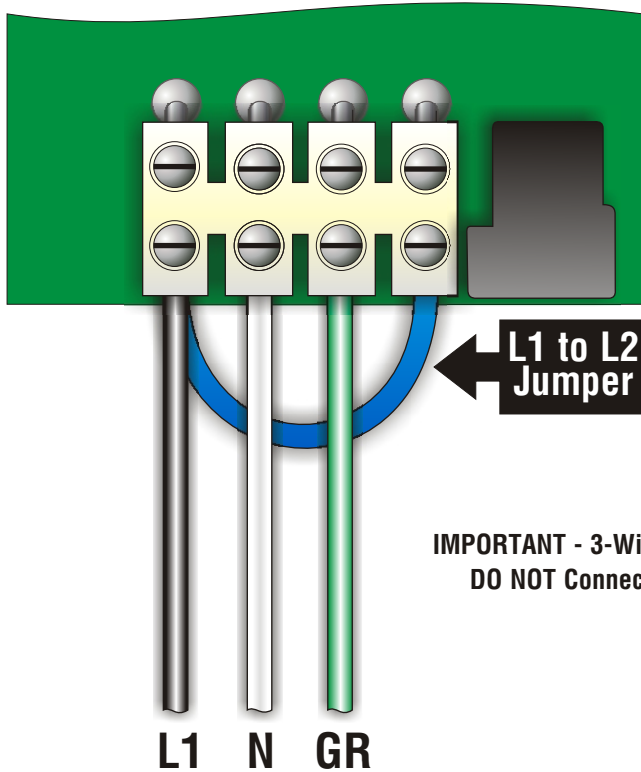


ECO-3 SERIES - INCOMING POWER WIRING

All Universal systems leave configured 120-Volt input power (Option 1).

OPTION 1



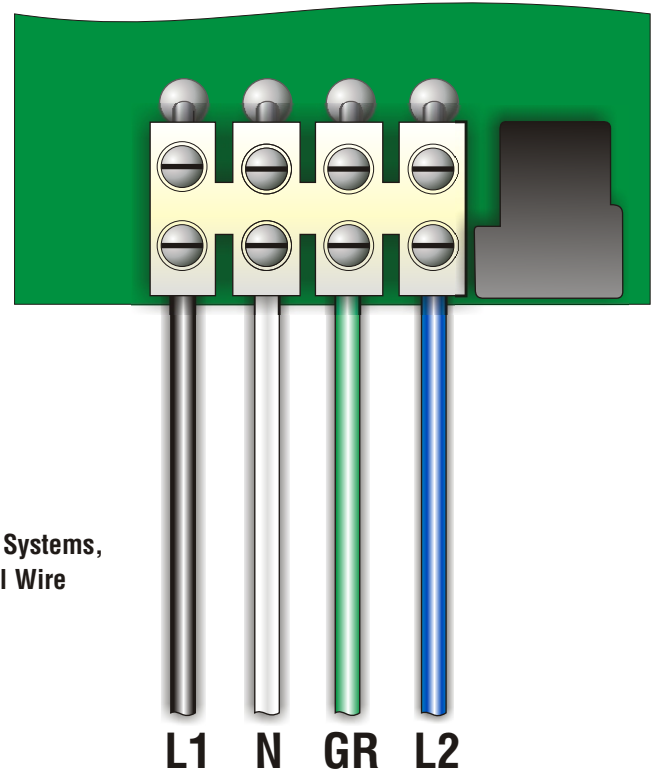
**IMPORTANT - 3-Wire 240V Systems,
DO NOT Connect Neutral Wire**

120-Volt electrical service requires:

Line 1, Neutral and Ground.

(Line 1 to Line 2 jumper must be in place for system to operate properly)

OPTION 2



240-Volt electrical service requires:

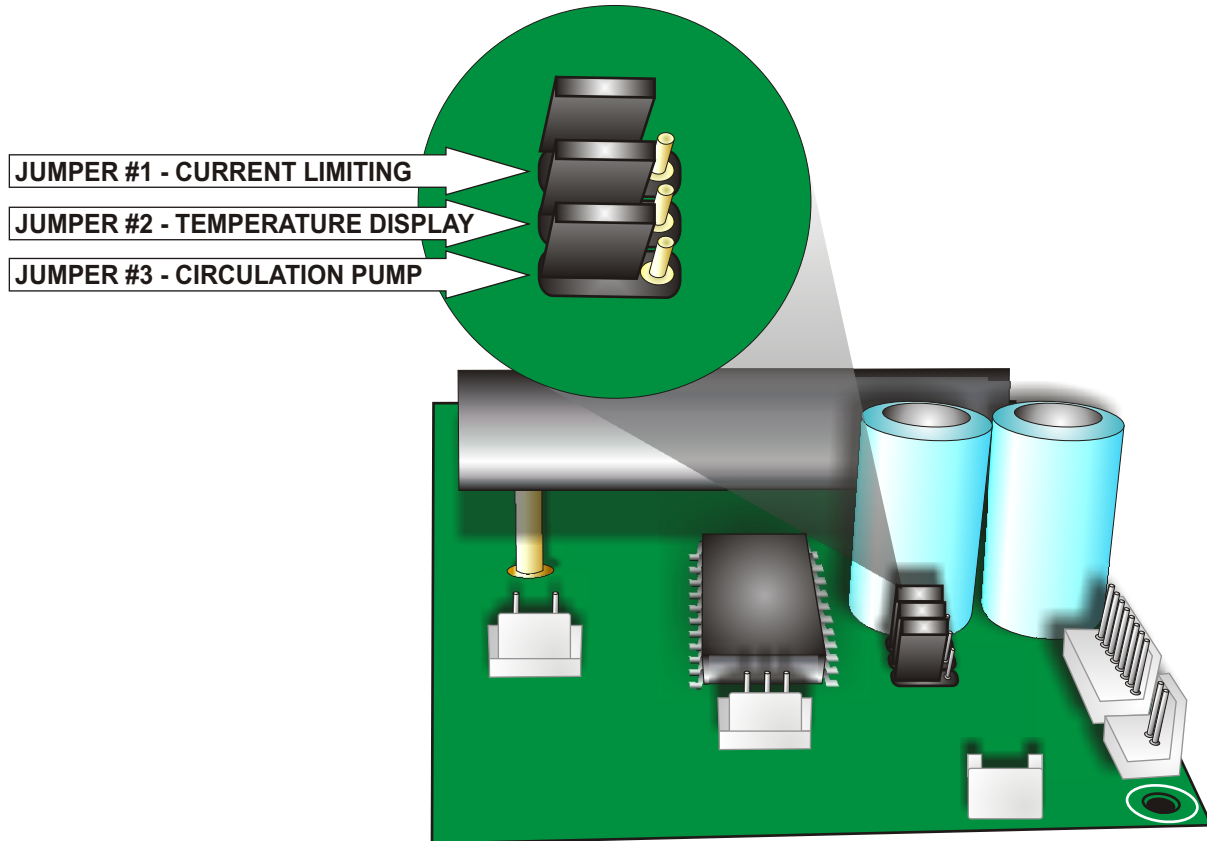
Line 1, Lin 2, Neutral and Ground.

(Line 1 to Line 2 jumper must be removed)

IMPORTANT: Always refer to the product data label (located on top of control box) for specific electrical information.

ECO-3 LOW LEVEL PROGRAMMING

It is possible to change the parameters of the system by positioning specific jumpers located on the system board (see illustration below).



JUMPER 1 = Current Limiting:

Position 1 - (High Current 240vac): There is no current restriction. This allows the heater to operate with the pump in high speed.

Position 2 - (Low Current 120vac): The system will not turn the heater on when the pump is in high speed. The heater indicator will flash on the spaside to tell the user that there is a call for heat but the heater is not allowed to start.

JUMPER 2 = Temperature Display:

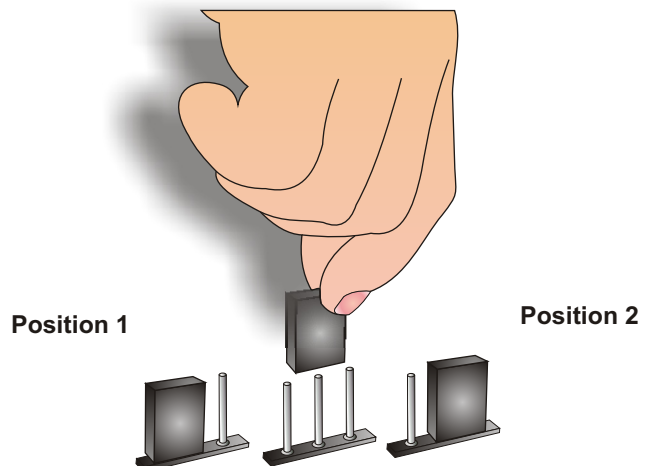
Position 1 - Fahrenheit Degrees

Position 2 - Celsius Degrees

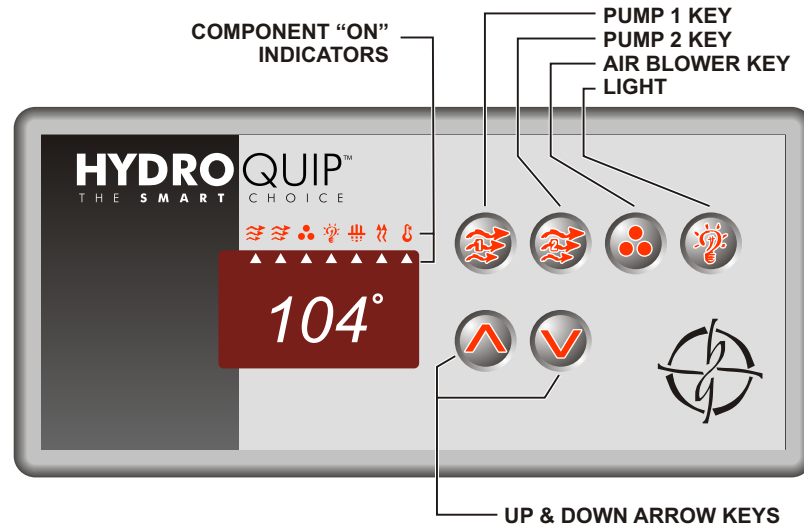
JUMPER 3 = Circulation Pump:

Position 1 - System without a Circ. Pump

Position 2 - System with a Circ. Pump



ECO-3 SERIES - BASIC OPERATION



Pump 1 Key: Press this key once to turn Pump 1 on. A second press will turn it off. For dual speed pump operation; Press this key once to turn Pump 1 onto Low speed, press this key a second time to turn Pump 1 onto High speed, a third press will turn the pump off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump 1 Icon will appear on the LCD while the pump is running in High speed and flash while it is in Low speed. If the filter icon appears, a filtration cycle has begun and you will not be able to turn the pump off.



Pump 2 Key: Press this key once to turn Pump 2 on. A second press will turn it off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump 2 Icon will appear while the pump is running in High speed.



Air Blower Key: Press this key once to turn Air Blower on. A second press will turn the Air Blower off. A built-in timer will shut the blower off after 20 minutes of operation unless done so manually. The Air Blower Icon will appear while the blower is running.



Light Key: Press this key to turn the light on. A second press will turn the Light off. If equipped with Fiber Optic: Press this key once to show "L1". Use the Up arrow key to turn the light on and off. Press the light key a second time, "F1" will appear. Use the Up arrow key to turn the Fiber Optic wheel and light on, Fiber Optic wheel off with light on and both Off. The light will automatically shut off after 2 hours. The Light Icon will appear while the light is on.



Temperature Set Keys: Press the Up Arrow key to increase the desired temperature. Press the Down Arrow key to decrease the temperature. The temperature can be adjusted in 1°F increments from 59°F to 104°F (5°C to 40°C). The new setting will remain on the display for 5 seconds as a confirmation. During this time the Set Point icon will be appear to let you know this is the desired and not the actual temperature. After 5 seconds the display will return to the current temperature reading. When the temperature drops to 1°F below the set temperature, the heater will be turned on until the temperature is 1°F above the set temperature. The heater icon will appear while the heater is on and flash when there is a call for heat and the heater has not yet been activated.

Power Loss: Any interruption of power will cause the unit to reset and revert to the default programming of 95°F set point temperature and 2, 2-hour filtration cycles.

ECO-3 SERIES - ERROR MESSAGES



Three Flashing Dots with Pump Off: To prevent damage to your equipment, Hydro-Quip installs a pressure or flow switch. If 3 flashing dots appear below the temperature display while there is no pump(s) operating, turn the pump(s) on. If the 3 flashing dots went away this indicates that the pressure or flow switch was activated although there was no water flow.
Contact your local dealer



Three Flashing Dots with Pump On: If 3 flashing dots appear below the temperature display while the pump(s) is operating, turn the pump(s) off. If the 3 flashing dots went away this indicates that the pressure or flow switch was not activated although there was water flow. Note: A dirty filter limiting the water flow will also cause this error message to appear.

When the pump is turned on, there is a 7-second delay before the system will start to auto check the pressure or flow switch.

Contact your local dealer



OR



Temperature Sensor: If the display shows a constant 32°F or 125°F and this is not the actual temperature or the displayed temperature greatly differs from the actual spa water temperature, a problem with the water temperature sensor has occurred.
Contact your local dealer



High Temperature: If the water temperature exceeds 119°F, the Hi-Limit protection will be turned on and the heater will be deactivated until the water has cooled to 110°F. 3 flashing dots will appear below the elevated temperature. Power to the system must be cycled off then on to reset the system.
Contact your local dealer

Freeze Protection & Winterizing: When freezing weather and/or power losses are expected, contact your local spa dealer for freeze protection or winterizing recommendations for both the spa and the equipment system. Freeze related damage is not covered by the Hydro-Quip warranty.



HYDROQUIP™

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