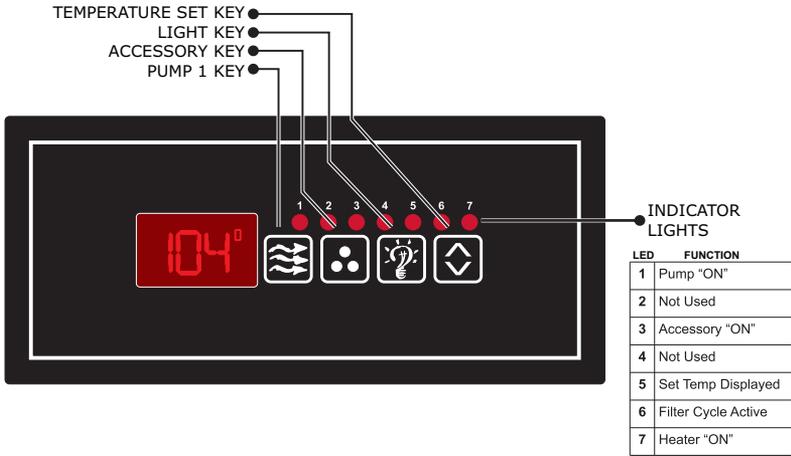


CS7500/CS6500 - BASIC OPERATION



Pump 1 Key: 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 indicator will illuminate while the pump is running in High speed and flash while it is in Low speed.



Pump 2/Blower Key: Press this key once to activate Pump 2 or Blower. A built-in timer will shut the device off after 20 minutes of operation unless done so manually. The indicator will illuminate while the is running is running.



Light/Enter Key: Press this key to turn the light on, a second press will turn the light off. If light circuit is set to two intensity light in the Low Level Setting first press will activate low intensity, second press will activate full intensity. The light will automatically shut off after 2 hours.



Temperature Set Key: Press the Up/Down Arrow key to increase the desired temperature, release and press again to decrease the desired 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 Temperature Program indicator will be illuminated 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 "On" indicator will illuminate while the heater is on and flash when there is a call for heat and the heater has not yet been activated or is dis-abled due to current limiting .

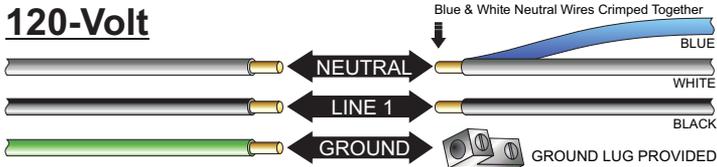
CS7500/CS6500 - POWER CONNECTION

Use the illustrations and instructions below to connect your input power wiring.

Always refer to the wiring diagram provided with your control (located inside the hinged cover) prior to connecting any wires.

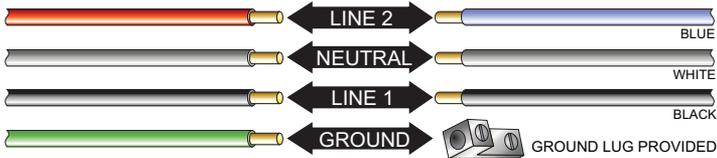
WARNING - Secure wires as defined by the NEC and in compliance with any local codes in effect at the time of installation. The system data label contains specific electrical information required for installation. A wiring diagram is provide with every system and is located inside the control systems hinged cover. The wiring diagram may contain "manufacturers notes" vital to your particular installation. Typical 120-Volt and 240-Volt installations are depicted below.

120-Volt



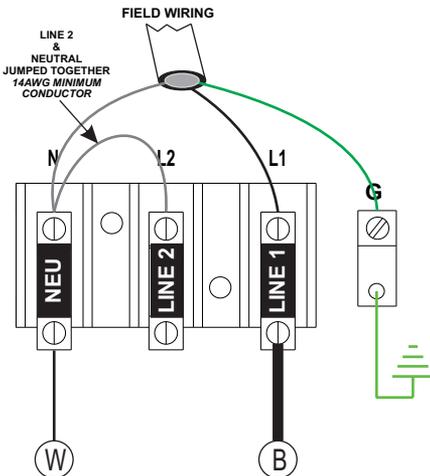
- Connect input Neutral to White Wire (crimped together with Blue wire).
- Connect Line 1 to Black Wire.
- Connect Ground to Ground Lug provided inside control box.

240-Volt

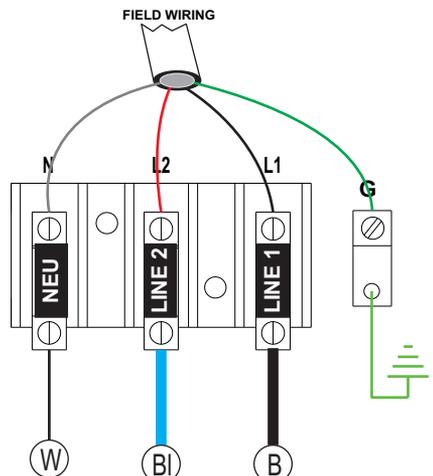


- Connect Line 2 to Blue Wire.
- Connect Input Neutral to White Wire.
- Connect Line 1 to Black Wire.
- Connect Ground to Ground Lug provided inside control box.

120V CONNECTION



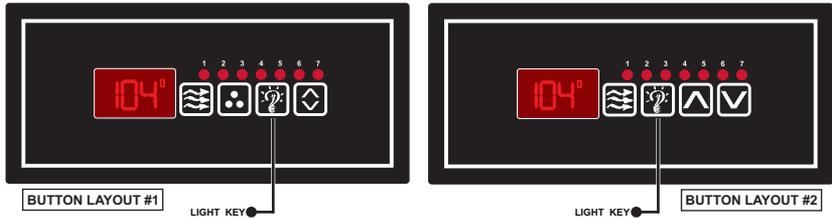
240V CONNECTION



CS7500/CS6500 - LOW LEVEL PROGRAMMING

The CS6500/7500 series control systems offer the user the unique ability to re-configure the layout of the keypad buttons to accommodate a one or two component system. Follow the instructions below paying attention to the "Accessory Configuration" to define the desired button layout. The system is supplied with (2) keypad overlays for to cover either configuration.

The default layout is Button Layout #1



ACCESSING LOW LEVEL SETTINGS

- 1) Press and hold the Light Key for approximately 20 seconds, the first parameter shown will be the filtration duration setting "D_X" continue to hold the button down until "HC" or "LC" appears indicating you are now in the low-level settings.
- 2) Press the Light Key to change to the next parameter.
- 3) Use the Up/Down Arrow Key to change the setting.
- 4) Press the Light key repeatedly after the chosen setting is changed to save the setting and exit the low level programming

LOW LEVEL SETTINGS

Current Limiting:

HC = High Current (No Current Limiting)

LC = Low Current* (Heater will turn off with high speed pump or accessory operation)

Pump 1 Configuration:

SP1 = Single Speed

SP2 = Dual Speed *

Accessory Configuration: ****NOTE: THIS SETTING DETERMINES BUTTON CONFIGURATION****

BL0 = Not Installed (Button Layout #2)

BL1 = Single Speed Pump 2 or Blower Installed* (Button Layout #1)

Circulation Pump:

CP0 = No Circulation Pump*

CP1 = Circulation Pump

Temperature Display:

TuF = Fahrenheit *

TuC = Celsius

Light Configuration:

LI1 = Single Intensity (On/Off) *

LI2 = Two Intensities

* Indicates default setting

Note: If the error code "FLC" appears after programming simply turn the power off then back on to the control unit and the error should clear.

CS7500/CS6500 - ERROR MESSAGES

FLC

PRESSURE or FLOW SWITCH ACTIVATED - This error is an indication the pressure or flow switch is not opening when the pump is off, the programming is not correct, or low level programming has just been done with the pump running.

Confirm proper system programming and/or pressure switch calibration

Contact your local spa dealer

FLO

PRESSURE or FLOW SWITCH NOT ACTIVATED - This error is an indication the pressure or flow switch is not closing when the pump is on. Check for dirty filter, proper water level and flow, if the error does not clear this is an indication that the pressure or flow switch may need to be adjusted or replaced.

Contact your local spa dealer

Prr

TEMPERATURE SENSOR MALFUNCTION - This error will occur when a problem with the temperature sensor exists. This error may also occur if the system is activated while the water temperature is below 35°F.

Contact your local spa dealer

OH

OVERHEAT or HIGH-LIMIT PROTECTION - There are three (3) stages of over-temperature:

1 - The spa water has exceeded 112°F. The heater, pump and accessory will be deactivated until the water cools to 109°F. *Be sure to check the actual water temperature with an accurate thermometer.*

2 - The spa water has exceeded 119°F. The heater will deactivate while the pump and accessory will still operate. The blower (if equipped) can be activated to help cool the water. **WATER MUST BE BELOW 119°F AND POWER MUST BE RESET TO CLEAR THE "HL" ERROR**

A dirty spa filter can also cause a restricted flow of water, be sure the filter is cleaned regularly and ensure all water shutoff valves are open.

If the system has been operating normally until now, the pump may be overheating the spa. Refer to "Programing Filtration" on page X and reduce the duration and/or number of cycles per day.

3 - If you've eliminated items 1 & 2 as problems, the high-limit sensor may have malfunctioned.

Contact your local spa dealer

HL

FREEZE PROTECTION:

SMART WINTER MODE: This mode will activate any time the ambient/outside temperature falls below 59°F if required. This mode will be active for a period of 24-hours. In this mode, if a pump has not been activated in the last 2 hours, the system will automatically turn it on for 1-minute every 2 hours to prevent freezing. The "Filter Cycle" indicator will flash while this mode is active.



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