Enabling EC Mode (External Control)
on your D, DX and Z Series Digital HEAT SIPHON® to interface with 3rd Party Controllers

If you elect NOT to use Heat Siphon Brand Digital / Wireless Pool/Spa Controller Accessories, using the EC mode you can still interface your Heat Siphon's Player Control Board with any other 3rd party pool/spa control systems, however no brown sheathed red and white wire cable is supplied. NOTE: IN EC mode HEAT SIPHON will only turn ON/OFF when your controller tells it to. It will stay on until either the MAXIMUM EC set-point is reached or your controller shuts it off. ALL ERROR MESSAGES WILL STILL BE DISPLAYED. You set the MAX EC set-point on your Player with up/down keys.

NOTE: Once you place the Player in EC mode it will continuously display the water temperature or "OFF" if your Heat Siphon is not running), then the MAX EC set Temperature and "EC"

The hookup is simple. Run the 2 wires from the Players "POD" screw-down terminals to either:

A a dry contact switch that is closed when your 3rd party external controller is calling for heat and opened when no heat is required.
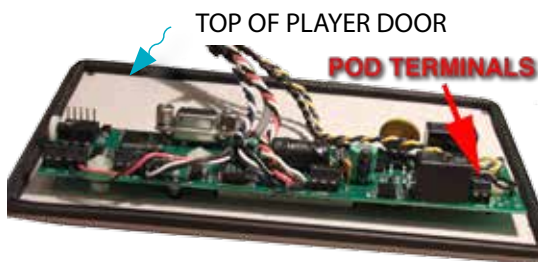
B a set of terminals that have 24 volts supplied across them when the external controller is call-ing for heat and no volts when the external controller wants the heater off.

Tools Required: Small Flat Blade Screw Driver & Phillips Head Screw Driver
NOTE: unless otherwise specified - "PRESS" KEYS MEANS PRESS AND RELEASE

Remove Screws and tilt door forward

CAUTION: DO NOT USE A CORDLESS DRILL OR SCREW GUN TO TIGHTEN THE DOOR SCREWS. YOU MAY STRIP THE THREADS AND RUIN THE DOOR SEAL. USE A SCREW DRIVER.

TOP OF PLAYER DOOR

POD TERMINALS

1 TURN POWER (circuit breaker) OFF and remove the 5 digital door screws. Tilt the door forward until you can access the back BOTTOM of the Player board.

2 Fasten the brown sheathed red and white wires (sup-plied if you use our POD) to the two POD screw-down terminals located on the bottom of the Player board and replace the Player board door and retighten by hand, the 5 door screws.

3 Run the Red/White wires to either **A** or **B** type 3rd party controller switch terminals as noted above. This may be called "heater" switch or "solar" contacts. Verify that the switch opens and closes with the heater selection either by turning the controller thermostat up and down or turning the heater on and off using the controller. Leave the controller in the closed state and proceed to the next step.

LATER PLAYER VERSION USE 2 TERMINALS ON RIGHT

4 Turn power to the Heat Siphon back on - If you have correctly wired to the controller, the Player should start up and go through its checking routines and display-Soft version, flo 15 sec countdown, then begins 300 second restart countdown countdown. To speed up 300 second countdown hold the down arrow key in. As long as the external controller's switch state remains the same, no error condition should be reported by the Player and it should display the normal "POOL" , "SPA", "Auto-Pic or "OFF" and the temperature status.

5 Put the Player into "EC" - External Control Mode by the following keypress sequence: PRESS BOTH KEYS. Current mode should blink. Before blinking stops, PRESS UP OR DOWN KEY repeatedly until "OFF" is displayed. After OFF stops blinking, PRESS UP OR DOWN until "On" blinks, While "On" is still blinking, PRESS BOTH KEYS. "EC" should be displayed. YOU ARE IN EC MODE and the software will reboot. YOU MAY SET THE MAXIMUM EC TEMPERATURE using the UP or DOWN keys.

6 TO EXIT EC MODE - PRESS BOTH KEYS. Before "EC" stops blinking, PRESS UP OR DOWN until "OFF" is displayed. When "OFF" stops blinking, PRESS BOTH KEYS. PRESS UP OR DOWN until "On" is displayed. Player will now reboot in normal mode.

7 IN EC MODE - your Digital Heat Siphon LED Display will scroll thru four screens:

1. "EC" - meaning it is in EC mode

2. "XX F" - displays the current water temperature measured by Heat Siphon water sensor

3. "StoP" - meaning the upper or "STOP" water temperature at which Heat Siphon will independently shut off at if reached EVEN IF EXTERNAL CONTROLLER IS STILL calling for heat.

4. "XX F" - the stop temperature which you can change using up down arrrow keys

The following diagram shows the Heat Siphon Player Board POD terminal wire connections to a Model LX100/LX100EZ Pentair/Compool Easytouch pool/spa controllers. According to their manual the P & S terminals need to be connected together for single thermostat heater circuits.

Heat Siphon EC MODE CONNECTIONS FOR:
Pentair/COMPOOL EasyTouch Pool/Spa Controller Model LX-100/LX-100EZ