

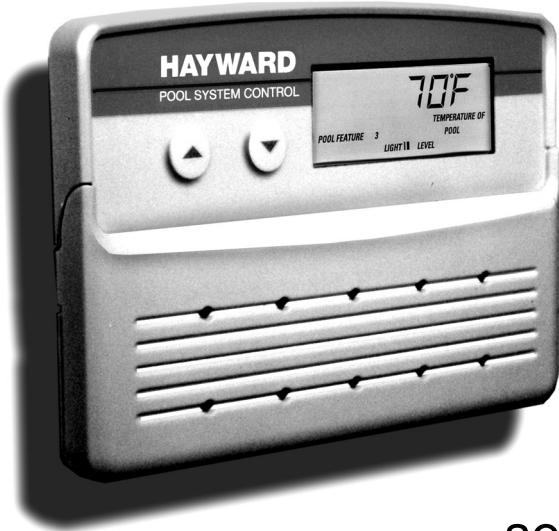
HAYWARD®

2100 SERIES POOL SYSTEM CONTROL



LISTED
SWIMMING POOL AND
SPA CONTROL
3262

CONSUMER OPERATING INSTRUCTIONS



Designed and engineered for today's carefree lifestyle, this 2100 series sets new standards of ease of operation and performance for remote pool system control. Easy to use master remote control allows you to monitor, set and control up to 12 functions necessary for total pool system control as well as pool environment control.

Manufactured under the following U.S. patents: 618797, 5332944, 5361215, 5550753, 5559720. Other patents, both foreign and domestic, applied for and pending.

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SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

WHEN USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD BE FOLLOWED, INCLUDING THE FOLLOWING: FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN INJURY.

READ AND FOLLOW ALL INSTRUCTIONS

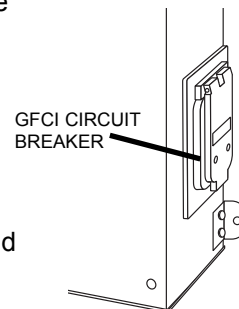
1. DANGER - Risk of electric shock. Do not permit any electrical appliance such as a light, telephone, radio, or television within 5 feet (1.5M) of a pool or spa.
2. All electrical work must be performed by a qualified electrician and must conform to all national, state, and local codes.
3. This product has not been designed to permit children to use it without supervision.
4. This control system is provided with an Integral Ground-Fault Circuit Interrupter (GFCI) for the underwater lighting circuit. It is located on the right side of the control enclosure under a Weather-Tite cover. (See illustration)

This GFCI must be tested before each use of the pool or spa. To test the GFCI, follow the following steps:

1. Turn on the underwater pool lighting circuit.
2. Press the 'RESET' button fully.
3. Check the underwater lights to be sure they are illuminated.
4. Press the 'TEST' button in order to trip the GFCI. The 'RESET' button will pop out and the underwater lights will go out.
5. Press the 'RESET' again and the underwater lights will again be illuminated.

If this GFCI fails to operate in this manner there is a ground current flowing indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.

5. WARNING - Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use the spa or pool to which this Control System is connected unless they are closely supervised at all times.
6. DANGER - To reduce the risk of drowning from hair or body entrapment, assure that the suction fittings, skimmers and main drains in the spa or pool connected to this Control System are approved for the application.
7. DANGER - To reduce the risk of injury, do not remove the suction fittings or main drain covers. Never operate the spa or pool if these covers are broken or missing.
8. Warning - To reduce the risk of injury:
 - A. The water in a spa to which the Control System is connected 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 young children and when spa use exceeds 10 minutes.
 - B. Since excessive water temperatures have high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100°F (38°C).
 - C. Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices vary.
 - D. Prolonged immersion in water hotter than 104°F (40°C) may cause hyperthermia. Hyperthermia occurs when the internal body temperature reaches a level several degrees above normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia 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.
 6. Unconsciousness resulting in a danger of drowning.
 - E. The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.
 - F. Leave the spa immediately if nausea, dizziness or headaches 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.
 - G. The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
 - H. Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.
 - I. Persons using medication should consult a physician before using a spa since some medication may induce drowsiness or may affect heart rate, blood pressure, and circulation.
9. Occasional users of the spa should be made aware of these important Safety Instructions.
10. WARNING - People with infectious diseases should not use a spa or pool.
11. WARNING - To avoid injury, exercise care when entering and exiting a spa or pool.
12. WARNING - Do not use a spa immediately following strenuous exercise.
13. CAUTION - Maintain water chemistry to provide safe bathing environment.



SAVE THESE INSTRUCTIONS

BUTTON FUNCTIONS FOR MASTER CONTROL PANEL & SPA SIDE CONTROL PANEL

MASTER CONTROL PANEL BASIC FUNCTION BUTTONS



UP BUTTON- Used in conjunction with Program button for many automatic settings, including fill valve operation (if installed). 1-2 hour time out.



DOWN BUTTON- Displays Ph and/or ORP and/or PSI with each press (if installed). Used in conjunction with Program button.



PROGRAM BUTTON- Used when setting automatic features and water temperatures and fill features.



FILTER BUTTON- Turns the filter pump on and off, 4 hour time out. **NOTE:** If the filter pump is 2-speed: the sequence is low, high, off. When the filter program is engaged, the low speed pump will run. When Aux 1 is a cleaner pump, it will automatically engage the high-speed filter pump. It will always run in high speed when calling for heat.



LIGHT BUTTON- Switches the light(s) between high, medium, and low intensity on 120V systems only. Turns light(s) on/off on low voltage lighting system. 12 hour time out.



SPA BUTTON- Switches the valve between spa and pool, 24 hour time out when in Spa position, turns the filter pump on in the spa position. Filter pump will turn off when valves are turning.



HEATER BUTTON- Enables/Disables Heat Seek feature.

NOTE: Heater Cool Down Feature -

The pump will stay on after the heater turns off for a 10-minute cool down period. This safety feature also extends the life of the heater.

NOTE: Heat Seek Feature (temp polling) -

Once the set temp has been realized, the heater will go into sleep mode. Every hour the pump will turn on for 5 minutes to register the temperature. If it is 2 degrees below the set temp, the heater will enable. If the temp has not dropped below 2 degrees of the set temp, the system will go back into sleep mode.



AUXILIARY 1 - 6A max

- A. Turns the pool feature on and off. Will not activate filter pump if dip switch #4 is down.
- B. Controls the cleaner pump in conjunction with the filter pump if dip switch #4 is in the up position.
- C. If dip switch #4 is in the up position and the filter pump is running when the Aux 1 button is pushed, the cleaner pump comes on immediately.
- D. If the filter pump is not running when the Aux 1 button is pushed, the cleaner pump will delay for 4 minutes before it comes on; 24 hour time out.
- E. Auxiliary 1 disabled in spa mode if dip switch #4 is in the up position.



AUXILIARY 2 -

Turns the feature on and off; 12 hour time out.



AUXILIARY 3 -

Turns the feature on and off; 24 hour time out. Filter pump turns on with feature. (If in Spa Mode - valves switch to Pool Mode)



AUXILIARY 4 -

Optional Pool Light:

- A. Controls the optional pool lighting circuit. The 1st press turns on the light.
- B. The button is pressed again AFTER 5 SECONDS, the light turns off.
- C. If the button is pressed again BEFORE 5 SECONDS, the Aux 4 option will operate.
- D. The next press stops the Aux 4 option and the next turns the light off. 12 hour time out.

On/Off Light Option:

The 1st press turns the light on. The 2nd press turns the light off; 12 hour time out.



AUXILIARY 5 -

Turns auxiliary 5 output on the expander board on and off. 12 hour time out.

The Spa Aux may also be turned on from the Master Panel by pressing "SPA" followed by "AUX1" within 5 seconds.

SPA SIDE CONTROL PANEL BASIC FUNCTION BUTTONS



AUXILIARY BUTTON - turns the spa auxiliary on and off, 2 hour time out. If blower feature is enabled, sequence is: Spa Aux, Blower, Spa Aux and Blower, Off.



TEMP BUTTON - controls the set temperature of the spa.

- A. Press the temp button once to display the temperature previously set. This display will revert back to the current air/water temperature.
- B. Pressing the temp button again will cause the temperature setting to increase or decrease depending on what direction was last chosen. Each press to follow will change the temperature in the same direction.
- C. If the opposite direction is desired, release the button and allow display to cycle back to current air/water temperature.
- D. Press temp button again to display the temperature set. Press temp button again to change temperature setting in desired direction.



SPA BUTTON - switches the valve between spa and pool, 24 hour time out when in the spa position, turns the filter pump on in the spa position.



LIGHT BUTTON - switches the light(s) between high, medium, and low intensity on 120V systems only. Turns light ON/OFF on low voltage systems. 12 hour time out.

WIRELESS REMOTE OPERATION

RF SPA REMOTE BASIC BUTTON FUNCTIONS



TEMP UP BUTTON - Increases temperature (same increments as when changing the temperature from the spa side control panel).



TEMP DOWN BUTTON - Decreases temperature (same decrements as when changing the temperature from the spa side control panel).



SPA BUTTON - Switches the valve between spa and pool, 24 hour timeout when in the spa position, turns the filter pump on in the spa position.



JETS/BLOWER BUTTON - Turns the jets and blower on and off, 2 hour timeout. The sequence is: Jets, Blower, Jets and Blower, Off. If there is no blower; this button turns the jets on and off.



LIGHTS BUTTON - Switches the light(s) between high, medium, and low intensity on 120V systems only. Turns light(s) on/off on low voltage lighting system. 12 hour timeout.



AUX 2 BUTTON - Turns the feature on and off; 12 hour timeout.



HEATER BUTTON - Enables the heater for heating whichever position the valves are in, whether it be pool or spa.



AUX 4 BUTTON - Optional Pool Light:

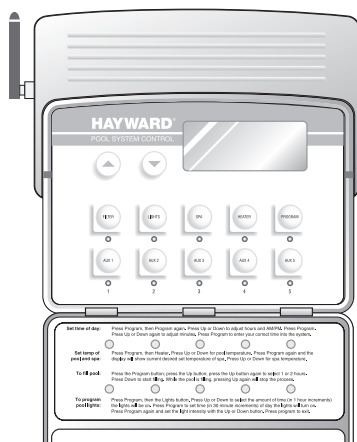
- A. Controls the optional pool lighting circuit. The 1st press turns on the light.
- B. The button is pressed again AFTER 5 SECONDS, the light turns off.
- C. If the button is pressed again BEFORE 5 SECONDS, the Aux 4 option will operate.
- D. The next press stops the Aux 4 option and the next turns the light off. 12 hour timeout.

On/Off Light Option:

The 1st press turns the light on. The 2nd press turns the light off; 12 hour timeout.



RF MASTER PANEL



Refer to the Master Control Panel basic function button operation instructions in your Hayward Operating Instructions or User's Guide.

To **TURN ON** the remote panel, push the **TEMP DOWN** button. The remote panel will turn off automatically 3 minutes after the last button press.

Display will flash **"SIG"** when the main control is not turned on, when the remote is too far away, or when there is a large metallic object between the remote and the main.

Display will flash **"BAT"** when the battery is low.

BASIC PROGRAMMING OF MASTER CONTROL PANEL

NOTE: BE SURE TO PROGRAM MASTER CONTROL PANEL USING THIS SEQUENCE.

TO PROGRAM TIME OF DAY:

1. Push Program button, display will blank out with the exception of the “SET” icon.
2. Push Program again and current time of day will display. At this point, time of day may be adjusted by use of the Up and Down buttons. You will see the words “SET TIME OF DAY” on the display and the hours flashing. To set the hours and AM/PM, press the Up or Down button.
3. After the hours have been set, press the Program button and the minutes will flash. Press Up or Down to adjust.
4. Press Program to enter your correct time into the system.



NOTE: In the “Time of Day Mode,” °Celsius or °Fahrenheit can be chosen for the temperature display. After pressing the Program button twice to enter the time of day mode, press the Heater button. “SET °F OR °C” will appear on the display. Change the setting with the Up or Down buttons. Press Heater button again to go back to “SET TIME OF DAY.”

NOTE: Air temperature and time displayed when filter is not running.

Air temperature and water temperature is displayed when filter is running.

For users of Hayward Swim Pure Cartridges, please note the following: In the “Time of Day Mode,” a “HAYWARD SWIM PURE” prompting message may be enabled. After pressing the Program button twice to enter the “Time of Day Mode,” press the Filter button. “SET,” “HSP” or “OFF” will appear on the display. Change the setting with the Up or Down buttons. Press the filter button again to go back to “SET TIME OF DAY.” Once enabled, the message “HSP” will appear every 6 months. Push any button to reset message.

TO PROGRAM FILTER PUMP:

1. Push the Program button, display will blank out with the exception of the “SET” icon.
2. Push the Filter button and display will show current filter duration in hours along with the icons “SET # OF HOURS TO RUN FILTER CYCLE 1.” Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 24 hours.
3. Push Program again to program time of day and to start filter cycle. Display will show “SET TIME OF DAY TO START FILTER CYCLE 1.” Filter cycle start time may be adjusted by the Up and Down buttons in 30-minute increments.
4. Push Program again to enable heater during the filter cycle. Press Up or Down to select on or off.

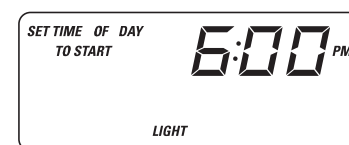


NOTE: If a solar panel is being used for pool heating purposes, Hayward suggests: A) Leaving Heat Seek off (see page 39); B) Enabling the heater during filter cycles; and C) Programming filter cycles for daytime periods which will provide the most solar energy. This will allow solar heating only when it will work best and will prevent your solar panel from potentially cooling your pool at night.

5. Push Program again to enable pool feature 1 during the filter cycle. Press Up or Down to select on or off.
6. Push Program again to set number of filter cycles. Display will show “SET # OF FILTER CYCLES.” Push Up or Down to select between 1 or 2 filter cycles a day.
7. If two cycles are selected, they will start 12 hours apart from each other. Push Program to exit if one filter cycle is chosen.
8. If two filter cycles are chosen, push Program to begin entering settings for the second filter cycle as entered for the first.

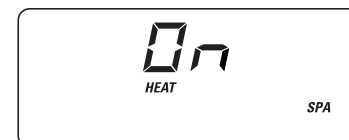
TO PROGRAM LIGHTS:

1. Push the Program button, display will blank out with the exception of the “SET” icon.
2. Push the Light button and display will show current light operation in hours along with the icons “SET # OF HOURS TO RUN LIGHT.” Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 12 hours.
3. Push Program again to program time of day and to start automatic light cycle. Display will show “SET TIME OF DAY TO START LIGHT.” Light cycle start time may be adjusted by the Up and Down buttons in 30-minute increments.
4. Push Program again to program light intensity. Push Up or Down to adjust between high, medium, and low intensity. Display will show “SET LIGHT LEVEL” along with the current light level. Push Program to exit.



TO PROGRAM SPA:

1. Push the Program button, display will blank out with the exception of the “SET” icon.
2. Push Spa button and display will show current spa operation in hours along with the icons “SET # OF HOURS TO RUN SPA.” Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 12 hours.
3. Push Program again to program time of day and to start automatic spa cycle. Display will show “SET TIME OF DAY TO START SPA”. Spa cycle start time may be adjusted by the Up and Down buttons in 30-minute increments.
4. Push Program again to program whether or not the heater is enabled during spa operation. Display will show “HEAT SPA” along with the word “ON” or “OFF” (“ON” means the heater is enabled during spa operation).
5. Push Program again to select spill-over mode. In spill-over mode, water will be drawn from the pool into the spa. (Dip switch 3 must be in the up position for this feature.) Press Up or Down to select. Display will show “OFLO” when spill-over mode is on, and “nOFLO” when off. Push Program to exit.



Note: To disable the spa-side control, push Program, then push Spa twice. Push Program to select. Push Spa to exit.

BASIC PROGRAMMING OF MASTER CONTROL PANEL (continued)

TO PROGRAM POOL AND SPA SET TEMPERATURE:

1. Push Program button, display will blank out with the exception of the "SET" icon.
2. Push Heater button and display will show current desired set temperature of spa. Display will show "SET TEMPERATURE OF SPA." Set temperature may be adjusted with the Up and Down buttons. Range is 70°F - 104°F (21°C - 40°C).
3. Push Program again and display will show current desired set temperature of pool. Display will show "SET TEMPERATURE OF POOL.." Set temperature may be adjusted with the Up and Down buttons. Range is 50°F - 95°F (10°C - 35°C).
4. Push Program again to display heating mode. Push Up or Down to select desired heating mode. Push Program to exit. The available heating modes are: A) Gas, B) Solar, C) Gas and Solar. Solar heating is only available when an optional valve actuator is installed (see plumbing schematics).



NOTE: See Note on previous page (under "to program time of day") for instructions on selecting °Celsius or °Fahrenheit.

TO PROGRAM AUXILIARY 1:

1. Push the Program button, display will blank out with the exception of the "SET" icon.
2. Push the Aux 1 button and display will show current Aux 1 (POOL FEATURE) operation in hours along with the icons "SET # OF HOURS TO RUN POOL FEATURE 1." Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 24 hours.
3. Push Program again to program time of day and to start automatic Aux 1 cycle. Display will show "SET TIME OF DAY TO START POOL FEATURE 1." Aux 1 cycle start time may be adjusted by the Up and Down buttons in 30-minute increments. Push Program to exit.



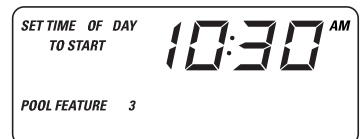
TO PROGRAM AUXILIARY 2:

1. Push the Program button, display will blank out with the exception of the "SET" icon.
2. Push the Aux 2 button and display will show current Aux 2 operation in hours along with the icons "SET # OF HOURS TO RUN POOL FEATURE 2." Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 12 hours.
3. Push Program again to program time of day and to start automatic Aux 2 cycle. Display will show "SET TIME OF DAY TO START POOL FEATURE 2." Aux 2 cycle start time may be adjusted by the Up and Down buttons in 30-minute increments. Push Program to exit.



TO PROGRAM AUXILIARY 3:

1. Push the Program button, display will blank out with the exception of the "SET" icon.
2. Push Aux 3 button and display will show current Aux 3 (POOL FEATURE) operation in hours along with the icons "SET # OF HOURS TO RUN POOL FEATURE 3." Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 12 hours.
3. Push Program again to program time of day and to start automatic Aux 3 cycle. Display will show "SET TIME OF DAY TO START POOL FEATURE 3." Aux 3 cycle start time may be adjusted by the Up and Down buttons in 30-minute increments. Push Program to exit.



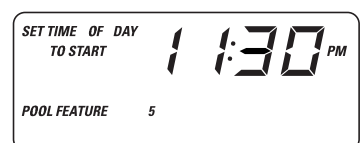
TO PROGRAM AUXILIARY 4:

1. Push Program button, display will blank out with the exception of the "SET" icon.
2. Push Aux 4 button and display will show current Aux 4 operation in hours along with the icons "SET # OF HOURS TO RUN POOL FEATURE 4." Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 12 hours. Push Program again to program time of day and to start automatic Aux 4 cycle. Display will show "SET TIME OF DAY TO START POOL FEATURE 4." Aux 4 cycle start time may be adjusted by the Up and Down buttons in 30-minute increments. Push Program to choose the F.O. Light or the On/Off Light option. Display will show either "Fo" or "Lt." Choose mode by pressing Up or Down. Push Program to exit. Aux 4 option will not operate during programmed times.
3. To choose between On/Off Light and the F.O. (fiber-optic) feature for Aux 4, push the program button once, followed by Aux 4. Press Program two more times after that. With the Up and Down arrows, you can toggle between "FO" and "LT." Press Program to set and exit. "FO" allows you to access: light, light option on, light option off, light off. "Lt" allows you to turn the underwater light on and off.



TO PROGRAM AUXILIARY 5:

1. Push the Program button, display will blank out with the exception of the "SET" icon.
2. Push the Aux 5 button and display will show current Aux 5 (Aux 5 on expander board) operation in hours along with the icons "SET # OF HOURS TO RUN POOL FEATURE 5." Duration may be adjusted with the use of the Up and Down buttons. Range is 0 to 24 hours.
3. Push Program again to program time of day and to start automatic Aux 5 cycle. Display will show "SET TIME OF DAY TO START POOL FEATURE 5." Aux 5 cycle start time may be adjusted by the Up and Down buttons in 30-minute increments. Push Program to exit.



BASIC PROGRAMMING OF MASTER CONTROL PANEL (continued)

TO PROGRAM OPTIONAL FILL VALVE

1. Push the Program button and then the up button and display will show "SET # OF HOURS TO FILL (1 OR 2 HRS)." Number of hours to fill pool may be adjusted between 1 and 2 hours by pushing the Up button.
2. To start filling the pool, push the Down button. This will turn on the fill valve. Display will show the "FILL" icon.
3. When the pool is filling, pushing the Up button will turn the fill valve off.

SET
OF
HOURS TO FILL

2hr

TO PROGRAM KEYPAD LOCK FEATURE

1. Push Program, then push Spa twice. The display will show ON or OFF, push Program to select. ON means all keypads will function. OFF means all keypads on all panels and remotes will be locked except for the service panel.
2. Press Spa to exit.
3. To unlock, press Program.

TROUBLESHOOTING

THE FOLLOWING MESSAGES MAY APPEAR ON THE LCD SCREEN OF THE MASTER CONTROL PANEL:

WARNING: THE SYSTEM IS NOT MEANT TO BE SERVICED BY THE CONSUMER.

RISK OF ELECTRIC SHOCK EXISTS INSIDE THE MASTER CONTROL PANEL. CONTACT YOUR LOCAL SERVICE PERSON FOR APPROPRIATE ACTION.

LCD MESSAGE	PROBLEM	RECOMMENDED ACTION
OH	WATER TEMPERATURE HIGH LIMIT	This is displayed when the water in the pool/spa system reaches 112 degrees. SYSTEM WILL RESET ITSELF ONCE THE WATER TEMPERATURE REACHES 110 DEGREES. IF PROBLEM PERSISTS, CONTACT YOUR SERVICE PERSON FOR APPROPRIATE ACTION.
SN1	WATER TEMPERATURE SENSOR FAILURE	CONTACT SERVICE PERSON FOR REVIEW AND POSSIBLE SENSOR REPLACEMENT IF SENSOR IS FOUND TO BE DEFECTIVE.
SN2	AIR TEMPERATURE SENSOR FAILURE	CONTACT SERVICE PERSON FOR REVIEW AND POSSIBLE SENSOR REPLACEMENT IF SENSOR IS FOUND TO BE DEFECTIVE.
ICE	FREEZE PROTECTION ACTIVATED	NO ACTION REQUIRED. Safety feature built into system to avoid damage to equipment. Activated when water temperature reaches 35 degrees. Pump will run for 1/2 hour intervals while temperature is at or below 35 degrees. This feature is only active when valves are in the pool mode.
HOT	WATER TEMPERATURE GREAT THAN 110°	NO ACTION REQUIRED. OH message will appear if the water in the pipes does not cool to below 110° within 5 minutes.

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 America's #1 Pool Water Systems

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