalinity is within the acceptable level the PH will not ever be below 7.2.

4. If water temperature deems it necessary to shock pool, do so 30 minutes after adding the muratic acid.

#### RECOMMENDED SHOCK TREATMENT AND BRUSHING:

( Frequency varies for Salt Pools) Contact Pool Environments for Details.

WATER TEMPERATURE	SHOCK	BRUSH
Below 50 deg.	once every 2 months	once a month (entire pool)
50 - 80 deg.	once every 4 to 6 wks.	every 2 to 3 wks
80 - 85 deg.	once every 2 weeks	once a week
85 deg & higher	once a week	once a week

These frequencies are approximate. A regular check of your pool is recommended as each pool varies, due to conditions. This minimum required brushing will help to prevent bacteria build up and possible staining.

5. If shocking is not needed but chlorine level is to low for water temperature, adjust the dial of the in-line chlorinator at the equipment pad upwards or adjust Salt Generator to higher setting.

#### SUGGESTED CHLORINE AND CALCIUM LEVELS BY TEMPERATURE:

WATER TEMPERATURE:	CHLORINE LEVEL:	CALCIUM LEVEL:
Below 60	.30	400 ppm
60 to 65	.50	250 ppm
65 to 75	.80	225 ppm
75 to 85	1.0 to 1.5	200 ppm
85 or up	2.0 to 3.0	200 ppm

**REMEMBER:** Always dilute acid by pouring **ACID INTO WATER**, not water into acid. Always open chemical containers in a well-ventilated area - **THAT MEANS OUTDOORS!!!** 

\*\* **NEVER:** Mix two or more chemicals together - Chlorine will always ignite or explode if mixed with Acid.\*\***NEVER:** Mix two types of chlorine together it will explode.

## RECOMMENDED RUN TIMES FOR 550 TO 650 SQUARE FOOT POOLS

WATER TEMPERATURE:
Below 50 deg.
4 hours \*
50 - 85 deg.
6 - 8 hours
12 hours

## CHLORINE SAVING TIPS (Summer Months Only)

After second week start up time, add a chlorine stabilizer to water. Add a three pound jar for a 600 square foot pool. This will drop the chlorine consumption. Your stabilizer residual should stay between 25 to 40 ppm.

#### !!!ALWAYS REMEMBER: ANY PROBLEMS OR QUESTIONS PLEASE CALL US:

## **POOL ENVIRONMENTS**

(972) 985-1576 Fax (972) 964-1685

Email: <a href="mailto:service@poolenvironments.com">service@poolenvironments.com</a>

#### **COMMON CHEMICALS AND SUPPLIES:**

3" Trichlor tablets (Only in Non Salt Pools)

Dichlor Granular (For Shocking / Oxidizing)

Calcium Hypo Chlorite (For Shocking / Oxidizing)

25 lb. bag of D.E.

4 gallons of Muratic Acid

12 lbs. of Baking Soda in 4 lb. Boxes

Sodium Monoper Sulfate (Non Chlorine Oxidizer) (Saline Pools Only)

#### **OPTIONAL ITEMS:**

Rubbermaid trash can with lid

Hooks to hang poles on fence

Plastic D.E. scoop

Floating Thermometer

<sup>\*</sup> Winter 4 hour Run Time is most efficient electrically, run 1 am to 6 am.

<sup>\*</sup>If your pool has low speed technology, contact the service department for run times.

## **TROUBLE SHOOTING:**

#### LIGHTS NOT WORKING:

### (1) ALL LIGHTS WILL NOT COME ON:

CHECK G.F.C.I. ( GROUND FAULT CIRCUIT INTERUPTER )

Your's is located:



IF YOU HAVE MORE THAN 3 LIGHTS YOU MAY HAVE MORE THAN 1 (ONE) G.F.C.I.

BE SURE THAT RESET BUTTON IS PUSHED IN & STAYS IN. IF IT DOES NOT CONTACT US A.S.A.P.

ALL G.F.C.I.'s WILL TRIP NORMALY 3 TO 6 TIMES PER YEAR, DUE TO STORMS OR ELECTRICAL SURGES.

### (2) HEATER NOT HEATING:

CHECK ON / OFF SWITCH ON THE HEATER. BE SURE THERMOSTAT DIALS ARE SET TO MAX (HOT). RHEEM/RAYPACK HEATER DIGITAL SCREEN SHOULD READ REM OFF OR COMPUTER CANNOT CONTROL HEATER OR TEMPERATURE FROM INDOOR PANEL. JANDY LRZ SHOULD READ REM TSTAT ENABLED AND THERE SHOULD BE A GREEN LIGHT ABOVE POOL OR SPA.





# (3) SPA CONTINUES TO SPILL OVER SPILLWAY & SPA DOES NOT HEAT, OR IT IS DRAINING IN SPA OPERATION.

CHECK THE 3 POSITION TOGGLE SWITCH ON THE JANDY JVA 2440 VALVE ACTUATORS ARE SET IN CORRECT POSITION ACCORDING TO YOUR SYSTEM. (See your Instruction notes for correct position.) TOGGLE SWITCH LOCATION IS NOTED BY ARROW.

AUTO IS =

TO \_\_\_\_\_\_AUTO IS =

#### Two Speed Operation

NOTE This equipment may not be part of your system. Please check with your installer. Optional TWO SPEED RELAY required.

#### Two Speed Manual Operation

### For Pool and Spa Combination Units

If your control is a POOL and SPA combination with a 2-speed filtration pump, the control will operate as follows: HIGH SPEED (Filter Pump) must be on before LOW SPEED. Filter Pump button, as well as the Spa button, turns it to HIGH SPEED. LOW SPEED (AUX 2) button toggles back and forth from LOW to HIGH.

#### For Pool or Spa Only Units

To use HIGH/LOW Speeds, Filter Pump turns on HIGH SPEED, AUX 2 turns on LOW SPEED. Whatever mode last used is the off button. To toggle, press whichever speed is not on.

## · Two Speed Programming for All Units

When programming HIGH and LOW Speeds to operate together, think of HIGH SPEED (Filter Pump) as total duration of filtration time, then set Low Speed (AUX 2) to operate within that duration. For example, if you want High Speed on for 2 hours and Low Speed for 10 hours, program the Filter Pump (High Speed) from 8 AM to 8 PM and Low Speed from 10 AM to 8 PM.

NOTE It is not necessary to program both HiGH and LOW Speeds, even with a Combo Control System. If only LOW SPEED is programmed, HIGH SPEED will turn on at the LOW SPEED on time to prime the pump. After 3 minutes the system will switch to LOW SPEED for the remainder of its programmed time.

## Section 2. Overview of the PDA Handheld Remote

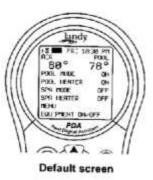
This document gives instructions for operating the Jandy AquaLink® RS PDA Handheld Remote. The instructions must be followed exactly. Read through the instructions completely before operating the equipment.

#### 2.1 Basic Functions

The AquaLink RS PDA Handheld Remote can turn your pool/spa equipment on and off in any of the following three ways:

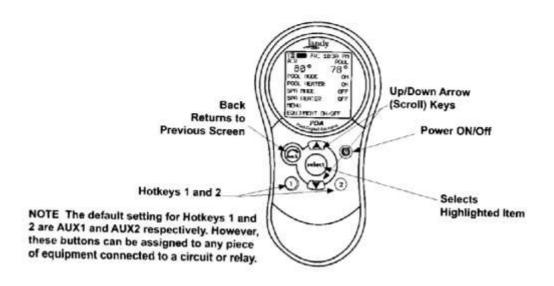
- Activate the equipment manually through the EQUIPMENT ON/OFF menu.
- Program the equipment to turn on and off at specific times. See page 17 for a detailed explanation of how to program equipment for automatic operation.
- Use the PDA Handheld Remote buttons 1 or 2 (Hotkeys). See page 20 for a detailed explanation of how to program Hotkeys 1 and 2.

NOTE The default setting for Hotkeys 1 and 2 are AUX1 and AUX2 respectively. However, these buttons can be assigned to any piece of equipment connected to a circuit or relay.



## 2.2 Using the Buttons

Use the buttons as explained in the diagram below.



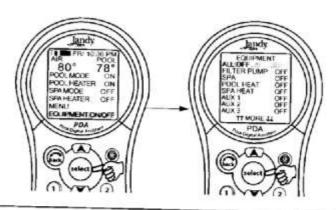
## Section 3. Using the Equipment On/Off Menu

## **Equipment On/Off**

Use this menu to manually turn a piece of equipment on or off. The ALL OFF mode will turn off equipment that has been turned on by any means (manual or pre-programmed). This includes any of the heater enables that were on (unless in use by the Maintain function).

## To use Equipment On/Off

- Highlight EQUIPMENT ON/OFF and press SELECT. To highlight an item, use the UP/DOWN arrow keys.
  Use the SELECT button to turn the equipment on or off. Return to the main menu by using the BACK button,
  or use the UP/DOWN arrow keys to highlight another device.
- Highlight ALL OFF and press SELECT. After using ALL OFF, return to the main menu by using the BACK button.



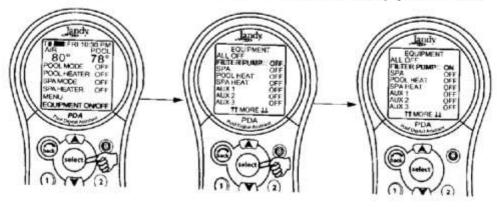
## Filter Pump

The FILTER PUMP selection turns the main filtration pump on or off for circulation to the pool. The filter pump also activates if the spa is turned on, if the pool cleaner is turned on, or if the spa spill-over effect is activated. The main filtration pump circulates the pool or spa water through the filter and heater. The pump must be on if you want to display the pool temperature, or if you want to heat the pool.

For 2-speed operation, see page 15.

## To use Filter Pump

Highlight FILTER PUMP and press SELECT. Use the SELECT button to turn the equipment on or off.

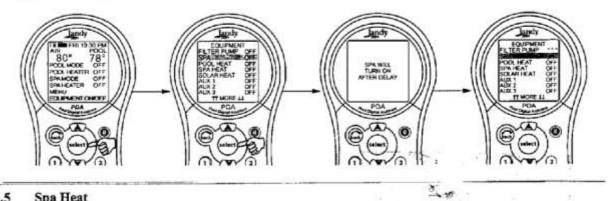


#### Spa

The SPA mode switches water circulation from the pool to spa (pool/spa combination models only). Turning on the spa also activates the filter pump (after a delay for valve rotation) and deactivates the pool cleaner if it is on. The SPA mode must be on to display the spa temperature and/or to heat the spa. Activation takes place after a thirty second delay (while valves are turning).

#### To use Spa

Highlight SPA and press SELECT. Use the SELECT button to turn the spa on or off.



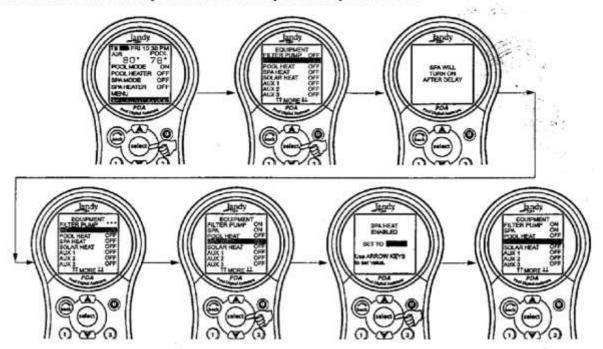
#### 3.5 Spa Heat

The SPA HEAT enables the heater for the spa. The desired temperature can be set from the SET TEMP menu, or you can increase/decrease the temperature when enabling the heater.

## 3.5.1 To use Spa Heat

Highlight SPA and press SELECT. The spa will come on after a short delay. Highlight SPA-HEAT and press SELECT. Use the UP/DOWN arrow keys to set the desired temperature and press SELECT.

Christian Land Valence



#### Set Light Colors

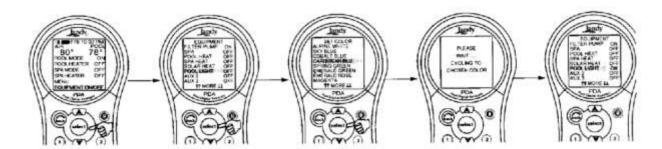
NOTE This equipment may not be part of your system. Please check with your installer.

The SET COLOR menu is used to set the color of a color light and then turn the light on.

NOTE Prior to setting the color of the light, the light must be assigned and controlled by an auxiliary (for example, AUX 1). See "Using System Setup" to assign the light to an auxiliary control. Please note that the auxiliary control can be custom labeled.

#### To use Set Colors

Highlight EQUIPMENT ON/OFF and press SELECT. Highlight the auxiliary assigned to the color light and press SELECT. A list of available colors will be displayed. The most recently selected color will be highlighted. Use the UP/DOWN arrow keys to highlight the desired color and press SELECT.

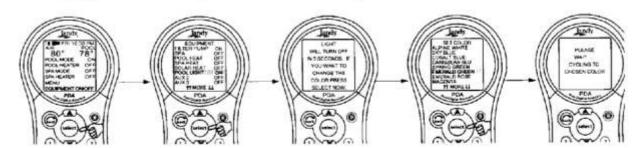


NOTE

If you select POOL LIGHT or SPA LIGHT from the EQUIPMENT ON/OFF menu and the light is already ON, pressing
SELECT will display the message "LIGHT WILL TURN OFF IN 5 SECONDS. IF YOU WANT TO CHANGE THE COLOR
PRESS SELECT NOW". If you press SELECT, the SET COLOR menu will open and allow you to select a different color. If
a different color is chosen, the light will reset to Alpine White, rotate to the selected color, and then automatically lock on to
that color. During the color rotation, the message "PLEASE WAIT...CYCLING TO CHOSEN COLOR" will be displayed.

When a pool or spa light is turned ON manually, by the PDA Handheld Remote panel, or by a program, the last used color will automatically be chosen unless you press SELECT to change the color

If you press the BACK key when in the EQUIPMENT ON/OFF menu, the light will turn on the *last* selected color. If the SELECT key or the BACK key is not pressed, and if it has been 15 seconds since the UP/DOWN keys have been pressed, then the most recently selected color will be selected again.

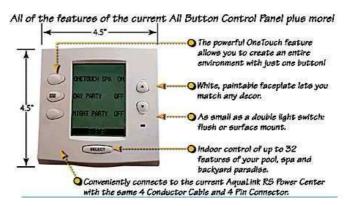


#### Important Information

Do not activate this feature unless you are certain that color lights are installed on your system

## **Reference Diagrams**

# (Fig. 1 ) Jandy AquaLink RS inside panel



(Fig. 2)
Jandy AquaLink RS outdoor panel



(Fig. 3) Jandy Spa Side Remote Switch



## **Reference Diagrams**

( Fig. 4 ) Jandy JVA 2440 Valve Actuator



( Fig. 5 ) Jandy Never Lube Valve



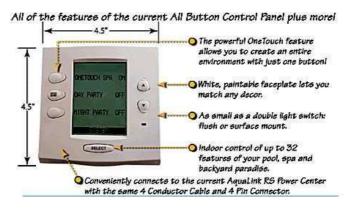
( Fig. 6 ) Heater Control Panel





### **Reference Diagrams**

## ( Fig. 7 ) Jandy AquaLink RS OneTouch







## **Printable Manual Downloads**



AquaLink RS OneTouch Owner's Manual (.pdf, 2.5 MB)

http://www.jandy.com/pdfs/OneTouch\_Manual.pdf

AquaLink RS Owner's Manual, All Button (.pdf, 633 kb)

http://www.jandy.com/pdfs/Allbutton\_manual.pdf



## RP2100 Gas Pool/Spa Heater (Models 185, 265, 335, 405) - Manual (PDF)

http://www.raypak.com/uploads/6000.52AF.pdf